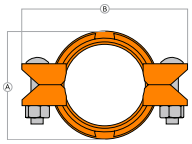
# MUNRO HDPE TRANSITION COUPLING

## HDPE Transition Coupling M97

Mechanical HDPE transition fittings are an ideal solution to join high density polyethylene pipe with grooved steel pipe.

Munro HDPE transition fittings offer a lighter, easier to handle design with sharp, well-defined teeth for maximum penetration and grip. Engineered to satisfy the working pressure of DR 7.3 to DR 32.5, every Munro HDPE transition fitting uses four high-quality bolts and flanged nuts or washers for improved tightening and holding.





## TECHNICAL DATA

| | |
|---|---|
| Couplings | Ductile iron, non-lead orange rust-inhibiting paint coating, ASTM A536, Grade 65-45-12 |
| 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 |
| Nuts | Carbon steel, zinc plated: ASTM 563 Grade 2 |
| Flanged Nuts | Carbon steel, and zinc plated: ASME B18.2.2-2010. Flanged Nuts have a metric head |

| Nominal Size | Pipe OD | Dimensions | | | Bolts | | Approx. Weight | Model Number |
|---|---|---|---|---|---|---|---|---|
| | | A | B | C | Qty | Size | | |
| in/mm | in/mm | in/mm | in/mm | in/mm | | in/mm | lb/kg | |
| 2<br>50 | 2.375<br>60.3 | 3.125<br>79.37 | 5.7<br>144.78 | 3.125<br>79.37 | 4 | ⅜ x 2 ⅜<br>M10 x 60 | 3<br>1.36 | M97X2 |
| 3<br>80 | 3.5<br>88.9 | 4.375<br>111.12 | 7.4<br>187 | 3.125<br>79.37 | | ½ x 3<br>M12 x 75 | 5<br>2.27 | M97X3 |
| 4<br>100 | 4.5<br>114.3 | 5.125<br>130.17 | 8.7<br>220 | 3.75<br>95.25 | | ½ x 3<br>M12 x 75 | 7<br>3.17 | M97X4 |
| 6<br>150 | 6.625<br>168.3 | 6.375<br>161.95 | 11.69<br>296 | 3.75<br>95.25 | | ⅝ x 3 ½<br>M16 x 90 | 11<br>4.99 | M97X6 |
| 8<br>200 | 8.625<br>219.1 | 9.5<br>241.3 | 14<br>355 | 4.25<br>107.95 | | ⅝ x 3 ½<br>M16 x 90 | 18<br>8.16 | M97X8 |
| 10<br>250 | 10.750<br>273.0 | 11.5<br>292.1 | 17.1<br>434 | 5<br>127 | | ¾ x 4 ¾<br>M20 x 120 | 28<br>12.7 | M97X10 |
| 12<br>300 | 12.750<br>323.9 | 14.5<br>368.3 | 19.5<br>495.3 | 5<br>127 | | ¾ x 4 ¾<br>M20 x 120 | 35<br>15.87 | M97X12 |

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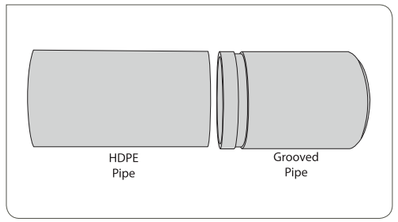
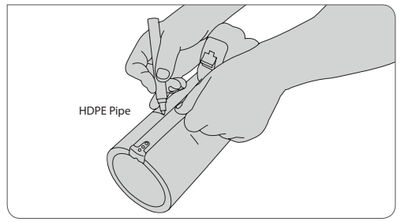
Installation Guide




## 1. INSPECT PIPES ENDS

Inspect the steel grooved pipe. 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.

Inspect the HDPE pipe. Make certain that the pipes are cut squarely and free of imperfections.




## 2. MEASURE FOR COUPLING PLACEMENT

Measure and mark, at a minimum, 5 equally spaced lines around the HDPE pipe to ensure that the pipe placement is correct when the coupling is installed.

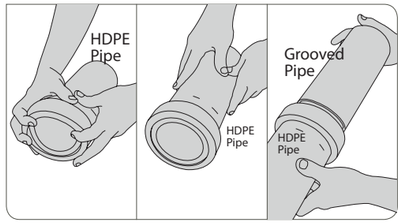
2″ thru 3″ pipe - mark 2 1/8″ from the end of the pipe

4″ thru 6″ pipe - mark 2 3/4″ from the end of the pipe

8″ pipe - mark 3″ from the end of the pipe

10″ pipe - mark 3 3/4″ from the end of the pipe

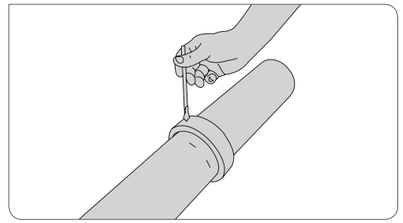
12″ pipe - mark 3 7/8″ from the end of the pipe




## 3. INSTALL GASKET

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

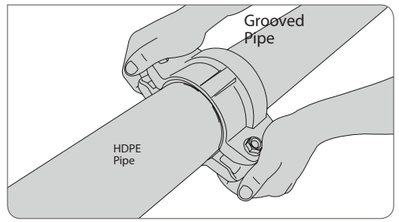
Slide the gasket over the end of the HDPE pipe until the gasket is not overhanging the end of the pipe. Next, align the HDPE pipe end with the grooved steel pipe end and slide the gasket into place so that it is centered between the two pipe ends. The gasket should not extend into the groove on the steel pipe.



## 4. LUBRICATE GASKET

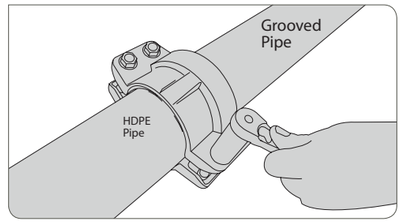
Coat the sealing edges and outer surface of the gasket with a thin layer of silicon-based lubricant (available from Munro).






## 5.INSTALL HOUSINGS AND BOLTS

Align housings over the gasket. Your marks on the HDPE pipe should align with the edge of the housing. You may find it easier to start with one bolt in place, with the nut unthreaded to the end of the bolt. Insert the bolts through the housings and thread the nuts on the bolts until they are finger tight. Ensure that the housings are not misaligned and that the oval head of each bolt sits properly in the bolt hole.




## 6. 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.

| Coupling Bolts In. | BOLT TORQUE Minimum Ft.-Lbs./N-m | Maximum Ft.-Lbs./N-m |
|---|---|---|
| ½ X 2 ⅜ (2″ couplings) | 80<br>110 | 100<br>150 |
| ½ X 3 (3″- 4″ couplings) | 80<br>110 | 100<br>150 |
| ⅝ X 3 ½ (6″- 8″ couplings) | 100<br>135 | 130<br>175 |
| ¾ X 4 ¾ (10″- 12″ couplings) | 130<br>175 | 180<br>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.