

# Why swim with all the other fish?



## IPEX Municipal Water Systems...innovation at its best!

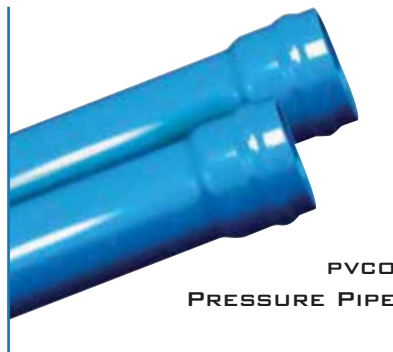
### IPEX FUSIBLE™



FPVC  
PRESSURE PIPE

- ✓ Available in CIOD & IPS sizes 4" to 24"
- ✓ Achieves higher flow rates
- ✓ Connects directly to existing PVC systems for material consistency
- ✓ Use standard CIOD or IPS fittings

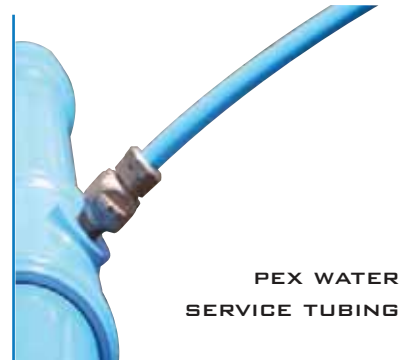
### BIONAX®



PVC  
PRESSURE PIPE

- ✓ Molecularly Enhanced
- ✓ 2X Stronger
- ✓ 3X Tougher
- ✓ 2X More Flexible
- ✓ Code Compliant

### BLUE904®



PEX WATER  
SERVICE TUBING

- ✓ Corrosion Resistant
- ✓ Lightweight & Flexible
- ✓ Jobsite Safe
- ✓ Fewer Connections

Proven in tough North American climates for more than 50 years, IPEX AWWA municipal pressure pipe & fittings are manufactured from custom engineered PVC compounds to deliver superior strength and corrosion resistance, along with the ability to flex without damage – even under high traffic loads and in deep burial applications. IPEX AWWA PVC pressure pipe offers long-term performance unmatched by any other pipe material.

# PRESSURE PIPE & FITTINGS



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# BLUE BRUTE PIPE

4" - 12" (100mm - 300mm)

## BLUE BRUTE®

Designed for municipal water applications, Blue Brute AWWA C900 pressure pipe delivers superior strength with corrosion-resistant performance and the ability to flex without damage. Made with a high-strength, high-impact PVC compound, Blue Brute pipes perform even under high traffic loads and deep burial conditions.

Manufactured with cast-iron outside diameters, Blue Brute is compatible with existing infrastructure of older iron pipes with no special transition fittings required. Blue Brute pressure pipe is hydrostatically proof tested to two times its pressure class/rating ensuring the integrity of every length of pipe that goes into the ground.

### ADVANTAGES

- 1 Corrosion-Proof Performance**  
IPEX Blue Brute systems are immune to corrosion from aggressive soils and galvanic action.
- 2 Superior Hydraulics**  
The glass-like finish of PVC reduces friction losses and eliminates the tuberculation common in iron pipes. As a result, pumping costs are reduced and water quality is maintained.
- 3 Cast-Iron Outside Diameter (CIOD)**  
Blue Brute systems are manufactured with a cast-iron outside diameter (CIOD). This is compatible with waterworks valves, appurtenances and restrainers.
- 4 Bottle-tight Joints, Removable Gaskets**  
IPEX's patented gasket system not only withstands many times the rated system pressure, but also withstands full vacuum pressures. The removable gasket system allows special oil-resistant (nitrile) gaskets to be easily installed when working in contaminated soils.
- 5 Third-party Certification**  
All IPEX municipal systems are third-party certified as applicable. In addition, IPEX Blue Brute systems have Factory Mutual approval and Underwriter's Laboratories (ULI and ULC) listings.

### APPLICATIONS

- Municipal Water Systems
- Fire Lines
- Industrial Lines
- Forcemains
- Irrigation Lines

### STANDARDS



AWWA  
MEMBER



B137.3



ULC



3624-250



ULI



FM



NSF  
NSF-61



### DID YOU KNOW?

Each piece of Blue Brute is hydrostatically tested to 2 times its pressure class, ensuring excellent performance in the field.

2

BLUE BRUTE PIPE



## CONSERVATIVE DESIGN

The pressure class/rating is extremely conservative. For example, for DR18 pipe the pressure capacity is 235 psi (1620 kPa), but the minimum burst pressure is 755 psi (5210 kPa).

Dimension Ratio	AWWA Pressure Class	CSA Pressure Rating
14	305	305
18	235	235
25	165	165



## SHORT FORM SPECIFICATIONS

### GENERAL

Blue Brute pipe shall be certified to CSA B137.3 "Rigid Polyvinyl Chloride PVC Pipe for Pressure Applications" and shall conform to AWWA C900 "Polyvinyl Chloride (PVC) Pressure Pipe, 4" – 12" for Water Transmission and Distribution." Blue Brute DR25 pipe shall have a pressure class/rating of 1120 kPa (165 psi). DR18 pipe shall have a pressure class/rating of 1620 kPa (235 psi). DR14 pipe shall have a pressure class/rating of 2100 kPa (305 psi).

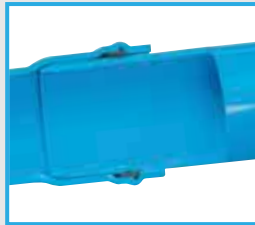
### MATERIAL

Blue Brute pipe shall be made from PVC compound conforming to ASTM D1784 cell class 12454B.

### PRODUCT

Pipe shall be suitable for use at maximum hydrostatic working pressure equal to the pressure class/rating at 23°C (73°F). Laying lengths shall be 6.1 metres (20 feet). Pipe shall have cast-iron outside diameters. Each length of pipe must be proof-tested at two times the pressure class.

### JOINING



The gasket shall be carefully fitted to the bell groove if not already factory installed. Both bell and spigot shall be clean and free of debris before approved lubricant is applied. The pipe and/or fittings shall be joined by push-fitting bell-and-spigot joint to the depth line marked on the spigot. When pipe has

been cut in the field, the end shall be made square and beveled to a 15° chamfer. All insertion lines should be re-drawn, according to the IPEX Pressure Pipe Installation Guide.

Blue Brute fittings shall conform to AWWA C907 "Polyvinyl Chloride (PVC) Pressure Fittings for Water (4" through 12")" and be certified to CSA B137.2 "PVC Injection Moulded Gasketed Fittings for Pressure Applications." They shall also be UL Listed and FM approved.

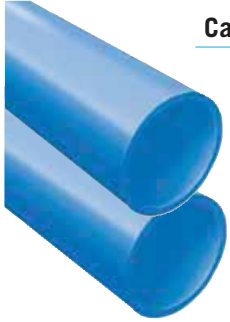


### FABRICATED FITTINGS

Fabricated fittings shall be made from segments of AWWA C900 PVC pipe. Segments are bonded together and may be over-wrapped with fibreglass-reinforced polyester. The pressure class must match the pipe. The fittings must meet the requirements of CSA B137.3.

## PRODUCT SELECTION CHART

Length: 6.1 metres | Colour: Blue



### Capped PVC Pressure Pipe

Class/Rating 165  
CIOD DR 25

Class/Rating 235  
CIOD DR 18

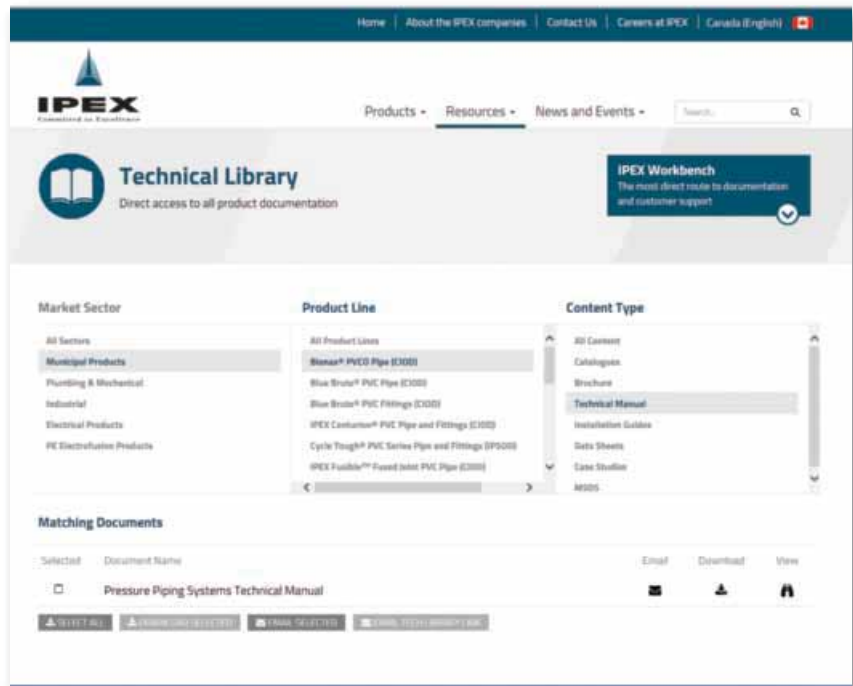
Class/Rating 305  
CIOD DR 14

	Size		Product Code	Avg. ID		Min. Wall Thickness		Avg. OD	
	in	mm		in	mm	in	mm	in	mm
	4	100	070104	4.42	112	0.192	5	4.80	122
	6	150	070106	6.35	161	0.276	7	6.90	175
	8	200	070108	8.33	212	0.362	9	9.05	230
	10	250	070110	10.21	260	0.444	11	11.10	282
	12	300	070112	12.15	309	0.527	13	13.20	335
	4	100	070514	4.27	108	0.267	7	4.80	122
	6	150	070516	6.13	155	0.383	10	6.90	175
	8	200	070518	8.05	204	0.502	13	9.05	230
	10	250	070520	9.87	250	0.616	16	11.10	282
	12	300	070522	11.73	297	0.733	19	13.20	335
	4	100	070414	4.11	104	0.343	9	4.80	122
	6	150	070416	5.91	149	0.493	13	6.90	175
	8	200	070418	7.76	198	0.646	16	9.05	230
	10	250	070420	9.51	242	0.793	20	11.10	282
	12	300	070422	11.31	287	0.943	24	13.2	335

# IPEX TECHNICAL MANUALS available at [www.ipexna.com](http://www.ipexna.com)



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# BLUE BRUTE FITTINGS

Blue Brute Fittings 4" - 12" (100mm - 300mm)  
IPEX Centurion Fittings 14" - 24" (350mm - 600mm)

## BLUE BRUTE

Blue Brute fittings are injection molded and are even tougher than the pipe. Blue Brute fittings have a wall thickness 25% greater than DR18 pipe, and some custom-made fabricated fittings are wrapped with a tough layer of fiberglass for extra protection.

### APPLICATIONS

- Municipal Water Systems
- Fire Lines
- Industrial Lines
- Forcemains
- Irrigation Lines

### STANDARDS

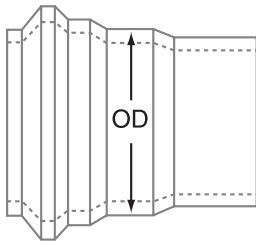


### ADVANTAGES

- 1 Corrosion-Proof Performance**  
Blue Brute systems are immune to corrosion from aggressive soils and galvanic action.
- 2 Superior Hydraulics**  
The glass-like finish of PVC reduces friction losses and eliminates the tuberculation common in iron pipes. As a result, pumping costs are reduced and water quality is maintained.
- 3 Strength**  
A thicker bell results in a more robust fitting.
- 4 Gasket Options**  
All Blue Brute fittings are shipped with standard gaskets that accept cast-iron-sized PVC pipe. Transition gaskets for IPS-sized pipe are an option for all sizes. For applications where fittings must be buried in soil with hydrocarbon contamination, Nitrile gaskets are available.
- 5 Saves Time & Money**  
A consistent O.D. for each size simplifies the restraint selection. Each fitting is labeled with the O.D. information for easy identification and restraint selection.



## PRODUCT SELECTION CHART - PC/PR 235 psi (1620 kPa)



### Bell OD for Joint Restraint Selection

Size	Min.	Max.
4" 100 mm	5.44"	5.61"
6" 150 mm	7.84"	8.03"
8" 200 mm	10.29"	10.55"
10" 250 mm	12.69"	12.96"
12" 300 mm	15.07"	15.46"



### 11-1/4° Elbow B x B



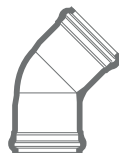
Dimension	Product Code	
	inches	mm
4	100	273104
6	150	073091
8	200	073092
* 10	250	273093
* 12	300	273094

### 22-1/2° Elbow B x B



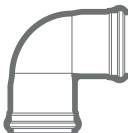
4	100	073105
6	150	073106
8	200	073107
10	250	073108
12	300	073109

### 45° Elbow B x B



4	100	073120
6	150	073121
8	200	073122
10	250	073123
12	300	073124

### 90° Elbow B x B



4	100	073150
6	150	073151
8	200	073152
10	250	373012
12	300	373013

### DR18, 5° CIOD Bend



6	150	273076
8	200	273077
* 10	250	273078
* 12	300	273079

\* Denotes Fabricated Fitting