High Pressure Coupling
Fig. 770EG

The Figure 770EG High Pressure Coupling provides a rigid joint by firmly gripping along the circumference of the pipe grooves. This coupling offers a dependable method for joining pipe and is an economical alternative to welding, threading, or using flanges. It is capable of pressures up to 2500 psi (172.4 bar) depending on pipe size and wall thickness.

Additional Features:

- Full 360° gripping of the groove circumference provides a strong rigid connection.
- Tongue-and-groove design simplifies installation.

For Listings / Approval Details and Limitations, visit our website at www.asc-es.com or contact an ASC Engineered Solutions® Sales Representative.

Material Specifications

Bolts
SAE J429, Grade 5, Zinc Electroplated (standard)

Heavy Hex Nuts
SAE A563, Grade A, Zinc Electroplated (standard)

Housing
Ductile Iron conforming to ASTM A536, Grade 65-45-12.

Material Specifications (Continued)

Coatings

☐ Rust inhibiting paint
Color: Black (standard)

☐ Other Colors Available
(IE: RAL3000 and RAL9000)

For other Coating requirements contact an ASC Engineered Solutions® Sales Representative.

Gaskets

Properties as designated in accordance with ASTM D2000.

☐ **Grade "T" Nitrile** (Orange color code)
NOT FOR USE IN DRINKING WATER

-20°F to 180°F (Service Temperature Range)
(-29°C to 82°C)

Recommended for petroleum applications, air with oil vapors and vegetable and mineral oils.

NOT FOR USE IN HOT WATER OR HOT AIR

Gasket Type
"EG" Style

Lubrication

☐ Standard
☐ Gruvlok Xtreme

PROJECT INFORMATION	APPROVAL STAMP
Project:	☐ Approved
Address:	☐ Approved as noted
Contractor:	☐ Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

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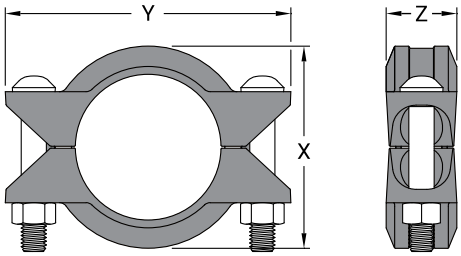
Fig. 770EG



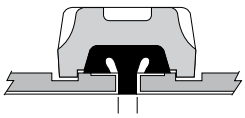


Fig. 770EG with "EG" Gasket

Nominal Size	O.D.	Max. Working Pressure	Max. End Load	Allowable Pipe End Separation	Coupling Dimensions			Coupling Bolts		Approx. Wt. Ea.
					X	Y	Z	Qty.	Size	
In./DN(mm)	In./mm	PSI/bar	Lbs./kN	In./mm	In./mm	In./mm	In./mm		In./mm	Lbs./kg
2 50	2.375 60.3	2500 172.4	4,430 19.71	0.14 3.6	3.53 89.7	5.72 145.3	1.88 47.8	2	⅝ x 2¾ M16 x 70	3.4 1.5
2½ 65	2.875 73.0	2500 172.4	6,492 28.88	0.14 3.6	4.06 103.1	6.00 152.4	1.88 47.8	2	⅝ x 3½ M16 x 89	4.0 1.8
3 80	3.500 88.9	2500 172.4	9,621 42.79	0.14 3.6	4.78 121.4	6.76 171.7	1.88 47.8	2	⅝ x 3½ M16 x 89	5.3 2.4
4 100	4.500 114.3	2500 172.4	15,904 70.74	0.25 6.4	6.01 152.7	8.50 215.9	2.10 53.3	2	¾ x 4¼ M20 x 108	7.3 3.3
6 150	6.625 168.3	2000 137.9	34,472 153.33	0.25 6.4	8.51 216.2	11.25 285.8	2.10 53.3	2	⅞ x 5½ M22 x 140	15.0 6.8
8 200	8.625 219.1	1500 103.4	46,741 207.90	0.25 6.4	10.93 277.6	13.75 349.3	2.60 66.0	2	1 x 5½ M24 x 140	25.0 11.3

Notes:

Maximum end load is defined as the max allowable force from the combination of internal pressure thrust at the pipe joint and external loads based on the use of standard ASME B36.10 pipe that is grooved in accordance with ASC's groove specification.

Pressure ratings and end loads may differ for other pipe materials and/or wall thicknesses.

See Gruvlok Coupling Working Pressure Ratings document published in the resources section of the website for pressure ratings on alternate pipe materials.

Fig. 770EG High Pressure Coupling

WARNING

Read and understand all instructions before use.

Ensure system is drained and depressurized before installation or service.

Use appropriate personal protective equipment.

Failure to follow these instructions could result in serious personal injury and/or property damage.

Figure 770EG High Pressure Coupling requires specified pipe end groove dimensions and fittings, see Gruvlok® Catalog for groove dimensions

1 Check & Lubricate Gasket

Check gasket to be sure it is compatible for the intended service. Apply a thin coating of Gruvlok lubricant to the exterior surface and sealing lips of the gasket. Some applications require lubrication of the entire gasket surface. Be careful that foreign particles do not adhere to lubricated surfaces.

2 Gasket and Pipe Installation

Slip the gasket half way on to the pipe end, stop when the center gasket leg comes in contact with the pipe end. Slide the second pipe end half way into the gasket, stopping then the pipe end comes in contact with the center gasket leg. Ensure pipes are aligned properly.

3 Housings

Remove one nut and bolt and loosen the other nut. Place one housing over the gasket, making sure the housing keys fit into the pipe grooves. Swing the other housing over the gasket and into the grooves on both pipes, making sure the tongue and recess of each housing is properly mated. Reinsert the bolt and run-up both nuts finger tight.

4 Tighten Nuts

Securely tighten nuts alternately and equally, keeping the gaps at the bolt pads evenly spaced.

Notice: Uneven tightening may cause the gasket to pinch. Gasket should not be visible between segments after bolts are tightened.

Maximum Bolt Torque

Bolt Size (In.)	Wrench Size (In.)	Ft-Lbs
5/8	1 1/16	235
3/4	1 1/2	425
7/8	1 7/16	675
1	1 5/8	900

5 Assembly is Complete

Visually inspect the pipe joint to assure the coupling keys are fully engaged in the pipe grooves. The bolt pads are to have equal gaps on each side of the coupling.

Notice: Visually inspect both sides of the coupling to ensure gaps between bolt pads are evenly spaced and are parallel. Any deviations must be corrected before placing coupling into service.

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Building connections that last™