

# A.W.W.A MANUAL M11 HARNESS RESTRAINT



## MATERIAL SPECIFICATIONS

**RESTRAINT RINGS:** This weldment is manufactured from ASTM A36 Steel with a minimum yield stress of 36,000 psi. Two of these are required, one on each side of the coupling.

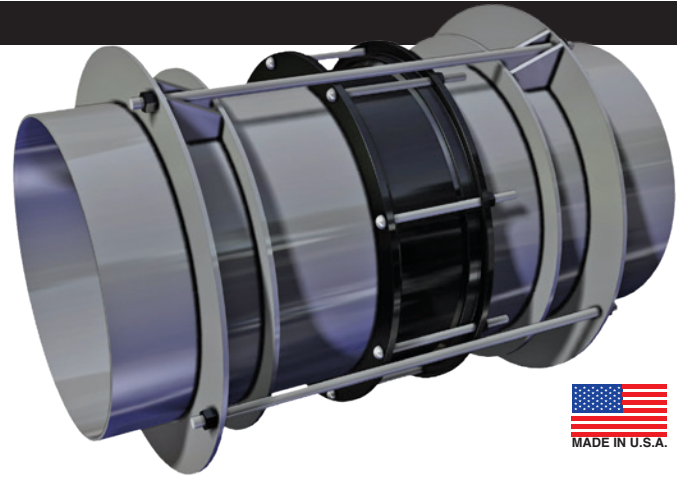
**TIE RODS:** High tensile alloy steel per ASTM A193 grade B7. Type 304 or 316 stainless steel is optional and requires twice as many rods.

**COATING:** Bare, unless otherwise specified.

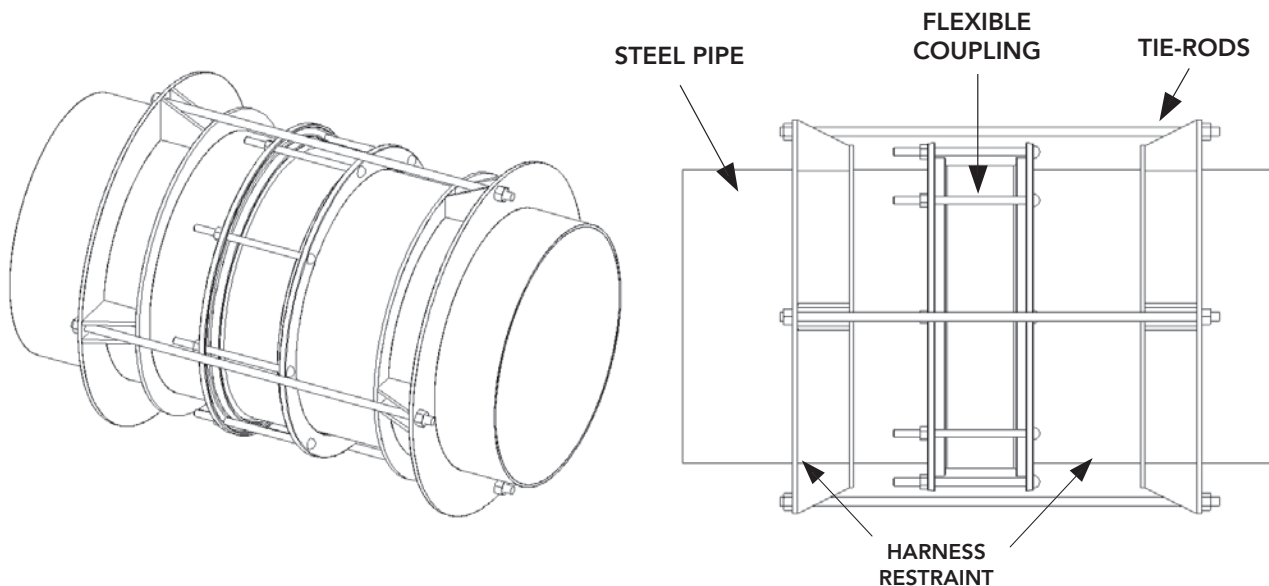
**PRESSURE:** The standard design pressures of 50, 100, 150, 200, 250 & 300 psi are specified in the AWWA M11 manual. These pressures specify the tie rod quantities and diameter. Other pressures can be accommodated.

**RING TOLERANCE:** The Harness weldment inner diameter (ID) is manufactured with a 3/16 inch (on diameter) clearance between the specified pipe OD up through 24 inch and 1/4 inch larger than 24 inch.

**SIZES:** 6"- 144" for steel pipe. Other sizes available on request.



**ROMAC MANUFACTURES JOINT HARNESES AS SPECIFIED PER AWWA M11  
DESIGNED TO RESTRAIN FLEXIBLE COUPLINGS (STYLE 501 AND STYLE 400) ON STEEL PIPE-  
LINES. THESE HARNESS ASSEMBLIES ARE FIELD WELDED IN PLACE.**



Contact your Romac representative for more information.

**ALL PRICES:** Priced On Application.