

## **MUNRO STANDARD FLEXIBLE COUPLING**

Standard Flexible Coupling M7705

Made to USA standards, to easily interchange with other major manufacturers, the Munro flexible coupling is ideal for use in countless piping applications where misalignment might be present. The M7705 can accommodate vibration, thermal stress and moderate seismic activity. This tried and true coupling offers pressure ratings to 500 psi, depending on pipe size and wall thickness.





#### **TECHNICAL DATA**

Couplings	Ductile iron, non-lead orange rust-inhibiting paint coating, ASTM A536, Grade 65-45-12
Nuts	Carbon steel and zinc plated: ASTM 563 Grade 2
Gaskets	Nitrile, orange color-coded, service temperature: -20°F to 180°F (-29°C to 82°C)
Bolts	Carbon steel, heat treated and zinc plated, tensile strength to 110,000 psi: ASTM A 183 Grade 2

Nominal		Max. Working		Dimensions			Bolts		Model
Size	Pipe OD Pressure (CWP)	A	В	С	Qty	Size	Weight	Number	
in/mm	in/mm	psi/bar	in/mm	in/mm	in/mm		in/mm	lb/kg	
2 50	2.375 60.3	500 35	3.31 84	5.08 129	1.89 48	2	³⁄8 x 2 ⅓ M10 x 55	1.8 0.8	M7705X2
3 80	3.5 88.9	500 35	4.57 116	6.65 169	1.89 48		½ x 3 M12 x 75	2.8 1.3	M7705X3
4 100	4.5 114.3	500 35	5.71 145	7.76 197	2.05 52		½ x 3 M12 x 75	4.1 1.9	M7705X4
6 150	6.625 168.3	450 31	7.87 200	10.55 268	2.44 62		5⁄8 x 3 ½ M16 x 90	6.4 2.9	M7705X6
8 200	8.625 219.1	300 20	10.24 260	13.78 350	2.52 64		<sup>5</sup> ⁄ <sub>8</sub> x 3 <sup>1</sup> ⁄ <sub>2</sub> M16 x 90	11 4.9	M7705X8
10 250	10.750 273.0	300 20	13.50 343	16.73 425	2.52 64		<sup>3</sup> ⁄4 × 4 <sup>3</sup> ⁄4 M20 × 120	16 7.20	M7705X10
12 300	12.750 323.9	300 20	15.35 390	18.39 467	2.52 64		% x 6 ½ M22 x 165	22.5 10.8	M7705X12







# **MUNRO FLEXIBLE COUPLING**

Installation Guide



#### 1. INSPECT GROOVED END PIPES or fittings

Make certain that any burrs, grease, dirt or foreign objects are removed from the grooved end. Ends must be free of sharp edges, indentations, or other defects.



#### 2. INSTALL GASKET

Inspect gasket to ensure that it is the correct material for the application and that it is clean and free of defects.

Slide the gasket over the end of the pipe until the gasket is not overhanging the end of the pipe. Next, align the two pipe ends and slide the gasket into place so that it is centered between the two pipe ends, between the groove on either pipe.



#### **3. PREPARE GASKET**

Coat the sealing edges and outer surface of the gasket with a thin layer of siliconbased lubricant (available from Munro).



#### 4. INSTALL HOUSINGS AND BOLTS

Ensure that the gasket is free from burrs or any imperfections and that the gasket material and size is acceptable for the intended service. Slide the gasket over the pipe end so that it is flush with the pipe end. Next, butt up against and center with the other pipe. Slide the gasket into place, so that it is equally covering both pieces of pipe. Use the first set of lines that you marked on the pipe as a guide to ensure proper placement, centering the gasket between the pipes.



### **5. TIGHTEN NUTS**

Using the torque specification table as a guide, ensure that the nuts are tightened alternately and equally until metal to metal contact is made with no gaps.

#### **SPECIFIED BOLT TORQUE**

Specified bolt torque is for the oval neck track bolts used on Munro couplings. The nuts must be tightened alternately and evenly until fully tightened. CAUTION: Use of an impact wrench is not recommended because the torque output can vary significantly due to many variables including air pressure supply, battery strength and operational variations.

BOLT TORQUE							
Coupling Bolts	Minimum	Maximum					
In.	FtLbs./N-m	FtLbs./N-m					
½ X 2 ⅔	80	100					
(2″ couplings)	110	150					
½ X 3	80	100					
(3"- 4" couplings)	110	150					
5⁄8 X 3 1⁄2	100	130					
(6"- 8" couplings)	135	175					
<sup>3</sup> ⁄4 X 4 <sup>3</sup> ⁄4	130	180					
(10"- 12" couplings)	175	245					

#### CAUTION

Proper torquing of coupling bolts is required to obtain specified performance. Over torquing the bolts may result in damage to the bolt and/or casting which could result in pipe joint separation. Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.







