# XIRTEC PVC & CPVC

PVC Sch 40 - 1/2" - 24" (12mm - 600mm)
PVC Sch 80 - 1/2" - 24" (12mm - 600mm)
CPVC Sch 40 & 80 - 1/2" - 16" (12mm - 400mm)

## Xirtec® PVC Xirtec® CPVC

### THE IPEX SYSTEM ADVANTAGE

Introducing IPEX vinyl process piping systems – A complete line of pipe, fittings, flanges, strainers and valves to meet all your process system requirements.

IPEX manufactures the Xirtec® PVC and Xirtec® CPVC systems to meet industry demands for a complete Pipe, Valves and Fittings (PVF) package that is designed, produced and backed by a single manufacturer. These systems are engineered and manufactured to IPEX's strict quality, performance and dimensional standards, and therefore eliminate compatibility concerns associated with mixed brands of pipe and fittings.

IPEX high-performance vinyl systems are designed to meet the temperature, pressure and flow requirements of piping systems used in chemical processes and other industrial applications. They feature outstanding resistance to corrosion, and are exceptionally suited for use with a wide range of acids, alcohols, salts and halogens. The perfect extended service, low maintenance alternative to common and exotic metal systems.

Xirtec PVC pipe and fittings and Xirtec CPVC pipe are available in Schedule 40 and 80 thicknesses. Xirtec CPVC fittings are also available in Schedule 80 thicknesses.

### DESIGNED, MANUFACTURED AND BACKED BY IPEX

Our total systems approach means you can be confident that all the material you need is designed, manufactured and backed by the same company. One source to stand behind you and your complete system.

### APPLICATIONS

- Plant chemical distribution lines
- Water and wastewater treatment
- Acid systems for refineries, pickling lines and plating shops
- Chlorine injection, chlorine dioxide and chloralkali plant piping
- Steel wire plants
- Battery manufacturing
- Bleach lines in textile and paper mills
- Alum and caustic handling systems
- Circuit board manufacturing
- Semiconductor
- Pharmaceutical
- Cooling water and cooling tower systems
- Tailing and slurry lines
- Washwater recovery systems
- Plant water supply
- Brine and seawater systems
- Fish farming
- Waterworks
- Aquariums and swimming pools
- Irrigation systems in golf courses, greenhouses, etc.

### STANDARDS

| XIRTEC PVC | XIRTEC CPVC |
|---|---|
| ASTM D1785 | ASTM F441 |
| CSA B137.3 | |
| NSF 14 | |

Caution: Do not use or test PVC or CPVC with compressed air or other gases including air-over-water boosters.

## ADVANTAGES

1. **Lower Installation Costs, Easy Handling**
In addition to a lower material cost, Xirtec pipe can significantly reduce labor and transportation costs on a typical installation. The reason? They are lightweight, easily handled, stored, cut and joined.

2. **Extended Life**
Xirtec PVC and CPVC are fundamentally ageless and impervious to normal weather conditions. These piping components in uninterrupted service and in a variety of demanding industrial applications have operated successfully for over 40 years.

3. **Superior Underground Performance**
Xirtec PVC and CPVC are immune to deterioration from naturally corrosive soil conditions as well as electrochemical and galvanic corrosion. This is particularly advantageous in underground installations where galvanic reaction often causes damage to metal piping products.

4. **Exceptional Chemical Resistance**
The IPEX vinyl systems, including pipe, valves and fittings, provide outstanding resistance to a wide range of chemicals such as most acids, alcohols, alkalies, salt solutions, halogens and more.

5. **Improved Flow**
Xirtec has a substantially lower Roughness Factor than metal and other materials, and since it does not rust, pit, scale or corrode, the interior walls remain smooth in virtually any service.

6. **Potable Water Approved**
Xirtec PVC (polyvinyl chloride) and Xirtec CPVC (chlorinated polyvinyl chloride) are suitable for use with potable water as listed with NSF International and CSA.

7. **Broad Temperature Range**
IPEX vinyl systems are designed to meet a broad range of service temperatures. Xirtec PVC has a recommended maximum service temperature of 140°F (60°C) in pressure, with intermittent flow capability of 180°F (82°C) for drainage. Xirtec CPVC has a maximum service temperature of 200°F (93°C).

8. **Lower Thermal Conductivity**
With a low thermal conductivity factor, IPEX vinyl systems have less heat loss or gain, thus sustaining service temperature more efficiently than metal piping. As a result, pipe insulation is often not required.

9. **Environmentally Responsible**
With energy conservation a prime concern, you can rely on the fact that IPEX's manufacturing process for Xirtec piping materials require less than half the energy needed to produce the equivalent size of carbon steel or steel alloy materials.

### DID YOU KNOW?

One of the outstanding characteristics of PVC is its resistance to ignition. This is demonstrated by its flash point of 730°F (388°C), compared to 400°F (204°C) for woodchips.

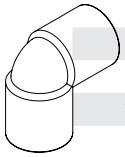
CPVC offers an even greater fire safety profile than PVC. CPVC's ignition resistance is demonstrated by its flash point of 900°F (482°C), with a low flame spread as well.

## XIRTEC PIPE PRESSURE RATINGS

| Sizes | | IPEX Schedule 40 PVC / CPVC | | | IPEX Schedule 80 PVC / CPVC | | |
|---|---|---|---|---|---|---|---|
| Diameter (in.) | O.D. (in.) | Wall Thickness (in.) | I.D. (in.) | *Max. Pressure 73°F (psi) | Wall Thickness (in.) | I.D. (in.) | *Max. Pressure 73°F (psi) |
| 1/4 | .540 | – | – | – | .119 | .302 | 1,130 |
| 3/8 | .675 | – | – | – | .126 | .423 | 920 |
| 1/2 | .840 | .109 | .602 | 600 | .147 | .526 | 850 |
| 3/4 | 1.050 | .113 | .804 | 480 | .154 | .722 | 690 |
| 1 | 1.315 | .133 | 1.029 | 450 | .179 | .936 | 630 |
| 1-1/4 | 1.660 | .141 | 1.360 | 370 | .191 | 1.255 | 520 |
| 1-1/2 | 1.900 | .145 | 1.590 | 330 | .200 | 1.476 | 470 |
| 2 | 2.375 | .154 | 2.047 | 280 | .218 | 1.913 | 400 |
| 2-1/2 | 2.875 | .203 | 2.445 | 300 | .276 | 2.290 | 420 |
| 3 | 3.500 | .216 | 3.042 | 260 | .300 | 2.864 | 370 |
| 4 | 4.500 | .237 | 3.998 | 220 | .337 | 3.786 | 320 |
| 6 | 6.625 | .280 | 6.031 | 180 | .432 | 5.709 | 280 |
| 8 | 8.625 | .322 | 7.941 | 160 | .500 | 7.565 | 250 |
| 10 | 10.750 | .365 | 9.976 | 140 | .593 | 9.493 | 230 |
| 12 | 12.750 | .406 | 11.888 | 130 | .687 | 11.294 | 230 |
| 14 | 14.000 | .438 | 13.072 | 130 | .750 | 12.412 | 220 |
| 16 | 16.000 | .500 | 14.936 | 130 | .843 | 14.224 | 220 |
| 18 | 18.000 | .562 | 16.809 | 130 | .937 | 16.014 | 220 |
| 20 | 20.000 | .593 | 18.743 | 120 | 1.031 | 17.814 | 220 |
| 24 | 24.000 | .687 | 22.544 | 120 | 1.218 | 21.418 | 210 |

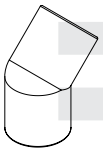
# PRODUCT SELECTION CHART - XIRTEC PVC SCH. 80 & CPVC SCH. 80 FITTINGS

## 90° Elbow Soc x FPT



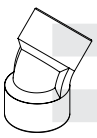
| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 1/2 | 12 | 036172 | 059187 |
| 3/4 | 20 | 036173 | 059941 |
| 1 | 25 | 036174 | 059188 |
| 1-1/4 | 32 | 036175 | 059189 |
| 1-1/2 | 40 | 036176 | 059190 |
| 2 | 50 | 036177 | 059191 |

## 45° Elbow Soc x Soc



| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 1/4 | 6 | 036142 | 059162 |
| 3/8 | 9 | 036143 | 059163 |
| 1/2 | 12 | 036144 | 059164 |
| 3/4 | 20 | 036145 | 059165 |
| 1 | 25 | 036146 | 059166 |
| 1-1/4 | 32 | 036147 | 059167 |
| 1-1/2 | 40 | 036148 | 059168 |
| 2 | 50 | 036149 | 059169 |
| 2-1/2 | 65 | 036150 | 059170 |
| 3 | 75 | 036151 | 059171 |
| 4 | 100 | 036152 | 059172 |
| 6 | 150 | 036154 | 059173 |
| 8 | 200 | 036155 | 059174 |
| 10 | 250 | 036862 ▮ | 059087 ▮ |
| 12 | 300 | 036863 ▮ | 059088 ▮ |
| 10 | 250 | 036156 † | - |
| 12 | 300 | 036157 † | - |
| 14 | 350 | 036158 † | - |
| 16 | 400 | 036159 † | - |

## 45° Elbow FPT x FPT



| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 1/4 | 6 | 036160 | 059176 |
| 3/8 | 9 | 036161 | 059177 |
| 1/2 | 12 | 036162 | 059178 |
| 3/4 | 20 | 036163 | 059179 |
| 1 | 25 | 036164 | 059180 |
| 1-1/4 | 32 | 036165 | 059181 |
| 1-1/2 | 40 | 036166 | 059182 |
| 2 | 50 | 036167 | 059183 |
| 2-1/2 | 65 | 036168 | 059184 |
| 3 | 75 | 036169 | 059185 |
| 4 | 100 | 036170 | 059186 |

## 30° Elbow Soc x Soc

| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 6 | 150 | 236003 | 059022 |

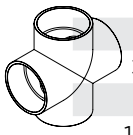
## 22-1/2° Elbow Soc x Soc

| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 2 | 50 | 036134 | 059614 |
| 3 | 75 | 036135 | 059615 |
| 4 | 100 | 036136 | 059616 |
| 6 | 150 | 036137 † | - |
| 8 | 200 | 036138 † | - |
| 10 | 250 | 036139 † | - |
| 12 | 300 | 036140 † | - |

## 11-1/4° Elbow Soc x Soc

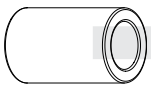
| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 2 | 50 | - | 059617 |
| 3 | 75 | - | 059618 |
| 4 | 100 | - | 059619 |

## Cross Soc x Soc x Soc x Soc



| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 1/4 | 6 | - | 059620 |
| 1/2 | 12 | 036116 | 059154 |
| 3/4 | 20 | 036117 | 059155 |
| 1 | 25 | 036118 | 059156 |
| 1-1/4 | 32 | 036119 | 059157 |
| 1-1/2 | 40 | 036120 | 059158 |
| 2 | 50 | 036121 | 059159 |
| 2-1/2 | 65 | 036122 | 059018 |
| 3 | 75 | 036123 | 059160 |
| 4 | 100 | 036124 | 059161 |
| 6 | 150 | 036125 † | - |

## Coupling Soc x Soc



| Dimension inches | Dimension mm | PVC Sch 80 Product Code | CPVC Sch 80 Product Code |
|---|---|---|---|
| 1/4 | 6 | 036088 | 059130 |
| 3/8 | 9 | 036089 | 059131 |
| 1/2 | 12 | 036090 | 059132 |
| 3/4 | 20 | 036091 | 059133 |
| 1 | 25 | 036092 | 059134 |
| 1-1/4 | 32 | 036093 | 059135 |
| 1-1/2 | 40 | 036094 | 059136 |
| 2 | 50 | 036095 | 059137 |
| 2-1/2 | 65 | 036096 | 059138 |
| 3 | 75 | 036097 | 059139 |
| 4 | 100 | 036098 | 059140 |
| 6 | 150 | 036099 | 059141 |
| 8 | 200 | 036100 | 059142 |
| 10 | 250 | 036101 † | 059033 † |
| 12 | 300 | 036102 † | 059043 † |
| 14 | 350 | 036103 † | - |
| 16 | 400 | 036889 † | - |

▮,†,◗ See page 75 for descriptions