

PACK JOINT COMPRESSION CONNECTIONS FOR WATER USE (CONDUCTIVE TYPE)

Product Specifications

1. MATERIAL SPECIFICATIONS

- 1.1 **Nut** – Cast Brass, ASTM B584 Alloy C83600 or C87850.
- 1.2 **Gasket** - Rubber - ASTM D2000 EPDM.
- 1.3 **Body** - Cast Brass - ASTM B584 Alloy C89833 or C87850.
- 1.4 **Rigid Metal Liner** (for use with plastic pipe or tubing) - Stainless Steel - ANSI Type 304.

2. SIZES, OPERATING PRESSURE & OPERATING TEMPERATURE

- 2.1 Two basic styles of connections are available.
 - 2.1.1 Connections are available for 1/2", 3/4", 1", 1-1/2", and 2" Copper Tube Size (CTS O.D.) See chart below.

TUBING & PIPE DIMENSIONS USED WITH MUELLER PACK JOINT COMPRESSION CONNECTION

| Nominal Size | Material | Tubing or Pipe O.D. Range | Wall Thickness Range | Tubing or Pipe I.D Range |
|--------------|-----------------|---------------------------|----------------------|--------------------------|
| 1/2" CTS | Type "K" Cooper | 0.622 - 0.628 | 0.045 - 0.053 | - |
| 3/4" CTS | CU (1) | 0.872 - 0.878 | 0.061 - 0.069 | - |
| | PE (2) | 0.871 - 0.879 | 0.097 - 0.107 | 0.657 - 0.685 |
| 1" CTS | CU (1) | 1.121 - 1.129 | 0.061 - 0.069 | - |
| | PE (2) | 1.120 - 1.130 | 0.125 - 0.137 | 0.846 - 0.880 |
| 1 - 1/2" CTS | CU (1) | 1.621 - 1.630 | 0.067 - 0.077 | - |
| | PE (2) | 1.619 - 0.181 | 0.181 - 0.199 | 1.221 - 1.269 |
| 2" CTS | CU (1) | 2.120 - 2.130 | 0.076 - 0.090 | - |
| | PE (2) | 2.119 - 2.131 | 0.236 - 0.260 | 1.559 - 1.659 |
| 3/4" IPS | PE (3) | 1.045 - 1.110 | 0.118 - 0.138 | 0.809 - 0.834 |
| | PVC Sch 40 (4) | 1.045 - 1.110 | 0.113 - 0.133 | 0.780 - 0.828 |
| | PVC Sch 80 (4) | 1.046 - 1.054 | 0.154 - 0.174 | 0.698 - 0.746 |
| 1" IPS | PE (3) | 1.329 - 1.399 | 0.150 - 0.170 | 1.029 - 1.059 |
| | PVC Sch 40 (4) | 1.310 - 1.320 | 0.133 - 0.153 | - |
| | PVC Sch 80 (4) | 1.310 - 1.320 | 0.179 - 0.200 | - |
| 1-1/4" IPS | Polyethylene | 1.754 - 1.832 | 0.197 - 0.221 | 1.360 - 1.390 |
| | PE (3) | 2.05 - 2.141 | 0.230 - 0.258 | 1.590 - 1.625 |
| 1-1/2" IPS | PVC Sch 40 (4) | 1.894 - 1.906 | 0.145 - 0.165 | - |
| | PVC Sch 80 (4) | 1.894 - 1.906 | 0.200 - 0.224 | - |
| | PE (3) | 2.637 - 2.742 | 0.295 - 0.330 | 2.047 - 2.082 |
| 2" IPS | PVC Sch 40 (4) | 2.369 - 2.381 | 0.154 - 0.174 | - |
| | PVC Sch 80 (4) | 2.369 - 2.381 | 0.218 - 0.244 | - |

(1) Type "K" copper tubing – ASTM B88 (2) CTS polyethylene (PE) – ASTM D2737 SDR-9 (3) IPS polyethylene (PE) – ASTM D-2239 SDR-7 (4) IPS polyvinylchloride (PVC) – ASTM D1785

NOTE: Due to the characteristics of plastic tubing and pipe, it is necessary to use a rigid metal liner inside the end of the tubing or pipe.

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2. SIZES, OPERATING PRESSURE & OPERATING TEMPERATURE (CONTINUED)

- 2.1.2 Connections are available for 3/4", 1", 1-1/4", 1-1/2", and 2" Iron Pipe Size (IPS I.D.) - PE Plastic Pipe. See chart above.
- 2.1.3 Connections are available for 3/4", 1", 1-1/4", 1-1/2", and 2" Iron Pipe Size (IPS I.D.) - PVC Plastic Pipe, Schedules 40 and 80. See *chart above*.
- 2.2 **Operating Pressure** - The pressure holding capability of the MUELLER Pack Joint Compression Connection is designed to be greater than that of the valve or fitting on which it is used (only in potable water distribution applications complying with AWWA Standards).
- 2.3 **Operating Temperature** - range is +32F to +150F.

3. DESIGN FEATURES

- 3.1 Connection parts are pre-assembled permitting piping to be stabbed into connection for fast, easy assembly, except for corporation valve use. For this use only it is necessary to remove the connection while corporation valve is inserted into the main or drilled through.
- 3.2 Integral serrated gripper tightened by stainless steel screw holds tubing or pipe securely against pull out, and on metallic tubing assures electrical continuity.
- 3.3 Plastic washer beneath gasket reduces assembly friction and avoids gasket twisting or snaking while being compressed.
- 3.4 Sealing gasket is totally confined to prevent cold flow or creep either of which could cause future leakage.
- 3.5 When this connection is used for plastic tubing or pipe, stainless steel continuous tube liners are used, which are flared at one end to prevent over-insertion into end of pipe.
- 3.6 Mueller Pack Joint Compression Connections are supplied as integral parts of a variety of waterworks products such as corporation valves, curb valves, meter valves and meter setting materials, and as separate couplings and fittings.