

## Pneumatic and Hydraulic Linkages

### - Quick Release Couplings

#### Introduction

Series QRC Couplings are designed for general purpose hydraulic service. Some are suitable for use with various liquids, chemicals, steam, gases and vacuum. Series QRC couplings conform to the dimensional requirements of ISO 7241-1 Series B. Body sizes range from 1/4" to 1".

#### Features

Series QRC Couplings have brass, steel and stainless steel construction available in all sizes. The Couplings have female NPTF, BSPP end connections.

#### Standard Materials

Coupling Body	Brass, zinc-plated steel, stainless steel construction
Coupling Elements	Stainless steel springs, balls and retaining rings
Coupling Seal	Nitrile seals

#### Options

Non-valved socket and plug  
 Seals : Neoprene, Viton, Nitrile, EPDM

#### Coupling Selection Guide

Coupling Series		1/4 INCH	3/8 INCH	1/2 INCH	3/4 INCH	1 INCH
Coupling Style	MANUAL CONNECT	●	●	●	●	●
Body Size	1/4 INCH	●				
	3/8 INCH		●			
	1/2 INCH			●		
	3/4 INCH				●	
	1 INCH					●
Body Material	BRASS	●	●	●	●	●
	STEEL (Zinc/Chromate Finish)	●	●	●	●	●
	STAINLESS STEEL (303)	●	●	●	●	●
	STAINLESS STEEL (316)	●	●	●	●	●
Locking Mechanism	BALL LOCK	●	●	●	●	●
Options	SLEEVE LOCK	●	●	●	●	●
	SEAL MATERIALS (Various)	●	●	●	●	●

#### Technical & Safety Information

Since application conditions vary so widely, the pressures listed are intended as a guide only and not a guarantee of performance. Pressure peaks and extreme surge flows may cause a coupling to become inoperative. Service pressure is the "rated pressure" as defined by Standards as "the qualified operating pressures which are recommended by the manufacturer"

Pressure ratings listed were determined by testing threaded sockets and plugs. Sockets and plugs with hose stem and hose clamp end connections are designed and recommended for use with shop air line pressure only (150 psig maximum) when used with the appropriate style hose. Over-pressurization could result in a sudden failure of the coupling causing severe bodily injury or death. Be sure to select the proper coupling for your application and use it only within the specified service pressure range.

Some part numbers may be subject to minimum order quantities. Some options may be available only by special quotation.

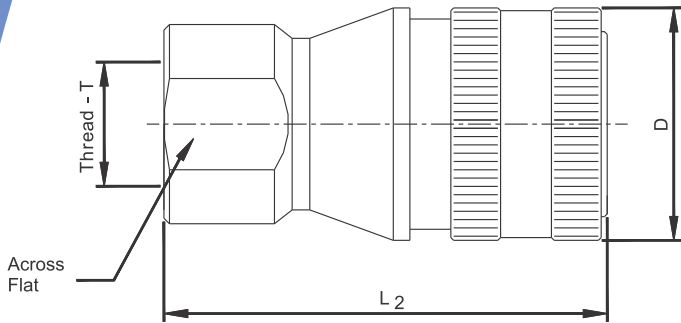
Please also see note regarding interchangeability of products on back inside page.



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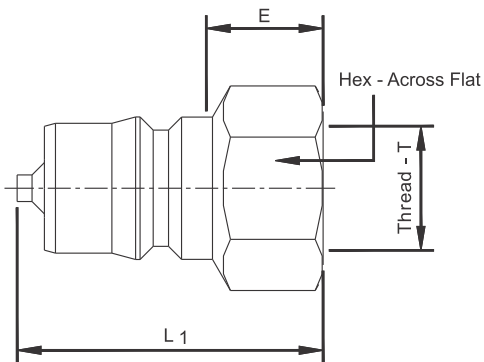
#### Socket Assembly



Body Size	L <sub>2</sub> mm	T Thread		D mm	Across Flat mm
		BSPP	NPTF		
1/4"	57.00	1/4" - 19	1/4" - 18	28	19.00
3/8"	72.00	3/8" - 19	3/8" - 18	38	22.00
1/2"	80.00	1/2" - 14	1/2" - 14	42	32.00
3/4"	100.00	3/4" - 14	3/4" - 14	54	36.00
1"	120.00	1" - 11	1" - 11½	64	41.30

L<sub>2</sub> : Overall Length, D: Maximum Diameter  
 All dimensions in mm unless specified otherwise

#### Plug Assembly



Body Size	L <sub>1</sub> mm	T Thread		Across Flat (Hex) mm	E mm
		BSPP	NPTF		
1/4"	39.60	1/4" - 19	1/4" - 18	19.00	12.80
3/8"	48.70	3/8" - 19	3/8" - 18	22.00	17.00
1/2"	55.30	1/2" - 14	1/2" - 14	32.00	21.00
3/4"	69.00	3/4" - 14	3/4" - 14	38.10	25.00
1"	83.50	1" - 11	1" - 11½	41.30	30.00

L<sub>1</sub> : Overall Length, E : Exposed length when connected  
 All dimensions in mm unless specified otherwise

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#### Rated Pressure and Flow Capacity

Body Size	Brass		Steel		Stainless Steel	
	PSI	BAR	PSI	BAR	PSI	BAR
1/4"	2,700	186	3,700	255	3,700	255
3/8"	2,200	152	3,700	255	3,700	255
1/2"	2,250	155	5,000	345	4,250	293
3/4"	2,000	138	4,000	275	3,500	242
1"	1,500	103	4,000	275	2,500	173

#### Elastomer Selection Guide

FLUID	ELASTOMER
Air (to 200° F)	Nitrile
Air (Above 200° F)	Viton
Acetone	EPDM
Acetylene	Nitrile
Alcohol, Ethyl	EPDM
Alcohol, Methyl	Nitrile
Alkalies	EPDM
Ammonia, Anhydrous	Nitrile
Ammonium Hydroxide	EPDM
Brake Fluid, Non-Petroleum Based	EPDM
Butane	Nitrile
Carbon Dioxide	Nitrile
Carbon Tetrachloride	Viton
Cellulube	EPDM
Diesel Fuel	Nitrile
Diester Lubricants	Viton
Ethane	Nitrile
Ethanol	EPDM
Ethylene Glycol	EPDM
Freon (most varieties)	Neoprene
Gasoline, Aromatic and Non-Aromatic	Viton
Glycerin	Nitrile
Helium	Nitrile
Heptane	Nitrile
Hexane	Nitrile
Hydraulic Fluid, Petroleum-based with Aniline Point above 160 F	Nitrile
Hydrolube	Nitrile
Jet Fuel (to 250 F)	Nitrile

FLUID	ELASTOMER
Jet Fuel (above 250 F)	Viton
Kerosene	Nitrile
L.P.Gases	Nitrile
Methane	Nitrile
Methanol	Nitrile
Methyl Ethyl Ketone	EPDM
Methyl Iso-Butyl Ketone	EPDM
Mineral Spirits	Nitrile
Natural Gas	Nitrile
Nitrogen	Nitrile
Octane	Viton
Oils, including: Animal, Mineral with Aniline Point above 160° F and Non-Food Service Vegetable	Nitrile
OS45 and OS45-1	Viton
Pentane	Nitrile
Perchloroethylene	Viton
Propane	Nitrile
Propylene	Viton
Steam (to 350° F)	EPDM
Steam (above 350° F)	EPDM
Toluene	Viton
Transmission Oil, Automotive	Nitrile
Trichloroethylene	Viton
Turpentine	Nitrile
Water (to 180° F)	Nitrile
Water (Above 180° F)	EPDM

Some EPDM Compounds are not compatible with mineral based greases or oils

#### Ordering Instructions

