

Technical

Tapping Saddles & Tapping Bands

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Metric OD Tapping Saddles

Description:

The Elysee range of metric OD tapping saddles are for lateral line derivation from mainline pipes for high pressure conveyance of water, irrigation, gaseous fuels, compressed air, certain chemical solutions and slurries. They suit metric MDPE pipe manufactured to NZS 4130, and some sizes fit PVC pressure pipe to AS/NZS 1477 (please consult Waterworks).

Range:

Metric O.D. series from 20mm O.D. up to 200mm O.D. with off-take sizes from ½" BSP to 4" BSP.

Pressure Rating:

Sizes 20mm O.D. up to 63mm O.D. – 16 bar @ 20°C.
 Sizes 75mm O.D. up to 110mm O.D. – 10 bar @ 20°C.
 Sizes 125mm O.D. up to 200mm O.D. – 6 bar @ 20°C.
 N.B. Pressure rating must be adjusted if fittings are to be used at elevated temperatures above 20°C. Please consult Waterworks.

Materials:

Body: Polypropylene copolymer PP-B.
 O-Ring: Elastomeric rubber NBR70.
 Reinforcing Ring: Stainless Steel.
 Bolts and Nuts: Stainless Steel.

General:

The Elysee metric OD tapping saddles comply with BS 6920:2000 for use in potable water. Tested by Intertek Testing and Certification Ltd England. They are suitable for exposure to UV and give excellent chemical resistance. These fittings are manufactured by an ISO 9001 accredited manufacturer.



4N Tapping Bands

Description:

The 4N range of heavy duty tapping bands are for lateral line and service connections from mainline pipes. They are suitable for both low and high-pressure lines carrying water, waste water, gaseous fuels, compressed air etc. They are used in municipal, agricultural, horticultural, irrigation and frost protection schemes.

Range:

4N White suits Series One PVC Pipe AS/NZS 1477 DN40 to DN300.
 4N Blue suits Ductile Iron, AC and Series Two PVC pipe AS/NZS 1477 DN100 to DN300.
 4N Black suits Metric OD Polyethylene Pipes AS/NZS 4130 63mm OD to 315mm OD.
 Female tapered threaded outlets sizes from 20mm to 50mm BSP.

Pressure Rating:

All sizes 16bar at 20°C. Pressure rating must be adjusted if used at temperatures exceeding 20°C.

Temperature Range:

-40°C to 70°C.

Materials:

Body Halves: Precision moulded in a high grade engineered glass reinforced Noryl Resin.
 Bolts, Nuts and Washers: Grade 316 Stainless Steel and nuts coated with dry molybdenum for anti-galling.
 Reinforcing Ring: 316 grade stainless steel.
 Seal: The elastomeric 'E-lip' seal is moulded from EPDM rubber.
 O-Ring: DN40 and DN50 White Band only.

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Standards Approval:

The 4N tapping band has been tested and approved to the appropriate standards AS/NZS 4129 and AS/NZS 4793. AS/NZS ISO 9001:2000 approved manufacturer.

4N Tapping Band Installation Instructions:

1. Clean the pipe area where the tapping band is to be installed. Ensure no dirt or pipe surface defects are present.
2. Prior to installation inspect the tapping band parts to ensure the seals are clean and defect free.
3. Position the tapping band bottom-half under the pipe and hold in place.
4. O-ring or Multi-Lip seal tapping bands – check the seal is correctly positioned prior to fitting the tapping band onto the pipe.
5. E-lip seal tapping bands – check the seal is correctly positioned prior to fitting the tapping band onto the pipe. Position the lug into the matching band groove notch to ensure correct alignment and to avoid leaks.
6. Fit the tapping band top-half over the pipe so the bottom-half bolts pass through the top-half bolt holes.
7. Continue to hold the bottom-half while fitting washers and nuts. Finger tighten the nuts ensuring equal gaps between the tapping band halves on both sides.
8. Position and level the tapping band if required.
9. Using a torque wrench, tighten the nuts evenly in stages to 15Nm (10ft/lbs). Ensure even gaps on both sides if applicable. Re-torque after approximately 20 minutes.
10. Apply no more than three wraps thickness of AGA (gas) or WaterMark (Water) approved premium PTFE thread tape to the full length of male take-off fittings threaded into the tapping bands.
11. Maximum recommended installation torque for take-off fittings is 30Nm (20ft/lbs). Recommended installation when not using a torque wrench is hand-tight plus half to one-full turn. Ferrules must not be screwed in deeper than their thread depth.
12. Take-off pipes must be oriented to avoid exerting undue leverage force on tapping bands.
13. Take care not to damage the band or force swarf under the seal when tapping the pipe through the tapping band.
14. A good practise after tapping is to permanently mark the pipe so the tapping band can be replaced exactly centrally over a tapped hole if removed later for any reason.

NOTE: Installers must employ suitable precautions, (Eg. thrust blocks), to prevent tapping band movement that may occur due to water hamper, pipe expansion, soil subsidence or other environmental factors.