

# Industrial Product Catalogue



[www.ipexinc.com](http://www.ipexinc.com)

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- Process Piping Systems
- Double Containment Systems
- Acid Waste Piping Systems
- Compressed Air Systems
- Thermoplastic Valves
- Specialty Products



**IPEX**

We build tough products for tough environments.®

NEUTRATANK

Clear-Guard™

PLENUMLINE™

Centra-Guard™

enpure™

Guardian™

Encase™

Duratec®  
AIRLINE SYSTEM

Xirtec 140

CORZAN®

FLOWAY™

ENFIELD™

CustomGuard®

LABLINE®

Duraplus®



# Committed to EXCELLENCE

As one of the world's leading manufacturer's of thermoplastic pipe, valves, fittings and related products for plumbing and mechanical applications, IPEX offers a comprehensive range of integrated solutions to meet the needs of engineers and contractors in commercial, institutional, industrial and residential construction.

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# PHYSICAL PROPERTIES

PVC (POLYVINYL CHLORIDE) CPVC (CHLORINATED POLYVINYL CHLORIDE)

PROPERTIES	MATERIALS			STANDARDS
	PVC	CPVC (STANDARD)	CORZAN CPVC (HIGH IMPACT)	
Cell classification	12454	23447	24448	ASTM D1784
Specific gravity	1.42	1.50	1.51	ASTM D792
Tensile strength, psi at 73°F	7,000	7,500	7,320	ASTM D638
Modulus of elasticity tensile, psi at 73°F	400,000	380,000	423,000	ASTM D638
Flexural strength, psi	14,500	11,400	13,200	ASTM D790
Izod impact, ft.lbs./in. at 73°F, notched	0.65	2.0	10.0	ASTM D256
Compressive strength, psi	9,000	10,100	10,100	ASTM D695
Poisson's ratio	0.38	0.33	0.33	
Working stress, psi at 73°F	2,000	2,000	2,000	
Coefficient of thermal expansion in./in./°F (x 10 <sup>-5</sup> )	3.0	3.8	3.4	ASTM D696
Linear expansion, in./10°F per 100' of pipe	0.36	0.44 - 0.46	0.41	
Maximum operating temperature under pressure	140°F (60°C)	200°F (93°C)	200°F (93°C)	
Deflection temperature under load, °F at 66 psi	173	n/a	n/a	ASTM D648
Deflection temperature under load, °F at 264 psi	160	212	239	ASTM D648
Thermal conductivity, BTU.in./hr.ft <sup>2</sup> .°F	1.2	0.95	0.95	ASTM C177
Burning rate	Self extinguish	Self extinguish	Self extinguish	ASTM D635
Burning class	V-0	V-0	V-0	UL-94
Flash ignition, °F	730	900	900	
Limited oxygen index (%)	43	60	60	ASTM D2863-70
Water absorption, %, (24 hrs. at 73°F)	0.05	0.03	0.03	ASTM D570

\* The properties listed in this table represent general material properties and should be used as a guideline only.

IPEX offers a comprehensive range of integrated process piping systems – pipe, fittings, flanges, strainers and valves in PVC, CPVC, polypropylene and ABS – designed to meet the temperature, pressure and size requirements of a wide range of chemical processing and similar industrial applications.

In addition to costing less than common and exotic metal systems, IPEX thermoplastic process piping systems are lightweight, as well as easy to handle, store, cut and join, so transportation and installation cost are substantially lower.

When you specify a high-performance process piping system from IPEX, you get the added benefits of a complete piping solution that is engineered for total integration, and backed by comprehensive, coast-to-coast support – all from one reliable source.

# Process Piping Systems



Xirtec PVC & Corzan CPVC

2

Enpure High Purity

26

Duraplus ABS Industrial

34

# XIRTEC PVC & CORZAN CPVC

PVC Sch 40 - 1/2" - 24" (12mm - 600mm)  
PVC Sch 80 - 1/4" - 24" (6mm - 600mm)  
CPVC Sch 40 & 80 - 1/4" - 16" (6mm - 300mm)



## THE IPEX SYSTEM ADVANTAGE

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

IPEX developed the Xirtec®140 (PVC) and Corzan® (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 the problems inherent in purchasing and installing piping system components manufactured by several different companies.

IPEX high-performance vinyl systems are designed to meet the temperature, pressure and size requirements of piping systems used in chemical processes and other industrial applications. They feature outstanding resistance to photodegradation, creep stress and immunity to oxidation, 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.

Xirtec140 pipe and fittings and Corzan pipe are available in Schedule 40 and 80, IPS. Corzan fittings are available in Schedule 80. All pipe and fittings are also available in cast iron sizes.

## APPLICATIONS

- Plant chemical distribution lines
- Water and wastewater
- 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

### XIRTEC140



ASTM D1785



CSA B137.3



NSF 14

### CORZAN



ASTM F441



ULC-102.2

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 & Corzan pipe can significantly reduce labour and transportation costs on a typical installation. The reason? They are lightweight, easily handled, stored, cut and joined.
- 2 Extended Life**

Xirtec PVC and Corzan CPVC provide years of maintenance free service. Our materials will not rust, pit, scale or corrode on either interior or exterior surfaces. Thermoplastic piping systems in a variety of demanding industrial applications have operated successfully for over 45 years.
- 3 Superior Underground Performance**

Xirtec and Corzan CPVC are immune to damage 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 and Corzan have a substantially lower Roughness Factor than metal and other materials, and since they do not rust, pit, scale or corrode, the interior walls remain smooth in virtually any service.
- 6 Potable Water Approved**

Xirtec140 polyvinyl chloride (PVC) and Corzan chlorinated polyvinyl chloride (CPVC) are suitable for use with potable water as listed with the National Sanitation Foundation (NSF) and CSA International.
- 7 Exceptional Temperature Range**

IPEX vinyl systems are designed to meet a broad range of service temperatures. Xirtec has a recommended maximum service temperature of 140°F (60°C) in pressure, with occasional exposure to boiling water (212°F / 100°C) in drainage; Corzan has a maximum service temperature of 200°F.
- 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 and Corzan piping materials requires less than half the energy needed to produce the equivalent size of carbon steel or steel alloy materials.



### **i 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 wood chips.

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.

**PVC PIPE PRESSURE RATINGS**

Sizes		IPEX schedule 40 PVC			IPEX Schedule 80 PVC		
Diameter	O.D.	Wall Thickness	I.D.	*Max. Pressure 73°F	Wall Thickness	I.D.	*Max. Pressure 73°F
(in.)	(in.)	(in.)	(in.)	(psi)	(in.)	(in.)	(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

**CPVC PIPE PRESSURE RATINGS**

Sizes		IPEX schedule 40 CPVC			IPEX Schedule 80 CPVC		
Diameter	O.D.	Wall Thickness	I.D.	*Max. Pressure 73°F	Wall Thickness	I.D.	*Max. Pressure 73°F
(in.)	(in.)	(in.)	(in.)	(psi)	(in.)	(in.)	(psi)
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

# PRODUCT SELECTION CHART

## XIRTEC 140 PRESSURE PIPE

Dimension		PVC Sch 40 White Plain End	PVC Sch 40 Grey Solvent Bell End	PVC Sch 80 Grey Plain End	PVC Sch 80 Grey Solvent Bell End	CPVC Sch 40 Plain End	CPVC Sch 80 Plain End
inches	mm	Product Code	Product Code	Product Code	Product Code	Product Code	Product Code
1/2 x 10'	12 x 3m	022600	022004	-	-	-	-
3/4 x 10'	20 x 3m	022633	022011	-	-	-	-
1 x 10'	25 x 3m	022612	022016	-	-	-	-
1-1/4 x 10'	32 x 3m	022608	022027	-	-	-	-
1-1/2 x 10'	40 x 3m	022614	022032	-	-	-	-
2 x 10'	50 x 3m	022618	022037	-	-	-	-
2-1/2 x 10'	65 x 3m	022621	022042	-	-	-	-
3 x 10'	75 x 3m	022637	022046	-	-	-	-
1/4 x 20'	6 x 6m	-	-	085103	-	n/a	019100
3/8 x 20'	10 x 6m	-	-	085104	-	019300	019203
1/2 x 20'	12 x 6m	-	-	085101	-	-	-
3/4 x 20'	20 x 6m	-	-	085107	-	019301	019205
1 x 20'	25 x 6m	-	-	085110	-	019302	019207
1-1/4 x 20'	32 x 6m	-	-	085117	-	019303	019209
1-1/2 x 20'	40 x 6m	-	-	085115	085127	019304	019211
2 x 20'	50 x 6m	-	-	085120	085132	019305	019213
2-1/2 x 20'	65 x 6m	-	-	085125	085134	019306	019216
3" x 20'	75 x 6m	-	-	085130	085137	019307	019217
4 x 20'	100 x 6m	-	022040	085140	085139	019308	019219
6 x 20'	150 x 6m	-	022060	085160	085162	019309	019220
8 x 20'	200 x 6m	-	022058	085180	085147	019310	019221
10 x 20'	250 x 6m	-	022061	085190	085192	019013	019222
12 x 20'	300 x 6m	-	022064	085195	085151	019016	019223
14 x 20'	350 x 6m	-	022066	085158	085152	019227	019228
16 x 20'	400 x 6m	-	022068	085153	085155	019226	019229
18 x 20'	450 x 6m	-	022069	085159	085156	-	-
20 x 20'	500 x 6m	-	022072	085170	085170	-	-
24 x 20'	600 x 6m	-	022073	085171	085171	-	-

### FOR XIRTEC 140 PVC SCHEDULE 40 WHITE

† Fabricated fittings

■ Molded fittings: 150 psi max. working pressure, non-shock @ 23°F (73°F)

### FOR XIRTEC 140 PVC SCHEDULE 40 GREY

† Indicates fabricated and fiberglass reinforced pipe fittings


■ Indicates Series 160 Fabricated and Fiberglass reinforced pipe fittings. The maximum continuous working pressure of fittings is 160 psi @ 23°C (73°F) under ideal conditions. no provisions have been made for pressure surges, water hammer, or other conditions which should be considered.

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code


Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

**Tee** Soc x Soc x Soc




1/2	12	035775	035290
3/4	20	035776	035291
1	25	035777	035292
1-1/4	32	035778	035293
1-1/2	40	035779	035294
2	50	035780	035295
2-1/2	65	035781	035296
3	75	035782	035297
4	100	035783	035298
5	125	035784	035299
6	150	035785	035300
8	200	035786	035301
10	250	035930	■ -
12	300	035931	■ -
10	250	-	+ 035302 +
12	300	035787	+ 035303 +
14	350	035788	+ 035304 +
16	400	-	+ - +
18	450	-	+ - ▶
20	500	-	+ - ▶
24	600	-	+ - ▶

**Reducing Tee** Soc x Soc x Soc




1/2 x 1/2 x 3/4	12 x 12 x 20	035789	-
1/2 x 1/2 x 1	12 x 12 x 25	035354	-
3/4 x 1/2 x 1/2	20 x 12 x 12	035790	-
3/4 x 1/2 x 3/4	20 x 12 x 20	235007	-
3/4 x 3/4 x 1/2	20 x 20 x 12	035792	035305
3/4 x 3/4 x 1	20 x 20 x 25	035791	-
1 x 1/2 x 1	25 x 12 x 25	235008	-
1 x 3/4 x 1/2	25 x 20 x 12	235009	-
1 x 3/4 x 3/4	25 x 20 x 20	035994	-
1 x 3/4 x 1	25 x 20 x 25	035962	-
1 x 1 x 1/2	25 x 25 x 12	035794	035307
1 x 1 x 3/4	25 x 25 x 20	035795	035308
1 x 1 x 1-1/4	25 x 25 x 32	035989	-
1 x 1 x 1-1/2	25 x 25 x 40	035793	-
1-1/4 x 1 x 1/2	32 x 25 x 12	235010	-
1-1/4 x 1 x 3/4	32 x 25 x 20	035796	-
1-1/4 x 1 x 1	32 x 25 x 25	235011	-
1-1/4 x 1-1/4 x 1/2	32 x 32 x 12	035797	035311
1-1/4 x 1-1/4 x 3/4	32 x 32 x 20	035798	035312
1-1/4 x 1-1/4 x 1	32 x 32 x 25	035799	035313
1-1/4 x 1-1/4 x 1-1/2	32 x 32 x 40	235012	-
1-1/2 x 1-1/4 x 1/2	40 x 32 x 12	235014	-
1-1/2 x 1-1/4 x 3/4	40 x 32 x 20	235015	-
1-1/2 x 1-1/4 x 1	40 x 32 x 25	035959	-
1-1/2 x 1-1/2 x 1/2	40 x 40 x 12	035800	035315
1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	035801	035316
1-1/2 x 1-1/2 x 1	40 x 40 x 25	035802	035317
1-1/2 x 1-1/2 x 1-1/4	40 x 40 x 32	035803	035318
1-1/2 x 1-1/2 x 2	40 x 40 x 50	035082	-
1-1/2 x 1-1/2 x 2-1/2	40 x 40 x 65	235016	-
2 x 1-1/2 x 3/4	50 x 40 x 20	235017	-
2 x 1-1/2 x 1	50 x 40 x 25	035804	-
2 x 1-1/2 x 1-1/2	50 x 40 x 40	035805	-
2 x 2 x 1/2	50 x 50 x 12	035806	035319
2 x 2 x 3/4	50 x 50 x 20	035807	035320
2 x 2 x 1	50 x 50 x 25	035808	035321
2 x 2 x 1-1/4	50 x 50 x 32	035809	-
2 x 2 x 1-1/2	50 x 50 x 40	035810	035322
2-1/2 x 2-1/2 x 1/2	65 x 65 x 12	035811	-
2-1/2 x 2-1/2 x 3/4	65 x 65 x 20	035812	-
2-1/2 x 2-1/2 x 1	65 x 65 x 25	035813	-
2-1/2 x 2-1/2 x 1-1/4	65 x 65 x 32	035814	-
2-1/2 x 2-1/2 x 1-1/2	65 x 65 x 40	035815	-
2-1/2 x 2-1/2 x 2	65 x 65 x 50	035816	-
3 x 3 x 1/2	75 x 75 x 12	035817	-
3 x 3 x 3/4	75 x 75 x 20	035818	-
3 x 3 x 1	75 x 75 x 25	035819	035326
3 x 3 x 1-1/4	75 x 75 x 32	035820	-
3 x 3 x 1-1/2	75 x 75 x 40	035821	035327
3 x 3 x 2	75 x 75 x 50	035822	035328
3 x 3 x 2-1/2	75 x 75 x 65	035823	035329
3 x 3 x 4	75 x 75 x 100	235018	-
4 x 4 x 3/4	100 x 100 x 20	035824	-
4 x 4 x 1	100 x 100 x 25	035825	-

**Tee** Soc x Soc x Fpt



1/2	12	035851	-
3/4	20	035852	-
1	25	035853	-
1-1/4	32	035854	-
1-1/2	40	035855	-
2	50	035856	-
2-1/2	65	035857	-
3	75	035858	-
4	100	035859	-
3/4 x 3/4 x 1/2	20 x 20 x 12	-	035348
1 x 1 x 1/2	25 x 25 x 12	-	-
1 x 1 x 3/4	25 x 25 x 20	-	035349
1-1/4 x 1-1/4 x 1/2	32 x 32 x 12	-	035350
1-1/4 x 1-1/4 x 3/4	32 x 32 x 20	-	035977
1-1/4 x 1-1/4 x 1	32 x 32 x 25	-	-
1-1/2 x 1-1/2 x 1/2	40 x 40 x 12	-	035351
1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	-	035352
1-1/2 x 1-1/2 x 1	40 x 40 x 25	-	035353
2 x 2 x 3/4	50 x 50 x 20	-	035355
2 x 2 x 1	50 x 50 x 25	-	035356
2 x 2 x 1-1/2	50 x 50 x 40	-	-

**Tee** Fpt x Fpt x Fpt



1/2	12	035844	-
3/4	20	035845	-
1	25	035846	-
1-1/4	32	035847	-
1-1/2	40	035848	-
2	50	035849	-

■,†,▶ See page 75 for descriptions

## PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

### Reducing Tee Soc x Soc x Soc (cont'd)

### Reducing Tee Soc x Soc x Fpt



4 x 4 x 1-1/4	100x100x32	035826	-
4 x 4 x 1-1/2	100x100x40	035827	-
4 x 4 x 2	100x100x50	035828	035331
4 x 4 x 3	100x100x75	035829	035332
5 x 5 x 2	125x125x50	035956	-
5 x 5 x 3	125x125x75	035830	-
5 x 5 x 4	125x125x100	035831	-
6 x 6 x 2	150x150x50	035832	-
6 x 6 x 3	150x150x75	035833	035334
6 x 6 x 4	150x150x100	035834	035335
8 x 8 x 3	200x200x75	035835	- †
8 x 8 x 4	200x200x100	035836	035336 †
8 x 8 x 6	200x200x150	035837	035337 †
10 x 10 x 4	250x250x100	035971	† 035339
10 x 10 x 6	250x250x150	035838	† 035340
10 x 10 x 8	250x250x200	035839	† 035341
12 x 12 x 4	300x300x100	-	† 035342
12 x 12 x 6	300x300x150	035840	† 035343
12 x 12 x 8	300x300x200	035949	† 035344
12 x 12 x 10	300x300x250	-	† 035345
14 x 14 x 6	350x350x150	035841	† -
14 x 14 x 8	350x350x200	035961	† -
14 x 14 x 10	350x350x250	035842	† -
14 x 14 x 12	350x350x300	-	† - †
16 x 16 x 8	400x400x200	-	† - †
16 x 16 x 10	400x400x250	035843	† - †
16 x 16 x 12	400x400x300	-	† - †
16 x 16 x 14	400x400x350	-	† - †
18 x 18 x 8	450x450x200	-	† - †
18 x 18 x 10	450x450x250	-	† - †
18 x 18 x 12	450x450x300	-	† - †
18 x 18 x 14	450x450x350	-	† - †
18 x 18 x 16	450x450x400	-	† - †
20 x 20 x 12	500x500x300	-	† - †
20 x 20 x 14	500x500x350	-	† - †
20 x 20 x 16	500x500x400	-	† - †
20 x 20 x 18	500x500x450	-	† - †
24 x 24 x 14	600x600x350	-	† - †
24 x 24 x 16	600x600x400	-	† - †
24 x 24 x 18	600x600x450	-	† - †
24 x 24 x 20	600x600x500	-	† - †

1/2 x 1/2 x 3/4	12 x 12 x 20	035860	-
3/4 x 1/2 x 1/2	20 x 12 x 12	035862	-
3/4 x 1/2 x 3/4	20 x 12 x 20	235019	-
3/4 x 3/4 x 1/2	20 x 20 x 12	035863	-
1 x 3/4 x 1/2	25 x 20 x 12	035867	-
1 x 1 x 1/2	25 x 25 x 12	035865	-
1 x 1 x 3/4	25 x 25 x 20	035866	-
1-1/4 x 1 x 1/2	32 x 25 x 12	035868	-
1-1/4 x 1 x 1	32 x 25 x 25	235020	-
1-1/4 x 1-1/4 x 1/2	32 x 32 x 12	035869	-
1-1/4 x 1-1/4 x 3/4	32 x 32 x 20	035870	-
1-1/4 x 1-1/4 x 1	32 x 32 x 25	035871	-
1-1/2 x 1-1/4 x 1/2	40 x 32 x 12	235021	-
1-1/2 x 1-1/4 x 3/4	40 x 32 x 20	035872	-
1-1/2 x 1-1/4 x 1	40 x 32 x 25	235022	-
1-1/2 x 1-1/2 x 1/2	40 x 40 x 12	035873	-
1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	035874	-
1-1/2 x 1-1/2 x 1	40 x 40 x 25	035875	-
1-1/2 x 1-1/2 x 1-1/4	40 x 40 x 32	035876	-
2 x 1-1/2 x 3/4	50 x 40 x 20	235023	-
2 x 1-1/2 x 1	50 x 40 x 25	235024	-
2 x 2 x 1/2	50 x 50 x 12	035877	-
2 x 2 x 3/4	50 x 50 x 20	035878	-
2 x 2 x 1	50 x 50 x 25	035879	-
2 x 2 x 1-1/4	50 x 50 x 32	035880	-
2 x 2 x 1-1/2	50 x 50 x 40	035881	-
2-1/2 x 2-1/2 x 1/2	65 x 65 x 12	235025	-
2-1/2 x 2-1/2 x 3/4	65 x 65 x 20	035592	-
2-1/2 x 2-1/2 x 1	65 x 65 x 25	035882	-
2-1/2 x 2-1/2 x 1-1/4	65 x 65 x 32	035883	-
2-1/2 x 2-1/2 x 1-1/2	65 x 65 x 40	035884	-
3 x 3 x 1/2	75 x 75 x 12	035885	-
3 x 3 x 3/4	75 x 75 x 20	035886	-
3 x 3 x 1	75 x 75 x 25	035887	-
3 x 3 x 1-1/4	75 x 75 x 32	035888	-
3 x 3 x 1-1/2	75 x 75 x 40	035889	-
3 x 3 x 2	75 x 75 x 50	035890	-
4 x 4 x 1	100x100x25	035891	-
4 x 4 x 1-1/2	100x100x40	035893	-
4 x 4 x 2	100x100x50	035894	-
4 x 4 x 3	100x100x75	035895	-
5 x 5 x 4	125x125x100	235026	-
6 x 6 x 2	150x150x50	035896	-
6 x 6 x 3	150x150x75	235027	-
6 x 6 x 4	150x150x100	035897	-
8 x 8 x 3	200x200x75	235028	-
8 x 8 x 4	200x200x100	035898	-




# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code


Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

**90° Elbow Soc x Soc**




Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
3/8	9	-	035108
1/2	12	035519	035109
3/4	20	035520	035110
1	25	035521	035111
1-1/4	32	035522	035112
1-1/2	40	035523	035113
2	50	035524	035114
2-1/2	65	035525	035115
3	75	035526	035116
4	100	035527	035117
5	125	035528	035118
6	150	035529	035119
8	200	035530	035120
10	250	035928	-
12	300	035929	-
10	250	035531	035121
12	300	035532	035122
14	350	035533	035123
16	400	035534	035124
18	450	-	-
20	500	-	-
24	600	-	-

**90° Street Elbow Spig x Soc**



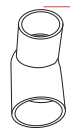
Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2	12	035544	-
3/4	20	035545	-
1	25	035546	035128
1-1/4	32	035547	-
1-1/2	40	035548	035129
2	50	035549	-

**90° Street Elbow Mpt x Fpt**



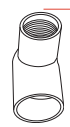
Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2	12	035552	035132
3/4	20	035553	035133
1	25	035554	035134
1-1/4	32	035555	-
1-1/2	40	035556	035135
2	50	035557	-

**90° Reducing Elbow Soc x Soc**




Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
3/4 x 1/2	20 x 12	035535	-
1 x 1/2	25 x 12	035536	-
1 x 3/4	25 x 20	035978	-
1-1/4 x 1/2	32 x 12	235029	-
1-1/4 x 3/4	32 x 20	235030	-
1-1/4 x 1	32 x 25	035991	-
1-1/2 x 1/2	40 x 12	235031	-
1-1/2 x 1	40 x 25	235032	-
2 x 1-1/2	50 x 40	035537	-

**90° Reducing Elbow Soc x Fpt**




Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2 x 3/4	12 x 20	035514	-
3/4 x 1/2	20 x 12	035515	-
1 x 1/2	25 x 12	035516	-
1 x 3/4	25 x 20	035517	-
1-1/4 x 1	32 x 25	051007	-
1-1/2 x 1	40 x 25	035594	-
2 x 1-1/2	50 x 40	035518	-

**Side Outlet Elbow Soc x Soc x Soc**




Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2	12	035498	-

**Side Outlet Elbow Soc x Soc x Fpt**




Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2	12	235033	-
3/4	20	235034	-
3/4 x 3/4 x 1/2	20 x 20 x 12	235035	-
1 x 1 x 1/2	25 x 25 x 12	235036	-

**90° Elbow Soc x Fpt**




Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2	12	035506	035101
3/4	20	035507	035102
1	25	035508	035103
1-1/4	32	035509	035104
1-1/2	40	035510	035105
2	50	035511	035106
2-1/2	65	035512	-
3	75	035589	-
4	100	035513	-

**90° Elbow Fpt x Fpt**



Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2	12	035538	035125
3/4	20	035539	035126
1	25	035540	035127
1-1/4	32	035541	-
1-1/2	40	035542	-
2	50	035543	-

**90° Street Elbow Mt x Soc**



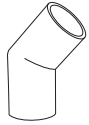
Dimension (inches)	Dimension (mm)	Sch 40 White Product Code	Sch 40 Grey Product Code
1/2	12	035500	-
3/4	20	035501	-
1	25	035502	-
1-1/4	32	035503	-
1-1/2	40	035504	-
2	50	035505	-

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

## 45° Elbow Soc x Soc



1/2	12	035481	035083
3/4	20	035482	035084
1	25	035483	035085
1-1/4	32	035484	035086
1-1/2	40	035485	035087
2	50	035486	035088
2-1/2	65	035487	035089
3	75	035488	035090
4	100	035489	035091
5	125	035490	035092
6	150	035491	035093
8	200	035492	035094
10	250	035926	-
12	300	035927	-
10	250	035493	+ 035095 +
12	300	035494	+ 035096 +
14	350	-	+ 035097 +
16	400	035495	+ 035098 +
18	450	-	+ - ▶
20	500	035496	+ - ▶
24	600	035497	+ - ▶

## 22-1/2° Radius Bends - 6D Sp x Sp



1/2	12	n/a	+ - +
3/4	20	n/a	+ 035000 +
1	25	035383	+ - +
1-1/4	32	035384	+ - +
1-1/2	40	035385	+ 035970 +
2	50	035386	+ 035001 +
2-1/2	65	035387	+ - +
3	75	035388	+ 035002 +
4	100	035389	+ 035003 +
6	150	035390	+ - +
8	200	-	+ - +
10	250	-	+ 057502 +
12	300	-	+ - +

## 90° Radius Bends - 6D Sp x Sp



1/2	12	-	+ 035932 +
3/4	20	035396	+ 035009 +
1	25	035397	+ 035010 +
1-1/4	32	035398	+ 035011 +
1-1/2	40	035399	+ 035012 +
2	50	035400	+ 035013 +
2-1/2	65	035401	+ 035957 +
3	75	035402	+ 035014 +
4	100	035403	+ 035015 +
6	150	035404	+ 035016 +
8	200	-	+ n/a +
10	250	-	+ n/a +
12	300	-	+ - +

## 45° Radius Bends - 6D Sp x Sp



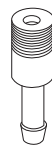
1/2	12	-	+ - +
3/4	20	035391	+ - +
1	25	-	+ - +
1-1/4	32	-	+ - +
1-1/2	40	035392	+ 035004 +
2	50	035939	+ 035005 +
2-1/2	65	-	+ - +
3	75	035393	+ 035006 +
4	100	035394	+ 035007 +
6	150	035395	+ 035008 +
8	200	-	+ - +
10	250	-	+ - +
12	300	-	+ - +

## Hose Adapter Insert x IPS Soc



1/2	12	035596	-
3/4	20	035597	-
1	25	035598	-
1-1/4	32	035599	-
1-1/2	40	035600	-
2	50	035601	-
3	75	235037	-
4	100	235038	-

## Hose Adapter Insert x Mt



1/2	12	-	035157
3/4	20	-	035158
1	25	-	035159
1-1/4	32	-	035160
1-1/2	40	-	035161
2	50	-	035162
2-1/2	65	-	035163
3	75	-	035164
4	100	-	035165


ASTM D2609 - Plastic Insert fitting for polyethylene

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code


Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

**Cross** Soc x Soc x Soc x Soc




1/2	12	035469	035068
3/4	20	035470	035069
1	25	035471	035070
1-1/4	32	035472	035071
1-1/2	40	035473	035072
2	50	035474	035073
2-1/2	65	035475	035074
3	75	035476	035075
4	100	035477	035076
6	150	035478	† 035077 †
8	200	-	† - †
10	250	-	† - †
12	300	-	† - †
14	350	-	† - †
16	400	-	† - †
18	450	-	† - †
20	500	-	† - †
24	600	-	† - †

**Coupling** Soc x Soc




3/8	9	035447	-
1/2	12	035448	035052
3/4	20	035449	035053
1	25	035450	035054
1-1/4	32	035451	035055
1-1/2	40	035452	035056
2	50	035453	035057
2-1/2	65	035454	035058
3	75	035455	035059
4	100	035456	035060
5	125	035457	035061
6	150	035458	035062
8	200	035459	035063
10	250	035460	† 035064 †
12	300	035461	† 035065 †
14	350	035462	† 035066 †
16	400	035463	† 035067 †
18	450	-	† 035933 †
20	500	035464	† - †
24	600	035465	† - †

**Reducing Cross** Soc x Soc x Soc x Soc



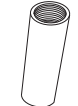
8 x 4	200 x 100	-	†	-
8 x 6	200 x 150	-	†	-
10 x 6	250 x 150	-	†	-
10 x 8	250 x 200	-	†	-
12 x 8	300 x 200	-	†	-
12 x 10	300 x 250	-	†	-
14 x 10	350 x 250	-	†	-
14 x 12	350 x 300	-	†	-
16 x 12	400 x 300	-	†	-
16 x 14	400 x 350	-	†	-
18 x 14	450 x 350	-	†	-
18 x 16	450 x 400	-	†	-
20 x 16	500 x 400	-	†	-
20 x 18	500 x 450	-	†	-
24 x 18	600 x 450	-	†	-
24 x 20	600 x 500	-	†	-

**Female Adapter** Soc x Fpt




1/2	12	035559	035136
3/4	20	035560	035137
1	25	035561	035138
1-1/4	32	035562	035139
1-1/2	40	035563	035140
2	50	035564	035141
2-1/2	65	035565	035142
3	75	035566	035143
4	100	035567	035144
5	125	035568	035145
6	150	035569	035146
8	200	035570	-

**Coupling** Fpt x Fpt




1/2	12	035466
3/4	20	035467
1	25	035468

**Female Adapter** Spig x Fpt




1/2	12	-	035148
3/4	20	-	035149
1	25	-	035150
1-1/4	32	-	035151
1-1/2	40	-	035152
2	50	-	035153
3	75	-	035155
4	100	-	035156

**Reducing Coupling** Soc x Soc



3/4 x 1/2	20 x 12	035759
1 x 3/4	25 x 20	035760
1-1/4 x 1	32 x 25	035761
1-1/2 x 1-1/4	40 x 32	035762
2 x 1-1/2	50 x 40	035764
4 x 3	100 x 75	035765

**Reducing Female Adapter** Soc x Fpt



1/2 x 1/4	12 x 6	035571	-
1/2 x 3/8	12 x 9	035951	-
1/2 x 3/4	12 x 20	035572	-
3/4 x 1/2	20 x 12	035992	-
3/4 x 1	20 x 25	035990	-
1 x 3/4	25 x 20	035958	-

†, †, † See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

### Concentric Coupling Soc x Soc



8 x 3	200 x 75	035437	†	-	†
8 x 4	200 x 100	035438	†	035042	†
8 x 6	200 x 150	035439	†	035043	†
10 x 4	250 x 100	035440	†	035044	†
10 x 6	250 x 150	035441	†	035045	†
10 x 8	250 x 200	035442	†	035046	†
12 x 4	300 x 100	-	†	-	†
12 x 6	300 x 150	035443	†	035047	†
12 x 8	300 x 200	035444	†	035048	†
12 x 10	300 x 250	-	†	035049	†
14 x 6	350 x 150	-	†	-	†
14 x 8	350 x 200	035445	†	-	†
14 x 10	350 x 250	-	†	-	†
14 x 12	350 x 300	-	†	-	†
16 x 8	400 x 200	035446	†	-	†
16 x 10	400 x 250	-	†	-	†
16 x 12	400 x 300	-	†	035051	†
16 x 14	400 x 350	-	†	-	†
18 x 8	450 x 200	-	†	-	▶
18 x 10	450 x 250	-	†	-	▶
18 x 12	450 x 300	-	†	-	▶
18 x 14	450 x 350	-	†	-	▶
18 x 16	450 x 400	-	†	-	▶
20 x 12	500 x 300	-	†	-	▶
20 x 14	500 x 350	-	†	-	▶
20 x 16	500 x 400	-	†	-	▶
20 x 18	500 x 450	-	†	-	▶
24 x 14	600 x 350	-	†	-	▶
24 x 16	600 x 400	035436	†	-	▶
24 x 18	600 x 450	-	†	-	▶
24 x 20	600 x 500	-	†	-	▶

### Eccentric Coupling Soc x Soc



8 x 4	200 x 100	-	†	035078	†
8 x 6	200x150	-	†	035079	†
10 x 4	250 x 100	035479	†	-	†
10 x 6	250 x 150	-	†	035080	†
10 x 8	250 x 200	-	†	035081	†
12 x 4	300 x 100	-	†	-	†
12 x 6	300 x 150	035480	†	-	†
12 x 8	300 x 200	-	†	-	†
12 x 10	300 x 250	-	†	-	†
14 x 6	350 x 150	-	†	-	†
14 x 8	350 x 200	-	†	-	†
14 x 10	350 x 250	-	†	-	†
14 x 12	350 x 300	-	†	-	†
16 x 8	400 x 200	-	†	-	†
16 x 10	400 x 250	-	†	-	†
16 x 12	400 x 300	-	†	-	†
16 x 14	400 x 350	-	†	-	†
18 x 8	450 x 200	-	†	-	▶
18 x 10	450 x 250	-	†	-	▶
18 x 12	450 x 300	-	†	-	▶
18 x 14	450 x 350	-	†	-	▶
18 x 16	450 x 400	-	†	-	▶
20 x 12	500 x 300	-	†	-	▶
20 x 14	500 x 350	-	†	-	▶
20 x 16	500 x 400	-	†	-	▶
20 x 18	500 x 450	-	†	-	▶
24 x 14	600 x 350	-	†	-	▶
24 x 16	600 x 400	-	†	-	▶
24 x 18	600 x 450	-	†	-	▶
24 x 20	600 x 500	-	†	-	▶

### Male Adapter Soc x Mt



3/8	9	035934	-
1/2	12	035602	-
3/4	20	035603	-
1	25	035604	-
1-1/4	32	035605	-
1-1/2	40	035606	-
2	50	035607	-
2-1/2	65	035608	-
3	75	035609	-
4	100	035610	-
5	125	035611	-
6	150	035612	-
8	200	035613	-

### IPS to PIP Adapter Spig x Soc



6	150	235045	-
8	200	235046	-

### Reducing Male Adapter Mt x Soc



1/2	12	-	035167
1/2 x 3/4	12 x 20	035614	-
3/4	20	-	035168
3/4 x 1/2	20 x 12	035615	-
3/4 x 1	20 x 25	035616	-
1	25	-	035169
1 x 3/4	25 x 20	035617	-
1 x 1-1/4	25 x 32	035618	-
1 1/4	32	-	035170
1-1/4 x 1	32 x 25	035380	-
1-1/4 x 1-1/2	32 x 40	035593	-
1-1/2	40	-	035171
1-1/2 x 1-1/4	40 x 32	035619	-
1-1/2 x 2	40 x 50	035620	-
2	50	-	035172
2 x 1-1/2	50 x 40	035973	-
2 x 2-1/2	50 x 65	235041	-
2-1/2	65	-	035173
2-1/2 x 3	65 x 75	235042	-
2-1/2 x 4	65 x 100	235043	-
3	75	-	035174
3 x 4	75 x 100	235044	-
4	100	-	035175
5	125	-	035176
6	150	-	035177

†,▶ See page 75 for descriptions

## PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

### Riser Extension Fpt x Mpt



1/2	12	035591	-
3/4	20	035944	-
1	25	035947	-

### Spigot x Female Adapter Spig x Fpt



1/2	12	035578	-
3/4	20	035579	-
1	25	035580	-
1-1/4	32	035581	-
1-1/2	40	035582	-
2	50	035583	-
2-1/2	65	035584	-
3	75	035585	-
4	100	035586	-

### Reducer Bushing Spig x Soc



1/2 x 1/4	12 x 6	035643	-
1/2 x 3/8	20 x 9	035644	-
3/4 x 1/2	20 x 12	035646	035209
1 x 1/2	25 x 12	035648	035211
1 x 3/4	25 x 20	035649	035212
1-1/4 x 1/2	32 x 12	035650	035213
1-1/4 x 3/4	32 x 20	035651	035214
1-1/4 x 1	32 x 25	035652	035215
1-1/2 x 1/2	40 x 12	035653	035216
1-1/2 x 3/4	40 x 20	035654	035217
1-1/2 x 1	40 x 25	035655	035218
1-1/2 x 1-1/4	40 x 32	035656	035219
2 x 1/2	50 x 12	035657	035220
2 x 3/4	50 x 20	035658	035221
2 x 1	50 x 25	035659	035222
2 x 1-1/4	50 x 32	035660	035223
2 x 1-1/2	50 x 40	035661	035224
2-1/2 x 1/2	65 x 12	035662	-
2-1/2 x 3/4	65 x 20	035663	-
2-1/2 x 1	65 x 25	035664	-
2-1/2 x 1-1/4	65 x 32	035665	035227
2-1/2 x 1-1/2	65 x 40	035666	035228
2-1/2 x 2	65 x 50	035667	035229
3 x 3/4	75 x 20	035668	-
3 x 1	75 x 25	035669	035231
3 x 1-1/4	75 x 32	035670	035232
3 x 1-1/2	75 x 40	035671	035233
3 x 2	75 x 50	035672	035234
3 x 2-1/2	75 x 65	035673	035235
4 x 2	100 x 50	035677	035238
4 x 2-1/2	100 x 65	035678	035239
4 x 3	100 x 75	035679	035240
5 x 2	125 x 50	035680	-
5 x 3	125 x 75	035681	-
5 x 4	125 x 100	035682	035241

### Reducer Bushing Spig x Soc (con't)



6 x 2	150 x 50	035683	-
6 x 3	150 x 75	035684	-
6 x 4	150 x 100	035685	035244
6 x 5	150 x 125	035686	-
8 x 4	200 x 100	035687	035245 †
8 x 6	200 x 150	035688	035246
10 x 4	250 x 100	035689 †	035247 †
10 x 6	250 x 150	035690 †	035248 †
10 x 8	250 x 200	035691 †	035249 †
12 x 4	300 x 100	035041 †	035250 †
12 x 6	300 x 150	035692 †	035251 †
12 x 8	300 x 200	035693 †	035252 †
12 x 10	300 x 250	035694 †	035253 †
14 x 6	350 x 150	-	† - †
14 x 8	350 x 200	-	† - †
14 x 10	350 x 250	-	† 035254 †
14 x 12	350 x 300	035695 †	035255 †
16 x 8	400 x 200	-	† - †
16 x 10	400 x 250	-	† 035256 †
16 x 12	400 x 300	-	† 035207 †
16 x 14	400 x 350	-	† 035257 †
18 x 10	450 x 250	-	† - †
18 x 12	450 x 300	-	† - †
18 x 14	450 x 350	-	† - †
18 x 16	450 x 400	-	† - †
20 x 12	500 x 300	-	† - †
20 x 14	500 x 350	-	† - †
20 x 16	500 x 400	-	† - †
20 x 18	500 x 450	-	† - †
24 x 14	600 x 350	-	† - †
24 x 16	600 x 400	-	† - †
24 x 18	600 x 450	-	† - †
24 x 20	600 x 500	-	† - †

### T.T. Bushing Mpt x FPT



3/8 x 1/4	9 x 6	035696	-
1/2 x 1/4	12 x 6	035697	-
1/2 x 3/8	12 x 9	035698	-
3/4 x 1/4	20 x 6	035699	-
3/4 x 3/8	20 x 9	035968	-
3/4 x 1/2	20 x 12	035700	-
1 x 1/2	25 x 12	035701	-
1 x 3/4	25 x 20	035702	-
1-1/4 x 1/2	32 x 12	035703	-
1-1/4 x 3/4	32 x 20	035704	-
1-1/4 x 1	32 x 25	035705	-
1-1/2 x 1/2	40 x 12	035706	-
1-1/2 x 3/4	40 x 20	035707	-
1-1/2 x 1	40 x 25	035708	-
1-1/2 x 1-1/4	40 x 32	035709	-
2 x 1	50 x 25	035711	-
2 x 1-1/4	50 x 32	035712	-
2 x 1-1/2	50 x 40	035713	-
2-1/2 x 2	65 x 50	035714	-
3 x 2	75 x 50	035715	-
3 x 2-1/2	75 x 65	035716	-

†, †, † See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

### Reducer Bushing Spig x Fpt



1/2 x 1/8	12 x 3	035717	-
1/2 x 1/4	12 x 6	035718	035258
1/2 x 3/8	12 x 9	035719	035259
3/4 x 1/4	20 x 6	035720	-
3/4 x 1/2	20 x 12	035722	035260
1 x 3/8	25 x 9	035723	-
1 x 1/2	25 x 12	035724	035262
1 x 3/4	25 x 20	035725	035263
1-1/4 x 1/2	32 x 12	035726	035264
1-1/4 x 3/4	32 x 20	035727	035265
1-1/4 x 1	32 x 25	035728	035266
1-1/2 x 1/2	40 x 12	035729	035267
1-1/2 x 3/4	40 x 20	035730	035268
1-1/2 x 1	40 x 25	035731	035269
1-1/2 x 1-1/4	40 x 32	035732	035270
2 x 1/2	50 x 12	035733	035271
2 x 3/4	50 x 20	035734	035272
2 x 1	50 x 25	035735	035273
2 x 1-1/4	50 x 32	035736	035274
2 x 1-1/2	50 x 40	035737	035275
2-1/2 x 1/2	65 x 12	035738	-
2-1/2 x 3/4	65 x 20	035739	-
2-1/2 x 1	65 x 25	035740	-
2-1/2 x 1-1/4	65 x 32	035741	-
2-1/2 x 1-1/2	65 x 40	035742	035277
2-1/2 x 2	65 x 50	035743	035278
3 x 3/4	75 x 20	035744	-
3 x 1	75 x 25	035745	-
3 x 1-1/4	75 x 32	035746	-
3 x 1-1/2	75 x 40	035747	035282 †
3 x 2	75 x 50	035748	035283
3 x 2-1/2	75 x 65	035749	-
4 x 2	100 x 50	035750	035285
4 x 2-1/2	100 x 65	035751	-
4 x 3	100 x 75	035752	035286
5 x 3	125 x 75	035753	-
5 x 4	125 x 100	035754	235062
6 x 2	150 x 50	035755	-
6 x 3	150 x 75	035756	-
6 x 4	150 x 100	035757	035287
6 x 5	150 x 125	035758	-

### 45° Wye Soc x Soc x Soc (50 psi / 345 kPa max)



1/2	12	-	035357 †
3/4	20	-	035358 †
1-1/2	40	-	035359 †
2	50	-	035360 †
2-1/2	65	-	035361 †
3	75	-	- †
4	100	-	035363 †
6	150	-	035364 †
8	200	-	035365 †
10	250	-	035366 †
12	300	-	035367 †
14	350	-	- †
16	400	-	- †
18	450	-	- †
20	500	-	- †
24	600	-	- †

### 45° Reducing Wye Soc x Soc x Soc (50 psi / 345 kPa max)



8 x 8 x 4	200 x 200 x 100	-	035372 †
8 x 8 x 6	200 x 200 x 150	-	035373 †
10 x 10 x 4	250 x 250 x 100	-	- †
10 x 10 x 6	250 x 250 x 150	-	035374 †
10 x 10 x 8	250 x 250 x 200	-	- †
12 x 12 x 4	300 x 300 x 100	-	- †
12 x 12 x 6	300 x 300 x 150	-	035935 †
12 x 12 x 8	300 x 300 x 200	-	- †
12 x 12 x 10	300 x 300 x 250	-	- †
14 x 14 x 6	350 x 350 x 150	-	- †
14 x 14 x 8	350 x 350 x 200	-	- †
14 x 14 x 10	350 x 350 x 250	-	- †
14 x 14 x 12	350 x 350 x 300	-	- †
16 x 16 x 8	400 x 400 x 200	-	035375 †
16 x 16 x 10	400 x 400 x 250	-	- †
16 x 16 x 12	400 x 400 x 300	-	- †
16 x 16 x 14	400 x 400 x 350	-	- †
18 x 18 x 8	450 x 450 x 200	-	- †
18 x 18 x 10	450 x 450 x 250	-	- †
18 x 18 x 12	450 x 450 x 300	-	- †
18 x 18 x 14	450 x 450 x 350	-	- †
18 x 18 x 16	450 x 450 x 400	-	- †
20 x 20 x 12	500 x 500 x 300	-	- †
20 x 20 x 14	500 x 500 x 350	-	- †
20 x 20 x 16	500 x 500 x 400	-	- †
20 x 20 x 18	500 x 500 x 450	-	- †
24 x 24 x 14	600 x 600 x 350	-	- †
24 x 24 x 16	600 x 600 x 400	-	- †
24 x 24 x 18	600 x 600 x 450	-	- †
24 x 24 x 20	600 x 600 x 500	-	- †

### 45° Wye Soc x Soc x Soc



1-1/2	40	035912	■	-
2	50	035913	■	-
3	75	035915	■	-
4	100	035916	■	-
6	150	035917	■	-
6 x 6 x 4	150 x 150 x 100	035922	■	-

**1/2" - 2" - 235 psi maximum internal pressure rating @ 73°F**  
(12 - 50mm - 1 620 kPa maximum internal pressure rating @ 23°C)

**3" - 6" - 150 psi maximum internal pressure rating @ 73°F**  
(75 - 150mm - 1 034 kPa maximum internal pressure rating @ 23°C)

■,† See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 40 WHITE & SCH. 40 GREY FITTINGS

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

Dimension		Sch 40 White	Sch 40 Grey
inches	mm	Product Code	Product Code

### Cap Soc



3/8	9	035406	035590
1/2	12	035407	035017
3/4	20	035408	035018
1	25	035409	035019
1-1/4	32	035410	035020
1-1/2	40	035411	035021
2	50	035412	035022
2-1/2	65	035413	035023
3	75	035414	035024
4	100	035415	035025
5	125	035416	035026
6	150	035417	035027
8	200	035418	035028
10	250	035419	† 035029 †
12	300	035420	† 035030 †
14	350	035421	† 035031 †
16	400	-	† - †
18	450	035422	† - ▶
20	500	035940	† - ▶
24	600	-	† - ▶

### Plug Mpt



3/8	9	035621	-
1/2	12	035622	035188
3/4	20	035623	035189
1	25	035624	035190
1-1/4	32	035625	035191
1-1/2	40	035626	035192
2	50	035627	035193
2-1/2	65	035628	035194
3	75	035629	035195
4	100	035630	035196
6	150	235047	-

### Plug Spig



3/8	9	035946	-
1/2	12	035631	035197
3/4	20	035632	035198
1	25	035633	035199
1-1/4	32	035634	035200
1-1/2	40	035635	035201
2	50	035636	035202
2-1/2	65	035637	035203 †
3	75	035638	035204
4	100	035639	-

### Cap Fpt



3/8	9	035948	-
1/2	12	035423	035032
3/4	20	035424	035033
1	25	035425	035034
1-1/4	32	035426	035035
1-1/2	40	035427	035036
2	50	035428	035037
2-1/2	65	035429	035038
3	75	035430	035039
4	100	035431	-
5	125	035432	-
6	150	035433	-

### Saddles Pipe OD x Soc (Rated for 80 psi / 552 kPa Open-Ended)



• These sizes are bushed.

2-1/2 x 3/4	65 x 20	235048	-
• 3 x 1-1/4	75 x 32	035996	-
• 3 x 1-1/2	75 x 40	235049	-
• 3 x 2	75 x 50	035995	-
• 4 x 1-1/4	100 x 32	035767	-
• 4 x 1-1/2	100 x 40	035768	-
• 4 x 2	100 x 50	035769	-
• 5 x 1-1/2	125 x 40	235050	-
• 5 x 2	125 x 50	035955	-
• 6 x 1-1/4	150 x 32	235051	-
• 6 x 1-1/2	150 x 40	035588	-
• 6 x 2	150 x 50	035942	-
• 6 x 4	150 x 100	035770	-
• 8 x 1-1/4	200 x 32	235052	-
• 8 x 1-1/2	200 x 40	235053	-
• 8 x 2	200 x 50	235054	-
• 8 x 4	200 x 100	035976	-
• 10 x 4	250 x 100	035771	-

### Union Soc x Soc Buna O-ring Seal



1/2	12	035900	-
3/4	20	035901	-
1	25	035902	-
1-1/4	32	035903	-
1-1/2	40	035904	-
2	50	035905	-

### Union Fpt x Fpt Buna O-ring Seal



1/2	12	035906	-
3/4	20	035907	-
1	25	035908	-
1-1/4	32	035909	-
1-1/2	40	035910	-
2	50	035911	-

### Saddles Pipe OD x Fpt (Rated for 80 psi / 552 kPa Open-Ended)



2-1/2 x 3/4	65 x 20	235055	-
• 3 x 1-1/2	75 x 40	035993	-
• 4 x 1-1/2	100 x 40	035772	-
• 5 x 2	125 x 50	035943	-
• 6 x 1-1/2	150 x 40	035587	-
• 6 x 4	150 x 100	235056	-
• 8 x 1-1/2	200 x 40	235057	-
• 8 x 4	200 x 100	035774	-
• 10 x 4	250 x 100	235058	-

†, †, ▶ See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

### Tee Soc x Soc x Soc



1/4	6	036768	059479
3/8	9	036769	059480
1/2	12	036770	059481
3/4	20	036771	059482
1	25	036772	059483
1-1/4	32	036773	059484
1-1/2	40	036774	059485
2	50	036775	059486
2-1/2	65	036776	059487
3	75	036777	059488
4	100	036778	059489
6	150	036780	059490
8	200	036781	059491
10	250	036866	059062
12	300	036876	059084
10	250	036782	+
12	300	036783	+
14	350	036784	+
16	400	036785	+
18	450	036126	+

### Tee Soc x Soc x Fpt



1/2	12	036828	059942
3/4	20	036829	059943
1	25	036830	059518
2	50	036832	-

### Tee Fpt x Fpt x Fpt



1/4	6	036817	059507
3/8	9	036818	059508
1/2	12	036819	059509
3/4	20	036820	059510
1	25	036821	059511
1-1/4	32	036822	059512
1-1/2	40	036823	059513
2	50	036824	059514
2-1/2	65	036825	059515
3	75	036826	059516
4	100	036827	059517

### 90° Elbow Fpt x Fpt



1/4	6	036197	059206
3/8	9	036198	059207
1/2	12	036199	059208
3/4	20	036200	059209
1	25	036201	059210
1-1/4	32	036202	059211
1-1/2	40	036203	059212
2	50	036204	059213
2-1/2	65	036205	059214
3	75	036206	059215
4	100	036207	059216

### Reducing Tee Soc x Soc x Soc



3/4 x 3/4 x 1/2	20 x 20 x 12	036786	059492
1 x 3/4 x 3/4	25 x 20 x 20	036790	-
1 x 3/4 x 1	25 x 20 x 25	036791	059493
1 x 1 x 1/2	25 x 25 x 12	036788	059494
1 x 1 x 3/4	25 x 25 x 20	036789	-
1-1/4 x 1 x 3/4	32 x 25 x 20	036792	-
1-1/4 x 1 x 1-1/4	32 x 32 x 25	-	059495
1-1/4 x 1-1/4 x 3/4	32 x 32 x 20	036793	-
1-1/4 x 1-1/4 x 1	32 x 32 x 25	036794	-
1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	036795	059496
1-1/2 x 1-1/2 x 1	40 x 40 x 25	036796	059497
2 x 2 x 1/2	50 x 50 x 12	036797	059498
2 x 2 x 3/4	50 x 50 x 20	036798	059499
2 x 2 x 1	50 x 50 x 25	036799	059500
2 x 2 x 1-1/2	50 x 50 x 40	036800	059501
3 x 3 x 2	75 x 75 x 50	036802	059502
3 x 3 x 2-1/2	75 x 75 x 65	036803	059504
4 x 4 x 2	100 x 100 x 50	036804	059505
4 x 4 x 3	150 x 100 x 75	036805	-
6 x 6 x 3	150 x 150 x 75	036807	-
6 x 6 x 4	150x150x100	036808	059506
8 x 8 x 4	200x200x100	036809	-
8 x 8 x 6	200x200x150	036810	059567
10 x 10 x 4	250x250x100	036919	+
10 x 10 x 6	250x250x150	036812	+
10 x 10 x 8	250x250x200	036813	+
12 x 12 x 8	300x300x200	036814	+
12 x 12 x 10	300x300x250	036815	+
14 x 14 x 10	350x350x250	036816	+
14 x 14 x 12	350x350x300	-	+
16 x 16 x 12	400x400x300	-	+
16 x 16 x 14	400x400x350	-	-

### 90° Elbow Soc x Soc



1/4	6	036179	059192
3/8	9	036180	059193
1/2	12	036181	059194
3/4	20	036182	059195
1	25	036183	059196
1-1/4	32	036184	059197
1-1/2	40	036185	059198
2	50	036186	059199
2-1/2	65	036187	059200
3	75	036188	059201
4	100	036189	059202
6	150	036191	059203
8	200	036192	059204
10	250	036864	059085
12	300	036865	059086
10	250	036193	+
12	300	036194	+
14	350	036195	+
16	400	036196	+
18	450	036132	+

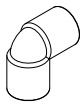
†,‡ See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code


Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

**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

**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 †	-

**45° Elbow** Soc x Soc



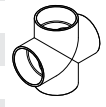
Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/4	6	036142	059162
3/8	9	036143	059163
1/2	12	036144	059164
3/4	20	036145	059165
1	25	036146	059166
1-1/4	32	036147	059167
1-1/2	40	036148	059168
2	50	036149	059169
2-1/2	65	036150	059170
3	75	036151	059171
4	100	036152	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 †	-

**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 †	-

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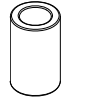
XIRTEC PVC AND CORZAN CPVC

**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

**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 †	-

**30° Elbow** Soc x Soc



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
6	150	236003	059022

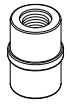
†, ■ See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

## Coupling Fpt x Fpt



1/4	6	036104	059143
3/8	9	036105	059144
1/2	12	036106	059145
3/4	20	036107	059146
1	25	036108	059147
1-1/4	32	036109	059148
1-1/2	40	036110	059149
2	50	036111	059150
2-1/2	65	036112	059151
3	75	036113	059152
4	100	036114	059153

## 45° Wye Soc x Soc x Soc

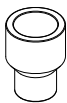


1-1/2	40	036854	059553
2	50	036855	059536
3	75	036856	059537
4	100	036857	059538
6	150	036858	059539
6 x 4	150 x 100	036861	059541
8	200	036859	-
8 x 6	200 x 150	036884	-

**1/2" - 2" - 235 psi maximum internal pressure rating @ 73°F**  
(12 - 50mm - 1 620 kPa maximum internal pressure rating @ 23°C)

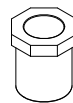
**3" - 6" - 150 psi maximum internal pressure rating @ 73°F**  
(75 - 150mm - 1 034 kPa maximum internal pressure rating @ 23°C)

## Reducer Coupling Soc x Soc



3/4 x 1/2	20 x 12	036719	059460
1 x 1/2	25 x 12	036720	059461
1 x 3/4	25 x 20	036721	059462
1-1/4 x 3/4	32 x 20	036723	-
1-1/4 x 1	32 x 25	036724	059463
1-1/2 x 1/2	40 x 12	036725	-
1-1/2 x 3/4	40 x 20	036726	059464
1-1/2 x 1	40 x 25	036727	059465
1-1/2 x 1-1/4	40 x 32	036728	059466
2 x 1/2	50 x 12	036897	-
2 x 1	50 x 25	036729	059467
2 x 1-1/2	50 x 40	036731	059458
3 x 2	75 x 50	036735	059470
4 x 2	100 x 50	036736	059459
4 x 3	100 x 75	036738	059472
6 x 4	150 x 100	036740	059471
8 x 6	200 x 150	036743	059473

## Reducer Bushing Spig x Soc (flushstyle)



3/8 x 1/4	9 x 6	036599	-
1/2 x 1/4	12 x 6	036600	059373
1/2 x 3/8	12 x 9	036601	059374
3/4 x 1/2	20 x 12	036604	059375
1 x 1/2	25 x 12	036605	059376
1 x 3/4	25 x 20	036606	059377
1-1/4 x 1/2	32 x 12	036607	059378
1-1/4 x 3/4	32 x 20	036608	059379
1-1/4 x 1	32 x 25	036609	059380
1-1/2 x 1/2	40 x 12	036610	059381
1-1/2 x 3/4	40 x 20	036611	059382
1-1/2 x 1	40 x 25	036612	059383
1-1/2 x 1-1/4	40 x 32	036613	059384
2 x 1/2	50 x 12	036614	059385
2 x 3/4	50 x 20	036615	059386
2 x 1	50 x 25	036616	059387
2 x 1-1/4	50 x 32	036617	059388
2 x 1-1/2	50 x 40	036618	059389
2-1/2 x 1-1/4	65 x 32	036620	-
2-1/2 x 1-1/2	65 x 40	036621	-
2-1/2 x 2	65 x 50	036622	059392
3 x 1	75 x 25	036623	-
3 x 1-1/2	75 x 40	036624	059393
3 x 2	75 x 50	036625	059394
3 x 2-1/2	75 x 65	036626	059395
4 x 2	100 x 50	036628	059396
4 x 3	100 x 75	036630	059397
6 x 2	150 x 50	036632	059398
6 x 3	150 x 75	036633	059399
6 x 4	150 x 100	036634	059400
8 x 6	200 x 150	036638	059401
10 x 6	250 x 150	036922	+ -
10 x 8	250 x 200	036270	+ -
12 x 10	300 x 250	036208	+ -
12 x 6	300 x 150	036908	-
12 x 8	300 x 200	036645	-

## Reducer Coupling Fpt x Fpt

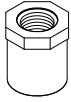


1/2 x 1/4	12 x 6	036746	-
3/4 x 1/2	20 x 12	036748	-
1 x 1/2	25 x 12	036749	-
1 x 3/4	25 x 20	036750	-
1-1/4 x 3/4	32 x 20	036751	-
1-1/2 x 1	40 x 25	036754	-
2 x 1-1/2	50 x 40	036758	-

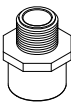
# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

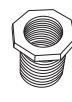
Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code



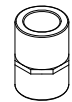
Reducer Bushing		Spig x Fpt (flushstyle)	
3/8 x 1/4	9 x 6	036679	-
1/2 x 1/4	12 x 6	036681	059428
1/2 x 3/8	12 x 9	036682	059429
3/4 x 1/4	20 x 6	036683	059430
3/4 x 1/2	20 x 12	036684	059431
1 x 3/8	25 x 9	036685	-
1 x 1/2	25 x 12	036686	059432
1 x 3/4	25 x 20	036687	059433
1-1/4 x 1/2	32 x 12	036688	059434
1-1/4 x 3/4	32 x 20	036689	059435
1-1/4 x 1	32 x 25	036690	059436
1-1/2 x 1/2	40 x 12	036691	059437
1-1/2 x 3/4	40 x 20	036692	059438
1-1/2 x 1	40 x 25	036693	059439
1-1/2 x 1-1/4	40 x 32	036694	059440
2 x 1/2	50 x 12	036695	059441
2 x 3/4	50 x 20	036696	059442
2 x 1	50 x 25	036697	059443
2 x 1-1/4	50 x 32	036698	059444
2 x 1-1/2	50 x 40	036699	059445
2-1/2 x 3/4	65 x 20	036700	059446
2-1/2 x 1	65 x 25	036701	059447
2-1/2 x 1-1/4	65 x 32	036702	059448
2-1/2 x 1-1/2	65 x 40	036703	059449
2-1/2 x 2	65 x 50	036704	059450
3 x 3/4	75 x 20	036705	-
3 x 1	75 x 25	036706	059547
3 x 1-1/4	75 x 32	036707	-
3 x 1-1/2	75 x 40	036708	059451
3 x 2	75 x 50	036709	059452
3 x 2-1/2	75 x 65	036710	059453
4 x 2	100 x 50	036711	059454
4 x 2-1/2	100 x 65	036712	059640
4 x 3	100 x 75	036713	059455
6 x 2	150 x 50	036714	-
6 x 3	150 x 75	036715	059641
6 x 4	150 x 100	036716	059456



Male Adapter		Soc x Mpt	
1/2	12	036420	059286
3/4	20	036421	059287
1	25	036422	059288
1-1/4	32	036423	059289
1-1/2	40	036424	059290
2	50	036425	059291
2-1/2	65	036426	059292
3	75	036427	059293
4	100	036428	059294
6	150	036887	+ -



T T Bushing		Mpt x Fpt (flushstyle)	
3/8 x 1/4	9 x 6	036647	059402
1/2 x 1/4	12 x 6	036648	059403
1/2 x 3/8	12 x 9	036649	059404
3/4 x 1/4	20 x 6	036651	059405
3/4 x 3/8	20 x 9	036652	059406
3/4 x 1/2	20 x 12	036653	059407
1 x 1/4	25 x 6	036654	059643
1 x 3/8	25 x 9	036655	-
1 x 1/2	25 x 12	036656	059408
1 x 3/4	25 x 20	036657	059409
1-1/4 x 1/2	32 x 12	036658	059410
1-1/4 x 3/4	32 x 20	036659	059411
1-1/4 x 1	32 x 25	036660	059412
1-1/2 x 1/2	40 x 12	036661	059413
1-1/2 x 3/4	40 x 20	036662	059414
1-1/2 x 1	40 x 25	036663	059415
1-1/2 x 1-1/4	40 x 32	036664	059416
2 x 1/2	50 x 12	036665	059417
2 x 3/4	50 x 20	036666	059418
2 x 1	50 x 25	036667	059419
2 x 1-1/4	50 x 32	036668	059420
2 x 1-1/2	50 x 40	036669	059421
2-1/2 x 2	65 x 50	036672	059422
3 x 1-1/2	75 x 40	036673	059423
3 x 2	75 x 50	036674	059424
3 x 2-1/2	75 x 65	036675	059425
4 x 2	100 x 50	036676	059426
4 x 3	100 x 75	036677	059427



Female Adapter		Soc x Fpt	
1/4	6	036209	059217
3/8	9	036210	059218
1/2	12	036211	059219
3/4	20	036212	059220
1	25	036213	059221
1-1/4	32	036214	059222
1-1/2	40	036215	059223
2	50	036216	059224
2-1/2	65	036217	059225
3	75	036218	059226
4	100	036219	059227
6	150	036221	+ -

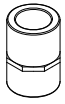
! , t , + See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

### Female Adapter Soc x Fpt (SS reinforced)



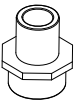
Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036971	059951
3/4	20	036972	059952
1	25	036973	059953
1-1/4	32	036974	059954
1-1/2	40	036975	059955
2	50	036976	059956
2-1/2	65	036977	-
3	75	036978	059957
4	100	036979	059958

### Cap Fpt



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/4	6	036072	059119
3/8	9	036073	059120
1/2	12	036074	059121
3/4	20	036075	059122
1	25	036076	059123
1-1/4	32	036077	059124
1-1/2	40	036078	059125
2	50	036079	059126
2-1/2	65	036080	059127
3	75	036081	059128
4	100	036082	059129

### Female Adapter Spig x Fpt (SS reinforced)



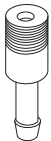
Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036965	059945
3/4	20	036966	059946
1	25	036967	059947
1-1/4	32	036968	059948
1-1/2	40	036969	059949
2	50	036970	059950
3	75	236000	059647
4	100	236001	059648

### Plug Mpt



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/4	6	036568	059361
3/8	9	036569	059362
1/2	12	036570	059363
3/4	20	036571	059364
1	25	036572	059365
1-1/4	32	036573	059366
1-1/2	40	036574	059367
2	50	036575	059368
2-1/2	65	036576	059369
3	75	036577	059370
4	100	036578	059371
6	150	036579	-

### Hose Adapter Hose x Mpt



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/4	6	036394 †	-
3/8	9	036395 †	-
1/2	12	036396 †	-
3/4	20	036397 †	-
1	25	036398 †	-
1 1/4	32	036399 †	-
1 1/2	40	036400 †	-
2	50	036401 †	-
2 1/2	65	036402 †	-
3	75	036403 †	-
4	100	036404 †	-

### Plug Spig



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
2	50	036585	-

### Cap Soc



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/4	6	036056	059107
3/8	9	036057	059108
1/2	12	036058	059109
3/4	20	036059	059110
1	25	036060	059111
1-1/4	32	036061	059112
1-1/2	40	036062	059113
2	50	036063	059114
2-1/2	65	036064	059115
3	75	036065	059116
4	100	036066	059117
6	150	036067	059118
8	200	036068	059029
10	250	036069 †	-
12	300	036070 †	-
14	350	-	†
16	400	036071 †	-

### 90° Radius Bends - 6D Spig x Spig



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	-	†
3/4	20	036027 †	-
1	25	036028 †	-
1-1/4	32	036029 †	-
1-1/2	40	036030 †	-
2	50	036031 †	-
2-1/2	65	036032 †	-
3	75	036033 †	-
4	100	036034 †	-
6	150	036035 †	-
8	200	036036 †	-
10	250	036868 †	-
12	300	-	†


†, † See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code


Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

**45° Radius Bends - 6D** Spig x Spig




Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	-	†
3/4	20	036020	†
1	25	036021	†
1-1/4	32	-	†
1-1/2	40	036022	†
2	50	036023	†
2-1/2	65	036867	†
3	75	036024	†
4	100	036025	†
6	150	036026	†
8	200	-	†
10	250	-	†
12	300	-	†

**Union** Soc x Fpt (Viton® O-ring Seal)




Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036410	-
3/4	20	036411	-
1	25	036412	-
1-1/4	32	036413	-
1-1/2	40	036414	-
2	50	036415	-
3	75	236010	-
4	100	236011	-

**22-1/2° Radius Bends - 6D** Spig x Spig




Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036012	† -
3/4	20	-	† -
1	25	036013	† -
1-1/4	32	-	† -
1-1/2	40	-	† -
2	50	036014	† -
2-1/2	65	036015	† -
3	75	036016	† -
4	100	036017	† -
6	150	036018	† -
8	200	036019	† -
10	250	-	† -
12	300	-	† -

**Tank Adapter** Soc x Fpt



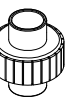
Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036038	059100
3/4	20	036039	059101
1	25	036040	059102
1-1/4	32	036041	-
1-1/2	40	036042	059103
2	50	036043	059104
3	75	036045	059105
4	100	036046	059106
6	150	-	† -

**Tank Adapter** Fpt x Fpt



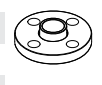
Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036047	-
3/4	20	036048	-
1	25	036049	-
1-1/4	32	036050	-
1-1/2	40	036051	-
2	50	036052	-
3	75	036054	-
4	100	036055	-
6	150	-	† -

**Union** Soc x Soc (Viton® O-ring Seal)



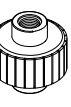
Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/4	6	036833	059519
3/8	9	036834	-
1/2	12	036835	059520
3/4	20	036836	059521
1	25	036837	059522
1-1/4	32	036838	059523
1-1/2	40	036839	059524
2	50	036840	059525
3	75	036842	059526
4	100	036843	059550

**Flange** Soc (solid style)



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036223	059228
3/4	20	036224	059229
1	25	036225	059230
1-1/4	32	036226	059231
1-1/2	40	036227	059232
2	50	036228	059233
2-1/2	65	036229	059234
3	75	036230	059235
4	100	036231	059236
5	125	036232	-
6	150	036233	059238
8	200	036234	059239
10	250	036235	† -
12	300	036236	† -
14	350	036237	† -
16	400	036238	† -
18	450	036870	† -
20	500	-	† -
24	600	036239	† -

**Union** Fpt x Fpt (Viton® O-ring Seal)



Dimension (inches)	Dimension (mm)	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/4	6	036844	059527
3/8	9	036845	-
1/2	12	036846	059529
3/4	20	036847	059530
1	25	036848	059531
1-1/4	32	036849	059532
1-1/2	40	036850	059533
2	50	036851	059534
3	75	036852	059535
4	100	036853	059651

†, ‡ See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

## Flange Fpt (solid style)



Fpt	mm	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036240	059240
3/4	20	036241	059241
1	25	036242	059242
1-1/4	32	036243	059243
1-1/2	40	036244	059244
2	50	036245	059245
2-1/2	65	036246	059246
3	75	036247	059247
4	100	036248	059248
6	150	036249	059249

## Flange Blind



Blind	mm	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036250	059250
3/4	20	036251	059251
1	25	036252	059252
1-1/4	32	036253	059253
1-1/2	40	036254	059254
2	50	036255	059255
2-1/2	65	036256	059256
3	75	036257	059257
4	100	036258	059258
6	150	036259	059259
8	200	036260	059260
10	250	036261 †	-
12	300	036262 †	-
14	350	036263 †◆	-
16	400	036264 †◆	-
18	450	036265 †◆	-
20	500	- †◆	-
24	600	036266 †◆	-

◆ Domed flange

## No-Leak Flange Spig x Spig



Spig x Spig	mm	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036331 †	-
3/4	20	036332 †	-
1	25	036923 †	-
1-1/4	32	036333 †	-
1-1/2	40	036334 †	-
2	50	036335 †	-
2-1/2	65	036336 †	-
3	75	036337 †	-
4	100	036338 †	-
6	150	036339 †	-
8	200	036340 †	-
10	250	036341 †	-
12	300	036342 †	-
14	350	036915 †	-
16	400	036343 †	-
18	450	036871 †	-
20	500	- †	-
24	600	036924 †	-

## Heavy Duty Vanstone Flange Soc w Fibre-Loc Ring



Soc	mm	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	-	059262
3/4	20	-	059263
1	25	-	059264
1-1/4	32	-	059265
1-1/2	40	036323	059266
2	50	036324	059267
2-1/2	65	-	059268
3	75	036326	059269
4	100	036416	059270
6	150	036417	059271
8	200	036418	059272
10	250	036419 †	059273
12	300	036429 †	059569
14	350	036358 †▼	-
16	400	036359 †▼	-

▼ Molded hub, c/w coated metal rings

## Vanstone Flange Soc w PVC Ring



Soc	mm	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
1/2	12	036344	-
3/4	20	036345	-
1	25	036346	-
1-1/4	32	036347	-
1-1/2	40	036348	-
2	50	036349	-
2-1/2	65	036350	-
3	75	036351	-
4	100	036352	-
5	125	036353	-
6	150	036354	-
8	200	036355	-
10	250	036356 ▼	-
12	300	036357 ▼	-

▼ Molded hub, c/w coated metal rings

## Vanstone Flange Soc w Steel Ring



Soc	mm	PVC Sch 80 Product Code	CPVC Sch 80 Product Code
18	450	036947 †	-
20	500	036913 †	-
24	600	036914 †	-

Note: these flanges are rated at 50 psi (345 kPa) maximum operating

†, † See page 75 for descriptions

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

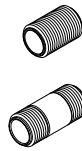
Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

## Vanstone Flange Spig



1/2	12	036374	059274
3/4	20	036375	059275
1	25	036376	059276
1-1/4	32	036377	059277
1-1/2	40	036378	059278
2	50	036379	059279
2-1/2	65	036380	059280
3	75	036381	059281
4	100	036382	059282
6	150	036383	059283
8	200	036384	059570
10	250	036321 †	-
12	300	036406 †	-

## Nipples



### 1/4" (6mm) diameter

7/8 close	22	036434	059296
1-1/2	40	036445	059306
2	50	036456	059316
2-1/2	65	036457	-
3	75	036458	059317
3 1/2	90	036459	-
4	100	036460	059318
4-1/2	115	036461	-
5	125	036462	059319
6	150	036463	059320
8	200	036464	-
10	250	236012	-
12	300	236013	-

## Vanstone Flange Fpt



1/2	12	036385	059656
3/4	20	036386	059657
1	25	036387	059658
1-1/4	32	036388	059284
1-1/2	40	036389	059659
2	50	036390	059660
2-1/2	65	036391	059661
3	75	036392	059285
4	100	036393	059662

### 3/8" (9mm) diameter

1 close	25	036435	059551
1-1/2	40	036446	059307
2	50	036466	059552
2-1/2	65	036467	-
3	75	036468	059939
3-1/2	90	036469	-
4	100	036470	059554
4-1/2	115	036471	-
5	125	036472	-
6	150	036473	-
8	200	036474	-

### 1/2" (12mm) diameter

1-1/8 close	28	036436	059297
1-1/2	40	036447	059308
2	50	036475	059322
2-1/2	65	036476	-
3	75	036477	059321
3-1/2	90	036478	-
4	100	036479	059324
4-1/2	115	036480	-
5	125	036481	059325
5-1/2	140	036482	-
6	150	036483	059326
8	200	036484	-
10	250	036485	-
12	300	036486	-

## 1/8" Flange Gasket Neoprene



1/2	12	036296	-
3/4	20	036297	-
1	25	036298	-
1-1/4	32	036299	-
1-1/2	40	036300	-
2	50	036301	-
2-1/2	65	036302	-
3	75	036303	-
4	100	036304	-
5	125	036305	-
6	150	036306	-
8	200	036307	-
10	250	036308	-
12	300	036309	-
14	350	036310	-
16	400	036311	-
18	450	036312	-
20	500	036313	-
24	600	036314	-

†, ‡ See page 75 for descriptions



# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

## Nipples

### 3/4" (20mm) diameter

	1-3/8 close	35	036437	059298
	1-1/2	40	036448	059309
	2	50	036490	059327
	2-1/2	65	036491	-
	3	75	036492	059328
	3-1/2	90	036493	-
	4	100	036494	059329
	4-1/2	115	036495	-
	5	125	036496	059331
	5-1/2	140	036497	-
	6	150	036498	059332
	8	200	036500	-
	10	250	036501	-
	12	300	036502	-

### 1" (25mm) diameter



	1-1/2 close	40	036438	059299
	2	50	036449	059310
	2-1/2	65	036504	-
	3	75	036505	059333
	3-1/2	90	036506	-
	4	100	036507	059334
	4-1/2	115	036508	-
	5	125	036509	059335
	5-1/2	140	036510	-
	6	150	036511	059336
	8	200	036512	-
	10	250	036514	-
	12	300	036515	-

### 1-1/4" (32mm) diameter

	1-5/8 close	41	036439	059300
	2	50	036450	059311
	2-1/2	65	036516	-
	3	75	036517	059338
	3-1/2	90	036518	-
	4	100	036519	059339
	4-1/2	115	036520	-
	5	125	036521	059340
	6	150	036522	059341
	8	200	036523	-
	10	250	036524	-
	12	300	036525	-

## Nipples

### 1-1/2" (40mm) diameter

	1-3/4 close	45	036440	059301
	2	50	036451	059312
	2-1/2	65	036526	-
	3	75	036527	059342
	3-1/2	90	036528	-
	4	100	036529	059343
	4-1/2	115	036530	-
	5	125	036531	059344
	5-1/2	140	036532	-
	6	150	036533	059345
	8	200	036534	-
	10	250	036535	-
	12	300	036536	-

### 2" (50mm) diameter

	2 close	50	036441	059302
	2-1/2	65	036452	-
	3	75	036539	059346
	3-1/2	90	036540	-
	4	100	036541	059347
	4-1/2	115	036542	-
	5	125	036543	059348
	5-1/2	140	036544	-
	6	150	036545	059349
	8	200	036546	-
	10	250	036547	-
	12	300	036548	-

### 2-1/2" (65mm) diameter

	2-1/2 close	65	036442	059303
	3	75	036549	-
	4	100	036550	059351
	6	150	036551	059352
	8	200	036552	-
	12	300	036553	-

### 3" (75mm) diameter

	2-5/8 close	67	036443	059304
	3	75	036554	059353
	4	100	036555	059354
	5	125	036556	059355
	6	150	036557	059356
	8	200	036558	-
	10	250	036559	-
	12	300	036560	-

### 4" (100mm) diameter

	2-7/8 close	72	036444	059305
	4	100	036562	-
	5	125	036563	-
	6	150	036564	059357
	8	200	036565	-
	10	250	036566	-
	12	300	036567	-

# PRODUCT SELECTION CHART - XIRTEC 140 PVC SCH. 80 & CORZAN CPVC SCH. 80 FITTINGS

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

Dimension		PVC Sch 80	CPVC Sch 80
inches	mm	Product Code	Product Code

## Expansion Joint 6" (150mm) Travel EPDM



1/2	12	136115	059973
3/4	20	136117	059975
1	25	136119	059977
1-1/2	40	136121	059979
2	50	136123	059981
3	75	136125	059983
4	100	136127	059985

## Polypropylene Pipe Clamps



1/2	12	035180	-
3/4	20	035181	-
1	25	035182	-
1-1/4	32	035183	-
1-1/2	40	035184	-
2	50	035185	-

## Expansion Joint 12" (1300mm) Travel EPDM



1/2	12	136116	059959
3/4	20	136118	059961
1	25	136120	059963
1-1/2	40	136122	059965
2	50	136124	059967
3	75	136126	059969
4	100	136128	059971

## Strut Base



-	-	035186	
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Note: Strut Bases are sold individually, two Strut Bases are required to create one Strut Base Unit.  
Example: If you require 10 complete Strut Base Units you must order 20 strut bases.

## Expansion Joint 6" (150mm) Travel Viton®



1/2	12	136101	059974
3/4	20	136103	059976
1	25	136105	059978
1-1/2	40	136107	059980
2	50	136109	059982
3	75	136111	059984
4	100	136113	059986

## Pipe Straps 2 holes



1/2	12	036000
3/4	20	036001
1	25	036002
1-1/4	32	036003
1-1/2	40	036004
2	50	036005

## Expansion Joint 12" (1300mm) Travel Viton®



1/2	12	136102	059960
3/4	20	136104	059962
1	25	136106	059964
1-1/2	40	136108	059966
2	50	136110	059968
3	75	136112	059970
4	100	136114	059972

## Pipe Straps PVC Coated Steel 2 holes



2-1/2	65	036006
3	75	036007
3-1/2	90	036008
4	100	036009
5	125	036010
6	150	036011

## "U" Bend 4" (100mm) O.C. for Ice Rink Piping



1	25	059019 Barbed end
1	25	- Plain End (Spigot)

Fits 1" (25mm) ID Poly Pipe



## **IPEX Industrial CADonDemand Center**



### **REGISTER TO GAIN ACCESS TO:**

- Complete dimensions of Schedule 40 and Schedule 80, Xirtec PVC and Corzan CPVC fittings
- 2D & 3D CAD drawing formats available



Register at [www.ipexinc.com](http://www.ipexinc.com)

# ENPURE HIGH PURITY

1/2" - 4" (12mm - 100mm)

**enpure™**

Enpure® proves itself as the superior high purity system manufacturing industries and research facilities are increasingly requiring high purity water systems that will meet the stringent requirements of their operations. Whether the application is for ultra pure water or for transporting chemically pure agents of foodstuffs, water purification technologies such as distillation, de-ionization, reverse osmosis and filtration eliminate a variety of impurities such as bacteria, particulates and both organic and inorganic contaminants.

The purity of a system depends on the leach ability of the material and joining method used to assemble the system.

Traditional materials used for handling high purity water have been metal and glass piping. The issue is that metals can exhibit problems with trace metal contamination; and elements such as sodium, boron, silica, lead and arsenic can be leached out of glass piping.

Over the past twenty years, advances in thermoplastic technology have enabled the effective use of plastics for high-purity water distribution systems, even in aggressive ultra high purity applications.

## APPLICATIONS

- Food processing
- Laboratories
- Hospitals
- Universities
- Research facilities
- Biotechnology
- Chemical manufacturing
- Photographic chemical processing
- Effluent treatment plants
- Water treatment plants
- Pharmaceutical manufacturing

## STANDARDS



FDA Code of Federal Regulations  
CFR Title 21-177.1520 2002

## DID YOU KNOW?

Enpure is manufactured from special high purity natural polypropylene materials. No regrind material or pigment is used in the production of pipe or fittings. Using virgin un-pigmented material ensures purity. To avoid contamination during manufacturing, the pipe is capped and boxed immediately after production. Enpure is a low-cost solution with a high resistance to chemicals, corrosion, and abrasion. It also has improved flow characteristics compared to traditional purity systems.



## ADVANTAGES

- 1 Virgin Material**  
 Enpure is manufactured from special high purity virgin polypropylene materials. No regrind material is used in the manufacturing process, thereby avoiding contamination by colorants or other materials and potential loss of physical properties due to the incorporation of heat stressed materials.
- 2 Abrasion Resistance**  
 The inherent abrasion resistance of natural PP allows substantial increases in life expectancy compared to other materials. In many applications, natural polypropylene outperforms other materials such as metals.
- 3 Improved Flow**  
 IPEX piping is smooth and has a substantially lower roughness factor than metal and other materials, and since thermoplastics do not rust, pit, scale or corrode, the interior walls remain smooth in virtually any service.
- 4 Biological Resistance**  
 Enpure natural PP piping is resistant to fungi and bacterial growth. The smoothness of the interior walls inhibits bacterial growth by eliminating sites where bacteria can adhere.
- 5 Chemical Resistance**  
 Enpure natural PP offers a complete high purity system including pipe, fittings and valves with outstanding resistance to most organic and inorganic chemicals in common use. It is potentially vulnerable to strong oxidizing acids, certain organic solvents and chlorinated hydrocarbons.
- 6 Corrosion Resistance**  
 Our thermoplastic materials are immune to damage from naturally corrosive soil conditions as well as electrochemical or galvanic corrosion. These non-corroding properties extend service life and lower maintenance costs even in below-grade applications
- 7 Extended Life**  
 Once properly selected for the application and correctly installed, Enpure products provide years of maintenance free service.
- 8 Lower Costs**  
 IPEX Enpure natural PP has lower material and installation costs than other comparable materials such as stainless steel or PVDF.
- 9 Service Temperature**  
 IPEX Enpure line of pipe, fittings and valves are designed to meet the highest purity standards. It is because of this that there are no additives in the virgin polypropylene material. Additives such as antioxidants and UV stabilizers help thermoplastic materials with oxidation resistance. Since Enpure does not contain these additives, it is pressure rated at 73°F (23°C) and will experience lower pressure capabilities and a shortened service life if operated at elevated temperatures.
- 10 Standards and Approvals**  
 IPEX manufactures the widest range of thermoplastic piping systems available. All products are produced to the strictest internal quality control specifications and meet or exceed applicable regulatory standards.

### VALVE SELECTION

As is the case with other thermoplastic components in a processing system, a valve must be selected based on the characteristics of the fluid medium, the system's operating parameters, and its intended function for a particular application. Certain valve types are more suitable than others for on/off service, throttling or modulating, automation, back flow prevention, etc. The following table summarizes the valves offered as part of the Enpure system.

Some other considerations that may be important when selecting a valve include: physical space requirements or constraints, connection style, manual or remote operation, as well as position indication or feedback.

### AUTOMATED VALVES

IPEX can provide quarter turn pneumatic or electric actuators and mounting assemblies for Enpure ball valves. Pneumatic actuator bonnets are also available for Enpure diaphragm valves. A wide selection of accessories such as pilot solenoid valves, position indicators, and microswitches, allow various control and feedback options. Please refer to the Thermoplastic Valves and Quarter Turn Automation literature or contact IPEX for further details regarding availability.

### ENPURE NATURAL PP VALVES

Valve Type	Sizes	Materials	Connections/ Style	Pressure Rating (psi) at 73°F
VKD Series Ball Valves	1/2 - 2	Natural PP	Socket, Flange	150
VM Series Diaphragm Valves	1/2 - 2	Natural PP	Socket, Flange	150
SR Series Ball Check Valves	1/2 - 2	Natural PP	Socket, Flange	150

## SHORT FORM SPECIFICATIONS

### SCOPE

All high-purity water piping as shown on drawings shall be socket-fused, virgin natural polypropylene (containing no regrind material) as manufactured by IPEX. The complete system of piping, valves, fittings, faucets, pipe supports and fusion equipment shall be supplied and warranted by a single manufacturer.

### DIMENSIONS

Physical dimensions of Enpure PP pipe and fittings shall meet or exceed Schedule 40 and Schedule 80 requirements.

### PIPING

Piping shall be manufactured in 10' or 20' (3 m or 6.1 m) lengths to Schedule 40 and Schedule 80 dimensions from virgin, unpigmented, Type 2 high-impact copolymer polypropylene conforming to ASTM D 4101, using no antioxidants or plasticizers.

Piping shall be capped at each end and boxed for protection and cleanliness at the point of manufacturing.

### FITTINGS

Fittings shall be manufactured from virgin, unpigmented, Type 2 high-impact copolymer polypropylene conforming to ASTM D 4101, using no antioxidants or plasticizers. Fittings shall be designed for socket fusion utilizing IPEX socket fusion tools and shall have a working design pressure of 150 psi at 73°F (1,000 kPa @ 23°C). All fittings shall be packaged in polybags at the point of manufacturing to preserve fitting cleanliness.



### FAUCETS

All metal faucets shall be polyster powered lacquer coated and have non-pigmented polypropylene wetted parts. Faucets shall be recirculating-style to ensure the elimination of static water pockets and shall be rated at 150 psi @ 73°F (1,000 kPa @ 23°C). All faucets shall be fully compatible with all other natural polypropylene piping components in terms of dimensions, quality and purity.

### VALVES

All valves shall be manufactured from virgin, unpigmented type 1 Homopolymer polypropylene conforming to ASTM D 4101, using no antioxidants or plasticizers that could compromise water quality. Valves shall be designed for socket fusion utilizing IPEX socket fusion tools and shall have a working design pressure of 150 psi @ 73°F (1,000 kPa @ 23°C).



- All ball valves shall be double-blocking type with o-ring cushions under the PTFE seats, in-line micro adjustment capability and incorporate a spanner wrench in the handle.
- All diaphragm valves shall be weir-style featuring smooth (non-drilled) GRF bonnets with integrated fasteners (for cleanliness) and rising position indicator.
- All valves with EPDM diaphragms shall feature concentric ridges on valve body and smooth diaphragms.
- All valves with PTFE diaphragm shall feature machined (smooth) bodies and rigid PTFE diaphragms for positive seal and longer cycle life.
- All ball check valves shall be single union design with micro adjustable locking seat carrier.

### SUPPORTS

All piping supports shall incorporate IPEX Cobra clips manufactured from U.V. stabilized polypropylene and designed to allow free axial pipe movement during expansion and contraction of a pipe system. Support spacings shall be to the manufacturer's recommendations for the design temperature of the system.

### INSTALLATION

Installation shall be in accordance with the contract drawings, the manufacturer's recommendations and the local building codes. The entire system shall be installed stress-free and in proper alignment, with due allowance for expansion and contraction.

### TESTING

The water-testing requirements on any complete piping system vary dramatically depending on the operating pressure, temperature, installation conditions, jointing method and the proposed service medium. If the testing is not determined by the engineer or governed by regulatory code, the manufacturer should be contacted.

**Air or compressed gas shall never be used for pressure testing rigid thermoplastic piping systems.**


## JOINING METHODS


Joining methods should also be considered when reviewing sources of potential contamination. Not all joining methods are equal. Some joining methods can introduce contaminants into the system that are not introduced by the pipe material itself.


Below is a breakdown of the most common joining methods and their potential affects on purity. To ensure a contamination-free system, Enpure utilizes a socket fusion joining method.


Purity Level	Joining Methods	Description
●	Threaded Metal Joints	Threaded metal components may cause leaching of contained metals, local stagnation of fluid flow and may produce potential sites for bacterial growth when used with high purity water.
● ●	Soldered Metal Joints	Oxidation at welded, braised or soldered metal joints can cause contamination when exposed to the high purity water.
● ● ●	Solvent Welded Joints	Solvent welded plastic joints, unless carefully made and cured, can contribute contamination to high purity water.
● ● ● ●	Socket Fusion	Socket fusion is a simple process of melting and fusing components together resulting in a clean homogeneous joint. As no compounds are used in the process, sources of material contamination are eliminated. For these types of applications, socket fusion is the joining method of choice.

## PRODUCT SELECTION CHART

	Dimension inches	Product Code
	<b>Schedule 40 Pipe 10' Lengths</b>	
	1/2	546000
	3/4	546001
	1	546002
	1-1/4	546003
	1-1/2	546004
	2	546005
	3	546006
	4	546007

	Dimension inches	Product Code
	<b>Schedule 80 Pipe 10' Lengths</b>	
	1/2	546008
	3/4	546009
	1	546010
	1-1/4	546011
	1-1/2	546012
	2	546013
	3	546014
	4	546015

	Dimension inches	Product Code
	<b>Schedule 40 Pipe 20' Lengths</b>	
	1/2	546020
	3/4	546021
	1	546022
	1-1/4	546023
	1-1/2	546024
	2	546025
	3	546026
	4	546027

	Dimension inches	Product Code
	<b>Schedule 80 Pipe 20' Lengths</b>	
	1/2	546028
	3/4	546029
	1	546030
	1-1/4	546031
	1-1/2	546032
	2	546033
	3	546034
	4	546035

Note: 20' Enpure pipe lengths are non-stock items available upon special request.

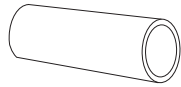
Note: 20' Enpure pipe lengths are non-stock items available upon special request.

IPEX components are dimensionally matched; do not install Enpure system components with components of other brands.

# PRODUCT SELECTION CHART

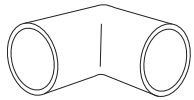
Dimension inches	Product Code
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## Coupling Soc



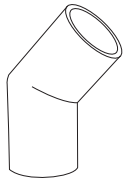
1/2	537122
3/4	537123
1	537124
1-1/4	537125
1-1/2	537126
2	53717
3	537128
4	537129

## 90° Elbow Soc



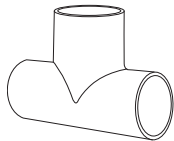
1/2	537142
3/4	537143
1	537144
1-1/4	537145
1-1/2	537146
2	537147
3	537148
4	537149

## 45° Elbow Soc



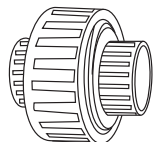
1/2	537152
3/4	537153
1	537154
1-1/4	537155
1-1/2	537156
2	537157
3	537158
4	537159

## Tee Soc



1/2	537162
3/4	537163
1	537164
1-1/4	537165
1-1/2	537166
2	537167
3	537168
4	537169

## Union w/ Viton® Seals Soc



1/2	537172
3/4	537173
1	537174
1-1/4	537175
1-1/2	537176
2	537177

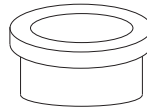
Dimension inches	Product Code
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## Cap Soc



1/2	537182
3/4	537183
1	537184
1-1/4	537185
1-1/2	537186
2	537187
3	537188

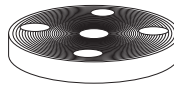
## Stub Flange Soc



1/2	537192
3/4	537193
1	537194
1-1/4	537195
1-1/2	537196
2	537197
3	537198
4	537099

Note: One stub flange and one steel backing flange are required for complete flange system.

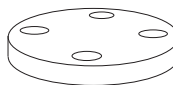
## Steel Backing Flange - ASA 150 Drilling



1/2	537222
3/4	537223
1	537224
1-1/4	537225
1-1/2	537226
2	537227
3	537228
4	537229

Note: One stub flange and one steel backing flange are required for complete flange system.

## Blind Flange - ASA 150 Drilling



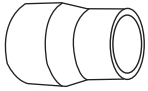
1/2	537212
3/4	537213
1	537214
1-1/4	537215
1-1/2	537216
2	537217
3	537218
4	537219

IPEX components are dimensionally matched; do not install Enpure system components with components of other brands.

## PRODUCT SELECTION CHART

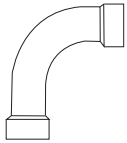
Dimension inches	Product Code
---------------------	-----------------

### Reducer Bushing Soc



3/4 x 1/2	537241
1 x 1/2	537242
1 x 3/4	537243
1-1/4 x 1	537244
1-1/2 x 1	537245
1-1/2 x 1-1/4	537246
2 x 1	537247
2 x 1-1/4	537248
2 x 1-1/2	537249
3 X 1-1/2	537250
3 x 2	537251
4 x 2	537252
4 x 3	537253

### 90° Bend Soc



1/2	537272
3/4	537273
1	537304
1-1/4	537305
1-1/2	537306
2	537307
3	537308
4	537309

### Nipple - 6" Long Sp x MPT



1/2	537322
3/4	537323
1	537324
1-1/4	537325
1-1/2	537326
2	537327
3	537328
4	537329

### Cobra Pipe Clip - PP

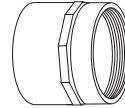


1/2	437341
3/4	437342
1	437343
1-1/4	437344
1-1/2	437345
2	437346
3	437348
4	437349

Note: \* 1/2" and 3/4" pipe clips are supplied without retaining bands.

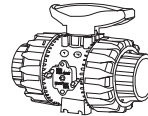
Dimension inches	Product Code
---------------------	-----------------

### Female Adapter Soc x FPT



1/2 x 1/2	537362
1/2 x 1/4	537370
1/2 x 3/8	537371
3/4 x 3/4	537363
1 x 1	537364
1-1/4 x 1-1/4	537365

### VKD True Union Ball Valve w/ Viton® Seals Soc



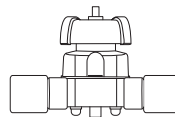
1/2	537031
3/4	537032
1	537033
1-1/4	537034
1-1/2	537035
2	537036

### End Connectors for True Union Ball Valves Soc



1/2	537014
3/4	537015
1	537016
1-1/4	537017
1-1/2	537018
2	537019

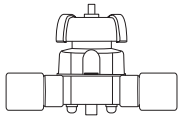
### UPP Diaphragm Valve - PTFE Diaphragm Soc




1/2	537451
3/4	537453
1	537455
1-1/4	537456
1-1/2	537457
2	537458

IPEX components are dimensionally matched; do not install Enpure system components with components of other brands.

## PRODUCT SELECTION CHART

	Dimension inches	Product Code
	1/2	537469
	3/4	537470
	1	537471
	1-1/4	537472
	1-1/2	537473
	2	537474

### Single Union Ball Check Valve w/ Viton® Seats & Seals Soc

	Dimension inches	Product Code
	1/2	537784
	3/4	537785
	1	537786
	1-1/4	537787
	1-1/2	537788
	2	537189

### Socket Fusion Joining Kit c/w Full Set of Heater Bushings

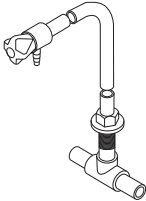
1/2 to 2	537401
1/2 to 4	537404

### Socket Fusion Joining Tool - Paddle Only

1/2 to 2	537403
1/2 to 4	537400

### Bench Fusion Joining Kit c/w Full Set of Heater Bushings

1/2 to 4	537410
----------	--------

	Dimension inches	Product Code
	1/2	537382
	3/4	537383
	1	537384
	1-1/4	537385
	1-1/2	537386
	2	537387
	3	537388
	4	537389

### Recirculating Faucet Sp

1/2	537480
-----	--------

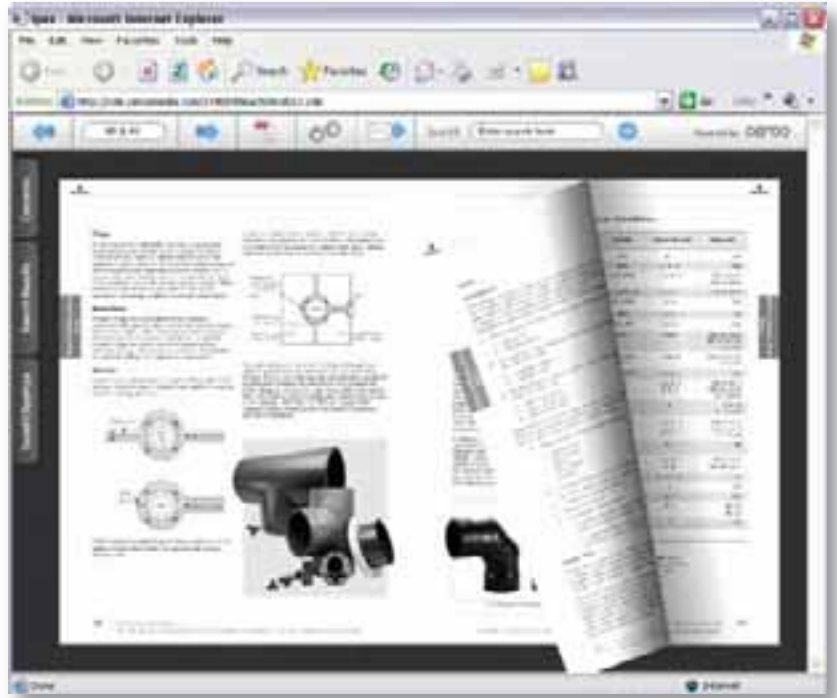
### Tempilstiks

	537406
	537407

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## SHORT FORM SPECIFICATIONS

### GENERAL

Duraplus ABS is designed for industrial pressure pipe applications where the extremely high-impact resistance and ductility of the material offers some insurance against internal and external shock loadings and site abuse conditions. It's unique combination of ABS properties – non-toxicity, purity, corrosion- and chemical-resistance, toughness, low-hydraulic resistance, and the ability to perform over a wide temperature range (-40°F to +176°F) ensures excellent in-service performance and system life.

### MATERIAL SPECIFICATION

Pipe and fittings shall be manufactured from a copolymeric material – Acrylonitrile Butadiene Styrene (ABS) – conforming to a 43232 cell classification in accordance with ASTM D3965.

Material for both pipe and fittings shall have a design stress of not less than 2,000 psi, and shall be designed with a 2 to 1 safety factor for a 50 year lifespan when operated under continuous pressure.

The material shall have an izod impact resistance value of not less than 6 ft./lb. at 73°F and 3 ft./lb. at -22°F, when tested in accordance with ASTM D256, method 'A'.

### PIPE

Pipes shall be manufactured by IPEX and designed on a Standard Dimension Ratio (SDR) basis to give various pressure ratings as described below:

Pipe Class	SDR	Continuous Pressure Rating at 73°F (23°C)	Size Range
Class 90 psi	SDR 24.0	90 psi (6 bar)	10" & 12"
Class 115 psi	SDR 19.0	115 psi (8 bar)	6" & 8"
Class 145 psi	SDR 15.5	145 psi (10 bar)	1" to 8"
Class 180 psi	SDR 12.5	180 psi (12 bar)	1" to 6"
Class 230 psi	SDR 10.0	230 psi (16 bar)	3/8" to 4"

### FITTINGS

Fittings shall be of the socket type, designed for solvent welding as supplied by IPEX.

Fittings shall be designed and manufactured so that they withstand the continuous pressures applicable to the maximum pressure native of the pipe.

### SOLVENT CEMENT

All joints shall be made with Gray Duraplus ABS solvent cement as supplied by IPEX.

The solvent cement shall be designed to withstand continuous applied pressures up to 230 psi at 73°F.

### DESIGN AND INSTALLATION

The design and installation of ABS pressure systems shall be performed in accordance with the recommendations detailed in the Handling and Installation section of this manual, local and national regulations where applicable.

To ensure the full integrity of the completed system, all components shall be supplied by IPEX.

### DID YOU KNOW?

Duraplus Industrial ABS is an extremely versatile process piping system that combines ruggedness, chemical resistance, light weight and ease of installation.

The most common applications for Duraplus Industrial ABS utilizes its outstanding impact resistance, ductility and abrasion resistance at both low and high temperatures.



# PRODUCT SELECTION CHART

Dimension inches	Product Code
------------------	--------------

## Pipe - 90 psi at 73° F



10	346034
12	346035

Standard length of pipe is 20 feet.

## Pipe - 145 psi at 73° F



1	346003
1-1/2	346004
2	346005
3	346007
4	346008
6	346009
8	346010

Standard length of pipe is 20 feet.

## Pipe - 180 psi at 73° F



1	346013
1-1/4	346014
1-1/2	346015
2	346011
3	346016
4	346017
6	346012

Standard length of pipe is 20 feet.

Note: 180 psi pipe is a non-stock item available upon special request.

Minimum runs are required.

## Pipe - 230 psi at 73° F



3/8	346018
1/2	346019
3/4	346020
1	346021
1-1/4	346022
1-1/2	346023
2	346024
3	346025
4	346026

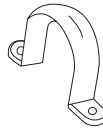
The standard pipe length for 3/8" and 1/2" pipe is 10 feet. The standard length for all other sizes is 20 feet.

Dimension inches	Product Code
------------------	--------------

## Class "T" - Suitable for Threading

3/8	346033
1/2	346027
3/4	346028
1	346029
1-1/4	346030
1-1/2	346031
2	346032

## Saddle Clip - Polypropylene



3/8	337453
1/2	337454
3/4	337455
1	337456
1-1/4	337457
1-1/2	337458
2	337459
3	337460
4	337461

## Cobra Pipe Clip - Polypropylene

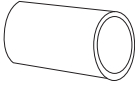


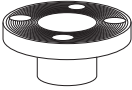
3/8	437340
1/2	437341
3/4	437342
1	437343
1-1/4	437344
1-1/2	437345
2	437346
2-1/2	437347
3	437348
4	437349

Note: \* 3/8" 1/2" and 3/4" pipe clips are supplied without retaining bands.


Only the correct Duraplus® cement will provide a compatible joint. All warranties void if other cement used.

## PRODUCT SELECTION CHART


	Dimension inches	Product Code
	3/8	337021
	1/2	337022
	3/4	337023
	1	337024
	1-1/4	337025
	1-1/2	337026
	2	337027
	3	337028
	4	337029
	6	337030
	8	337031
	10	337032
	12	337033

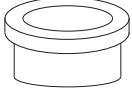
	Dimension inches	Product Code
	1/2	337353
	3/4	337354
	1	337355
	1-1/4	337356
	1-1/2	337357
	2	337358
	3	337359
	4	337360
6	337361	

Note: A metal backing ring must be used with this flange.


	Dimension inches	Product Code
	1/2	337226
	3/4	337227
	1	337228
	1-1/4	337229
	1-1/2	337230
	2	337231
	3	337232
	4	337233
6	337234	

Note: A metal backing ring must be used with this flange.

	Dimension inches	Product Code
	1/2	337439
	3/4	337440
	1	337441
	1-1/4	337442
	1-1/2	337443
	2	337444
	3	337445
	4	337446
	6	337447

	Dimension inches	Product Code
	2	337235
	3	337236
	4	337237
	6	337238
	8	337239
	10	337243
12	337244	

Note: A metal backing ring must be used with this flange.

	Dimension inches	Product Code
	2	337448
	3	337449
	4	337450
	6	337451
	8	337452
	10	337422
12	337423	

Note: It is essential that steel backing rings are used with all types of stub, full face and blind flanges.

# PRODUCT SELECTION CHART

Dimension inches	Product Code
------------------	--------------

## Backing Ring - Galv, M.S. Drilled ASA 150



1/2	337426
3/4	337427
1	337428
1-1/4	337429
1-1/2	337430
2	337431
3	337433
4	337434
6	337435
8	337436
10	337437
12	337438

Note: For use with flanges.

## Blind Flange - Drilled ASA 150



3	337364
4	337365
6	337366
8	337367
10	337368
12	337383

Note: A metal backing ring must be used with this flange.

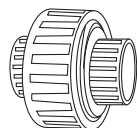
Undrilled flanges are available at the same price as drilled. Order code 131.

## Cap Soc



3/8	337245
1/2	337246
3/4	337247
1	337248
1-1/4	337249
1-1/2	337250
2	337251
3	337252
4	337253

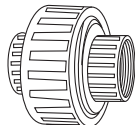
## Union - EPDM Seal Soc



3/8	337270
1/2	337271
3/4	337272
1	337273
1-1/4	337274
1-1/2	337275
2	337276
3	337277
4	337278

Dimension inches	Product Code
------------------	--------------

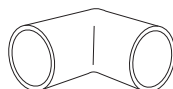
## Union ABS Soc x Brass Female Thread



*3/8	337279
1/2	337280
3/4	337281
1	337282
1-1/4	337000
1-1/2	337283
2	337284

\* Discontinued when stock is depleted

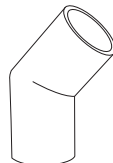
## 90° Elbow Soc



3/8	337132
1/2	337133
3/4	337134
1	337135
1-1/4	337136
1-1/2	337137
2	337138
3	337139
4	337140
6	337141
8	337142
*10	337011
*12	337012

\*Only available in spigot x spigot.

## 45° Elbow Soc



3/8	337156
1/2	337157
3/4	337158
1	337159
1-1/4	337160
1-1/2	337161
2	337162
3	337163
4	337164
6	337165
8	337166
*10	337013
*12	337014

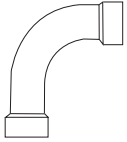
\*Only available in spigot x spigot.

Only the correct Duraplus® cement will provide a compatible joint. All warranties void if other cement used.

# PRODUCT SELECTION CHART

Dimension inches	Product Code
------------------	--------------

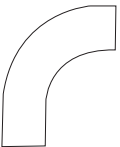
## 90° Bend - Short Radius Soc



1/2	337148
3/4	337149
1	337150
1-1/4	337151
1-1/2	337152
2	337153
3	337154
4	337155

\*\*\* All Threads are BSP tapered unless otherwise noted \*\*\*

## 90° Bend - Long Radius Sp (Center Line Radius = 4xD)



3	337320
4	337321
6	337322
8	337323
*10	337324
*12	337325

\* Please note center line radius of 10" & 12" varies from 4xD

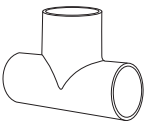
## 45° Bend - Long Radius Sp (Center Line Radius = 4xD)



3	337330
4	337331
6	337332
8	337333
*10	337334
*12	337335

\* Please note center line radius of 10" & 12" varies from 4xD

## Tee Soc

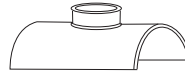


3/8	337170
1/2	337171
3/4	337172
1	337173
1-1/4	337174
1-1/2	337175
2	337176
3	337177
4	337178
6	337179
8	337180
*10	337015
*12	337016

\* Only available in spigot tees.

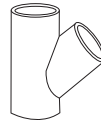
Dimension inches	Product Code
------------------	--------------

## Saddle Soc



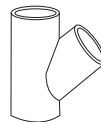
2 x 1-1/4	337205
3 x 1	337207
3 x 1-1/2	337208
4 x 1	337209
4 x 2	337210
6 x 1	337211
6 x 1-1/2	337212
6 x 2	337213

## 45° Wye Soc



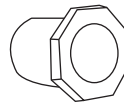
1/2	337214
3/4	337215
1	337216
1-1/4	337217
1-1/2	337218
2	337219

## 45° Wye - Fabricated Sp x Sp



3	337220
4	337221
6	337222
8	337223
10	337224
12	337225

## Reducer Bushing Sp x Soc



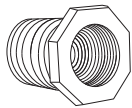
1/2 x 3/8	337050
3/4 x 1/2	337051
1 x 1/2	337052
1 x 3/4	337053
1 1/4 x 1/2	337045
1 1/4 x 3/4	337046
1 1/4 x 1	337054
1 1/2 x 1/2	337047
1 1/2 x 3/4	337048
1 1/2 x 1	337055
1 1/2 x 1 1/4	337056
2 x 3/4	337049
2 x 1	337057
2 x 1 1/4	337058
2 x 1 1/2	337059
3 x 1 1/2	337061
3 x 2	337062
4 x 3	337064
6 x 4	337065
8 x 6	337066
10 x 8	337067
12 x 10	337068

Only the correct Duraplus® cement will provide a compatible joint. All warranties void if other cement used.

# PRODUCT SELECTION CHART

Dimension inches	Product Code
------------------	--------------

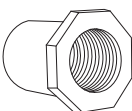
## Reducer Bushing Male Thread x Female Thread



**1/2 x 3/8	337075
**3/4 x 1/2	337076
**1 x 3/4	337077

\*\* Discontinued when stock is depleted  
All Threads are BSP tapered unless otherwise noted

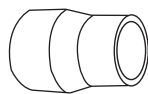
## Reducer Bushing Sp x Female Thread



**1/2 x 3/8	337072
**3/4 x 1/2	337073
**1 x 3/4	337074

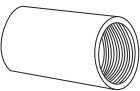
\*\* Discontinued when stock is depleted  
All Threads are BSP tapered unless otherwise noted

## Reducer Coupler Soc



1/2 x 3/8	337120
3/4 x 1/2	337121
1 x 3/4	337122
1-1/4 x 1	337123
1-1/2 x 1-1/4	337124
2 x 1-1/2	337125
3 x 2	337126
4 x 3	337127
6 x 4	337128
8 x 6	337129
10 x 8	337130
12 x 10	337131

## Adapter Coupling Soc x Female Thread



1/2	337037
3/4	337038
1	337039
1-1/4	337040
1-1/2	337041
2	337042

Dimension inches	Product Code
------------------	--------------

## Female Adapter Sp x Female Thread



1/2	337257
3/4	337258
1	337259
1-1/4	337260
1-1/2	337261
2	337262

## Nipple Sp x NPT



3/8	337340
1/2	337341
3/4	337342
1	337343
1-1/4	337344
1-1/2	337345
2	337346
3	337347
4	337348

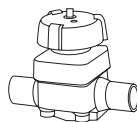
Note: Systems using plastic threaded components are restricted to 180 psi. The use of PTFE sealing tape is recommended.  
All Threads are BSP tapered unless otherwise noted

## Plug Male Thread



1/2	337264
3/4	337265
1	337266
1-1/4	337267
1-1/2	337268
2	337269

## VM Manual Diaphragm Valve - EPDM Diaphragm Sp



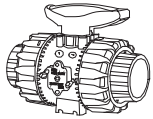
1/2	337643
3/4	337644
1	337645
1-1/4	337646
1-1/2	337647
2	337648
3	337649

Note: Other diaphragm materials are available upon request

# PRODUCT SELECTION CHART

Dimension inches	Product Code
------------------	--------------

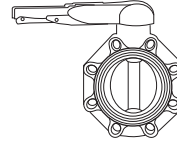
## VKD True Union Ball Valve - EPDM Seals Soc



3/8	337801
1/2	337802
3/4	337803
1	337804
1-1/4	337805
1-1/2	337806
2	337807
3	337808
4	337809

Dimension inches	Product Code
------------------	--------------

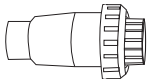
## FK, Viton® Seals - Glass filled PP body



2	337656
3	337657
4	337658
6	337659
8	337660

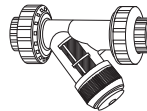
Chemical duty (CD) - incorporating more chemically resistant components, this valve can be used with a wide range of organic or inorganic chemicals even at elevated temperatures.

## Single Union Ball Check Valve - EPDM Soc



3/8	337727
1/2	337728
3/4	337729
1	337730
1-1/4	337731
1-1/2	337732
2	337733
3	337734

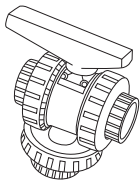
## RV Y-Strainer EPDM Seals Soc



1/2	337739
3/4	337740
1	337741
1 1/4	337742
1 1/2	337743
2	337744

Liquid Quantity	Product Code
-----------------	--------------

## L Port Ball Valve - EPDM Soc



**1/2	337720
**3/4	337721
**1	337722
**1 1/4	337723
**1 1/2	337724
**2	337725

\*\* Discontinued when stock is depleted  
Note: T Port valves are available upon Request  
All Threads are BSP tapered unless otherwise noted

## Solvent Cement



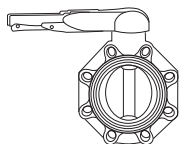
1 pint	337466
1 quart	337467

## Solvent Cement



1 pint	337468
1 quart	337469

## FK, EPDM Seals - Glass filled PP Body



2	337651
3	337652
4	337653
6	337654
8	337655

General service (GS) - offered primarily for use with water, but suitable for a wide range of diluted chemicals, swimming pools, irrigation, potable water, etc. The GS valve is also suitable for compressed air and gases.

## Joints

An indication of the number of joints likely to be made per quart of Duraplus® cement is as follows (it is recommended that MEK Cleaner order equals one-half the quantity of solvent cement required):

Pipe Size inches	Number of Joints
3/8 - 1	290
1-1/4 - 2	144
3	48
4	32
6	16
8	10
10	4
12	4

Only the correct Duraplus® cement will provide a compatible joint. All warranties void if other cement used.

# Industrial Waste



## Your Double Containment & Leak Detection Specialist

Certain environments demand fail-safe systems. No leaks. No risk. The professionals at IPEX understand the complexity of design and installation for demanding double containment applications. And, unlike other manufacturers of double containment systems, our specialists are part of a division of IPEX dedicated solely to the design, production and installation of state-of-the-art double containment systems. With more than 20 years of experience and success, we are the proven experts.

The IPEX family of double containment systems includes: Guardian™ PVC and CPVC, and Clear-Guard™

PVC pressure and drainage systems, Encase™ PolyPro drainage systems, CustomGuard® FRP and metal pressure systems and Centra-Guard™ leak detection systems.



Safety and environmental concerns are top priorities on today's industrial agenda. Reduction of emissions, energy conservation and prevention of ground water contamination are some of the areas where regulations are increasingly defining an important line between utilization and exploitation of our planet's resources.

For most common chemical-waste or process applications, IPEX offers systems that are both simple yet highly advanced state-of-the-art technologies.

**Guardian™**  
Vinyl Double Containment Systems

**Encase™**  
PP Double Containment System

**CustomGuard®**  
Specialty Double Containment Systems

**Centra-Guard™**  
Double Containment Leak Detection System

**Clear-Guard™**



**Double Containment Systems**

*We build tough products for tough environments®*

Products are manufactured by IPEX Inc. Guardian™, Encase™, CustomGuard®, Centra-Guard™, and Clear-Guard™ are trademarks of IPEX Branding Inc.

Call 1-800-473-9462 or visit [www.ipexinc.com](http://www.ipexinc.com)

Safety and environmental concerns are top priorities on today's industrial agenda. Reduction of emissions, energy conservation and prevention of ground water contamination are some of the areas where regulations are increasingly defining an important line between utilization and exploitation of our planet's resources.

For most common chemical-waste or process applications, IPEX offers systems that are both simple yet highly advanced state-of-the-art technologies. These systems utilize pre-assembled components that guarantee reliability, ease of installation, fewer joints (up to 40% less) and quick delivery.

Certain environments demand fail-safe systems. No leaks. No risk. The professionals at IPEX understand the complexity of design and installation for demanding double containment applications.

# Double Containment Systems



Encase

44

Guardian

50

Customguard

51

Clear-Guard

52

Centra-Guard

53

# ENCASE ACID WASTE PP DOUBLE CONTAINMENT

1-1/2" - 8" (38mm - 200mm)



At the heart of our patented Encase polypro system is its electrofusion fitting with a groundbreaking heavy-gauge resistance wire molded into the socket. The result is a premier system that offers considerable reduction of installation time and the highest quality bubble-tight joints available.



## DID YOU KNOW?

Encase is a polypropylene piping system that uses proven Enfusion joining methods to provide an easy-to-install, safe, reliable and cost-effective method to convey chemical waste under gravity-flow conditions.

## ADVANTAGES

- 1 Polypropylene Material**
  - Thirty years of success in chemical waste applications
  - High corrosion resistance
  - Wide temperature range
  - Excellent chemical resistance
- 2 Same Material Inside and Out**
  - Eliminates differential expansion problems
  - Chemical resistance is the same for the entire piping system
  - System integrity is maintained in the event of a primary pipe leak
- 3 Restrained System**
  - Expansion anchor plates are installed on each fitting to control expansion
  - No expansion loops necessary
- 4 Full Product Range**
  - 1-1/2" to 8" primary sizes available
  - Manufactured in both non-flame retardant as well as flame retardant material for above ground installation
- 5 Drainage Pattern Fittings**
  - Ensures smooth chemical flow.
  - Enfield piping has been used for chemical waste for over 23 years
- 6 Modular Design**
  - Components are factory fabricated. The only site joining necessary is the fusion of couplings to pipes and fittings
  - Reduces labor costs
- 7 Fast Joining Method**
  - All site joints are made by electrofusion using an Enfusion Hand Held Unit.
  - Quick and simple to make without the need for costly and cumbersome butt fusion machines
  - Proven technology
  - Narrower trench widths than for butt fusion, resulting in quicker and cheaper installation
  - Joints can be made in the trench which reduces installation time
  - Automatic microprocessor-controlled Enfusion unit ensures joint repeatability
- 8 Easy System Testing**
  - The primary pipe can be inspected and tested prior to closing the secondary joint (impossible with butt-welded systems)
  - Any suspect primary joints can be re-fused prior to final closure of the secondary pipe
- 9 Leak Detection Compatible**
  - Encase is compatible with all common types of leak detection systems
  - Upon request, pipe is furnished with knot-free twine to allow insertion of a pull rope for leak detection cable installation minimizing installation time.
- 10 Full Product Backup**
  - Expert personnel are available to assist in every facet of the Encase product



## SHORT FORM SPECIFICATIONS

### GENERAL

Acid waste double containment drain lines shall be Encase, manufactured by IPEX, with no substitutions. Pipe and fittings shall be manufactured from Schedule 40 polypropylene and joined by the Enfusion method.

### MATERIAL

Pipe, fittings, internal pipe supports and anchor plates shall be manufactured from Type 1 homopolymer or Type 2 copolymer polypropylene material as described in ASTM D4101.

### PIPE AND FITTINGS – CONSTRUCTION

All pipe fittings shall be factory assembled and of unitized construction, with the primary and secondary components integrally anchored together to prevent movement of the primary pipe/fitting with in the containment pipe/fitting. All piping components shall be manufactured to Schedule 40 dimensions. The primary pipe shall be adequately supported by means of support plates welded to the primary pipe. Anchor plates shall be provided at each end of the pipe/fitting section to restrain pipe expansion. All anchor plates must be mechanically located in a machined recess on the inside of each secondary pipe/fitting and welded to both the primary and secondary pipe/fitting sections.

### FACTORY WELDED JOINTS

All factory joints shall be made either by butt fusion or Enfusion. Joining by means of fillet welding is expressly forbidden.

### SITE JOINTS

All site joints shall be made using Enfusion couplings, manufactured from polypropylene with a nickel/chrome resistance wire, molded in place. Components with copper wire elements are prohibited. Solvent, butt-welded or fillet-welded site joints are also prohibited.

### INSTALLATION

Installation shall be in accordance with the contract drawings, the manufacturer's recommendations and the local plumbing code. The entire installation shall be installed in proper alignment and free of stress.

### TESTING

The system shall be tested in accordance with the manufacturer's recommendations and the local plumbing code. The primary pipe shall be tested prior to making the secondary joints. If Secondary pipe cannot be hydro-tested, as determined by the engineer or authority having jurisdiction, then the use of nitrogen or air at a MAXIMUM 5 psi (gauge) shall be allowed. It is imperative that a working-pressure regulator be used during the pneumatic test to ensure that over-pressurization of the PVC, beyond 5 psi, cannot occur. The following must also be noted: Air or nitrogen under pressure is compressed and therefore poses a potential hazard. If a failure of the pipe or fitting occurs during such test, the air exits at the failure point and expands rapidly. This increase in velocity can cause the system to fail in a catastrophic mode. Therefore during such air test all personnel involved in the test or present in the test surrounding area must be aware of such a possibility and take all necessary precautions. Precautions include, but are not limited to, taking extreme care not to impact or damage the system in any way. Such procedure is a limited exception to IPEX standard policy which forbids the use of its rigid systems with any compressed gases.


Material	Carrier	Containment
PP	1-1/2" - 8"	4" - 12"



# PRODUCT SELECTION CHART

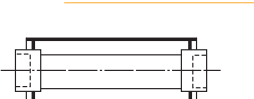
Dimension inches		Product Code
Primary	secondary	

## Schedule 40 Pipe Soc x Sp (20' Nominal Lengths)



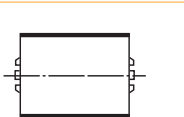
1-1/2	4	246040
2	4	246050
3	6	246060
4	8	246070
6	10	246020
8	12	246030

## Schedule 40 Pipe Spool Soc x Soc (5' Nominal Lengths)



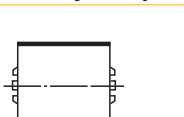
1-1/2	4	231313
2	4	231314
3	6	231315
4	8	231316
6	10	231311
8	12	231312

## Secondary Coupling Soc



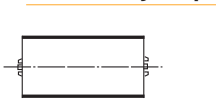
-	4	231114
-	4	231116
-	6	231118
-	8	231110
-	10	231112

## Primary Coupling Soc



1-1/2	-	257141
2	-	257147
3	-	257150
4	-	257154
6	-	257158
8	-	257161

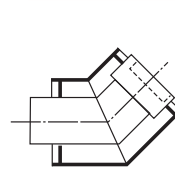
## Secondary Repair Coupling Soc



-	4	231004
-	6	231006
-	8	231008
-	10	231010
-	12	231009

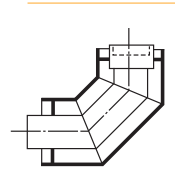
Dimension inches		Product Code
Primary	secondary	

## 1/8 Bend Soc x Sp



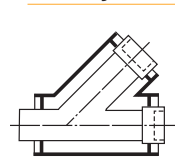
1-1/2	4	231141
2	4	231142
3	6	231143
4	8	231144
6	10	231139
8	12	231140

## 1/4 Bend Soc x Sp



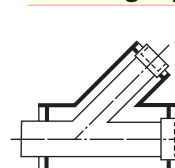
1-1/2	4	231134
2	4	231135
3	6	231136
4	8	231137
6	10	231132
8	12	231133

## 45° Wye Soc x Sp x Soc



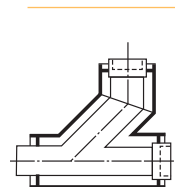
1-1/2	4	231153
2	4	231154
3	6	231155
4	8	231156
6	10	231151
8	12	231152

## Reducing Wye Soc x Sp x Soc



2 x 1-1/2	4 x 4	231187
3 x 1-1/2	6 x 4	231188
3 x 2	6 x 4	231189
4 x 2	8 x 4	231190
4 x 3	8 x 6	231191
6 x 2	10 x 4	231181
6 x 3	10 x 6	231182
6 x 4	10 x 8	231183
8 x 3	12 x 6	231184
8 x 4	12 x 8	231185
8 x 6	12 x 10	231186

## Combination Wye & 1/8 Bend Soc x Sp x Soc



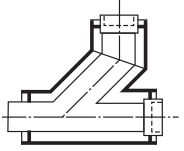
1-1/2	4	231203
2	4	231204
3	6	231205
4	8	231206
6	10	231201
8	12	231202

Encase components should only be joined using IPEX Control Units. NFRPP is the standard material of construction for all Encase components. FRPP is available on request.

## PRODUCT SELECTION CHART

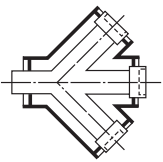
Dimension inches		Product Code
Primary	secondary	

### Reducing Combination Wye & 1/8 Bend Soc x Sp x Soc



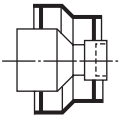
2 x 1-1/2	4 x 4	231227
3 x 1-1/2	6 x 4	231228
3 x 2	6 x 4	231229
4 x 2	8 x 4	231230
4 x 3	8 x 6	231231
6 x 2	10 x 4	231221
6 x 3	10 x 6	231222
6 x 4	10 x 8	231223
8 x 3	12 x 6	231224
8 x 4	12 x 8	231225
8 x 6	12 x 10	231226

### Double Wye Soc x Sp



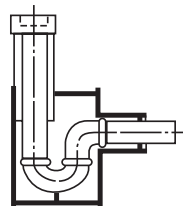
1-1/2	4	231243
2	4	231244
3	6	231245
4	8	231246
6	10	231241
8	12	231242

### Reducing Coupling Soc x Sp



2 x 1-1/2	4 x 4	231347
3 x 1-1/2	6 x 4	231348
3 x 2	6 x 4	231349
4 x 1-1/2	8 x 4	231324
4 x 2	8 x 4	231350
4 x 3	8 x 6	231351
6 x 1-1/2	10 x 4	231352
6 x 2	10 x 4	231341
6 x 3	10 x 6	231342
6 x 4	10 x 8	231343
8 x 3	12 x 6	231344
8 x 4	12 x 8	231345
8 x 6	12 x 10	231346

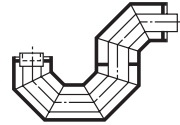
### P-Trap Soc x Sp



1-1/2	4	231361
2	4	231372

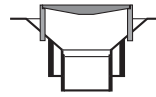
Dimension inches		Product Code
Primary	secondary	

### P-Trap Soc x Sp



3	6	231373
4	8	231374
6	10	231371
8	12	231375

### Floor Drain Sp



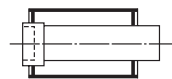
1-1/2	4	231400
2	4	231402
3	6	231403
4	8	231404
6	10	231401

### End Cap Soc



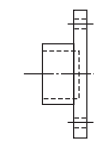
1-1/2	-	231462
2	-	231463
3	-	231464
4	-	231465
6	-	231466
8	-	231467
10	-	231832
12	-	231833

### End Seal Soc x Sp



1-1/2	4	231483
2	4	231484
3	6	231485
4	8	231486
6	10	231481
8	12	231482

### Flange - ASA 150 Soc




1-1/2	-	257361
2	-	257365
3	-	257366
4	-	257367
6	-	257368
8	-	257369
10	-	257362
12	-	257363

Encase components should only be joined using IPEX Control Units. NFRPP is the standard material of construction for all Encase components. FRPP is available on request

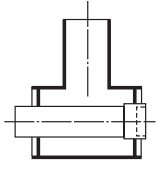
# PRODUCT SELECTION CHART

Dimension inches		Product Code
Primary	secondary	

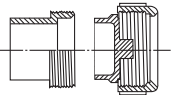
## Blind Flange - ASA 150

	1-1/2	-	231453
	2	-	231454
	3	-	231455
	4	-	231456
	6	-	231457
	8	-	231458
	10	-	231451
	12	-	231452

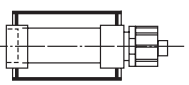
## Access Tee Soc x Sp x Sp

	1-1/2	4	231425
	2	4	231426
	3	6 x 4	231421
	4	8 x 4	231422
	6	10 x 4	231423
	8	12 x 4	231424

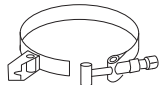
## Cleanout Sp

	1-1/2	-	257232
	2	-	257235
	3	-	257238
	4	-	257241
	6	-	257244

## Cleanout Assembly Soc

	1-1/2	4	231383
	2	4	231384
	3	6	231385
	4	8	231386
	6	10	231381
	8	12	231382

## Primary Hub Clamp c/w Brass Nut

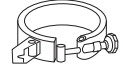
	1-1/2	-	231741
	2	-	231742
	*3	-	231411
	4	-	231743
	6	-	231744
	8	-	231745

\* Designed to be left on.


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Dimension inches		Product Code
Primary	secondary	

## Secondary Hub Clamp

	-	4	257258
	-	6	231444
	-	8	231445
	-	10	231441
	-	12	231442

## IPEX Control Unit (Current Style)

	-	-	257279
	Kit includes hub clamps, 1 1/2" thru 6", connector cable & 5' link cable.		


## Connector Cable Old Style Machine

	-	-	231302
--	---	---	--------


## Connector Cable Current Style Machine

	-	-	231301
--	---	---	--------

## Link Cable c/w EZ Connector

	2 ft. EZ	4	257268
	5 ft. EZ	6	257269
	10 ft. EZ	8	257270
	15 ft. EZ	10	257271

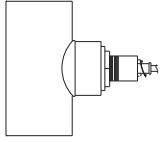
## Encase Link Cable c/w Link Lead

	5 ft.	-	257124
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# PRODUCT SELECTION CHART

Dimension inches		Product Code
Primary	secondary	

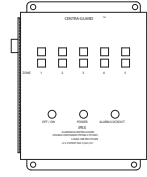
## Above Ground Leak Detection Station with Sensor



4	-	231834
6	-	231835
8	-	231836
10	-	231837

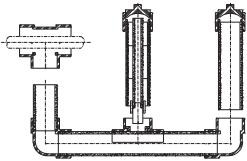
Dimension inches		Product Code
Primary	secondary	

## 5 Zone Panel



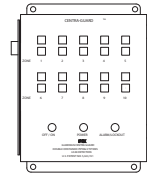
-	-	631188
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## Below Ground Leak Detection Station with Sensor



4	-	231838
6	-	231839
8	-	231840
10	-	231841
12	-	231842

## 10 Zone Panel



-	-	631189
---	---	--------

## Leak Detection Jumper Cable



-	-	631186
---	---	--------

# GUARDIAN VINYL DOUBLE CONTAINMENT SYSTEMS



For more than 15 years, Guardian systems have been the benchmark in pressure and drainage double containment. Guardian systems are available in tough industrial grade PVC and even tougher high temperature CPVC. For instant leak detection of overhead piping, Clear-Guard clear PVC containment pipe is also available. Guardian's patented Centra-Lock design reduces the required joints by 40 - 60%.

Material	Carrier	Containment
Xirtec140 PVC	1/2" - 12"	2" - 18"
Corzan CPVC	1/2" - 12"	2" - 18"
Clear-Guard PVC	n/a	2" - 8"

Larger sizes are available from IPEX.

**FOR PRICING CONTACT YOUR IPEX REPRESENTATIVE.**

## SPECIFICATIONS

### Material Selection

Xirtec®140 PVC and Corzan® CPVC are the chosen materials for the Guardian systems. IPEX controls not only the design and fabrication of the systems, but also the blending of the PVC resin, the extrusion and injection molding of most components. This unparalleled consistency of quality and resin as well as dimensional compatibility results in superior systems that are unmatched in the industry. Clear-Guard utilizes a fail-safe, fully pressure rated clear PVC that uses a solvent cement jointing method identical to traditional vinyl pressure pipe. This eliminates the need for expensive caulking guns and epoxy adhesive for assembly. Clear-Guard can be used in conjunction with both Schedule 40 and 80 Xirtec140 PVC or Corzan CPVC primary pipe.

### Design

Guardian and Clear-Guard systems offer a complete selection of pretested modular components which are extremely easy to install. Our Centra-lok™ patented design allows IPEX to offer vinyl systems which average up to 60% fewer overall joints and up to 10% fewer field joints. Since joints are always the most common source of premature failures and leaks, it is easy to realize the immense impact the Centra-lok design has on maintenance, repair and installation costs. The patented ingenuity and simplicity of the Centra-lok design also reduces the purchase cost of IPEX systems, making Guardian and Clear-Guard the industry's most cost-effective vinyl system. As with all our containment systems, the IPEX patented Centra-Guard™ point-of-collection or cable leak detection systems are also available.

### General

Each contained piping system shall consist of Xirtec®140 PVC primary piping system supported within a Xirtec®140 PVC secondary containment housing. Carrier fitting sizes 1/2" through 4" will use Centra-Lok [U.S. Patent No. 5,398,973] molded supports minimizing the number of field (factory assembled) fitting joints. Carrier sizes 6" and larger will use IPEX standard polypropylene fitting discs to support and centralize. Each system shall be provided with suitable drains and vents and be designed to provide complete drainage of both the primary and secondary containment piping. Interstitial supporting devices shall be made from Polypropylene Centra-Guide supports and shall be provided within the secondary containment pipe, and shall be designed to allow continuous drainage in the annular space to the drain points. Drain fittings shall be designed to allow a valve attachment to be made so that the secondary containment compartment may be readily drained and manually checked for leaks.

### DID YOU KNOW?

Made from PVC and Corzan® CPVC, these systems offer a complete selection of pre-tested modular components that are considered unmatched in the industry.



# THE CUSTOMGUARD OPTION

## CustomGuard®

Custom-designed and fabricated double containment systems including dissimilar material systems, CustomGuard is unlike other systems that try to run everything through the same material. Our specialists will recommend and provide the absolute best system for each individual application, looking not only at chemical compatibility but also at cost (material and installation), life expectancy and turn around time.

For applications with more demanding mechanical, chemical and/or thermal requirements, IPEX has developed our CustomGuard offering. CustomGuard includes a variety of different system choices ranging from Fluoropolymers (e.g. PVDF), Thermosets (FRP); and carbon and stainless steel to hybrid combinations. Applications that require such materials are obviously complex, each demanding expertise and specialized knowledge to design an effective system. The CustomGuard option includes material selection, design, specification support (if needed) and fabrication of pre-assembled spooled pieces to minimize installation time and field joints.



### DID YOU KNOW?

Together with Encase and Guardian, Custom Guard sets IPEX apart from any other double containment system. Custom Guard is available in several different materials. Unlike other manufacturers, IPEX is not constrained by a limited material selection. This variety enables IPEX to provide customers with the best solution for their double containment needs.

Material	Carrier	Containment
FRP/Metals/Dissimilar	1/2" - 20"	2" - 26"

**FOR PRICING CONTACT YOUR IPEX REPRESENTATIVE.**

## SPECIFICATIONS

### Material Selection

Carbon and stainless steel, copper, fiberglass (polyester and vinylester resins), PVDF, PP and dissimilar materials, are all available in CustomGuard® systems. This comprehensive offering, unmatched by any one company, gives IPEX the unique ability to examine just about any double containment requirement and truly offer the best suited, most cost-effective system. While other manufacturers have vested interests in recommending their one and only material/system, IPEX isn't confined by that limitation.

### Design

Drawing on more than 15 years of experience in double containment, IPEX has developed a variety of product-specific designs to maximize efficiency and reduce installation costs. As with all our containment systems, our own patented CentraGuard™ point-of-collection or cable leak detection systems are also available.

### General

Each contained piping system shall consist of Schedule 40 A-53 Carbon Steel primary piping system supported within a UL FRP secondary containment housing. Each system shall be provided with suitable drains and vents and be designed to provide complete drainage of both the primary and secondary containment piping. Interstitial supporting devices shall be made from Polypropylene Centra-Guide supports and shall be provided within the secondary containment pipe, and shall be designed to allow continuous drainage in the annular space to the drain points. Drain fittings shall be designed to allow a valve attachment to be made so that the secondary containment compartment may be readily drained and manually checked for leaks.

# THE CLEAR-GUARD OPTION

## Clear-Guard™

Clear-Guard's fail-safe, fully pressure rated clear containment system allows for easy detection of leaks and eliminates the risks associated with piping aggressive chemicals overhead. Clear-Guard utilizes Guardian's patented Centra-Lok fitting design, which reduces the required joints by 40-60%. Fittings are available in clear or opaque containment fittings.

Material	Carrier	Containment
PVC	-	1/2" - 8"

**FOR PRICING CONTACT YOUR IPEX REPRESENTATIVE.**

### SPECIFICATIONS

#### General

Each contained piping system shall consist of Xirtec 140 PVC or Corzan CPVC primary piping system supported within a Clear-Guard Schedule 40 clear PVC secondary containment housing. Carrier fitting sizes 1/2" through 4" will use Centra-Lok [U.S. Patent No. 5,398,973] molded supports minimizing the number of field (factory assembled) fitting joints. Each system shall be provided with suitable drains and vents and be designed to provide complete drainage of both the primary and secondary containment piping. Interstitial supporting devices shall be made from Polypropylene Centra-Guide supports and shall be provided within the secondary containment pipe, and shall be designed to allow continuous drainage in the annular space to the drain points. Drain fittings shall be designed to allow a valve attachment to be made so that the secondary containment compartment maybe readily drained and manually checked for leaks.



# CENTRA-GUARD LEAK DETECTION

## Centra-Guard™

In many situations, as for example in buried systems, double containment protection by itself may not be enough. In these applications it is critical that a leak is immediately detected and located.

Although many different leak detection systems are available on the market today, only one offers a combination of advanced features, reliability, re-usability and cost-effectiveness: Centra-Guard, an innovative and patented leak-detection system.

No cables to string during installation, no false alarms due to condensation and always re-usable, this patented system features self-contained capacitive proximity sensors (with sensing point adjustment) connected to a NEMA4 enclosed control panel with both audible and visual signals. Part of this ingenious system are its two different sensor housing designs; one specifically for over-head applications and one for below-grade applications.

The initial cost of the Centra-Guard system is offset tenfold by the savings realized in avoiding the much higher costs of an environmental cleanup or lost production.

## FOR PRICING CONTACT YOUR IPEX REPRESENTATIVE.

### APPLICATIONS

- above-ground suspended pipeline applications, with sensors housed in a saddle-type clamp, as well as underground pipeline systems with drip leg assembly.

### OVERVIEW

The basic concept behind cable leak detection is that a monitor detects any changes in the electrical properties of the cable caused by contact with a liquid. The monitor then raises an alarm in the plant to warn operators that a leak has been detected. Usually the detection system will pinpoint the leak and report its location. This allows operators to quickly rectify the situation.

Centra-Guard is the only non-intrusive leak detection system available. The sensor never comes in contact with the media.



**CHOOSE FROM A WIDE RANGE OF SYSTEM OPTIONS**

IPEX offers an extremely wide array of materials and sizes. You can specify virtually any piping material to create a system that contains whatever corrosive or hazardous substance your application handles. If you don't see what you need listed here, call us! Other systems or sizes may be available, or we may have suggestions for substitutions.

SYSTEM		Carrier SIZE
Carrier	Containment	inches
PVC 80	PVC 80	1/2 - 12
PVC 80	PVC 40	1/2 - 12
PVC 40	PVC 40	1/2 - 12
PVC DWV	PVC DWV	1-1/2 - 12
PVC 80	CS SCH 10	1/2 - 12
CPVC 80	CPVC 80	1/2 - 8
CPVC 80	PVC 80	1/2 - 12
CPVC 80	PVC 40	1/2 - 12
CPVC 80	CS SCH 10	1/2 - 12
NAT PP 80	PVC 80	1/2 - 2
NAT PP 80	PVC 40	1/2 - 2
RED PVDF 80	CPVC 80	1/2 - 2
RED PVDF 80	PVC 80	1/2 - 2
NAT PVDF 80	PVC 80	1/2 - 2
ENFUSION PP	PVC DWV	1/2 - 6
S40 A53B CS BW	PVC 80	1/2 - 8
S40 A106B CS BW	PVC 80	1/2 - 8
S80 A106B CS SW	PVC 80	1/2 - 8
S40 A53B CS BW	FRP	1/2 - 12
S40 A106B CS BW	FRP	1/2 - 12
S80 A106B CS SW	FRP	1/2 - 2
S40 A53B THRD	PVC 40	1/2 - 2
S40 A106 SMLS BW	PVC 40	1/2 - 8
S40 A53 BLK BS	PVC 40	1/2 - 8
S80 A53 BLK SW	PVC 80	1/2 - 2
S80 A53 BLK SW	FRP	1/2 - 2
S40 A53 BLK SW	S40 A53 BLK	1/2 - 2
S40 A106B CS SW	PVC 80	1/2 - 8
S80 A53B CS BW	PVC 80	1/2 - 8
S80 A106B CS SW	PVC 80	1/2 - 8
S40 A106 CS SW	FRP	1/2 - 2
S80 A53B CS BW	FRP	1/2 - 12
S80 A106B CS BW	FRP	1/2 - 2
S40 A53B THRD	FRP	1/2 - 2
S40 A53 BLK CS	S40 A53 BLK CS	1/2 - 12
S40 A53 BLK SW	PVC 40	1/2 - 2

SYSTEM		Carrier SIZE
Carrier	Containment	inches
S40 A53 BLK SW	FRP	1/2 - 2
S40 A53 BLK SW	PVC 80	1/2 - 2
S80 A53B CS SW	PVC 80	1/2 - 2
S10 T304L SS BW	PVC 80	1/2 - 8
S10 T304L SS BW	PVC 40	1/2 - 8
S10 T0304L SS BW	CPVC 80	1/2 - 8
S10 T304L SS BW	FRP	1/2 - 12
S10 T304L SS BW	S10 T304L	1/2 - 12
S40 T316L SS BW	PVC 80	1/2 - 8
S40 T316L SS BW	CPVC 80	1/2 - 8
S40 T316L SS BW	FRP	1/2 - 12
S40 T304L SS SW	PVC 80	1/2 - 2
S40 T304L SS SW	PVC 40	1/2 - 2
S40 T304L SS SW	CPVC 80	1/2 - 2
S40 T304L SS SW	FRP	1/2 - 2
S10 T316L SS SW	PVC 80	1/2 - 2
S10 T316L SS SW	CPVC 80	1/2 - 2
S10 T316L SS SW	FRP	1/2 - 2
S40 T304L SS BW	PVC 80	1/2 - 8
S40 T304L SS BW	PVC 80	1/2 - 8
S40 T304L SS BW	CPVC 80	1/2 - 8
S40 T304L SS BW	FRP	1/2 - 12
S10 T316L SS BW	PVC 80	1/2 - 8
S10 T316L SS BW	CPVC 80	1/2 - 8
S10 T316L SS BW	FRP	1/2 - 12
S10 T304L SS SW	PVC 80	1/2 - 2
S10 T304L SS SW	PVC 40	1/2 - 2
S10 T304L SS SW	CPVC 80	1/2 - 2
S10 T304L SS SW	FRP	1/2 - 2
S10 T304L SS SW	S10 T304L	1/2 - 2
S40 T316L SS SW	PVC 80	1/2 - 2
S40 T316L SS SW	CPVC 80	1/2 - 2
S40 T316L SS SW	FRP	1/2 - 2
HARD COPPER	PVC 40	1/2 - 4
HARD COPPER	3000 FRP	1/2 - 4

For more than 30 years, IPEX has been supplying industrial, commercial, school and hospital laboratories throughout North America with high-quality, easy-to-install acid waste systems designed to handle a wide variety of chemicals and pH levels. Our comprehensive line of dedicated acid waste conveyance, neutralization and monitoring systems offers innovative features not available with any other system. In fact, IPEX Enfield™ electrofusion and Labline® mechanical joint systems have long been recognized as the industry benchmark for performance and reliability, and are among the most widely specified systems in North America.

Also available through IPEX is the next generation, E-84 compliant Plenumline™ system, made of flame retardant PVDF for extremely demanding applications such as return-air plenums. The complete range of IPEX integrated total solutions for acid waste applications also includes our Neutratanke® neutralization tanks, Neutrasystem2™ pH monitoring system, Floway™ drains, and Encase™ double containment systems.

# Acid Waste Piping Systems



Enfield Electrofusion Acid Waste Systems FRPP & NRPP 56

Labline Mechanical-Joint Acid Waste System FRPP 66

Floway Polypropylene Floor Drains 72

Plenumline Mechanical Joint Acid Waste System FR-PVDF 74

Neutratanke Neutralization Tanks HDPE & PP 78

# ENFIELD ELECTROFUSION ACID WASTE SYSTEMS

## ENFIELD™

Enfield electrofusion fittings are molded with an integral resistance wire in the socket, with jointing completed by energizing the resistance wire via a microprocessor controlled Enfusion Control Unit. The result of these innovations is an unparalleled level of joint reliability and repeatability. Enfield has proven over time that it produces the optimum level of performance where it matters most - at the joint interface. It offers unprecedented control of jointing - controlled fit, controlled temperature and controlled time.

### ADVANTAGES

- 1 **Positive reliable joints** made in 2 minutes - installation time is reduced
- 2 **Several joints can be made at one time**
- 3 **Proven reliability** for over a decade
- 4 **Enfield is manufactured from polypropylene** which has an operating temperature range from -10°F (-23°C) to 212°F (100°C).\* This allows systems to be flushed with boiling water
- 5 **Heavy gauge resistance wire** molded into sockets - no loose components, controlled fusion of joints
- 6 **Easy connecting** heavy duty socket terminal posts complete with protection ears
- 7 **Microprocessor controlled Enfusion unit** ensures secure joints and joint repeatability
- 8 **Matched system** - high quality pipe and fittings are matched to give ease of installation and long term reliability
- 9 **Easy to install** - even in difficult areas
- 10 **Installed cost 50% less than glass**
- 11 **Breakage factor eliminated**
- 12 **Maintenance free**

### STANDARDS



NSF-approved  
IAPMO-listed & CSA-certified  
Meets ASTM F1412, D4101 and CSA B181.3

### **i** DID YOU KNOW?

Enfield® offers polypro fittings, constructed with a heavy gauge resistance wire that is integrally molded into the socket. These are considered to be the premier fittings on the market.



## SHORT FORM SPECIFICATIONS

### GENERAL

Acid waste drain and vent system, as shown on drawings, shall be NSF listed and CSA certified Schedule 40, polypropylene as manufactured by IPEX. System to include pipe supplied in 10 ft. lengths (or 20 ft lengths if NFRPP is specified), fittings, traps and neutralization tanks from the same manufacturer. It shall also include recommended adapters to connect to other piping materials, where applicable.

### MATERIAL

Pipe shall be made from NSF listed Type 1, flame retardant polypropylene conforming to ASTM D4101, with a maximum average flame spread of zero seconds and a maximum extent of burning of 13 mm, in accordance with ASTM D635. Matched fittings shall be made from NSF listed flame retardant polypropylene with average maximum burn time of 80 seconds and maximum extent of burning of 20 mm in accordance with ASTM D635.

If NFRPP pipe is specified, it shall be made from NSF 14 listed and CSA certified Schedule 40 PP as manufactured by IPEX. Pipe shall comply with ASTM F1412 and material used shall comply with the material requirements of ASTM D4101.

### FITTINGS

Fittings shall be NSF listed and have an integral heavy gauge, nickel/chrome electrical resistance wire molded in place in the fitting body. Copper wire elements, loose wire or other loose joint components, are prohibited. Fittings shall be Enfield or approved equal.

### JOINTS

Connections between polypropylene pipe and fittings shall be made using the Enfield joint. All joints shall have a fusion cycle controlled by a microprocessor operated, waterproof, Enfusion control unit equipped with input and output voltage sensors, ambient temperature sensors to automatically adjust fusion time and audible alarms to indicate cycle interruptions and completion of the joining process. The unit shall be capable of fusing multiple joints and with a minimum capability of eight 2" joints with the same fusion time as a single joint.

Connections between polypropylene and other piping materials shall be made using Enfield adapters according to manufacturer's (IPEX) recommendations. All electrofusion machines shall be third party certified by UL and CSA.

### INSTALLATION AND TESTING

Installation and testing shall be in accordance with the contract drawings, the manufacturer's recommendations and the local plumbing codes. Testing with compressed air is prohibited. The entire system shall be installed free of stress and in proper alignment. Horizontal supports shall provide a wide bearing area and be free of burrs or sharp edges. Support spacings shall be in accordance with the manufacturer's recommendations and local plumbing codes. Vertical piping shall have riser clamps at each floor. Pipe supports should be installed so that horizontal piping is in uniform alignment and with a uniform slope of at least 1/8".



## PRODUCT SELECTION CHART

Dimension inches	Product Code
---------------------	-----------------

### AW Polypropylene Pipe Flame Retardant Sch 40



1-1/2	146001
2	146002
3	146003
4	146004
6	146006
8	146008
10	146010
12	146012

10' Lengths

Dimension inches	Product Code
---------------------	-----------------

### AW Polypropylene Pipe Flame Retardant Sch 40



1-1/2	146031
2	146032
3	146033
4	146034
6	146036
8	146038
10	146040
12	146042

20' Lengths

Note: 20' Schedule 40 FR pipe is a non-stock item available upon special request.

### AW Polypropylene Pipe Flame Retardant Sch 80



1-1/2	146013
2	146014
3	146015
4	146016

10' Lengths

### AW Polypropylene Pipe Flame Retardant Sch 80



1-1/2	146022
2	146023
3	146024
4	146025

20' Lengths

Note: 20' Schedule 80 FR pipe is a non-stock item available upon special request.

### AW Polypropylene Pipe Black Non-Flame Retardant Sch 40



1-1/2	146101
2	146102
3	146103
4	146104
6	146106
8	146108
10	146110
12	146212

20' Lengths

### AW Polypropylene Pipe Black Non-Flame Retardant Sch 80



1-1/2	146201
2	146202
3	146203
4	146204
6	146206
8	146208
10	146210
12	146211

20' Lengths

### Black Non-Flame Retardant Enfield Coupling



2	257147
3	257150
4	257154
6	257158
8	257161
10	257143
12	257145

### Coupling EJ



1-1/2	257141
2	257146
3	257149
4	257153
6	257157
8	257160
10	257142
12	257144

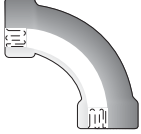
### Fabricated Repair Coupling EJ





2	257148
3	257152
4	257156
6	257159
8	257295


IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.


## PRODUCT SELECTION CHART


	Dimension inches	Product Code
<b>90° Sweep EJ</b> 	1-1/2	257171
	2	257172
	3	257173
	4	257174
	6	257175


	Dimension inches	Product Code
<b>90° Sweep EJ x Sp</b> 	1-1/2	257281
	2	257282
	3	257283
	4	257284
	6	257286


	Dimension inches	Product Code
<b>1/8 Bend EJ</b> 	1-1/2	257191
	2	257194
	3	257195
	4	257196
	6	257197


	Dimension inches	Product Code
<b>1/8 Bend EJ x Sp</b> 	1-1/2	257221
	2	257222
	3	257223
	4	257224
	6	257225

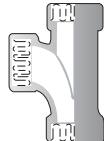
	Dimension inches	Product Code
<b>Fabricated 1/8 Bend EJ</b> 	8	257198
	10	257192
	12	257193

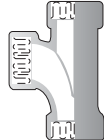
	Dimension inches	Product Code
<b>1/4 Bend (90°) EJ</b> 	1-1/2	257181
	2	257184

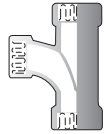
	Dimension inches	Product Code
<b>1/4 Bend (90°) EJ x Sp</b> 	1-1/2	257291
	2	257293

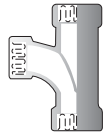
	Dimension inches	Product Code
<b>1/4 Bend EJ x LN</b> 	1-1/2	257292

	Dimension inches	Product Code
<b>Fabricated 1/4 Bend (90°) EJ</b> 	8	257185
	10	257182
	12	257183

	Dimension inches	Product Code
<b>Sanitary Tee EJ</b> 	1-1/2	257201
	2	257206
	3	257208
	4	257211

	Dimension inches	Product Code
<b>Fabricated Sanitary Tee EJ</b> 	6	257214
	8	257217
	10	257202
	12	257205

	Dimension inches	Product Code
<b>Reducing Sanitary Tee EJ</b> 	2 x 1-1/2	257207
	3 x 1-1/2	257209
	3 x 2	257210
	4 x 2	257212
	*4 x 3	257213
	* Fabricated	

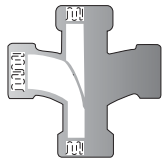
	Dimension inches	Product Code
<b>Fabricated Reducing Sanitary Tee EJ</b> 	6 x 2	257215
	6 x 4	257216
	8 x 3	257163
	8 x 4	257218
	8 x 6	257219
	10 x 3	257164
	10 x 4	257203
	10 x 6	257204
	10 x 8	257165
	12 x 4	257166
	12 x 6	257167
	12 x 8	257168
	12 x 10	257169

IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.

## PRODUCT SELECTION CHART

Dimension inches	Product Code
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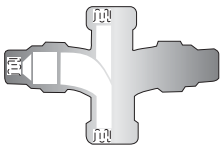
### Double Sanitary Tee EJ



*1-1/2	257351
2	257352
3	257354
4	257357

\* Fabricated

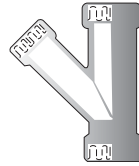
### Reducing Double Sanitary Tee EJ



2 x 1-1/2	257353
3 x 1-1/2	257355
4 x 2	257358
4 x 3	257359

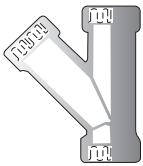
Dimension inches	Product Code
---------------------	-----------------

### Fabricated Reducing Wye EJ



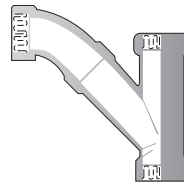
8 x 2	257427
8 x 3	257415
8 x 4	257416
8 x 6	257421
10 x 3	257428
10 x 4	257373
10 x 6	257379
10 x 8	257380
12 x 3	257429
12 x 4	257383
12 x 6	257387
12 x 8	257388
12 x 10	257430

### 45° Wye EJ



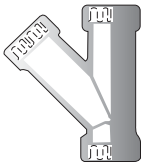
1-1/2	257371
2	257390
3	257394
4	257400
6	257406

### Combination Wye & 1/8 Bend (Long Turn Wye) EJ



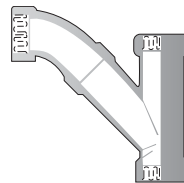
1-1/2	257389
2	257392
3	257397
4	257403
6	257410

### Fabricated 45° Wye EJ



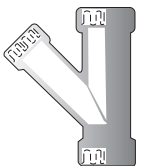
8	257414
10	257372
12	257381

### Fabricated Combination Wye & 1/8 Bend EJ



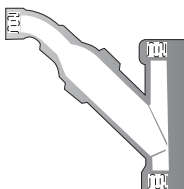
8	257417
10	257374
12	257384

### Reducing Wye EJ



2 x 1-1/2	257391
3 x 1-1/2	257395
3 x 2	257396
4 x 1-1/2	257425
4 x 2	257401
4 x 3	257402
6 x 1-1/2	257426
6 x 2	257407
6 x 3	257408
6 x 4	257409

### Reducing Combination Wye & 1/8 Bend EJ

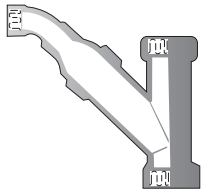


2 x 1-1/2	257393
3 x 1-1/2	257398
3 x 2	257399
4 x 1-1/2	257431
4 x 2	257404
4 x 3	257405
6 x 1-1/2	257432
6 x 2	257411
6 x 3	257412
6 x 4	257413

# PRODUCT SELECTION CHART

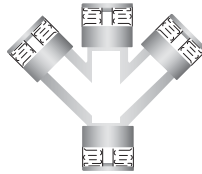
Dimension inches	Product Code
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## Fabricated Reducing Combination Wye & 1/8 Bend EJ



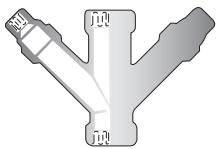
8 x 3	257418
8 x 4	257419
8 x 6	257420
10 x 3	257375
10 x 4	257376
10 x 6	257377
10 x 8	257378
12 x 3	257433
12 x 4	257434
12 x 6	257435
12 x 8	257386
12 x 10	257385

## Fabricated Double 45° Wye EJ



2	257445
3	257448
4	257452
6	257457
8	257460
10	257442
12	257462

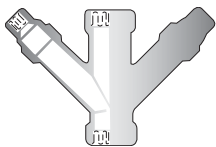
## Reducing Double 45° Wye EJ



*2 x 1-1/2	257446
6 x 4	257458

\* Fabricated

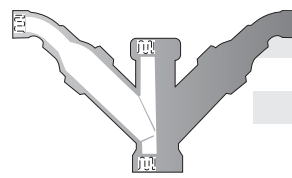
## Fabricated Reducing Double 45° Wye EJ



3 x 2	257449
4 x 2	257453
4 x 3	257454
8 x 6	257461
10 x 4	257443
10 x 6	257463
10 x 8	257444
12 x 4	257464
12 x 6	257465
12 x 8	257466
12 x 10	257467

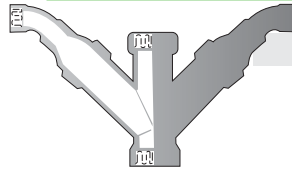
Dimension inches	Product Code
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## Fabricated Double Combination Wye & 1/8 Bend EJ



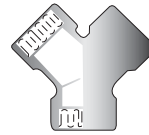
2	257447
3	257450
4	257455
6	257459

## Fabricated Reducing Double Combination Wye & 1/8 Bend EJ



3 x 2	257451
4 x 2	257456

## True Wye EJ



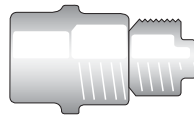
1-1/2	257341
2	257342

## Reducing True Wye EJ



2 x 1-1/2	257343
3 x 2	257344
4 x 3	257345

## Cleanout Sp



1-1/2	257232
2	257235
3	257238
4	257241
*6	257244

\*Fabricated

## Cleanout Plug Male Thread



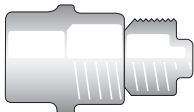
1-1/2	257233
2	257236
3	257239
4	257242

IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.

## PRODUCT SELECTION CHART

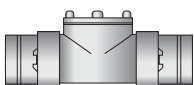
Dimension inches	Product Code
---------------------	-----------------

### Cleanout w/ Brass Plug Sp



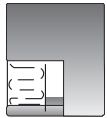
1-1/2	257246
2	257231
3	257247
4	257248

### Fabricated Cleanout Tee EJ




1-1/2	257551
2	257552
3	257553
4	257554
6	257555

### Fabricated Cap EJ




1-1/2	257541
2	257543
3	257544
4	257545
6	257546
8	257547
10	257542
12	257548

### Flange - ASA 150 EJ



1-1/2	257361
2	257365
3	257366
4	257367
6	257368

### Fabricated Flange - ASA 150 EJ



8	257369
10	257362
12	257363

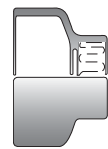
### Fabricated Blind Flange - ASA 150



8	257370
10	257360
12	257364

Dimension inches	Product Code
---------------------	-----------------

### Reducing Bushing Sp x EJ




2 x 1-1/2	257472
** 3 x 1-1/2	257473
3 x 2	257476
** 4 x 1-1/2	257474
4 x 2	257477
4 x 3	257479
6 x 1-1/2	257475
6 x 3	257480
6 x 4	257483
8 x 3	257481
8 x 4	257484
8 x 6	257486
10 x 4	257482
10 x 6	257485
10 x 8	257487
12 x 4	257489
12 x 6	257490
12 x 8	257488
12 x 10	257471

\*\* Discontinued when stock is depleted


### Adapter Female Thread x LN

1-1/2	257101
-------	--------




### Adapter EJ x LN

1-1/2	257111
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### Male Adapter EJ x Male Thread

1-1/2	257121
2	257122




### Female Adapter EJ x Female Thread

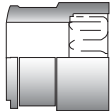
1-1/2	257131
2	257132




IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.

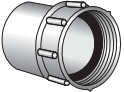
## PRODUCT SELECTION CHART

	Dimension inches	Product Code
<b>Glass Adapter</b> EJ x Bead 	1-1/2	257501
	2	257502
	3	257503
	4	257504

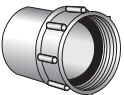
	Dimension inches	Product Code
<b>No Hub Adapter</b> EJ x Sp 	1-1/2	257511
	2	257512
	3	257513
	4	257514

	Dimension inches	Product Code
<b>3"/12" FRPP Tail Piece Adapter</b> 	1-1/2 x 3	257133
	1-1/2 x 12	257134


c/w Spig x Brass Compression Ring

	Dimension inches	Product Code
<b>1-1/2" x 12" FRPP Swivel Sink Strainer Adapter</b> Spg x Female Thread 	1-1/2 x 12	257090

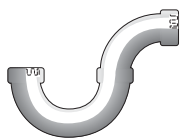
c/w Viton® Gasket

	Dimension inches	Product Code
<b>FRPP Swivel Sink Strainer Adapter</b> Spg x Female Thread 	1-1/2	257093
	*1-1/2	156450

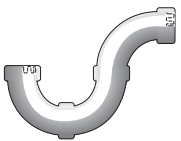
c/w Viton® Gasket  
\*Pregrooved for Labline. Nut and Olive are extra.

	Dimension inches	Product Code
<b>P Trap - 2 piece</b> EJ 	1-1/2	257104
	2	257105

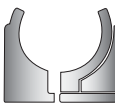
Shipped as 2 pieces

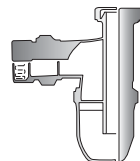
	Dimension inches	Product Code
<b>Fabricated P Trap - 2 piece</b> EJ 	8	257566
	10	257562

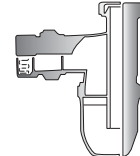
Shipped as 2 pieces

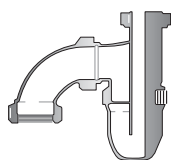
	Dimension inches	Product Code
<b>P Trap - 3 piece</b> EJ 	3	257563
	4	257564
	6	257565

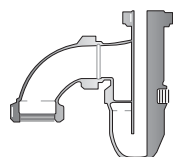
Shipped as 3 pieces

	Dimension inches	Product Code
<b>Pipe Clip</b> 	1-1/2	156251
	2	156252

	Dimension inches	Product Code
<b>Universal Trap - Solid Base, P Type</b> EJ x Female Thread 	1-1/2	257521
	1-1/2	257522

	Dimension inches	Product Code
<b>Universal Trap - Clear Base, P Type</b> EJ x Female Thread 	1-1/2	257531
	1-1/2	257532

	Dimension inches	Product Code
<b>Universal Trap - Solid Base, S Type</b> EJ 	1-1/2	257523

	Dimension inches	Product Code
<b>Universal Trap - Clear Base, S Type</b> EJ 	1-1/2	257533

IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.

## PRODUCT SELECTION CHART

	Dimension inches	Product Code		Description	Product Code
<b>Fabricated Expansion Joint</b>					
	3	257107		-	257263
	4	257108			
	6	257109			
<b>Enfusion Control Unit - Complete Kit</b>					
	-	257279	Kit includes hub clamps, 1 1/2" thru 6", connector cable & 5' link cable.		
<b>Enfusion Hub Clamp - New T Bar Handle &amp; Bushing</b>					
	1-1/2	257254		2 ft. EZ	257268
	2	257256		5 ft. EZ	257269
	3	257257		10 ft. EZ	257270
	4	257258		15 ft. EZ	257271
	6	257259			
	8	257260			
	10	257255			
	12	257262			
<b>Link Cable c/w EZ Connector</b>					
			<b>Link Cable c/w Link Lead</b>		
			5 ft.	257265	
			10 ft.	257266	
			15 ft.	257267	
<b>Link Cable c/w Link Lead</b>					
<b>Fuses</b>					
			16 AMP	257801	
			100 MILAMP	257276	
			100 MILAMP	257277	
<b>Fuses</b>					
<b>Connector Cable - Current Style Machine</b>					
	-	257278			
<b>Oil Impregnated Brass Bushings for Clamps</b>					
	1-1/2 to 12	257094			
<b>Stainless Steel T Handle for Hub Clamps</b>					
	1-1/2 to 12	257125			

# Health Care Systems



**At IPEX you get more than products. You get our knowledge.**

You get more than just purity with Enpure™. You get peace of mind. Enpure is one of the most complete and dependable pure-water thermoplastic piping systems available today. From the manufacturing of cosmetics to solutions for medical use, from pure-water lab applications to dialysis machines, Enpure is designed to meet all challenges. Manufactured with FDA approved materials, Enpure natural polypropylene pipe, valves and fittings eliminate the potential of contamination to your pure process.

And, unlike conventional systems, Enpure is designed as a socket fusion system. No hazardous chemicals are used for joining. Connections are as "clean" as any other components in the system.



For more than 20 years IPEX has provided laboratories throughout North America with complete acid waste systems designed to take a variety of chemicals. Pour it, flush it or dump it – from school labs to industrial labs, Labline™ polypro, and Plenumline™ FR-PVDF acid waste systems are built to handle it.

Since their introduction, Labline and Plenumline mechanical joints have revolutionized the industry – and they continue to be regarded as state-of-the-art. Labline and Plenumline also feature a new no-heat Elastolive for quicker installation and higher performance.

Backed by IPEX's 50 years of experience, Enpure, Labline and Plenumline are built to our strict quality, performance and dimensional standards.

**enpure™**  
HIGH PURITY PP SYSTEM

**LABLINE®**  
MECHANICAL JOINT ACID WASTE SYSTEM

**PLENUMLINE™**  
FR-PVDF MECHANICAL JOINT ACID WASTE SYSTEM



**Acid Waste Systems**

We build tough products for tough environments®

*Products are manufactured by IPEX Inc. Enpure™, Labline™ and Plenumline™ are trademarks of IPEX Branding Inc.*

Call 1-800-473-9462 or visit [www.ipexinc.com](http://www.ipexinc.com)

# LABLINE MECHANICAL JOINT ACID WASTE SYSTEMS

## LABLINE®

Labline (Mechanical Joint) has displaced the more expensive and difficult to install glass and metal systems. Gone is the need for fusing, caulking or welding of joints. Joining of the Labline System is complete in just 30 seconds and once the nut is locked into place, the end-user is assured of many years of trouble-free service. Yet, because it is a mechanical joint, the system can be easily dismantled and re-used, making it ideal for modular designs and for systems that may require re-modeling in the future.

### STANDARDS



NSF-approved  
IAPMO-listed & CSA-certified  
Meets ASTM F1412, D4101 and CSA B181.3

### ADVANTAGES

- 1 **30 second jointing** - save on installation time
- 2 **Proven reliability** for over 30 years
- 3 **Labline is manufactured from polypropylene** which has an operating temperature range from -10°F (-23°C) to 212°F (100°C).\* This allows systems to be flushed with boiling water
- 4 **All plastic construction** - no galvanic action, electrolysis or corrosion in the joint
- 5 **Simple, inexpensive, non-temperamental tools**
- 6 **Easy to install**, even in difficult areas
- 7 **Mastered by plumbers in minutes.** No pre-heating required to install olive
- 8 **System changes during installation can be done without spoiling fittings**
- 9 **Can be disassembled and re-used**
- 10 **Ideal for modular systems**
- 11 **Ideal for remodeling**
- 12 **Matched system** - high quality pipe and fittings are matched to give ease of installation and long term reliability





## DID YOU KNOW?

Both Labline® and Plenumline™ contain no-heat Elastolives™ for quick installation and high performance.

## SHORT FORM SPECIFICATIONS

### GENERAL

Acid waste drain and vent system, as shown on drawings, shall be NSF listed, Schedule 40, polypropylene as manufactured by IPEX to include pipe supplied in 10 ft. lengths (or 20 ft lengths if NFRPP is specified), and matched fittings, traps and neutralization tanks from the same manufacturer. It shall also include recommended adapters to connect to other piping materials, where applicable.

### MATERIAL

Pipe shall be made from NSF listed Type 1, flame retardant polypropylene conforming to ASTM D4101, with a maximum average flame spread of zero seconds and a maximum extent of burning of 13 mm, in accordance with ASTM D635.

Matched fittings shall be made from NSF listed flame retardant polypropylene with average

maximum burn time of 80 seconds and maximum extent of burning of 20 mm in accordance with ASTM D635.

If NFRPP pipe is specified, it shall be made from NSF 14 listed and CSA certified Schedule 40 PP as manufactured by IPEX. Pipe shall comply with ASTM F1412 and material used shall comply with the material requirements of ASTM D4101.

### FITTINGS

Fittings shall be NSF listed, be of all plastic construction and be designed to lock into a machined groove on the mating piping. All fittings shall have integrally molded union connections. No metallic grab rings or clamps shall be allowed. Fittings containing EVA (ethylene vinyl acetate) are strictly prohibited. Couplings shall not be added to make mechanical joint fittings. Fittings shall be Labline or approved equivalent.

### JOINTS

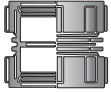
Connections between polypropylene pipe and matched fittings shall be made using the Labline Joint.

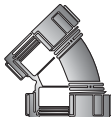
### INSTALLATION AND TESTING

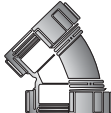
Installation and testing shall be in accordance with the contract drawings, the manufacturer's recommendations and the local plumbing codes. Testing with compressed air is prohibited. The entire system shall be installed free of stress and in proper alignment. Horizontal supports shall provide a wide bearing area and be free of burrs or sharp edges. Support spacings shall be in accordance with the manufacturer's recommendations and local plumbing codes. Vertical piping shall have riser clamps at each floor. Pipe supports shall be installed so that horizontal piping is in uniform alignment and with a uniform slope of at least 1/8" per foot, or in accordance with the local plumbing codes.




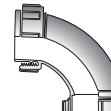
## PRODUCT SELECTION CHART

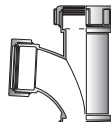
	Dimension inches	Product Code
	1-1/2	156161
	2	156162
	3	156163
	4	156164

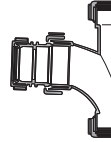
1/8 Bend (45°)		
	1-1/2	156191
	2	156192
	3	156193
	4	156194


Loose Nut 1/8 Bend (45°) MJ x LN		
	1-1/2	156216
	2	156217
	3	156218
	4	156219


1/4 Bend (90°)		
	1-1/2	156181
	2	156182
	3	156183
	4	156184

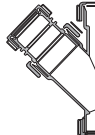
Loose Nut 1/4 Bend MJ x LN		
	1-1/2	156291
	2	156292
	3	156293
	4	156294

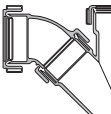
Sanitary Tee		
	1-1/2	156201
	2	156203
	3	156206
	4	156210

	Dimension inches	Product Code
	2 x 1-1/2	156204
	3 x 1-1/2	156207
	3 x 2	156208
	4 x 1-1/2	156211
	4 x 2	156212
	4 x 3	156213

Cleanout Tee		
	1-1/2	156202
	2	156205
	3	156209
	4	156214

45° Wye		
	1-1/2	156361
	2	156363
	3	156367
	4	156373

Reducing 45° Wye		
	2 x 1-1/2	156364
	3 x 1-1/2	156368
	3 x 2	156369
	4 x 1-1/2	156374
	4 x 2	156375
	4 x 3	156376

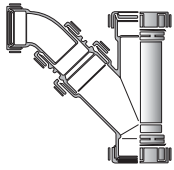
Combination Wye & 1/8 Bend		
	1-1/2	156362
	2	156365
	3	156370
	4	156377

All Labline fittings are furnished assembled with Olives and Union Nuts. IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.

## PRODUCT SELECTION CHART

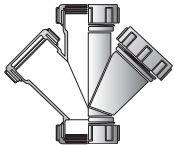
Dimension inches	Product Code
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### Reducing Combination Wye & 1/8 Bend



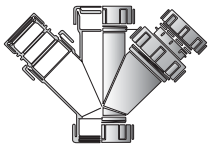
2 x 1-1/2	156366
3 x 1-1/2	156371
3 x 2	156372
4 x 1-1/2	156380
4 x 2	156378
4 x 3	156379

### Double Wye



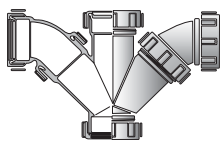
1-1/2	156381
2	156383
3	156387
4	156392

### Reducing Double Wye



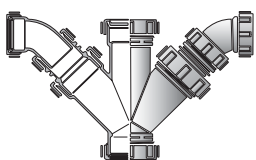
2 x 1-1/2	156384
3 x 1-1/2	156388
3 x 2	156389
4 x 1-1/2	156405
4 x 2	156393
4 x 3	156394

### Double Wye & 1/8 Bend



1-1/2	156382
2	156385
3	156390
4	156395

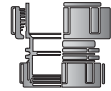
### Reducing Double Wye & 1/8 Bend



2 x 1-1/2	156386
3 x 1-1/2	156406
3 x 2	156391
4 x 1-1/2	156407
4 x 2	156396
4 x 3	156408

Dimension inches	Product Code
---------------------	-----------------

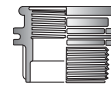
### Reducing Coupling LN x MJ



2 x 1-1/2	156397
3 x 1-1/2	156398*
3 x 2	156400*
4 x 1-1/2	156399*
4 x 2	156401*
4 x 3	156402

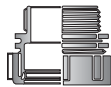
\* Loose nut not furnished

### Threaded Adapter Male Thread x Female Thread



1-1/2 x 1-1/4	156121
1-1/2 x 1-1/2	156131

### Male Adapter MJ x Male Thread



1-1/2	156141
2	156142
3	156143
4	156144

### Female Adapter MJ x Female Thread



1-1/2	156151
2	156152

### Glass Adapter MJ x Bead



1-1/2	156451
2	156452
3	156453
4	156454


### No Hub Adapter MJ x Spigot





1-1/2	156461
2	156462
3	156463
4	156464

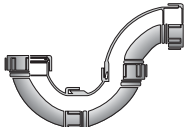
All Labline fittings are furnished assembled with Olives and Union Nuts. IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent


## PRODUCT SELECTION CHART


	Dimension inches	Product Code
<b>Cleanout Plug</b> 	1-1/2	156241
	2	156242
	3	156243
	4	156244

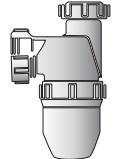
	Dimension inches	Product Code
<b>Vent Loop U Bend</b> 	1-1/2	156101
	2	156102

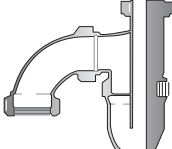
	Dimension inches	Product Code
<b>P Trap - 2 Piece</b> 	1-1/2	156103
	2	156104

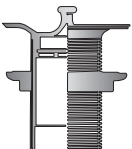
	Dimension inches	Product Code
<b>P Trap - 3 piece Long Radius</b> 	1-1/2	156711
	2	156712
	3	156713
	4	156714

	Dimension inches	Product Code
<b>S Trap - 3 Piece</b> 	1-1/2	156105
	2	156106

	Dimension inches	Product Code
<b>Running Trap - 3 Piece</b> 	1-1/2	156107
	2	156108

	Dimension inches	Product Code
<b>Universal Trap Female Thread x MJ</b> 	1-1/2	156501
	1-1/2	156511
	Transparent Base	
	-	156512
	PP Base Only	
	-	156513
	Clear Base Only	
	-	156514
	O-ring Gasket Only	
-	156516	
Top Assembly For W501 & W511		

	Dimension inches	Product Code
<b>Universal Trap, S-Type Female Thread x MJ</b> 	1-1/2	156502
	*1-1/2	156515
* Transparent Base		

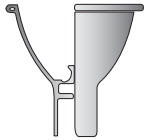
	Dimension inches	Product Code
<b>Sink Outlet w/ Plug</b> 	1-1/2 - 3-3/8	156303
	1-1/2 - 3-3/8	156304
	1-1/2 - 2-7/8	156311
	1-1/2 - 2-7/8	156312
	-	156302


	Dimension inches	Product Code
<b>Sink Outlet Plug</b>	-	156301
	-	156305

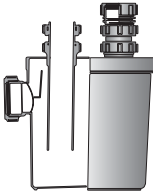
	Dimension inches	Product Code
<b>Sink Overflow</b>	1-1/2	156321
	1-1/2	156322

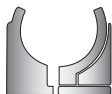
All Labline fittings are furnished assembled with Olives and Union Nuts. IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.

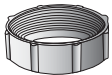
## PRODUCT SELECTION CHART

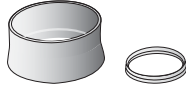
	Dimension inches	Product Code
	6 x 4 Deep	156403
	4 x 4 Deep	156404
	-	156409

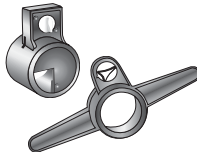
	Dimension inches	Product Code
	6 x 3	156491
	9 x 3	156493
	-	156492


	Dimension inches	Product Code
	1-1/2	156601
	*1-1/2	156611
* Transparent Base		

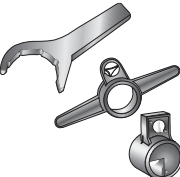
	Dimension inches	Product Code
	1-1/2	156251
	2	156252

	Dimension inches	Product Code
	1-1/2	156231
	2	156232
	3	156233
	4	156234

	Dimension inches	Product Code
	1-1/2	156222
	2	156113
	3	156114
	4	156115

	Dimension inches	Product Code
	1-1/2	156109
	2	156110
	3	156111
	4	156112

	Dimension inches	Product Code
	1-1/2	156264
	2	156266
	3	156268
	4	156270

	Dimension inches	Product Code
	1-1/2	156263
	2	156265
	3	156267
	4	156269

# FLOWAY POLYPROPYLENE FLOOR DRAINS

## FLOWAY™

For efficiently managing chemical spills, our Floway™ adjustable and non-adjustable polypropylene drain ports are specially designed to feed into IPEX acid waste systems.

### ADVANTAGES

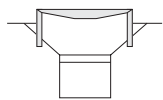
- ① Rated for pedestrian traffic and available in sizes from 2" to 6".
- ② Floway™ drains can be optionally configured with adjustable strainers, round funnels, sediment baskets and plain end or threaded outlets.
- ③ Adjustable feature allows easy leveling after pouring of finished floors



### PRODUCT SELECTION CHART

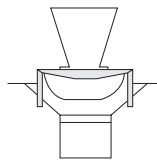
Dimension Inches	Product Code
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#### F1000 Series Adjustable Floor Drain



Enfield 2	237001
Labline 2	237075
3	237011
4	237021
6	237031

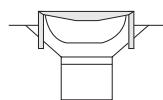
#### F1000 Series Adjustable Floor Drain



Enfield 2	237003
Labline 2	237077
3	237013
4	237023
6	237034

w/ Sediment Basket and 6" Round Funnel

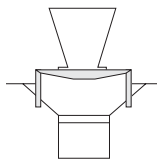
#### F1000 Series Adjustable Floor Drain



Enfield 2	237002
Labline 2	237076
3	237012
4	237022
6	237033

w/ Sediment Basket

#### F1000 Series Adjustable Floor Drain



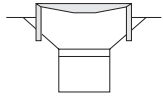
Enfield 2	237004
Labline 2	237078
3	237014
4	237024
6	237032

w/ 6" Round Funnel Only

# PRODUCT SELECTION CHART

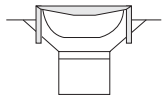
Dimension Inches	Product Code
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## F4000 Series Non-Adjustable Floor Drain



Enfield 2	237041
Labline 2	237079
3	237051
4	237061
6	237071

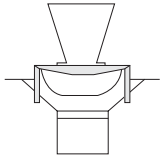
## F4000 Series Non-Adjustable Floor Drain



Enfield 2	237042
Labline 2	237080
3	237052
4	237062
6	237072

w/ Sediment Basket

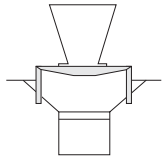
## F4000 Series Non-Adjustable Floor Drain



Enfield 2	237044
Labline 2	237081
3	237053
4	237063
6	237073

w/ Sediment Basket & 6" Round Funnel

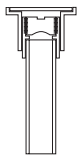
## F4000 Series Non-Adjustable Floor Drain



Enfield 2	237043
Labline 2	237082
3	237054
4	237064
6	237074

w/ 6" Round Funnel Only

## Floor Cleanout with Brass Cover (adjustable Cleanout) Sp



2	237173
3	237174
4	237175
6	237177

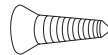
Dimension Inches	Product Code
---------------------	-----------------

## Gas Tight Plug



3	237815
4	237816
6	237817

## Allenhead Vandalproof Screws



Set of 3 screws	237045
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## Blank Cover for F Series Drains

F1000 Series	237814
F4000 Series	237813

## Round Funnel

6	237810
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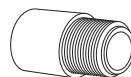
## Sediment Basket Strainer for F Series Drains

F1000 Series	237809
F4000 Series	237808

## Grid Strainers for F Series Drains

F1000 Series	237807
F4000 Series	237806

## Male Iron Pipe Threaded Outlet



3	257091
4	257092

## FPT Tap for Priming Drain Assembly

3/8	237430
1/2	237429

# PLENUMLINE MECHANICAL JOINT ACID WASTE SYSTEM

1-1/2" - 6"

## PLENUMLINE™

Plenumline mechanical joint acid waste systems easily displace costly and difficult-to-install glass and metal systems. With Plenumline, time-consuming methods associated with conventional heavy and brittle systems are replaced by a time proven mechanical joint that takes only 30 seconds to complete. Once the Plenumline nut is locked in place, the end-user is assured of many years of trouble-free service. In addition, mechanical joint systems can easily be dismantled and re-used, making Plenumline ideal for modular designs and future expansions.

### ADVANTAGES

- 1 **Ideally suited to plenum applications**
- 2 **30-second joints shorten installation time**
- 3 **Manufactured from Flame Retardant PVDF**, which has an operating temperature range from -40°F (-40°C) to 285°F (140°C). With this high upper limit, Plenumline systems can be flushed with boiling water.
- 4 **All-plastic construction eliminates galvanic action, electrolysis and corrosion in the joint.**
- 5 **Easy to install**, even in tight areas, by using simple, inexpensive tools. Mechanical joints are mastered by plumbers in minutes; no pre-heating is required to install the new blue elastolive.
- 6 **Modularized design** means Plenumline components can be disassembled and re-used. In addition, system modifications during installation can be performed without damaging fittings.
- 7 **High-quality pipe and fittings** are matched to simplify installation and extend long-term reliability.
- 8 **Flame Retardant PVDF** material exhibits a flame spread index of 5 and smoke development index of 35 as tested in accordance with ASTM E84 and UL723.

### STANDARDS



IAPMO listed, meets ASTM F1673

Certified by NSF to CSA B181.3

ULC listed, with Flame and Smoke rating of IO and Smoke Development of IO when tested to CAN/ULC-S102.2

UL listed when tested to ASTM E84 (UL723)



## **i DID YOU KNOW?**

IPEX Plenumline is a robust acid waste system, made from flame-retardant PVDF thermoplastic, designed for challenging conditions, including highly restrictive return air plenum applications and high-temperature corrosive chemical waste situations.



## **SHORT FORM SPECIFICATIONS**

### **GENERAL**

Acid waste drain and vent system, as shown on drawings, shall be IAPMO listed, Schedule 40, FR-PVDF as manufactured by IPEX to include pipe supplied in 10 ft. lengths and matched fittings, traps and neutralization tanks from the same manufacturer. It shall also include recommended adapters to connect to other piping materials, where applicable.

### **MATERIAL**

Pipe and fittings shall be made from Kynar 740-02, flame retardant PVDF conforming to ASTM F 1673, with a limiting oxygen index (LOI) of 60, Resin must have a vertical burn rating of 94 V-0. Kynar 740-02 resin based on testing to ASTM E84 (UL 723) must have surface burning characteristics greater than or equal to a flame spread 5 and smoke development 35.


### **FITTINGS**


Fittings shall be third party certified to ASTM F 1673 and ASTM E84, and IAPMO approved, be of all plastic construction and a tapered elastic retaining ring shall be designed to lock into a machined groove on the mating piping. All fittings shall have integrally molded union connections. No metallic grab rings or clamps shall be allowed. Fittings shall be Plenumline™ or approved equal.


### **INSTALLATION AND TESTING**


Installation and testing shall be in accordance with the contract drawings, the manufacturer's recommendations and the local plumbing codes. Testing with compressed air including air booster over water is prohibited. The entire system shall be installed free of stress and in proper alignment. Horizontal supports shall provide a wide bearing area and be free of burrs or sharp edges. Support spacings shall be in accordance with the manufacturer's recommendations and local plumbing codes. Vertical piping shall have riser clamps at each floor. Pipe supports shall be installed so that horizontal piping is in uniform alignment and with a uniform slope of at least 1/8" per foot, or in accordance with the local plumbing code requirements.

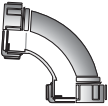
## PRODUCT SELECTION CHART


	Dimension Inches	Product Code
<b>Pipe</b> 	1-1/2	147045
	2	147046
	3	147047
	4	147048


	Dimension Inches	Product Code
<b>Coupling</b> 	1-1/2	157006
	2	157007
	3	157008
	4	157009

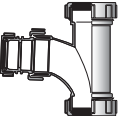
	Dimension Inches	Product Code
<b>1/8 Bend</b> 	1-1/2	157014
	2	157015
	3	157016
	4	157017


	Dimension Inches	Product Code
<b>Loose Nut 1/8 Bend</b> 	1-1/2	157024
	2	157025
	3	157026
	4	157027


	Dimension Inches	Product Code
<b>1/4 Bend</b> 	1-1/2	157010
	2	157011
	3	157012
	4	157013

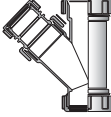
	Dimension Inches	Product Code
<b>Loose Nut 1/4 Bend LN x MJ</b> 	1-1/2	157032
	2	157033
	3	157034
	4	157035

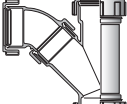
	Dimension Inches	Product Code
<b>Sanitary Tee</b> 	1-1/2	157018
	2	157019
	3	157020
	4	157021

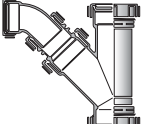
	Dimension Inches	Product Code
<b>Reducing Sanitary Tee</b> 	2 x 1-1/2	157022
	3 x 1/12	157065
	3 x 2	157023
	4 x 2	157067
	4 x 3	157068


	Dimension Inches	Product Code
<b>Cleanout Tee</b> 	1-1/2	157061
	2	157062
	3	157063
	4	157064

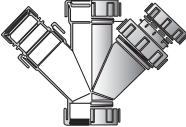
	Dimension Inches	Product Code
<b>45° Wye</b> 	1-1/2	157036
	2	157037
	3	157038
	4	157039

	Dimension Inches	Product Code
<b>Reducing 45° Wye</b> 	2 x 1-1/2	157069
	3 x 1/12	157073
	3 x 2	157070
	4 x 2	157071
	4 x 3	157072

	Dimension Inches	Product Code
<b>Combination Wye &amp; 1/8 Bend</b> 	1-1/2	157074
	2	157075
	3	157076
	4	157077

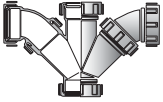
	Dimension Inches	Product Code
<b>Reducing combination Wye &amp; 1/8 Bend</b> 	2 x 1-1/2	157078
	3 x 1/12	157079
	3 x 2	157080
	4 x 2	157081
	4 x 3	157082


	Dimension Inches	Product Code
<b>Double 45° Wye (Fabricated)</b> 	1-1/2	157049
	2	157050
	3	157051
	4	157052

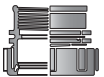
	Dimension Inches	Product Code
<b>Reducing Double Wye</b> 	2 x 1-1/2	157096
	3 x 1/12	157104
	3 x 2	157097
	4 x 1-1/2	157091
	4 x 2	157098
4 x 3	157099	


All fittings are furnished assembled with Olives and Union Nuts. IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent.


## PRODUCT SELECTION CHART


	Dimension Inches	Product Code
	1-1/2	157100
	2	157101
	3	157102
	4	157103


Male Adapter MJ x Male Thread	Dimension Inches	Product Code
	1-1/2	157002
	2	157003


Female Adapter MJ x Female Thread	Dimension Inches	Product Code
	1-1/2	157004
	2	157005


Cleanout Plug	Dimension Inches	Product Code
	1-1/2	157028
	2	157029
	3	157030
	4	157031

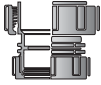
U Bend for P-Trap	Dimension Inches	Product Code
	1-1/2	157000
	2	157001

P-Trap 2 piece	Dimension Inches	Product Code
	1-1/2	157083
	2	157084

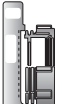
P-Trap Long Radius 3 piece	Dimension Inches	Product Code
	1-1/2	157085
	2	157086
	3	157087
	4	157088

Running Trap	Dimension Inches	Product Code
	1-1/2	157089
	2	157090


Fabricated Cap	Dimension Inches	Product Code
	1-1/2	157053
	2	157054
	3	157055
	4	157056

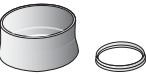
	Dimension Inches	Product Code
	2 x 1-1/2	157040
	3 x 1/12	157041
	3 x 2	157042
	4 x 2	157043
	4 x 3	157044

Note: Loose Nut and Olive not furnished.

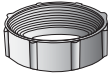
Flange (Fabricated)	Dimension Inches	Product Code
	1-1/2	157057
	2	157058
	*3	157059
	4	157060


\*While quantities last, Obsolete when stock depleted


Tail Piece Adapter Sp x Brass Compression Ring	Dimension Inches	Product Code
	1-1/2 x 12	157105

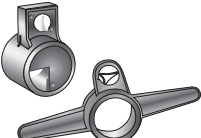
No Heat Elastolive Blue	Dimension Inches	Product Code
	1-1/2	157066
	2	157106
	3	157107
	4	157108

Note: Blue olive nut is not interchangeable with the FRPP Yellow olive nut.

Union Nut	Dimension Inches	Product Code
	1-1/2	157109
	2	157110
	3	157111
	4	157112

Grooving Tool & Spanner Combination Set	Dimension Inches	Product Code
	1-1/2	156263
	2	156265
	3	156267
	4	156269

Spanner	Dimension Inches	Product Code
	1-1/2	156264
	2	156266
	3	156268
	4	156270

Grooving Tool	Dimension Inches	Product Code
	1-1/2	156109
	2	156110
	3	156111
	4	156270

All fittings are furnished assembled with Olives and Union Nuts. IPEX components are dimensionally matched; do not install system of mixed brands without our expressed written consent

# HDPE & POLYPROPYLENE NEUTRALIZATION TANKS

## NEUTRATANK®

IPEX offers a complete range of Neutratan<sup>®</sup> neutralization tanks as well as dilution, sampling and pH tanks for managing concentrations and pH levels in acid waste systems.

Neutratan<sup>®</sup>s are made of high-density polyethylene or polypropylene material with a one-piece rotationally molded, seamless construction, a bolt-down flanged top and combination EZ Access cover. Neutratan<sup>®</sup>s are available in sizes from 5 gallons to 2,000 gallons to suit most potential design conditions.



### DID YOU KNOW?

Neutratan<sup>®</sup>s are used for limestone neutralization of chemical waste prior to discharge into the sewer.

### ADVANTAGES

- 1 **Cylindrical and rectangular limestone neutralization tanks from 5 to 2000 gallons are available.**
- 2 **A variety of lids, inlets, outlets and accessories are offered.**
- 3 **Dilution tanks are available in 1, 2 and 5-gallon sizes.**

### SHORT FORM SPECIFICATIONS

Contractor shall furnish and install HDPE (Polypropylene) Neutralization Tank. Tank shall be rotationally molded, seamless construction with flanged top and welded or bolt down cover, as supplied by IPEX. Tank shall be Neutratan<sup>®</sup> No. CT0100, having 100-gallon capacity complete with 3" inlet and outlet, and 1 1/2" vent connection. Tank to be 32" diameter x 42" high. Tank shall be installed in accordance with manufacturer's recommendations.

Contractor shall furnish and fill the tank prior to installation with limestone chips, as supplied by IPEX, to a level just below the tank outlet. Water should be added to the tank prior to placement of the limestone chips. equal to a flame spread 5 and smoke development 35.



## PRODUCT SELECTION CHART

Gallons	Inlet/Outlet Inches	Product Code
---------	---------------------	--------------

### \*HDPE EZ Plain End

5	1-1/2	237111
5	2	237112
15	2	237122
15	3	237123
30	2	237132
30	3	237133
30	4	237134
55	3	237143
55	4	237144
100	3	237152
100	4	237153
150	3	237241
150	4	237242
200	3	237271
200	4	237272
275	3	237128
275	4	237129

\*Obsolete when stock is depleted

### HDPE Standard Domed Plain End

5	1-1/2	237211
5	2	237212
15	2	237222
15	3	237223
30	2	237232
30	3	237233
30	4	237234
55	3	237243
55	4	237244
100	3	237252
100	4	237253
150	3	237281
150	4	237282
200	3	237411
200	4	237412
275	3	237130
275	4	237124
360	3	237125
360	4	237126
360	6	237497
500	3	237135
500	4	237136
500	6	237498

Gallons	Inlet/Outlet Inches	Product Code
---------	---------------------	--------------

### HDPE HD Bolted Flat Plain End

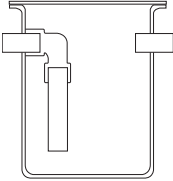
5	1-1/2	237183
5	2	237184
15	2	237185
15	3	237186
30	2	237187
30	3	237188
30	4	237189
55	3	237190
55	4	237191
100	3	237192
100	4	237193
150	3	237194
150	4	237195
200	3	237196
200	4	237197
275	3	237198
275	4	237199
360	3	237200
360	4	237201
360	6	237202
500	3	237203
500	4	237204
500	6	237205

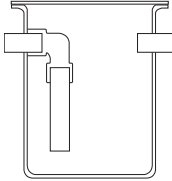
### HDPE Steel Pedestrian Plain End

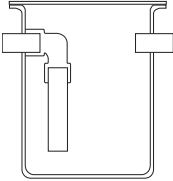
5	1-1/2	237501
5	2	237502
15	2	237503
15	3	237504
30	2	237505
30	3	237506
30	4	237507
55	3	237508
55	4	237509
100	3	237510
100	4	237511
150	3	237512
150	4	237513
200	3	237514
200	4	237515
275	3	237516
275	4	237517
360	3	237518
360	4	237519
360	6	237520
500	3	237521
500	4	237522
500	6	237526

EZ Standard Domed & HD Flat covers are not suitable for pedestrian traffic. Always use steel pedestrian covers. Neutratanks are not rated for H2) live loading. In areas requiring H2O loading, position the tank below a Department of Transportation approved manhole cover. Regular tanks and 700 to 2000 gallon cylindrical tanks are available on request.

## PRODUCT SELECTION CHART

	Gallons	Inlet/Outlet Inches	Product Code
	<b>Polypro Standard Domed Plain End</b>		
	7	1-1/2	237059
	7	2	237065
	15	2	237066
	15	3	237067
	30	2	237068
	30	3	237069
	30	4	237070
	55	3	237093
	55	4	237094
	100	3	237095
	100	4	237096
	150	3	237097
	150	4	237098
	200	3	237099
	200	4	237100
	275	3	237101
	275	4	237102
360	3	237103	
360	4	237104	
360	6	237105	
500	3	237106	
500	4	237107	
500	6	237108	

	Gallons	Inlet/Outlet Inches	Product Code
	<b>Polypro Steel Pedestrian Plain End</b>		
	7	1 1/2	237524
	7	2	237525
	15	2	237526
	15	3	237527
	30	2	237528
	30	3	237529
	30	4	237530
	55	3	237531
	55	4	237532
	100	3	237533
	100	4	237534
	150	3	237535
	150	4	237536
	200	3	237537
	200	4	237538
	275	3	237539
	275	4	237540
360	3	237541	
360	4	237542	
360	6	237543	
500	3	237544	
500	4	237545	
500	6	237546	

	Gallons	Inlet/Outlet Inches	Product Code
	<b>Polypro HD Bolted Flat Plain End</b>		
	7	1-1/2	237206
	7	2	237207
	15	2	237208
	15	3	237209
	30	2	237210
	30	3	237213
	30	4	237214
	55	3	237215
	55	4	237216
	100	3	237218
	100	4	237220
	150	3	237224
	150	4	237225
	200	3	237226
	200	4	237228
	275	3	237230
	275	4	237235
360	3	237236	
360	4	237238	
360	6	237239	
500	3	237240	
500	4	237245	
500	6	237246	

Inlet / Outlet	Tank Size
<b>Inlet / Outlet Tank Sizes &amp; Connection Options</b>	
1-1/2" Plain End, MPT, FPT, Flanged	5 gal to 55 gal
2" Plain End, MPT, FPT, Flanged	5 gal to 150 gal
3" Plain End, MPT, FPT, Flanged	15 gal to 500 gal
3" Flanged	30 gal to 500 gal
4" Plain End, MPT, FPT, Flanged	30 gal to 2000 gal
6" Flanged	360 gal to 2000 gal

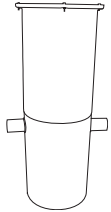
EZ Standard Domed & HD Flat covers are not suitable for pedestrian traffic. Always use steel pedestrian covers. Neutraltanks are not rated for H2) live loading. In areas requiring H2O loading, position the tank below a Department of Transportation approved manhole cover. Regular tanks and 700 to 2000 gallon cylindrical tanks are available on request.

# PRODUCT SELECTION CHART

Gallons	Ext Length Inches	Product Code
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Inlet/Outlet Inches	Product Code
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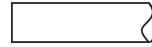
## HDPE Non-Adjustable Extension



5	6 to 9	237462
15	6 to 14	237463
30	6 to 24	237464
55	6 to 31	237465
100	6 to 35	237466
150	6 to 43	237467
200	6 to 43	237468
275	6 to 42	237469
360	6 to 42	237470
500	6 to 54	237471

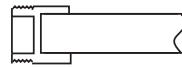
Polypro Non-Adjustable extensions are available upon request.

## HDPE Plain End Vent



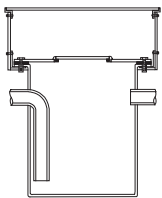
1-1/2	237401
2	237402
3	237403
4	237404

## HDPE MPT Connection



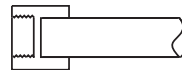
1-1/2	237421
2	237422
3	237423
4	237424

## Variable Extension (2" of Vertical Adjustment)



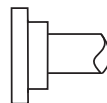
5/7	6 to 36	237454
15	6 to 36	237455
30	6 to 36	237456
55	6 to 36	237457
100	6 to 36	237458
150	6 to 36	237459
200	6 to 36	237460
275	6 to 36	237461
360	6 to 36	-
500	6 to 36	-

## HDPE FPT Connection



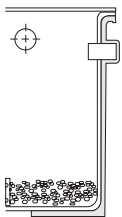
1-1/2	237431
2	237432
3	237433
4	237434

## HDPE Flange Connection



1-1/2	237121
2	237131
3	237141
4	237142
6	237500

## FRP Overwrap



5/7	-	237440
15	-	237441
30	-	237442
55	-	237443
100	-	237444
150	-	237445
200	-	237446
275	-	237447
360	-	237448
500	-	237449

FRP Overwrap is for tanks without extensions. Please contact IPEX for FRP overwrap pricing on tanks with non-adjustable extensions.

## PolyPro Plain End Vent



1-1/2	237109
2	237110
3	237113
4	237114

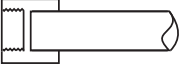
## PolyPro MPT Connection

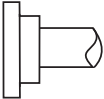



1-1/2	237156
2	237157
3	237158
4	237159

EZ Standard Domed & HD Flat covers are not suitable for pedestrian traffic. Always use steel pedestrian covers. Neutraltanks are not rated for H2O live loading. In areas requiring H2O loading, position the tank below a Department of Transportation approved manhole cover. Regular tanks and 700 to 2000 gallon cylindrical tanks are available on request.

## PRODUCT SELECTION CHART

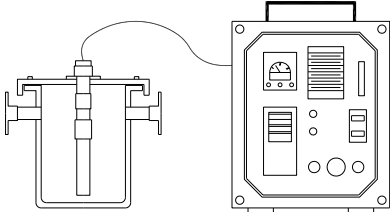
	Inlet/Outlet Inches	Product Code
	1-1/2	237139
	2	237140
	3	237148
	4	237149

	Inlet/Outlet Inches	Product Code
	1-1/2	237116
	2	237118
	3	237120
	4	237138

	Diameter Inches	Product Code
	8	237450
	16	237451
	22	237452

Neutralizing Agent	Limestone Bags	Product Code
	50 lbs	237321 TC50

NOTE: F.O.B.- Shipping Location

	Diameter Inches	Product Code
	1-1/2	237371
	2	237331
	3	237341
	4	237351

Tank Size	Loading (lbs.)
5	50
15	125
30	250
55	500
100	1000
150	1500
200	2000
275	2500
360	3500
500	5250
700	8000
1000	10000
1250	12000
2000	18000

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IPEX offers two compressed air systems designed to meet the requirements of a wide range of applications.

When you specify a high-performance piping systems from IPEX, you get the added benefits of a complete piping solution that is engineered for total integration, and backed by comprehensive, coast-to-coast support – all from one reliable source.

# Compressed Air Systems



Duraplus Airline

84

Duratec Airline

90

# DURAPLUS AIR-LINE SYSTEM

1/2" - 4" (20mm - 110mm)



Compressed air, a major source of industrial energy, is being used increasingly in both the manufacturing and processing industries. There, its distinct advantages of cleanliness, flexibility, safety and economy of use (compared with other energy sources) are fully exploited.

Modern process equipment, pneumatic controls and instrumentation demand a supply of clean, uncontaminated air and this has prompted the development in recent years of more advanced designs of compressors and ancillary equipment.

Duraplus Air-Line is manufactured from a specially formulated Acrylonitrile Butadiene Styrene (ABS) blend that has a high performance co-extruded nylon liner which greatly enhances its mechanical and chemical properties. Duraplus fittings are manufactured using an alloy blend of ABS and nylon, ensuring high performance of the whole system.

## APPLICATIONS

- Plant air
- Valve actuation
- Food and beverage – CO<sub>2</sub> delivery
- Ventilation

## STANDARDS



## ADVANTAGES

### 1 Safety

The Butadiene component of Duraplus Air-Line contributes resistance to accidental damage and prevents material fracture should the pipe be subjected to severe impact. Duraplus has been designed and tested to withstand impact for a large range of temperatures and has a design life of 30 years with a factor of safety of 2:1.

### 2 Wide Range of Applications

The advanced liner and ABS material combination protects against stray chemicals which may sometimes cause problems for ordinary systems. Duraplus Air-Line is now compatible with even more compressor lubricants.

### 3 Low Installation Costs

Duraplus Air-Line pipe reduces costs on a typical installation not only for materials but also for labor and transportation costs when compared to traditional materials. The reason? Its lightweight construction and simple assembly procedures. Like all thermoplastics, Duraplus is easily handled, stored, cut, joined and installed. As a result, project costs for installed Duraplus systems are significantly lower. Requirements for heavy installation equipment are also eliminated.

### 4 Clean

Duraplus products are packaged to protect the surface finish of the pipe and fittings and to prevent contamination before use. The smooth liner of Duraplus Air-Line cannot rust, corrode or form loose scale, ensuring air remains clean throughout the life of the system.

### 5 Smooth Interior

Less friction means lower pressure drops and higher flow rates allowing for smaller pipe diameters to be used in some cases.

### 6 Ease of Use

Duraplus Air-Line is one sixth the weight of steel and can be joined by solvent welding for easy on-site modifications and repairs without requiring special training or equipment.

### 7 Leak Free System

Correctly made solvent welded joints are leak free and can greatly reduce running costs.

### 8 Metric Sized & Colour Coded

Duraplus Air-Line is metric sized to prevent mixing with I.P.S. sized PVC and CPVC pipe. Also the Duraplus Airline is colour coded blue to comply with the ISO standards for compressed air products.

### 9 Proven

From manufacturing to the marketplace, Duraplus Air-Line is supported by the technical experience gained through over 30 years of thermoplastic pressure piping production. Both raw material and finished Air-Line products are subjected to rigorous tests, including aging, weathering and stressed environmental tests, to ensure complete system integrity over the designed operating life.



## **i DID YOU KNOW?**

Duraplus Air-Line is corrosion-resistant and features metal-to-ABS special adapter fittings, single and multi-port wall brackets, high-efficiency dropper bends and blue color-coding for easy identification.

### **SHORT FORM SPECIFICATIONS**

#### **GENERAL**

Duraplus ABS Air-Line is designed for industrial compressed air pipe applications where the extremely high-impact resistance and ductility of the material offers some insurance against internal and external shock loadings and site abuse conditions. Its unique combination of ABS properties –non-toxicity, purity, corrosion- and chemical-resistance, toughness, low-hydraulic resistance, and the ability to perform over a wide temperature range 40°F – 120°F (4°C – 49°C), ensures excellent in-service performance and system life.

#### **MATERIAL SPECIFICATIONS**

Pipe shall be manufactured from an Acrylonitrile Butadiene Styrene (ABS) blend, with a co-extruded nylon-liner. Fitting shall be manufactured from an ABS blend.

Material for both pipe and fittings shall be designed with a 2 to 1 safety factor for a 30 year lifespan when operated under continuous pressure. Pipe and fittings are capable of withstanding a continuous working pressure of 185 psi at 73°F (1275 kPa at 23°C) in accordance with ASTM D2282 and carry a DIN 4102-B2 fire rating.

The material shall have an izod impact resistance value of no less than 8.5 ft.lb/in at 73°F when tested in accordance with ASTM D256, method 'A'. Pipe bore contains a co-extruded nylon liner and fittings are manufactured using an alloy blend of ABS and nylon.

#### **PIPE**

Pipes shall be manufactured by IPEX and designed in metric sizes that comply with the dimensional requirements of DIN 8062, and ISO 161/1.

#### **FITTINGS**

Fittings shall be of the socket type, designed for solvent welding as supplied by IPEX.

Fittings shall be designed and manufactured to withstand the continuous pressures applicable to the maximum pressure rating of the pipe. The sockets and fittings shall have a 0°30 taper, the diameter decreasing from the mouth to the root.

#### **BALL VALVES - VKD**

The valve body, stem, ball and unions shall be made of Duraplus® ABS compound which shall meet or exceed the requirements of cell classification 43234 according to ASTM D3965.

Ball valves shall be double-blocking type with O-ring cushions under the PTFE seats, in-line micro adjustment capability and incorporate a spanner wrench in the handle.

#### **BUTTERFLY VALVES - FK**

The valve body shall also be made of glass reinforced polypropylene (GRPP) obtained from homopolymer polypropylene (PPH).

The valve disc shall also be made of ABS compound.

All butterfly valves shall have non wetted stainless steel shafts and a wafer or lug design with ANSI 150 flange connections. The liner shall completely isolate the valve body from the process flow and act as a flange gasket on both sides of the valve.

#### **SOLVENT CEMENT**


All joints shall be made with Blue Duraplus Air-Line ABS solvent cement as supplied by IPEX. The solvent cement shall be designed to withstand continuous applied pressures up to 185 psi at 73°F.

#### **DESIGN AND INSTALLATION**


The design and installation of ABS pressure systems shall be performed in accordance with the recommendations detailed in the Handling and Installation section of this manual and in local and national regulations where applicable. To ensure the full integrity of the completed system, all components shall be supplied by IPEX.




## PRODUCT SELECTION CHART

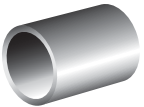
	Dimension		Product Code
	Inches	mm	
	1/2	20	446000
	3/4	25	446001
	1	32	446002
	1-1/2	50	446003
	2	63	446004
	3	90	446005
	4	110	446006
	6	-	346012
	8	-	346010


20-110mm pipe in 19 ft. lengths. 6" & 8" pipe in 20 ft. lengths  
Priced per foot


	Dimension		Product Code
	Inches	mm	
	1/2	20	437259
	3/4	25	437260
	1	32	437261


	Dimension		Product Code
	Inches	mm	
	1/2	20	437341
	3/4	25	437342
	1	32	437343
	1-1/2	50	437345
	2	63	437346
	3	90	437348
4	110	437349	


Note: \* 1/2" and 3/4" pipe clips are supplied without retaining

	Dimension		Product Code
	Inches	mm	
	1/2	20	437026
	3/4	25	437027
	1	32	437028
	1-1/2	50	437029
	2	63	437030
	3	90	437032
	4	110	437033
	6	-	337030
	8	-	337031

	Dimension		Product Code
	Inches	mm	
	1/2	20	437111
	3/4	25	437112
	1	32	437113
	1-1/2	50	437114
	2	63	437115
	3	90	437117
	4	110	437118
	6	-	337141
	8	-	337142


	Dimension		Product Code
	Inches	mm	
	1/2	20	437128
	3/4	25	437129
	1	32	437130
	1-1/2	50	437131
	2	63	437132
	3	90	437134
	4	110	437135
	6	-	337165
	8	-	337166


	Dimension		Product Code
	Inches	mm	
	1/2	20	437120
	3/4	25	437121
	1	32	437122
	1-1/2	50	437123
	2	63	437125
	3	90	437126
4	110	337166	

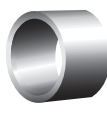
	Dimension		Product Code
	Inches	mm	
	1/2	20	437192
	3/4	25	437193
	1	32	437194
	1-1/2	50	437195
	2	63	437196
	3	90	437198
4	110	337001	


Certain compressor and lubricant oils will damage your Duraplus Air-Line installation. Before using any oils in the system contact IPEX to obtain a list of recommended oils or to confirm individual oil suitability.


## PRODUCT SELECTION CHART


	Dimension		Product Code
	Inches	mm	
	1/2	20	437151
	3/4	25	437152
	1	32	437153
	1-1/2	50	437154
	2	63	437155
	3	90	437157
	4	110	437158
	6	-	337179
	8	-	337180

	Dimension		Product Code
	Inches	mm	
	3/4 x 1/2	25 x 20	437161
	1 x 1/2	32 x 20	437163
	1 x 3/4	32 x 25	437164
	1-1/2 x 1/2	50 x 20	437166
	1-1/2 x 3/4	50 x 25	437167
	1-1/2 x 1	50 x 32	437168
	2 x 3/4	63 x 25	437169
	2 x 1	63 x 32	437170
	2 x 1-1/2	63 x 50	437171


	Dimension		Product Code
	Inches	mm	
	3/4 x 1/2	25 x 20	437051
	1 x 3/4	32 x 20	437053
	1-1/2 x 1/2	50 x 20	437055
	1-1/2 x 3/4	50 x 25	437056
	1-1/2 x 1	50 x 32	437057
	2 x 3/4	63 x 25	437059
	2 x 1	63 x 32	437060
	2 x 1-1/2	63 x 50	437061
	3 x 1-1/2	90 x 50	437062
	3 x 2	90 x 63	437063
	4 x 2	110 x 63	437065
	4 x 3	110 x 90	437066
	8 x 6	-	337066


	Dimension		Product Code
	Inches	mm	
	1/2	20	437234
	3/4	25	437235
	1	32	437236
	1-1/2	50	437237
	2	63	437238

	Dimension		Product Code
	Inches	mm	
	Sp/ Soc x Soc		
	1 x 3/4 x 1/2	32 x 25 x 20	437103
	1-1/2 x 1-1/4 x 1	50 x 40 x 32	437105
	3 x 2-1/2 x 2	90 x 75 x 63	437108
	8 x 6	-	337129


	Dimension		Product Code
	Inches	mm	
	Soc		
	1	32	437181
	1-1/2	50	437182
	2	63	437183
	3	90	437185
	4	110	437186
	6	-	337238
	8	-	337239

Note: A metal backing ring must be used with this flange.

	Dimension		Product Code
	Inches	mm	
	Soc (flat neoprene)		
	1	32	437325
	1-1/2	50	437326
	2	63	437327
	3	90	437329
	4	110	437330
	6	-	337451
	8	-	337452


	Dimension		Product Code
	Inches	mm	
	Galv. M.S.		
	1	32	437331
	1-1/2	50	337430
	2	63	337431
	3	90	337433
	4	110	337434
	6	-	337435
	8	-	337436


Note: For use with flanges


	Dimension		Product Code
	Inches	mm	
	Blind (gray ABS)		
	3	90	337364
	4	110	337365
	6	-	337366
	8	-	337367


Note: A backing ring must be used with this flange.


## PRODUCT SELECTION CHART

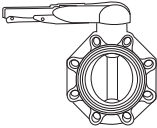
	Dimension		Product Code
	Inches	mm	
<b>Female Adapter Soc x Female Thread</b> 	1/2 x 1/2	20 x 1/2	437034
	3/4 x 3/4	25 x 3/4	437035
	1 x 1	32 x 1	437036


	Dimension		Product Code
	Inches	mm	
<b>Female Adapter Sp x Female Thread</b> 	1-1/2 x 1-1/2	50 x 1-1/2	437231
	2 x 2	63 x 2	437232

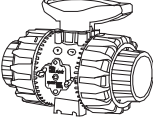
	Dimension		Product Code
	Inches	mm	
<b>Plug Male Thread</b> 	1/2	-	337264
	3/4	-	337265

	Dimension		Product Code
	Inches	mm	
<b>Wall Bracket Soc x Female Thread (Brass body)</b> 	1/2 x 1/2	20 x 1/2	437335
	3/4 x 1/2	25 x 1/2	437336
	3/4 x 3/4	25 x 3/4	437337


	Dimension		Product Code
	Inches	mm	
<b>Wall Bracket Multiport</b> 	1/2 x 1/2	20 x 1/2	437335
	Inlet - 3/4" male thread. Outlet - 1/2" female		

	Dimension		Product Code
	Inches	mm	
<b>Butterfly Valve - FK Manual, Viton Seals - Glass filled PP Body</b> 	2	63	337656
	3	90	337657
	4	110	337658
	6	-	337659
	8	-	337660

	Dimension		Product Code
	Inches	mm	
<b>Composite Union Soc x Male Thread (Air-line to Brass)</b> 	1/2 x 1/2	20 x 1/2	437247
	3/4 x 3/4	25 x 3/4	437248
	1 x 1	32 x 1	437249
	1-1/2 x 1-1/2	50 x 1-1/2	437250
	2 x 2	63 x 2	437251

	Dimension		Product Code
	Inches	mm	
<b>True Union Ball Valve Soc 230psi at 73°F Viton Seals</b> 	*1/2	20	437451
	*3/4	25	437452
	*1	32	437453
	*1-1/2	50	437454
	*2	63	437455

\*Grey Duraplus ABS valves may be substituted at time of order.

	Dimension		Product Code
	Inches	mm	
<b>End Connectors</b> 	1/2	20	437446
	3/4	25	437447
	1	32	437448
	1-1/2	50	437449
	2	63	437450

\*Grey Duraplus ABS valves may be substituted at time of order.

\*Grey Duraplus ABS valves may be substituted at time of order.

Quantity	Product Code	Significant Number
----------	--------------	--------------------

<b>Air-Line Solvent Cement</b>		
1 pint		437354
1 quart		437355

<b>MEK Cleaner</b>		
1 pint		337468
1 quart		337469

**Joints**  
An indication of the number of joints likely to be made per quart of Duraplus® cement is as follows (it is recommended that MEK cleaner orders equals one-half the quantity of solvent cement required).

Pipe Size	Number of Joints	
	inches	mm
3/8 - 1	20 - 32	290
1-1/4 - 2	50 - 63	144
3	75 - 90	48
4	110	32
6	-	16
8	-	10

Certain compressor and lubricant oils will damage your Duraplus Air-Line installation. Before using any oils in the system contact IPEX to obtain a list of recommended oils or to confirm individual oil suitability.

# Compressed Air



## Your Compressed Air System for the 21st Century

When your plant's compressed air system leaks, more than just air is getting out. You're losing money in the form of wasted energy, wear and tear on your compressors and increased operating and maintenance costs. Duratec® Airline, a unique time and money-saving piping system, is designed to reduce leaks and costs.

A tough piping system that meets ASME codes and OSHA safety requirements, Duratec Airline requires less time, labor and money to install and maintain than



traditional systems. Its long, lightweight coils cut down on the number of potential leak points in your system.

Duratec fittings are quick and easy to install and feature double O-ring seals that ensure maximum joint integrity.

Duratec requires no special tools or installation training and eliminates the need for soldering and threading. And because Duratec is so quickly and easily installed, modified, and adapted to existing metal systems, it can reduce your plant's downtime. So stop your compressed air system's problems before they become big news — Install Duratec.

**Duratec**  
AIRLINE SYSTEM

*Products are manufactured by IPEX Inc.  
Duratec® is a trademark of IPEX Branding Inc.*



Call 1-800-473-9462 or visit [www.ipexinc.com](http://www.ipexinc.com)

# DURATEC AIRLINE SYSTEMS

3/8" - 1"

## Duratec®

Duratec is an innovative compressed air and inert gas distribution system designed to be absolutely leak-proof, installed quickly and easily, and maintained cost-effectively. As a result, Duratec saves you time and money.

Traditional metallic compressed air systems are a main cause of unnecessary energy use, excessive wear and tear on compressors and high consumption of compressor oils and filters. The culprits? Corrosion and leakage at pipe joints and fitting connections which often go undetected until they're discovered during a detailed compressed air system audit.

Duratec pipe comes in long 100 foot or 300 foot coils, which significantly reduces the number of joints in your system. Duratec fittings feature unique double o-ring seals to ensure long-term joint integrity. And the entire Duratec system can be easily and quickly installed, modified or expanded without the need for specialized equipment.

### APPLICATIONS

- Plant air
- Inert gas distribution
- Manufacturing hand tool operation
- Manual and automated welding operations
- Semi-conductor tool hook up
- Valve actuation - control systems
- Microbulk inert gas delivery systems
- Robotic installations

### STANDARDS



CSA B51, B137.9

ASTM F1974

ASME B31.3, B31.9

FDA Compliant

NSI / ASTM F1282

National CRN OA02020.2C

Certified to OSHA Safety Regulations

### DID YOU KNOW?


To make designing, sizing and installing a Duratec compressed air system easy, IPEX offers comprehensive reference tools, such as our Duratec Technical Manual. To download this manual visit our website at [www.ipexinc.com](http://www.ipexinc.com).



### QUICK INSTALLATION

**Cutting and joining Duratec is fast and simple.**

1. Cut pipe square using plastic pipe cutter.
2. Slide nut and split ring over pipe and bevel the inside of the pipe by inserting then rotating the beveling tool.
3. Push the fitting into the pipe.
4. Turn the nut finger tight plus one full turn with a wrench.



HDPE

Aluminum

HDPE

## ADVANTAGES

- 1 Low Installation Costs**

Duratec reduces costs on a typical installation not only for materials but also for labour and transportation costs when compared to traditional materials. How? Duratec's lightweight construction and simple assembly procedures.
- 2 Ease of Handling**

Duratec is 75% lighter than the equivalent diameter of copper and SCH 40 carbon steel.
- 3 Quick Removable Connections**

Threading is not required. All joints have double o-ring seals and can be quickly assembled or disassembled. Easy on-site modifications and repairs can be made.
- 4 Quick Installation**

No special training or equipment is required to complete a Duratec system.
- 5 Clean**

All Duratec pipe is packaged in cardboard boxes preventing contamination before use. The smooth HDPE inner layer cannot rust, corrode or form loose scale. Clean air remains clean throughout the life of the system.
- 6 Flexible Yet Rigid**

Due to its composite structure, Duratec pipe can be easily bent by hand and will maintain its desired shape. This unique feature allows for straight, professional looking installation and eliminates sagging.
- 7 Lower Operating Costs**

Due to Duratec's advantages over metal systems, it costs you less time, labour and money to keep a Duratec system in optimal condition.
- 8 Pressure loss means money loss**

Metal systems can lose pressure due to pin-hole leaks and leakage at connections, all of which result in increased energy costs. Duratec's high-quality construction, on the other hand, guarantees consistent pressure for years to come.
- 9 Smooth Interior**

Less friction means lower pressure drops and higher flow rates. This may allow for smaller pipe sizes to be used.
- 10 Extended Life**

Duratec is designed not to rust, scale or pit. Once properly selected for the application and correctly installed, Duratec Airline Systems will provide years of maintenance-free service.
- 11 Corrosion Resistant**

Duratec's tough outer HDPE layer protects it against corrosion and deterioration and ensures long service life even in the most aggressive manufacturing environments. Its inner HDPE layer is unaffected by inert gases and commonly-used compressor oils. Combined with its industrial nickel-plated Duratec fittings, the system provides long-term performance superior to metal piping systems.
- 12 Fewer Fittings**

Duratec pipe comes in convenient 100 ft. and 300 ft. coils eliminating several joints and the need for threading, or soldering.
- 13 Safe**

Duratec's unique composite construction means that accidental impact or puncture of the pipe results in a safe, ductile mode of failure. Duratec pipe has been third-party tested and certified to stringent OSHA safety requirements for compressed air systems, standards that guarantee safety comes first.
- 14 Performance**

IPEX engineered Duratec pipe and fittings to provide top-notch performance. Rated for long term continuous operating pressures of 200psi at 73°F and 160psi at 140°F, Duratec pipe and fitting assemblies are also capable of sustaining quick burst pressures in excess of 800psi. This built-in safety factor ensures system performance and provides peace of mind for designers and facility managers.

## SHORT FORM SPECIFICATIONS

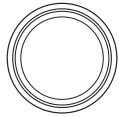
All compressed air and inert gas pipe in sizes 1" and smaller shall be PE-AL-PE composite pipe made with high density polyethylene and aluminum conforming to ASTM F1282 and CSA B137.9. PE-AL-PE pipe shall meet the health and safety requirements of OSHA.

All compressed air and inert gas fittings in sizes 1" and smaller shall be nickel plated brass or 316 stainless steel and shall conform to the dimensional and physical requirements of ASTM F1974 and CSA B137.9.

All pipe, fittings and accessories shall be Duratec Air-Line as manufactured by IPEX.

# PRODUCT SELECTION CHART

Dimension inches	Product Code	Coil Length feet
------------------	--------------	------------------

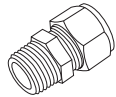


**HDPE-AL-HDPE** 200 psi @ 73°F, 160 psi @ 2140° F, ASTM F1282

3/8	446024	100
3/8	446025	300
1/2	446026	100
1/2	446027	300
3/4	446030	100
3/4	446031	300
1	446032	100
1	446033	300

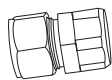
Dimension inches	Product Code
------------------	--------------

## Duratec x Male Thread Adapter



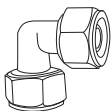
3/8 D1 x 1/4 MPT	438081
3/8 D1 x 3/8 MPT	438000
3/8 D1 x 1/2 MPT	438001
1/2 D1 x 1/2 MPT	438002
3/4 D1 x 3/4 MPT	438003
1 D1 x 1 MPT	438004

## Duratec x Female Thread Adapter



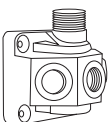
3/8 D1 x 1/2 FPT	438005
1/2 D1 x 1/2 FPT	438006
3/4 D1 x 3/4 FPT	438007
1 D1 x 1 FPT	438008

## Duratec x Duratec 90° Elbow



3/8 D1 x 3/8 D1	438079
1/2 D1 x 1/2 D1	438080
3/4 D1 x 3/4 D1	438067
1 D1 x 1 D1	438068

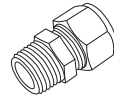
## Wall Bracket Multiport



3/4 x 1/2	437338
Inlet - 3/4 MPT	
Outlet - 1/2 FPT	

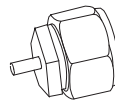
Dimension inches	Product Code
------------------	--------------

## Duratec x Male Thread Adapter Stainless Steel



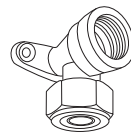
3/8 D1 x 3/8 MPT SS	438029
1/2 D1 x 1/2 MPT SS	438030
3/4 D1 x 3/4 MPT SS	438031
1 D1 x 1 MPT SS	438032

## Duratec Airline x Tubing Adapter



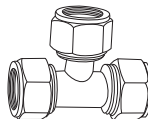
3/8 D1 x 1/4 MPT	438041
3/8 D1 x 3/8 MPT	438042
1/2 D1 x 1/2 MPT	438043
3/4 D1 x 3/4 MPT	438044
1 D1 x 1 MPT	438045

## Duratec x Female Thread Wing Back (or Drop-Ear) 90° Elbow



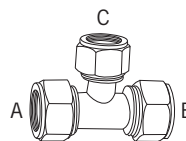
1/2 D1 x 1/2 FPT	438009
------------------	--------

## Duratec x Duratec x Duratec Tee



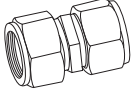
3/8	438033
1/2	438010
3/4	438011
1	438012

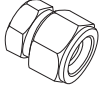
## Duratec x Duratec x Duratec Reducing Tee




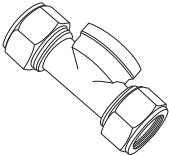
1/2 x 1/2 x 3/8	438034
3/4 x 1/2 x 1/2	438013
3/4 x 3/4 x 1/2	438014
3/4 x 1/2 x 3/4	438015
1 x 1 x 1/2	438016
1 x 3/4 x 3/4	438017
1 x 1 x 3/4	438018
A x B x C	


## PRODUCT SELECTION CHART

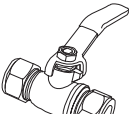
	Dimension inches	Product Code
	3/8	438020
	1/2	438021
	3/4	438022
	1	438023

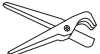
Duratec x Cap	Dimension inches	Product Code
	3/8	438036
	1/2	438026
	3/4	438027
	1	438028

5-in-1 Beveling Tool	Dimension inches	Product Code
	3/8" to 1" Beveling Tool	438050

Duratec x Duratec x Female Thread Tee	Dimension inches	Product Code
	1/2 D1 x 1/2 D1 x 1/2 FPT	438019
	3/4 D1 x 3/4 D1 x 1/2 FPT	438078


Duratec Reducing Coupling	Dimension inches	Product Code
	1/2 x 3/8	438035
	3/4 x 1/2	438024
	1 x 3/4	438025


Duratec Airline Ball Valve	Dimension inches	Product Code
	3/8	438037
	1/2	438038
	3/4	438039
	1	438040


Plastic Pipe Cutter	Dimension inches	Product Code
	3/8" to 1" Pipe Cutter	438051

Dimension inches	Product Code
-	438052

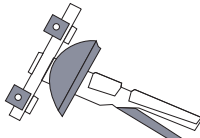
### Plastic Pipe Cutter Replacement SS Blade


Duratec Pipe Clip	Dimension inches	Product Code
	3/8	438063
	1/2	438064
	3/4	438065
	1	438066

Replacement Split Ring	Dimension inches	Product Code
	3/8 Split Ring D1	438046
	1/2 Split Ring D1	438047
	3/4 Split Ring D1	438048
	1 Split Ring D1	438049

Duratec Airline Replacement O-Ring	Dimension inches	Product Code
	3/8	438053
	1/2	438054
	3/4	438055
	1	438056

Protective Heat Shrink Sleeve	Dimension inches	Product Code
	4" Heatshrink Sleeve for 3/4", 1" Fittings	438061
	4" Heatshrink Sleeve for 1/2", 3/8" Fittings	438062

Composite Pipe Bending Tool Kit up to 1"	Dimension inches	Product Code
	1/2", 3/4", 1" Bending Tool Kit	438057

Composite Pipe Bending Spring	Dimension inches	Product Code
	1/2	438058
	3/4	438059
	1	438060



**DON'T SETTLE FOR A  
WEAK PLAYER ON YOUR  
CHAMPIONSHIP TEAM**

## Join the IPEX Winning Tradition

### Our Strength:

An all-star line-up of thermoplastic pipe, valves and fittings, designed and built to work together in any process piping application.

### The IPEX Advantage:

Only IPEX offers a complete system of pipe, valves and fittings engineered and manufactured to IPEX's strict quality, performance and dimensional standards. With Xirtec®140 (industrial grade PVC) and Corzan® (CPVC), you can be confident that all the material you need is designed, manufactured and backed by the same company.



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**Industrial Systems**

Tough Products for Tough Environments®

Corzan® is a registered trademark of Lubrizol Corp.

IPEX offers one of the most comprehensive ranges of high quality, high performance thermoplastic valves and actuation products available today. With more than 50 years of design and manufacturing experience, our lightweight, long life, maintenance free valves will save you time and money. Our high-tech automated manufacturing and testing facility ensures unparalleled reliability for each and every valve.

# Thermoplastic Valves



Ball Valves

97

Butterfly Valves

102

Diaphragm Valves

105

Check and Vent Valves

112

Specialty Valves

115

Quarter Turn Automation

118

# THERMOPLASTIC VALVES

## Manual & Actuated Thermoplastic Valves

IPEX offers one of the most comprehensive ranges of high quality, high performance thermoplastic valves and actuation products available today. With more than 50 years of design and manufacturing experience, our lightweight, long life, maintenance free valves will save you time and money.

Material options such as PVC, CPVC, PP, PVDF, and ABS make our corrosion resistant valves ideal for use in a wide variety of applications. Quarter turn pneumatic and electric actuation, pneumatically actuated diaphragm valves, and many options and accessories allow for fully automated control. Whether a valve is required for isolation, diversion, control, or throttling, IPEX has a solution to meet your needs.

### APPLICATIONS

- Industrial Processes
- Chemical Production
- Water Treatment
- General Plumbing
- Water and Waste
- Irrigation
- Aquatic Life
- Pool and Spa

WHAT TYPE OF VALVE TO USE	Ball Valves	Butterfly Valves	Diaphragm Valves	Check & Vent Valves	Specialty Valves
On/Off Service	✓	✓			
High Capacity	✓	✓			
Throttling		✓	✓		✓
Quick & Frequent Cycling	✓				✓
Slurries/Dirty Fluids		✓	✓		
Filtering					✓
Back Flow Prevention				✓	
Air & Gas Release				✓	
Electro-Mechanical Control Actuation	✓	✓	✓		✓



## VKD SERIES BALL VALVES - TRUE UNION

The next generation industrial valve features the patented Dual Block® system which allows locking of the union nuts in a preset position, assuring seal integrity under severe service conditions. A patented seat stop carrier, high quality stem and ball support system, integral mounting flange and bracketing, and a multifunctional locking handle (standard on sizes 2-1/2" to 4") set this valve apart from the rest. The VKD is available in PVC, CPVC, PP, and ABS with PTFE seats and either EPDM or Viton® seals.

Pressure: up to 232 psi at 73°F depending on the material  
 Sizes: 3/8" – 4"



End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC, w/ PTFE Seats

S/T	3/8	253067	253068
S/T	1/2	053461	053467
S/T	3/4	053462	053468
S/T	1	053463	053469
S/T	1-1/4	053464	053470
S/T	1-1/2	053465	053471
S/T	2	053466	053472
Socket	2-1/2	053539	053542
Socket	3	053540	053543
Socket	4	053541	053544

### Corzan® CPVC, w/ PTFE Seats

S/T	3/8	253069	253070
S/T	1/2	053473	253008
S/T	3/4	053474	253009
S/T	1	053475	253010
S/T	1-1/4	053476	253011
S/T	1-1/2	053477	253012
S/T	2	053478	253013
Socket	2-1/2	053545	053548
Socket	3	053546	053549
Socket	4	053547	053550

### PP, w/ PTFE Seats

Threaded	1/2	053525	253002
Threaded	3/4	053526	253003
Threaded	1	053527	253004
Threaded	1-1/4	053528	253005
Threaded	1-1/2	053529	253006
Threaded	2	053530	253007

### PP, w/ PTFE Seats

Socket	20mm	053513	053519
Socket	25mm	053514	053520
Socket	32mm	053515	053521
Socket	40mm	053516	053522
Socket	50mm	053517	053523
Socket	63mm	053518	053524

## TKD SERIES 3-WAY BALL VALVES - TRUE UNION

The TKD offers a host of advanced features that set it apart from other multi-port valves. The patented seat stop carrier allows for in-line micro-adjustment of the ball seating, and features o-ring cushioning to minimize wear and prevent seizing. Integral mounting flange and bracketing allows for direct actuation and simple support, while a locking handle can prevent improper positioning. The TKD is available in PVC with PTFE seats and either EPDM or Viton® seals. Other materials are available upon request.

Pressure: 232 psi at 73°F

Sizes: 1/2" – 2"



End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### PVC, w/ PTFE Seats , L-Port

S/T	1/2	253844	253856
S/T	3/4	253845	253857
S/T	1	253846	253858
S/T	1-1/4	253847	253859
S/T	1-1/2	253848	253860
S/T	2	253849	253861

### PVC, w/ PTFE Seats , T-Port

S/T	1/2	253850	253862
S/T	3/4	253851	253863
S/T	1	253852	253864
S/T	1-1/4	253853	253865
S/T	1-1/2	253854	253866
S/T	2	253855	253867

Ball valves are generally used for on/off service, but can range from simple molded-in-place construction to high-end industrial designs with many features and benefits. Multi-port ball valves allow for mixing, diverting, and bypassing flow. Extensive material options provide for complete chemical compatibility in highly corrosive processes. Many ball valves feature full port flow, blocking true union ends, and compact ergonomic designs allowing for simple installation and maintenance.

## VKD AND TKD BALL VALVE ACCESSORIES



Size inches	Product Code
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### Locking Handle Kit - VKD & TKD

3/8 & 1/2	253014
3/4 & 1	253015
1-1/4 & 1-1/2	253016
2	253017

Note: The locking attachment fits on the standard handle



Size inches	Dimensions		Product Code
	A	B (min)	

### Stem Extension Kit - VKD & TKD

3/8 & 1/2	25mm	2"	154062
3/4	25mm	2"	154063
1	25mm	2"	154064
1-1/4	32mm	2"	154065
1-1/2	32mm	2"	154066
2	32mm	2"	154067

Note: The kit includes top and bottom PVC components, as well as a 6" length of extension pipe that must be solvent welded together to achieve the desired extension length. The minimum length to which the extension pipe can be cut is shown in the adjacent table. For longer extensions, contact IPEX Customer Service.



Size inches	Product Code
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### Wall / Panel Mounting Kit - VKD only

3/8 thru 1	154322
1-1/4 thru 2	154323

Note: The kit includes the mounting plate, 2 brass inserts and 2 screws



Size inches	PVC Kit	CPVC Kit
	Product Code	Product Code

### ANSI 150 Flanging Kit - VKD & TKD

3/8 & 1/2	154324	154330
3/4	154325	154331
1	154326	154332
1-1/4	154327	154333
1-1/2	154328	154334
2	154329	154335

**PVC Kit** includes: 1 PVC Flange & Nut, 1 PVDF locking ring and 1 True union nut.

**CPVC Kit** includes: 1 CPVC Flange & Nut, 1 PVDF locking ring and 1 True union nut.

This is a NON-STOCKING item. For OEM business, please contact Customer Service for pricing and stocking options.

## VXE/VX SERIES BALL VALVES – TRUE UNION

These ultra-compact valves feature a full-port, bi-directional double block design. The true union style allows the valve to be easily removed from the piping system and fully serviced. A threaded seat stop carrier provides improved seal integrity under tough service conditions while the removable handle also functions as a tool for ball seat adjustment.

The EasyFit VXE Series True Union Ball Valves represent the latest innovation in thermoplastic ball valve manufacturing technology. The VXE Series is designed for industrial, general purpose and O.E.M applications. This valve features an ultra-compact double block design, and full port bi-directional operation. The true union design allows the valve to be easily removed from the piping system and fully serviced. A threaded seat stop carrier provides improved seal integrity under tough service conditions while the EasyFit multifunction handle doubles as a tool for ball seat adjustment, and for tightening union nuts precisely.

**VXE**



**VX**



Pressure: up to 232 psi at 73°F depending on the size  
 Sizes 1/2" - 2"

Pressure: up to 150 psi at 73°F depending on the size  
 Sizes: 2-1/2" - 6

The VX series is designed for industrial, general purpose and O.E.M. applications. The VX series is ideal for use in light industrial and water applications. These valves feature an ultra-compact double block design, and full port bi-directional operation. The true union design allows the valve to be easily removed from the piping system and fully serviced. A threaded seat stop carrier provides improved seal integrity under tough service conditions while the removable handle also functions as a tool for ball seat adjustment.

VXE & VX Series ball valves are part of our complete system of pipe, valves, and fittings, engineered and manufactured to our strict quality, performance, and dimensional standards.

### EXAMPLE APPLICATIONS

- ✓ Plant water supply and distribution
- ✓ Wash-water and recovery systems
- ✓ Acid Products Handling for Refineries, Metal Works, etc.
- ✓ Alum and Ferric Chloride Handling
- ✓ Pulp and Chemical Recovery Systems
- ✓ Deionized Water
- ✓ Water treatment
- ✓ Swimming pools
- ✓ Chlorine Injection Systems Bleach, Dye and Acid Lines
- ✓ Aquariums
- ✓ Irrigation

Model	End Conn.	Size inches	EPDM Product Code	Viton® Product Code
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### PVC, w/ PTFE Seats

VXE	S/T	1/2	053001	053002
	S/T	3/4	053003	053004
	S/T	1	053005	053006
	S/T	1-1/4	053007	053008
	S/T	1-1/2	053009	053010
	S/T	2	053011	053012
VX	Socket	2-1/2	053623	053624
	Socket	3	053013	053014
	Socket	4	053015	053016
	Threaded	3	053017	053018
	Threaded	4	053019	053020
	* Socket	6	053625	053626

### PVC, w/ PTFE Seats

VXE	Flanged	1/2	053627	053637
	Flanged	3/4	053628	053638
	Flanged	1	053629	053639
	Flanged	1-1/4	053630	053640
	Flanged	1-1/2	053631	053641
	Flanged	2	053632	053642
VX	Flanged	2-1/2	053633	053643
	Flanged	3	053634	053644
	Flanged	4	053635	053645
	* Flanged	6	053636	053646

### Corzan® CPVC, w/ PTFE Seats

VXE	S/T	1/2	053041	053042
	S/T	3/4	053043	053044
	S/T	1	053045	053046
	S/T	1-1/4	053047	053048
	S/T	1-1/2	053049	053050
	S/T	2	053051	053052
VX	Socket	2-1/2	053647	053648
	Socket	3	053053	053054
	Socket	4	053055	053056
	Threaded	3	053057	053058
	Threaded	4	053059	053060
	* Socket	6	053649	053650

### Corzan® CPVC, w/ PTFE Seats

VXE	Flanged	1/2	053651	053661
	Flanged	3/4	053652	053662
	Flanged	1	053653	053663
	Flanged	1-1/4	053654	053664
	Flanged	1-1/2	053655	053665
	Flanged	2	053656	053666
VX	Flanged	2-1/2	053657	053667
	Flanged	3	053658	053668
	Flanged	4	053659	053669
	* Flanged	6	053660	053670

\* Note: The 6" valve is a 4" with Venturied ends.

## VE SERIES BALL VALVES - TRUE UNION

The VE is ideal for light industrial and water applications. It shares many features with the VX such as the ultra-compact double block design, and full port bi-directional operation. A threaded seat stop carrier provides improved seal integrity under tough service conditions while the removable handle also functions as a tool for ball seat adjustment. The VE is available exclusively in PVC with EPDM seals and either socket or threaded end connections.

Pressure: 232 psi at 73°F  
 Sizes: 1/2" – 2"



## MP SERIES COMPACT BALL VALVES

Available in both Schedule 80 grey PVC and Schedule 40 white PVC, with either socket or threaded connections. EPDM seals and PTFE seats make this valve ideally suited to all kinds of plumbing and industrial applications where a compact, inexpensive on/off valve is required.

Pressure: 150 psi at 73°F  
 Sizes: 1/2" – 2"



End Connection	Size inches	Product Code
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### PVC, EPDM w/ HDPE Seats

Socket	1/2	053373
Socket	3/4	053124
Socket	1	053125
Socket	1-1/4	053126
Socket	1-1/2	053127
Socket	2	053128

### PVC, EPDM w/ PTFE-HDPE Seats

Threaded	1/2	053374
Threaded	3/4	053215
Threaded	1	053217
Threaded	1-1/4	053219
Threaded	1-1/2	053220
Threaded	2	053221

End Connection	Size inches	Sch 80 Grey Product Code	Sch 40 White Product Code
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### PVC, EPDM w/ PTFE

Socket	1/2	052000	052277
Socket	3/4	052006	052278
Socket	1	052007	052279
Socket	1-1/4	052009	052280
Socket	1-1/2	052019	052281
Socket	2	052024	052282

### PVC, EPDM w/ PTFE

Threaded	1/2	052026	052283
Threaded	3/4	052029	052284
Threaded	1	052107	052285
Threaded	1-1/4	052108	052286
Threaded	1-1/2	052109	052287
Threaded	2	052144	052288

## FK SERIES BUTTERFLY VALVES

The FK offers superior strength as well as excellent chemical resistance needed to operate in the corrosive environments often found near flanged connections. The special trapezoid shape of the liner and a serrated body cavity guarantee a bubble tight seal while keeping break-away torque at an absolute minimum. Double self-lubricating seals (available in either EPDM or Viton®), direct actuator mount capability, and choice of a lever handle or mounted gear box are just a few more features of this technologically advanced valve. The body is made of standard glass-filled PP while discs are available in PP, PVC, CPVC, PVDF, and ABS.

Pressure: up to 150 psi at 73°F depending on the size  
 Sizes: 1-1/2" – 12"



LEVER HANDLE



WITH MOUNTED GEAR BOX

Size inches	EPDM Product Code	Viton® Product Code
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### PP Disc, Wafer Style

1/2	053198	053200
2	053199	053201
2-1/2	052145	052147
3	053105	053153
4	053106	053154
5	052146	052148
6	053107	053155
8	053108	053156

Size inches	Product Code
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### Infinite Adjustable Handle Kit

1-1/2 & 2	154173
2-1/2	153968
3 & 4	153969
5 & 6	153970
8	153971

Size inches	EPDM Product Code	Viton® Product Code
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### PP Disc, Wafer Style, Gear Box

2-1/2	253145	253147
3	253105	253153
4	253106	253154
5	253146	253148
6	253107	253155
8	253108	253156
10	153014	153016
12	153015	153017

## FK SERIES LUGGED BUTTERFLY VALVES

This FK version features the world's first integral lug design. Unlike other plastic butterfly valves, these valves feature stainless steel lugs permanently anchored in the body of the valve. This unique design provides for full bi-directional operation, and allows disassembly and assembly of the downstream flange connection without weakening the integrity of the upstream connection to the pressurized line. The same body, disc, and seal material options as the normal FK are available for the lugged version.

Pressure: up to 150 psi at 73°F depending on the size  
 Sizes: 2-1/2" – 12"



LEVER HANDLE



WITH MOUNTED GEAR BOX

Size inches	EPDM Product Code	Viton® Product Code
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### PP Disc, SS Lugs

2-1/2	053133	053139
3	053134	053140
4	053135	053141
5	053105	053142
6	053136	053143
8	053138	053144

Note: PVC, CPVC, ABS, and PVDF discs are available on request.

### PP Disc, SS Lugs, Gear Box

2-1/2	253133	253139
3	253134	253140
4	253135	253141
5	253136	253142
6	253137	253143
8	253138	253144
10	053328	053330
12	053329	053331

Note: PVC, CPVC, ABS, and PVDF discs are available upon request. 14" – 24" butterfly valves are available on request. Gear operated valves are made-to-order.

## FE SERIES BUTTERFLY VALVES

The FE incorporates many of the features and benefits of our industrial FK valve yet is one of the most competitively priced thermoplastic butterfly valves available today. The all PVC construction with EPDM liner makes this valve the perfect choice for applications ranging from swimming pools to chemical processes. The FE can be operated by either a lever handle or mounted gear box.

Pressure: up to 150 psi at 73°F depending on the size  
 Sizes: 1-1/2" – 12"



LEVER HANDLE



WITH MOUNTED GEAR BOX

Size inches	EPDM Product Code
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### PVC Body & Disc, Wafer Style

1-1/2	053202
2	053203
2-1/2	053842
3	053081
4	053082
5	053843
6	053083
8	053084

NBR and Viton® lined valves are available upon request.

### PVC Body & Disc, Wafer Style, Gear Box

2-1/2	253842
3	253081
4	253082
5	253843
6	253083
8	253084
10	052264
12	052265

NBR and Viton® lined valves are available upon request.

These highly versatile valves can be used for simple on/off service but also for processes requiring precise throttling. End-of-line installation of a lugged version allows for downstream piping disassembly with the upstream system still under pressure. The extensive size range and material availability make them suitable for a wide range of applications. With simple, direct mounting for actuation, automated process control can be easily achieved.

## VM SERIES DIAPHRAGM VALVES - MANUAL HAND WHEEL

The VM series weir-style diaphragm valves are available in PVC, CPVC, PP, or PVDF, four body styles, and three choices of diaphragms (EPDM, Viton®, or PTFE). Able to be mounted in any position, the VM is ideal for either very clean or abrasive slurry applications. A unique and proprietary PTFE diaphragm design, available automation, and multiple accessories make this one of the most advanced and versatile lines in the industry.

Pressure: up to 150 psi at 73°F depending on the size  
Size: 1/2" – 4"



End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### Corzan® CPVC Body

Spigot	1/2	054247	054256	054265
Spigot	3/4	054248	054257	054266
Spigot	1	054249	054258	054267
Spigot	1-1/4	054250	054259	054268
Spigot	1-1/2	054251	054260	054269
Spigot	2	054252	054261	054270
Spigot	2-1/2	054253	054262	054271
Spigot	3	054254	054263	054272
Spigot	4	054255	054264	054273

### Corzan® CPVC Body

T/U	1/2	054274	054280	054286
T/U	3/4	054275	054281	054287
T/U	1	054276	054282	054288
T/U	1-1/4	054277	054283	054289
T/U	1-1/2	054278	054284	054290
T/U	2	054279	054285	054291

### Corzan® CPVC Body

Flanged	1/2	054292	054301	054310
Flanged	3/4	054293	054302	054311
Flanged	1	054294	054303	054312
Flanged	1-1/4	054295	054304	054313
Flanged	1-1/2	054296	054305	054314
Flanged	2	054297	054306	054315
Flanged	2-1/2	054298	054307	054316
Flanged	3	054299	054308	054317
Flanged	4	054300	054309	054318

Note: EPDM diaphragms have EPDM o-rings, Viton® and PTFE diaphragms have Viton® o-rings. For ABS and u-PP VM diaphragm valves, please refer to the Duraplus ABS Industrial and Enpure. Other options are available on request. VM Series Diaphragm valves are made-to-order.

End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PVC Body

Spigot	1/2	054175	054184	054193
Spigot	3/4	054176	054185	054194
Spigot	1	054177	054186	054195
Spigot	1-1/4	054178	054187	054196
Spigot	1-1/2	054179	054188	054197
Spigot	2	054180	054189	054198
Spigot	2-1/2	054181	054190	054199
Spigot	3	054182	054191	054200
Spigot	4	054183	054192	054201

### PVC Body

T/U	1/2	054202	054214	054208
T/U	3/4	054203	054215	054209
T/U	1	054204	054216	054210
T/U	1-1/4	054205	054217	054211
T/U	1-1/2	054206	054218	054212
T/U	2	054207	054219	054213

### PVC Body

Flanged	1/2	054220	054229	054238
Flanged	3/4	054221	054230	054239
Flanged	1	054222	054231	054240
Flanged	1-1/4	054223	054232	054241
Flanged	1-1/2	054224	054233	054242
Flanged	2	054225	054234	054243
Flanged	2-1/2	054226	054235	054244
Flanged	3	054227	054236	054245
Flanged	4	054228	054237	054246

End Connection	Size mm	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PP Body

Spigot	20mm	054319	054328	054337
Spigot	25mm	054320	054329	054338
Spigot	32mm	054321	054330	054339
Spigot	40mm	054322	054331	054340
Spigot	50mm	054323	054332	054341
Spigot	63mm	054324	054333	054342
Spigot	75mm	054325	054334	054343
Spigot	90mm	054326	054335	054344
Spigot	110mm	054327	054336	054345

### PP Body

T/U	20mm	054346	054352	054358
T/U	25mm	054347	054353	054359
T/U	32mm	054348	054354	054360
T/U	40mm	054349	054355	054361
T/U	50mm	054350	054356	054362
T/U	63mm	054351	054357	054363

## VM SERIES PNEUMATIC DIAPHRAGM VALVES - NORMALLY OPEN (AIR TO AIR) PNEUMATIC

Pressure: up to 150 psi at 73°F depending on the size  
 Size: 1/2" – 4"



End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### Corzan® CPVC Body

Spigot	1/2	054482	054491	054500
Spigot	3/4	054483	054492	054501
Spigot	1	054484	054493	054502
Spigot	1-1/4	054485	054494	054503
Spigot	1-1/2	054486	054495	054504
Spigot	2	054487	054496	054505
Spigot	2-1/2	054488	054497	054506
Spigot	3	054489	054498	054507
Spigot	4	054490	054499	054508

### Corzan® CPVC Body

T/U	1/2	054509	054515	054521
T/U	3/4	054510	054516	054522
T/U	1	054511	054517	054523
T/U	1-1/4	054512	054518	054524
T/U	1-1/2	054513	054519	054525
T/U	2	054514	054520	054526

### Corzan® CPVC Body

Flanged	1/2	054527	054536	054545
Flanged	3/4	054528	054537	054546
Flanged	1	054529	054538	054547
Flanged	1-1/4	054530	054539	054548
Flanged	1-1/2	054531	054540	054549
Flanged	2	054532	054541	054550
Flanged	2-1/2	054533	054542	054551
Flanged	3	054534	054543	054552
Flanged	4	054535	054544	054553

End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PVC Body

Spigot	1/2	054410	054419	054428
Spigot	3/4	054411	054420	054429
Spigot	1	054412	054421	054430
Spigot	1-1/4	054413	054422	054431
Spigot	1-1/2	054414	054423	054432
Spigot	2	054415	054424	054433
Spigot	2-1/2	054416	054425	054434
Spigot	3	054417	054426	054435
Spigot	4	054418	054427	054436

### PVC Body

T/U	1/2	054437	054443	054449
T/U	3/4	054438	054444	054450
T/U	1	054439	054445	054451
T/U	1-1/4	054440	054446	054452
T/U	1-1/2	054441	054447	054453
T/U	2	054442	054448	054454

### PVC Body

Flanged	1/2	054455	054464	054473
Flanged	3/4	054456	054465	054474
Flanged	1	054457	054466	054475
Flanged	1-1/4	054458	054467	054476
Flanged	1-1/2	054459	054468	054477
Flanged	2	054460	054469	054478
Flanged	2-1/2	054461	054470	054479
Flanged	3	054462	054471	054480
Flanged	4	054463	054472	054481

End Connection	Size mm	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PP Body

Spigot	20mm	054554	054563	054572
Spigot	25mm	054555	054564	054573
Spigot	32mm	054556	054565	054574
Spigot	40mm	054557	054566	054575
Spigot	50mm	054558	054567	054576
Spigot	63mm	054559	054568	054577
Spigot	75mm	054560	054569	054578
Spigot	90mm	054561	054570	054579
Spigot	110mm	054562	054571	054580

### PP Body

T/U	20mm	054581	054587	054593
T/U	25mm	054582	054588	054594
T/U	32mm	054583	054589	054595
T/U	40mm	054584	054590	054596
T/U	50mm	054585	054591	054597
T/U	63mm	054586	054592	054598

Note: EPDM diaphragms have EPDM o-rings, Viton® and PTFE diaphragms have Viton® o-rings.  
 For ABS and u-PP VM diaphragm valves, please refer to the Duraplus ABS Industrial and Enpure.  
 Other options are available on request. VM Series Diaphragm valves are made-to-order.

## VM SERIES PNEUMATIC DIAPHRAGM VALVES - NORMALLY CLOSED PNEUMATIC

Pressure: up to 150 psi at 73°F depending on the size  
 Size: 1/2" – 4"



End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### Corzan® CPVC Body

Spigot	1/2	054716	054725	054734
Spigot	3/4	054717	054726	054735
Spigot	1	054718	054727	054736
Spigot	1-1/4	054719	054728	054737
Spigot	1-1/2	054720	054729	054738
Spigot	2	054721	054730	054739
Spigot	2-1/2	054722	054731	054740
Spigot	3	054723	054732	054741
Spigot	4	054724	054733	054742

### Corzan® CPVC Body

T/U	1/2	054743	054749	054755
T/U	3/4	054744	054750	054756
T/U	1	054745	054751	054757
T/U	1-1/4	054746	054752	054758
T/U	1-1/2	054747	054753	054759
T/U	2	054748	054754	054760

### Corzan® CPVC Body

Flanged	1/2	054761	054770	054780
Flanged	3/4	054762	054771	054781
Flanged	1	054763	054772	054782
Flanged	1-1/4	054764	054773	054783
Flanged	1-1/2	054765	054774	054784
Flanged	2	054766	054775	054785
Flanged	2-1/2	054767	054776	054786
Flanged	3	054768	054778	054787
Flanged	4	054769	054779	054788

End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PVC Body

Spigot	1/2	054644	054653	054662
Spigot	3/4	054645	054654	054663
Spigot	1	054646	054655	054664
Spigot	1-1/4	054647	054656	054665
Spigot	1-1/2	054648	054657	054666
Spigot	2	054649	054658	054667
Spigot	2-1/2	054650	054659	054668
Spigot	3	054651	054660	054669
Spigot	4	054652	054661	054670

### PVC Body

T/U	1/2	054671	054677	054683
T/U	3/4	054672	054678	054684
T/U	1	054673	054679	054685
T/U	1-1/4	054674	054680	054686
T/U	1-1/2	054675	054681	054687
T/U	2	054676	054682	054688

### PVC Body

Flanged	1/2	054689	054698	054707
Flanged	3/4	054690	054699	054708
Flanged	1	054691	054700	054709
Flanged	1-1/4	054692	054701	054710
Flanged	1-1/2	054693	054702	054711
Flanged	2	054694	054703	054712
Flanged	2-1/2	054695	054704	054713
Flanged	3	054696	054705	054714
Flanged	4	054697	054706	054715

End Connection	Size mm	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PP Body

Spigot	20mm	054789	054798	054807
Spigot	25mm	054790	054799	054808
Spigot	32mm	054791	054800	054809
Spigot	40mm	054792	054801	054810
Spigot	50mm	054793	054802	054811
Spigot	63mm	054794	054803	054812
Spigot	75mm	054795	054804	054813
Spigot	90mm	054796	054805	054814
Spigot	110mm	054797	054806	054815

### PP Body

T/U	20mm	054816	054824	054830
T/U	25mm	054819	054825	054831
T/U	32mm	054820	054826	054832
T/U	40mm	054821	054827	054833
T/U	50mm	054822	054828	054834
T/U	63mm	054823	054829	054835

Note: EPDM diaphragms have EPDM o-rings, Viton® and PTFE diaphragms have Viton® o-rings. Other options are available on request. VM Series Diaphragm valves are made-to-order.

## DV SERIES DIAPHRAGM VALVES - MANUAL HANDWHEEL

The DV is a rugged industrial product ideal for throttling or use in abrasive slurry lines. The raising position indicator also functions as an adjustable travel stop. This feature can be used to avoid over-compression of the EPDM or PTFE diaphragm, or as a travel limiter allowing different settings for the "closed" position. The molded flanged body eliminates potentially leaky joints while featuring end-to-end dimensions identical to most plastic lined metal diaphragm valves, allowing for direct replacement.

Pressure: up to 150 psi at 73°F depending on the size  
 Sizes: 1/2" – 6"



End Connection	Size inches	EPDM Product Code
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### PVC Body

Flanged	1/2	052196
Flanged	3/4	052197
Flanged	1	052198
Flanged	1-1/2	052207
Flanged	2	052208
Flanged	3	052209
Flanged	4	052217
Flanged	6	052218

End Connection	Size inches	PTFE Product Code
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### PVC Body

Flanged	1/2	052296
Flanged	3/4	052297
Flanged	1	052298
Flanged	1-1/2	052299
Flanged	2	052354
Flanged	3	052355
Flanged	4	052356
Flanged	6	052357

## CM SERIES COMPACT DIAPHRAGM VALVES

The CM is a compact design with true union ends, available in PVC, CPVC, PP, or PVDF. With three diaphragm options (EPDM, Viton®, or PTFE), these manually operated or pneumatically actuated valves are ideal for OEMs. A standard position indicator and integrated mounting bushings complete the long list of features.

Pressure: up to 90 psi at 73°F  
 Size: 1/2" in PVC and CPVC, 16 mm – 20 mm in PP and PVDF



End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PVC Body

T/U S/T	3/8	253071	-	253072
T/U S/T	1/2	253073	-	253074
T/U Socket	1/2	054127	054129	054131

### Corzan® CPVC Body

T/U Socket	1/2	054128	054130	054132
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End Connection	Size mm	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PP Body

Socket	16mm	054133	054136	054139
Spigot	20mm	054134	054137	054140
T/U Socket	20mm	054135	054138	054141

### PVDF Body

Socket	16mm	054142	054145	054148
Spigot	20mm	054143	054146	054149
T/U Socket	20mm	054144	054147	054150

## CM SERIES COMPACT DIAPHRAGM VALVES - NORMALLY CLOSED PNEUMATIC

Pressure: up to 90 psi at 73°F

Size: 1/2" in PVC and CPVC, 16 mm – 20 mm in PP and PVDF



End Connection	Size inches	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PVC Body

T/U Socket	1/2	054151	054152	054153
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### Corzan® CPVC Body

T/U Socket	1/2	054154	054155	054156
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End Connection	Size mm	EPDM Product Code	Viton® Product Code	PTFE Product Code
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### PP Body

Socket	16mm	054157	054160	054163
Spigot	20mm	054158	054161	054164
T/U Socket	20mm	054159	054162	054165

### PVDF Body

Socket	16mm	054166	054169	054172
Spigot	20mm	054167	054170	054173
T/U Socket	20mm	054168	054171	054174

Note: EPDM diaphragms have EPDM o-rings Viton® and PTFE diaphragms have Viton® o-rings.

## DM SERIES DIAPHRAGM VALVES - DIRECT ACTING PNEUMATIC

Available in both PVC and CPVC, and with either an EPDM or Viton® diaphragm, its rugged construction allows the ultra-compact DM to handle even extremely aggressive media. The direct operation of the diaphragm does not require a closing spring, which makes the small DM particularly suitable when space is at a premium.

Pressure: up to 115 psi at 73°F depending upon the available control pressure

Sizes: 1/2" – 2"



End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### PVC Body

Spigot	1/2	054880	054886
Spigot	3/4	054881	054887
Spigot	1	054882	054888
Spigot	1-1/4	054883	054889
Spigot	1-1/2	054884	054890
Spigot	2	054885	054891

### PVC Body

True Union	1/2	054892	054898
True Union	3/4	054893	054899
True Union	1	054894	054900
True Union	1-1/4	054895	054901
True Union	1-1/2	054896	054902
True Union	2	054897	054903

### PVC Body

Flanged	1/2	054904	054910
Flanged	3/4	054905	054911
Flanged	1	054906	054912
Flanged	1-1/4	054907	054913
Flanged	1-1/2	054908	054914
Flanged	2	054909	054915

## DM SERIES DIAPHRAGM VALVES - DIRECT ACTING PNEUMATIC W/STROKE LIMITER & POSITION INDICATOR

Pressure: up to 115 psi at 73°F depending upon the available control pressure

Sizes: 1/2" - 2"



Diaphragm valves are the perfect solution when precise flow throttling is required. The weir style design - no dead space in the valve - is extremely good for abrasive slurries. These valves are widely used in high purity applications because their design prevents friction and subsequent particle creation when cycling. Many body and diaphragm material options are available as well as simple pneumatic actuation.

End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### PVC Body

Spigot	1/2	054916	054922
Spigot	3/4	054917	054923
Spigot	1	054918	054924
Spigot	1-1/4	054919	054925
Spigot	1-1/2	054920	054926
Spigot	2	054921	054927

### PVC Body

True Union	1/2	054928	054934
True Union	3/4	054929	054935
True Union	1	054930	054936
True Union	1-1/4	054931	054937
True Union	1-1/2	054932	054938
True Union	2	054933	054939

### PVC Body

Flanged	1/2	054940	054946
Flanged	3/4	054941	054947
Flanged	1	054942	054948
Flanged	1-1/4	054943	054949
Flanged	1-1/2	054944	054950
Flanged	2	054945	054951

Note: EPDM diaphragms have EPDM o-rings Viton® and PTFE diaphragms have Viton® o-rings.

## DIAPHRAGM VALVES - AUTOMATION & ACCESSORIES

IPEX diaphragm valves can be pneumatically actuated providing precise control of critical applications. The normally closed (fail close), normally open (fail open), and double acting VM valves make up of one of the most extensive ranges in the industry. The actuated CM provides a compact solution to automated needs while the DM employs an efficient direct acting design. All pneumatic diaphragm valves can be outfitted with many options and accessories such as: stroke limiters, optical and electric position indicators, electro-pneumatic positioners, pilot valves, and various combinations thereof.

Valve Series	Size inches	Product Code
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### Pilot Solenoid Valve - Direct Mount, NBR Seals, 110 VAC



VM	1/4	053074
CM	1/8	053075

### Pilot Solenoid Valve - Remote Mount, NBR Seals, 110 VAC



N/A	1/4	053076
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Note: Other voltages are available upon request.

### Optical Position Indicator



VM / NC - NO - DA	1/2 - 2	054997
VM / NC - NO - DA	2-1/2 - 4	054998

Protection cap included, see assembly instructions.

### Stroke Limiter



VM / NC	1/2 - 1-1/2	054991
VM / NC	2	054992
*VM / NC	2-1/2 - 4	054993
VM / NO - DA	1/2 - 2	054994
VM / NO - DA	2-1/2 - 4	054995

Protection cap included for VM.  
\*Actuator must have the metal cap.

### Stroke Limiter w/ Optical Position Indicator



VM / NC	1/2 - 1	054999
VM / NC	1-1/4 - 1-1/2	053063
VM / NC	2	053064
*VM / NC	2-1/2 - 4	053065
VM / NO - DA	1/2 - 2	053066
VM / NO - DA	2-1/2 - 4	053067

Protection cap included for VM.  
\*Actuator must have the metal cap.

Valve Series	Size inches	Product Code
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### Stroke Limiter w/ Optical Position Indicator & Manual Override



VM / NC	1/2 - 1	053069
VM / NC	1-1/4 - 2	053071
VM / NO - DA	1/2 - 1	053072
VM / NO - DA	1-1/4 - 2	053073

Protection cap included for VM.

### Electrical Position Indicator - 1 Mechanical Switch



CM / NC	1/2	054952
VM / NC	1/2 - 1	054953
VM / NC	1-1/4 - 1-1/2	054954
VM / NC	2	054955
VM / NC	2-1/2 - 4	054956
VM Manual*	1/2 - 1	054962
VM Manual*	1-1/4 - 1-1/2	054963
VM Manual*	2	054964
VM Manual*	2-1/2 - 3	054965
VM Manual*	4	054966

\* Special machining needed for the valve bonnet and compressor.

### Microswitch Box - 2 Electromechanical Switches



VM / NC	1/2 - 1-1/2	054967
VM / NC	2 - 4	054968
VM / NO	1/2 - 4	054969

### Microswitch Box - 2 Inductive Switches

VM / NC	1/2 - 1-1/2	054970
VM / NC	2 - 4	054971
VM / NO	1/2 - 4	054972

### Compact Microswitch Box

- 2 Electromechanical Switches



VM / NC	1/2 - 1	054973
VM / NC	1-1/4 - 1-1/2	054974
VM / NC	2	054975
VM / NO	1/2 - 1	054976
VM / NO	1-1/4 - 1-1/2	054977
VM / NO	2	054978
CM / NC - NO	1/2	054979

### Compact Microswitch Box

- 2 Inductive Switches

VM / NC	1/2 - 1	054980
VM / NC	1-1/4 - 1-1/2	054981
VM / NC	2	054982
VM / NO	1/2 - 1	054983
VM / NO	1-1/4 - 1-1/2	054984
VM / NO	2	054985
CM / NC - NO	1/2	054986

## VB SERIES BALL CHECK VALVES - TRUE UNION

As one of the most requested styles of check valves for smaller diameter plastic piping systems, these valves feature a true union design for simple maintenance. Full length guide ribs allow for maximum flow and minimum turbulence, preventing ball sticking and chatter. Very low back pressure is needed for positive shut off. The VB is available in PVC with either EPDM or Viton® seals, and CPVC with Viton® seals.

Pressure: 150 psi at 73°F

Sizes: 1/2" – 4"



Check valves should be used whenever there is a need to prevent back-flow of process media. This may be when two incompatible fluids cannot be allowed to mix, or when reverse flow would cause undesirable drainage of a system line or tank. Many styles exist including: simple ball checks, heavy duty swing checks, and highly efficient piston checks. These valves are typically gravity operated and require very little back pressure to seal. Air release valves safely allow any entrapped air or gas to escape, avoiding damage to the piping system.

End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### PVC

S/T	1/2	052231	052241
S/T	3/4	052232	052242
S/T	1	052233	052243
S/T	1-1/4	052234	052244
S/T	1-1/2	052235	052245
S/T	2	052236	052246
Socket	2-1/2	053848	052247
Socket	3	052237	052248
Socket	4	052238	052249

### PVC

Flanged	1/2	053849	053858
Flanged	3/4	053850	053859
Flanged	1	053851	053860
Flanged	1-1/4	053852	053861
Flanged	1-1/2	053853	053862
Flanged	2	053854	053863
Flanged	2-1/2	053855	053864
Flanged	3	053856	052382
Flanged	4	053857	052384

End Connection	Size inches	Viton® Product Code
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### CPVC

S/T	1/2	052251
S/T	3/4	052252
S/T	1	052253
S/T	1-1/4	052254
S/T	1-1/2	052255
S/T	2	052256
Socket	2-1/2	053865
Socket	3	052257
Socket	4	052219

### CPVC

Flanged	1/2	053867
Flanged	3/4	053868
Flanged	1	053869
Flanged	1-1/4	053870
Flanged	1-1/2	053871
Flanged	2	053872
Flanged	2-1/2	053873
Flanged	3	052383
Flanged	4	053874

## VR SERIES PISTON CHECK VALVES - TRUE UNION, Y-PATTERN

The VR features an all PVC construction of high performance components. This Y-pattern valve will perform equally as well in both vertical and horizontal orientations. With an increased flow rate yet low-return pressure positive seal, and top-entry maintenance, our VR piston check valve far exceeds the limited performance of other popular check valves. Both EPDM and Viton® seals are available.

Pressure: up to 232 psi depending on the size

Sizes: 1/2" – 4"



End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### PVC

S/T	1/2	053346	053289
S/T	3/4	053347	053290
S/T	1	053348	053291
S/T	1-1/4	053349	053292
S/T	1-1/2	053350	053293
S/T	2	053351	053294

### PVC

Flanged	1/2	053879	053885
Flanged	3/4	053880	053886
Flanged	1	053881	053887
Flanged	1-1/4	053882	053888
Flanged	1-1/2	053883	053889
Flanged	2	053884	053890

End Connection	Size inches	EPDM Product Code
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### PVC, NOT True Union

Threaded	3	053352
Threaded	4	053353
Socket	3	053295
Socket	4	053296
Flanged	3	053925
Flanged	4	053926

## SC SERIES SWING CHECK VALVES

The SC combines superior flow rate with maximum versatility. With stainless wetted parts and hardware, top entry design, and extremely low back pressure requirements, these flanged valves are the perfect choice for back-flow prevention in large diameter lines, both vertical and horizontal. The SC is available in PVC with either EPDM or Viton® seals.

Pressure: up to 100 psi at 73°F depending on the size  
 Sizes: 3" – 8"



End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### PVC

Flanged	3	052289	053875
Flanged	4	052290	053876
Flanged	6	052291	053877
Flanged	8	052292	053878

## VA SERIES AIR RELEASE VALVES - SINGLE UNION

The VA is one of only two such plastic valves in the industry, and the only one controlled by media and not pressure. Designed for tanks, slurries, or start-ups, the VA valve will economically and efficiently eliminate air or gas pockets as well as break potentially dangerous vacuums. This no-spill valve is offered in PVC with EPDM seals. Viton® sealing kits are also available.

Pressure: 232 psi  
 Sizes: 3/4", 1-1/4" and 2"



Size inches	EPDM Product Code
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### PVC, Single Union

3/4	053559
1-1/4	053560
2	053561

Note: Valves supplied with dual (socket & threaded) end connectors for the exhaust port

Size inches	Product Code
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### Viton® O-ring Set

3/4	153845
1-1/4	153846
2	153847

## RV SERIES SEDIMENT STRAINERS - TRUE UNION - Y PATTERN

The RV Y-pattern strainer protects critical pipeline components by removing solids and suspended impurities. Clear PVC construction allows for inspection of the screen while in service, whereas the bottom-entry design permits maintenance on the valve while in-line. The RV is available with either EPDM or Viton® seals, as well as in Corzan® CPVC.

Pressure: up to 150 psi depending on the size  
 Sizes: 1/2" – 4"



### RV Series Sediment Strainer Replacement Screens

Size Inches	Product Code	Size Inches	Product Code
<b>PVC 18 Mesh - 3/32"</b>			
1/2	053947	<b>PVC 30 Mesh - 5/64"</b>	
3/4	053948	1/2	053955
1	053949	3/4	053956
1-1/4	053950	1	053957
1-1/2	053951	1-1/4	053958
2	053952	1-1/2	053959
3	053953	2	053960
4	053954	3	053961
<b>PVC 35 Mesh - 1/32"</b>			
1/2	053963	<b>PVC 50 Mesh - 3/64"</b>	
3/4	053964	1/2	053971
1	053965	3/4	053972
1-1/4	053966	1	053973
1-1/2	053967	1-1/4	053974
2	053968	1-1/2	053975
3	053969	2	053976
4	053970	3	053977
<b>SS 35 Mesh - 1/32"</b>			
1/2	053979	<b>PP 30 Mesh - 1/16"</b>	
3/4	053980	1/2	053332
1	053981	3/4	053340
1-1/4	053982	1	053341
1-1/2	053983	1-1/4	053342
2	053984	1-1/2	053343
3	053985	2	053344
4	053986	3	-
		4	-

End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### Clear PVC True Union, w/PVC 35 Mesh Screen

S/T	1/2	053261	053233
S/T	3/4	053262	053234
S/T	1	053263	053235
S/T	1-1/4	053264	053236
S/T	1-1/2	053265	053237
S/T	2	053266	053238

### Clear PVC True Union, w/PVC 35 Mesh Screen

Flanged	1/2	053935	053941
Flanged	3/4	053936	053942
Flanged	1	053937	053943
Flanged	1-1/4	053938	053944
Flanged	1-1/2	053939	053945
Flanged	2	053940	053946

End Connection	Size inches	Viton® Product Code
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### CPVC True Union, w/PP 30 Mesh Screen

S/T	1/2	053334
S/T	3/4	053335
S/T	1	053336
S/T	1-1/4	053337
S/T	1-1/2	053338
S/T	2	053339

End Connection	Size inches	EPDM Product Code	Viton® Product Code
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### Clear PVC NOT True Union, w/PVC 35 Mesh Screen

Threaded	3	053267	053239
Threaded	4	053268	053240
Socket	3	053211	054012
Socket	4	053212	054013
Flanged	3	054020	054028
Flanged	4	054021	054029

Sizes ASTM Mesh	Hole Pitch inches	Availability		
		PVC	SS	PP
18 Mesh	3/32	X	-	-
30 Mesh	1/16	-	-	X
30 Mesh	5/64	X	-	-
35 Mesh	1/32	X	X	-
50 Mesh	3/64	X	-	-

## SF SERIES 2-WAY SOLENOID VALVES - TRUE UNION, NORMALLY CLOSED, 110 VAC

The SF is a 100% duty cycle solenoid valve, and is available in PVC with EPDM or Viton® seals. Remote operation and a quick cycle time allow for precise control of media in automated applications. With their "shutter" design, standard manual override, and position indicator, these valves will outlast and outperform more conventional diaphragm-style solenoid valves.

Pressure: up to 60 psi depending on the size  
 Sizes: 1/4" and 1/2"



Orifice Size	Size inches	EPDM Product Code	Viton® Product Code
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### PVC, True Union, Normally Closed, FNPT Threaded

0.23	1/4	053615	053616
0.31	1/4	053617	053618
0.39	1/2	053619	053620

Note: 3-way valves and other voltages are available on request.

## VV ANGLE SEAT VALVE - TRUE UNION, Y-PATTERN

Sizes: 1/2 - 2"



End Connection	Size inches	EPDM Product Code
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### PVC, True Union w/ PTFE Gland Packing

S/T	1/2	253869
S/T	3/4	253870
S/T	1	253871
S/T	1-1/4	253872
S/T	1-1/2	253873
S/T	2	253874

Note: Viton® sealing sets are available on request, please contact customer service.

## LV SERIES LAB VALVES WITH FNPT, MNPT AND HOSE CONNECTORS

The LV is an ingenious PVC quarter turn product supplied with an assortment of connections that match up with many kinds of pipe or hose.

Pressure: 150 psi at 73°F  
 Sizes: 1/4"



Size inches	Product Code
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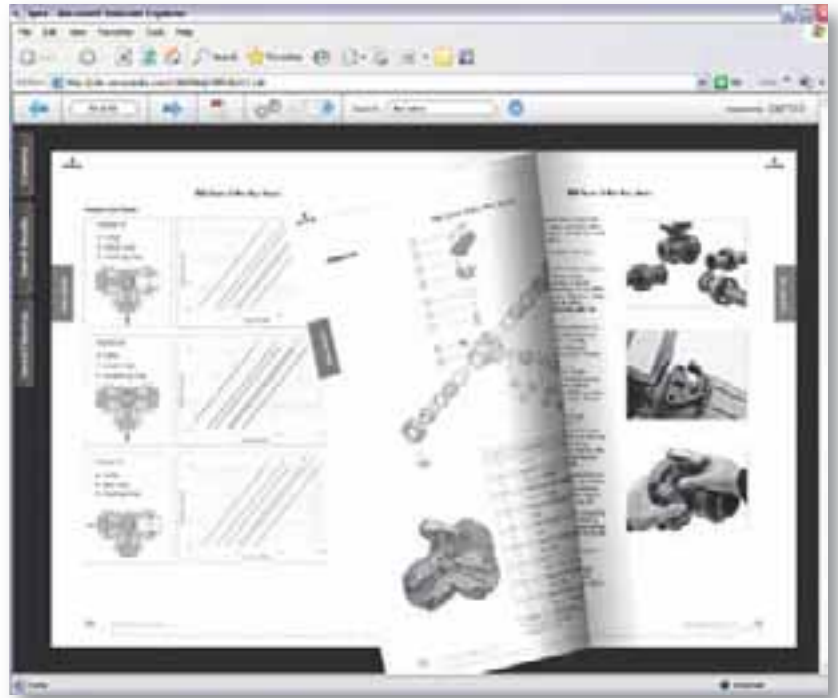
### LV Series Lab Valve w FNPT, MNPT & Hose Connectors

1/4	052308
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# QUARTER TURN AUTOMATION

## Quarter Turn Automation - Pneumatic / Electric

Automation is an ideal solution for precise control of many valves in a system, when valves are remotely located, or when the process requires constant monitoring and adjustment. Pneumatic and electric actuators can be easily fitted on our ball, multi-port, and butterfly valves. Some features and functions include normally closed, normally open, or double-acting operation; corrosion resistant aluminum bodies, pre-loaded springs, and adjustable cams. Many accessories such as visual position indicators, limit switches, 3 and 4-way solenoids, and positioners are also available. For further information, please refer to the IPEX *Industrial Technical Manual Volume IX* entitled, "Quarter Turn Automation".



### DID YOU KNOW?

The three basic control functions available through quarter turn automation are:

- 1. Double Acting**– This requires external power for each stroke. For example, power to open the valve, then power to close the valve.
- 2. Normally Open**– Also referred to as 'fail safe open', the default position is open and the actuator requires power to close the valve.
- 3. Normally Closed**– Also referred to as 'fail safe closed', the default position is closed and the actuator requires power to open the valve.

### PNEUMATIC ACTUATORS OVERVIEW

Pneumatic actuators are the most common choice for quarter turn plastic valves in process applications. Compressed air systems are readily available in any plant, and the cost of the actuator itself is generally lower than that of an electric unit with a comparable torque output. Typical quarter turn automation seldom requires positioning (something achieved more easily with an electric actuator), therefore the cycle life of a pneumatic unit will be substantially greater, and will be intrinsically safer than an electric actuator in volatile environments. While there are many different kinds of pneumatic actuators, a rack and pinion style is the preferred choice within the plastic piping industry. This type of actuator is quite tough and rugged, and has a high cycle life. They generally have a compact, simple construction, and certain models can be quite light in weight. The design also allows the same basic actuator to be used as a double acting or (with minor additions) a spring return unit.

### ELECTRICAL ACTUATORS OVERVIEW

Although slightly more expensive than pneumatics, electric actuators have certain desirable benefits. They are the preferred choice when cycle time is an issue, as a quick closing pneumatically actuated valve could cause a damaging pressure surge condition (water hammer). The use of an electric actuator may also be preferred when the distance from the power source is considerable. The friction losses in long runs of compressed air line may result in reduced efficiency and/or additional compressor stations. In addition, electric actuators are the preferred (if not the only) choice when a quarterturn valve like a multi-port is used. In this case, it is possible that the travel required is not just 0° to 90° but 0° to 90° to 180°. A rack and pinion actuator would need four separate pistons and a multiplicity of related air chambers, whereas this is easily accomplished with an electric unit. Most electric actuators have a cam/limit switch arrangement which allows the unit to be set up for a variety of rotations. The two standard limit switches can be used to provide a remote location with an open or closed signal. A multitude of voltages both for AC and DC current are also typically available.

## VKD SERIES BALL VALVE - TRUE UNION, PNEUMATIC - DOUBLE ACTING



End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats

S/T	1/2	253296	253305
S/T	3/4	253297	253306
S/T	1	253298	253307
S/T	1-1/4	253299	253308
S/T	1-1/2	253300	253309
S/T	2	253301	253310
Socket	2-1/2	253302	253311
Socket	3	253303	253312
Socket	4	253304	253313

### Pneumatic - Spring Return, Normally Open

#### PVC w PTFE Seats

S/T	1/2	253368	253377
S/T	3/4	253369	253378
S/T	1	253370	253379
S/T	1-1/4	253371	253380
S/T	1-1/2	253372	253381
S/T	2	253373	253382
Socket	2-1/2	253374	253383
Socket	3	253375	253384
Socket	4	253376	253385

### Pneumatic - Spring Return, Normally Closed

#### PVC w PTFE Seats

S/T	1/2	253332	253341
S/T	3/4	253333	253342
S/T	1	253334	253343
S/T	1-1/4	253335	253344
S/T	1-1/2	253336	253345
S/T	2	253337	253346
Socket	2-1/2	253338	253347
Socket	3	253339	253348
Socket	4	253340	253349

End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### Corzan® CPVC w PTFE Seats

S/T	1/2	253314	253323
S/T	3/4	253315	253324
S/T	1	253316	253325
S/T	1-1/4	253317	253326
S/T	1-1/2	253318	253327
S/T	2	253319	253328
Socket	2-1/2	253320	253329
Socket	3	253321	253330
Socket	4	253322	253331

### Pneumatic - Spring Return, Normally Open

#### Corzan® CPVC w PTFE Seats

S/T	1/2	253386	253395
S/T	3/4	253387	253396
S/T	1	253388	253397
S/T	1-1/4	253389	253398
S/T	1-1/2	253390	253399
S/T	2	253391	253400
Socket	2-1/2	253392	253401
Socket	3	253393	253402
Socket	4	253394	253403

### Pneumatic - Spring Return, Normally Closed

#### Corzan® CPVC w PTFE Seats

S/T	1/2	253350	253359
S/T	3/4	253351	253360
S/T	1	253352	253361
S/T	1-1/4	253353	253362
S/T	1-1/2	253354	253363
S/T	2	253355	253364
Socket	2-1/2	253356	253365
Socket	3	253357	253366
Socket	4	253358	253367

## VKD SERIES BALL VALVE - ELECTRIC - DOUBLE ACTING, 110 VAC



End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats

S/T	1/2	253404	253413
S/T	3/4	253405	253414
S/T	1	253406	253415
S/T	1-1/4	253407	253416
S/T	1-1/2	253408	253417
S/T	2	253409	253418
Socket	2-1/2	253410	253419
Socket	3	253411	253420
Socket	4	253412	253421

End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### Corzan® CPVC w PTFE Seats

S/T	1/2	253422	253431
S/T	3/4	253423	253432
S/T	1	253424	253433
S/T	1-1/4	253425	253434
S/T	1-1/2	253426	253435
S/T	2	253427	253436
Socket	2-1/2	253428	253437
Socket	3	253429	253438
Socket	4	253430	253439

## TKD SERIES 3-WAY BALL VALVE - TRUE UNION, PNEUMATIC - DOUBLE ACTING



End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats, L-Port

S/T	1/2	253791	253797
S/T	3/4	253792	253798
S/T	1	253793	253799
S/T	1-1/4	253794	253800
S/T	1-1/2	253795	253801
S/T	2	253796	253802

### Pneumatic - Spring Return, Normally Open

#### PVC w PTFE Seats, L-Port

S/T	1/2	253744	253750
S/T	3/4	253745	253751
S/T	1	253746	253752
S/T	1-1/4	253747	253753
S/T	1-1/2	253748	253754
S/T	2	253749	253755

### Pneumatic - Spring Return, Normally Closed

#### PVC w PTFE Seats, L-Port

S/T	1/2	253767	253773
S/T	3/4	253768	253774
S/T	1	253769	253775
S/T	1-1/4	253770	253776
S/T	1-1/2	253771	253777
S/T	2	253772	253778

End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats, T-Port

S/T	1/2	253803	253809
S/T	3/4	253804	253810
S/T	1	253805	253811
S/T	1-1/4	253806	253812
S/T	1-1/2	253807	253813
S/T	2	253808	253814

### Pneumatic - Spring Return, Normally Open

#### PVC w PTFE Seats, T-Port

S/T	1/2	253756	253762
S/T	3/4	253757	253763
S/T	1	253758	253764
S/T	1-1/4	253759	253765
S/T	1-1/2	253760	253766
S/T	2	253761	253815

### Pneumatic - Spring Return, Normally Closed

#### PVC w PTFE Seats, T-Port

S/T	1/2	253779	253785
S/T	3/4	253780	253786
S/T	1	253781	253787
S/T	1-1/4	253782	253788
S/T	1-1/2	253783	253789
S/T	2	253784	253790

## TKD SERIES 3-WAY BALL VALVE - ELECTRIC - DOUBLE ACTING, 110 VAC



End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats, L-Port

S/T	1/2	253720	253726
S/T	3/4	253721	253727
S/T	1	253722	253728
S/T	1-1/4	253723	253729
S/T	1-1/2	253724	253730
S/T	2	253725	253731

End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats, T-Port

S/T	1/2	253732	253738
S/T	3/4	253733	253739
S/T	1	253734	253740
S/T	1-1/4	253735	253741
S/T	1-1/2	253736	253742
S/T	2	253737	253743

Note: Customer must specify 'open' and 'closed' positions for 3-way actuated valves. See technical manual for details.

Electric actuators can be configured for either 90° or 180° operation.

## VX SERIES BALL VALVE - TRUE UNION, PNEUMATIC - DOUBLE ACTING



End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats

S/T	1/2	253200	253206
S/T	3/4	253201	253207
S/T	1	253202	253208
S/T	1-1/4	253203	253209
S/T	1-1/2	253204	253210
S/T	2	253205	253211

### Pneumatic - Spring Return, Normally Open

#### PVC w PTFE Seats

S/T	1/2	253248	253254
S/T	3/4	253249	253255
S/T	1	253250	253256
S/T	1-1/4	253251	253257
S/T	1-1/2	253252	253258
S/T	2	253253	253259

### Pneumatic - Spring Return, Normally Closed

#### PVC w PTFE Seats

S/T	1/2	253224	253230
S/T	3/4	253225	253231
S/T	1	253226	253232
S/T	1-1/4	253227	253233
S/T	1-1/2	253228	253234
S/T	2	253229	253235

End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### Corzan® CPVC w PTFE Seats

S/T	1/2	253212	253218
S/T	3/4	253213	253219
S/T	1	253214	253220
S/T	1-1/4	253215	253221
S/T	1-1/2	253216	253222
S/T	2	253217	253223

### Pneumatic - Spring Return, Normally Open

#### Corzan® CPVC w PTFE Seats

S/T	1/2	253260	253266
S/T	3/4	253261	253267
S/T	1	253262	253268
S/T	1-1/4	253263	253269
S/T	1-1/2	253264	253270
S/T	2	253265	253271

### Pneumatic - Spring Return, Normally Closed

#### Corzan® CPVC w PTFE Seats

S/T	1/2	253236	253242
S/T	3/4	253237	253243
S/T	1	253238	253244
S/T	1-1/4	253239	253245
S/T	1-1/2	253240	253246
S/T	2	253241	253247

## VX SERIES BALL VALVE - ELECTRIC - DOUBLE ACTING, 110 VAC



End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### PVC w PTFE Seats

S/T	1/2	253272	253278
S/T	3/4	253273	253279
S/T	1	253274	253280
S/T	1-1/4	253275	253281
S/T	1-1/2	253276	253282
S/T	2	253277	253283

End Connection	Size inches	EPDM Product Code	Viton® Product Code
----------------	-------------	-------------------	---------------------

### Corzan® CPVC w PTFE Seats

S/T	1/2	253284	253290
S/T	3/4	253285	253291
S/T	1	253286	253292
S/T	1-1/4	253287	253293
S/T	1-1/2	253288	253294
S/T	2	253289	253295

## FK SERIES BUTTERFLY VALVE - DOUBLE ACTING



Size inches	EPDM Product Code	Viton® Product Code
-------------	-------------------	---------------------

### PP Disc, Wafer Style

1-1/2	253536	253546
2	253537	253547
2-1/2	253538	253548
3	253539	253549
4	253540	253550
5	253541	253551
6	253542	253552
8	253543	253553
10	253544	253554
12	253545	253555

### Pneumatic - Spring Return, Normally Open

#### PP Disc, Wafer Style

1-1/2	253608	253618
2	253609	253619
2-1/2	253610	253620
3	253611	253621
4	253612	253622
5	253613	253623
6	253614	253624
8	253615	253625
10	253616	253626
12	253617	253627

### Pneumatic - Spring Return, Normally Closed

#### PP Disc, Wafer Style

1-1/2	253572	253582
2	253573	253583
2-1/2	253574	253584
3	253575	253585
4	253576	253586
5	253577	253587
6	253578	253588
8	253579	253589
10	253580	253590
12	253581	253591

Size inches	EPDM Product Code	Viton® Product Code
-------------	-------------------	---------------------

### PP Disc, SS Lugs

2-1/2	253556	253564
3	253557	253565
4	253558	253566
5	253559	253567
6	253560	253568
8	253561	253569
10	253562	253570
12	253563	253571

### Pneumatic - Spring Return, Normally Open

#### PP Disc, SS Lugs

2-1/2	253628	253636
3	253629	253637
4	253630	253638
5	253631	253639
6	253632	253640
8	253633	253641
10	253634	253642
12	253635	253643

### Pneumatic - Spring Return, Normally Closed

#### PP Disc, SS Lugs

2-1/2	253592	253600
3	253593	253601
4	253594	253602
5	253595	253603
6	253596	253604
8	253597	253605
10	253598	253606
12	253599	253607

## FK SERIES BUTTERFLY VALVES - ELECTRIC - DOUBLE ACTING, 110 VAC



Size inches	EPDM Product Code	Viton® Product Code
-------------	-------------------	---------------------

### PP Disc, Wafer Style

1-1/2	253644	253654
2	253645	253655
2-1/2	253646	253656
3	253647	253657
4	253648	253658
5	253649	253659
6	253650	253660
8	253651	253661

Size inches	EPDM Product Code	Viton® Product Code
-------------	-------------------	---------------------

### PP Disc, SS Lugs

2-1/2	253664	253672
3	253665	253673
4	253666	253674
5	253667	253675
6	253668	253676
8	253669	253677

Note: PVC, CPVC, ABS, and PVDF discs are available on request  
10" and 12" electrically actuated butterfly valves are available on request.

## FE SERIES BUTTERFLY VALVE PNEUMATIC - DOUBLE ACTING



Size inches	EPDM Product Code
-------------	-------------------

### PVC Body & Disc, Wafer Style

1-1/2	253680
2	253681
2-1/2	253682
3	253683
4	253684
5	253685
6	253686
8	253687
10	253688
12	253689

Size inches	EPDM Product Code
-------------	-------------------

### Pneumatic - Spring Return, Normally Open

#### PVC Body & Disc, Wafer Style

1-1/2	253700
2	253701
2-1/2	253702
3	253703
4	253704
5	253705
6	253706
8	253707
10	253708
12	253709

Note: NBR and Viton® lined valves are available on request

### Pneumatic - Spring Return, Normally Closed

#### PVC Body & Disc, Wafer Style

1-1/2	253690
2	253691
2-1/2	253692
3	253693
4	253694
5	253695
6	253696
8	253697
10	253698
12	253699

## FE SERIES BUTTERFLY VALVE ELECTRIC - DOUBLE ACTING, 110 VAC



Size inches	EPDM Product Code
-------------	-------------------

### PVC Body & Disc, Wafer Style

1-1/2	253710
2	253711
2-1/2	253712
3	253713
4	253714
5	253715
6	253716
8	253717

10" and 12" electrically actuated butterfly valves are available upon request.

## PNEUMATIC ACTUATOR ACCESSORIES

Component Style	Product Code
-----------------	--------------

### Pilot Solenoids - 110 VAC, 3/4-Way



NEMA 4/4X	253055
NEMA 7/9	253056

Note: Pilot solenoids meet NAMUR mounting specifications. Other voltages available.

### Limit Switches - NEMA 4/4X



Mechanical	253057
Proximity	253058

Note: Limit switches include universal mounting brackets (ISO 5211)

### Positioners



3-15 psi	253061
4 - 20 mA	253059
4 - 20 mA, w/ limit switch (LS)	253816
4 - 20 mA, w/ position transmitter (PT)	253817
4 - 20 mA, w/ LS & PT	253818
4 - 20 mA, I-safe	253062



Note: All positioners include universal mounting brackets (ISO 5211) and gages.

Several other positioners available, including Intrinsically Safe, Explosion proof, Smart, Stainless Steel and High Vibration models, with limit switch and position transmitter options. Please contact IPEX for more information.

### Other



Sandwich Declutch. Gearbox ISO 5211	253819
Muffler - Brass/Bronze	253065
Speed Control - Brass/Bronze	253066



Note: Declutchable gearbox has MAXIMUM torque rating of 2600 in-lbs. For higher torque values, please contact IPEX for larger size gearbox models.

## MOUNTING ACCESSORIES

Size Inches	Mounting Detail	Product Code
-------------	-----------------	--------------

### VKD & TKD Series Ball Valve Mounting Kit



1/2	F03 / F04 / 11mm	154048
3/4	F04 / 11mm	154049
3/4	F03 / F05 / 11mm	154050
1	F04 / 11mm	154051
1	F03 / F05 / 11mm	154052
1-1/4	F05 / F07 / 11mm	154182
1-1/4	F05 / F07 / 14mm	154053
1-1/2	F05 / F07 / 11mm	154183
1-1/2	F05 / F07 / 14mm	154054
2	F05 / F07 / 11mm	154174
2	F05 / F07 / 14mm	154055
2-1/2 - 4 (VKD)	F05 / F07	153001

### VX Series Ball Valve Mounting Kit



1/2	F04 / F05 / 11mm	154042
3/4	F04 / F05 / 11mm	154043
1	F04 / F05 / 11mm	154044
1-1/4	F04 / F05 / 11mm	154045
1-1/2	F05 / F07 / 14mm	154046
2	F05 / F07 / 14mm	154047

### Spacer Plate for FK Series Butterfly Valves



1-1/2 - 6	F05 / F07	153001
8	F10	153002

### Square Stem Adapter



0.43 x 0.35	11mm x 9mm	253048
0.55 x 0.43	14mm x 11mm	253049
0.67 x 0.43	17mm x 11mm	253050
0.67 x 0.55	17mm x 14mm	253051
0.87 x 0.67	22mm x 17mm	253052
1.06 x 0.87	27mm x 22mm	253053
1.42 x 1.06	36mm x 27mm	253054

1) IPEX's highly chemically resistant PVC ventilation duct systems feature seamless pipe for greater flow rates. Their light weight allows for easier handling on the job, which means lower installation costs.

2) For applications where quick assembly is required under adverse conditions, IPEX offers factory-grooved PVC pipe designed to mate easily with mechanical grooved couplings.

3) And, IPEX well casings offer corrosion-resistant, maintenance-free protection for well-drop-pipe and submersible pumps.

# Specialty Products



Ventilation Duct

126

Well Casings

127

Grooved PVC Pipe

128



# SPECIALTY PRODUCTS

## Ventilation Duct

### PVC Exhaust System Ducting

IPEX PVC exhaust system ducting provides effective solutions for industrial ventilation systems, protecting workers and the environment from contaminated air.

#### ADVANTAGES

- ① **PVC cell class 12454 as per ASTM D1785**
- ② **Extruded seamless PVC duct in all standard diameters 6" through 24"**
- ③ **For use in industrial and institutional fume handling systems requiring high resistance to corrosive vapors**
- ④ **Ideal for plating, metal finishing and laboratory installations**
- ⑤ **Low installed cost as compared to noncorrosive metallics**
- ⑥ **Light weight allows longer runs and speeds installation with simple tools and piping techniques**
- ⑦ **Low maintenance requirements over extended service periods**
- ⑧ **Low flame spread rating of 10 as per CAN/ULC S102.2**

#### STANDARDS



ASTM D1785  
CAN/ULC S102.2

#### PVC Duct Dimensions

Duct Size (diameter in inches)	Product Code	Average O.D. (in.)	Average I.D. (in.)	Average Wall Thickness (in.)
6 x 20	046700	6.625	6.251	0.187
8 x 20	046702	8.625	8.251	0.187
10 x 20	046704	10.750	10.376	0.187
12 x 20	046706	12.750	12.376	0.187
14 x 20	046707	14.000	13.626	0.187
16 x 20	046708	16.000	15.626	0.187
18 x 20	046709	18.000	17.626	0.187
20 x 20	046711	20.000	19.500	0.250
24 x 20	046713	24.000	23.500	0.250

10' lengths available upon request.  
These products are for atmospheric venting only. Do not use in pressurized air or gas systems.



# PVC Well Casing

IPEX bell end PVC well casing provides corrosion-resistant, maintenance-free protection for well drop-pipe and submersible pumps. Its light weight facilitates installation with conventional tools and piping techniques. It is manufactured to ASTM standards and is available throughout North America from IPEX's fully stocked service centers.



ASTM D1784, ASTM D1785, ASTM F480  
ASTM D2665 - Sch 40 pipe only

## ADVANTAGES

- 1 Meets ASTM D1784, D1785, D2665 (Sch 40 pipe only) and F480 specifications.
- 2 Third-party certified by NSF.
- 3 Solvent weld joints are strong and water tight.
- 4 Installation can be accomplished with lighter setting equipment than is required for metallic piping.
- 5 Electrically non-conductive which reduces job site work hazards.
- 6 Non-toxic and non-leaching with excellent chemical resistance.
- 7 Available in bell end 2" - 16" or plain end for threading 2" - 12".

Dimensions for Xirtec140 PVC Well Casing Pipe – ASTM F480

Pipe Size (in.)	Product Code	Outside Diameter (in.)		Minimum Wall Thickness (in.)			Bell Length (in.)
		Average	Tolerance on Avg	SDR21	Sch 40	Sch 80	
2	022620	2.375	±0.006	0.113	0.154	0.218	4.000
2-1/2	022625	2.875	±0.007	0.137	0.203	0.276	5.000
3	022630	3.500	±0.008	0.167	0.216	0.300	5.500
4	022640	4.500	±0.009	0.214	0.237	0.337	6.500
5	022650	5.563	±0.010	0.265	0.258	0.375	6.000
6	022660	6.625	±0.011	0.316	0.280	0.432	8.000
8	022680	8.625	±0.015	0.410	0.322	0.500	7.000
10	022690	10.750	±0.015	0.511	0.365	0.593	7.500
12	022692	12.750	±0.015	0.606	0.406	0.687	8.500
14	022694	14.000	±0.020	0.667	0.437	0.750	9.000
16	022696	16.000	±0.020	0.762	0.500	0.843	10.000

# Grooved PVC Pipe

IPEX PVC pipe can be roll or cut-grooved at each end for quick connection using mechanical couplings specifically designed for PVC pipe. This method can be used in any application where PVC pipe is acceptable and where it is desirable to have a means for quick assembly under adverse conditions.

## ADVANTAGES

- ① **Completely re-usable pressure system that does not require threading, solvent welding, or flanging.**
- ② **Joints are mechanically locked to produce a secure, leak-tight connection under pressure or vacuum.**  
(See coupling manufacturer's product information for details on pressure capabilities.)
- ③ **A union at every joint allows for speed and ease of assembly and field maintenance.**
- ④ **In abrasive applications, pipe can easily be rotated to distribute wear evenly.**
- ⑤ **Flexible system permits laying on rough or uneven terrain.**
- ⑥ **When using a gasket-type coupler, each joint will absorb some expansion and contraction due to temperature changes.**
- ⑦ **Grooved systems facilitate fast add-ons, modifications or re-location of the pipe.**

## DID YOU KNOW?

For more information on our Specialty Products, you can download our Vinyl Process Piping Systems Technical Manual quickly and easily. Just go to our website: [www.ipexinc.com](http://www.ipexinc.com).



### Recommended Piping for Roll Grooved Joints

Piping Material PVC Sch 40	Pipe Size (inches)	Piping Material PVC Sch 80
22686	2	85194
22688	3	85200
22706	4	85201
22712	6	85202
22714	8	85203
22730	10	85204
22716	12	85205

Consult an IPEX representative for detailed design considerations





**IPEX.**

**ALL THE NAMES YOU'VE COME TO KNOW AND TRUST.**

**BUILT AND BACKED BY ONE RELIABLE SOURCE.**

Over the past 50 years, we've built quite a few names for ourselves – in PVC, CPVC, pressure ABS, and natural and pigmented PP. Even so, you might not be aware who the single-source manufacturer is behind them all. It's IPEX.



Process Piping Systems

from facilities across North America, or taking advantage of our product installation training programs and technical reference materials – you can count on us.

One supplier to stand behind you and your complete system.

Why should this be important to you?

Because the IPEX integrated system advantage means all the materials you need are designed, built and backed by the same company. Whether it's receiving onsite technical assistance

For your nearest full line distributor of all these quality products please contact your local IPEX office. IPEX. We build tough products for tough environments.



Double Containment



High Purity Systems



Acid Waste Systems



Compressed Air



Actuated Valves



**Industrial Systems**

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# MUNICIPAL PRODUCT OVERVIEW

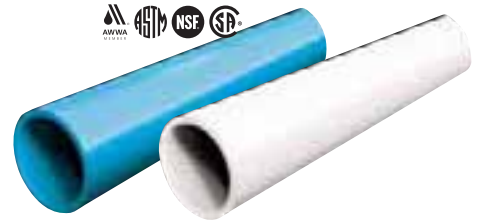
**Blue Brute® CIOD**  
4" - 12" (100mm - 300mm)  
AWWA C900 pressure pipe  
and fittings



**Cycle Tough®**  
1/2" - 24" (12mm - 600mm)  
IPSOD PVC pressure pipe and fittings  
for irrigation, rural & force main applications.



**BIONAX®**  
4" - 12" (100mm - 300mm)  
AWWA C909 and IPS molecularly-  
enhanced PVC pipe designed for  
watermains, sewage forcemains,  
irrigation lines and industrial  
process piping. Made from  
biaxially-oriented PVC.



## PRESSURE PIPING SYSTEMS

**TerraBrute® CR**  
4" - 12" (100mm - 300mm)  
Nonmetallic AWWA C900  
PVC pressure pipe system  
for HDD applications which  
withstands up to 120,000 lbs  
of pull force.



**IPEX Centurion®**  
14" - 48" (350mm - 1200mm)  
AWWA C905 large diameter  
pressure pipe and fittings.



**IPEX Fusible™**  
4" - 36" (100mm - 900mm)  
Fusible Brute™ (CIOD) and Fusible  
Series™ (IPS) pipes are monolithic,  
fully restrained PVC pipe systems for  
trenchless or direct bury  
applications.



**Q-Line®**  
3/4" - 1" (20mm - 25mm)  
AWWA C903 composite  
water service tubing.



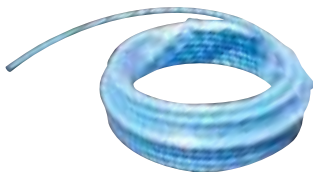
**Philmac® 3G™  
Valves & Fittings**  
1/2" - 2" (12mm - 50mm)  
Water line compression  
fittings in CTS OD and ID  
Series sizes.



**Gold Stripe®**  
3/4" - 2"  
Polyethylene water service  
line made to CTS OD.



**Blue904™**  
3/4" - 2" (20mm - 50mm)  
PEX water service tubing made  
to CTS OD (SDR9).



## WATER SERVICE SYSTEMS

# SEWER PIPING SYSTEMS

## Ring-Tite®

4" - 42" (100mm - 1050mm)

SDR35 and SDR28 sewer pipe and fittings.



## Enviro-Tite®

4" - 15" (100mm - 375mm)

SDR35 and SDR28 sewer pipes made from 50% recycled material.



## Ultra-Rib®

8" - 24" (200mm - 600mm)

Open-profile sewer pipe and fittings.



## Perma-Loc™

21" - 36" (525mm - 900mm)

Spiral-wound PVC profile sewer pipe with fusion welded seams.



## Ultra-X2™

30" - 36" (750mm - 900mm)

Dual wall PVC profile sewer pipe and fittings up to 900mm.



# SPECIALTY PRODUCTS

## LifeSaver®

High impact HDPE adjustment units designed to bring manhole and catchbasin castings up to the exact height of the roadway, and prevents road damage caused by infiltration.



## Inlet Control Device (ICD)

8" - 18" (200mm - 450mm)

ICDs are used to control flow into storm sewers during peak flow events.



## EnviroStream® Stormwater Treatment System

Catch basin drop-in structure to remove over 90% of hydrocarbons suspended solids and dissolved metals from stormwater run-off.



## Vortex Flow™ Insert

Custom designed, the Vortex Flow Insert eliminates odorous emissions and minimizes corrosion in vertical sewer drops.

### Products manufactured by IPEX Inc.

Blue Brute®, BIONAX®, IPEX Centurion®, IPEX Fusible™, Fusible Brute™, Fusible Series™, TerraBrute® CR, Cycle Tough®, Blue904™, Q-Line®, Gold Stripe®, Philmac® 3G™, Ultra-Rib®, Ultra-X2™, PermaLoc™, Ring-Tite®, Enviro-Tite®, Vortex Flow™, EnviroStream®, and Life Saver® are trademarks of IPEX Branding Inc.

Fusible PVC™ is a trademark of Underground Solutions Inc. used under license.

# PLUMBING & MECHANICAL PRODUCT OVERVIEW

## AquaRise®

1/2" – 3" (12mm – 75mm)  
IPS SDR11 CPVC pipe, valves  
and fittings for hot and cold  
water distribution.



## Pipe-with-the-Stripe®

1/2" – 3" (12mm – 50mm)  
Pipe with the Stripe is available in  
standard and CSA-certified Polyethylene,  
with a permanent coloured stripe ID system.



## POTABLE WATER



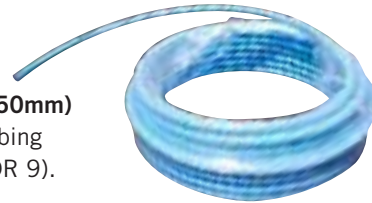
## Q-Line®

3/4" & 1" (20mm & 25mm)  
AWWA C903 composite water  
service tubing.



## Blue904™

3/4" – 2" (19mm – 50mm)  
PEX water service tubing  
made to CTS OD (SDR 9).



## Philmac® 3G™ Compression Fittings

3/4" – 2" (20mm – 50mm)  
Water line compression fittings  
in CTS OD and ID series sizes.



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## System 636®

### Flue Gas Venting

1-1/2" – 8" (40mm – 200mm)  
PVC-FGV Type BH Class II A vent pipe and  
fittings and CPVC-FGV Type BH Class II B vent.



## GAS VENTING

## XIRTEC & CORZAN

### Xirtec 140® PVC – Corzan® CPVC

1/2" – 24" (12mm – 600mm)  
XIRTEC 140®: PVC Schedule 40 & 80  
pipe and fittings systems.

CORZAN®: CPVC Schedule 80 pipe and fittings  
systems cell classification 24448 & 23447



# DWV SYSTEMS



**Drainway® ABS DWV Systems**  
 1-1/4" – 6" (32mm – 150mm)  
 ABS DWV pipe and fittings.



## Solvent Weld Sewer & Drain Piping Systems

3" – 6" (75mm – 150mm)  
 PVC Building Drain Sewer for sanitary, storm or septic drainage. Perforated pipe for perimeter drainage or septic fields.



## Backwater Valves

1-1/2" – 6" (40mm – 150mm)  
 Available in both PVC and ABS lightweight, corrosion-resistant plastic.



## DWV System 15® & System XFR®

1-1/2" – 24" (40mm – 600mm)  
**System 15:** Drain, Waste and Vent piping for low-rise commercial or residential.

**System XFR:** Drain, Waste and Vent piping for high-rise commercial or residential including air plenum installations.



## Cements & Primers

A complete range of cements, primers and applicators specially formulated for your pipe, valves and fittings.



# CEMENTS & PRIMERS

# FIRE PROTECTION

## Blazemaster® Fire Sprinkler Systems

3/4" – 3" (20mm – 75mm)  
 CPVC Pipe & Fittings for Fire Sprinkler Systems.



Products manufactured by IPEX Inc.  
 AquaRise®, PlumbBetter®, Polyethylene Pipe-with-the-Stripe®, Blue 904™, Q-Line®, Philmac® 3G™, Drainway®, System 15® & System XFR®, Xirtec 140® and System 636® are trademarks of IPEX Branding Inc.

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## About the IPEX Group of Companies

As leading suppliers of thermoplastic piping systems, the IPEX Group of Companies provides our customers with some of the world's largest and most comprehensive product lines. All IPEX products are backed by more than 50 years of experience. With state-of-the-art manufacturing facilities and distribution centers across North America, we have established a reputation for product innovation, quality, end-user focus and performance.

Markets served by IPEX group products are:

- PVC, CPVC, PP, ABS, PVCO, FR-PVDF and PE pipe and fittings (1/4" to 48")
- Industrial process piping systems
- Double containment systems
- Acid waste systems
- High purity systems
- Compressed air and inert gas piping system
- Manual and actuated thermoplastic valves
- Industrial, plumbing and electrical cements
- Municipal pressure and gravity piping systems
- PE Electrofusion systems for gas and water
- Plumbing and mechanical piping systems
- Electrical systems
- Telecommunications and utility piping systems
- Irrigation systems

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A policy of ongoing product improvement is maintained. This may result in modifications of features and/or specifications without notice.

