

## GRINNELL Figure 774 Grooved Rigid Coupling, 1 Inch to 12 Inch (DN25 to DN300) (Europe, Middle East, and Africa Only)

### General Description

The GRINNELL Figure 774 Grooved Rigid Coupling provides a rigid joint by firmly gripping along the circumference of the pipe grooves. The Figure 774 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 500 psi (34,5 bar) depending on pipe size and wall thickness. The Figure 774 Coupling is UL Listed for grounding and bonding, and is suitable for bonding systems with a maximum service entrance capacity of 200 amps. For further details, contact the Technical Services department.

**Note:** Rigid Couplings are recommended for low temperature and vacuum applications.

#### NOTICE

The GRINNELL Figure 774 Grooved Rigid Coupling described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the Approval agency, in addition to the standards of any other authorities having jurisdiction. Failure to do so may result in serious personal injury or impair the performance of these devices.

Never remove any piping component nor correct or modify any piping deficiencies without first de-pressurizing and draining the system. Failure to do so may result in serious personal injury, property damage, and/or impaired device performance.

It is the designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Material and gasket selection should be verified to

be compatible for the specific application. Always read and understand the installation instructions.

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

### Technical Data

#### Approvals

UL and ULC Listed  
FM Approved  
VdS Approved  
LPCB Certified

#### Sizes

1 in. to 12 in. (DN25 to DN300)

#### Housing

Ductile iron conforming to ASTM A 536, Grade 65-45-12

#### Finish

- Orange non-lead paint
- Red non-lead paint
- Hot-dipped, Galvanized conforming to ASTM A 153

#### Bolts/Nuts

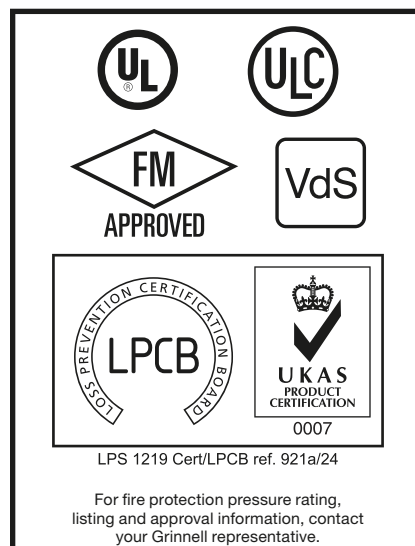
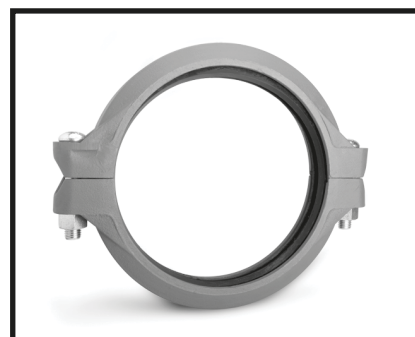
- ANSI:  
Carbon Steel oval neck track head bolts are heat-treated and conform to the physical properties of ASTM A 183 Grade 2 and SAE J429 Grade 5 with a minimum tensile strength of 110,000 psi.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A 183 Grade 2 and SAE J995 Grade 5. Bolts and nuts are zinc-electroplated conforming to ASTM B 633.

Stainless Steel Bolts and Nuts are available upon request.

- Metric:  
Carbon steel oval neck track head bolts (Gold color coded) are heat-treated and conform to the physical properties of ASTM F 568 M with a minimum tensile strength of 760 MPa.

Carbon Steel heavy hex nuts conform to the physical properties of ASTM A 563 M Class 9. Bolts and nuts are zinc-electroplated conforming to ASTM B 633.



**10  
YEAR  
LIMITED  
WARRANTY**

Full warranty terms  
can be found on  
www.grinnell.com

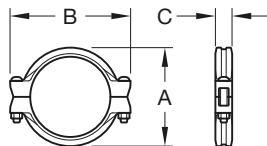
#### Gaskets

- Grade "E" EPDM,  
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)
- Grade "L" Silicone,  
Red gasket,  
-30°F to 350°F (-34°C to 177°C)

Recommended for use in low temperature and vacuum systems

#### IMPORTANT

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



Pipe Size		Max. <sup>b</sup> Pressures psi (bar)	Max. <sup>b</sup> End Load Lbs. (kN)	Max. <sup>a,d</sup> End Gap Inches (mm)	Nominal Dimensions			Coupling Bolts		Approx. Weight Lbs. (kg)
Nominal ANSI Inches DN	O.D. Inches (mm)				A Inches (mm)	B Inches (mm)	C Inches (mm)	Qty.	Size <sup>c</sup> Inches (mm)	
1 DN25	1.315 (33,4)	500 (34,5)	679 (3,02)	0.06 (1,5)	1.63 (41)	3.92 (100)	1.65 (42)	2	3/8 x 2-1/4 M10 x 57	1.2 (0,55)
1-1/4 DN32	1.660 (42,2)	500 (34,5)	1082 (4,81)	0.06 (1,5)	2.66 (68)	4.40 (112)	1.64 (42)	2	3/8 x 2-1/4 M10 x 57	1.3 (0,59)
1-1/2 DN40	1.900 (48,3)	500 (34,5)	1418 (6,31)	0.06 (1,5)	2.90 (74)	4.66 (118)	1.66 (42)	2	3/8 x 2-1/4 M10 x 57	1.5 (0,68)
2 DN50	2.375 (60,3)	500 (34,5)	2215 (9,85)	0.06 (1,5)	3.38 (86)	5.20 (132)	1.70 (43)	2	3/8 x 2-1/4 M10 x 57	1.8 (0,82)
2-1/2 DN65	2.875 (73,0)	500 (34,5)	3246 (14,44)	0.06 (1,5)	3.88 (99)	5.64 (143)	1.75 (44)	2	3/8 x 2-1/4 M10 x 57	2.0 (0,91)
76,1 mm DN65	3.000 (76,2)	500 (34,5)	3534 (15,72)	0.06 (1,5)	4.00 (102)	5.78 (147)	1.75 (44)	2	— M10 x 57	2.0 (0,91)
3 DN80	3.500 (88,9)	500 (34,5)	4811 (21,40)	0.06 (1,5)	4.50 (114)	6.33 (161)	1.75 (44)	2	3/8 x 2-1/4 M10 x 57	3.3 (1,50)
4 DN100	4.500 (114,3)	500 (34,5)	7952 (35,37)	0.06 (1,5)	5.70 (145)	7.50 (191)	1.83 (46)	2	3/8 x 2-1/4 M10 x 57	3.3 (1,50)
139,7 mm DN125	5.500 (139,7)	500 (34,5)	11,879 (52,84)	0.125 (3,2)	6.80 (173)	8.75 (222)	1.91 (49)	2	— M12 x 76	5.3 (2,41)
5 DN125	5.563 (141,3)	500 (34,5)	12,153 (54,06)	0.125 (3,2)	6.86 (174)	8.82 (224)	1.91 (49)	2	1/2 x 3 M12 x 76	5.3 (2,41)
165,1 mm DN150	6.500 (165,1)	500 (34,5)	16,592 (73,80)	0.125 (3,2)	7.80 (198)	9.75 (248)	1.91 (49)	2	— M12 x 76	5.7 (2,59)
6 DN150	6.625 (168,3)	500 (34,5)	17,236 (76,67)	0.125 (3,2)	8.47 (215)	9.88 (251)	1.91 (49)	2	1/2 x 3 M12 x 76	5.9 (2,68)
8 DN200	8.625 (219,1)	400 (27,5)	23,371 (103,96)	0.125 (3,2)	10.25 (260)	12.78 (325)	2.40 (61)	2	5/8 x 3-1/4 M16 x 83	11.7 (5,32)
10 DN250	10.750 (273,1)	233 (16,0)	21,148 (94,07)	0.25 (6,4)	12.50 (318)	16.50 (419)	2.56 (65)	2	3/4 x 4-3/4 M20 x 121	19.5 (8,86)
12 DN300	12.750 (323,9)	175 (12,1)	22,343 (99,39)	0.25 (6,4)	14.50 (368)	18.50 (470)	2.56 (65)	2	3/4 x 4-3/4 M20 x 121	22.0 (10,00)

**Notes:**

- a. Maximum available gap between pipe ends. Minimum gap = 0.  
b. Maximum Pressure and End Load are total from all loads based on standard weight steel pipe. Pressure ratings and end loads may differ for other pipe materials and/or wall thickness. Contact your GRINNELL Representative.  
c. Gold color coded metric bolt sizes for DN25 - DN300 couplings are available upon request.  
d. Max End Gap is for cut grooved standard weight pipe.

**FIGURE 1**  
**FIGURE 774, GROOVED RIGID COUPLING, 1 INCH TO 12 INCH (DN25 TO DN300)**  
**NOMINAL DIMENSIONS**

- 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)

For proper gasket selection, refer to Technical Data Sheet G610.

## Ordering Procedure

Grinnell Products are available globally through a network of distribution centers. For the nearest distributor, visit [www.grinnell.com](http://www.grinnell.com). When placing an order, indicate the full product name.

Specify Figure 774 Grooved Rigid Coupling, quantity, pipe size (Nominal ANSI or O.D.), finish (Orange, Red, or Galvanized), and type of gasket:

- Grade “E” EPDM
- Tri-Seal Grade “E” EPDM
- Grade “L” Silicone
- Grade “T” Nitrile
- Grade “O” Fluoroelastomer