

Reliable®

Model QRS1 Push-On Grooved Coupling

cULus Listed, FM Approved
300 psi (20.7 bar)

QRS1 Push-On Grooved Coupling Technical Data

Operating Specifications

Maximum Working Pressure:

300 psi (20.7 bar)

Operating Temperature

-30 F to 230 °F (-34 C to 110 °C)

Material Specifications

Housings: ASTM A536 Grade 65-45-12 Ductile Iron

Gasket: Pre-lubricated Grade E EPDM

Design Specification:

Groove: ISO 6182

Coupling Type:

Installation-Ready Rigid Coupling

Bolt Specification:

SAE J429 Grade 5

Available Finishes:

Housing:

Red powdercoating

Hot dipped galvanized (ASTM A-153)

Bolts:

Zinc Electroplating

Listings and Approvals

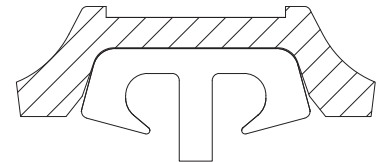
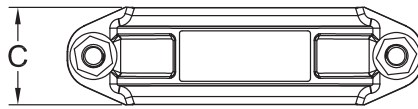
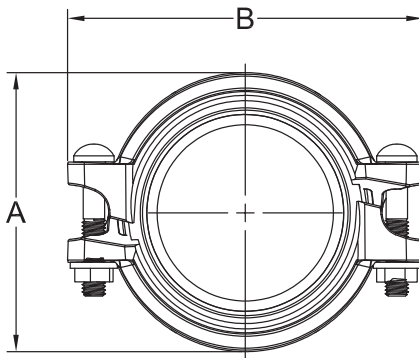
cULus Listed

FM Approved



QRS1 Push-On Grooved Coupling Dimensions

Figure 1



Push-On Coupling Gasket

Table A

Nominal Size in (mm)	Pipe O.D. in (mm)	Max. End Load Lbs (KN)	Max. Pipe End Gap in (mm)	Bolts Size mm	Dimensions			Weight lb (kg)
					A in (mm)	B in (mm)	C in (mm)	
1-1/4 (32)	1.660 (42.2)	656 (2.92)	1/16 (1.6)	M10 x 60	2-13/16 (72)	4-7/16 (112)	1-7/8 (47)	1.45 (.66)
1-1/2 (40)	1.900 (48.3)	852 (3.79)	1/16 (1.6)	M10 x 60	3-1/16 (78)	4-5/8 (117)	1-7/8 (47)	1.54 (.70)
2 (50)	2.375 (60.3)	1327 (5.91)	1/16 (1.6)	M10 x 60	3-9/16 (90)	5-3/16 (132)	1-7/8 (48)	1.87 (.85)
2-1/2 (65)	2.875 (73.0)	2114 (9.41)	1/16 (1.6)	M10 x 70	4-1/16 (104)	5-13/16 (148)	1-7/8 (48)	2.12 (.96)
76 mm	3.000 (76.1)	2114 (9.41)	1/16 (1.6)	M10 x 70	4-3/16 (106)	5-15/16 (150)	1-7/8 (48)	2.12 (.96)
3 (80)	3.500 (88.9)	2885 (12.84)	1/16 (1.6)	M12 x 75	4-3/4 (121)	6-1/2 (164)	2 (49)	2.78 (1.26)
4 (100)	4.500 (114.3)	4769 (21.22)	3/16 (4.1)	M12 x 75	5-13/16 (147)	7-1/2 (190)	2-1/16 (52)	3.31 (1.50)
139 mm	5.500 (139.7)	7124 (31.7)	3/16 (4.1)	M12 x 80	6-7/8 (174)	8-3/4 (222)	2-1/16 (52)	3.97 (1.80)
165 mm	6.500 (165.1)	9950 (44.3)	3/16 (4.1)	M16 x 85	8-1/8 (206)	10-3/8 (263)	2-1/16 (52)	5.69 (2.58)
6 (150)	6.625 (168.3)	10340 (46)	3/16 (4.1)	M16 x 85	8-1/8 (206)	10-3/8 (264)	2-1/16 (52)	5.69 (2.58)
8 (200)	8.625 (219.1)	17524 (77.97)	3/16 (4.1)	M16 x 120	12-5/8 (320)	9-15/16 (252)	2-1/2 (65)	11.02 (5.00)

Nominal Size in (mm)	Groove Type	Pipe	Approvals
1-1/4 (32)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	
		Mega-Flow Sch 7	
		Eddy Flow Sch 7	
1-1/2 (40)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	
		Mega-Flow Sch 7	
		Eddy Flow Sch 7	
		Fire-Flo Sch 7	
2 (50)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	
		Mega-Flow Sch 7	
		Eddy Flow Sch 7	
		Fire-Flo Sch 7	
		Hydroflow Sch 7	cULus
2-1/2 (65)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	
		Mega-Flow Sch 7	
		Eddy Flow Sch 7	
		Fire-Flo Sch 7	
		Hydroflow Sch 7	cULus
76mm	Cut, Rolled	Sch 40	FM
		ISO 4200 (G and F wall thickness)	
	Cut	GB/T 3091	cULus
		EN10217 (2.9mm wall thickness)	
		EN10220 (2.6mm wall thickness)	
		JIS G3452	
	Rolled	Sch 10	FM
		GB/T 3091	
		EN10255 (Light, Medium, & Heavy)	
		JIS G3452	
3 (80)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	
		Mega-Flow Sch 7	
		Eddy Flow Sch 7	
		Fire-Flo Sch 7	
		Hydroflow Sch 7	cULus

QRS1 Pipe Compatibility (cont.)
Table B

Nominal Size in (mm)	Groove Type	Pipe	Approvals
4 (100)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	
		Mega-Flow Sch 7	
		Eddy Flow Sch 7	
		Fire-Flo Sch 7	
		Hydroflow Sch 7	cULus
139mm	Cut, Rolled	Sch 40	FM
		ISO 4200 (G wall thickness)	
	Cut	GB/T 3091	cULus
		EN10217 (3.6mm wall thickness)	
		EN10220 (6.3mm wall thickness)	
		JIS G3452	
	Rolled	Sch 10	FM
		GB/T 3091	
		EN10255 (Medium & Heavy)	
		JIS G3452	
		ISO 4200 (D, E, & F wall thickness)	
165mm	Cut, Rolled	Sch 40	FM
	Cut	GB/T 3091	cULus
		EN10255 (Heavy / 5.0mm wall thickness)	
		JIS G3452	
	Rolled	Sch 10	FM
		GB/T 3091	
		EN10255 (Medium & Heavy)	
		JIS G3452	
6 (150)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	
		Mega-Flow Sch 7	
8 (200)	Cut, Rolled	Sch 40	cULus, FM
	Rolled	Sch 10	

P/N 9999970809