

**Mission Rubber Company LLC** 

1660 Leeson Lane Corona, CA 92879 (800) 854-9991 • Fax (800) 637-4601 missionrubber.com

Unshielded flexible sewer couplings that connect similar and dissimilar pipe materials and sizes MEETS: ASTM C 425 ASTM C 1173 ASTM A240/A240M CSA B602 UPC 4224



## Flex-Seal® Sewer Coupling - Submittal MR01 Series

Performance Couplings for Similar and Dissimilar Pipe Sizes and Materials

PROJECT\_\_\_\_\_

ENGINEER \_\_\_\_\_\_CONTRACTOR

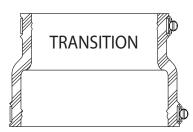
MATERIALS

Worm Drive Clamp

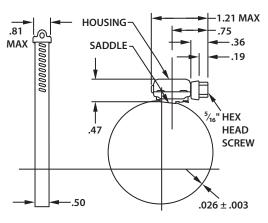
300 series ASTM stainless steel
This gasket is fabricated from a compound with high-quality elastomeric properties

to meet physical testing.

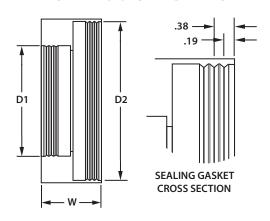
## SIZE-ON-SIZE



## WORM DRIVE CLAMP DETAILS



## SEALING GASKET DETAILS



| MISSION<br>REFERENCE | SEALING GASKET DIMENSIONS |       |       |  |
|----------------------|---------------------------|-------|-------|--|
| MR01 SERIES          | D1                        | D2    | W     |  |
| MR01 44              | 5.40                      | 5.40  | 4.00  |  |
| MR01 54              | 5.40                      | 6.56  | 6.00  |  |
| MR01 55              | 6.56                      | 6.56  | 6.00  |  |
| MR01 64              | 5.40                      | 7.80  | 6.00  |  |
| MR01 64 Type O       | 5.40                      | 8.12  | 6.00  |  |
| MR01 66              | 7.80                      | 7.80  | 6.00  |  |
| MR01 86              | 7.80                      | 10.00 | 6.00  |  |
| MR01 88              | 10.00                     | 10.00 | 6.00  |  |
| MR01 1008            | 10.00                     | 12.45 | 6.00  |  |
| MR01 1010            | 12.45                     | 12.45 | 6.00  |  |
| MR01 1210            | 12.45                     | 14.80 | 6.00  |  |
| MR01 1212            | 14.80                     | 14.80 | 6.00  |  |
| MR01 1512            | 14.80                     | 18.30 | 10.00 |  |
| MR01 1515            | 18.30                     | 18.30 | 10.00 |  |
| MR01 1818            | 22.30                     | 22.30 | 10.00 |  |
| MR01 2121            | 25.90                     | 25.90 | 10.00 |  |
| MR01 2424            | 30.30                     | 30.30 | 10.00 |  |
| MR01 2727            | 32.50                     | 32.50 | 10.00 |  |

|            | WIITO I Z/Z/                | 32.30        | 32.30        | 10.00         |  |
|------------|-----------------------------|--------------|--------------|---------------|--|
|            |                             |              |              |               |  |
|            |                             |              |              |               |  |
| Used to Jo | <b>oin -</b> MR01 Series co | ouplings are | used to join | clay to clay. |  |

Mission's Flex-Seal® Unshielded Coupling is a flexible sewer coupling designed to connect similar and dissimilar pipe materials and sizes. Coupling consists of two (2) 300 series stainless steel worm drive clamps over a molded one-piece elastomeric sealing gasket. MR01 Series couplings are available in sizes 4" to 27".

**Leak-Proof Seal** - Stainless steel clamps provide a positive seal when properly tightened to 60 in/lbs. of torque. Axially slotted clamps enable bands to tighten independently to accommodate variances in the outside diameters of the pipe to be joined, ensuring a water-tight, leak-proof and root-proof seal. Sealing "O" Rings are installed under each sealing clamp to prevent pipe slippage and create a more positive seal.

| TEST   | GASKET PHYSICAL TESTS (ASTM C 425)   |       |
|--|--|-------|
| Tensile Strength   | 1000 PSI minimum   | D412  |
| Elongation   | 250% minimum   | D412  |
| Durometer (Shore A)  | 55 minimum 70 maximum  | D2240 |
| Accelerated Aging  | 85% of original tensile strength<br>85% of original elongation<br>All determined after oven aging at 70°C for 7 days | D573  |
| Compression Set  | 20% maximum of original deflection   | D395  |
| Ozone Cracking  No visible cracking at 2X magnification of the gasket after 24 hours exposure in 0.5 PPHM ozone concentrations at 40°C.  Testing and inspection to be on gasket which is loop-mounted to give approximately 20% elongation of outer surface. |  | D1149 |
| Water Absorption   | 5% maximum by weight after 7 days at 70°F  | D471  |

**Corrosion Resistant** - Use of 300 series stainless steel components are highly effective in a variety of environments; such as marine applications, poorly aerated or moist soils, contaminated ground conditions (particularly industrial fill sites) and where the ground water contains chloride, sulfates or bicarbonates.

Withstands Tension and Compression - Synthetic rubbers permit a substantial degree of distortion without change in basic physical resistance, unlike other manufacturers' thermoplastic coupling materials. Molded synthetic rubber gasket is strong, durable and resilient to ultraviolet rays, ozone, fungus growth, natural erosive properties and normal sewer gases. More pliable and easier to install in cold weather applications than an elastomeric PVC gasket. Pre-Set Calibration - All Flex-Seal® Unshielded Couplings are designed to be installed with a pre-set torque wrench calibrated to 60 in/lbs. maximum to accommodate the 300 series stainless steel  $\frac{5}{16}$  hex head screw.