

STAINLESS STEEL TAPPING SLEEVE WITH MECHANICAL JOINT OUTLET

SCOPE

The intent of the specification is to receive Stainless Steel Tapping Sleeves with Mechanical Joint Outlet ranging in pipe sizes from 4" and larger and with outlet sizes from 2" to 24". The MJ tapping sleeve shall meet or exceed all material specifications as listed below and be suitable for use with standard mechanical joint x mechanical joint resilient wedge gate valves per ANSI/AWWA C509 and ANSI/AWWA C515. The tapping sleeves specified herein shall be manufactured from stainless steel and designed to withstand working pressures up to 250 psi for outlets 8 and smaller, and 200 psi for outlets 10" and 12". The Tapping Sleeve furnished shall be equivalent to Model 3490MJ Stainless Steel Tapping Sleeve with Mechanical Joint Outlet, as manufactured by PowerSeal Pipeline Products Corporation.

DESIGN AND MATERIAL OF CONSTRUCTION

Sleeve Body – Shall be fabricated completely from Stainless Steel grade 304 or 316 per ASTM A240. All welding shall be passivated to return the welded stainless steel to its original corrosion resistant style. 4" through 24" main size sleeves shall be two-piece and have a 0.40" outside diameter range of fit. 30" and larger main size sleeves shall be three pieces, and have a 0.60" outside diameter range of fit.

Mechanical Joint Outlet – Shall be a one piece casting of 304/316 stainless steel TIG and MIG welded 360 degrees to the branch of the sleeve, casting shall have a shoulder and plain end cross sectional profile fully complying with AWWA/ANSI C110/A21.10. The inside diameter of the Mechanical Joint Outlet Fitting, and the branch shall be larger in diameter than nominal to allow the use of a full-size cutter.

Gaskets – The Tapping Sleeve shall have a Branch Sealing gasket with the TwinSeal® dual o-ring design incorporating both hydrostatic and mechanical forces to affect a dynamic seal. A Complete Circle Gasket attached to the sleeve at the factory manufactured with SBR Check-O-Seal with multi o-ring sealing ribs from 100% new rubber. An industry standard Mechanical Joint Outlet Gasket complying with ANSI/AWWA C111/A21.11 must be supplied.

Lugs – Fabricated of 304/316 Stainless Steel per ASTM A240, and are to be attached by means of a continuous weld (GMAW or FCAW) to the body of the sleeve on at least one side, and shall be so designed to prevent the rotation of the head of the drop-in bolts, and facilitate the installation of the sleeve.

Fasteners - The Tapping Sleeve shall incorporate Drop-in, Oval Neck, Track-Head bolts type 304/316 (18-8) Stainless Steel per ASTM A193. Stainless Steel 304 heavy Hex Nuts shall be furnished with fusion bonded coating.

The minimum quantity of drop-in bolts and flange or mechanical outlet per outlet diameter shall be:

Outlet Diameter	Drop-In Bolt Quantity	Mechanical joint Outlet Bolt Quantity	Tapping Sleeve Width
2"	8pcs	2pcs	12"
3"	8pcs	4pcs	12"
4"	10pcs	4pcs	16"
6"	10pcs	6pcs	16"
8"	12pcs	6pcs	20"
10"	20pcs	8pcs	24"
12"	16pcs	8pcs	30"

Testing – Each tapping sleeve shall be Factory Hydrostatically Tested on pipe to verify proper fit and weld integrity with Zero Leakage allowed

Marking - There shall be no Paper or Plastic Adhesive Labels attached to the tapping sleeve, any information appearing on the sleeve shall be stenciled.