X Series PTFE Hose

Features
- Highly flexible PTFE hose.
- Smooth-bore PTFE core.
- Size range of 1/4 through 1 in. and working pressures up to 3500 psig (241 bar).
- Fiber braid bonded to the core with a patent-pending process supports core to resist kinking.
- 304 stainless steel braid protects the core from abrasion and enhances hose pressure rating.
- PTFE material complies with FDA regulation 21CFR Part 177.1550 USP <88> Class VI

- Optional carbon black-filled PTFE core is available for applications that require static dissipation.
- Commonly used where flexibility and chemical compatibility are desired.
- Custom hose lengths and end connections available.
- Options include hose covers and hose tags. See page 102 for details.
- For electrical properties, see page 5 for details.

Technical Data

<table>
<thead>
<tr>
<th>Nominal Hose Size, in.</th>
<th>Inside Diameter, in. (mm)</th>
<th>Outside Diameter, in. (mm)</th>
<th>Minimum Inside Bend Radius, in. (cm)</th>
<th>Temperature Range, °F (°C)</th>
<th>Vacuum (28.5 in.Hg [96.5 kPa]) Rated to °F (°C)</th>
<th>Working Pressure at 70°F (20°C), psig (bar)</th>
<th>Minimum Burst Pressure at 70°F (20°C), psig (bar)</th>
<th>Bulk Hose Weight, lb/ft (kg/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 (6.4)</td>
<td>0.25 (6.4)</td>
<td>0.46 (11.7)</td>
<td>1.25 (3.18)</td>
<td></td>
<td>450 (230)</td>
<td>3500 (241)</td>
<td>14 000 (964)</td>
<td>0.13 (0.19)</td>
</tr>
<tr>
<td>3/8 (9.6)</td>
<td>0.38 (9.6)</td>
<td>0.57 (14.5)</td>
<td>1.75 (4.44)</td>
<td></td>
<td>450 (230)</td>
<td>3000 (206)</td>
<td>12 000 (826)</td>
<td>0.17 (0.25)</td>
</tr>
<tr>
<td>1/2 (12.7)</td>
<td>0.50 (12.7)</td>
<td>0.76 (19.3)</td>
<td>2.50 (6.35)</td>
<td></td>
<td>450 (230)</td>
<td>1800 (124)</td>
<td>7 200 (496)</td>
<td>0.24 (0.36)</td>
</tr>
<tr>
<td>3/4 (19.0)</td>
<td>0.75 (19.0)</td>
<td>1.00 (25.4)</td>
<td>3.50 (8.89)</td>
<td></td>
<td>200 (93)</td>
<td>1250 (86.1)</td>
<td>5 000 (344)</td>
<td>0.36 (0.54)</td>
</tr>
<tr>
<td>1 (25.4)①</td>
<td>1.00 (25.4)</td>
<td>1.32 (33.5)</td>
<td>5.50 (14.0)</td>
<td></td>
<td>150 (65)</td>
<td>1000 (68.9)</td>
<td>4 000 (275)</td>
<td>1.1 (1.6)</td>
</tr>
</tbody>
</table>

Pressure-temperature ratings may be limited by the end connections.
① Constructed with two stainless steel braids and no fiber braid reinforcement.

Pressure-Temperature Ratings

<table>
<thead>
<tr>
<th>Nominal Hose Size, in.</th>
<th>1/4</th>
<th>3/8</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature, °F (°C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–65 to 450 (–53 to 230)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 (93)</td>
<td>3500 (241)</td>
<td>3000 (206)</td>
<td>1800 (124)</td>
<td>1250 (86.1)</td>
<td>1000 (68.9)</td>
</tr>
<tr>
<td>300 (148)</td>
<td>3460 (238)</td>
<td>1965 (135)</td>
<td>1790 (123)</td>
<td>1010 (69.5)</td>
<td>895 (61.6)</td>
</tr>
<tr>
<td>400 (204)</td>
<td>3265 (224)</td>
<td>1810 (124)</td>
<td>1665 (114)</td>
<td>900 (62.0)</td>
<td>895 (61.6)</td>
</tr>
<tr>
<td>450 (230)</td>
<td>3205 (220)</td>
<td>1675 (115)</td>
<td>1665 (114)</td>
<td>900 (62.0)</td>
<td>895 (61.6)</td>
</tr>
</tbody>
</table>
X Series PTFE Hose

Testing
Every Swagelok X series hose assembly is pressure tested with water at room temperature for 30 seconds to a requirement of no detectable leakage. Testing is performed at 1000 psig (69 bar), or 225 psig (15.5 bar) if an end connection is rated below 1000 psig (69 bar).

Cleaning and Packaging
Every Swagelok X series hose component is cleaned in accordance with Swagelok Standard Cleaning and Packaging (SC-10) catalog, MS-06-62.

Ordering Information

Custom Hose Assemblies
Build a hose assembly ordering number by combining the designators in the sequence shown below.

Typical Ordering Number

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS</td>
<td>XT</td>
<td>TA</td>
<td>KC</td>
<td>16</td>
<td>28</td>
<td>MB</td>
<td>71</td>
<td>CM</td>
</tr>
</tbody>
</table>

1 Material
End Connections
SS = 316 stainless steel
B = Brass (only on 1/4 in. PM, PF, and 1/4 in. hose size)
HC = Alloy C-276

2 Hose
XT = X series PTFE hose
XC = X series carbon black-filled PTFE hose

3 Nominal Hose Size, in.
4 = 1/4
6 = 3/8
8 = 1/2
12 = 3/4
16 = 1

4 End Connections
See End Connection Designator column in tables on pages 69 to 78.

5 Overall Length
Inches or centimeters, in whole numbers. Include CM as shown for centimeter lengths.
Typical maximum one-piece hose length:
- 900 in. or 2286 cm for 1/4 through 1/2 in. hose
- 600 in. or 1524 cm for 3/4 and 1 in. hose.
Longer assemblies may be spliced; specify splices under Options. See page 4 for more information about splices.

6 Options
For multiple options, add designators with a dash between each designator.
CRN = Lanyard tag with CRN
A = Armor guard
F = Fire jacket
G6 = Spiral guard, black
G7 = Spiral guard, blue
G8 = Spiral guard, yellow
W = Hydrostatic test

Splices
SP1 = 1 splice
SP2 = 2 splices

Mat Tags
MA = Gray
MB = Blue
MC = Brown
MG = Green
MK = Black
MN = Pink
MO = Orange
MP = Purple
MR = Red
MW = White
MY = Yellow

Other Tags
T = Lanyard tag
T2 = Two lanyard tags
T5 = Clamp tag

Specify text for tags. see Hose Tag Text table, page 103.

See page 102 for detailed descriptions of options.

7 Two Elbow Orientation
Only include a value in the assembly number when both end connections are elbows. See page 72 for values and further information.