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Grinnell Mechanical Products Figure 472 Rigid Coupling - Stainless Steel

General Description

The Figure 472 Rigid Coupling is a Stainless Steel coupling made of ASTM A-743/A743M cast stainless Steel which is the cast equivalent to 316 Stainless Steel. It is designed for installation on grooved Stainless Steel Schedules 5, 10, and 40 pipe and grooved fittings. The stainless steel material is suitable for a variety of aggressive corrosive environments. The Figure 472 provides a rigid joint connection by firmly gripping along the circumference of the pipe grooves. The Figure 472 Rigid Coupling is a proven dependable method of joining pipe and is an economical alternative to welding, threading or using flanges. It is capable of pressures up to 750 psi (41,4 bar) depending on pipe size and wall thickness. For additional information on pressure ratings see data sheets G810 and G815.

NOTICE

The Figure 472 Rigid Coupling described herein must be installed and maintained in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of this device.

The owner is responsible for maintaining their system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Sizes

1-1/4 in. to 12 in. (DN32 to DN300)

ApprovalsUL and ULC Listed
FM Approved

△ CAUTION

Pressure performance values shown for GRINNELL couplings on light-wall (Sch. 5 and Sch. 10) stainless steel pipe are dependent on the use of the required special roll for roll grooving light-wall stainless steel pipe. Failure to utilize the required special roll for roll grooving light-wall stainless steel pipe may result in equipment failure.

Maximum Pressure

See Figure 1

Housing

Type 316 Stainless Steel conforming to ASTM A-743/A-743M Grade CF8M - Standard Specification for Castings, Iron-Chromium, Iron-Chromium-Nickle, Corrosion Resistant, for General Application.

Bolt/Nuts

Stainless Steel bolts are Type 316 conforming to ASTM A-193M Class 2, Grade B8M.

Stainless Steel nuts are Type 316 hex nuts conforming to ASTM A-194M, Grade 8M.







For warranty terms and conditions, visit www.grinnell.com

Gasket

(specify when ordering)

Green Color Code -30°F to 230°F (-34°C to 110°C)

Tri-Seal Grade "E" EPDM Green Color Code -30°F to 230°F (-34°C to 110°C)

Tri-Seal Grade "EN" EPDM Copper Color Code +86°F to 180°F (30°C to 82°C)

Grade "T" Nitrile Orange Color Code -20°F to 180°F (-29°C to 82°C)

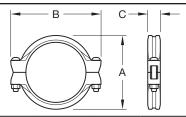
Grade "O" Fluoroelastomer Blue Color Code 20°F to 300°F (-7°C to 149°C)

Grade "L" Silicone Red Gasket -30°F to 350°F (-34°C to 177°C)

(See Technical Data Sheet G610 for aid in selecting proper gasket.)

IMPORTANT

Refer to Technical Data Sheet G1100 for warnings pertaining to regulatory and health information.



Pipe Size		Max.b	Max.b	End	Nominal Dimensions			Coupling Bolts		Approx.
Nominal ANSI Inches DN	O.D. Inches mm	Pressures psi bar	End Load Lbs. kN	Gap ^a Inches <i>mm</i>	A Inches mm	B Inches mm	C Inches <i>mm</i>	Qty.	Size Inches <i>mm</i>	Weight Lbs. kg
1-1/4	1.660	750	1623	0.06	2.75	4.38	1.81	2	3/8 x 2-1/4	1.0
32	<i>42,4</i>	<i>51,7</i>	7,22	<i>1,</i> 5	69,9	111,3	<i>46,0</i>		<i>M10 x 57</i>	<i>0,5</i>
1-1/2	1.900	750	2127	0.08	3.00	4.62	1.81	2	3/8 x 2-1/4	1.0
40	<i>48,3</i>	<i>51,7</i>	9,46	<i>2,0</i>	<i>76,2</i>	117,3	<i>46,0</i>		<i>M</i> 10 x 57	<i>0,</i> 5
2	2.375	750	3323	0.13	3.41	5.12	1.88	2	3/8 x 2-1/4	1.5
50	60,3	<i>51,7</i>	<i>14,7</i> 8	<i>3,</i> 3	86,6	130,0	<i>47</i> ,8		<i>M10 x 57</i>	<i>0,7</i>
2-1/2	2.875	600	3,895	0.13	3.91	5.63	1.88	2	3/8 x 2-1/4	2.5
65	73,0	<i>41,4</i>	<i>17,3</i>	<i>3,</i> 3	99,3	143,0	<i>47</i> ,8		<i>M10 x 57</i>	1,1
_	3.000	600	4,241	0.13	4.19	5.72	2.00	2	_	2.6
65	<i>76,1</i>	<i>41,4</i>	<i>1</i> 8,9	<i>3,</i> 3	<i>106,4</i>	145,3	50,8		M10 x 57	1,2
3	3.500	600	5,772	0.13	4.63	6.25	1.88	2	1/2 x 3	2.6
80	88,9	<i>41,4</i>	<i>25,7</i>	<i>3,</i> 3	117,6	158,8	<i>47,</i> 8		<i>M12 x 7</i> 6	1,2
4	4.500	600	9,542.	0.19	5.81	7.50	1.97	2	1/2 x 3	3.5
100	<i>114,3</i>	<i>41,4</i>	<i>42,4</i>	<i>4,</i> 8	<i>147,6</i>	190,5	50,0		<i>M12 x 7</i> 6	1,6
_	5.500	600	14,254	0.19	7.02	9.72	2.06	2	–	7.5
125	<i>139,7</i>	<i>41,4</i>	<i>63,4</i>	<i>4,</i> 8	178,3	246,9	52,3		M16 x 83	3,4
5	5.563	600	14,583	0.19	7.09	9.71	2.04	2	5/8 x 3-1/4	7.5
125	<i>141,3</i>	<i>41,4</i>	<i>64,</i> 9	<i>4,</i> 8	180,1	<i>246,6</i>	51,8		<i>M16 x 83</i>	3,4
6	6.625	600	20,682	0.19	8.09	10.53	2.13	2	5/8 x 3-1/4	7.6
150	168,3	<i>41,4</i>	92,0	<i>4,</i> 8	<i>205,5</i>	267,5	<i>54,1</i>		<i>M16 x</i> 83	3,4
8	8.625	600	35,054	0.19	10.56	13.56	2.62	2	3/4 x 4-3/4	18.0
200	219,1	<i>41,4</i>	<i>1</i> 56	<i>4,</i> 8	268,2	<i>344,4</i>	66,5		M20 x 121	8,2
10	10.750	600	54,455	0.13	12.84	16.41	2.62	2	1 x 6-1/2	24.6
250	273,0	<i>41,4</i>	242	3,3	<i>326,1</i>	<i>416,8</i>	66,5		<i>M24 x 165</i>	11,2
12	12.750	600	76,603	0.13	15.41	18.84	2.62	2	1 x 6-1/2	42.0
300	323,9	<i>41,4</i>	<i>340</i>	3,3	391,4	<i>478,5</i>	66,5		<i>M24 x 165</i>	19,1

- a. Nominal gap between pipe ends. Minimum gap = 0.
 b. Maximum pressure and end load are total from all loads based on standard weight stainless steel pipe. Pressure ratings and end loads may differ for other pipe materials and/or wall thickness. Stainless Steel pipe must be grooved with rollers specifically designed for Stainless Steel pipe. Contact Tyco Fire Protection Products for details.
- c. Figure 472 Rigid Couplings have an Anti-Rotation Feature of "gripping teeth" along the coupling keys in sizes 11/4" 4", making the Figure 472 perfectly suited for installations where the likelihood of rotation is greatest.

FIGURE 1 FIGURE 472 RIGID COUPLING **NOMINAL DIMENSIONS**

Ordering Procedure

Grinnell Mechanical Products, valves, accessories and other products are available globally through a network of distribution centers. For the nearest distributor, visit www.grinnell.com. When placing an order, indicate the full product name.

Specify: Figure 472 Rigid Coupling, quantity, pipe size, (ANSI inch size or pipe O.D.), and type of gasket:

- Grade "E" EPDM
- Grade "E" EPDM Tri-Seal
- Grade "EN" EPDM
- Grade "T" Nitrile
- · Grade "O" Fluoroelastomer
- · Grade "L" Silicone

