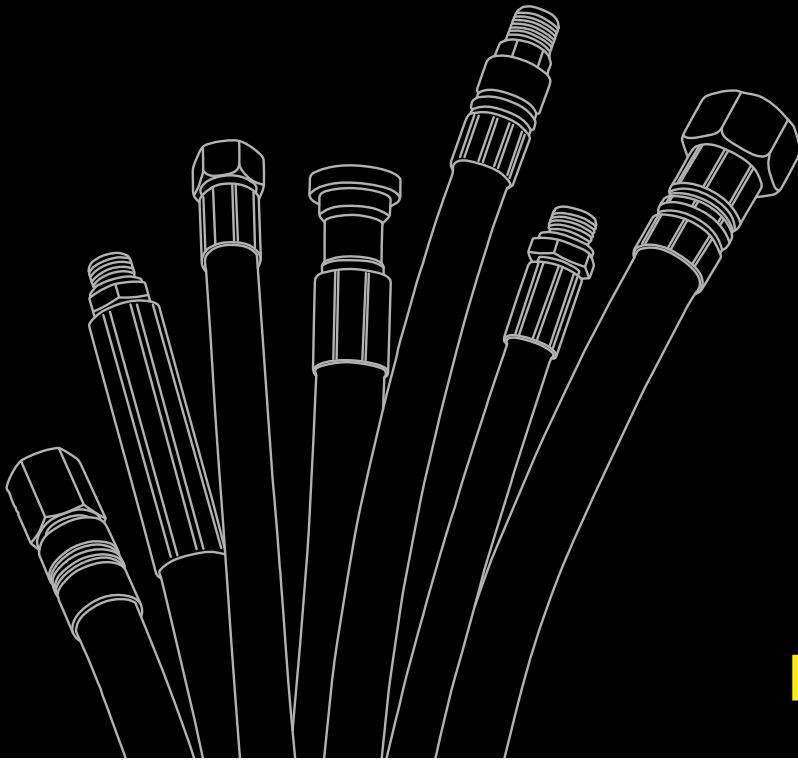




HYDRAULIC HOSE FITTINGS & ADAPTERS





Dunlop Hiflex is one of the market's most established suppliers of hydraulics hoses and couplings, industrial hoses and fittings. The manufacturing of hoses and couplings, for both high and low pressure, gives Dunlop Hiflex extensive knowledge of the products and enables it to put forward suggestions for new solutions and enhancements to industry.



5

COUNTRIES

302

PEOPLE

68

MILLION € TURNOVER

41

STORES

87

DISTRIBUTORS

ISO⁹⁰⁰¹

CERTIFICATION

// DUNLOP HIFLEX



// THE FIRST HOSES

Scotland, 1887. John Boyd Dunlop, a Scottish born inventive veterinarian observes his son as he's cycling down a bumpy road. The bike has hard solid rubber tyres and the ride is rough and shaky. The ride is neither fast nor particularly comfortable. He then comes up with an idea of wrapping an air filled rubber hose around the rim. In 1888 he patented the idea and the rest as we say, is history.



// A PRODUCT THAT CHANGES THE WORLD

John Dunlop's idea about air-filled rubber hoses was the beginning of an industrial manufacturing of air-filled tires and, later, a development of hydraulic and industrial hoses. We, at Dunlop Hiflex, are specialists at hoses for high and low pressure and through our unique position with manufacturing in our own factories we are leading the development of the next generation of hoses. Since 1969 there's been a constant development with a headquarter in Halmstad. Today we are a part of the ALFAGOMMA GROUP, one of the leading manufactures of hoses in the world. But we still carry the name that originated from a Scot and bike with pride.

// ALFAGOMMA GROUP

Dunlop Hiflex was acquired by ALFAGOMMA Group in 2005. The Group, established in 1956, is a global manufacturer specialized in highly engineered, technically demanding hydraulic and industrial products, created with a commitment to excellence in quality and innovation.

// RESEARCH AND DEVELOPMENT

ALFAGOMMA is focused on continuous improvement, proven by its constant engineering innovation at product, process and production level, which has made it possible to quickly respond to evolving international regulations, improving products performance, safety and efficiency.

The company's distinguishing feature is its ability to innovate, by investing in research and development of products and materials, and designing solutions that meet customer's requirements, in compliance with international regulations.



// APPLICATIONS OVERVIEW



HYDRAULIC AND INDUSTRIAL INTEGRATED FLUID HANDLING SOLUTIONS

HYDRAULIC AND INDUSTRIAL INTEGRATED FLUID HANDLING SOLUTIONS

- COMPLETE PORT-TO-PORT SYSTEMS
- COHERENT AND INTEGRATED DESIGN LOGIC
- MAXIMUM QUALITY, SAFETY AND RELIABILITY
- TOTAL COMPONENT TRACEABILITY
- CUSTOMIZED SOLUTIONS
- EXPERT COMPONENT SELECTION FOR COST EFFECTIVE OPTIMUM PERFORMANCE

// INDEX BY CHAPTER



// HYDRAULIC HOSE

// HYDRAULIC HOSE.....	7
// FERRULE SELECTION CHART	40



// HYDRAULIC FITTING

// STANDARD.....	45
// NEW POWERTRACK.....	98
// WATERBLAST	114
// INTERLOCK.....	118



// HYDRAULIC ADAPTER

// JIC 37° ADAPTERS.....	136
// ORFS ADAPTERS.....	177
// BSP ADAPTERS.....	205
// DIN 24° ADAPTERS.....	221

// SYMBOLS



INTERNAL DIAMETER



OUTSIDE DIAMETER



MAXIMUM WORKING PRESSURE



MINIMUM BURST PRESSURE



MINIMUM BEND RADIUS



WALL THICKNESS



WEIGHT



// HYDRAULIC HOSE

// THERMOPLASTIC.....	8	// HIGH TEMPERATURE.....	28
// TEXTILE BRAID.....	13	// LOW TEMPERATURE.....	30
// WIRE BRAID.....	15	// OIL RETURN LINES.....	32
// WIRE SPIRAL.....	21	// PRESSURE WASH.....	34
// POWERFLEXBIO.....	24	// PTFE HOSE.....	38
// TUFLEX.....	27		

// THERMOPLASTIC

// 630 - MINIMESS



PRESSURE TEST POINT

Tube: polyester.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for pressure gauges and transducers connections.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	↔			↔		↻		↻		↷		⬆	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1000310	01	2,0	5/64"	5,00	0,20	63,0	9100	190,0	27300	20,0	0,79	0,020	0,02
1001522	L2	4,0	5/32"	8,00	0,31	63,0	9100	190,0	27300	40,0	1,57	0,045	0,04

// 570A - R7



SAE 100 R7 - EN 855 R7

Tube: polyester.

Reinforcement: one/two high tensile textile braids.

Cover: abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	↔			↔		↻		↻		↷		⬆	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1000290	03	5,0	3/16"	9,60	0,38	21,0	3000	84,0	12000	25,0	0,98	0,060	0,05
1000291	04	6,0	1/4"	12,20	0,48	21,0	3000	84,0	12000	35,0	1,38	0,100	0,07
1001151	04	6,0	1/4"	12,20	0,48	21,0	3000	84,0	12000	35,0	1,38	0,100	0,07
1001234	05	8,0	5/16"	14,30	0,56	19,0	2750	76,0	11000	45,0	1,77	0,130	0,09
1000292	05	8,0	5/16"	14,30	0,56	19,0	2750	76,0	11000	45,0	1,77	0,130	0,09
1000293	06	10,0	3/8"	16,00	0,63	16,0	2320	64,0	9280	55,0	2,17	0,145	0,10
1001152	06	10,0	3/8"	16,00	0,63	16,0	2320	64,0	9280	55,0	2,17	0,145	0,10
1000294	08	13,0	1/2"	20,30	0,80	14,0	2000	56,0	8000	75,0	2,95	0,220	0,15
1001153	08	13,0	1/2"	20,30	0,80	14,0	2000	56,0	8000	75,0	2,95	0,220	0,15

Dimensions shown may be changed without prior notice

// 570A - R7 TWIN



SAE 100 R7 - EN 855 R7

Tube: polyester.**Reinforcement:** one/two high tensile textile braids.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1000298	04	6,0	1/4"	12,20	0,48	21,0	3000	84,0	12000	35,0	1,38	0,200	0,14
1001145	04	6,0	1/4"	12,20	0,48	21,0	3000	84,0	12000	35,0	1,38	0,200	0,14
1000299	05	8,0	5/16"	14,30	0,56	19,0	2750	76,0	11000	45,0	1,77	0,260	0,18
1001146	05	8,0	5/16"	14,30	0,56	19,0	2750	76,0	11000	45,0	1,77	0,260	0,18
1000300	06	10,0	3/8"	16,00	0,63	16,0	2320	64,0	9280	55,0	2,17	0,290	0,20
1001147	06	10,0	3/8"	16,00	0,63	16,0	2320	64,0	9280	55,0	2,17	0,290	0,20
1000301	08	13,0	1/2"	20,30	0,80	14,0	2000	56,0	8000	75,0	2,95	0,440	0,30
1001148	08	13,0	1/2"	20,30	0,80	14,0	2000	56,0	8000	75,0	2,95	0,440	0,30

// 580A - R8



SAE 100 R8 - EN 855 R8

Tube: polyester.**Reinforcement:** one/two braids of aramid fiber.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001213	04	6,0	1/4"	11,50	0,45	35,0	5000	140,0	20000	50,0	1,97	0,085	0,06
1000295	04	6,0	1/4"	11,50	0,45	35,0	5000	140,0	20000	50,0	1,97	0,085	0,06
1000483	05	8,0	5/16"	13,40	0,53	30,0	4300	120,0	17450	55,0	2,17	0,105	0,08
1001235	05	8,0	5/16"	13,40	0,53	30,0	4300	120,0	17450	55,0	2,17	0,105	0,08
1000296	06	10,0	3/8"	15,50	0,61	28,0	4000	112,0	16000	60,0	2,36	0,135	0,10
1001227	06	10,0	3/8"	15,50	0,61	28,0	4000	112,0	16000	60,0	2,36	0,135	0,10
1001155	08	13,0	1/2"	13,40	0,53	30,0	4300	120,0	17450	55,0	2,17	0,105	0,08
1000416	08	13,0	1/2"	19,90	0,78	24,5	3500	98,0	14000	80,0	3,15	0,200	0,14

// 550A - TWB1



ONE WIRE BRAID

Tube: polyester.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	↔↔↔			↔↔↔		↔↔↔		↔↔↔		↔↔↔		↔↔↔	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001161	04	6,0	1/4"	11,70	0,46	31,0	4500	124,0	18000	40,0	1,57	0,165	0,12
1000283	04	6,0	1/4"	11,70	0,46	31,0	4500	124,0	18000	40,0	1,57	0,165	0,12
1001162	05	8,0	5/16"	13,20	0,52	25,0	3630	100,0	14500	55,0	2,17	0,190	0,13
1000284	05	8,0	5/16"	13,20	0,52	25,0	3630	100,0	14500	55,0	2,17	0,190	0,13
1000285	06	10,0	3/8"	15,50	0,61	22,5	3250	90,0	13000	65,0	2,56	0,230	0,16
1001163	06	10,0	3/8"	15,50	0,61	22,5	3250	90,0	13000	65,0	2,56	0,230	0,16
1000286	08	13,0	1/2"	18,80	0,74	19,0	2750	76,0	11000	85,0	3,35	0,300	0,21
1001164	08	13,0	1/2"	18,80	0,74	19,0	2750	76,0	11000	85,0	3,35	0,300	0,21

// 550A - TWB1 - TWIN



ONE WIRE BRAID

Tube: polyester.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	↔↔↔			↔↔↔		↔↔↔		↔↔↔		↔↔↔		↔↔↔	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001165	04	6,0	1/4"	11,70	0,46	31,0	4500	124,0	18000	40,0	1,57	0,330	0,23
1000289	04	6,0	1/4"	11,70	0,46	31,0	4500	124,0	18000	40,0	1,57	0,330	0,23
1000288	05	8,0	5/16"	13,20	0,52	25,0	3630	100,0	14500	55,0	2,17	0,380	0,26
1001424	05	8,0	5/16"	13,20	0,52	25,0	3630	100,0	14500	55,0	2,17	0,380	0,26
1001166	06	10,0	3/8"	15,50	0,61	22,5	3250	90,0	13000	65,0	2,56	0,460	0,31
1000287	06	10,0	3/8"	15,50	0,61	22,5	3250	90,0	13000	65,0	2,56	0,460	0,31

Dimensions shown may be changed without prior notice

// FLEXOR VHP700



Tube: polyester.
Reinforcement: one/two braids of aramid fiber plus one steel wire braid
Cover: red abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.
Application: high pressure systems and pumps; rescue, safety, jacking and rerailing equipments; bolt tensioning tools
Constant operation: -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)
Length: random

Item Code	Constr.													
		Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1003461	1TB+1WB	04	6,0	1/4"	12,70	0,50	70,0	10000	280,0	40600	35,0	1,38	0,180	0,13

HALOGEN FREE HOSE ENVIRONMENTAL FRIENDLY



GREENLINE PLUS HYDRAULIC RANGE

MAIN FEATURES

- HALOGEN FREE
- ENVIRONMENTAL FRIENDLY

A variety of environmental problems now affect our entire world. The environmental challenges facing industrial companies and governments throughout the world are numerous and complex.

In attempting to make a contribution to find an answer to these challenges, Dunlop Hiflex also in line with the latest OEM environmental requisites for a hydraulic hose not containing Chlorine,

Fluorine and Iodine has replaced its standard range of hydraulic hose with an environmental friendly Greenline Plus range of product.

How can the Greenline Plus range be identified? The new product can be identified by "Greenline Plus" on the branding text of the hose and have a new set of part numbers.



// TEXTILE BRAID

// ARGUS 1TE/R6 PLUS

**SAE 100 R6 - EN 854 R6 (up to 3/4") - EXCEEDS EN 854 1TE****Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile textile braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** low pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**HALOGEN-FREE COMPOUND****Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001385	04	6,0	1/4"	12,70	0,50	2,8	400	11,2	1620	64,0	2,52	0,110	0,08
1001386	05	8,0	5/16"	14,30	0,56	2,8	400	11,2	1620	76,0	2,99	0,130	0,09
1001387	06	10,0	3/8"	15,90	0,63	2,8	400	11,2	1620	76,0	2,99	0,160	0,11
1001388	08	13,0	1/2"	19,80	0,78	2,8	400	11,2	1620	102,0	4,02	0,220	0,15
1001389	10	16,0	5/8"	23,00	0,91	2,4	350	9,6	1400	107,0	4,21	0,270	0,19
1001390	12	19,0	3/4"	26,90	1,06	2,1	300	8,4	1200	152,0	5,98	0,330	0,23
1001391	16	25,0	1"	33,50	1,32	1,7	250	7,0	1000	203,0	7,99	0,500	0,34

// ARGUS 2TE PLUS

**EN 854 2TE****Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile textile braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**HALOGEN-FREE COMPOUND****Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001398	04	6,0	1/4"	13,10	0,52	7,5	1100	30,0	4300	40,0	1,57	0,112	0,08
1001399	05	8,0	5/16"	14,90	0,59	6,8	986	27,0	3945	50,0	1,97	0,148	0,10
1001400	06	10,0	3/8"	16,50	0,65	6,3	920	25,2	3680	60,0	2,36	0,163	0,11
1001401	08	13,0	1/2"	19,70	0,78	5,8	840	23,2	3360	70,0	2,76	0,206	0,14
1001402	10	16,0	5/8"	23,90	0,94	5,0	730	20,0	2900	90,0	3,54	0,281	0,19
1001761	12	19,0	3/4"	27,00	1,06	4,5	650	18,0	2610	110,0	4,33	0,350	0,24
1001404	16	25,0	1"	34,40	1,35	4,0	600	16,0	2320	150,0	5,91	0,497	0,34

// ARGUS 3TE/R3 PLUS



EN 854 3TE

Tube: oil resistant synthetic rubber.

Reinforcement: two high tensile textile braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

HALOGEN-FREE COMPOUND

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code														
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	
1001405	04	6,0	1/4"	14,40	0,57	14,5	2100	58,0	8400	45,0	1,77	0,174	0,12	
1001406	05	8,0	5/16"	16,90	0,67	13,0	1900	52,0	7560	55,0	2,17	0,223	0,15	
1001407	06	10,0	3/8"	18,50	0,73	11,0	1600	44,0	6400	70,0	2,76	0,243	0,17	
1001408	08	13,0	1/2"	21,70	0,85	9,3	1350	37,2	5400	85,0	3,35	0,294	0,20	
1001409	10	16,0	5/8"	25,90	1,02	8,0	1200	32,0	4640	105,0	4,13	0,399	0,27	
1001410	12	19,0	3/4"	29,00	1,14	7,0	1000	28,0	4000	130,0	5,12	0,455	0,31	
1001411	16	25,0	1"	35,90	1,41	5,5	800	22,0	3200	150,0	5,91	0,612	0,42	
1001412	20	32,0	1 1/4"	42,30	1,67	4,5	650	18,0	2610	190,0	7,48	0,737	0,50	
1001531	24	38,0	1 1/2"	49,30	1,94	4,0	600	16,0	2320	240,0	9,45	1,150	0,78	
1001532	32	51,0	2"	63,00	2,48	3,3	470	13,2	1900	300,0	11,81	1,500	1,01	

// 2TE RAILWAY



EN 854 2TE - EN 45545-2

Tube: oil resistant synthetic rubber.

Reinforcement: one high tensile textile braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for railway applications.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code														
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	
1002680	04	6,0	1/4"	13,10	0,52	7,5	1100	30,0	4300	40,0	1,57	0,112	0,08	
1002681	05	8,0	5/16"	14,90	0,59	6,8	986	27,0	3945	50,0	1,97	0,148	0,10	
1002682	06	10,0	3/8"	16,50	0,65	6,3	920	25,2	3680	60,0	2,36	0,163	0,11	
1002683	08	13,0	1/2"	19,70	0,78	5,8	840	23,2	3360	70,0	2,76	0,206	0,14	
1002684	10	16,0	5/8"	23,90	0,94	5,0	730	20,0	2900	90,0	3,54	0,281	0,19	
1002685	12	19,0	3/4"	27,00	1,06	4,5	650	18,0	2610	110,0	4,33	0,350	0,24	
1002686	16	25,0	1"	34,40	1,35	4,0	600	16,0	2320	150,0	5,91	0,497	0,34	

Dimensions shown may be changed without prior notice

// WIRE BRAID

// PLT - PILOT

**Tube:** oil resistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for hydraulic pilot lines.**Constant operation:** -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)**Length:** random

Item Code	↔			↔		↺		↻		↻		↻		
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	
1000274	03	5,0	3/16"	9,60	0,38	12,0	1750	48,0	7000	20,0	0,79	0,111	0,08	
1003480	03	5,0	3/16"	9,60	0,38	12,0	1750	48,0	7000	20,0	0,79	0,111	0,08	
1002747	04	6,0	1/4"	11,40	0,45	12,0	1750	48,0	7000	30,0	1,18	0,150	0,11	
1000097	04	6,0	1/4"	11,40	0,45	12,0	1750	48,0	7000	30,0	1,18	0,150	0,11	
1000475	05	8,0	5/16"	13,00	0,51	12,0	1750	48,0	7000	40,0	1,57	0,180	0,13	
1000960	05	8,0	5/16"	13,00	0,51	12,0	1750	48,0	7000	40,0	1,57	0,180	0,13	
1002177	06	10,0	3/8"	14,70	0,58	12,0	1750	48,0	7000	60,0	2,36	0,220	0,15	
1000476	06	10,0	3/8"	14,70	0,58	12,0	1750	48,0	7000	60,0	2,36	0,220	0,15	
1000962	08	13,0	1/2"	17,80	0,70	12,0	1750	48,0	7000	80,0	3,15	0,230	0,16	
1000347	08	13,0	1/2"	17,80	0,70	12,0	1750	48,0	7000	80,0	3,15	0,230	0,16	

// 121T SLIMLINE PLUS - 1SC



ISO 11237 - EN 857 1SC

Tube: oil resistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**HALOGEN-FREE COMPOUND****Constant operation:** -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)**Length:** random

Item Code	↔			↔		↺		↻		↻		↻		
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	
1000944	04	6,0	1/4"	12,10	0,48	22,5	3250	90,0	13000	50,0	1,97	0,170	0,12	
1000946	05	8,0	5/16"	14,10	0,56	21,5	3120	86,0	12500	55,0	2,17	0,190	0,13	
1000948	06	10,0	3/8"	15,60	0,61	21,0	3000	84,0	12000	65,0	2,56	0,260	0,18	
1000950	08	13,0	1/2"	19,50	0,77	16,0	2320	64,0	9280	90,0	3,54	0,410	0,28	
1000952	10	16,0	5/8"	23,00	0,91	13,0	1900	52,0	7560	100,0	3,94	0,440	0,30	
1000954	12	19,0	3/4"	26,70	1,05	10,5	1530	42,0	6000	125,0	4,92	0,570	0,39	
1000956	16	25,0	1"	34,90	1,37	8,8	1280	35,2	5100	150,0	5,91	0,740	0,50	

// 141T SUPERSLIMLINE



Tube: oil resistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)

Length: random

Item Code	↔			↔		↺		↻		↻		↻		
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	
1001212	04	6,0	1/4"	12,00	0,47	28,0	4000	112,0	16000	80,0	3,15	0,170	0,12	
1001112	06	10,0	3/8"	15,40	0,61	22,5	3250	90,0	13000	105,0	4,13	0,260	0,18	
1001778	08	13,0	1/2"	19,20	0,76	21,0	3000	84,0	12000	120,0	4,72	0,360	0,25	

// 122T PLUS - 1SN/R1AT



ISO 1436-1 - SAE 100 R1AT - EN 853 1SN

Tube: oil resistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

HALOGEN-FREE COMPOUND

Constant operation: -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1"1/4

Item Code	↔			↔		↺		↻		↻		↻		
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	
1001330	03	5,0	3/16"	11,10	0,44	25,0	3630	100,0	14500	90,0	3,54	0,160	0,11	
1002584	03	5,0	3/16"	11,10	0,44	25,0	3630	100,0	14500	90,0	3,54	0,160	0,11	
1001331	04	6,0	1/4"	12,70	0,50	22,5	3250	90,0	13000	100,0	3,94	0,198	0,14	
1002755	04	6,0	1/4"	13,00	0,51	22,5	3250	90,0	13000	100,0	3,94	0,198	0,14	
1003033	05	8,0	5/16"	14,50	0,57	21,5	3120	86,0	12500	115,0	4,53	0,236	0,16	
1001332	05	8,0	5/16"	14,20	0,56	21,5	3120	86,0	12500	115,0	4,53	0,240	0,17	
1001333	06	10,0	3/8"	16,50	0,65	18,0	2610	72,0	10500	130,0	5,12	0,300	0,21	
1002756	06	10,0	3/8"	17,20	0,68	18,0	2610	72,0	10500	130,0	5,12	0,296	0,20	
1001334	08	13,0	1/2"	19,90	0,78	16,0	2320	64,0	9280	180,0	7,09	0,372	0,26	
1002758	08	13,0	1/2"	20,10	0,79	16,0	2320	64,0	9280	180,0	7,09	0,367	0,25	
1002760	10	16,0	5/8"	23,10	0,91	13,0	1900	52,0	7560	200,0	7,87	0,421	0,29	
1001335	10	16,0	5/8"	23,00	0,91	13,0	1900	52,0	7560	200,0	7,87	0,420	0,29	
1002761	12	19,0	3/4"	27,30	1,07	10,5	1530	42,0	6000	240,0	9,45	0,555	0,38	
1001336	12	19,0	3/4"	27,00	1,06	10,5	1530	42,0	6000	240,0	9,45	0,560	0,38	
1002763	16	25,0	1"	35,20	1,39	8,8	1280	35,2	5100	300,0	11,81	0,876	0,59	
1001337	16	25,0	1"	35,00	1,38	8,8	1280	35,2	5100	300,0	11,81	0,876	0,59	
1002765	20	32,0	1 1/4"	42,50	1,67	6,3	920	25,2	3680	420,0	16,54	1,095	0,74	
1001338	20	32,0	1 1/4"	42,50	1,67	6,3	920	25,2	3680	420,0	16,54	1,095	0,74	
1001371	24	38,0	1 1/2"	49,70	1,96	5,0	730	20,0	2900	500,0	19,69	1,329	0,90	
1001339	24	38,0	1 1/2"	49,70	1,96	5,0	730	20,0	2900	500,0	19,69	1,329	0,90	
1001372	32	51,0	2"	62,90	2,48	4,0	600	16,0	2320	630,0	24,80	1,835	1,24	
1001340	32	51,0	2"	62,90	2,48	4,0	600	16,0	2320	630,0	24,80	1,835	1,24	

Dimensions shown may be changed without prior notice

// 221T SLIMLINE PLUS - 2SC



ISO 11237 - EN 857 2SC

Tube: oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**HALOGEN-FREE COMPOUND****Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	↔			↔		↙		↘		↗		↖	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001801	04	6,0	1/4"	13,20	0,52	40,0	5850	160,0	23200	50,0	1,97	0,255	0,18
1001802	05	8,0	5/16"	14,50	0,57	35,0	5000	140,0	20000	55,0	2,17	0,300	0,21
1001803	06	10,0	3/8"	17,00	0,67	33,0	4800	132,0	19200	65,0	2,56	0,370	0,25
1001804	08	13,0	1/2"	20,30	0,80	27,5	4000	110,0	16000	90,0	3,54	0,470	0,32
1001017	10	16,0	5/8"	23,90	0,94	25,0	3630	100,0	14500	100,0	3,94	0,591	0,40
1001020	12	19,0	3/4"	27,70	1,09	21,5	3120	86,0	12500	120,0	4,72	0,760	0,52
1001022	16	25,0	1"	34,60	1,36	16,5	2400	66,0	9600	150,0	5,91	1,130	0,76

// 241T - SUPERSLIMLINE - HI-TUFF



ISO 11237 - SAE 100 R16 - EN 857 2SC (up to 1")

Tube: oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**MSHA APPROVED****Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Constant operation:** -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1"1/4

Item Code	↔			↔		↙		↘		↗		↖	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001049	04	6,0	1/4"	13,20	0,52	42,0	6000	168,0	24000	51,0	2,01	0,259	0,18
1001053	05	8,0	5/16"	14,80	0,58	37,5	5500	150,0	22000	57,0	2,24	0,313	0,22
1001056	06	10,0	3/8"	17,40	0,69	35,0	5000	140,0	20000	64,0	2,52	0,382	0,26
1001060	08	13,0	1/2"	20,70	0,81	31,0	4500	124,0	18000	90,0	3,54	0,502	0,34
1001065	10	16,0	5/8"	23,70	0,93	28,0	4000	112,0	16000	101,0	3,98	0,598	0,41
1001068	12	19,0	3/4"	27,60	1,09	24,0	3500	96,0	14000	121,0	4,76	0,781	0,53
1001073	16	25,0	1"	35,60	1,40	21,0	3000	84,0	12000	152,0	5,98	1,266	0,86
1001791	20	32,0	1 1/4"	43,60	1,72	14,0	2000	58,0	8400	360,0	14,17	1,500	1,01
1002289	24	38,0	1 1/2"	49,90	1,96	12,5	1820	50,0	7280	430,0	16,93	1,970	1,33
1002290	32	51,0	2"	63,50	2,50	10,0	1500	40,0	5850	550,0	21,65	2,550	1,72
1002291	40	63,0	2 1/2"	76,40	3,01	7,5	1100	30,0	4300	720,0	28,35	3,300	2,22
1002292	48	76,0	3"	90,00	3,54	7,0	1000	28,0	4000	880,0	34,65	3,850	2,59

// 222T PLUS - 2SN/R2AT



ISO 1436-1 - SAE 100 R2AT - EN 853 2SN

Tube: oil resistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

HALOGEN-FREE COMPOUND

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1"1/4

Item Code	↔↔↔			↔↔↔		↻		↻		↻		↻	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001341	03	5,0	3/16"	13,00	0,51	42,0	6000	168,0	24000	90,0	3,54	0,282	0,19
1001342	04	6,0	1/4"	14,20	0,56	40,0	5850	160,0	23200	100,0	3,94	0,330	0,23
1002769	04	6,0	1/4"	14,50	0,57	40,0	5850	160,0	23200	100,0	3,94	0,330	0,23
1002770	05	8,0	5/16"	16,10	0,63	35,0	5000	140,0	20000	115,0	4,53	0,357	0,24
1001343	05	8,0	5/16"	15,80	0,62	35,0	5000	140,0	20000	115,0	4,53	0,357	0,24
1002773	06	10,0	3/8"	18,50	0,73	33,0	4800	132,0	19200	125,0	4,92	0,463	0,32
1001344	06	10,0	3/8"	18,20	0,72	33,0	4800	132,0	19200	125,0	4,92	0,460	0,31
1002776	08	13,0	1/2"	21,40	0,84	27,5	4000	110,0	16000	175,0	6,89	0,534	0,36
1001345	08	13,0	1/2"	21,30	0,84	27,5	4000	110,0	16000	175,0	6,89	0,534	0,36
1001346	10	16,0	5/8"	24,50	0,96	25,0	3630	100,0	14500	200,0	7,87	0,670	0,46
1002778	10	16,0	5/8"	24,60	0,97	25,0	3630	100,0	14500	200,0	7,87	0,665	0,45
1002780	12	19,0	3/4"	29,00	1,14	21,5	3120	86,0	12500	240,0	9,45	0,845	0,57
1001347	12	19,0	3/4"	28,60	1,13	21,5	3120	86,0	12500	240,0	9,45	0,846	0,57
1002782	16	25,0	1"	36,80	1,45	16,5	2400	66,0	9600	300,0	11,81	1,253	0,85
1001348	16	25,0	1"	36,60	1,44	16,5	2400	66,0	9600	300,0	11,81	1,250	0,85
1002783	20	32,0	1 1/4"	46,40	1,83	12,5	1820	50,0	7280	420,0	16,54	1,540	1,04
1001349	20	32,0	1 1/4"	46,00	1,81	12,5	1820	50,0	7280	420,0	16,54	1,540	1,04
1001382	24	38,0	1 1/2"	53,70	2,11	9,0	1310	36,0	5240	500,0	19,69	2,026	1,37
1001350	24	38,0	1 1/2"	52,80	2,08	9,0	1310	36,0	5240	500,0	19,69	2,030	1,37
1001383	32	51,0	2"	65,90	2,59	8,0	1200	32,0	4640	630,0	24,80	2,756	1,86
1001351	32	51,0	2"	65,60	2,58	8,0	1200	32,0	4640	630,0	24,80	2,760	1,86

// 3SPT - SUPERFOREST



Tube: oil resistant synthetic rubber.

Reinforcement: three high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	↔↔↔			↔↔↔		↻		↻		↻		↻	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001037	06	10,0	3/8"	21,70	0,85	50,0	7280	196,0	28000	120,0	4,72	0,760	0,52
1001038	08	13,0	1/2"	24,80	0,98	46,9	6800	188,0	27200	160,0	6,30	0,880	0,60
1001039	10	16,0	5/8"	28,30	1,11	41,0	6000	164,0	23500	210,0	8,27	1,110	0,75
1001040	12	19,0	3/4"	32,20	1,27	37,5	5500	150,0	22000	260,0	10,24	1,380	0,93
1001041	16	25,0	1"	40,40	1,59	32,7	4750	130,8	19000	310,0	12,20	1,938	1,31
1001042	20	32,0	1 1/4"	45,90	1,81	24,0	3500	96,0	14000	410,0	16,14	2,310	1,56

Dimensions shown may be changed without prior notice

// 2SC RAILWAY



ISO 11237 - EN 857 2SC - EN 45545-2

Tube: oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**MSHA APPROVED****Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for railway applications.**Constant operation:** -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)**Length:** random

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1002687	04	6,0	1/4"	13,20	0,52	40,0	5850	160,0	23200	50,0	1,97	0,270	0,19
1002689	05	8,0	5/16"	14,50	0,57	35,0	5000	140,0	20000	55,0	2,17	0,310	0,21
1002690	06	10,0	3/8"	17,00	0,67	33,0	4800	132,0	19200	65,0	2,56	0,360	0,25
1002691	08	13,0	1/2"	20,30	0,80	27,5	4000	110,0	16000	90,0	3,54	0,470	0,32
1002692	10	16,0	5/8"	23,90	0,94	25,0	3630	100,0	14500	100,0	3,94	0,570	0,39
1002693	12	19,0	3/4"	27,70	1,09	21,5	3120	86,0	12500	120,0	4,72	0,760	0,52
1002694	16	25,0	1"	34,60	1,36	16,5	2400	66,0	9600	150,0	5,91	1,130	0,76

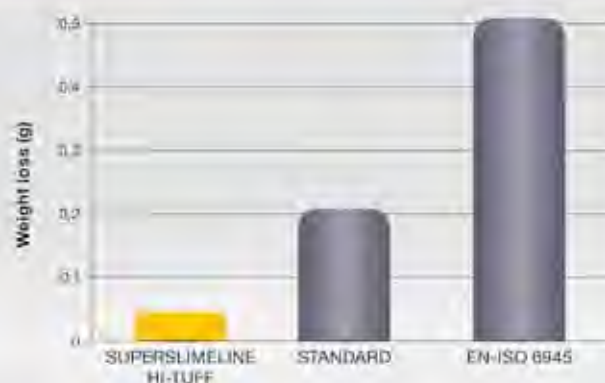
HI-TUFF

**HIGH ABRASION
RESISTANCE**

HI-TUFF

Abrasion resistance

- ▶ **EXCELLENT ABRASION RESISTANCE (10 TIMES HIGHER THAN EN-ISO 6945 REQUIREMENT)**
- ▶ **HIGH OZONE RESISTANCE (10 TIMES MORE THAN THE STANDARD)**
- ▶ **MSHA APPROVED COVER**
- ▶ **ALTERNATIVE TO PROTECTIVE SLEEVE IN APPLICATIONS REQUIRING ABRASION RESISTANCE**



// WIRE SPIRAL

// 490 - POWERTRAK - AT7K - HI-TUFF



Tube: oil resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: very high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 5/8" - 61 m max over 1 1/4"

Item Code	Const.	↔			↔		↻	↻	↻	↻	↵		kg/m	lb/ft
		Dash	mm	in	mm	in					mm	in		
1000275	4WS	10	16,0	5/8"	29,40	1,16	49,0	7000	196,0	28000	250,0	9,84	1,320	0,89
1001847	6WS	20	32,0	1 1/4"	50,40	1,98	52,5	7500	210,0	30000	420,0	16,54	3,590	2,42
1001848	6WS	24	38,0	1 1/2"	57,30	2,26	49,0	7000	196,0	28000	500,0	19,69	5,100	3,43

// 560 - POWERTRAK - AT8K - HI-TUFF



Tube: oil resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: very high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: random

Item Code	↔			↔		↻	↻	↻	↻	↵		kg/m	lb/ft
	Dash	mm	in	mm	in					mm	in		
1003064	12	19,0	3/4"	31,80	1,25	56,0	8000	224,0	32000	270,0	10,63	1,710	1,15
1003066	16	25,0	1"	39,60	1,56	56,0	8000	224,0	32000	300,0	11,81	2,471	1,67

// BOP - FIRESAFE 5000



API 16-D FLAME RESISTANCE

Tube: oil resistant synthetic rubber.

Reinforcement: four/six high tensile steel spirals.

Cover: oil and fire resistant red synthetic rubber.

MSHA APPROVED

LLOYD'S type approval on hose assemblies

Application: high pressure hydraulic lines in blow out preventer system, where continuous operation in case of fire is required.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1"1/4

Item Code	Constr.	↔			↔		↺		↻		↻		↻		↻	
		Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	kg/m	lb/ft
1001245	4WS	04	6,0	1/4"	25,30	1,00	35,0	5000	140,0	20000	150,0	5,91	0,710	0,48		
1001250	4WS	06	10,0	3/8"	28,10	1,11	35,0	5000	140,0	20000	180,0	7,09	1,134	0,77		
1001244	4WS	08	13,0	1/2"	31,00	1,22	35,0	5000	140,0	20000	230,0	9,06	1,280	0,87		
1001249	4WS	12	19,0	3/4"	38,80	1,53	35,0	5000	140,0	20000	300,0	11,81	1,860	1,26		
1001243	4WS	16	25,0	1"	46,00	1,81	35,0	5000	140,0	20000	340,0	13,39	2,690	1,81		
1001247	4WS	20	32,0	1 1/4"	53,10	2,09	35,0	5000	140,0	20000	460,0	18,11	3,340	2,25		
1001246	6WS	24	38,0	1 1/2"	64,90	2,56	35,0	5000	140,0	20000	560,0	22,05	5,870	3,95		
1001248	6WS	32	51,0	2"	78,70	3,10	35,0	5000	140,0	20000	700,0	27,56	7,780	5,23		

POWERFLEX^{Bio}

NEW EXTRA FLEXIBLE BIO OIL RESISTANT HOSE RANGE



POWERFLEX^{Bio}

- SPECIALLY DESIGNED FOR BIO OIL FULL COMPABILITY
- EXTREME FLEXIBILITY. UP TO 50% BETTER BAND RADIUS COMPARED TO SAE 100R
- MINETUFF COVER FOR TOP ABRASION & OZONE RESISTANCE
- MSHA-APPROVED FIRE RESISTANT COVER



BEND RADIUS
Standard SAE 100R

BEND RADIUS
reduced up to 50%

// POWERFLEXBIO

// POWERFLEXBIO 3000 - HI-TUFF



ISO 18752 - EXCEEDS SAE 100 R12

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: 61 m from 1 1/4" to 3"

Item Code	Const.	↔			↔									
		Dash	mm	in	mm	in								
1001742	4WS	20	32,0	1 1/4"	45,70	1,80	21,0	3000	84,0	12000	230,0	9,06	2,245	1,51

Notes: also available with TUFLEX cover

// POWERFLEXBIO 4000 - HI-TUFF



ISO 18752

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1"1/4"

Item Code	↔			↔										
	Dash	mm	in	mm	in									
1001743	12	19,0	3/4"	29,50	1,16	28,0	4000	112,0	16000	120,0	4,72	1,019	0,69	
1001744	16	25,0	1"	37,50	1,48	28,0	4000	112,0	16000	150,0	5,91	1,637	1,11	
1002490	20	32,0	1 1/4"	46,40	1,83	28,0	4000	112,0	16000	260,0	10,24	2,264	1,53	
1002799	24	38,0	1 1/2"	51,80	2,04	29,0	4200	116,0	16800	420,0	16,54	2,864	1,93	
1002491	32	51,0	2"	67,60	2,66	28,0	4000	112,0	16000	630,0	24,80	4,475	3,01	

Notes: also available with TUFLEX cover

Dimensions shown may be changed without prior notice

// POWERFLEXBIO 5000 - HI-TUFF



ISO 18752

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1"1/4

Item Code	Constr.	↔↔↔			↔↔↔		↻		↻		↷		⬮	
		Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001745	4WS	10	16,0	5/8"	25,90	1,02	35,0	5000	140,0	20000	140,0	5,51	0,873	0,59
1001746	4WS	12	19,0	3/4"	31,00	1,22	35,0	5000	140,0	20000	150,0	5,91	1,228	0,83
1001747	4WS	16	25,0	1"	37,80	1,49	35,0	5000	140,0	20000	180,0	7,09	1,678	1,13
1001748	4WS	20	32,0	1 1/4"	45,80	1,80	35,0	5000	140,0	20000	280,0	11,02	2,521	1,70
1001946	6WS	24	38,0	1 1/2"	56,50	2,22	35,0	5000	140,0	20000	500,0	19,69	4,483	3,02
1001947	6WS	32	51,0	2"	70,20	2,76	35,0	5000	140,0	20000	550,0	21,65	6,159	4,14

Notes: also available with TUFLEX cover

// POWERFLEXBIO 5000 PLUS - HI-TUFF



ISO 18752

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: random

Item Code	↔↔↔			↔↔↔		↻		↻		↷		⬮	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001749	12	19,0	3/4"	31,40	1,24	38,0	5500	152,0	22040	180,0	7,09	1,338	0,90
1001734	16	25,0	1"	38,00	1,50	38,0	5500	152,0	22040	210,0	8,27	1,918	1,29

Notes: also available with TUFLEX cover

// POWERFLEXBIO 6000 - HI-TUFF



ISO 18752 - EXCEEDS SAE 100 R15

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1"1/4

Item Code	Const.	↔			↔		↻		↻		↵		⬆	
		Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001751	4WS	04	6,0	1/4"	16,90	0,67	45,0	6550	180,0	26200	60,0	2,36	0,540	0,37
1001752	4WS	06	10,0	3/8"	19,90	0,78	44,5	6450	178,0	25800	75,0	2,95	0,620	0,42
1001735	4WS	08	13,0	1/2"	23,00	0,91	42,0	6000	168,0	24000	90,0	3,54	0,749	0,51
1001736	4WS	10	16,0	5/8"	28,00	1,10	42,0	6000	168,0	24000	180,0	7,09	1,190	0,80
1001737	4WS	12	19,0	3/4"	31,20	1,23	42,0	6000	168,0	24000	210,0	8,27	1,429	0,97
1001738	4WS	16	25,0	1"	37,80	1,49	42,0	6000	168,0	24000	250,0	9,84	2,026	1,37
1002492	4WS	20	32,0	1 1/4"	46,10	1,81	42,0	6000	168,0	24000	445,0	17,52	2,920	1,97
1002493	6WS	20	32,0	1 1/4"	49,40	1,94	42,0	6000	168,0	24000	445,0	17,52	3,401	2,29
1002494	6WS	24	38,0	1 1/2"	56,50	2,22	42,0	6000	168,0	24000	530,0	20,87	4,480	3,02

Notes: also available with TUFLEX cover

// TUFLEX

// 241X - SUPERSLIMLINE - TUFLEX



ISO 11237 - SAE 100 R16 - EN 857 2SC

Tube: oil resistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for excellent abrasion resistance and long service life in heavy duty applications.

MSHA APPROVED

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	↔			↔		↙ ↘		↙ ↘		↗ ↘		↗ ↘	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001077	04	6,0	1/4"	13,20	0,52	45,0	6550	180,0	26200	51,0	2,01	0,275	0,19
1001078	05	8,0	5/16"	15,00	0,59	40,0	5850	160,0	23200	57,0	2,24	0,328	0,23
1001079	06	10,0	3/8"	17,40	0,69	35,0	5000	140,0	20000	64,0	2,52	0,393	0,27
1001081	08	13,0	1/2"	20,60	0,81	31,0	4500	124,0	18000	90,0	3,54	0,528	0,36
1001082	10	16,0	5/8"	23,70	0,93	28,0	4000	112,0	16000	101,0	3,98	0,614	0,42
1001083	12	19,0	3/4"	27,70	1,09	28,0	4000	112,0	16000	121,0	4,76	0,826	0,56
1001084	16	25,0	1"	35,60	1,40	21,0	3000	84,0	12000	150,0	5,91	1,300	0,88

// HIGH TEMPERATURE

// 241T - SUPERSLIMLINE HIGH TEMP

**ISO 11237 - SAE 100 R16 - EN 857 2SC (up to 1")****Tube:** oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant blue synthetic rubber.**MSHA APPROVED****Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for high temperature applications.**Constant operation:** -40 °C +135 °C (-40 °F +275 °F)
air max T = +70 °C (+160 °F)**Length:** random

Item Code	↔			↔		↔		↔		↔		↔	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1002803	04	6,0	1/4"	13,40	0,53	42,0	6000	160,0	23200	51,0	2,01	0,260	0,18
1002804	05	8,0	5/16"	15,00	0,59	37,5	5500	150,0	22000	57,0	2,24	0,310	0,21
1002805	06	10,0	3/8"	17,40	0,69	35,0	5000	140,0	20000	64,0	2,52	0,390	0,27
1002806	08	13,0	1/2"	20,60	0,81	31,0	4500	124,0	18000	90,0	3,54	0,520	0,35
1002807	10	16,0	5/8"	23,70	0,93	28,0	4000	112,0	16000	101,0	3,98	0,600	0,41
1002808	12	19,0	3/4"	27,70	1,09	24,0	3500	96,0	14000	121,0	4,76	0,825	0,56
1002809	16	25,0	1"	35,60	1,40	21,0	3000	84,0	12000	152,0	5,98	1,230	0,83
1002810	20	32,0	1 1/4"	43,30	1,70	14,5	2100	58,0	8400	360,0	14,17	1,339	0,90
1002811	24	38,0	1 1/2"	49,90	1,96	12,5	1820	50,0	7280	430,0	16,93	1,857	1,25
1002812	32	51,0	2"	63,50	2,50	10,0	1500	40,0	5850	550,0	21,65	2,550	1,72
1002813	40	63,0	2 1/2"	76,40	3,01	7,5	1100	30,0	4300	720,0	28,35	3,300	2,22
1002814	48	76,0	3"	90,00	3,54	7,0	1000	28,0	4000	880,0	34,65	3,850	2,59

// COMMANDER 1SN



ISO 1436-1 - SAE 100 R1AT - EN 853 1SN

Tube: oil resistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** abrasion, ozone and hydrocarbon resistant blue synthetic rubber.**MSHA APPROVED****Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for high temperature applications. Not recommended for steam service.**Constant operation:** -40 °C +150 °C (-40 °F +300 °F)
air max T = +110 °C (+230 °F)**Length:** random up to 1" - 61 m max over 1"1/4

Item Code	↔			↔		↻		↻		↻		↻	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1000556	04	6,0	1/4"	13,40	0,53	22,5	3250	90,0	13000	100,0	3,94	0,213	0,15
1000557	04	6,0	1/4"	13,40	0,53	22,5	3250	90,0	13000	100,0	3,94	0,213	0,15
1000332	06	10,0	3/8"	17,40	0,69	18,0	2610	72,0	10500	130,0	5,12	0,330	0,23
1000558	06	10,0	3/8"	17,40	0,69	18,0	2610	72,0	10500	130,0	5,12	0,330	0,23
1000445	08	13,0	1/2"	20,60	0,81	16,0	2320	64,0	9280	180,0	7,09	0,420	0,29
1000559	08	13,0	1/2"	20,60	0,81	16,0	2320	64,0	9280	180,0	7,09	0,420	0,29
1000360	10	16,0	5/8"	23,70	0,93	13,0	1900	52,0	7560	200,0	7,87	0,515	0,35
1000560	10	16,0	5/8"	23,70	0,93	13,0	1900	52,0	7560	200,0	7,87	0,515	0,35
1000561	12	19,0	3/4"	27,70	1,09	10,5	1530	42,0	6000	240,0	9,45	0,651	0,44
1000333	12	19,0	3/4"	27,70	1,09	10,5	1530	42,0	6000	240,0	9,45	0,651	0,44
1000361	16	25,0	1"	35,60	1,40	8,8	1280	35,2	5100	300,0	11,81	0,997	0,68
1000562	16	25,0	1"	35,60	1,40	8,8	1280	35,2	5100	300,0	11,81	0,997	0,68
1000563	20	32,0	1 1/4"	43,50	1,71	6,3	920	25,2	3680	420,0	16,54	1,300	0,88
1000564	20	32,0	1 1/4"	43,50	1,71	6,3	920	25,2	3680	420,0	16,54	1,300	0,88
1000565	24	38,0	1 1/2"	50,60	1,99	5,0	730	20,0	2900	500,0	19,69	1,480	1,00
1000566	24	38,0	1 1/2"	50,60	1,99	5,0	730	20,0	2900	500,0	19,69	1,480	1,00
1001554	32	51,0	2"	64,00	2,52	4,0	600	16,0	2320	630,0	24,80	2,000	1,35
1000567	32	51,0	2"	64,00	2,52	4,0	600	16,0	2320	630,0	24,80	2,000	1,35

// COMMANDER 2SN



ISO 1436-1 - SAE 100 R2AT - EN 853 2SN

Tube: oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant blue synthetic rubber.**MSHA APPROVED****Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for high temperature applications. Not recommended for steam service.**Constant operation:** -40 °C +150 °C (-40 °F +300 °F)
air max T = +110 °C (+230 °F)**Length:** random up to 1" - 61 m max over 1"1/4

Item Code	↔			↔		↻		↻		↻		↻	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1000447	04	6,0	1/4"	15,00	0,59	40,0	5850	160,0	23200	100,0	3,94	0,360	0,25
1000334	06	10,0	3/8"	19,10	0,75	33,0	4800	132,0	19200	125,0	4,92	0,512	0,35
1000335	08	13,0	1/2"	22,20	0,87	28,0	4000	112,0	16000	175,0	6,89	0,640	0,44
1000349	10	16,0	5/8"	25,40	1,00	25,0	3630	100,0	14500	200,0	7,87	0,794	0,54
1000350	12	19,0	3/4"	29,30	1,15	21,5	3120	86,0	12500	240,0	9,45	0,932	0,63
1000351	16	25,0	1"	38,10	1,50	16,5	2400	66,0	9600	300,0	11,81	1,320	0,89
1000362	20	32,0	1 1/4"	48,30	1,90	12,5	1820	50,0	7280	420,0	16,54	1,930	1,30
1000352	24	38,0	1 1/2"	54,60	2,15	9,0	1310	36,0	5240	500,0	19,69	2,410	1,62
1000448	32	51,0	2"	67,40	2,65	8,0	1200	32,0	4640	630,0	24,80	2,960	1,99

// LOW TEMPERATURE

// 261E - HYPERCOLD SUPERSLIMLINE



Tube: oil resistant ultra low temperature synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: oil, water, ozone and ultra low temperature resistant synthetic rubber.

Application: hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils. Specially designed for ultra low temperature applications.

Constant operation: -55 °C +100 °C (-67 °F +212 °F)
air max T = +70 °C (+160 °F)

Length: random

Item Code	↔			↔		↻		↻		↷		⬮	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001556	04	6,0	1/4"	13,20	0,52	42,0	6000	168,0	24000	51,0	2,01	0,280	0,19
1002432	05	8,0	5/16"	14,80	0,58	37,5	5500	150,0	22000	57,0	2,24	0,310	0,21
1001557	06	10,0	3/8"	17,40	0,69	35,0	5000	140,0	20000	64,0	2,52	0,390	0,27
1001491	08	13,0	1/2"	20,70	0,81	31,0	4500	124,0	18000	90,0	3,54	0,520	0,35
1001941	10	16,0	5/8"	23,70	0,93	28,0	4000	112,0	16000	101,0	3,98	0,600	0,41
1001559	12	19,0	3/4"	27,60	1,09	24,0	3500	96,0	14000	121,0	4,76	0,810	0,55
1001560	16	25,0	1"	35,60	1,40	21,0	3000	84,0	12000	152,0	5,98	1,220	0,82
1003108	20	32,0	1 1/4"	43,30	1,70	14,0	2000	58,0	8400	360,0	14,17	1,390	0,94
1002790	24	38,0	1 1/2"	49,90	1,96	12,5	1820	50,0	7280	430,0	16,93	1,863	1,26

// 3SPE - HYPERCOLD SUPERFOREST



Tube: oil resistant ultra low temperature synthetic rubber.

Reinforcement: three high tensile steel braids.

Cover: oil, water, ozone and ultra low temperature resistant synthetic rubber.

Application: hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils. Specially designed for ultra low temperature applications.

Constant operation: -55 °C +100 °C (-67 °F +212 °F)
air max T = +70 °C (+160 °F)

Length: random

Item Code	↔			↔		↻		↻		↷		⬮	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001093	08	13,0	1/2"	24,80	0,98	46,9	6800	188,0	27200	160,0	6,30	0,909	0,62
1002293	10	16,0	5/8"	28,30	1,11	41,4	6000	164,0	23500	210,0	8,27	1,146	0,78
1001094	12	19,0	3/4"	32,20	1,27	37,5	5500	150,0	22000	260,0	10,24	1,490	1,01
1001095	16	25,0	1"	40,40	1,59	33,0	4800	130,8	19000	310,0	12,20	2,100	1,42

// 735E - HYPERCOLD 4SP



EN 856 4SP

Tube: oil resistant ultra low temperature synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: oil, water, ozone and ultra low temperature resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for ultra low temperature applications.

Constant operation: -55 °C +100 °C (-67 °F +212 °F)
air max T = +70 °C (+160 °F)

Length: random

Notes: specification reference: SAE 100 R15 (1/1, 3/8, 1/2)

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1002955	04	6,0	1/4"	17,90	0,70	45,0	6550	180,0	26200	150,0	5,91	0,580	0,39
1002957	06	10,0	3/8"	21,40	0,84	44,5	6450	178,0	25800	180,0	7,09	0,749	0,51
1002958	08	13,0	1/2"	24,60	0,97	42,0	6000	168,0	24000	230,0	9,06	0,880	0,60
1002959	10	16,0	5/8"	28,20	1,11	35,0	5000	140,0	20000	250,0	9,84	1,060	0,72
1002960	12	19,0	3/4"	32,20	1,27	38,0	5500	152,0	22040	300,0	11,81	1,440	0,97
1002961	16	25,0	1"	39,70	1,56	32,0	4640	128,0	18560	340,0	13,39	1,960	1,32

// 795E - HYPERCOLD 4SH



EN 856 4SH

Tube: oil resistant ultra low temperature synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: oil, water, ozone and ultra low temperature resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for ultra low temperature applications.

Constant operation: -55 °C +100 °C (-67 °F +212 °F)
air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1"1/4

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1003507	12	19,0	3/4"	32,20	1,27	42,0	6000	168,0	24000	280,0	11,02	1,585	1,07
1003212	16	25,0	1"	38,70	1,52	38,0	5500	152,0	22040	340,0	13,39	1,957	1,32
1003021	20	32,0	1 1/4"	45,50	1,79	35,0	5000	140,0	20000	460,0	18,11	2,470	1,66
1003022	24	38,0	1 1/2"	53,50	2,11	29,0	4200	116,0	16800	560,0	22,05	3,270	2,20
1003023	32	51,0	2"	68,10	2,68	25,0	3630	100,0	14500	700,0	27,56	4,670	3,14

// OIL RETURN LINES

// FLEXOR R4 604



SAE 100 R4

Tube: oil resistant synthetic rubber.

Reinforcement: high tensile textile cords with embedded steel helix wire.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery. Specially designed for hydraulic oil return lines.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

Length: 61 m max

Item Code	↔			↔		↻		↻		↷		⏏	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001123	12	19,0	3/4"	30,00	1,18	2,1	300	8,4	1200	57,0	2,24	0,600	0,41
1001124	16	25,0	1"	36,00	1,42	1,7	250	6,8	986	75,0	2,95	0,740	0,50
1001126	20	32,0	1 1/4"	43,00	1,69	1,4	200	5,6	800	96,0	3,78	0,940	0,64
1001127	24	38,0	1 1/2"	49,00	1,93	1,0	150	4,0	600	114,0	4,49	1,080	0,73
1001128	32	51,0	2"	62,00	2,44	0,7	100	2,8	400	152,0	5,98	1,410	0,95
1001129	40	63,0	2 1/2"	76,00	2,99	0,4	60	1,6	240	189,0	7,44	2,040	1,38
1001130	48	76,0	3"	89,00	3,50	0,4	60	1,6	240	228,0	8,98	2,430	1,64
1001131	56	90,0	3 1/2"	104,00	4,09	0,3	45	1,2	180	270,0	10,63	3,000	2,02
1001132	64	102,0	4"	116,00	4,57	0,2	30	0,8	120	306,0	12,05	3,350	2,26

// FLEXOR R4 634

EXTRA FLEXIBLE
SAE 100 R4

Tube: oil resistant synthetic rubber.

Reinforcement: high tensile textile cords with embedded steel helix wire.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery. Specially designed for hydraulic oil return lines requiring tight bend radius.

Constant operation: -40 °C +100 °C (-40 °F +212 °F)

Length: 61 m max

Item Code	↔			↔		↻		↻		↷		⏏	
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001272	12	19,0	3/4"	30,00	1,18	2,1	300	8,4	1200	38,0	1,50	0,600	0,41
1001273	16	25,0	1"	36,00	1,42	1,7	250	6,8	986	50,0	1,97	0,750	0,51
1001275	20	32,0	1 1/4"	43,00	1,69	1,4	200	5,6	800	64,0	2,52	0,920	0,62
1001278	24	38,0	1 1/2"	49,00	1,93	1,0	150	4,0	600	76,0	2,99	1,060	0,72
1001280	32	51,0	2"	62,00	2,44	0,7	100	2,8	400	102,0	4,02	1,380	0,93
1001282	40	63,0	2 1/2"	76,00	2,99	0,4	60	1,6	240	125,0	4,92	2,180	1,47
1001284	48	76,0	3"	89,00	3,50	0,4	60	1,6	240	152,0	5,98	2,590	1,75
1001288	64	102,0	4"	116,00	4,57	0,2	30	0,8	120	203,0	7,99	3,400	2,29

Dimensions shown may be changed without prior notice

// FLEXOR R4 644 HT



EXTRA FLEXIBLE - HIGH TEMP SAE 100 R4

Tube: oil resistant synthetic rubber.
Reinforcement: high tensile textile cords with embedded steel helix wire.
Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.
MSHA APPROVED
Application: fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery. Specially designed for high temperature applications and hydraulic oil return lines requiring tight bend radius.
Constant operation: -40 °C +135 °C (-40 °F +275 °F)
Length: 61 m max

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1001277	12	19,0	3/4"	30,00	1,18	2,1	300	8,4	1200	38,0	1,50	0,630	0,43
1001274	16	25,0	1"	36,00	1,42	1,7	250	6,8	986	50,0	1,97	0,810	0,55
1001196	20	32,0	1 1/4"	43,00	1,69	1,4	200	5,6	800	64,0	2,52	1,000	0,68
1001279	24	38,0	1 1/2"	49,00	1,93	1,0	150	4,0	600	76,0	2,99	1,150	0,78
1001281	32	51,0	2"	62,00	2,44	0,7	100	2,8	400	102,0	4,02	1,490	1,01
1001283	40	63,0	2 1/2"	76,00	2,99	0,5	75	2,0	300	125,0	4,92	2,230	1,50
1001285	48	76,0	3"	89,00	3,50	0,5	75	2,0	300	152,0	5,98	2,750	1,85
1001290	64	102,0	4"	116,00	4,57	0,5	75	2,0	300	203,0	7,99	3,610	2,43

// PRESSURE WASH

// ALFAJET 210



Tube: oil, detergents and hot water resistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: smooth. Abrasion, ozone and hydrocarbon resistant blue synthetic rubber, pin-pricked. Black cover also available.

Application: high pressure power cleaners. Specially designed for hot water applications. Not recommended for steam service.

Length: random

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1000192	04	6,0	1/4"	12,10	0,48	21,0	3000	84,0	12000	50,0	1,97	0,180	0,13
1000185	05	8,0	5/16"	14,10	0,56	21,0	3000	84,0	12000	60,0	2,36	0,190	0,13
1000098	06	10,0	3/8"	15,60	0,61	21,0	3000	73,0	10588	65,0	2,56	0,274	0,19
1000166	08	13,0	1/2"	19,50	0,77	21,0	3000	73,0	10588	90,0	3,54	0,390	0,27

// ALFAJET 400



Tube: oil, detergents and hot water resistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: smooth. abrasion, ozone and hydrocarbon resistant blue synthetic rubber, pin-pricked. Black cover also available.

Application: high pressure power cleaners. Specially designed for hot water applications. Not recommended for steam service.

Length: random

Item Code													
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft
1000221	04	6,0	1/4"	13,20	0,52	40,0	5850	140,0	20000	70,0	2,76	0,253	0,18
1000220	05	8,0	5/16"	14,90	0,59	40,0	5850	140,0	20000	76,0	2,99	0,293	0,20
1000219	06	10,0	3/8"	16,70	0,66	40,0	5850	130,0	18900	90,0	3,54	0,380	0,26
1000218	08	13,0	1/2"	20,10	0,79	40,0	5850	120,0	17450	115,0	4,53	0,492	0,34

THE SAFE SOLUTION FOR WATERBLASTING APPLICATION



WATERBLAST

MAIN APPLICATION

- SURFACE PREPARATION AND CLEANING
- HYDRODEMOLITION
- WATER JET CUTTING

// WATERBLAST - WB10L



Tube: oil and water resistant synthetic rubber.

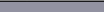
Reinforcement: four high tensile steel spirals.

Cover: oil, water and ozone resistant synthetic rubber.

Application: very high pressure water jetting.

Constant operation: -10 °C +70 °C (14 °F +158 °F)

Length: multiples of lengths shown in below grid.

Item Code														Length
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	m
1003795	08	13,0	1/2"	13,00	0,51	70,0	10000	175,0	25000	200,0	7,87	0,805	0,55	15,250
1003796	08	13,0	1/2"	13,00	0,51	70,0	10000	175,0	25000	200,0	7,87	0,805	0,55	20,000
1004044	12	19,0	3/4"	32,20	1,27	70,0	10000	175,0	25000	210,0	8,27	1,450	0,98	15,250
1004212	12	19,0	3/4"	32,20	1,27	70,0	10000	175,0	25000	210,0	8,27	1,450	0,98	20,000
1004213	16	25,0	1"	38,70	1,52	70,0	10000	175,0	25000	320,0	12,60	1,981	1,34	15,250
1004214	16	25,0	1"	38,70	1,52	70,0	10000	175,0	25000	320,0	12,60	1,981	1,34	20,000

// WATERBLAST - WB15L



Tube: oil and water resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: oil, water and ozone resistant synthetic rubber.

Application: very high pressure water jetting.

Constant operation: -10 °C +70 °C (14 °F +158 °F)

Length: multiples of lengths shown in below grid.

Item Code														Length
	Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	m
1003471	06	10,0	3/8"	21,40	0,84	124,0	18000	310,0	45000	150,0	5,91	0,850	0,58	15,250
1003470	06	10,0	3/8"	21,40	0,84	124,0	18000	310,0	45000	150,0	5,91	0,850	0,58	20,000
1003473	08	13,0	1/2"	24,40	0,96	110,0	16000	275,0	40000	200,0	7,87	1,120	0,76	15,250
1003472	08	13,0	1/2"	24,40	0,96	110,0	16000	275,0	40000	200,0	7,87	1,120	0,76	20,000
1003475	12	19,0	3/4"	32,00	1,26	100,0	14500	250,0	36000	280,0	11,02	1,683	1,14	15,250
1003474	12	19,0	3/4"	32,00	1,26	100,0	14500	250,0	36000	280,0	11,02	1,683	1,14	20,000

Dimensions shown may be changed without prior notice

// WATERBLAST - WB20L

**Tube:** oil and water resistant synthetic rubber.**Reinforcement:** four or six high tensile steel spirals or four high tensile steel spiral and one steel braid.**Cover:** oil, water and ozone resistant synthetic rubber.**Application:** very high pressure water jetting.**Constant operation:** -10 °C +70 °C (14 °F +158 °F)**Length:** multiples of lengths shown in below grid.

Item Code	Const.	↔			↔		↙ ↘		↙ ↘		↙ ↘		↙ ↘		Length
		Dash	mm	in	mm	in	Mpa	psi	Mpa	psi	mm	in	kg/m	lb/ft	
1004171	4WS	04	6,0	1/4"	16,20	0,64	140,0	20000	350,0	50000	125,0	4,92	0,609	0,41	15,250
1004172	4WS	04	6,0	1/4"	16,20	0,64	140,0	20000	350,0	50000	125,0	4,92	0,609	0,41	20,000
1004175	4WS	05	8,0	5/16"	17,30	0,68	140,0	20000	350,0	50000	135,0	5,31	0,660	0,45	15,250
1004176	4WS	05	8,0	5/16"	17,30	0,68	140,0	20000	350,0	50000	135,0	5,31	0,660	0,45	20,000
1004178	4WS+1WB	06	10,0	3/8"	22,00	0,87	140,0	20000	350,0	50000	150,0	5,91	1,021	0,69	15,250
1004179	4WS+1WB	06	10,0	3/8"	22,00	0,87	140,0	20000	350,0	50000	150,0	5,91	1,021	0,69	20,000
1003798	4WS+1WB	08	13,0	1/2"	29,50	1,16	140,0	20000	350,0	50000	200,0	7,87	1,433	0,97	15,250
1003799	4WS+1WB	08	13,0	1/2"	29,50	1,16	140,0	20000	350,0	50000	200,0	7,87	1,433	0,97	20,000
1004181	6WS	12	19,0	3/4"	35,00	1,38	140,0	20000	350,0	50000	300,0	11,81	2,529	1,70	15,250
1004182	6WS	12	19,0	3/4"	35,00	1,38	140,0	20000	350,0	50000	300,0	11,81	2,529	1,70	20,000

// PTFE HOSE

// 9TS 0M


**SMOOTH PTFE STAINLESS STEEL BRAID
STANDARD DUTY
EXCEEDS SAE 100 R14**

Tube: smooth ptfе - high mechanical and vibration resistance, low permeability, dielectrical, fire resistant, food grade (FDA, DVGW, BFR compliant). Chemically inert, non sticking, ozone and weather resistant.

Reinforcement: high tensile stainless steel braid AISI 304.

Application: compressed air, gas, steam, fuel, oil, chemical and pharmaceutical products, particularly suitable for steam piping on injection moulding machines, diathermic oil installations, charging lines for cryogenic gas, compressor discharge lines, automotive, pharmaceutical and food sectors. Solvents, pigments and paint transfer lines. Hydraulic lines in power steering marine applications. Not suitable for molten alkali metals and halogens at high temperature.

Constant operation: -60 °C +260 °C (-76 °F +500 °F)

Item Code									
	mm	in	mm	mm	Mpa	psi	mm	in	kg/m
2600557	5,0	3/16"	7,86	0,89	27,6	4000	51,0	2,01	0,090
2600558	6,0	1/4"	8,64	0,64	24,1	3500	76,0	2,99	0,090
2600559	8,0	5/16"	11,05	0,64	20,7	3000	102,0	4,02	0,130
2600560	10,0	3/8"	12,65	0,64	18,3	2600	127,0	5,00	0,150
2600561	13,0	1/2"	15,40	0,76	16,1	2300	140,0	5,51	0,200
2600562	16,0	5/8"	18,40	0,89	13,8	2000	165,0	6,50	0,270
2600563	19,0	3/4"	22,10	0,89	11,4	1600	203,0	7,99	0,330
2600564	25,0	1"	29,75	1,10	6,9	1000	305,0	12,01	0,520

// 9TC OM



CONVOLUTED PTFE STAINLESS STEEL BRAID

Tube: smooth ptfе - high mechanical and vibration resistance, low permeability, dielectrical, fire resistant, food grade (FDA, DVGW, BFR compliant). Chemically inert, non sticking, ozone and weather resistant.

Reinforcement: high tensile stainless steel braid AISI 304.

Application: compressed air, gas, steam, fuel, oil, chemical and pharmaceutical products, particularly suitable for steam piping on injection moulding machines, diathermic oil installations, charging lines for cryogenic gas, compressor discharge lines, automotive, pharmaceutical and food sectors. Solvents, pigments and paint transfer lines. Hydraulic lines in power steering marine applications. Not suitable for molten alkali metals and halogens at high temperature.

Constant operation: -60 °C +260 °C (-76 °F +500 °F)

Item Code									
	mm	in	mm	mm	Mpa	psi	mm	in	kg/m
2600574	13,0	1/2"	18,80	0,89	10,3	1500	25,0	0,98	0,280
2600575	16,0	5/8"	22,10	0,89	8,3	1200	51,0	2,01	0,330
2600576	19,0	3/4"	24,65	0,89	6,9	1000	64,0	2,52	0,400
2600577	25,0	1"	32,77	1,02	4,6	670	89,0	3,50	0,550
2600578	32,0	1 1/4"	40,72	1,02	3,4	525	127,0	5,00	0,690
2600579	38,0	1 1/2"	48,25	1,12	3,0	450	152,0	5,98	0,890
2600580	51.0	2"	61.50	1.20	2.3	345	200.0	7.87	1.240



// FERRULE SELECTION CHART

// NO SKIVE	41
// SKIVE	42

// INTERLOCK	43
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// NO SKIVE FERRULE FOR STANDARD FITTINGS

Hose	Table n°	-03 DN 5 3/16"	-04 DN 6 1/4"	-05 DN 8 5/16"	-06 DN 10 3/8"	-08 DN 12 1/2"	-10 DN 16 5/8"	-12 DN 19 3/4"	-16 DN 25 1"	-20 DN 32 1 1/4"	-24 DN 38 1 1/2"	-32 DN 51 2"	-40 DN 63 2 1/2"
ARGUS 1TE/R6 PLUS	209		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1				
ARGUS 2TE PLUS	210		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100404	H1100404	H1100SK1				
2TE RAILWAY	210		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100404	H1100404	H1100SK1				
ARGUS 3TE/R3 PLUS	252		H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2	
550A - TWB1	200	H1200TP0	H1200TP0	H1200TP0	H1200TP0	H1200TP0	H1200TP0	H1200TP0	H1200TP0				
570A - R7	198	H1200TP0	H1200TP0	H1200TP0	H1200TP0	H1200TP0							
580A - R8	199	H1200TP0	H1200TP0	H1200TP0	H1200TP0	H1200TP0							
PLT - PILOT	197	H1200TP0	H1100SK1	H1200TP0	H1200TP0	H1200TP0							
121T SLIMLINE PLUS - 1SC	178		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1				
	206	H1200TP0		H1200TP0	H1200TP0	H1200TP0							
141T SUPERSLIMLINE	185		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1				
	248	H1200TP0		H1200TP0	H1200TP0	H1200TP0							
ALFAJET 210	248			H1200TP0	H1200TP0	H1200TP0							
	185		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1				
221T - SLIMLINE PLUS - 2SC	176		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1				
2SC RAILWAY	176		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1				
ALFAJET 400	176		H1200AD1	H1200AD1	H1200AD1	H1200AD1							
241T - SUPERSLIMLINE - HI-TUFF	177		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200TX2
241X - SUPERSLIMLINE - TUFLEX	177		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1				
241T - SUPERSLIMLINE - HIGH TEMP	177		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200TX2
261E - SUPERSLIMLINE LT	177		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1			
122T PLUS - 1SN/R1AT	173	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	
COMMANDER 1SN	179		H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	H1200AD1	
222T PLUS - 2SN/R2AT	174	H1200AD2	H1200AD2	H1200AD2	H1200AD2	H1200AD2	H1200AD2	H1200AD2	H1200AD2	H1200AD2	H1200AD2	H1200AD2	
POWERFLEXBIO 3000 HI-TUFF	186									H1200204	H1200204		
POWERFLEXBIO 4000 HI-TUFF	194							H1200204	H1200204	H1200204			
POWERFLEXBIO 5000 HI-TUFF	258						H1200204						
POWERFLEXBIO 6000 HI-TUFF	259				H1200204	H1200204							
FLEXOR R4 604/634/644	018							H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2	H1200TX2
9TS OM	201	H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0				
9TC OM	203				H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0	H2200TF0	

// SKIVE FERRULE FOR STANDARD FITTINGS

Hose	Table n°	-03 DN 5 3/16"	-04 DN 6 1/4"	-05 DN 8 5/16"	-06 DN 10 3/8"	-08 DN 12 1/2"	-10 DN 16 5/8"	-12 DN 19 3/4"	-16 DN 25 1"	-20 DN 32 1 1/4"	-24 DN 38 1 1/2"	-32 DN 51 2"	-40 DN 63 2 1/2"	-48 DN 76 3"
121T SLIMLINE PLUS - 1SC	208		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
141T SUPERSLIMLINE	239		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
ALFAJET 210	239		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
122T PLUS - 1SN/R1AT	223		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
COMMANDER 1SN	240		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
221T - SLIMLINE PLUS - 2SC	222		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
ALFAJET 400	222		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
241T - SUPERSLIMLINE - HI-TUFF	207		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100404	H1100104	H1100404		
241X - SUPERSLIMLINE - TUFLEX	207		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1					
241T - SUPERSLIMLINE - HIGH TEMP	207		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100404	H1100104	H1100404		
261E - SUPERSLIMLINE LT	207		H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100SK1	H1100404				
222T PLUS - 2SN/R2AT	235		H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404		
COMMANDER 2SN	237		H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404	H1100404		
735E - POWERTRAK - 4SP LT	41		H1100404		H1100404	H1100404	H1100404	H1100404	H1100404					
3SPT - SUPERFOREST	33				H1100404	H1100404	H1100404	H1100404	H1100404	H1100404				
3SPE - SUPERFOREST LT	33				H1100404	H1100404	H1100404	H1100404	H1100404	H1100404				
POWERFLEXBIO 3000 HI-TUFF	229									H1100404	H1100404	H1100404		
POWERFLEXBIO 4000 HI-TUFF	187					H1100404		H1100404	H1100404					
POWERFLEXBIO 5000 HI-TUFF	188						H1100404	H1100404	H1100404					
POWERFLEXBIO 5000 PLUS HI-TUFF	211							H1100404						
POWERFLEXBIO 6000 HI-TUFF	192		H1100404		H1100404	H1100404								
WATERBLAST - WB10L	281				H1100404									
BOP FIRESAFE 5000	-		H1100404		H1100404	H1100404		H1100404						

// INTERLOCK FERRULE FOR INTERLOCK FITTINGS

Hose	Table n°	-06 DN 10 3/8"	-08 DN 12 1/2"	-10 DN 16 5/8"	-12 DN 19 3/4"	-16 DN 25 1"	-20 DN 32 1 1/4"	-24 DN 38 1 1/2"	-32 DN 51 2"	-40 DN 63 2 1/2"	-48 DN 76 3"
795E - POWERTRAK - LT	8				H1400200	H1400200	H1400200	H1400200	H1400200		
POWERFLEXBIO 3000 HI-TUFF	217										H1T00600
POWERFLEXBIO 4000 HI-TUFF	195					H1400200		H1400200	H1400200		
POWERFLEXBIO 5000 HI-TUFF	189				H1400200	H1400200	H1400200	H1400301	H1400301		
POWERFLEXBIO 5000 PLUS HI-TUFF	190				H1400200	H1400200					
POWERFLEXBIO 6000 HI-TUFF - 4S	191			H1400301	H1400200	H1400200	H1400301				
POWERFLEXBIO 6000 HI-TUFF - 6S							H1400301	H1400301			
490 - POWERTRAK - AT7K - HI-TUFF	101			H1400301			H1400301	H1400301			
560 - POWERTRAK - AT8K - HI-TUFF	102				H1400301	H1T00600*					
BOP FIRESAFE 5000	-					H1400200	H1400200	H1400301	H1400301		

* suitable with only ALFAGOMMA H1T special inserts

Hose	Table n°	-03 DN 5 3/16"	-04 DN 6 1/4"	-05 DN 8 5/16"	-06 DN 10 3/8"	-08 DN 12 1/2"	-10 DN 16 5/8"	-12 DN 19 3/4"	-16 DN 25 1"	-20 DN 32 1 1/4"	-24 DN 38 1 1/2"
WATERBLAST - WB10L	281					H1400200*			H1400200*	H1400200*	
	-				D990000	D990000			D990000	D990000	
WATERBLAST - WB15L	284				D990000	D990000			D990000		
WATERBLAST - WB20L	285		D990000	D990000	D980000	D980000			D980000		

* to be used with Interlock H14 series inserts

// NO SKIVE FERRULE FOR NEW POWERTRAK FITTINGS

Hose	Table n°	-06 DN 10 3/8"	-08 DN 12 1/2"	-10 DN 16 5/8"	-12 DN 19 3/4"	-16 DN 25 1"	-20 DN 32 1 1/4"	-24 DN 38 1 1/2"	-32 DN 51 2"	-40 DN 63 2 1/2"	-48 DN 76 3"
POWERFLEXBIO 4000 HI-TUFF	275							H1300NS4	H1300NS4		
POWERFLEXBIO 5000 HI-TUFF - 4S	276				H1300NS4	H1300NS4	H1300NS4				
POWERFLEXBIO 5000 HI-TUFF - 6S	280							H1300NS6	H1300NS6		
POWERFLEXBIO 5000 PLUS HI-TUFF	277				H1300NS4	H1300NS4					
POWERFLEXBIO 6000 HI-TUFF - 4S	278				H1300NS4	H1300NS4					
POWERFLEXBIO 6000 HI-TUFF - 6S	282						H1300NS6				

// SKIVE FERRULE FOR NEW POWERTRAK FITTINGS

Hose	Table n°	-06 DN 10 3/8"	-08 DN 12 1/2"	-10 DN 16 5/8"	-12 DN 19 3/4"	-16 DN 25 1"	-20 DN 32 1 1/4"	-24 DN 38 1 1/2"	-32 DN 51 2"	-40 DN 63 2 1/2"	-48 DN 76 3"
POWERFLEXBIO 4000 HI-TUFF	264							H1300SK4	H1300SK4		
POWERFLEXBIO 5000 HI-TUFF	265				H1300SK4	H1300SK4	H1300SK4				
POWERFLEXBIO 5000 PLUS HI-TUFF	266				H1300SK4	H1300SK4					
POWERFLEXBIO 6000 HI-TUFF	267				H1300SK4	H1300SK4					

TOP COAT

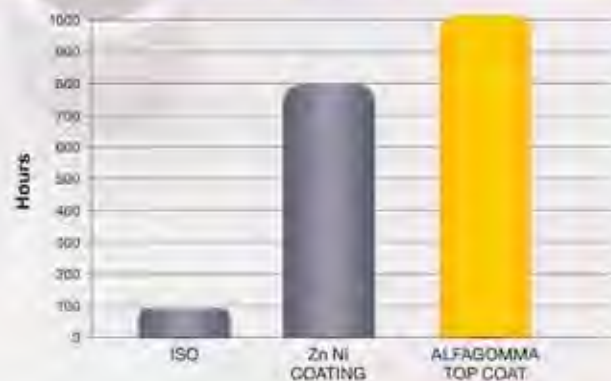
**OVER 10 TIMES
HIGHER THAN
STANDARD**



TOP COAT

Resistance to red rust in salt fog
(test in compliance with ISO 9227)

- TESTED IN ACCORDANCE WITH ASTM B117-03 AND UNI ISO 9227 STANDARDS
- OVER 500 HOURS CORROSION PREVENTION IN SALT SPRAY FOG TO WHITE RUST
- MORE THAN 1000 HOURS CORROSION RESISTANCE TO RED RUST





// STANDARD

// FERRULES.....	46	// NPTF INSERTS.....	78
// HOSE MENDER.....	48	// NPSM INSERTS.....	80
// BSP INSERTS.....	49	// ORFS INSERTS.....	81
// DIN METRIC INSERTS.....	56	// FRENCH INSERTS.....	85
// PRESSURE WASHER.....	70	// JIS INSERTS.....	86
// SAE INSERTS.....	71	// KOMATSU INSERTS.....	88
// JIC 37° INSERTS.....	72	// SAE FLANGES.....	90

// FERRULES

H1100104
Skive Ferrule for 1SN
and 241T

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1201545	H1100104-200000	20	31,0	1 1/4"	50,0	43,8
1201546	H1100104-240000	24	38,0	1 1/2"	57,0	49,2
1201547	H1100104-320000	32	51,0	2"	71,0	63,7

H1100404
Skive Ferrule for 2SN
and Wire Spiral

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1202719	H1100404-040000	04	6,0	1/4"	22,0	26,3
1203253	H1100404-060000	06	10,0	3/8"	25,0	28,5
1203266	H1100404-080000	08	13,0	1/2"	29,0	34,7
1219132	H1100404-100000	10	16,0	5/8"	33,0	37,5
1203368	H1100404-120000	12	19,0	3/4"	37,0	41,5
1234701	H1100404-160000	16	25,0	1"	45,0	47,7
1234766	H1100404-200000	20	31,0	1 1/4"	55,0	54,5
1234767	H1100404-240000	24	38,0	1 1/2"	67,0	61,1
1234768	H1100404-320000	32	51,0	2"	82,0	75,1

H1100SK1
Skive Ferrule for 1 Wire
Braid and 2 Wire Braid
Compact Hoses

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1233077	H1100SK1-040000	04	6,0	1/4"	19,0	25,5
1233078	H1100SK1-050000	05	8,0	5/16"	21,0	25,5
1233079	H1100SK1-060000	06	10,0	3/8"	23,0	27,5
1233080	H1100SK1-080000	08	13,0	1/2"	27,0	33,5
1233081	H1100SK1-100000	10	16,0	5/8"	30,0	36,5
1233082	H1100SK1-120000	12	19,0	3/4"	33,0	40,0
1233083	H1100SK1-160000	16	25,0	1"	41,0	46,5

H1200204
No-skive Ferrule for
R12 and Powerflexbio
Hoses

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1216588	H1200204-060000	06	10,0	3/8"	30,0	28,0
1216589	H1200204-080000	08	13,0	1/2"	34,0	33,9
1216590	H1200204-100000	10	16,0	5/8"	38,0	36,6
1203322	H1200204-120000	12	19,0	3/4"	42,0	39,5
1203323	H1200204-160000	16	25,0	1"	50,0	47,5
1216591	H1200204-200000	20	31,0	1 1/4"	61,0	50,2

H1200AD1
No-skive Ferrule for 1
Wire Braid and 2 Wire
Braid Compact Hoses

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1227977	H1200AD1-030000	03	5,0	3/16"	19,0	24,0
1227978	H1200AD1-040000	04	6,0	1/4"	22,0	24,7
1227979	H1200AD1-050000	05	8,0	5/16"	23,0	24,7
1227980	H1200AD1-060000	06	10,0	3/8"	26,0	29,7
1227981	H1200AD1-080000	08	13,0	1/2"	29,0	30,5
1227983	H1200AD1-100000	10	16,0	5/8"	32,0	30,5
1227985	H1200AD1-120000	12	19,0	3/4"	36,0	36,0
1227986	H1200AD1-160000	16	25,0	1"	44,0	36,7
1227987	H1200AD1-200000	20	31,0	1 1/4"	53,0	48,6
1227988	H1200AD1-240000	24	38,0	1 1/2"	61,0	48,6
1227989	H1200AD1-320000	32	51,0	2"	75,0	48,6

H1200AD2
No-skive Ferrule for
2SN

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1227990	H1200AD2-030000	03	5,0	3/16"	21,0	21,5
1227991	H1200AD2-040000	04	6,0	1/4"	23,0	24,7
1227992	H1200AD2-050000	05	8,0	5/16"	25,0	24,7
1227993	H1200AD2-060000	06	10,0	3/8"	27,0	29,7
1227994	H1200AD2-080000	08	13,0	1/2"	30,0	30,5
1227995	H1200AD2-100000	10	16,0	5/8"	33,0	30,5
1227996	H1200AD2-120000	12	19,0	3/4"	37,0	36,0
1227997	H1200AD2-160000	16	25,0	1"	45,0	36,7
1227998	H1200AD2-200000	20	31,0	1 1/4"	56,0	48,6
1227999	H1200AD2-240000	24	38,0	1 1/2"	64,0	48,5
1228000	H1200AD2-320000	32	51,0	2"	78,0	48,6

Dimensions shown may be changed without prior notice

H1200TP0

No-skive Ferrule for Thermoplastic and 1 Wire Braid Compact Hoses



Item Code	Part Number	ID			B	L
		Dash	mm	in		
1232354	H1200TP0-030000	03	5,0	3/16"	15,0	22,0
1232358	H1200TP0-040000	04	6,0	1/4"	17,0	26,5
1232359	H1200TP0-050000	05	8,0	5/16"	19,0	26,5
1232360	H1200TP0-060000	06	10,0	3/8"	22,0	26,5
1232361	H1200TP0-080000	08	13,0	1/2"	26,0	30,5

H2200TF0

No-skive Ferrule for PTFE Hoses



Item Code	Part Number	ID			B	L
		Dash	mm	in		
1232132	H2200TF0-030000	03	5,0	3/16"	14,0	20,0
1232133	H2200TF0-040000	04	6,0	1/4"	15,0	25,0
1232134	H2200TF0-050000	05	8,0	5/16"	17,2	25,0
1232135	H2200TF0-060000	06	10,0	3/8"	22,0	25,0
1232136	H2200TF0-080000	08	13,0	1/2"	25,0	30,0
1232137	H2200TF0-100000	10	16,0	5/8"	30,0	33,0
1232138	H2200TF0-120000	12	19,0	3/4"	35,0	37,0
1232139	H2200TF0-160000	16	25,0	1"	42,0	45,0
1232140	H2200TF0-200000	20	31,0	1 1/4"	50,0	48,0
1232141	H2200TF0-240000	24	38,0	1 1/2"	57,0	58,0
1232142	H2200TF0-320000	32	51,0	2"	73,0	67,0

H1200TX2

No-skive Ferrule for 3TE, R4, R5 and 241T -40



Item Code	Part Number	ID			B	L
		Dash	mm	in		
1236581	H1200TX2-030000	03	5,0	3/16"	21,0	21,5
1236582	H1200TX2-040000	04	6,0	1/4"	23,0	24,7
1236583	H1200TX2-050000	05	8,0	5/16"	25,0	24,7
1236584	H1200TX2-060000	06	10,0	3/8"	27,0	29,7
1236585	H1200TX2-080000	08	13,0	1/2"	30,0	30,5
1236586	H1200TX2-100000	10	16,0	5/8"	34,0	35,5
1236587	H1200TX2-120000	12	19,0	3/4"	38,0	36,0
1236588	H1200TX2-160000	16	25,0	1"	48,0	42,5
1236589	H1200TX2-200000	20	31,0	1 1/4"	53,0	56,5
1236590	H1200TX2-240000	24	38,0	1 1/2"	60,0	61,5
1236591	H1200TX2-320000	32	51,0	2"	76,0	73,5
1236592	H1200TX2-400000	40	63,0	2 1/2"	89,0	85,0

// HOSE MENDER

Hose Mender



Item Code	Part Number	ID		
		Dash	mm	in
1202949	H12C5610-040400	04	6,0	1/4"
1203161	H12C5610-121200	12	19,0	3/4"
1202870	H12C5610-050500	05	8,0	5/16"
1220607	H12C5610-202000	20	32,0	1 1/4"
1220608	H12C5610-161600	16	25,0	1"
1220605	H12C5610-242400	24	38,0	1 1/2"
1220606	H12C5610-323200	32	51,0	2"
1202868	H12C5610-060600	06	10,0	3/8"
1203160	H12C5610-101000	10	16,0	5/8"
1202867	H12C5610-080800	08	13,0	1/2"

Dimensions shown may be changed without prior notice

// **BSP INSERTS****BSPP Male 60° Flare
AGR**

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size			
1201095	H1210510-121600	NA	12	19,0	3/4"	16	1-11	41,6	41,0
1201096	H1210510-081000	NA	08	13,0	1/2"	10	5/8-14	34,1	30,0
1201291	H1210510-030200	NA	03	5,0	3/16"	02	1/8-28	20,3	14,0
1200340	H1210510-060400	NA	06	10,0	3/8"	04	1/4-19	26,3	19,0
1200384	H1210510-080800	NA	08	13,0	1/2"	08	1/2-14	32,1	27,0
1200341	H1210510-060600	NA	06	10,0	3/8"	06	3/8-19	27,8	22,0
1200385	H1210510-081200	NA	08	13,0	1/2"	12	3/4-14	36,1	32,0
1201098	H1210510-040800	NA	04	6,0	1/4"	08	1/2-14	31,3	27,0
1200418	H1210510-101200	NA	10	16,0	5/8"	12	3/4-14	36,1	32,0
1200419	H1210510-101000	NA	10	16,0	5/8"	10	5/8-14	34,1	30,0
1200339	H1210510-060800	NA	06	10,0	3/8"	08	1/2-14	31,3	27,0
1201101	H1210510-050800	NA	05	8,0	5/16"	08	1/2-14	31,3	27,0
1201722	H1210510-040200	NA	04	6,0	1/4"	02	1/8-28	20,8	14,0
1201085	H1210510-100800	NA	10	16,0	5/8"	08	1/2-14	32,1	27,0
1200507	H1210510-040400	NA	04	6,0	1/4"	04	1/4-19	26,3	19,0
1200508	H1210510-040600	NA	04	6,0	1/4"	06	3/8-19	27,8	22,0
1201356	H1210510-162000	NA	16	25,0	1"	20	1 1/4-11	46,4	50,0
1201357	H1210510-202000	NA	20	32,0	1 1/4"	20	1 1/4-11	48,0	50,0
1200540	H1210510-050400	NA	05	8,0	5/16"	04	1/4-19	26,3	19,0
1200386	H1210510-080600	NA	08	13,0	1/2"	06	3/8-19	28,6	22,0
1200541	H1210510-050600	NA	05	8,0	5/16"	06	3/8-19	27,8	22,0
1201355	H1210510-161600	NA	16	25,0	1"	16	1-11	42,4	41,0
1201358	H1210510-242400	NA	24	38,0	1 1/2"	24	1 1/2-11	51,0	55,0
1200446	H1210510-121200	NA	12	19,0	3/4"	12	3/4-14	36,6	32,0
1201359	H1210510-323200	NA	32	51,0	2"	32	2-11	56,5	70,0

**BSPP Male Flat Seat
AGR FD**

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size			
1223423	H1210610-060600	NA	06	10,0	3/8"	06	3/8-19	27,8	22,0
1225012	H1210610-080800	NA	08	13,0	1/2"	08	1/2-14	32,1	27,0
1216596	H1210610-060800	NA	06	10,0	3/8"	08	1/2-14	31,3	27,0
1214181	H1210610-040400	NA	04	6,0	1/4"	04	1/4-19	26,3	19,0

**BSPT Male
AGR K**

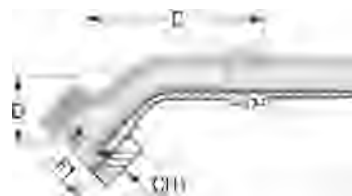
Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in				
1200490	H1210710-040400	NA	04	6,0	1/4"	04	1/4-19	26,8	17,0
1200491	H1210710-040200	NA	04	6,0	1/4"	02	1/8-28	21,3	12,0
1201360	H1210710-323200	NA	32	51,0	2"	32	2-11	54,2	65,0
1200373	H1210710-080600	NA	08	13,0	1/2"	06	3/8-19	28,6	19,0
1201363	H1210710-202000	NA	20	32,0	1 1/4"	20	1 1/4-11	49,0	46,0
1200440	H1210710-121200	NA	12	19,0	3/4"	12	3/4-14	34,6	27,0
1201364	H1210710-242400	NA	24	38,0	1 1/2"	24	1 1/2-11	50,5	50,0
1200492	H1210710-040600	NA	04	6,0	1/4"	06	3/8-19	27,8	19,0
1200371	H1210710-080800	NA	08	13,0	1/2"	08	1/2-14	33,1	22,0
1201361	H1210710-161600	NA	16	25,0	1"	16	1-11	44,4	36,0
1200328	H1210710-060400	NA	06	10,0	3/8"	04	1/4-19	26,8	17,0
1200329	H1210710-060600	NA	06	10,0	3/8"	06	3/8-19	27,8	19,0
1200439	H1210710-121600	NA	12	19,0	3/4"	16	1-11	43,6	36,0
1200410	H1210710-101200	NA	10	16,0	5/8"	12	3/4-14	34,1	27,0
1200532	H1210710-050400	NA	05	8,0	5/16"	04	1/4-19	26,8	17,0
1201365	H1210710-161200	NA	16	25,0	1"	12	3/4-14	37,4	32,0
1200327	H1210710-060800	NA	06	10,0	3/8"	08	1/2-14	32,3	22,0
1200456	H1210710-030200	NA	03	5,0	3/16"	02	1/8-28	20,8	12,0
1200533	H1210710-050600	NA	05	8,0	5/16"	06	3/8-19	27,8	19,0

Dimensions shown may be changed without prior notice

**BSPP Female 60° Cone with O-Ring
DKOR**

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH1
			Dash	mm	in	Dash Size		mm	mm
1202463	H1220812-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	33,8	55,0
1202462	H1220811-121200	CR	12	19,0	3/4"	12	3/4-14	23,9	32,0
1202340	H1220813-243200	SN	24	38,0	1 1/2"	32	2-11	47,0	70,0
1202457	H1220811-101000	CR	10	16,0	5/8"	10	5/8-14	17,1	27,0
1202336	H1220813-101200	SN	10	16,0	5/8"	12	3/4-14	29,0	32,0
1202335	H1220813-081200	SN	08	13,0	1/2"	12	3/4-14	29,0	32,0
1202334	H1220813-081000	SN	08	13,0	1/2"	10	5/8-14	28,4	27,0
1202455	H1220811-161600	CR	16	25,0	1"	16	1-11	23,9	38,0
1202333	H1220813-080800	SN	08	13,0	1/2"	08	1/2-14	25,1	27,0
1202014	H1220812-323200	TN	32	51,0	2"	32	2-11	34,0	70,0
1202339	H1220813-202400	SN	20	32,0	1 1/4"	24	1 1/2-11	41,9	55,0
1202338	H1220813-162000	SN	16	25,0	1"	20	1 1/4-11	39,4	50,0
1202337	H1220813-121600	SN	12	19,0	3/4"	16	1-11	34,0	38,0
1202458	H1220812-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	32,0	50,0
1201066	H1220511-040200	CR	04	6,0	1/4"	02	1/8-28	14,7	14,0
1202332	H1220813-060800	SN	06	10,0	3/8"	08	1/2-14	24,3	27,0
1202331	H1220813-060600	SN	06	10,0	3/8"	06	3/8-19	23,3	22,0
1202330	H1220811-060400	CR	06	10,0	3/8"	04	1/4-19	17,3	19,0
1202571	H1220811-080600	CR	08	13,0	1/2"	06	3/8-19	18,6	22,0
1200606	H1220511-030200	CR	03	5,0	3/16"	02	1/8-28	14,3	14,0
1202325	H1220813-030400	SN	03	5,0	3/16"	04	1/4-19	20,3	19,0
1202329	H1220813-050600	SN	05	8,0	5/16"	06	3/8-19	23,3	22,0
1202328	H1220811-050400	CR	05	8,0	5/16"	04	1/4-19	17,3	19,0
1202327	H1220813-040600	SN	04	6,0	1/4"	06	3/8-19	23,3	22,0
1202326	H1220813-040400	SN	04	6,0	1/4"	04	1/4-19	20,8	19,0

45° BSPP Female 60° Cone with O-Ring
DKOR 45
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1202350	H1220843-121600	SN	12	19,0	3/4"	16	1-11	74,6	31,5	38,0
1202343	H1220843-050600	SN	05	8,0	5/16"	06	3/8-19	45,1	18,5	22,0
1202464	H1220841-101000	CR	10	16,0	5/8"	10	5/8-14	64,0	21,5	27,0
1202342	H1220843-040600	SN	04	6,0	1/4"	06	3/8-19	41,5	17,5	22,0
1202341	H1220843-040400	SN	04	6,0	1/4"	04	1/4-19	45,5	15,0	19,0
1214200	H1220841-050400	CR	05	8,0	5/16"	04	1/4-19	19,0	17,5	19,0
1216663	H1220843-162000	SN	16	25,0	1"	20	1 1/4-11	97,0	47,5	50,0
1202347	H1220843-081000	SN	08	13,0	1/2"	10	5/8-14	57,2	23,0	27,0
1202468	H1220842-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	115,7	46,0	55,0
1202346	H1220843-080800	SN	08	13,0	1/2"	08	1/2-14	55,0	21,0	27,0
1202467	H1220842-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	100,8	40,0	50,0
1202345	H1220843-060800	SN	06	10,0	3/8"	08	1/2-14	45,7	21,0	27,0
1202466	H1220841-161600	CR	16	25,0	1"	16	1-11	84,0	34,0	38,0
1202344	H1220843-060600	SN	06	10,0	3/8"	06	3/8-19	49,9	20,5	22,0
1202465	H1220841-121200	CR	12	19,0	3/4"	12	3/4-14	70,0	28,0	32,0
1202349	H1220843-101200	SN	10	16,0	5/8"	12	3/4-14	66,5	22,5	32,0
1202348	H1220843-081200	SN	08	13,0	1/2"	12	3/4-14	56,7	23,0	32,0
1202469	H1220842-323200	TN	32	51,0	2"	32	2-11	151,5	60,0	70,0

Dimensions shown may be changed without prior notice

**90° BSPP Female 60° Cone with O-Ring
DKOR 90
Solid one piece**



Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1202471	H1220891-121200	CR	12	19,0	3/4"	12	3/4-14	49,1	53,0	32,0
1202361	H1220893-121600	SN	12	19,0	3/4"	16	1-11	54,1	60,5	38,0
1202470	H1220891-101000	CR	10	16,0	5/8"	10	5/8-14	47,9	47,0	27,0
1202360	H1220893-101200	SN	10	16,0	5/8"	12	3/4-14	51,9	49,0	32,0
1202354	H1220893-050600	SN	05	8,0	5/16"	06	3/8-19	33,2	36,0	22,0
1202475	H1220891-161600	CR	16	25,0	1"	16	1-11	75,1	69,0	38,0
1202353	H1220893-040600	SN	04	6,0	1/4"	06	3/8-19	29,8	31,0	22,0
1202881	H1220891-080600	CR	08	13,0	1/2"	06	3/8-19	35,3	43,0	22,0
1202364	H1220893-243200	SN	24	38,0	1 1/2"	32	2-11	107,8	104,0	70,0
1202363	H1220893-202400	SN	20	32,0	1 1/4"	24	1 1/2-11	101,0	83,0	55,0
1202473	H1220892-323200	TN	32	51,0	2"	32	2-11	128,5	136,0	70,0
1202362	H1220893-162000	SN	16	25,0	1"	20	1 1/4-11	75,1	88,5	50,0
1202472	H1220892-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	82,3	83,0	50,0
1200607	H1220591-030200	CR	03	5,0	3/16"	02	1/8-28	24,0	30,0	14,0
1201707	H1220591-040200	CR	04	6,0	1/4"	02	1/8-28	30,5	32,0	14,0
1202358	H1220893-081000	SN	08	13,0	1/2"	10	5/8-14	41,6	43,5	27,0
1202357	H1220893-080800	SN	08	13,0	1/2"	08	1/2-14	35,8	41,0	27,0
1202456	H1220892-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	95,7	96,0	55,0
1202367	H1220893-040400	SN	04	6,0	1/4"	04	1/4-19	29,3	29,0	19,0
1202356	H1220893-060800	SN	06	10,0	3/8"	08	1/2-14	34,3	35,5	27,0
1202355	H1220893-060600	SN	06	10,0	3/8"	06	3/8-19	34,8	42,0	22,0
1202359	H1220893-081200	SN	08	13,0	1/2"	12	3/4-14	41,8	43,0	32,0

90° Compact BSPP Female 60° Cone DKR 90



Item Code	Part Number	Nut Type	ID			F1		C	D Drop	CH1
			Dash	mm	in	Dash Size	F1			
1203330	H1220581-161600	CR	16	25,0	1"	16	1-11	34,5	27,5	38,0
1202027	H1220581-080800	CR	08	13,0	1/2"	08	1/2-14	22,6	24,5	27,0
1202422	H1220581-040400	CR	04	6,0	1/4"	04	1/4-19	16,8	19,5	19,0
1202026	H1220581-060800	CR	06	10,0	3/8"	08	1/2-14	21,5	22,5	27,0
1202025	H1220581-060600	CR	06	10,0	3/8"	06	3/8-19	18,8	22,0	22,0
1203213	H1220581-121200	CR	12	19,0	3/4"	12	3/4-14	26,7	31,0	32,0

BSPP Female Flat Seat DKR FD



Item Code	Part Number	Nut Type	ID			F1		C	CH1
			Dash	mm	in	Dash Size	F1		
1202140	H1220613-060800	SN	06	10,0	3/8"	08	1/2-14	20,8	27,0
1201570	H1220611-121200	CR	12	19,0	3/4"	12	3/4-14	18,1	32,0
1201384	H1220611-161600	CR	16	25,0	1"	16	1-11	19,9	38,0
1202226	H1220613-040400	SN	04	6,0	1/4"	04	1/4-19	20,3	19,0
1201684	H1220611-101200	CR	10	16,0	5/8"	12	3/4-14	17,6	32,0
1202229	H1220613-081200	SN	08	13,0	1/2"	12	3/4-14	24,6	32,0
1202228	H1220613-080800	SN	08	13,0	1/2"	08	1/2-14	21,6	27,0
1202227	H1220613-060600	SN	06	10,0	3/8"	06	3/8-19	20,3	22,0
1216659	H1220611-121600	CR	12	19,0	3/4"	16	1-11	20,6	38,0

Dimensions shown may be changed without prior notice

**BSPP Banjo
RNR**

Item Code	Part Number	ID			F1	C	BH	R
		Dash	mm	in		mm	mm	mm
1203087	H1230310-040200	04	6,0	1/4"	1/8-28	20,0	10,10	17
1203086	H1230310-040400	04	6,0	1/4"	1/4-19	26,5	13,30	22
1203085	H1230310-101000	10	16,0	5/8"	5/8-14	38,0	23,00	40
1203084	H1230310-161600	16	25,0	1"	1-11	50,5	33,30	58
1216840	H1230310-040600	04	6,0	1/4"	3/8-19	30,5	16,70	28
1201760	H1230310-060600	06	10,0	3/8"	3/8-19	30,5	16,70	28
1201763	H1230310-050600	05	8,0	5/16"	3/8-19	30,5	16,70	28
1216843	H1230310-080600	08	13,0	1/2"	3/8-19	30,5	16,70	28
1203048	H1230310-080800	08	13,0	1/2"	1/2-14	35,0	21,00	38
1201754	H1230310-060800	06	10,0	3/8"	1/2-14	34,5	21,00	38
1200423	H1230310-121200	12	19,0	3/4"	3/4-14	41,5	26,50	46

BSPP Bolt

Item Code	Part Number	ID	F1	LT	L	CH
		Dash		mm	mm	mm
1210365	H10V0210-080000	08	1/2-14	38,0	46,0	27,0
1210366	H10V0210-040000	04	1/4-19	25,0	30,0	19,0
1210367	H10V0210-060000	06	3/8-19	31,0	38,0	22,0
1210402	H10V0210-160000	16	1-11	58,0	69,0	38,0
1210403	H10V0210-120000	12	3/4-14	47,0	56,0	32,0

// DIN METRIC INSERTS

**Metric Male 24° Seat - Light
DIN 3853 - CEL**

Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH mm
			Dash	mm	in				
1200362	H1211110-082600	NA	08	13,0	1/2"	M26X1.5	18	27,1	27,0
1201374	H1211110-245200	NA	24	38,0	1 1/2"	M52X2	42	42,0	55,0
1200451	H1211110-031200	NA	03	5,0	3/16"	M12X1.5	6	20,8	14,0
1200481	H1211110-041200	NA	04	6,0	1/4"	M12X1.5	6	21,3	14,0
1201086	H1211110-051800	NA	05	8,0	5/16"	M18X1.5	12	24,3	19,0
1201372	H1211110-163600	NA	16	25,0	1"	M36X2	28	34,4	36,0
1200482	H1211110-041400	NA	04	6,0	1/4"	M14X1.5	8	21,3	14,0
1201373	H1211110-204500	NA	20	32,0	1 1/4"	M45X2	35	40,0	46,0
1200518	H1211110-051600	NA	05	8,0	5/16"	M16X1.5	10	23,3	17,0
1200432	H1211110-123000	NA	12	19,0	3/4"	M30X2	22	31,6	32,0
1200320	H1211110-062200	NA	06	10,0	3/8"	M22X1.5	15	25,3	22,0
1202565	H1211110-081800	NA	08	13,0	1/2"	M18X1.5	12	25,1	19,0
1200315	H1211110-061800	NA	06	10,0	3/8"	M18X1.5	12	24,3	19,0
1201558	H1211110-041600	NA	04	6,0	1/4"	M16X1.5	10	23,3	17,0
1200401	H1211110-102600	NA	10	16,0	5/8"	M26X1.5	18	27,1	27,0
1200314	H1211110-061600	NA	06	10,0	3/8"	M16X1.5	10	23,3	17,0
1200358	H1211110-082200	NA	08	13,0	1/2"	M22X1.5	15	26,1	22,0

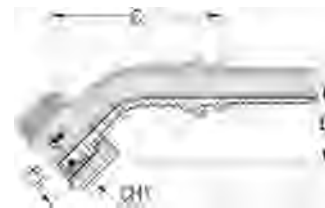
Dimensions shown may be changed without prior notice

Metric Female 24° Cone with O-Ring - Light DIN 3865 - DKOL



Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH1 mm
			Dash	mm	in				
1225980	H1221513-164500	SN	16	25,0	1"	M45X2	35	38,5	50,0
1220609	H1221513-123600	SN	12	19,0	3/4"	M36X2	28	32,8	41,0
1201593	H1221512-163000	TN	16	25,0	1"	M30X2	22	44,6	36,0
1239646	H1221512-122600	TN	12	19,0	3/4"	M26X1.5	18	25,5	32,0
1240281	H1221512-102600	TN	10	16,0	5/8"	M26X1.5	18	25,0	32,0
1240280	H1221512-082200	TN	08	13,0	1/2"	M22X1.5	15	25,3	27,0
1238163	H1221512-102200	TN	10	16,0	5/8"	M22X1.5	15	25,3	27,0
1240278	H1221512-041400	TN	04	6,0	1/4"	M14X1.5	6	22,9	17,0
1240279	H1221512-051600	TN	05	8,0	5/16"	M16X1.5	10	23,2	19,0
1246676	HU221513-051800	SN	05	8,0	5/16"	M18X1.5	12	25,4	22,0
1200595	H1221513-031200	SN	03	5,0	3/16"	M12X1.5	6	23,9	14,0
1201387	H1221513-245200	SN	24	38,0	1 1/2"	M52X2	42	40,5	60,0
1238160	H1221512-051400	TN	05	8,0	5/16"	M14X1.5	8	47,7	17,0
1238161	H1221512-061600	TN	06	10,0	3/8"	M16X1.5	10	25,4	19,0
1201843	H1221513-082600	SN	08	13,0	1/2"	M26X1.5	18	29,2	32,0
1238162	H1221512-081800	TN	08	13,0	1/2"	M18X1.5	12	24,0	22,0
1201060	H1221513-041800	SN	04	6,0	1/4"	M18X1.5	12	25,4	22,0
1200670	H1221513-062200	SN	06	10,0	3/8"	M22X1.5	15	27,4	27,0
1201385	H1221513-163600	SN	16	25,0	1"	M36X2	28	33,6	41,0
1201386	H1221513-204500	SN	20	32,0	1 1/4"	M45X2	35	40,1	50,0
1200609	H1221513-041600	SN	04	6,0	1/4"	M16X1.5	10	25,4	19,0
1200762	H1221513-123000	SN	12	19,0	3/4"	M30X2	22	31,7	36,0
1200667	H1221513-061800	SN	06	10,0	3/8"	M18X1.5	12	25,4	22,0
1200643	H1221513-051800	SN	05	8,0	5/16"	M18X1.5	12	25,4	22,0

45° Metric Female 24° Cone with O-Ring - Light
DIN 3865 - DKOL 45
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1201392	H1221543-204500	SN	20	32,0	1 1/4"	M45X2	35	100,0	45,0	50,0
1201390	H1221543-163600	SN	16	25,0	1"	M36X2	28	91,4	32,0	41,0
1200594	H1221543-031200	SN	03	5,0	3/16"	M12X1.5	6	44,9	19,0	14,0
1200671	H1221543-061800	SN	06	10,0	3/8"	M18X1.5	12	46,8	19,5	22,0
1239647	H1221542-061600	TN	06	10,0	3/8"	M16X1.5	10	43,0	19,0	19,0
1200738	H1221543-102600	SN	10	16,0	5/8"	M26X1.5	18	65,3	24,0	32,0
1216676	H1221541-041200	CR	04	6,0	1/4"	M12X1.5	6	45,2	15,5	14,0
1239971	H1221542-081800	TN	08	13,0	1/2"	M18X1.5	12	52,0	23,0	22,0
1201576	H1221543-041600	SN	04	6,0	1/4"	M16X1.5	10	42,0	20,0	19,0
1225983	H1221542-163000	TN	16	25,0	1"	M30X2	22	71,1	29,0	36,0
1225984	H1221543-0514B0	SN	05	8,0	5/16"	M14X1.5	8	47,5	20,0	17,0
1240723	H1221542-122600	TN	12	19,0	3/4"	M26X1.5	20	77,0	34,0	32,0
1200612	H1221543-041400	SN	04	6,0	1/4"	M14X1.5	8	43,0	17,5	17,0
1200645	H1221543-051600	SN	05	8,0	5/16"	M16X1.5	10	47,5	20,0	19,0
1200711	H1221543-082200	SN	08	13,0	1/2"	M22X1.5	15	55,0	21,0	27,0
1200646	H1221543-051800	SN	05	8,0	5/16"	M18X1.5	12	47,0	22,0	22,0
1200764	H1221543-123000	SN	12	19,0	3/4"	M30X2	22	69,4	32,0	36,0
1202128	H1221543-245200	SN	24	38,0	1 1/2"	M52X2	42	114,1	47,0	60,0

Dimensions shown may be changed without prior notice

90° Metric Female 24° Cone with O-Ring - Light
DIN 3865 - DKOL 90
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1201393	H1221593-204500	SN	20	32,0	1 1/4"	M45X2	35	90,5	89,0	50,0
1201292	H1221593-1022B0	SN	10	16,0	5/8"	M22X1.5	15	51,4	47,0	27,0
1201391	H1221593-163600	SN	16	25,0	1"	M36X2	28	75,0	68,0	41,0
1201394	H1221593-245200	SN	24	38,0	1 1/2"	M52X2	42	106,5	100,0	60,0
1203154	H1221593-082600	SN	08	13,0	1/2"	M26X1.5	18	39,8	41,0	32,0
1239648	H1221592-061600	TN	06	10,0	3/8"	M16X1.5	10	35,0	36,0	19,0
1200616	H1221593-041600	SN	04	6,0	1/4"	M16X1.5	10	28,3	32,5	19,0
1200713	H1221593-082200	SN	08	13,0	1/2"	M22X1.5	15	39,8	40,5	27,0
1239994	H1221592-041200	TN	04	6,0	1/4"	M12X1.5	6	29,0	34,0	14,0
1200618	H1221593-041400	SN	04	6,0	1/4"	M14X1.5	8	28,3	32,5	17,0
1200597	H1221593-031200	SN	03	5,0	3/16"	M12X1.5	6	23,6	33,0	14,0
1200679	H1221593-062200	SN	06	10,0	3/8"	M22X1.5	15	35,8	38,5	27,0
1200676	H1221593-061800	SN	06	10,0	3/8"	M18X1.5	12	32,8	39,0	22,0
1216679	H1221592-203600	TN	20	32,0	1 1/4"	M36X2	28	92,2	86,0	41,0
1239736	H1221592-122600	TN	12	19,0	3/4"	M26X1.5	18	60,0	64,0	32,0
1200649	H1221593-051800	SN	05	8,0	5/16"	M18X1.5	12	32,2	40,0	22,0
1200648	H1221593-051600	SN	05	8,0	5/16"	M16X1.5	10	33,7	38,0	19,0
1216685	H1221593-123600	SN	12	19,0	3/4"	M36X2	28	60,0	63,0	41,0
1200740	H1221593-102600	SN	10	16,0	5/8"	M26X1.5	18	51,4	48,0	32,0
1225987	H1221592-163000	TN	16	25,0	1"	M30X2	22	66,0	64,0	36,0
1200767	H1221593-123000	SN	12	19,0	3/4"	M30X2	22	52,1	59,0	36,0
1203218	H1221593-041800	SN	04	6,0	1/4"	M18X1.5	12	28,8	35,0	22,0
1200742	H1221593-103000	SN	10	16,0	5/8"	M30X2	22	52,4	49,0	36,0
1238173	H1221592-081800	TN	08	13,0	1/2"	M18X1.5	12	42,0	44,0	22,0

Metric Male 24° Seat - Heavy DIN 3853 - CES



Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH mm
			Dash	mm	in				
1203151	H1211210-163600	NA	16	25,0	1"	M36X2	25	38,4	36,0
1201375	H1211210-164200	NA	16	25,0	1"	M42X2	30	42,4	46,0
1200360	H1211210-082400	NA	08	13,0	1/2"	M24X1.5	16	29,1	24,0
1200319	H1211210-062200	NA	06	10,0	3/8"	M22X1.5	14	27,3	22,0
1201828	H1211210-041400	NA	04	6,0	1/4"	M14X1.5	6	24,3	17,0
1200477	H1211210-041800	NA	04	6,0	1/4"	M18X1.5	10	25,3	19,0
1200521	H1211210-052000	NA	05	8,0	5/16"	M20X1.5	12	25,3	22,0
1200485	H1211210-041600	NA	04	6,0	1/4"	M16X1.5	8	24,3	17,0
1200364	H1211210-083000	NA	08	13,0	1/2"	M30X2	20	33,1	32,0
1201376	H1211210-205200	NA	20	32,0	1 1/4"	M52X2	38	48,0	55,0
1202267	H1211210-061800	NA	06	10,0	3/8"	M18X1.5	10	25,3	19,0
1221728	H1211210-062400	NA	06	10,0	3/8"	M24X1.5	16	28,1	24,0
1202564	H1211210-082200	NA	08	13,0	1/2"	M22X1.5	14	28,1	22,0
1200403	H1211210-103000	NA	10	16,0	5/8"	M30X2	20	33,1	32,0
1200316	H1211210-062000	NA	06	10,0	3/8"	M20X1.5	12	25,3	22,0
1202526	H1211210-123000	NA	12	19,0	3/4"	M30X2	20	33,6	32,0
1200434	H1211210-123600	NA	12	19,0	3/4"	M36X2	25	37,6	36,0

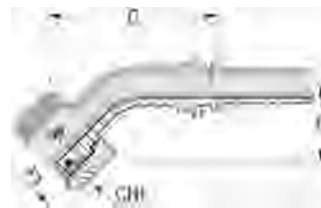
Dimensions shown may be changed without prior notice

Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS



Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH1 mm
			Dash	mm	in				
1203099	H1221613-163600	SN	16	25,0	1"	M36X2	25	41,0	46,0
1239744	H1221612-163000	TN	16	25,0	1"	M30X2	20	29,8	36,0
1200737	H1221613-103000	SN	10	16,0	5/8"	M30X2	20	36,5	36,0
1201827	H1221613-041400	SN	04	6,0	1/4"	M14X1.5	6	26,4	17,0
1239671	H1221612-061600	TN	06	10,0	3/8"	M16X1.5	8	23,2	19,0
1216693	H1221613-204200	SN	20	32,0	1 1/4"	M42X2	30	44,7	50,0
1239650	H1221612-082000	TN	08	13,0	1/2"	M20X1.5	12	23,2	24,0
1200615	H1221613-041600	SN	04	6,0	1/4"	M16X1.5	8	27,7	19,0
1239651	H1221612-10240Z	TN	10	16,0	5/8"	M24X1.5	16	25,3	30,0
1218557	H1221613-082200	SN	08	13,0	1/2"	M22X1.5	14	31,9	27,0
1216696	H122161Z-123600	SN	12	19,0	3/4"	M36X2	25	40,2	41,0
1216695	H1221613-245200	SN	24	38,0	1 1/2"	M52X2	38	48,1	60,0
1201389	H1221613-205200	SN	20	32,0	1 1/4"	M52X2	38	48,1	60,0
1200596	H1221613-031600	SN	03	5,0	3/16"	M16X1.5	8	27,2	19,0
1201388	H1221613-164200	SN	16	25,0	1"	M42X2	30	43,1	50,0
1200610	H1221613-041800	SN	04	6,0	1/4"	M18X1.5	10	27,6	22,0
1200710	H1221613-083000	SN	08	13,0	1/2"	M30X2	20	36,5	36,0
1202570	H1221613-062400	SN	06	10,0	3/8"	M24X1.5	16	30,9	30,0
1201061	H1221613-042000	SN	04	6,0	1/4"	M20X1.5	12	27,6	24,0
1200669	H1221613-062200	SN	06	10,0	3/8"	M22X1.5	14	31,1	27,0
1200708	H1221613-082400	SN	08	13,0	1/2"	M24X1.5	16	31,7	30,0
1238179	H1221612-061800	TN	06	10,0	3/8"	M18X1.5	10	22,3	22,0
1200763	H1221613-123600	SN	12	19,0	3/4"	M36X2	25	40,2	46,0
1200668	H1221613-062000	SN	06	10,0	3/8"	M20X1.5	12	27,6	24,0
1201732	H1221613-123000	SN	12	19,0	3/4"	M30X2	20	37,0	36,0
1200644	H1221613-052000	SN	05	8,0	5/16"	M20X1.5	12	27,6	24,0
1201832	H1221613-051800	SN	05	8,0	5/16"	M18X1.5	10	27,6	22,0

45° Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS 45
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1203098	H1221643-163600	SN	16	25,0	1"	M36X2	25	89,7	36,0	46,0
1226010	H1221643-0616B0	SN	06	10,0	3/8"	M16X1.5	8	50,6	21,0	19,0
1202891	H1221643-123000	SN	12	19,0	3/4"	M30X2	20	66,1	29,0	36,0
1201395	H1221643-164200	SN	16	25,0	1"	M42X2	30	110,3	40,5	50,0
1239968	H1221642-061800	TN	06	10,0	3/8"	M18X1.5	10	47,0	21,0	22,0
1200647	H1221643-052000	SN	05	8,0	5/16"	M20X1.5	12	48,1	21,0	24,0
1216697	H1221643-041400	SN	04	6,0	1/4"	M14X1.5	6	47,0	20,0	17,0
1240698	H1221643-051800	SN	05	8,0	5/16"	M18X1.5	10	46,0	18,0	22,0
1200672	H1221643-062000	SN	06	10,0	3/8"	M20X1.5	12	50,6	20,0	24,0
1242602	H1221642-082000	TN	08	13,0	1/2"	M20X1.5	12	54,0	24,0	24,0
1201398	H1221643-205200	SN	20	32,0	1 1/4"	M52X2	38	109,0	45,0	60,0
1200673	H1221643-062200	SN	06	10,0	3/8"	M22X1.5	14	52,9	21,0	27,0
1201300	H1221643-103000	SN	10	16,0	5/8"	M30X2	20	66,3	30,0	36,0
1200613	H1221643-041600	SN	04	6,0	1/4"	M16X1.5	8	48,6	16,0	19,0
1200712	H1221643-082400	SN	08	13,0	1/2"	M24X1.5	16	55,8	21,5	30,0
1200611	H1221643-041800	SN	04	6,0	1/4"	M18X1.5	10	43,5	19,0	22,0
1200765	H1221643-123600	SN	12	19,0	3/4"	M36X2	25	69,5	33,0	46,0

Dimensions shown may be changed without prior notice

90° Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS 90
Solid one piece



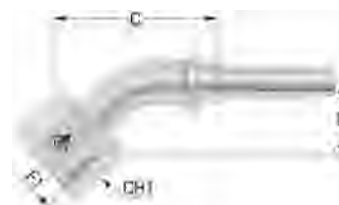
Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1203097	H1221693-163600	SN	16	25,0	1"	M36X2	25	77,6	73,5	46,0
1201253	H1221693-083000	SN	08	13,0	1/2"	M30X2	20	45,8	50,0	36,0
1201396	H1221693-164200	SN	16	25,0	1"	M42X2	30	75,6	79,0	50,0
1201397	H1221693-205200	SN	20	32,0	1 1/4"	M52X2	38	94,0	92,0	60,0
1201065	H1221693-041400	SN	04	6,0	1/4"	M14X1.5	6	27,3	33,0	17,0
1216700	H1221693-051800	SN	05	8,0	5/16"	M18X1.5	10	33,2	39,0	22,0
1239989	H1221692-061600	TN	06	10,0	3/8"	M16X1.5	8	33,0	38,0	19,0
1239926	H1221692-061800	TN	06	10,0	3/8"	M18X1.5	10	35,0	38,0	22,0
1200617	H1221693-041800	SN	04	6,0	1/4"	M18X1.5	10	26,8	34,0	22,0
1240110	H1221692-082000	TN	08	13,0	1/2"	M20X1.5	12	40,0	45,0	24,0
1240088	H1221692-102400	TN	10	16,0	5/8"	M24X1.5	16	52,0	56,0	30,0
1200768	H1221693-123600	SN	12	19,0	3/4"	M36X2	25	50,6	59,5	46,0
1200714	H1221693-082400	SN	08	13,0	1/2"	M24X1.5	16	39,8	41,5	30,0
1200619	H1221693-041600	SN	04	6,0	1/4"	M16X1.5	8	27,3	33,0	19,0
1200741	H1221693-103000	SN	10	16,0	5/8"	M30X2	20	47,9	55,0	36,0
1200650	H1221693-052000	SN	05	8,0	5/16"	M20X1.5	12	33,2	39,0	24,0
1200678	H1221693-062200	SN	06	10,0	3/8"	M22X1.5	14	34,3	40,5	27,0
1200766	H1221693-123000	SN	12	19,0	3/4"	M30X2	20	50,6	58,0	36,0
1200677	H1221693-062000	SN	06	10,0	3/8"	M20X1.5	12	34,3	38,5	24,0

Universal Metric Female



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH1
			Dash	mm	in	Dash Size		mm	mm
1200658	H1221313-051600	SN	05	8,0	5/16"	16	M16X1.5	22,3	19,0
1200659	H1221313-051800	SN	05	8,0	5/16"	18	M18X1.5	22,3	22,0
1200729	H1221313-082200	SN	08	13,0	1/2"	22	M22X1.5	24,7	27,0
1200631	H1221313-041400	SN	04	6,0	1/4"	14	M14X1.5	22,3	17,0
1200632	H1221313-041600	SN	04	6,0	1/4"	16	M16X1.5	21,8	19,0
1200698	H1221313-061800	SN	06	10,0	3/8"	18	M18X1.5	22,3	22,0
1200753	H1221313-102600	SN	10	16,0	5/8"	26	M26X1.5	25,1	32,0
1200633	H1221313-041800	SN	04	6,0	1/4"	18	M18X1.5	22,3	22,0

45° Universal Metric Female



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1201450	H1221343-061800	SN	06	10,0	3/8"	18	M18X1.5	42,8	20,0	22,0
1216669	H1221343-041400	SN	04	6,0	1/4"	14	M14X1.5	36,5	16,0	17,0
1225972	H1221343-082200	SN	08	13,0	1/2"	22	M22X1.5	54,9	20,0	27,0
1225973	H1221343-102600	SN	10	16,0	5/8"	26	M26X1.5	54,0	22,0	32,0

Dimensions shown may be changed without prior notice

90° Universal Metric Female

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1216672	H1221393-102600	SN	10	16,0	5/8"	26	M26X1.5	51,0	46,0	32,0
1201580	H1221393-062200	SN	06	10,0	3/8"	22	M22X1.5	32,3	36,0	27,0
1201452	H1221393-041600	SN	04	6,0	1/4"	16	M16X1.5	28,3	33,0	19,0
1201323	H1221393-051800	SN	05	8,0	5/16"	18	M18X1.5	34,0	32,0	22,0
1200730	H1221393-082200	SN	08	13,0	1/2"	22	M22X1.5	39,8	40,0	27,0
1200661	H1221393-051600	SN	05	8,0	5/16"	16	M16X1.5	34,2	36,0	19,0
1225975	H1221393-041400	SN	04	6,0	1/4"	14	M14X1.5	29,9	28,5	17,0
1200701	H1221393-061800	SN	06	10,0	3/8"	18	M18X1.5	32,8	37,0	22,0

Metric Female 60° Cone - DIN 3863

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH1 mm
			Dash	mm	in				
1200759	H1221013-123000	SN	12	19,0	3/4"	30	M30X1.5	21,6	36,0
1201572	H1221013-163800	SN	16	25,0	1"	38	M38X1.5	28,0	46,0

**90° Metric Female 60° Cone - DIN 3863
Solid one piece**

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1202056	H1221093-123000	SN	12	19,0	3/4"	30	M30X1.5	54,6	47,0	36,0
1201620	H1221093-163800	SN	16	25,0	1"	38	M38X1.5	72,6	60,0	46,0

Metric Straight Standpipe - DIN 2353 RSL/RSS



Item Code	Part Number	ID			OD1 mm	C mm
		Dash	mm	in		
1216922	H1252010-081000	08	13,0	1/2"	10	32,5
1214227	H1252010-163800	16	25,0	1"	38	60,4
1214228	H1252010-203000	20	32,0	1 1/4"	30	56,0
1200859	H1252010-041000	04	6,0	1/4"	10	32,2
1200815	H1252010-081800	08	13,0	1/2"	18	36,0
1200856	H1252010-030800	03	5,0	3/16"	8	29,8
1200878	H1252010-050800	05	8,0	5/16"	8	30,3
1200812	H1252010-081500	08	13,0	1/2"	15	32,1
1200813	H1252010-081600	08	13,0	1/2"	16	37,1
1200838	H1252010-122000	12	19,0	3/4"	20	45,5
1200872	H1252010-051200	05	8,0	5/16"	12	32,7
1201444	H1252010-203800	20	32,0	1 1/4"	38	62,0
1200796	H1252010-061400	06	10,0	3/8"	14	35,8
1201445	H1252010-244200	24	38,0	1 1/2"	42	52,0
1200793	H1252010-061000	06	10,0	3/8"	10	30,3
1201442	H1252010-162500	16	25,0	1"	25	51,4
1200871	H1252010-051000	05	8,0	5/16"	10	30,2
1200794	H1252010-061200	06	10,0	3/8"	12	29,3
1201443	H1252010-203500	20	32,0	1 1/4"	35	48,0
1200832	H1252010-102200	10	16,0	5/8"	22	37,2
1200855	H1252010-030600	03	5,0	3/16"	6	27,8
1200811	H1252010-081400	08	13,0	1/2"	14	36,1
1200797	H1252010-061500	06	10,0	3/8"	15	34,8
1201440	H1252010-162800	16	25,0	1"	28	40,4
1201441	H1252010-163000	16	25,0	1"	30	54,4
1200809	H1252010-081200	08	13,0	1/2"	12	32,1
1203082	H1252010-243800	24	38,0	1 1/2"	38	62,0
1200867	H1252010-040800	04	6,0	1/4"	8	30,2
1200829	H1252010-102000	10	16,0	5/8"	20	44,2
1200828	H1252010-101800	10	16,0	5/8"	18	34,2
1200840	H1252010-122200	12	19,0	3/4"	22	36,5
1200860	H1252010-041200	04	6,0	1/4"	12	31,2
1200865	H1252010-040600	04	6,0	1/4"	6	28,3
1200841	H1252010-122500	12	19,0	3/4"	25	48,5

Dimensions shown may be changed without prior notice

45° Metric Standpipe
RSL 45/RSS 45 - DIN 2353
Solid one piece



Item Code	Part Number	ID			OD1	C	D Drop
		Dash	mm	in			
1200801	H1252040-061200	06	10,0	3/8"	12	55,5	28,0
1200802	H1252040-061400	06	10,0	3/8"	14	53,1	28,0
1200818	H1252040-081600	08	13,0	1/2"	16	63,3	32,0
1200817	H1252040-081500	08	13,0	1/2"	15	62,6	28,5
1214232	H1252040-163000	16	25,0	1"	30	137,0	46,1
1200862	H1252040-041000	04	6,0	1/4"	10	48,0	24,0
1200876	H1252040-051000	05	8,0	5/16"	10	48,4	24,0
1200843	H1252040-122200	12	19,0	3/4"	22	74,3	37,0
1200877	H1252040-051200	05	8,0	5/16"	12	55,4	28,0
1200800	H1252040-061000	06	10,0	3/8"	10	48,5	24,0
1200844	H1252040-122500	12	19,0	3/4"	25	83,0	44,0
1200863	H1252040-040600	04	6,0	1/4"	6	50,1	28,0
1200864	H1252040-040800	04	6,0	1/4"	8	43,2	23,0

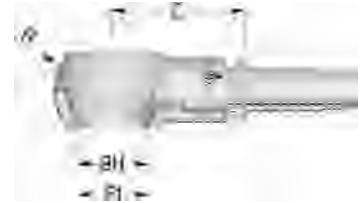
90° Metric Standpipe
RSL 90/RSS 90 - DIN 2353
Solid one piece



Item Code	Part Number	ID			OD1	C	D Drop
		Dash	mm	in			
1200880	H1252090-051200	05	8,0	5/16"	12	39,4	55,0
1203079	H1252090-081800	08	13,0	1/2"	18	58,1	59,0
1200836	H1252090-102000	10	16,0	5/8"	20	62,6	70,0
1218454	H1252090-081200	08	13,0	1/2"	12	41,1	52,0
1200835	H1252090-101800	10	16,0	5/8"	18	52,2	58,0
1200879	H1252090-051000	05	8,0	5/16"	10	28,6	48,5
1200857	H1252090-030600	03	5,0	3/16"	6	24,5	36,0
1214233	H1252090-162500	16	25,0	1"	25	73,1	98,5
1214234	H1252090-163000	16	25,0	1"	30	73,1	102,5
1200870	H1252090-040800	04	6,0	1/4"	8	25,9	44,0
1202296	H1252090-041200	04	6,0	1/4"	12	34,9	50,0
1214235	H1252090-203500	20	32,0	1 1/4"	35	89,0	106,5
1203081	H1252090-122000	12	19,0	3/4"	20	63,4	70,0
1210832	H1252090-102200	10	16,0	5/8"	22	49,4	64,0
1200803	H1252090-061000	06	10,0	3/8"	10	30,7	42,0
1200869	H1252090-040600	04	6,0	1/4"	6	25,4	36,0
1200847	H1252090-122500	12	19,0	3/4"	25	63,2	85,0
1200804	H1252090-061200	06	10,0	3/8"	14	35,0	50,0
1200823	H1252090-081600	08	13,0	1/2"	16	43,7	64,0
1200868	H1252090-041000	04	6,0	1/4"	10	37,0	42,0
1200846	H1252090-122200	12	19,0	3/4"	22	53,1	67,5
1200805	H1252090-061400	06	10,0	3/8"	14	37,0	50,0
1202886	H1252090-162800	16	25,0	1"	28	73,1	89,5
1200822	H1252090-081500	08	13,0	1/2"	15	44,7	57,0

Dimensions shown may be changed without prior notice

Metric Banjo RNM



Item Code	Part Number	ID			F1	C	BH	R
		Dash	mm	in				
1200470	H1230910-041400	04	6,0	1/4"	M14X1.5	27,5	14,00	24
1203083	H1230910-163000	16	25,0	1"	M30X1.5	42,5	30,00	54
1200309	H1230910-061400	06	10,0	3/8"	M14X1.5	27,5	14,00	24
1200515	H1230910-051600	05	8,0	5/16"	M16X1.5	30,5	16,00	28
1200516	H1230910-051800	05	8,0	5/16"	M18X1.5	28,5	18,00	32
1200311	H1230910-061800	06	10,0	3/8"	M18X1.5	31,5	18,00	32
1202577	H1230910-031000	03	5,0	3/16"	M10X1.0	24,0	10,00	17
1200389	H1230910-102200	10	16,0	5/8"	M22X1.5	35,0	22,00	39
1200422	H1230910-122600	12	19,0	3/4"	M26X1.5	38,5	26,00	46
1200310	H1230910-061600	06	10,0	3/8"	M16X1.5	30,5	16,00	28
1200469	H1230910-041200	04	6,0	1/4"	M12X1.5	28,5	12,00	20
1200513	H1230910-051200	05	8,0	5/16"	M12X1.5	28,5	12,00	24
1200514	H1230910-051400	05	8,0	5/16"	M14X1.5	27,5	14,00	24
1200346	H1230910-081800	08	13,0	1/2"	M18X1.5	32,0	18,00	32
1200468	H1230910-041000	04	6,0	1/4"	M10X1.0	25,0	10,00	17
1200347	H1230910-082200	08	13,0	1/2"	M22X1.5	35,0	22,00	39

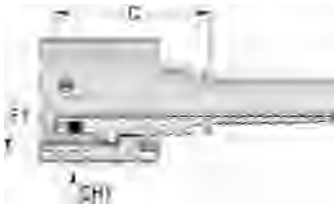
Metric Bolt



Item Code	Part Number	ID	F1	LT	L	CH
		Dash		mm	mm	mm
1210405	H10V0810-300000	30	M30X1.5	51,0	62,0	38,0
1210406	H10V0810-260000	26	M26X1.5	42,0	52,0	32,0
1210371	H10V0810-220000	22	M22X1.5	41,0	48,0	27,0
1210384	H10V0810-160000	16	M16X1.5	34,0	41,0	22,0
1210374	H10V0810-100000	10	M10X1.0	19,0	24,0	14,0
1210375	H10V0810-120000	12	M12X1.5	24,0	29,0	17,0
1210368	H10V0810-140000	14	M14X1.5	28,0	34,0	19,0
1210369	H10V0810-180000	18	M18X1.5	37,0	44,0	24,0

// PRESSURE WASHER

Universal Female for Pressure Washer



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH1
			Dash	mm	in	Dash Size		mm	mm
1203351	H1224914-052200	TN	05	8,0	5/16"	22	M22X1.5	36,8	35,0
1203350	H1224914-042200	TN	04	6,0	1/4"	22	M22X1.5	36,8	35,0
1203352	H1224914-062200	TN	06	10,0	3/8"	22	M22X1.5	36,8	35,0

Dimensions shown may be changed without prior notice

// SAE INSERTS

SAE Female Swivel 45° Seat



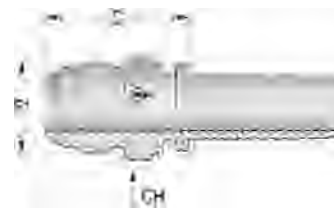
Item Code	Part Number	Nut Type	ID			F1		C	CH	CH1
			Dash	mm	in	Dash Size	F1			
1202371	H1226611-121200	CR	12	19,0	3/4"	12	1 1/16-14	28,6	27,0	32,0
1226098	H1226611-081000	CR	08	13,0	1/2"	10	7/8-14	26,6	22,0	27,0
1202661	H1226611-060600	CR	06	10,0	3/8"	06	5/8-18	23,3	19,0	22,0

SAE Male Solid O-Ring Boss



Item Code	Part Number	Nut Type	ID			F1		C	CH
			Dash	mm	in	Dash Size	F1		
1200381	H1213010-081200	NA	08	13,0	1/2"	12	1 1/16-12	32,1	32,0
1203146	H1213010-121000	NA	12	19,0	3/4"	10	7/8-14	28,1	27,0
1200382	H1213010-080800	NA	08	13,0	1/2"	08	3/4-16	25,1	22,0
1200383	H1213010-081000	NA	08	13,0	1/2"	10	7/8-14	27,6	27,0
1202519	H1213010-040600	NA	04	6,0	1/4"	06	9/16-18	22,3	17,0
1201836	H1213010-161600	NA	16	25,0	1"	16	1 5/16-12	35,4	38,0
1221652	H1213010-101000	NA	10	16,0	5/8"	10	7/8-14	27,6	24,0
1203147	H1213010-040400	NA	04	6,0	1/4"	04	7/16-20	20,3	14,0
1201833	H1213010-040500	NA	04	6,0	1/4"	05	1/2-20	21,3	16,0
1200337	H1213010-060800	NA	06	10,0	3/8"	08	3/4-16	24,3	22,0
1201834	H1213010-060600	NA	06	10,0	3/8"	06	9/16-18	23,3	19,0
1200338	H1213010-061000	NA	06	10,0	3/8"	10	7/8-14	26,8	27,0
1200445	H1213010-121200	NA	12	19,0	3/4"	12	1 1/16-12	32,6	32,0

// JIC 37° INSERTS

**JIC Male 37° Cone
AGJ**

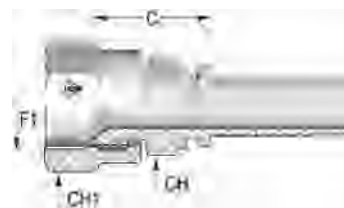
Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm
			Dash	mm	in				
1201785	H1212510-202400	NA	20	32,0	1 1/4"	24	1 7/8-12	52,5	50,0
1200411	H1212510-101200	NA	10	16,0	5/8"	12	1 1/16-12	37,1	27,0
1200499	H1212510-040500	NA	04	6,0	1/4"	05	1/2-20	25,3	14,0
1200375	H1212510-080800	NA	08	13,0	1/2"	08	3/4-16	30,6	19,0
1200331	H1212510-061000	NA	06	10,0	3/8"	10	7/8-14	33,8	24,0
1200376	H1212510-081000	NA	08	13,0	1/2"	10	7/8-14	34,6	24,0
1200332	H1212510-060600	NA	06	10,0	3/8"	06	9/16-18	26,3	17,0
1200535	H1212510-050600	NA	05	8,0	5/16"	06	9/16-18	26,3	17,0
1222989	H1212510-161200	NA	16	25,0	1"	12	1 1/16-12	40,4	32,0
1200457	H1212510-030400	NA	03	5,0	3/16"	04	7/16-20	23,8	12,0
1200534	H1212510-050500	NA	05	8,0	5/16"	05	1/2-20	25,3	14,0
1200413	H1212510-101000	NA	10	16,0	5/8"	10	7/8-14	34,6	24,0
1201381	H1212510-202000	NA	20	32,0	1 1/4"	20	1 5/8-12	48,5	46,0
1201382	H1212510-242400	NA	24	38,0	1 1/2"	24	1 7/8-12	52,5	50,0
1201380	H1212510-162000	NA	16	25,0	1"	20	1 5/8-12	46,9	46,0
1200330	H1212510-060800	NA	06	10,0	3/8"	08	3/4-16	29,8	19,0
1200374	H1212510-081200	NA	08	13,0	1/2"	12	1 1/16-12	37,1	27,0
1201383	H1212510-323200	NA	32	51,0	2"	32	2 1/2-12	62,0	65,0
1201087	H1212510-050800	NA	05	8,0	5/16"	08	3/4-16	29,8	19,0
1200443	H1212510-121600	NA	12	19,0	3/4"	16	1 5/16-12	42,6	36,0
1201379	H1212510-161600	NA	16	25,0	1"	16	1 5/16-12	43,4	36,0
1200441	H1212510-121200	NA	12	19,0	3/4"	12	1 1/16-12	37,6	27,0
1200442	H1212510-121400	NA	12	19,0	3/4"	14	1 3/16-12	40,1	32,0
1200500	H1212510-040400	NA	04	6,0	1/4"	04	7/16-20	25,3	12,0
1200501	H1212510-040600	NA	04	6,0	1/4"	06	9/16-18	26,3	17,0

Dimensions shown may be changed without prior notice

**JIC Female 37° Seat
DKJ**

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH1 mm
			Dash	mm	in				
1201097	H1222512-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	29,4	55,0
1201400	H1222511-161600	CR	16	25,0	1"	16	1 5/16-12	23,9	38,0
1200751	H1222511-101000	CR	10	16,0	5/8"	10	7/8-14	19,6	27,0
1201841	H1222511-121000	CR	12	19,0	3/4"	10	7/8-14	20,1	27,0
1200774	H1222511-121200	CR	12	19,0	3/4"	12	1 1/16-12	20,6	32,0
1201401	H1222512-162000	TN	16	25,0	1"	20	1 5/8-12	26,5	50,0
1200656	H1222511-050600	CR	05	8,0	5/16"	06	9/16-18	15,3	19,0
1201404	H1222512-323200	TN	32	51,0	2"	32	2 1/2-12	32,0	-
1200775	H1222511-121400	CR	12	19,0	3/4"	14	1 3/16-12	19,9	36,0
1201402	H1222512-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	28,1	50,0
1200655	H1222511-050500	CR	05	8,0	5/16"	05	1/2-20	15,3	17,0
1200776	H1222511-121600	CR	12	19,0	3/4"	16	1 5/16-12	22,1	38,0
1201403	H1222512-202400	TN	20	32,0	1 1/4"	24	1 7/8-12	30,4	55,0
1200690	H1222511-061000	CR	06	10,0	3/8"	10	7/8-14	20,3	27,0
1200691	H1222511-060600	CR	06	10,0	3/8"	06	9/16-18	15,3	19,0
1200749	H1222511-101200	CR	10	16,0	5/8"	12	1 1/16-12	20,1	32,0
1200625	H1222511-040400	CR	04	6,0	1/4"	04	7/16-20	14,6	16,0
1200626	H1222511-040600	CR	04	6,0	1/4"	06	9/16-18	15,3	19,0
1200725	H1222511-081000	CR	08	13,0	1/2"	10	7/8-14	19,6	27,0
1202820	H1222511-201600	CR	20	32,0	1 1/4"	16	1 5/16-12	26,5	38,0
1201399	H1222511-161200	CR	16	25,0	1"	12	1 1/16-12	22,4	32,0
1200623	H1222511-040500	CR	04	6,0	1/4"	05	1/2-20	15,3	17,0
1200722	H1222511-081200	CR	08	13,0	1/2"	12	1 1/16-12	22,1	32,0
1200723	H1222511-080800	CR	08	13,0	1/2"	08	3/4-16	18,6	25,0
1200687	H1222511-060800	CR	06	10,0	3/8"	08	3/4-16	17,8	25,0
1200600	H1222511-030400	CR	03	5,0	3/16"	04	7/16-20	14,3	16,0

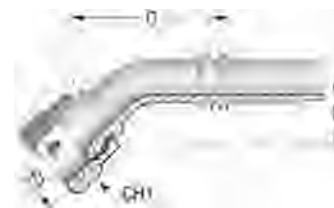
JIC Female 37° Seat with Stem Hexagon DKJ



Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm	CH1 mm
			Dash	mm	in					
1202483	H1226512-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	39,1	41,0	50,0
1203090	H1226511-080600	CR	08	13,0	1/2"	06	9/16-18	23,1	19,0	19,0
1226093	H1226512-202400	TN	20	32,0	1 1/4"	24	1 7/8-12	43,4	50,0	55,0
1201728	H1226511-101000	CR	10	16,0	5/8"	10	7/8-14	27,6	24,0	27,0
1201464	H1226511-101200	CR	10	16,0	5/8"	12	1 1/16-12	28,1	25,0	32,0
1202895	H1226511-121000	CR	12	19,0	3/4"	10	7/8-14	28,1	27,0	27,0
1203246	H1226511-060400	CR	06	10,0	3/8"	04	7/16-20	20,6	17,0	16,0
1203329	H1226511-100800	CR	10	16,0	5/8"	08	3/4-16	26,6	24,0	25,0
1200599	H1226511-030400	CR	03	5,0	3/16"	04	7/16-20	18,1	12,0	16,0
1210833	H1226511-081200	CR	08	13,0	1/2"	12	1 1/16-12	28,1	25,0	32,0
1201264	H1226511-050600	CR	05	8,0	5/16"	06	9/16-18	20,3	14,0	19,0
1203089	H1226511-121600	CR	12	19,0	3/4"	16	1 5/16-12	32,1	32,0	38,0
1203243	H1226511-141600	CR	14	22,0	7/8"	16	1 5/16-12	32,1	32,0	38,0
1201340	H1226511-061000	CR	06	10,0	3/8"	10	7/8-14	25,8	22,0	27,0
1203088	H1226511-161200	CR	16	25,0	1"	12	1 1/16-12	31,4	32,0	32,0
1216812	H1226511-201600	CR	20	32,0	1 1/4"	16	1 5/16-12	37,5	41,0	38,0
1214219	H1226511-121400	CR	12	19,0	3/4"	14	1 3/16-12	29,9	32,0	36,0
1216816	H1226512-323200	TN	32	51,0	2"	32	2 1/2-12	49,0	65,0	70,0
1216815	H1226512-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	43,4	50,0	55,0
1216814	H1226512-222400	TN	-	35,0	1 3/8"	24	1 7/8-12	43,4	50,0	55,0
1216813	H1226512-182000	TN	-	29,0	1 1/8"	20	1 5/8-12	37,5	41,0	50,0
1202408	H1226511-161600	CR	16	25,0	1"	16	1 5/16-12	32,9	32,0	38,0
1223146	H1226511-060500	CR	06	10,0	3/8"	05	1/2-20	21,3	16,0	17,0
1214220	H1226512-162000	TN	16	25,0	1"	20	1 5/8-12	37,5	41,0	50,0
1200685	H1226511-060800	CR	06	10,0	3/8"	08	3/4-16	24,8	19,0	25,0
1200686	H1226511-060600	CR	06	10,0	3/8"	06	9/16-18	21,3	17,0	19,0
1201497	H1226511-050500	CR	05	8,0	5/16"	05	1/2-20	20,3	14,0	17,0
1201333	H1226511-121200	CR	12	19,0	3/4"	12	1 1/16-12	28,6	27,0	32,0
1202406	H1226511-040500	CR	04	6,0	1/4"	05	1/2-20	20,3	14,0	17,0
1200621	H1226511-040400	CR	04	6,0	1/4"	04	7/16-20	19,6	14,0	16,0
1200720	H1226511-080800	CR	08	13,0	1/2"	08	3/4-16	25,6	19,0	25,0
1200622	H1226511-040600	CR	04	6,0	1/4"	06	9/16-18	20,3	14,0	19,0
1200721	H1226511-081000	CR	08	13,0	1/2"	10	7/8-14	26,6	22,0	27,0

Dimensions shown may be changed without prior notice

45° JIC Female 37° Seat - Medium Drop
DKJ 45M
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1202791	H1222541-06080M	CR	06	10,0	3/8"	08	3/4-16	47,2	15,0	25,0
1202828	H1222541-08080M	CR	08	13,0	1/2"	08	3/4-16	51,6	15,0	25,0
1202839	H1222542-24240M	TN	24	38,0	1 1/2"	24	1 7/8-12	112,7	43,0	55,0
1202827	H1222541-06060M	CR	06	10,0	3/8"	06	9/16-18	46,3	11,0	19,0
1202826	H1222541-05060M	CR	05	8,0	5/16"	06	9/16-18	42,8	12,0	19,0
1202837	H1222542-20200M	TN	20	32,0	1 1/4"	20	1 5/8-12	97,1	37,0	50,0
1202825	H1222541-05050M	CR	05	8,0	5/16"	05	1/2-20	39,8	12,0	17,0
1202836	H1222542-16200M	TN	16	25,0	1"	20	1 5/8-12	83,8	37,0	50,0
1202829	H1222541-08100M	CR	08	13,0	1/2"	10	7/8-14	50,7	16,0	27,0
1202831	H1222541-10120M	CR	10	16,0	5/8"	12	1 1/16-12	68,6	21,0	32,0
1202830	H1222541-08120M	CR	08	13,0	1/2"	12	1 1/16-12	57,0	21,0	32,0
1202840	H1222542-32320M	TN	32	51,0	2"	32	2 1/2-12	159,9	67,0	70,0
1202824	H1222541-04060M	CR	04	6,0	1/4"	06	9/16-18	39,4	11,0	19,0
1202835	H1222541-16160M	CR	16	25,0	1"	16	1 5/16-12	79,4	24,0	38,0
1202823	H1222541-04050M	CR	04	6,0	1/4"	05	1/2-20	37,2	12,0	17,0
1200778	H1222541-121400	CR	12	19,0	3/4"	14	1 3/16-12	67,6	23,0	36,0
1202834	H1222541-12160M	CR	12	19,0	3/4"	16	1 5/16-12	71,4	26,0	38,0
1202822	H1222541-04040M	CR	04	6,0	1/4"	04	7/16-20	36,6	10,0	16,0
1202833	H1222541-12120M	CR	12	19,0	3/4"	12	1 1/16-12	67,5	21,0	32,0
1202821	H1222541-03040M	CR	03	5,0	3/16"	04	7/16-20	37,1	10,0	16,0
1202832	H1222541-10100M	CR	10	16,0	5/8"	10	7/8-14	62,2	19,0	27,0

90° JIC Female 37° Seat - Short Drop
DKJ 90S
Solid one piece



Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1203032	H1222591-06060S	CR	06	10,0	3/8"	06	9/16-18	42,3	25,0	19,0
1202772	H1222591-04040S	CR	04	6,0	1/4"	04	7/16-20	27,0	21,0	16,0
1200780	H1222591-12140S	CR	12	19,0	3/4"	14	1 3/16-12	49,6	52,5	36,0
1203036	H1222591-16160S	CR	16	25,0	1"	16	1 5/16-12	74,0	56,0	38,0
1203035	H1222591-1010BS	CR	10	16,0	5/8"	10	7/8-14	36,5	32,0	27,0
1203034	H1222591-08080S	CR	08	13,0	1/2"	08	3/4-16	46,4	29,0	25,0
1203033	H1222591-06080S	CR	06	10,0	3/8"	08	3/4-16	48,8	29,0	25,0
1216771	H1222591-06050S	CR	06	10,0	3/8"	05	1/2-20	33,3	25,0	17,0
1202815	H1222591-08100S	CR	08	13,0	1/2"	10	7/8-14	45,8	32,0	27,0
1202841	H1222591-03040S	CR	03	5,0	3/16"	04	7/16-20	26,7	21,0	16,0
1203116	H1222591-05060S	CR	05	8,0	5/16"	06	9/16-18	42,7	23,0	19,0
1202846	H1222591-12160S	CR	12	19,0	3/4"	16	1 5/16-12	53,6	53,0	38,0
1202845	H1222591-12120S	CR	12	19,0	3/4"	12	1 1/16-12	58,2	46,0	32,0
1202745	H1222591-10120S	CR	10	16,0	5/8"	12	1 1/16-12	47,9	48,0	32,0
1203118	H1222591-04050S	CR	04	6,0	1/4"	05	1/2-20	26,5	23,5	17,0
1202788	H1222591-04060S	CR	04	6,0	1/4"	06	9/16-18	31,0	23,0	19,0
1202744	H1222591-08120S	CR	08	13,0	1/2"	12	1 1/16-12	37,3	46,0	32,0

Dimensions shown may be changed without prior notice

90° JIC Female 37° Seat - Medium Drop
DKJ 90M
Solid one piece



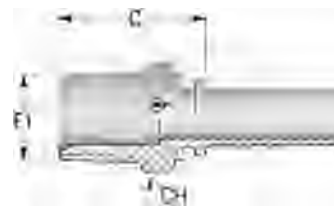
Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1202794	H1222591-05050M	CR	05	8,0	5/16"	05	1/2-20	34,2	32,0	17,0
1202793	H1222591-04060M	CR	04	6,0	1/4"	06	9/16-18	28,5	38,0	19,0
1200693	H1222591-06100M	CR	06	10,0	3/8"	10	7/8-14	44,6	47,0	27,0
1202792	H1222591-03040M	CR	03	5,0	3/16"	04	7/16-20	33,5	32,0	16,0
1216778	H1222591-10120M	CR	10	16,0	5/8"	12	1 1/16-12	47,9	58,0	32,0
1202739	H1222591-04040M	CR	04	6,0	1/4"	04	7/16-20	34,2	32,0	16,0
1202849	H1222592-20200M	TN	20	32,0	1 1/4"	20	1 5/8-12	82,4	78,0	50,0
1216780	H1222591-12160M	CR	12	19,0	3/4"	16	1 5/16-12	52,6	72,0	38,0
1202848	H1222592-16200M	TN	16	25,0	1"	20	1 5/8-12	72,6	78,0	50,0
1202847	H1222591-16160M	CR	16	25,0	1"	16	1 5/16-12	72,6	71,5	38,0
1202732	H1222591-06080M	CR	06	10,0	3/8"	08	3/4-16	39,5	41,0	25,0
1202743	H1222591-08080M	CR	08	13,0	1/2"	08	3/4-16	37,2	40,0	25,0
1202731	H1222591-05060M	CR	05	8,0	5/16"	06	9/16-18	33,2	35,0	19,0
1202742	H1222591-06060M	CR	06	10,0	3/8"	06	9/16-18	31,3	35,0	19,0
1202852	H1222592-32320M	TN	32	51,0	2"	32	2 1/2-12	129,5	140,0	70,0
1202741	H1222591-08100M	CR	08	13,0	1/2"	10	7/8-14	43,3	47,0	27,0
1202851	H1222592-24240M	TN	24	38,0	1 1/2"	24	1 7/8-12	95,3	92,0	55,0
1202740	H1222591-04050M	CR	04	6,0	1/4"	05	1/2-20	25,7	30,0	17,0
1202850	H1222592-20240M	TN	20	32,0	1 1/4"	24	1 7/8-12	87,3	82,0	55,0
1202746	H1222591-12120M	CR	12	19,0	3/4"	12	1 1/16-12	52,4	54,0	32,0
1202844	H1222591-10100M	CR	10	16,0	5/8"	10	7/8-14	49,4	48,0	27,0

90° JIC Female 37° Seat - Long Drop
DKJ 90L
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1203131	H1222591-04040L	CR	04	6,0	1/4"	04	7/16-20	30,8	46,0	16,0
1203112	H1222591-12120L	CR	12	19,0	3/4"	12	1 1/16-12	54,1	95,0	32,0
1203111	H1222591-16160L	CR	16	25,0	1"	16	1 5/16-12	78,6	114,0	38,0
1214215	H1222591-04050L	CR	04	6,0	1/4"	05	1/2-20	31,3	45,0	17,0
1202842	H1222591-06080L	CR	06	10,0	3/8"	08	3/4-16	46,8	64,0	25,0
1214216	H1222591-08080L	CR	08	13,0	1/2"	08	3/4-16	49,9	64,0	25,0
1203115	H1222591-06060L	CR	06	10,0	3/8"	06	9/16-18	43,3	54,0	19,0
1203114	H1222591-10100L	CR	10	16,0	5/8"	10	7/8-14	49,9	65,0	27,0
1202843	H1222591-08100L	CR	08	13,0	1/2"	10	7/8-14	37,3	65,0	27,0

// NPTF INSERTS

**NPTF Male 60° Seat
AGN**

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm
			Dash	mm	in				
1201370	H1212810-323200	NA	32	51,0	2"	32	2-11 1/2	54,2	65,0
1202282	H1212810-161200	NA	16	25,0	1"	12	3/4-14	39,4	36,0
1203150	H1212810-040800	NA	04	6,0	1/4"	08	1/2-14	31,3	22,0
1228235	H121281P-040400	NA	04	6,0	1/4"	04	1/4-18	26,8	14,3
1216610	H1212810-141600	NA	14	22,0	7/8"	16	1-11 1/2	43,6	36,0
1201367	H1212810-162000	NA	16	25,0	1"	20	1 1/4-11 1/2	47,4	46,0
1203149	H1212810-120800	NA	12	19,0	3/4"	08	1/2-14	33,6	27,0
1201368	H1212810-202000	NA	20	32,0	1 1/4"	20	1 1/4-11 1/2	49,0	46,0
1201366	H1212810-161600	NA	16	25,0	1"	16	1-11 1/2	44,4	36,0
1200511	H1212810-050400	NA	05	8,0	5/16"	04	1/4-18	26,8	17,0
1201369	H1212810-242400	NA	24	38,0	1 1/2"	24	1 1/2-11 1/2	50,5	50,0
1200512	H1212810-050600	NA	05	8,0	5/16"	06	3/8-18	27,8	19,0
1216613	H1212810-293200	NA	29	46,0	1 13/16"	32	2-11 1/2	54,2	65,0
1216612	H1212810-222400	NA	-	35,0	1 3/8"	24	1 1/2-11 1/2	50,5	50,0
1200308	H1212810-060600	NA	06	10,0	3/8"	06	3/8-18	27,8	19,0
1200306	H1212810-060800	NA	06	10,0	3/8"	08	1/2-14	31,3	22,0
1200307	H1212810-060400	NA	06	10,0	3/8"	04	1/4-18	26,8	17,0
1200421	H1212810-121200	NA	12	19,0	3/4"	12	3/4-14	34,6	27,0
1200388	H1212810-101200	NA	10	16,0	5/8"	12	3/4-14	34,1	27,0
1200344	H1212810-081200	NA	08	13,0	1/2"	12	3/4-14	34,1	27,0
1200345	H1212810-080600	NA	08	13,0	1/2"	06	3/8-18	28,6	19,0
1200466	H1212810-040200	NA	04	6,0	1/4"	02	1/8-27	21,3	14,0
1200420	H1212810-121600	NA	12	19,0	3/4"	16	1-11 1/2	43,6	36,0
1200387	H1212810-100800	NA	10	16,0	5/8"	08	1/2-14	33,1	24,0
1200343	H1212810-080800	NA	08	13,0	1/2"	08	1/2-14	32,1	22,0
1200448	H1212810-030200	NA	03	5,0	3/16"	02	1/8-27	20,8	12,0
1200467	H1212810-040600	NA	04	6,0	1/4"	06	3/8-18	27,8	19,0

Dimensions shown may be changed without prior notice

NPTF Female Solid

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1216797	H1222810-161600	NA	16	25,0	1"	16	1-11 1/2	44,9	38,0
1216796	H1222810-121200	NA	12	19,0	3/4"	12	3/4-14	38,1	32,0
1216795	H1222810-080800	NA	08	13,0	1/2"	08	1/2-14	35,6	25,0
1216794	H1222810-040200	NA	04	6,0	1/4"	02	1/8-27	22,3	14,0
1200464	H1222810-040400	NA	04	6,0	1/4"	04	1/4-18	27,8	19,0

NPTF Male Swivel 60° Seat

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1214186	H1212811-060600	CR	06	10,0	3/8"	06	3/8-18	37,5	22,0
1216619	H1212811-080600	CR	08	13,0	1/2"	06	3/8-18	38,3	22,0
1216621	H1212811-161600	CR	16	25,0	1"	16	1-11 1/2	57,9	41,0
1216620	H1212811-121200	CR	12	19,0	3/4"	12	3/4-14	50,1	32,0
1214187	H1212811-080800	CR	08	13,0	1/2"	08	1/2-14	42,3	25,0
1216614	H1212811-040400	CR	04	6,0	1/4"	04	1/4-18	37,6	17,0
1216617	H1212811-060800	CR	06	10,0	3/8"	08	1/2-14	43,5	25,0
1216616	H1212811-060400	CR	06	10,0	3/8"	04	1/4-18	39,6	17,0
1216615	H1212811-040600	CR	04	6,0	1/4"	06	3/8-18	39,5	22,0

90° Compact NPTF Male Swivel 60° Seat

Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH
			Dash	mm	in	Dash Size		mm	mm	mm
1225918	H1212881-040400	CR	04	6,0	1/4"	04	1/4-18	17,0	39,0	17,0
1225920	H1212881-060600	CR	06	10,0	3/8"	06	3/8-18	20,0	41,0	22,0
1225921	H1212881-080800	CR	08	13,0	1/2"	08	1/2-14	23,0	48,0	25,0
1225922	H1212881-121200	CR	12	19,0	3/4"	12	3/4-14	27,0	61,0	32,0

// NPSM INSERTS

NPSM Female



Item Code	Part Number	Nut Type	ID			F1		F1	C	CH	CH1
			Dash	mm	in	Dash Size					
1202084	H1227311-080800	CR	08	13,0	1/2"	08		1/2-14	26,6	22,0	27,0
1216834	H1227311-060600	CR	06	10,0	3/8"	06		3/8-18	24,8	19,0	22,0
1203280	H1227311-040400	CR	04	6,0	1/4"	04		1/4-18	24,3	17,0	19,0
1216836	H1227311-161600	CR	16	25,0	1"	16		1-11 1/2	35,4	36,0	38,0
1216835	H1227311-121200	CR	12	19,0	3/4"	12		3/4-14	28,6	30,0	32,0

Dimensions shown may be changed without prior notice

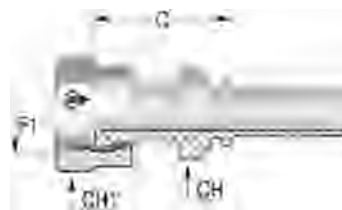
// ORFS INSERTS

ORFS Male



Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm
			Dash	mm	in				
1202493	H1212410-081200	NA	08	13,0	1/2"	12	1 3/16-12	34,1	32,0
1202492	H1212410-080800	NA	08	13,0	1/2"	08	13/16-16	27,1	22,0
1202491	H1212410-060800	NA	06	10,0	3/8"	08	13/16-16	26,3	22,0
1202490	H1212410-060600	NA	06	10,0	3/8"	06	11/16-16	24,3	19,0
1202497	H1212410-121600	NA	12	19,0	3/4"	16	1 7/16-12	38,1	41,0
1202892	H1212410-101000	NA	10	16,0	5/8"	10	1-14	30,6	27,0
1202496	H1212410-121200	NA	12	19,0	3/4"	12	1 3/16-12	34,6	32,0
1202055	H1212410-061000	NA	06	10,0	3/8"	10	1-14	29,8	27,0
1202495	H1212410-121000	NA	12	19,0	3/4"	10	1-14	31,1	27,0
1202054	H1212410-081000	NA	08	13,0	1/2"	10	1-14	30,6	27,0
1202494	H1212410-101200	NA	10	16,0	5/8"	12	1 3/16-12	34,1	32,0
1214185	H1212410-050600	NA	05	8,0	5/16"	06	11/16-16	24,3	19,0
1202489	H1212410-040600	NA	04	6,0	1/4"	06	11/16-16	24,3	19,0
1202500	H1212410-202000	NA	20	32,0	1 1/4"	20	1 11/16-12	41,5	46,0
1202488	H1212410-040400	NA	04	6,0	1/4"	04	9/16-18	22,3	17,0
1202499	H1212410-162000	NA	16	25,0	1"	20	1 11/16-12	39,9	46,0
1202498	H1212410-161600	NA	16	25,0	1"	16	1 7/16-12	37,9	38,0

ORFS Female with Stem Hexagon



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH	CH1
			Dash	mm	in					
1203053	H1222411-081200	CR	08	13,0	1/2"	12	1 3/16-12	42,1	30,0	36,0
1202563	H1222411-080600	CR	08	13,0	1/2"	06	11/16-16	32,1	19,0	22,0
1202046	H1222411-242400	CR	24	38,0	1 1/2"	24	2-12	56,5	50,0	60,0
1203056	H1222411-162000	CR	16	25,0	1"	20	1 11/16-12	50,4	41,0	50,0
1202560	H1222411-121200	CR	12	19,0	3/4"	12	1 3/16-12	42,6	30,0	36,0
1201741	H1222411-050600	CR	05	8,0	5/16"	06	11/16-16	30,3	17,0	22,0
1201586	H1222411-040400	CR	04	6,0	1/4"	04	9/16-18	27,3	14,0	17,0
1201446	H1222411-161600	CR	16	25,0	1"	16	1 7/16-12	49,4	36,0	41,0
1202612	H1222411-101000	CR	10	16,0	5/8"	10	1-14	39,6	24,0	30,0
1201447	H1222411-202000	CR	20	32,0	1 1/4"	20	1 11/16-12	52,0	41,0	50,0
1202053	H1222411-121600	CR	12	19,0	3/4"	16	1 7/16-12	48,6	36,0	41,0
1203142	H1222411-161200	CR	16	25,0	1"	12	1 3/16-12	45,4	32,0	36,0
1202052	H1222411-081000	CR	08	13,0	1/2"	10	1-14	39,6	24,0	30,0
1201782	H1222411-121000	CR	12	19,0	3/4"	10	1-14	40,1	27,0	30,0
1203143	H1222411-040800	CR	04	6,0	1/4"	08	13/16-16	35,3	22,0	24,0
1203220	H1222411-030400	CR	03	5,0	3/16"	04	9/16-18	26,8	14,0	17,0
1203061	H1222411-100800	CR	10	16,0	5/8"	08	13/16-16	37,1	24,0	24,0
1201815	H1222411-101200	CR	10	16,0	5/8"	12	1 3/16-12	42,1	30,0	36,0
1202369	H1222411-060600	CR	06	10,0	3/8"	06	11/16-16	30,3	17,0	22,0
1226017	H1222411-202400	CR	20	32,0	1 1/4"	24	2-12	56,5	50,0	60,0
1203237	H1222411-060400	CR	06	10,0	3/8"	04	9/16-18	28,3	17,0	17,0
1201855	H1222411-040600	CR	04	6,0	1/4"	06	11/16-16	30,3	17,0	22,0
1201338	H1222411-080800	CR	08	13,0	1/2"	08	13/16-16	36,1	22,0	24,0
1201339	H1222411-060800	CR	06	10,0	3/8"	08	13/16-16	35,3	22,0	24,0

Dimensions shown may be changed without prior notice

45° ORFS Female - Medium Drop
DK ORFS 45M
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1203141	H1222443-16200M	SN	16	25,0	1"	20	1 11/16-12	85,4	26,0	50,0
1202871	H1222443-05060M	SN	05	8,0	5/16"	06	11/16-16	46,3	12,0	22,0
1202771	H1222443-08100M	SN	08	13,0	1/2"	10	1-14	50,4	16,5	30,0
1203060	H1222441-12100M	CR	12	19,0	3/4"	10	1-14	51,4	24,0	30,0
1202915	H1222443-12160M	SN	12	19,0	3/4"	16	1 7/16-12	70,7	24,0	41,0
1202819	H1222443-10100M	SN	10	16,0	5/8"	10	1-14	57,7	17,0	30,0
1202776	H1222443-06060M	SN	06	10,0	3/8"	06	11/16-16	47,4	12,0	22,0
1202853	H1222443-10120M	SN	10	16,0	5/8"	12	1 3/16-12	63,1	21,0	36,0
1202775	H1222443-04060M	SN	04	6,0	1/4"	06	11/16-16	46,1	11,0	22,0
1202797	H1222443-16160M	SN	16	25,0	1"	16	1 7/16-12	82,4	26,0	41,0
1202874	H1222443-24240M	SN	24	38,0	1 1/2"	24	2-12	104,4	28,0	60,0
1202774	H1222443-04040M	SN	04	6,0	1/4"	04	9/16-18	41,1	11,0	17,0
1202873	H1222443-20200M	SN	20	32,0	1 1/4"	20	1 11/16-12	97,4	26,0	50,0
1202872	H1222443-12120M	SN	12	19,0	3/4"	12	1 3/16-12	63,5	21,0	36,0
1202777	H1222443-06080M	SN	06	10,0	3/8"	08	13/16-16	51,2	15,0	24,0
1202854	H1222441-08080M	CR	08	13,0	1/2"	08	13/16-16	47,1	16,0	24,0

90° ORFS Female - Short Drop
DK ORFS 90S
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1203054	H1222493-08100S	SN	08	13,0	1/2"	10	1-14	46,3	32,5	30,0
1203392	H1222491-08060S	CR	08	13,0	1/2"	06	11/16-16	44,1	25,0	22,0
1202860	H1222493-10100S	SN	10	16,0	5/8"	10	1-14	52,3	32,5	30,0
1203135	H1222493-16200S	SN	16	25,0	1"	20	1 11/16-12	82,6	64,0	50,0
1203133	H1222493-20200S	SN	20	32,0	1 1/4"	20	1 11/16-12	95,0	68,0	50,0
1203055	H1222493-12160S	SN	12	19,0	3/4"	16	1 7/16-12	61,6	56,0	41,0
1214213	H1222493-24240S	SN	24	38,0	1 1/2"	24	2-12	103,7	78,0	60,0
1202859	H1222493-06080S	SN	06	10,0	3/8"	08	13/16-16	41,8	29,0	24,0
1202858	H1222493-06060S	SN	06	10,0	3/8"	06	11/16-16	41,8	25,0	22,0
1202863	H1222493-16160S	SN	16	25,0	1"	16	1 7/16-12	80,0	58,0	41,0
1202862	H1222493-12120S	SN	12	19,0	3/4"	12	1 3/16-12	60,6	51,0	36,0
1203334	H1222493-08120S	SN	08	13,0	1/2"	12	1 3/16-12	56,3	51,0	36,0
1202861	H1222493-10120S	SN	10	16,0	5/8"	12	1 3/16-12	55,4	49,0	36,0
1202857	H1222493-05060S	SN	05	8,0	5/16"	06	11/16-16	49,3	23,0	22,0
1203209	H1222491-16120S	CR	16	25,0	1"	12	1 3/16-12	54,6	51,0	36,0
1202856	H1222493-04060S	SN	04	6,0	1/4"	06	11/16-16	32,0	23,0	22,0
1202778	H1222493-04040S	SN	04	6,0	1/4"	04	9/16-18	28,5	21,0	17,0
1202855	H1222491-08080S	CR	08	13,0	1/2"	08	13/16-16	39,8	29,0	24,0

90° ORFS Female - Medium Drop
DK ORFS 90M
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1202783	H1222493-12120M	SN	12	19,0	3/4"	12	1 3/16-12	61,6	58,0	36,0
1203069	H1222493-16200M	SN	16	25,0	1"	20	1 11/16-12	82,6	78,0	50,0
1202782	H1222493-10100M	SN	10	16,0	5/8"	10	1-14	55,4	44,0	30,0
1202781	H1222491-08080M	CR	08	13,0	1/2"	08	13/16-16	34,8	42,0	24,0
1202770	H1222493-08100M	SN	08	13,0	1/2"	10	1-14	48,3	47,0	30,0
1202780	H1222493-06060M	SN	06	10,0	3/8"	06	11/16-16	41,8	38,0	22,0
1216748	H1222491-16120M	CR	16	25,0	1"	12	1 3/16-12	62,6	58,0	36,0
1202916	H1222493-12160M	SN	12	19,0	3/4"	16	1 7/16-12	65,6	71,0	41,0
1202717	H1222493-16160M	SN	16	25,0	1"	16	1 7/16-12	82,6	66,0	41,0
1202716	H1222493-06080M	SN	06	10,0	3/8"	08	13/16-16	43,8	41,0	24,0
1202715	H1222493-04060M	SN	04	6,0	1/4"	06	11/16-16	37,3	38,0	22,0
1202875	H1222493-04040M	SN	04	6,0	1/4"	04	9/16-18	29,8	32,0	17,0
1203137	H1222493-10120M	SN	10	16,0	5/8"	12	1 3/16-12	55,4	58,0	36,0
1202779	H1222493-05060M	SN	05	8,0	5/16"	06	11/16-16	40,7	34,0	22,0
1202877	H1222493-24240M	SN	24	38,0	1 1/2"	24	2-12	107,8	87,0	60,0
1202876	H1222493-20200M	SN	20	32,0	1 1/4"	20	1 11/16-12	97,0	78,0	50,0

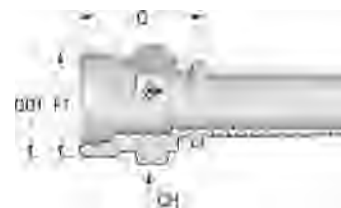
90° ORFS Female - Long Drop
DK ORFS 90L
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1203057	H1222493-06080L	SN	06	10,0	3/8"	08	13/16-16	46,8	64,0	24,0
1203134	H1222493-20200L	SN	20	32,0	1 1/4"	20	1 11/16-12	97,0	129,0	50,0
1214208	H1222493-08100L	SN	08	13,0	1/2"	10	1-14	46,3	70,0	30,0
1210841	H1222493-04040L	SN	04	6,0	1/4"	04	9/16-18	32,8	46,0	17,0
1202919	H1222493-10120L	SN	10	16,0	5/8"	12	1 3/16-12	55,4	96,0	36,0
1214212	H1222493-24240L	SN	24	38,0	1 1/2"	24	2-12	110,8	141,0	60,0
1202918	H1222493-10100L	SN	10	16,0	5/8"	10	1-14	55,4	70,0	30,0
1203139	H1222493-04060L	SN	04	6,0	1/4"	06	11/16-16	34,8	54,0	22,0
1203138	H1222493-06060L	SN	06	10,0	3/8"	06	11/16-16	41,8	54,0	22,0
1203136	H1222493-16160L	SN	16	25,0	1"	16	1 7/16-12	82,6	114,0	41,0
1202922	H1222491-08080L	CR	08	13,0	1/2"	08	13/16-16	38,3	64,0	24,0
1202921	H1222493-12160L	SN	12	19,0	3/4"	16	1 7/16-12	61,6	118,0	41,0
1202920	H1222493-12120L	SN	12	19,0	3/4"	12	1 3/16-12	61,6	96,0	36,0

Dimensions shown may be changed without prior notice

// FRENCH INSERTS

**Metric Male
French Type**

Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH mm
			Dash	mm	in				
1200317	H1211810-062000	NA	06	10,0	3/8"	M20X1.5	13,25	25,3	22,0
1200361	H1211810-082400	NA	08	13,0	1/2"	M24X1.5	16,75	27,1	24,0
1200404	H1211810-103000	NA	10	16,0	5/8"	M30X1.5	21,25	31,1	30,0
1200522	H1211810-052000	NA	05	8,0	5/16"	M20X1.5	13,25	17,0	22,0
1200435	H1211810-123600	NA	12	19,0	3/4"	M36X1.5	26,75	33,6	36,0

**Metric Female
French Type**

Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH1 mm
			Dash	mm	in				
1200681	H1221813-062000	SN	06	10,0	3/8"	M20X1.5	14	23,8	24,0
1200770	H1221813-123600	SN	12	19,0	3/4"	M36X1.5	28	27,0	42,0
1200717	H1221813-082400	SN	08	13,0	1/2"	M24X1.5	16	26,8	30,0
1200651	H1221813-052000	SN	05	8,0	5/16"	M20X1.5	14	23,8	24,0
1200744	H1221813-103000	SN	10	16,0	5/8"	M30X1.5	22	26,6	36,0

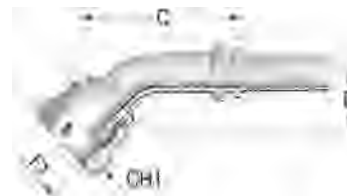
**90° Metric Female
French type**

Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1200719	H1221893-082400	SN	08	13,0	1/2"	M24X1.5	16	39,5	46,0	30,0
1203156	H1221893-103000	SN	10	16,0	5/8"	M30X1.5	22	43,0	49,0	36,0
1200773	H1221893-123600	SN	12	19,0	3/4"	M36X1.5	28	46,6	48,5	42,0
1200683	H1221893-062000	SN	06	10,0	3/8"	M20X1.5	14	36,7	44,0	24,0
1200654	H1221893-052000	SN	05	8,0	5/16"	M20X1.5	14	32,5	36,5	24,0

// JIS INSERTS

JIS Female 60° Cone - B 8363 (type C)

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH	CH1
			Dash	mm	in					
1226069	H1223711-100800	CR	10	16,0	5/8"	08	1/2-14	27,1	24,0	27,0
1226549	H1223711-101200	CR	10	16,0	5/8"	12	3/4-14	29,6	30,0	36,0
1203108	H1223711-080800	CR	08	13,0	1/2"	08	1/2-14	26,1	22,0	27,0
1203107	H1223711-121200	CR	12	19,0	3/4"	12	3/4-14	30,1	30,0	36,0
1214218	H1223711-161600	CR	16	25,0	1"	16	1-11	34,9	36,0	41,0

45° JIS Female 60° Cone - B 8363 (type C)

Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1216801	H1223741-121200	CR	12	19,0	3/4"	12	3/4-14	19,9	25,0	36,0
1216800	H1223741-080800	CR	08	13,0	1/2"	08	1/2-14	27,0	22,0	27,0
1216799	H1223741-060600	CR	06	10,0	3/8"	06	3/8-19	26,5	21,0	22,0
1216798	H1223741-040400	CR	04	6,0	1/4"	04	1/4-19	24,3	19,0	19,0

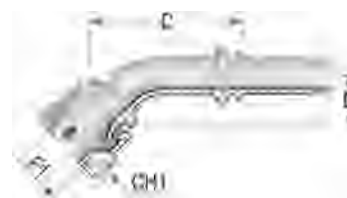
90° JIS Female 60° Cone - B 8363 (type C)

Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1216806	H1223791-080800	CR	08	13,0	1/2"	08	1/2-14	37,3	38,5	27,0
1216805	H1223791-060600	CR	06	10,0	3/8"	06	3/8-19	32,3	36,5	22,0
1216803	H1223791-040400	CR	04	6,0	1/4"	04	1/4-19	25,3	33,0	19,0

Dimensions shown may be changed without prior notice

JIS Female 60° Seat Flare - B 8363 (type F)

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1202947	H122381Z-040400	CR	04	6,0	1/4"	04	1/4-19	20,8	17,0	19,0
1203106	H122381Z-121200	CR	12	19,0	3/4"	12	3/4-14	27,1	30,0	36,0
1203105	H122381Z-161600	CR	16	25,0	1"	16	1-11	32,9	36,0	41,0
1201585	H122381Z-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	39,5	46,0	50,0
1202879	H122381Z-060600	CR	06	10,0	3/8"	06	3/8-19	21,8	19,0	22,0
1202878	H122381Z-080800	CR	08	13,0	1/2"	08	1/2-14	23,6	22,0	27,0
1201677	H122381Z-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	41,5	50,0	55,0

45° JIS Female 60° Seat Flare - B 8363 (type F)

Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1203104	H122384Z-040400	CR	04	6,0	1/4"	04	1/4-19	42,5	15,0	19,0

90° JIS Female 60° Seat Flare - B 8363 (type F)

Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1203095	H122389Z-040400	CR	04	6,0	1/4"	04	1/4-19	27,3	29,5	19,0
1203094	H122389Z-060600	CR	06	10,0	3/8"	06	3/8-19	31,3	33,0	22,0
1203093	H122389Z-080800	CR	08	13,0	1/2"	08	1/2-14	37,3	36,5	27,0
1203092	H122389Z-121200	CR	12	19,0	3/4"	12	3/4-14	46,1	52,0	36,0
1203091	H122389Z-161600	CR	16	25,0	1"	16	1-11	77,1	64,5	41,0

// KOMATSU INSERTS

Komatsu Female



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH	CH1
			Dash	mm	in					
1216808	H1224011-061400	CR	06	10,0	3/8"	14	M14X1.5	20,8	17,0	19,0
1202688	H1224011-082200	CR	08	13,0	1/2"	22	M22X1.5	23,6	22,0	27,0
1200334	H1224011-061800	CR	06	10,0	3/8"	18	M18X1.5	21,8	19,0	22,0
1200444	H1224011-123000	CR	12	19,0	3/4"	30	M30X1.5	27,6	30,0	36,0
1201720	H1224011-163300	CR	16	25,0	1"	33	M33X1.5	35,7	36,0	41,0
1200502	H1224011-041400	CR	04	6,0	1/4"	14	M14X1.5	20,8	17,0	19,0
1200414	H1224011-102400	CR	10	16,0	5/8"	24	M24X1.5	27,1	30,0	32,0

Komatsu Flange



Item Code	Part Number	ID			Flange	Flange Size	C	FD
		Dash	mm	in				
1201625	H1244110-101000	10	16,0	5/8"	10	5/8	46,7	34,0

Dimensions shown may be changed without prior notice

45° Komatsu Flange

Solid one piece



Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop
		Dash	mm	in	Dash Size		mm	mm	mm
1202066	H1244140-101000	10	16,0	5/8"	10	5/8	34,0	49,1	25,0

90° Komatsu Flange

Solid one piece



Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop
		Dash	mm	in	Dash Size		mm	mm	mm
1202067	H1244190-101000	10	16,0	5/8"	10	5/8	34,0	51,0	51,0

// SAE FLANGES

Flange SAE 3000 PSI J518 Code 61 - SFL



Item Code	Part Number	ID			Flange	Flange Size	C	FD	WP
		Dash	mm	in	Dash Size				
1202074	H1243310-324000	32	51,0	2"	40	2 1/2	83,0	84,1	2500
1203063	H1243310-404000	40	63,0	2 1/2"	40	2 1/2	86,5	84,1	2500
1202750	H1243310-121600	12	19,0	3/4"	16	1	50,5	44,5	5000
1226113	H1243310-403200	40	63,0	2 1/2"	32	2	86,5	71,4	3000
1201408	H1243310-161600	16	25,0	1"	16	1	51,4	44,5	5000
1201409	H1243310-162000	16	25,0	1"	20	1 1/4	53,9	50,8	4000
1221654	H1243310-201600	20	32,0	1 1/4"	16	1	53,0	44,5	5000
1221662	H1243310-322400	32	51,0	2"	24	1 1/2	66,0	60,3	3000
1201411	H1243310-202400	20	32,0	1 1/4"	24	1 1/2	58,5	60,3	3000
1201412	H1243310-242400	24	38,0	1 1/2"	24	1 1/2	58,5	60,3	3000
1202763	H1243310-081200	08	13,0	1/2"	12	3/4	42,0	38,1	5000
1201410	H1243310-202000	20	32,0	1 1/4"	20	1 1/4	55,5	50,8	4000
1202747	H1243310-080800	08	13,0	1/2"	08	1/2	41,0	30,2	5000
1201734	H1243310-121200	12	19,0	3/4"	12	3/4	42,5	38,1	5000
1202801	H1243310-101200	10	16,0	5/8"	12	3/4	42,2	38,1	5000
1201413	H1243310-243200	24	38,0	1 1/2"	32	2	70,0	71,4	3000
1201414	H1243310-323200	32	51,0	2"	32	2	70,0	71,4	3000

22° Flange SAE 3000 PSI J518 Code 61 - SFL 22
Solid one piece

Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size					
1216856	H1243320-202000	20	32,0	1 1/4"	20	1 1/4	50,8	113,6	16,0	4000
1216854	H1243320-161600	16	25,0	1"	16	1	44,5	92,7	12,0	5000
1216859	H1243320-323200	32	51,0	2"	32	2	71,4	153,0	30,0	3000
1216858	H1243320-242400	24	38,0	1 1/2"	24	1 1/2	60,3	131,0	22,0	3000
1216857	H1243320-202400	20	32,0	1 1/4"	24	1 1/2	60,3	114,7	20,5	3000

Dimensions shown may be changed without prior notice

30° Flange SAE 3000 PSI J518 Code 61 - SFL 30

Solid one piece



Item Code	Part Number	ID			Flange	Flange	FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Size				
1216863	H1243330-161600	16	25,0	1"	16	1	44,5	89,8	12,0	5000
1216862	H1243330-121600	12	19,0	3/4"	16	1	44,5	83,8	12,0	5000
1216861	H1243330-121200	12	19,0	3/4"	12	3/4	38,1	80,8	12,0	5000
1216867	H1243330-202400	20	32,0	1 1/4"	24	1 1/2	60,3	111,9	13,0	3000
1216866	H1243330-202000	20	32,0	1 1/4"	20	1 1/4	50,8	102,4	12,0	4000
1216864	H1243330-162000	16	25,0	1"	20	1 1/4	50,8	90,0	12,0	4000
1216869	H1243330-243200	24	38,0	1 1/2"	32	2	71,4	147,0	29,5	3000
1216868	H1243330-242400	24	38,0	1 1/2"	24	1 1/2	60,3	128,6	23,0	3000

45° Flange SAE 3000 PSI J518 Code 61 - SFL 45

Solid one piece



Item Code	Part Number	ID			Flange	Flange	FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Size				
1202681	H1243340-161600	16	25,0	1"	16	1	44,5	82,7	33,5	5000
1201848	H1243340-202000	20	32,0	1 1/4"	20	1 1/4	50,8	95,1	37,5	4000
1202748	H1243340-080800	08	13,0	1/2"	08	1/2	30,2	52,9	22,0	5000
1216874	H1243340-4040SL	40	63,0	2 1/2"	40	2 1/2	84,1	139,0	53,0	2500
1214223	H1243340-122000	12	19,0	3/4"	20	1 1/4	50,8	81,5	30,0	5000
1216873	H1243340-242000	24	38,0	1 1/2"	20	1 1/4	50,8	144,9	49,5	4000
1216872	H1243340-201600	20	32,0	1 1/4"	16	1	44,5	114,6	35,1	5000
1202677	H1243340-202400	20	32,0	1 1/4"	24	1 1/2	60,3	104,1	40,0	3000
1202754	H1243340-243200	24	38,0	1 1/2"	32	2	71,4	135,6	55,5	3000
1202753	H1243340-242400	24	38,0	1 1/2"	24	1 1/2	60,3	116,7	48,0	3000
1202752	H1243340-121600	12	19,0	3/4"	16	1	44,5	77,9	29,0	5000
1202751	H1243340-081200	08	13,0	1/2"	12	3/4	38,1	60,3	26,0	5000
1201982	H1243340-323200	32	51,0	2"	32	2	71,4	140,8	47,5	3000
1201845	H1243340-162000	16	25,0	1"	20	1 1/4	50,8	82,2	36,0	4000
1202678	H1243340-121200	12	19,0	3/4"	12	3/4	38,1	73,7	32,0	5000

60° Flange SAE 3000 PSI J518 Code 61 - SFL 60

Solid one piece



Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size					
1216881	H1243360-162000	16	25,0	1"	20	1 1/4	50,8	106,6	43,5	4000
1216880	H1243360-161600	16	25,0	1"	16	1	44,5	101,0	47,0	5000
1202882	H1243360-242400	24	38,0	1 1/2"	24	1 1/2	60,3	151,5	57,0	3000
1216884	H1243360-323200	32	51,0	2"	32	2	71,4	173,0	92,0	3000
1216882	H1243360-202000	20	32,0	1 1/4"	20	1 1/4	50,8	129,5	56,5	4000
1216878	H1243360-121200	12	19,0	3/4"	12	3/4	38,1	85,7	37,0	5000

90° Flange SAE 3000 PSI J518 Code 61 - SFL 90

Solid one piece



Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size					
1202680	H1243390-161600	16	25,0	1"	16	1	44,5	70,6	67,0	5000
1203364	H1243390-4040SL	40	63,0	2 1/2"	40	2 1/2	84,1	137,2	125,0	2500
1216898	H1243390-322400	32	51,0	2"	24	1 1/2	60,3	132,8	133,0	3000
1202806	H1243390-242000	24	38,0	1 1/2"	20	1 1/4	50,8	93,6	93,0	4000
1202805	H1243390-101200	10	16,0	5/8"	12	3/4	38,1	49,4	51,0	5000
1202749	H1243390-080800	08	13,0	1/2"	08	1/2	30,2	45,8	42,0	5000
1201846	H1243390-162000	16	25,0	1"	20	1 1/4	50,8	73,6	71,0	4000
1201847	H1243390-202000	20	32,0	1 1/4"	20	1 1/4	50,8	88,0	84,0	4000
1216894	H1243390-162400	16	25,0	1"	24	1 1/2	60,3	93,1	75,0	3000
1201983	H1243390-323200	32	51,0	2"	32	2	71,4	129,3	130,0	3000
1202676	H1243390-202400	20	32,0	1 1/4"	24	1 1/2	60,3	91,5	87,5	3000
1202884	H1243390-201600	20	32,0	1 1/4"	16	1	44,5	94,4	65,0	5000
1202883	H1243390-122000	12	19,0	3/4"	20	1 1/4	50,8	69,7	60,0	4000
1203169	H1243390-3240SO	32	51,0	2"	40	2 1/2	84,1	103,0	100,0	2500
1202758	H1243390-243200	24	38,0	1 1/2"	32	2	71,4	104,8	115,0	3000
1202757	H1243390-242400	24	38,0	1 1/2"	24	1 1/2	60,3	104,8	91,0	3000
1202679	H1243390-121200	12	19,0	3/4"	12	3/4	38,1	59,7	58,0	5000
1202756	H1243390-121600	12	19,0	3/4"	16	1	44,5	66,2	64,5	5000
1202755	H1243390-081200	08	13,0	1/2"	12	3/4	38,1	45,3	51,0	5000

Dimensions shown may be changed without prior notice

Flange SAE 6000 PSI J518 Code 62 - SFS

Item Code	Part Number	ID			Flange	Flange Size	C	FD	WP
		Dash	mm	in	Dash Size		mm	mm	psi
1216908	H1243610-161200	16	25,0	1"	12	3/4	56,4	41,3	6000
1202760	H1243610-121600	12	19,0	3/4"	16	1	55,5	47,6	6000
1201419	H1243610-242400	24	38,0	1 1/2"	24	1 1/2	101,0	63,5	6000
1201417	H1243610-202000	20	32,0	1 1/4"	20	1 1/4	83,0	54,0	6000
1202759	H1243610-081200	08	13,0	1/2"	12	3/4	52,0	41,3	6000
1201418	H1243610-202400	20	32,0	1 1/4"	24	1 1/2	71,0	63,5	6000
1202807	H1243610-101200	10	16,0	5/8"	12	3/4	52,2	41,3	6000
1202511	H1243610-080800	08	13,0	1/2"	08	1/2	47,0	31,8	6000
1201420	H1243610-243200	24	38,0	1 1/2"	32	2	76,0	79,4	6000
1201421	H1243610-323200	32	51,0	2"	32	2	76,0	79,4	6000
1201415	H1243610-161600	16	25,0	1"	16	1	56,4	47,6	6000
1201416	H1243610-162000	16	25,0	1"	20	1 1/4	63,4	54,0	6000
1202733	H1243610-121200	12	19,0	3/4"	12	3/4	52,5	41,3	6000

45° Flange SAE 6000 PSI J518 Code 62 - SFS 45
Solid one piece

Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size		mm	mm	mm	psi
1202083	H1243640-121600	12	19,0	3/4"	16	1	47,6	80,0	33,5	6000
1202761	H1243640-202000	20	32,0	1 1/4"	20	1 1/4	54,0	108,6	40,0	6000
1202453	H1243640-242400	24	38,0	1 1/2"	24	1 1/2	63,5	122,9	45,0	6000
1202452	H1243640-202400	20	32,0	1 1/4"	24	1 1/2	63,5	114,8	45,5	6000
1201729	H1243640-080800	08	13,0	1/2"	08	1/2	31,8	56,5	23,0	6000
1202764	H1243640-081200	08	13,0	1/2"	12	3/4	41,3	79,9	30,5	6000
1216910	H1243640-101200	10	16,0	5/8"	12	3/4	41,3	69,0	31,0	6000
1201794	H1243640-161600	16	25,0	1"	16	1	47,6	96,7	36,0	6000
1202082	H1243640-121200	12	19,0	3/4"	12	3/4	41,3	84,1	31,0	6000
1202091	H1243640-162000	16	25,0	1"	20	1 1/4	54,0	96,1	39,0	6000
1202734	H1243640-323200	32	51,0	2"	32	2	79,4	156,6	60,0	6000

90° Flange SAE 6000 PSI J518 Code 62 - SFS 90
Solid one piece



Item Code	Part Number	ID			Flange	Flange	FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Size				
1202075	H1243690-121200	12	19,0	3/4"	12	3/4	41,3	63,2	61,0	6000
1216913	H1243690-161200	16	25,0	1"	12	3/4	41,3	72,6	61,0	6000
1201739	H1243690-161600	16	25,0	1"	16	1	47,6	73,6	75,0	6000
1242230	C12443690-10080	10	16,0	5/8"	08	1/2	31,8	50,0	52,0	6000
1202814	H1243690-101200	10	16,0	5/8"	12	3/4	41,3	49,9	55,0	6000
1202808	H1243690-100800	10	16,0	5/8"	08	1/2	31,8	50,0	52,0	6000
1202257	H1243690-080800	08	13,0	1/2"	08	1/2	31,8	47,8	46,0	6000
1201795	H1243690-121600	12	19,0	3/4"	16	1	47,6	63,2	66,0	6000
1202762	H1243690-323200	32	51,0	2"	32	2	79,4	143,3	132,0	6000
1202736	H1243690-242400	24	38,0	1 1/2"	24	1 1/2	63,5	99,6	105,0	6000
1202769	H1243690-243200	24	38,0	1 1/2"	32	2	79,4	116,9	123,0	6000
1202735	H1243690-202000	20	32,0	1 1/4"	20	1 1/4	54,0	94,5	89,0	6000
1202768	H1243690-202400	20	32,0	1 1/4"	24	1 1/2	63,5	98,0	94,0	6000
1202767	H1243690-162000	16	25,0	1"	20	1 1/4	54,0	77,6	78,0	6000
1202766	H1243690-081200	08	13,0	1/2"	12	3/4	41,3	47,8	54,0	6000

Dimensions shown may be changed without prior notice

Split Flange Clamp 3000 PSI J518 Code 61 - FHL

Item Code	Part Number	FD	V	H
		in	mm	mm
1900455	H10W3320-320000	2"	77,8	21,4
1900456	H10W3320-400000	2 1/2"	89,0	25,5
1900457	H10W3320-120000	3/4"	47,6	11,1
1900458	H10W3320-480000	3"	106,0	31,0
1900451	H10W3320-080000	1/2"	38,1	8,7
1900452	H10W3320-160000	1"	52,4	13,1
1901123	H10W3320-560000	3 1/2"	120,0	35,0
1900453	H10W3320-240000	1 1/2"	69,9	17,9
1900454	H10W3320-200000	1 1/4"	58,7	15,1
1900715	H10W3320-640000	4"	130,0	39,0

Split Flange Clamp 6000 PSI J518 Code 62 - FHS

Item Code	Part Number	FD	V	H
		in	mm	mm
1900445	H10W3620-080000	1/2"	40,5	9,1
1900446	H10W3620-160000	1"	57,2	13,9
1900447	H10W3620-240000	1 1/2"	79,4	18,3
1900450	H10W3620-120000	3/4"	50,8	11,9
1900448	H10W3620-200000	1 1/4"	66,7	15,9
1900449	H10W3620-320000	2"	96,8	22,2

4 Hole Flange Clamp 3000 PSI J518 Code 61 - VHL

Item Code	Part Number	FD	V	H
		in	mm	mm
1900440	H10W3310-320000	2"	77,8	42,8
1900442	H10W3310-120000	3/4"	47,6	22,2
1900437	H10W3310-160000	1"	52,4	26,2
1900438	H10W3310-240000	1 1/2"	69,9	35,8
1900439	H10W3310-200000	1 1/4"	58,7	30,2

4 Hole Flange Clamp 6000 PSI J518 Code 62 - VHS

Item Code	Part Number	FD	V	H
		in	mm	mm
1900433	H10W3610-120000	3/4"	50,8	23,8
1900430	H10W3610-240000	1 1/2"	79,4	36,6
1900431	H10W3610-200000	1 1/4"	66,7	31,8
1900432	H10W3610-320000	2"	96,8	44,4
1900910	H10W3610-400000	2 1/2"	123,8	58,7
1900428	H10W3610-080000	1/2"	40,5	18,2
1900429	H10W3610-160000	1"	57,2	27,8

Dimensions shown may be changed without prior notice

SAE Male Swivel O-Ring Boss



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1230553	H1213011-121200	CR	12	19,0	3/4"	12	1 1/16-12	49,6	32,0
1225927	H1213011-060600	CR	06	10,0	3/8"	06	9/16-18	40,5	22,0
1225928	H1213011-060800	CR	06	10,0	3/8"	08	3/4-16	22,0	22,0
1225929	H1213011-080800	CR	08	13,0	1/2"	08	3/4-16	23,0	25,0
1225930	H1213011-081000	CR	08	13,0	1/2"	10	7/8-14	23,0	25,0

90° Compact SAE Male Swivel O-Ring Boss



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH
			Dash	mm	in	Dash Size		mm	mm	mm
1240593	H1213081-161600	CR	16	25,0	1"	16	1 5/16-12	34,4	67,5	41,0
1226492	H1213081-121200	CR	12	19,0	3/4"	12	1 1/16-12	27,0	61,0	32,0
1225933	H1213081-060800	CR	06	10,0	3/8"	08	3/4-16	22,0	44,0	25,0
1225934	H1213081-080800	CR	08	13,0	1/2"	08	3/4-16	23,0	47,0	25,0
1226490	H1213081-040500	CR	04	6,0	1/4"	05	1/2-20	17,0	34,0	17,0
1225935	H1213081-081000	CR	08	13,0	1/2"	10	7/8-14	23,0	49,0	25,0



// NEW POWERTRACK

// FERRULES.....	99	// NPTF INSERTS.....	106
// BSP INSERTS.....	100	// ORFS INSERTS.....	107
// DIN METRIC INSERTS.....	102	// SAE FLANGES.....	109
// JIC 37° INSERTS.....	104	// SUPERCAT FLANGES.....	112

Dimensions shown may be changed without prior notice

// FERRULES**H1300SK4
Multispiral Ferrule for 4
Spiral Hoses**

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1240185	H1300SK4-120000	12	19,0	3/4"	38,0	59,0
1240186	H1300SK4-160000	16	25,0	1"	46,0	64,0
1240187	H1300SK4-200000	20	31,0	1 1/4"	56,0	91,0
1240188	H1300SK4-240000	24	38,0	1 1/2"	62,0	91,0
1240189	H1300SK4-320000	32	51,0	2"	78,0	115,0

**H1300NS4
Multispiral No-Skive
Ferrule for 4 Spiral
Hoses**

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1236599	H1300NS4-120000	12	19,0	3/4"	44,0	55,0
1236600	H1300NS4-160000	16	25,0	1"	51,0	64,0
1236601	H1300NS4-200000	20	31,0	1 1/4"	61,0	99,0
1236602	H1300NS4-240000	24	38,0	1 1/2"	70,0	89,5
1236603	H1300NS4-320000	32	51,0	2"	87,0	125,0

**H1300NS6
Multispiral No-Skive
Ferrule for 6 Spiral
Hoses**

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1236604	H1300NS6-200000	20	31,0	1 1/4"	65,0	99,0
1236605	H1300NS6-240000	24	38,0	1 1/2"	73,0	89,5
1236606	H1300NS6-320000	32	51,0	2"	88,9	125,0

// BSP INSERTS

**BSPP Male 60° Flare
AGR**

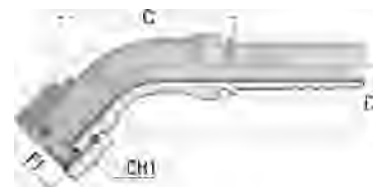
Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1226162	H1310510-161600	NA	16	25,0	1"	16	1-11	44,5	41,0
1230555	H1310510-202000	NA	20	32,0	1 1/4"	20	1 1/4-11	95,5	50,0
1246526	H3310510-323200	NA	32	51,0	2"	32	2-11	71,5	70,0
1246531	H3310510-121200	NA	12	19,0	3/4"	12	3/4-14	37,5	32,0
1246545	H3310510-161600	NA	16	25,0	1"	16	1-11	44,5	41,0
1238090	H1310510-121200	NA	12	19,0	3/4"	12	3/4-14	37,5	32,0
1241601	H1310510-323200	NA	32	51,0	2"	32	2-11	71,5	70,0
1246540	H3310510-202000	NA	20	32,0	1 1/4"	20	1 1/4-11	51,0	50,0
1241600	H1310510-242400	NA	24	38,0	1 1/2"	24	1 1/2-11	56,0	55,0

**BSPP Female 60° Cone with O-Ring
DKOR**

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH1
			Dash	mm	in	Dash Size		mm	mm
1238240	H1320812-323200	TN	32	51,0	2"	32	2-11	49,0	70,0
1238241	H1320812-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	35,0	50,0
1226178	H1320812-121200	TN	12	19,0	3/4"	12	3/4-14	25,2	32,0
1226179	H1320812-161600	TN	16	25,0	1"	16	1-11	31,0	38,0
1239857	H1320812-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	38,8	55,0
1241617	H1320812-162000	TN	16	25,0	1"	20	1 1/4-11	32,0	50,0
1241616	H1320812-121600	TN	12	19,0	3/4"	16	1-11	27,7	38,0

Dimensions shown may be changed without prior notice

45° BSPP Female 60° Cone with O-Ring
DKOR 45
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1242138	H1320842-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	113,0	46,0	55,0
1241630	H1320842-323200	TN	32	51,0	2"	32	2-11	153,5	60,0	70,0
1237423	H1320842-161600	TN	16	25,0	1"	16	1-11	92,1	40,0	38,0
1241629	H1320842-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	90,4	40,0	50,0
1241628	H1320842-121200	TN	12	19,0	3/4"	12	3/4-14	75,2	30,0	32,0

90° BSPP Female 60° Cone with O-Ring
DKOR 90
Solid one piece

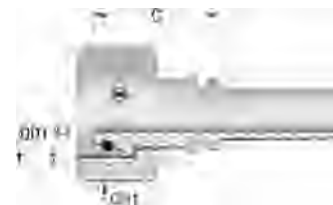


Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1246645	H1320892-202400	TN	20	32,0	1 1/4"	24	1 1/2-11	76,0	92,0	55,0
1238242	H1320892-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	98,7	96,0	55,0
1246642	H1320892-121600	TN	12	19,0	3/4"	16	1-11	50,0	62,0	38,0
1246643	H1320892-162000	TN	16	25,0	1"	20	1 1/4-11	61,0	76,0	50,0
1241625	H1320892-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	84,3	83,0	50,0
1226181	H1320892-161600	TN	16	25,0	1"	16	1-11	73,7	71,0	38,0
1226180	H1320892-121200	TN	12	19,0	3/4"	12	3/4-14	59,1	61,0	32,0
1241626	H1320892-323200	TN	32	51,0	2"	32	2-11	140,5	130,0	70,0

// DIN METRIC INSERTS

**Metric Male 24° Seat - Heavy
DIN 3853 - CES**

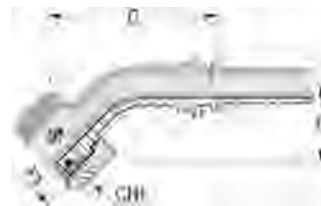
Item Code	Part Number	Nut Type	ID			F1	OD1	C	CH
			Dash	mm	in		mm	mm	mm
1226165	H1311210-205200	NA	20	32,0	1 1/4"	M52X2	38	51,0	55,0
1226164	H1311210-164200	NA	16	25,0	1"	M42X2	30	36,2	46,0
1241605	H1311210-123600	NA	12	19,0	3/4"	M36X2	25	36,5	36,0

**Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS**

Item Code	Part Number	Nut Type	ID			F1	OD1	C	CH1
			Dash	mm	in		mm	mm	mm
1226185	H1321613-205200	SN	20	32,0	1 1/4"	M52X2	38	51,1	60,0
1226184	H1321613-164200	SN	16	25,0	1"	M42X2	30	45,2	50,0
1238244	H1321612-245200	TN	24	38,0	1 1/2"	M52X2	38	58,0	60,0
1240224	H1321612-163600	TN	16	25,0	1"	M36X2	25	46,0	46,0
1242139	H1321612-204200	TN	20	32,0	1 1/4"	M42X2	30	51,0	50,0
1226182	H1321612-123000	TN	12	19,0	3/4"	M30X2	20	36,8	36,0

Dimensions shown may be changed without prior notice

45° Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS 45
Solid one piece



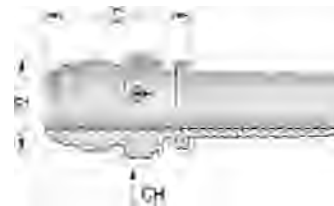
Item Code	Part Number	Nut Type	ID			F1	OD1	C	D Drop	CH1
			Dash	mm	in		mm	mm	mm	mm
1237408	H1321643-123600	SN	12	19,0	3/4"	M36X2	25	70,4	33,0	46,0
1238246	H1321643-205200	SN	20	32,0	1 1/4"	M52X2	38	112,0	45,0	60,0
1237422	H1321643-164200	SN	16	25,0	1"	M42X2	30	109,5	35,5	50,0
1242140	H1321642-163600	TN	16	25,0	1"	M36X2	25	93,0	37,5	46,0

90° Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS 90
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	OD1	C	D Drop	CH1
			Dash	mm	in		mm	mm	mm	mm
1238248	H1321693-205200	SN	20	32,0	1 1/4"	M52X2	38	97,0	92,0	60,0
1237410	H1321693-164200	SN	16	25,0	1"	M42X2	30	85,0	70,0	50,0
1240225	H1321692-163600	TN	16	25,0	1"	M36X2	25	75,6	82,0	46,0
1241633	H1321692-123000	TN	12	19,0	3/4"	M30X2	20	65,5	67,5	36,0
1237409	H1321693-123600	SN	12	19,0	3/4"	M36X2	25	51,0	59,5	46,0

// JIC 37° INSERTS

**JIC Male 37° Cone
AGJ**

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1226169	H1312510-161600	NA	16	25,0	1"	16	1 5/16-12	45,5	36,0
1226168	H1312510-121200	NA	12	19,0	3/4"	12	1 1/16-12	38,5	27,0
1226170	H1312510-202000	NA	20	32,0	1 1/4"	20	1 5/8-12	51,5	46,0

**JIC Female 37° Seat
DKJ**

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH1
			Dash	mm	in	Dash Size		mm	mm
1241619	H1322512-121600	TN	12	19,0	3/4"	16	1 5/16-12	25,0	38,0
1241621	H1322512-162000	TN	16	25,0	1"	20	1 5/8-12	29,0	50,0
1241620	H1322512-161600	TN	16	25,0	1"	16	1 5/16-12	27,0	38,0
1241624	H1322512-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	36,5	55,0
1241623	H1322512-202400	TN	20	32,0	1 1/4"	24	1 7/8-12	34,0	55,0
1241622	H1322512-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	31,5	50,0
1241618	H1322512-121200	TN	12	19,0	3/4"	12	1 1/16-12	22,2	32,0

Dimensions shown may be changed without prior notice

45° JIC Female 37° Seat - Medium Drop
DKJ 45M
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1238251	H1322542-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	99,0	37,0	50,0
1241631	H1322542-121600	TN	12	19,0	3/4"	16	1 5/16-12	69,0	33,5	38,0
1226206	H1322542-161600	TN	16	25,0	1"	16	1 5/16-12	84,8	31,0	38,0
1226205	H1322542-121200	TN	12	19,0	3/4"	12	1 1/16-12	69,5	27,5	32,0
1226207	H1322542-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	118,3	43,5	55,0

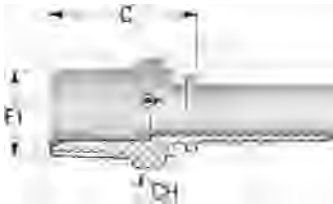
90° JIC Female 37° Seat - Medium Drop
DKJ 90M
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1238254	H1322592-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	84,0	78,0	50,0
1226211	H1322592-121600	TN	12	19,0	3/4"	16	1 5/16-12	58,1	63,5	38,0
1238255	H1322592-323200	TN	32	51,0	2"	32	2 1/2-12	147,5	135,0	70,0
1226212	H1322592-161600	TN	16	25,0	1"	16	1 5/16-12	75,7	67,0	38,0
1230690	H1322592-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	105,3	92,0	55,0
1226209	H1322592-121200	TN	12	19,0	3/4"	12	1 1/16-12	59,1	57,0	32,0

// NPTF INSERTS

NPTF Male 60° Seat
AGN



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1226173	H1312810-161600	NA	16	25,0	1"	16	1-11 1/2	46,5	36,0
1226172	H1312810-121200	NA	12	19,0	3/4"	12	3/4-14	35,5	27,0

Dimensions shown may be changed without prior notice

// ORFS INSERTS

ORFS Male



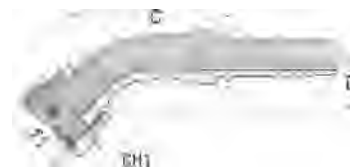
Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in				
1226166	H1312410-161600	NA	16	25,0	1"	16	1 7/16-12	35,7	38,0
1230556	H1312410-121200	NA	12	19,0	3/4"	12	1 3/16-12	32,7	32,0

ORFS Female with Stem Hexagon



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH	CH1
			Dash	mm	in					
1226195	H1322411-242400	CR	24	38,0	1 1/2"	24	2-12	62,5	50,0	60,0
1226190	H1322411-121200	CR	12	19,0	3/4"	12	1 3/16-12	44,5	30,0	36,0
1242141	H1322411-161200	CR	16	25,0	1"	12	1 3/16-12	42,0	32,0	36,0
1226192	H1322411-161600	CR	16	25,0	1"	16	1 7/16-12	52,5	36,0	41,0
1226191	H1322411-121600	CR	12	19,0	3/4"	16	1 7/16-12	50,5	36,0	41,0
1226194	H1322411-202000	CR	20	32,0	1 1/4"	20	1 11/16-12	56,0	41,0	50,0
1226193	H1322411-162000	CR	16	25,0	1"	20	1 11/16-12	53,5	41,0	50,0

45° ORFS Female - Medium Drop
DK ORFS 45M
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1226196	H1322441-121200	CR	12	19,0	3/4"	12	1 3/16-12	32,5	26,0	36,0
1226198	H1322441-161600	CR	16	25,0	1"	16	1 7/16-12	94,0	28,0	41,0
1226197	H1322441-121600	CR	12	19,0	3/4"	16	1 7/16-12	31,2	28,0	41,0
1238249	H1322441-202000	CR	20	32,0	1 1/4"	20	1 11/16-12	110,0	36,5	50,0
1241634	H1322441-162000	CR	16	25,0	1"	20	1 11/16-12	88,0	28,0	50,0

90° ORFS Female - Medium Drop
DK ORFS 90M
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1226200	H1322491-121200	CR	12	19,0	3/4"	12	1 3/16-12	67,6	58,0	36,0
1226202	H1322491-161600	CR	16	25,0	1"	16	1 7/16-12	79,6	66,0	41,0
1226201	H1322491-121600	CR	12	19,0	3/4"	16	1 7/16-12	69,6	58,0	36,0
1241635	H1322491-162000	CR	16	25,0	1"	20	1 11/16-12	73,0	66,0	50,0
1226203	H1322491-202000	CR	20	32,0	1 1/4"	20	1 11/16-12	102,4	81,0	50,0

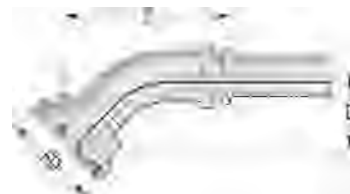
Dimensions shown may be changed without prior notice

// SAE FLANGES

Flange SAE 3000 PSI J518 Code 61 - SFL



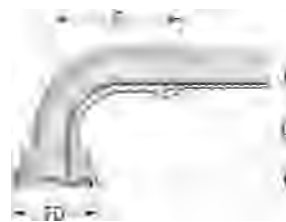
Item Code	Part Number	ID			Flange		C	FD	WP
		Dash	mm	in	Dash Size	Flange Size			
1226222	H1343310-121200	12	19,0	3/4"	12	3/4	43,5	38,1	5000
1226224	H1343310-161600	16	25,0	1"	16	1	53,5	44,5	5000
1241603	H1343310-242000	24	38,0	1 1/2"	20	1 1/4	55,5	50,8	5000
1226225	H1343310-162000	16	25,0	1"	20	1 1/4	56,0	50,8	5000
1241602	H1343310-201600	20	32,0	1 1/4"	16	1	58,5	44,4	5000
1226228	H1343310-242400	24	38,0	1 1/2"	24	1 1/2	63,5	60,3	5000
1226227	H1343310-202000	20	32,0	1 1/4"	20	1 1/4	58,5	50,8	5000
1235374	H1343310-323200	32	50,0	2"	32	2	85,0	71,4	5000
1226229	H1343310-243200	24	38,0	1 1/2"	32	2	75,0	71,4	5000
1241604	H1343310-202400	20	32,0	1 1/4"	24	1 1/2	61,5	60,3	5000

45° Flange SAE 3000 PSI J518 Code 61 - SFL 45
Solid one piece


Item Code	Part Number	ID			Flange		FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Flange Size				
1233534	H1343340-323200	32	50,0	2"	32	2	71,4	154,0	54,0	5000
1226233	H1343340-162000	16	25,0	1"	20	1 1/4	50,8	88,9	32,5	5000
1226235	H1343340-242400	24	38,0	1 1/2"	24	1 1/2	60,3	99,8	43,0	5000
1226234	H1343340-202000	20	32,0	1 1/4"	20	1 1/4	50,8	94,3	38,5	5000

90° Flange SAE 3000 PSI J518 Code 61 - SFL 90

Solid one piece



Item Code	Part Number	ID			Flange	Flange	FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Size	mm	mm	mm	psi
1226242	H1343390-162000	16	25,0	1"	20	1 1/4	50,8	74,7	69,0	5000
1226241	H1343390-161600	16	25,0	1"	16	1	44,5	78,1	64,0	5000
1241608	H1343390-202400	20	32,0	1 1/4"	24	1 1/2	60,3	87,0	85,0	5000
1226244	H1343390-202000	20	32,0	1 1/4"	20	1 1/4	50,8	92,0	81,0	5000
1226245	H1343390-242400	24	38,0	1 1/2"	24	1 1/2	60,3	103,0	93,0	5000
1235375	H1343390-323200	32	50,0	2"	32	2	71,4	139,0	130,0	5000

Flange SAE 6000 PSI J518 Code 62 - SFS

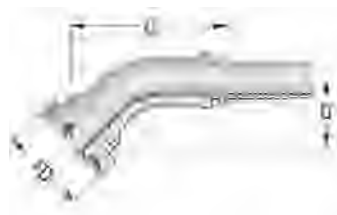


Item Code	Part Number	ID			Flange	Flange	C	FD	WP
		Dash	mm	in	Dash Size	Size	mm	mm	psi
1226250	H1343610-161600	16	25,0	1"	16	1	58,5	47,6	6000
1226253	H1343610-202400	20	32,0	1 1/4"	24	1 1/2	74,0	63,5	6000
1226252	H1343610-202000	20	32,0	1 1/4"	20	1 1/4	64,0	54,0	6000
1226255	H1343610-243200	24	38,0	1 1/2"	32	2	88,0	79,4	6000
1226254	H1343610-242400	24	38,0	1 1/2"	24	1 1/2	76,0	63,5	6000
1235378	H1343610-323200	32	50,0	2"	32	2	103,0	79,4	6000
1226248	H1343610-121600	12	19,0	3/4"	16	1	56,5	47,6	6000
1241614	H1343610-242000	24	38,0	1 1/2"	20	1 1/4	71,0	54,0	6000
1226247	H1343610-121200	12	19,0	3/4"	12	3/4	53,5	41,3	6000
1236992	H1343610-201600	20	32,0	1 1/4"	16	1	61,0	47,6	6000
1226624	H1343610-162000	16	25,0	1"	20	1 1/4	65,5	54,0	6000
1226623	H1343610-161200	16	25,0	1"	12	3/4	58,5	41,3	6000
1241615	H1343610-322400	32	51,0	2"	24	1 1/2	86,0	63,5	6000

Dimensions shown may be changed without prior notice

45° Flange SAE 6000 PSI J518 Code 62 - SFS 45

Solid one piece



Item Code	Part Number	ID			Flange	Flange	FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Size				
1226262	H1343640-121600	12	19,0	3/4"	16	1	47,6	65,4	33,0	6000
1226261	H1343640-121200	12	19,0	3/4"	12	3/4	41,3	62,8	30,0	6000
1241609	H1343640-161200	16	25,0	1"	12	3/4	41,3	77,0	29,5	6000
1226264	H1343640-162000	16	25,0	1"	20	1 1/4	54,0	78,0	44,0	6000
1226263	H1343640-161600	16	25,0	1"	16	1	47,6	82,9	38,5	6000
1242142	H1343640-201600	20	32,0	1 1/4"	16	1	47,6	104,7	34,5	6000
1241610	H1343640-202400	20	32,0	1 1/4"	24	1 1/2	63,5	117,0	48,0	6000
1235379	H1343640-323200	32	50,0	2"	32	2	79,4	177,0	61,0	6000
1226265	H1343640-242400	24	38,0	1 1/2"	24	1 1/2	63,5	122,5	48,0	6000
1238305	H1343640-202000	20	32,0	1 1/4"	20	1 1/4	54,0	103,0	41,0	6000

90° Flange SAE 6000 PSI J518 Code 62 - SFS 90

Solid one piece



Item Code	Part Number	ID			Flange	Flange	FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Size				
1226273	H1343690-161600	16	25,0	1"	16	1	47,6	74,8	74,0	6000
1226274	H1343690-162000	16	25,0	1"	20	1 1/4	54,0	78,8	85,0	6000
1238310	H1343690-202400	20	32,0	1 1/4"	24	1 1/2	63,5	99,0	103,5	6000
1226276	H1343690-242400	24	38,0	1 1/2"	24	1 1/2	63,5	113,8	109,0	6000
1226633	H1343690-161200	16	25,0	1"	12	3/4	41,3	74,7	61,0	6000
1241611	H1343690-201600	20	32,0	1 1/4"	16	1	47,6	87,0	72,0	6000
1230765	H1343690-202000	20	32,0	1 1/4"	20	1 1/4	54,0	96,0	91,0	6000
1226271	H1343690-121600	12	19,0	3/4"	16	1	47,6	64,7	66,0	6000
1226270	H1343690-121200	12	19,0	3/4"	12	3/4	41,3	64,7	64,0	6000
1235381	H1343690-323200	32	50,0	2"	32	2	79,4	172,0	131,0	6000

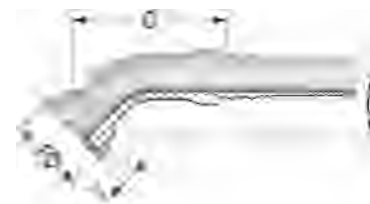
// SUPERCAT FLANGES

Flange SUPERCAT



Item Code	Part Number	ID			Flange		Flange Size	FD	T	C
		Dash	mm	in	Dash Size			mm	mm	mm
1226283	H1343910-202400	20	32,0	1 1/4"	24		1 1/2	63,5	14,3	87,0
1226279	H1343910-121600	12	19,0	3/4"	16		1	47,6	14,3	85,5
1226278	H1343910-121200	12	19,0	3/4"	12		3/4	41,3	14,3	85,5
1226280	H1343910-161600	16	25,0	1"	16		1	47,6	14,3	94,5
1226282	H1343910-202000	20	32,0	1 1/4"	20		1 1/4	54,0	14,3	92,0
1226281	H1343910-162000	16	25,0	1"	20		1 1/4	54,0	14,3	94,5

45° Flange SUPERCAT Solid one piece



Item Code	Part Number	ID			Flange		Flange Size	FD	T	C	D Drop
		Dash	mm	in	Dash Size			mm	mm	mm	mm
1241612	H1343940-121600	12	19,0	3/4"	16		1	47,6	14,3	112,0	34,0
1226291	H1343940-162000	16	25,0	1"	20		1 1/4	54,0	14,3	128,0	40,0
1226290	H1343940-161600	16	25,0	1"	16		1	47,6	14,3	129,0	42,5
1226292	H1343940-202000	20	32,0	1 1/4"	20		1 1/4	54,0	14,3	150,0	45,1

Dimensions shown may be changed without prior notice

90° Flange SUPERCAT

Solid one piece



Item Code	Part Number	ID			Flange	Flange	FD	T	C	D Drop
		Dash	mm	in	Dash Size	Size				
1226297	H1343990-121200	12	19,0	3/4"	12	3/4	41,3	14,3	67,2	67,0
1226299	H1343990-161600	16	25,0	1"	16	1	47,6	14,3	84,8	79,0
1226298	H1343990-121600	12	19,0	3/4"	16	1	47,6	14,3	68,7	70,0
1226301	H1343990-162000	16	25,0	1"	20	1 1/4	54,0	14,3	79,8	82,5
1238312	H1343990-202000	20	32,0	1 1/4"	20	1 1/4	54,0	14,3	97,0	93,0
1238315	H1343990-202400	20	32,0	1 1/4"	24	1 1/2	63,5	14,3	97,0	101,0



// WATERBLAST

// FERRULES.....	115	// WATERBLAST INSERTS.....	116
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Dimensions shown may be changed without prior notice

// FERRULES

D990000
Waterblast Ferrule
for WB10L - WB15L -
WB20L*

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1240103	D99000H-04/0	04	6,0	1/4"	22,0	25,5
1240105	D99000H-05/0	05	8,0	5/16"	27,0	35,0
1215264	D990000-06/0	06	10,0	3/8"	28,0	47,0
1223163	D99000N-08/0	08	13,0	1/2"	33,0	50,0
1215266	D990000-12/0	12	19,0	3/4"	41,0	63,0
1215267	D990000-16/0	16	25,0	1"	49,0	75,0

* For WB20L: 1/4" and 5/16" only

D980000
Waterblast Ferrule for
WB20L

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1242379	D980000-06/0	06	10,0	3/8"	32,0	45,0
1215257	D980000-08/0	08	13,0	1/2"	37,4	46,0
1241935	D980000-12/0	12	19,0	3/4"	46,0	63,0

// WATERBLAST INSERTS

BSP Female 60° with O-Ring

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH1
			Dash	mm	in	Dash Size		mm	mm
1214927	DA99001-1212/0	TN	12	19,0	3/4"	12	3/4-14	37,3	36,0
1214925	DA99001-0606/0	TN	06	10,0	3/8"	06	3/8-19	32,1	22,0
1225828	DA9900N-0808/0	TN	08	13,0	1/2"	08	1/2-14	36,0	30,0
1240158	DA99001-0404/0	SN	04	6,0	1/4"	04	1/4-19	26,0	22,0
1240159	DA99001-0605/0	SN	05	8,0	5/16"	06	3/8-19	31,0	25,0

BSP Female 60° without O-Ring

Item Code	Head/Tail	Nut Type	ID			F1	F1	C	CH1
	Dash		Dash	mm	in	Dash Size		mm	mm
1245682	-0808	TN	08	13,0	1/2"	08	1/2-14	36,0	30,0

UNF Type "M Swivel"

Item Code	Part Number	Nut Type	ID			F1	F1	C	CH1
			Dash	mm	in	Dash Size		mm	mm
1230563	DA99061-1008/0	TN	08	13,0	1/2"	10	1-12 UNF	41,0	32,0

Dimensions shown may be changed without prior notice

Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS
Slip on Nut with Relief Bore



Item Code	Part Number	Nut Type	ID			F1	OD1	C	CH1
			Dash	mm	in		mm	mm	mm
1214929	DA99179-0606/0	SN	06	10,0	3/8"	M22X1.5	14	36,5	27,0
1240100	DA99179-0204/0	SN	04	6,0	1/4"	M14X1.5	6	28,0	22,0
1240101	DA99179-0405/0	SN	05	8,0	5/16"	M18X1.5	10	34,3	27,0
1214930	DA99179-0806/0	SN	06	10,0	3/8"	M24X1.5	16	39,5	30,0
1214931	DA9917N-0808/0	SN	08	13,0	1/2"	M24X1.5	16	40,0	30,0
1214932	DA99179-1212/0	SN	12	19,0	3/4"	M36X2	25	47,3	46,0
1214933	DA99179-1616/0	SN	16	25,0	1"	M42X2	30	49,6	50,0

NPTF Male 60° Seat
AGN



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1215274	D990170-1616/0	NA	16	25,0	1"	16	1-11 1/2	47,3	36,0
1215272	D99017N-0808/0	NA	08	13,0	1/2"	08	1/2-14	35,0	22,0
1215273	D990170-1212/0	NA	12	19,0	3/4"	12	3/4-14	37,9	30,0
1240135	D990170-0605/0	NA	05	8,0	5/16"	06	3/8-18	30,5	19,0
1240134	D990170-0404/0	NA	04	6,0	1/4"	04	1/4-18	27,5	17,0
1215271	D990170-0606/0	NA	06	10,0	3/8"	06	3/8-18	31,0	19,0



// INTERLOCK

// FERRULES.....	119	// NPTF INSERTS.....	127
// HOSE MENDER.....	120	// ORFS INSERTS.....	128
// BSP INSERTS.....	121	// SAE FLANGES.....	130
// DIN METRIC INSERTS.....	123	// SUPERCAT FLANGES.....	134
// JIC 37° INSERTS.....	125	// HAMMER UNION.....	135

Dimensions shown may be changed without prior notice

// FERRULES

H1400200
Interlock Dual Skive
Ferrule for 4 Spiral
Hoses

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1201571	H1400200-060000	06	10,0	3/8"	27,0	49,0
1201856	H1400200-080000	08	13,0	1/2"	30,0	52,5
1201502	H1400200-100000	10	16,0	5/8"	34,0	57,5
1201503	H1400200-120000	12	19,0	3/4"	38,0	60,2
1201504	H1400200-160000	16	25,0	1"	46,0	74,7
1200098	H1400200-200000	20	31,0	1 1/4"	55,0	88,2
1200099	H1400200-240000	24	38,0	1 1/2"	62,0	94,2
1201284	H1400200-320000	32	51,0	2"	78,0	99,2

H1400301
Interlock Dual Skive
Ferrule for 4-6 Spiral
Hoses

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1202585	H1400301-100000	10	16,0	5/8"	35,5	57,5
1202730	H1400301-120000	12	19,0	3/4"	43,5	60,0
1202222	H1400301-160000	16	25,0	1"	52,0	75,0
1201761	H1400301-200000	20	31,0	1 1/4"	62,0	88,0
1201805	H1400301-240000	24	38,0	1 1/2"	69,5	94,0
1202006	H1400301-320000	32	51,0	2"	88,0	99,0

H1T00600
Interlock Special Dual
Skive Ferrule

Item Code	Part Number	ID			B	L
		Dash	mm	in		
1225872	H1T00600-320000	32	51,0	2"	88,1	108,2

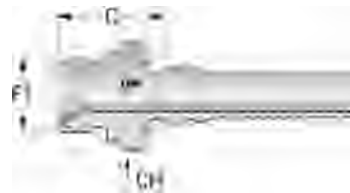
// HOSE MENDER

Hose Mender

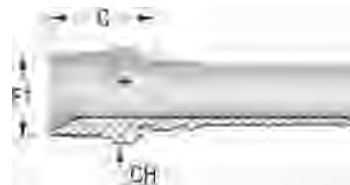


Item Code	Part Number	ID		
		Dash	mm	in
1219636	H14C5610-101000	10	16,0	5/8"
1235393	H14C5610-242400	24	38,0	1 1/2"
1235394	H14C5610-323200	32	51,0	2"
1235392	H14C5610-202000	20	32,0	1 1/4"

Dimensions shown may be changed without prior notice

// **BSP INSERTS****BSPP Male 60° Flare
AGR**

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm
			Dash	mm	in				
1200218	H1410510-121200	NA	12	19,0	3/4"	12	3/4-14	34,0	32,0
1201219	H1410510-202000	NA	20	32,0	1 1/4"	20	1 1/4-11	45,2	50,0
1200280	H1410510-242400	NA	24	38,0	1 1/2"	24	1 1/2-11	48,5	55,0
1201080	H1410510-323200	NA	32	51,0	2"	32	2-11	55,5	70,0
1200239	H1410510-161600	NA	16	25,0	1"	16	1-11	40,0	41,0

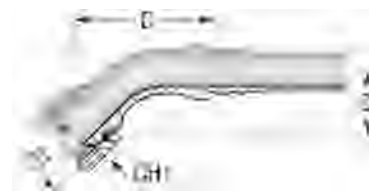
**BSPT Male
AGR K**

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm
			Dash	mm	in				
1200261	H1410710-202000	NA	20	32,0	1 1/4"	20	1 1/4-11	46,2	46,0
1200278	H1410710-242400	NA	24	38,0	1 1/2"	24	1 1/2-11	48,0	50,0
1200215	H1410710-121200	NA	12	19,0	3/4"	12	3/4-14	32,0	27,0

**BSPP Female 60° Cone with O-Ring
DKOR**

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH1 mm
			Dash	mm	in				
1201132	H1420812-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	30,2	50,0
1202440	H1420812-161600	TN	16	25,0	1"	16	1-11	25,5	38,0
1202424	H1420812-121200	TN	12	19,0	3/4"	12	3/4-14	22,5	32,0
1201136	H1420812-323200	TN	32	51,0	2"	32	2-11	35,0	70,0
1201134	H1420812-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	33,5	55,0
1214247	H1420811-080800	CR	08	13,0	1/2"	08	1/2-14	19,5	27,0

45° BSPP Female 60° Cone with O-Ring
DKOR 45
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1202442	H1420842-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	113,0	46,0	55,0
1202446	H1420842-161600	TN	16	25,0	1"	16	1-11	81,0	34,0	38,0
1202444	H1420842-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	97,2	40,0	50,0
1202447	H1420842-121200	TN	12	19,0	3/4"	12	3/4-14	72,0	30,0	32,0
1201535	H1420842-323200	TN	32	51,0	2"	32	2-11	151,0	60,0	70,0

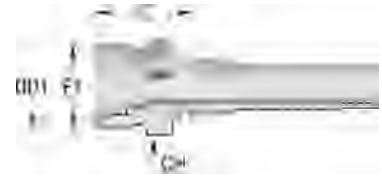
90° BSPP Female 60° Cone with O-Ring
DKOR 90
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1202441	H1420892-242400	TN	24	38,0	1 1/2"	24	1 1/2-11	93,5	96,0	55,0
1202445	H1420892-161600	TN	16	25,0	1"	16	1-11	75,0	71,0	38,0
1202443	H1420892-202000	TN	20	32,0	1 1/4"	20	1 1/4-11	79,2	83,0	50,0
1200288	H1420892-323200	TN	32	51,0	2"	32	2-11	134,0	125,0	70,0
1200217	H1420892-121200	TN	12	19,0	3/4"	12	3/4-14	58,0	61,0	32,0

Dimensions shown may be changed without prior notice

// DIN METRIC INSERTS

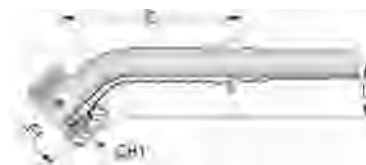
**Metric Male 24° Seat - Heavy
DIN 3853 - CES**

Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH mm
			Dash	mm	in				
1216929	H1411210-082400	NA	08	13,0	1/2"	M24X1.5	16	27,0	24,0
1200260	H1411210-205200	NA	20	32,0	1 1/4"	M52X2	38	45,2	55,0
1201077	H1411210-103000	NA	10	16,0	5/8"	M30X2	20	31,0	32,0
1200212	H1411210-123600	NA	12	19,0	3/4"	M36X2	25	35,0	36,0
1200236	H1411210-164200	NA	16	25,0	1"	M42X2	30	40,0	46,0

**Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS**

Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	CH1 mm
			Dash	mm	in				
1201857	H1421613-082400	SN	08	13,0	1/2"	M24X1.5	16	29,6	30,0
1202584	H1421612-123000	TN	12	19,0	3/4"	M30X2	20	37,5	36,0
1201125	H1421613-164200	SN	16	25,0	1"	M42X2	30	40,7	50,0
1201118	H1421613-103000	SN	10	16,0	5/8"	M30X2	20	34,4	36,0
1201129	H1421613-205200	SN	20	32,0	1 1/4"	M52X2	38	45,3	60,0
1201092	H1421613-123600	SN	12	19,0	3/4"	M36X2	25	37,6	46,0
1216936	H1421612-245200	TN	24	38,0	1 1/2"	M52X2	38	50,8	60,0
1216935	H1421612-204200	TN	20	32,0	1 1/4"	M42X2	30	43,6	50,0
1202887	H1421612-163600	TN	16	25,0	1"	M36X2	25	38,8	46,0

45° Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS 45
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1202073	H1421643-103000	SN	10	16,0	5/8"	M30X2	20	59,0	31,5	36,0
1202079	H1421643-123600	SN	12	19,0	3/4"	M36X2	25	78,1	36,0	46,0
1216940	H1421642-163600	TN	16	25,0	1"	M36X2	25	86,5	37,5	46,0
1202583	H1421642-123000	TN	12	19,0	3/4"	M30X2	20	74,0	33,0	36,0
1216942	H1421643-082400	SN	08	13,0	1/2"	M24X1.5	16	83,0	29,0	30,0
1202003	H1421643-205200	SN	20	32,0	1 1/4"	M52X2	38	112,7	48,0	60,0
1216941	H1421642-245200	TN	24	38,0	1 1/2"	M52X2	38	111,0	44,0	60,0
1201724	H1421643-164200	SN	16	25,0	1"	M42X2	30	96,8	38,0	50,0

90° Metric Female 24° Cone with O-Ring - Heavy
DIN 3865 - DKOS 90
Solid one piece

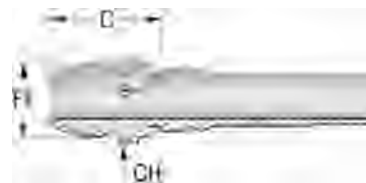


Item Code	Part Number	Nut Type	ID			F1	OD1 mm	C mm	D Drop mm	CH1 mm
			Dash	mm	in					
1202072	H1421693-103000	SN	10	16,0	5/8"	M30X2	20	48,0	55,0	36,0
1202582	H1421692-123000	TN	12	19,0	3/4"	M30X2	20	61,0	67,5	36,0
1201059	H1421693-205200	SN	20	32,0	1 1/4"	M52X2	38	90,9	101,0	60,0
1203126	H1421692-163600	TN	16	25,0	1"	M36X2	25	76,5	76,5	46,0
1203125	H1421693-082400	SN	08	13,0	1/2"	M24X1.5	16	52,0	50,0	30,0
1201740	H1421693-164200	SN	16	25,0	1"	M42X2	30	86,4	79,0	50,0
1201723	H1421693-123600	SN	12	19,0	3/4"	M36X2	25	61,7	65,0	46,0
1216945	H1421692-245200	TN	24	38,0	1 1/2"	M52X2	38	100,5	102,0	60,0

Dimensions shown may be changed without prior notice

// JIC 37° INSERTS

JIC Male 37° Cone AGJ



Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm
			Dash	mm	in				
1201094	H1412510-121600	NA	12	19,0	3/4"	16	1 5/16-12	40,0	36,0
1200262	H1412510-202000	NA	20	32,0	1 1/4"	20	1 5/8-12	45,7	46,0
1200279	H1412510-242400	NA	24	38,0	1 1/2"	24	1 7/8-12	50,0	50,0
1216931	H1412510-202400	NA	20	32,0	1 1/4"	24	1 7/8-12	49,7	50,0
1200216	H1412510-121200	NA	12	19,0	3/4"	12	1 1/16-12	37,0	32,0
1200238	H1412510-161600	NA	16	25,0	1"	16	1 5/16-12	41,0	36,0
1201787	H1412510-162000	NA	16	25,0	1"	20	1 5/8-12	44,5	46,0
1201798	H1412510-323200	NA	32	51,0	2"	32	2 1/2-12	61,0	65,0

JIC Female 37° Seat DKJ



Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH1 mm
			Dash	mm	in				
1201121	H1422512-121200	TN	12	19,0	3/4"	12	1 1/16-12	18,7	32,0
1216973	H1422512-202400	TN	20	32,0	1 1/4"	24	1 7/8-12	28,2	55,0
1201265	H1422512-101200	TN	10	16,0	5/8"	12	1 1/16-12	18,7	32,0
1201122	H1422512-121600	TN	12	19,0	3/4"	16	1 5/16-12	21,5	38,0
1201133	H1422512-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	29,0	55,0
1201131	H1422512-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	25,7	50,0
1201126	H1422512-161600	TN	16	25,0	1"	16	1 5/16-12	22,5	38,0
1201135	H1422512-323200	TN	32	51,0	2"	32	2 1/2-12	34,0	70,0
1201127	H1422512-162000	TN	16	25,0	1"	20	1 5/8-12	24,5	50,0

45° JIC Female 37° Seat
DKJ 45
Solid one piece



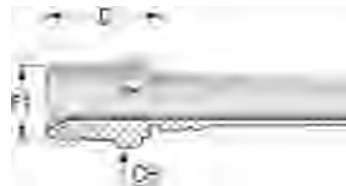
Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1201485	H1422542-121200	TN	12	19,0	3/4"	12	1 1/16-12	66,0	27,5	32,0
1202098	H1422542-121600	TN	12	19,0	3/4"	16	1 5/16-12	72,0	30,0	38,0
1201486	H1422542-161600	TN	16	25,0	1"	16	1 5/16-12	79,5	31,0	38,0
1201487	H1422542-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	93,0	37,0	50,0
1201765	H1422542-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	121,0	38,0	55,0

90° JIC Female 37° Seat
DKJ 90
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1201491	H1422592-242400	TN	24	38,0	1 1/2"	24	1 7/8-12	94,5	92,0	55,0
1201490	H1422592-202000	TN	20	32,0	1 1/4"	20	1 5/8-12	79,2	78,0	50,0
1201488	H1422592-121200	TN	12	19,0	3/4"	12	1 1/16-12	45,0	57,0	32,0
1201489	H1422592-161600	TN	16	25,0	1"	16	1 5/16-12	71,0	67,0	38,0
1202103	H1422592-121600	TN	12	19,0	3/4"	16	1 5/16-12	58,0	60,5	38,0

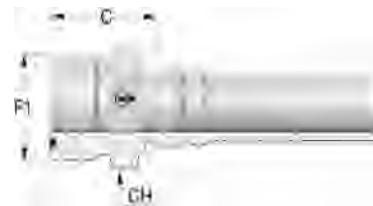
Dimensions shown may be changed without prior notice

// NPTF INSERTS**NPTF Male 60° Seat
AGN**

Item Code	Part Number	Nut Type	ID			F1 Dash Size	F1	C mm	CH mm
			Dash	mm	in				
1200193	H1412810-121200	NA	12	19,0	3/4"	12	3/4-14	32,0	27,0
1200281	H1412810-323200	NA	32	51,0	2"	32	2-11 1/2	53,2	65,0
1200219	H1412810-161600	NA	16	25,0	1"	16	1-11 1/2	42,0	36,0
1200263	H1412810-242400	NA	24	38,0	1 1/2"	24	1 1/2-11 1/2	48,0	50,0
1201609	H1412810-060600	NA	06	10,0	3/8"	06	3/8-18	26,5	19,0
1200240	H1412810-202000	NA	20	32,0	1 1/4"	20	1 1/4-11 1/2	46,2	46,0
1203127	H1412810-080800	NA	08	13,0	1/2"	08	1/2-14	30,0	22,0

// ORFS INSERTS

ORFS Male



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH
			Dash	mm	in	Dash Size		mm	mm
1231483	H1412410-161600	NA	16	25,0	1"	16	1 7/16-12	35,8	38,0
1214664	H1412410-121200	NA	12	19,0	3/4"	12	1 3/16-12	30200,0	30,0

ORFS Female with Stem Hexagon



Item Code	Part Number	Nut Type	ID			F1	F1	C	CH	CH1
			Dash	mm	in	Dash Size		mm	mm	mm
1202099	H1422411-121200	CR	12	19,0	3/4"	12	1 3/16-12	40,0	30,0	36,0
1201807	H1422411-202000	CR	20	32,0	1 1/4"	20	1 11/16-12	47,2	46,0	50,0
1202864	H1422411-101200	CR	10	16,0	5/8"	12	1 3/16-12	40,0	30,0	36,0
1216955	H1422411-201600	CR	20	32,0	1 1/4"	16	1 7/16-12	47,2	41,0	41,0
1216952	H1422411-161200	CR	16	25,0	1"	12	1 3/16-12	42,0	32,0	36,0
1202071	H1422411-161600	CR	16	25,0	1"	16	1 7/16-12	47,0	36,0	41,0
1202107	H1422411-162000	CR	16	25,0	1"	20	1 11/16-12	49,0	46,0	50,0
1202106	H1422411-121600	CR	12	19,0	3/4"	16	1 7/16-12	43,0	36,0	41,0
1216956	H1422411-242400	CR	24	38,0	1 1/2"	24	2-12	52,0	50,0	60,0

Dimensions shown may be changed without prior notice

45° ORFS Female
DK ORFS 45
Solid one piece



Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1202112	H1422441-202000	CR	20	32,0	1 1/4"	20	1 11/16-12	100,7	33,0	50,0
1202111	H1422441-162000	CR	16	25,0	1"	20	1 11/16-12	83,4	28,0	50,0
1202110	H1422441-161600	CR	16	25,0	1"	16	1 7/16-12	114,0	28,0	41,0
1202109	H1422441-121600	CR	12	19,0	3/4"	16	1 7/16-12	68,4	28,0	41,0
1202108	H1422441-121200	CR	12	19,0	3/4"	12	1 3/16-12	77,7	26,0	36,0

90° ORFS Female
DK ORFS 90
Solid one piece



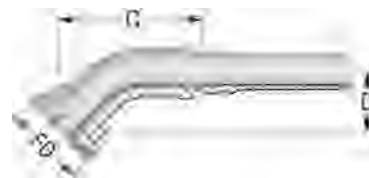
Item Code	Part Number	Nut Type	ID			F1	F1	C	D Drop	CH1
			Dash	mm	in					
1203123	H1422491-101200	CR	10	16,0	5/8"	12	1 3/16-12	48,1	58,0	36,0
1202116	H1422491-121600	CR	12	19,0	3/4"	16	1 7/16-12	66,2	58,0	41,0
1202115	H1422491-161600	CR	16	25,0	1"	16	1 7/16-12	75,2	66,0	41,0
1202114	H1422491-162000	CR	16	25,0	1"	20	1 11/16-12	73,2	66,0	50,0
1202113	H1422491-202000	CR	20	32,0	1 1/4"	20	1 11/16-12	91,7	81,0	50,0
1202117	H1422491-121200	CR	12	19,0	3/4"	12	1 3/16-12	64,2	58,0	36,0

// SAE FLANGES

Flange SAE 3000 PSI J518 Code 61 - SFL



Item Code	Part Number	ID			Flange	Flange Size	C	FD	WP
		Dash	mm	in	Dash Size		mm	mm	psi
1200234	H1443310-162000	16	25,0	1"	20	1 1/4	51,5	50,8	4000
1200256	H1443310-202400	20	32,0	1 1/4"	24	1 1/2	55,7	60,3	3000
1200257	H1443310-202000	20	32,0	1 1/4"	20	1 1/4	52,7	50,8	4000
1200276	H1443310-242400	24	38,0	1 1/2"	24	1 1/2	56,0	60,3	3000
1200287	H1443310-323200	32	51,0	2"	32	2	69,0	71,4	3000
1200233	H1443310-161600	16	25,0	1"	16	1	49,0	44,5	5000
1200277	H1443310-243200	24	38,0	1 1/2"	32	2	67,5	71,4	3000

45° Flange SAE 3000 PSI J518 Code 61 - SFL 45
Solid one piece

Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size		mm	mm	mm	psi
1200230	H1443340-162000	16	25,0	1"	20	1 1/4	50,8	95,6	30,0	4000
1200252	H1443340-202400	20	32,0	1 1/4"	24	1 1/2	60,3	92,8	40,0	3000
1200285	H1443340-323200	32	51,0	2"	32	2	71,4	138,1	54,0	3000
1200253	H1443340-202000	20	32,0	1 1/4"	20	1 1/4	50,8	100,9	32,5	4000
1200272	H1443340-242400	24	38,0	1 1/2"	24	1 1/2	60,3	103,7	43,0	3000
1200273	H1443340-243200	24	38,0	1 1/2"	32	2	71,4	132,7	56,5	3000

90° Flange SAE 3000 PSI J518 Code 61 - SFL 90
Solid one piece

Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size		mm	mm	mm	psi
1200274	H1443390-242400	24	38,0	1 1/2"	24	1 1/2	60,3	95,5	93,0	3000
1200231	H1443390-161600	16	25,0	1"	16	1	44,5	72,2	64,0	5000
1200275	H1443390-243200	24	38,0	1 1/2"	32	2	71,4	130,3	97,0	3000
1200286	H1443390-323200	32	51,0	2"	32	2	71,4	134,4	130,0	3000
1200232	H1443390-162000	16	25,0	1"	20	1 1/4	50,8	70,2	69,0	4000
1200254	H1443390-202400	20	32,0	1 1/4"	24	1 1/2	60,3	81,2	85,0	3000
1200255	H1443390-202000	20	32,0	1 1/4"	20	1 1/4	50,8	86,2	81,0	4000

Dimensions shown may be changed without prior notice

Flange SAE 6000 PSI J518 Code 62 - SFS

Item Code	Part Number	ID			Flange	Flange Size	C	FD	WP
		Dash	mm	in	Dash Size		mm	mm	psi
1200270	H1443610-242000	24	38,0	1 1/2"	20	1 1/4	62,5	54,0	6000
1200271	H1443610-243200	24	38,0	1 1/2"	32	2	80,5	79,4	6000
1200198	H1443610-121600	12	19,0	3/4"	16	1	53,0	47,6	6000
1200284	H1443610-323200	32	51,0	2"	32	2	87,0	79,4	6000
1200245	H1443610-202400	20	32,0	1 1/4"	24	1 1/2	68,2	63,5	6000
1200224	H1443610-161600	16	25,0	1"	16	1	54,0	47,6	6000
1200246	H1443610-202000	20	32,0	1 1/4"	20	1 1/4	62,2	54,0	6000
1200268	H1443610-242400	24	38,0	1 1/2"	24	1 1/2	68,5	63,5	6000
1200199	H1443610-121200	12	19,0	3/4"	12	3/4	50,0	41,3	6000
1201218	H1443610-161200	16	25,0	1"	12	3/4	51,0	41,3	6000
1200225	H1443610-162000	16	25,0	1"	20	1 1/4	61,0	54,0	6000
1201556	H1443610-201600	20	32,0	1 1/4"	16	1	80,2	47,6	6000

**45° Flange SAE 6000 PSI J518 Code 62 - SFS 45
Solid one piece**

Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size		mm	mm	mm	psi
1200194	H1443640-121600	12	19,0	3/4"	16	1	47,6	76,8	33,0	6000
1200282	H1443640-323200	32	51,0	2"	32	2	79,4	160,6	63,0	6000
1200241	H1443640-202400	20	32,0	1 1/4"	24	1 1/2	63,5	111,7	48,0	6000
1200220	H1443640-161600	16	25,0	1"	16	1	47,6	94,8	35,0	6000
1200242	H1443640-202000	20	32,0	1 1/4"	20	1 1/4	54,0	102,0	39,5	6000
1200264	H1443640-242400	24	38,0	1 1/2"	24	1 1/2	63,5	136,3	48,0	6000
1200195	H1443640-121200	12	19,0	3/4"	12	3/4	41,3	72,1	30,0	6000
1202890	H1443640-161200	16	25,0	1"	12	3/4	41,3	80,3	29,5	6000
1200221	H1443640-162000	16	25,0	1"	20	1 1/4	54,0	105,3	44,0	6000
1200265	H1443640-243200	24	38,0	1 1/2"	32	2	79,4	129,1	55,0	6000
1201557	H1443640-201600	20	32,0	1 1/4"	16	1	47,6	104,7	34,5	6000

90° Flange SAE 6000 PSI J518 Code 62 - SFS 90

Solid one piece



Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size					
1200197	H1443690-121200	12	19,0	3/4"	12	3/4	41,3	61,2	64,0	6000
1200283	H1443690-323200	32	51,0	2"	32	2	79,4	146,0	138,5	6000
1200196	H1443690-121600	12	19,0	3/4"	16	1	47,6	61,2	66,0	6000
1200223	H1443690-162000	16	25,0	1"	20	1 1/4	54,0	77,2	80,0	6000
1200267	H1443690-243200	24	38,0	1 1/2"	32	2	79,4	106,5	121,5	6000
1200243	H1443690-202400	20	32,0	1 1/4"	24	1 1/2	63,5	92,9	103,5	6000
1200222	H1443690-161600	16	25,0	1"	16	1	47,6	70,4	74,0	6000
1200244	H1443690-202000	20	32,0	1 1/4"	20	1 1/4	54,0	88,2	91,0	6000
1200266	H1443690-242400	24	38,0	1 1/2"	24	1 1/2	63,5	106,3	109,0	6000
1202811	H1443690-161200	16	25,0	1"	12	3/4	41,3	70,2	61,0	6000

Flange SAE 6000 PSI J518 Code 62 - SFS

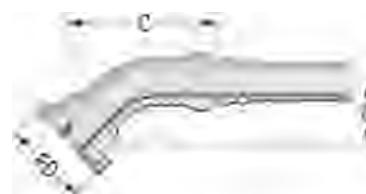
Special version



Item Code	Part Number	ID			Flange	Flange Size	C	FD	WP
		Dash	mm	in	Dash Size				
1223388	H1T43610-323200	32	51,0	2"	32	2	104,0	79,4	6000
1235395	H1T43610-404000	40	63,0	2 1/2"	40	2 1/2	124,3	108,0	6000

45° Flange SAE 6000 PSI J518 Code 62 - SFS 45

Solid one piece
Special version



Item Code	Part Number	ID			Flange	Flange Size	FD	C	D Drop	WP
		Dash	mm	in	Dash Size					
1223389	H1T43640-323200	32	51,0	2"	32	2	79,4	141,0	63,0	6000

Dimensions shown may be changed without prior notice

90° Flange SAE 6000 PSI J518 Code 62 - SFS 90
Solid one piece
Special version



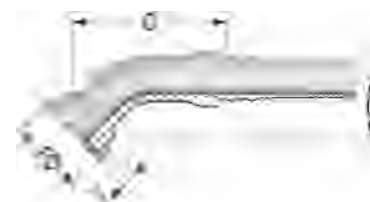
Item Code	Part Number	ID			Flange	Flange	FD	C	D Drop	WP
		Dash	mm	in	Dash Size	Size				
1223168	H1T43690-322400	32	51,0	2"	24	1 1/2	63,5	134,0	112,0	6000
1228051	H1T43690-323200	32	51,0	2"	32	2	79,4	132,0	145,0	6000

// SUPERCAT FLANGES

Flange SUPERCAT



Item Code	Part Number	ID			Flange	Flange Size	FD	T	C
		Dash	mm	in	Dash Size				
1202392	H1443910-202400	20	32,0	1 1/4"	24	1 1/2	63,5	14,3	83,2
1202391	H1443910-202000	20	32,0	1 1/4"	20	1 1/4	54,0	14,3	86,2
1202389	H1443910-161600	16	25,0	1"	16	1	47,6	14,3	90,0
1202388	H1443910-121600	12	19,0	3/4"	16	1	47,6	14,3	82,0
1202219	H1443910-121200	12	19,0	3/4"	12	3/4	41,3	14,3	82,0
1202390	H1443910-162000	16	25,0	1"	20	1 1/4	54,0	14,3	90,0

45° Flange SUPERCAT
Solid one piece

Item Code	Part Number	ID			Flange	Flange Size	FD	T	C	D Drop
		Dash	mm	in	Dash Size					
1202394	H1443940-202000	20	32,0	1 1/4"	20	1 1/4	54,0	14,3	103,6	43,0
1202393	H1443940-202400	20	32,0	1 1/4"	24	1 1/2	63,5	14,3	110,1	49,5
1202398	H1443940-121200	12	19,0	3/4"	12	3/4	41,3	14,3	82,9	34,0
1202397	H1443940-121600	12	19,0	3/4"	16	1	47,6	14,3	87,4	34,0
1202396	H1443940-161600	16	25,0	1"	16	1	47,6	14,3	93,9	40,0
1202395	H1443940-162000	16	25,0	1"	20	1 1/4	54,0	14,3	95,4	40,0

90° Flange SUPERCAT
Solid one piece

Item Code	Part Number	ID			Flange	Flange Size	FD	T	C	D Drop
		Dash	mm	in	Dash Size					
1202402	H1443990-162000	16	25,0	1"	20	1 1/4	54,0	14,3	75,4	82,5
1202401	H1443990-161600	16	25,0	1"	16	1	47,6	14,3	80,4	79,0
1202400	H1443990-121600	12	19,0	3/4"	16	1	47,6	14,3	65,2	70,0
1202399	H1443990-121200	12	19,0	3/4"	12	3/4	41,3	14,3	63,7	67,0
1202404	H1443990-202400	20	32,0	1 1/4"	24	1 1/2	63,5	14,3	91,4	101,0
1202403	H1443990-202000	20	32,0	1 1/4"	20	1 1/4	54,0	14,3	89,2	93,0

Dimensions shown may be changed without prior notice

// HAMMER UNION**Male Hammer Union Fig. 1502 integral fitting with Lug Nut
Special version**

Item Code	Part Number	ID			C	L
		Dash	mm	in	mm	mm
1235624	H1T13F13-323200	32	51,0	2"	60,8	162,20

**Female Hammer Union Fig. 1502 integral fitting with Rubber
Ring
Special version**

Item Code	Part Number	ID			C	L
		Dash	mm	in	mm	mm
1235623	H1T23F10-323200	32	51,0	2"	57,3	158,70



// JIC 37° ADAPTERS

// MALE UNION.....	137	// SAE UNF.....	161
// MALE / FEMALE UNION.....	139	// NPTF.....	169
// BULKHEAD.....	142	// FLANGES.....	172
// BSPP.....	145	// ACCESSORIES.....	175
// METRIC.....	155	// PLUG.....	176

Dimensions shown may be changed without prior notice

// MALE UNION

Straight union JIC - JIC Male



Item Code	Part Number	OD1	F1	C1	CH	L
		in		mm	mm	mm
1203670	R1A25M125M-0808	1/2"	3/4-16	16,5	22,0	41,0
1203628	R1A25M125M-0505	5/16"	1/2-20	14,0	14,0	35,0
1203639	R1A25M125M-1616	1"	1 5/16-12	23,0	36,0	57,0
1203685	R1A25M125M-0404	1/4"	7/16-20	14,0	12,0	35,0
1203698	R1A25M125M-1010	5/8"	7/8-14	19,5	24,0	48,0
1203653	R1A25M125M-2424	1 1/2"	1 7/8-12	27,5	50,0	70,0
1203616	R1A25M125M-1212	3/4"	1 1/16-12	22,0	30,0	55,0
1216393	R1A25M125M-1414	7/8"	1 3/16-12	22,5	32,0	56,5
1203713	R1A25M125M-0606	3/8"	9/16-18	14,0	17,0	36,0
1203646	R1A25M125M-2020	1 1/4"	1 5/8-12	24,5	46,0	61,5

90° union JIC - JIC Male



Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1206334	R1A25M925M-2424	1 1/2"	1 7/8-12	59,0	48,0
1203849	R1A25M925M-1616	1"	1 5/16-12	46,0	33,0
1216421	R1A25M925M-1414	7/8"	1 3/16-12	44,0	33,0
1203876	R1A25M925M-0404	1/4"	7/16-20	22,5	12,0
1203842	R1A25M925M-0505	5/16"	1/2-20	24,0	14,0
1203897	R1A25M925M-0606	3/8"	9/16-18	27,0	14,0
1203884	R1A25M925M-1010	5/8"	7/8-14	37,0	22,0
1203836	R1A25M925M-1212	3/4"	1 1/16-12	42,0	27,0
1203866	R1A25M925M-0808	1/2"	3/4-16	32,0	19,0
1203855	R1A25M925M-2020	1 1/4"	1 5/8-12	52,5	41,0

Tee union JIC - JIC Male

Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1203948	R1A25MT25M-0808	1/2"	3/4-16	32,0	19,0
1206335	R1A25MT25M-2424	1"1/2	1 7/8-12	59,0	48,0
1216460	R1A25MT25M-1414	7/8"	1 3/16-12	44,0	33,0
1203947	R1A25MT25M-1616	1"	1 5/16-12	46,0	33,0
1203952	R1A25MT25M-1010	5/8"	7/8-14	37,0	22,0
1203950	R1A25MT25M-0404	1/4"	7/16-20	22,5	12,0
1205959	R1A25MT25M-2020	1"1/4	1 5/8-12	52,5	41,0
1203945	R1A25MT25M-0505	5/16"	1/2-20	24,0	14,0
1203944	R1A25MT25M-1212	3/4"	1 1/16-12	42,0	27,0
1203954	R1A25MT25M-0606	3/8"	9/16-18	27,0	14,0

Cross union JIC - JIC Male

Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1205453	R1A25MX25M-0808	1/2"	3/4-16	32,0	19,0
1205454	R1A25MX25M-1010	5/8"	7/8-14	37,0	22,0
1212824	R1A25MX25M-2424	1"1/2	1 7/8-12	59,0	48,0
1205455	R1A25MX25M-0606	3/8"	9/16-18	27,0	14,0
1216494	R1A25MX25M-1414	7/8"	1 3/16-12	44,0	33,0
1205451	R1A25MX25M-0505	5/16"	1/2-20	24,0	14,0
1206909	R1A25MX25M-0404	1/4"	7/16-20	22,5	12,0
1205452	R1A25MX25M-1616	1"	1 5/16-12	46,0	33,0
1212823	R1A25MX25M-2020	1"1/4	1 5/8-12	52,5	41,0
1206835	R1A25MX25M-1212	3/4"	1 1/16-12	42,0	27,0

Dimensions shown may be changed without prior notice

// MALE / FEMALE UNION

Straight reducing JIC Female - JIC Male



Item Code	Part Number	OD1	F1	F2	C1	CH
		in			mm	mm
1207357	R1A253125M-0604	3/8"	9/16-18	7/16-20	24,5	19,0
1207368	R1A253125M-2016	1"1/4	1 5/8-12	1 5/16-12	40,0	50,0
1207367	R1A253125M-1612	1"	1 5/16-12	1 1/16-12	37,5	41,0
1207359	R1A253125M-0805	1/2"	3/4-16	1/2-20	25,5	22,0
1207369	R1A253125M-2420	1"1/2	1 7/8-12	1 5/8-12	47,8	60,0
1207358	R1A253125M-0804	1/2"	3/4-16	7/16-20	25,5	22,0
1207364	R1A253125M-1206	3/4"	1 1/16-12	9/16-18	27,0	32,0
1207363	R1A253125M-1204	3/4"	1 1/16-12	7/16-20	27,0	32,0
1207366	R1A253125M-2012	1"1/4	1 5/8-12	1 1/16-12	39,1	50,0
1207365	R1A253125M-1208	3/4"	1 1/16-12	3/4-16	30,5	32,0
1207360	R1A253125M-0806	1/2"	3/4-16	9/16-18	25,5	22,0
1208272	R1A253125M-1610	1"	1 5/16-12	7/8-14	34,0	41,0
1213168	R1A251125M-1614	1"	1 5/16-12	1 3/16-12	39,5	38,0
1207362	R1A253125M-1006	5/8"	7/8-14	9/16-18	26,5	27,0
1207361	R1A253125M-1004	5/8"	7/8-14	7/16-20	26,5	27,0
1216367	R1A253125M-2416	1"1/2	1 7/8-12	1 5/16-12	46,3	60,0
1216366	R1A253125M-1608	1"	1 5/16-12	3/4-16	31,0	41,0
1216344	R/A251125M-1412	7/8"	1 3/16-12	1 1/16-12	36,4	36,0
1216365	R1A253125M-1606	1"	1 5/16-12	9/16-18	28,5	41,0
1207617	R1A251125M-1210	3/4"	1 1/16-12	7/8-14	34,5	32,0
1207616	R1A251125M-1008	5/8"	7/8-14	3/4-16	32,5	27,0
1207615	R/A251125M-0605	3/8"	9/16-18	1/2-20	25,0	19,0

45° union JIC Male - JIC Female



Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207346	R1A25M4251-1616	1"	1 5/16-12	36,5	44,6	33,0	38,0
1207345	R1A25M4251-1212	3/4"	1 1/16-12	32,5	38,3	27,0	32,0
1207347	R1A25M4252-2020	1"1/4	1 5/8-12	40,5	51,4	41,0	50,0
1207342	R1A25M4251-0505	5/16"	1/2-20	20,0	25,5	14,0	17,0
1207341	R1A25M4251-0606	3/8"	9/16-18	21,5	28,5	14,0	19,0
1207344	R1A25M4251-0808	1/2"	3/4-16	24,5	32,7	19,0	25,0
1216410	R1A25M4251-1414	7/8"	1 3/16-12	35,4	43,0	33,0	36,0
1207343	R1A25M4251-0404	1/4"	7/16-20	18,5	23,7	12,0	16,0
1206944	R1A25M4251-1010	5/8"	7/8-14	28,0	36,7	22,0	27,0
1210765	R1A25M4252-2424	1"1/2	1 7/8-12	45,0	57,1	48,0	55,0

90° union JIC Male - JIC Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207269	R1A25M9251-0808	1/2"	3/4-16	32,5	35,2	19,0	25,0
1207268	R1A25M9251-0606	3/8"	9/16-18	27,0	32,0	14,0	19,0
1207267	R1A25M9251-0505	5/16"	1/2-20	24,5	27,0	14,0	17,0
1207266	R1A25M9251-0404	1/4"	7/16-20	22,5	25,2	12,0	16,0
1216420	R1A25M9251-1414	7/8"	1 3/16-12	45,5	48,0	33,0	36,0
1207272	R1A25M9251-1616	1"	1 5/16-12	46,0	50,6	33,0	38,0
1207271	R1A25M9251-1212	3/4"	1 1/16-12	42,0	44,3	27,0	32,0
1207274	R1A25M9252-2424	1 1/2"	1 7/8-12	59,0	65,6	48,0	55,0
1207273	R1A25M9252-2020	1 1/4"	1 5/8-12	52,5	58,9	41,0	50,0
1207270	R1A25M9251-1010	5/8"	7/8-14	36,5	41,5	22,0	27,0

Branch Tee union JIC Male - JIC Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207312	R1A25MT252-2424	1 1/2"	1 7/8-12	59,0	59,0	48,0	50,0
1207304	R1A25MT251-0404	1/4"	7/16-20	22,5	22,5	12,0	16,0
1207311	R1A25MT252-2020	1 1/4"	1 5/8-12	52,5	52,5	41,0	50,0
1207310	R1A25MT251-1616	1"	1 5/16-12	46,0	46,0	33,0	38,0
1207309	R1A25MT251-1212	3/4"	1 1/16-12	42,0	42,0	27,0	32,0
1216459	R1A25MT251-1414	7/8"	1 3/16-12	45,5	45,5	33,0	36,0
1207306	R1A25MT251-0606	3/8"	9/16-18	27,0	27,0	14,0	19,0
1207305	R1A25MT251-0505	5/16"	1/2-20	24,0	24,0	14,0	17,0
1207308	R1A25MT251-1010	5/8"	7/8-14	36,5	36,5	22,0	27,0
1207307	R1A25MT251-0808	1/2"	3/4-16	32,0	32,0	19,0	25,0

Dimensions shown may be changed without prior notice

Run Tee union JIC Male - JIC Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207287	R1A25ML251-1010	5/8"	7/8-14	36,5	41,5	22,0	27,0
1216434	R1A25ML251-1414	7/8"	1 3/16-12	45,5	46,5	33,0	36,0
1207286	R1A25ML251-0808	1/2"	3/4-16	32,0	35,2	19,0	25,0
1207289	R1A25ML251-1616	1"	1 5/16-12	46,0	50,5	33,0	38,0
1207288	R1A25ML251-1212	3/4"	1 1/16-12	42,0	44,3	27,0	32,0
1207283	R1A25ML251-0404	1/4"	7/16-20	22,5	25,2	12,0	16,0
1207285	R1A25ML251-0606	3/8"	9/16-18	27,0	32,0	14,0	19,0
1207284	R1A25ML251-0505	5/16"	1/2-20	24,0	27,0	14,0	17,0
1207290	R1A25ML252-2020	1"1/4	1 5/8-12	52,5	59,0	41,0	50,0
1207291	R1A25ML252-2424	1"1/2	1 7/8-12	59,0	65,6	48,0	55,0

// BULKHEAD

Straight union JIC - JIC Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	L
		in		mm	mm	mm	mm	mm
1203629	R1A25M125T-0505	5/16"	1/2-20	14,0	30,5	19,0	19,0	52,5
1203617	R1A25M125T-1212	3/4"	1 1/16-12	22,0	44,5	36,0	36,0	78,5
1216394	R1A25M125T-1414	7/8"	1 3/16-12	22,5	44,5	38,0	41,0	79,2
1203640	R1A25M125T-1616	1"	1 5/16-12	23,0	44,5	41,0	41,0	80,0
1203671	R1A25M125T-0808	1/2"	3/4-16	16,5	36,5	24,0	24,0	62,0
1203699	R1A25M125T-1010	5/8"	7/8-14	19,5	40,0	30,0	30,0	69,5
1203686	R1A25M125T-0404	1/4"	7/16-20	14,0	30,5	17,0	17,0	52,5
1211675	R1A25M125T-2424	1"1/2	1 7/8-12	27,5	46,0	55,0	55,0	89,5
1203714	R1A25M125T-0606	3/8"	9/16-18	14,0	32,5	22,0	22,0	55,5
1203647	R1A25M125T-2020	1"1/4	1 5/8-12	24,5	45,5	50,0	50,0	84,0

45° union JIC - JIC Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1210767	R1A25M425T-0808	1/2"	3/4-16	25,0	49,5	19,0	24,0	31,8
1210768	R1A25M425T-1010	5/8"	7/8-14	28,0	55,0	22,0	30,0	35,3
1210769	R1A25M425T-1212	3/4"	1 1/16-12	32,5	62,0	27,0	36,0	39,6
1211706	R1A25M425T-0505	5/16"	1/2-20	19,5	42,0	14,0	19,0	25,9
1208045	R/A25M425T-0606	3/8"	9/16-18	20,0	42,7	14,0	22,0	27,7
1216411	R1A25M425T-1414	7/8"	1 3/16-12	35,0	63,5	33,0	38,0	39,6
1211707	R/A25M425T-2020	1"1/4	1 5/8-12	40,0	67,5	41,0	50,0	40,9
1211708	R/A25M425T-2424	1"1/2	1 7/8-12	45,0	68,0	48,0	55,0	41,1
1210770	R1A25M425T-1616	1"	1 5/16-12	37,5	65,0	33,0	41,0	39,6
1210766	R/A25M425T-0404	1/4"	7/16-20	18,5	39,0	12,0	17,0	25,9

Dimensions shown may be changed without prior notice

90° union JIC - JIC Bulkhead

Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1211735	R1A25M925T-1616	1"	1 5/16-12	49,5	71,0	33,0	41,0	39,6
1205564	R1A25M925T-0404	1/4"	7/16-20	24,5	40,5	12,0	17,0	25,9
1211736	R1A25M925T-2020	1"1/4	1 5/8-12	55,0	79,0	41,0	50,0	40,9
1208117	R1A25M925T-2424	1"1/2	1 7/8-12	59,5	87,0	48,0	55,0	41,1
1216422	R1A25M925T-1414	7/8"	1 3/16-12	47,0	69,0	33,0	38,0	39,6
1206783	R1A25M925T-1212	3/4"	1 1/16-12	45,0	68,0	27,0	36,0	39,6
1203898	R1A25M925T-0606	3/8"	9/16-18	27,5	46,0	14,0	22,0	27,7
1203885	R1A25M925T-1010	5/8"	7/8-14	39,5	60,5	22,0	30,0	35,3
1206405	R1A25M925T-0505	5/16"	1/2-20	27,0	43,5	14,0	19,0	25,9
1203867	R1A25M925T-0808	1/2"	3/4-16	34,5	53,5	19,0	24,0	31,8

Branch Tee union JIC - JIC Bulkhead

Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1205586	R1A25MT25T-0808	1/2"	3/4-16	34,5	53,5	19,0	24,0	31,8
1211637	R1A25MT25T-1010	5/8"	7/8-14	39,5	60,5	22,0	30,0	35,3
1216462	R1A25MT25T-1414	7/8"	1 3/16-12	49,0	69,0	33,0	38,0	39,6
1208225	R1A25MT25T-2020	1"1/4	1 5/8-12	55,0	79,0	41,0	50,0	40,9
1210747	R/A25MT25T-0505	5/16"	1/2-20	27,0	43,5	14,0	19,0	25,9
1211638	R1A25MT25T-1212	3/4"	1 1/16-12	45,0	68,0	27,0	36,0	39,6
1208139	R/A25MT25T-0404	1/4"	7/16-20	24,5	40,5	12,0	17,0	25,9
1210748	R1A25MT25T-0606	3/8"	9/16-18	27,5	46,0	14,0	22,0	27,7
1212775	R1A25MT25T-1616	1"	1 5/16-12	49,5	71,0	33,0	41,0	39,6
1212776	R1A25MT25T-2424	1"1/2	1 7/8-12	59,5	87,0	48,0	55,0	41,1

Run Tee union JIC - JIC Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1212715	R1A25ML25T-2424	1"1/2	1 7/8-12	59,5	87,0	48,0	55,0	41,1
1212714	R1A25ML25T-2020	1"1/4	1 5/8-12	55,0	79,0	41,0	50,0	40,9
1211617	R/A25ML25T-0404	1/4"	7/16-20	24,5	40,5	12,0	17,0	25,9
1206974	R1A25ML25T-0606	3/8"	9/16-18	27,5	46,0	14,0	22,0	27,7
1211618	R1A25ML25T-0505	5/16"	1/2-20	27,0	43,5	14,0	19,0	25,9
1211619	R1A25ML25T-0808	1/2"	3/4-16	34,5	53,5	19,0	24,0	32,0
1211620	R1A25ML25T-1212	3/4"	1 1/16-12	45,0	68,0	27,0	36,0	39,6
1216435	R1A25ML25T-1414	7/8"	1 3/16-12	47,0	69,0	33,0	38,0	39,6
1210743	R/A25ML25T-1010	5/8"	7/8-14	39,5	60,5	22,0	30,0	35,3
1212713	R1A25ML25T-1616	1"	1 5/16-12	49,5	71,0	33,0	41,0	39,6

Dimensions shown may be changed without prior notice

// BSPP

Straight connector JIC Male - BSPP cylindric Male 60°

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1212827	R1A25M105M-0404	1/4"	7/16-20	1/4-19	14,0	13,0	19,0	34,0
1212826	R1A25M105M-0402	1/4"	7/16-20	1/8-28	14,0	9,5	14,0	29,0
1212829	R1A25M105M-0408	1/4"	7/16-20	1/2-14	14,0	17,0	27,0	40,0
1212828	R1A25M105M-0406	1/4"	7/16-20	3/8-19	14,0	15,5	22,0	35,5
1212841	R1A25M105M-1616	1"	1 5/16-12	1-11	23,0	22,0	41,0	54,0
1212840	R1A25M105M-1612	1"	1 5/16-12	3/4-14	23,0	20,0	36,0	55,0
1212843	R1A25M105M-2020	1"1/4	1 5/8-12	1 1/4-11	24,5	23,0	50,0	59,5
1231525	R1A25M105M-1012	5/8"	7/8-14	3/4-14	19,5	20,0	32,0	48,5
1212842	R1A25M105M-1620	1"	1 5/16-12	1 1/4-11	23,0	23,0	50,0	56,0
1212845	R1A25M105M-2424	1"1/2	1 7/8-12	1 1/2-11	27,5	25,0	55,0	64,5
1212844	R1A25M105M-2420	1"1/2	1 7/8-12	1 1/4-11	27,5	23,0	50,0	62,5
1216372	R1A25M105M-1412	7/8"	1 3/16-12	3/4-14	22,5	20,0	32,0	51,5
1212835	R1A25M105M-0804	1/2"	3/4-16	1/4-19	16,5	13,0	19,0	36,0
1212838	R1A25M105M-1212	3/4"	1 1/16-12	3/4-14	22,0	20,0	32,0	50,0
1212837	R1A25M105M-1208	3/4"	1 1/16-12	1/2-14	22,0	17,0	32,0	50,0
1212839	R1A25M105M-1216	3/4"	1 1/16-12	1-11	22,0	18,0	41,0	53,0
1212830	R1A25M105M-0502	5/16"	1/2-20	1/8-28	14,0	9,5	14,0	29,0
1212832	R1A25M105M-0604	3/8"	9/16-18	1/4-19	14,0	13,0	19,0	34,0
1212831	R1A25M105M-0504	5/16"	1/2-20	1/4-19	14,0	13,0	19,0	32,0
1212834	R1A25M105M-0608	3/8"	9/16-18	1/2-14	14,0	17,0	27,0	41,0
1212833	R1A25M105M-0606	3/8"	9/16-18	3/8-19	14,0	15,5	22,0	35,5
1207739	R1A25M105M-2016	1"1/4	1 5/8-12	1-11	24,5	22,0	46,0	58,5
1207738	R1A25M105M-1006	5/8"	7/8-14	3/8-19	19,5	15,5	24,0	41,5
1207735	R1A25M105M-0806	1/2"	3/4-16	3/8-19	16,5	15,5	22,0	38,0
1205996	R1A25M105M-1008	5/8"	7/8-14	1/2-14	19,5	17,0	27,0	45,5
1207737	R1A25M105M-0812	1/2"	3/4-16	3/4-14	16,5	20,0	32,0	45,5
1207736	R1A25M105M-0808	1/2"	3/4-16	1/2-14	16,5	17,0	27,0	41,0

Straight connector JIC Male - BSPP cylindric Male with elastomer

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1207412	R1A25M106I-0406	1/4"	7/16-20	3/8-19	14,0	12,0	22,0	35,5
1208006	R1A25M106I-2016	1"1/4	1 5/8-12	1-11	24,5	18,0	46,0	62,0
1207434	R1A25M106I-2424	1"1/2	1 7/8-12	1 1/2-11	27,5	22,0	55,0	67,0
1207411	R1A25M106I-0404	1/4"	7/16-20	1/4-19	14,0	12,0	19,0	36,0
1207433	R1A25M106I-2420	1"1/2	1 7/8-12	1 1/4-11	27,5	20,0	50,0	64,0
1207414	R1A25M106I-0504	5/16"	1/2-20	1/4-19	14,0	12,0	19,0	35,0
1207413	R1A25M106I-0408	1/4"	7/16-20	1/2-14	14,0	14,0	27,0	39,0
1207430	R1A25M106I-1616	1"	1 5/16-12	1-11	23,0	18,0	41,0	54,5
1207993	R1A25M106I-0502	5/16"	1/2-20	1/8-28	14,0	8,0	14,0	30,5
1207410	R1A25M106I-0402	1/4"	7/16-20	1/8-28	14,0	8,0	14,0	30,0
1207432	R1A25M106I-2020	1"1/4	1 5/8-12	1 1/4-11	24,5	20,0	50,0	60,0
1207431	R1A25M106I-1620	1"	1 5/16-12	1 1/4-11	23,0	20,0	50,0	58,5
1207427	R1A25M106I-1212	3/4"	1 1/16-12	3/4-14	22,0	16,0	32,0	51,0
1207426	R1A25M106I-1208	3/4"	1 1/16-12	1/2-14	22,0	14,0	32,0	49,0
1207429	R1A25M106I-1612	1"	1 5/16-12	3/4-14	23,0	16,0	36,0	51,5
1207428	R1A25M106I-1216	3/4"	1 1/16-12	1-11	22,0	18,0	41,0	53,5
1207423	R1A25M106I-1006	5/8"	7/8-14	3/8-19	19,5	12,0	24,0	42,5
1207422	R1A25M106I-0812	1/2"	3/4-16	3/4-14	16,5	16,0	32,0	45,5
1207425	R1A25M106I-1012	5/8"	7/8-14	3/4-14	19,5	16,0	32,0	49,5
1207424	R1A25M106I-1008	5/8"	7/8-14	1/2-14	19,5	14,0	27,0	44,5
1207421	R1A25M106I-0808	1/2"	3/4-16	1/2-14	16,5	14,0	27,0	42,0
1207420	R1A25M106I-0806	1/2"	3/4-16	3/8-19	16,5	12,0	22,0	38,5
1212875	R1A25M106I-1412	7/8"	1 3/16-12	3/4-14	22,5	16,0	32,0	53,5
1207419	R1A25M106I-0804	1/2"	3/4-16	1/4-19	16,5	12,0	19,0	38,5
1207416	R1A25M106I-0604	3/8"	9/16-18	1/4-19	14,0	12,0	19,0	35,0
1207415	R1A25M106I-0506	5/16"	1/2-20	3/8-19	14,0	12,0	22,0	35,5
1207418	R1A25M106I-0608	3/8"	9/16-18	1/2-14	14,0	14,0	27,0	39,5
1207417	R1A25M106I-0606	3/8"	9/16-18	3/8-19	14,0	12,0	22,0	36,0

Dimensions shown may be changed without prior notice

Long connector JIC Male - BSPP cylindric Male with elastomer

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1212847	R1A25M106H-0404	1/4"	7/16-20	1/4-19	35,0	12,0	19,0	55,5
1212869	R1A25M106H-2016	1"1/4	1 5/8-12	1-11	88,0	18,0	46,0	123,0
1212846	R1A25M106H-0402	1/4"	7/16-20	1/8-28	35,0	8,0	14,0	50,0
1212868	R1A25M106H-1620	1"	1 5/16-12	1 1/4-11	72,1	20,0	50,0	107,6
1212849	R1A25M106H-0408	1/4"	7/16-20	1/2-14	35,0	14,0	27,0	60,3
1212848	R1A25M106H-0406	1/4"	7/16-20	3/8-19	35,0	12,0	22,0	56,8
1212861	R1A25M106H-1008	5/8"	7/8-14	1/2-14	53,1	14,0	27,0	78,1
1212860	R1A25M106H-1006	5/8"	7/8-14	3/8-19	53,0	12,0	24,0	74,0
1212863	R1A25M106H-1208	3/4"	1 1/16-12	1/2-14	63,5	14,0	30,0	90,5
1212862	R1A25M106H-1012	5/8"	7/8-14	3/4-14	53,1	16,0	32,0	84,1
1212865	R1A25M106H-1216	3/4"	1 1/16-12	1-11	63,5	18,0	41,0	95,0
1212864	R1A25M106H-1212	3/4"	1 1/16-12	3/4-14	64,0	16,0	32,0	92,5
1212867	R1A25M106H-1616	1"	1 5/16-12	1-11	72,1	18,0	41,0	103,6
1212866	R1A25M106H-1612	1"	1 5/16-12	3/4-14	72,0	16,0	36,0	100,0
1212870	R1A25M106H-2020	1"1/4	1 5/8-12	1 1/4-11	88,1	20,0	50,0	123,6
1212858	R1A25M106H-0808	1/2"	3/4-16	1/2-14	48,0	14,0	27,0	73,5
1212857	R1A25M106H-0806	1/2"	3/4-16	3/8-19	47,8	12,0	22,0	70,8
1212859	R1A25M106H-0812	1/2"	3/4-16	3/4-14	48,0	16,0	32,0	76,8
1212850	R1A25M106H-0502	5/16"	1/2-20	1/8-28	37,0	8,0	14,0	53,3
1212872	R1A25M106H-2424	1"1/2	1 7/8-12	1 1/2-11	98,6	22,0	55,0	138,1
1212871	R1A25M106H-2420	1"1/2	1 7/8-12	1 1/4-11	98,6	20,0	50,0	135,1
1212852	R1A25M106H-0506	5/16"	1/2-20	3/8-19	37,0	12,0	22,0	57,5
1212851	R1A25M106H-0504	5/16"	1/2-20	1/4-19	37,0	12,0	19,0	57,5
1212854	R1A25M106H-0606	3/8"	9/16-18	3/8-19	39,5	12,0	22,0	62,0
1212853	R1A25M106H-0604	3/8"	9/16-18	1/4-19	39,0	12,0	19,0	59,5
1212856	R1A25M106H-0804	1/2"	3/4-16	1/4-19	47,8	12,0	22,0	69,8
1212855	R1A25M106H-0608	3/8"	9/16-18	1/2-14	39,0	14,0	27,0	63,0
1216388	R1A25M106H-1412	7/8"	1 3/16-12	3/4-14	68,3	16,0	32,0	99,3

45° adjustable elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1211702	R/A25M406Q-0504	5/16"	1/2-20	1/4-19	19,5	26,5	14,0	19,0
1212968	R/A25M406Q-1412	7/8"	1 3/16-12	3/4-14	35,0	45,5	33,0	36,0
1212967	R1A25M406N-1216	3/4"	1 1/16-12	1-11	37,0	47,0	33,0	41,0
1207334	R1A25M406N-1616	1"	1 5/16-12	1-11	37,0	47,0	33,0	41,0
1211703	R/A25M406Q-2424	1 1/2"	1 7/8-12	1 1/2-11	45,0	48,0	48,0	55,0
1207326	R1A25M406N-0404	1/4"	7/16-20	1/4-19	21,0	29,0	14,0	19,0
1212959	R1A25M406Q-0406	1/4"	7/16-20	3/8-19	22,0	33,0	17,0	22,0
1207325	R1A25M406N-0402	1/4"	7/16-20	1/8-28	19,5	26,5	12,0	14,0
1212969	R1A25M406N-1612	1"	1 5/16-12	3/4-14	37,0	47,0	33,0	36,0
1207331	R1A25M406N-1008	5/8"	7/8-14	1/2-14	28,0	38,5	22,0	27,0
1207330	R1A25M406N-0808	1/2"	3/4-16	1/2-14	25,5	38,5	22,0	27,0
1207333	R1A25M406N-1212	3/4"	1 1/16-12	3/4-14	32,5	44,0	27,0	36,0
1212960	R/A25M406Q-0408	1/4"	7/16-20	1/2-14	22,5	38,5	22,0	27,0
1212962	R/A25M406Q-0506	5/16"	1/2-20	3/8-19	21,0	32,5	17,0	22,0
1212961	R1A25M406N-0502	5/16"	1/2-20	1/8-28	19,5	26,5	14,0	14,0
1212964	R1A25M406N-0804	1/2"	3/4-16	1/4-19	25,5	30,0	19,0	19,0
1212963	R1A25M406N-0608	3/8"	9/16-18	1/2-14	22,5	38,5	22,0	27,0
1208292	R1A25M406N-1012	5/8"	7/8-14	3/4-14	30,0	44,0	27,0	36,0
1208380	R1A25M406N-2020	1 1/4"	1 5/8-12	1 1/4-11	39,5	48,5	41,0	50,0
1207328	R1A25M406N-0606	3/8"	9/16-18	3/8-19	22,0	33,0	17,0	22,0
1207327	R/A25M406Q-0604	3/8"	9/16-18	1/4-19	21,0	29,0	14,0	19,0
1207329	R1A25M406N-0806	1/2"	3/4-16	3/8-19	25,5	33,0	19,0	22,0

Dimensions shown may be changed without prior notice

90° adjustable elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1208226	R1A25M906N-0608	3/8"	9/16-18	1/2-14	31,0	43,0	22,0	27,0
1207238	R1A25M906N-0402	1/4"	7/16-20	1/8-28	22,5	26,0	12,0	14,0
1207254	R1A25M906N-2020	1"1/4	1 5/8-12	1 1/4-11	52,0	57,0	41,0	50,0
1207253	R1A25M906N-2016	1"1/4	1 5/8-12	1-11	52,0	57,0	41,0	41,0
1207255	R1A25M906N-2424	1"1/2	1 7/8-12	1 1/2-11	59,0	61,0	48,0	55,0
1207250	R1A25M906N-1216	3/4"	1 1/16-12	1-11	44,5	52,0	33,0	41,0
1207252	R1A25M906N-1616	1"	1 5/16-12	1-11	46,0	52,0	33,0	41,0
1207251	R1A25M906N-1612	1"	1 5/16-12	3/4-14	46,0	52,0	33,0	36,0
1213024	R/A25M906Q-0406	1/4"	7/16-20	3/8-19	28,5	36,5	17,0	22,0
1207746	R1A25M906N-1620	1"	1 5/16-12	1 1/4-11	51,0	57,0	41,0	50,0
1207745	R1A25M906N-1012	5/8"	7/8-14	3/4-14	39,5	49,0	27,0	27,0
1207247	R1A25M906N-1008	5/8"	7/8-14	1/2-14	36,5	43,0	22,0	27,0
1207246	R1A25M906N-0808	1/2"	3/4-16	1/2-14	34,1	43,0	22,0	27,0
1207744	R1A25M906N-1006	5/8"	7/8-14	3/8-19	36,5	39,5	22,0	22,0
1207249	R1A25M906N-1212	3/4"	1 1/16-12	3/4-14	42,0	49,0	27,0	36,0
1207743	R/A25M906Q-0506	5/16"	1/2-20	3/8-19	28,5	36,5	17,0	22,0
1207248	R1A25M906N-1208	3/4"	1 1/16-12	1/2-14	42,0	45,5	27,0	27,0
1207243	R1A25M906N-0606	3/8"	9/16-18	3/8-19	28,5	36,5	17,0	22,0
1207242	R1A25M906N-0604	3/8"	9/16-18	1/4-19	27,0	31,5	14,0	19,0
1207245	R1A25M906N-0806	1/2"	3/4-16	3/8-19	31,5	36,5	19,0	22,0
1207244	R1A25M906N-0804	1/2"	3/4-16	1/4-19	31,5	33,5	19,0	19,0
1213026	R1A25M906N-0812	1/2"	3/4-16	3/4-14	37,0	49,0	27,0	36,0
1213025	R/A25M906Q-0408	1/4"	7/16-20	1/2-14	31,0	43,0	22,0	27,0
1207241	R1A25M906N-0504	5/16"	1/2-20	1/4-19	27,0	31,5	14,0	19,0
1213028	R/A25M906Q-2420	1"1/2	1 7/8-12	1 1/4-11	59,0	61,0	48,0	50,0
1213027	R1A25M906Q-1412	7/8"	1 3/16-12	3/4-14	44,0	50,5	33,0	36,0
1207240	R1A25M906N-0502	5/16"	1/2-20	1/8-28	24,0	27,5	14,0	14,0
1207239	R1A25M906N-0404	1/4"	7/16-20	1/4-19	27,0	31,5	14,0	19,0

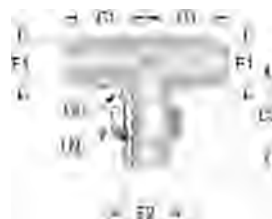
90° adjustable long elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1213037	R1A25M906Y-0606	3/8"	9/16-18	3/8-19	28,5	67,0	17,0	22,0
1213036	R1A25M906Y-0604	3/8"	9/16-18	1/4-19	27,0	56,5	14,0	19,0
1213039	R1A25M906Y-0804	1/2"	3/4-16	1/4-19	31,5	64,0	22,0	19,0
1213038	R1A25M906Y-0608	3/8"	9/16-18	1/2-14	28,5	78,0	22,0	27,0
1213040	R1A25M906Y-0806	1/2"	3/4-16	3/8-19	31,5	67,0	22,0	22,0
1213042	R1A25M906Y-0812	1/2"	3/4-16	3/4-14	37,0	92,0	27,0	36,0
1213041	R1A25M906Y-0808	1/2"	3/4-16	1/2-14	34,1	78,0	22,0	27,0
1213044	R/A25M906Y-1008	5/8"	7/8-14	1/2-14	36,5	78,0	22,0	27,0
1213043	R1A25M906Y-1006	5/8"	7/8-14	3/8-19	36,5	75,0	22,0	22,0
1213046	R1A25M906Y-1208	3/4"	1 1/16-12	1/2-14	42,0	88,0	27,0	27,0
1213045	R1A25M906Y-1012	5/8"	7/8-14	3/4-14	39,5	92,0	27,0	36,0
1213048	R1A25M906Y-1616	1"	1 5/16-12	1-11	46,0	105,0	33,0	41,0
1213047	R1A25M906Y-1216	3/4"	1 1/16-12	1-11	44,5	105,0	33,0	41,0
1213049	R1A25M906Y-1620	1"	1 5/16-12	1 1/4-11	51,0	123,0	41,0	50,0
1213029	R1A25M906Y-0402	1/4"	7/16-20	1/8-28	24,0	46,0	14,0	14,0
1216418	R1A25M906Y-1412	7/8"	1 3/16-12	3/4-14	44,0	99,0	33,0	36,0
1213051	R1A25M906Y-2020	1"1/4	1 5/8-12	1 1/4-11	52,0	123,0	41,0	50,0
1213050	R1A25M906Y-2016	1"1/4	1 5/8-12	1-11	52,0	124,0	41,0	41,0
1213031	R/A25M906Y-0406	1/4"	7/16-20	3/8-19	28,5	67,0	17,0	22,0
1213053	R1A25M906Y-2424	1"1/2	1 7/8-12	1 1/2-11	59,0	135,0	48,0	55,0
1213030	R1A25M906Y-0404	1/4"	7/16-20	1/4-19	27,0	56,5	14,0	19,0
1213052	R1A25M906Y-2420	1"1/2	1 7/8-12	1 1/4-11	59,0	134,0	48,0	50,0
1213033	R1A25M906Y-0502	5/16"	1/2-20	1/8-28	24,0	49,5	14,0	14,0
1213032	R1A25M906Y-0408	1/4"	7/16-20	1/2-14	31,0	78,0	22,0	27,0
1213035	R1A25M906Y-0506	5/16"	1/2-20	3/8-19	28,5	61,0	17,0	22,0
1213034	R1A25M906Y-0504	5/16"	1/2-20	1/4-19	27,0	56,5	14,0	19,0

Dimensions shown may be changed without prior notice

Branch Tee adjustable elbow connector JIC Male - BSPP
cylindric Male with O-Ring and retaining ring



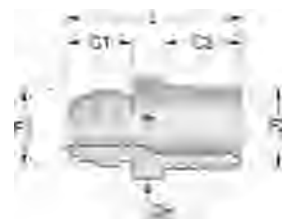
Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210701	R/A25MT06Q-0404	1/4"	7/16-20	1/4-19	27,0	31,5	14,0	19,0
1207313	R/A25MT06Q-0604	3/8"	9/16-18	1/4-19	27,0	31,5	14,0	19,0
1212769	R1A25MT06N-1006	5/8"	7/8-14	3/8-19	36,5	39,5	22,0	22,0
1207314	R/A25MT06Q-0504	5/16"	1/2-20	1/4-19	27,0	31,5	14,0	19,0
1216449	R1A25MT06N-1412	7/8"	1 3/16-12	-	44,0	50,5	33,0	27,0
1212762	R/A25MT06Q-0406	1/4"	7/16-20	3/8-19	28,5	36,5	17,0	22,0
1212764	R1A25MT06N-0502	5/16"	1/2-20	1/8-28	24,0	27,5	14,0	14,0
1212763	R1A25MT06Q-0408	1/4"	7/16-20	1/2-14	31,0	43,0	22,0	27,0
1211631	R1A25MT06N-2020	1"1/4	1 5/8-12	1 1/4-11	52,0	57,0	41,0	50,0
1212766	R1A25MT06N-0608	3/8"	9/16-18	1/2-14	31,0	43,0	22,0	27,0
1211632	R1A25MT06N-2420	1"1/2	1 7/8-12	1 1/4-11	59,0	61,0	48,0	50,0
1212765	R/A25MT06Q-0506	5/16"	1/2-20	3/8-19	28,5	36,5	17,0	22,0
1211633	R/A25MT06Q-2424	1"1/2	1 7/8-12	1 1/2-11	59,0	61,0	48,0	55,0
1212768	R/A25MT06Q-0812	1/2"	3/4-16	3/4-14	37,0	49,0	27,0	36,0
1210744	R/A25MT06Q-0606	3/8"	9/16-18	3/8-19	28,5	36,5	17,0	22,0
1212767	R/A25MT06Q-0804	1/2"	3/4-16	1/4-19	31,5	33,5	19,0	19,0
1212771	R/A25MT06Q-1216	3/4"	1 1/16-12	1-11	44,5	52,0	33,0	41,0
1212770	R1A25MT06N-1012	5/8"	7/8-14	3/4-14	36,5	43,0	27,0	36,0
1208134	R1A25MT06N-0402	1/4"	7/16-20	1/8-28	24,5	26,0	12,0	14,0
1207320	R1A25MT06N-1616	1"	1 5/16-12	1-11	46,0	52,0	33,0	41,0
1212773	R1A25MT06N-1620	1"	1 5/16-12	1 1/4-11	51,0	57,0	41,0	50,0
1240190	R1A25MT06N-0806	1/2"	3/4-16	3/8-19	31,5	36,5	19,0	22,0
1212772	R/A25MT06Q-1612	1"	1 5/16-12	3/4-14	46,0	52,0	33,0	27,0
1212774	R1A25MT06N-2016	1"1/4	1 5/8-12	1-11	52,0	57,0	41,0	41,0
1207317	R1A25MT06N-1008	5/8"	7/8-14	1/2-14	36,5	43,0	22,0	27,0
1207316	R1A25MT06N-0808	1/2"	3/4-16	1/2-14	34,0	43,0	22,0	27,0
1207319	R1A25MT06N-1212	3/4"	1 1/16-12	3/4-14	42,0	49,0	27,0	27,0
1207318	R/A25MT06Q-1208	3/4"	1 1/16-12	1/2-14	42,0	45,5	27,0	27,0

Run Tee adjustable elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1212704	R1A25ML06N-0506	5/16"	1/2-20	3/8-19	28,5	36,5	17,0	22,0
1212703	R1A25ML06N-0408	1/4"	7/16-20	1/2-14	31,0	43,0	22,0	27,0
1212706	R1A25ML06N-0804	1/2"	3/4-16	1/4-19	31,5	33,5	19,0	19,0
1212705	R1A25ML06N-0608	3/8"	9/16-18	1/2-14	31,0	43,0	22,0	27,0
1212708	R1A25ML06N-1006	5/8"	7/8-14	3/8-19	36,5	39,5	22,0	22,0
1212707	R1A25ML06N-0812	1/2"	3/4-16	3/4-14	37,0	49,0	27,0	36,0
1207297	R1A25ML06Q-1616	1"	1 5/16-12	1-11	46,0	52,0	33,0	41,0
1208125	R/A25ML06Q-2424	1"1/2	1 7/8-12	1 1/2-11	59,0	61,0	48,0	55,0
1207299	R/A25ML06Q-1208	3/4"	1 1/16-12	1/2-14	42,0	45,5	27,0	27,0
1208124	R1A25ML06N-1216	3/4"	1 1/16-12	1-11	44,5	52,0	33,0	41,0
1207294	R1A25ML06N-0806	1/2"	3/4-16	3/8-19	31,5	36,5	19,0	22,0
1207293	R1A25ML06N-0606	3/8"	9/16-18	3/8-19	28,5	36,5	17,0	22,0
1207296	R1A25ML06N-1212	3/4"	1 1/16-12	3/4-14	42,0	49,0	27,0	36,0
1210740	R/A25ML06Q-0402	1/4"	7/16-20	1/8-28	22,5	26,5	12,0	14,0
1207295	R/A25ML06Q-0808	1/2"	3/4-16	1/2-14	34,0	43,0	22,0	27,0
1210742	R/A25ML06Q-0404	1/4"	7/16-20	1/4-19	27,0	31,5	14,0	19,0
1212702	R1A25ML06N-0406	1/4"	7/16-20	3/8-19	28,5	36,5	17,0	22,0
1207292	R1A25ML06N-0604	3/8"	9/16-18	1/4-19	27,0	31,5	14,0	19,0
1207748	R1A25ML06N-1008	5/8"	7/8-14	1/2-14	36,5	43,0	22,0	27,0
1208277	R/A25ML06Q-1612	1"	1 5/16-12	3/4-14	46,0	52,0	33,0	36,0
1210694	R1A25ML06N-0504	5/16"	1/2-20	1/4-19	27,0	31,5	14,0	19,0
1208030	R/A25ML06Q-1012	5/8"	7/8-14	3/4-14	39,5	49,0	27,0	36,0
1212711	R1A25ML06N-2016	1"1/4	1 5/8-12	1-11	52,0	57,0	41,0	41,0
1212710	R/A25ML06Q-1620	1"	1 5/16-12	1 1/4-11	52,0	56,0	41,0	50,0
1212712	R1A25ML06N-2420	1"1/2	1 7/8-12	1 1/4-11	59,0	61,0	48,0	50,0

Dimensions shown may be changed without prior notice

Straight connector JIC Male - BSPT Male

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1203696	R1A25M107M-1006	5/8"	7/8-14	3/8-19	19,5	14,5	24,0	42,0
1203652	R1A25M107M-2424	1"1/2	1 7/8-12	1 1/2-11	27,5	25,5	50,0	68,0
1203695	R1A25M107M-1012	5/8"	7/8-14	3/4-14	19,5	19,0	27,0	48,5
1203683	R1A25M107M-0402	1/4"	7/16-20	1/8-28	14,0	10,0	14,0	30,5
1203694	R1A25M107M-1008	5/8"	7/8-14	1/2-14	19,5	19,0	24,0	46,5
1203682	R1A25M107M-0404	1/4"	7/16-20	1/4-19	14,0	14,5	14,0	35,5
1203711	R1A25M107M-0604	3/8"	9/16-18	1/4-19	14,0	14,5	17,0	35,5
1203667	R1A25M107M-0804	1/2"	3/4-16	1/4-19	16,5	14,5	19,0	38,5
1203645	R1A25M107M-2020	1"1/4	1 5/8-12	1 1/4-11	24,5	25,0	46,0	61,0
1203710	R1A25M107M-0608	3/8"	9/16-18	1/2-14	14,0	19,0	22,0	41,0
1203666	R1A25M107M-0808	1/2"	3/4-16	1/2-14	16,5	19,0	22,0	43,5
1203644	R1A25M107M-2016	1"1/4	1 5/8-12	1-11	24,5	24,0	46,0	60,5
1203638	R1A25M107M-1612	1"	1 5/16-12	3/4-14	23,0	19,0	36,0	53,0
1203626	R1A25M107M-0502	5/16"	1/2-20	1/8-28	14,0	10,0	14,0	30,5
1203615	R1A25M107M-1212	3/4"	1 1/16-12	3/4-14	22,0	19,0	27,0	51,0
1203625	R1A25M107M-0504	5/16"	1/2-20	1/4-19	14,0	14,5	14,0	35,5
1203669	R1A25M107M-0806	1/2"	3/4-16	3/8-19	16,5	14,5	19,0	38,5
1203614	R1A25M107M-1208	3/4"	1 1/16-12	1/2-14	22,0	19,0	27,0	51,0
1216391	R1A25M107M-1412	7/8"	1 3/16-12	3/4-14	22,5	19,0	32,0	50,5
1203636	R1A25M107M-1616	1"	1 5/16-12	1-11	23,0	24,0	36,0	58,0
1203712	R1A25M107M-0606	3/8"	9/16-18	3/8-19	14,0	14,5	19,0	35,5
1203613	R1A25M107M-1216	3/4"	1 1/16-12	1-11	22,0	24,0	36,0	56,5

90° elbow connector JIC Male - BSPT Male



Item Code	Part Number	OD1	F1	F2	C1	C2	CH
		in			mm	mm	mm
1203894	R1A25M907M-0608	3/8"	9/16-18	1/2-14	31,0	37,5	22,0
1203883	R1A25M907M-1006	5/8"	7/8-14	3/8-19	36,5	32,5	22,0
1205460	R1A25M907M-2016	1"1/4	1 5/8-12	1-11	52,0	59,5	41,0
1203882	R1A25M907M-1012	5/8"	7/8-14	3/4-14	39,5	40,5	27,0
1203881	R1A25M907M-1008	5/8"	7/8-14	1/2-14	36,5	40,0	22,0
1216419	R1A25M907M-1412	7/8"	1 3/16-12	3/4-14	44,0	43,0	33,0
1203839	R1A25M907M-0504	5/16"	1/2-20	1/4-19	27,0	27,0	14,0
1213054	R1A25M907M-2424	1"1/2	1 7/8-12	1 1/2-11	59,0	67,0	48,0
1203865	R1A25M907M-0806	1/2"	3/4-16	3/8-19	31,5	31,0	19,0
1203864	R/A25M907M-0804	1/2"	3/4-16	1/4-19	31,5	31,0	19,0
1203853	R/A25M907M-2020	1"1/4	1 5/8-12	1 1/4-11	52,0	60,5	41,0
1203874	R1A25M907M-0402	1/4"	7/16-20	1/8-28	22,5	19,5	12,0
1203896	R1A25M907M-0606	3/8"	9/16-18	3/8-19	28,5	31,0	17,0
1203863	R1A25M907M-0808	1/2"	3/4-16	1/2-14	34,0	37,0	22,0
1203873	R1A25M907M-0404	1/4"	7/16-20	1/4-19	27,0	27,5	14,0
1203840	R/A25M907M-0502	5/16"	1/2-20	1/8-28	24,0	20,0	14,0
1203895	R1A25M907M-0604	3/8"	9/16-18	1/4-19	27,0	27,0	14,0
1203847	R1A25M907M-1612	1"	1 5/16-12	3/4-14	46,0	45,0	33,0
1203835	R1A25M907M-1212	3/4"	1 1/16-12	3/4-14	42,0	40,5	27,0
1203846	R1A25M907M-1616	1"	1 5/16-12	1-11	46,0	50,0	33,0
1203833	R1A25M907M-1216	3/4"	1 1/16-12	1-11	44,5	50,0	33,0

Dimensions shown may be changed without prior notice

// METRIC

Straight connector JIC Female - Metric Male with O-Ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	CH1	L
		in			mm	mm	mm	mm	mm
1207444	R/A2511525-0614	3/8"	9/16-18	M14X1.5	18,5	13,5	19,0	19,0	41,0
1207447	R/A2511525-1227	3/4"	1 1/16-12	M27X2	27,3	18,5	32,0	32,0	57,5
1207446	R1A2511525-1022	5/8"	7/8-14	M22X1.5	25,2	15,5	27,0	27,0	50,7
1207443	R/A2511525-0512	5/16"	1/2-20	M12X1.5	18,5	13,5	17,0	17,0	39,0
1207442	R1A2511525-0410	1/4"	7/16-20	M10X1.0	17,0	11,0	14,0	16,0	34,5
1216349	R1A2511525-0514	5/16"	1/2-20	M14X1.5	18,5	13,5	19,0	17,0	40,0
1216348	R1A2511525-0510	5/16"	1/2-20	M10X1.0	18,5	11,0	14,0	17,0	36,5
1216347	R1A2511525-0412	1/4"	7/16-20	M12X1.5	17,0	13,5	17,0	16,0	36,5
1216353	R1A2511525-1222	3/4"	1 1/16-12	M22X1.5	27,3	15,5	27,0	32,0	53,5
1216352	R1A2511525-1020	5/8"	7/8-14	M20X1.5	25,2	16,5	24,0	27,0	49,7
1216351	R1A2511525-0818	1/2"	3/4-16	M18X1.5	22,2	15,0	24,0	25,0	45,5
1216350	R1A2511525-0616	3/8"	9/16-18	M16X1.5	18,5	14,0	22,0	19,0	42,5
1216355	R1A2511525-1627	1"	1 5/16-12	M27X2	29,6	18,5	36,0	38,0	60,0
1216354	R1A2511525-1426	7/8"	1 3/16-12	M26X1.5	27,0	21,0	32,0	36,0	60,0
1207629	R1A2511525-1018	5/8"	7/8-14	M18X1.5	25,2	15,0	24,0	27,0	48,2
1207448	R1A2511525-1633	1"	1 5/16-12	M33X2.0	29,6	19,0	41,0	38,0	61,0

Straight connector JIC Male - Metric Male with O-Ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1224083	R1A25M1525-0512	5/16"	1/2-20	M12X1.5	14,0	13,5	17,0	33,5
1207401	R1A25M1525-2042	1"1/4	1 5/8-12	M42X2	24,5	19,0	50,0	55,0
1207400	R/A25M1525-2448	1"1/2	1 7/8-12	M48X2.0	27,5	17,5	55,0	60,0
1207403	R/A25M1525-1227	3/4"	1 1/16-12	M27X2	22,0	18,5	32,0	49,0
1212958	R1A25M1525-1020	5/8"	7/8-14	M20X1.5	19,5	16,5	24,0	41,5
1207402	R/A25M1525-1633	1"	1 5/16-12	M33X2.0	23,0	19,0	41,0	51,0
1207387	R1A25M1525-0818	1/2"	3/4-16	M18X1.5	16,5	15,0	24,0	38,5
1211696	R1A25M1525-0816	1/2"	3/4-16	M16X1.5	16,5	14,0	22,0	38,0
1216402	R1A25M1525-1627	1"	1 5/16-12	M27X2	23,0	18,5	36,0	50,5
1225818	R/A25M1525-1018	5/8"	7/8-14	M18X1.5	19,5	15,0	24,0	42,0
1207408	R/A25M1525-0614	3/8"	9/16-18	M14X1.5	14,0	13,5	19,0	33,5
1207639	R1A25M1525-0616	3/8"	9/16-18	M16X1.5	14,0	14,0	22,0	35,0
1207636	R1A25M1525-0510	5/16"	1/2-20	M10X1.0	14,0	11,0	14,0	30,5
1207405	R1A25M1525-1022	5/8"	7/8-14	M22X1.5	19,5	15,5	27,0	43,0
1207635	R1A25M1525-0412	1/4"	7/16-20	M12X1.5	14,0	13,5	17,0	31,5
1207404	R1A25M1525-1222	3/4"	1 1/16-12	M22X1.5	22,0	15,5	27,0	45,5

Dimensions shown may be changed without prior notice

Straight connector JIC Male - Metric Male with elastomer

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1212957	R1A25M152I-1627	1"	1 5/16-12	M27X2	23,0	16,0	36,0	55,0
1207389	R1A25M152I-1018	5/8"	7/8-14	M18X1.5	19,5	12,0	24,0	41,5
1207397	R1A25M152I-1633	1"	1 5/16-12	M33X2.0	23,0	18,0	41,0	51,5
1207396	R1A25M152I-1227	3/4"	1 1/16-12	M27X2	22,0	16,0	32,0	49,0
1207388	R1A25M152I-0818	1/2"	3/4-16	M18X1.5	16,5	12,0	24,0	39,0
1207399	R1A25M152I-2448	1"1/2	1 7/8-12	M48X2.0	27,5	22,0	55,0	60,5
1207398	R1A25M152I-2042	1"1/4	1 5/8-12	M42X2	24,5	20,0	50,0	55,0
1207393	R1A25M152I-0816	1/2"	3/4-16	M16X1.5	16,5	12,0	22,0	37,5
1216405	R1A25M152I-1426	7/8"	1 3/16-12	M26X1.5	22,5	16,0	32,0	49,5
1207392	R1A25M152I-0614	3/8"	9/16-18	M14X1.5	14,0	12,0	19,0	33,5
1212951	R1A25M152I-0510	5/16"	1/2-20	M10X1.0	14,0	8,0	14,0	30,5
1207395	R1A25M152I-1222	3/4"	1 1/16-12	M22X1.5	22,0	14,0	27,0	45,5
1212950	R1A25M152I-0412	1/4"	7/16-20	M12X1.5	14,0	12,0	17,0	33,5
1207394	R1A25M152I-1022	5/8"	7/8-14	M22X1.5	19,5	14,0	27,0	43,0
1212953	R1A25M152I-1020	5/8"	7/8-14	M20X1.5	19,5	14,0	24,0	43,5
1212952	R1A25M152I-0616	3/8"	9/16-18	M16X1.5	14,0	12,0	22,0	35,5
1207391	R1A25M152I-0512	5/16"	1/2-20	M12X1.5	14,0	12,0	17,0	33,5
1207390	R1A25M152I-0410	1/4"	7/16-20	M10X1.0	14,0	8,0	14,0	31,0
1208306	R1A25M152I-0514	5/16"	1/2-20	M14X1.5	14,0	12,0	19,0	35,0

Long connector JIC Male - Metric Male with elastomer

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1212935	R1A25M152H-0510	5/16"	1/2-20	M10X1.0	37,0	9,5	14,0	53,0
1212946	R1A25M152H-1627	1"	1 5/16-12	M27X2	72,0	19,0	36,0	102,0
1212934	R1A25M152H-0410	1/4"	7/16-20	M10X1.0	35,0	9,5	14,0	51,0
1212945	R1A25M152H-1227	3/4"	1 1/16-12	M27X2	63,0	19,0	32,0	92,5
1212937	R1A25M152H-0514	5/16"	1/2-20	M14X1.5	37,0	14,0	19,0	56,5
1212948	R1A25M152H-2042	1"1/4	1 5/8-12	M42X2	88,0	23,0	50,0	121,0
1212936	R1A25M152H-0512	5/16"	1/2-20	M12X1.5	37,0	14,0	17,0	55,5
1212947	R1A25M152H-1633	1"	1 5/16-12	M33X2.0	72,0	21,0	41,0	102,5
1212939	R1A25M152H-0616	3/8"	9/16-18	M16X1.5	39,0	14,0	22,0	60,0
1212938	R1A25M152H-0614	3/8"	9/16-18	M14X1.5	39,0	14,0	19,0	58,5
1212949	R1A25M152H-2448	1"1/2	1 7/8-12	M48X2.0	88,0	25,0	55,0	136,0
1212940	R1A25M152H-0816	1/2"	3/4-16	M16X1.5	48,0	14,0	22,0	69,0
1212942	R1A25M152H-1018	5/8"	7/8-14	M18X1.5	53,0	14,5	24,0	75,5
1212941	R1A25M152H-0818	1/2"	3/4-16	M18X1.5	48,0	14,5	24,0	70,5
1212944	R1A25M152H-1222	3/4"	1 1/16-12	M22X1.5	63,0	17,0	27,0	89,0
1212943	R1A25M152H-1022	5/8"	7/8-14	M22X1.5	53,0	17,0	27,0	78,0

90° adjustable elbow connector JIC Male - Metric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1207279	R1A25M952Q-1018	5/8"	7/8-14	M18X1.5	36,5	41,5	22,0	24,0
1207523	R1A25M952Q-0818	1/2"	3/4-16	M18X1.5	31,5	39,5	19,0	24,0
1207276	R/A25M952Q-0512	5/16"	1/2-20	M12X1.5	27,0	31,5	14,0	17,0
1207275	R1A25M952Q-0410	1/4"	7/16-20	M10X1.0	22,5	27,5	12,0	14,0
1207278	R1A25M952Q-0816	1/2"	3/4-16	M16X1.5	31,5	36,5	19,0	22,0
1207277	R1A25M952Q-0614	3/8"	9/16-18	M14X1.5	27,0	32,5	14,0	19,0
1210693	R1A25M952Q-1227	3/4"	1 1/16-12	M27X2	42,0	51,5	27,0	32,0
1213147	R1A25M952Q-2448	1"1/2	1 7/8-12	M48X1.5	59,0	67,0	48,0	55,0
1213146	R1A25M952Q-1627	1"	1 5/16-12	M27X2	46,0	55,0	33,0	32,0
1207282	R1A25M952Q-1633	1"	1 5/16-12	M33X1.5	46,0	55,0	33,0	41,0
1213138	R1A25M952Q-0412	1/4"	7/16-20	M12X1.5	27,0	31,5	14,0	17,0
1211742	R1A25M952Q-2042	1"1/4	1 5/8-12	M42X2	52,0	60,0	41,0	50,0
1207281	R/A25M952Q-1222	3/4"	1 1/16-12	M22X1.5	42,0	45,5	27,0	27,0
1207280	R1A25M952Q-1022	5/8"	7/8-14	M22X1.5	36,5	43,0	22,0	27,0
1213141	R1A25M952Q-0514	5/16"	1/2-20	M14X1.5	27,0	32,5	14,0	19,0
1213140	R1A25M952Q-0510	5/16"	1/2-20	M10X1.0	24,0	27,5	14,0	14,0
1213142	R/A25M952Q-0616	3/8"	9/16-18	M16X1.5	28,5	36,5	17,0	22,0
1213145	R1A25M952Q-1426	7/8"	1 3/16-12	M26X1.5	44,0	50,5	27,0	36,0
1213144	R1A25M952Q-1020	5/8"	7/8-14	M20X1.5	36,5	43,0	22,0	27,0

Dimensions shown may be changed without prior notice

90° adjustable long elbow connector JIC Male - Metric Male with O-Ring and retaining ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1213158	R1A25M952Y-1020	5/8"	7/8-14	M20X1.5	36,5	78,0	22,0	27,0
1213157	R/A25M952Y-1018	5/8"	7/8-14	M18X1.5	36,5	75,0	22,0	24,0
1213149	R1A25M952Y-0412	1/4"	7/16-20	M12X1.5	27,0	53,5	14,0	17,0
1213148	R1A25M952Y-0410	1/4"	7/16-20	M10X1.0	22,5	46,0	12,0	14,0
1213159	R1A25M952Y-1022	5/8"	7/8-14	M22X1.5	36,5	78,0	22,0	27,0
1213150	R1A25M952Y-0510	5/16"	1/2-20	M10X1.0	24,0	49,5	14,0	14,0
1213161	R1A25M952Y-1227	3/4"	1 1/16-12	M27X2	42,0	95,0	27,0	32,0
1213160	R1A25M952Y-1222	3/4"	1 1/16-12	M22X1.5	42,0	88,0	27,0	27,0
1213152	R1A25M952Y-0514	5/16"	1/2-20	M14X1.5	27,0	56,5	14,0	19,0
1213163	R1A25M952Y-1633	1"	1 5/16-12	M33X1.5	46,0	105,0	33,0	41,0
1213151	R1A25M952Y-0512	5/16"	1/2-20	M12X1.5	27,0	53,5	14,0	17,0
1213162	R1A25M952Y-1627	1"	1 5/16-12	M27X2	46,0	105,0	33,0	32,0
1213154	R/A25M952Y-0616	3/8"	9/16-18	M16X1.5	28,5	67,0	17,0	22,0
1213165	R1A25M952Y-2448	1"1/2	1 7/8-12	M48X1.5	59,0	141,0	48,0	55,0
1213153	R1A25M952Y-0614	3/8"	9/16-18	M14X1.5	27,0	56,5	14,0	19,0
1213164	R1A25M952Y-2042	1"1/4	1 5/8-12	M42X2	52,0	124,0	41,0	50,0
1213156	R1A25M952Y-0818	1/2"	3/4-16	M18X1.5	31,5	67,0	19,0	24,0
1216432	R1A25M952Y-1426	7/8"	1 3/16-12	M26X1.5	44,0	97,0	27,0	36,0
1213155	R1A25M952Y-0816	1/2"	3/4-16	M16X1.5	31,5	67,0	19,0	22,0

Branch Tee adjustable elbow connector JIC Male - Metric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1207324	R/A25MT52Q-0614	3/8"	9/16-18	M14X1.5	27,0	32,5	14,0	19,0
1212816	R1A25MT52Q-0510	5/16"	1/2-20	M10X1.0	24,0	27,5	14,0	14,0
1212815	R1A25MT52Q-0412	1/4"	7/16-20	M12X1.5	27,0	31,5	14,0	17,0
1212818	R1A25MT52Q-0616	3/8"	9/16-18	M16X1.5	28,5	36,5	17,0	22,0
1210706	R/A25MT52Q-0512	5/16"	1/2-20	M12X1.5	27,0	31,5	14,0	17,0
1212817	R1A25MT52Q-0514	5/16"	1/2-20	M14X1.5	27,0	32,5	14,0	19,0
1210707	R/A25MT52Q-0816	1/2"	3/4-16	M16X1.5	31,5	36,5	19,0	22,0
1212819	R1A25MT52Q-0818	1/2"	3/4-16	M18X1.5	31,5	39,5	19,0	24,0
1211640	R1A25MT52Q-0410	1/4"	7/16-20	M10X1.0	22,5	27,5	12,0	14,0
1211641	R1A25MT52Q-1022	5/8"	7/8-14	M22X1.5	36,5	43,0	22,0	27,0
1211642	R1A25MT52Q-1227	3/4"	1 1/16-12	M27X1.5	42,0	51,5	27,0	32,0
1212821	R1A25MT52Q-1222	3/4"	1 1/16-12	M22X1.5	42,0	45,5	27,0	27,0
1211643	R/A25MT52Q-1633	1"	1 5/16-12	M33X1.5	46,0	55,0	33,0	41,0
1212820	R1A25MT52Q-1020	5/8"	7/8-14	M20X1.5	36,5	43,0	22,0	27,0
1211644	R1A25MT52Q-2042	1"1/4	1 5/8-12	M42X2	52,0	60,0	41,0	50,0
1211645	R1A25MT52Q-2448	1"1/2	1 7/8-12	M48X1.5	59,0	67,0	48,0	55,0
1212822	R1A25MT52Q-1627	1"	1 5/16-12	M27X2	46,0	55,0	33,0	32,0
1216493	R1A25MT52Q-1426	7/8"	1 3/16-12	M26X1.5	44,0	50,5	27,0	36,0

Run Tee adjustable elbow connector JIC Male - Metric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1207302	R1A25ML52Q-0816	1/2"	3/4-16	M16X1.5	31,5	36,5	19,0	22,0
1212759	R1A25ML52Q-1020	5/8"	7/8-14	M20X1.5	36,5	43,0	22,0	27,0
1211626	R1A25ML52Q-0512	5/16"	1/2-20	M12X1.5	27,0	31,5	14,0	17,0
1212758	R1A25ML52Q-1018	5/8"	7/8-14	M18X1.5	36,5	41,5	22,0	24,0
1211627	R/A25ML52Q-1227	3/4"	1 1/16-12	M27X2	42,0	51,5	27,0	32,0
1207303	R/A25ML52Q-0614	3/8"	9/16-18	M14X1.5	27,0	32,5	14,0	19,0
1211628	R/A25ML52Q-1633	1"	1 5/16-12	M33X1.5	46,0	55,0	33,0	41,0
1211629	R1A25ML52Q-2042	1"1/4	1 5/8-12	M42X2	52,0	60,0	41,0	50,0
1216448	R1A25ML52Q-1426	7/8"	1 3/16-12	M26X1.5	44,0	50,5	27,0	36,0
1212761	R1A25ML52Q-1627	1"	1 5/16-12	M27X2	46,0	55,0	33,0	32,0
1212753	R1A25ML52Q-0412	1/4"	7/16-20	M12X1.5	27,0	31,5	14,0	17,0
1211630	R1A25ML52Q-2448	1"1/2	1 7/8-12	M48X1.5	59,0	67,0	48,0	55,0
1212755	R1A25ML52Q-0514	5/16"	1/2-20	M14X1.5	27,0	32,5	14,0	19,0
1212754	R1A25ML52Q-0510	5/16"	1/2-20	M10X1.0	24,0	27,5	14,0	14,0
1210699	R/A25ML52Q-0410	1/4"	7/16-20	M10X1.0	22,5	27,5	12,0	14,0
1212757	R1A25ML52Q-0818	1/2"	3/4-16	M18X1.5	31,5	39,5	19,0	24,0
1212756	R1A25ML52Q-0616	3/8"	9/16-18	M16X1.5	28,5	36,5	17,0	22,0
1210700	R1A25ML52Q-1022	5/8"	7/8-14	M22X1.5	36,5	43,0	22,0	27,0
1212760	R1A25ML52Q-1222	3/4"	1 1/16-12	M22X1.5	42,0	45,5	27,0	27,0

Dimensions shown may be changed without prior notice

// SAE UNF

Straight connector JIC Male - SAE UNF/UN Male with O-Ring



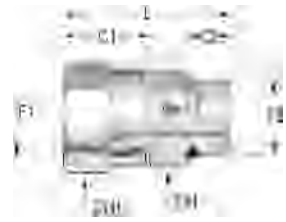
Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1207632	R1A25M1305-1008	5/8"	7/8-14	3/4-16	19,5	14,3	27,0	41,5
1207379	R1A25M1305-1210	3/4"	1 1/16-12	7/8-14	22,0	12,5	27,0	47,5
1207631	R1A25M1305-0812	1/2"	3/4-16	1 1/16-12	16,5	15,0	32,0	44,5
1207378	R1A25M1305-1208	3/4"	1 1/16-12	3/4-16	22,0	14,3	27,0	48,5
1207634	R1A25M1305-1620	1"	1 5/16-12	1 5/8-12	23,0	15,0	46,0	54,0
1207633	R1A25M1305-1012	5/8"	7/8-14	1 1/16-12	19,5	15,0	32,0	47,0
1207375	R1A25M1305-0808	1/2"	3/4-16	3/4-16	16,5	11,0	22,0	38,0
1207374	R1A25M1305-0608	3/8"	9/16-18	3/4-16	14,0	11,0	22,0	35,0
1207630	R1A25M1305-0406	1/4"	7/16-20	9/16-18	14,0	10,0	17,0	32,5
1207377	R1A25M1305-1010	5/8"	7/8-14	7/8-14	19,5	12,5	27,0	43,0
1207376	R1A25M1305-0810	1/2"	3/4-16	7/8-14	16,5	12,5	27,0	40,5
1207371	R1A25M1305-0405	1/4"	7/16-20	1/2-20	14,0	9,0	16,0	31,0
1207370	R1A25M1305-0404	1/4"	7/16-20	7/16-20	14,0	9,0	14,0	31,0
1207373	R1A25M1305-0606	3/8"	9/16-18	9/16-18	14,0	10,0	17,0	33,0
1207372	R1A25M1305-0505	5/16"	1/2-20	1/2-20	14,0	9,0	17,0	31,0
1216397	R1A25M1305-0605	3/8"	9/16-18	1/2-20	14,0	9,0	17,0	32,5
1216398	R1A25M1305-1414	7/8"	1 3/16-12	1 3/16-12	22,5	15,0	36,0	50,5
1207385	R1A25M1305-2424	1"1/2	1 7/8-12	1 7/8-12	27,5	15,0	55,0	60,5
1208278	R1A25M1305-0604	3/8"	9/16-18	7/16-20	14,0	9,0	17,0	32,0
1207382	R1A25M1305-1612	1"	1 5/16-12	1 1/16-12	23,0	18,3	36,0	50,5
1207381	R1A25M1305-1216	3/4"	1 1/16-12	1 5/16-12	22,0	15,0	38,0	50,5
1207384	R1A25M1305-2020	1"1/4	1 5/8-12	1 5/8-12	24,5	15,0	46,0	55,0
1207383	R1A25M1305-1616	1"	1 5/16-12	1 5/16-12	23,0	15,0	38,0	52,0
1207380	R1A25M1305-1212	3/4"	1 1/16-12	1 1/16-12	22,0	15,0	32,0	50,0
1205938	R1A25M1305-2016	1"1/4	1 5/8-12	1 5/16-12	24,5	19,1	46,0	55,5

Long connector JIC Male - SAE UNF/UN Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1212901	R1A25M130J-1616	1"	1 5/16-12	1 5/16-12	72,0	15,0	41,0	101,0
1212904	R1A25M130J-2424	1"1/2	1 7/8-12	1 7/8-12	98,0	15,0	55,0	131,0
1212903	R1A25M130J-2020	1"1/4	1 5/8-12	1 5/8-12	88,0	15,0	50,0	119,0
1212883	R1A25M130J-0404	1/4"	7/16-20	7/16-20	35,0	9,0	17,0	52,5
1212894	R1A25M130J-1010	5/8"	7/8-14	7/8-14	53,0	12,5	27,0	77,0
1212893	R1A25M130J-1008	5/8"	7/8-14	3/4-16	53,0	11,0	27,0	75,5
1212885	R1A25M130J-0406	1/4"	7/16-20	9/16-18	35,0	10,0	19,0	54,5
1212884	R1A25M130J-0405	1/4"	7/16-20	1/2-20	35,0	9,0	17,0	52,5
1212895	R1A25M130J-1012	5/8"	7/8-14	1 1/16-12	53,0	15,0	32,0	81,5
1212898	R1A25M130J-1212	3/4"	1 1/16-12	1 1/16-12	63,0	15,0	32,0	91,5
1212886	R1A25M130J-0505	5/16"	1/2-20	1/2-20	37,0	9,0	16,0	54,5
1212889	R1A25M130J-0608	3/8"	9/16-18	3/4-16	39,0	11,0	24,0	60,0
1212900	R1A25M130J-1612	1"	1 5/16-12	1 1/16-12	72,0	15,0	41,0	100,0
1212888	R1A25M130J-0606	3/8"	9/16-18	9/16-18	39,0	10,0	19,0	58,5
1212899	R1A25M130J-1216	3/4"	1 1/16-12	1 5/16-12	63,0	15,0	41,0	92,5
1212890	R1A25M130J-0808	1/2"	3/4-16	3/4-16	48,0	11,0	24,0	68,5
1216400	R1A25M130J-1414	7/8"	1 3/16-12	1 3/16-12	68,0	15,0	36,0	96,5
1212892	R1A25M130J-0812	1/2"	3/4-16	1 1/16-12	48,0	15,0	32,0	71,5
1212891	R1A25M130J-0810	1/2"	3/4-16	7/8-14	48,0	12,5	27,0	71,5

Dimensions shown may be changed without prior notice

Straight connector JIC Female - SAE UNF/UN Male with O-Ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	CH1	L
		in			mm	mm	mm	mm	mm
1207436	R1A2511305-0505	5/16"	1/2-20	1/2-20	18,5	9,0	17,0	17,0	35,5
1207435	R/A2511305-0404	1/4"	7/16-20	7/16-20	17,0	9,0	14,0	16,0	34,0
1207441	R/A2511305-1616	1"	1 5/16-12	1 5/16-12	29,6	15,0	41,0	38,0	56,6
1207440	R/A2511305-1212	3/4"	1 1/16-12	1 1/16-12	27,3	15,0	32,0	32,0	54,3
1213179	R1A2511305-0812	1/2"	3/4-16	1 1/16-12	22,2	15,0	32,0	25,0	49,2
1213208	R1A2521305-2424	1" 1/2	1 7/8-12	1 7/8-12	18,4	15,0	50,0	55,0	67,0
1213183	R1A2511305-1210	3/4"	1 1/16-12	7/8-14	27,3	12,5	27,0	32,0	51,3
1213185	R1A2511305-1612	1"	1 5/16-12	1 1/16-12	29,6	15,0	32,0	38,0	56,6
1213184	R1A2511305-1216	3/4"	1 1/16-12	1 5/16-12	27,3	15,0	38,0	32,0	54,3
1213176	R1A2511305-0406	1/4"	7/16-20	9/16-18	17,0	10,0	17,0	16,0	35,0
1213175	R1A2511305-0405	1/4"	7/16-20	1/2-20	17,0	9,0	16,0	16,0	34,0
1216346	R1A2511305-1414	7/8"	1 3/16-12	1 3/16-12	27,0	15,0	36,0	36,0	54,0
1213178	R1A2511305-0810	1/2"	3/4-16	7/8-14	22,2	12,5	27,0	27,0	46,2
1213177	R1A2511305-0608	3/8"	9/16-18	3/4-16	18,5	11,0	22,0	19,0	39,5
1207438	R1A2511305-0808	1/2"	3/4-16	3/4-16	22,2	11,0	22,0	25,0	43,2
1207437	R1A2511305-0606	3/8"	9/16-18	9/16-18	18,5	10,0	17,0	19,0	36,5
1213181	R1A2511305-1012	5/8"	7/8-14	1 1/16-12	25,2	15,0	32,0	27,0	52,2
1213180	R1A2511305-1008	5/8"	7/8-14	3/4-16	25,2	11,0	22,0	27,0	46,2
1207439	R1A2511305-1010	5/8"	7/8-14	7/8-14	25,2	12,5	27,0	27,0	49,2

45° adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1212979	R1A25M4305-0405	1/4"	7/16-20	1/2-20	21,0	26,5	14,0	19,0
1207335	R/A25M4305-0505	5/16"	1/2-20	1/2-20	21,0	26,5	14,0	19,0
1207337	R/A25M4305-0808	1/2"	3/4-16	3/4-16	25,0	33,0	19,0	24,0
1207336	R1A25M4305-0606	3/8"	9/16-18	9/16-18	19,5	26,5	14,0	22,0
1212982	R/A25M4305-1008	5/8"	7/8-14	3/4-16	28,0	37,0	22,0	24,0
1212981	R/A25M4305-0810	1/2"	3/4-16	7/8-14	27,5	42,5	22,0	30,0
1212984	R1A25M4305-1216	3/4"	1 1/16-12	1 5/16-12	32,5	47,0	33,0	41,0
1207340	R1A25M4305-1616	1"	1 5/16-12	1 5/16-12	37,5	47,0	33,0	41,0
1216413	R/A25M4305-1012	5/8"	7/8-14	1 1/16-12	28,5	44,0	27,0	36,0
1212983	R/A25M4305-1208	3/4"	1 1/16-12	3/4-16	32,5	37,5	27,0	24,0
1212986	R1A25M4305-1612	1"	1 5/16-12	1 1/16-12	37,5	44,0	33,0	36,0
1211710	R1A25M4305-1210	3/4"	1 1/16-12	7/8-14	32,5	40,5	27,0	27,0
1212985	R1A25M4305-1414	7/8"	1 3/16-12	1 3/16-12	37,0	47,0	33,0	38,0
1211711	R1A25M4305-2020	1"1/4	1 5/8-12	1 5/8-12	40,5	48,5	41,0	50,0
1212987	R1A25M4305-1620	1"	1 5/16-12	1 5/8-12	40,0	48,5	41,0	50,0
1211712	R1A25M4305-2424	1"1/2	1 7/8-12	1 7/8-12	45,0	48,5	48,0	55,0
1212980	R1A25M4305-0608	3/8"	9/16-18	3/4-16	22,5	38,0	19,0	24,0
1207339	R1A25M4305-1212	3/4"	1 1/16-12	1 1/16-12	32,5	44,0	27,0	36,0
1207338	R1A25M4305-1010	5/8"	7/8-14	7/8-14	28,0	38,5	22,0	30,0

Dimensions shown may be changed without prior notice

90° adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1207258	R1A25M9305-0606	3/8"	9/16-18	9/16-18	27,0	31,5	14,0	19,0
1207643	R1A25M9305-1008	5/8"	7/8-14	3/4-16	36,5	39,5	22,0	24,0
1207257	R/A25M9305-0505	5/16"	1/2-20	1/2-20	24,0	27,5	14,0	17,0
1207642	R1A25M9305-0810	1/2"	3/4-16	7/8-14	34,0	43,0	22,0	27,0
1207259	R1A25M9305-0808	1/2"	3/4-16	3/4-16	31,5	36,5	19,0	24,0
1211738	R1A25M9305-2424	1"1/2	1 7/8-12	1 7/8-12	59,0	61,0	48,0	55,0
1207265	R1A25M9305-2020	1"1/4	1 5/8-12	1 5/8-12	52,0	57,0	41,0	50,0
1207264	R1A25M9305-1616	1"	1 5/16-12	1 5/16-12	46,0	54,0	33,0	41,0
1207641	R1A25M9305-0608	3/8"	9/16-18	3/4-16	28,5	36,5	19,0	24,0
1207256	R1A25M9305-0404	1/4"	7/16-20	7/16-20	22,5	26,0	12,0	17,0
1207640	R/A25M9305-0405	1/4"	7/16-20	1/2-20	24,0	27,5	14,0	17,0
1207261	R1A25M9305-1210	3/4"	1 1/16-12	7/8-14	42,0	45,5	27,0	27,0
1207260	R1A25M9305-1010	5/8"	7/8-14	7/8-14	36,5	43,0	22,0	27,0
1207263	R1A25M9305-1612	1"	1 5/16-12	1 1/16-12	46,0	52,0	33,0	32,0
1207262	R1A25M9305-1212	3/4"	1 1/16-12	1 1/16-12	42,0	49,0	27,0	32,0
1216429	R1A25M9305-0610	3/8"	9/16-18	7/8-14	31,0	43,5	22,0	27,0
1213084	R1A25M9305-1620	1"	1 5/16-12	1 5/8-12	51,0	57,0	41,0	50,0
1213083	R1A25M9305-1414	7/8"	1 3/16-12	1 3/16-12	44,0	50,5	33,0	41,0
1213077	R1A25M9305-0406	1/4"	7/16-20	9/16-18	27,0	31,5	14,0	19,0
1213079	R1A25M9305-0812	1/2"	3/4-16	1 1/16-12	37,0	49,0	27,0	32,0
1213080	R1A25M9305-1012	5/8"	7/8-14	1 1/16-12	39,5	49,0	27,0	32,0
1213082	R1A25M9305-1216	3/4"	1 1/16-12	1 5/16-12	44,5	52,0	33,0	41,0
1213081	R1A25M9305-1208	3/4"	1 1/16-12	3/4-16	42,0	42,0	27,0	22,0

90° adjustable long elbow connector JIC Male - SAE UNF/UN Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1213059	R1A25M930J-0505	5/16"	1/2-20	1/2-20	24,0	49,5	14,0	17,0
1213058	R1A25M930J-0406	1/4"	7/16-20	9/16-18	27,0	56,5	17,0	19,0
1213069	R1A25M930J-1210	3/4"	1 1/16-12	7/8-14	44,6	88,0	27,0	27,0
1213062	R1A25M930J-0808	1/2"	3/4-16	3/4-16	31,5	67,0	22,0	24,0
1213073	R1A25M930J-1616	1"	1 5/16-12	1 5/16-12	46,0	105,0	33,0	41,0
1213061	R1A25M930J-0608	3/8"	9/16-18	3/4-16	28,5	67,0	22,0	24,0
1213072	R1A25M930J-1612	1"	1 5/16-12	1 1/16-12	46,0	105,0	33,0	32,0
1213064	R1A25M930J-0812	1/2"	3/4-16	1 1/16-12	37,0	92,0	27,0	32,0
1213075	R1A25M930J-2020	1"1/4	1 5/8-12	1 5/8-12	52,0	124,0	41,0	50,0
1213063	R1A25M930J-0810	1/2"	3/4-16	7/8-14	34,0	78,0	22,0	27,0
1213074	R1A25M930J-1620	1"	1 5/16-12	1 5/8-12	51,0	124,0	41,0	50,0
1213066	R1A25M930J-1010	5/8"	7/8-14	7/8-14	36,5	78,0	22,0	27,0
1213065	R1A25M930J-1008	5/8"	7/8-14	3/4-16	36,5	75,0	22,0	24,0
1213076	R1A25M930J-2424	1"1/2	1 7/8-12	1 7/8-12	59,0	135,0	48,0	55,0
1213057	R1A25M930J-0405	1/4"	7/16-20	1/2-20	24,0	49,5	14,0	17,0
1213068	R1A25M930J-1208	3/4"	1 1/16-12	3/4-16	42,0	85,0	27,0	24,0
1213056	R1A25M930J-0404	1/4"	7/16-20	7/16-20	23,5	46,0	14,0	17,0
1213067	R1A25M930J-1012	5/8"	7/8-14	1 1/16-12	39,5	92,0	27,0	32,0
1216431	R1A25M930J-1414	7/8"	1 3/16-12	1 3/16-12	44,0	92,0	33,0	41,0
1213060	R1A25M930J-0606	3/8"	9/16-18	9/16-18	27,0	56,5	17,0	19,0
1213071	R1A25M930J-1216	3/4"	1 1/16-12	1 5/16-12	44,5	105,0	33,0	41,0
1213070	R1A25M930J-1212	3/4"	1 1/16-12	1 1/16-12	42,0	92,0	27,0	32,0

Dimensions shown may be changed without prior notice

Branch Tee adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210702	R/A25MT305-0404	1/4"	7/16-20	7/16-20	22,5	26,0	12,0	16,0
1207323	R/A25MT305-1010	5/8"	7/8-14	7/8-14	36,5	43,0	22,0	27,0
1210703	R1A25MT305-0505	5/16"	1/2-20	1/2-20	24,0	27,5	14,0	17,0
1210704	R1A25MT305-1212	3/4"	1 1/16-12	1 1/16-12	42,0	49,0	27,0	32,0
1210705	R1A25MT305-1616	1"	1 5/16-12	1 5/16-12	46,0	54,6	33,0	41,0
1207322	R/A25MT305-0808	1/2"	3/4-16	3/4-16	31,5	36,5	19,0	24,0
1207321	R/A25MT305-0606	3/8"	9/16-18	9/16-18	27,0	31,5	14,0	19,0
1212784	R1A25MT305-1208	3/4"	1 1/16-12	3/4-16	42,0	42,0	27,0	24,0
1212783	R1A25MT305-1012	5/8"	7/8-14	1 1/16-12	36,5	49,0	22,0	32,0
1212786	R1A25MT305-1216	3/4"	1 1/16-12	1 5/16-12	44,5	52,0	33,0	41,0
1212785	R1A25MT305-1210	3/4"	1 1/16-12	7/8-14	42,0	45,5	27,0	27,0
1212777	R1A25MT305-0405	1/4"	7/16-20	1/2-20	24,0	27,5	14,0	17,0
1212788	R1A25MT305-1620	1"	1 5/16-12	1 5/8-12	51,0	57,0	41,0	50,0
1212787	R1A25MT305-1612	1"	1 5/16-12	1 1/16-12	46,0	52,0	33,0	32,0
1212779	R1A25MT305-0608	3/8"	9/16-18	3/4-16	28,5	36,5	19,0	24,0
1212778	R1A25MT305-0406	1/4"	7/16-20	9/16-18	27,0	31,5	14,0	19,0
1212789	R1A25MT305-2020	1"1/4	1 5/8-12	1 5/8-12	52,0	57,0	41,0	50,0
1212780	R1A25MT305-0810	1/2"	3/4-16	7/8-14	34,0	43,0	22,0	27,0
1212790	R1A25MT305-2424	1"1/2	1 7/8-12	1 7/8-12	59,0	61,0	48,0	55,0
1212782	R1A25MT305-1008	5/8"	7/8-14	3/4-16	36,5	39,5	22,0	24,0
1212781	R1A25MT305-0812	1/2"	3/4-16	1 1/16-12	37,0	49,0	27,0	32,0
1216491	R1A25MT305-1414	7/8"	1 3/16-12	1 3/16-12	44,0	50,5	33,0	38,0

Run Tee adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring



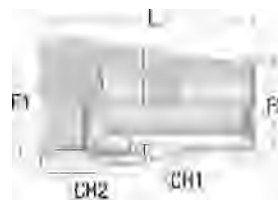
Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1211625	R1A25ML305-2020	1"1/4	1 5/8-12	1 5/8-12	52,0	57,0	41,0	50,0
1207301	R/A25ML305-1212	3/4"	1 1/16-12	1 1/16-12	42,0	49,0	27,0	32,0
1212725	R1A25ML305-1216	3/4"	1 1/16-12	1 5/16-12	44,5	52,0	33,0	41,0
1212717	R1A25ML305-0406	1/4"	7/16-20	9/16-18	27,0	31,5	14,0	22,0
1212728	R1A25ML305-2424	1"1/2	1 7/8-12	1 7/8-12	59,0	61,0	48,0	55,0
1212716	R1A25ML305-0405	1/4"	7/16-20	1/2-20	24,0	27,5	14,0	17,0
1212727	R1A25ML305-1620	1"	1 5/16-12	1 5/8-12	51,0	57,0	41,0	50,0
1212719	R1A25ML305-0810	1/2"	3/4-16	7/8-14	34,0	43,0	22,0	30,0
1212718	R1A25ML305-0608	3/8"	9/16-18	3/4-16	28,5	36,5	19,0	24,0
1207300	R/A25ML305-0606	3/8"	9/16-18	9/16-18	27,0	31,5	14,0	22,0
1210695	R/A25ML305-0404	1/4"	7/16-20	7/16-20	22,5	26,0	12,0	17,0
1212720	R1A25ML305-0812	1/2"	3/4-16	1 1/16-12	37,0	49,0	27,0	32,0
1210696	R1A25ML305-0505	5/16"	1/2-20	1/2-20	24,0	27,5	14,0	19,0
1210697	R/A25ML305-0808	1/2"	3/4-16	3/4-16	31,5	36,5	19,0	24,0
1212722	R1A25ML305-1012	5/8"	7/8-14	1 1/16-12	39,5	49,0	27,0	32,0
1212721	R1A25ML305-1008	5/8"	7/8-14	3/4-16	36,5	39,5	22,0	24,0
1210698	R1A25ML305-1010	5/8"	7/8-14	7/8-14	36,5	39,5	22,0	24,0
1212724	R1A25ML305-1210	3/4"	1 1/16-12	7/8-14	42,0	45,5	27,0	27,0
1212723	R1A25ML305-1208	3/4"	1 1/16-12	3/4-16	42,0	42,0	27,0	24,0
1211624	R/A25ML305-1616	1"	1 5/16-12	1 5/16-12	46,0	54,6	33,0	41,0

Dimensions shown may be changed without prior notice

// NPTF

Straight connector JIC - NPTF Male

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1203691	R1A25M128M-1006	5/8"	7/8-14	3/8-18	19,5	14,5	24,0	43,5
1203690	R1A25M128M-1012	5/8"	7/8-14	3/4-14	19,5	19,0	27,0	49,5
1212882	R1A25M128M-2420	1"1/2	1 7/8-12	1 1/4-11 1/2	27,5	25,0	50,0	67,5
1203609	R1A25M128M-1212	3/4"	1 1/16-12	3/4-14	22,0	19,0	27,0	52,5
1203608	R1A25M128M-1208	3/4"	1 1/16-12	1/2-14	22,0	18,0	27,0	51,5
1216396	R1A25M128M-1412	7/8"	1 3/16-12	3/4-14	22,5	19,0	30,0	53,0
1203607	R1A25M128M-1216	3/4"	1 1/16-12	1-11 1/2	22,0	24,0	36,0	57,0
1203705	R1A25M128M-0606	3/8"	9/16-18	3/8-18	14,0	14,5	19,0	36,5
1203689	R1A25M128M-1008	5/8"	7/8-14	1/2-14	19,5	18,0	24,0	47,0
1203621	R1A25M128M-0502	5/16"	1/2-20	1/8-27	14,0	10,0	14,0	31,0
1203643	R1A25M128M-2020	1"1/4	1 5/8-12	1 1/4-11 1/2	24,5	25,0	46,0	62,5
1203620	R1A25M128M-0504	5/16"	1/2-20	1/4-18	14,0	14,5	14,0	36,0
1203642	R1A25M128M-2016	1"1/4	1 5/8-12	1-11 1/2	24,5	24,0	46,0	61,5
1203704	R1A25M128M-0602	3/8"	9/16-18	1/8-27	14,0	10,0	17,0	32,0
1203649	R1A25M128M-2424	1"1/2	1 7/8-12	1 1/2-11 1/2	27,5	25,5	50,0	68,0
1203703	R1A25M128M-0604	3/8"	9/16-18	1/4-18	14,0	14,5	17,0	36,5
1203702	R1A25M128M-0608	3/8"	9/16-18	1/2-14	14,0	18,0	22,0	43,0
1203661	R1A25M128M-0806	1/2"	3/4-16	3/8-18	16,5	14,5	19,0	39,0
1203660	R1A25M128M-0812	1/2"	3/4-16	3/4-14	16,5	19,0	27,0	47,0
1212881	R/A25M128M-1004	5/8"	7/8-14	1/4-18	19,5	14,5	24,0	43,0
1203678	R1A25M128M-0404	1/4"	7/16-20	1/4-18	14,0	14,5	14,0	36,0
1203633	R1A25M128M-1612	1"	1 5/16-12	3/4-14	23,0	19,0	36,0	53,5
1203631	R1A25M128M-1616	1"	1 5/16-12	1-11 1/2	23,0	24,0	36,0	58,5
1203659	R1A25M128M-0804	1/2"	3/4-16	1/4-18	16,5	14,5	19,0	39,0
1203658	R1A25M128M-0808	1/2"	3/4-16	1/2-14	16,5	18,0	22,0	44,5
1203679	R1A25M128M-0402	1/4"	7/16-20	1/8-27	14,0	10,0	14,0	31,0

Straight connector JIC Female - NPTF Male

Item Code	Part Number	OD1	F1	F2	CH1	CH2	L
		in			mm	mm	mm
1207621	R1A251128M-0606	3/8"	9/16-18	3/8-18	19,0	19,0	41,5
1207620	R/A251128M-0604	3/8"	9/16-18	1/4-18	19,0	14,0	41,0
1207622	R1A251128M-0806	1/2"	3/4-16	3/8-18	25,0	19,0	43,2
1210848	R1A251128M-0402	1/4"	7/16-20	1/8-27	16,0	14,0	34,2
1213206	R/A252128M-2020	1"1/4	1 5/8-12	1 1/4-11 1/2	50,0	46,0	69,4
1213171	R1A251128M-0602	3/8"	9/16-18	1/8-27	19,0	14,0	36,5
1213174	R1A251128M-1012	5/8"	7/8-14	3/4-14	27,0	27,0	52,5
1213173	R1A251128M-0804	1/2"	3/4-16	1/4-18	25,0	19,0	44,0
1216345	R1A251128M-1412	7/8"	1 3/16-12	3/4-14	36,0	30,0	55,2
1207618	R1A251128M-0404	1/4"	7/16-20	1/4-18	16,0	14,0	39,2
1207628	R1A251128M-1616	1"	1 5/16-12	1-11 1/2	38,0	36,0	64,0
1207619	R/A251128M-0504	5/16"	1/2-20	1/4-18	17,0	14,0	41,0
1207625	R/A251128M-1208	3/4"	1 1/16-12	1/2-14	32,0	27,0	54,3
1207624	R1A251128M-1008	5/8"	7/8-14	1/2-14	27,0	22,0	49,7
1213170	R1A251128M-0502	5/16"	1/2-20	1/8-27	17,0	14,0	35,0
1207627	R/A251128M-1612	1"	1 5/16-12	3/4-14	38,0	32,0	58,6
1207626	R1A251128M-1212	3/4"	1 1/16-12	3/4-14	32,0	27,0	55,3

45° elbow connector JIC - NPTF Male

Item Code	Part Number	OD1	F1	F2	C1	C2	CH
		in			mm	mm	mm
1210674	R1A25M428M-0504	5/16"	1/2-20	1/4-18	21,0	21,5	14,0
1212975	R/A25M428M-1006	5/8"	7/8-14	3/8-18	28,0	24,5	22,0
1212976	R1A25M428M-1012	5/8"	7/8-14	3/4-14	30,0	30,5	27,0
1203927	R/A25M428M-0606	3/8"	9/16-18	3/8-18	22,0	24,0	19,0
1203916	R1A25M428M-0806	1/2"	3/4-16	3/8-18	25,0	24,0	19,0
1203915	R1A25M428M-0808	1/2"	3/4-16	1/2-14	25,5	29,5	22,0
1203925	R/A25M428M-0604	3/8"	9/16-18	1/4-18	21,0	21,5	14,0
1203919	R1A25M428M-0404	1/4"	7/16-20	1/4-18	21,0	21,5	14,0
1203908	R1A25M428M-1212	3/4"	1 1/16-12	3/4-14	32,5	30,5	27,0
1203907	R1A25M428M-1208	3/4"	1 1/16-12	1/2-14	32,5	30,5	27,0
1203920	R1A25M428M-0402	1/4"	7/16-20	1/8-27	19,0	16,0	12,0
1203913	R1A25M428M-1616	1"	1 5/16-12	1-11 1/2	37,0	37,5	33,0
1203923	R/A25M428M-1008	5/8"	7/8-14	1/2-14	28,0	29,0	22,0

Dimensions shown may be changed without prior notice

90° elbow connector JIC - NPTF Male

Item Code	Part Number	OD1	F1	F2	C1	C2	CH
		in			mm	mm	mm
1203872	R1A25M928M-0402	1/4"	7/16-20	1/8-27	22,5	19,5	12,0
1203861	R1A25M928M-0806	1/2"	3/4-16	3/8-18	31,5	31,0	19,0
1203871	R1A25M928M-0404	1/4"	7/16-20	1/4-18	27,0	27,5	14,0
1203860	R/A25M928M-0812	1/2"	3/4-16	3/4-14	37,0	40,5	27,0
1203891	R1A25M928M-0606	3/8"	9/16-18	3/8-18	28,5	31,0	19,0
1203838	R/A25M928M-0502	5/16"	1/2-20	1/8-27	24,0	19,5	14,0
1203837	R1A25M928M-0504	5/16"	1/2-20	1/4-18	26,5	27,5	14,0
1203832	R/A25M928M-1212	3/4"	1 1/16-12	3/4-14	42,0	40,5	27,0
1203843	R1A25M928M-1616	1"	1 5/16-12	1-11 1/2	46,0	50,0	33,0
1203831	R1A25M928M-1208	3/4"	1 1/16-12	1/2-14	42,0	40,5	27,0
1203852	R/A25M928M-2020	1"1/4	1 5/8-12	1 1/4-11 1/2	52,0	60,0	41,0
1203851	R/A25M928M-2016	1"1/4	1 5/8-12	1-11 1/2	52,0	59,0	41,0
1203858	R1A25M928M-0808	1/2"	3/4-16	1/2-14	34,0	37,5	22,0
1203879	R1A25M928M-1012	5/8"	7/8-14	3/4-14	39,5	40,5	27,0
1203889	R1A25M928M-0604	3/8"	9/16-18	1/4-18	27,0	27,5	14,0
1203878	R1A25M928M-1008	5/8"	7/8-14	1/2-14	36,5	37,0	22,0
1203888	R/A25M928M-0608	3/8"	9/16-18	1/2-14	31,0	37,0	22,0

// FLANGES

Straight flange SAE J518 code 61 - JIC - Low pressure



Item Code	Part Number	OD1	F1	Flange Size	L	T	H	V	H1
		in			mm	mm	mm	mm	mm
1212913	R1A25M133W-1616	1"	1 5/16-12	1	52,0	17,0	52,4	26,2	11,0
1212912	R1A25M133W-1612	1"	1 5/16-12	3/4	50,0	15,0	47,6	22,2	11,0
1212915	R1A25M133W-2016	1 1/4	1 5/8-12	1	54,0	17,0	52,4	26,2	11,0
1212914	R1A25M133W-1620	1"	1 5/16-12	3/4	56,0	21,0	58,7	30,2	11,5
1212906	R1A25M133W-0808	1/2"	3/4-16	1/2	41,0	14,0	38,1	17,5	9,0
1212917	R1A25M133W-2024	1 1/4	1 5/8-12	1	64,0	24,0	69,9	35,7	13,5
1212916	R1A25M133W-2020	1 1/4	1 5/8-12	1 1/4	58,0	21,0	58,4	30,2	11,5
1212908	R1A25M133W-1012	5/8"	7/8-14	3/4	47,0	15,0	47,6	22,2	11,0
1212919	R1A25M133W-2424	1 1/2	1 7/8-12	1 1/2	67,0	24,0	69,9	35,7	13,5
1212907	R1A25M133W-1008	5/8"	7/8-14	1/2	44,0	14,0	38,1	17,5	9,0
1212918	R1A25M133W-2420	1 1/2	1 7/8-12	1 1/4	61,0	21,0	58,4	30,2	11,5
1212911	R1A25M133W-1216	3/4"	1 1/16-12	1	51,0	17,0	52,4	26,2	11,0
1212910	R1A25M133W-1212	3/4"	1 1/16-12	3/4	49,0	15,0	47,6	22,2	11,0
1212909	R1A25M133W-1208	3/4"	1 1/16-12	1/2	46,0	14,0	38,1	17,5	9,0

Straight flange SAE J518 code 62 - JIC - High pressure



Item Code	Part Number	OD1	F1	Flange Size	L	T	H	V	H1
		in			mm	mm	mm	mm	mm
1212924	R1A25M136W-1212	3/4"	1 1/16-12	3/4	51,0	17,0	50,8	23,8	11,0
1212923	R1A25M136W-1208	3/4"	1 1/16-12	1/2	47,0	15,0	40,5	18,2	9,0
1212926	R1A25M136W-1612	1"	1 5/16-12	3/4	52,0	17,0	50,8	23,8	11,0
1212925	R1A25M136W-1216	3/4"	1 1/16-12	1	58,0	21,0	57,2	27,8	13,0
1212928	R1A25M136W-1620	1"	1 5/16-12	1 1/4	64,0	24,0	66,7	31,8	15,0
1212927	R1A25M136W-1616	1"	1 5/16-12	1	59,0	21,0	57,2	27,8	13,0
1212929	R1A25M136W-2016	1 1/4	1 5/8-12	1	61,0	21,0	57,2	27,8	13,0
1212920	R1A25M136W-0808	1/2"	3/4-16	1/2	42,0	15,0	40,5	18,2	9,0
1212931	R1A25M136W-2024	1 1/4	1 5/8-12	1 1/2	70,0	27,0	79,4	36,5	17,0
1212930	R1A25M136W-2020	1 1/4	1 5/8-12	1 1/4	66,0	24,0	66,7	31,8	15,0
1212922	R1A25M136W-1012	5/8"	7/8-14	3/4	49,0	17,0	50,8	23,8	11,0
1212933	R1A25M136W-2424	1 1/2	1 7/8-12	1 1/2	73,0	27,0	79,4	36,5	17,0
1212921	R1A25M136W-1008	5/8"	7/8-14	1/2	45,0	15,0	40,5	18,2	9,0
1212932	R1A25M136W-2420	1 1/2	1 7/8-12	1 1/4	69,0	24,0	66,7	31,8	15,0

Dimensions shown may be changed without prior notice

90° flange SAE J518 code 61 - JIC - Low pressure

Item Code	Part Number	OD1	F1	Flange size	C1	T	H	V	H1
	Part Number	in			mm	mm	mm	mm	mm
1213095	R1A25M933W-2020	1"1/4	1 5/8-12	1 1/4	58,0	31,0	58,4	30,2	11,5
1213094	R1A25M933W-2016	1"1/4	1 5/8-12	1	53,0	31,0	52,4	26,2	11,0
1213086	R1A25M933W-1008	5/8"	7/8-14	1/2	42,0	17,0	38,1	17,5	9,0
1213097	R1A25M933W-2420	1"1/2	1 7/8-12	1 1/4	58,0	37,0	58,4	30,2	11,5
1213085	R1A25M933W-0808	1/2"	3/4-16	1/2	40,0	17,0	38,1	17,5	9,0
1213096	R1A25M933W-2024	1"1/4	1 5/8-12	1 1/2	63,0	31,0	69,9	35,7	13,5
1213088	R1A25M933W-1208	3/4"	1 1/16-12	1/2	42,0	20,0	38,1	17,5	9,0
1213087	R1A25M933W-1012	5/8"	7/8-14	3/4	45,0	20,0	47,6	22,2	11,0
1213098	R1A25M933W-2424	1"1/2	1 7/8-12	1 1/2	66,0	37,0	69,9	35,7	13,5
1213089	R1A25M933W-1212	3/4"	1 1/16-12	3/4	47,0	20,0	47,6	22,2	11,0
1213091	R1A25M933W-1612	1"	1 5/16-12	3/4	48,0	25,0	47,6	22,2	11,0
1213090	R1A25M933W-1216	3/4"	1 1/16-12	1	50,0	20,0	52,4	26,2	11,0
1213093	R1A25M933W-1620	1"	1 5/16-12	1 1/4	56,0	25,0	58,7	30,2	11,5
1213092	R1A25M933W-1616	1"	1 5/16-12	1	51,0	25,0	52,4	26,2	11,0

90° flange SAE J518 code 62 - JIC - High pressure

Item Code	Part Number	OD1	F1	Flange size	C1	T	H	V	H1
	Part Number	in			mm	mm	mm	mm	mm
1213114	R1A25M936W-1208	3/4"	1 1/16-12	1/2	42,0	20,0	40,5	18,2	9,0
1213113	R1A25M936W-1012	5/8"	7/8-14	3/4	49,0	20,0	50,8	23,8	11,0
1213124	R1A25M936W-2424	1"1/2	1 7/8-12	1 1/2	70,0	37,0	79,4	36,5	17,0
1213116	R1A25M936W-1216	3/4"	1 1/16-12	1	55,0	25,0	57,2	27,8	13,0
1213115	R1A25M936W-1212	3/4"	1 1/16-12	3/4	51,0	20,0	50,8	23,8	11,0
1213118	R1A25M936W-1616	1"	1 5/16-12	1	56,0	25,0	57,2	27,8	13,0
1213117	R1A25M936W-1612	1"	1 5/16-12	3/4	52,0	25,0	50,8	23,8	11,0
1213119	R1A25M936W-1620	1"	1 5/16-12	1 1/4	56,0	31,0	66,7	31,8	15,0
1213121	R1A25M936W-2020	1"1/4	1 5/8-12	1 1/4	63,0	31,0	66,7	31,8	15,0
1213120	R1A25M936W-2016	1"1/4	1 5/8-12	1	58,0	31,0	57,2	27,8	13,0
1213112	R1A25M936W-1008	5/8"	7/8-14	1/2	42,0	17,0	40,5	18,2	9,0
1213123	R1A25M936W-2420	1"1/2	1 7/8-12	1 1/4	63,0	37,0	66,7	31,8	15,0
1213111	R1A25M936W-0808	1/2"	3/4-16	1/2	40,0	17,0	40,5	18,2	9,0
1213122	R1A25M936W-2024	1"1/4	1 5/8-12	1 1/2	67,0	37,0	79,4	36,5	17,0

90° adjustable split flange SAE J518 code 61 - JIC - Low pressure

Item Code	Part Number	OD1	F1	Flange size	C1	C2	FD	CH
		in			mm	mm	mm	mm
1213103	R1A25M9334-1216	3/4"	1 1/16-12	1	65,0	60,0	44,5	27,0
1213102	R1A25M9334-1212	3/4"	1 1/16-12	3/4	64,0	53,0	38,1	27,0
1213105	R1A25M9334-1616	1"	1 5/16-12	1	65,0	60,0	44,5	34,0
1213104	R1A25M9334-1612	1"	1 5/16-12	3/4	64,0	53,0	38,1	34,0
1213107	R1A25M9334-2016	1"1/4	1 5/8-12	1	65,0	60,0	44,5	42,0
1213106	R1A25M9334-1620	1"	1 5/16-12	1 1/4	64,0	55,0	50,8	34,0
1213109	R1A25M9334-2024	1"1/4	1 5/8-12	1 1/2	78,0	66,0	60,3	42,0
1213108	R1A25M9334-2020	1"1/4	1 5/8-12	1 1/4	64,0	55,0	50,8	42,0
1213099	R1A25M9334-0808	1/2"	3/4-16	1/2	48,0	42,0	30,2	22,0
1213110	R1A25M9334-2424	1"1/2	1 7/8-12	1 1/2	78,0	66,0	60,3	50,0
1213101	R1A25M9334-1012	5/8"	7/8-14	3/4	64,0	53,0	38,1	22,0
1213100	R1A25M9334-1008	5/8"	7/8-14	1/2	50,0	44,0	30,2	22,0

90° adjustable split flange SAE J518 code 62 - JIC - High pressure

Item Code	Part Number	OD1	F1	Flange size	C1	C2	FD	CH
		in			mm	mm	mm	mm
1213125	R1A25M9364-0808	1/2"	3/4-16	1/2	49,0	43,0	31,8	22,0
1213136	R1A25M9364-2424	1"1/2	1 7/8-12	1 1/2	78,0	66,0	63,5	50,0
1213135	R1A25M9364-2024	1"1/4	1 5/8-12	1 1/2	78,0	66,0	63,5	42,0
1213127	R1A25M9364-1012	5/8"	7/8-14	3/4	64,0	53,0	41,3	22,0
1213126	R1A25M9364-1008	5/8"	7/8-14	1/2	50,0	44,0	31,8	22,0
1213129	R1A25M9364-1216	3/4"	1 1/16-12	1	65,0	60,0	47,6	27,0
1213128	R1A25M9364-1212	3/4"	1 1/16-12	3/4	64,0	53,0	41,3	27,0
1213130	R1A25M9364-1612	1"	1 5/16-12	3/4	64,0	53,0	41,3	34,0
1213132	R1A25M9364-1620	1"	1 5/16-12	1 1/4	64,0	55,0	54,0	34,0
1213131	R1A25M9364-1616	1"	1 5/16-12	1	65,0	60,0	47,6	34,0
1213134	R1A25M9364-2020	1"1/4	1 5/8-12	1 1/4	64,0	55,0	54,0	42,0
1213133	R1A25M9364-2016	1"1/4	1 5/8-12	1	65,0	60,0	47,6	42,0

Dimensions shown may be changed without prior notice

// ACCESSORIES

Nut JIC



Item Code	Item Code	OD1	F1	CH	L
		mm		mm	mm
1208049	RXA25D0000-1000	14	7/8-14	27,0	25,10
1208046	RXA25D0000-0400	6	7/16-20	14,0	15,80
1208048	RXA25D0000-0800	12	3/4-16	22,0	21,80
1208047	RXA25D0000-0500	8	1/2-20	17,0	17,30
1246561	RXA25D0000-100X	14	7/8-14	27,0	25,10
1207580	RXA25D0000-0600	10	9/16-18	19,0	18,80
1208053	RXA25D0000-2400	38	1 7/8-12	60,0	36,10
1208052	RXA25D0000-2000	30	1 5/8-12	50,0	31,20
1208051	RXA25D0000-1600	25	1 5/16-12	41,0	28,70
1208050	RXA25D0000-1200	18	1 1/16-12	32,0	26,20
1245938	RXA25D0000-060X	10	9/16-18	19,0	18,80
1245939	RXA25D0000-080X	12	3/4-16	22,0	21,80
1245937	RXA25D0000-040X	6	7/16-20	14,0	15,80
1203514	RXA25D0000-1220	20	1 1/16-12	32,0	26,20

Sleeve JIC



Item Code	Part Number	OD1	L
		in	mm
1203719	R1A25R0000-0508	5/16"	11,0
1203729	R1A25R0000-0610	3/8"	12,5
1203718	R1A25R0000-1220	3/4"	17,5
1216495	R1A25R0000-1422	7/8"	19,5
1203728	R1A25R0000-1016	5/8"	17,0
1203717	R1A25R0000-1218	3/4"	17,5
1203727	R1A25R0000-1015	5/8"	17,0
1203722	R1A25R0000-2032	1"1/4	23,0
1203721	R1A25R0000-2030	1"1/4	23,0
1203720	R1A25R0000-1625	1"	20,0
1203726	R1A25R0000-1014	5/8"	17,0
1203725	R1A25R0000-0406	1/4"	10,5
1203724	R1A25R0000-0812	1/2"	14,0
1203723	R1A25R0000-2438	1"1/2	28,5

// PLUG

Cap JIC Female



Item Code	Part Number	OD1	F1	CH	L
		in		mm	mm
1207356	R1A2531000-2400	1 1/2	1 7/8-12	60,0	43,0
1207348	R1A2531000-0400	1/4"	7/16-20	14,0	17,0
1207353	R1A2531000-1200	3/4"	1 1/16-12	32,0	31,5
1207352	R1A2531000-1000	5/8"	7/8-14	27,0	27,0
1207355	R1A2531000-2000	1 1/4	1 5/8-12	50,0	35,5
1207354	R1A2531000-1600	1"	1 5/16-12	41,0	32,5
1213213	R1A2531000-1400	7/8"	1 3/16-12	36,0	32,0
1207351	R1A2531000-0800	1/2"	3/4-16	22,0	24,0
1207350	R1A2531000-0600	3/8"	9/16-18	19,0	20,5
1207349	R1A2531000-0500	5/16"	1/2-20	17,0	19,5

Plug JIC Male



Item Code	Part Number	OD1	F1	CH	L
		in		mm	mm
1212825	R1A25M1000-1400	7/8"	1 3/16-12	33,0	33,0
1207456	R1A25M1000-2000	1 1/4	1 5/8-12	46,0	37,0
1207455	R1A25M1000-1600	1"	1 5/16-12	36,0	34,0
1207457	R1A25M1000-2400	1 1/2	1 7/8-12	50,0	42,0
1207452	R1A25M1000-0800	1/2"	3/4-16	22,0	24,0
1207451	R1A25M1000-0600	3/8"	9/16-18	14,0	21,5
1207454	R1A25M1000-1200	3/4"	1 1/16-12	30,0	32,5
1207453	R1A25M1000-1000	5/8"	7/8-14	24,0	28,0
1207450	R1A25M1000-0500	5/16"	1/2-20	14,0	20,5
1207449	R1A25M1000-0400	1/4"	7/16-20	12,0	20,5



// ORFS ADAPTERS

// MALE UNION.....	178
// MALE / FEMALE UNION.....	180
// BULKHEAD.....	182
// BSPP.....	185
// METRIC.....	190

// SAE UNF.....	195
// FLANGES.....	200
// ACCESSORIES.....	203
// PLUG.....	204

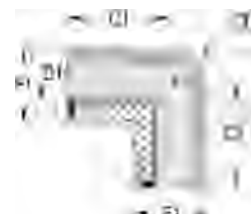
// MALE UNION

Straight union ORFS Male



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1207588	R1A2451245-1010	5/8"	1-14	1-14	15,5	15,5	27,0	42,5
1207587	R1A2451245-0606	3/8"	11/16-16	11/16-16	11,0	11,0	19,0	31,0
1207579	R1A2451245-0808	1/2"	13/16-16	13/16-16	13,0	13,0	22,0	35,5
1207589	R1A2451245-1212	3/4"	1 3/16-12	1 3/16-12	17,0	17,0	32,0	47,0
1208177	R1A2451245-1612	1"	1 7/16-12	13/16-16	17,5	17,0	41,0	49,5
1207586	R1A2451245-0404	1/4"	9/16-18	9/16-18	10,0	10,0	17,0	27,0
1208179	R1A2451245-2016	1"1/4	1 11/16-12	1 7/16-12	17,5	17,5	46,0	51,5
1208174	R/A2451245-0806	1/2"	13/16-16	11/16-16	13,0	11,0	22,0	33,5
1208173	R/A2451245-0604	3/8"	11/16-16	9/16-18	11,0	10,0	19,0	30,0
1207590	R1A2451245-1616	1"	1 7/16-12	1 7/16-12	17,5	17,5	41,0	49,5
1208176	R/A2451245-1210	3/4"	1 3/16-12	1-14	17,0	15,5	32,0	45,5
1208175	R1A2451245-1008	5/8"	1-14	13/16-16	15,5	13,0	27,0	40,0
1211533	R1A2451245-2424	1"1/2	2-12	2-12	17,5	17,5	55,0	53,0
1208180	R1A2451245-2020	1"1/4	1 11/16-12	1 11/16-12	17,5	17,5	46,0	51,5

90° union ORFS Male



Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1208129	R/A2459245-1010	5/8"	1-14	33,5	27,0
1208128	R1A2459245-0606	3/8"	11/16-16	25,0	17,0
1207578	R1A2459245-0808	1/2"	13/16-16	28,0	19,0
1207045	R/A2459245-0404	1/4"	9/16-18	21,5	14,0
1211560	R/A2459245-2424	1"1/2	2-12	49,0	48,0
1208130	R1A2459245-1212	3/4"	1 3/16-12	37,5	27,0
1208132	R1A2459245-2020	1"1/4	1 11/16-12	45,0	41,0
1208131	R1A2459245-1616	1"	1 7/16-12	42,0	36,0

Dimensions shown may be changed without prior notice

Branch Tee union ORFS Male

Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1207601	R1A245T245-0606	3/8"	11/16-16	25,0	17,0
1208206	R1A245T245-2020	1"1/4	1 11/16-12	45,0	41,0
1207600	R1A245T245-0404	1/4"	9/16-18	21,5	14,0
1208205	R1A245T245-1212	3/4"	1 3/16-12	37,5	27,0
1207572	R1A245T245-0808	1/2"	13/16-16	28,0	19,0
1207571	R1A245T245-1010	5/8"	1-14	33,5	27,0
1211520	R1A245T245-2424	1"1/2	2-12	49,0	48,0
1207602	R1A245T245-1616	1"	1 7/16-12	42,0	36,0

Cross union ORFS Male

Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1212538	R1A245X245-2424	1"1/2	2-12	49,0	48,0
1212531	R1A245X245-0404	1/4"	9/16-18	21,5	14,0
1212533	R1A245X245-0808	1/2"	13/16-16	28,0	19,0
1212532	R1A245X245-0606	3/8"	11/16-16	25,0	17,0
1212535	R1A245X245-1212	3/4"	1 3/16-12	37,5	27,0
1212534	R1A245X245-1010	5/8"	1-14	33,5	27,0
1212537	R1A245X245-2020	1"1/4	1 11/16-12	45,0	41,0
1212536	R1A245X245-1616	1"	1 7/16-12	42,0	36,0

// MALE / FEMALE UNION

Straight union ORFS Female - ORFS Male



Item Code	Part Number	OD1	F1	F2	C1	CH1
		in			mm	mm
1208347	R1A2411245-0806	1/2"	13/16-16	11/16-16	23,0	24,0
1208214	R/A2431245-2012	1"1/4	1 11/16-12	13/16-16	33,5	50,0
1212519	R1A2431245-1204	3/4"	1 3/16-12	9/16-18	25,0	36,0
1212518	R1A2431245-1006	5/8"	1-14	11/16-16	24,0	30,0
1208211	R1A2431245-1206	3/4"	1 3/16-12	11/16-16	26,0	36,0
1207661	R/A2431245-1610	1"	1 7/16-12	1-14	32,0	41,0
1208210	R1A2431245-0804	1/2"	13/16-16	9/16-18	22,0	24,0
1207033	R/A2431245-1004	5/8"	1-14	9/16-18	23,0	30,0
1207660	R/A2431245-1008	5/8"	1-14	13/16-16	26,0	30,0
1208213	R1A2431245-1608	1"	1 7/16-12	13/16-16	29,5	41,0
1208037	R1A2431245-2016	1"1/4	1 11/16-12	1 7/16-12	38,5	50,0
1208212	R1A2431245-1208	3/4"	1 3/16-12	13/16-16	28,0	36,0
1212498	R1A2411245-0604	3/8"	11/16-16	9/16-18	19,5	22,0
1211497	R1A2431245-2416	1"1/2	2-12	1 7/16-12	34,0	60,0
1211498	R1A2431245-2420	1"1/2	2-12	1 11/16-12	34,0	60,0
1214621	R1A2411245-1210	3/4"	1 3/16-12	1-14	30,5	36,0
1212499	R1A2411245-1612	1"	1 7/16-12	1 3/16-12	33,5	41,0

45° union ORFS Male - ORFS Female



Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1212616	R1A2454241-1010	5/8"	1-14	23,5	36,0	27,0	30,0
1212615	R1A2454241-0808	1/2"	13/16-16	20,5	30,0	19,0	24,0
1212618	R1A2454241-2020	1"1/4	1 11/16-12	32,0	45,0	41,0	50,0
1212617	R1A2454241-1616	1"	1 7/16-12	30,0	45,0	36,0	41,0
1212619	R1A2454241-2424	1"1/2	2-12	32,0	47,5	48,0	60,0
1211542	R1A2454241-1212	3/4"	1 3/16-12	26,0	41,0	27,0	36,0
1212614	R1A2454241-0606	3/8"	11/16-16	19,0	25,0	17,0	22,0
1212613	R/A2454241-0404	1/4"	9/16-18	16,0	26,5	14,0	17,0

Dimensions shown may be changed without prior notice

90° union ORFS Male - ORFS Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1211559	R1A2459241-2424	1"1/2	2-12	49,0	61,0	48,0	60,0
1208126	R1A2459241-2020	1"1/4	1 11/16-12	44,5	58,0	41,0	50,0
1207595	R1A2459241-1616	1"	1 7/16-12	41,5	53,5	36,0	41,0
1207594	R1A2459241-1212	3/4"	1 3/16-12	37,5	46,5	27,0	36,0
1206968	R1A2459241-1010	5/8"	1-14	33,5	41,5	27,0	30,0
1207593	R1A2459241-0606	3/8"	11/16-16	25,0	29,0	17,0	22,0
1208021	R1A2459241-0404	1/4"	9/16-18	21,5	26,5	14,0	17,0
1207569	R1A2459241-0808	1/2"	13/16-16	28,0	38,0	19,0	24,0

Branch Tee union ORFS Male - ORFS Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1208204	R/A245T241-2020	1"1/4	1 11/16-12	44,5	58,0	41,0	50,0
1208203	R1A245T241-1616	1"	1 7/16-12	41,5	53,5	36,0	41,0
1208200	R1A245T241-0404	1/4"	9/16-18	21,5	26,5	14,0	17,0
1211519	R1A245T241-2424	1"1/2	2-12	49,0	61,0	48,0	60,0
1208202	R1A245T241-1212	3/4"	1 3/16-12	37,5	46,5	27,0	36,0
1208201	R1A245T241-1010	5/8"	1-14	33,5	41,5	27,0	30,0
1208033	R1A245T241-0606	3/8"	11/16-16	25,0	29,0	17,0	22,0
1207570	R1A245T241-0808	1/2"	13/16-16	28,0	38,0	19,0	24,0

Run Tee union ORFS Male - ORFS Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207599	R1A245L241-1616	1"	1 7/16-12	41,5	53,5	36,0	41,0
1207598	R1A245L241-0808	1/2"	13/16-16	28,0	38,0	19,0	27,0
1207573	R1A245L241-0606	3/8"	11/16-16	25,0	29,0	17,0	22,0
1211508	R1A245L241-2424	1"1/2	2-12	48,5	61,0	48,0	60,0
1207597	R1A245L241-0404	1/4"	9/16-18	21,5	26,5	14,0	19,0
1207032	R1A245L241-1010	5/8"	1-14	33,5	41,5	27,0	30,0
1207559	R1A245L241-1212	3/4"	1 3/16-12	37,5	46,5	27,0	36,0
1208209	R1A245L241-2020	1"1/4	1 11/16-12	44,0	58,0	41,0	50,0

// BULKHEAD

Straight union ORFS Bulkhead



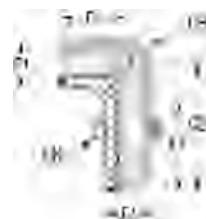
Item Code	Part Number	OD1	F1	C1	C2	CH	LN	L
		in		mm	mm	mm	mm	mm
1208189	R1A245124T-2020	1"1/4	1 11/16-12	17,5	39,0	50,0	50,0	70,0
1208188	R1A245124T-1616	1"	1 7/16-12	17,5	39,0	46,0	46,0	70,0
1207035	R1A245124T-0606	3/8"	11/16-16	11,0	32,5	27,0	27,0	53,0
1239974	R1A245124T-0812	1/2"	13/16-16	13,0	38,5	41,0	41,0	65,0
1208185	R1A245124T-0808	1/2"	13/16-16	13,0	34,0	30,0	30,0	58,0
1208184	R1A245124T-0404	1/4"	9/16-18	10,0	30,0	22,0	22,0	48,0
1208187	R1A245124T-1212	3/4"	1 3/16-12	17,0	38,5	41,0	41,0	69,0
1211532	R1A245124T-2424	1"1/2	2-12	17,5	39,0	60,0	60,0	70,0
1206967	R1A245124T-1010	5/8"	1-14	15,5	38,0	36,0	36,0	65,5

45° union ORFS Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1212605	R1A245424T-0404	1/4"	9/16-18	16,0	44,0	14,0	22,0	31,5
1212607	R1A245424T-0808	1/2"	13/16-16	20,5	51,0	19,0	30,0	36,5
1212606	R1A245424T-0606	3/8"	11/16-16	19,0	48,5	17,0	27,0	34,0
1212609	R1A245424T-1212	3/4"	1 3/16-12	26,0	60,5	27,0	41,0	41,5
1212608	R1A245424T-1010	5/8"	1-14	23,5	56,5	27,0	36,0	40,5
1212610	R1A245424T-1616	1"	1 7/16-12	30,0	65,0	36,0	46,0	42,0
1212612	R1A245424T-2424	1"1/2	2-12	37,0	67,0	48,0	60,0	42,0

Dimensions shown may be changed without prior notice

90° union ORFS Bulkhead

Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1208158	R1A245924T-2020	1"1/4	1 11/16-12	45,5	75,5	41,0	50,0	42,0
1208157	R1A245924T-1212	3/4"	1 3/16-12	38,5	67,0	27,0	41,0	41,5
1207560	R1A245924T-1010	5/8"	1-14	34,5	63,0	27,0	36,0	40,5
1210753	R1A245924T-0404	1/4"	9/16-18	22,5	47,0	14,0	22,0	31,5
1210754	R1A245924T-0606	3/8"	11/16-16	26,0	52,0	17,0	27,0	34,0
1211557	R1A245924T-1616	1"	1 7/16-12	42,5	71,0	36,0	46,0	42,0
1210755	R1A245924T-0808	1/2"	13/16-16	29,0	55,5	19,0	30,0	36,5
1211558	R1A245924T-2424	1"1/2	2-12	49,5	79,5	48,0	60,0	42,0

Branch Tee union ORFS Bulkhead

Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1212528	R1A245T24T-1616	1"	1 7/16-12	42,5	71,0	36,0	46,0	42,0
1212527	R1A245T24T-1212	3/4"	1 3/16-12	38,5	67,0	27,0	41,0	41,5
1212529	R1A245T24T-2020	1"1/4	1 11/16-12	45,5	75,5	41,0	50,0	42,0
1208224	R1A245T24T-0808	1/2"	13/16-16	29,0	55,5	19,0	30,0	36,5
1212530	R1A245T24T-2424	1"1/2	2-12	49,5	79,5	48,0	60,0	42,0
1212524	R1A245T24T-0404	1/4"	9/16-18	22,5	47,0	14,0	22,0	31,5
1212526	R1A245T24T-1010	5/8"	1-14	34,5	63,0	27,0	36,0	40,5
1212525	R1A245T24T-0606	3/8"	11/16-16	26,0	52,0	17,0	27,0	34,0

Run Tee union ORFS Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1211504	R1A245L24T-1212	3/4"	1 3/16-12	38,5	67,0	27,0	41,0	44,5
1211505	R1A245L24T-1616	1"	1 7/16-12	42,5	71,0	36,0	46,0	46,0
1211506	R1A245L24T-2020	1"1/4	1 11/16-12	45,5	75,5	41,0	50,0	46,5
1211507	R1A245L24T-2424	1"1/2	2-12	49,5	79,5	48,0	60,0	45,0
1240057	R1A245L24T-0404	1/4"	9/16-18	22,5	47,0	14,0	22,0	35,0
1210797	R1A245L24T-0808	1/2"	13/16-16	29,0	55,5	19,0	30,0	40,0
1211502	R1A245L24T-0606	3/8"	11/16-16	26,0	52,0	17,0	27,0	39,0
1211503	R1A245L24T-1010	5/8"	1-14	34,5	63,0	27,0	36,0	43,5

Dimensions shown may be changed without prior notice

// BSPP

Straight connector ORFS Male - BSPP cylindric Male with elastomer

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1207577	R1A245106I-1616	1"	1 7/16-12	1-11	17,5	18,0	41,0	49,0
1207576	R1A245106I-0806	1/2"	13/16-16	3/8-19	13,0	12,0	22,0	34,5
1207996	R1A245106I-0608	3/8"	11/16-16	1/2-14	11,0	14,0	27,0	37,0
1207990	R1A245106I-0402	1/4"	9/16-18	1/8-28	10,0	8,0	17,0	25,5
1207575	R1A245106I-0604	3/8"	11/16-16	1/4-19	11,0	12,0	19,0	31,5
1207574	R1A245106I-0606	3/8"	11/16-16	3/8-19	11,0	12,0	22,0	33,5
1208003	R1A245106I-1612	1"	1 7/16-12	3/4-14	17,5	16,0	41,0	51,0
1208022	R1A245106I-0812	1/2"	13/16-16	3/4-14	13,0	16,0	32,0	42,0
1208000	R1A245106I-1208	3/4"	1 3/16-12	1/2-14	17,0	14,0	32,0	48,5
1206957	R1A245106I-0406	1/4"	9/16-18	3/8-19	10,0	12,0	22,0	31,5
1206958	R1A245106I-0808	1/2"	13/16-16	1/2-14	13,0	14,0	27,0	38,5
1206955	R1A245106I-1212	3/4"	1 3/16-12	3/4-14	17,0	16,0	32,0	46,0
1206956	R1A245106I-0404	1/4"	9/16-18	1/4-19	10,0	12,0	19,0	30,5
1208017	R1A245106I-0408	1/4"	9/16-18	1/2-14	10,0	14,0	27,0	35,5
1211527	R1A245106I-1216	3/4"	1 3/16-12	1-11	17,0	18,0	41,0	49,5
1211528	R1A245106I-2024	1"1/4	1 11/16-12	1 1/2-11	17,5	22,0	55,0	57,5
1208018	R1A245106I-2020	1"1/4	1 11/16-12	1 1/4-11	17,5	20,0	50,0	54,0
1211529	R1A245106I-2424	1"1/2	2-12	1 1/2-11	17,5	22,0	55,0	57,5
1208034	R1A245106I-2016	1"1/4	1 11/16-12	1-11	17,5	18,0	46,0	57,5
1208010	R1A245106I-1008	5/8"	1-14	1/2-14	15,5	14,0	27,0	41,0
1207959	R1A245106I-1012	5/8"	1-14	3/4-14	15,5	16,0	32,0	44,5
1207999	R1A245106I-1006	5/8"	1-14	3/8-19	15,5	12,0	27,0	43,0
1207998	R1A245106I-0804	1/2"	13/16-16	1/4-19	13,0	12,0	22,0	39,5
1207979	R1A245106I-1620	1"	1 7/16-12	1 1/4-11	17,5	20,0	50,0	54,0

45° adjustable elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210800	R/A245406Q-0402	1/4"	9/16-18	1/8-28	16,0	28,0	14,0	14,0
1207720	R1A245406N-1616	1"	1 7/16-12	1-11	30,0	52,5	36,0	41,0
1210801	R1A245406N-0404	1/4"	9/16-18	1/4-19	17,5	31,0	14,0	19,0
1212604	R/A245406Q-0808	1/2"	13/16-16	1/2-14	22,0	42,0	27,0	27,0
1210802	R1A245406Q-0604	3/8"	11/16-16	1/4-19	19,0	32,0	19,0	19,0
1211539	R1A245406Q-1216	3/4"	1 3/16-12	1-11	29,5	52,5	36,0	41,0
1210803	R1A245406N-0606	3/8"	11/16-16	3/8-19	19,0	33,0	19,0	22,0
1210804	R1A245406Q-0608	3/8"	11/16-16	1/2-14	19,5	43,0	27,0	27,0
1210805	R/A245406Q-0806	1/2"	13/16-16	3/8-19	20,5	33,5	19,0	22,0
1210806	R1A245406Q-1008	5/8"	1-14	1/2-14	23,5	42,0	27,0	27,0
1210807	R/A245406Q-1012	5/8"	1-14	3/4-14	24,5	46,5	30,0	36,0
1211540	R/A245406Q-2020	1"1/4	1 11/16-12	1 1/4-11	32,0	53,5	41,0	50,0
1211541	R/A245406Q-2424	1"1/2	2-12	1 1/2-11	37,0	53,5	48,0	55,0
1210733	R1A245406N-1212	3/4"	1 3/16-12	3/4-14	26,0	50,0	30,0	36,0

Dimensions shown may be changed without prior notice

**90° adjustable elbow connector ORFS Male - BSPP cylindric
Male with O-Ring and retaining ring**



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1207722	R/A245906Q-0604	3/8"	11/16-16	1/4-19	25,0	38,0	19,0	19,0
1207568	R1A245906N-0606	3/8"	11/16-16	3/8-19	26,5	38,0	19,0	22,0
1208118	R/A245906Q-1006	5/8"	1-14	3/8-19	33,5	43,0	27,0	22,0
1207557	R1A245906N-1212	3/4"	1 3/16-12	3/4-14	37,5	51,5	30,0	36,0
1210714	R1A245906N-1612	1"	1 7/16-12	3/4-14	42,0	56,0	36,0	36,0
1207721	R1A245906N-0404	1/4"	9/16-18	1/4-19	23,5	35,0	14,0	19,0
1207567	R1A245906N-0608	3/8"	11/16-16	1/2-14	29,5	48,0	27,0	27,0
1208029	R1A245906N-1208	3/4"	1 3/16-12	1/2-14	37,5	49,5	30,0	27,0
1207034	R1A245906Q-1008	5/8"	1-14	1/2-14	33,5	48,0	27,0	27,0
1210739	R/A245906Q-0402	1/4"	9/16-18	1/8-28	21,5	30,0	14,0	14,0
1211552	R/A245906Q-1620	1"	1 7/16-12	1 1/4-11	45,0	60,5	41,0	50,0
1208121	R1A245906N-1616	1"	1 7/16-12	1-11	42,0	63,5	36,0	41,0
1211553	R1A245906N-2016	1"1/4	1 11/16-12	1-11	45,0	60,0	41,0	41,0
1207581	R/A245906Q-0406	1/4"	9/16-18	3/8-19	25,0	38,0	19,0	22,0
1211554	R/A245906Q-2020	1"1/4	1 11/16-12	1 1/4-11	45,0	67,5	41,0	50,0
1210741	R/A245906Q-1012	5/8"	1-14	3/4-14	36,0	51,5	30,0	36,0
1211555	R/A245906Q-2024	1"1/4	1 11/16-12	1 1/2-11	49,0	64,5	48,0	55,0
1211556	R1A245906Q-2424	1"1/2	2-12	1 1/2-11	49,0	64,5	48,0	55,0
1207724	R1A245906N-0806	1/2"	13/16-16	3/8-19	28,0	38,0	19,0	22,0
1207723	R/A245906Q-0804	1/2"	13/16-16	1/4-19	28,0	35,0	19,0	19,0
1208119	R1A245906N-1216	3/4"	1 3/16-12	1-11	41,5	58,0	36,0	41,0
1207725	R1A245906N-0808	1/2"	13/16-16	1/2-14	31,0	48,0	27,0	27,0

90° adjustable long elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1212627	R1A245906Y-1012	5/8"	1-14	3/4-14	36,0	90,0	33,0	36,0
1212626	R1A245906Y-1008	5/8"	1-14	1/2-14	33,0	82,0	27,0	27,0
1212629	R1A245906Y-1216	3/4"	1 3/16-12	1-11	41,5	104,0	36,0	41,0
1212628	R1A245906Y-1212	3/4"	1 3/16-12	3/4-14	37,5	97,0	33,0	36,0
1212630	R1A245906Y-1616	1"	1 7/16-12	1-11	42,0	112,0	36,0	41,0
1212621	R1A245906Y-0406	1/4"	9/16-18	3/8-19	25,0	62,0	22,0	22,0
1212632	R1A245906Y-2020	1"1/4	1 11/16-12	1 1/4-11	45,0	113,0	41,0	50,0
1212620	R1A245906Y-0404	1/4"	9/16-18	1/4-19	23,5	59,0	14,0	19,0
1212631	R1A245906Y-1620	1"	1 7/16-12	1 1/4-11	45,0	113,0	41,0	50,0
1212623	R1A245906Y-0608	3/8"	11/16-16	1/2-14	36,5	93,1	27,0	27,0
1212634	R1A245906Y-2424	1"1/2	2-12	1 1/2-11	49,0	137,0	48,0	55,0
1212622	R1A245906Y-0606	3/8"	11/16-16	3/8-19	26,5	67,0	22,0	22,0
1212633	R1A245906Y-2024	1"1/4	1 11/16-12	1 1/2-11	45,0	113,0	41,0	50,0
1212625	R1A245906Y-0808	1/2"	13/16-16	1/2-14	31,0	82,0	27,0	27,0
1212624	R1A245906Y-0806	1/2"	13/16-16	3/8-19	28,0	73,0	22,0	22,0

Branch Tee adjustable elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1211516	R/A245T06Q-1616	1"	1 7/16-12	1-11	42,0	58,0	36,0	41,0
1211517	R/A245T06Q-2020	1"1/4	1 11/16-12	1 1/4-11	45,0	60,5	41,0	50,0
1210825	R/A245T06Q-0402	1/4"	9/16-18	1/8-28	21,5	30,0	14,0	14,0
1211518	R1A245T06N-2424	1"1/2	2-12	1 1/2-11	49,0	64,5	48,0	55,0
1210826	R1A245T06N-0404	1/4"	9/16-18	1/4-19	23,5	35,0	14,0	19,0
1210827	R1A245T06Q-0604	3/8"	11/16-16	1/4-19	25,0	36,0	17,0	19,0
1210828	R/A245T06Q-0606	3/8"	11/16-16	3/8-19	26,5	38,0	17,0	22,0
1210829	R/A245T06Q-0806	1/2"	13/16-16	3/8-19	28,0	38,0	19,0	22,0
1210830	R1A245T06Q-1012	5/8"	1-14	3/4-14	36,0	51,5	30,0	36,0
1212523	R1A245T06N-0808	1/2"	13/16-16	1/2-14	31,0	48,0	22,0	27,0
1207558	R/A245T06Q-1212	3/4"	1 3/16-12	3/4-14	37,5	51,5	30,0	36,0
1207726	R/A245T06Q-1008	5/8"	1-14	1/2-14	33,5	48,0	27,0	27,0

Dimensions shown may be changed without prior notice

Run Tee adjustable elbow connector ORFS Male - BSPP
cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210789	R/A245L06Q-0402	1/4"	9/16-18	1/8-28	21,5	30,0	14,0	14,0
1210791	R/A245L06Q-0604	3/8"	11/16-16	1/4-19	25,0	36,0	17,0	19,0
1210792	R/A245L06Q-0606	3/8"	11/16-16	3/8-19	26,5	38,0	17,0	22,0
1210793	R1A245L06Q-0808	1/2"	13/16-16	1/2-14	31,0	48,0	22,0	27,0
1210794	R1A245L06N-1008	5/8"	1-14	1/2-14	33,5	48,0	27,0	27,0
1211499	R/A245L06Q-0806	1/2"	13/16-16	3/8-19	28,0	38,0	19,0	22,0
1210795	R/A245L06Q-1012	5/8"	1-14	3/4-14	38,0	51,5	30,0	36,0
1210796	R/A245L06Q-1212	3/4"	1 3/16-12	3/4-14	37,5	51,5	30,0	36,0
1208208	R/A245L06Q-1616	1"	1 7/16-12	1-11	42,0	58,0	36,0	41,0
1211500	R/A245L06Q-2020	1"1/4	1 11/16-12	1 1/4-11	45,0	60,5	41,0	50,0
1211501	R/A245L06Q-2424	1"1/2	2-12	1 1/2-11	49,0	64,5	48,0	55,0

// METRIC

Straight connector ORFS Male - Metric Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1211538	R1A2451525-0822	1/2"	13/16-16	M22X1.5	13,0	17,5	27,0	39,0
1208019	R1A2451525-0414	1/4"	9/16-18	M14X1.5	10,0	13,5	19,0	29,5
1208020	R1A2451525-1022	5/8"	1-14	M22X1.5	15,5	17,5	27,0	42,0
1208032	R1A2451525-0616	3/8"	11/16-16	M16X1.5	11,0	15,0	22,0	33,5
1208040	R1A2451525-0818	1/2"	13/16-16	M18X1.5	13,0	16,5	24,0	38,0
1216276	R1A2451525-1227	3/4"	1 3/16-12	M27X2	17,0	21,0	32,0	48,5
1216274	R1A2451525-1027	5/8"	1-14	M27X2	15,5	18,5	32,0	46,0
1216268	R1A2451525-0412	1/4"	9/16-18	M12X1.5	10,0	13,5	17,0	28,5
1216279	R1A2451525-1642	1"	1 7/16-12	M42X2	17,5	22,0	50,0	54,5
1216277	R1A2451525-1233	3/4"	1 3/16-12	M33X2.0	17,0	21,5	41,0	51,5
1216267	R1A2451525-0410	1/4"	9/16-18	M10X1.0	10,0	12,0	17,0	27,0
1216278	R1A2451525-1633	1"	1 7/16-12	M33X2.0	17,5	21,5	41,0	52,0
1216282	R1A2451525-2448	1"1/2	2-12	M48X2.0	17,5	24,5	55,0	57,0
1216272	R1A2451525-0816	1/2"	13/16-16	M16X1.5	13,0	15,0	24,0	36,5
1207957	R1A2451525-0614	3/8"	11/16-16	M14X1.5	11,0	13,5	22,0	32,0
1216280	R1A2451525-2042	1"1/4	1 11/16-12	M42X2	17,5	22,0	50,0	54,5
1216270	R1A2451525-0618	3/8"	11/16-16	M18X1.5	11,0	16,5	24,0	36,0
1207956	R1A2451525-0814	1/2"	13/16-16	M14X1.5	13,0	13,5	22,0	35,0
1216281	R1A2451525-2048	1"1/4	1 11/16-12	M48X2.0	17,5	24,5	55,0	55,5

Dimensions shown may be changed without prior notice

Straight connector ORFS Male - Metric Male with elastomer

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1206960	R1A245152I-0412	1/4"	9/16-18	M12X1.5	10,0	12,0	17,0	29,5
1211537	R1A245152I-2448	1"1/2	2-12	M48X2.0	17,5	22,0	55,0	57,5
1206961	R1A245152I-0616	3/8"	11/16-16	M16X1.5	11,0	12,0	22,0	32,0
1206962	R1A245152I-0818	1/2"	13/16-16	M18X1.5	13,0	12,0	24,0	36,5
1208035	R1A245152I-0414	1/4"	9/16-18	M14X1.5	10,0	12,0	19,0	30,5
1208036	R1A245152I-0614	3/8"	11/16-16	M14X1.5	11,0	12,0	22,0	32,0
1212597	R1A245152I-1642	1"	1 7/16-12	M42X2	17,5	20,0	50,0	54,0
1208192	R1A245152I-1227	3/4"	1 3/16-12	M27X2	17,0	16,0	32,0	46,0
1208191	R1A245152I-1022	5/8"	1-14	M22X1.5	15,5	14,0	27,0	41,0
1211535	R1A245152I-1633	1"	1 7/16-12	M33X2.0	17,5	18,0	41,0	50,0
1211536	R1A245152I-2042	1"1/4	1 11/16-12	M42X2	17,5	20,0	50,0	54,0
1212593	R1A245152I-0822	1/2"	13/16-16	M22X1.5	13,0	14,0	27,0	38,5
1212592	R1A245152I-0814	1/2"	13/16-16	M14X1.5	13,0	12,0	22,0	34,0
1212594	R1A245152I-1222	3/4"	1 3/16-12	M22X1.5	17,0	14,0	32,0	44,0
1206959	R1A245152I-0410	1/4"	9/16-18	M10X1.0	10,0	8,0	17,0	25,0
1216283	R1A245152I-0816	1/2"	13/16-16	M16X1.5	13,0	12,0	22,0	34,0

45° adjustable elbow connector ORFS Male - Metric Male with O-Ring and retaining ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1211548	R1A245452Q-1227	3/4"	1 3/16-12	M27X2	26,0	50,5	27,0	32,0
1208115	R1A245452Q-0616	3/8"	11/16-16	M16X1.5	19,0	33,5	17,0	22,0
1211549	R1A245452Q-1633	1"	1 7/16-12	M33X2.0	30,0	52,5	36,0	41,0
1210736	R/A245452Q-0412	1/4"	9/16-18	M12X1.5	16,0	30,0	14,0	17,0
1210737	R1A245452Q-0818	1/2"	13/16-16	M18X1.5	20,5	37,0	19,0	24,0
1210738	R/A245452Q-1022	5/8"	1-14	M22X1.5	23,5	44,0	27,0	27,0
1211550	R1A245452Q-2042	1"1/4	1 11/16-12	M42X2	32,0	54,0	41,0	50,0
1211551	R1A245452Q-2448	1"1/2	2-12	M48X2.0	37,0	56,5	48,0	55,0

90° adjustable elbow connector ORFS Male - Metric Male with O-Ring and retaining ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1208159	R1A245952Q-0412	1/4"	9/16-18	M12X1.5	21,5	33,0	14,0	17,0
1210758	R1A245952Q-0410	1/4"	9/16-18	M10X1.0	21,5	30,5	14,0	14,0
1210759	R1A245952Q-0818	1/2"	13/16-16	M18X1.5	28,0	41,0	19,0	24,0
1208042	R1A245952Q-0614	3/8"	11/16-16	M14X1.5	25,0	35,5	17,0	19,0
1210760	R1A245952Q-0822	1/2"	13/16-16	M22X1.5	31,0	49,0	19,0	27,0
1210761	R/A245952Q-1022	5/8"	1-14	M22X1.5	33,5	49,0	27,0	27,0
1208043	R1A245952Q-0616	3/8"	11/16-16	M16X1.5	25,0	37,5	17,0	22,0
1210762	R1A245952Q-1027	5/8"	1-14	M27X2	33,5	55,0	27,0	32,0
1210763	R1A245952Q-1227	3/4"	1 3/16-12	M27X2	37,5	55,5	27,0	32,0
1210764	R1A245952Q-1233	3/4"	1 3/16-12	M33X2.0	37,5	59,5	36,0	41,0
1211568	R1A245952Q-1633	1"	1 7/16-12	M33X2.0	41,5	59,5	36,0	41,0
1211569	R/A245952Q-1642	1"	1 7/16-12	M42X2	41,5	62,0	41,0	50,0
1212692	R1A245952Q-0612	3/8"	11/16-16	M12X1.5	25,0	35,5	17,0	17,0
1211570	R/A245952Q-2042	1"1/4	1 11/16-12	M42X2	43,5	63,0	41,0	50,0
1211571	R1A245952Q-2048	1"1/4	1 11/16-12	M48X2.0	44,5	71,5	48,0	55,0
1212693	R1A245952Q-1627	1"	1 7/16-12	M27X2	41,5	59,5	36,0	32,0
1211572	R/A245952Q-2448	1"1/2	2-12	M48X2.0	44,5	66,0	48,0	55,0

Dimensions shown may be changed without prior notice

**90° adjustable long elbow connector ORFS Male - Metric Male
with O-Ring and retaining ring**

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1212694	R1A245952Y-0412	1/4"	9/16-18	M12X1.5	21,5	56,5	14,0	17,0
1212696	R1A245952Y-0818	1/2"	13/16-16	M18X1.5	28,0	75,0	19,0	24,0
1212695	R1A245952Y-0616	3/8"	11/16-16	M16X1.5	25,0	67,0	17,0	22,0
1212698	R1A245952Y-1227	3/4"	1 3/16-12	M27X2	37,5	100,0	27,0	32,0
1212697	R1A245952Y-1022	5/8"	1-14	M22X1.5	33,5	89,0	27,0	27,0
1212700	R1A245952Y-2042	1"1/4	1 11/16-12	M42X2	44,5	125,0	41,0	50,0
1212699	R1A245952Y-1633	1"	1 7/16-12	M33X2.0	41,5	113,0	36,0	41,0
1212701	R1A245952Y-2448	1"1/2	2-12	M48X2.0	49,0	139,0	48,0	55,0

**Branch Tee adjustable elbow connector ORFS Male - Metric
Male with O-Ring and retaining ring**

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1211526	R1A245T52Q-2448	1"1/2	2-12	M48X2.0	49,0	71,5	48,0	55,0
1210784	R1A245T52Q-0412	1/4"	9/16-18	M12X1.5	21,5	33,0	14,0	17,0
1210785	R1A245T52Q-0616	3/8"	11/16-16	M16X1.5	25,0	37,5	17,0	22,0
1210786	R1A245T52Q-0818	1/2"	13/16-16	M18X1.5	28,0	41,0	19,0	24,0
1210787	R1A245T52Q-1022	5/8"	1-14	M22X1.5	33,5	49,0	27,0	27,0
1211524	R1A245T52Q-1633	1"	1 7/16-12	M33X2.0	41,5	59,5	36,0	41,0
1210788	R1A245T52Q-1227	3/4"	1 3/16-12	M27X2	37,5	55,5	27,0	32,0
1211525	R1A245T52Q-2042	1"1/4	1 11/16-12	M42X2	44,5	63,0	41,0	36,0

Run Tee adjustable elbow connector ORFS Male - Metric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210822	R/A245L52Q-0818	1/2"	13/16-16	M18X1.5	28,0	41,0	19,0	24,0
1211515	R/A245L52Q-2448	1"1/2	2-12	M48X2.0	49,0	71,5	48,0	55,0
1210823	R1A245L52Q-1227	3/4"	1 3/16-12	M27X2	37,5	55,5	27,0	32,0
1210709	R/A245L52Q-1022	5/8"	1-14	M22X1.5	33,5	49,0	27,0	27,0
1210820	R1A245L52Q-0412	1/4"	9/16-18	M12X1.5	21,5	33,0	14,0	17,0
1211513	R1A245L52Q-1633	1"	1 7/16-12	M33X2.0	41,5	59,5	36,0	41,0
1210821	R1A245L52Q-0616	3/8"	11/16-16	M16X1.5	25,0	37,5	17,0	22,0
1211514	R1A245L52Q-2042	1"1/4	1 11/16-12	M42X2	44,5	63,0	41,0	50,0

Dimensions shown may be changed without prior notice

// SAE UNF

Straight connector ORFS Male - SAE UNF/UN Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1210723	R1A2451305-0608	3/8"	11/16-16	3/4-16	11,0	14,0	22,0	35,0
1207973	R1A2451305-0810	1/2"	13/16-16	7/8-14	13,0	16,0	27,0	40,5
1210778	R1A2451305-2020	1"1/4	1 11/16-12	1 5/8-12	17,5	18,5	46,0	52,0
1207972	R1A2451305-0606	3/8"	11/16-16	9/16-18	11,0	12,0	22,0	32,0
1206963	R1A2451305-0404	1/4"	9/16-18	7/16-20	10,0	11,0	17,0	29,0
1208013	R1A2451305-0808	1/2"	13/16-16	3/4-16	13,0	14,0	22,0	36,5
1208012	R/A2451305-0806	1/2"	13/16-16	9/16-18	13,0	12,0	22,0	37,5
1207561	R1A2451305-1216	3/4"	1 3/16-12	1 5/16-12	17,0	18,5	41,0	50,0
1208015	R/A2451305-1616	1"	1 7/16-12	1 5/16-12	17,5	18,5	41,0	50,5
1208014	R1A2451305-1008	5/8"	1-14	3/4-16	15,5	14,0	27,0	45,0
1212564	R1A2451305-0604	3/8"	11/16-16	7/16-20	11,0	11,0	19,0	34,0
1212566	R1A2451305-1210	3/4"	1 3/16-12	7/8-14	17,0	16,0	32,0	50,5
1212565	R1A2451305-0812	1/2"	13/16-16	1 1/16-12	13,0	18,5	32,0	44,5
1207592	R1A2451305-1212	3/4"	1 3/16-12	1 1/16-12	17,0	18,0	32,0	48,5
1212568	R1A2451305-2016	1"1/4	1 11/16-12	1 5/16-12	17,5	18,5	46,0	58,0
1212567	R1A2451305-1220	3/4"	1 3/16-12	1 5/8-12	17,0	18,5	46,0	50,5
1211534	R1A2451305-2424	1"1/2	2-12	1 7/8-12	17,5	18,5	55,0	54,0
1210721	R/A2451305-1612	1"	1 7/16-12	1 1/16-12	17,5	18,5	41,0	54,0
1210777	R1A2451305-1620	1"	1 7/16-12	1 5/8-12	17,5	18,5	46,0	52,0
1206964	R1A2451305-0406	1/4"	9/16-18	9/16-18	10,0	12,0	19,0	30,5
1206965	R/A2451305-1010	5/8"	1-14	7/8-14	15,5	16,0	27,0	43,0
1207968	R1A2451305-1012	5/8"	1-14	1 1/16-12	15,5	18,5	32,0	47,0

Long connector ORFS Male - SAE UNF/UN Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1212560	R1A245130J-1212	3/4"	1 3/16-12	1 1/16-12	64,0	15,0	32,0	95,5
1212562	R1A245130J-2020	1"1/4	1 11/16-12	1 5/8-12	86,0	15,0	46,0	121,0
1212561	R1A245130J-1616	1"	1 7/16-12	1 5/16-12	72,5	15,0	41,0	105,0
1212563	R1A245130J-2424	1"1/2	2-12	1 7/8-12	97,0	15,0	55,0	133,5
1212557	R1A245130J-0606	3/8"	11/16-16	9/16-18	37,0	10,0	22,0	58,0
1212556	R1A245130J-0404	1/4"	9/16-18	7/16-20	34,0	9,0	17,0	52,5
1212559	R1A245130J-1010	5/8"	1-14	7/8-14	52,0	12,5	27,0	79,5
1212558	R1A245130J-0808	1/2"	13/16-16	3/4-16	44,0	11,0	22,0	68,0

Straight connector ORFS Female - SAE UNF/UN Male with O-Ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	CH1	L
		in			mm	mm	mm	mm	mm
1208302	R1A2411305-1008	5/8"	1-14	3/4-16	37,5	14,0	24,0	30,0	65,0
1212508	R1A2411305-0404	1/4"	9/16-18	7/16-20	24,4	11,0	17,0	19,0	45,2
1212509	R1A2411305-0606	3/8"	11/16-16	9/16-18	27,5	12,0	19,0	22,0	50,0
1212511	R1A2411305-1010	5/8"	1-14	7/8-14	37,5	16,0	27,0	30,0	66,5
1212510	R1A2411305-0808	1/2"	13/16-16	3/4-16	33,0	14,0	22,0	24,0	60,0
1212513	R1A2411305-1616	1"	1 7/16-12	1 5/16-12	43,8	18,5	41,0	41,0	82,0
1212512	R1A2411305-1212	3/4"	1 3/16-12	1 1/16-12	41,5	18,0	32,0	36,0	73,5
1212515	R1A2411305-2424	1"1/2	2-12	1 7/8-12	47,5	18,5	55,0	60,0	81,0
1212514	R1A2411305-2020	1"1/4	1 11/16-12	1 5/8-12	43,8	18,5	50,0	50,0	82,0

Dimensions shown may be changed without prior notice

45° adjustable elbow connector ORFS Male - SAE UNF/UN Male with O-Ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210811	R/A2454305-0806	1/2"	13/16-16	9/16-18	20,5	32,5	19,0	19,0
1210812	R1A2454305-0808	1/2"	13/16-16	3/4-16	20,5	36,5	19,0	24,0
1210813	R1A2454305-0810	1/2"	13/16-16	7/8-14	21,0	45,0	22,0	27,0
1207975	R1A2454305-1212	3/4"	1 3/16-12	1 1/16-12	26,0	44,0	27,0	32,0
1210814	R1A2454305-1010	5/8"	1-14	7/8-14	23,5	45,0	27,0	27,0
1207974	R1A2454305-1612	1"	1 7/16-12	1 1/16-12	30,0	51,5	33,0	32,0
1210815	R1A2454305-1012	5/8"	1-14	1 1/16-12	24,5	50,0	27,0	32,0
1210816	R1A2454305-1210	3/4"	1 3/16-12	7/8-14	26,0	46,0	30,0	27,0
1210817	R1A2454305-1616	1"	1 7/16-12	1 5/16-12	30,0	52,5	36,0	41,0
1211543	R1A2454305-1008	5/8"	1-14	3/4-16	23,5	40,5	27,0	24,0
1211544	R1A2454305-1216	3/4"	1 3/16-12	1 5/16-12	29,5	52,5	36,0	41,0
1211545	R1A2454305-1620	1"	1 7/16-12	1 5/8-12	32,0	53,5	41,0	50,0
1211546	R1A2454305-2020	1 1/4"	1 11/16-12	1 5/8-12	32,0	48,5	41,0	50,0
1210810	R1A2454305-0604	3/8"	11/16-16	7/16-20	19,0	31,0	17,0	16,0
1210722	R1A2454305-0606	3/8"	11/16-16	9/16-18	19,0	33,0	17,0	19,0
1211547	R1A2454305-2424	1 1/2"	2-12	1 7/8-12	33,5	48,5	48,0	55,0
1210808	R/A2454305-0404	1/4"	9/16-18	7/16-20	16,0	30,0	14,0	16,0
1210809	R1A2454305-0406	1/4"	9/16-18	9/16-18	17,5	33,0	14,0	19,0
1207936	R1A2454305-0608	3/8"	11/16-16	3/4-16	19,0	36,5	19,0	24,0

90° adjustable elbow connector ORFS Male - SAE UNF/UN Male with O-Ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210756	R1A2459305-1210	3/4"	1 3/16-12	7/8-14	37,5	51,0	30,0	27,0
1208016	R1A2459305-0604	3/8"	11/16-16	7/16-20	25,0	35,0	17,0	17,0
1210724	R1A2459305-0608	3/8"	11/16-16	3/4-16	26,5	40,5	19,0	24,0
1210757	R/A2459305-1616	1"	1 7/16-12	1 5/16-12	42,0	60,0	36,0	41,0
1210725	R/A2459305-0806	1/2"	13/16-16	9/16-18	28,0	36,5	19,0	19,0
1210726	R/A2459305-1008	5/8"	1-14	3/4-16	33,5	46,0	27,0	24,0
1207980	R1A2459305-0404	1/4"	9/16-18	7/16-20	22,5	32,5	14,0	16,0
1207971	R1A2459305-1010	5/8"	1-14	7/8-14	33,5	50,0	27,0	27,0
1207497	R1A2459305-0606	3/8"	11/16-16	9/16-18	25,0	37,0	17,0	19,0
1207596	R1A2459305-0808	1/2"	13/16-16	3/4-16	28,0	40,5	19,0	24,0
1207970	R1A2459305-0810	1/2"	13/16-16	7/8-14	31,0	50,0	22,0	27,0
1211562	R1A2459305-2016	1"1/4	1 11/16-12	1 5/16-12	45,0	62,0	41,0	41,0
1211563	R1A2459305-2020	1"1/4	1 11/16-12	1 5/8-12	44,5	62,0	41,0	50,0
1211564	R1A2459305-2024	1"1/4	1 11/16-12	1 7/8-12	49,0	66,0	48,0	55,0
1211565	R/A2459305-2424	1"1/2	2-12	1 7/8-12	49,0	66,0	48,0	55,0
1210711	R1A2459305-1216	3/4"	1 3/16-12	1 5/16-12	41,5	60,0	36,0	41,0
1211561	R1A2459305-1620	1"	1 7/16-12	1 5/8-12	45,0	62,0	41,0	50,0
1207969	R/A2459305-1012	5/8"	1-14	1 1/16-12	36,0	55,0	27,0	32,0
1207977	R1A2459305-1212	3/4"	1 3/16-12	1 1/16-12	37,5	55,0	30,0	32,0
1207976	R1A2459305-0406	1/4"	9/16-18	9/16-18	23,5	37,0	14,0	19,0
1207978	R/A2459305-1612	1"	1 7/16-12	1 1/16-12	42,0	59,0	33,0	32,0

90° adjustable long elbow connector ORFS Male - SAE UNF/UN Male with O-Ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1212638	R1A245930J-0608	3/8"	11/16-16	3/4-16	26,5	75,0	19,0	24,0
1212649	R1A245930J-2424	1"1/2	2-12	1 7/8-12	49,0	139,0	48,0	55,0
1212637	R1A245930J-0606	3/8"	11/16-16	9/16-18	25,0	66,0	17,0	19,0
1212648	R1A245930J-2024	1"1/4	1 11/16-12	1 7/8-12	49,0	139,0	48,0	55,0
1212639	R1A245930J-0808	1/2"	13/16-16	3/4-16	28,0	75,0	19,0	24,0
1212641	R1A245930J-1010	5/8"	1-14	7/8-14	33,5	89,0	27,0	27,0
1212640	R1A245930J-0810	1/2"	13/16-16	7/8-14	31,0	89,0	22,0	27,0
1212643	R1A245930J-1212	3/4"	1 3/16-12	1 1/16-12	37,5	101,0	30,0	32,0
1212642	R1A245930J-1012	5/8"	1-14	1 1/16-12	36,0	101,0	27,0	32,0
1212645	R1A245930J-1616	1"	1 7/16-12	1 5/16-12	42,0	114,0	36,0	41,0
1212644	R1A245930J-1216	3/4"	1 3/16-12	1 5/16-12	41,5	114,0	36,0	41,0
1212636	R1A245930J-0406	1/4"	9/16-18	9/16-18	23,5	66,0	14,0	19,0
1212647	R1A245930J-2020	1"1/4	1 11/16-12	1 5/8-12	45,0	126,0	41,0	50,0
1212635	R1A245930J-0404	1/4"	9/16-18	7/16-20	21,5	56,5	14,0	16,0
1212646	R1A245930J-1620	1"	1 7/16-12	1 5/8-12	45,0	126,0	41,0	50,0

Dimensions shown may be changed without prior notice

**Branch Tee adjustable elbow connector ORFS Male - SAE UNF/
UN Male with O-Ring**

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210780	R/A245T305-0606	3/8"	11/16-16	9/16-18	25,0	37,0	17,0	19,0
1210781	R1A245T305-0808	1/2"	13/16-16	3/4-16	28,0	40,5	19,0	24,0
1210782	R1A245T305-1010	5/8"	1-14	7/8-14	33,5	50,0	27,0	27,0
1210783	R1A245T305-1212	3/4"	1 3/16-12	1 1/16-12	37,5	55,0	30,0	32,0
1211521	R1A245T305-1616	1"	1 7/16-12	1 5/16-12	42,0	60,0	36,0	41,0
1211522	R1A245T305-2020	1"1/4	1 11/16-12	1 5/8-12	45,0	62,0	41,0	50,0
1210720	R/A245T305-0404	1/4"	9/16-18	7/16-20	21,5	32,5	14,0	16,0
1211523	R1A245T305-2424	1"1/2	2-12	1 7/8-12	49,0	66,0	48,0	55,0

**Run Tee adjustable elbow connector ORFS Male - SAE UNF/UN
Male with O-Ring**

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1211509	R/A245L305-1212	3/4"	1 3/16-12	1 1/16-12	37,5	55,0	30,0	32,0
1210818	R1A245L305-0808	1/2"	13/16-16	3/4-16	28,0	40,5	19,0	24,0
1210819	R1A245L305-1010	5/8"	1-14	7/8-14	33,5	50,0	27,0	27,0
1211510	R/A245L305-1616	1"	1 7/16-12	1 5/16-12	42,0	60,0	36,0	41,0
1211511	R1A245L305-2020	1"1/4	1 11/16-12	1 5/8-12	45,0	62,0	41,0	50,0
1211512	R1A245L305-2424	1"1/2	2-12	1 7/8-12	49,0	66,0	48,0	55,0
1210798	R/A245L305-0404	1/4"	9/16-18	7/16-20	21,5	32,5	14,0	16,0
1210799	R/A245L305-0606	3/8"	11/16-16	9/16-18	25,0	37,0	17,0	19,0

// FLANGES

Straight flange SAE J518 code 61 - ORFS Male - Low pressure



Item Code	Part Number	OD1	F1	Flange Size	L	T	H	V	H1
		in			mm	mm	mm	mm	mm
1212571	R1A245133W-1008	5/8"	1-14	1/2	40,0	14,0	38,1	17,5	9,0
1212570	R1A245133W-0808	1/2"	13/16-16	1/2	39,0	14,0	38,1	17,5	9,0
1212573	R1A245133W-1212	3/4"	1 3/16-12	3/4	45,0	15,0	47,6	22,2	11,0
1212572	R1A245133W-1012	5/8"	1-14	3/4	44,0	15,0	47,6	22,2	11,0
1212575	R1A245133W-1616	1"	1 7/16-12	1	49,0	17,0	52,4	26,2	11,0
1212574	R1A245133W-1216	3/4"	1 3/16-12	1	48,0	17,0	52,4	26,2	11,0
1212577	R1A245133W-2020	1 1/4	1 11/16-12	1 1/4	55,0	21,0	58,7	30,2	11,5
1212576	R1A245133W-1620	1"	1 7/16-12	1 1/4	55,0	21,0	58,7	30,2	11,5
1212579	R1A245133W-2424	1 1/2	2-12	1 1/2	61,0	24,0	69,9	35,7	13,5
1212578	R1A245133W-2024	1 1/4	1 11/16-12	1 1/2	59,0	24,0	69,9	35,7	13,5
1212569	R1A245133W-0608	3/8"	11/16-16	1/2	37,0	14,0	38,1	17,5	9,0

Straight flange SAE J518 code 62 - ORFS Male - High pressure



Item Code	Part Number	OD1	F1	Flange Size	L	T	H	V	H1
		in			mm	mm	mm	mm	mm
1212580	R1A245136W-0608	3/8"	11/16-16	1/2	37,0	15,0	40,5	18,2	9,0
1212590	R1A245136W-2424	1 1/2	2-12	1 1/2	61,0	27,0	79,4	36,5	17,0
1212582	R1A245136W-1008	5/8"	1-14	1/2	40,0	15,0	40,5	18,2	9,0
1212581	R1A245136W-0808	1/2"	13/16-16	1/2	39,0	15,0	40,5	18,2	9,0
1212584	R1A245136W-1212	3/4"	1 3/16-12	3/4	45,0	17,0	50,8	23,8	11,0
1212583	R1A245136W-1012	5/8"	1-14	3/4	44,0	17,0	50,8	23,8	11,0
1212586	R1A245136W-1616	1"	1 7/16-12	1	49,0	21,0	57,2	27,8	13,0
1212585	R1A245136W-1216	3/4"	1 3/16-12	1	48,0	21,0	57,2	27,8	13,0
1212588	R1A245136W-2020	1 1/4	1 11/16-12	1 1/4	55,0	24,0	66,7	31,8	15,0
1212587	R1A245136W-1620	1"	1 7/16-12	1 1/4	55,0	24,0	66,7	31,8	15,0
1212589	R1A245136W-2024	1 1/4	1 11/16-12	1 1/2	59,0	27,0	79,4	36,5	17,0

Dimensions shown may be changed without prior notice

90° flange SAE J518 code 61 - ORFS Male - Low pressure

Item Code	Part Number	OD1	F1	Flange size	C1	T	H	V	H1
	Part Number	in			mm	mm	mm	mm	mm
1212659	R1A245933W-2024	1"1/4	1 11/16-12	1 1/2	59,0	31,0	69,9	35,7	13,5
1212650	R1A245933W-0608	3/8"	11/16-16	1/2	37,0	17,0	38,1	17,5	9,0
1212660	R1A245933W-2424	1"1/2	2-12	1 1/2	61,0	37,0	69,9	35,7	13,5
1212652	R1A245933W-1008	5/8"	1-14	1/2	40,0	20,0	38,1	17,5	9,0
1212651	R1A245933W-0808	1/2"	13/16-16	1/2	39,0	17,0	38,1	17,5	9,0
1212654	R1A245933W-1212	3/4"	1 3/16-12	3/4	45,0	25,0	47,6	22,2	11,0
1212653	R1A245933W-1012	5/8"	1-14	3/4	44,0	20,0	47,6	22,2	11,0
1212656	R1A245933W-1616	1"	1 7/16-12	1	49,0	31,0	52,4	26,2	11,0
1212655	R1A245933W-1216	3/4"	1 3/16-12	1	48,0	25,0	52,4	26,2	11,0
1212658	R1A245933W-2020	1"1/4	1 11/16-12	1 1/4	55,0	31,0	58,7	30,2	11,5
1212657	R1A245933W-1620	1"	1 7/16-12	1 1/4	55,0	31,0	58,7	30,2	11,5

90° flange SAE J518 code 62 - ORFS Male - High pressure

Item Code	Part Number	OD1	F1	Flange size	C1	T	H	V	H1
	Part Number	in			mm	mm	mm	mm	mm
1212670	R1A245936W-0608	3/8"	11/16-16	1/2	37,0	17,0	40,5	18,2	9,0
1212680	R1A245936W-2424	1"1/2	2-12	1 1/2	61,0	37,0	79,4	36,5	17,0
1212672	R1A245936W-1008	5/8"	1-14	1/2	40,0	20,0	40,5	18,2	9,0
1212671	R1A245936W-0808	1/2"	13/16-16	1/2	39,0	17,0	40,5	18,2	9,0
1212674	R1A245936W-1212	3/4"	1 3/16-12	3/4	45,0	25,0	50,8	23,8	11,0
1212673	R1A245936W-1012	5/8"	1-14	3/4	44,0	20,0	50,8	23,8	11,0
1212676	R1A245936W-1616	1"	1 7/16-12	1	49,0	31,0	57,2	27,8	13,0
1212675	R1A245936W-1216	3/4"	1 3/16-12	1	48,0	25,0	57,2	27,8	13,0
1212678	R1A245936W-2020	1"1/4	1 11/16-12	1 1/4	55,0	31,0	66,7	31,8	15,0
1212677	R1A245936W-1620	1"	1 7/16-12	1 1/4	55,0	31,0	66,7	31,8	15,0
1212679	R1A245936W-2024	1"1/4	1 11/16-12	1 1/2	59,0	37,0	79,4	36,5	17,0

90° adjustable flange SAE J518 code 61 - ORFS Male - Low pressure

Item Code	Part Number	OD1	F1	Flange size	C1	C2	FD	CH
		in			mm	mm	mm	mm
1212663	R1A2459334-1008	5/8"	1-14	1/2	50,0	44,0	30,2	22,0
1212662	R1A2459334-0808	1/2"	13/16-16	1/2	48,0	42,0	30,2	22,0
1212665	R1A2459334-1616	1"	1 7/16-12	1	65,0	60,0	44,4	34,0
1212664	R1A2459334-1212	3/4"	1 3/16-12	3/4	64,0	53,0	38,1	27,0
1212667	R1A2459334-2020	1 1/4"	1 11/16-12	1 1/4	64,0	55,0	50,8	42,0
1212666	R1A2459334-1620	1"	1 7/16-12	1 1/4	64,0	55,0	50,8	42,0
1212669	R1A2459334-2424	1 1/2"	2-12	1 1/2	78,0	66,0	60,3	50,0
1212668	R1A2459334-2024	1 1/4"	1 11/16-12	1 1/2	78,0	66,0	60,3	50,0

90° adjustable flange SAE J518 code 62 - ORFS Male - High pressure

Item Code	Part Number	OD1	F1	Flange size	C1	C2	FD	CH
		in			mm	mm	mm	mm
1212690	R1A2459364-2024	1 1/4"	1 11/16-12	1 1/2	84,0	80,0	63,5	50,0
1212681	R1A2459364-0608	3/8"	11/16-16	1/2	50,0	44,0	31,8	22,0
1212691	R1A2459364-2424	1 1/2"	2-12	1 1/2	84,0	80,0	63,5	50,0
1212683	R1A2459364-1008	5/8"	1-14	1/2	50,0	44,0	31,8	22,0
1212682	R1A2459364-0808	1/2"	13/16-16	1/2	43,0	49,0	31,8	22,0
1212685	R1A2459364-1212	3/4"	1 3/16-12	3/4	64,0	53,0	41,3	27,0
1212684	R1A2459364-1012	5/8"	1-14	3/4	64,0	53,0	41,3	27,0
1212687	R1A2459364-1616	1"	1 7/16-12	1	62,0	60,0	47,6	34,0
1212686	R1A2459364-1216	3/4"	1 3/16-12	1	62,0	60,0	47,6	34,0
1212689	R1A2459364-2020	1 1/4"	1 11/16-12	1 1/4	72,0	70,0	54,0	42,0
1212688	R1A2459364-1620	1"	1 7/16-12	1 1/4	72,0	70,0	54,0	42,0

Dimensions shown may be changed without prior notice

// ACCESSORIES

Nut ORFS



Item Code	Part Number	OD1	F1	CH	L
		mm		mm	mm
1217530	HX0D2403-240000	35	2-12	57,0	28,00
1221423	HX0D2403-060000	8	11/16-16	22,0	17,00
1209992	HX0D2403-100000	14	1-14	30,0	23,50
1210042	HX0D2403-120000	18	1 3/16-12	36,0	26,00
1223385	HX0D2403-040000	6	9/16-18	17,0	14,50
1209980	HX0D2403-080000	12	13/16-16	24,0	21,00
1217529	HX0D2403-200000	28	1 11/16-12	50,0	28,00
1217528	HX0D2403-160000	22	1 7/16-12	41,0	28,00

// PLUG**Cap ORFS Female**

Item Code	Part Number	OD1	F1	CH	L
		in		mm	mm
1208259	R1A2431000-1600	1"	1 7/16-12	41,0	31,0
1210844	R/A2431000-2400	1"1/2	2-12	57,0	31,0
1208258	R1A2431000-2000	1"1/4	1 11/16-12	50,0	31,0
1207711	R1A2431000-0600	3/8"	11/16-16	22,0	20,0
1208261	R1A2431000-1000	5/8"	1-14	30,0	27,0
1207933	R1A2431000-0800	1/2"	13/16-16	24,0	23,0
1207932	R1A2431000-0400	1/4"	9/16-18	17,0	17,0
1208260	R1A2431000-1200	3/4"	1 3/16-12	36,0	30,0

Plug ORFS Male

Item Code	Part Number	OD1	F1	CH	L
		in		mm	mm
1208215	R1A2451000-1000	5/8"	1-14	27,0	26,0
1208217	R1A2451000-1600	1"	1 7/16-12	41,0	28,0
1210824	R1A2451000-2400	1"1/2	2-12	55,0	28,0
1208216	R1A2451000-1200	3/4"	1 3/16-12	32,0	27,5
1207772	R1A2451000-0600	3/8"	11/16-16	19,0	19,0
1208218	R1A2451000-2000	1"1/4	1 11/16-12	46,0	28,0
1207935	R1A2451000-0800	1/2"	13/16-16	22,0	22,0
1207934	R1A2451000-0400	1/4"	9/16-18	17,0	16,5



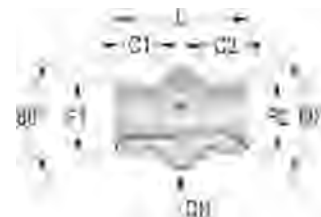
// BSP ADAPTERS

// MALE UNION.....	206
// MALE / FEMALE UNION.....	208
// FEMALE UNION.....	210
// BULKHEAD.....	211

// BSPP.....	213
// FLANGES.....	217
// PLUG.....	220

// MALE UNION

Straight union BSP 60° Male



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1207676	R1A05M105M-1620	1"	1-11	1 1/4-11	18,0	20,0	50,0	56,0
1207675	R1A05M105M-1216	3/4"	3/4-14	1-11	16,0	18,0	41,0	50,0
1207677	R1A05M105M-1624	1"	1-11	1 1/2-11	18,0	22,0	55,0	60,0
1207672	R1A05M105M-0408	1/4"	1/4-19	1/2-14	11,0	14,0	27,0	36,0
1203751	R1A05M105M-2424	1"1/2	1 1/2-11	1 1/2-11	22,0	22,0	55,0	64,0
1207671	R1A05M105M-0406	1/4"	1/4-19	3/8-19	11,0	12,0	22,0	33,5
1207674	R1A05M105M-0812	1/2"	1/2-14	3/4-14	14,0	16,0	32,0	43,5
1205572	R1A05M105M-1016	5/8"	5/8-14	1-11	16,0	18,0	41,0	50,0
1207673	R1A05M105M-0608	3/8"	3/8-19	1/2-14	12,0	14,0	27,0	37,5
1207670	R1A05M105M-0204	1/8"	1/8-28	1/4-19	8,0	11,0	19,0	27,5
1212029	R1A05M105M-0206	1/8"	1/8-28	3/8-19	8,0	12,0	22,0	30,0
1212030	R1A05M105M-0208	1/8"	1/8-28	1/2-14	8,0	14,0	27,0	33,0
1212032	R1A05M105M-0616	3/8"	3/8-19	1-11	12,0	18,0	41,0	46,0
1212031	R1A05M105M-0610	3/8"	3/8-19	5/8-14	12,0	16,0	30,0	40,5
1212034	R1A05M105M-0816	1/2"	1/2-14	1-11	14,0	18,0	41,0	48,0
1212033	R1A05M105M-0810	1/2"	1/2-14	5/8-14	14,0	16,0	30,0	43,0
1203766	R1A05M105M-0808	1/2"	1/2-14	1/2-14	14,0	14,0	27,0	40,0
1203803	R1A05M105M-1010	5/8"	5/8-14	5/8-14	16,0	16,0	30,0	45,0
1207701	R1A05M105M-0612	3/8"	3/8-19	3/4-14	12,0	16,0	32,0	41,0
1203747	R1A05M105M-1616	1"	1-11	1-11	18,0	18,0	41,0	52,0
1203789	R1A05M105M-1212	3/4"	3/4-14	3/4-14	16,0	16,0	32,0	45,5
1203780	R1A05M105M-3232	2"	2-11	2-11	24,0	24,0	70,0	69,0
1208335	R1A05M105M-0412	1/4"	1/4-19	3/4-14	11,0	16,0	32,0	39,5
1205940	R1A05M105M-2432	1"1/2	1 1/2-11	2-11	22,0	24,0	70,0	66,5
1212036	R1A05M105M-0824	1/2"	1/2-14	1 1/2-11	14,0	22,0	55,0	56,0
1212035	R1A05M105M-0820	1/2"	1/2-14	1 1/4-11	14,0	20,0	50,0	52,0
1208195	R1A05M105M-2024	1"1/4	1 1/4-11	1 1/2-11	20,0	22,0	55,0	62,0
1212038	R1A05M105M-1224	3/4"	3/4-14	1 1/2-11	16,0	22,0	55,0	58,0
1208252	R1A05M105M-1012	5/8"	5/8-14	3/4-14	16,0	16,0	32,0	45,5
1212037	R1A05M105M-1020	5/8"	5/8-14	1 1/4-11	16,0	20,0	50,0	54,0
1208293	R1A05M105M-1220	3/4"	3/4-14	1 1/4-11	16,0	20,0	50,0	54,0
1212040	R1A05M105M-2032	1"1/4	1 1/4-11	2-11	20,0	24,0	70,0	64,5
1203798	R1A05M105M-0606	3/8"	3/8-19	3/8-19	12,0	12,0	22,0	35,0
1203775	R1A05M105M-0404	1/4"	1/4-19	1/4-19	11,0	11,0	19,0	31,0
1203757	R1A05M105M-2020	1"1/4	1 1/4-11	1 1/4-11	20,0	20,0	50,0	58,0
1203778	R1A05M105M-0202	1/8"	1/8-28	1/8-28	8,0	8,0	14,0	25,0

Dimensions shown may be changed without prior notice

90° union BSP 60° Male

Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1203905	R1A05M905M-1212	3/4"	3/4-14	42,0	27,0
1210968	R/A05M905M-2424	1"1/2	1 1/2-11	60,0	48,0
1208199	R/A05M905M-2020	1"1/4	1 1/4-11	52,0	41,0
1207542	R1A05M905M-0808	1/2"	1/2-14	35,0	22,0
1212187	R1A05M905M-1010	5/8"	5/8-14	38,0	22,0
1208198	R1A05M905M-1616	1"	1-11	47,0	33,0
1207905	R1A05M905M-0202	1/8"	1/8-28	20,0	12,0
1206438	R1A05M905M-0606	3/8"	3/8-19	30,0	17,0
1207505	R1A05M905M-0404	1/4"	1/4-19	26,0	14,0

Branch Tee union BSP 60° Male

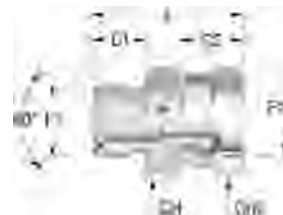
Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1207236	R1A05MT05M-1212	3/4"	3/4-14	42,0	27,0
1206940	R1A05MT05M-0808	1/2"	1/2-14	35,0	22,0
1211959	R1A05MT05M-0202	1/8"	1/8-28	20,0	12,0
1206450	R1A05MT05M-1616	1"	1-11	47,0	33,0
1208145	R1A05MT05M-2424	1"1/2	1 1/2-11	60,0	48,0
1208144	R/A05MT05M-2020	1"1/4	1 1/4-11	52,0	41,0
1211960	R1A05MT05M-1010	5/8"	5/8-14	38,0	22,0
1203956	R1A05MT05M-0606	3/8"	3/8-19	30,0	17,0
1203955	R1A05MT05M-0404	1/4"	1/4-19	26,0	14,0

Cross union BSP 60° Male

Item Code	Part Number	OD1	F1	C1	CH
		in		mm	mm
1206941	R1A05MX05M-0808	1/2"	1/2-14	35,0	22,0
1212021	R1A05MX05M-0202	1/8"	1/8-28	20,0	12,0
1212023	R1A05MX05M-0606	3/8"	3/8-19	30,0	17,0
1212022	R1A05MX05M-0404	1/4"	1/4-19	26,0	14,0
1212025	R1A05MX05M-1212	3/4"	3/4-14	42,0	27,0
1212024	R1A05MX05M-1010	5/8"	5/8-14	38,0	22,0
1212027	R1A05MX05M-2020	1"1/4	1 1/4-11	52,0	41,0
1212026	R1A05MX05M-1616	1"	1-11	47,0	33,0
1212028	R1A05MX05M-2424	1"1/2	1 1/2-11	60,0	48,0

// MALE / FEMALE UNION

Straight union BSP 60° Male - Female



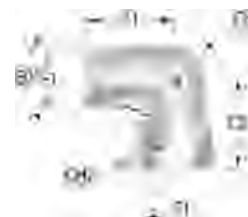
Item Code	Part Number	OD1	F1	C1	C2	CH	CH2	L
		in		mm	mm	mm	mm	mm
1207698	R1A05M1051-0606	3/8"	3/8-19	14,5	17,7	22,0	22,0	38,7
1207697	R1A05M1051-0404	1/4"	1/4-19	13,0	15,5	19,0	19,0	33,5
1207686	R1A05M1051-1616	1"	1-11	21,0	25,5	41,0	38,0	59,5
1207700	R1A05M1051-1212	3/4"	3/4-14	19,0	22,0	32,0	32,0	50,0
1207699	R1A05M1051-0808	1/2"	1/2-14	17,0	19,0	27,0	27,0	43,0
1207784	R1A05M1052-2424	1"1/2	1 1/2-11	22,0	35,0	55,0	55,0	75,0
1207783	R1A05M1052-2020	1"1/4	1 1/4-11	20,0	31,1	50,0	50,0	69,1
1216217	R1A05M1051-0202	1/8"	1/8-28	9,5	13,0	14,0	14,0	29,0

45° union BSP 60° Male - Female



Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207786	R1A05M4051-1212	3/4"	3/4-14	32,0	39,0	27,0	32,0
1207907	R1A05M4051-0808	1/2"	1/2-14	27,0	35,5	22,0	27,0
1212146	R1A05M4051-0606	3/8"	3/8-19	24,0	31,2	17,0	22,0
1212145	R1A05M4051-0404	1/4"	1/4-19	21,0	25,5	14,0	19,0
1212126	R1A05M4051-0202	1/8"	1/8-28	16,0	20,5	12,0	14,0
1212148	R1A05M4052-2020	1"1/4	1 1/4-11	37,0	44,1	41,0	50,0
1212149	R/A05M4082-2424	1"1/2	1 1/2-11	46,0	59,2	48,0	55,0
1210963	R1A05M4051-1616	1"	1-11	35,0	42,5	33,0	38,0

Dimensions shown may be changed without prior notice

90° union BSP 60° Male - Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1212219	R1A05M9051-1010	5/8"	5/8-14	38,0	47,7	22,0	27,0
1208137	R1A05M9052-2424	1"1/2	1 1/2-11	60,0	73,2	48,0	55,0
1218490	R1A05M9051-0202	1/8"	1/8-28	22,0	26,5	12,0	14,0
1207948	R1A05M9052-2020	1"1/4	1 1/4-11	52,0	59,1	41,0	50,0
1207947	R1A05M9051-1616	1"	1-11	47,0	54,5	33,0	38,0
1207702	R1A05M9051-0404	1/4"	1/4-19	26,0	30,5	14,0	19,0
1207704	R1A05M9051-0808	1/2"	1/2-14	35,0	41,5	22,0	27,0
1207946	R1A05M9051-1212	3/4"	3/4-14	42,0	51,0	27,0	32,0
1207703	R1A05M9051-0606	3/8"	3/8-19	30,0	36,2	17,0	22,0

Branch Tee union BSP 60° Male - Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207709	R1A05MT051-1616	1"	1-11	47,0	54,5	33,0	38,0
1207706	R1A05MT051-0606	3/8"	3/8-19	30,0	36,2	17,0	22,0
1211970	R1A05MT051-0202	1/8"	1/8-28	22,0	27,0	12,0	14,0
1207705	R1A05MT051-0404	1/4"	1/4-19	26,0	30,5	14,0	19,0
1211982	R1A05MT081-1010	5/8"	5/8-14	38,0	47,7	22,0	27,0
1207708	R1A05MT051-1212	3/4"	3/4-14	42,0	51,0	27,0	32,0
1207707	R1A05MT051-0808	1/2"	1/2-14	35,0	41,5	22,0	27,0
1211983	R1A05MT052-2424	1"1/2	1 1/2-11	60,0	73,2	48,0	55,0
1210950	R1A05MT082-2020	1"1/4	1 1/4-11	52,0	59,1	41,0	50,0

Run Tee union BSP 60° Male - Female

Item Code	Part Number	OD1	F1	C1	C2	CH	CH2
		in		mm	mm	mm	mm
1207788	R1A05ML051-0606	3/8"	3/8-19	30,0	36,2	17,0	22,0
1207787	R1A05ML051-0404	1/4"	1/4-19	26,0	30,5	14,0	19,0
1210946	R1A05ML052-2020	1"1/4	1 1/4-11	52,0	59,1	41,0	50,0
1211908	R1A05ML051-0202	1/8"	1/8-28	22,0	26,5	12,0	14,0
1207791	R1A05ML051-1616	1"	1-11	47,0	54,5	33,0	38,0
1207790	R1A05ML051-1212	3/4"	3/4-14	42,0	51,0	27,0	32,0
1207789	R1A05ML051-0808	1/2"	1/2-14	35,0	41,5	22,0	27,0
1211921	R1A05ML052-2424	1"1/2	1 1/2-11	60,0	73,2	48,0	55,0

// FEMALE UNION

Straight union BSP 60° Female



Item Code	Part Number	OD1	F1	CH1	L
		in		mm	mm
1203738	R1A0511051-1616	1"	1-11	38,0	56,0
1205934	R1A0511051-0606	3/8"	3/8-19	22,0	38,9
1205935	R1A0511051-0404	1/4"	1/4-19	19,0	36,0
1205936	R1A0511051-0808	1/2"	1/2-14	27,0	44,5
1207901	R1A0511051-1212	3/4"	3/4-14	32,0	49,5

90° union BSP 60° Female



Item Code	Part Number	OD1	F1	C1	CH	CH1
		in		mm	mm	mm
1208320	R1A0519051-0808	1/2"	1/2-14	41,5	22,0	27,0
1224079	R1A0519051-0404	1/4"	1/4-19	30,5	14,0	19,0
1224080	R1A0519051-0606	3/8"	3/8-19	36,2	17,0	22,0
1224081	R1A0519051-1212	3/4"	3/4-14	51,0	27,0	32,0
1224082	R1A0519051-1616	1"	1-11	54,5	33,0	38,0

Branch Tee union BSP 60° Female



Item Code	Part Number	OD1	F1	C1	CH	CH1
		in		mm	mm	mm
1206665	R1A051T051-1212	3/4"	3/4-14	51,0	27,0	32,0
1218502	R1A051T051-0606	3/8"	3/8-19	36,2	17,0	22,0
1218501	R1A051T051-0404	1/4"	1/4-19	30,5	14,0	19,0
1218505	R1A051T051-1616	1"	1-11	54,5	33,0	38,0
1218503	R1A051T051-0808	1/2"	1/2-14	41,5	22,0	27,0

Dimensions shown may be changed without prior notice

// BULKHEAD

Straight union BSP 60° Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	L
		in		mm	mm	mm	mm	mm
1210955	R1A05M105T-2424	1"1/2	1 1/2-11	25,0	49,0	55,0	55,0	88,0
1207678	R1A05M105T-0404	1/4"	1/4-19	13,0	29,0	19,0	19,0	47,0
1207683	R1A05M105T-1616	1"	1-11	21,0	41,0	41,0	41,0	72,0
1212042	R1A05M105T-0202	1/8"	1/8-28	9,5	25,0	14,0	14,0	40,5
1207682	R1A05M105T-1212	3/4"	3/4-14	19,0	37,0	32,0	32,0	63,5
1207684	R1A05M105T-2020	1"1/4	1 1/4-11	23,0	45,0	50,0	50,0	80,0
1207681	R1A05M105T-1010	5/8"	5/8-14	19,0	37,0	30,0	32,0	63,0
1207680	R1A05M105T-0808	1/2"	1/2-14	17,0	34,0	27,0	27,0	58,0
1207679	R1A05M105T-0606	3/8"	3/8-19	14,5	31,0	22,0	22,0	51,5

90° elbow connector BSP 60° Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1210969	R/A05M905T-0404	1/4"	1/4-19	26,0	47,0	14,0	19,0	29,0
1212188	R1A05M905T-0202	1/8"	1/8-28	20,0	37,0	12,0	14,0	25,0
1212189	R1A05M905T-1010	5/8"	5/8-14	38,0	59,0	22,0	32,0	37,0
1210970	R/A05M905T-0606	3/8"	3/8-19	30,0	49,0	17,0	22,0	31,0
1210971	R1A05M905T-0808	1/2"	1/2-14	35,0	55,0	22,0	27,0	34,0
1210972	R/A05M905T-1212	3/4"	3/4-14	42,0	63,0	33,0	41,0	35,0
1210973	R1A05M905T-1616	1"	1-11	47,0	69,0	33,0	41,0	41,0
1210974	R1A05M905T-2020	1"1/4	1 1/4-11	52,0	77,0	41,0	50,0	45,0
1210975	R/A05M905T-2424	1"1/2	1 1/2-11	60,0	87,0	48,0	55,0	49,0

Branch Tee union BSP 60° Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1211966	R1A05MT05T-1212	3/4"	3/4-14	42,0	63,0	27,0	36,0	37,0
1211967	R1A05MT05T-1616	1"	1-11	47,0	69,0	33,0	41,0	41,0
1211968	R1A05MT05T-2020	1"1/4	1 1/4-11	52,0	77,0	41,0	50,0	45,0
1211969	R1A05MT05T-2424	1"1/2	1 1/2-11	60,0	87,0	48,0	55,0	49,0
1211961	R1A05MT05T-0202	1/8"	1/8-28	20,0	37,0	12,0	14,0	25,0
1211962	R1A05MT05T-0404	1/4"	1/4-19	26,0	44,0	14,0	19,0	29,0
1211963	R1A05MT05T-0606	3/8"	3/8-19	27,0	49,0	17,0	22,0	31,0
1211964	R1A05MT05T-0808	1/2"	1/2-14	35,0	55,0	22,0	27,0	34,0
1211965	R/A05MT05T-1010	5/8"	5/8-14	38,0	59,0	22,0	32,0	37,0

Run Tee union BSP 60° Bulkhead



Item Code	Part Number	OD1	F1	C1	C2	CH	LN	LT
		in		mm	mm	mm	mm	mm
1211900	R1A05ML05T-0404	1/4"	1/4-19	26,0	44,0	14,0	19,0	29,0
1211901	R/A05ML05T-0606	3/8"	3/8-19	27,0	49,0	17,0	22,0	31,0
1211902	R/A05ML05T-0808	1/2"	1/2-14	35,0	55,0	22,0	27,0	34,0
1211903	R1A05ML05T-1010	5/8"	5/8-14	38,0	59,0	22,0	32,0	37,0
1211904	R1A05ML05T-1212	3/4"	3/4-14	42,0	63,0	27,0	36,0	37,0
1211905	R1A05ML05T-1616	1"	1-11	47,0	69,0	33,0	41,0	41,0
1211906	R1A05ML05T-2020	1"1/4	1 1/4-11	52,0	77,0	41,0	50,0	45,0
1211907	R1A05ML05T-2424	1"1/2	1 1/2-11	60,0	87,0	48,0	55,0	49,0
1211899	R1A05ML05T-0202	1/8"	1/8-28	20,0	37,0	12,0	14,0	25,0

Dimensions shown may be changed without prior notice

// BSPP

Straight connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring

Item Code	Part Number	OD1	F1	F2	C1	C2	CH	L
		in			mm	mm	mm	mm
1236668	R1A05M106N-1208	3/4"	3/4-14	1/2-14	17,0	14,5	32,0	44,0
1212047	R/A05M106Q-0604	3/8"	3/8-19	1/4-19	13,0	13,0	22,0	33,0
1212058	R1A05M106Q-1616	1"	1-11	1-11	19,0	18,5	41,0	55,0
1212046	R1A05M106N-0406	1/4"	1/4-19	3/8-19	11,0	11,0	22,0	31,0
1212057	R1A05M106Q-1612	1"	1-11	3/4-14	19,0	14,5	41,0	49,0
1212049	R1A05M106Q-0608	3/8"	3/8-19	1/2-14	13,0	14,5	27,0	38,0
1212048	R/A05M106Q-0606	3/8"	3/8-19	3/8-19	13,0	11,0	22,0	34,0
1212059	R1A05M106Q-1620	1"	1-11	1 1/4-11	19,0	18,5	50,0	60,0
1212050	R1A05M106Q-0806	1/2"	1/2-14	3/8-19	16,0	11,0	27,0	35,0
1212061	R1A05M106Q-2424	1"1/2	1 1/2-11	1 1/2-11	22,0	18,5	55,0	63,0
1212060	R1A05M106N-2020	1"1/4	1 1/4-11	1 1/4-11	20,0	18,5	50,0	62,5
1212052	R1A05M106Q-0812	1/2"	1/2-14	3/4-14	16,0	14,5	32,0	40,0
1212051	R1A05M106N-0808	1/2"	1/2-14	1/2-14	16,0	16,0	27,0	40,0
1212043	R/A05M106Q-0202	1/8"	1/8-28	1/8-28	8,0	7,5	14,0	21,5
1212053	R1A05M106N-1008	5/8"	5/8-14	1/2-14	16,0	14,5	27,0	38,5
1212045	R/A05M106Q-0404	1/4"	1/4-19	1/4-19	11,0	11,0	19,0	28,0
1212056	R1A05M106Q-1216	3/4"	3/4-14	1-11	17,0	18,5	41,0	52,0
1212044	R1A05M106N-0204	1/8"	1/8-28	1/4-19	8,0	11,0	19,0	28,0
1212055	R1A05M106N-1212	3/4"	3/4-14	3/4-14	17,0	14,5	32,0	46,0

45° adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1212135	R1A05M406Q-0810	1/2"	1/2-14	5/8-14	39,0	50,0	27,0	32,0
1212134	R1A05M406N-0808	1/2"	1/2-14	1/2-14	28,0	38,0	22,0	27,0
1212137	R1A05M406Q-1208	3/4"	3/4-14	1/2-14	32,0	40,0	27,0	27,0
1212136	R1A05M406Q-1008	5/8"	5/8-14	1/2-14	28,0	38,0	22,0	27,0
1212128	R1A05M406Q-0204	1/8"	1/8-28	1/4-19	21,0	28,0	14,0	19,0
1212139	R/A05M406Q-1216	3/4"	3/4-14	1-11	35,0	47,0	33,0	41,0
1212127	R1A05M406Q-0202	1/8"	1/8-28	1/8-28	20,0	26,0	12,0	14,0
1210962	R1A05M406Q-0404	1/4"	1/4-19	1/4-19	21,0	28,0	14,0	19,0
1212138	R1A05M406N-1212	3/4"	3/4-14	3/4-14	32,0	44,0	27,0	36,0
1212129	R/A05M406Q-0406	1/4"	1/4-19	3/8-19	22,0	33,0	17,0	22,0
1212140	R/A05M406Q-1612	1"	1-11	3/4-14	37,0	47,0	33,0	36,0
1212131	R1A05M406N-0606	3/8"	3/8-19	3/8-19	25,0	33,0	17,0	22,0
1212142	R1A05M406Q-1620	1"	1-11	1 1/4-11	39,0	49,0	41,0	50,0
1212130	R/A05M406Q-0604	3/8"	3/8-19	1/4-19	25,0	30,0	17,0	19,0
1212141	R/A05M406Q-1616	1"	1-11	1-11	37,0	47,0	33,0	41,0
1212133	R/A05M406Q-0806	1/2"	1/2-14	3/8-19	26,0	35,0	19,0	22,0
1212144	R/A05M406Q-2424	1 1/2"	1 1/2-11	1 1/2-11	45,0	49,0	48,0	55,0
1212132	R1A05M406N-0608	3/8"	3/8-19	1/2-14	25,5	38,0	19,0	27,0
1212143	R/A05M406Q-2020	1 1/4"	1 1/4-11	1 1/4-11	40,0	49,0	41,0	50,0

Dimensions shown may be changed without prior notice

90° adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210745	R1A05M906N-1616	1"	1-11	1-11	46,0	53,0	33,0	41,0
1210976	R/A05M906Q-2020	1"1/4	1 1/4-11	1 1/4-11	51,0	58,0	41,0	50,0
1207950	R1A05M906N-0808	1/2"	1/2-14	1/2-14	34,0	43,0	22,0	27,0
1210977	R1A05M906N-2424	1"1/2	1 1/2-11	1 1/2-11	59,0	67,0	48,0	55,0
1208136	R1A05M906N-1212	3/4"	3/4-14	3/4-14	41,0	50,0	27,0	36,0
1208135	R1A05M906N-0404	1/4"	1/4-19	1/4-19	27,0	31,5	14,0	19,0
1212201	R1A05M906N-1612	1"	1-11	3/4-14	46,0	52,0	33,0	36,0
1212200	R1A05M906N-1216	3/4"	3/4-14	1-11	43,0	53,0	33,0	41,0
1212202	R1A05M906N-1620	1"	1-11	1 1/4-11	50,0	58,0	41,0	50,0
1212193	R1A05M906N-0406	1/4"	1/4-19	3/8-19	28,0	37,0	17,0	22,0
1212192	R/A05M906Q-0204	1/8"	1/8-28	1/4-19	24,0	31,5	14,0	19,0
1212195	R1A05M906N-0608	3/8"	3/8-19	1/2-14	32,0	43,0	19,0	27,0
1212194	R1A05M906N-0604	3/8"	3/8-19	1/4-19	29,0	35,0	17,0	19,0
1212196	R1A05M906N-0806	1/2"	1/2-14	3/8-19	34,0	40,0	19,0	22,0
1212199	R1A05M906N-1208	3/4"	3/4-14	1/2-14	41,0	46,0	27,0	27,0
1207949	R1A05M906N-0606	3/8"	3/8-19	3/8-19	29,0	37,0	17,0	22,0
1212191	R1A05M906N-0202	1/8"	1/8-28	1/8-28	22,0	27,0	12,0	14,0

Branch Tee adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1210713	R1A05MT06N-0808	1/2"	1/2-14	1/2-14	34,0	43,0	22,0	27,0
1211978	R1A05MT06N-1008	5/8"	5/8-14	1/2-14	37,0	43,0	22,0	27,0
1211979	R/A05MT06Q-1208	3/4"	3/4-14	1/2-14	41,0	46,0	27,0	27,0
1207710	R1A05MT06N-1620	1"	1-11	1 1/4-11	50,0	58,0	41,0	50,0
1210749	R1A05MT06N-0606	3/8"	3/8-19	3/8-19	29,0	37,0	17,0	22,0
1210947	R/A05MT06Q-1616	1"	1-11	1-11	46,0	53,0	33,0	41,0
1210948	R/A05MT06Q-2020	1"1/4	1 1/4-11	1 1/4-11	51,0	58,0	41,0	50,0
1208147	R1A05MT06N-0404	1/4"	1/4-19	1/4-19	27,0	31,5	14,0	19,0
1210949	R/A05MT06Q-2424	1"1/2	1 1/2-11	1 1/2-11	59,0	67,0	48,0	55,0
1211980	R1A05MT06N-1216	3/4"	3/4-14	1-11	43,0	53,0	33,0	41,0
1211981	R1A05MT06N-1612	1"	1-11	3/4-14	46,0	52,0	33,0	36,0
1211971	R1A05MT06N-0202	1/8"	1/8-28	1/8-28	22,0	27,0	12,0	14,0
1210750	R1A05MT06N-1212	3/4"	3/4-14	3/4-14	41,0	50,0	27,0	36,0
1211972	R1A05MT06Q-0204	1/8"	1/8-28	1/4-19	24,0	31,5	14,0	19,0
1211973	R/A05MT06Q-0406	1/4"	1/4-19	3/8-19	28,0	37,0	17,0	22,0
1211974	R/A05MT06Q-0604	3/8"	3/8-19	1/4-19	29,0	35,0	17,0	19,0
1211976	R/A05MT06Q-0806	1/2"	1/2-14	3/8-19	34,0	40,0	19,0	22,0

Run Tee adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring



Item Code	Part Number	OD1	F1	F2	C1	C2	CH	LN
		in			mm	mm	mm	mm
1211911	R1A05ML06N-0406	1/4"	1/4-19	3/8-19	28,0	37,0	17,0	22,0
1210943	R1A05ML06N-1620	1"	1-11	1 1/4-11	50,0	58,0	41,0	50,0
1210746	R1A05ML06N-0404	1/4"	1/4-19	1/4-19	27,0	31,5	14,0	19,0
1211912	R1A05ML06N-0604	3/8"	3/8-19	1/4-19	29,0	35,0	17,0	19,0
1210944	R/A05ML06Q-2020	1"1/4	1 1/4-11	1 1/4-11	51,0	58,0	41,0	50,0
1211913	R1A05ML06N-0608	3/8"	3/8-19	1/2-14	32,0	43,0	19,0	27,0
1210945	R1A05ML06N-2424	1"1/2	1 1/2-11	1 1/2-11	59,0	67,0	48,0	55,0
1211914	R1A05ML06N-0806	1/2"	1/2-14	3/8-19	34,0	40,0	19,0	22,0
1210715	R1A05ML06N-1212	3/4"	3/4-14	3/4-14	41,0	50,0	27,0	36,0
1211915	R1A05ML06N-0810	1/2"	1/2-14	5/8-14	39,0	50,0	27,0	32,0
1211916	R1A05ML06N-1008	5/8"	5/8-14	1/2-14	37,0	43,0	22,0	27,0
1211917	R1A05ML06N-1208	3/4"	3/4-14	1/2-14	41,0	46,0	27,0	27,0
1211918	R1A05ML06N-1216	3/4"	3/4-14	1-11	43,0	53,0	33,0	41,0
1208141	R1A05ML06N-0808	1/2"	1/2-14	1/2-14	34,0	43,0	22,0	27,0
1208140	R1A05ML06N-0606	3/8"	3/8-19	3/8-19	29,0	37,0	17,0	22,0
1211910	R1A05ML06N-0204	1/8"	1/8-28	1/4-19	24,0	31,5	14,0	19,0
1210942	R/A05ML06Q-1616	1"	1-11	1-11	46,0	53,0	33,0	41,0
1211919	R1A05ML06N-1612	1"	1-11	3/4-14	46,0	52,0	33,0	36,0
1211909	R1A05ML06N-0202	1/8"	1/8-28	1/8-28	22,0	27,0	12,0	14,0

Dimensions shown may be changed without prior notice

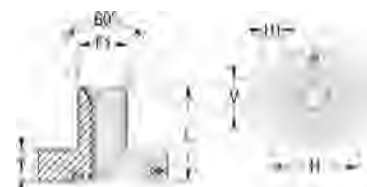
// FLANGES

Straight flange SAE J518 code 61 - BSP - Low pressure



Item Code	Part Number	OD1	F1	Flange Size	L	T	H	V	H1
		in			mm	mm	mm	mm	mm
1212083	R1A05M133W-0812	1/2"	1/2-14	3/4	42,0	15,0	47,6	22,2	11,0
1212082	R1A05M133W-0808	1/2"	1/2-14	1/2	39,0	14,0	38,1	17,5	9,0
1212093	R1A05M133W-2424	1" 1/2	1 1/2-11	1 1/2	61,0	24,0	69,9	35,7	13,5
1212085	R1A05M133W-1212	3/4"	3/4-14	3/4	45,0	15,0	47,6	22,2	11,0
1212084	R1A05M133W-1208	3/4"	3/4-14	1/2	42,0	14,0	38,1	17,5	9,0
1212087	R1A05M133W-1612	1"	1-11	3/4	47,0	15,0	47,6	22,2	11,0
1212086	R1A05M133W-1216	3/4"	3/4-14	1	47,0	17,0	52,4	26,2	11,0
1212089	R1A05M133W-2016	1" 1/4	1 1/4-11	1	49,0	17,0	52,4	26,2	11,0
1212088	R1A05M133W-1616	1"	1-11	1	53,0	21,0	58,7	30,2	11,5
1212090	R1A05M133W-2020	1" 1/4	1 1/4-11	1 1/4	53,0	21,0	58,7	30,2	11,5
1212081	R1A05M133W-0608	3/8"	3/8-19	1/2	37,0	14,0	38,1	17,5	9,0
1212092	R1A05M133W-2420	1" 1/2	1 1/2-11	1 1/4	55,0	21,0	58,7	30,2	11,5
1212091	R1A05M133W-2024	1" 1/4	1 1/4-11	1 1/2	59,0	24,0	69,9	35,7	13,5

Straight flange SAE J518 code 62 - BSP - High pressure



Item Code	Part Number	OD1	F1	Flange Size	L	T	H	V	H1
		in			mm	mm	mm	mm	mm
1212102	R1A05M136W-1620	1"	1-11	1 1/4	53,0	21,0	58,7	30,2	11,5
1212101	R1A05M136W-1616	1"	1-11	1	49,0	17,0	52,4	26,2	11,0
1212104	R1A05M136W-2020	1" 1/4	1 1/4-11	1 1/4	53,0	21,0	58,7	30,2	11,5
1212103	R1A05M136W-2016	1" 1/4	1 1/4-11	1	49,0	17,0	52,4	26,2	11,0
1212106	R1A05M136W-2420	1" 1/2	1 1/2-11	1 1/4	55,0	21,0	58,7	30,2	11,5
1212105	R1A05M136W-2024	1" 1/4	1 1/4-11	1 1/2	59,0	24,0	69,9	35,7	13,5
1212107	R1A05M136W-2424	1" 1/2	1 1/2-11	1 1/2	61,0	24,0	69,9	35,7	13,5
1212094	R1A05M136W-0608	3/8"	3/8-19	1/2	37,0	14,0	38,1	17,5	9,0
1212096	R1A05M136W-0812	1/2"	1/2-14	3/4	42,0	15,0	47,6	22,2	11,0
1212095	R1A05M136W-0808	1/2"	1/2-14	1/2	39,0	14,0	38,1	17,5	9,0
1212098	R1A05M136W-1212	3/4"	3/4-14	3/4	45,0	15,0	47,6	22,2	11,0
1212097	R1A05M136W-1208	3/4"	3/4-14	1/2	42,0	14,0	38,1	17,5	9,0
1212100	R1A05M136W-1612	1"	1-11	3/4	47,0	15,0	47,6	22,2	11,0
1212099	R1A05M136W-1216	3/4"	3/4-14	1	47,0	17,0	52,4	26,2	11,0

90° flange SAE J518 code 61 - BSP - Low pressure

Item Code	Part Number	OD1	F1	Flange size	C1	T	H	V	H1
	Part Number	in			mm	mm	mm	mm	mm
1212256	R1A05M933W-1212	3/4"	3/4-14	3/4	44,0	20,0	47,6	22,2	11,0
1212255	R1A05M933W-1208	3/4"	3/4-14	1/2	40,0	20,0	38,1	17,5	9,0
1212258	R1A05M933W-1612	1"	1-11	3/4	45,0	25,0	47,6	22,2	11,0
1212257	R1A05M933W-1216	3/4"	3/4-14	1	47,0	20,0	52,4	26,2	11,0
1212259	R1A05M933W-1616	1"	1-11	1	48,0	25,0	52,4	26,2	11,0
1212261	R1A05M933W-2016	1"1/4	1 1/4-11	1	49,0	31,0	52,4	26,2	11,0
1212260	R1A05M933W-1620	1"	1-11	1 1/4	54,0	25,0	58,7	30,2	11,5
1212252	R1A05M933W-0608	3/8"	3/8-19	1/2	37,0	17,0	38,1	17,5	9,0
1212263	R1A05M933W-2024	1"1/4	1 1/4-11	1 1/2	59,0	31,0	69,9	35,7	13,5
1212262	R1A05M933W-2020	1"1/4	1 1/4-11	1 1/4	55,0	31,0	58,7	30,2	11,5
1212254	R1A05M933W-0812	1/2"	1/2-14	3/4	41,0	20,0	47,6	22,2	11,0
1212265	R1A05M933W-2424	1"1/2	1 1/2-11	1 1/2	61,0	37,0	69,9	35,7	13,5
1212253	R1A05M933W-0808	1/2"	1/2-14	1/2	39,0	17,0	38,1	17,5	9,0
1212264	R1A05M933W-2420	1"1/2	1 1/2-11	1 1/4	56,0	37,0	58,7	30,2	11,5

90° flange SAE J518 code 62 - BSP - High pressure

Item Code	Part Number	OD1	F1	Flange size	C1	T	H	V	H1
	Part Number	in			mm	mm	mm	mm	mm
1212278	R1A05M936W-0608	3/8"	3/8-19	1/2	37,0	17,0	38,1	17,5	9,0
1212289	R1A05M936W-2024	1"1/4	1 1/4-11	1 1/2	59,0	31,0	69,9	35,7	13,5
1212288	R1A05M936W-2020	1"1/4	1 1/4-11	1 1/4	55,0	31,0	58,7	30,2	11,5
1212279	R1A05M936W-0808	1/2"	1/2-14	1/2	39,0	17,0	38,1	17,5	9,0
1212281	R1A05M936W-1208	3/4"	3/4-14	1/2	40,0	20,0	38,1	17,5	9,0
1212280	R1A05M936W-0812	1/2"	1/2-14	3/4	41,0	20,0	47,6	22,2	11,0
1212291	R1A05M936W-2424	1"1/2	1 1/2-11	1 1/2	61,0	37,0	69,9	35,7	13,5
1212283	R1A05M936W-1216	3/4"	3/4-14	1	47,0	20,0	52,4	26,2	11,0
1212282	R1A05M936W-1212	3/4"	3/4-14	3/4	44,0	20,0	47,6	22,2	11,0
1212285	R1A05M936W-1616	1"	1-11	1	48,0	25,0	52,4	26,2	11,0
1212284	R1A05M936W-1612	1"	1-11	3/4	45,0	25,0	47,6	22,2	11,0
1212287	R1A05M936W-2016	1"1/4	1 1/4-11	1	49,0	31,0	52,4	26,2	11,0
1212286	R1A05M936W-1620	1"	1-11	1 1/4	54,0	25,0	58,7	30,2	11,5
1212290	R1A05M936W-2420	1"1/2	1 1/2-11	1 1/4	56,0	37,0	58,7	30,2	11,5

Dimensions shown may be changed without prior notice

90° adjustable flange SAE J518 code 61 - BSP - Low pressure

Item Code	Part Number	OD1	F1	Flange size	C1	C2	FD	CH
		in			mm	mm	mm	mm
1212267	R1A05M9334-0808	1/2"	1/2-14	1/2	48,0	42,0	30,2	22,0
1212266	R1A05M9334-0608	3/8"	3/8-19	1/2	44,0	50,0	30,2	22,0
1212277	R1A05M9334-2424	1"1/2	1 1/2-11	1 1/2	66,0	78,0	60,3	50,0
1212269	R1A05M9334-1212	3/4"	3/4-14	3/4	53,0	64,0	38,1	27,0
1212268	R1A05M9334-0812	1/2"	1/2-14	3/4	53,0	64,0	38,1	22,0
1212270	R1A05M9334-1216	3/4"	3/4-14	1	60,0	65,0	44,5	27,0
1212272	R1A05M9334-1616	1"	1-11	1	60,0	65,0	44,5	34,0
1212271	R1A05M9334-1612	1"	1-11	3/4	53,0	64,0	38,1	34,0
1212274	R1A05M9334-2016	1"1/4	1 1/4-11	1	60,0	65,0	44,5	42,0
1212273	R1A05M9334-1620	1"	1-11	1 1/4	55,0	64,0	50,8	34,0
1212276	R1A05M9334-2024	1"1/4	1 1/4-11	1 1/2	66,0	78,0	60,3	42,0
1212275	R1A05M9334-2020	1"1/4	1 1/4-11	1 1/4	55,0	64,0	50,8	42,0

90° adjustable flange SAE J518 code 62 - BSP - High pressure

Item Code	Part Number	OD1	F1	Flange size	C1	C2	FD	CH
		in			mm	mm	mm	mm
1212300	R1A05M9364-2016	1"1/4	1 1/4-11	1	72,0	70,0	47,6	41,0
1212299	R1A05M9364-1620	1"	1-11	1 1/4	70,0	72,0	54,0	34,0
1212302	R1A05M9364-2024	1"1/4	1 1/4-11	1 1/2	80,0	84,0	63,5	42,0
1212301	R1A05M9364-2020	1"1/4	1 1/4-11	1 1/4	70,0	72,0	54,0	42,0
1212303	R1A05M9364-2424	1"1/2	1 1/2-11	1 1/2	80,0	84,0	63,5	50,0
1212292	R1A05M9364-0608	3/8"	3/8-19	1/2	44,0	50,0	31,8	22,0
1212294	R1A05M9364-0812	1/2"	1/2-14	3/4	53,0	64,0	41,3	22,0
1212293	R1A05M9364-0808	1/2"	1/2-14	1/2	49,0	43,0	31,8	22,0
1212296	R1A05M9364-1216	3/4"	3/4-14	1	60,0	62,0	47,6	27,0
1212295	R1A05M9364-1212	3/4"	3/4-14	3/4	53,0	64,0	41,3	27,0
1212298	R1A05M9364-1616	1"	1-11	1	60,0	62,0	47,6	34,0
1212297	R1A05M9364-1612	1"	1-11	3/4	59,5	54,5	41,3	30,0

// PLUG**Cap BSP 60° Female**

Item Code	Part Number	OD1	F1	CH	L
		in		mm	mm
1210712	R1A0531000-2400	1"1/2	1 1/2-11	55,0	38,0
1207694	R1A0531000-1200	3/4"	3/4-14	32,0	21,5
1207693	R1A0531000-1000	5/8"	5/8-14	27,0	26,0
1207696	R1A0531000-2000	1"1/4	1 1/4-11	50,0	32,0
1207695	R1A0531000-1600	1"	1-11	38,0	32,0
1207690	R1A0531000-0400	1/4"	1/4-19	19,0	19,0
1207692	R1A0531000-0800	1/2"	1/2-14	27,0	23,3
1207691	R1A0531000-0600	3/8"	3/8-19	22,0	21,0

Plug BSP 60° Male

Item Code	Part Number	OD1	F1	CH	L
		in		mm	mm
1207665	R1A05M1000-0800	1/2"	1/2-14	27,0	24,0
1207664	R1A05M1000-0600	3/8"	3/8-19	22,0	20,5
1207667	R1A05M1000-1600	1"	1-11	41,0	30,0
1207666	R1A05M1000-1200	3/4"	3/4-14	32,0	26,5
1207663	R1A05M1000-0400	1/4"	1/4-19	19,0	19,0
1207662	R1A05M1000-0200	1/8"	1/8-28	14,0	14,5
1207669	R1A05M1000-2400	1"1/2	1 1/2-11	55,0	43,0
1207668	R1A05M1000-2000	1"1/4	1 1/4-11	50,0	39,0
1210952	R1A05M1000-1000	5/8"	5/8-14	30,0	24,0



// DIN 24° ADAPTERS

// ACCESSORIES.....	222
// MALE UNION.....	225
// MALE / FEMALE UNION.....	229
// BULKHEAD.....	240
// METRIC.....	242

// BSPP.....	254
// BSPT.....	266
// BUTT WELD.....	271
// PLUG.....	273

// ACCESSORIES

Nut DIN 24° - Light series



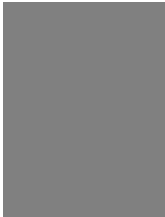
Item Code	Item Code	OD1	F1	CH	L
		mm		mm	mm
1240839	RXA11D0000-0600	6	M12X1.5	14,0	14,50
1240840	RXA11D0000-0800	8	M14X1.5	17,0	14,50
1240843	RXA11D0000-1500	15	M22X1.5	27,0	17,00
1240844	RXA11D0000-1800	18	M26X1.5	32,0	18,00
1240841	RXA11D0000-1000	10	M16X1.5	19,0	15,50
1240842	RXA11D0000-1200	12	M18X1.5	22,0	15,50
1240847	RXA11D0000-3500	35	M45X2	50,0	24,00
1240848	RXA11D0000-4200	42	M52X2	60,0	24,00
1240845	RXA11D0000-2200	22	M30X2	36,0	20,00
1240846	RXA11D0000-2800	28	M36X2	41,0	21,00

Nut DIN 24° - Heavy series



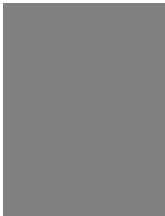
Item Code	Item Code	OD1	F1	CH	L
		mm		mm	mm
1235329	RXA12D0000-1600	16	M24X1.5	30,0	20,50
1240849	RXA12D0000-0600	6	M14X1.5	17,0	16,50
1240850	RXA12D0000-0800	8	M16X1.5	19,0	16,50
1240851	RXA12D0000-1000	10	M18X1.5	22,0	17,50
1246446	RXA12D0000-1400	14	M22X1.5	27,0	20,50
1237301	RXA12D0000-2000	20	M30X2	36,0	24,00
1240854	RXA12D0000-3000	30	M42X2	50,0	29,00
1240855	RXA12D0000-3800	38	M52X2	60,0	32,50
1240852	RXA12D0000-1200	12	M20X1.5	24,0	17,50
1240853	RXA12D0000-2500	25	M36X2	46,0	27,00

Dimensions shown may be changed without prior notice

Double cutting ring DIN 24° - Light series


Item Code	Part Number	OD1	L
		mm	mm
1204121	R1A11R0000-1800	18	10,5
1204125	R1A11R0000-2200	22	11,0
1204136	R1A11R0000-4200	42	13,5
1204113	R1A11R0000-1200	12	10,0
1204133	R1A11R0000-3500	35	13,5
1204118	R1A11R0000-1500	15	10,0
1204129	R1A11R0000-2800	28	11,0
1204139	R1A11R0000-0800	8	9,5
1204137	R1A11R0000-0600	6	9,5
1204109	R1A11R0000-1000	10	10,0

Codes from 6 to 12mm also Heavy Series

Double cutting ring DIN 24° - Heavy series


Item Code	Part Number	OD1	L
		mm	mm
1204120	R1A12R0000-1600	16	10,5
1204131	R1A12R0000-3000	30	13,5
1204124	R1A12R0000-2000	20	13,0
1204135	R1A12R0000-3800	38	13,5
1204117	R1A12R0000-1400	14	10,0
1204128	R1A12R0000-2500	25	13,0

Codes from 6 to 12mm same as Light Series ones

Double cutting ring with tight sealing DIN 24° - Light series DIN 2353



Item Code	Head	OD1	L
	Dash	in	mm
1244467	-0600	6	9,0
1239498	-0800	8	8,0
1244468	-1000	10	9,3
1237046	-1200	12	9,5
1241104	-1500	15	9,5
1241106	-1800	18	9,5
1237047	-2200	22	11,5
1237048	-2800	28	11,5
1241110	-3500	35	13,0
1244469	-4200	42	13,0

Codes from 6 to 12mm also Heavy Series

Double cutting ring with tight sealing DIN 24° - Heavy series DIN 2353



Item Code	Head	OD1	L
	Dash	in	mm
1244470	-1400	14	10,0
1239871	-1600	16	10,0
1239870	-2000	20	13,0
1237071	-2500	25	13,3
1241138	-3000	30	14,0
1244471	-3800	38	14,0

Codes from 6 to 12mm same as Light Series ones

Dimensions shown may be changed without prior notice

// MALE UNION

Straight union DIN 24° Male - Light series

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	CH mm	CH1 mm	L mm	L1 mm
1205541	1242417	R1A11M111M-2222	22	20,0	32,0	36,0	52,0	35,0
1205544	1240805	R1A11M111M-0606	6	10,0	12,0	14,0	39,0	24,0
1204234	1241077	R1A11M111M-1515	15	16,0	24,0	27,0	46,0	30,0
1205708	1243785	R1A11M111M-2828	28	21,0	41,0	41,0	54,0	36,0
1204233	1240808	R1A11M111M-1212	12	14,0	19,0	22,0	43,0	28,0
1205709	1243786	R1A11M111M-3535	35	20,0	46,0	50,0	63,0	41,0
1205538	1243784	R1A11M111M-1818	18	16,0	27,0	32,0	48,0	31,0
1205710	1241080	R1A11M111M-4242	42	21,0	55,0	60,0	66,0	43,0
1205546	1240806	R1A11M111M-0808	8	11,0	14,0	17,0	40,0	25,0
1205537	1240807	R1A11M111M-1010	10	13,0	17,0	19,0	42,0	27,0

Straight union DIN 24° Male - Heavy series

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	CH mm	CH1 mm	L mm	L1 mm
1205542	1241125	R1A12M112M-2525	25	26,0	41,0	46,0	74,0	50,0
1205543	1244133	R1A12M112M-3030	30	27,0	46,0	50,0	80,0	54,0
1205687	1244128	R1A12M112M-0808	8	18,0	17,0	19,0	47,0	32,0
1205691	1244132	R1A12M112M-1616	16	21,0	27,0	30,0	57,0	38,0
1205539	1241122	R1A12M112M-2020	20	23,0	32,0	36,0	66,0	44,0
1206097	1244127	R1A12M112M-0606	6	16,0	14,0	17,0	45,0	30,0
1205690	1244131	R1A12M112M-1414	14	22,0	24,0	27,0	57,0	38,0
1205688	1244129	R1A12M112M-1010	10	17,0	19,0	22,0	49,0	32,0
1205689	1244130	R1A12M112M-1212	12	19,0	22,0	24,0	51,0	34,0
1205711	1244134	R1A12M112M-3838	38	29,0	55,0	60,0	90,0	61,0

90° union DIN 24° Male - Light series

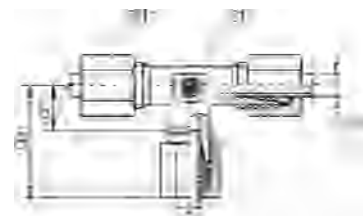
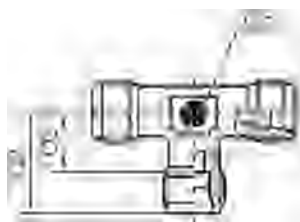
Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	Q1	Q2	Q3	CH	CH1
			mm	mm	mm	mm	mm	mm
1205695	1243864	R1A11M911M-1818	18	40,0	23,5	31,0	24,0	32,0
1205696	1243865	R1A11M911M-2222	22	44,0	27,5	35,0	27,0	36,0
1204064	1243863	R1A11M911M-1515	15	36,0	21,0	28,0	19,0	27,0
1205697	1243866	R1A11M911M-2828	28	47,0	30,5	38,0	36,0	41,0
1205707	1243867	R1A11M911M-3535	35	56,0	34,5	45,0	41,0	50,0
1206043	1243868	R1A11M911M-4242	42	63,0	40,0	51,0	50,0	60,0
1205692	1243861	R1A11M911M-0606	6	27,0	12,0	19,0	12,0	14,0
1205693	1241534	R1A11M911M-0808	8	29,0	14,0	21,0	12,0	17,0
1205694	1240812	R1A11M911M-1010	10	30,0	15,0	22,0	14,0	19,0
1204062	1243862	R1A11M911M-1212	12	32,0	17,0	24,0	17,0	22,0

90° union DIN 24° Male - Heavy series

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	Q1	Q2	Q3	CH	CH1
			mm	mm	mm	mm	mm	mm
1205698	1244224	R1A12M912M-0606	6	31,0	16,0	23,0	12,0	17,0
1242137	1205705	R1A12M912M-2525	25	54,0	30,0	42,0	36,0	46,0
1205703	1244229	R1A12M912M-1616	16	43,0	24,5	33,0	24,0	30,0
1205704	1244230	R1A12M912M-2020	20	48,0	26,5	37,0	27,0	36,0
1205706	1244231	R1A12M912M-3030	30	62,0	35,5	49,0	41,0	50,0
1207042	1244232	R1A12M912M-3838	38	72,0	41,0	57,0	50,0	60,0
1205699	1244225	R1A12M912M-0808	8	32,0	17,0	24,0	14,0	19,0
1205700	1244226	R1A12M912M-1010	10	34,0	17,5	25,0	17,0	22,0
1205701	1244227	R1A12M912M-1212	12	38,0	21,5	29,0	17,0	24,0
1205702	1244228	R1A12M912M-1414	14	40,0	22,0	30,0	19,0	27,0

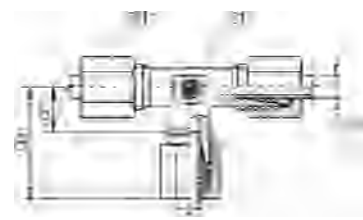
Dimensions shown may be changed without prior notice

Branch Tee union DIN 24° Male - Light series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	Q2 mm	Q3 mm	CH mm	CH1 mm
1204217	1242245	R1A11MT11M-1515	15	36,0	21,0	28,0	19,0	27,0
1205714	1243983	R1A11MT11M-2828	28	47,0	30,5	38,0	36,0	41,0
1204216	1241099	R1A11MT11M-1212	12	32,0	17,0	24,0	17,0	22,0
1205715	1243984	R1A11MT11M-3535	35	56,0	34,5	45,0	41,0	50,0
1204215	1240814	R1A11MT11M-1010	10	30,0	15,0	22,0	14,0	19,0
1206042	1243985	R1A11MT11M-4242	42	63,0	40,0	51,0	50,0	60,0
1204219	1240813	R1A11MT11M-0808	8	29,0	14,0	21,0	12,0	17,0
1205712	1243981	R1A11MT11M-1818	18	40,0	23,5	31,0	24,0	32,0
1204218	1241542	R1A11MT11M-0606	6	27,0	12,0	19,0	12,0	14,0
1205713	1243982	R1A11MT11M-2222	22	44,0	27,5	35,0	27,0	36,0

Branch Tee union DIN 24° Male - Heavy series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	Q2 mm	Q3 mm	CH mm	CH1 mm
1205720	1244354	R1A12MT12M-1414	14	40,0	22,0	30,0	19,0	27,0
1205718	1244352	R1A12MT12M-1010	10	34,0	17,5	25,0	17,0	22,0
1205719	1244353	R1A12MT12M-1212	12	38,0	21,5	29,0	17,0	24,0
1205616	1244355	R1A12MT12M-1616	16	43,0	24,5	33,0	24,0	30,0
1205716	1244350	R1A12MT12M-0606	6	31,0	16,0	23,0	12,0	17,0
1205717	1244351	R1A12MT12M-0808	8	32,0	17,0	24,0	14,0	19,0
1205721	1244356	R1A12MT12M-2020	20	48,0	26,5	37,0	27,0	36,0
1205722	1244357	R1A12MT12M-2525	25	54,0	30,0	42,0	36,0	46,0
1205723	1244358	R1A12MT12M-3030	30	62,0	35,5	49,0	41,0	50,0
1205724	1244359	R1A12MT12M-3838	38	72,0	41,0	57,0	50,0	60,0

Cross union DIN 24° Male - Light series

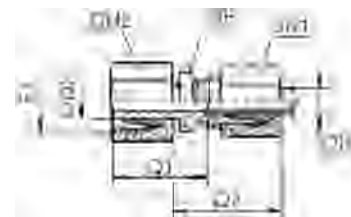
Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	Q1	Q2	Q3	CH	CH1
			mm	mm	mm	mm	mm	mm
1205730	1244010	R1A11MX11M-2222	22	44,0	27,5	35,0	27,0	36,0
1211083	1244011	R1A11MX11M-2828	28	47,0	30,5	38,0	36,0	41,0
1211084	1244012	R1A11MX11M-3535	35	56,0	34,5	45,0	41,0	50,0
1205729	1244009	R1A11MX11M-1818	18	40,0	23,5	31,0	24,0	32,0
1211085	1244013	R1A11MX11M-4242	42	63,0	40,0	51,0	50,0	60,0
1205725	1244005	R1A11MX11M-0606	6	27,0	12,0	19,0	12,0	14,0
1205726	1244006	R1A11MX11M-0808	8	29,0	14,0	21,0	12,0	17,0
1205727	1242918	R1A11MX11M-1010	10	30,0	15,0	22,0	14,0	19,0
1205728	1244008	R1A11MX11M-1515	15	36,0	21,0	28,0	19,0	27,0
1205755	1244007	R1A11MX11M-1212	12	32,0	17,0	24,0	17,0	22,0

Cross union DIN 24° Male - Heavy series

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	Q1	Q2	Q3	CH	CH1
			mm	mm	mm	mm	mm	mm
1208138	1244387	R1A12MX12M-3030	30	62,0	35,5	49,0	41,0	50,0
1206356	1244380	R1A12MX12M-0808	8	32,0	17,0	24,0	14,0	19,0
1206241	1244383	R1A12MX12M-1414	14	40,0	22,0	30,0	19,0	27,0
1206571	1244386	R1A12MX12M-2525	25	54,0	30,0	42,0	36,0	46,0
1206242	1244384	R1A12MX12M-1616	16	43,0	24,5	33,0	24,0	30,0
1211263	1244388	R1A12MX12M-3838	38	72,0	41,0	57,0	50,0	60,0
1206376	1244379	R1A12MX12M-0606	6	31,0	16,0	23,0	12,0	17,0
1206308	1244381	R1A12MX12M-1010	10	34,0	17,5	25,0	17,0	22,0
1206570	1244385	R1A12MX12M-2020	20	48,0	26,5	37,0	27,0	36,0
1206128	1244382	R1A12MX12M-1212	12	38,0	21,5	29,0	17,0	24,0

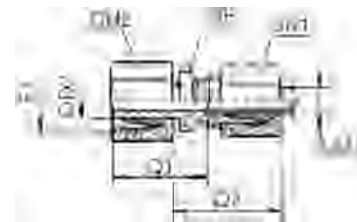
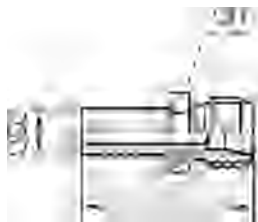
Dimensions shown may be changed without prior notice

// MALE / FEMALE UNION

Reducers DIN 24° pre-assembled -
Light series

Item Code	Part Number	OD1	OD2	F1	Q1	Q2	L1	CH	CH1	CH2
		mm	mm		mm	mm	mm	mm	mm	mm
1205630	R1A11M1113-1218	12	18	M18X1.5	32,0	30,0	39,0	19,0	22,0	32,0
1205631	R1A11M1113-1518	15	18	M22X1.5	32,5	32,0	39,5	24,0	27,0	32,0
1205632	R1A11M1113-1222	12	22	M18X1.5	35,0	33,0	42,0	24,0	22,0	36,0
1206562	R1A11M1113-1022	10	22	M16X1.5	35,0	33,0	42,0	24,0	19,0	36,0
1211000	R1A11M1113-0835	8	35	M14X1.5	40,5	34,0	47,5	36,0	17,0	50,0
1207827	R1A11M1113-1028	10	28	M16X1.5	36,0	34,0	43,0	32,0	19,0	41,0
1205626	R1A11M1113-1215	12	15	M18X1.5	31,0	30,0	38,0	19,0	22,0	27,0
1205627	R1A11M1113-0618	6	18	M12X1.5	30,5	29,0	37,5	19,0	14,0	32,0
1207826	R1A11M1113-0828	8	28	M14X1.5	34,5	33,0	41,5	32,0	17,0	41,0
1205628	R1A11M1113-0818	8	18	M14X1.5	30,5	29,0	37,5	19,0	17,0	32,0
1205629	R1A11M1113-1018	10	18	M16X1.5	32,0	30,0	39,0	19,0	19,0	32,0
1207828	R1A11M1113-1842	18	42	M26X1.5	44,0	38,0	51,5	46,0	32,0	60,0
1205622	R1A11M1113-0608	6	8	M12X1.5	29,5	30,0	36,5	14,0	14,0	17,0
1205623	R1A11M1113-0610	6	10	M12X1.5	29,5	30,0	36,5	14,0	14,0	19,0
1207825	R1A11M1113-0628	6	28	M12X1.5	34,5	33,0	41,5	32,0	14,0	41,0
1205624	R1A11M1113-0810	8	10	M14X1.5	29,5	30,0	36,5	17,0	17,0	19,0
1207824	R1A11M1113-0622	6	22	M12X1.5	33,5	32,0	40,5	24,0	14,0	36,0
1205625	R1A11M1113-1015	10	15	M16X1.5	31,0	30,0	38,0	17,0	19,0	27,0
1205640	R1A11M1113-2835	28	35	M36X2	44,0	39,0	51,5	41,0	41,0	50,0
1210999	R1A11M1113-0635	6	35	M12X1.5	40,5	34,0	47,5	36,0	14,0	50,0
1205641	R1A11M1113-2242	22	42	M30X2	46,0	40,0	53,5	46,0	36,0	60,0
1205620	R1A11M1113-0815	8	15	M14X1.5	29,5	29,0	36,5	17,0	17,0	27,0
1205621	R1A11M1113-0615	6	15	M12X1.5	29,5	29,0	36,5	17,0	14,0	27,0
1211001	R1A11M1113-1035	10	35	M16X1.5	42,0	35,0	49,0	36,0	19,0	50,0
1211002	R1A11M1113-1235	12	35	M18X1.5	42,0	35,0	49,0	36,0	22,0	50,0
1211003	R1A11M1113-1535	15	35	M22X1.5	42,5	36,0	49,5	36,0	27,0	50,0
1208154	R1A11M1113-1835	18	35	M26X1.5	42,0	37,0	49,5	36,0	32,0	50,0
1211004	R1A11M1113-1042	10	42	M16X1.5	44,0	36,0	51,0	46,0	19,0	60,0
1211005	R1A11M1113-1242	12	42	M18X1.5	43,0	36,0	50,0	46,0	22,0	60,0
1211006	R1A11M1113-1542	15	42	M22X1.5	44,5	37,0	51,5	46,0	27,0	60,0
1205619	R1A11M1113-1012	10	12	M16X1.5	31,0	31,0	38,0	17,0	19,0	22,0
1205637	R1A11M1113-1828	18	28	M26X1.5	36,0	36,0	43,5	32,0	32,0	41,0
1205638	R1A11M1113-2228	22	28	M30X2	36,0	38,0	43,5	32,0	36,0	41,0
1205617	R1A11M1113-0612	6	12	M12X1.5	29,5	30,0	36,5	14,0	14,0	22,0
1205639	R1A11M1113-2235	22	35	M30X2	44,0	39,0	51,5	36,0	36,0	50,0
1205618	R1A11M1113-0812	8	12	M14X1.5	29,5	30,0	36,5	17,0	17,0	22,0
1206843	R1A11M1113-0822	8	22	M14X1.5	33,5	32,0	40,5	24,0	17,0	36,0
1205633	R1A11M1113-1522	15	22	M22X1.5	35,5	35,0	42,5	24,0	27,0	36,0
1205634	R1A11M1113-1822	18	22	M26X1.5	35,0	35,0	42,5	27,0	32,0	36,0
1205635	R1A11M1113-1228	12	28	M18X1.5	36,0	34,0	43,0	32,0	22,0	41,0
1205636	R1A11M1113-1528	15	28	M22X1.5	36,5	35,0	43,5	32,0	27,0	41,0

Reducers DIN 24° pre-assembled - Heavy series



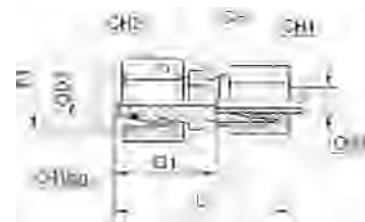
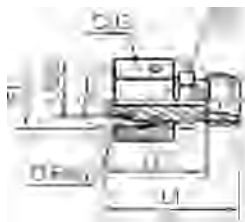
Item Code	Part Number	OD1	OD2	F1	Q1	Q2	L1	CH	CH1	CH2
		mm	mm		mm	mm	mm	mm	mm	mm
1205651	R1A12M1123-1014	10	14	M18X1.5	36,5	35,0	44,0	19,0	22,0	27,0
1206884	R1A12M1123-0825	8	25	M16X1.5	47,0	38,0	54,0	27,0	19,0	46,0
1205652	R1A12M1123-1214	12	14	M20X1.5	36,5	35,0	44,0	22,0	24,0	27,0
1205653	R1A12M1123-0816	8	16	M16X1.5	37,0	34,0	44,0	17,0	19,0	30,0
1205654	R1A12M1123-1016	10	16	M18X1.5	36,5	35,0	44,0	19,0	22,0	30,0
1206340	R1A12M1123-0616	6	16	M14X1.5	37,0	34,0	44,0	17,0	17,0	30,0
1206362	R1A12M1123-0820	8	20	M16X1.5	43,0	36,0	50,0	22,0	19,0	36,0
1205650	R1A12M1123-0814	8	14	M16X1.5	37,0	34,0	44,0	17,0	19,0	27,0
1205653	R1A12M1123-1230	12	30	M20X1.5	48,5	38,0	56,0	32,0	24,0	50,0
1205648	R1A12M1123-0812	8	12	M16X1.5	33,0	32,0	40,0	17,0	19,0	24,0
1205649	R1A12M1123-1012	10	12	M18X1.5	32,5	33,0	40,0	19,0	22,0	24,0
1205644	R1A12M1123-0608	6	8	M14X1.5	31,0	31,0	39,0	17,0	17,0	19,0
1205666	R1A12M1123-2030	20	30	M30X2	49,5	45,0	60,0	32,0	36,0	50,0
1205645	R1A12M1123-0610	6	10	M14X1.5	32,0	31,0	39,0	17,0	17,0	22,0
1206338	R1A12M1123-0614	6	14	M14X1.5	37,0	34,0	44,0	17,0	17,0	27,0
1205667	R1A12M1123-2530	25	30	M36X2	50,0	48,0	62,0	41,0	46,0	50,0
1205646	R1A12M1123-0810	8	10	M16X1.5	32,0	31,0	39,0	17,0	19,0	22,0
1206339	R1A12M1123-1425	14	25	M22X1.5	48,0	42,0	56,0	27,0	27,0	46,0
1205668	R1A12M1123-2038	20	38	M30X2	56,5	46,0	67,0	41,0	36,0	60,0
1205647	R1A12M1123-0612	6	12	M14X1.5	33,0	32,0	40,0	17,0	17,0	24,0
1205669	R1A12M1123-2538	25	38	M36X2	57,0	49,0	69,0	41,0	46,0	60,0
1205662	R1A12M1123-1225	12	25	M20X1.5	46,5	39,0	54,0	27,0	24,0	46,0
1205663	R1A12M1123-1625	16	25	M24X1.5	47,5	42,0	56,0	27,0	30,0	46,0
1205664	R1A12M1123-2025	20	25	M30X2	47,5	45,0	58,0	32,0	36,0	46,0
1205665	R1A12M1123-1630	16	30	M24X1.5	49,5	41,0	58,0	32,0	30,0	50,0
1205660	R1A12M1123-1620	16	20	M24X1.5	43,5	40,0	52,0	27,0	30,0	36,0
1205661	R1A12M1123-1025	10	25	M18X1.5	46,5	39,0	54,0	27,0	22,0	46,0
1211188	R1A12M1123-0625	6	25	M14X1.5	47,0	38,0	54,0	27,0	17,0	46,0
1211189	R1A12M1123-0630	6	30	M14X1.5	49,0	37,0	56,0	32,0	17,0	50,0
1211191	R1A12M1123-1030	10	30	M18X1.5	48,5	38,0	56,0	32,0	22,0	50,0
1211195	R1A12M1123-1438	14	38	M22X1.5	57,0	42,0	65,0	41,0	27,0	60,0
1205659	R1A12M1123-1420	14	20	M22X1.5	44,0	40,0	52,0	24,0	27,0	36,0
1205656	R1A12M1123-1416	14	16	M22X1.5	38,0	38,0	46,0	24,0	27,0	30,0
1205657	R1A12M1123-1020	10	20	M18X1.5	42,5	37,0	50,0	22,0	22,0	36,0
1207858	R1A12M1123-1638	16	38	M24X1.5	56,5	42,0	65,0	41,0	30,0	60,0
1207857	R1A12M1123-0620	6	20	M14X1.5	43,0	36,0	50,0	22,0	17,0	36,0
1211190	R1A12M1123-0830	8	30	M16X1.5	49,0	37,0	56,0	32,0	19,0	50,0
1205658	R1A12M1123-1220	12	20	M20X1.5	42,5	37,0	50,0	22,0	24,0	36,0
1206846	R1A12M1123-1430	14	30	M22X1.5	50,0	41,0	58,0	32,0	27,0	50,0

Dimensions shown may be changed without prior notice

Reducers DIN 24° with O-Ring - Light series

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	OD2 mm	F1	Q1 mm	CH mm	CH1 mm	CH2 mm	L mm	L1 mm
1211375	1243819	R1A11M1152-1528	15	28	M22X1.5	36,0	32,0	27,0	41,0	51,0	43,0
1211354	1243796	R1A11M1152-0608	6	8	M12X1.5	23,5	12,0	14,0	17,0	38,0	30,5
1211376	1243825	R1A11M1152-2228	22	28	M30X2	37,5	32,0	36,0	41,0	54,0	45,0
1211355	1243797	R1A11M1152-0610	6	10	M12X1.5	25,0	14,0	14,0	19,0	40,0	32,0
1211377	1243820	R1A11M1152-1535	15	35	M22X1.5	39,0	41,0	27,0	50,0	54,0	46,0
1211356	1243803	R1A11M1152-0810	8	10	M14X1.5	25,0	14,0	17,0	19,0	40,0	32,0
1211378	1243823	R1A11M1152-1835	18	35	M26X1.5	38,5	41,0	32,0	50,0	55,0	46,0
1211357	1243798	R1A11M1152-0612	6	12	M12X1.5	25,0	17,0	14,0	22,0	40,0	32,0
1208082	1243822	R1A11M1152-1828	18	28	M26X1.5	36,5	32,0	32,0	41,0	52,0	44,0
1211379	1243824	R1A11M1152-1842	18	42	M26X1.5	42,0	50,0	32,0	60,0	58,0	49,5
1211358	1243809	R1A11M1152-1012	10	12	M16X1.5	26,0	17,0	19,0	22,0	41,0	33,0
1211359	1243799	R1A11M1152-0615	6	15	M12X1.5	28,5	19,0	14,0	27,0	43,0	35,5
1208083	1243826	R1A11M1152-2235	22	35	M30X2	40,5	41,0	36,0	50,0	57,0	48,0
1211380	1243827	R1A11M1152-2242	22	42	M30X2	44,0	50,0	36,0	60,0	60,0	49,5
1211381	1243828	R1A11M1152-2842	28	42	M36X2	44,0	50,0	41,0	60,0	61,0	51,5
1211360	1243813	R1A11M1152-1215	12	15	M18X1.5	29,5	19,0	22,0	27,0	44,0	36,5
1211382	1243829	R1A11M1152-3542	35	42	M45X2	43,0	50,0	50,0	60,0	65,0	53,5
1211361	1243800	R1A11M1152-0618	6	18	M12X1.5	28,0	24,0	14,0	32,0	43,0	35,0
1211362	1243806	R1A11M1152-0818	8	18	M14X1.5	28,0	24,0	17,0	32,0	43,0	35,0
1211363	1243811	R1A11M1152-1018	10	18	M16X1.5	29,0	24,0	19,0	32,0	44,0	36,0
1211364	1243817	R1A11M1152-1518	15	18	M22X1.5	30,0	24,0	27,0	32,0	45,0	37,0
1211365	1243801	R1A11M1152-0622	6	22	M12X1.5	32,0	27,0	14,0	36,0	47,0	39,0
1211366	1243807	R1A11M1152-0822	8	22	M14X1.5	32,0	27,0	17,0	36,0	47,0	39,0
1211367	1243815	R1A11M1152-1222	12	22	M18X1.5	33,0	27,0	22,0	36,0	48,0	40,0
1208071	1243805	R1A11M1152-0815	8	15	M14X1.5	28,5	19,0	17,0	27,0	43,0	35,5
1211368	1243818	R1A11M1152-1522	15	22	M22X1.5	34,0	27,0	27,0	36,0	49,0	41,0
1208070	1243804	R1A11M1152-0812	8	12	M14X1.5	25,0	17,0	17,0	22,0	40,0	32,0
1211369	1243821	R1A11M1152-1822	18	22	M26X1.5	33,5	27,0	32,0	36,0	50,0	41,0
1208073	1243814	R1A11M1152-1218	12	18	M18X1.5	29,0	24,0	22,0	32,0	44,0	36,0
1208072	1243810	R1A11M1152-1015	10	15	M16X1.5	29,5	19,0	19,0	27,0	44,0	36,5
1211371	1243802	R1A11M1152-0628	6	28	M12X1.5	34,0	32,0	14,0	41,0	49,0	41,0
1211372	1243808	R1A11M1152-0828	8	28	M14X1.5	34,0	32,0	17,0	41,0	49,0	41,0
1211373	1243812	R1A11M1152-1028	10	28	M16X1.5	35,0	32,0	19,0	41,0	50,0	42,0
1211374	1243816	R1A11M1152-1228	12	28	M18X1.5	35,0	32,0	22,0	41,0	50,0	42,0

Reducers DIN 24° with O-Ring - Heavy series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	OD2 mm	F1	Q1 mm	CH mm	CH1 mm	CH2 mm	L mm	L1 mm
1211416	1244159	R1A12M1162-1012	10	12	M18X1.5	29,5	19,0	22,0	24,0	46,0	37,0
1211438	1244177	R1A12M1162-1630	16	30	M24X1.5	44,5	41,0	30,0	50,0	63,0	54,0
1211417	1244147	R1A12M1162-0614	6	14	M14X1.5	31,5	19,0	17,0	27,0	46,0	38,5
1211418	1244154	R1A12M1162-0814	8	14	M16X1.5	31,5	19,0	19,0	27,0	46,0	38,5
1211419	1244160	R1A12M1162-1014	10	14	M18X1.5	31,0	19,0	22,0	27,0	47,0	38,5
1208068	1244161	R1A12M1162-1016	10	16	M18X1.5	31,5	22,0	22,0	30,0	48,0	39,0
1208167	1244176	R1A12M1162-1625	16	25	M24X1.5	39,0	32,0	30,0	46,0	57,0	47,5
1208166	1244175	R1A12M1162-1620	16	20	M24X1.5	36,5	27,0	30,0	36,0	55,0	45,0
1211430	1244168	R1A12M1162-1225	12	25	M20X1.5	38,0	32,0	24,0	46,0	54,0	45,5
1211431	1244172	R1A12M1162-1425	14	25	M22X1.5	39,5	32,0	27,0	46,0	57,0	47,5
1208165	1244167	R1A12M1162-1220	12	20	M20X1.5	35,5	27,0	24,0	36,0	52,0	43,0
1211432	1244179	R1A12M1162-2025	20	25	M30X2	39,0	32,0	36,0	46,0	61,0	49,5
1211411	1244144	R1A12M1162-0608	6	8	M14X1.5	27,0	14,0	17,0	19,0	42,0	34,0
1211433	1244151	R1A12M1162-0630	6	30	M14X1.5	44,0	41,0	17,0	50,0	59,0	51,0
1211412	1244145	R1A12M1162-0610	6	10	M14X1.5	27,5	17,0	17,0	22,0	42,0	34,5
1211434	1244158	R1A12M1162-0830	8	30	M16X1.5	44,0	41,0	19,0	50,0	59,0	51,0
1211413	1244152	R1A12M1162-0810	8	10	M16X1.5	27,5	17,0	19,0	22,0	42,0	34,5
1211435	1244164	R1A12M1162-1030	10	30	M18X1.5	43,5	41,0	22,0	50,0	60,0	51,0
1211414	1244146	R1A12M1162-0612	6	12	M14X1.5	29,0	17,0	17,0	24,0	44,0	36,0
1211436	1244169	R1A12M1162-1230	12	30	M20X1.5	43,5	41,0	24,0	50,0	60,0	51,0
1211415	1244153	R1A12M1162-0812	8	12	M16X1.5	29,0	17,0	19,0	24,0	44,0	36,0
1211437	1244173	R1A12M1162-1430	14	30	M22X1.5	45,0	41,0	27,0	50,0	63,0	53,0
1242333	1244166	R1A12M1162-1216	12	16	M20X1.5	31,5	22,0	24,0	30,0	48,0	39,0
1207987	1244180	R1A12M1162-2030	20	30	M30X2	44,5	41,0	36,0	50,0	66,0	55,0
1207967	1244148	R1A12M1162-0616	6	16	M14X1.5	32,0	22,0	17,0	30,0	47,0	39,0
1211427	1244150	R1A12M1162-0625	6	25	M14X1.5	38,5	32,0	17,0	46,0	53,0	45,5
1211428	1244157	R1A12M1162-0825	8	25	M16X1.5	38,5	32,0	19,0	46,0	53,0	45,5
1211429	1244163	R1A12M1162-1025	10	25	M18X1.5	38,0	32,0	22,0	46,0	54,0	45,5
1207963	1244182	R1A12M1162-2530	25	30	M36X2	45,0	41,0	46,0	50,0	69,0	57,0
1211420	1244165	R1A12M1162-1214	12	14	M20X1.5	31,0	22,0	24,0	27,0	47,0	38,5
1211442	1244174	R1A12M1162-1438	14	38	M22X1.5	48,5	50,0	27,0	60,0	66,0	56,5
1211421	1244155	R1A12M1162-0816	8	16	M16X1.5	32,0	22,0	19,0	30,0	47,0	39,0
1211443	1244178	R1A12M1162-1638	16	38	M24X1.5	48,0	50,0	30,0	60,0	66,0	56,5
1211422	1244170	R1A12M1162-1416	14	16	M22X1.5	33,0	24,0	27,0	30,0	51,0	41,0
1211444	1244181	R1A12M1162-2038	20	38	M30X2	48,0	50,0	36,0	60,0	70,0	58,5
1211423	1244149	R1A12M1162-0620	6	20	M14X1.5	36,0	27,0	17,0	36,0	51,0	43,0
1211445	1244183	R1A12M1162-2538	25	38	M36X2	48,5	50,0	46,0	60,0	73,0	60,5
1211424	1244156	R1A12M1162-0820	8	20	M16X1.5	36,0	27,0	19,0	36,0	51,0	43,0
1211446	1244184	R1A12M1162-3038	30	38	M42X2	49,0	50,0	50,0	60,0	76,0	62,5
1211425	1244162	R1A12M1162-1020	10	20	M18X1.5	35,5	27,0	22,0	36,0	52,0	43,0
1211426	1244171	R1A12M1162-1420	14	20	M22X1.5	37,0	27,0	27,0	36,0	55,0	45,0

Dimensions shown may be changed without prior notice

**45° adjustable elbow connector DIN
24° Male - Female with O-Ring - Light
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1244874	1244946	R1A11M4152-2828	28	M36X2	39,0	23,0	41,5	30,5	41,0	41,0
1244875	1244947	R1A11M4152-3535	35	M45X2	48,0	27,0	51,0	37,5	48,0	50,0
1208305	1244942	R1A11M4152-1212	12	M18X1.5	29,0	14,0	29,5	21,0	19,0	22,0
1244876	1244948	R1A11M4152-4242	42	M52X2	49,0	26,0	56,0	37,0	48,0	60,0
1244870	1244940	R1A11M4152-0808	8	M14X1.5	27,0	12,0	27,5	19,0	14,0	17,0
1244871	1244943	R1A11M4152-1515	15	M22X1.5	32,0	17,0	32,5	24,0	22,0	27,0
1244872	1244944	R1A11M4152-1818	18	M26X1.5	33,0	17,0	35,5	24,5	27,0	32,0
1244873	1244945	R1A11M4152-2222	22	M30X2	35,5	19,5	38,5	27,0	33,0	36,0
1241985	1244941	R1A11M4152-1010	10	M16X1.5	27,0	12,0	29,0	19,0	19,0	19,0
1244869	1244939	R1A11M4152-0606	6	M12X1.5	24,5	9,5	26,0	16,5	14,0	14,0

**45° adjustable elbow connector DIN
24° Male - Female with O-Ring -
Heavy series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1244896	1245010	R1A12M4162-1010	10	M18X1.5	29,0	13,0	30,0	20,5	19,0	22,0
1244897	1245011	R1A12M4162-1212	12	M20X1.5	33,0	17,0	31,0	24,5	22,0	24,0
1244898	1245012	R1A12M4162-1616	16	M24X1.5	34,0	16,0	36,5	24,5	27,0	30,0
1244899	1245013	R1A12M4162-2020	20	M30X2	40,0	19,0	44,5	29,5	33,0	36,0
1244894	1245008	R1A12M4162-0606	6	M14X1.5	26,0	11,0	27,0	18,0	14,0	17,0
1244895	1245009	R1A12M4162-0808	8	M16X1.5	28,0	13,0	27,5	20,0	19,0	19,0
1244900	1245014	R1A12M4162-2525	25	M36X2	46,0	22,0	50,0	34,0	41,0	46,0
1244901	1245015	R1A12M4162-3030	30	M42X2	50,0	24,0	55,0	37,5	48,0	50,0
1244902	1245016	R1A12M4162-3838	38	M52X2	55,0	24,0	63,0	40,0	48,0	60,0

**90° adjustable elbow connector DIN
24° Male - Female pre-assembled -
Light series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1205731	1243858	R1A11M9113-2222	22	M30X2	44,0	27,5	38,5	35,0	27,0	36,0
1206164	1241531	R1A11M9113-0606	6	M12X1.5	27,0	12,0	26,0	19,0	12,0	14,0
1206044	1243860	R1A11M9113-3535	35	M45X2	56,0	34,5	51,0	45,0	41,0	50,0
1242246	1241532	R1A11M9113-1212	12	M18X1.5	32,0	17,0	29,5	24,0	17,0	22,0
1206045	1243859	R1A11M9113-2828	28	M36X2	47,0	30,5	41,5	38,0	36,0	41,0
1204072	1241533	R1A11M9113-1515	15	M22X1.5	36,0	21,0	32,5	28,0	19,0	27,0
1205535	1241092	R1A11M9113-4242	42	M52X2	63,0	40,0	60,0	51,0	50,0	60,0
1205536	1240810	R1A11M9113-0808	8	M14X1.5	29,0	14,0	27,5	21,0	12,0	17,0
1205756	1243857	R1A11M9113-1818	18	M26X1.5	40,0	23,5	35,5	31,0	24,0	32,0
1204070	1240811	R1A11M9113-1010	10	M16X1.5	30,0	15,0	29,0	22,0	14,0	19,0

**90° adjustable elbow connector DIN
24° Male - Female pre-assembled -
Heavy series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1206278	1244214	R1A12M9123-0606	6	M14X1.5	31,0	16,0	27,0	23,0	12,0	17,0
1205563	1244216	R1A12M9123-1010	10	M18X1.5	34,0	17,5	30,0	25,0	17,0	22,0
1205532	1244219	R1A12M9123-1616	16	M24X1.5	43,0	24,5	36,5	33,0	24,0	30,0
1206412	1244223	R1A12M9123-3838	38	M52X2	72,0	41,0	64,5	57,0	50,0	60,0
1205533	1244220	R1A12M9123-2020	20	M30X2	48,0	26,5	44,5	37,0	27,0	36,0
1205732	1244215	R1A12M9123-0808	8	M16X1.5	32,0	17,0	27,5	24,0	14,0	19,0
1205534	1244221	R1A12M9123-2525	25	M36X2	54,0	30,0	50,0	42,0	36,0	46,0
1205733	1244218	R1A12M9123-1414	14	M22X1.5	40,0	22,0	35,0	30,0	19,0	27,0
1205734	1244222	R1A12M9123-3030	30	M42X2	62,0	35,5	55,0	49,0	41,0	50,0
1205757	1244217	R1A12M9123-1212	12	M20X1.5	38,0	21,5	31,0	29,0	17,0	24,0

Dimensions shown may be changed without prior notice

**90° adjustable elbow connector DIN
24° Male - Female with O-Ring - Light
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1206852	1243871	R1A11M9152-1212	12	M18X1.5	32,0	17,0	29,5	24,0	17,0	22,0
1206853	1243872	R1A11M9152-1515	15	M22X1.5	36,0	21,0	32,5	28,0	19,0	27,0
1211396	1243869	R1A11M9152-0606	6	M12X1.5	27,0	12,0	26,0	20,0	12,0	14,0
1211397	1243875	R1A11M9152-2828	28	M36X2	47,0	30,5	41,5	38,0	36,0	41,0
1211398	1243877	R1A11M9152-4242	42	M52X2	63,0	40,0	56,0	51,0	50,0	60,0
1244462	1206816	R1A11M9152-1010	10	M16X1.5	30,0	15,0	29,0	22,5	17,0	19,0
1208087	1243876	R1A11M9152-3535	35	M45X2	56,0	34,5	51,0	45,0	41,0	50,0
1207070	1243870	R1A11M9152-0808	8	M14X1.5	29,0	14,0	27,5	21,0	12,0	17,0
1206854	1243873	R1A11M9152-1818	18	M26X1.5	40,0	23,5	35,5	31,0	24,0	32,0
1206855	1243874	R1A11M9152-2222	22	M30X2	44,0	27,5	38,5	35,0	27,0	36,0

**90° adjustable elbow connector DIN
24° Male - Female with O-Ring -
Heavy series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1207074	1244239	R1A12M9162-2020	20	M30X2	48,0	26,5	44,5	37,0	27,0	36,0
1207073	1244238	R1A12M9162-1616	16	M24X1.5	43,0	24,5	36,5	33,0	24,0	30,0
1207076	1244240	R1A12M9162-3030	30	M42X2	62,0	35,5	55,0	49,0	41,0	50,0
1208186	1244237	R1A12M9162-1414	14	M22X1.5	40,0	22,0	35,0	30,0	19,0	27,0
1241699	1207075	R1A12M9162-2525	25	M36X2	54,0	30,0	50,0	42,0	36,0	46,0
1211456	1244235	R1A12M9162-1010	10	M18X1.5	34,0	17,5	30,0	25,0	17,0	22,0
1211457	1244241	R1A12M9162-3838	38	M52X2	72,0	41,0	63,0	57,0	50,0	60,0
1208183	1244233	R1A12M9162-0606	6	M14X1.5	31,0	16,0	27,0	23,0	12,0	17,0
1206823	1244236	R1A12M9162-1212	12	M20X1.5	38,0	21,5	31,0	29,0	17,0	24,0
1206824	1244234	R1A12M9162-0808	8	M16X1.5	32,0	17,0	27,5	24,0	14,0	19,0

**Branch Tee adjustable elbow
connector DIN 24° Male - Female
pre-assembled - Light series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1206279	1243978	R1A11MT113-2828	28	M36X2	47,0	30,5	41,5	38,0	36,0	41,0
1205477	1241539	R1A11MT113-0808	8	M14X1.5	29,0	14,0	27,5	21,0	12,0	17,0
1205522	1241541	R1A11MT113-1212	12	M18X1.5	32,0	17,0	29,5	24,0	17,0	22,0
1205676	1243975	R1A11MT113-1515	15	M22X1.5	36,0	21,0	32,5	28,0	19,0	27,0
1204222	1243974	R1A11MT113-0606	6	M12X1.5	27,0	12,0	26,0	19,0	12,0	14,0
1206584	1243979	R1A11MT113-3535	35	M45X2	56,0	34,5	51,0	45,0	41,0	50,0
1206585	1243980	R1A11MT113-4242	42	M52X2	63,0	40,0	60,0	51,0	50,0	60,0
1205758	1243976	R1A11MT113-1818	18	M26X1.5	40,0	23,5	35,5	31,0	24,0	32,0
1205736	1243977	R1A11MT113-2222	22	M30X2	44,0	27,5	38,5	35,0	27,0	36,0
1205735	1241540	R1A11MT113-1010	10	M16X1.5	30,0	15,0	29,0	22,0	14,0	19,0

**Branch Tee adjustable elbow
connector DIN 24° Male - BSPP Male
with O-Ring - Heavy series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1206355	1244340	R1A12MT123-0606	6	M14X1.5	31,0	16,0	27,0	23,0	12,0	17,0
1206587	1244349	R1A12MT123-3838	38	M52X2	72,0	41,0	64,5	57,0	50,0	60,0
1206373	1244341	R1A12MT123-0808	8	M16X1.5	32,0	17,0	27,5	24,0	14,0	19,0
1205581	1244342	R1A12MT123-1010	10	M18X1.5	34,0	17,5	30,0	25,0	17,0	22,0
1206297	1244348	R1A12MT123-3030	30	M42X2	62,0	35,5	55,0	49,0	41,0	50,0
1206281	1244347	R1A12MT123-2525	25	M36X2	54,0	30,0	50,0	42,0	36,0	46,0
1205737	1244343	R1A12MT123-1212	12	M20X1.5	38,0	21,5	31,0	29,0	17,0	24,0
1205738	1244345	R1A12MT123-1616	16	M24X1.5	43,0	24,5	36,5	33,0	24,0	30,0
1205739	1244346	R1A12MT123-2020	20	M30X2	48,0	26,5	44,5	37,0	27,0	36,0
1206280	1244344	R1A12MT123-1414	14	M22X1.5	40,0	22,0	35,0	30,0	19,0	27,0

Dimensions shown may be changed without prior notice

**Branch Tee adjustable elbow
connector DIN 24° Male - Female
with O-Ring - Light series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1211350	1243986	R1A11MT152-0606	6	M12X1.5	27,0	12,0	26,0	20,0	12,0	14,0
1208059	1243989	R1A11MT152-1515	15	M22X1.5	36,0	21,0	32,5	28,0	19,0	27,0
1211351	1243991	R1A11MT152-2222	22	M30X2	44,0	27,5	38,5	35,0	27,0	36,0
1208058	1243987	R1A11MT152-0808	8	M14X1.5	29,0	14,0	27,5	21,0	12,0	17,0
1211352	1243992	R1A11MT152-2828	28	M36X2	47,0	30,5	41,5	38,0	36,0	41,0
1211353	1243994	R1A11MT152-4242	42	M52X2	63,0	40,0	56,0	51,0	50,0	60,0
1208060	1243990	R1A11MT152-1818	18	M26X1.5	40,0	23,5	35,5	31,0	24,0	32,0
1206856	1243988	R1A11MT152-1010	10	M16X1.5	30,0	15,0	29,0	22,5	14,0	19,0
1210689	1241143	R1A11MT152-1212	12	M18X1.5	32,0	17,0	29,5	24,0	17,0	22,0
1208061	1243993	R1A11MT152-3535	35	M45X2	56,0	34,5	51,0	45,0	41,0	50,0

**Branch Tee adjustable elbow
connector DIN 24° Male - Female
with O-Ring - Heavy series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1211405	1244361	R1A12MT162-0808	8	M16X1.5	32,0	17,0	27,5	24,0	14,0	19,0
1211406	1244364	R1A12MT162-1414	14	M22X1.5	40,0	22,0	35,0	30,0	19,0	27,0
1211407	1244366	R1A12MT162-2020	20	M30X2	48,0	26,5	44,5	37,0	27,0	36,0
1211408	1244367	R1A12MT162-2525	25	M36X2	54,0	30,0	50,0	42,0	36,0	46,0
1211409	1244368	R1A12MT162-3030	30	M42X2	62,0	35,5	55,0	49,0	41,0	50,0
1208196	1244362	R1A12MT162-1010	10	M18X1.5	34,0	17,5	30,0	25,0	17,0	22,0
1207470	1244365	R1A12MT162-1616	16	M24X1.5	43,0	24,5	36,5	33,0	24,0	30,0
1211410	1244369	R1A12MT162-3838	38	M52X2	72,0	41,0	63,0	57,0	50,0	60,0
1208197	1244363	R1A12MT162-1212	12	M20X1.5	38,0	21,5	31,0	29,0	17,0	24,0
1211404	1244360	R1A12MT162-0606	6	M14X1.5	31,0	16,0	27,0	23,0	12,0	17,0

Run Tee adjustable elbow connector
DIN 24° Male - Female pre-
assembled - Light series



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1206586	1243943	R1A11ML113-4242	42	M52X2	63,0	40,0	60,0	51,0	50,0	60,0
1205478	1241964	R1A11ML113-0606	6	M12X1.5	27,0	12,0	26,0	19,0	12,0	14,0
1242248	1241536	R1A11ML113-1212	12	M18X1.5	32,0	17,0	29,5	24,0	17,0	22,0
1204221	1241537	R1A11ML113-1515	15	M22X1.5	36,0	21,0	32,5	28,0	19,0	27,0
1206072	1243941	R1A11ML113-2828	28	M36X2	47,0	30,5	41,5	38,0	36,0	41,0
1205759	1243940	R1A11ML113-2222	22	M30X2	44,0	27,5	38,5	35,0	27,0	36,0
1205529	1243939	R1A11ML113-1818	18	M26X1.5	40,0	23,5	35,5	31,0	24,0	32,0
1205479	1241535	R1A11ML113-0808	8	M14X1.5	29,0	14,0	27,5	21,0	12,0	17,0
1205677	1241702	R1A11ML113-1010	10	M16X1.5	30,0	15,0	29,0	22,0	14,0	19,0
1206129	1243942	R1A11ML113-3535	35	M45X2	56,0	34,5	51,0	45,0	41,0	50,0

Run Tee adjustable elbow connector
DIN 24° Male - Female pre-
assembled - Heavy series



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1206179	1244305	R1A12ML123-1212	12	M20X1.5	38,0	21,5	31,0	29,0	17,0	24,0
1205574	1244310	R1A12ML123-3030	30	M42X2	62,0	35,5	55,0	49,0	41,0	50,0
1206367	1244303	R1A12ML123-0808	8	M16X1.5	32,0	17,0	27,5	24,0	14,0	19,0
1206588	1244311	R1A12ML123-3838	38	M52X2	72,0	41,0	64,5	57,0	50,0	60,0
1206010	1244307	R1A12ML123-1616	16	M24X1.5	43,0	24,5	36,5	33,0	24,0	30,0
1206354	1244302	R1A12ML123-0606	6	M14X1.5	31,0	16,0	27,0	23,0	12,0	17,0
1206255	1244309	R1A12ML123-2525	25	M36X2	54,0	30,0	50,0	42,0	36,0	46,0
1205580	1244304	R1A12ML123-1010	10	M18X1.5	34,0	17,5	30,0	25,0	17,0	22,0
1206130	1244306	R1A12ML123-1414	14	M22X1.5	40,0	22,0	35,0	30,0	19,0	27,0
1205678	1244308	R1A12ML123-2020	20	M30X2	48,0	26,5	44,5	37,0	27,0	36,0

Dimensions shown may be changed without prior notice

Run Tee adjustable elbow connector DIN 24° Male - Female with O-Ring - Light series



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1207522	1243948	R1A11ML152-1515	15	M22X1.5	36,0	21,0	32,5	28,0	19,0	27,0
1208090	1243951	R1A11ML152-2828	28	M36X2	47,0	30,5	41,5	38,0	36,0	41,0
1208089	1243949	R1A11ML152-1818	18	M26X1.5	40,0	23,5	35,5	31,0	24,0	32,0
1207518	1243950	R1A11ML152-2222	22	M30X2	44,0	27,5	38,5	35,0	27,0	36,0
1208088	1243945	R1A11ML152-0808	8	M14X1.5	29,0	14,0	27,5	21,0	12,0	17,0
1211347	1243944	R1A11ML152-0606	6	M12X1.5	27,0	12,0	26,0	20,0	12,0	14,0
1206889	1243947	R1A11ML152-1212	12	M18X1.5	32,0	17,0	29,5	24,0	17,0	22,0
1211348	1243952	R1A11ML152-3535	35	M45X2	56,0	34,5	51,0	45,0	41,0	50,0
1206813	1243946	R1A11ML152-1010	10	M16X1.5	30,0	15,0	29,0	22,5	14,0	19,0
1211349	1243953	R1A11ML152-4242	42	M52X2	63,0	40,0	56,0	51,0	50,0	60,0

Run Tee adjustable elbow connector DIN 24° Male - Female with O-Ring - Heavy series

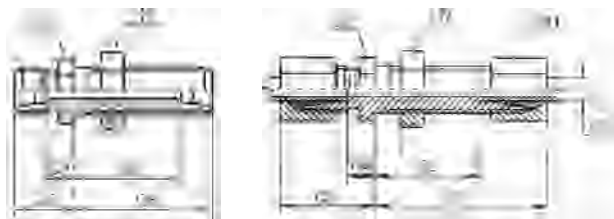


Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm
1206883	1244316	R1A12ML162-1414	14	M22X1.5	40,0	22,0	35,0	30,0	19,0	27,0
1208190	1244315	R1A12ML162-1212	12	M20X1.5	38,0	21,5	31,0	29,0	17,0	24,0
1207087	1244313	R1A12ML162-0808	8	M16X1.5	32,0	17,0	27,5	24,0	14,0	19,0
1211400	1244312	R1A12ML162-0606	6	M14X1.5	31,0	16,0	27,0	23,0	12,0	17,0
1207086	1244319	R1A12ML162-2525	25	M36X2	54,0	30,0	50,0	42,0	36,0	46,0
1211401	1244314	R1A12ML162-1010	10	M18X1.5	34,0	17,5	30,0	25,0	17,0	22,0
1211402	1244317	R1A12ML162-1616	16	M24X1.5	43,0	24,5	36,5	33,0	24,0	30,0
1211403	1244320	R1A12ML162-3030	30	M42X2	62,0	35,5	55,0	49,0	41,0	50,0
1208194	1244321	R1A12ML162-3838	38	M52X2	72,0	41,0	63,0	57,0	50,0	60,0
1208193	1244318	R1A12ML162-2020	20	M30X2	48,0	26,5	44,5	37,0	27,0	36,0

// BULKHEAD

**Straight union DIN 24° Bulkhead -
Light series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	Q4	Q5	CH	CH1	LN
			mm		mm	mm	mm	mm	mm	mm	mm	mm
1206125	1244014	R1A11T111M-0606	6	M12X1.5	42,0	27,0	22,0	7,0	14,0	17,0	14,0	17,0
1206126	1244015	R1A11T111M-1818	18	M26X1.5	49,0	32,5	30,0	13,5	19,0	32,0	32,0	36,0
1206243	1240818	R1A11T111M-1010	10	M16X1.5	43,0	28,0	25,0	10,0	17,0	22,0	19,0	22,0
1205892	1241544	R1A11T111M-1212	12	M18X1.5	44,0	29,0	25,0	10,0	17,0	24,0	22,0	24,0
1205540	1244016	R1A11T111M-2222	22	M30X2	51,0	34,5	33,0	16,5	24,0	36,0	36,0	41,0
1206244	1244018	R1A11T111M-3535	35	M45X2	58,0	36,5	40,0	18,5	29,0	50,0	50,0	55,0
1207043	1244019	R1A11T111M-4242	42	M52X2	59,0	36,0	42,0	19,0	30,0	60,0	60,0	65,0
1205545	1240816	R1A11T111M-0808	8	M14X1.5	42,0	27,0	23,0	8,0	15,0	19,0	17,0	19,0
1205679	1241546	R1A11T111M-1515	15	M22X1.5	46,0	31,0	27,0	12,0	19,0	27,0	27,0	30,0
1206071	1244017	R1A11T111M-2828	28	M36X2	52,0	35,5	35,0	18,5	26,0	41,0	41,0	46,0

**Straight union DIN 24° Bulkhead -
Heavy series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	Q4	Q5	CH	CH1	LN
			mm		mm	mm	mm	mm	mm	mm	mm	mm
1206245	1244391	R1A12T112M-1010	10	M18X1.5	46,0	29,5	31,0	14,5	22,0	24,0	22,0	24,0
1205970	1243660	R1A12T112M-1616	16	M24X1.5	50,0	31,5	35,0	16,5	25,0	32,0	30,0	32,0
1206246	1244393	R1A12T112M-1414	14	M22X1.5	50,0	32,0	35,0	17,0	25,0	30,0	27,0	30,0
1205575	1244396	R1A12T112M-3030	30	M42X2	64,0	37,5	48,0	21,5	35,0	50,0	50,0	50,0
1206247	1244392	R1A12T112M-1212	12	M20X1.5	47,0	30,5	31,0	14,5	22,0	27,0	24,0	27,0
1206358	1244389	R1A12T112M-0606	6	M14X1.5	44,0	29,0	27,0	12,0	19,0	19,0	17,0	19,0
1206127	1244395	R1A12T112M-2525	25	M36X2	59,0	35,0	44,0	20,0	32,0	46,0	46,0	46,0
1205957	1244394	R1A12T112M-2020	20	M30X2	55,0	33,5	39,0	17,5	28,0	41,0	36,0	41,0
1205969	1244390	R1A12T112M-0808	8	M16X1.5	44,0	29,0	28,0	13,0	20,0	22,0	19,0	22,0
1206417	1244397	R1A12T112M-3838	38	M52X2	68,0	37,0	53,0	22,0	38,0	65,0	60,0	65,0

Dimensions shown may be changed without prior notice

90° union DIN 24° Bulkhead - Light series

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	LN mm
1205686	1244021	R1A11T911M-1515	15	M22X1.5	46,0	31,0	36,0	21,0	28,0	23,0	19,0	27,0	30,0
1206357	1244024	R1A11T911M-2828	28	M36X2	52,0	35,5	47,0	30,5	38,0	34,0	36,0	41,0	46,0
1206248	1241547	R1A11T911M-0606	6	M12X1.5	42,0	27,0	27,0	12,0	19,0	14,0	12,0	14,0	17,0
1206820	1244026	R1A11T911M-4242	42	M52X2	59,0	36,0	63,0	40,0	51,0	43,0	50,0	60,0	65,0
1206252	1244022	R1A11T911M-1818	18	M26X1.5	49,0	32,5	40,0	23,5	31,0	24,0	24,0	32,0	36,0
1206253	1244023	R1A11T911M-2222	22	M30X2	51,0	34,5	44,0	27,5	35,0	30,0	27,0	36,0	41,0
1206254	1244025	R1A11T911M-3535	35	M45X2	58,0	36,5	56,0	34,5	45,0	39,0	41,0	50,0	55,0
1206250	1241549	R1A11T911M-1010	10	M16X1.5	43,0	28,0	30,0	15,0	22,0	18,0	14,0	19,0	22,0
1206251	1244020	R1A11T911M-1212	12	M18X1.5	44,0	29,0	32,0	17,0	24,0	20,0	17,0	22,0	24,0
1206249	1241548	R1A11T911M-0808	8	M14X1.5	42,0	27,0	29,0	14,0	21,0	17,0	12,0	17,0	19,0

90° union DIN 24° Bulkhead - Heavy series

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	LN mm
1206256	1244400	R1A12T912M-1010	10	M18X1.5	46,0	29,5	34,0	17,5	25,0	20,0	17,0	22,0	24,0
1207148	1244405	R1A12T912M-3030	30	M42X2	64,0	37,5	62,0	35,5	49,0	39,0	41,0	50,0	50,0
1207147	1244398	R1A12T912M-0606	6	M14X1.5	44,0	29,0	31,0	16,0	23,0	17,0	12,0	17,0	19,0
1206257	1244402	R1A12T912M-1414	14	M22X1.5	50,0	32,0	40,0	22,0	30,0	23,0	19,0	27,0	30,0
1206258	1243661	R1A12T912M-1616	16	M24X1.5	50,0	31,5	43,0	24,5	33,0	24,0	24,0	30,0	32,0
1206259	1244403	R1A12T912M-2020	20	M30X2	55,0	33,5	48,0	26,5	37,0	30,0	27,0	36,0	41,0
1207149	1244406	R1A12T912M-3838	38	M52X2	68,0	37,0	72,0	41,0	57,0	43,0	50,0	60,0	65,0
1206374	1244399	R1A12T912M-0808	8	M16X1.5	44,0	29,0	32,0	17,0	24,0	18,0	14,0	19,0	22,0
1206260	1244401	R1A12T912M-1212	12	M20X1.5	47,0	30,5	38,0	21,5	29,0	21,0	17,0	24,0	27,0
1206261	1244404	R1A12T912M-2525	25	M36X2	59,0	35,0	54,0	30,0	42,0	34,0	36,0	46,0	46,0

// METRIC

**Straight connector DIN 24° Male -
Metric cylindric Male - Light series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1205684	1243831	R1A11M150M-0812	8	M12X1.5	25,0	10,0	17,0	17,0	17,0	12,0	17,0
1206006	1243835	R1A11M150M-1822	18	M22X1.5	31,0	14,5	22,0	27,0	32,0	14,0	27,0
1206534	1243837	R1A11M150M-2833	28	M33X2.0	34,0	17,5	25,0	41,0	41,0	18,0	39,0
1203520	1243833	R1A11M150M-1216	12	M16X1.5	27,0	12,5	19,5	22,0	22,0	12,0	21,0
1205809	1243830	R1A11M150M-0610	6	M10X1.0	23,0	8,5	15,5	14,0	14,0	8,0	14,0
1208162	1243838	R1A11M150M-3542	35	M42X2	39,0	17,5	28,0	50,0	50,0	20,0	49,0
1205556	1243832	R1A11M150M-1014	10	M14X1.5	26,0	11,0	18,0	19,0	19,0	12,0	19,0
1205557	1243834	R1A11M150M-1518	15	M18X1.5	29,0	14,0	20,5	24,0	27,0	14,0	23,0
1207814	1243839	R1A11M150M-4248	42	M48X2.0	42,0	19,0	30,0	55,0	60,0	22,0	55,0
1205812	1243836	R1A11M150M-2226	22	M26X1.5	33,0	16,5	24,0	32,0	36,0	16,0	31,0

**Straight connector DIN 24° Male -
Metric cylindric Male - Heavy series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1205971	1244187	R1A12M150M-1016	10	M16X1.5	31,0	15,0	22,5	22,0	22,0	12,0	21,0
1206225	1244185	R1A12M150M-0612	6	M12X1.5	28,0	13,0	20,0	17,0	17,0	12,0	17,0
1206226	1244186	R1A12M150M-0814	8	M14X1.5	30,0	15,0	22,0	19,0	19,0	12,0	19,0
1211293	1244193	R1A12M150M-3042	30	M42X2	50,0	23,5	37,0	50,0	50,0	20,0	49,0
1205817	1244192	R1A12M150M-2533	25	M33X2.0	47,0	23,0	35,0	41,0	46,0	18,0	39,0
1211294	1244194	R1A12M150M-3848	38	M48X2.0	57,0	26,0	42,0	55,0	60,0	22,0	55,0
1205813	1244188	R1A12M150M-1218	12	M18X1.5	33,0	17,0	24,5	24,0	24,0	12,0	23,0
1205814	1244189	R1A12M150M-1420	14	M20X1.5	37,0	19,0	27,0	27,0	27,0	14,0	25,0
1205815	1244190	R1A12M150M-1622	16	M22X1.5	37,0	18,5	27,0	27,0	30,0	14,0	27,0
1205816	1244191	R1A12M150M-2027	20	M27X2	42,0	20,5	31,0	32,0	36,0	16,0	32,0

Dimensions shown may be changed without prior notice

**90° elbow connector DIN 24° Male -
Metric cylindric Male - Light series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LT mm	G mm
1211163	1243878	R1A11M950M-2226	22	M26X1.5	44,0	27,5	26,0	35,0	27,0	36,0	16,0	31,0
1211164	1243879	R1A11M950M-2833	28	M33X2.0	47,0	30,5	30,0	38,0	36,0	41,0	18,0	39,0
1211165	1243880	R1A11M950M-3542	35	M42X2	56,0	34,5	34,0	45,0	41,0	50,0	20,0	49,0
1211166	1243881	R1A11M950M-4248	42	M48X2.0	63,0	40,0	39,0	51,0	50,0	60,0	22,0	55,0

**90° elbow connector DIN 24° Male -
Metric cylindric Male - Heavy series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LT mm	G mm
1211320	1244242	R1A12M950M-2027	20	M27X2	48,0	26,5	26,0	37,0	27,0	36,0	16,0	32,0
1211321	1244243	R1A12M950M-2533	25	M33X2.0	54,0	31,0	30,0	42,0	36,0	46,0	18,0	39,0
1211322	1244244	R1A12M950M-3042	30	M42X2	62,0	35,5	34,0	49,0	41,0	50,0	20,0	49,0
1211323	1244245	R1A12M950M-3848	38	M48X2.0	72,0	41,0	39,0	57,0	50,0	60,0	22,0	55,0

**45° adjustable elbow connector DIN
24° Male - Metric Male with O-Ring
and retaining ring - Light series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1244885	1244958	R1A11M452Q-4248	42	M48X2.0	61,0	38,0	50,0	49,0	48,0	60,0	55,0	15,0	56,0
1244877	1244949	R1A11M452Q-0610	6	M10X1.0	29,0	14,0	20,0	21,0	14,0	14,0	14,0	7,5	15,0
1244881	1244954	R1A11M452Q-1822	18	M22X1.5	40,0	24,0	34,0	31,5	27,0	32,0	27,0	11,0	28,0
1244882	1244955	R1A11M452Q-2227	22	M27X2	44,0	28,0	36,0	35,5	33,0	36,0	32,0	13,5	33,0
1244883	1244956	R1A11M452Q-2833	28	M33X2.0	47,0	31,0	40,5	38,5	41,0	41,0	41,0	13,5	41,0
1244884	1244957	R1A11M452Q-3542	35	M42X2	59,0	38,0	48,5	48,5	48,0	50,0	50,0	13,5	51,0
1239701	1244951	R1A11M452Q-1014	10	M14X1.5	32,0	17,0	25,5	24,0	19,0	19,0	19,0	9,5	20,0
1244880	1244953	R1A11M452Q-1518	15	M18X1.5	36,0	21,0	30,0	28,0	22,0	27,0	24,0	11,0	25,0
1244878	1244950	R1A11M452Q-0812	8	M12X1.5	31,0	16,0	22,5	23,0	14,0	17,0	17,0	9,5	18,0
1244879	1244952	R1A11M452Q-1216	12	M16X1.5	34,0	19,0	26,0	26,0	19,0	22,0	22,0	10,0	23,0

**45° adjustable elbow connector DIN
24° Male - Metric Male with O-Ring
and retaining ring - Heavy series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1244908	1245024	R1A12M452Q-3042	30	M42X2	62,0	36,0	52,0	49,5	48,0	50,0	50,0	16,0	51,0
1244909	1245025	R1A12M452Q-3848	38	M48X2.0	65,0	34,0	51,0	50,0	48,0	60,0	55,0	18,0	56,0
1244904	1245018	R1A12M452Q-0814	8	M14X1.5	33,0	18,0	26,5	25,0	19,0	19,0	19,0	9,5	20,0
1244905	1245020	R1A12M452Q-1218	12	M18X1.5	38,0	22,0	30,5	29,5	22,0	24,0	24,0	12,5	25,0
1244906	1245021	R1A12M452Q-1622	16	M22X1.5	43,0	25,0	37,0	33,5	27,0	30,0	27,0	13,0	28,0
1244907	1245023	R1A12M452Q-2533	25	M33X2.0	54,5	30,5	43,0	42,5	41,0	46,0	41,0	14,0	41,0
1237053	1245022	R1A12M452Q-2027	20	M27X2	49,0	28,0	39,5	38,5	33,0	36,0	32,0	14,0	33,0
1244903	1245017	R1A12M452Q-0612	6	M12X1.5	30,5	15,5	23,5	22,5	14,0	17,0	17,0	9,5	18,0
1237052	1245019	R1A12M452Q-1016	10	M16X1.5	34,0	18,0	27,0	25,5	19,0	22,0	22,0	11,0	23,0

Dimensions shown may be changed without prior notice

**90° adjustable elbow connector DIN
24° Male - Metric Male with O-Ring
and retaining ring - Light series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1242474	1243891	R1A11M952Q-4248	42	M48X2.0	61,0	38,0	50,0	49,0	48,0	60,0	55,0	15,0	56,0
1242473	1243887	R1A11M952Q-1822	18	M22X1.5	40,0	24,0	34,0	31,5	27,0	32,0	27,0	11,0	28,0
1242472	1243885	R1A11M952Q-1216	12	M16X1.5	34,0	19,0	26,0	26,0	19,0	22,0	22,0	10,0	23,0
1231362	1243884	R1A11M952Q-1014	10	M14X1.5	32,0	17,0	25,5	24,0	19,0	19,0	19,0	9,5	20,0
1231363	1243886	R1A11M952Q-1518	15	M18X1.5	36,0	21,0	30,0	28,0	22,0	27,0	24,0	11,0	25,0
1231364	1243889	R1A11M952Q-2833	28	M33X2.0	47,0	31,0	40,5	38,5	41,0	41,0	41,0	13,5	41,0
1231365	1243890	R1A11M952Q-3542	35	M42X2	59,0	38,0	48,5	48,5	48,0	50,0	50,0	13,5	51,0
1231361	1243883	R1A11M952Q-0812	8	M12X1.5	31,0	16,0	22,5	23,0	14,0	17,0	17,0	9,5	18,0
1242471	1243882	R1A11M952Q-0610	6	M10X1.0	29,0	14,0	20,0	21,0	14,0	14,0	14,0	7,5	15,0
1237041	1243888	R1A11M952Q-2227	22	M27X2	44,0	28,0	36,0	35,5	33,0	36,0	32,0	13,5	33,0

**90° adjustable elbow connector DIN
24° Male - Metric Male with O-Ring
and retaining ring - Heavy series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1242475	1244248	R1A12M952Q-1016	10	M16X1.5	34,0	18,0	27,0	25,5	19,0	22,0	22,0	11,0	23,0
1216243	1244247	R1A12M952Q-0814	8	M14X1.5	33,0	18,0	26,5	25,0	19,0	19,0	19,0	9,5	20,0
1211329	1244251	R1A12M952Q-2027	20	M27X2	49,0	28,0	39,5	38,5	33,0	36,0	32,0	14,0	33,0
1231379	1244246	R1A12M952Q-0612	6	M12X1.5	30,5	15,5	23,5	22,5	14,0	17,0	17,0	9,5	18,0
1242479	1244253	R1A12M952Q-3042	30	M42X2	62,0	36,0	52,0	49,5	48,0	50,0	50,0	16,0	51,0
1242478	1244252	R1A12M952Q-2533	25	M33X2.0	54,5	30,5	43,0	42,5	41,0	46,0	41,0	14,0	41,0
1242477	1244250	R1A12M952Q-1622	16	M22X1.5	43,0	25,0	37,0	33,5	27,0	30,0	27,0	13,0	28,0
1242476	1244249	R1A12M952Q-1218	12	M18X1.5	38,0	22,0	30,5	29,5	22,0	24,0	24,0	12,5	25,0
1242480	1244254	R1A12M952Q-3848	38	M48X2.0	65,0	34,0	51,0	50,0	48,0	60,0	55,0	18,0	56,0

**Branch Tee adjustable elbow
connector DIN 24° Male - Metric
Male with O-Ring and retaining ring -
Light series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1242486	1244000	R1A11MT52Q-1822	18	M26X1.5	40,0	24,0	34,0	31,5	27,0	32,0	27,0	11,0	28,0
1242485	1243999	R1A11MT52Q-1518	15	M22X1.5	36,0	21,0	30,0	28,0	22,0	27,0	24,0	11,0	25,0
1242484	1243998	R1A11MT52Q-1216	12	M18X1.5	34,0	19,0	26,0	26,0	19,0	22,0	22,0	10,0	23,0
1242483	1243997	R1A11MT52Q-1014	10	M16X1.5	32,0	17,0	25,5	24,0	19,0	19,0	19,0	9,5	20,0
1242489	1244003	R1A11MT52Q-3542	35	M45X2	59,0	38,0	48,5	48,5	48,0	50,0	50,0	13,5	51,0
1242488	1244002	R1A11MT52Q-2833	28	M36X2	47,0	31,0	40,5	38,5	41,0	41,0	41,0	13,5	41,0
1242487	1244001	R1A11MT52Q-2227	22	M30X2	44,0	28,0	36,0	35,5	33,0	36,0	32,0	13,5	33,0
1242482	1243996	R1A11MT52Q-0812	8	M14X1.5	31,0	16,0	22,5	23,0	14,0	17,0	17,0	9,5	18,0
1242481	1243995	R1A11MT52Q-0610	6	M12X1.5	29,0	14,0	20,0	21,0	14,0	14,0	14,0	7,5	15,0
1237043	1244004	R1A11MT52Q-4248	42	M52X2	61,0	38,0	50,0	49,0	48,0	60,0	55,0	15,0	56,0

**Branch Tee adjustable elbow
connector DIN 24° Male - Metric
Male with O-Ring and retaining ring -
Heavy series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1242497	1244377	R1A12MT52Q-3042	30	M42X2	62,0	36,0	52,0	49,5	48,0	50,0	50,0	16,0	51,0
1242496	1244376	R1A12MT52Q-2533	25	M36X2	54,5	30,5	43,0	42,5	41,0	46,0	41,0	14,0	41,0
1242495	1244375	R1A12MT52Q-2027	20	M30X2	49,0	28,0	39,5	38,5	33,0	36,0	32,0	14,0	33,0
1242494	1244374	R1A12MT52Q-1622	16	M24X1.5	43,0	25,0	37,0	33,5	27,0	30,0	27,0	13,0	28,0
1242498	1244378	R1A12MT52Q-3848	38	M52X2	65,0	34,0	51,0	50,0	48,0	60,0	55,0	18,0	56,0
1242493	1244373	R1A12MT52Q-1218	12	M20X1.5	38,0	22,0	30,5	29,5	22,0	24,0	24,0	12,5	25,0
1242492	1244372	R1A12MT52Q-1016	10	M18X1.5	34,0	18,0	27,0	25,5	19,0	22,0	22,0	11,0	23,0
1242491	1244371	R1A12MT52Q-0814	8	M16X1.5	33,0	18,0	26,5	25,0	19,0	19,0	19,0	9,5	20,0
1242490	1244370	R1A12MT52Q-0612	6	M14X1.5	30,5	15,5	23,5	22,5	14,0	17,0	17,0	9,5	18,0

Dimensions shown may be changed without prior notice

**Run Tee adjustable elbow connector
DIN 24° Male - Metric Male with
O-Ring and retaining ring - Light
series**



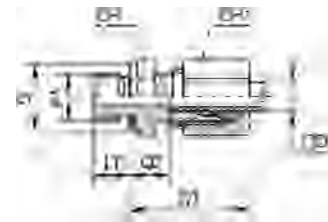
Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1242501	1243956	R1A11ML52Q-1014	10	M14X1.5	32,0	17,0	25,5	24,0	19,0	19,0	19,0	9,5	20,0
1242500	1243955	R1A11ML52Q-0812	8	M12X1.5	31,0	16,0	22,5	23,0	14,0	17,0	17,0	9,5	18,0
1242499	1243954	R1A11ML52Q-0610	6	M10X1.0	29,0	14,0	20,0	21,0	14,0	14,0	14,0	7,5	15,0
1242505	1243960	R1A11ML52Q-2227	22	M27X2	44,0	28,0	36,0	35,5	33,0	36,0	32,0	13,5	33,0
1242504	1243959	R1A11ML52Q-1822	18	M22X1.5	40,0	24,0	34,0	31,5	27,0	32,0	27,0	11,0	28,0
1242503	1243958	R1A11ML52Q-1518	15	M18X1.5	36,0	21,0	30,0	28,0	22,0	27,0	24,0	11,0	25,0
1242502	1243957	R1A11ML52Q-1216	12	M16X1.5	34,0	19,0	26,0	26,0	19,0	22,0	22,0	10,0	23,0
1242508	1243963	R1A11ML52Q-4248	42	M48X2.0	61,0	38,0	50,0	49,0	48,0	60,0	55,0	15,0	56,0
1242507	1243962	R1A11ML52Q-3542	35	M42X2	59,0	38,0	48,5	48,5	48,0	50,0	50,0	13,5	51,0
1242506	1243961	R1A11ML52Q-2833	28	M33X2.0	47,0	31,0	40,5	38,5	41,0	41,0	41,0	13,5	41,0

**Run Tee adjustable elbow connector
DIN 24° Male - Metric Male with
O-Ring and retaining ring - Heavy
series**



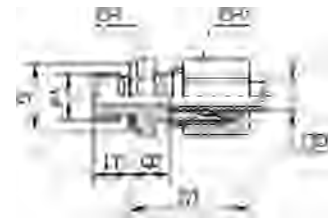
Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1242512	1244325	R1A12ML52Q-1218	12	M18X1.5	38,0	22,0	30,5	29,5	22,0	24,0	24,0	12,5	25,0
1242511	1244324	R1A12ML52Q-1016	10	M16X1.5	34,0	18,0	27,0	25,5	19,0	22,0	22,0	11,0	23,0
1242510	1244323	R1A12ML52Q-0814	8	M14X1.5	33,0	18,0	26,5	25,0	19,0	19,0	19,0	9,5	20,0
1242516	1244329	R1A12ML52Q-3042	30	M42X2	62,0	36,0	52,0	49,5	48,0	50,0	50,0	16,0	51,0
1242515	1244328	R1A12ML52Q-2533	25	M33X2.0	54,5	30,5	43,0	45,5	41,0	46,0	41,0	14,0	41,0
1242514	1244327	R1A12ML52Q-2027	20	M27X2	49,0	28,0	39,5	38,5	33,0	36,0	32,0	14,0	33,0
1242513	1244326	R1A12ML52Q-1622	16	M22X1.5	43,0	25,0	37,0	33,5	27,0	30,0	27,0	13,0	28,0
1242509	1244322	R1A12ML52Q-0612	6	M12X1.5	30,5	15,5	23,5	22,5	14,0	17,0	17,0	9,5	18,0
1242517	1244330	R1A12ML52Q-3848	38	M48X2.0	65,0	34,0	51,0	50,0	48,0	60,0	55,0	18,0	56,0

**Straight connector DIN 24° Male -
Metric cylindric Male with elastomer
- Light series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1206135	1241558	R1A11M152I-0610	6	M10X1.0	23,0	8,5	15,5	14,0	14,0	8,0	14,0
1207005	1243846	R1A11M152I-3542	35	M42X2	39,0	17,5	28,0	50,0	50,0	20,0	50,0
1206136	1241700	R1A11M152I-0812	8	M12X1.5	25,0	10,0	17,0	17,0	17,0	12,0	17,0
1207004	1243845	R1A11M152I-2833	28	M33X2.0	34,0	17,5	25,0	41,0	41,0	18,0	40,0
1206137	1243840	R1A11M152I-1014	10	M14X1.5	26,0	11,0	18,0	19,0	19,0	12,0	19,0
1206138	1243842	R1A11M152I-1518	15	M18X1.5	29,0	14,0	20,5	24,0	27,0	14,0	24,0
1206085	1243843	R1A11M152I-1822	18	M22X1.5	31,0	14,5	22,0	27,0	32,0	14,0	27,0
1206163	1243841	R1A11M152I-1216	12	M16X1.5	27,0	12,5	19,5	22,0	22,0	12,0	22,0
1206284	1243844	R1A11M152I-2226	22	M26X1.5	33,0	16,5	24,0	32,0	36,0	16,0	32,0

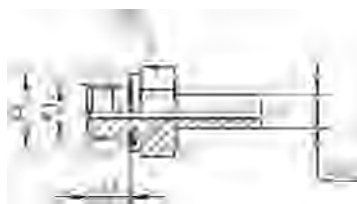
**Straight connector DIN 24° Male -
Metric cylindric Male with elastomer
- Heavy series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1206285	1244195	R1A12M152I-0612	6	M12X1.5	28,0	13,0	20,0	17,0	17,0	12,0	17,0
1206286	1244197	R1A12M152I-1016	10	M16X1.5	31,0	15,0	22,5	22,0	22,0	12,0	22,0
1211295	1244199	R1A12M152I-1420	14	M20X1.5	37,0	19,0	27,0	27,0	27,0	14,0	26,0
1206287	1244200	R1A12M152I-1622	16	M22X1.5	37,0	18,5	27,0	27,0	30,0	14,0	27,0
1211296	1244203	R1A12M152I-3042	30	M42X2	50,0	23,5	37,0	50,0	50,0	20,0	50,0
1207024	1244196	R1A12M152I-0814	8	M14X1.5	30,0	15,0	22,0	19,0	19,0	12,0	19,0
1206061	1244202	R1A12M152I-2533	25	M33X2.0	47,0	23,0	35,0	41,0	46,0	18,0	40,0
1206162	1244198	R1A12M152I-1218	12	M18X1.5	33,0	17,0	24,5	24,0	24,0	12,0	24,0
1241127	1244201	R1A12M152I-2027	20	M27X2	42,0	20,5	31,0	32,0	36,0	16,0	32,0
1208081	1244204	R1A12M152I-3848	38	M48X2.0	57,0	26,0	42,0	55,0	60,0	22,0	55,0

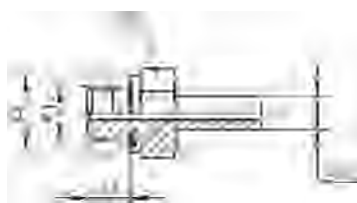
Dimensions shown may be changed without prior notice

**Straight connector DIN 24° Female
pre-assembled - Metric cylindric
Male with elastomer - Light series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	F2	LT mm	CH mm	CH1 mm	G mm	L mm
1206982	1243703	R1A113152I-1822	18	M26X1.5	M22X1.5	14,0	27,0	32,0	27,0	45,5
1206983	1243704	R1A113152I-2226	22	M30X2	M26X1.5	16,0	32,0	36,0	32,0	48,5
1206984	1243705	R1A113152I-2833	28	M36X2	M33X2.0	18,0	41,0	41,0	40,0	53,5
1206985	1243706	R1A113152I-3542	35	M45X2	M42X2	20,0	50,0	50,0	50,0	62,5
1206980	1243699	R1A113152I-0812	8	M14X1.5	M12X1.5	12,0	17,0	17,0	17,0	38,5
1206067	1243702	R1A113152I-1518	15	M22X1.5	M18X1.5	12,0	24,0	27,0	24,0	43,5
1206981	1243700	R1A113152I-1014	10	M16X1.5	M14X1.5	12,0	19,0	19,0	19,0	39,0
1206288	1243701	R1A113152I-1216	12	M18X1.5	M16X1.5	12,0	22,0	22,0	22,0	42,5
1206979	1243698	R1A113152I-0610	6	M12X1.5	M10X1.0	8,0	14,0	14,0	14,0	32,5
1206986	1243707	R1A113152I-4248	42	M52X2	M48X2.0	22,0	55,0	60,0	55,0	68,5

**Straight connector DIN 24° Female
pre-assembled - Metric cylindric
Male with elastomer - Heavy series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	F2	LT mm	CH mm	CH1 mm	G mm	L mm
1207016	1244042	R1A123152I-1622	16	M24X1.5	M22X1.5	14,0	27,0	30,0	27,0	51,0
1207015	1244041	R1A123152I-1420	14	M22X1.5	M20X1.5	14,0	27,0	27,0	26,0	50,5
1207018	1244044	R1A123152I-2533	25	M36X2	M33X2.0	18,0	41,0	46,0	40,0	66,0
1207017	1244043	R1A123152I-2027	20	M30X2	M27X2	16,0	32,0	36,0	32,0	59,0
1207012	1244038	R1A123152I-0814	8	M16X1.5	M14X1.5	12,0	19,0	19,0	19,0	41,5
1207011	1244037	R1A123152I-0612	6	M14X1.5	M12X1.5	12,0	17,0	17,0	17,0	39,0
1207014	1244040	R1A123152I-1218	12	M20X1.5	M18X1.5	12,0	24,0	24,0	24,0	46,0
1207013	1244039	R1A123152I-1016	10	M18X1.5	M16X1.5	12,0	22,0	22,0	22,0	44,0
1207020	1244046	R1A123152I-3848	38	M52X2	M48X2.0	22,0	55,0	60,0	55,0	82,0
1207019	1244045	R1A123152I-3042	30	M42X2	M42X2	20,0	50,0	50,0	50,0	71,0

Straight connector DIN 24° Female with O-Ring - Metric cylindric Male with elastomer - Light series



Item Code	Part Number	OD1	F1	F2	Q1	LT	CH	CH1	G
		mm			mm				
1211390	R1A152152I-1216	12	M18X1.5	M16X1.5	30,5	12,0	22,0	22,0	22,0
1211391	R1A152152I-1518	15	M22X1.5	M18X1.5	31,5	12,0	24,0	27,0	24,0
1211392	R1A152152I-2226	22	M30X2	M26X1.5	32,5	16,0	32,0	36,0	32,0
1211393	R1A152152I-2833	28	M36X2	M33X2.0	35,0	18,0	41,0	41,0	40,0
1211394	R1A152152I-3542	35	M45X2	M42X2	42,5	20,0	50,0	50,0	50,0
1211395	R1A152152I-4248	42	M52X2	M48X2.0	46,5	22,0	55,0	60,0	55,0
1208086	R1A152152I-1822	18	M26X1.5	M22X1.5	31,5	14,0	27,0	32,0	27,0
1211387	R1A152152I-0610	6	M12X1.5	M10X1.0	24,5	8,0	14,0	14,0	14,0
1211388	R1A152152I-0812	8	M14X1.5	M12X1.5	26,5	12,0	17,0	17,0	17,0
1211389	R1A152152I-1014	10	M16X1.5	M14X1.5	27,5	12,0	19,0	19,0	19,0

Straight connector DIN 24° Female with O-Ring - Metric cylindric Male with elastomer - Heavy series



Item Code	Part Number	OD1	F1	F2	Q1	LT	CH	CH1	G
		mm			mm				
1208178	R1A162152I-3042	30	M42X2	M42X2	51,0	20,0	50,0	50,0	50,0
1211450	R1A162152I-0612	6	M14X1.5	M12X1.5	27,0	12,0	17,0	17,0	17,0
1211451	R1A162152I-0814	8	M16X1.5	M14X1.5	29,5	12,0	19,0	19,0	19,0
1211452	R1A162152I-1016	10	M18X1.5	M16X1.5	32,0	12,0	22,0	22,0	22,0
1211453	R1A162152I-1622	16	M24X1.5	M22X1.5	37,0	14,0	27,0	30,0	27,0
1211454	R1A162152I-2027	20	M30X2	M27X2	43,0	16,0	32,0	36,0	32,0
1211455	R1A162152I-2533	25	M36X2	M33X2.0	48,0	18,0	41,0	46,0	40,0
1208181	R1A162152I-3848	38	M52X2	M48X2.0	60,0	22,0	55,0	60,0	55,0
1208172	R1A162152I-1420	14	M22X1.5	M20X1.5	36,5	14,0	27,0	27,0	26,0
1208171	R1A162152I-1218	12	M20X1.5	M18X1.5	34,0	12,0	24,0	24,0	24,0

Dimensions shown may be changed without prior notice

**90° elbow connector DIN 24° Male -
Metric conic Male - Light series**

Item Code	Part Number	OD1	F2	Q1	Q2	Q3	Q4	CH	CH1	LT
		mm		mm	mm	mm	mm	mm	mm	mm
1208106	R1A11M962M-1822	18	M22X1.5	40,0	23,5	36,0	31,0	24,0	32,0	14,0
1205818	R1A11M962M-1014	10	M14X1.5	30,0	15,0	27,0	22,0	14,0	19,0	12,0
1206353	R1A11M962M-0812	8	M12X1.5	29,0	14,0	26,0	21,0	12,0	17,0	12,0
1205819	R1A11M962M-1216	12	M16X1.5	32,0	17,0	28,0	24,0	17,0	22,0	12,0
1206141	R1A11M962M-0610	6	M10X1.0	27,0	12,0	20,0	19,0	12,0	14,0	8,0
1206229	R1A11M962M-1518	15	M18X1.5	36,0	21,0	34,0	28,0	19,0	27,0	14,0

**90° elbow connector DIN 24° Male -
Metric conic Male - Heavy series**

Item Code	Part Number	OD1	F2	Q1	Q2	Q3	Q4	CH	CH1	LT
		mm		mm	mm	mm	mm	mm	mm	mm
1206720	R1A12M962M-1622	16	M22X1.5	43,0	24,5	32,0	33,0	24,0	30,0	14,0
1206142	R1A12M962M-1016	10	M16X1.5	34,0	17,5	28,0	25,0	17,0	22,0	12,0
1206143	R1A12M962M-1218	12	M18X1.5	38,0	21,5	31,0	29,0	17,0	24,0	12,0
1211333	R1A12M962M-0612	6	M12X1.5	31,0	16,0	26,0	23,0	12,0	17,0	12,0
1211334	R1A12M962M-0814	8	M14X1.5	32,0	17,0	27,0	24,0	14,0	19,0	12,0
1211335	R1A12M962M-1420	14	M20X1.5	40,0	22,0	32,0	30,0	19,0	27,0	14,0

Banjo adjustable - Type A - Metric cylindric DIN 24° - Light series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1205882	1243914	R1A11ME505-0610	6	M10X1.0	27,0	12,5	29,0	13,0	20,0	8,0	19,0	14,0	17,0	15,0
1206577	1243917	R1A11ME505-1518	15	M18X1.5	44,5	21,5	39,0	22,5	29,0	14,0	36,0	27,0	24,0	22,0
1206274	1243915	R1A11ME505-0812	8	M12X1.5	30,5	15,0	30,5	14,5	21,5	12,0	22,0	17,0	19,0	17,0
1244461	1231370	R1A11ME505-1014	10	M14X1.5	30,5	15,0	32,0	15,5	22,5	12,0	22,0	19,0	19,0	18,0
1206580	1243918	R1A11ME505-1822	18	M22X1.5	48,0	23,0	40,0	22,0	29,5	14,0	36,0	32,0	27,0	26,0
1206581	1243916	R1A11ME505-1216	12	M16X1.5	38,5	19,0	36,0	19,5	26,5	12,0	30,0	22,0	24,0	22,0
1206579	1243919	R1A11ME505-2226	22	M26X1.5	56,0	26,0	47,0	28,0	35,5	16,0	41,0	36,0	32,0	32,0

Banjo adjustable - Type A - Metric cylindric DIN 24° - Heavy series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1206456	1244279	R1A12ME505-1218	12	M18X1.5	37,5	18,0	38,0	20,0	27,5	12,0	30,0	24,0	24,0	22,0
1206578	1244281	R1A12ME505-1622	16	M22X1.5	48,0	23,0	43,0	23,0	31,5	14,0	36,0	30,0	27,0	26,0
1207056	1244276	R1A12ME505-0612	6	M12X1.5	30,5	15,0	33,0	16,5	23,5	12,0	22,0	17,0	19,0	17,0
1207057	1244277	R1A12ME505-0814	8	M14X1.5	30,5	15,0	32,5	16,5	23,5	12,0	22,0	19,0	19,0	18,0
1208099	1244280	R1A12ME505-1420	14	M20X1.5	48,0	23,0	42,5	23,5	31,5	14,0	36,0	27,0	27,0	26,0
1208098	1244278	R1A12ME505-1016	10	M16X1.5	38,5	19,0	38,0	20,0	27,5	12,0	30,0	22,0	24,0	22,0
1211301	1244282	R1A12ME505-2027	20	M27X2	56,0	26,0	51,5	27,0	37,5	16,0	41,0	36,0	32,0	32,0

Dimensions shown may be changed without prior notice

Banjo adjustable - Type B - Metric cylindric DIN 24° - Light series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1206153	1243921	R1A11ME50M-0812	8	M12X1.5	30,0	15,0	29,0	14,5	21,5	12,0	22,0	17,0	6,0	17,0
1206275	1243922	R1A11ME50M-1014	10	M14X1.5	30,0	16,0	30,0	15,5	23,0	12,0	22,0	19,0	8,0	19,0
1206154	1243924	R1A11ME50M-1518	15	M18X1.5	40,0	20,0	36,0	21,0	28,0	12,0	30,0	27,0	12,0	23,0
1207055	1243925	R1A11ME50M-1822	18	M22X1.5	46,0	23,0	38,0	21,5	29,0	14,0	36,0	32,0	14,0	27,0
1211010	1243920	R1A11ME50M-0610	6	M10X1.0	24,0	12,0	27,0	12,5	19,5	8,0	19,0	14,0	6,0	14,0
1206276	1243923	R1A11ME50M-1216	12	M16X1.5	37,0	18,0	33,0	18,0	25,5	12,0	27,0	22,0	10,0	21,0
1211011	1243926	R1A11ME50M-2226	22	M26X1.5	51,0	25,0	42,0	26,0	35,0	16,0	41,0	36,0	17,0	31,0
1211012	1243927	R1A11ME50M-2833	28	M33X2.0	64,0	32,0	48,0	31,5	39,0	18,0	50,0	41,0	22,0	39,0
1211013	1243928	R1A11ME50M-3542	35	M42X2	76,0	37,0	57,0	35,5	46,0	20,0	60,0	50,0	27,0	49,0

Banjo adjustable - Type B - Metric cylindric DIN 24° - Heavy series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1206157	1244292	R1A12ME50M-3848	38	M48X2.0	85,0	42,0	72,0	41,0	58,5	22,0	70,0	60,0	32,0	55,0
1206895	1244283	R1A12ME50M-0612	6	M12X1.5	30,0	15,0	31,0	16,5	23,5	12,0	22,0	17,0	6,0	17,0
1208222	1244291	R1A12ME50M-3042	30	M42X2	76,0	37,0	63,0	36,5	50,0	20,0	60,0	50,0	27,0	49,0
1208221	1244288	R1A12ME50M-1622	16	M22X1.5	46,0	23,0	41,0	22,5	31,0	14,0	36,0	30,0	14,0	27,0
1207058	1244284	R1A12ME50M-0814	8	M14X1.5	30,0	16,0	31,0	16,5	23,5	12,0	22,0	19,0	8,0	19,0
1206155	1244285	R1A12ME50M-1016	10	M16X1.5	37,0	18,0	35,0	18,5	26,0	12,0	27,0	22,0	10,0	21,0
1207465	1244289	R1A12ME50M-2027	20	M27X2	58,0	28,0	49,0	27,5	38,0	16,0	46,0	36,0	17,0	32,0
1206156	1244286	R1A12ME50M-1218	12	M18X1.5	41,0	20,0	37,0	20,5	28,0	12,0	30,0	24,0	12,0	23,0
1211200	1244290	R1A12ME50M-2533	25	M33X2.0	64,0	32,0	55,0	31,0	43,0	18,0	50,0	46,0	22,0	39,0
1206844	1244287	R1A12ME50M-1420	14	M20X1.5	42,0	21,0	41,0	23,0	31,0	14,0	32,0	27,0	12,0	25,0

// BSPP

**Straight connector DIN 24° Male
- BSPP cylindric flat Male - Light
series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1206597	1243735	R1A11M106M-0808	8	1/2-14	27,0	12,0	19,0	27,0	17,0	14,0	26,0
1204264	1243737	R1A11M106M-1006	10	3/8-19	27,0	12,5	19,0	22,0	19,0	12,0	22,0
1205740	1243731	R1A11M106M-0602	6	1/8-28	23,0	8,5	15,5	14,0	14,0	8,0	14,0
1204274	1243734	R1A11M106M-0806	8	3/8-19	26,0	11,5	18,5	22,0	17,0	12,0	22,0
1204273	1243732	R1A11M106M-0604	6	1/4-19	25,0	10,0	17,0	19,0	14,0	12,0	18,0
1204262	1243736	R1A11M106M-1004	10	1/4-19	26,0	11,0	18,0	19,0	19,0	12,0	18,0
1205741	1243742	R1A11M106M-1808	18	1/2-14	31,0	14,5	22,0	27,0	32,0	14,0	26,0
1206930	1243733	R1A11M106M-0606	6	3/8-19	26,0	11,5	18,5	22,0	14,0	12,0	22,0
1205742	1243743	R1A11M106M-1812	18	3/4-14	30,0	14,5	22,0	32,0	32,0	16,0	32,0
1204268	1243740	R1A11M106M-1206	12	3/8-19	27,0	12,5	19,5	22,0	22,0	12,0	22,0
1204267	1241073	R1A11M106M-1208	12	1/2-14	28,0	13,0	20,0	27,0	22,0	14,0	26,0
1205481	1243746	R1A11M106M-3520	35	1 1/4-11	39,0	17,5	28,0	50,0	50,0	20,0	49,0
1204260	1243738	R1A11M106M-1008	10	1/2-14	28,0	13,0	20,0	27,0	19,0	14,0	26,0
1204271	1243741	R1A11M106M-1506	15	3/8-19	29,0	13,5	20,5	24,0	27,0	12,0	22,0
1204270	1242250	R1A11M106M-1508	15	1/2-14	29,0	14,0	21,0	27,0	27,0	14,0	26,0
1205549	1243739	R1A11M106M-1204	12	1/4-19	27,0	12,0	19,0	19,0	22,0	12,0	18,0
1205528	1242345	R1A11M106M-0804	8	1/4-19	25,0	10,0	17,0	19,0	17,0	12,0	18,0
1205743	1243744	R1A11M106M-2212	22	3/4-14	33,0	16,5	24,0	32,0	36,0	16,0	32,0
1205744	1243745	R1A11M106M-2816	28	1-11	34,0	17,5	25,0	41,0	41,0	18,0	39,0
1206911	1243747	R1A11M106M-4224	42	1 1/2-11	42,0	19,0	30,0	55,0	60,0	22,0	55,0

**Straight connector DIN 24° Male
- BSPP cylindric flat Male - Heavy
series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1206014	1244080	R1A12M106M-1208	12	1/2-14	34,0	17,5	25,0	27,0	24,0	14,0	26,0
1205750	1244082	R1A12M106M-1608	16	1/2-14	37,0	18,5	27,0	27,0	30,0	14,0	26,0
1205751	1244084	R1A12M106M-2012	20	3/4-14	42,0	20,5	31,0	32,0	36,0	16,0	32,0
1205884	1244083	R1A12M106M-1612	16	3/4-14	39,0	20,5	29,0	32,0	30,0	16,0	32,0
1205752	1244085	R1A12M106M-2516	25	1-11	47,0	23,0	35,0	41,0	46,0	18,0	39,0
1205753	1244086	R1A12M106M-3020	30	1 1/4-11	50,0	23,5	37,0	50,0	50,0	20,0	49,0
1205582	1244078	R1A12M106M-1006	10	3/8-19	31,0	15,0	22,5	22,0	22,0	12,0	22,0
1206096	1244076	R1A12M106M-0604	6	1/4-19	28,0	13,0	20,0	19,0	17,0	12,0	18,0
1205748	1244081	R1A12M106M-1408	14	1/2-14	37,0	19,0	27,0	27,0	27,0	14,0	26,0
1205754	1244087	R1A12M106M-3824	38	1 1/2-11	57,0	26,0	42,0	55,0	60,0	22,0	55,0
1205745	1244077	R1A12M106M-0804	8	1/4-19	30,0	15,0	22,0	19,0	19,0	12,0	18,0
1205746	1244079	R1A12M106M-1206	12	3/8-19	33,0	17,0	24,5	22,0	24,0	12,0	22,0

Dimensions shown may be changed without prior notice

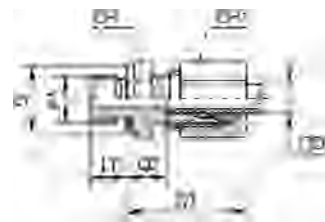
**Straight connector DIN 24° Male -
BSPP cylindric Female - Light series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F2	Q1 mm	CH mm	CH1 mm	L mm	L1 mm
1206267	1240579	R1A11M106F-0602	6	1/8-28	19,0	14,0	14,0	34,0	26,0
1206996	1243718	R1A11M106F-0806	8	3/8-19	25,0	17,0	24,0	40,0	32,5
1208155	1243724	R1A11M106F-4224	42	1 1/2-11	42,5	60,0	60,0	65,0	53,5
1205802	1242104	R1A11M106F-1508	15	1/2-14	31,0	27,0	27,0	46,0	38,0
1205803	1243720	R1A11M106F-1808	18	1/2-14	30,5	32,0	27,0	47,0	38,0
1205804	1243722	R1A11M106F-2816	28	1-11	38,0	41,0	41,0	55,0	45,5
1205799	1241529	R1A11M106F-0804	8	1/4-19	24,0	17,0	19,0	39,0	31,0
1206998	1243723	R1A11M106F-3520	35	1 1/4-11	41,0	50,0	55,0	63,0	51,5
1205800	1240804	R1A11M106F-1004	10	1/4-19	25,0	19,0	19,0	40,0	32,0
1205547	1243721	R1A11M106F-2212	22	3/4-14	35,5	36,0	36,0	52,0	43,0
1205801	1243719	R1A11M106F-1206	12	3/8-19	26,0	22,0	24,0	41,0	33,0

**Straight connector DIN 24° Male -
BSPP cylindric Female - Heavy series**

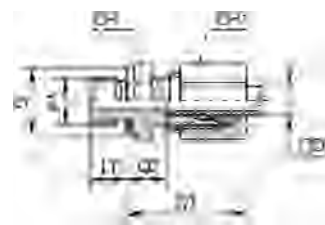
Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F2	Q1 mm	CH mm	CH1 mm	L mm	L1 mm
1206268	1244062	R1A12M106F-2012	20	3/4-14	34,5	36,0	36,0	56,0	45,0
1205806	1244060	R1A12M106F-1408	14	1/2-14	32,0	27,0	30,0	50,0	40,0
1205807	1244061	R1A12M106F-1608	16	1/2-14	31,5	30,0	30,0	50,0	40,0
1207143	1244065	R1A12M106F-3824	38	1 1/2-11	43,5	60,0	60,0	74,0	59,5
1206364	1244057	R1A12M106F-0604	6	1/4-19	26,0	17,0	19,0	41,0	33,0
1205808	1244063	R1A12M106F-2516	25	1-11	37,5	46,0	41,0	62,0	49,5
1206365	1244059	R1A12M106F-1206	12	3/8-19	26,5	24,0	24,0	43,0	34,0
1207021	1244064	R1A12M106F-3020	30	1 1/4-11	42,0	50,0	55,0	69,0	55,5
1205805	1244058	R1A12M106F-0804	8	1/4-19	26,0	19,0	19,0	41,0	33,0

**Straight connector DIN 24° Male -
BSPP cylindric Male with elastomer
- Light series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1205761	1243727	R1A11M106I-2212	22	3/4-14	33,0	16,5	24,0	32,0	36,0	16,0	32,0
1205488	1241083	R1A11M106I-1206	12	3/8-19	27,0	12,5	19,5	22,0	22,0	12,0	22,0
1205489	1241085	R1A11M106I-1508	15	1/2-14	29,0	14,0	21,0	27,0	27,0	14,0	27,0
1206039	1243730	R1A11M106I-4224	42	1 1/2-11	42,0	19,0	30,0	55,0	60,0	22,0	55,0
1206131	1242311	R1A11M106I-0602	6	1/8-28	23,0	8,5	15,5	14,0	14,0	8,0	14,0
1206056	1243728	R1A11M106I-2816	28	1-11	34,0	17,5	25,0	41,0	41,0	18,0	40,0
1205760	1243725	R1A11M106I-1004	10	1/4-19	26,0	11,0	18,0	19,0	19,0	12,0	19,0
1205490	1241082	R1A11M106I-0804	8	1/4-19	25,0	10,0	17,0	19,0	17,0	12,0	19,0
1206040	1243726	R1A11M106I-1808	18	1/2-14	31,0	14,5	22,0	27,0	32,0	14,0	27,0
1206283	1243729	R1A11M106I-3520	35	1 1/4-11	39,0	17,5	28,0	50,0	50,0	20,0	50,0

**Straight connector DIN 24° Male -
BSPP cylindric Male with elastomer
- Heavy series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1	F1	Q1	Q2	Q3	CH	CH1	LT	G
			mm		mm	mm	mm	mm	mm	mm	mm
1206047	1244073	R1A12M106I-2516	25	1-11	47,0	23,0	35,0	41,0	46,0	18,0	40,0
1205762	1244070	R1A12M106I-1408	14	1/2-14	37,0	19,0	27,0	27,0	27,0	14,0	27,0
1206049	1244067	R1A12M106I-0804	8	1/4-19	30,0	15,0	22,0	19,0	19,0	12,0	19,0
1205763	1244071	R1A12M106I-1608	16	1/2-14	37,0	18,5	27,0	27,0	30,0	14,0	27,0
1205764	1244072	R1A12M106I-2012	20	3/4-14	42,0	20,5	31,0	32,0	36,0	16,0	32,0
1207842	1244075	R1A12M106I-3820	38	1 1/4-11	57,0	26,0	42,0	55,0	60,0	20,0	50,0
1206133	1244066	R1A12M106I-0604	6	1/4-19	28,0	13,0	20,0	19,0	17,0	12,0	19,0
1206134	1244068	R1A12M106I-1006	10	3/8-19	31,0	15,0	22,5	22,0	22,0	12,0	22,0
1205901	1244069	R1A12M106I-1206	12	3/8-19	33,0	17,0	24,5	22,0	24,0	12,0	22,0
1206416	1244074	R1A12M106I-3020	30	1 1/4-11	50,0	23,5	37,0	50,0	50,0	20,0	50,0

Dimensions shown may be changed without prior notice

**45° adjustable elbow connector DIN
24° Male - BSPP cylindric Male with
O-Ring and retaining ring - Light
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1237039	1244938	R1A11M406N-4224	42	1 1/2-11	49,0	26,0	38,0	37,0	48,0	60,0	55,0	16,0	58,5
1237038	1244937	R1A11M406N-3520	35	1 1/4-11	48,0	27,0	38,0	37,5	48,0	50,0	50,0	16,0	53,0
1237036	1244935	R1A11M406N-2212	22	3/4-14	35,5	19,5	37,5	27,0	33,0	36,0	36,0	13,0	35,0
1237035	1244934	R1A11M406N-1808	18	1/2-14	33,0	17,0	32,0	24,5	27,0	32,0	27,0	13,0	29,0
1231360	1244936	R1A11M406N-2816	28	1-11	39,0	23,0	36,0	30,5	41,0	41,0	41,0	16,0	44,5
1237034	1244933	R1A11M406N-1508	15	1/2-14	32,0	17,0	26,0	24,0	22,0	27,0	27,0	13,0	29,0
1237033	1244932	R1A11M406N-1206	12	3/8-19	29,0	14,0	27,5	21,0	19,0	22,0	22,0	9,5	24,0
1237032	1244931	R1A11M406N-1004	10	1/4-19	27,0	12,0	24,5	19,0	19,0	19,0	19,0	9,5	20,5
1237031	1244930	R1A11M406N-0804	8	1/4-19	27,0	12,0	19,5	19,0	14,0	17,0	19,0	9,5	20,5
1237030	1244929	R1A11M406N-0602	6	1/8-28	24,5	9,5	21,7	16,5	14,0	14,0	14,0	6,3	16,0

**45° adjustable elbow connector DIN
24° Male - BSPP cylindric Male with
O-Ring and retaining ring - Heavy
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1237062	1245007	R1A12M406N-3824	38	1 1/2-11	55,0	24,0	37,0	40,0	48,0	60,0	55,0	16,0	58,5
1237061	1245006	R1A12M406N-3020	30	1 1/4-11	50,0	24,0	37,0	37,5	48,0	50,0	50,0	16,0	53,0
1237060	1245005	R1A12M408M-2516	25	1-11	46,0	22,0	35,0	34,0	41,0	46,0	41,0	16,0	44,5
1237059	1245004	R1A12M406N-2012	20	3/4-14	40,0	19,0	33,0	29,5	33,0	36,0	36,0	13,0	35,0
1237058	1245003	R1A12M406N-1608	16	1/2-14	34,0	16,0	31,0	24,5	27,0	30,0	27,0	13,0	29,0
1237057	1245002	R1A12M406N-1206	12	3/8-19	33,0	17,0	24,5	24,5	22,0	24,0	22,0	9,5	24,0
1237056	1245001	R1A12M406N-1006	10	3/8-19	29,0	13,0	24,5	20,5	19,0	22,0	22,0	9,5	24,0
1237055	1245000	R1A12M406N-0804	8	1/4-19	28,0	13,0	22,5	20,5	19,0	19,0	19,0	9,5	20,5
1237054	1244999	R1A12M406N-0604	6	1/4-19	26,0	11,0	18,5	18,5	14,0	17,0	19,0	9,5	20,5

**90° adjustable elbow connector DIN
24° Male - BSPP cylindric Male with
O-Ring and retaining ring - Light
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1208116	1243856	R1A11M906N-4224	42	1 1/2-11	61,0	38,0	51,0	49,0	48,0	60,0	55,0	16,0	58,5
1210735	1243852	R1A11M906N-1808	18	1/2-14	40,0	24,0	36,5	31,5	27,0	32,0	27,0	13,0	29,0
1206896	1243853	R1A11M906N-2212	22	3/4-14	44,0	28,0	37,5	35,5	33,0	36,0	36,0	13,0	35,0
1208111	1243849	R1A11M906N-1004	10	1/4-19	32,0	17,0	24,5	24,0	19,0	19,0	19,0	9,5	20,5
1208114	1243854	R1A11M906N-2816	28	1-11	47,0	31,0	41,0	38,5	41,0	41,0	41,0	16,0	44,5
1208113	1243851	R1A11M906N-1508	15	1/2-14	36,0	21,0	30,0	28,0	22,0	27,0	27,0	13,0	29,0
1211135	1243847	R1A11M906N-0602	6	1/8-28	29,0	14,0	20,2	21,0	14,0	14,0	14,0	6,3	16,0
1208110	1243848	R1A11M906N-0804	8	1/4-19	31,0	16,0	22,5	23,0	14,0	17,0	19,0	9,5	20,5
1211136	1243855	R1A11M906N-3520	35	1 1/4-11	59,0	38,0	49,0	48,5	48,0	50,0	50,0	16,0	53,0
1239726	1243850	R1A11M906N-1206	12	3/8-19	34,0	19,0	27,5	26,0	19,0	22,0	22,0	9,5	24,0

**90° adjustable elbow connector DIN
24° Male - BSPP cylindric Male with
O-Ring and retaining ring - Heavy
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1211298	1244205	R1A12M906N-0604	6	1/4-19	30,5	15,5	22,5	22,5	14,0	17,0	19,0	9,5	20,5
1208097	1244211	R1A12M906N-2516	25	1-11	54,5	30,5	41,0	42,5	41,0	46,0	41,0	16,0	44,5
1208096	1244210	R1A12M906N-2012	20	3/4-14	49,0	28,0	38,0	38,5	33,0	36,0	36,0	13,0	35,0
1211299	1244212	R1A12M906N-3020	30	1 1/4-11	62,0	36,0	48,0	49,5	48,0	50,0	50,0	16,0	53,0
1211300	1244213	R1A12M906N-3824	38	1 1/2-11	65,0	34,0	53,0	50,0	48,0	60,0	55,0	16,0	58,5
1208093	1244207	R1A12M906N-1006	10	3/8-19	34,0	18,0	28,5	25,5	19,0	22,0	22,0	9,5	24,0
1208092	1244206	R1A12M906N-0804	8	1/4-19	33,0	18,0	26,5	25,0	19,0	19,0	19,0	9,5	20,5
1208095	1244209	R1A12M906N-1608	16	1/2-14	43,0	25,0	36,0	33,5	27,0	30,0	27,0	13,0	29,0
1208094	1244208	R1A12M906N-1206	12	3/8-19	38,0	22,0	28,5	29,5	22,0	24,0	22,0	9,5	24,0

Dimensions shown may be changed without prior notice

**Branch Tee adjustable elbow
connector DIN 24° Male - BSPP Male
with O-Ring and retaining ring - Light
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1211050	1243964	R1A11MT06N-0602	6	M12X1.5	29,0	14,0	20,2	21,0	14,0	14,0	14,0	6,3	16,0
1211051	1243965	R1A11MT06N-0804	8	M14X1.5	31,0	16,0	22,5	23,0	14,0	17,0	19,0	9,5	20,5
1231369	1243971	R1A11MT06N-2816	28	M36X2	47,0	31,0	41,0	38,5	41,0	41,0	41,0	16,0	44,5
1211052	1243966	R1A11MT06N-1004	10	M16X1.5	32,0	17,0	24,5	24,0	19,0	19,0	19,0	9,5	20,5
1211053	1243967	R1A11MT06N-1206	12	M18X1.5	34,0	19,0	27,5	26,0	19,0	22,0	22,0	9,5	24,0
1211055	1243969	R1A11MT06N-1808	18	M26X1.5	40,0	24,0	36,5	31,5	27,0	32,0	27,0	13,0	29,0
1211056	1243970	R1A11MT06N-2212	22	M30X2	44,0	28,0	37,5	35,5	33,0	36,0	36,0	13,0	35,0
1211058	1243973	R1A11MT06N-4224	42	M52X2	61,0	38,0	51,0	49,0	48,0	60,0	55,0	16,0	58,5
1237042	1243968	R1A11MT06N-1508	15	M22X1.5	36,0	21,0	30,0	28,0	22,0	27,0	27,0	13,0	29,0
1208182	1243972	R1A11MT06N-3520	35	M45X2	59,0	38,0	49,0	48,5	48,0	50,0	50,0	16,0	53,0

**Branch Tee adjustable elbow
connector DIN 24° Male - BSPP Male
with O-Ring and retaining ring -
Heavy series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1211240	1244335	R1A12MT06N-1608	16	M24X1.5	43,0	25,0	36,0	33,5	27,0	30,0	27,0	13,0	29,0
1211241	1244336	R1A12MT06N-2012	20	M30X2	49,0	28,0	38,0	38,5	33,0	36,0	36,0	13,0	35,0
1211242	1244337	R1A12MT06N-2516	25	M36X2	54,5	30,5	41,0	42,5	41,0	46,0	41,0	16,0	44,5
1211243	1244338	R1A12MT06N-3020	30	M42X2	62,0	36,0	48,0	49,5	48,0	50,0	50,0	16,0	53,0
1231381	1244332	R1A12MT06N-0804	8	M16X1.5	33,0	18,0	26,5	25,0	19,0	19,0	19,0	9,5	20,5
1211244	1244339	R1A12MT06N-3824	38	M52X2	65,0	34,0	53,0	50,0	48,0	60,0	55,0	16,0	58,5
1211236	1244331	R1A12MT06N-0604	6	M14X1.5	30,5	15,5	22,5	22,5	14,0	17,0	19,0	9,5	20,5
1211238	1244333	R1A12MT06N-1006	10	M18X1.5	34,0	18,0	28,5	25,5	19,0	22,0	22,0	9,5	24,0
1211239	1244334	R1A12MT06N-1206	12	M20X1.5	38,0	22,0	28,5	29,5	22,0	24,0	22,0	9,5	24,0

**Run Tee adjustable elbow connector
DIN 24° Male - BSPP Male with
O-Ring and retaining ring - Light
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1210734	1243930	R1A11ML06N-0804	8	1/4-19	31,0	16,0	22,5	23,0	14,0	17,0	19,0	9,5	20,5
1231368	1243935	R1A11ML06N-2212	22	3/4-14	44,0	28,0	37,5	35,5	33,0	36,0	36,0	13,0	35,0
1211020	1243931	R1A11ML06N-1004	10	1/4-19	32,0	17,0	24,5	24,0	19,0	19,0	19,0	9,5	20,5
1211021	1243932	R1A11ML06N-1206	12	3/8-19	34,0	19,0	27,5	26,0	19,0	22,0	22,0	9,5	24,0
1211022	1243933	R1A11ML06N-1508	15	1/2-14	36,0	21,0	30,0	28,0	22,0	27,0	27,0	13,0	29,0
1211023	1243934	R1A11ML06N-1808	18	1/2-14	40,0	24,0	36,5	31,5	27,0	32,0	27,0	13,0	29,0
1211025	1243936	R1A11ML06N-2816	28	1-11	47,0	31,0	41,0	38,5	41,0	41,0	41,0	16,0	44,5
1211026	1243937	R1A11ML06N-3520	35	1 1/4-11	59,0	38,0	49,0	48,5	48,0	50,0	50,0	16,0	53,0
1211027	1243938	R1A11ML06N-4224	42	1 1/2-11	61,0	38,0	51,0	49,0	48,0	60,0	55,0	16,0	58,5
1211019	1243929	R1A11ML06N-0602	6	1/8-28	29,0	14,0	20,2	21,0	14,0	14,0	14,0	6,3	16,0

**Run Tee adjustable elbow connector
DIN 24° Male - BSPP Male with
O-Ring and retaining ring - Heavy
series**



Item Code Body Only	Item Code Complete	Part Number	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	CH mm	CH1 mm	LN mm	LT mm	G mm
1211207	1244293	R1A12ML06N-0604	6	1/4-19	30,5	15,5	22,5	22,5	14,0	17,0	19,0	9,5	20,5
1211209	1244295	R1A12ML06N-1006	10	3/8-19	34,0	18,0	28,5	25,5	19,0	22,0	22,0	9,5	24,0
1231380	1244294	R1A12ML06N-0804	8	1-11	33,0	18,0	26,5	25,0	19,0	19,0	19,0	9,5	20,5
1211210	1244296	R1A12ML06N-1206	12	3/8-19	38,0	22,0	28,5	29,5	22,0	24,0	22,0	9,5	24,0
1211211	1244297	R1A12ML06N-1608	16	1/2-14	43,0	25,0	36,0	33,5	27,0	30,0	27,0	13,0	29,0
1211212	1244298	R1A12ML06N-2012	20	3/4-14	49,0	28,0	38,0	38,5	33,0	36,0	36,0	13,0	35,0
1211213	1244299	R1A12ML06N-2516	25	1-11	54,5	30,5	41,0	42,5	41,0	46,0	41,0	16,0	44,5
1211214	1244300	R1A12ML06N-3020	30	1 1/4-11	62,0	36,0	48,0	49,5	48,0	50,0	50,0	16,0	53,0
1211215	1244301	R1A12ML06N-3824	38	1 1/2-11	65,0	34,0	53,0	50,0	48,0	60,0	55,0	16,0	58,5

Dimensions shown may be changed without prior notice

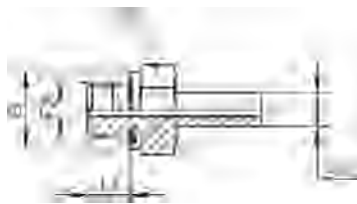
**Straight connector DIN 24° Female with O-Ring - BSPP cylindric
Male with elastomer - Light series**


Item Code	Part Number	OD1	F1	F2	Q1	LT	CH	CH1	G
		mm			mm				
1211383	R1A152106I-0602	6	M12X1.5	1/8-28	24,5	8,0	14,0	14,0	14,0
1211384	R1A152106I-2816	28	M36X2	1-11	35,0	18,0	41,0	41,0	40,0
1211385	R1A152106I-3520	35	M45X2	1 1/4-11	42,5	20,0	50,0	50,0	50,0
1206814	R1A152106I-1004	10	M16X1.5	1/4-19	27,5	12,0	19,0	19,0	19,0
1211386	R1A152106I-4224	42	M52X2	1 1/2-11	46,5	22,0	55,0	60,0	55,0
1208085	R1A152106I-2212	22	M30X2	3/4-14	32,5	16,0	32,0	36,0	32,0
1208044	R1A152106I-1808	18	M26X1.5	1/2-14	31,5	14,0	27,0	32,0	27,0
1206931	R1A152106I-0804	8	M14X1.5	1/4-19	29,5	12,0	19,0	17,0	19,0
1206558	R1A152106I-1206	12	M18X1.5	3/8-19	34,0	12,0	22,0	22,0	22,0
1208084	R1A152106I-1508	15	M22X1.5	1/2-14	32,0	14,0	27,0	27,0	27,0

**Straight connector DIN 24° Female with O-Ring - BSPP cylindric
Male with elastomer - Heavy series**

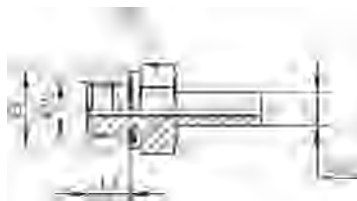

Item Code	Part Number	OD1	F1	F2	Q1	LT	CH	CH1	G
		mm			mm				
1207555	R1A162106I-2012	20	M30X2	3/4-14	43,0	16,0	32,0	36,0	32,0
1207544	R1A162106I-3020	30	M42X2	1 1/4-11	51,0	20,0	50,0	50,0	50,0
1211449	R1A162106I-3824	38	M52X2	1 1/2-11	60,0	22,0	55,0	60,0	55,0
1206561	R1A162106I-1608	16	M24X1.5	1/2-14	37,0	14,0	27,0	30,0	27,0
1208169	R1A162106I-1206	12	M20X1.5	3/8-19	34,0	12,0	22,0	24,0	22,0
1208168	R1A162106I-1006	10	M18X1.5	3/8-19	32,0	12,0	22,0	22,0	22,0
1207131	R1A162106I-2516	25	M36X2	1-11	48,0	18,0	41,0	46,0	40,0
1208170	R1A162106I-1408	14	M22X1.5	1/2-14	36,5	14,0	27,0	27,0	27,0
1206834	R1A162106I-0804	8	M16X1.5	1/4-19	29,5	12,0	19,0	19,0	19,0
1211448	R1A162106I-0604	6	M14X1.5	1/4-19	27,0	12,0	19,0	17,0	19,0

Straight connector DIN 24° Female pre-assembled - BSPP cylindric Male with elastomer - Light series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	F2	LT mm	CH mm	CH1 mm	G mm	L mm
1205553	1243691	R1A113106I-1206	12	M18X1.5	3/8-19	12,0	22,0	22,0	22,0	46,0
1205554	1243692	R1A113106I-1508	15	M22X1.5	1/2-14	14,0	27,0	27,0	27,0	46,0
1206303	1243688	R1A113106I-0602	6	M12X1.5	1/8-28	8,0	14,0	14,0	14,0	32,5
1205555	1243694	R1A113106I-2212	22	M30X2	3/4-14	16,0	32,0	36,0	32,0	48,5
1206000	1243696	R1A113106I-3520	35	M45X2	1 1/4-11	20,0	50,0	50,0	50,0	62,5
1205583	-	R1A113106I-0804 _ A	8	M14X1.5	1/4-19	12,0	19,0	17,0	19,0	41,5
1205573	1243690	R1A113106I-1004	10	M16X1.5	1/4-19	12,0	19,0	19,0	19,0	39,5
1206073	1243695	R1A113106I-2816	28	M36X2	1-11	18,0	41,0	41,0	40,0	53,0
1206492	1243697	R1A113106I-4224	42	M52X2	1 1/2-11	22,0	55,0	60,0	55,0	68,5
1205766	1243693	R1A113106I-1808	18	M26X1.5	1/2-14	14,0	27,0	32,0	27,0	45,5

Straight connector DIN 24° Female pre-assembled - BSPP cylindric Male with elastomer - Heavy series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	F2	LT mm	CH mm	CH1 mm	G mm	L mm
1206487	1244029	R1A123106I-1006	10	M18X1.5	3/8-19	12,0	22,0	22,0	22,0	44,5
1206032	1244032	R1A123106I-1608	16	M24X1.5	1/2-14	14,0	27,0	30,0	27,0	50,5
1206033	1244031	R1A123106I-1408	14	M22X1.5	1/2-14	14,0	27,0	27,0	27,0	51,0
1206485	1244027	R1A123106I-0604	6	M14X1.5	1/4-19	12,0	19,0	17,0	19,0	39,0
1206034	1244030	R1A123106I-1206	12	M20X1.5	3/8-19	12,0	22,0	24,0	22,0	46,0
1206035	1244028	R1A123106I-0804	8	M16X1.5	1/4-19	12,0	19,0	19,0	19,0	41,5
1206490	1244035	R1A123106I-3020	30	M42X2	1 1/4-11	20,0	50,0	50,0	50,0	71,0
1206491	1244036	R1A123106I-3824	38	M52X2	1 1/2-11	22,0	55,0	60,0	55,0	82,0
1206030	1244034	R1A123106I-2516	25	M36X2	1-11	18,0	41,0	46,0	40,0	66,0
1206031	1244033	R1A123106I-2012	20	M30X2	3/4-14	16,0	32,0	36,0	32,0	59,0

Dimensions shown may be changed without prior notice

Banjo elbow - Type B - BSPP Male DIN 24° - Light series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1211009	1243913	R1A11ME06M-4224	42	1 1/2-11	85,0	42,0	63,0	40,0	52,5	22,0	70,0	60,0	32,0	55,0
1206158	1243905	R1A11ME06M-0804	8	1/4-19	30,0	16,0	29,0	14,5	21,5	12,0	22,0	17,0	8,0	18,0
1208107	1243911	R1A11ME06M-2816	28	1-11	64,0	32,0	48,0	31,5	39,0	18,0	50,0	41,0	22,0	39,0
1243686	1243906	R1A11ME06M-1004	8	1/4-19	30,0	16,0	30,0	15,5	23,0	12,0	22,0	19,0	8,0	18,0
1206277	1243908	R1A11ME06M-1508	15	1/2-14	42,0	21,0	37,0	22,0	29,0	14,0	32,0	27,0	12,0	26,0
1206160	1243907	R1A11ME06M-1206	12	3/8-19	37,0	18,0	33,0	18,0	25,5	12,0	27,0	22,0	10,0	22,0
1206161	1243912	R1A11ME06M-3520	35	1 1/4-11	76,0	37,0	57,0	35,5	46,0	20,0	60,0	50,0	27,0	49,0
1207054	1243904	R1A11ME06M-0602	6	1/8-28	24,0	12,0	27,0	12,5	19,5	8,0	19,0	14,0	6,0	14,0
1211007	1243909	R1A11ME06M-1808	18	1/2-14	46,0	23,0	38,0	21,5	29,0	14,0	36,0	32,0	12,0	26,0
1211008	1243910	R1A11ME06M-2212	22	3/4-14	58,0	28,0	45,0	28,5	36,0	16,0	46,0	36,0	17,0	32,0

Banjo elbow - Type B - BSPP Male DIN 24° - Heavy series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1206114	1244268	R1A12ME06M-0604	6	1/4-19	30,0	16,0	31,0	16,5	23,5	12,0	22,0	17,0	8,0	18,0
1207059	1244267	R1A12ME06M-1408	14	1/2-14	42,0	21,0	41,0	23,0	31,0	14,0	32,0	27,0	12,0	26,0
1206115	1244269	R1A12ME06M-0804	8	1/4-19	30,0	16,0	31,0	16,5	23,5	12,0	22,0	19,0	8,0	18,0
1206116	1244270	R1A12ME06M-1006	10	3/8-19	37,0	18,0	35,0	18,5	26,0	12,0	27,0	22,0	10,0	22,0
1244267	-	R1A12ME06M-1408_A	14	1/2-14	42,0	21,0	41,0	23,0	-	14,0	32,0	27,0	12,0	26,0
1211197	1244272	R1A12ME06M-2012	20	3/4-14	58,0	28,0	49,0	27,5	38,0	16,0	46,0	36,0	17,0	32,0
1211198	1244273	R1A12ME06M-2516	25	1-11	64,0	32,0	55,0	31,0	43,0	18,0	50,0	46,0	22,0	39,0
1211199	1244274	R1A12ME06M-3020	30	1 1/4-11	76,0	37,0	63,0	36,5	50,0	20,0	60,0	50,0	27,0	49,0
1208220	1244275	R1A12ME06M-3824	38	1 1/2-11	85,0	42,0	72,0	41,0	58,5	22,0	70,0	60,0	32,0	55,0
1206117	1244271	R1A12ME06M-1206	12	3/8-19	37,0	18,0	35,0	18,5	26,0	12,0	27,0	24,0	10,0	22,0

Banjo elbow - Type A - BSPP Male DIN 24° - Light series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1206531	1243902	R1A11ME035-1808	18	1/2-14	48,0	23,0	40,0	22,0	29,5	14,0	36,0	32,0	27,0	26,0
1206576	1243897	R1A11ME035-0602	6	1/8-28	27,0	12,5	29,0	13,0	20,0	8,0	19,0	14,0	17,0	15,0
1206148	1243898	R1A11ME035-0804	8	1/4-19	30,5	15,0	30,5	14,5	21,5	12,0	22,0	17,0	19,0	18,0
1206149	1243899	R1A11ME035-1004	10	1/4-19	30,5	15,0	32,0	15,5	22,5	12,0	22,0	19,0	19,0	18,0
1207006	1243903	R1A11ME035-2212	22	1/8-28	56,0	26,0	47,0	28,0	35,5	16,0	41,0	36,0	32,0	32,0
1206530	1243901	R1A11ME035-1508	15	1/2-14	48,0	23,0	39,0	22,5	29,5	14,0	36,0	27,0	27,0	26,0
1206150	1243900	R1A11ME035-1206	12	3/8-19	38,5	19,0	36,0	19,5	26,5	12,0	30,0	22,0	24,0	22,0

Banjo elbow - Type A - BSPP Male DIN 24° - Heavy series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	Q4 mm	Q5 mm	LT mm	CH mm	CH1 mm	CH2 mm	G mm
1206532	1241550	R1A12ME035-1006	10	3/8-19	38,5	19,0	38,0	20,0	27,5	12,0	30,0	22,0	24,0	22,0
1206533	1244265	R1A12ME035-1608	16	1/2-14	48,0	23,0	43,0	23,0	31,5	14,0	36,0	30,0	27,0	26,0
1206098	1244261	R1A12ME035-0604	6	1/4-19	30,5	15,0	33,0	16,5	23,5	12,0	22,0	17,0	19,0	18,0
1206582	1244264	R1A12ME035-1408	14	1/2-14	48,0	23,0	42,5	23,5	31,5	14,0	36,0	27,0	27,0	26,0
1206583	1244266	R1A12ME035-2012	20	3/4-14	56,0	26,0	51,5	27,0	37,5	16,0	41,0	36,0	32,0	32,0
1207025	1244262	R1A12ME035-0804	8	1/4-19	30,5	15,0	32,5	16,5	23,5	12,0	22,0	19,0	19,0	18,0
1206151	1244263	R1A12ME035-1206	12	3/8-19	38,5	19,0	38,0	20,0	27,5	12,0	30,0	24,0	24,0	22,0

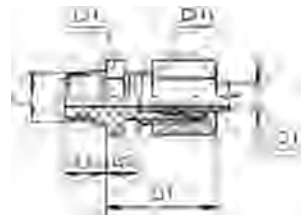
Dimensions shown may be changed without prior notice

Straight connector BSPP Female - BSPP Male with elastomer



Item Code	Part Number	F2	CH	L	LT	G	Type
			mm	mm	mm	mm	
1206421	R1A06F106I-1224	1 1/2-11	60,0	57,0	16,0	32,0	B
1206465	R1A06F106I-2016	1-11	50,0	53,0	20,0	50,0	B
1206422	R1A06F106I-1220	1 1/4-11	55,0	55,0	16,0	32,0	B
1206500	R1A06F106I-1612	3/4-14	41,0	49,0	18,0	40,0	B
1206501	R1A06F106I-1608	1/2-14	41,0	29,0	18,0	40,0	A
1206420	R1A06F106I-0816	1-11	41,0	49,0	14,0	27,0	B
1206418	R1A06F106I-1216	1-11	41,0	51,0	16,0	32,0	B
1206517	R1A06F106I-1620	1 1/4-11	55,0	57,0	18,0	40,0	B
1206419	R1A06F106I-1208	1/2-14	32,0	43,0	16,0	32,0	B
1206518	R1A06F106I-1624	1 1/2-11	60,0	59,0	18,0	40,0	B
1206519	R1A06F106I-2024	1 1/2-11	60,0	60,0	20,0	50,0	B
1206513	R1A06F106I-0608	1/2-14	30,0	41,0	12,0	22,0	B
1206514	R1A06F106I-0612	3/4-14	36,0	44,0	12,0	22,0	B
1206515	R1A06F106I-0812	3/4-14	36,0	46,0	14,0	27,0	B
1206516	R1A06F106I-0820	1 1/4-11	55,0	53,0	14,0	27,0	B
1207863	R1A06F106I-0802	1/8-28	27,0	24,0	14,0	27,0	A
1206432	R1A06F106I-0406	3/8-19	24,0	36,0	12,0	19,0	B
1206510	R1A06F106I-0402	1/8-28	19,0	29,0	12,0	19,0	B
1206499	R1A06F106I-2008	1/2-14	50,0	32,0	20,0	50,0	A
1206511	R1A06F106I-0206	3/8-19	24,0	32,0	8,0	14,0	B
1206016	R1A06F106I-0408	1/2-14	30,0	40,0	12,0	19,0	B
1206512	R1A06F106I-0412	3/4-14	36,0	43,0	12,0	19,0	B
1206494	R1A06F106I-2416	1-11	55,0	36,0	22,0	55,0	A
1206495	R1A06F106I-2412	3/4-14	55,0	36,0	22,0	55,0	A
1206496	R1A06F106I-2408	1/2-14	55,0	36,0	22,0	55,0	A
1206431	R1A06F106I-0204	1/4-19	19,0	31,0	8,0	14,0	B
1206497	R1A06F106I-2012	3/4-14	50,0	32,0	20,0	50,0	A
1206493	R1A06F106I-2420	1 1/4-11	55,0	58,0	22,0	55,0	B
1206506	R1A06F106I-0806	3/8-19	27,0	37,0	14,0	27,0	B
1206507	R1A06F106I-0804	1/4-19	27,0	24,0	14,0	27,0	A
1206508	R1A06F106I-0604	1/4-19	22,0	36,0	12,0	22,0	B
1206509	R1A06F106I-0602	1/8-28	22,0	22,5	12,0	22,0	A
1206502	R1A06F106I-1606	3/8-19	41,0	29,0	18,0	40,0	A
1206503	R1A06F106I-1604	1/4-19	41,0	29,0	18,0	40,0	A
1206504	R1A06F106I-1206	3/8-19	32,0	26,0	16,0	32,0	A
1206505	R1A06F106I-1204	1/4-19	32,0	26,0	16,0	32,0	A

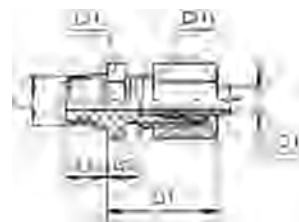
// BSPT

**Straight connector DIN 24° Male
- BSPT cylindric flat Male - Light
series**


Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	CH mm	CH1 mm	LT mm
1206454	1244915	R1A11M107M-1002	10	1/8-28	26,0	9,0	16,0	17,0	19,0	10,0
1204296	1244921	R1A11M107M-1508	15	1/2-14	29,0	11,0	18,0	24,0	27,0	16,0
1205587	1241960	R1A11M107M-0806	8	3/8-19	26,0	9,0	16,0	19,0	17,0	13,0
1205482	1241566	R1A11M107M-1204	12	1/4-19	27,0	10,0	17,0	19,0	22,0	13,0
1208156	1244924	R1A11M107M-1812	18	3/4-14	32,0	11,5	19,0	32,0	32,0	18,0
1204289	1241526	R1A11M107M-1004	10	1/4-19	26,0	9,0	16,0	17,0	19,0	13,0
1206221	1244914	R1A11M107M-0808	8	1/2-14	26,0	9,0	16,0	22,0	17,0	16,0
1204288	1244917	R1A11M107M-1008	10	1/2-14	27,0	10,0	17,0	22,0	19,0	16,0
1205770	1244925	R1A11M107M-2212	22	3/4-14	33,0	13,5	21,0	32,0	36,0	18,0
1205584	1244913	R1A11M107M-0804	8	1/4-19	25,0	8,0	15,0	17,0	17,0	13,0
1205771	1244926	R1A11M107M-2816	28	1-11	34,0	14,5	22,0	41,0	41,0	20,0
1206046	1244928	R1A11M107M-3520	35	1 1/4-11	39,0	14,5	25,0	46,0	50,0	21,0
1204293	1244918	R1A11M107M-1206	12	3/8-19	27,0	10,0	17,0	19,0	22,0	13,0
1204292	1244919	R1A11M107M-1208	12	1/2-14	27,0	10,0	17,0	22,0	22,0	16,0
1204290	1244916	R1A11M107M-1006	10	3/8-19	27,0	10,0	17,0	19,0	19,0	13,0
1205769	1244923	R1A11M107M-1808	18	1/2-14	31,0	11,5	19,0	27,0	32,0	16,0
1206606	1241564	R1A11M107M-0802	8	1/8-28	25,0	8,0	15,0	14,0	17,0	10,0
1244867	1244922	R1A11M107M-1806	18	3/8-19	31,0	11,5	19,0	27,0	32,0	13,0
1244868	1244927	R1A11M107M-3516	35	1-11	39,0	14,5	25,0	46,0	50,0	20,0
1205767	1241561	R1A11M107M-0602	6	1/8-28	23,0	7,0	14,0	12,0	14,0	10,0
1206219	1242147	R1A11M107M-0604	6	1/4-19	24,0	8,0	15,0	17,0	14,0	13,0
1205768	1244920	R1A11M107M-1506	15	3/8-19	29,0	11,0	18,0	24,0	27,0	13,0

Dimensions shown may be changed without prior notice

**Straight connector DIN 24° Male
- BSPT cylindric flat Male - Heavy
series**



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	F1	Q1 mm	Q2 mm	Q3 mm	CH mm	CH1 mm	LT mm
1205772	1244989	R1A12M107M-0604	6	1/4-19	28,0	12,0	19,0	17,0	17,0	13,0
1207841	1244998	R1A12M107M-3824	38	1 1/2-11	57,0	22,0	38,0	55,0	60,0	22,0
1205773	1244990	R1A12M107M-0804	8	1/4-19	30,0	13,0	20,0	17,0	19,0	13,0
1205894	1244993	R1A12M107M-1408	14	1/2-14	37,0	16,0	24,0	24,0	27,0	16,0
1245383	1245391	R1A12M107M-3820	38	1 1/4-11	57,0	22,0	38,0	55,0	60,0	21,0
1244891	1244991	R1A12M107M-1006	10	3/8-19	31,0	12,5	20,0	19,0	22,0	13,0
1245380	1245385	R1A12M107M-1204	12	1/4-19	33,0	14,5	22,0	22,0	24,0	13,0
1245381	1245386	R1A12M107M-1208	12	1/2-14	33,0	14,5	22,0	22,0	24,0	16,0
1206082	1245389	R1A12M107M-1606	16	3/8-19	37,0	17,5	26,0	27,0	30,0	13,0
1245382	1245390	R1A12M107M-3016	30	1-11	50,0	19,5	33,0	46,0	50,0	20,0
1244892	1244992	R1A12M107M-1206	12	3/8-19	33,0	14,5	22,0	22,0	24,0	13,0
1244893	1244996	R1A12M107M-2516	25	1-11	47,0	18,0	30,0	41,0	46,0	20,0
1245379	1245384	R1A12M107M-1004	10	1/4-19	31,0	12,5	20,0	19,0	22,0	13,0
1206916	1244997	R1A12M107M-3020	30	1 1/4-11	50,0	19,5	33,0	46,0	50,0	21,0
1205776	1245388	R1A12M107M-1406	14	3/8-19	37,0	16,0	24,0	24,0	27,0	13,0
1205777	1244994	R1A12M107M-1608	16	1/2-14	37,0	17,5	26,0	27,0	30,0	16,0
1205778	1244995	R1A12M107M-2012	20	3/4-14	42,0	17,5	28,0	32,0	36,0	18,0

90° connector DIN 24° Male - BSPT

Male - Light series



Item Code Body Only	Item Code Complete	Part Number	OD1	F1	Q1	Q2	Q3	Q4	CH	CH1	LT
			mm		mm	mm	mm	mm	mm	mm	mm
1204088	1244963	R1A11M907M-1208	12	1/2-14	36,0	21,0	34,0	28,0	19,0	22,0	14,0
1205783	1244964	R1A11M907M-1506	15	3/8-19	36,0	21,0	34,0	28,0	19,0	27,0	12,0
1204098	1241091	R1A11M907M-0806	8	3/8-19	32,0	17,0	28,0	24,0	17,0	17,0	12,0
1205784	1241843	R1A11M907M-1808	18	1/2-14	40,0	23,5	36,0	31,0	24,0	32,0	14,0
1205521	1241567	R1A11M907M-1204	12	1/4-19	32,0	17,0	28,0	24,0	17,0	22,0	12,0
1205785	1244966	R1A11M907M-2212	22	3/4-14	44,0	27,5	42,0	25,0	27,0	36,0	16,0
1204096	1241962	R1A11M907M-0604	6	1/4-19	29,0	14,0	26,0	21,0	12,0	14,0	12,0
1204085	1244961	R1A11M907M-1006	10	3/8-19	32,0	17,0	28,0	24,0	17,0	19,0	12,0
1205780	1244959	R1A11M907M-0602	6	1/8-28	27,0	12,0	20,0	19,0	12,0	14,0	8,0
1206232	1244960	R1A11M907M-0802	8	1/8-28	29,0	14,0	26,0	21,0	12,0	17,0	8,0
1205781	1243352	R1A11M907M-0804	8	1/4-19	29,0	14,0	26,0	21,0	12,0	17,0	12,0
1205782	1242418	R1A11M907M-1004	10	1/4-19	30,0	15,0	27,0	22,0	14,0	19,0	12,0
1204089	1241475	R1A11M907M-1206	12	3/8-19	32,0	17,0	28,0	24,0	17,0	22,0	12,0
1206181	1244962	R1A11M907M-1008	10	1/2-14	36,0	21,0	34,0	28,0	19,0	19,0	14,0
1204092	1244965	R1A11M907M-1508	15	1/2-14	36,0	21,0	34,0	28,0	19,0	27,0	14,0
1244886	1244968	R1A11M907M-3520	35	1 1/4-11	56,0	34,5	54,0	45,0	41,0	50,0	20,0
1244887	1244969	R1A11M907M-4224	42	1 1/2-11	63,0	40,0	61,0	51,0	50,0	60,0	22,0
1206569	1244967	R1A11M907M-2816	28	1-11	47,0	30,5	48,0	38,0	36,0	41,0	18,0

90° connector DIN 24° Male - BSPT

Male - Heavy series



Item Code Body Only	Item Code Complete	Part Number	OD1	F1	Q1	Q2	Q3	Q4	CH	CH1	LT
			mm		mm	mm	mm	mm	mm	mm	mm
1205786	1245026	R1A12M907M-0604	6	1/4-19	31,0	16,0	26,0	23,0	12,0	17,0	12,0
1206792	1245030	R1A12M907M-1208	12	1/2-14	39,0	22,5	32,0	30,0	19,0	24,0	14,0
1205791	1245031	R1A12M907M-1408	14	1/2-14	40,0	22,0	32,0	30,0	19,0	27,0	14,0
1205792	1245033	R1A12M907M-1608	16	1/2-14	43,0	24,5	32,0	33,0	24,0	30,0	14,0
1205793	1245034	R1A12M907M-2012	20	3/4-14	48,0	26,5	42,0	37,0	27,0	36,0	16,0
1241128	1245037	R1A12M907M-3824	38	1 1/2-11	72,0	41,0	61,0	57,0	50,0	60,0	22,0
1205787	1245027	R1A12M907M-0804	8	1/4-19	32,0	17,0	27,0	24,0	14,0	19,0	12,0
1206722	1245032	R1A12M907M-1606	16	3/8-19	43,0	24,5	32,0	33,0	24,0	30,0	12,0
1207845	1245035	R1A12M907M-2516	25	1-11	54,0	30,0	48,0	42,0	36,0	46,0	18,0
1205788	1245028	R1A12M907M-1006	10	3/8-19	34,0	17,5	28,0	25,0	17,0	22,0	12,0
1205789	1245029	R1A12M907M-1206	12	3/8-19	38,0	21,5	31,0	29,0	17,0	24,0	12,0
1207846	1245036	R1A12M907M-3020	30	1 1/4-11	62,0	35,5	54,0	49,0	41,0	50,0	20,0

Dimensions shown may be changed without prior notice

**Branch Tee connector DIN 24° Male -
BSPT Male - Light series**

Item Code Body Only	Item Code Complete	Part Number	OD1	F1	Q1	Q2	Q3	Q4	CH	CH1	LT
			mm		mm	mm	mm	mm	mm	mm	mm
1205794	1242713	R1A11MT07M-0804	8	M14X1.5	29,0	14,0	26,0	21,0	12,0	17,0	12,0
1206124	1244985	R1A11MT07M-2212	22	M30X2	44,0	27,5	42,0	35,0	27,0	36,0	16,0
1205795	1244981	R1A11MT07M-1004	10	M16X1.5	30,0	15,0	27,0	22,0	14,0	19,0	12,0
1205796	1244982	R1A11MT07M-1206	12	M18X1.5	32,0	17,0	28,0	24,0	17,0	22,0	12,0
1207821	1244988	R1A11MT07M-4224	42	M52X2	63,0	40,0	61,0	51,0	50,0	60,0	22,0
1206237	1244980	R1A11MT07M-0602	6	M12X1.5	27,0	12,0	20,0	19,0	12,0	14,0	8,0
1207820	1244987	R1A11MT07M-3520	35	M45X2	56,0	34,5	54,0	45,0	41,0	50,0	20,0
1207819	1244986	R1A11MT07M-2816	28	M36X2	47,0	30,5	48,0	38,0	36,0	41,0	18,0
1206123	1244983	R1A11MT07M-1508	15	M22X1.5	36,0	21,0	34,0	28,0	19,0	27,0	14,0

**Branch Tee connector DIN 24° Male -
BSPT Male - Heavy series**

Item Code Body Only	Item Code Complete	Part Number	OD1	F1	Q1	Q2	Q3	Q4	CH	CH1	LT
			mm		mm	mm	mm	mm	mm	mm	mm
1207852	1245054	R1A12MT07M-2516	25	M36X2	54,0	30,0	48,0	42,0	36,0	46,0	18,0
1207851	1245052	R1A12MT07M-1408	14	M22X1.5	40,0	22,0	32,0	30,0	19,0	27,0	14,0
1207029	1245049	R1A12MT07M-0804	8	M16X1.5	32,0	17,0	27,0	24,0	14,0	19,0	12,0
1207028	1245048	R1A12MT07M-0604	6	M14X1.5	31,0	16,0	26,0	23,0	12,0	17,0	12,0
1207030	1245050	R1A12MT07M-1006	10	M18X1.5	34,0	17,5	28,0	25,0	17,0	22,0	12,0
1245394	1245397	R1A12MT07M-2012	20	M30X2	48,0	26,5	42,0	37,0	27,0	36,0	16,0
1245395	1245398	R1A12MT07M-3020	30	M42X2	62,0	35,5	54,0	49,0	41,0	50,0	20,0
-	1245399	-	38	M52X2	72,0	41,0	61,0	49,0	50,0	60,0	22,0
1207031	1245051	R1A12MT07M-1206	12	M20X1.5	38,0	21,5	31,0	29,0	17,0	24,0	12,0
1206239	1245053	R1A12MT07M-1608	16	M24X1.5	43,0	24,5	32,0	33,0	24,0	30,0	14,0

Run Tee connector DIN 24° Male - BSPT Male - Light series



Item Code Body Only	Item Code Complete	Part Number	OD1	F1	Q1	Q2	Q3	Q4	CH	CH1	LT
			mm		mm	mm	mm	mm	mm	mm	mm
1206236	1244973	R1A11ML07M-1206	12	3/8-19	32,0	17,0	28,0	24,0	17,0	22,0	12,0
1244888	1244976	R1A11ML07M-2212	22	3/4-14	44,0	27,5	42,0	35,0	27,0	36,0	16,0
1206409	1244974	R1A11ML07M-1508	15	1/2-14	36,0	21,0	34,0	38,0	19,0	27,0	14,0
1207818	1244978	R1A11ML07M-3520	35	1 1/4-11	56,0	34,5	54,0	45,0	41,0	50,0	20,0
1244890	1244979	R1A11ML07M-4224	42	1 1/2-11	63,0	40,0	61,0	51,0	50,0	60,0	22,0
1244889	1244977	R1A11ML07M-2816	28	1-11	47,0	30,5	48,0	38,0	36,0	41,0	18,0
1211017	1244971	R1A11ML07M-0804	8	1/4-19	29,0	14,0	26,0	21,0	12,0	17,0	12,0
1206723	1244972	R1A11ML07M-1004	10	1/4-19	30,0	15,0	27,0	22,0	14,0	19,0	12,0

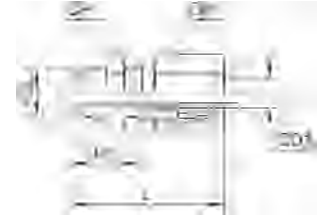
Run Tee connector DIN 24° Male - BSPT Male - Heavy series



Item Code Body Only	Item Code Complete	Part Number	OD1	F1	Q1	Q2	Q3	Q4	CH	CH1	LT
			mm		mm	mm	mm	mm	mm	mm	mm
1244910	1245045	R1A12ML07M-2516	25	1-11	54,0	30,0	48,0	42,0	36,0	46,0	18,0
1207850	1245044	R1A12ML07M-2012	20	3/4-14	48,0	26,5	42,0	37,0	27,0	36,0	16,0
1207849	1245043	R1A12ML07M-1608	16	1/2-14	43,0	24,5	32,0	33,0	24,0	30,0	14,0
1207848	1245041	R1A12ML07M-1206	12	3/8-19	38,0	21,5	31,0	29,0	17,0	24,0	12,0
1244911	1245046	R1A12ML07M-3020	30	1 1/4-11	62,0	35,5	54,0	49,0	41,0	50,0	20,0
1211204	1245038	R1A12ML07M-0604	6	1/4-19	31,0	16,0	26,0	23,0	12,0	17,0	12,0
1244912	1245047	R1A12ML07M-3824	38	1 1/2-11	72,0	41,0	61,0	57,0	50,0	60,0	22,0
1211205	1245039	R1A12ML07M-0804	8	1/4-19	32,0	17,0	27,0	24,0	14,0	19,0	12,0
1207847	1245040	R1A12ML07M-1006	10	3/8-19	34,0	17,5	28,0	25,0	17,0	22,0	12,0
1211206	1245042	R1A12ML07M-1408	14	1/2-14	40,0	22,0	32,0	30,0	19,0	27,0	14,0

Dimensions shown may be changed without prior notice

// BUTT WELD

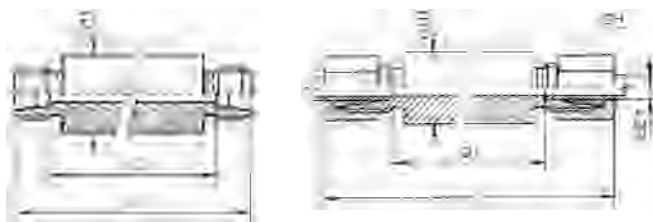
**Butt Weld straight coupling DIN 24° -
Light series**

Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	Q2 mm	CH mm	CH1 mm	L mm	L1 mm
1211092	1243712	R1A11M100S-1500	15	22,0	19,0	22,0	27,0	37,0	29,0
1211093	1243713	R1A11M100S-1800	18	23,5	22,0	27,0	32,0	40,0	31,0
1211094	1243714	R1A11M100S-2200	22	28,5	27,0	32,0	36,0	45,0	36,0
1211095	1243715	R1A11M100S-2800	28	30,5	32,0	41,0	41,0	47,0	38,0
1211096	1243716	R1A11M100S-3500	35	32,5	40,0	46,0	50,0	54,0	43,0
1211088	1243708	R1A11M100S-0600	6	14,0	10,0	12,0	14,0	29,0	21,0
1211089	1243709	R1A11M100S-0800	8	16,0	12,0	14,0	17,0	31,0	23,0
1210752	1243717	R1A11M100S-4200	42	35,0	46,0	55,0	60,0	58,0	46,0
1211090	1243710	R1A11M100S-1000	10	18,0	14,0	17,0	19,0	33,0	25,0
1211091	1243711	R1A11M100S-1200	12	18,0	16,0	19,0	22,0	33,0	25,0

**Butt Weld straight coupling DIN 24° -
Heavy series**

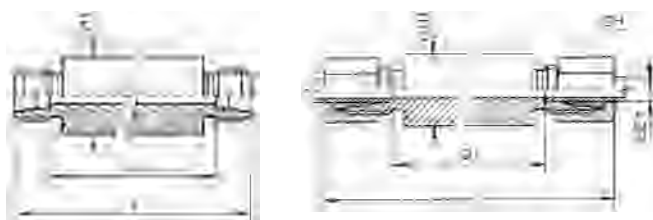
Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	Q2 mm	CH mm	CH1 mm	L mm	L1 mm
1207100	1244053	R1A12M100S-2000	20	29,5	26,0	32,0	36,0	51,0	40,0
1207132	1244056	R1A12M100S-3800	38	38,0	44,0	55,0	60,0	69,0	54,0
1206144	1244050	R1A12M100S-1200	12	24,5	17,0	22,0	24,0	41,0	32,0
1211265	1244047	R1A12M100S-0600	6	19,0	11,0	14,0	17,0	34,0	26,0
1208075	1244054	R1A12M100S-2500	25	32,0	31,0	41,0	46,0	56,0	44,0
1211266	1244048	R1A12M100S-0800	8	21,0	13,0	17,0	19,0	36,0	28,0
1208074	1244049	R1A12M100S-1000	10	22,5	15,0	19,0	22,0	39,0	30,0
1211267	1244051	R1A12M100S-1400	14	27,0	19,0	24,0	27,0	45,0	35,0
1211268	1244052	R1A12M100S-1600	16	26,5	21,0	27,0	30,0	45,0	35,0
1211269	1244055	R1A12M100S-3000	30	35,5	36,0	46,0	50,0	62,0	49,0

Butt Weld long straight coupling DIN 24° - Light series



Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	CH mm	CH1 mm	L mm	L1 mm
1211098	1243787	R1A11M111S-0606	6	56,0	14,0	18,0	85,0	70,0
1211099	1243788	R1A11M111S-0808	8	56,0	17,0	20,0	85,0	70,0
1211100	1243789	R1A11M111S-1010	10	58,0	19,0	22,0	87,0	72,0
1211101	1243790	R1A11M111S-1212	12	58,0	22,0	25,0	87,0	72,0
1211102	1243791	R1A11M111S-1818	18	69,0	32,0	32,0	101,0	84,0
1207460	1244547	R1A11M111S-1515	15	70,0	27,0	28,0	100,0	84,0
1211103	1243792	R1A11M111S-2222	22	73,0	36,0	36,0	105,0	88,0
1211104	1243793	R1A11M111S-2828	28	73,0	41,0	40,0	106,0	88,0
1211105	1243794	R1A11M111S-3535	35	71,0	50,0	50,0	114,0	92,0
1211106	1243795	R1A11M111S-4242	42	70,0	60,0	60,0	115,0	92,0

Butt Weld long straight coupling DIN 24° - Heavy series

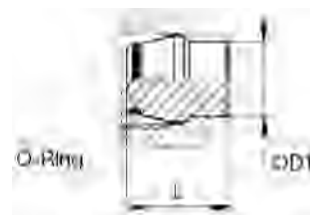


Item Code Body Only	Item Code Complete	Part Number Body Only	OD1 mm	Q1 mm	CH mm	CH1 mm	L mm	L1 mm
1207467	1242452	R1A12M112S-2020	20	71,0	36,0	38,0	114,0	92,0
1211271	1244135	R1A12M112S-0606	6	60,0	17,0	20,0	89,0	74,0
1211272	1244136	R1A12M112S-0808	8	60,0	19,0	22,0	89,0	74,0
1211273	1244138	R1A12M112S-1212	12	59,0	24,0	28,0	91,0	74,0
1211274	1244139	R1A12M112S-1414	14	72,0	27,0	30,0	107,0	88,0
1211275	1244140	R1A12M112S-1616	16	71,0	30,0	35,0	107,0	88,0
1211276	1244141	R1A12M112S-2525	25	72,0	46,0	45,0	120,0	96,0
1211277	1244142	R1A12M112S-3030	30	73,0	50,0	50,0	126,0	100,0
1211278	1244143	R1A12M112S-3838	38	72,0	60,0	60,0	133,0	104,0
1208076	1244137	R1A12M112S-1010	10	59,0	22,0	25,0	91,0	74,0

Dimensions shown may be changed without prior notice

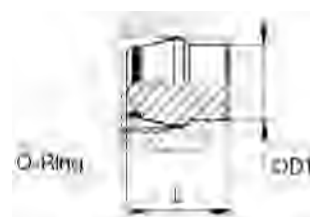
// PLUG

Plug with O-Ring 24° DIN 2353 - Light series



Item Code	Part Number	OD1	L
		mm	mm
1208149	R1A15F0000-3500	35	30,0
1208148	R1A15F0000-2800	28	25,5
1208146	R1A15F0000-2200	22	25,0
1208262	R1A15F0000-1000	10	20,0
1208240	R1A15F0000-1200	12	20,5
1208264	R1A15F0000-0600	6	18,5
1208143	R1A15F0000-1800	18	22,5
1208263	R1A15F0000-0800	8	18,5
1208142	R1A15F0000-1500	15	20,5
1208150	R1A15F0000-4200	42	30,0

Plug with O-Ring 24° DIN 2353 - Heavy series



Item Code	Part Number	OD1	L
		mm	mm
1208237	R1A16F0000-1000	10	20,0
1208236	R1A16F0000-1200	12	20,5
1208239	R1A16F0000-0600	6	18,5
1208238	R1A16F0000-0800	8	18,5
1208067	R1A16F0000-3800	38	33,0
1208064	R1A16F0000-2000	20	28,5
1208063	R1A16F0000-1600	16	23,5
1208066	R1A16F0000-3000	30	30,5
1208065	R1A16F0000-2500	25	29,0
1208062	R1A16F0000-1400	14	22,5

Socket head plug Metric cylindric with elastomer

Item Code	Part Number	F1	OD	CH	L	LT
			mm	mm	mm	mm
1204055	R1A-0189262100	M22X1.5	26,9	10,0	19,0	14,0
1204054	R1A50I0000-2000	M20X1.5	25,9	10,0	19,0	14,0
1204053	R1A50I0000-1800	M18X1.5	23,9	8,0	17,0	12,0
1207864	R1A50I0000-4800	M48X2.0	54,9	24,0	22,5	16,0
1204052	R1A-0189232100	M16X1.5	21,9	8,0	17,0	12,0
1206352	R1A-0189212100	M12X1.5	16,9	6,0	17,0	12,0
1204057	R1A50I0000-2700	M27X2	31,9	12,0	21,0	16,0
1246594	R1A50I0000-2600	M26X1.5	31,9	12,0	21,0	16,0
1204051	R1A-0189222100	M14X1.5	18,9	6,0	17,0	12,0
1211886	R1A50I0000-4200	M42X2	49,9	22,0	22,5	16,0
1246636	R1A50I0000-1000	M10X1.0	13,9	5,0	12,0	8,0
1206706	R1A50I0000-3300	M33X2.0	39,9	17,0	22,5	16,0

Socket head plug BSPP cylindric with elastomer

Item Code	Part Number	F1	OD	CH	L	LT
			mm	mm	mm	mm
1204044	R1A06I0000-0200	1/8-28	13,9	5,0	12,0	8,0
1204043	R1A06I0000-0400	1/4-19	18,9	6,0	17,0	12,0
1204042	R1A06I0000-0800	1/2-14	26,9	10,0	19,0	14,0
1204048	R1A06I0000-1200	3/4-14	31,9	12,0	21,0	16,0
1204047	R1A06I0000-2000	1 1/4-11	49,9	22,0	22,5	16,0
1204046	R1A06I0000-2400	1 1/2-11	54,9	24,0	22,5	16,0
1204045	R1A06I0000-1600	1-11	39,9	17,0	22,5	16,0
1204049	R1A06I0000-0600	3/8-19	21,9	8,0	17,0	12,0



// APPENDIX

// HOSE GUIDELINES.....	276
// FITTINGS GUIDELINES.....	288

// ADAPTERS GUIDELINES.....	302
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// HOSE GUIDELINES

SETTING NEW STANDARD

DUNLOP HIFLEX cares for the environment and for your equipment among DUNLOP HIFLEX's newest products are POWERFLEXBIO 3000, 4000, 5000, 5000 PLUS, 6000 spiral hose, low temperature, Temp Tech, MineTuff, SuperTuff hose and a complete coupling line.

They join the extensive range of DUNLOP HIFLEX hose, the high pressure hydraulic components that have set the standard for reliability and durability.

DESIGN

Throughout the world DUNLOP HIFLEX has build up a name synonymous with quality, a reputation based on first class product, a commitment to research and development and ongoing capital investment.

The development and product engineering staff in DUNLOP HIFLEX, continue to provide fluid conveying product innovations that assure better performance and cost saving to our customers.

DUNLOP HIFLEX hose and couplings are designed to work together as a system for problem free performance, no matter what machine you operate. The performance of all our product exceeds SAE, DIN, JIS requirements and some hoses meet the MSHA and LOBA flame resistance requirements, as well.

LEADERSHIP IN HYDRAULIC HOSE AND COUPLING COMPONENTS

DUNLOP HIFLEX has developed into a world leading manufacturer, of fluid power and fluid system components. A positive attitude towards the demands from new equipment which is using the latest technology has seen DUNLOP HIFLEX introduce many outstanding new hydraulic hose types. These hoses have found acceptance in a wide range of industry, some examples are:

Mining	Earthmoving	Moulding
Logging	Agriculture	Drilling
Petroleum	Waste/Refuse	Crane
Railroad	Manufacturing	
Construction	Pulp and Plywood Mills	

GLOBAL COMPANY

Due to our world-wide organisation of subsidiaries and distributors you will always be near a source for DUNLOP HIFLEX products. Your DUNLOP HIFLEX dealer has trained personnel to consult with you on your hose and coupling requirements guaranteeing consistent quality and performance.

OUR COMMITMENT

By remaining alert to customer's needs, DUNLOP HIFLEX is constantly engineering new products for tomorrow's markets as well as modifying them for even higher performances.

DUNLOP HIFLEX commitment to innovation and service makes our products known throughout the world for quality, reliability and leadership, when you need quality hose and couplings, use the best available.

Now you can count on DUNLOP HIFLEX for all your needs.

TESTING

DUNLOP HIFLEX laboratories are fully equipped to carry out tests according to standards like SAE, ISO, DIN and JIS. New products are also subjected to laboratory simulation of actual service prior to being released on the market.

WORLD CLASS QUALITY

DUNLOP HIFLEX is working to internationally recognised quality programs requiring stringent standards. Many of our customers are demanding ISO qualification or equivalent as a prerequisite for purchasing. This standard is an assurance of consistent quality.

For DUNLOP HIFLEX this is just the start "do it right from the beginning".

IMPORTANT NOTE FOR USERS

Hose assemblies require caution in use not only to provide long service life but also to guard against potentially dangerous failure.

Serious injury, death and destruction of property can result from the rupture or blowing-apart of a hydraulic hose assembly that is damaged, worn out, badly assembled or installed incorrectly.

Users should follow good maintenance practices. Avoid expensive downtime by establishing a program of inspection, testing and replacement of hose assemblies before failure occurs; taking into account factors including: severity of application, frequency of equipment use, past performance of hose assemblies. Document your maintenance, inspections and testing.

Only properly trained persons should inspect, test or service hose assemblies and this training should be updated regularly.

Users should carefully observe the precautions listed below under **"be aware that"** as well as following closely our recommendations for the selection of hose and couplings. In addition, care should be taken not to exceed the minimum bend radius listed for each hose size and type. Maximum operating pressure should not exceed the pressures listed. Instruction for assembling fittings to different hoses should be followed carefully to ensure the safe performance of the complete assembly.

By following the recommendations on hose assembly routing and installation, improved safety and longer service life of any hose installation will result.

Hydraulic fluid under pressure can be potentially dangerous!! An explosive burst or stream of escaping fluid can cause damage to equipment as well as serious injury to persons nearby.

BE AWARE THAT...

1. Highly pressurised fluid escaping from a small pinhole can be almost invisible and, yet, exert extreme force capable of penetrating the skin and other body tissues, causing possible severe injury.
2. Hot fluids or chemicals can cause severe burns.
3. Pressurised fluids, if released uncontrolled, can exert a tremendous explosive force.
4. All hydraulic hoses listed in this catalogue are electrically conductive.
5. Some hydraulic fluids are highly flammable.

AND...

6. Always position a shield between you and any pressurised hydraulic lines when working next to them... or shut the pressure off.
7. Wear safety glasses.
8. Do not use your hands to check for leaks. Do not touch a pressurised hydraulic hose assembly with any part of your body, if fluid punctures the skin, even if no pain is felt, a serious emergency exists. Obtain medical assistance immediately. Failure to do so can result in loss of the injured body part or death.
9. Stay out of hazardous areas while testing hose assemblies under pressure. Use proper safety protection.
10. If an injury or reaction occurs, get medical attention right away.
11. Use only non conductive thermoplastic hoses where electrical conductivity is not desired: for instance, equipment working on electric power lines.

DUNLOP HIFLEX hose and fitting are designed, engineered and tested to be used together in an assembly.

The use of DUNLOP HIFLEX fittings on other manufactures hose or the use of DUNLOP HIFLEX hose with other manufactures fittings may result in the production of unreliable or unsafe assemblies. It is neither recommended nor authorised by DUNLOP HIFLEX.

DUNLOP HIFLEX recommends only those hose and coupling combinations specified in the DUNLOP HIFLEX Hydraulic Products Catalogues.

DUNLOP HIFLEX disclaims any liability for any hose assemblies which have not been produced in conformance with DUNLOP HIFLEX assembly recommendations and current crimp data charts.

Extensive impulse testing has been performed by DUNLOP HIFLEX to verify the recommendations contained in this catalogue. A simple burst or pressure test cannot determine a hose and coupling combination.

Any claim for defects must be made in writing on the appropriate ISO 9001 complaint form within 8 days from receipt of the product. DUNLOP HIFLEX will have a reasonable opportunity thereafter to examine and investigate the alleged defect.

The customer's exclusive remedy with respect to any claim of any kind whatsoever shall be refund of the purchase price or replacement of the product at the option of DUNLOP HIFLEX and in no event shall DUNLOP HIFLEX be liable for any incidental or consequential damages whatsoever.

REFERENCE SPECIFICATIONS

SAE -	Society of Automotive Engineers	LOBA -	Landesobergamt Nordrhein - Westfalen
DNV - GL	Det Norske Veritas - Germanischer Lloyd	AS -	Australian Standard
EN -	European Norm	BV -	Bureau Veritas
DIN -	Deutsche Institute Normen	ISO -	International organization for Standardization
CERCHAR -	Centre d'Etudes et Recherches Des Charbonnages de France	KR -	Korean Register
MSHA -	U.S. Mine Safety and Health Administration	MA -	Chinese Mining

The listing below are intended only as guides in identifying which DUNLOP HIFLEX hoses comply with requirements of various agencies.

Hose	SAE J517	EN	ISO	Dunlop Hiflex Proprietary Hose	DNV GL	ABS	BV	NKK	RINA	Lloyd's Register	MSHA ²	USDOT ³	KR	MA
Flexor R4	100 R4						X							
122T Plus - 1SN/R1AT	100 R1AT	853 1SN	1436		X	X							X	
222T Plus - 2SN/R2AT	100 R2AT	853 2SN	1436		X	X							X	
121 Slimline		857 1SC	11237		X		X							
241 Superslimline	100 R16	857 2SC	11237		X				X		X		X	
221T Plus 2SC	100 R16	857 2SC	11237		X	X	X							X
Powerflexbio 3000	EX SAE R12		18752	X	X*					X*	X			
Powerflexbio 4000			18752	X	X	X				X*	X			
Powerflexbio 5000			18752	X	X	X				X*	X			
Powerflexbio 5000P			18752	X	X	X				X*	X			
Powerflexbio 6000	EX SAE R15		18752	X	X	X	X			X*	X			
Firesafe 5000				X							X*			
490 Powertrak - AT7K				X							X			
560 Powertrak - AT8K				X							X			
Commander 1SN	100 R1AT	853 1SN	1436	X	X	X*								

1. DNV approvals are with permanent (crimp) type fittings only
 2. Hoses with MSHA approved cover are always branded "MSHA"
 3. DOT Type All TYPE All FMVSS 106 approval up to size -12
- Listing may vary by style and size, for current and complete information, contact DUNLOP HIFLEX for details.

* Running

SAFETY GUIDE BASIC FACTORS FOR THE SELECTION, INSTALLATION AND MAINTENANCE OF HOSE AND HOSE ASSEMBLIES

Hydraulic hose (and hose assemblies) has a limited life dependent on service conditions to which is applied.

Subjecting hose (and hose assemblies) to conditions more severe than the recommended limits significantly reduce service life. Exposure to combinations of recommended limits (i.e., continuous use at maximum rated working pressure, maximum recommended operating temperature and minimum bend radius) will also reduce service life.

WARNING: FAILURE TO FOLLOW PROPER SELECTION, INSTALLATION AND MAINTENANCE PROCEDURES BODILY INJURY, AND DAMAGE TO PROPERTY.

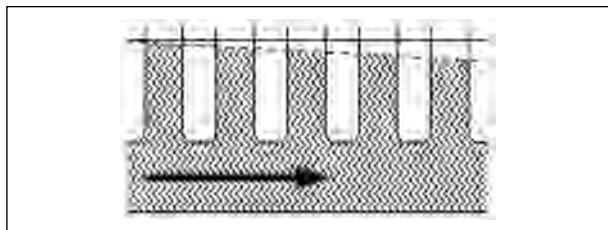
1. SELECTION

The following is a list of factors which must be considered before the selection of a hose can be made:

1.1 Line size

In order to achieve maximum efficiency in a hydraulic system, it is necessary to keep pressure losses (resistance to the volumetric flow) to a minimum when a fluid is conveyed by the different types of flow lines.

When a fluid flows through a flow line, heat is generated by friction. Thus part of the energy is lost as heat energy, which results in a pressure loss.



These pressure losses depend upon:

- flow velocity (for a given volumetric flow, the fluid flow velocity increases with a decrease in the cross sectional area of a flow line and vice versa)
- length of the flow line
- the viscosity of the fluid flowing
- the density of the fluid flowing
- the type of flow (laminar or turbulent)

Types of flow - The type of flow changes from laminar to turbulent at a certain flow velocity. This velocity is given by the Reynold's Number Re .

For cylindrical flow lines the following formula applies:

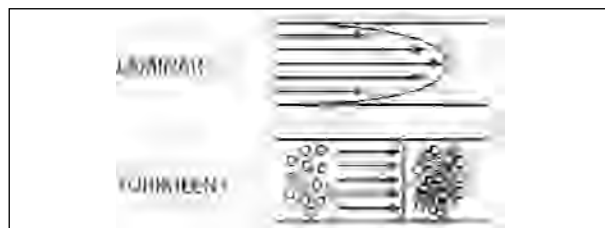
$$Re = \frac{v \times d}{\nu}$$

where: v = velocity (m/s)
 d = flow line internal dia (m)
 ν = kinematic viscosity (m^2/s)

As soon as the value for Re exceeds 2300, the laminar flow changes to turbulent flow.

Laminar flow - In laminar flow, the individual fluid particles move up to certain speeds in uniform layers alongside each other. They scarcely disturb or influence each other.

Turbulent flow - If the value for Re exceeds 2300, flow becomes whirling and turbulent. The individual particles no longer move in one direction in an orderly fashion, but influence and hinder each other.



Certain fluid flow velocities have proved to be most suitable for hydraulic flow lines.

Recommended flow velocities:

Suction lines:	0.5 ... 1.2 m/s	1.6 ... 4 feet/s
Return lines:	2 ... 3 m/s	6.5 ... 10 feet/s
Pressure lines:	4 ... 7.5 m/s	13 ... 25 feet/s

FLOW CAPACITY NORMOGRAM

Flow Capacities of Hose at Recommended Flow Velocities

The chart below is provided as an aid in the determination of the correct hose size.

Example at 45 l/min, what is the proper hose size within the recommended velocity range for pressure lines?

Locate 45 l/min in the left-hand column and 7.5 m/s in the right-hand column (the maximum recommended velocity range for pressure lines).

Lay a straight line across these two points. The inside diameters shown in the centre column is above 9.5 mm so we have to use 12.7 mm (1/2"). For suction hose, follow the same procedure except use recommended velocity range for intake lines in the righthand column.

where: Q = flow in liters per seconds (l/sec)

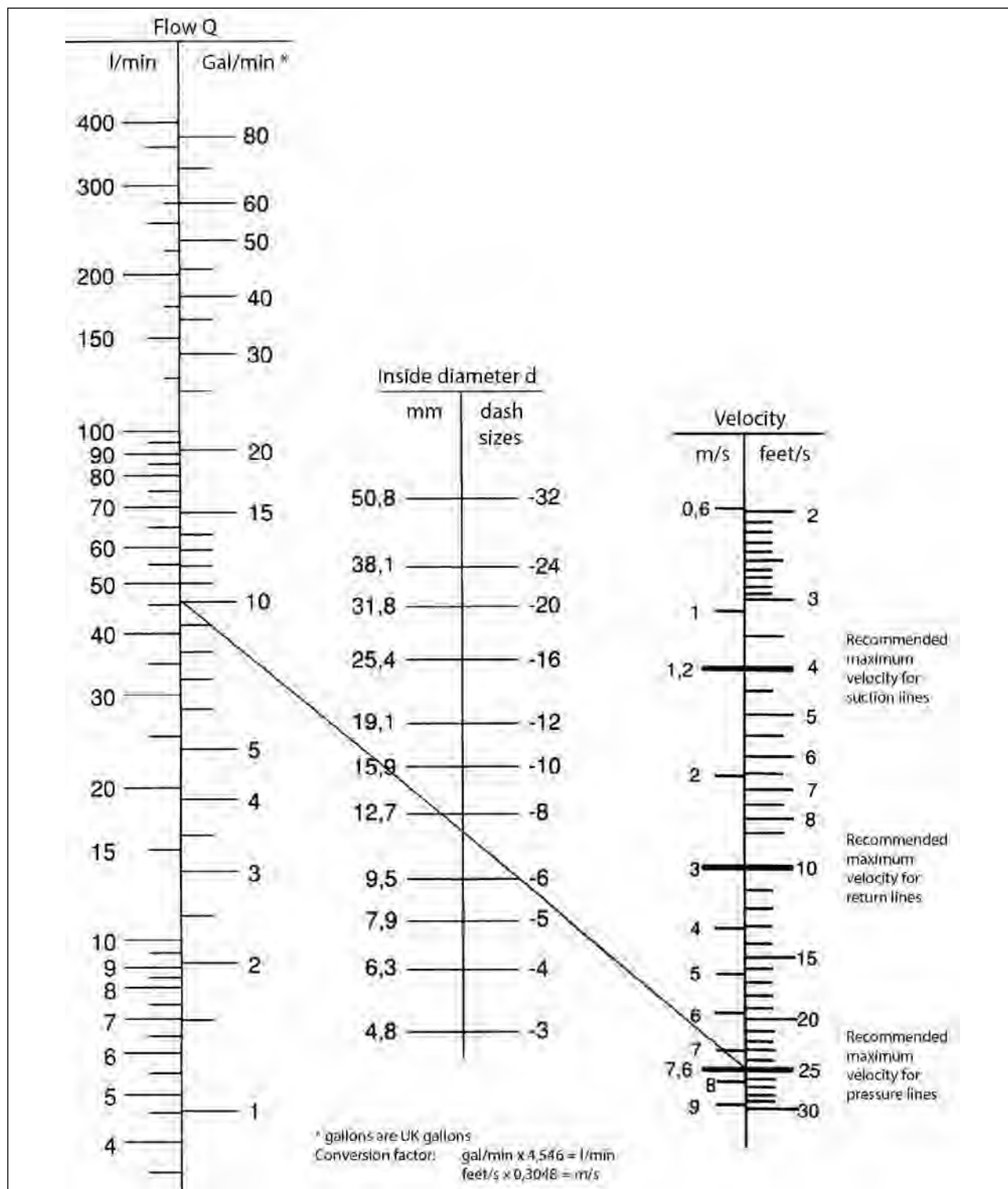
V = velocity in meters per seconds (m/s)

d = hose inside diameter (mm & dash size)

TECHNICAL INFORMATION – NORMOGRAM OF THE FLOW

The normogram herewith is pivotal to help you find the hose diameter by knowing the liquid flow and speed.

In order to find the correct diameter you should trace a line between the flow value (l/min) and the suggested speed (m/sec) according to the kind of delivery (pressure or return). The value touched by the line in the central column will indicate the hose ID (mm/inches) that must be used.



It is therefore important to calculate correctly the required flow line sizes. Undersized pressure lines results in high fluid velocity causing an excessive pressure drop, and heat built up, which impair overall system performance.

Undersized suction lines can cause cavitation at the hydraulic pump inlet, affecting performance, shortening pump life, and creating excessive noise levels.

The flow capacity normogram is an aid to determine the correct hose internal diameter size, desired flow rate and recommended velocity. By the use of any two known factors, the third can be determined.

1.2 Pressure

After determining the system pressure for a hydraulic system, hose selection must be made so that the recommended maximum operating pressure specified by a given hose, is equal or greater than the system pressure. Dynamic pressure is common for all hydraulic systems. Pressure surges which exceed the maximum working pressure (pressure relief valve setting) affect the service life of system components, including a hose assembly and therefore need to be taken into consideration. Hoses used for suction lines must be selected to ensure the hose will withstand the negative pressure of the system.

1.3 Temperature

Care must be taken to ensure that the operating temperature of the fluid being conveyed and ambient temperatures, do not exceed the limitations of the hose. Special care must be taken when routing near hot manifolds or molten metal.

1.4 Fluid Compatibility

Hose selection must assure compatibility of the hose tube, cover, reinforcement, and fittings with the fluid used.

Additional caution must be observed in hose selection for gaseous applications. Some fire resistant fluids require the same hose as petroleum oil. Some use a special hose, while a few fluids will not work with any hose at all.

For gas application, where compatible with DUNLOP HIFLEX hoses, and at pressure above 10 bar, the hose cover shall be pin-pricked.

1.5 Permeation

Permeation (that is, seepage through the hose) will occur from inside the hose to outside when hose is used with gases, liquid and gas fuels, and refrigerants (including but not limited to such materials such as helium, fuel oil, natural gas or freon). This permeation may result in high concentrations of vapours which are potentially flammable, explosive, or toxic and in loss of fluid. Even though the fluid compatibility is acceptable, you must take into account the fact that permeation will occur and could be hazardous. Permeation of moisture from outside the hose to inside the hose will also occur. If this moisture permeation would have detrimental effects (particularly but not limited to refrigeration and air conditioning systems), incorporation of sufficient drying capacity in the system or other appropriate system safeguards should be selected and used.

1.6 Routing

Attention must be given to optimum routing to minimise inherent problems. Restrain, protect or guide hose with the use of clamps if necessary to minimise risk or damage due to excessive flexing, whipping or contact with other moving parts or corrosives. Determine hose lengths and configurations that will result in proper routing and protection from abrasion, snagging or kinking and provide leak resistant connections.

1.7 Environment

Care must be taken to ensure that the hose and fittings are either compatible with or protected from the environment to which they are exposed. Environmental conditions including but not limited to ultraviolet light, heat, ozone, moisture, water, salt water, chemicals, and air pollutants can cause degradation and premature failure and, therefore, must be considered.

1.8 Mechanical Loads

External forces can significantly reduce hose life. Mechanical loads which must be considered include excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type fittings or adaptors may be required to ensure no twist is put into the hose. Unusual applications may require special testing prior to hose selection.

1.9 Abrasion

While a hose is designed with a reasonable level of abrasion resistance, care must be taken to protect the hose from excessive abrasion which can result in erosion, snagging, and cutting of the hose cover. Exposure of the reinforcement will significantly accelerate hose failure.

1.10 Proper End Fitting

Care must be taken to ensure proper compatibility exists between the hose and coupling selected based on the manufacturer's recommendations substantiated by testing to industry standards such as SAE J517, DIN 20024, JIS B 8360.

1.11 Length

When establishing proper hose length, motion absorption, hose length changes due to pressure, as well as hose and machine tolerances must be considered.

1.12 Specifications and Standards

When selecting hose and fittings, government, industry, and manufacturer's specifications and recommendations must be reviewed as applicable.

1.13 Hose Cleanliness

Hose components may vary in cleanliness levels. Care must be taken to ensure that the assemblies selected have an adequate level of cleanliness for the application.

1.14 Welding and Brazing

Heating of plated parts, including hose fittings and adaptors, above 232° C (450° F) such as during welding, brazing, or soldering may emit deadly gases.

1.15 Electrical Conductivity

Certain applications require that a hose be non-conductive to prevent electrical current flow. Other applications require the hose to be sufficiently conductive to drain off static electricity. Extreme care must be exercised when selecting hose and fittings for these or any other applications in which electrical conductivity or non-conductivity is a factor. For applications that require hose to be electrically non-conductive, including but not limited to applications near high voltage electric lines, only special non-conductive hose is to be used. The manufacturer of the equipment in which the non-conductive hose is to be used must be consulted to be certain that the hose and fittings that are selected are proper for the application.

Do not use any DUNLOP HIFLEX hose or fitting for any application requiring non-conductive hose, including but not limited to applications near high voltage electric lines, unless the application is expressly approved in the DUNLOP HIFLEX technical publication for the product, the SAFETY GUIDE hose is both orange in colour and marked "non-conductive", and the manufacturer of the equipment on which the hose is to be used specifically approves the particular DUNLOP HIFLEX hose and fitting for such use.

DUNLOP HIFLEX does not supply any hose or fittings for conveying paint in airless paint spraying or similar applications and therefore should not be used. A special hose and fitting assembly is required for this application, to avoid static electricity buildup which could cause a spark that may result in an explosion and/or fire.

The electrical conductivity or non-conductivity of hose and fittings is dependant upon many factors and may be susceptible to change. These factors include but are not limited to the various materials used to make the hose and the fittings, manufacturing methods (including moisture control), how the fittings contact the hose, age and amount of deterioration or damage or other changes, moisture content of the hose at and particular time, and others factors.

2. INSTALLATION

After the selection of the correct hose, the following factors must be considered prior to hose and fitting assembly and installation.

2.1 Pre-Installation Inspection

Prior to installation, a careful examination of the hose must be performed. All components must be checked for correct style, size, and length. The hose must be examined for cleanliness, obstructions, blisters, cover looseness, or any other visible defects.

2.2 Hose and Fitting Assembly

Do not assemble a DUNLOP HIFLEX fitting on a DUNLOP HIFLEX hose that is not specified by DUNLOP HIFLEX for that hose. Do not assemble DUNLOP HIFLEX fittings on another manufacturer's hose or a DUNLOP HIFLEX hose on another manufacturer's fitting unless DUNLOP HIFLEX approves the assembly in writing, and the user verifies the assembly and the application through analysis and testing.

The DUNLOP HIFLEX published hose assembly instructions must be followed for assembling the fittings on the hose.

2.3 Related Accessories

Crimp or swage DUNLOP HIFLEX hose or fittings only with DUNLOP HIFLEX approved swage or crimp machines and in accordance with the DUNLOP HIFLEX published hose assembly instructions.

2.4 Parts:

Do not use any DUNLOP HIFLEX hose fitting part (including but not limited to sockets, or inserts) except with the correct DUNLOP HIFLEX mating parts, in accordance with DUNLOP HIFLEX published hose assembly.

2.5 Reusable/Permanent

Do not reuse any reusable hose coupling that has blown or pulled off a hose. Do not reuse a DUNLOP HIFLEX permanent (that is, crimped or swaged) hose fitting or any part thereof.

2.6 Minimum Bend Radius

Installation of a hose at less than the minimum listed bend radius may significantly reduce the hose life. Particular attention must be given to avoid sharp bending at the hose/fitting juncture.

2.7 Twist Angle and Orientation

Hose installations must be such that relative motion of machine components does not produce twisting.

2.8 Securement

In many applications, it may be necessary to restrain, protect, or guide the hose to protect it from damage by unnecessary flexing, pressure surges, and contact with other mechanical components. Care must be taken to ensure such restraints do not introduce additional stress or wear points.

2.9 Proper Connection of Ports

Proper physical installation of the hose requires a correctly installed port connection while ensuring that no twist or torque is transferred to the hose.

2.10 External Damage

Proper installation is not complete without ensuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage, or damage to sealing surfaces are corrected or eliminated.

2.11 System Checkout

After completing the installation all air entrapment must be eliminated and the system pressurised to the maximum system pressure and checked for proper function without any leaks. Personnel must stay out of potential hazardous areas while testing.

3. HOSE AND FITTING MAINTENANC INSTRUCTIONS

Even with proper selection and installation, hose life may be significantly reduced without a continuing maintenance program. Frequency should be determined by the severity of the application and risk potential. A maintenance program must be established and followed to include the following as a minimum:

3.1 Visual Inspection Hose/Fitting

Any of the following conditions require immediate shut down and replacement of the hose assembly:

- Fitting slippage on hose.
- Damaged, cut or abraded cover (any reinforcement exposed).
- Hard, stiff, heat cracked, or charred hose.
- Cracked, damaged, or badly corroded fittings.
- Leaks at fitting or in hose.
- Kinked, crushed, flattened or twisted hose.
- Blistered, soft, degraded, or loose cover.

3.2 Visual Inspection All Other

The following items must be tightened, repaired or replaced as required:

- Leaking port conditions
- Remove excess dirt build-up
- Clamp, guards, shields
- System fluid level, fluid type and any air entrapment

3.3 Functional Test

Operate the system at maximum operating pressure and check for possible malfunctions and freedom from leaks. Personnel must stay out of potential hazardous areas while testing.

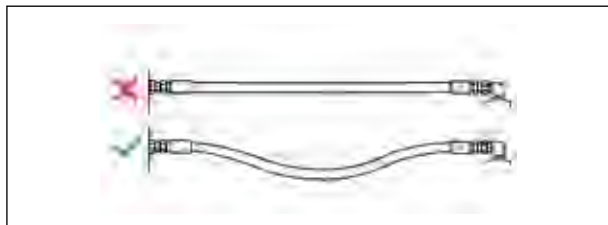
3.4 Replacement Intervals

Specific replacement intervals must be considered based on previous service life, government or industry recommendations, or when failures could result in unacceptable downtime, damage, or injury risk.

CORRECT ASSEMBLY INSTALLATION

Satisfactory performance and appearance depend upon proper hose installation. Excessive length destroys the trim appearance of an installation and adds unnecessarily to the cost of the equipment. Hose assemblies of insufficient length to permit adequate flexing, expansion or contraction will cause poor power transmission and shorten the life of the hose.

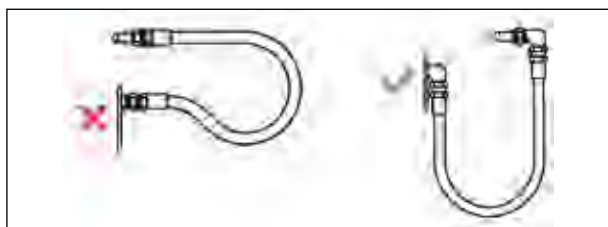
The diagrams below offer suggestions for proper hose installations to obtain the maximum in performance and economy.



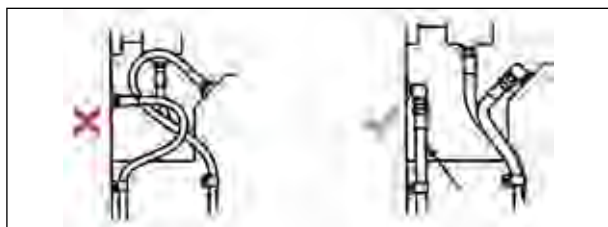
Since hose may change in length from +2% to -4% under the surge of high pressure, provide sufficient slack for expansion and contraction.



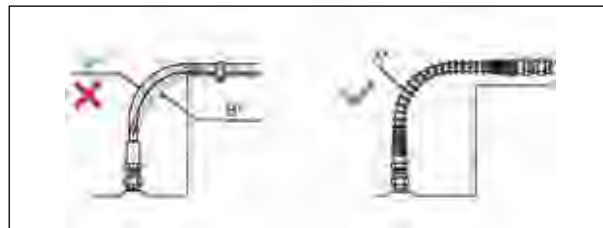
Avoid sharp twist or bend in hose by using proper angle adapters.



Where the radius falls below the required minimum, an angle adapter should be used as shown above to avoid sharp bends in hose.

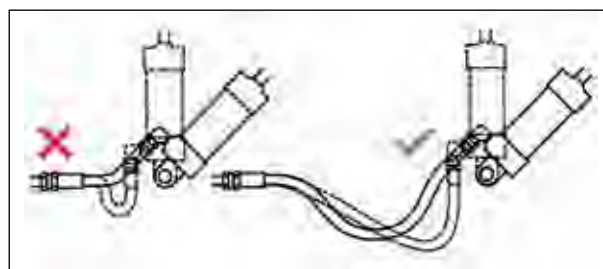


Obtain direct routing of hose through use of 45° and 90° adapters and fittings. Improve appearance by avoiding excessive hose length.

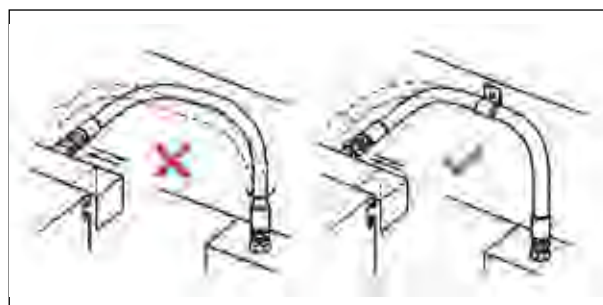


A: High Pressure - B: No Pressure

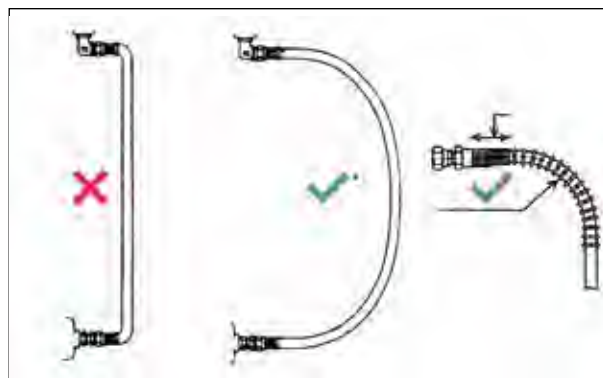
Due to changes in length when hose is pressurised, do not clamp at bends so curves absorb changes and protect the hose with a spring guard. Do not clamp high and low pressure lines together and protect the hose with a spring guard.



Adequate hose length is most important to distribute movement on flexing applications and to avoid abrasion.

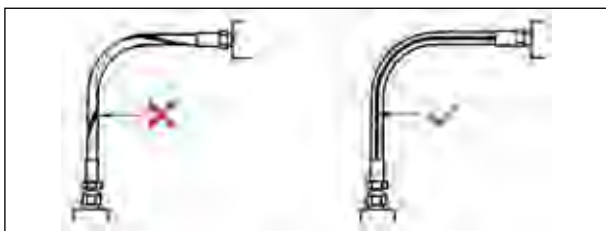


To avoid twisting in hose lines bent in two planes, clamp hose at change of plane, as shown.

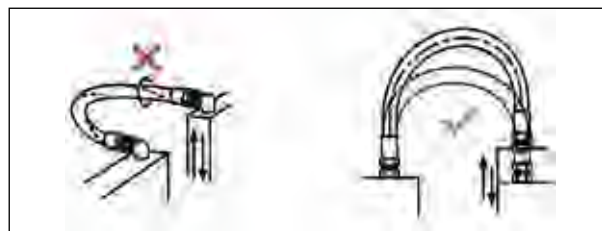


* Never use a banding radius less than the minimum amount shown in the table.

To prevent twisting and distortion, hose should be bent in the same plane as the motion of the boss to which the hose is connected.

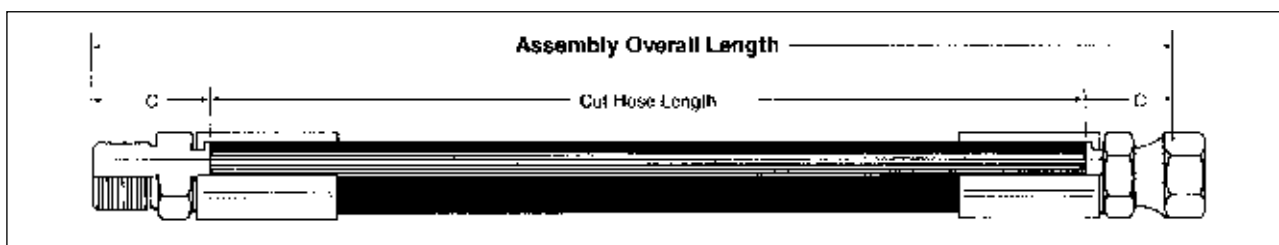


Hose should not be twisted. Hose is weakened when installed in twisted position. Also pressure in twisted hose tends to loosen fitting connections. Design so that machine motion produces bending rather than twisting.



Never use a bending radius less than the minimum shown in the hose specification tables. Avoid sharp bend in hose to reduce collapsing of line and restriction of flow by using proper spring guard. Exceeding minimum bend radius will greatly reduce hose assembly life.

HOW TO DETERMINE CORRECT ASSEMBLY LENGTH

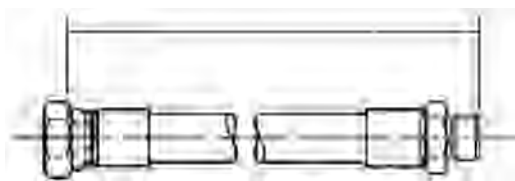


For most assemblies, the correct assembly length may be determined by direct measurement of the equipment or a drawing. Minimum bend radii as shown in the hose specification tables should be observed. Assemblies are measured to the end of the seal.

To determine the length of hose needed in making assemblies with permanent or reusable couplings, subtract Dimension "C" (Cut off factor) for each coupling from the required overall assembly length. Dimension "C" may be found in the coupling specification tables.

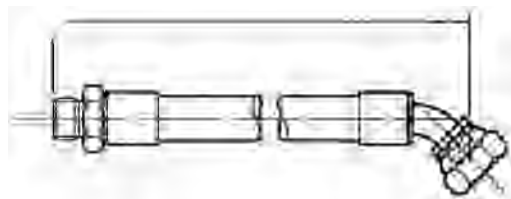
HOW TO MEASURE ASSEMBLIES

Length over nipples



Swivel female and male union

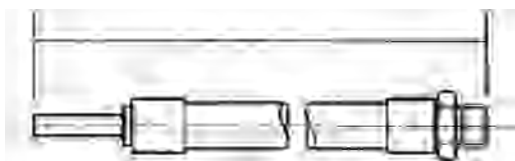
Length between male nipple and centre of female nipple



Male union

Swivel female 45° swept union

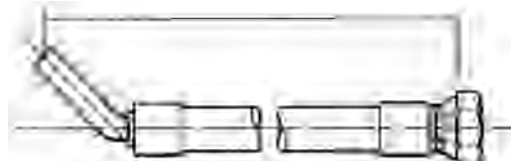
Length between S.P. and nipple ends



Straight standpipe

Male union

Length between centre lines of S.P. and end of nipple



45° standpipe

Swivel female union

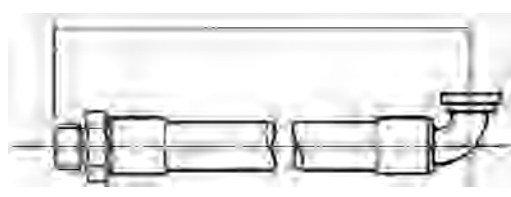
Length between centre lines of angle and banjo



Swivel female 90° swept union

Banjo coupling

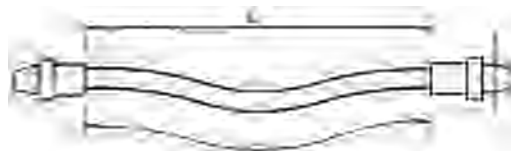
Length between centre of angle and nipple end



Male union

90° SAE flange

Remember that hydraulic hose under pressure will elongate up to 2% of its length or contract up to 4% depending on pressure, type and size. Sufficient allowance should be made to permit such changes in length.



$$L \geq l (1 + 0,04)$$

Occasionally an assembly will be required similar to the sketches to the right. The following equations are helpful in determining the correct length:

FOR 180° TURN APPLICATIONS

#1 $L = 2A + \pi R$

#2 $L = 2A + \pi R + T$

where:

L=overall length of the hydraulic hose assembly, in mm or inches.

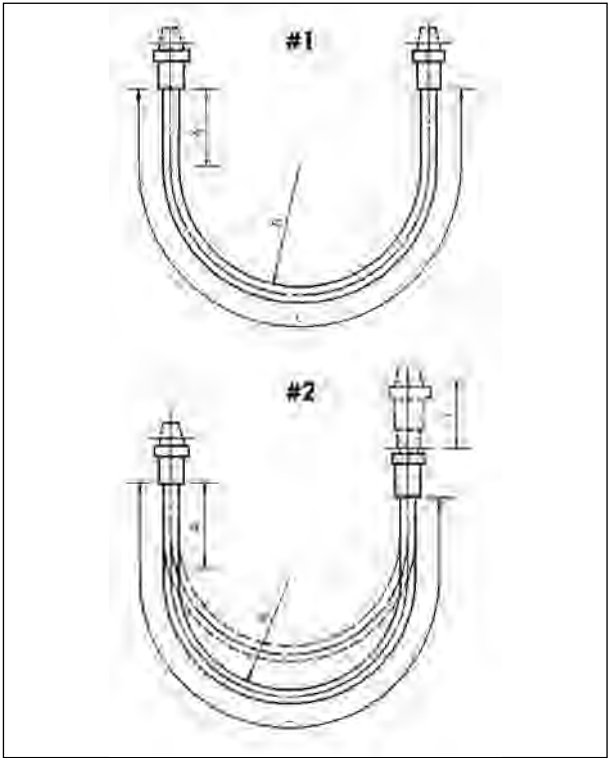
A=allowance for a minimum straight section of hydraulic hose at each end of the assembly, measured from the outer end of each coupling, in mm or inches. These two straight sections are necessary to prevent excessive stress concentrations directly back of the couplings. See table below.

R=bending radius of the hose, in mm or inches. See hose specifications tables.

T=amount of travel, in mm or inches.

Often right angle adapters provide a convenient means of avoiding too small a bend radius.

Hose ID	in	1/4	5/16	3/8	1/2	5/8	3/4	1	1.1/4	1.1/2	2
	mm	6,4	7,9	9,5	12,7	15,9	19	25	31,8	38,1	50,8
Min "A"	in	5	5	5	6	6	7	8	9	10	11
	mm	127	127	127	152	152	178	203	229	254	279



Length Tolerance for Hydraulic Hose Assemblies and Specified Hose Lengths

Length

For lengths from 0 up to and including 12" (305 mm)

For lengths ≥ 12" (305 mm) < 18" (457 mm)

For lengths ≥ 18" (457 mm) < 36" (914 mm)

For lengths ≥ 36" (914 mm) < 48" (1219 mm)

For lengths ≥ 48" (1219 mm) < 72" (1830 mm)

For lengths ≥ 72" (1830 mm)

Tolerance

± 1/8" ± 3 mm

± 3/16" ± 5 mm

± 1/4" ± 6 mm

± 3/8" ± 10 mm

± 1/2" ± 13 mm

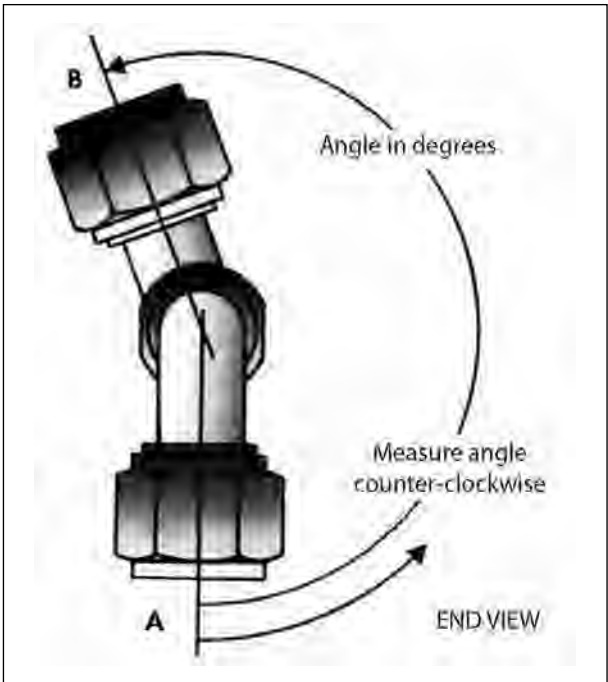
± 1%

Elbow angle and angle of orientation

Tolerance ±3

Angle Couplings

A - To measure angle of offset of a hose assembly, point one end of coupling "A" (the nearest) to a vertical position downward. The angle can then be measured from the centreline of this vertical coupling in an anticlockwise direction to the centreline of coupling "B" (the far coupling) (see illustration). Relationships can then be expressed from 0° to 360°. If angle not given elbows are positioned at 0°.



// FITTINGS GUIDELINES

FITTING IDENTIFICATION

Dash numbers

Most fluid piping system sizes are measured by dash numbers. These are universally used abbreviations for the size of component expressed as the numerator of the fraction with the denominator always being 16. For example, a -04 port is 4/16 or 1/4 inch. Dash numbers are usually nominal (in name only) and are abbreviations that make ordering of components easier.

There are many coupling systems used for hydraulic connections. They are identified as:
American, British, French, German, Japanese.
This section lists the origin and coupling style. Descriptions and dimensional data follows each coupling style.

AMERICANT THREAD TYPES

NPTF (National Pipe Tapered Fuel)

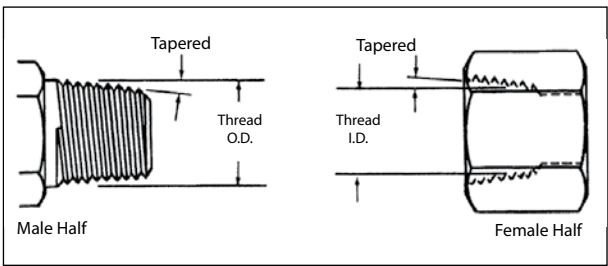
This is a dryseal thread, the National pipe tapered thread for fuels. This is used for both male and female ends. This connection is still widely used in fluid power systems, even through it is not recommended by the National Fluid Power Association (N.F.P.A.) for use in hydraulic applications. The NPTF male will mate with the NPTF, NPSF or NPSM female. The NPTF male has tapered threads and a 30° inverted seat. The NPTF female has tapered threads and no seat. The seal takes place by deformation of the threads. The NPSM female has straight threads and a 30° inverted seat. The seal takes place on the 30° seat. The NPTF connector is similar to, but not interchangeable with, the BSPT connector. The thread pitch is different in most sizes. Also, the thread angle is 60° instead of the 55° angle found on BSPT threads.

NPSF (National Pipe Straight Thread for Fuels)

The National pipe straight thread for fuels. This is sometimes used for female ends and properly mates with the NPTF male end. However, the SAE recommends the NPTF thread in preference to the NPSF for female ends.

NPSM (National Pipe Straight Mechanical)

National pipe straight thread for mechanical joint. This is used on the female swivel nut of iron pipe swivel adapters. The leak-resistant joint is not made by the sealing fit of threads, but by a tapered seat in the coupling end. This connection is sometimes used in fluid power systems.

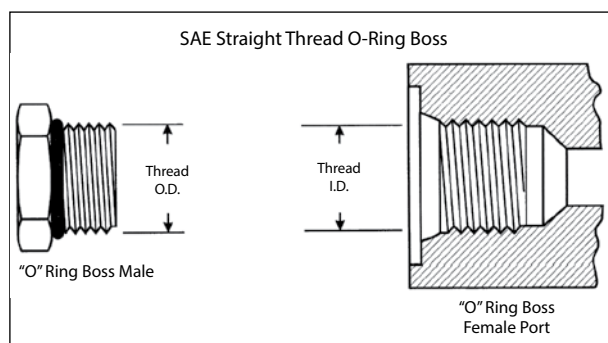


Thread Identification Table
National Pipe Straight Mechanical (NPSM)
National Pipe Tapered for Fuels (NPTF)

Tube Size	Tube Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
Dash	(in)	(in-TPI)	(mm)	(in)	(mm)	(in)
-2	1/8	1/8-27	8.7	0.34	10.3	0.41
-4	1/4	1/4-18	11.9	0.47	14.3	0.56
-6	3/8	3/8-18	15.1	0.59	17.5	0.69
-8	1/2	1/2-14	18.3	0.72	21.4	0.84
-12	3/4	3/4-14	23.8	0.94	27.0	1.06
-16	1	1-11.1/2	30.2	1.19	33.3	1.31
-20	1.1/4	1 1/4-11.1/2	38.9	1.53	42.9	1.69
-24	1.1/2	1 1/2-11.1/2	44.5	1.75	48.4	1.91
-32	2	2 - 11.1/2	57.2	2.25	60.3	2.38

SAE J514 Straight Thread O-Ring Boss (ORB)

This port connection is recommended by the N.F.P.A. for optional leakage control in medium and high pressure hydraulic systems. The O'ring boss male will mate with an O'ring boss female only.



Thread Identification Table

SAE J514 Straight Thread O-Ring Boss

Tube Size	Tube Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
Dash	(in)	(in-TPI)	(mm)	(in)	(mm)	(in)
-2	1/8	5/16-24	6.9	0.27	7.8	0.31
-3	3/16	3/8-24	8.5	0.34	9.4	0.37
-4	1/4	7/16-20	9.9	0.39	11.2	0.44
-5	5/16	1/2-20	11.5	0.45	12.6	0.49
-6	3/8	9/16-18	12.9	0.51	14.1	0.56
-8	1/2	3/4-16	17.5	0.69	18.9	0.74
-10	5/8	7/8-14	20.5	0.81	22.1	0.87
-12	3/4	1.1/16-12	24.9	0.98	26.9	1.06
-14	7/8	1.3/16-12	28.1	1.11	30.3	1.18
-16	1	1.5/16-12	31.3	1.23	33.1	1.31
-20	1.1/4	1.5/8-12	39.2	1.54	41.1	1.62
-24	1.1/2	1.7/8-12	45.6	1.79	47.4	1.87
-32	2	2.1/2-12	61.4	2.42	63.3	2.49

The male has straight threads and an O'ring. The female has straight threads and a sealing face. The seal is made at the O'ring on the male and the sealing face on the female. The threads hold the connection mechanically.

SAE J514 37° (JIC)

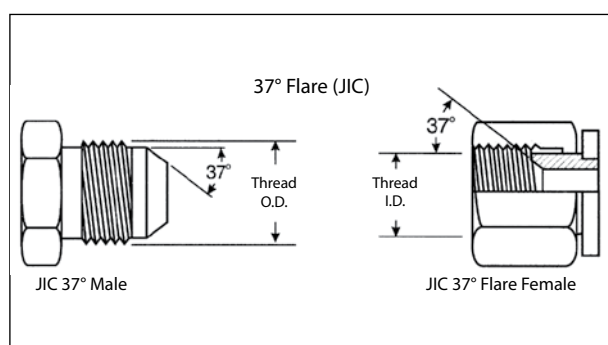
The Society of Automotive Engineers (SAE) specifies a 37° angle flare or seat be used with high pressure hydraulic tubing. These are commonly called JIC couplings.

The JIC 37° flare male will mate with a JIC female only.

The JIC male has straight threads and a 37° flare seat.

The JIC female has straight threads and a 37° flare seat.

The seal is made on the 37° flare seat by establishing a line contact between the male flare and the female cone seat. The threads hold the connection mechanically.



Thread Identification Table

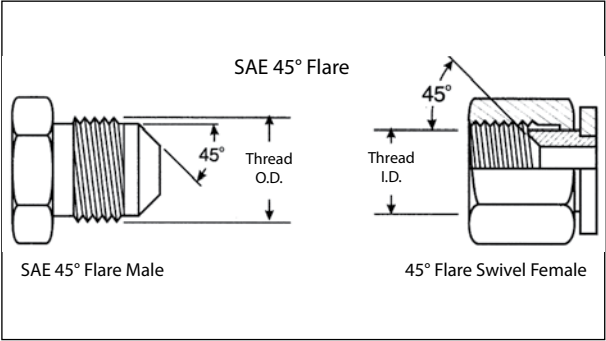
SAE J514 37° Flare (JIC)

Tube Size	Tube Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
Dash	(in)	(in-TPI)	(mm)	(in)	(mm)	(in)
-2	1/8	5/16-24	6.9	0.27	7.8	0.31
-3	3/16	3/8-24	8.5	0.34	9.4	0.37
-4	1/4	7/16-20	9.9	0.39	11.2	0.44
-5	5/16	1/2-20	11.5	0.45	12.6	0.49
-6	3/8	9/16-18	12.9	0.51	14.1	0.56
-8	1/2	3/4-16	17.5	0.69	18.9	0.74
-10	5/8	7/8-14	20.5	0.81	22.1	0.87
-12	3/4	1.1/16-12	24.9	0.98	26.9	1.06
-14	7/8	1.3/16-12	28.1	1.11	30.3	1.18
-16	1	1.5/16-12	31.3	1.23	33.1	1.31
-20	1.1/4	1.5/8-12	39.2	1.54	41.1	1.62
-24	1.1/2	1.7/8-12	45.6	1.79	47.4	1.87
-32	2	2.1/2-12	61.4	2.42	63.3	2.49

CAUTION: In the -02, -03, -04, -05, -08 and -10 sizes, the threads of the SAE 45° flare and the SAE 37° flare are the same. However, the sealing surface angles are not the same. Carefully measure the seat angle to differentiate.

SAE J512 45°

A term usually applied to fittings having a 45° angle flare or seat. Soft copper tubing is generally used in such applications as it is easily flared to the 45° angle. These are for low pressure applications - commonly used in refrigeration, automotive and truck piping systems. The SAE 45° flare male will mate with an SAE 45° flare female only. The SAE male has straight threads and a 45° flare seat. The SAE female has straight threads and a 45° flare seat. The seal is made on the 45° flare seat.



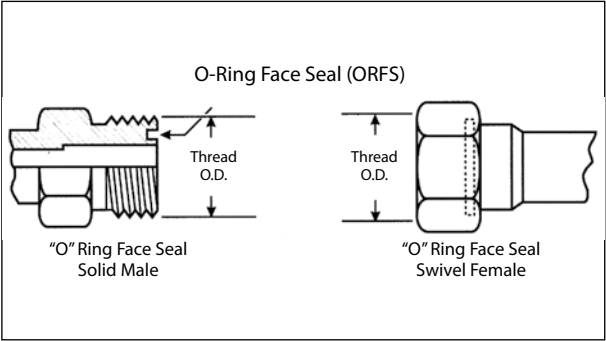
Thread Identification Table
SAE J512 45°

Tube Size	Tube Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
Dash	(in)	(in-TPI)	(mm)	(in)	(mm)	(in)
-2	1/8	5/16-24	6.9	0.27	7.9	0.31
-3	3/16	3/8-24	8.6	0.34	9.6	0.38
-4	1/4	7/16-20	9.9	0.39	11.2	0.44
-5	5/16	1/2-20	11.4	0.45	12.7	0.50
-6	3/8	5/8-18	14.2	0.56	15.7	0.62
-7	7/16	1 1/16-16	15.7	0.62	17.3	0.68
-8	1/2	3/4-16	17.0	0.68	19.0	0.75
-10	5/8	7/8-14	20.3	0.80	22.3	0.88
-12	3/4	1 1/16-14	25.1	0.99	26.9	1.06
-14	7/8	1 1/4-12	29.5	1.16	31.7	1.25
-16	1	1 3/8-12	32.5	1.28	35.0	1.38

The threads hold the connection mechanically.
CAUTION: In the -02, -03, -04, -05, -08 and -10 sizes, the threads of the SAE 45° flare and the SAE 37° flare are the same. However, the sealing surface angles are not the same. Carefully measure the seat angle to differentiate.

SAE J1453 O-Ring Face Seal (ORFS)

A seal is made when the O'ring in the male contacts the flat face on the female. Couplings are intended for hydraulic systems where elastomeric seals are acceptable to overcome leakage and leak resistance is crucial. This connection offers the very best leakage control available today.



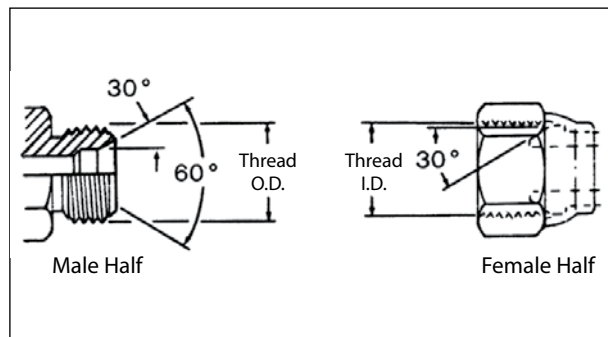
Thread Identification Table
SAE J1453 O-Ring Face Seal (ORFS)

Tube Size	Tube Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
Dash	(in)	(in-TPI)	(mm)	(in)	(mm)	(in)
-4	1/4	9/16-18	12.9	0.51	14.1	0.56
-6	3/8	1 1/16-16	15.9	0.63	17.3	0.68
-8	1/2	1 3/16-16	19.1	0.75	20.5	0.81
-10	5/8	1-14	23.6	0.93	25.2	0.99
-12	3/4	1 3/16-12	28.1	1.11	30.0	1.18
-16	1	1 7/16-12	34.4	1.36	36.3	1.43
-20	1 1/4	1 11/16-12	40.8	1.61	42.7	1.68
-24	1 1/2	2-12	48.7	1.92	50.6	1.99

The male connector has a straight thread and a machined flat face. The female has a straight thread and a machined flat face. The seal takes place by compressing the O-Ring onto the flat face of the female, similar to the split flange type fitting. The threads hold the connection mechanically.

SAE J512 Inverted Flare

This connection is frequently used in automotive systems. The male connector can either be a 45° flare in the tube fitting form or a 42° seat in the machined adapter form. The female has a straight thread with a 42° inverted flare. The seal takes place on the flared surface. The threads hold the connection mechanically.



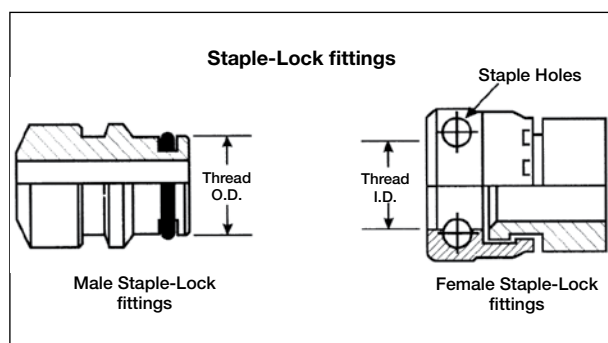
Thread Identification Table

SAE J512 Inverted Flare

Tube Size	Tube Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
Dash	(in)	(in-TPI)	(mm)	(in)	(mm)	(in)
-2	1/8	5/16-28	6.9	0.27	7.9	0.31
-3	3/16	3/8-24	8.6	0.34	9.6	0.38
-4	1/4	7/16-24	9.9	0.39	11.2	0.44
-5	5/16	1/2-20	11.4	0.45	12.7	0.50
-6	3/8	5/8-18	14.2	0.56	15.7	0.62
-7	7/16	11/16-18	15.7	0.62	17.3	0.68
-8	1/2	3/4-18	17.0	0.68	19.0	0.75
-10	5/8	7/8-18	20.3	0.80	22.3	0.88
-12	3/4	1.1/16-16	25.1	0.99	26.9	1.06

SAE J1467 Clip Fastener

This is a radial O-Ring seal connection commonly used for hydraulic applications in underground mines. The male contains an exterior O-Ring and backup ring, plus a groove to accept the "staple". The female has a smooth bore with two holes for the staple.



Thread Identification Table

SAE J1467 Clip Fastener

Dash Size	Inch Size	Female Staple-Lock I.D.		Male Staple-Lock O.D.	
	(in)	(mm)	(in)	(mm)	(in)
-4	1/4	14.9	19/32	15.1	19/32
-6	3/8	19.9	51/64	20.1	51/64
-8	1/2	23.9	61/64	24.1	61/64
-12	3/4	28.9	1.9/64	29.1	1.9/64
-16	1	38.9	1.35/64	39.1	1.35/64
-20	1.1/4	45.9	1.13/16	46.1	1.13/16
-24	1.1/2	54.9	1.11/64	55.2	2.11/64
-32	2	63.9	1.17/32	64.2	2.17/32

A "U" shaped retaining clip or staple is inserted through the two holes, passing through the groove in the male to lock the connection together. The seal takes place by contact between the O-Ring in the male and the smooth bore of the female.

SAE J518/ISO - DIS 6162/JIS B8363 O-Ring Flange

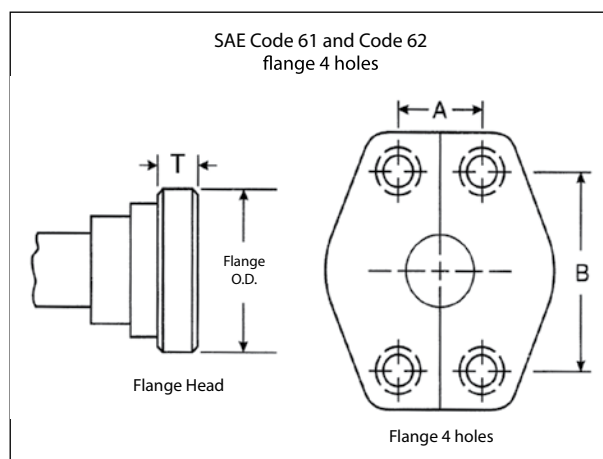
This connection is commonly used in fluid power system. There are two pressure ratings. Code 61 Form R, PN 35/350 bar, Type I, is referred to as the "standard" series and Code 62 Form S, PN 415 bar, Type II, is the "heavy duty" "6000 psi" series. The design concept for both series is the same, but the bolt hole spacing and flanged head diameters are larger for the higher pressure, Code 62 connection.

The female (port) is an unthreaded hole with four bolt holes in a rectangular pattern around the port.

The male consists of a flanged head, grooved for an O-Ring, and either a captive flange or split flange halves with bolt holes to match the port. The seal take place on the O-Ring, which is compressed between the flange head and the flat surface surrounding the port. The threaded bolts hold the connection together.

SAE J518, DIN 20066, ISO/DIS 6162 and JIS B 8363 are interchangeable, except for bolt sizes.

*All Code 61 flange head hose couplings meet or exceed SAE J518 Code 61 requirements for hydraulic split flange connections. The Code 61 flange head design can withstand a maximum operating pressure of 3000 to 5000 psi depending on size.



Flange Dash	SAE Cod 61 FORM R - PN 35/350 - TYPE I								SAE Cod 62 FORM S - PN 415 - TYPE II								CATERPILLAR							
	Flange Head Size		Flange Head T		A		B		Flange Head Size		Flange Head T		A		B		Flange Head Size		Flange Head T		A		B	
Size	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
-8	1.19	30.2	.265	6.7	.69	17.5	1.50	38.1	1.25	31.8	.305		.71	18.2	1.59	40.5								
-10*	1.34	34.0	.265	6.7	.78	19.8	1.69	42.9																
-12	1.50	38.1	.265	6.7	.87	22.2	1.89	47.6	1.63	41.3	.345	8.7	.94	23.8	2.00	50.8	1.63	41.3	.56	14.2	.94	23.8	2.00	50.8
-16	1.75	44.5	.315	8.0	1.03	26.2	2.05	52.4	1.88	47.6	.375	9.5	1.10	27.8	2.25	57.2	1.88	47.6	.56	14.2	1.10	27.8	2.25	57.2
-20	2.00	50.8	.315	8.0	1.19	30.2	2.31	58.7	2.13	54.0	.405	10.3	1.26	31.8	2.63	66.7	2.13	54.0	.56	14.2	1.26	31.8	2.63	66.7
-24	2.38	60.3	.315	8.0	1.41	35.7	2.75	69.9	2.50	63.5	.495	12.6	1.44	36.6	3.13	79.4	2.50	63.5	.56	14.2	1.44	36.6	3.13	79.4
-32	2.81	71.4	.375	9.5	1.69	42.9	3.06	77.8	3.13	79.4	.495	12.6	1.73	44.4	3.81	96.8	3.13	79.4	.56	14.2	1.73	44.4	3.81	96.8
-40	3.31	84.1	.375	9.5	2.00	50.8	3.50	88.9																

T = Thickness

-10 is a non SAE size flange

How to measure

Four Bolt Flange - First measure the port hole diameter using the caliper. Next, measure the longest bolt hole spacing from centre-to-centre (Dimension "A") or measure the flanged head diameter. O.D.

1. The size -10, which is common outside of North America is not an SAE Standard size.
2. Caterpillar flanges, which are the same flange O.D. as SAE Code 62, have a thicker flange head.
3. Poclain flanges, which are completely different from SAE flanges.

BRITISH CONNECTIONS

British Standard Pipe Parallel (BSPP)

Popular couplings British Standard Pipe (BSP) threads, also known as Whitworth threads.

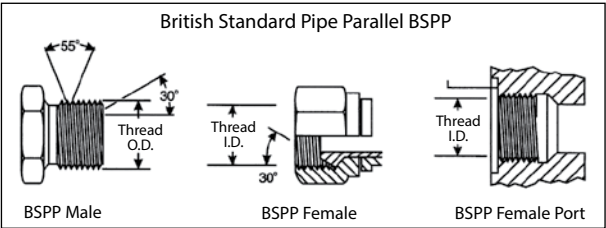
The BSPP (parallel) male will mate with a BSPP (parallel) female or a female port.

The BSPP male has straight threads and a 30° seat.

The BSPP female has straight threads and a 30° seat.

The female port has straight threads and a spotface. The seal on the port is made with an O-Ring or soft metal washer on the male.

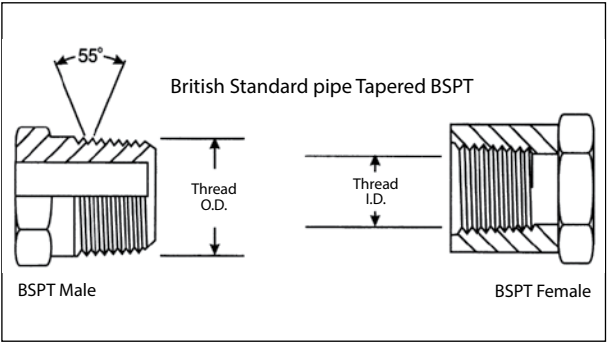
The BSPP (parallel) connector is similar to, but not interchangeable with, the NPSM connector. The thread pitch is different in most sizes, and the thread angle is 55° instead of the 60° angle found on NPSM threads. The female swivel BSPP has a tapered nose which seals on the cone seat of the male.



British Standard Pipe Tapered (BSPT)

The BSPT (tapered) male will mate with a BSPT (tapered)female, or a BSPP (parallel) female. The BSPT male has tapered threads. When mating with either the BSPT (tapered) female or the BSPP (parallel) female port, the seal is made on the threads accomplished by thread distortion. A thread sealant is recommended.

The BSPT connector is similar to, but not interchangeable with, the NPTF connector. The thread pitch is different in most cases, and the thread angle is 55° instead of the 60° angle found on NPTF threads.



Thread Identification Table

BSPP - (British Standard Pipe Parallel)

BSPT - (British Standard Pipe Taped)

Dash Size	Inch Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
	(in)	(in-TPI)	(mm)	(in)	(mm)	(in)
-2	1/8	1/8-27	8.7	0.34	9.5	0.38
-4	1/4	1/4-18	11.1	0.44	13.5	0.56
-6	3/8	3/8-18	15.1	0.59	16.7	0.66
-8	1/2	1/2-14	18.3	0.72	20.6	0.81
-10	5/8	5/8-14	20.6	0.81	23.0	0.91
-12	3/4	3/4-14	23.8	0.94	26.2	1.03
-16	1	1-11	30.2	1.19	33.3	1.31
-20	1-1/4	1.1/4-11	38.9	1.53	41.1	1.66
-24	1-1/2	1.1/2-11	45.2	1.78	47.6	1.88
-32	2	2-11	56.4	2.22	59.5	2.34

FRENCH CONNECTIONS

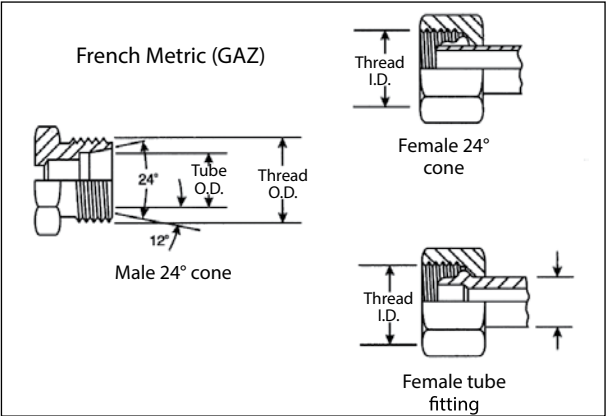
French GAZ have a 24° seat and metric threads. These are similar to German DIN couplings, but the threads are different in some sizes, the French use fine threads in all sizes. French flanges are different than SAE, they have a lip that protrudes from the flange face. These are Poclain style flanges.

Millimetrique and GAZ 24°

This connection consists of a common male and two different females. The French Metric (GAZ) male will mate with the female 24° cone or the female tube fitting. The male has a 24° seat and straight metric threads. The female has a 24° seat or a tubing sleeve and straight metric threads. The Millimetrique Series is used with whole number metric O.D. tubing and the GAZ Series is used with fractional number metric O.D. pipe size tubing.

Thread Identification Table
French Metric Millimetrique

Metric Thread	Female Thread I.D.		Male Thread O.D.		Tube O.D.	
M12 X 1.0	11.0	0.43	12.0	0.47	6	0.24
M14 X 1.5	12.5	0.49	14.0	0.55	8	0.31
M16 X 1.5	14.5	0.57	16.0	0.63	10	0.39
M18 X 1.5	16.5	0.65	18.0	0.71	12	0.47
M20 X 1.5	18.5	0.73	20.0	0.79	14	0.55
M22 X 1.5	20.5	0.81	22.0	0.87	15	0.59
M24 X 1.5	22.5	0.89	24.0	0.94	16	0.63
M27 X 1.5	25.5	1.00	27.0	1.06	18	0.71
M30 X 1.5	28.5	1.12	30.0	1.18	22	0.87
M33 X 1.5	31.5	1.24	33.0	1.30	25	0.98
M36 X 1.5	34.5	1.36	36.0	1.42	28	1.10
M39 X 1.5	37.5	1.48	39.0	1.54	30	1.18
M42 X 1.5	40.5	1.59	42.0	1.65	32	1.26
M45 X 1.5	43.5	1.71	45.0	1.77	35	1.38
M48 X 1.5	46.5	1.83	48.0	1.89	38	1.50
M52 X 1.5	50.5	1.99	52.0	2.05	40	1.57
M54 X 2.0	51.9	2.04	54.0	2.13	45	1.77



Thread Identification Table
French Metric GAZ 24° Cone

Dash Size	Metric Thread	Female Thread I.D.		Male Thread O.D.		Tube O.D.	
		(mm)	(in)	(mm)	(in)	(mm)	(in)
-6	M20 X 1.5	18.5	0.73	20.0	0.78	13.25	0.52
-8	M24 X 1.5	22.5	0.89	24.0	0.94	16.75	0.66
-10	M30 X 1.5	28.5	1.12	30.0	1.18	21.25	0.83
-12	M36 X 1.5	34.5	1.36	36.0	1.41	26.75	1.05
-16	M45 X 1.5	43.5	1.71	45.0	1.77	33.50	1.32
-20	M52 X 1.5	50.5	1.99	52.0	2.04	42.25	1.66

GAZ Poclain 24° Flange

The Poclain (French GAZ) 24° high pressure flange is usually found on Poclain equipment. The male flange will mate with a female flange or a port. The seal is made on the 24° seat.

Nominal Size (in)	A		B		E	
	(mm)	(in)	(mm)	(in)	(mm)	(in)
1/2	39.9	1.57	18.3	.72	14	.55
5/8	39.9	1.57	18.3	.72	14	.55
3/4	50.8	2	23.9	.94	18	.71

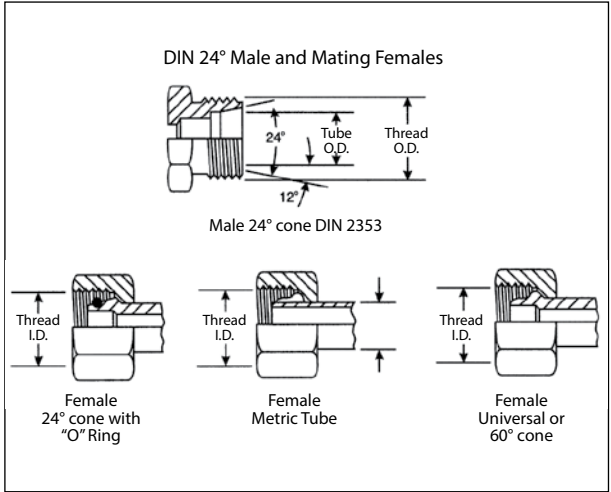
GERMAN DIN CONNECTIONS

A coupling referred to as metric, usually means a DIN coupling. Flanges are standard Code 61 or Code 62.

DIN 2353 24° Cone

The DIN 24° cone male will mate with any of the three females shown below.

The male has a 24° seat, straight metric threads, and a recessed counterbore which matches the tube O.D. used with it. The mating female may be a 24° cone with O’ring, (DKO type) a metric tube fitting or a universal 24° or 60° cone.



Thread Identification Table

DIN 24° Cone

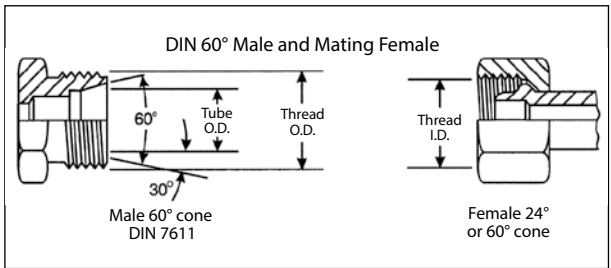
Metric Thread (dia x pitch)	Female Thread I.D.		Male Thread		Tube O.D.			
	I.D.		O.D.		Light Series		Heavy Series	
	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
M12 X 1.5	10.5	0.41	12	0.47	6	0.24		
M14 X 1.5	12.5	0.49	14	0.55	8	0.31	6	0.24
M16 X 1.5	14.5	0.57	16	0.63	10	0.39	8	0.31
M18 X 1.5	16.5	0.65	18	0.71	12	0.47	10	0.39
M20 X 1.5	18.5	0.73	20	0.79			12	0.47
M22 X 1.5	20.5	0.81	22	0.87	15	0.59	14	0.55
M24 X 1.5	22.5	0.89	24	0.94			16	0.63
M26 X 1.5	24.5	0.96	26	1.02	18	0.71		
M30 X 2.0	27.9	1.10	30	1.18	22	0.87	20	0.79
M36 X 2.0	33.9	1.33	36	1.42	28	1.10	25	0.98
M42 X 2.0	39.9	1.57	42	1.65			30	1.18
M45 X 2.0	42.9	1.69	45	1.77	35	1.38		
M52 X 2.0	49.9	1.96	52	2.05	42	1.65	38	1.50

There is a light and heavy series DIN coupling. Proper identification is made by measuring both the thread size and the tube O.D. (The heavy series has a smaller tube O.D. than the light, but has a thicker wall section).

DIN 3863 60° Cone

This connection is frequently used in hydraulic systems. The DIN 60° cone male will mate with the female universal 24° or 60° cone only.

The male has a 60° seat and straight metric threads. The female has a 24° and 60° universal seat and straight metric threads. The seal takes place by contact between the cone of the male and the nose of the flareless swivel. The threads hold the connection mechanically.



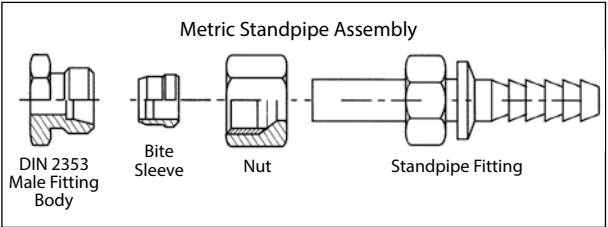
Thread Identification Table

DIN 60°

Metric Thread (dia x pitch)	Female Thread I.D.		Male Thread O.D.		Tube O.D.	
	(mm)	(in)	(mm)	(in)	(mm)	(in)
M12 X 1.5	10.5	0.41	12	0.47	6	0.24
M14 X 1.5	12.5	0.49	14	0.55	8	0.31
M16 X 1.5	14.5	0.57	16	0.63	10	0.39
M18 X 1.5	16.5	0.65	18	0.71	12	0.47
M22 X 1.5	20.5	0.81	22	0.87	15	0.59
M26 X 1.5	24.5	0.96	26	1.02	18	0.71
M30 X 1.5	28.5	1.12	30	1.18	22	0.87
M38 X 1.5	36.5	1.44	38	1.50	28	1.10
M45 X 1.5	43.5	1.71	45	1.77	35	1.38
M52 X 1.5	50.5	1.99	52	2.05	42	1.65

Metric Standpipe

A metric standpipe is comprised of three components attached to a male fitting. The components are a Standpipe, Bite Sleeve and Metric Nut. The nut is placed over the Standpipe, followed by the Bite Sleeve (see illustration below). For DIN light assemblies, a DIN light metric nut is used. For DIN heavy assemblies, a DIN heavy metric nut is used. Bite Sleeve and Standpipe are selected on the basis of tube O.D.



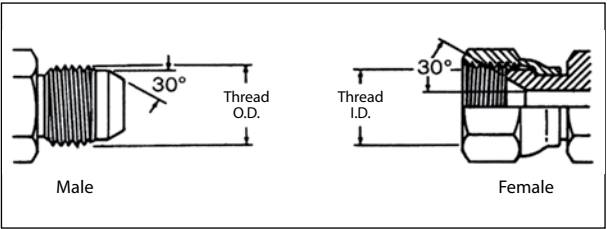
Tube O.D. (mm)	Metric Nut Thread	
	Light	Heavy
6	M12 x 1.5	
8	M14 x 1.5	M16 x 1.5
10	M16 x 1.5	M18 x 1.5
12	M18 x 1.5	M20 x 1.5
15	M22 x 1.5	
16		M24 x 1.5
18	M26 x 1.5	
20		M30 x 2.0
22	M30 x 1.5	
25		M36 x 2.0
28	M36 x 2.0	
30		M42 x 2.0
35	M45 x 2.0	
38		M52 x 2.0
42	M52 x 2.0	

JAPANESE CONNECTIONS

Japanese equipment uses JIS (Japanese Industrial Standard) couplings with a 30° seat and British Standard Pipe Parallel threads. All flanges are Code 61 or Code 62 (except -10).

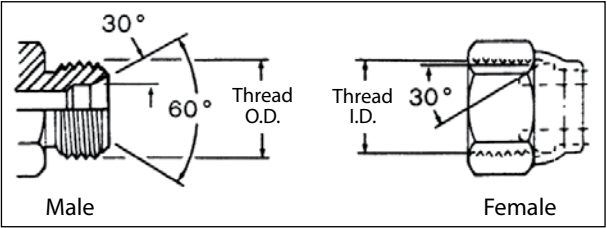
JIS 30° Flare Parallel Pipe Threads - JIS B 0202

These Japanese 30° flare male coupling will mate with a Japanese 30° flare female only. The male and female have straight threads and a 30° seat. The seal is made on the 30° seat. The threads on the Japanese 30° flare connector conform to JIS B 0202, the same as the BSPP threads. Both the British and Japanese connectors have a 30° seat, but they are not interchangeable, because the British seat is inverted.



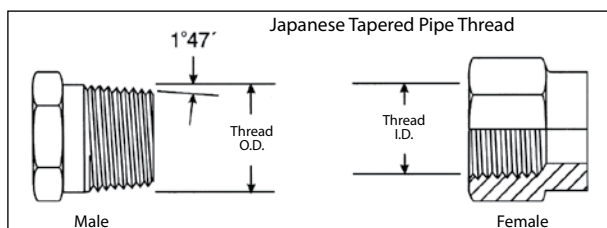
JIS 30° Inverted Seat, Parallel Pipe Threads - JIS B 0202

The JIS parallel is similar to the BSPP connection. The JIS parallel thread and the BSPP connection are interchangeable.



JIS Tapered Pipe Thread (PT) - JIS B 0203

The JIS tapered pipe thread connection is similar to the BSPT connection and fully interchangeable. The Japanese connection does not have a 30° Flare, and will not mate with the BSPP female. The thread conforms to JIS B 0203, same as BSPT threads. The seal on the JIS tapered pipe thread connection is made on the threads.

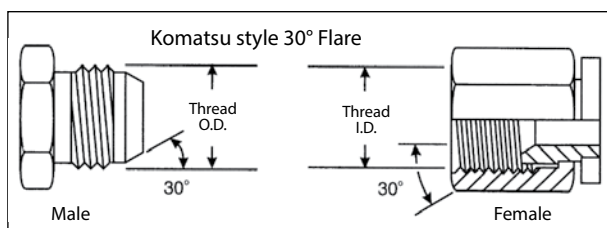


Thread Identification Table

Dash Size	Inch Size	Thread Size	Female Thread I.D.		Male Thread O.D.	
		(in-TPI)	(mm)	(in)	(mm)	(in)
-2	1/8	1/8-27	8.7	0.34	9.5	0.38
-4	1/4	1/4-18	11.1	0.44	13.5	0.56
-6	3/8	3/8-18	15.1	0.59	16.7	0.66
-8	1/2	1/2-14	18.3	0.72	20.6	0.81
-10	5/8	5/8-14	20.6	0.81	23.0	0.91
-12	3/4	3/4-14	23.8	0.94	26.2	1.03
-16	1	1-11	30.2	1.19	33.3	1.31
-20	1-1/4	1-1/4-11	38.9	1.53	41.1	1.66
-24	1-1/2	1-1/2-11	45.2	1.78	47.6	1.88
-32	2	2-11	56.4	2.22	59.5	2.34

Komatsu Style 30° Flare Parallel Threads

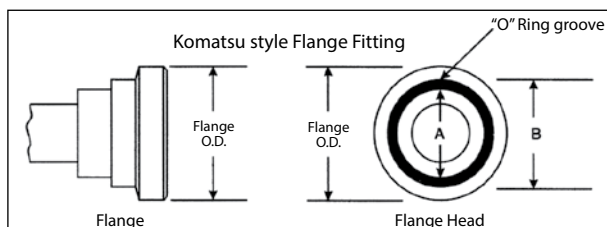
The Komatsu style 30° Flare Parallel thread coupling is identical to the Japanese 30° Flare parallel except for the threads. The Komatsu uses Metric fine threads which conform to JIS B 0207. The Komatsu connector seals on the 30° Flare.



Dash Size	Inch Size	Metrich Thread Size	Male Thread O.D.	B Thread I.D.
			(mm)	(mm)
-6	3/8	M18x1.5	18	16.4
-8	1/2	M22x1.5	22	20.4
-10	5/8	M24x1.5	24	22.4
-12	3/4	M30x1.5	30	28.4
-16	1	M33x1.5	33	31.4
-20	1-1/4	M36x1.5	36	34.4
-24	1-1/2	M42x1.5	42	40.4

Komatsu Flange Fitting

The Komatsu Flange fitting is nearly identical to and fully interchangeable with the SAE Code 61 flange fitting. In all sizes the O-ring dimensions are different. When replacing a Komatsu flange with an SAE style flange, an SAE style O-ring must be used.



Flange Dash Size	Flange Size (In)	A	B
-8	1.19	.73	.98
-10*	1.34	.73	1.10
-12	1.50	.85	1.22
-16	1.75	1.12	1.50
-20	2.00	1.36	1.73
-24	2.38	1.75	2.12
-32	2.81	2.22	2.56

*is a non SAE size flange

RACOMMENDED FITTING AND ADAPTER INSTALLATION TORQUE

SAE J514 37° CONE (JIC)

Dash	Thread	Lb.ft		N.m	
		Min	Max	Min	Max
-4	7/16-20	11	12	15	16
-5	1/2-20	14	15	19	21
-6	9/16-18	18	20	24	28
-8	3/4-16	36	39	49	53
-10	7/8-14	57	63	77	85
-12	1 1/16-12	79	88	107	119
-14	1 3/16-12	94	103	127	140
-16	1 5/16-12	108	113	147	154
-20	1 5/8-12	127	133	172	181
-24	1 7/8-12	158	167	215	226
-32	2 1/2-12	245	258	332	350

BSPP without O-Ring

Dash	Thread	Lb.ft	N.m
-2	1/8-28	7	10
-4	1/4-19	15	20
-6	3/8-19	26	35
-8	1/2-14	44	60
-10	5/8-14	52	70
-12	3/4-14	85	115
-16	1-11	103	140
-20	1 1/4-11	155	210
-24	1 1/2-11	214	290
-32	2-11	295	400

SAE J1453 O-Ring Face Seal (ORFS)

Dash	Thread	Lb.ft		N.m	
		Min	Max	Min	Max
-4	9/16-18	18	21	25	28
-6	11/16-16	30	32	40	44
-8	13/16-16	41	44	55	60
-10	1-14	46	50	60	68
-12	1 3/16-12	65	70	90	95
-16	1 7/16-12	92	100	125	135
-20	1 11/16-12	125	140	170	190
-24	2-12	150	165	200	225

BSPP with O-Ring

Dash	Thread	Lb.ft	N.m
-2	1/8-28	N/A	N/A
-4	1/4-19	15	20
-6	3/8-19	26	35
-8	1/2-14	37	50
-10	5/8-14	44	60
-12	3/4-14	63	85
-16	1-11	85	115
-20	1 1/4-11	140	190
-24	1 1/2-11	177	240
-32	2-11	221	300

SAE Flange J518 Code 61

Dash	Thread	Lb.ft		N.m	
		Min	Max	Min	Max
-8	1/2	15	19	20	25
-12	3/4	21	29	28	40
-16	1	27	35	37	48
-20	1 1/4	35	46	48	62
-24	1 1/2	46	58	62	79
-32	2	54	66	73	90
-40	2 1/2	79	91	107	124
-48	3	137	149	186	203

JIS (B8363)

Dash	Thread	Lb.ft	N.m
-4	1/4-19	19	25
-6	3/8-19	25	34
-8	1/2-14	49	64
-10	5/8-14	100	132
-12	3/4-14	100	132
-16	1-11	149	196
-20	1 1/4-11	171	225
-24	1 1/2-11	194	255
-32	2-11	240	316

SAE J518 Code 62

Dash	Thread	Lb.ft		N.m	
		Min	Max	Min	Max
-8	1/2	15	19	20	25
-12	3/4	25	33	34	45
-16	1	42	50	56	68
-20	1 1/4	63	75	85	102
-24	1 1/2	117	133	158	181
-32**	2	200	217	271	294

Metric

Thread	Lb.ft		N.m	
	Min	Max	Min	Max
M12x1,5	8	11	15	20
M14x1,5	13	18	25	30
M16x1,5	19	26	35	40
M18x1,5	22	30	40	45
M20x1,5	24	33	45	50
M22x1,5	32	44	60	70
M24x1,5	41	55	75	85
M26x1,5	46	63	85	95
M30x2	57	77	105	120
M36x2	74	100	135	150
M42x2	111	151	205	230
M45x2	136	184	250	280
M52x2	147	199	270	300

JIC FFFT TORQUE METHOD

The FFFT (Flats From Finger Tight) method allows to assemble fittings and adapters at the correct torque value without a dynamometric wrench. The rotation applied according the value shown in tab.1 ensures a good sealing, avoid unscrewing and over torque that can cause nut or cone crack.

Assembling instruction:

- hand tighten the joint
- make a longitudinal mark on one of the flats of hex and continue it on the body hex as shown in Fig.1
- tighten the joint further by the number of flat as shown in Tab.1

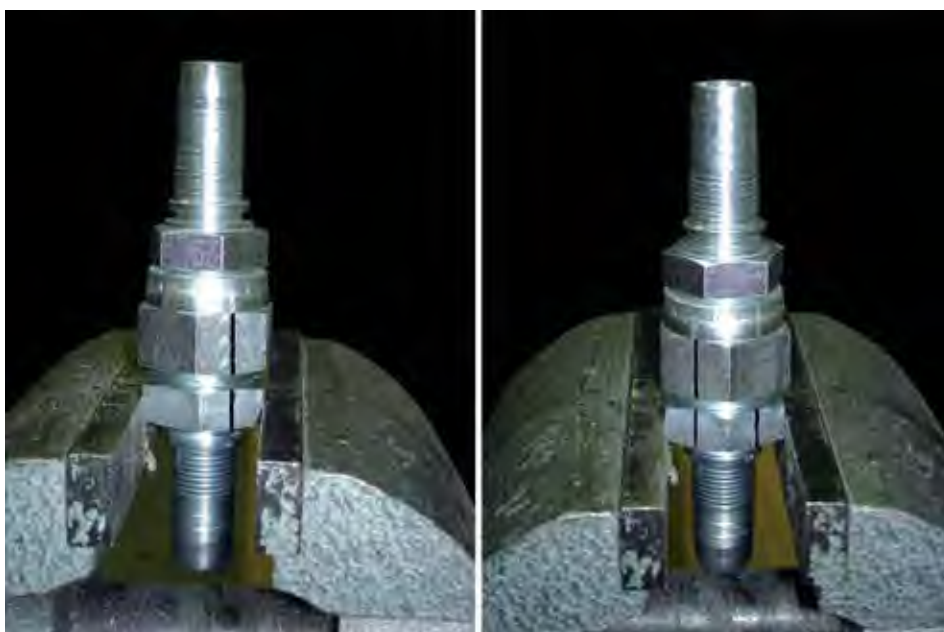


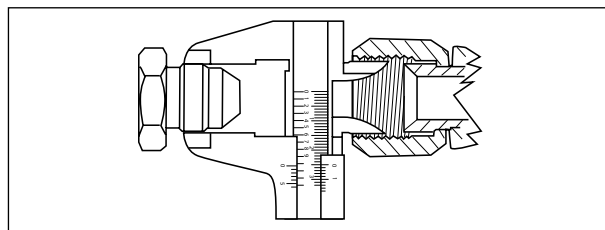
Fig. 1

Assembling value - carbon steel material - SAE J514 JIC 37° flare						
Dash size	Thread	Lb*ft		N*m		FFFT
		min	max	min	max	
-4	7/16-20	11	12	15	16	2
-5	1/2-20	14	15	19	21	2
-6	9/16-18	18	20	24	28	2
-8	3/4-16	36	39	49	53	1.5
-10	7/8-14	57	63	77	85	1.5
-12	1 1/16-12	79	88	107	119	1
-14	1 3/16-12	94	103	127	140	1
-16	1 5/16-12	108	113	147	154	1
-20	1 5/8-12	127	133	172	181	1
-24	1 7/8-12	158	167	215	226	1
-32	2 1/2-12	245	258	332	350	1

Tab. 1

HOW TO DETERMINE THE THREAD TYPE USING CALLIPERS

By measuring with a caliper the outside diameter of the thread of a male or the inside diameter of the thread of a female you will get a measure in mm. By finding this value in mm on the below table, you'll be able to find the relevant thread type.



Male OD	mm	Female ID
	8,7	G1/8" BSP
1/8" – 27 NPTF	9,5	
G1/8" BSP	9,6	
M 10 x 1	9,8	
	9,9	7/16" – 20 JIC
	10,5	M 12 x 1,5
7/16" – 20 JIC	11,0	
	11,4	1/2" – 20 SAE
	11,6	G1/4" BSP
M 12 x 1,5	11,9	
1/4" – 18 NPTF	12,5	
	12,5	M 14 x 1,5
1/2" – 20 SAE	12,6	
	12,9	9/16" – 18 JIC
G1/4" BSP	13,0	
M 14 x 1,5	13,9	
9/16" – 18 JIC	14,2	
	14,5	M16 x 1,5
	15,1	G3/8" BSP
M 16 x 1,5	15,8	
3/8" – 18 NPTF	15,9	
	16,5	M18 x 1,5
G3/8" BSP	16,6	
	17,5	3/4" – 16 JIC
M 18 x 1,5	17,9	
	18,4	20 x 1,5 DKF
3/4" – 16 JIC	18,8	
	18,8	G1/2" BSP
1/2" – 14 NPT	19,8	
20 x 1,5 CEF	19,9	
	20,4	7/8" – 14 SAE
	20,5	M 22 x 1,5
G1/2" BSP	20,8	
	20,9	G5/8" BSP
M 22 x 1,5	21,9	
7/8" – 14 SAE	22,1	
	22,5	24 x 1,5 DKF
G5/8" BSP	22,8	
24 x 1,5 CEF	23,9	
	24,5	G3/4" BSP
	24,8	1 1/16" – 12 JIC
3/4" – 14 NPTF	25,1	
	25,5	M26 x 1,5
M 26 x 1,5	25,9	
G3/4" BSP	26,3	
1 1/16" – 12 JIC	26,8	

Male OD	mm	Female ID
	27,9	1 3/16" – 12 JIC
	28,0	M 30 x 2
	28,5	30 x 1,5 DKF
M 30 x2	29,8	
30 x 1,5 CEF	29,9	
1 3/16" – 12 JIC	30,1	
	30,7	G1" BSP
	31,2	1 5/16" – 12 JIC
1" – 11 1/2 NPTF	31,4	
	31,5	M 33 x 1,5
G1" BSP	33,1	
1 5/16" – 12 JIC	33,2	
	34,0	M 36 x 2
	34,5	36 x 1,5 DKF
M 36 x 2	35,8	
36 x 1,5 CEF	35,9	
	36,5	M 36 x 1,5
M 38 x 1,5	37,9	
	38,8	1 5/8" – 12 JIC
	39,4	G1 1/4" BSP
	39,8	M 42 x 1,5
1 1/4" – 11 1/2 NPTF	40,2	
	40,5	M 42 x 1,5
1 5/8" – 12 JIC	41,1	
1 1/4" – 11 BSP	41,7	
M 42 x2	41,8	
	42,4	M 45 x 2
	43,3	45 x 1,5 DKF
M 45 x2	44,8	
45 x 1,5 CEF	44,9	
	45,1	1 7/8" – 12 JIC
	45,2	G1 1/2" BSP
1 1/2" – 11 1/2 NPTF	46,3	
1 7/8" – 12 JIC	47,5	
G1 1/2" BSP	47,7	
	49,6	M 52 x 2
	50,3	52 x 1,5 DKF
M 52 x2	51,8	
52 x 1,5 CEF	51,9	
	57,4	G2" BSP
2" – 11 1/2 NPTF	58,3	
G2" BSP	59,4	
	61,1	2 1/2" – 12 JIC
	62,5	M 65 x 2
2 1/2" – 12 JIC	63,3	

PRESSURE CONVERSION TABLES

Metric to psi (1 KPa = .145 psi)

Kilo Pascal (KPa)	Mega Pascal (KPa)	Bar (Bar)	Pounds per Square Inch (psi)
100	0,1	1	14,5
200	0,2	2	29,0
300	0,3	3	43,5
400	0,4	4	58,0
500	0,5	5	72,5
600	0,6	6	87,0
700	0,7	7	101,5
800	0,8	8	116,0
900	0,9	9	130,5
1000	1	10	145,0
2000	2	20	290,1
3000	3	30	435,1
4000	4	40	580,2
5000	5	50	725,5
6000	6	60	870,2
7000	7	70	1015
8000	8	80	1160
9000	9	90	1305
10000	10	100	1450
20000	20	200	2901
30000	30	300	4351
40000	40	400	5802
50000	50	500	7252
60000	60	600	8702
70000	70	700	10153
80000	80	800	11603
90000	90	900	13053
100000	100	1000	14504
200000	200	2000	29008
300000	300	3000	43511

psi to metric (1 psi = 6,89 KPa)

Pounds per Square Inch (psi)	Kilo Pascal (KPa)	Mega Pascal (MPa)	Bar (Bar)
10	68,9	0,07	0,7
20	137,9	0,14	1,4
30	206,8	0,21	2,1
40	275,8	0,28	2,8
50	344,7	0,34	3,4
60	413,7	0,41	4,1
70	482,6	0,48	4,8
80	551,6	0,55	5,5
90	620,5	0,62	6,2
100	689	0,70	6,9
200	1379	1,4	13,8
300	2068	2,1	20,7
400	2758	2,8	27,6
500	3447	3,4	34,5
600	4137	4,1	41,4
700	4826	4,8	48,3
800	5516	5,5	55,2
900	6205	6,2	62,1
1000	6895	6,9	68,9
2000	13790	13,8	147,9
3000	20684	20,7	206,8
4000	27579	27,6	275,8
5000	34474	34,5	344,7
6000	41369	41,4	413,7
7000	48263	48,3	482,6
8000	55158	55,2	551,6
9000	62053	62,1	620,5
10000	68948	68,9	689
20000	137895	147,9	1379
30000	206843	206,8	2068
40000	275790	275,8	2758

CONVERSION TABLES FROM IMPERIAL SYSTEM TO METRIC SYSTEM

Inches	mm
1/64	.0156
1/32	.0312
3/64	.0468
1/16	.0625
5/64	.0781
3/32	.0937
7/64	.1093
1/8	.1250
9/64	.1406
5/32	.1562
11/64	.1718
3/16	.1875
13/64	.2031
7/32	.2187
15/64	.2343
1/4	.2500

Inches	mm
17/64	.2656
9/32	.2812
19/64	.2968
15/16	.3125
21/64	.3281
11/32	.3437
23/64	.3593
3/8	.3750
25/64	.3906
13/32	.4062
27/64	.4218
7/16	.4375
29/64	.4531
15/32	.4687
31/64	.4843
1/2	.5000

Inches	mm
33/64	.5156
17/32	.5312
35/64	.5468
9/16	.5625
37/64	.5781
19/32	.5937
39/64	.6093
5/8	.6250
41/64	.6406
21/32	.6562
43/64	.6718
11/16	.6875
45/64	.7031
23/32	.7187
47/64	.7343
3/4	.7500

Inches	mm
49/64	.7656
25/32	.7812
51/64	.7968
13/16	.8125
53/64	.8281
27/32	.8437
55/64	.8593
7/8	.8750
57/64	.8906
29/32	.9062
59/64	.9218
15/16	.9375
61/64	.9531
31/32	.9687
63/64	.9843
1	1000

// ADAPTERS GUIDELINES

ADAPTER SELECTION

Selection of an appropriate DUNLOP HIFLEX adapter for a given application depends on the fluid system operating parameters listed below and the tube material and wall thickness they require:

1. Type of fluid
2. Operating temperature range
3. Type of line - pressure, return or suction
4. Maximum flow rate through the line
5. Maximum operating / service pressure
6. Severity of service
7. Environment

Then, based on the tube selected and appropriate fluid system operating parameters, determine adapter type(s) and material(s) using the features comparison table below.

FEATURES COMPARISON OF TUBE FITTINGS				
Feature		ORFS	JIC 37°	BSP
Performance	Pressure capability*	Very High	Medium to High	Medium to High
	Seal Reliability	Excellent	Good	Very Good
		Elastomeric Seal	Metal to Metal Seal	Elastomeric Seal
		High tolerance to minor surface imperfections and damage. High tolerance to assembly variations.	Low tolerance to minor surface imperfections and damage. Low tolerance to assembly variations.	Low tolerance to minor surface imperfections and damage. Low tolerance to assembly variations.
Tube Compatibility	Vibration Resistance in Rigid Systems	Excellent	Good	Very Good
	Wall Thickness	All	Medium	Medium
	Critical Features	OD tolerance and hardness for flat tube, OD tolerance only for brazed tube	ID finish, wall thickness uniformity (concentricity) and hardness	OD tolerance and hardness
Assembly	Tube Preparation	Easy and quick (slower for sleeve brazing)	Easy and quick	Easy and quick (slower for welded nipple)
	Inspection	Easy and quick	Easy and quick	Critical, need experience
	Ease of Installation	Excellent, Minimum skill and training are necessary because of high tolerances to assembly variations	Good. Low tolerance to assembly variations. Requires skilled and trained personnel	
	Ease of Maintenance	Excellent, no tube entry	Very Good, Small tube entry	Good, Large tube entry
Temperature Capability Adapters without O-Ring	Steel	To be used only with O-ring	-65° F to 500° F	-65° F to 500° F
	Stainless Steel		-425° F to 1200° F	==
	Brass		-40° F to 400° F	==
Temperature Capability Adapters with O-Ring**	All Style of Adapter	-30 F to 250° F	-30 F to 250° F	-30 F to 250° F

* For details see Working Pressure Charts in the individual adapters section

** For details concerning O-ring see section "O-ring selection" and "Fluid Resistance Table"

JIC 37° ADAPTER (ISO 8434-2, SAE J514)

Main Features

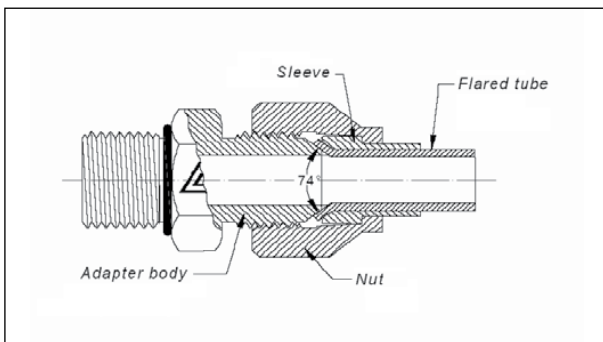
SAE J514 and ISO 8434-2, and commonly called 37° JIC adapters.

37° JIC adapter performs extremely well in all high pressure applications.

The seal is made by connecting a 37° flared tube surface to a 37° flare male and tightening by means of a nut and a sleeve. The flared tube avoids welded connection, so high performances are guaranteed even in case of severe vibrations, mechanic/hydraulic shocks and multiple assembly/disassembly operations.

When tightened, sleeve provides tube and adapter self alignment and helps to reduce the vibrations on the tube during application.

An appropriate choice of sleeve gives the possibility of assembling adapters with both metric and inch-tubes

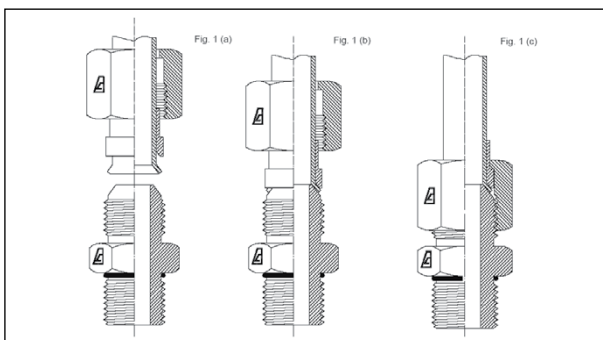


Flaring Operations

Perfect sealing is guaranteed with tubes having physical and mechanical characteristics obtained by cold-drawing and a ductility expressed as 21% of minimum elongation.

- Cut end of tube must be perpendicular to its axis. Note: cutting operation reduces the whole length of tube (almost $0,5 \pm 1\text{mm}$ for each end).
- Dimensions of the end of the tube shall allow the correct placing on the flaring machine.
- Flared surface must be inspected to avoid excessive roughness and defects such as cracks or exfoliation.
- Length of flared zone shall be enough to allow a sufficient sealing surface and avoid the blowing off of the tube, but not excessive to prevent the contact with thread of the nut.

A well followed flaring procedure assures no leakage even after frequent assembling and disassembling operations.



ORFS ADAPTER (ISO 8434-3, SAE J1453)

Main Features

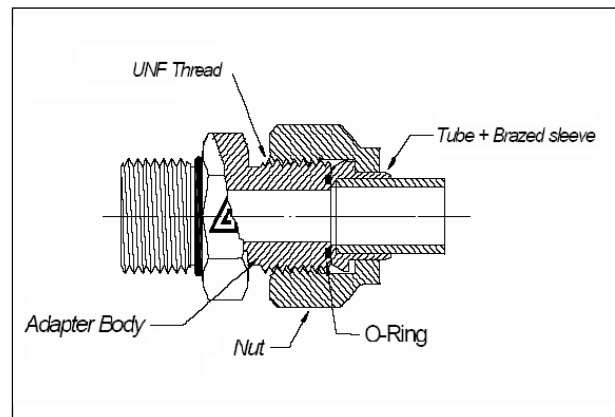
Adapters are designed and manufactured according to standard SAE J1453 and commonly called ORFS adapters.

O-Ring Face Seal adapters performs extremely well in all high pressure applications where elastomeric seals are needed to overcome leakage and leak resistance is crucial.

A seal is made when the O-Ring in the male contacts the 180° flat face of the tube. The male connector has a straight thread and a machined flat face. The seal takes place by compressing the O-Ring onto the flat face of the female.

ORFS system is composed by:

- Nut.
- Sleeve for flat tube and a shouldered sleeve for brazing. An appropriate choice of sleeve gives the possibility of assembling adapters with both metric and inch-tubes.
- Various kind and size of adapter body.
- O-Ring material is NBR, Shore "A": 90, suitable for a temperature range of: $-30^{\circ}\text{C}/+130^{\circ}\text{C}$ ($-22^{\circ}\text{F}/+266^{\circ}\text{F}$).

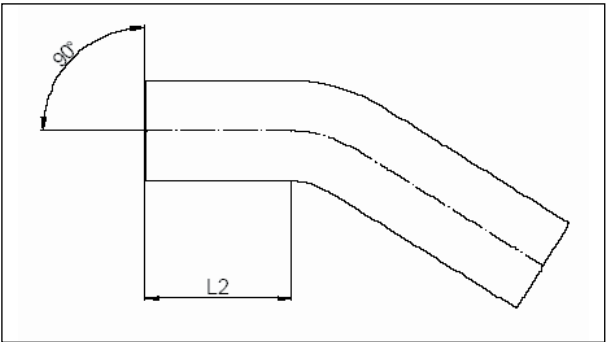


Flaring Tube Operations

Perfect sealing is guaranteed with tubes having physical and mechanical characteristics obtained by cold-drawing and a ductility expressed as 21% of minimum elongation.

- Cut end of tube must be perpendicular to its axis.
- Cutting operation reduces the whole length of tube.
- Dimensions of the end of the tube shall allow the correct placing on the flaring machine.
- Flared surface must be inspected to avoid excessive roughness and defects such as cracks or exfoliation.
- Brazing sleeve guarantees the same performances as the flared tube, and shall be used in the following cases:
- Tube is not in accordance with the above mechanical characteristics.
- The straight part of the tube is not of a sufficient length (see quote L2 and values listed in table of figure O-3).
- Tube thickness is lower than values listed in table (O-1).
- For cutting length consider shoulder of the sleeve (quote L1 of table O-1).

A well followed flaring procedure assures no leakage even after frequent assembling and disassembling operations.



Hose mm	L2 Min mm
Ø 6 - Ø 12	73
Ø 14 - Ø 18	100
Ø 20 - Ø 22	120
Ø 25 - Ø 42	130

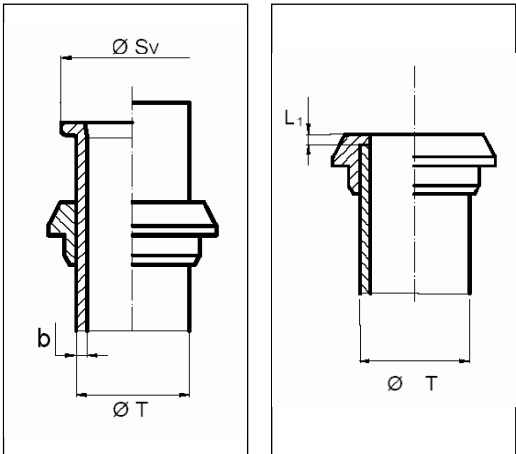
Only a few simple operations are required for assembling ORFS tube/adaptor.

Sleeve and Tube Flared:

- 1a) Place nut and sleeve on the tube with the appropriate orientation.
- 2a) Flare the tube (see procedure)
- 3a) Place the tube near seal surface of the adapter and screw by hand.
- 4a) Lock the adapter and tighten with a torque wrench

Brazed sleeve

- 1b) Cut the tube considering quote L1 of the sleeve (See Figure O-5);
- 2b) Clean and degrease accurately the end of the tube and the sleeve;
- 3b) Put the brazing ring into the sleeve
- 4b) Apply flux at the end of the tube and in the sleeve, then assemble the sleeve on the tube;
- 5b) Start brazing and be aware of not overheating flux material;
- 6b) Clean the connecting part and verify the good quality of weld around the external diameter of the hose;
- 7b) Complete the assembly procedure as described in points 3a) and 4a). See the correct installation torque in the attached table (O-2).



Hose		SV	
mm	In	mm	In
6	1/4	12,0	12,7
8	5/16	14,7	15,7
10	3/8	14,7	15,7
12	1/2	17,9	18,9
15		22,1	23,4
16	5/8	22,1	23,4
18		26,3	27,8
20	3/4	26,3	27,8
22		32,4	34,2
25	1	32,4	34,2
28		39,0	40,5
30		39,0	40,5
32	1.1/4	39,0	40,5
35		46,0	48,5
38	1.1/2	46,0	48,5

BSP ADAPTER (ISO 8434-6, BS 5200)

Main Features

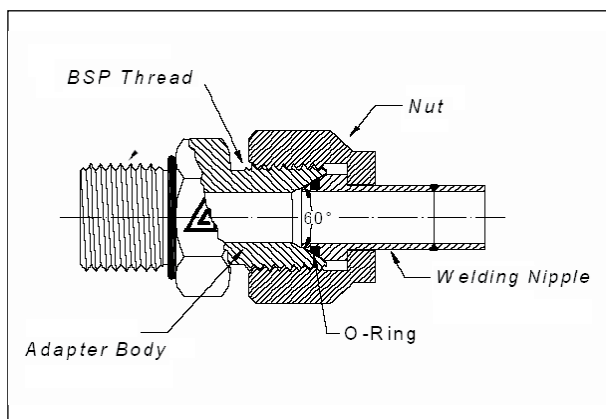
Adapters are designed and manufactured according to standard BS 5200, ISO 8434-6 and ISO 228-1 and they are commonly called BSP adapters (British Standard Pipe). BSP adapter is widely employed, it performs extremely well in all high pressure applications with oil and gas. The seal is made by connecting a 60° coned seat to the 60° male surface and tightening the nut assembly. The O-Ring placed in the tube groove improves the sealing. There are not welded part in the locking area and performances are good even after multiple assembly and disassembly operations, severe vibrations and mechanic/hydraulic shocks.

Assembling Procedure

Only a few simple operations are required for assembling BSP tube/adapter:

- 1) Carefully align tube and adapter. Otherwise sealing is not guaranteed.
- 2) Lubricate accurately sealing surfaces with mineral oil or suitable lubricant.
- 3) Place the tube near seal surface of the adapter and tight by hand.
- 4) Lock the adapter and tighten with a torque wrench.

See the correct installation torque in the attached table B-1



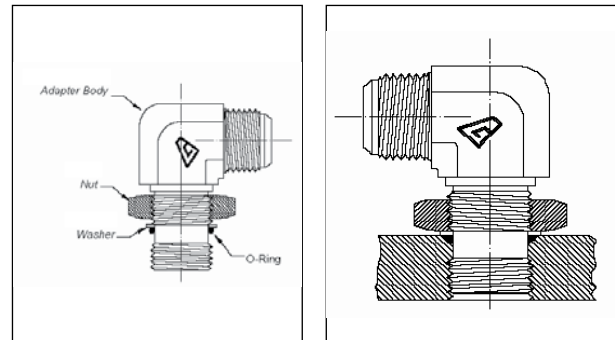
Assembly Instruction For Adjustable Adapter Thread: SAE, UNF, BSPP, Metric

Lubricate the O-Ring with mineral oil. Back off locknut as far as possible.

Make sure that washer is pushed-up as much as possible. Screw by hand the adapter into the port until the O-Ring enters the port.

To align adaptor orientation to tube end or hose assembly, unscrew the adaptor by the required amount, but not more than one full turn.

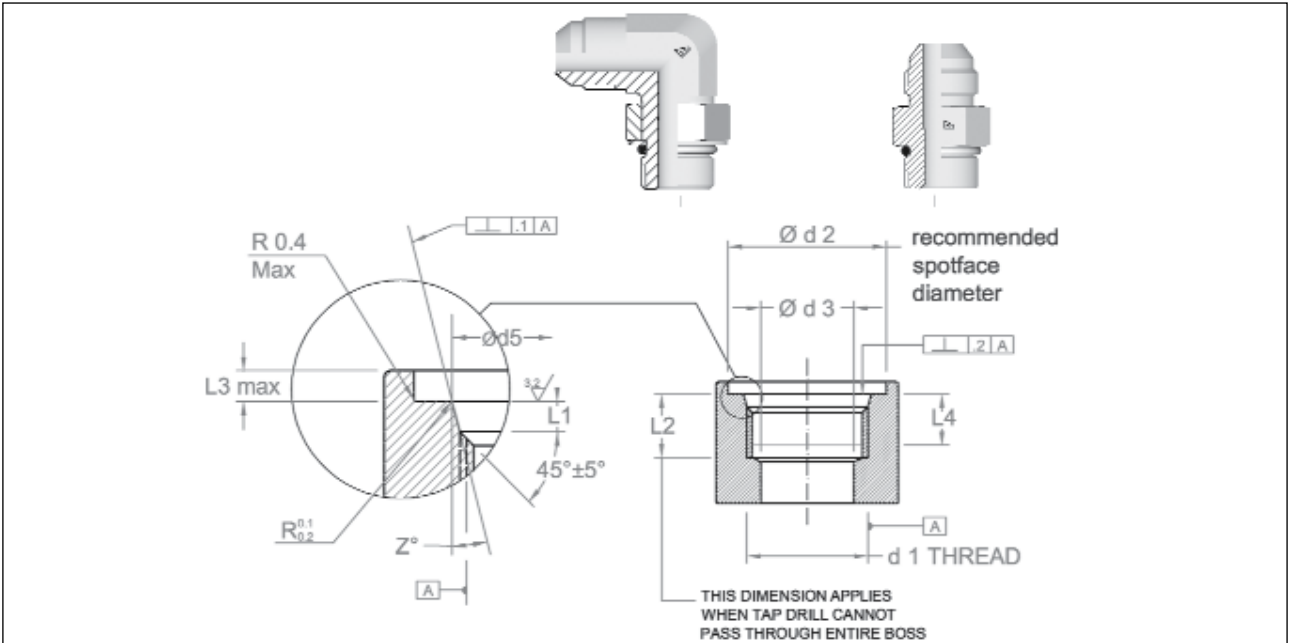
Hold the adapter in desired position by means of a wrench and tighten locknut to the suggested torque value by means of a dynamometric wrench.



METRIC PORT - ISO 6149 - SAE 2244-1

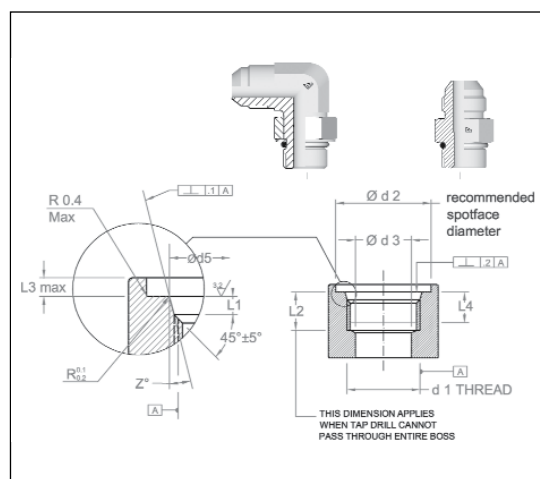
Metric Thread	D2 ²⁾ min	D3 ³⁾ min	D5 +0,10	D6 +0,50	L1 +0,40	L2 min	L3 max	L4	Z° ±1°	Assembly Torque +10%
D1	mm	mm	mm	mm	mm	mm	mm	mm		Nm
M8x1	17	14	9,1	14	1,6	11,5	1	10	12°	10
M10x1	20	16	11,1	16	1,6	11,5	1	10	12°	20
M12x1,5	23	19	13,8	19	2,4	14	1,5	11,5	15°	35
M14x1,51)	25	21	15,8	21	2,4	14	1,5	11,5	15°	45
M16x1,5	28	24	17,8	24	2,4	15,5	1,5	13	15°	55
M18x1,5	30	28	19,8	26	2,4	17	2	14,5	15°	70
M22x1,5	34	29	23,8	29	2,4	18	2	15,5	15°	100
M27x3	40	34	29,4	34	3,1	22	2	19	15°	170
M33x2	49	43	35,4	43	3,1	22	2,5	19	15°	310
M42x2	60	52	44,4	52	3,1	22,5	2,5	19,5	15°	330
M48x2	66	57	50,4	57	3,1	25	2,5	22	15°	420
M60x2	76	67	52,4	67	3,1	27,5	2,5	24,5	15°	500

- 1) Preferred for diagnostic port application
2) Spotface diameter with identification ridge
3) Spotface diameter without identification ridge



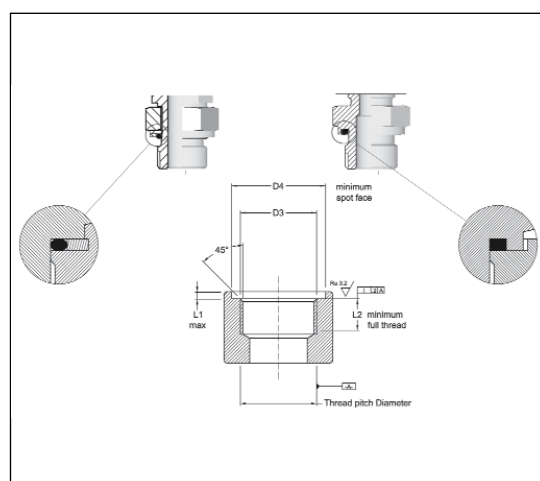
SAE UNF PORT - SAE J1926-1 - ISO 11926

ANSI B1.1	D2	D3 min	D3 +0,13	L1 +0,40	L2 min	L3 max	L4 min	Z° ±1°	Assembly Torque +10%
D1	mm	mm	mm	mm	mm	mm	mm		Nm
7/16"-20	21	4,4	12,4	2,4	14	1,6	11,5	12°	20
1/2"-20	23	6	14	2,4	14	1,6	11,5	12°	25
9/16"-18	25	7,5	15,6	2,5	15,5	1,6	12,7	12°	35
3/4"-16	30	10	20,6	2,5	17,5	2,4	14,3	15°	70
7/8"-14	34	12,5	23,9	3,3	20	2,4	16,7	15°	100
1" 1/16-12	41	16	29,2	3,3	23	2,4	19	15°	170



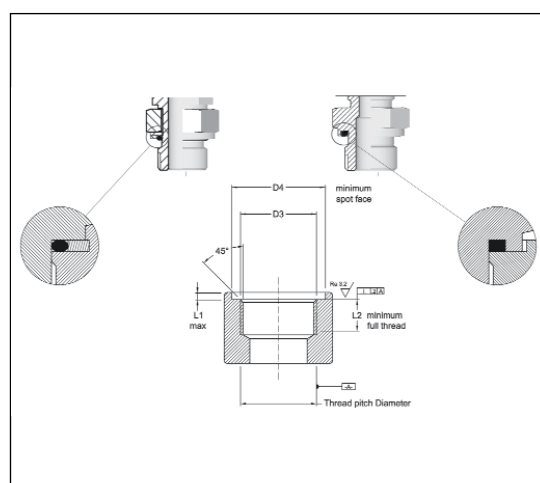
BSPP PORT - ISO 9974 - DIN 3852-1

ANSI B1.1 Thread	D3 +0.20	D4	L1 max	L2 min	Assembly Torque +10%
D1	mm	mm	mm	mm	Nm
1/8"-28	9,8	15	1	8	20
1/4"-19	13,2	20	1,5	12	50
3/8"-19	16,7	23	2	12	80
1/2"-14	21	28	2,5	14	100
3/4"-14	26,5	33	2,5	16	200
1"-11	33,3	41	2,5	18	380
1" 1/4-11	42	51	2,5	20	500
1" 1/2-11	47,9	56	2,5	22	600



METRIC PORT - ISO 9974 - DIN 3852-1

Metric Thread	D3 +0.20	D4 min	L1 max	L2 min	Assembly Torque +10%
D1	mm	mm	mm	mm	Nm
M12x1,5	12	18	1,5	12	35
M14x1,5	14	20	1,5	12	45
M16x1,5	16	23	1,5	12	55
M18x1,5	18	25	2	12	68
M20x1,5	20	27	2	14	80
M22x1,5	22	28	2,5	14	98
M27x2	27	33	2,5	16	180
M33x2	33	41	2,5	18	310
M42x2	42	51	2,5	20	330
M48x2	48	56	2,5	22	400



// HYDRAULIC HOSE

// THERMOPLASTIC

630 - MINIMESS.....	8
570A - R7.....	8
570A - R7 TWIN.....	9
580A - R8.....	9
550A - TWB1.....	10
550A - TWB1 - TWIN.....	10
FLEXOR VHP700.....	11

// TEXTILE BRAID

ARGUS 1TE/R6 PLUS.....	13
ARGUS 2TE PLUS.....	13
ARGUS 3TE/R3 PLUS.....	14
2TE RAILWAY.....	14

// WIRE BRAID

PLT - PILOT.....	15
121T SLIMLINE PLUS - 1SC.....	15
141T SUPERSLIMLINE.....	16
122T PLUS - 1SN/R1AT.....	16
221T SLIMLINE PLUS - 2SC.....	17
241T - SUPERSLIMLINE - HI-TUFF.....	17
222T PLUS - 2SN/R2AT.....	18
3SPT - SUPERFOREST.....	18

// WIRE SPIRAL

490 - POWERTRAK - AT7K - HI-TUFF.....	21
560 - POWERTRAK - AT8K - HI-TUFF.....	21
BOP - FIRESAFE 5000.....	22

// POWERFLEXBIO

POWERFLEXBIO 3000 - HI-TUFF.....	24
POWERFLEXBIO 4000 - HI-TUFF.....	24
POWERFLEXBIO 5000 - HI-TUFF.....	25
POWERFLEXBIO 5000 PLUS - HI-TUFF.....	25

POWERFLEXBIO 6000 - HI-TUFF.....	26
----------------------------------	----

// TUFLEX

241X - SUPERSLIMLINE - TUFLEX.....	27
------------------------------------	----

// HIGH TEMPERATURE

241T - SUPERSLIMLINE HIGH TEMP.....	28
COMMANDER 1SN.....	29
COMMANDER 2SN.....	29

// LOW TEMPERATURE

261E - HYPERCOLD SUPERSLIMLINE.....	30
3SPE - HYPERCOLD SUPERFOREST.....	30
735E - HYPERCOLD 4SP.....	31
795E - HYPERCOLD 4SH.....	31

// OIL RETURN LINES

FLEXOR R4 604.....	32
FLEXOR R4 634.....	32
FLEXOR R4 644 HT.....	33

// PRESSURE WASH

ALFAJET 210.....	34
ALFAJET 400.....	34
WATERBLAST - WB10L.....	36
WATERBLAST - WB15L.....	36
WATERBLAST - WB20L.....	37

// PTFE HOSE

9TS OM.....	38
9TC OM.....	39

// HYDRAULIC FITTING

// STANDARD

// FERRULES

H1100104 Skive Ferrule for 1SN and 241T	46
H1100SK1 Skive Ferrule for 1 Wire Braid and 2 Wire Braid Compact Hoses	46
H1200AD1 No-skive Ferrule for 1 Wire Braid and 2 Wire Braid Compact Hoses	46
H1100404 Skive Ferrule for 2SN and Wire Spiral	46
H1200204 No-skive Ferrule for R12 and Powerflexbio Hoses	46
H1200AD2 No-skive Ferrule for 2SN	46
H1200TP0 No-skive Ferrule for Thermoplastic and 1 Wire Braid Compact Hoses	47
H1200TX2 No-skive Ferrule for 3TE, R4, R5 and 241T -40	47
H2200TF0 No-skive Ferrule for PTFE Hoses	47

// HOSE MENDER

Hose Mender	48
-------------	----

// BSP INSERTS

BSPP Male 60° Flare AGR	49
BSPP Male Flat Seat AGR FD	49
BSPT MaleAGR K	50
BSPP Female 60° Cone with O-Ring DKOR	51
45° BSPP Female 60° Cone with O-Ring DKOR 45 Solid one piece	52
90° BSPP Female 60° Cone with O-Ring DKOR 90 Solid one piece	53
90° Compact BSPP Female 60° Cone DKR 90	54
BSPP Female Flat Seat DKR FD	54
BSPP Banjo RNR	55
BSPP Bolt	55

// DIN METRIC INSERTS

Metric Male 24° Seat - Light DIN 3853 - CEL	56
Metric Female 24° Cone with O-Ring - Light DIN 3865 - DKOL	57
45° Metric Female 24° Cone with O-Ring - Light DIN 3865 - DKOL 45 Solid one piece	58
90° Metric Female 24° Cone with O-Ring - Light DIN 3865 - DKOL 90 Solid one piece	59
Metric Male 24° Seat - Heavy DIN 3853 - CES	60
Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS	61
45° Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS 45 Solid one piece	62
90° Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS 90 Solid one piece	63
Universal Metric Female	64
45° Universal Metric Female	64
90° Universal Metric Female	65
Metric Female 60° Cone - DIN 3863	65
90° Metric Female 60° Cone - DIN 3863 Solid one piece	65
Metric Straight Standpipe - DIN 2353 RSL/RSS	66
45° Metric Standpipe RSL 45/RSS 45 - DIN 2353 Solid one piece	67
90° Metric Standpipe RSL 90/RSS 90 - DIN 2353 Solid one piece	68
Metric Banjo RNM	69
Metric Bolt	69

// PRESSURE WASHER

Universal Female for Pressure Washer	70
--------------------------------------	----

// SAE INSERTS

SAE Female Swivel 45° Seat	71
SAE Female Swivel 45° Seat	71
SAE Male Solid O-Ring Boss	71

// JIC 37° INSERTS

JIC Male 37° Cone AGJ	72
JIC Female 37° Seat DKJ	73
JIC Female 37° Seat with Stem Hexagon DKJ	74
45° JIC Female 37° Seat - Medium Drop DKJ 45M Solid one piece	75
90° JIC Female 37° Seat - Short Drop DKJ 90S Solid one piece	76
90° JIC Female 37° Seat - Medium Drop DKJ 90M Solid one piece	77
90° JIC Female 37° Seat - Long Drop DKJ 90L Solid one piece	77

// HYDRAULIC FITTING

// NPTF INSERTS

NPTF Male 60° Seat AGN	78
NPTF Female Solid	79
NPTF Male Swivel 60° Seat	79
90° Compact NPTF Male Swivel 60° Seat	79

// NPSM INSERTS

NPSM Female	80
-------------------	----

// ORFS INSERTS

ORFS Male	81
ORFS Female with Stem Hexagon	82
45° ORFS Female - Medium Drop DK ORFS 45M Solid one piece	83
90° ORFS Female - Short Drop DK ORFS 90S Solid one piece	83
90° ORFS Female - Medium Drop DK ORFS 90M Solid one piece	84
90° ORFS Female - Long Drop DK ORFS 90L Solid one piece	84

// FRENCH INSERTS

Metric Male French Type	85
Metric Female French Type	85
90° Metric Female French type	85

// JIS INSERTS

JIS Female 60° Cone - B 8363 (type C)	86
45° JIS Female 60° Cone - B 8363 (type C)	86
90° JIS Female 60° Cone - B 8363 (type C)	86
JIS Female 60° Seat Flare - B 8363 (type F)	87
45° JIS Female 60° Seat Flare - B 8363 (type F)	87
90° JIS Female 60° Seat Flare - B 8363 (type F)	87

// KOMATSU INSERTS

Komatsu Female	88
Komatsu Flange	88
45° Komatsu Flange Solid one piece	89
90° Komatsu Flange Solid one piece	89

// SAE FLANGES

Flange SAE 3000 PSI J518 Code 61 - SFL	90
22° Flange SAE 3000 PSI J518 Code 61 - SFL 22 Solid one piece	90
30° Flange SAE 3000 PSI J518 Code 61 - SFL 30 Solid one piece	91
45° Flange SAE 3000 PSI J518 Code 61 - SFL 45 Solid one piece	91
60° Flange SAE 3000 PSI J518 Code 61 - SFL 60 Solid one piece	92
90° Flange SAE 3000 PSI J518 Code 61 - SFL 90 Solid one piece	92
Flange SAE 6000 PSI J518 Code 62 - SFS	93
45° Flange SAE 6000 PSI J518 Code 62 - SFS 45 Solid one piece	93
90° Flange SAE 6000 PSI J518 Code 62 - SFS 90 Solid one piece	94
Split Flange Clamp 3000 PSI J518 Code 61 - FHL	95
Split Flange Clamp 6000 PSI J518 Code 62 - FHS	95
4 Hole Flange Clamp 3000 PSI J518 Code 61 - VHL	96
4 Hole Flange Clamp 6000 PSI J518 Code 62 - VHS	96
SAE Male Swivel O-Ring Boss	97
90° Compact SAE Male Swivel O-Ring Boss	97

// NEW POWERTRACK

// FERRULES

H1300SK4 Multispiral Ferrule for 4 Spiral Hoses	99
H1300NS6 Multispiral No-Skive Ferrule for 6 Spiral Hoses	99
H1300NS4 Multispiral No-Skive Ferrule for 4 Spiral Hoses	99

// HYDRAULIC FITTING

// BSP INSERTS

BSP Male 60° Flare AGR.....	100
BSP Female 60° Cone with O-Ring DKOR.....	100
45° BSP Female 60° Cone with O-Ring DKOR 45 Solid one piece.....	101
90° BSP Female 60° Cone with O-Ring DKOR 90 Solid one piece.....	101

// DIN METRIC INSERTS

Metric Male 24° Seat - Heavy DIN 3853 - CES.....	102
Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS.....	102
45° Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS 45 Solid one piece.....	103
90° Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS 90 Solid one piece.....	103

// JIC 37° INSERTS

JIC Male 37° Cone AGJ.....	104
JIC Female 37° Seat DKJ.....	104
45° JIC Female 37° Seat - Medium Drop DKJ 45M Solid one piece.....	105
90° JIC Female 37° Seat - Medium Drop DKJ 90M Solid one piece.....	105

// NPTF INSERTS

NPTF Male 60° Seat AGN.....	106
-----------------------------	-----

// ORFS INSERTS

ORFS Male.....	107
ORFS Female with Stem Hexagon.....	107
45° ORFS Female - Medium Drop DK ORFS 45M Solid one piece.....	108
90° ORFS Female - Medium Drop DK ORFS 90M Solid one piece.....	108

// SAE FLANGES

Flange SAE 3000 PSI J518 Code 61 - SFL.....	109
45° Flange SAE 3000 PSI J518 Code 61 - SFL 45 Solid one piece.....	109
90° Flange SAE 3000 PSI J518 Code 61 - SFL 90 Solid one piece.....	110
Flange SAE 6000 PSI J518 Code 62 - SFS.....	110
45° Flange SAE 6000 PSI J518 Code 62 - SFS 45 Solid one piece.....	111
90° Flange SAE 6000 PSI J518 Code 62 - SFS 90 Solid one piece.....	111

// SUPERCAT FLANGES

Flange SUPERCAT.....	112
45° Flange SUPERCAT Solid one piece.....	112
90° Flange SUPERCAT Solid one piece.....	113

// WATERBLAST

// FERRULES

D990000 Waterblast Ferrule for WB10L - WB15L - WB20L*.....	115
D980000 Waterblast Ferrule for WB20L.....	115

// WATERBLAST INSERTS

BSP Female 60° with O-Ring.....	116
BSP Female 60° without O-Ring.....	116
UNF Type "M Swivel".....	116
Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS Slip on Nut with Relief Bore.....	117
NPTF Male 60° Seat AGN.....	117

// HYDRAULIC FITTING

// INTERLOCK

// FERRULES

H1400200 Interlock Dual Skive Ferrule for 4 Spiral Hoses	119
H1T00600 Interlock Special Dual Skive Ferrule	119
H1400301 Interlock Dual Skive Ferrule for 4-6 Spiral Hoses	119

// HOSE MENDER

Hose Mender	120
-------------	-----

// BSP INSERTS

BSPP Male 60° Flare AGR	121
BSPT Male AGR K	121
BSPP Female 60° Cone with O-Ring DKOR	121
45° BSPP Female 60° Cone with O-Ring DKOR 45 Solid one piece	122
90° BSPP Female 60° Cone with O-Ring DKOR 90 Solid one piece	122

// DIN METRIC INSERTS

Metric Male 24° Seat - Heavy DIN 3853 - CES	123
Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS	123
45° Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS 45 Solid one piece	124
90° Metric Female 24° Cone with O-Ring - Heavy DIN 3865 - DKOS 90 Solid one piece	124

// JIC 37° INSERTS

JIC Male 37° Cone AGJ	125
JIC Female 37° Seat DKJ	125
45° JIC Female 37° Seat DKJ 45 Solid one piece	126
90° JIC Female 37° Seat DKJ 90 Solid one piece	126

// NPTF INSERTS

NPTF Male 60° Seat AGN	127
------------------------	-----

// ORFS INSERTS

ORFS Male	128
ORFS Female with Stem Hexagon	128
45° ORFS Female DK ORFS 45 Solid one piece	129
90° ORFS Female DK ORFS 90 Solid one piece	129

// SAE FLANGES

Flange SAE 3000 PSI J518 Code 61 - SFL	130
45° Flange SAE 3000 PSI J518 Code 61 - SFL 45 Solid one piece	130
90° Flange SAE 3000 PSI J518 Code 61 - SFL 90 Solid one piece	130
Flange SAE 6000 PSI J518 Code 62 - SFS	131
45° Flange SAE 6000 PSI J518 Code 62 - SFS 45 Solid one piece	131
90° Flange SAE 6000 PSI J518 Code 62 - SFS 90 Solid one piece	132
Flange SAE 6000 PSI J518 Code 62 - SFS Special version	132
45° Flange SAE 6000 PSI J518 Code 62 - SFS 45 Solid one piece Special version	132
90° Flange SAE 6000 PSI J518 Code 62 - SFS 90 Solid one piece Special version	133

// SUPERCAT FLANGES

Flange SUPERCAT	134
45° Flange SUPERCAT Solid one piece	134
90° Flange SUPERCAT Solid one piece	134

// HAMMER UNION

Male Hammer Union Fig. 1502 integral fitting with Lug Nut Special version	135
Female Hammer Union Fig. 1502 integral fitting with Rubber Ring Special version	135
Male Hammer Union Fig. 1502 integral fitting with Lug Nut Special version	135
Female Hammer Union Fig. 1502 integral fitting with Rubber Ring Special version	135

// HYDRAULIC ADAPTER

// JIC 37° ADAPTERS

// MALE UNION

Straight union JIC - JIC Male.....	137
90° union JIC - JIC Male.....	137
Tee union JIC - JIC Male.....	138
Cross union JIC - JIC Male.....	138

// MALE / FEMALE UNION

Straight reducing JIC Female - JIC Male.....	139
45° union JIC Male - JIC Female.....	139
90° union JIC Male - JIC Female.....	140
Branch Tee union JIC Male - JIC Female.....	140
Run Tee union JIC Male - JIC Female.....	141

// BULKHEAD

Straight union JIC - JIC Bulkhead.....	142
45° union JIC - JIC Bulkhead.....	142
90° union JIC - JIC Bulkhead.....	143
Branch Tee union JIC - JIC Bulkhead.....	143
Run Tee union JIC - JIC Bulkhead.....	144

// BSPP

Straight connector JIC Male - BSPP cylindric Male 60°.....	145
Straight connector JIC Male - BSPP cylindric Male with elastomer.....	146
Long connector JIC Male - BSPP cylindric Male with elastomer.....	147
45° adjustable elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring.....	148
90° adjustable elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring.....	149
90° adjustable long elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring.....	150
Branch Tee adjustable elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring.....	151
Run Tee adjustable elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring.....	152
Straight connector JIC Male - BSPT Male.....	153
90° elbow connector JIC Male - BSPT Male.....	154

// METRIC

Straight connector JIC Female - Metric Male with O-Ring.....	155
Straight connector JIC Male - Metric Male with O-Ring.....	156
Straight connector JIC Male - Metric Male with elastomer.....	157
Long connector JIC Male - Metric Male with elastomer.....	157
90° adjustable elbow connector JIC Male - Metric Male with O-Ring and retaining ring.....	158
90° adjustable long elbow connector JIC Male - Metric Male with O-Ring and retaining ring.....	159
Branch Tee adjustable elbow connector JIC Male - Metric Male with O-Ring and retaining ring.....	160
Run Tee adjustable elbow connector JIC Male - Metric Male with O-Ring and retaining ring.....	160

// SAE UNF

Straight connector JIC Male - SAE UNF/UN Male with O-Ring.....	161
Long connector JIC Male - SAE UNF/UN Male with O-Ring.....	162
Straight connector JIC Female - SAE UNF/UN Male with O-Ring.....	163
45° adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring.....	164
90° adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring.....	165
90° adjustable long elbow connector JIC Male - SAE UNF/UN Male with O-Ring.....	166
Branch Tee adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring.....	167
Run Tee adjustable elbow connector JIC Male - SAE UNF/UN Male with O-Ring.....	168

// NPTF

Straight connector JIC - NPTF Male.....	169
Straight connector JIC Female - NPTF Male.....	170
45° elbow connector JIC - NPTF Male.....	170
90° elbow connector JIC - NPTF Male.....	171

// FLANGES

Straight flange SAE J518 code 61 - JIC - Low pressure.....	172
Straight flange SAE J518 code 62 - JIC - High pressure.....	172

// HYDRAULIC ADAPTER

90° flange SAE J518 code 61 - JIC - Low pressure.....	173
90° flange SAE J518 code 62 - JIC - High pressure.....	173
90° adjustable split flange SAE J518 code 61 - JIC - Low pressure.....	174
90° adjustable split flange SAE J518 code 62 - JIC - High pressure.....	174

// ACCESSORIES

Nut JIC.....	175
Sleeve JIC.....	175

// PLUG

Cap JIC Female.....	176
Plug JIC Male.....	176

// ORFS ADAPTERS

// MALE UNION

Straight union ORFS Male.....	178
90° union ORFS Male.....	178
Branch Tee union ORFS Male.....	179
Cross union ORFS Male.....	179

// MALE / FEMALE UNION

Straight union ORFS Female - ORFS Male.....	180
45° union ORFS Male - ORFS Female.....	180
90° union ORFS Male - ORFS Female.....	181
Branch Tee union ORFS Male - ORFS Female.....	181
Run Tee union ORFS Male - ORFS Female.....	181

// BULKHEAD

Straight union ORFS Bulkhead.....	182
45° union ORFS Bulkhead.....	182
90° union ORFS Bulkhead.....	183
Branch Tee union ORFS Bulkhead.....	183
Run Tee union ORFS Bulkhead.....	184

// BSPP

Straight connector ORFS Male - BSPP cylindric Male with elastomer.....	185
45° adjustable elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....	186
90° adjustable elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....	187
90° adjustable long elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....	188
Branch Tee adjustable elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....	188
Run Tee adjustable elbow connector ORFS Male - BSPP cylindric Male with O-Ring and retaining ring.....	189

// METRIC

Straight connector ORFS Male - Metric Male with O-Ring.....	190
Straight connector ORFS Male - Metric Male with elastomer.....	191
45° adjustable elbow connector ORFS Male - Metric Male with O-Ring and retaining ring.....	192
90° adjustable elbow connector ORFS Male - Metric Male with O-Ring and retaining ring.....	192
90° adjustable long elbow connector ORFS Male - Metric Male with O-Ring and retaining ring.....	193
Branch Tee adjustable elbow connector ORFS Male - Metric Male with O-Ring and retaining ring.....	193
Run Tee adjustable elbow connector ORFS Male - Metric Male with O-Ring and retaining ring.....	194

// SAE UNF

Straight connector ORFS Male - SAE UNF/UN Male with O-Ring.....	195
Long connector ORFS Male - SAE UNF/UN Male with O-Ring.....	195
Straight connector ORFS Female - SAE UNF/UN Male with O-Ring.....	196
45° adjustable elbow connector ORFS Male - SAE UNF/UN Male with O-Ring.....	197
90° adjustable elbow connector ORFS Male - SAE UNF/UN Male with O-Ring.....	198
90° adjustable long elbow connector ORFS Male - SAE UNF/UN Male with O-Ring.....	198
Branch Tee adjustable elbow connector ORFS Male - SAE UNF/UN Male with O-Ring.....	199
Run Tee adjustable elbow connector ORFS Male - SAE UNF/UN Male with O-Ring.....	199

// HYDRAULIC ADAPTER

// FLANGES

Straight flange SAE J518 code 61 - ORFS Male - Low pressure.....	200
Straight flange SAE J518 code 62 - ORFS Male - High pressure.....	200
90° flange SAE J518 code 61 - ORFS Male - Low pressure.....	201
90° flange SAE J518 code 62 - ORFS Male - High pressure.....	201
90° adjustable flange SAE J518 code 61 - ORFS Male - Low pressure.....	202
90° adjustable flange SAE J518 code 62 - ORFS Male - High pressure.....	202

// ACCESSORIES

Nut ORFS.....	203
---------------	-----

// PLUG

Cap ORFS Female.....	204
Plug ORFS Male.....	204

// BSP ADAPTERS

// MALE UNION

Straight union BSP 60° Male.....	206
90° union BSP 60° Male.....	207
Branch Tee union BSP 60° Male.....	207
Cross union BSP 60° Male.....	207

// MALE / FEMALE UNION

Straight union BSP 60° Male - Female.....	208
45° union BSP 60° Male - Female.....	208
90° union BSP 60° Male - Female.....	209
Branch Tee union BSP 60° Male - Female.....	209
Run Tee union BSP 60° Male - Female.....	209

// FEMALE UNION

Straight union BSP 60° Female.....	210
90° union BSP 60° Female.....	210
Branch Tee union BSP 60° Female.....	210

// BULKHEAD

Straight union BSP 60° Bulkhead.....	211
90° elbow connector BSP 60° Bulkhead.....	211
Branch Tee union BSP 60° Bulkhead.....	212
Run Tee union BSP 60° Bulkhead.....	212

// BSPP

Straight connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....	213
45° adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....	214
90° adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....	215
Branch Tee adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....	215
Run Tee adjustable elbow connector BSP 60° Male - BSPP cylindric Male with O-Ring and retaining ring.....	216

// FLANGES

Straight flange SAE J518 code 61 - BSP - Low pressure.....	217
Straight flange SAE J518 code 62 - BSP - High pressure.....	217
90° flange SAE J518 code 61 - BSP - Low pressure.....	218
90° flange SAE J518 code 62 - BSP - High pressure.....	218
90° adjustable flange SAE J518 code 61 - BSP - Low pressure.....	219
90° adjustable flange SAE J518 code 62 - BSP - High pressure.....	219

// PLUG

Cap BSP 60° Female.....	220
Plug BSP 60° Male.....	220

// HYDRAULIC ADAPTER**// DIN 24° ADAPTERS****// ACCESSORIES**

Nut DIN 24° - Light series.....	222
Nut DIN 24° - Heavy series.....	222
Double cutting ring DIN 24° - Light series.....	223
Double cutting ring DIN 24° - Heavy series.....	223
Double cutting ring with tight sealing DIN 24° - Light seriesDIN 2353.....	224
Double cutting ring with tight sealing DIN 24° - Heavy seriesDIN 2353.....	224

// MALE UNION

Straight union DIN 24° Male - Light series.....	225
Straight union DIN 24° Male - Heavy series.....	225
90° union DIN 24° Male - Light series.....	226
90° union DIN 24° Male - Heavy series.....	226
Branch Tee union DIN 24° Male - Light series.....	227
Branch Tee union DIN 24° Male - Heavy series.....	227
Cross union DIN 24° Male - Light series.....	228
Cross union DIN 24° Male - Heavy series.....	228

// MALE / FEMALE UNION

Reducers DIN 24° pre-assembled - Light series.....	229
Reducers DIN 24° pre-assembled - Heavy series.....	230
Reducers DIN 24° with O-Ring - Light series.....	231
Reducers DIN 24° with O-Ring - Heavy series.....	232
45° adjustable elbow connector DIN 24° Male - Female with O-Ring - Light series.....	233
45° adjustable elbow connector DIN 24° Male - Female with O-Ring - Heavy series.....	233
90° adjustable elbow connector DIN 24° Male - Female pre-assembled - Light series.....	234
90° adjustable elbow connector DIN 24° Male - Female pre-assembled - Heavy series.....	234
90° adjustable elbow connector DIN 24° Male - Female with O-Ring - Light series.....	235
90° adjustable elbow connector DIN 24° Male - Female with O-Ring - Heavy series.....	235
Branch Tee adjustable elbow connector DIN 24° Male - Female pre-assembled - Light series.....	236
Branch Tee adjustable elbow connector DIN 24° Male - BSPP Male with O-Ring - Heavy series.....	236
Branch Tee adjustable elbow connector DIN 24° Male - Female with O-Ring - Light series.....	237
Branch Tee adjustable elbow connector DIN 24° Male - Female with O-Ring - Heavy series.....	237
Run Tee adjustable elbow connector DIN 24° Male - Female pre-assembled - Light series.....	238
Run Tee adjustable elbow connector DIN 24° Male - Female pre-assembled - Heavy series.....	238
Run Tee adjustable elbow connector DIN 24° Male - Female with O-Ring - Light series.....	239
Run Tee adjustable elbow connector DIN 24° Male - Female with O-Ring - Heavy series.....	239

// BULKHEAD

Straight union DIN 24° Bulkhead - Light series.....	240
Straight union DIN 24° Bulkhead - Heavy series.....	240
90° union DIN 24° Bulkhead - Light series.....	241
90° union DIN 24° Bulkhead - Heavy series.....	241

// METRIC

Straight connector DIN 24° Male - Metric cylindric Male - Light series.....	242
Straight connector DIN 24° Male - Metric cylindric Male - Heavy series.....	242
90° elbow connector DIN 24° Male - Metric cylindric Male - Light series.....	243
90° elbow connector DIN 24° Male - Metric cylindric Male - Heavy series.....	243
45° adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Light series.....	244
45° adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Heavy series.....	244
90° adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Light series.....	245
90° adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Heavy series.....	245
Branch Tee adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Light series.....	246
Branch Tee adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Heavy series.....	246
Run Tee adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Light series.....	247
Run Tee adjustable elbow connector DIN 24° Male - Metric Male with O-Ring and retaining ring - Heavy series.....	247
Straight connector DIN 24° Male - Metric cylindric Male with elastomer - Light series.....	248
Straight connector DIN 24° Male - Metric cylindric Male with elastomer - Heavy series.....	248
Straight connector DIN 24° Female pre-assembled - Metric cylindric Male with elastomer - Light series.....	249
Straight connector DIN 24° Female pre-assembled - Metric cylindric Male with elastomer - Heavy series.....	249
Straight connector DIN 24° Female with O-Ring - Metric cylindric Male with elastomer - Light series.....	250
Straight connector DIN 24° Female with O-Ring - Metric cylindric Male with elastomer - Heavy series.....	250
90° elbow connector DIN 24° Male - Metric conic Male - Light series.....	251
90° elbow connector DIN 24° Male - Metric conic Male - Heavy series.....	251

// HYDRAULIC ADAPTER

Banjo adjustable - Type A - Metric cylindric DIN 24° - Light series	252
Banjo adjustable - Type A - Metric cylindric DIN 24° - Heavy series	252
Banjo adjustable - Type B - Metric cylindric DIN 24° - Light series	253
Banjo adjustable - Type B - Metric cylindric DIN 24° - Heavy series	253

// BSPP

Straight connector DIN 24° Male - BSPP cylindric flat Male - Light series	254
Straight connector DIN 24° Male - BSPP cylindric flat Male - Heavy series	254
Straight connector DIN 24° Male - BSPP cylindric Female - Light series	255
Straight connector DIN 24° Male - BSPP cylindric Female - Heavy series	255
Straight connector DIN 24° Male - BSPP cylindric Male with elastomer - Light series	256
Straight connector DIN 24° Male - BSPP cylindric Male with elastomer - Heavy series	256
45° adjustable elbow connector DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring - Light series	257
45° adjustable elbow connector DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring - Heavy series	257
90° adjustable elbow connector DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring - Light series	258
90° adjustable elbow connector DIN 24° Male - BSPP cylindric Male with O-Ring and retaining ring - Heavy series	258
Branch Tee adjustable elbow connector DIN 24° Male - BSPP Male with O-Ring and retaining ring - Light series	259
Branch Tee adjustable elbow connector DIN 24° Male - BSPP Male with O-Ring and retaining ring - Heavy series	259
Run Tee adjustable elbow connector DIN 24° Male - BSPP Male with O-Ring and retaining ring - Light series	260
Run Tee adjustable elbow connector DIN 24° Male - BSPP Male with O-Ring and retaining ring - Heavy series	260
Straight connector DIN 24° Female with O-Ring - BSPP cylindric Male with elastomer - Light series	261
Straight connector DIN 24° Female with O-Ring - BSPP cylindric Male with elastomer - Heavy series	261
Straight connector DIN 24° Female pre-assembled - BSPP cylindric Male with elastomer - Light series	262
Straight connector DIN 24° Female pre-assembled - BSPP cylindric Male with elastomer - Heavy series	262
Banjo elbow - Type B - BSPP Male DIN 24° - Light series	263
Banjo elbow - Type B - BSPP Male DIN 24° - Heavy series	263
Banjo elbow - Type A - BSPP Male DIN 24° - Light series	264
Banjo elbow - Type A - BSPP Male DIN 24° - Heavy series	264
Straight connector BSPP Female - BSPP Male with elastomer	265

// BSPT

Straight connector DIN 24° Male - BSPT cylindric flat Male - Light series	266
Straight connector DIN 24° Male - BSPT cylindric flat Male - Heavy series	267
90° connector DIN 24° Male - BSPT Male - Light series	268
90° connector DIN 24° Male - BSPT Male - Heavy series	268
Branch Tee connector DIN 24° Male - BSPT Male - Light series	269
Branch Tee connector DIN 24° Male - BSPT Male - Heavy series	269
Run Tee connector DIN 24° Male - BSPT Male - Light series	270
Run Tee connector DIN 24° Male - BSPT Male - Heavy series	270

// BUTT WELD

Butt Weld straight coupling DIN 24° - Light series	271
Butt Weld straight coupling DIN 24° - Heavy series	271
Butt Weld long straight coupling DIN 24° - Light series	272
Butt Weld long straight coupling DIN 24° - Heavy series	272

// PLUG

Plug with O-Ring 24° DIN 2353 - Light series	273
Plug with O-Ring 24° DIN 2353 - Heavy series	273
Socket head plug Metric cylindric with elastomer	274
Socket head plug BSPP cylindric with elastomer	274



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