

POWER UTILITY CATALOG



All You Need is Atkore

We are a leading manufacturer of electrical and security solutions that power and protect the world around us. For nearly a century, we have grown through a deep understanding of the high demands of the construction industry. Our portfolio of industry-leading brands, coupled with our breadth of products and solutions, brings exceptional value to our customers. This interactive Product Catalog enables you to quickly navigate through more than 200 pages of electrical and security solutions for your next project.



Our Mission

Atkore's mission is to be our customers' first choice by providing unmatched quality, delivery and value based on sustainable excellence in strategy, people and process.

Our 4,000 employees and 71 manufacturing and distribution facilities worldwide are contributing to a future where engineers, contractors and our distributor partners can research, select, specify, procure and install the right solutions on time and under budget.

Broadest Selection. Better Functionality. Best Experience.

This Atkore Product Catalog not only presents the most options for each product requirement, it makes it easier for you to identify and procure the exact part numbers you need no matter where you are – behind your desk on your computer or at the jobsite on your cell phone. This digital catalog was created to optimize the user experience and deliver the right information to you . . . **FAST**.

All You Need is Atkore.

One Manufacturer Serving Power Utility Markets

Providing a solution for the distribution of energy and power generation



Keeping them secure



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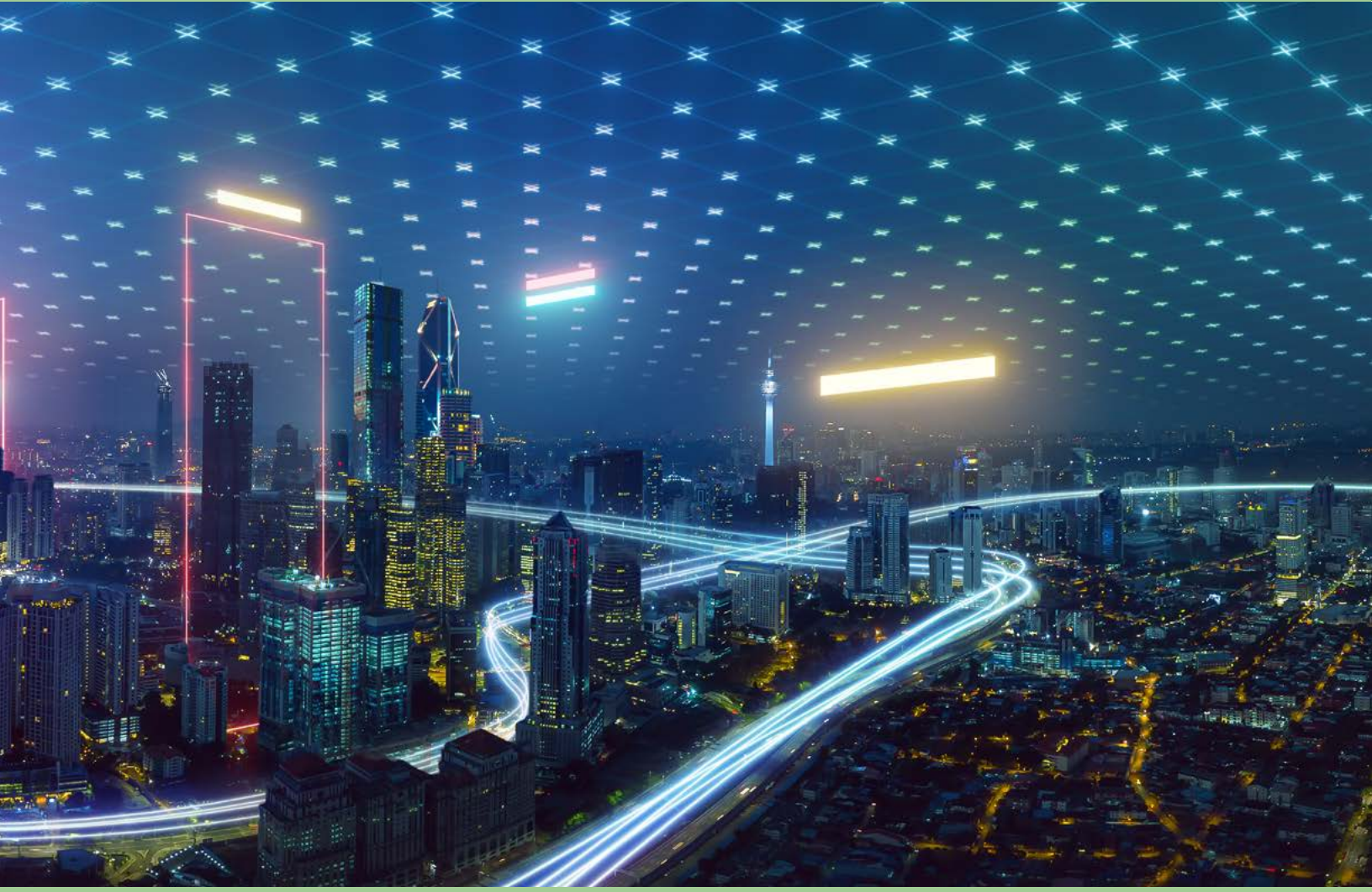
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CONDUIT



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FIBERGLASS CONDUIT

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Fiberglass Conduit Product Codes

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- IPS Heavy Wall (HW) Conduit
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- ID Standard Wall (SW) Conduit
- ID Heavy Wall (HW) Conduit

Extra Heavy Wall Epoxy System (HazGuard®)

- Introduction
- IPS Extra Heavy Wall (XW) Conduit
- ID Extra Heavy Wall (XW) Conduit

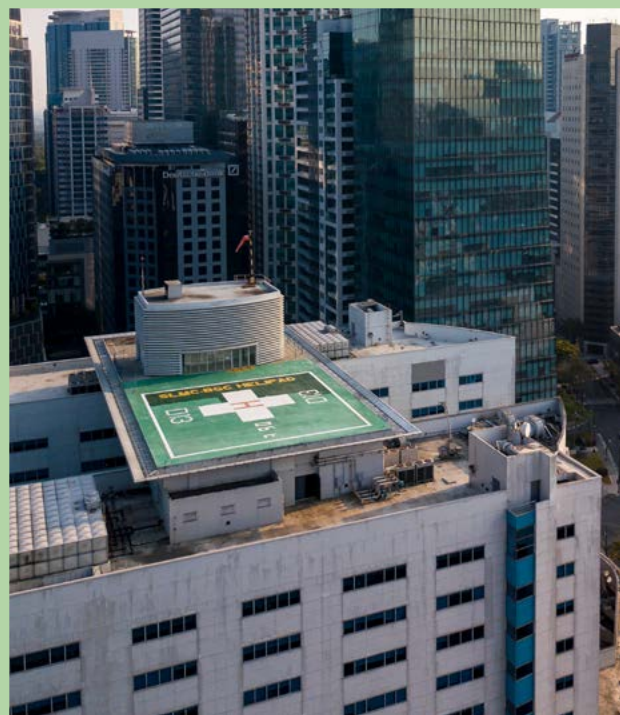
Phenolic System (BreathSaver®)

- Introduction
- IPS Extra Heavy Wall (XW) Conduit
- ID Extra Heavy Wall (XW) Conduit



Fiberglass Conduit Product Codes

Family	Product Name	Information with or without TriSeal®	Wall Thickness			
			Thin Wall TW	Standard Wall SW	Heavy Wall HW	Extra Heavy Wall XW
Epoxy System FRE® IPS	—	With TriSeal®	11-	10-	12-	—
Epoxy System FRE® ID	—	With TriSeal®	21-	20-	22-	—
Epoxy System FRE® IPS	HazGuard®	No TriSeal®	—	—	—	14-
Epoxy System FRE® ID	HazGuard®	No TriSeal®	—	—	—	24-
Phenolic System IPS	BreathSaver®	No TriSeal®	—	70-	—	74-
Phenolic System ID	BreathSaver®	No TriSeal®	—	80-	—	84-



FRE® Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 3/4" to 6" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral tapered bell and spigot end or use molded urethane push-fit TriSeal®
- Full interchangeability with existing metallic and non-metallic raceways
- Direct burial and encased burial applications

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Conduit is offered in 10' or 20' sections
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Will retain its shape after compression or impact
- Operation temperature -40°F to 230°F
- Low coefficient of friction in longer cable pulls
- Easy to install

Materials:

- Conduit, elbows and fittings shall be manufactured with continuous E or E-CR glass roving encapsulated in an internally steam cured, corrosion resistant epoxy resin system with UV inhibiting carbon black pigment dispersed homogeneously

Product Applications:

- The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Above ground and below ground applications

Relevant Certifications:

- ANSI/UL2420 (BG), ANSI/UL2515 (AG), CSA22.2 No. 2420 (BG), CSA22.2 No. 2515 (AG), NEMA TC 14



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

Among the different types of conduit available on the market, RTRC offers the best anti-corrosion properties, offering low installation costs and the possibility of adapting the product to specific requirements and applications.

Epoxy System Conduit

[Click brand for more product info](#) ↓

[FRE Composites](#)

IPS Thin Wall (TW) Conduit



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
4	103	11-4000	4.360	4.470	4.542	0.055	236.25
5	129	11-5000	5.373	5.513	5.610	0.070	236.25
6	155	11-6000	6.405	6.575	6.669	0.085	236.25
8*	203	11-8000	8.393	8.573	8.667	0.095	236.25

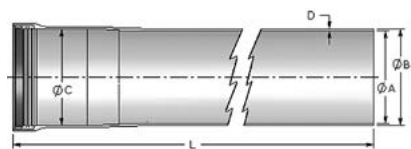
Standard length is 19.68 ft (6m). Also available in 9.84 ft (3m) upon special request.

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

[Click brand for more product info](#) ↓

[FRE Composites](#)

IPS Standard Wall (SW) Conduit



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
¾	21	10-7500	0.918	1.050	1.086	0.066	118.25
1	27	10-1000	1.183	1.315	1.351	0.066	118.25
1¼	35	10-1200	1.528	1.660	1.698	0.066	118.25
1½	41	10-1500	1.768	1.900	1.938	0.066	118.25
2	53	10-2000	2.235	2.375	2.417	0.070	236.25
2½	63	10-2500	2.750	2.890	2.932	0.070	236.25
3	78	10-3000	3.360	3.500	3.542	0.070	236.25
4	103	10-4000	4.360	4.500	4.542	0.070	236.25
5	129	10-5000	5.373	5.563	5.610	0.095	236.25
6	155	10-6000	6.405	6.625	6.669	0.110	236.25
8*	203	10-8000	8.393	8.623	8.667	0.115	236.25

Standard length is 9.84 ft (3m) for ¾" (19mm) to 1½" (38mm) and 19.68 ft (6m) for 2" (51mm) to 8" (203mm). Also available in 9.84 ft (3m) upon special request.

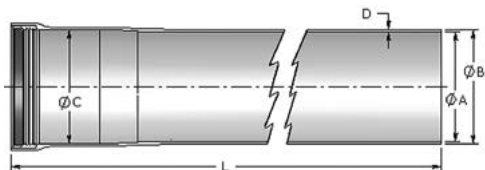
* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System Conduit

IPS Heavy Wall (HW) Conduit

[Click brand for more product info](#) ↓

[FRE Composites](#)



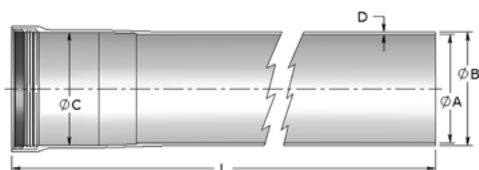
Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
4	103	12-4000	4.360	4.550	4.590	0.095	236.25
5	129	12-5000	5.373	5.603	5.643	0.115	236.25
6	155	12-6000	6.405	6.635	6.675	0.115	236.25

Standard length is 19.68 ft (6m). Also available in 9.84 ft (3m) upon special request.

ID Thin Wall (TW) Conduit

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
4	103	21-4000	4.000	4.110	4.170	0.055	236.25
4½	116	21-4500	4.500	4.640	4.730	0.070	236.25
5	129	21-5000	5.000	5.140	5.230	0.070	236.25
6	155	21-6000	6.000	6.140	6.230	0.070	236.25

Offered with a TriSeal™ for a push-fit assembly.

Standard length is 19.68 ft (6m). Also available in 9.84 ft (3m) upon special request.

Epoxy System Conduit

ID Standard Wall (SW) Conduit

[Click brand for more product info](#) ↓

[FRE Composites](#)



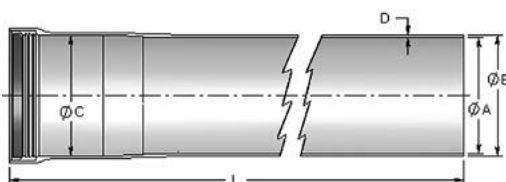
Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
2	53	20-2000	2.000	2.140	2.170	0.070	236.25
2½	63	20-2500	2.500	2.640	2.670	0.070	236.25
3	78	20-3000	3.000	3.140	3.170	0.070	236.25
3½	91	20-3500	3.500	3.640	3.670	0.070	236.25
4	103	20-4000	4.000	4.140	4.170	0.070	236.25
4½	116	20-4500	4.500	4.690	4.730	0.095	236.25
5	129	20-5000	5.000	5.190	5.230	0.095	236.25
6	155	20-6000	6.000	6.190	6.230	0.095	236.25

Standard length is 19.68 ft (6m). Also available in 9.84 ft (3m) upon special request.

ID Heavy Wall (HW) Conduit

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
4	103	22-4000	4.000	4.190	4.230	0.095	236.25
4½	116	22-4500	4.500	4.730	4.770	0.115	236.25
5	129	22-5000	5.000	5.230	5.270	0.115	236.25
6	155	22-6000	6.000	6.230	6.270	0.115	236.25

Standard length is 19.68 ft (6m). Also available in 9.84 ft (3m) upon special request.

HazGuard®, Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 1" to 1 1/2" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral bell and spigot end
- Full interchangeability with existing metallic and non-metallic raceways
- Greater extended support distance than published by the NEC table 355.30

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Conduit is offered in 10' or 20' sections
- Suitable for Physical Damage Locations (NEC-Class 1 Division 2)
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Will retain its shape after compression or impact
- Operation temperature -40°F to 230°F
- Low coefficient of friction in longer cable pulls
- Easy to install

Materials:

- Conduit, elbows and fittings shall consist of continuous E or E-CR glass roving in a cured corrosion resistant phenolic resin system pigmented with UV inhibiting carbon black dispersed homogeneously

Product Applications:

- Conduit and fittings are Class 1, Division 2 which can be subject to physical damage per NEC®. The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Bridges, airports, telecom, transportation, and more

Relevant Certifications:

- UL2515A, CSA C22.2 No. 2515. 1-13, NEMA TC 14.XW



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

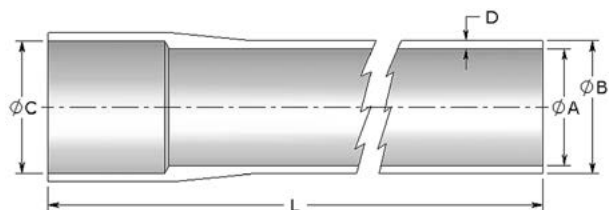
Among the different types of conduit available on the market, RTRC offers the best anti-corrosion properties, offering low installation costs and the possibility of adapting the product to specific requirements and applications.

Extra Heavy Wall Epoxy System (HazGuard®) Conduit

IPS Extra Heavy Wall (XW) Conduit

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
¾	21	14-7500	0.918	1.418	1.458	0.250	118.25
1	27	14-1000	1.183	1.683	1.723	0.250	118.25
1¼	35	14-1200	1.528	2.028	2.068	0.250	118.25
1½	41	14-1500	1.768	2.268	2.308	0.250	118.25
8*	203	14-8000	8.393	8.893	8.933	0.250	236.25

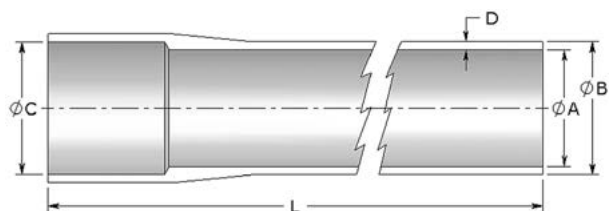
Standard length is 9.84 ft (3m) for ¾" to 1½" conduit.

*8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

ID Extra Heavy Wall (XW) Conduit

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
2	53	24-2000	2.000	2.500	2.540	0.250	236.25
2½	63	24-2500	2.500	3.000	3.040	0.250	236.25
3	78	24-3000	3.000	3.500	3.540	0.250	236.25
3½	91	24-3500	3.500	4.000	4.040	0.250	236.25
4	103	24-4000	4.000	4.500	4.540	0.250	236.25
5	129	24-5000	5.000	5.500	5.540	0.250	236.25
6	155	24-6000	6.000	6.500	6.540	0.250	236.25

Standard length is 19.68 ft (6m) for 2" to 6" conduit.

BreathSaver®, Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 3/4" to 1 1/2" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral bell and spigot end
- Full interchangeability with existing metallic and non-metallic raceways

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Flame resistant
- Smoke Development
- NFPA 130, NFPA 502, FHIT 25c
- Toxicity Emission
- Suitable for Physical Damage Locations (NEC-Class 1 Division 2)
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Two hour fire rated at 1850° F, operating temperatures up to 550° F
- Will retain its shape after compression or impact
- Easy to install

Materials:

- Conduit and fittings are Class 1, Division 2 which can be subject to physical damage per NEC®

Product Applications:

- Used to protect critical circuits including fire cable, emergency lighting, etc. It is also used in air handling spaces where circuits require "bulletproof" protection
- The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Areas exposed to physical damage, bridges, ports, oil & gas, transit, and more

Relevant Certifications:

- UL2515A, UL2196-FHIT.25C, FHIT.25D, FHIT7.25C, CSA C22.2 No. 2515. 1-13, NEMA TC 14.XW



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

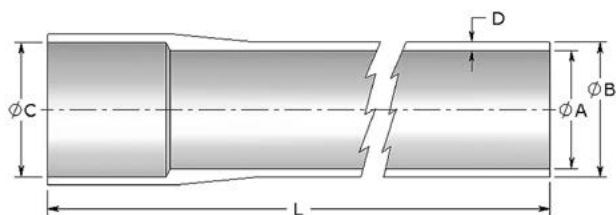
Among the different types of conduit available on the market, BreathSaver is set apart by its 2-hr fired rated UL2196 certification for both vertical and horizontal installations.

Phenolic System (BreathSaver®) Conduit

Click brand for more
product info ↓

[FRE Composites](#)

IPS Extra Heavy Wall (XW) Conduit



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
¾	21	74-7500	0.918	1.418	1.458	0.250	118.25
1	27	74-1000	1.183	1.683	1.723	0.250	118.25
1¼	35	74-1200	1.528	2.028	2.068	0.250	118.25
1½	41	74-1500	1.768	2.268	2.308	0.250	118.25
8*	203	74-8000	8.393	8.893	8.933	0.250	236.25

BreathSaver® products are offered with a straight socket assembly requiring adhesive for assembly.

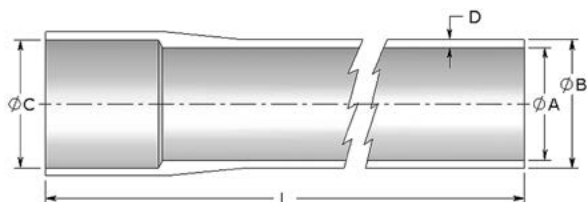
Standard length is 9.84 ft (3m) for ¾" to 1½" conduit.

*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Click brand for more
product info ↓

[FRE Composites](#)

ID Extra Heavy Wall (XW) Conduit



Size		Part Number	ØA	ØB	ØC	D	L
(in)	(mm)		(in)				
2	53	84-2000	2.000	2.500	2.540	0.250	236.25
2½	63	84-2500	2.500	3.000	3.040	0.250	236.25
3	78	84-3000	3.000	3.500	3.540	0.250	236.25
3½	91	84-3500	3.500	4.000	4.040	0.250	236.25
4	103	84-4000	4.000	4.500	4.540	0.250	236.25
5	129	84-5000	5.000	5.500	5.540	0.250	236.25
6	155	84-6000	6.000	6.500	6.540	0.250	236.25

BreathSaver® products are offered with a straight socket assembly requiring adhesive for assembly.

Standard length is 19.68 ft (6m) for 2" to 6" conduit.



HIGH DENSITY POLYETHYLENE (HDPE) CONDUIT

Allied Tube & Conduit
Heritage Plastics
United Poly System

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HDPE Smooth Wall
Single Wall Kortech®



High Density Polyethylene (HDPE) Conduit

HDPE Smooth Wall

Click brand for more
product info ↓

Allied Tube & Conduit
Heritage Plastics
United Poly System



Features:

- Material is high density polyethylene (HDPE)
- Smooth solid wall continuous length conduit
- Available in Orange, White, Blue, Green, Red, Black and Gray
- Markings: Date of Manufacture, sequential length markings
- High tensile and compression strength
- UV stabilization additive
- Available with 1130 lb, 1250 lb, 1800 lb, and 2500 lb pull tape

Certifications & Compliances:

- Dimensional and material specifications conform to ASTM F2160, NEMA TC-7 and UL651A for OD controlled conduit

Applications:

- Power and Communications
- Can be installed using open trench methods or HDD (Horizontal Directional Drilled)



High Density Polyethylene (HDPE) Conduit

HDPE Smooth Wall

Click brand for more
product info ↓

Allied Tube & Conduit
Heritage Plastics
United Poly System

Part Number Builder

Atkore part numbers are created using ten different values describing the attributes that make up each product and is used to easily identify each products characteristics.

D 1250 5 A OR NN 2 N S TS

Part No. Sections	Product	Size	SDR (SIDR)	Segmented	Color	Strip	Pull Tape	Lube	Ribbing	Market
Sample Section Value	Conduit/Duct	1.25"	13.5	Single way reel	Orange	None	1130#	None	Smooth	Smooth
Sample Value Code	D	1250	5	A	OR	NN	2	N	S	TS
Code Finder	Conduit/Duct = D	3/4" = 0750	SDR 7 = 1	Single way reel = A	None = NN	None = NN	None = N	None = N	Smooth = S	Conduit (Telco/Power) = TS
	UL Listed = U	1" = 1000	SDR 9 = 2	2way reel = B	Black = BK	Black = BK	200# = 1	Lubricated = Y	Ribbed = R	UL 651a Listed = US
		1.25" = 1250	SDR 11 = 3	3way reel = C	Red = RD	Red = RD	1130# = 2			
		1.5" = 1500	SDR 11.5 = 4	4way reel = D	Orange = OR	Orange = OR	1250# = 3			
		2" = 2000	SDR 13.5 = 5		Tan = TN	Tan = TN	1800# = 4			
		2.5" = 2500	SDR 15.5 = 6		Purple = VT	Purple = VT	2500# = 5			
		3" = 3000	SDR 17 = 7		Slate = ST	Slate = ST	2500# Detectable = 6			
		4" = 4000	SDR 19 = 8		Gray = GY	Gray = GY	1250# Detectable = 7			
		5" = 5000	SDR 21 = 9		Purple = PR	Purple = PR	1800# Detectable = 8			
		6" = 6000	SDR 32.5 = 10		None = NS	None = NS	4000# = 9			
			SDR 40 = 11		White = WT	White = WT				
			SDR 80 = 12		Green = GN	Green = GN				
			SDR 5 = 13		Blue = BL	Blue = BL				
			SDR 26 = 16		Pink = PK	Pink = PK				
					White = WH	White = WH				
					Terra Cotta = TC	Terra Cotta = TC				
					Lime = LM	Lime = LM				
					Brown = BN	Brown = BN				
					Lilac = LC	Lilac = LC				

High Density Polyethylene (HDPE) Conduit

HDPE Smooth Wall

Click brand for more
product info ↓

Allied Tube & Conduit
Heritage Plastics
United Poly System

Schedule 40 (SCH40)

Part Number*	Trade Size	OD	Min Wall Thickness	Approx. ID	Approx. Weight
	(in)	(in)	(in)	(in)	(lb/ft)
PDAN0500	½	0.840	0.109	0.615	0.105
PDAN0750	¾	1.050	0.113	0.817	0.140
PDAN1000	1	1.315	0.133	1.041	0.207
PDAN1250	1¼	1.660	0.140	1.372	0.281
PDAN1500	1½	1.900	0.145	1.601	0.336
PDAN2000	2	2.375	0.154	2.058	0.452
PDAN2500	2½	2.875	0.203	2.457	0.717
PDAN3000	3	3.500	0.216	3.055	0.937

* These are legacy Part Numbers that will be updated at a later date

Schedule 80 (SCH80)

Part Number*	Trade Size	OD	Min Wall Thickness	Approx. ID	Approx. Weight
	(in)	(in)	(in)	(in)	(lb/ft)
PDBN0500	½	0.840	0.147	0.537	0.134
PDBN0750	¾	1.050	0.154	0.733	0.182
PDBN1000	1	1.315	0.179	0.946	0.268
PDBN1250	1¼	1.660	0.191	1.267	0.370
PDBN1500	1½	1.900	0.200	1.488	0.449
PDBN2000	2	2.375	0.218	1.926	0.621
PDBN2500	2½	2.875	0.276	2.306	0.947
PDBN3000	3	3.500	0.300	2.882	1.268
PDBN4000	4	4.500	0.337	3.806	1.853
PDBN5000	5	5.563	0.375	4.790	2.570

* These are legacy Part Numbers that will be updated at a later date

High Density Polyethylene (HDPE) Conduit

HDPE Smooth Wall

Click brand for more
product info ↓

Allied Tube & Conduit
Heritage Plastics
United Poly System

SDR9

Part Number*	Trade Size	OD	Min Wall Thickness	Approx. ID	Approx. Weight
	(in)	(in)	(in)	(in)	(lb/ft)
PDVN0500	½	0.840	0.093	0.648	0.092
PDVN0750	¾	1.050	0.117	0.810	0.144
PDVN1000	1	1.315	0.146	1.014	0.225
PDVN1250	1¼	1.660	0.184	1.280	0.359
PDVN1500	1½	1.900	0.211	1.465	0.470
PDVN2000	2	2.375	0.264	1.831	0.735
PDVN2500	2½	2.875	0.319	2.217	1.077
PDVN3000	3	3.500	0.389	2.699	1.596
PDVN4000	4	4.500	0.500	3.470	2.638
PDVN5000	5	5.563	0.618	4.289	4.031
PDVN6000	6	6.625	0.736	5.109	5.718

SDR 9 covered by ASTM F2160 only

* These are legacy Part Numbers that will be updated at a later date

SDR11

Part Number*	Trade Size	OD	Min Wall Thickness	Approx. ID	Approx. Weight
	(in)	(in)	(in)	(in)	(lb/ft)
PDXN0500	½	0.840	0.076	0.683	0.077
PDXN0750	¾	1.050	0.095	0.853	0.120
PDXN1000	1	1.315	0.120	1.069	0.189
PDXN1250	1¼	1.660	0.151	1.349	0.301
PDXN1500	1½	1.900	0.173	1.544	0.394
PDXN2000	2	2.375	0.216	1.930	0.615
PDXN2500	2½	2.875	0.261	2.337	0.902
PDXN3000	3	3.500	0.318	2.845	1.336
PDXN4000	4	4.500	0.409	3.657	2.209
PDXN5000	5	5.563	0.506	4.521	3.376
PDXN6000	6	6.625	0.602	5.384	4.789

* These are legacy Part Numbers that will be updated at a later date

High Density Polyethylene (HDPE) Conduit

Click brand for more
product info ↓

HDPE Smooth Wall

Allied Tube & Conduit
Heritage Plastics
United Poly System

SDR13.5

Part Number*	Trade Size	OD	Min Wall Thickness	Approx. ID	Approx. Weight
	(in)	(in)	(in)	(in)	(lb/ft)
PDYN0500	½	0.840	0.062	0.712	0.064
PDYN0750	¾	1.050	0.078	0.890	0.100
PDYN1000	1	1.315	0.097	1.114	0.157
PDYN1250	1¼	1.660	0.123	1.407	0.250
PDYN1500	1½	1.900	0.141	1.610	0.327
PDYN2000	2	2.375	0.176	2.013	0.511
PDYN2500	2½	2.875	0.213	2.436	0.749
PDYN3000	3	3.500	0.259	2.966	1.110
PDYN4000	4	4.500	0.333	3.813	1.835
PDYN5000	5	5.563	0.412	4.714	2.803
PDYN6000	6	6.625	0.491	5.614	3.976

* These are legacy Part Numbers that will be updated at a later date

SDR15.5

Part Number*	Trade Size	OD	Min Wall Thickness	Approx. ID	Approx. Weight
	(in)	(in)	(in)	(in)	(lb/ft)
PDZN0500	½	0.840	0.062	0.712	0.064
PDZN0750	¾	1.050	0.068	0.910	0.088
PDZN1000	1	1.315	0.085	1.140	0.138
PDZN1250	1¼	1.660	0.107	1.439	0.220
PDZN1500	1½	1.900	0.123	1.647	0.288
PDZN2000	2	2.375	0.153	2.059	0.450
PDZN2500	2½	2.875	0.185	2.493	0.659
PDZN3000	3	3.500	0.226	3.035	0.977

* These are legacy Part Numbers that will be updated at a later date

SDR17

Part Number*	Trade Size	OD	Min Wall Thickness	Approx. ID	Approx. Weight
	(in)	(in)	(in)	(in)	(lb/ft)
PDUN0750	¾	1.050	0.062	0.923	0.081
PDUN1000	1	1.315	0.077	1.156	0.127
PDUN1250	1¼	1.660	0.098	1.459	0.202
PDUN1500	1½	1.900	0.112	1.670	0.264
PDUN2000	2	2.375	0.140	2.087	0.413
PDUN2500	2½	2.875	0.169	2.527	0.605
PDUN3000	3	3.500	0.206	3.076	0.896

SDR17 covered by NEMA TC-7 only

* These are legacy Part Numbers that will be updated at a later date

High Density Polyethylene (HDPE) Conduit

Single Wall Kortech®

Click brand for more
product info ↓

Allied Tube & Conduit
Heritage Plastics
United Poly System



Features:

- Material is high density polyethylene (HDPE)
- Corrugated continuous length conduit with pull tape
- Light weight with outstanding flexibility
- Easy to handle
- Less wear on installation equipment
- Available in reels or coils
- Available in Orange (standard), White, Blue, Green, Red, Black, Purple and Gray
- Markings: Date of Manufacture, sequential length markings
- UV stabilization additive

Applications:

- General purpose outdoor applications

Part Number	Trade Size	Average ID	Average OD	Approx. Weight
	(in)	(in)	(in)	(lb/ft)
PDCN0750FxxxxR	¾	0.804	1.040	0.090
PDCN1000FxxxxR	1	1.029	1.305	0.140
PDCN1250FxxxxR	1¼	1.360	1.650	0.175
PDCN1500FxxxxR	1½	1.590	1.890	0.230
PDCN2000FxxxxR	2	2.047	2.355	0.260

xxxx = Feet on Reel - Standards are:

¾": 1,000, 5,000 and 8,000

1": 1,000, 5,000, and 8,000

1¼": 1,000 and 5,000

1½": 1,000 and 4,000

2": 1,000 and 2,000

Standard Pull Tape = 400 lbs.



PVC CONDUIT

Allied Tube & Conduit
Heritage Plastics
Queen City Plastics

Table of Contents

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[Introduction](#)

[Schedule 40 Rigid PVC Conduit](#)

[Schedule 40 Rigid PVC Conduit - Cellular Core Cor-Tek](#)

[Schedule 80 Rigid PVC Conduit](#)

[Schedule 80 Rigid PVC Conduit - Cellular Core Cor-Tek](#)

[Telephone/Communications Duct \(C-Duct\)](#)

[Utility Duct DB](#)

[Utility Duct EB](#)



PVC Conduit

We offer a complete line of rigid PVC conduit, utility duct, and fittings which have proven durable and effective for years of maintenance free performance in underground, encased and exposed applications.

What are typical applications?

- Residential, Commercial and Industrial
- Transportation and Highway
- Airports and Marinas
- Cable, Data and Communication Lines
- Utilities

What are advantages of PVC?

- Corrosion Resistant
- Long Life
- Impact Resistant
- Labor Savings
- Lightweight
- Non Magnetic
- Self Extinguishing
- Non Galvanic

What determines the need for Schedule 80 conduit as opposed to Schedule 40?

In alignment with NEMA TC-2 and NEC, Section 352.10 (F), Schedule 40 and 80 can both be used in standard underground and above ground applications. Schedule 80 is designed for heavy duty applications above ground, where there are areas of potential physical damage.

Are Schedule 80 and 40 electrical conduit and fabricated fittings suited for direct sunlight?

Schedule 40 and 80 conduit and fabricated fittings are “Sunlight Resistant” in accordance with UL 651. Refer to the Atkore Sunlight Exposure Technical Bulletin on the website for additional information.

Part Number Guide

Rigid PVC Pipe

Schedule 40 ½-inch 10' Conduit

4005010

Schedule Trade Size Length in Feet



PVC Conduit

Schedule 40 Rigid PVC Conduit

Click brand for more product info ↓

[Allied Tube & Conduit](#)
[Heritage Plastics](#)
[Queen City Plastics](#)



Features:

- Smooth raceway for pulling wires and cables
- Superior corrosion resistance
- Excellent longevity

Certifications & Compliances:

- Conforms to UL 651 and NEMA TC 2
- Sunlight resistant per UL 651
- Rated for use with 90 degree C wiring

Applications:

- Electrical for use in Residential, Commercial, Industrial and Power Utility
- Communications and Fiber Optics
- Underground, exposed and encased installations



Part Number		Trade Size	Average OD	Min Wall Thickness	Crate Quantity	
10 Foot	20 Foot		(in)	(in)	10 Foot (ft)	20 Foot (ft)
4005010	4005020	½	0.840	0.109	6,000	12,000
4007510	4007520	¾	1.050	0.113	4,400	8,800
4010010	4010020	1	1.315	0.133	3,600	7,200
4012510	4012520	1¼	1.660	0.140	3,300	6,600
4015010	4015020	1½	1.900	0.145	2,250	4,500
4020010	4020020	2	2.375	0.154	1,400	2,800
4025010	4025020	2½	2.875	0.203	930	1,860
4030010	4030020	3	3.500	0.216	880	1,760
4035010	4035020	3½	4.000	0.226	630	1,260
4040010	4040020	4	4.500	0.237	570	1,140
4050010	4050020	5	5.563	0.258	380	760
4060010	4060020	6	6.625	0.280	260	520
4080010	4080020	8*	8.625	0.322	140	280

*8 inch products are not included in UL 651 and are therefore not certified by ETL
 Product availability varies by region and minimum run quantities may apply

PVC Conduit

Schedule 40 Rigid PVC Conduit Cellular Core Cor-Tek

Click brand for more
product info ↓

[Allied Tube & Conduit](#)
[Heritage Plastics](#)



- Features:**
- Smooth raceway for pulling wires and cables
 - Superior corrosion resistance
 - Excellent longevity
 - Significant weight advantages

- Certifications & Compliances:**
- Conforms to UL 651 and NEMA TC 2
 - Sunlight resistant per UL 651
 - Rated for use with 90 degree C wiring

- Applications:**
- Electrical for use in Residential, Commercial, Industrial and Power Utility
 - Communications and Fiber Optics
 - Underground, exposed and encased installations



Part Number		Trade Size	Average OD	Min Wall Thickness	Crate Quantity	
10 Foot	20 Foot		(in)	(in)	10 Foot (ft)	20 Foot (ft)
4030010COR	4030020COR	3	3.500	0.216	880	1,760
4035010COR	4035020COR	3½	4.000	0.226	630	1,260
4040010COR	4040020COR	4	4.500	0.237	570	1,140
4050010COR	4050020COR	5	5.563	0.258	380	760
4060010COR	4060020COR	6	6.625	0.280	260	520

PVC Conduit

Schedule 80 Rigid PVC Conduit

Click brand for more product info ↓

[Allied Tube & Conduit](#)
[Heritage Plastics](#)
[Queen City Plastics](#)



Features:

- Smooth raceway for pulling wires and cables
- Superior corrosion resistance
- Excellent longevity

Certifications & Compliances:

- Conforms to UL 651 and NEMA TC 2
- Sunlight resistant per UL 651
- Rated for use with 90 degree C wiring

Applications:

- Electrical for use in Residential, Commercial, Industrial and Power Utility
- Communications and Fiber Optics
- Underground, exposed and encased installations



Part Number		Trade Size	Average OD (in)	Min Wall Thickness (in)	Crate Quantity	
10 Foot	20 Foot				10 Foot (ft)	20 Foot (ft)
8005010	8005020	1/2	0.840	0.147	6,000	12,000
8007510	8007520	3/4	1.050	0.154	4,400	8,800
8010010	8010020	1	1.315	0.179	3,600	7,200
8012510	8012520	1 1/4	1.660	0.191	3,300	6,600
8015010	8015020	1 1/2	1.900	0.200	2,250	4,500
8020010	8020020	2	2.375	0.218	1,400	2,800
8025010	8025020	2 1/2	2.875	0.276	930	1,860
8030010	8030020	3	3.500	0.300	880	1,760
8035010	8035020	3 1/2	4.000	0.318	630	1,260
8040010	8040020	4	4.500	0.337	570	1,140
8050010	8050020	5	5.563	0.375	380	760
8060010	8060020	6	6.625	0.432	260	520
8080010	8080020	8*	8.625	0.500	140	280

*8 inch products are not included in UL 651 and are therefore not certified by ETL
 Product availability varies by region and minimum run quantities may apply

PVC Conduit

Schedule 80 Rigid PVC Conduit Cellular Core Cor-Tek

Click brand for more product info ↓

Allied Tube & Conduit
Heritage Plastics



- Features:**
- Smooth raceway for pulling wires and cables
 - Superior corrosion resistance
 - Excellent longevity
 - Significant weight advantages

- Certifications & Compliances:**
- Conforms to UL 651 and NEMA TC 2
 - Sunlight resistant per UL 651
 - Rated for use with 90 degree C wiring

- Applications:**
- Electrical for use in Residential, Commercial, Industrial and Power Utility
 - Communications and Fiber Optics
 - Underground, exposed and encased installations



Part Number		Trade Size	Average OD	Min Wall Thickness	Crate Quantity	
10 Foot	20 Foot		(in)	(in)	10 Foot (ft)	20 Foot (ft)
8030010COR	8030020COR	3	3.500	0.300	880	1,760
8040010COR	8040020COR	4	4.500	0.337	570	1,140
8050010COR	8050020COR	5	5.563	0.375	380	760
8060010COR	8060020COR	6	6.625	0.432	260	520

PVC Conduit

Telephone/Communications Duct (C-Duct)

Click brand for more product info ↓

- Allied Tube & Conduit
- Heritage Plastics
- Queen City Plastics



- Features:**
- Smooth raceway for pulling wires and cables
 - Superior corrosion resistance
 - Excellent longevity

- Certifications & Compliances:**
- Conforms to CAO 8546
- Applications:**
- Communications and Fiber Optics

Part Number	Trade Size	Average OD	Min Wall Thickness	Crate Quantity
20 Foot		(in)	(in)	(ft)
9040020WHT	4 (white)	4.350	0.140	1,260
9040020	4 (gray)	4.350	0.140	1,260

C-Duct compliance with CAO-8546 varies by region

PVC Conduit

Utility Duct DB

Click brand for more
product info ↓

[Allied Tube & Conduit](#)
[Heritage Plastics](#)
[Queen City Plastics](#)



- Features:**
- Smooth raceway for pulling wires and cables
 - Superior corrosion resistance
 - Excellent longevity

- Certifications & Compliances:**
- Conforms to NEMA TC 6 & 8 and ASTM F 512
 - Rated for use with 90 degree C wiring

- Applications:**
- Direct or encased burial

Part Number 20 Foot	Trade Size	Average OD	Min Wall Thickness	Crate Quantity
		(in)	(in)	(ft)
DB-60				
6020020	2	2.375	0.060	2,800
6030020	3	3.500	0.092	1,760
6040020	4	4.500	0.121	1,140
6050020	5	5.563	0.152	760
6060020	6	6.625	0.182	520
DB-100				
1030020	3	3.500	0.112	1,760
1040020	4	4.500	0.145	1,140
1050020	5	5.563	0.179	760
1060020	6	6.625	0.213	520
DB-120				
1210020	1	1.315	0.060	7,200
1215020	1½	1.900	0.060	4,500
1220020	2	2.375	0.077	2,800
1230020	3	3.500	0.118	1,760
1240020	4	4.500	0.154	1,140
1250020	5	5.563	0.191	760
1260020	6	6.625	0.227	520

If you don't see the product you require, please call for availability
Product availability varies by region and minimum run quantities may apply

PVC Conduit

Utility Duct EB

Click brand for more product info ↓

[Allied Tube & Conduit](#)
[Heritage Plastics](#)
[Queen City Plastics](#)



- Features:**
- Smooth raceway for pulling wires and cables
 - Superior corrosion resistance
 - Excellent longevity

- Certifications & Compliances:**
- Conforms to NEMA TC 6 & 8 and ASTM F 512
 - Rated for use with 90 degree C wiring

- Applications:**
- Concrete encased burial

Part Number 20 Foot	Trade Size	Average OD	Min Wall Thickness	Crate Quantity
		(in)	(in)	(ft)
EB-20				
2030020	3	3.500	0.061	1,760
2040020	4	4.500	0.082	1,140
2050020	5	5.563	0.103	760
2060020	6	6.625	0.125	520
EB-35				
3530020	3	3.500	0.076	1,760
3540020	4	4.500	0.100	1,140
3550020	5	5.563	0.126	760
3560020	6	6.625	0.152	520

If you don't see the product you require, please call for availability
 Product availability varies by region and minimum run quantities may apply



ELBOWS & SWEEPS



Allied Tube & Conduit
FRE Composites
Heritage Plastics
Queen City Plastics

Elbows & Sweeps - Table of Contents

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[Fiberglass Elbows & Sweeps](#)

[PVC Elbows & Sweeps](#)



FIBERGLASS ELBOWS & SWEEPS

[FRE Composites](#)

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Fiberglass Elbows Product Codes

Epoxy System

Introduction

IPS (Iron Pipe Size) Series

IPS SW 11.25° Elbow

IPS SW 22.5° Elbow

IPS SW 30° Elbow

IPS SW 45° Elbow

IPS SW 60° Elbow

IPS SW 90° Elbow

IPS HW 11.25° Elbow

IPS HW 22.5° Elbow

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Epoxy System (continued)

IPS HW 30° Elbow

IPS HW 45° Elbow

IPS HW 60° Elbow

IPS HW 90° Elbow

ID (Inside Diameter) Series

ID SW 11.25° Elbow

ID SW 22.5° Elbow

ID SW 30° Elbow

ID SW 45° Elbow

ID SW 60° Elbow

ID SW 90° Elbow

ID HW 11.25° Elbow

ID HW 22.5° Elbow

ID HW 30° Elbow

ID HW 45° Elbow

ID HW 60° Elbow

ID HW 90° Elbow

Extra Heavy Wall Epoxy System (HazGuard®)

Introduction

IPS (Iron Pipe Size) Series

IPS XW 11.25° Elbow

IPS XW 22.5° Elbow

IPS XW 30° Elbow

IPS XW 45° Elbow

IPS XW 60° Elbow

IPS XW 90° Elbow

ID (Inside Diameter) Series

ID XW 11.25° Elbow

ID XW 22.5° Elbow

ID XW 30° Elbow

ID XW 45° Elbow

ID XW 60° Elbow

ID XW 90° Elbow

Phenolic System (BreathSaver®)

Introduction

IPS (Iron Pipe Size) Series

IPS XW 11.25° Elbow

IPS XW 22.5° Elbow

IPS XW 30° Elbow

IPS XW 45° Elbow

IPS XW 60° Elbow

IPS XW 90° Elbow

Table of Contents (continued)

↓ [Click below to view product section](#)

Phenolic System (BreathSaver®) (continued)

ID (Inside Diameter) Series

ID XW 11.25° Elbow

ID XW 22.5° Elbow

ID XW 30° Elbow

ID XW 45° Elbow

ID XW 60° Elbow

ID XW 90° Elbow

Fiberglass Elbows Product Codes

Family	Product Name	Information with or without TriSeal®	Wall Thickness			
			Thin Wall TW	Standard Wall SW	Heavy Wall HW	Extra Heavy Wall XW
Epoxy System FRE® IPS	—	With TriSeal®	11-	10-	12-	—
Epoxy System FRE® ID	—	With TriSeal®	21-	20-	22-	—
Epoxy System FRE® IPS	HazGuard®	No TriSeal®	—	—	—	14-
Epoxy System FRE® ID	HazGuard®	No TriSeal®	—	—	—	24-
Phenolic System IPS	BreathSaver®	No TriSeal®	—	70-	—	74-
Phenolic System ID	BreathSaver®	No TriSeal®	—	80-	—	84-

How To Select An Elbow Part

XX - XX XX R XX

10 or 30
Use Product Code
from Table Above

Trade
Size

Elbow
Angle

Elbow
Radius

Example

4" IPS (Iron Pipe Size)

Epoxy System 90° X 36"

Radius With 2 PVC Deep Swedge Couplings

10 - 40 30 R 36 - PVC

IPS 4" 90° 36" PVC
Epoxy Trade Radius On Both
System Size Ends

Use Product Code from Table

Iron Pipe Size (IPS)	Use	Trade Size (in)	Use	Elbow Angles	Use	Elbow Radius (in)	Use
SW Epoxy System	10	¾	75	11¼	35	*12	12
		1	10				
		1¼	12	22½	34	**24	24
		1½	15				
		2	20	30	33	36	36
		2½	25	45	32	48	48
HW Epoxy System	12	3	30	60	31	60	60
		-	35				
		4	40	90	30	72	72
		5	50				
		6	60	90	30	***72	72
		8	80				

RS = Red Stripe
S=Stub Out

End Type	Use
Deep socket PVC coupling on each end	PVC
1 PVC end, 1 factory plain end	1PVC
1 PVC end and female threaded adapter on the other end	1PVC1FTHR
1 PVC Cplg, 1 Stub Out	PS
1 PVC Cplg, 1 stub out Red Stripe	PSRS
2 PVC Cplgs Red Stripe	RSPVC

Custom degree, radii, and configurations are available.
Please call your local representative.

*Not applicable for trade sizes 3" and above

**Not applicable for trade sizes 5" and above

*** 72" is the highest radius available for 8" elbows

FRE® Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 3/4" to 6" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral tapered bell and spigot end or use molded urethane push-fit TriSeal®
- Full interchangeability with existing metallic and non-metallic raceways
- Direct burial and encased burial applications

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Conduit is offered in 10' or 20' sections
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Will retain its shape after compression or impact
- Operation temperature -40°F to 230°F
- Low coefficient of friction in longer cable pulls
- Easy to install

Materials:

- Conduit, elbows and fittings shall be manufactured with continuous E or E-CR glass roving encapsulated in an internally steam cured, corrosion resistant epoxy resin system with UV inhibiting carbon black pigment dispersed homogeneously

Product Applications:

- The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Above ground and below ground applications

Relevant Certifications:

- ANSI/UL2420 (BG), ANSI/UL2515 (AG), CSA22.2 No. 2420 (BG), CSA22.2 No. 2515 (AG), NEMA TC 14



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

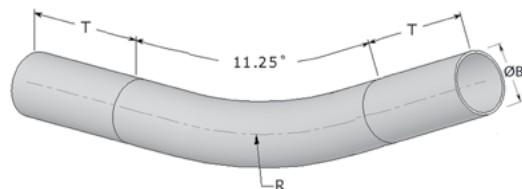
Among the different types of conduit available on the market, RTRC offers the best anti-corrosion properties, offering low installation costs and the possibility of adapting the product to specific requirements and applications.

Epoxy System • IPS Series Elbows

IPS SW 11.25° Elbow

Click brand for more
product info ↓

FRE Composites



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	10-7535R12	1.050	12	6
1	27	10-1035R12	1.315	12	6
1¼	35	10-1235R12	1.660	12	6
1½	41	10-1535R12	1.900	12	6
2	53	10-2035R12	2.375	12	6
2½	63	10-2535R12	2.890	12	6
18" Radius					
¾	21	10-7535R18	1.050	18	6
1	27	10-1035R18	1.315	18	6
1 ¼	35	10-1235R18	1.660	18	6
1 ½	41	10-1535R18	1.900	18	6
2	53	10-2035R18	2.375	18	6
2 ½	63	10-2535R18	2.890	18	6
3	63	10-3035R18	3.500	18	6
24" Radius					
¾	21	10-7535R24	1.050	24	6
1	27	10-1035R24	1.315	24	6
1¼	35	10-1235R24	1.660	24	6
1½	41	10-1535R24	1.900	24	6
2	53	10-2035R24	2.375	24	6
2½	63	10-2535R24	2.890	24	6
3	78	10-3035R24	3.500	24	6
4	103	10-4035R24	4.500	24	6
36" Radius					
¾	21	10-7535R36	1.050	36	6
1	27	10-1035R36	1.315	36	6
1¼	35	10-1235R36	1.660	36	6
1½	41	10-1535R36	1.900	36	6
2	53	10-2035R36	2.375	36	6
2½	63	10-2535R36	2.890	36	6
3	78	10-3035R36	3.500	36	6
4	103	10-4035R36	4.500	36	6
5	129	10-5035R36	5.563	36	6
6	155	10-6035R36	6.625	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	10-7535R48	1.050	48	6
1	27	10-1035R48	1.315	48	6
1¼	35	10-1235R48	1.660	48	6
1½	41	10-1535R48	1.900	48	6
2	53	10-2035R48	2.375	48	6
2½	63	10-2535R48	2.890	48	6
3	78	10-3035R48	3.500	48	6
4	103	10-4035R48	4.500	48	6
5	129	10-5035R48	5.563	48	6
6	155	10-6035R48	6.625	48	6
60" Radius					
¾	21	10-7535R60	1.050	60	6
1	27	10-1035R60	1.315	60	6
1¼	35	10-1235R60	1.660	60	6
1½	41	10-1535R60	1.900	60	6
2	53	10-2035R60	2.375	60	6
2½	63	10-2535R60	2.890	60	6
3	78	10-3035R60	3.500	60	6
4	103	10-4035R60	4.500	60	6
5	129	10-5035R60	5.563	60	6
6	155	10-6035R60	6.625	60	6
72" Radius					
¾	21	10-7535R72	1.050	72	6
1	27	10-1035R72	1.315	72	6
1¼	35	10-1235R72	1.660	72	6
1½	41	10-1535R72	1.900	72	6
2	53	10-2035R72	2.375	72	6
2½	63	10-2535R72	2.890	72	6
3	78	10-3035R72	3.500	72	6
4	103	10-4035R72	4.500	72	6
5	129	10-5035R72	5.563	72	6
6	155	10-6035R72	6.625	72	6
8*	203	10-8035R72	8.623	72	6
84" Radius					
8*	203	10-8035R84	8.623	84	6
96" Radius					
8*	203	10-8035R96	8.623	96	6
108" Radius					
8*	203	10-8035R108	8.623	108	6

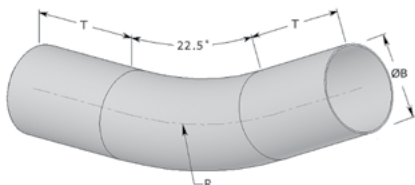
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System • IPS Series Elbows

IPS SW 22.5° Elbow

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FRE Composites



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	10-7534R12	1.050	12	6
1	27	10-1034R12	1.315	12	6
1¼	35	10-1234R12	1.660	12	6
1½	41	10-1534R12	1.900	12	6
2	53	10-2034R12	2.375	12	6
2½	63	10-2534R12	2.890	12	6
18" Radius					
¾	21	10-7534R18	1.050	18	6
1	27	10-1034R18	1.315	18	6
1 ¼	35	10-1234R18	1.660	18	6
1 ½	41	10-1534R18	1.900	18	6
2	53	10-2034R18	2.375	18	6
2 ½	63	10-2534R18	2.890	18	6
3	63	10-3034R18	3.500	18	6
24" Radius					
¾	21	10-7534R24	1.050	24	6
1	27	10-1034R24	1.315	24	6
1¼	35	10-1234R24	1.660	24	6
1½	41	10-1534R24	1.900	24	6
2	53	10-2034R24	2.375	24	6
2½	63	10-2534R24	2.890	24	6
3	78	10-3034R24	3.500	24	6
4	103	10-4034R24	4.500	24	6
36" Radius					
¾	21	10-7534R36	1.050	36	6
1	27	10-1034R36	1.315	36	6
1¼	35	10-1234R36	1.660	36	6
1½	41	10-1534R36	1.900	36	6
2	53	10-2034R36	2.375	36	6
2½	63	10-2534R36	2.890	36	6
3	78	10-3034R36	3.500	36	6
4	103	10-4034R36	4.500	36	6
5	129	10-5034R36	5.563	36	6
6	155	10-6034R36	6.669	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	10-7534R48	1.050	48	6
1	27	10-1034R48	1.315	48	6
1¼	35	10-1234R48	1.660	48	6
1½	41	10-1534R48	1.900	48	6
2	53	10-2034R48	2.375	48	6
2½	63	10-2534R48	2.890	48	6
3	78	10-3034R48	3.500	48	6
4	103	10-4034R48	4.500	48	6
5	129	10-5034R48	5.563	48	6
6	155	10-6034R48	6.625	48	6
60" Radius					
¾	21	10-7534R60	1.050	60	6
1	27	10-1034R60	1.315	60	6
1¼	35	10-1234R60	1.660	60	6
1½	41	10-1534R60	1.900	60	6
2	53	10-2034R60	2.375	60	6
2½	63	10-2534R60	2.890	60	6
3	78	10-3034R60	3.500	60	6
4	103	10-4034R60	4.500	60	6
5	129	10-5034R60	5.563	60	6
6	155	10-6034R60	6.625	60	6
72" Radius					
¾	21	10-7534R72	1.050	72	6
1	27	10-1034R72	1.315	72	6
1¼	35	10-1234R72	1.660	72	6
1½	41	10-1534R72	1.900	72	6
2	53	10-2034R72	2.375	72	6
2½	63	10-2534R72	2.890	72	6
3	78	10-3034R72	3.500	72	6
4	103	10-4034R72	4.500	72	6
5	129	10-5034R72	5.563	72	6
6	155	10-6034R72	6.625	72	6
8	203	10-8034R72	8.623	72	6
84" Radius					
8*	203	10-8034R84	8.623	84	6
96" Radius					
8*	203	10-8034R96	8.623	96	6
108" Radius					
8*	203	10-8034R108	8.623	108	6

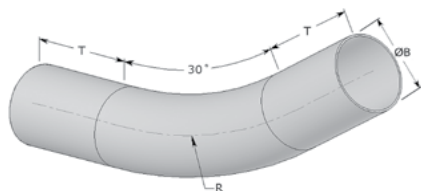
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System • IPS Series Elbows

IPS SW 30° Elbow

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FRE Composites



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	10-7533R12	1.050	12	6
1	27	10-1033R12	1.315	12	6
1¼	35	10-1233R12	1.660	12	6
1½	41	10-1533R12	1.900	12	6
2	53	10-2033R12	2.375	12	6
2½	63	10-2533R12	2.890	12	6
18" Radius					
¾	21	10-7533R18	1.050	18	6
1	27	10-1033R18	1.315	18	6
1 ¼	35	10-1233R18	1.660	18	6
1 ½	41	10-1533R18	1.900	18	6
2	53	10-2033R18	2.375	18	6
2 ½	63	10-2533R18	2.890	18	6
3	63	10-3033R18	3.500	18	6
24" Radius					
¾	21	10-7533R24	1.050	24	6
1	27	10-1033R24	1.315	24	6
1¼	35	10-1233R24	1.660	24	6
1½	41	10-1533R24	1.900	24	6
2½	63	10-2033R24	2.890	24	6
2	53	10-2533R24	2.375	24	6
3	78	10-3033R24	3.500	24	6
4	103	10-4033R24	4.500	24	6
36" Radius					
¾	21	10-7533R36	1.050	36	6
1	27	10-1033R36	1.315	36	6
1¼	35	10-1233R36	1.660	36	6
1½	41	10-1533R36	1.900	36	6
2	53	10-2033R36	2.375	36	6
2½	63	10-2533R36	2.890	36	6
3	78	10-3033R36	3.500	36	6
4	103	10-4033R36	4.500	36	6
5	129	10-5033R36	5.563	36	6
6	155	10-6033R36	6.625	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	10-7533R48	1.050	48	6
1	27	10-1033R48	1.315	48	6
1¼	35	10-1233R48	1.660	48	6
1½	41	10-1533R48	1.900	48	6
2	53	10-2033R48	2.375	48	6
2½	63	10-2533R48	2.890	48	6
3	78	10-3033R48	3.500	48	6
4	103	10-4033R48	4.500	48	6
5	129	10-5033R48	5.563	48	6
6	155	10-6033R48	6.625	48	6
60" Radius					
¾	21	10-7533R60	1.050	60	6
1	27	10-1033R60	1.315	60	6
1¼	35	10-1233R60	1.660	60	6
1½	41	10-1533R60	1.900	60	6
2	53	10-2033R60	2.375	60	6
2½	63	10-2533R60	2.890	60	6
3	78	10-3033R60	3.500	60	6
4	103	10-4033R60	4.500	60	6
5	129	10-5033R60	5.563	60	6
6	155	10-6033R60	6.625	60	6
72" Radius					
¾	21	10-7533R72	1.050	72	6
1	27	10-1033R72	1.315	72	6
1¼	35	10-1233R72	1.660	72	6
1½	41	10-1533R72	1.900	72	6
2	53	10-2033R72	2.375	72	6
2½	63	10-2533R72	2.890	72	6
3	78	10-3033R72	3.500	72	6
4	103	10-4033R72	4.500	72	6
5	129	10-5033R72	5.563	72	6
6	155	10-6033R72	6.625	72	6
8	203	10-8033R72	8.623	72	6
84" Radius					
8"	203	10-8033R84	8.623	84	6
96" Radius					
8"	203	10-8033R96	8.623	96	6
108" Radius					
8"	203	10-8033R108	8.623	108	6

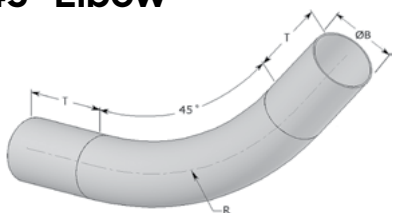
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System • IPS Series Elbows

IPS SW 45° Elbow

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FRE Composites



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	10-7532R12	1.050	12	6
1	27	10-1032R12	1.315	12	6
1¼	35	10-1232R12	1.660	12	6
1½	41	10-1532R12	1.900	12	6
2	53	10-2032R12	2.375	12	6
2½	63	10-2532R12	2.890	12	6
18" Radius					
¾	21	10-7532R18	1.050	18	6
1	27	10-1032R18	1.315	18	6
1 ¼	35	10-1232R18	1.660	18	6
1 ½	41	10-1532R18	1.900	18	6
2	53	10-2032R18	2.375	18	6
2 ½	63	10-2532R18	2.890	18	6
3	63	10-3032R18	3.500	18	6
24" Radius					
¾	21	10-7532R24	1.050	24	6
1	27	10-1032R24	1.315	24	6
1¼	35	10-1232R24	1.660	24	6
1½	41	10-1532R24	1.900	24	6
2	53	10-2032R24	2.375	24	6
2½	63	10-2532R24	2.890	24	6
3	78	10-3032R24	3.500	24	6
4	103	10-4032R24	4.500	24	6
36" Radius					
¾	21	10-7532R36	1.050	36	6
1	27	10-1032R36	1.315	36	6
1¼	35	10-1232R36	1.660	36	6
1½	41	10-1532R36	1.900	36	6
2	53	10-2032R36	2.375	36	6
2½	63	10-2532R36	2.890	36	6
3	78	10-3032R36	3.500	36	6
4	103	10-4032R36	4.500	36	6
5	123	10-5032R36	5.563	36	6
6	155	10-6032R36	6.625	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	10-7532R48	1.050	48	6
1	27	10-1032R48	1.315	48	6
1¼	35	10-1232R48	1.660	48	6
1½	41	10-1532R48	1.900	48	6
2	53	10-2032R48	2.375	48	6
2½	63	10-2532R48	2.890	48	6
3	78	10-3032R48	3.500	48	6
4	103	10-4032R48	4.500	48	6
5	129	10-5032R48	5.563	48	6
6	155	10-6032R48	6.625	48	6
60" Radius					
¾	21	10-7532R60	1.050	60	6
1	27	10-1032R60	1.315	60	6
1¼	35	10-1232R60	1.660	60	6
1½	41	10-1532R60	1.900	60	6
2	53	10-2032R60	2.375	60	6
2½	63	10-2532R60	2.890	60	6
3	78	10-3032R60	3.500	60	6
4	103	10-4032R60	4.500	60	6
5	129	10-5032R60	5.563	60	6
6	155	10-6032R60	6.625	60	6
72" Radius					
¾	21	10-7532R72	1.050	72	6
1	27	10-1032R72	1.315	72	6
1¼	35	10-1232R72	1.660	72	6
1½	41	10-1532R72	1.900	72	6
2	53	10-2032R72	2.375	72	6
2½	63	10-2532R72	2.890	72	6
3	78	10-3032R72	3.500	72	6
4	103	10-4032R72	4.500	72	6
5	129	10-5032R72	5.563	72	6
6	155	10-6032R72	6.625	72	6
8*	203	10-8032R72	8.623	72	6
84" Radius					
8*	203	10-8032R84	8.623	84	6
96" Radius					
8*	203	10-8032R96	8.623	96	6
108" Radius					
8*	203	10-8032R108	8.623	108	6

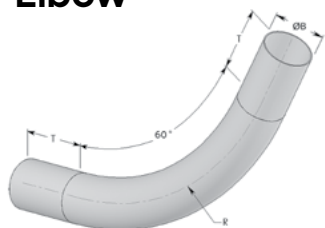
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System • IPS Series Elbows

IPS SW 60° Elbow

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FRE Composites



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	10-7531R12	1.050	12	6
1	27	10-1031R12	1.315	12	6
1¼	35	10-1231R12	1.660	12	6
2	53	10-1531R12	2.375	12	6
1½	41	10-2031R12	1.900	12	6
2½	63	10-2531R12	2.890	12	6
18" Radius					
¾	21	10-7531R18	1.050	18	6
1	27	10-1031R18	1.315	18	6
1 ¼	35	10-1231R18	1.660	18	6
1 ½	41	10-1531R18	1.900	18	6
2	53	10-2031R18	2.375	18	6
2 ½	63	10-2531R18	2.890	18	6
3	63	10-3031R18	3.500	18	6
24" Radius					
¾	21	10-7531R24	1.050	24	6
1	27	10-1031R24	1.315	24	6
1¼	35	10-1231R24	1.660	24	6
1½	41	10-1531R24	1.900	24	6
2	53	10-2031R24	2.375	24	6
2½	63	10-2531R24	2.890	24	6
3	78	10-3031R24	3.500	24	6
4	103	10-4031R24	4.500	24	6
36" Radius					
¾	21	10-7531R36	1.050	36	6
1	27	10-1031R36	1.315	36	6
1¼	35	10-1231R36	1.660	36	6
1½	41	10-1531R36	1.900	36	6
2	53	10-2031R36	2.375	36	6
2½	63	10-2531R36	2.890	36	6
3	78	10-3031R36	3.500	36	6
4	103	10-4031R36	4.500	36	6
5	129	10-5031R36	5.563	36	6
6	155	10-6031R36	6.625	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	10-7531R48	1.050	48	6
1	27	10-1031R48	1.315	48	6
1¼	35	10-1231R48	1.660	48	6
1½	41	10-1531R48	1.900	48	6
2	53	10-2031R48	2.375	48	6
2½	63	10-2531R48	2.890	48	6
3	78	10-3031R48	3.500	48	6
4	103	10-4031R48	4.500	48	6
5	129	10-5031R48	5.563	48	6
6	155	10-6031R48	6.625	48	6
60" Radius					
¾	21	10-7531R60	1.050	60	6
1	27	10-1031R60	1.315	60	6
1¼	35	10-1231R60	1.660	60	6
1½	41	10-1531R60	1.900	60	6
2	53	10-2031R60	2.375	60	6
2½	63	10-2531R60	2.890	60	6
3	78	10-3031R60	3.500	60	6
4	103	10-4031R60	4.500	60	6
5	129	10-5031R60	5.563	60	6
6	155	10-6031R60	6.625	60	6
72" Radius					
¾	21	10-7531R72	1.050	72	6
1	27	10-1031R72	1.315	72	6
1¼	35	10-1231R72	1.660	72	6
1½	41	10-1531R72	1.900	72	6
2	53	10-2031R72	2.375	72	6
2½	63	10-2531R72	2.890	72	6
3	78	10-3031R72	3.500	72	6
4	103	10-4031R72	4.500	72	6
5	129	10-5031R72	5.563	72	6
6	155	10-6031R72	6.625	72	6
8*	203	10-8031R72	8.623	72	6
84" Radius					
8*	203	10-8031R84	8.623	84	6
96" Radius					
8*	203	10-8031R96	8.623	96	6
108" Radius					
8*	203	10-8031R108	8.623	108	6

Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System • IPS Series Elbows

IPS SW 90° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	10-7530R12	1.050	12	6
1	27	10-1030R12	1.315	12	6
1¼	35	10-1230R12	1.660	12	6
1½	41	10-1530R12	1.900	12	6
2	53	10-2030R12	2.375	12	6
2½	63	10-2530R12	2.890	12	6
18" Radius					
¾	21	10-7530R18	1.050	18	6
1	27	10-1030R18	1.315	18	6
1 ¼	35	10-1230R18	1.660	18	6
1 ½	41	10-1530R18	1.900	18	6
2	53	10-2030R18	2.375	18	6
2 ½	63	10-2530R18	2.890	18	6
3	63	10-3030R18	3.500	18	6
24" Radius					
¾	21	10-7530R24	1.050	24	6
1	27	10-1030R24	1.315	24	6
1¼	35	10-1230R24	1.660	24	6
1½	41	10-1530R24	1.900	24	6
2	53	10-2030R24	2.375	24	6
2½	63	10-2530R24	2.890	24	6
3	78	10-3030R24	3.500	24	6
4	103	10-4030R24	4.500	24	6
36" Radius					
¾	21	10-7530R36	1.050	36	6
1	27	10-1030R36	1.315	36	6
1¼	35	10-1230R36	1.660	36	6
1½	41	10-1530R36	1.900	36	6
2	53	10-2030R36	2.375	36	6
2½	63	10-2530R36	2.890	36	6
3	78	10-3030R36	3.500	36	6
4	103	10-4030R36	4.500	36	6
5	129	10-5030R36	5.563	36	6
6	155	10-6030R36	6.625	36	6

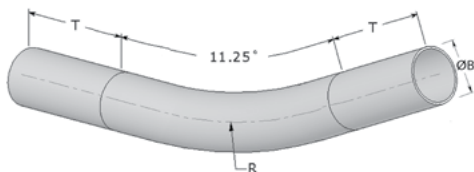
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	10-7530R48	1.050	48	6
1	27	10-1030R48	1.315	48	6
1¼	35	10-1230R48	1.660	48	6
1½	41	10-1530R48	1.900	48	6
2	53	10-2030R48	2.375	48	6
2½	63	10-2530R48	2.890	48	6
3	78	10-3030R48	3.500	48	6
4	103	10-4030R48	4.500	48	6
5	129	10-5030R48	5.563	48	6
6	155	10-6030R48	6.625	48	6
60" Radius					
¾	21	10-7530R60	1.050	60	6
1	27	10-1030R60	1.315	60	6
1¼	35	10-1230R60	1.660	60	6
1½	41	10-1530R60	1.900	60	6
2	53	10-2030R60	2.375	60	6
2½	63	10-2530R60	2.890	60	6
3	78	10-3030R60	3.500	60	6
4	103	10-4030R60	4.500	60	6
5	129	10-5030R60	5.563	60	6
6	155	10-6030R60	6.625	60	6
72" Radius					
2	53	10-2030R72	2.375	72	6
2½	63	10-2530R72	2.890	72	6
3	78	10-3030R72	3.500	72	6
4	103	10-4030R72	4.500	72	6
5	129	10-5030R72	5.563	72	6
6	155	10-6030R72	6.625	72	6
8*	203	10-8030R72	8.623	72	6
84" Radius					
8*	203	10-8030R84	8.623	84	6
96" Radius					
8*	203	10-8030R96	8.623	96	6
108" Radius					
8*	203	10-8030R108	8.623	108	6

Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

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IPS HW 11.25° Elbow

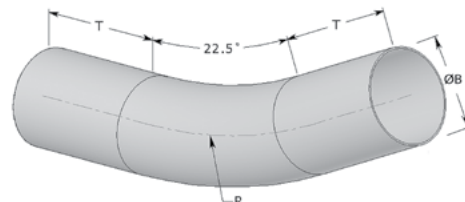
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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	12-4035R24	4.550	24	6
36" Radius					
4	103	12-4035R36	4.550	36	6
5	129	12-5035R36	5.603	36	6
6	155	12-6035R36	6.635	36	6
48" Radius					
4	103	12-4035R48	4.550	48	6
5	129	12-5035R48	5.603	48	6
6	155	12-6035R48	6.635	48	6
60" Radius					
4	103	12-4035R60	4.550	60	6
5	129	12-5035R60	5.603	60	6
6	155	12-6035R60	6.635	60	6
72" Radius					
4	103	12-4035R72	4.550	72	6
5	129	12-5035R72	5.603	72	6
6	155	12-6035R72	6.635	72	6

IPS HW 22.5° Elbow

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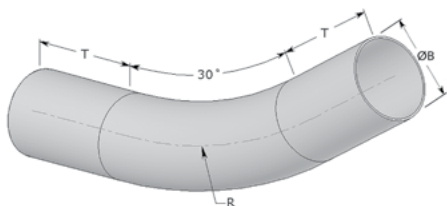


Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	12-4034R24	4.550	24	6
36" Radius					
4	103	12-4034R36	4.550	36	6
5	129	12-5034R36	5.603	36	6
6	155	12-6034R36	6.635	36	6
48" Radius					
4	103	12-4034R48	4.550	48	6
5	129	12-5034R48	5.603	48	6
6	155	12-6034R48	6.635	48	6
60" Radius					
4	103	12-4034R60	4.550	60	6
5	129	12-5034R60	5.603	60	6
6	155	12-6034R60	6.635	60	6
72" Radius					
4	103	12-4034R72	4.550	72	6
5	129	12-5034R72	5.603	72	6
6	155	12-6034R72	6.635	72	6

Epoxy System • IPS Series Elbows

IPS HW 30° Elbow

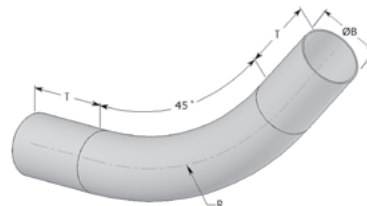
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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	12-4033R24	4.550	24	6
36" Radius					
4	103	12-4033R36	4.550	36	6
5	129	12-5033R36	5.603	36	6
6	155	12-6033R36	6.635	36	6
48" Radius					
4	103	12-4033R48	4.550	48	6
5	129	12-5033R48	5.603	48	6
6	155	12-6033R48	6.635	48	6
60" Radius					
4	103	12-4033R60	4.550	60	6
5	129	12-5033R60	5.603	60	6
6	155	12-6033R60	6.635	60	6
72" Radius					
4	103	12-4033R72	4.550	72	6
5	129	12-5033R72	5.603	72	6
6	155	12-6033R72	6.635	72	6

IPS HW 45° Elbow

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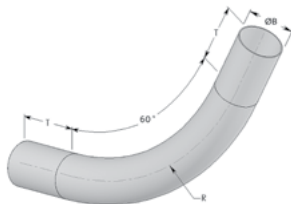


Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	12-4032R24	4.550	24	6
36" Radius					
4	103	12-4032R36	4.550	36	6
5	129	12-5032R36	5.603	36	6
6	155	12-6032R36	6.635	36	6
48" Radius					
4	103	12-4032R48	4.550	48	6
5	129	12-5032R48	5.603	48	6
6	155	12-6032R48	6.635	48	6
60" Radius					
4	103	12-4032R60	4.550	60	6
5	129	12-5032R60	5.603	60	6
6	155	12-6032R60	6.635	60	6
72" Radius					
4	103	12-4032R72	4.550	72	6
5	129	12-5032R72	5.603	72	6
6	155	12-6032R72	6.635	72	6

Epoxy System • IPS Series Elbows

IPS HW 60° Elbow

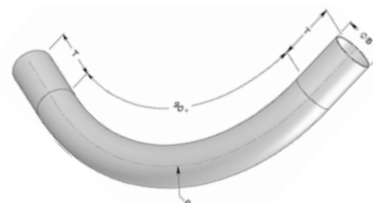
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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	12-4031R24	4.550	24	6
36" Radius					
4	103	12-4031R36	4.550	36	6
5	129	12-5031R36	5.603	36	6
6	155	12-6031R36	6.635	36	6
36" Radius					
4	103	12-4031R48	4.550	48	6
5	129	12-5031R48	5.603	48	6
6	155	12-6031R48	6.635	48	6
60" Radius					
4	103	12-4031R60	4.550	60	6
5	129	12-5031R60	5.603	60	6
6	155	12-6031R60	6.635	60	6
72" Radius					
4	103	12-4031R72	4.550	72	6
5	129	12-5031R72	5.603	72	6
6	155	12-6031R72	6.635	72	6

IPS HW 90° Elbow

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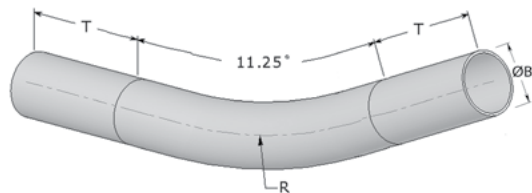
Size		Part Number	ØB	R	T
(in)	(mm)				
24" Radius					
4	103	12-4030R24	4.550	24	6
36" Radius					
4	103	12-4030R36	4.550	36	6
5	129	12-5030R36	5.603	36	6
6	155	12-6030R36	6.635	36	6
36" Radius					
4	103	12-4030R48	4.550	48	6
5	129	12-5030R48	5.603	48	6
6	155	12-6030R48	6.635	48	6
60" Radius					
4	103	12-4030R60	4.550	60	6
5	129	12-5030R60	5.603	60	6
6	155	12-6030R60	6.635	60	6
72" Radius					
4	103	12-4030R72	4.550	72	6
5	129	12-5030R72	5.603	72	6
6	155	12-6030R72	6.635	72	6

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ID SW 11.25° Elbow



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	20-2035R12	2.140	12	6
2½	63	20-2535R12	2.640	12	6
18" Radius					
2	53	20-2035R18	2.140	18	6
2 ½	63	20-2535R18	2.640	18	6
3	78	20-3035R18	3.140	18	6
24" Radius					
2	53	20-2035R24	2.140	24	6
2½	63	20-2535R24	2.640	24	6
3	78	20-3035R24	3.140	24	6
3½	91	20-3535R24	3.640	24	6
4	103	20-4035R24	4.140	24	6
36" Radius					
2	53	20-2035R36	2.140	36	6
2½	63	20-2535R36	2.640	36	6
3	78	20-3035R36	3.140	36	6
3½	91	20-3535R36	3.640	36	6
4	103	20-4035R36	4.140	36	6
4½	116	20-4535R36	4.690	36	6
5	129	20-5035R36	5.190	36	6
6	155	20-6035R36	6.190	36	6
48" Radius					
2	53	20-2035R48	2.140	48	6
2½	63	20-2535R48	2.640	48	6
3	78	20-3035R48	3.140	48	6
3½	91	20-3535R48	3.640	48	6
4	103	20-4035R48	4.140	48	6
4½	116	20-4535R48	4.690	48	6
5	129	20-5035R48	5.190	48	6
6	155	20-6035R48	6.190	48	6

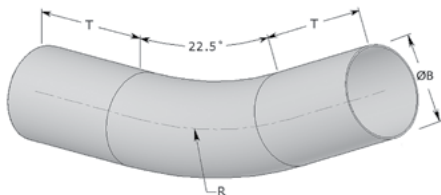
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
2	53	20-2035R60	2.140	60	6
2½	63	20-2535R60	2.640	60	6
3	78	20-3035R60	3.140	60	6
3½	91	20-3535R60	3.640	60	6
4	103	20-4035R60	4.140	60	6
4½	116	20-4535R60	4.690	60	6
5	129	20-5035R60	5.190	60	6
6	155	20-6035R60	6.190	60	6
72" Radius					
2	53	20-2035R72	2.140	72	6
2½	63	20-2535R72	2.640	72	6
3	78	20-3035R72	3.140	72	6
3½	91	20-3535R72	3.640	72	6
4	103	20-4035R72	4.140	72	6
4½	116	20-4535R72	4.690	72	6
5	129	20-5035R72	5.190	72	6
6	155	20-6035R72	6.190	72	6

Epoxy System • ID Series Elbows

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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	20-2034R12	2.140	12	6
2½	63	20-2534R12	2.640	12	6
18" Radius					
2	53	20-2034R18	2.140	18	6
2 ½	63	20-2534R18	2.640	18	6
3	78	20-3034R18	3.140	18	6
24" Radius					
2	53	20-2034R24	2.140	24	6
2½	63	20-2534R24	2.640	24	6
3	78	20-3034R24	3.140	24	6
3½	91	20-3534R24	3.640	24	6
4	103	20-4034R24	4.140	24	6
36" Radius					
2	53	20-2034R36	2.140	36	6
2½	63	20-2534R36	2.640	36	6
3	78	20-3034R36	3.140	36	6
3½	91	20-3534R36	3.640	36	6
4	103	20-4034R36	4.140	36	6
4½*	116	20-4534R36	4.690	36	6
5	129	20-5034R36	5.190	36	6
6	155	20-6034R36	6.190	36	6
48" Radius					
2	53	20-2034R48	2.140	48	6
2½	63	20-2534R48	2.640	48	6
3	78	20-3034R48	3.140	48	6
3½	91	20-3534R48	3.640	48	6
4	103	20-4034R48	4.140	48	6
4½	116	20-4534R48	4.690	48	6
5	129	20-5034R48	5.190	48	6
6	155	20-6034R48	6.190	48	6

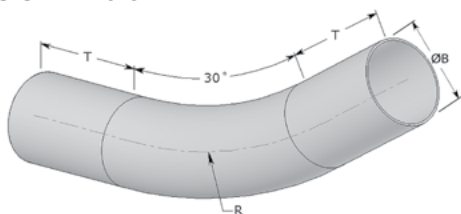
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
2	53	20-2034R60	2.140	60	6
2½	63	20-2534R60	2.640	60	6
3	78	20-3034R60	3.140	60	6
3½	91	20-3534R60	3.640	60	6
4	103	20-4034R60	4.140	60	6
4½	116	20-4534R60	4.690	60	6
5	129	20-5034R60	5.190	60	6
6	155	20-6034R60	6.190	60	6
72" Radius					
2	53	20-2034R72	2.140	72	6
2½	63	20-2534R72	2.640	72	6
3	78	20-3034R72	3.140	72	6
3½	91	20-3534R72	3.640	72	6
4	103	20-4034R72	4.140	72	6
4½	116	20-4534R72	4.690	72	6
5	129	20-5034R72	5.190	72	6
6	155	20-6034R72	6.190	72	6

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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	20-2033R12	2.140	12	6
2½	63	20-2533R12	2.640	12	6
18" Radius					
2	53	20-2033R18	2.140	18	6
2 ½	63	20-2533R18	2.640	18	6
3	78	20-3033R18	3.140	18	6
24" Radius					
2	53	20-2033R24	2.140	24	6
2½	63	20-2533R24	2.640	24	6
3	78	20-3033R24	3.140	24	6
3½	91	20-3533R24	3.640	24	6
4	103	20-4033R24	4.140	24	6
36" Radius					
2	53	20-2033R36	2.140	36	6
2½	63	20-2533R36	2.640	36	6
3	78	20-3033R36	3.140	36	6
3½	91	20-3533R36	3.640	36	6
4	103	20-4033R36	4.140	36	6
4½*	116	20-4533R36	4.690	36	6
5	129	20-5033R36	5.190	36	6
6	155	20-6033R36	6.190	36	6
48" Radius					
2	53	20-2033R48	2.140	48	6
2½	63	20-2533R48	2.640	48	6
3	78	20-3033R48	3.140	48	6
3½	91	20-3533R48	3.640	48	6
4	103	20-4033R48	4.140	48	6
4½	116	20-4533R48	4.690	48	6
5	129	20-5033R48	5.190	48	6
6	155	20-6033R48	6.190	48	6

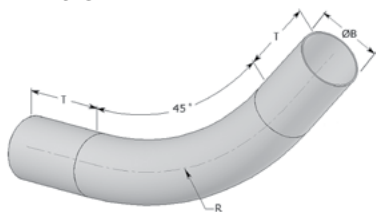
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
2	53	20-2033R60	2.140	60	6
2½	63	20-2533R60	2.640	60	6
3	78	20-3033R60	3.140	60	6
3½	91	20-3533R60	3.640	60	6
4	103	20-4033R60	4.140	60	6
4½	116	20-4533R60	4.690	60	6
5	129	20-5033R60	5.190	60	6
6	155	20-6033R60	6.190	60	6
72" Radius					
2	53	20-2033R72	2.140	72	6
2½	63	20-2533R72	2.640	72	6
3	78	20-3033R72	3.140	72	6
3½	91	20-3533R72	3.640	72	6
4	103	20-4033R72	4.140	72	6
4½	116	20-4533R72	4.690	72	6
5	129	20-5033R72	5.190	72	6
6	155	20-6033R72	6.190	72	6

Epoxy System • ID Series Elbows

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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	20-2032R12	2.140	12	6
2½	63	20-2532R12	2.640	12	6
18" Radius					
2	53	20-2032R18	2.140	18	6
2 ½	63	20-2532R18	2.640	18	6
3	78	20-3032R18	3.140	18	6
24" Radius					
2	53	20-2032R24	2.140	24	6
2½	63	20-2532R24	2.640	24	6
3	78	20-3032R24	3.140	24	6
3½	91	20-3532R24	3.640	24	6
4	103	20-4032R24	4.140	24	6
36" Radius					
2	53	20-2032R36	2.140	36	6
2½	63	20-2532R36	2.640	36	6
3	78	20-3032R36	3.140	36	6
3½	91	20-3532R36	3.640	36	6
4	103	20-4032R36	4.140	36	6
4½	116	20-4532R36	4.690	36	6
5	129	20-5032R36	5.190	36	6
6	155	20-6032R36	6.190	36	6
48" Radius					
2	53	20-2032R48	2.140	48	6
2½	63	20-2532R48	2.640	48	6
3	78	20-3032R48	3.140	48	6
3½	91	20-3532R48	3.640	48	6
4	103	20-4032R48	4.140	48	6
4½	116	20-4532R48	4.690	48	6
5	129	20-5032R48	5.190	48	6
6	155	20-6032R48	6.190	48	6

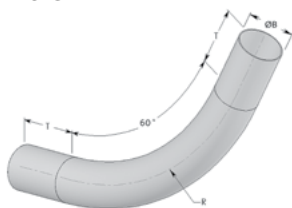
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
2	53	20-2032R60	2.140	60	6
2½	63	20-2532R60	2.640	60	6
3	78	20-3032R60	3.140	60	6
3½	91	20-3532R60	3.640	60	6
4	103	20-4032R60	4.140	60	6
4½	116	20-4532R60	4.690	60	6
5	129	20-5032R60	5.190	60	6
6	155	20-6032R60	6.190	60	6
72" Radius					
2	53	20-2032R72	2.140	72	6
2½	63	20-2532R72	2.640	72	6
3	78	20-3032R72	3.140	72	6
3½	91	20-3532R72	3.640	72	6
4	103	20-4032R72	4.140	72	6
4½	116	20-4532R72	4.690	72	6
5	129	20-5032R72	5.190	72	6
6	155	20-6032R72	6.190	72	6

Epoxy System • ID Series Elbows

ID SW 60° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	20-2031R12	2.140	12	6
2½	63	20-2531R12	2.640	12	6
18" Radius					
2	53	20-2031R18	2.140	18	6
2 ½	63	20-2531R18	2.640	18	6
3	78	20-3031R18	3.140	18	6
24" Radius					
2	53	20-2031R24	2.140	24	6
2½	63	20-2531R24	2.640	24	6
3	78	20-3031R24	3.140	24	6
3½	91	20-3531R24	3.640	24	6
4	103	20-4031R24	4.140	24	6
36" Radius					
2	53	20-2031R36	2.140	36	6
2½	63	20-2531R36	2.640	36	6
3	78	20-3031R36	3.140	36	6
3½	91	20-3531R36	3.640	36	6
4	103	20-4031R36	4.140	36	6
4½	116	20-4531R36	4.690	36	6
5	129	20-5031R36	5.190	36	6
6	155	20-6031R36	6.190	36	6
48" Radius					
2	53	20-2031R48	2.140	48	6
2½	63	20-2531R48	2.640	48	6
3	78	20-3031R48	3.140	48	6
3½	91	20-3531R48	3.640	48	6
4	103	20-4031R48	4.140	48	6
4½	116	20-4531R48	4.690	48	6
5	129	20-5031R48	5.190	48	6
6	155	20-6031R48	6.190	48	6

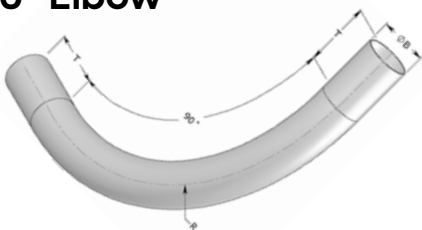
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
2	53	20-2031R60	2.140	60	6
2½	63	20-2531R60	2.640	60	6
3	78	20-3031R60	3.140	60	6
3½	91	20-3531R60	3.640	60	6
4	103	20-4031R60	4.140	60	6
4½	116	20-4531R60	4.690	60	6
5	129	20-5031R60	5.190	60	6
6	155	20-6031R60	6.190	60	6
72" Radius					
2	53	20-2031R72	2.140	72	6
2½	63	20-2531R72	2.640	72	6
3	78	20-3031R72	3.140	72	6
3½	91	20-3531R72	3.640	72	6
4	103	20-4031R72	4.140	72	6
4½	116	20-4531R72	4.690	72	6
5	129	20-5031R72	5.190	72	6
6	155	20-6031R72	6.190	72	6

Epoxy System • ID Series Elbows

ID SW 90° Elbow

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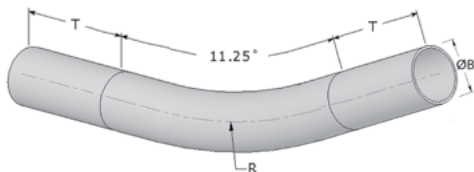
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	20-2030R12	2.140	12	6
2½	63	20-2530R12	2.640	12	6
18" Radius					
2	53	20-2030R18	2.140	18	6
2 ½	63	20-2530R18	2.640	18	6
3	78	20-3030R18	3.140	18	6
24" Radius					
2	53	20-2030R24	2.140	24	6
2½	63	20-2530R24	2.640	24	6
3	78	20-3030R24	3.140	24	6
3½	91	20-3530R24	3.640	24	6
4	103	20-4030R24	4.140	24	6
36" Radius					
2	53	20-2030R36	2.140	36	6
2½	63	20-2530R36	2.640	36	6
3	78	20-3030R36	3.140	36	6
3½	91	20-3530R36	3.640	36	6
4	103	20-4030R36	4.140	36	6
4½	116	20-4530R36	4.690	36	6
5	129	20-5030R36	5.190	36	6
6*	155	20-6030R36	6.190	36	6
48" Radius					
2	53	20-2030R48	2.140	48	6
2½	63	20-2530R48	2.640	48	6
3	78	20-3030R48	3.140	48	6
3½	91	20-3530R48	3.640	48	6
4	103	20-4030R48	4.140	48	6
4½	116	20-4530R48	4.690	48	6
5	129	20-5030R48	5.190	48	6
6	155	20-6030R48	6.190	48	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
2	53	20-2030R60	2.140	60	6
2½	63	20-2530R60	2.640	60	6
3	78	20-3030R60	3.140	60	6
3½	91	20-3530R60	3.640	60	6
4	103	20-4030R60	4.140	60	6
4½	116	20-4530R60	4.690	60	6
5	129	20-5030R60	5.190	60	6
6	155	20-6030R60	6.190	60	6
72" Radius					
2	53	20-2030R72	2.140	72	6
2½	63	20-2530R72	2.640	72	6
3	78	20-3030R72	3.140	72	6
3½	91	20-3530R72	3.640	72	6
4	103	20-4030R72	4.140	72	6
4½	116	20-4530R72	4.690	72	6
5	129	20-5030R72	5.190	72	6
6	155	20-6030R72	6.190	72	6

Epoxy System • ID Series Elbows

ID HW 11.25° Elbow

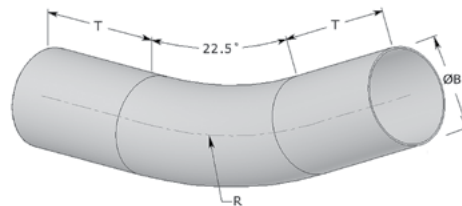
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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	22-4035R24	4.190	24	6
36" Radius					
4	103	22-4035R36	4.190	36	6
4½	116	22-4535R36	4.730	36	6
5	129	22-5035R36	5.230	36	6
6	155	22-6035R36	6.230	36	6
48" Radius					
4	103	22-4035R48	4.190	48	6
4½	116	22-4535R48	4.730	48	6
5	129	22-5035R48	5.230	48	6
6	155	22-6035R48	6.230	48	6
60" Radius					
4	103	22-4035R60	4.190	60	6
4½	116	22-4535R60	4.730	60	6
5	129	22-5035R60	5.230	60	6
6	155	22-6035R60	6.230	60	6
72" Radius					
4	103	22-4035R72	4.190	72	6
4½	116	22-4535R72	4.730	72	6
5	129	22-5035R72	5.230	72	6
6	155	22-6035R72	6.230	72	6

ID HW 22.5° Elbow

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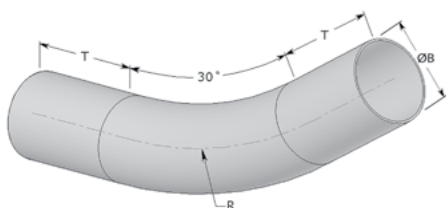


Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	22-4034R24	4.190	24	6
36" Radius					
4	103	22-4034R36	4.190	36	6
4½	116	22-4534R36	4.730	36	6
5	129	22-5034R36	5.230	36	6
6	155	22-6034R36	6.230	36	6
48" Radius					
4	103	22-4034R48	4.190	48	6
4½	116	22-4534R48	4.730	48	6
5	129	22-5034R48	5.230	48	6
6	155	22-6034R48	6.230	48	6
60" Radius					
4	103	22-4034R60	4.190	60	6
4½	116	22-4534R60	4.730	60	6
5	129	22-5034R60	5.230	60	6
6	155	22-6034R60	6.230	60	6
72" Radius					
4	103	22-4034R72	4.190	72	6
4½	116	22-4534R72	4.730	72	6
5	129	22-5034R72	5.230	72	6
6	155	22-6034R72	6.230	72	6

Epoxy System • ID Series Elbows

ID HW 30° Elbow

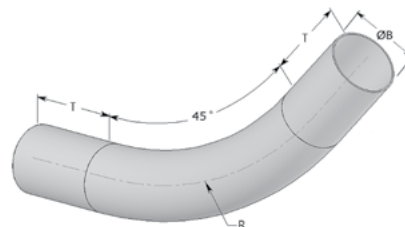
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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	22-4033R24	4.190	24	6
36" Radius					
4	103	22-4033R36	4.190	36	6
4½	116	22-4533R36	4.730	36	6
5	129	22-5033R36	5.230	36	6
6	155	22-6033R36	6.230	36	6
48" Radius					
4	103	22-4033R48	4.190	48	6
4½	116	22-4533R48	4.730	48	6
5	129	22-5033R48	5.230	48	6
6	155	22-6033R48	6.230	48	6
60" Radius					
4	103	22-4033R60	4.190	60	6
4½	116	22-4533R60	4.730	60	6
5	129	22-5033R60	5.230	60	6
6	155	22-6033R60	6.230	60	6
72" Radius					
4	103	22-4033R72	4.190	72	6
4½	116	22-4533R72	4.730	72	6
5	129	22-5033R72	5.230	72	6
6	155	22-6033R72	6.230	72	6

ID HW 45° Elbow

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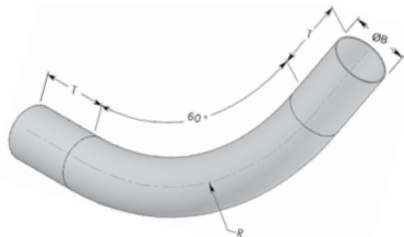


Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	22-4032R24	4.190	24	6
36" Radius					
4	103	22-4032R36	4.190	36	6
4½	116	22-4532R36	4.730	36	6
5	129	22-5032R36	5.230	36	6
6	155	22-6032R36	6.230	36	6
48" Radius					
4	103	22-4032R48	4.190	48	6
4½	116	22-4532R48	4.730	48	6
5	129	22-5032R48	5.230	48	6
6	155	22-6032R48	6.230	48	6
60" Radius					
4	103	22-4032R60	4.190	60	6
4½	116	22-4532R60	4.730	60	6
5	129	22-5032R60	5.230	60	6
6	155	22-6032R60	6.230	60	6
72" Radius					
4	103	22-4032R72	4.190	72	6
4½	116	22-4532R72	4.730	72	6
5	129	22-5032R72	5.230	72	6
6	155	22-6032R72	6.230	72	6

Epoxy System • ID Series Elbows

ID HW 60° Elbow

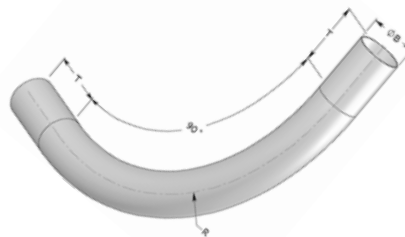
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Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	22-4031R24	4.190	24	6
36" Radius					
4	103	22-4031R36	4.190	36	6
4½	116	22-4531R36	4.730	36	6
5	129	22-5031R36	5.230	36	6
6	155	22-6031R36	6.230	36	6
48" Radius					
4	103	22-4031R48	4.190	48	6
4½	116	22-4531R48	4.730	48	6
5	129	22-5031R48	5.230	48	6
6	155	22-6031R48	6.230	48	6
60" Radius					
4	103	22-4031R60	4.190	60	6
4½	116	22-4531R60	4.730	60	6
5	129	22-5031R60	5.230	60	6
6	155	22-6031R60	6.230	60	6
72" Radius					
4	103	22-4031R72	4.190	72	6
4½	116	22-4531R72	4.730	72	6
5	129	22-5031R72	5.230	72	6
6	155	22-6031R72	6.230	72	6

ID HW 90° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
24" Radius					
4	103	22-4030R24	4.190	24	6
36" Radius					
4	103	22-4030R36	4.190	36	6
4½	116	22-4530R36	4.730	36	6
5	129	22-5030R36	5.230	36	6
6	155	22-6030R36	6.230	36	6
48" Radius					
4	103	22-4030R48	4.190	48	6
4½	116	22-4530R48	4.730	48	6
5	129	22-5030R48	5.230	48	6
6	155	22-6030R48	6.230	48	6
60" Radius					
4	103	22-4030R60	4.190	60	6
4½	116	22-4530R60	4.730	60	6
5	129	22-5030R60	5.230	60	6
6	155	22-6030R60	6.230	60	6
72" Radius					
4	103	22-4030R72	4.190	72	6
4½	116	22-4530R72	4.730	72	6
5	129	22-5030R72	5.230	72	6
6	155	22-6030R72	6.230	72	6

HazGuard®, Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 1" to 1 1/2" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral bell and spigot end
- Full interchangeability with existing metallic and non-metallic raceways
- Greater extended support distance than published by the NEC table 355.30

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Conduit is offered in 10' or 20' sections
- Suitable for Physical Damage Locations (NEC-Class 1 Division 2)
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Will retain its shape after compression or impact
- Operation temperature -40°F to 230°F
- Low coefficient of friction in longer cable pulls
- Easy to install

Materials:

- Conduit, elbows and fittings shall consist of continuous E or E-CR glass roving in a cured corrosion resistant phenolic resin system pigmented with UV inhibiting carbon black dispersed homogeneously

Product Applications:

- Conduit and fittings are Class 1, Division 2 which can be subject to physical damage per NEC®. The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Bridges, airports, telecom, transportation, and more

Relevant Certifications:

- UL2515A, CSA C22.2 No. 2515. 1-13, NEMA TC 14.XW



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

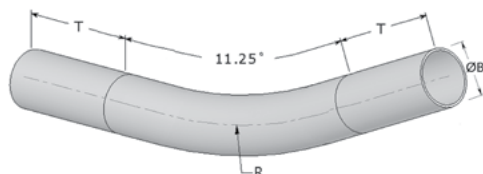
Among the different types of conduit available on the market, RTRC offers the best anti-corrosion properties, offering low installation costs and the possibility of adapting the product to specific requirements and applications.

Extra Heavy Wall Epoxy System (HazGuard®) IPS Series Elbows

IPS XW 11.25° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	14-7535R12	1.418	12	6
1	27	14-1035R12	1.683	12	6
1¼	35	14-1235R12	2.028	12	6
1½	41	14-1535R12	2.268	12	6
18" Radius					
¾	21	14-7535R18	1.418	18	6
1	27	14-1035R18	1.683	18	6
1 ¼	35	14-1235R18	2.028	18	6
1 ½	41	14-1535R18	2.268	18	6
24" Radius					
¾	21	14-7535R24	1.418	24	6
1	27	14-1035R24	1.683	24	6
1¼	35	14-1235R24	2.028	24	6
1½	41	14-1535R24	2.268	24	6
36" Radius					
¾	21	14-7535R36	1.418	36	6
1	27	14-1035R36	1.683	36	6
1¼	35	14-1235R36	2.028	36	6
1½	41	14-1535R36	2.268	36	6
48" Radius					
¾	21	14-7535R48	1.418	48	6
1	27	14-1035R48	1.683	48	6
1¼	35	14-1235R48	2.028	48	6
1½	41	14-1535R48	2.268	48	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
¾	21	14-7535R60	1.418	60	6
1	27	14-1035R60	1.683	60	6
1¼	35	14-1235R60	2.028	60	6
1½	41	14-1535R60	2.268	60	6
72" Radius					
¾	21	14-7535R72	1.418	72	6
1	27	14-1035R72	1.683	72	6
1¼	35	14-1235R72	2.028	72	6
1½	41	14-1535R72	2.268	72	6
8*	203	14-8035R72	8.893	72	6
84" Radius					
8*	203	14-8035R84	8.893	84	6
96" Radius					
8*	203	14-8035R96	8.893	96	6
108" Radius					
8*	203	14-8035R108	8.893	108	6

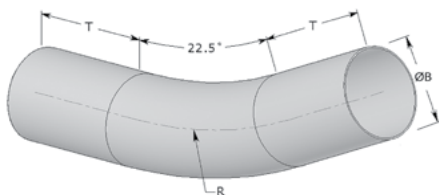
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System (HazGuard®) IPS Series Elbows

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[FRE Composites](#)

IPS XW 22.5° Elbow



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	14-7534R12	1.418	12	6
1	27	14-1034R12	1.683	12	6
1¼	35	14-1234R12	2.028	12	6
1½	41	14-1534R12	2.268	12	6
18" Radius					
¾	21	14-7534R18	1.418	18	6
1	27	14-1034R18	1.683	18	6
1¼	35	14-1234R18	2.028	18	6
1½	41	14-1534R18	2.268	18	6
24" Radius					
¾	21	14-7534R24	1.418	24	6
1	27	14-1034R24	1.683	24	6
1¼	35	14-1234R24	2.028	24	6
1½	41	14-1534R24	2.268	24	6
36" Radius					
¾	21	14-7534R36	1.418	36	6
1	27	14-1034R36	1.683	36	6
1¼	35	14-1234R36	2.028	36	6
1½	41	14-1534R36	2.268	36	6
48" Radius					
¾	21	14-7534R48	1.418	48	6
1	27	14-1034R48	1.683	48	6
1¼	35	14-1234R48	2.028	48	6
1½	41	14-1534R48	2.268	48	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
¾	21	14-7534R60	1.418	60	6
1	27	14-1034R60	1.683	60	6
1¼	35	14-1234R60	2.028	60	6
1½	41	14-1534R60	2.268	60	6
72" Radius					
¾	21	14-7534R72	1.418	72	6
1	27	14-1034R72	1.683	72	6
1¼	35	14-1234R72	2.028	72	6
1½	41	14-1534R72	2.268	72	6
8*	203	14-8034R72	8.893	72	6
84" Radius					
8*	203	14-8034R84	8.893	84	6
96" Radius					
8*	203	14-8034R96	8.893	96	6
108" Radius					
8*	203	14-8034R108	8.893	108	6

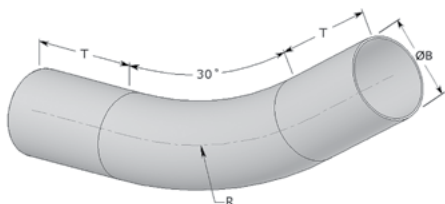
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System (HazGuard®) IPS Series Elbows

IPS XW 30° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	14-7533R12	1.418	12	6
1	27	14-1033R12	1.683	12	6
1¼	35	14-1233R12	2.028	12	6
1½	41	14-1533R12	2.268	12	6
18" Radius					
¾	21	14-7533R18	1.418	18	6
1	27	14-1033R18	1.683	18	6
1¼	35	14-1233R18	2.028	18	6
1½	41	14-1533R18	2.268	18	6
24" Radius					
¾	21	14-7533R24	1.418	24	6
1	27	14-1033R24	1.683	24	6
1¼	35	14-1233R24	2.028	24	6
1½	41	14-1533R24	2.268	24	6
36" Radius					
¾	21	14-7533R36	1.418	36	6
1	27	14-1033R36	1.683	36	6
1¼	35	14-1233R36	2.028	36	6
1½	41	14-1533R36	2.268	36	6
48" Radius					
¾	21	14-7533R48	1.418	48	6
1	27	14-1033R48	1.683	48	6
1¼	35	14-1233R48	2.028	48	6
1½	41	14-1533R48	2.268	48	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
¾	21	14-7533R60	1.418	60	6
1	27	14-1033R60	1.683	60	6
1¼	35	14-1233R60	2.028	60	6
1½	41	14-1533R60	2.268	60	6
72" Radius					
¾	21	14-7533R72	1.418	72	6
1	27	14-1033R72	1.683	72	6
1¼	35	14-1233R72	2.028	72	6
1½	41	14-1533R72	2.268	72	6
8*	203	14-8033R72	8.893	72	6
84" Radius					
8*	203	14-8033R84	8.893	84	6
96" Radius					
8*	203	14-8033R96	8.893	96	6
108" Radius					
8*	203	14-8033R108	8.893	108	6

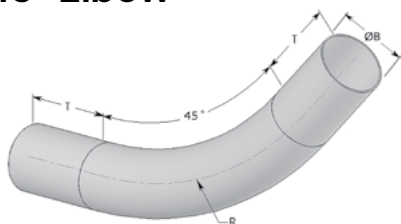
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System (HazGuard®) IPS Series Elbows

IPS XW 45° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	14-7532R12	1.418	12	6
1	27	14-1032R12	1.683	12	6
1¼	35	14-1232R12	2.028	12	6
1½	41	14-1532R12	2.268	12	6
18" Radius					
¾	21	14-7532R18	1.418	18	6
1	27	14-1032R18	1.683	18	6
1¼	35	14-1232R18	2.028	18	6
1½	41	14-1532R18	2.268	18	6
24" Radius					
¾	21	14-7532R24	1.418	24	6
1	27	14-1032R24	1.683	24	6
1¼	35	14-1232R24	2.028	24	6
1½	41	14-1532R24	2.268	24	6
36" Radius					
¾	21	14-7532R36	1.418	36	6
1	27	14-1032R36	1.683	36	6
1¼	35	14-1232R36	2.028	36	6
1½	41	14-1532R36	2.268	36	6
48" Radius					
¾	21	14-7532R48	1.418	48	6
1	27	14-1032R48	1.683	48	6
1¼	35	14-1232R48	2.028	48	6
1½	41	14-1532R48	2.268	48	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
¾	21	14-7532R60	1.418	60	6
1	27	14-1032R60	1.683	60	6
1¼	35	14-1232R60	2.028	60	6
1½	41	14-1532R60	2.268	60	6
72" Radius					
¾	21	14-7532R72	1.418	72	6
1	27	14-1032R72	1.683	72	6
1¼	35	14-1232R72	2.028	72	6
1½	41	14-1532R72	2.268	72	6
8*	203	14-8032R72	8.893	72	6
84" Radius					
8*	203	14-8032R84	8.893	84	6
96" Radius					
8*	203	14-8032R96	8.893	96	6
108" Radius					
8*	203	14-8032R108	8.893	108	6

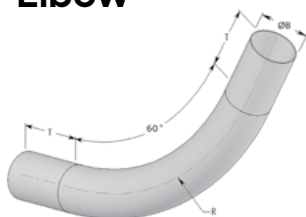
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System (HazGuard®) IPS Series Elbows

IPS XW 60° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	14-7531R12	1.418	12	6
1	27	14-1031R12	1.683	12	6
1¼	35	14-1231R12	2.028	12	6
1½	41	14-1531R12	2.268	12	6
18" Radius					
¾	21	14-7531R18	1.418	18	6
1	27	14-1031R18	1.683	18	6
1¼	35	14-1231R18	2.028	18	6
1½	41	14-1531R18	2.268	18	6
24" Radius					
¾	21	14-7531R24	1.418	24	6
1	27	14-1031R24	1.683	24	6
1¼	35	14-1231R24	2.028	24	6
1½	41	14-1531R24	2.268	24	6
36" Radius					
¾	21	14-7531R36	1.418	36	6
1	27	14-1031R36	1.683	36	6
1¼	35	14-1231R36	2.028	36	6
1½	41	14-1534R36	2.268	36	6
48" Radius					
¾	21	14-7531R48	1.418	48	6
1	27	14-1031R48	1.683	48	6
1¼	35	14-1231R48	2.028	48	6
1½	41	14-1531R48	2.268	48	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
¾	21	14-7531R60	1.418	60	6
1	27	14-1031R60	1.683	60	6
1¼	35	14-1231R60	2.028	60	6
1½	41	14-1531R60	2.268	60	6
72" Radius					
¾	21	14-7531R72	1.418	72	6
1	27	14-1031R72	1.683	72	6
1¼	35	14-1231R72	2.028	72	6
1½	41	14-1531R72	2.268	72	6
8*	203	14-8031R72	8.893	72	6
84" Radius					
8*	203	14-8031R84	8.893	84	6
96" Radius					
8*	203	14-8031R96	8.893	96	6
108" Radius					
8*	203	14-8031R108	8.893	108	6

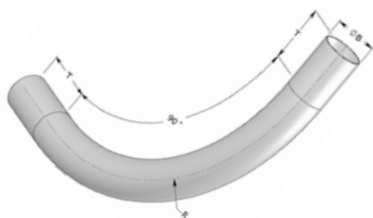
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System (HazGuard®) IPS Series Elbows

IPS XW 90° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	14-7530R12	1.418	12	6
1	27	14-1030R12	1.683	12	6
1 ¼	35	14-1230R12	2.028	12	6
1 ½	41	14-1530R12	2.268	12	6
18" Radius					
¾	21	14-7530R18	1.418	18	6
1	27	14-1030R18	1.683	18	6
1¼	35	14-1230R18	2.028	18	6
1½	41	14-1530R18	2.268	18	6
24" Radius					
¾	21	14-7530R24	1.418	24	6
1	27	14-1030R24	1.683	24	6
1¼	35	14-1230R24	2.028	24	6
1½	41	14-1530R24	2.268	24	6
36" Radius					
¾	21	14-7530R36	1.418	36	6
1	27	14-1030R36	1.683	36	6
1¼	35	14-1230R36	2.028	36	6
1½	41	14-1530R36	2.268	36	6
48" Radius					
¾	21	14-7530R48	1.418	48	6
1	27	14-1030R48	1.683	48	6
1¼	35	14-1230R48	2.028	48	6
1½	41	14-1530R48	2.268	48	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
60" Radius					
¾	21	14-7530R60	1.418	60	6
1	27	14-1030R60	1.683	60	6
1¼	35	14-1230R60	2.028	60	6
1½	41	14-1530R60	2.268	60	6
72" Radius					
8*	203	14-8030R72	8.893	72	6
84" Radius					
8*	203	14-8030R84	8.893	84	6
96" Radius					
8*	203	14-8030R96	8.893	96	6
108" Radius					
8*	203	14-8030R108	8.893	108	6

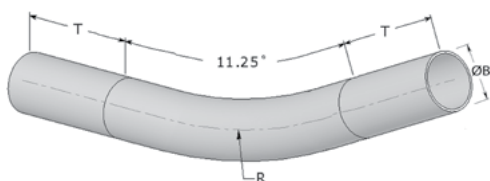
Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System (HazGuard®) ID Series Elbows

ID XW 11.25° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	24-2035R12	2.500	12	6
2 ½	63	24-2535R12	3.000	12	6
18" Radius					
2	53	24-2035R18	2.500	18	6
2½	63	24-2535R18	3.000	18	6
3	78	24-3035R18	3.500	18	6
24" Radius					
2	53	24-2035R24	2.500	24	6
2½	63	24-2535R24	3.000	24	6
3	78	24-3035R24	3.500	24	6
3½	91	24-3535R24	4.000	24	6
4	103	24-4035R24	4.500	24	6
36" Radius					
2	53	24-2035R36	2.500	36	6
2½	63	24-2535R36	3.000	36	6
3	78	24-3035R36	3.500	36	6
3½	91	24-3535R36	4.000	36	6
4	103	24-4035R36	4.500	36	6
5	129	24-5035R36	5.500	36	6
6	155	24-6035R36	6.500	36	6

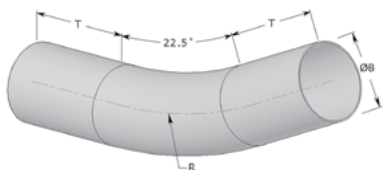
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	24-2035R48	2.500	48	6
2½	63	24-2535R48	3.000	48	6
3	78	24-3035R48	3.500	48	6
3½	91	24-3535R48	4.000	48	6
4	103	24-4035R48	4.500	48	6
5	129	24-5035R48	5.500	48	6
6	155	24-6035R48	6.500	48	6
60" Radius					
2	53	24-2035R60	2.500	60	6
2½	63	24-2535R60	3.000	60	6
3	78	24-3035R60	3.500	60	6
3½	91	24-3535R60	4.000	60	6
4	103	24-4035R60	4.500	60	6
5	129	24-5035R60	5.500	60	6
6	155	24-6035R60	6.500	60	6
72" Radius					
2	53	24-2035R72	2.500	72	6
2½	63	24-2535R72	3.000	72	6
3	78	24-3035R72	3.500	72	6
3½	91	24-3535R72	4.000	72	6
4	103	24-4035R72	4.500	72	6
5	129	24-5035R72	5.500	72	6
6	155	24-6035R72	6.500	72	6

Extra Heavy Wall Epoxy System (HazGuard®) ID Series Elbows

ID XW 22.5° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	24-2034R12	2.500	12	6
2 ½	63	24-2534R12	3.000	12	6
18" Radius					
2	53	24-2034R18	2.500	18	6
2½	63	24-2534R18	3.000	18	6
3	78	24-3034R18	3.500	18	6
24" Radius					
2	53	24-2034R24	2.500	24	6
2½	63	24-2534R24	3.000	24	6
3	78	24-3034R24	3.500	24	6
3½	91	24-3534R24	4.000	24	6
4	103	24-4034R24	4.500	24	6
36" Radius					
2	53	24-2034R36	2.500	36	6
2½	63	24-2534R36	3.000	36	6
3	78	24-3034R36	3.500	36	6
3½	91	24-3534R36	4.000	36	6
4	103	24-4034R36	4.500	36	6
5	129	24-5034R36	5.500	36	6
6	155	24-6034R36	6.500	36	6

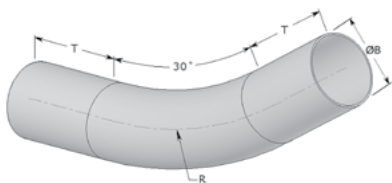
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	24-2034R48	2.500	48	6
2½	63	24-2534R48	3.000	48	6
3	78	24-3034R48	3.500	48	6
3½	91	24-3534R48	4.000	48	6
4	103	24-4034R48	4.500	48	6
5	129	24-5034R48	5.500	48	6
6	155	24-6034R48	6.500	48	6
60" Radius					
2	53	24-2034R60	2.500	60	6
2½	63	24-2534R60	3.000	60	6
3	78	24-3034R60	3.500	60	6
3½	91	24-3534R60	4.000	60	6
4	103	24-4034R60	4.500	60	6
5	129	24-5034R60	5.500	60	6
6	155	24-6034R60	6.500	60	6
72" Radius					
2	53	24-2034R72	2.500	72	6
2½	63	24-2534R72	3.000	72	6
3	78	24-3034R72	3.500	72	6
3½	91	24-3534R72	4.000	72	6
4	103	24-4034R72	4.500	72	6
5	129	24-5034R72	5.500	72	6
6	155	24-6034R72	6.500	72	6

Extra Heavy Wall Epoxy System (HazGuard®) ID Series Elbows

ID XW 30° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	24-2033R12	2.500	12	6
2 ½	63	24-2533R12	3.000	12	6
18" Radius					
2	53	24-2033R18	2.500	18	6
2½	63	24-2533R18	3.000	18	6
3	78	24-3033R18	3.500	18	6
24" Radius					
2	53	24-2033R24	2.500	24	6
2½	63	24-2533R24	3.000	24	6
3	78	24-3033R24	3.500	24	6
3½	91	24-3533R24	4.000	24	6
4	103	24-4033R24	4.500	24	6
36" Radius					
2	53	24-2033R36	2.500	36	6
2½	63	24-2533R36	3.000	36	6
3	78	24-3033R36	3.500	36	6
3½	91	24-3533R36	4.000	36	6
4	103	24-4033R36	4.500	36	6
5	129	24-5033R36	5.500	36	6
6	155	24-6033R36	6.500	36	6

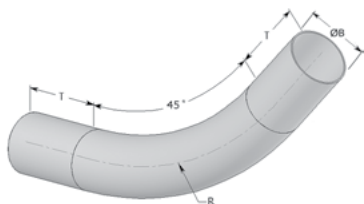
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	24-2033R48	2.500	48	6
2½	63	24-2533R48	3.000	48	6
3	78	24-3033R48	3.500	48	6
3½	91	24-3533R48	4.000	48	6
4	103	24-4033R48	4.500	48	6
5	129	24-5033R48	5.500	48	6
6	155	24-6033R48	6.500	48	6
60" Radius					
2	53	24-2033R60	2.500	60	6
2½	63	24-2533R60	3.000	60	6
3	78	24-3033R60	3.500	60	6
3½	91	24-3533R60	4.000	60	6
4	103	24-4033R60	4.500	60	6
5	129	24-5033R60	5.500	60	6
6	155	24-6033R60	6.500	60	6
72" Radius					
2	53	24-2033R72	2.500	72	6
2½	63	24-2533R72	3.000	72	6
3	78	24-3033R72	3.500	72	6
3½	91	24-3533R72	4.000	72	6
4	103	24-4033R72	4.500	72	6
5	129	24-5033R72	5.500	72	6
6	155	24-6033R72	6.500	72	6

Extra Heavy Wall Epoxy System (HazGuard®) ID Series Elbows

ID XW 45° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	24-2032R12	2.500	12	6
2½	63	24-2532R12	3.000	12	6
18" Radius					
2	53	24-2032R18	2.500	18	6
2½	63	24-2532R18	3.000	18	6
3	78	24-3032R18	3.500	18	6
24" Radius					
2	53	24-2032R24	2.500	24	6
2½	63	24-2532R24	3.000	24	6
3	78	24-3032R24	3.500	24	6
3½	91	24-3532R24	4.000	24	6
4	103	24-4032R24	4.500	24	6
36" Radius					
2	53	24-2032R36	2.500	36	6
2½	63	24-2532R36	3.000	36	6
3	78	24-3032R36	3.500	36	6
3½	91	24-3532R36	4.000	36	6
4	103	24-4032R36	4.500	36	6
5	129	24-5032R36	5.500	36	6
6	155	24-6032R36	6.500	36	6

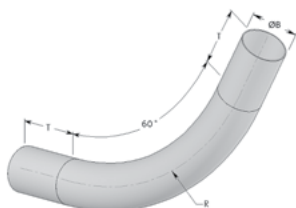
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	24-2032R48	2.500	48	6
2½	63	24-2532R48	3.000	48	6
3	78	24-3032R48	3.500	48	6
3½	91	24-3532R48	4.000	48	6
4	103	24-4032R48	4.500	48	6
5	129	24-5032R48	5.500	48	6
6	155	24-6032R48	6.500	48	6
60" Radius					
2	53	24-2032R60	2.500	60	6
2½	63	24-2532R60	3.000	60	6
3	78	24-3032R60	3.500	60	6
3½	91	24-3532R60	4.000	60	6
4	103	24-4032R60	4.500	60	6
5	129	24-5032R60	5.500	60	6
6	155	24-6032R60	6.500	60	6
72" Radius					
2	53	24-2032R72	2.500	72	6
2½	63	24-2532R72	3.000	72	6
3	78	24-3032R72	3.500	72	6
3½	91	24-3532R72	4.000	72	6
4	103	24-4032R72	4.500	72	6
5	129	24-5032R72	5.500	72	6
6	155	24-6032R72	6.500	72	6

Extra Heavy Wall Epoxy System (HazGuard®) ID Series Elbows

ID XW 60° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	24-2031R12	2.500	12	6
2½	63	24-2531R12	3.000	12	6
18" Radius					
2	53	24-2031R18	2.500	18	6
2½	63	24-2531R18	3.000	18	6
3	78	24-3031R18	3.500	18	6
24" Radius					
2	53	24-2031R24	2.500	24	6
2½	63	24-2531R24	3.000	24	6
3	78	24-3031R24	3.500	24	6
3½	91	24-3531R24	4.000	24	6
4	103	24-4031R24	4.500	24	6
36" Radius					
2	53	24-2031R36	2.500	36	6
2½	63	24-2531R36	3.000	36	6
3	78	24-3031R36	3.500	36	6
3½	91	24-3531R36	4.000	36	6
4	103	24-4031R36	4.500	36	6
5	129	24-5031R36	5.500	36	6
6	155	24-6031R36	6.500	36	6

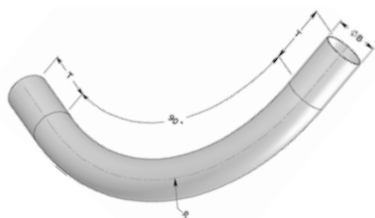
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	24-2031R48	2.500	48	6
2½	63	24-2531R48	3.000	48	6
3	78	24-3031R48	3.500	48	6
3½	91	24-3531R48	4.000	48	6
4	103	24-4031R48	4.500	48	6
5	129	24-5031R48	5.500	48	6
6	155	24-6031R48	6.500	48	6
60" Radius					
2	53	24-2031R60	2.500	60	6
2½	63	24-2531R60	3.000	60	6
3	78	24-3031R60	3.500	60	6
3½	91	24-3531R60	4.000	60	6
4	103	24-4031R60	4.500	60	6
5	129	24-5031R60	5.500	60	6
6	155	24-6031R60	6.500	60	6
72" Radius					
2	53	24-2031R72	2.500	72	6
2½	63	24-2531R72	3.000	72	6
3	78	24-3031R72	3.500	72	6
3½	91	24-3531R72	4.000	72	6
4	103	24-4031R72	4.500	72	6
5	129	24-5031R72	5.500	72	6
6	155	24-6031R72	6.500	72	6

Extra Heavy Wall Epoxy System (HazGuard®) ID Series Elbows

ID XW 90° Elbow

Click brand for more
product info ↓

[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	24-2030R12	2.500	12	6
2 ½	63	24-2530R18	2.500	12	6
18" Radius					
2	53	24-2030R18	2.500	18	6
2 ½	63	24-2530R18	3.000	12	6
3	78	24-3030R18	3.500	18	6
24" Radius					
2	53	24-2030R24	2.500	24	6
2½	63	24-2530R24	3.000	24	6
3	78	24-2530R24	3.500	24	6
3½	91	24-3530R24	4.000	24	6
4	103	24-4030R24	4.500	24	6
36" Radius					
2	53	24-2030R36	2.500	36	6
2½	63	24-2530R36	3.000	36	6
3	78	24-3030R36	3.500	36	6
3½	91	24-3530R36	4.000	36	6
4	103	24-4030R36	4.500	36	6
5	129	24-5030R36	5.500	36	6
6	155	24-6030R36	6.500	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	24-2030R48	2.500	48	6
2½	63	24-2530R48	3.000	48	6
3	78	24-3030R48	3.500	48	6
3½	91	24-3530R48	4.000	48	6
4	103	24-4030R48	4.500	48	6
5	129	24-5030R48	5.500	48	6
6	155	24-6030R48	6.500	48	6
60" Radius					
2	53	24-2030R60	2.500	60	6
2½	63	24-2530R60	3.000	60	6
3	78	24-3030R60	3.500	60	6
3½	91	24-3530R60	4.000	60	6
4	103	24-4030R60	4.500	60	6
5	129	24-5030R60	5.500	60	6
6	155	24-6030R60	6.500	60	6
72" Radius					
2	53	24-2030R72	2.500	72	6
2½	63	24-2530R72	3.000	72	6
3	78	24-3030R72	3.500	72	6
3½	91	24-3530R72	4.000	72	6
4	103	24-4030R72	4.500	72	6
5	129	24-5030R72	5.500	72	6
6	155	24-6030R72	6.500	72	6

BreathSaver®, Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 3/4" to 1 1/2" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral bell and spigot end
- Full interchangeability with existing metallic and non-metallic raceways

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Flame resistant
- Smoke Development
- NFPA 130, NFPA 502, FHIT 25c
- Toxicity Emission
- Suitable for Physical Damage Locations (NEC-Class 1 Division 2)
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Two hour fire rated at 1850° F, operating temperatures up to 550° F
- Will retain its shape after compression or impact
- Easy to install

Materials:

- This product is Class 1 Division 2 and is used to protect critical circuits including fire cable, emergency lighting, etc. It is also used in air handling spaces where circuits require "bulletproof" protection.

Product Applications:

- Conduit and fittings are Class 1, Division 2 which can be subject to physical damage per NEC®. The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Areas exposed to physical damage, bridges, ports, oil & gas, transit, and more

Relevant Certifications:

- UL2515A, UL2196-FHIT.25C, FHIT.25D, FHIT.7.25C, CSA C22.2 No. 2515. 1-13, NEMA TC 14.XW



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

Among the different types of conduit available on the market, BreathSaver is set apart by its 2-hr fire rated UL2196 certification for both vertical and horizontal installations.

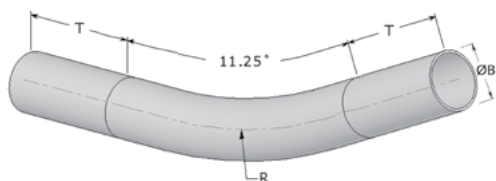
Phenolic System (BreathSaver®)

IPS Series Elbows

Click brand for more
product info ↓

[FRE Composites](#)

IPS XW 11.25° Elbow



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	74-7535R12	1.418	12	6
1	27	74-1035R12	1.683	12	6
1¼	35	74-1235R12	2.028	12	6
1½	41	74-1535R12	2.268	12	6
18" Radius					
¾	21	74-7535R18	1.418	18	6
1	27	74-1035R18	1.683	18	6
1 ¼	35	74-1235R18	2.028	18	6
1 ½	41	74-1535R18	2.268	18	6
24" Radius					
¾	21	74-7535R24	1.418	24	6
1	27	74-1035R24	1.683	24	6
1¼	35	74-1235R24	2.028	24	6
1½	41	74-1535R24	2.268	24	6
36" Radius					
¾	21	74-7535R36	1.418	36	6
1	27	74-1035R36	1.683	36	6
1¼	35	74-1235R36	2.028	36	6
1½	41	74-1535R36	2.268	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	74-7535R48	1.418	48	6
1	27	74-1035R48	1.683	48	6
1¼	35	74-1235R48	2.028	48	6
1½	41	74-1535R48	2.268	48	6
60" Radius					
¾	21	74-7535R60	1.418	60	6
1	27	74-1035R60	1.683	60	6
1¼	35	74-1235R60	2.028	60	6
1½	41	74-1535R60	2.268	60	6
72" Radius					
¾	21	74-7535R72	1.418	72	6
1	27	74-1035R72	1.683	72	6
1¼	35	74-1235R72	2.028	72	6
1½	41	74-1535R72	2.268	72	6
8*	203	74-8035R72	8.893	72	6
84" Radius					
8*	203	74-8035R84	8.893	84	6
96" Radius					
8*	203	74-8035R96	8.893	96	6
108" Radius					
8*	203	74-8035R108	8.893	108	6

Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

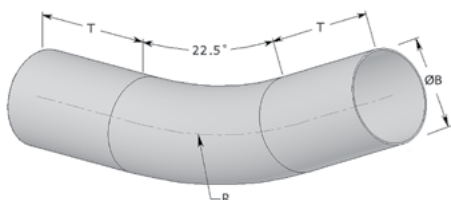
Phenolic System (BreathSaver®)

IPS Series Elbows

Click brand for more
product info ↓

FRE Composites

IPS XW 22.5° Elbow



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	74-7534R12	1.418	12	6
1	27	74-1034R12	1.683	12	6
1¼	35	74-1234R12	2.028	12	6
1½	41	74-1534R12	2.268	12	6
18" Radius					
¾	21	74-7534R18	1.418	18	6
1	27	74-1034R18	1.683	18	6
1¼	35	74-1234R18	2.028	18	6
1½	41	74-1534R18	2.268	18	6
24" Radius					
¾	21	74-7534R24	1.418	24	6
1	27	74-1034R24	1.683	24	6
1¼	35	74-1234R24	2.028	24	6
1½	41	74-1534R24	2.268	24	6
36" Radius					
¾	21	74-7534R36	1.418	36	6
1	27	74-1034R36	1.683	36	6
1¼	35	74-1234R36	2.028	36	6
1½	41	74-1534R36	2.268	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	74-7534R48	1.418	48	6
1	27	74-1034R48	1.683	48	6
1¼	35	74-1234R48	2.028	48	6
1½	41	74-1534R48	2.268	48	6
60" Radius					
¾	21	74-7534R60	1.418	60	6
1	27	74-1034R60	1.683	60	6
1¼	35	74-1234R60	2.028	60	6
1½	41	74-1534R60	2.268	60	6
72" Radius					
¾	21	74-7534R72	1.418	72	6
1	27	74-1034R72	1.683	72	6
1¼	35	74-1234R72	2.028	72	6
1½	41	74-1534R72	2.268	72	6
8*	203	74-8034R72	8.893	72	6
84" Radius					
8*	203	74-8034R84	8.893	84	6
96" Radius					
8*	203	74-8034R96	8.893	96	6
108" Radius					
8*	203	74-8034R108	8.893	108	6

Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

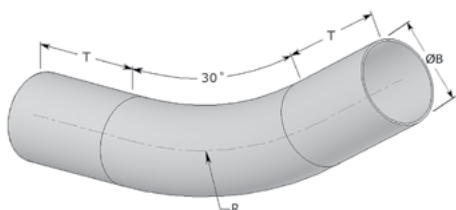
Phenolic System (BreathSaver®)

IPS Series Elbows

Click brand for more product info ↓

[FRE Composites](#)

IPS XW 30° Elbow



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	74-7533R12	1.418	12	6
1	27	74-1033R12	1.683	12	6
1¼	35	74-1233R12	2.028	12	6
1½	41	74-1533R12	2.268	12	6
18" Radius					
¾	21	74-7533R18	1.418	18	6
1	27	74-1033R18	1.683	18	6
1¼	35	74-1233R18	2.028	18	6
1½	41	74-1533R18	2.268	18	6
24" Radius					
¾	21	74-7533R24	1.418	24	6
1	27	74-1033R24	1.683	24	6
1¼	35	74-1233R24	2.028	24	6
1½	41	74-1533R24	2.268	24	6
36" Radius					
¾	21	74-7533R36	1.418	36	6
1	27	74-1033R36	1.683	36	6
1¼	35	74-1233R36	2.028	36	6
1½	41	74-1533R36	2.268	36	6

Size		Part Number	ØB	R	T
(in)	(mm)				
48" Radius					
¾	21	74-7533R48	1.418	48	6
1	27	74-1033R48	1.683	48	6
1¼	35	74-1233R48	2.028	48	6
1½	41	74-1533R48	2.268	48	6
60" Radius					
¾	21	74-7533R60	1.418	60	6
1	27	74-1033R60	1.683	60	6
1¼	35	74-1233R60	2.028	60	6
1½	41	74-1533R60	2.268	60	6
72" Radius					
¾	21	74-7533R72	1.418	72	6
1	27	74-1033R72	1.683	72	6
1¼	35	74-1233R72	2.028	72	6
1½	41	74-1533R72	2.268	72	6
8*	203	74-8033R72	8.893	72	6
84" Radius					
8*	203	74-8033R84	8.893	84	6
96" Radius					
8*	203	74-8033R96	8.893	96	6
108" Radius					
8*	203	74-8033R108	8.893	108	6

Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

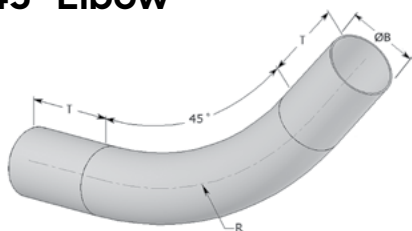
Phenolic System (BreathSaver®)

IPS Series Elbows

IPS XW 45° Elbow

Click brand for more
product info ↓

[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	74-7532R12	1.418	12	6
1	27	74-1032R12	1.683	12	6
1¼	35	74-1232R12	2.028	12	6
1½	41	74-1532R12	2.268	12	6
18" Radius					
¾	21	74-7532R18	1.418	18	6
1	27	74-1032R18	1.683	18	6
1¼	35	74-1232R18	2.028	18	6
1½	41	74-1532R18	2.268	18	6
24" Radius					
¾	21	74-7532R24	1.418	24	6
1	27	74-1032R24	1.683	24	6
1¼	35	74-1232R24	2.028	24	6
1½	41	74-1532R24	2.268	24	6
36" Radius					
¾	21	74-7532R36	1.418	36	6
1	27	74-1032R36	1.683	36	6
1¼	35	74-1232R36	2.028	36	6
1½	41	74-1532R36	2.268	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	74-7532R48	1.418	48	6
1	27	74-1032R48	1.683	48	6
1¼	35	74-1232R48	2.028	48	6
1½	41	74-1532R48	2.268	48	6
60" Radius					
¾	21	74-7532R60	1.418	60	6
1	27	74-1032R60	1.683	60	6
1¼	35	74-1232R60	2.028	60	6
1½	41	74-1532R60	2.268	60	6
72" Radius					
¾	21	74-7532R72	1.418	72	6
1	27	74-1032R72	1.683	72	6
1¼	35	74-1232R72	2.028	72	6
1½	41	74-1532R72	2.268	72	6
8*	203	74-8032R72	8.893	72	6
84" Radius					
8*	203	74-8032R84	8.893	84	6
96" Radius					
8*	203	74-8032R96	8.893	96	6
108" Radius					
8*	203	74-8032R108	8.893	108	6

Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

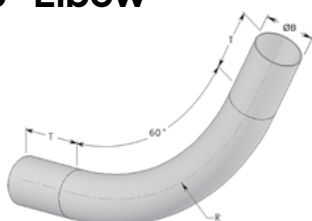
Phenolic System (BreathSaver®)

IPS Series Elbows

IPS XW 60° Elbow

Click brand for more
product info ↓

[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	74-7531R12	1.418	12	6
1	27	74-1031R12	1.683	12	6
1¼	35	74-1231R12	2.028	12	6
1½	41	74-1531R12	2.268	12	6
18" Radius					
¾	21	74-7531R18	1.418	18	6
1	27	74-1031R18	1.683	18	6
1¼	35	74-1231R18	2.028	18	6
1½	41	74-1531R18	2.268	18	6
24" Radius					
¾	21	74-7531R24	1.418	24	6
1	27	74-1031R24	1.683	24	6
1¼	35	74-1231R24	2.028	24	6
1½	41	74-1531R24	2.268	24	6
36" Radius					
¾	21	74-7531R36	1.418	36	6
1	27	74-1031R36	1.683	36	6
1¼	35	74-1231R36	2.028	36	6
1½	41	74-1531R36	2.268	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	74-7531R48	1.418	48	6
1	27	74-1031R48	1.683	48	6
1¼	35	74-1231R48	2.028	48	6
1½	41	74-1531R48	2.268	48	6
60" Radius					
¾	21	74-7531R60	1.418	60	6
1	27	74-1031R60	1.683	60	6
1¼	35	74-1231R60	2.028	60	6
1½	41	74-1531R60	2.268	60	6
72" Radius					
¾	21	74-7531R72	1.418	72	6
1	27	74-1031R72	1.683	72	6
1¼	35	74-1231R72	2.028	72	6
1½	41	74-1531R72	2.268	72	6
8*	203	74-8031R72	8.893	72	6
84" Radius					
8*	203	74-8031R84	8.893	84	6
96" Radius					
8*	203	74-8031R96	8.893	96	6
108" Radius					
8*	203	74-8031R108	8.893	108	6

Note: * 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

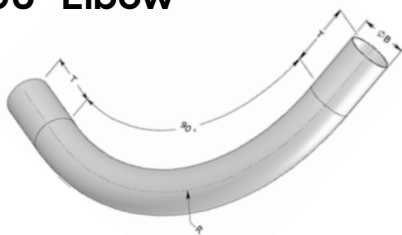
Phenolic System (BreathSaver®)

IPS Series Elbows

Click brand for more
product info ↓

[FRE Composites](#)

IPS XW 90° Elbow



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
¾	21	74-7530R12	1.418	12	6
1	27	74-1030R12	1.683	12	6
1 ¼	35	74-1230R12	2.028	12	6
1 ½	41	74-1530R12	2.268	12	6
18" Radius					
¾	21	74-7530R18	1.418	18	6
1	27	74-1030R18	1.683	18	6
1¼	35	74-1230R18	2.028	18	6
1½	41	74-1530R18	2.268	18	6
24" Radius					
¾	21	74-7530R24	1.418	24	6
1	27	74-1030R24	1.683	24	6
1¼	35	74-1230R24	2.028	24	6
1½	41	74-1530R24	2.268	24	6
36" Radius					
¾	21	74-7530R36	1.418	36	6
1	27	74-1030R36	1.683	36	6
1¼	35	74-1230R36	2.028	36	6
1½	41	74-1530R36	2.268	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
¾	21	74-7530R48	1.418	48	6
1	27	74-1030R48	1.683	48	6
1¼	35	74-1230R48	2.028	48	6
1½	41	74-1530R48	2.268	48	6
60" Radius					
¾	21	74-7530R60	1.418	60	6
1	27	74-1030R60	1.683	60	6
1¼	35	74-1230R60	2.028	60	6
1½	41	74-1530R60	2.268	60	6
72" Radius					
8*	203	74-8030R72	8.893	72	6
84" Radius					
8*	203	74-8030R84	8.893	84	6
96" Radius					
8*	203	74-8030R96	8.893	96	6
108" Radius					
8*	203	74-8030R108	8.893	108	6

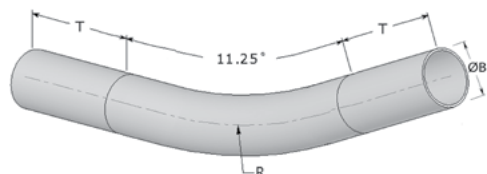
Note: *8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Phenolic System (BreathSaver®) ID Series Elbows

ID XW 11.25° Elbow

Click brand for more
product info ↓

[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	84-2035R12	2.500	12	6
2 ½	63	84-2535R12	3.000	12	6
18" Radius					
2	53	84-2035R18	2.500	18	6
2½	63	84-2535R18	3.000	18	6
3	78	84-3035R18	3.500	18	6
24" Radius					
2	53	84-2035R24	2.500	24	6
2½	63	84-2535R24	3.000	24	6
3	78	84-3035R24	3.500	24	6
3½	91	84-3535R24	4.000	24	6
4	103	84-4035R24	4.500	24	6
36" Radius					
2	53	84-2035R36	2.500	36	6
2½	63	84-2535R36	3.000	36	6
3	78	84-3035R36	3.500	36	6
3½	91	84-3535R36	4.000	36	6
4	103	84-4035R36	4.500	36	6
5	129	84-5035R36	5.500	36	6
6	155	84-6035R36	6.500	36	6

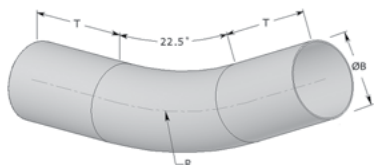
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	84-2035R48	2.500	48	6
2½	63	84-2535R48	3.000	48	6
3	78	84-3035R48	3.500	48	6
3½	91	84-3535R48	4.000	48	6
4	103	84-4035R48	4.500	48	6
5	129	84-5035R48	5.500	48	6
6	155	84-6035R48	6.500	48	6
60" Radius					
2	53	84-2035R60	2.500	60	6
2½	63	84-2535R60	3.000	60	6
3	78	84-3035R60	3.500	60	6
3½	91	84-3535R60	4.000	60	6
4	103	84-4035R60	4.500	60	6
5	129	84-5035R60	5.500	60	6
6	155	84-6035R60	6.500	60	6
72" Radius					
2	53	84-2035R72	2.500	72	6
2½	63	84-2535R72	3.000	72	6
3	78	84-3035R72	3.500	72	6
3½	91	84-3535R72	4.000	72	6
4	103	84-4035R72	4.500	72	6
5	129	84-5035R72	5.500	72	6
6	155	84-6035R72	6.500	72	6

Phenolic System (BreathSaver®) ID Series Elbows

ID XW 22.5° Elbow

Click brand for more
product info ↓

[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	84-2034R12	2.500	12	6
2 ½	63	84-2534R12	3.000	12	6
18" Radius					
2	53	84-2034R18	2.500	18	6
2½	63	84-2534R18	3.000	18	6
3	78	84-3034R18	3.500	18	6
24" Radius					
2	53	84-2034R24	2.500	24	6
2½	63	84-2534R24	3.000	24	6
3	78	84-3034R24	3.500	24	6
3½	91	84-3534R24	4.000	24	6
4	103	84-4034R24	4.500	24	6
36" Radius					
2	53	84-2034R36	2.500	36	6
2½	63	84-2534R36	3.000	36	6
3	78	84-3034R36	3.500	36	6
3½	91	84-3534R36	4.000	36	6
4	103	84-4034R36	4.500	36	6
5	129	84-5034R36	5.500	36	6
6	155	84-6034R36	6.500	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	84-2034R48	2.500	48	6
2½	63	84-2534R48	3.000	48	6
3	78	84-3034R48	3.500	48	6
3½	91	84-3534R48	4.000	48	6
4	103	84-4034R48	4.500	48	6
5	129	84-5034R48	5.500	48	6
6	155	84-6034R48	6.500	48	6
60" Radius					
2	53	84-2034R60	2.500	60	6
2½	63	84-2534R60	3.000	60	6
3	78	84-3034R60	3.500	60	6
3½	91	84-3534R60	4.000	60	6
4	103	84-4034R60	4.500	60	6
5	129	84-5034R60	5.500	60	6
6	155	84-6034R60	6.500	60	6
72" Radius					
2	53	84-2034R72	2.500	72	6
2½	63	84-2534R72	3.000	72	6
3	78	84-3034R72	3.500	72	6
3½	91	84-3534R72	4.000	72	6
4	103	84-4034R72	4.500	72	6
5	129	84-5034R72	5.500	72	6
6	155	84-6034R72	6.500	72	6

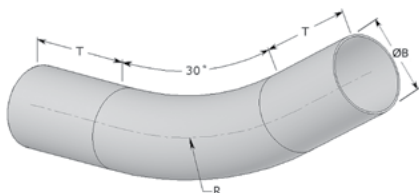
Phenolic System (BreathSaver®)

ID Series Elbows

ID XW 30° Elbow

Click brand for more
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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	84-2033R12	2.500	12	6
2 ½	63	84-2533R12	3.000	12	6
18" Radius					
2	53	84-2033R18	2.500	18	6
2½	63	84-2533R18	3.000	18	6
3	78	84-3033R18	3.500	18	6
24" Radius					
2	53	84-2033R24	2.500	24	6
2½	63	84-2533R24	3.000	24	6
3	78	84-3033R24	3.500	24	6
3½	91	84-3533R24	4.000	24	6
4	103	84-4033R24	4.500	24	6
36" Radius					
2	53	84-2033R36	2.500	36	6
2½	63	84-2533R36	3.000	36	6
3	78	84-3033R36	3.500	36	6
3½	91	84-3533R36	4.000	36	6
4	103	84-4033R36	4.500	36	6
5	129	84-5033R36	5.500	36	6
6	155	84-6033R36	6.500	36	6

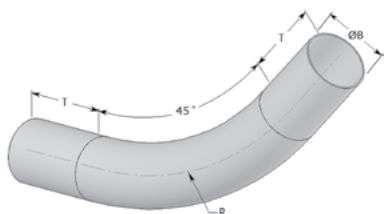
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	84-2033R48	2.500	48	6
2½	63	84-2533R48	3.000	48	6
3	78	84-3033R48	3.500	48	6
3½	91	84-3533R48	4.000	48	6
4	103	84-4033R48	4.500	48	6
5	129	84-5033R48	5.500	48	6
6	155	84-6033R48	6.500	48	6
60" Radius					
2	53	84-2033R60	2.500	60	6
2½	63	84-2533R60	3.000	60	6
3	78	84-3033R60	3.500	60	6
3½	91	84-3533R60	4.000	60	6
4	103	84-4033R60	4.500	60	6
5	129	84-5033R60	5.500	60	6
6	155	84-6033R60	6.500	60	6
72" Radius					
2	53	84-2033R72	2.500	72	6
2½	63	84-2533R72	3.000	72	6
3	78	84-3033R72	3.500	72	6
3½	91	84-3533R72	4.000	72	6
4	103	84-4033R72	4.500	72	6
5	129	84-5033R72	5.500	72	6
6	155	84-6033R72	6.500	72	6

Phenolic System (BreathSaver®) ID Series Elbows

ID XW 45° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	84-2032R12	2.500	12	6
2½	63	84-2532R12	3.000	12	6
18" Radius					
2	53	84-2032R18	2.500	18	6
2½	63	84-2532R18	3.000	18	6
3	78	84-3032R18	3.500	18	6
24" Radius					
2	53	84-2032R24	2.500	24	6
2½	63	84-2532R24	3.000	24	6
3	78	84-3032R24	3.500	24	6
3½	91	84-3532R24	4.000	24	6
4	103	84-4032R24	4.500	24	6
36" Radius					
2	53	84-2032R36	2.500	36	6
2½	63	84-2532R36	3.000	36	6
3	78	84-3032R36	3.500	36	6
3½	91	84-3532R36	4.000	36	6
4	103	84-4032R36	4.500	36	6
5	129	84-5032R36	5.500	36	6
6	155	84-6032R36	6.500	36	6

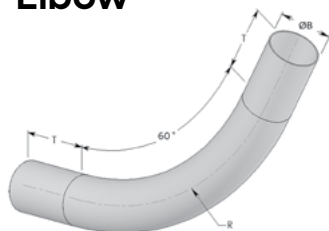
Size		Part Number	ØB	R	T
(in)	(mm)				
48" Radius					
2	53	84-2032R48	2.500	48	6
2½	63	84-2532R48	3.000	48	6
3	78	84-3032R48	3.500	48	6
3½	91	84-3532R48	4.000	48	6
4	103	84-4032R48	4.500	48	6
5	129	84-5032R48	5.500	48	6
6	155	84-6032R48	6.500	48	6
60" Radius					
2	53	84-2032R60	2.500	60	6
2½	63	84-2532R60	3.000	60	6
3	78	84-3032R60	3.500	60	6
3½	91	84-3532R60	4.000	60	6
4	103	84-4032R60	4.500	60	6
5	129	84-5032R60	5.500	60	6
6	155	84-6032R60	6.500	60	6
72" Radius					
2	53	84-2032R72	2.500	72	6
2½	63	84-2532R72	3.000	72	6
3	78	84-3032R72	3.500	72	6
3½	91	84-3532R72	4.000	72	6
4	103	84-4032R72	4.500	72	6
5	129	84-5032R72	5.500	72	6
6	155	84-6032R72	6.500	72	6

Phenolic System (BreathSaver®) ID Series Elbows

ID XW 60° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	84-2031R12	2.500	12	6
2½	63	84-2531R12	3.000	12	6
18" Radius					
2	53	84-2031R18	2.500	18	6
2½	63	84-2531R18	3.000	18	6
3	78	84-3031R18	3.500	18	6
24" Radius					
2	53	84-2031R24	2.500	24	6
2½	63	84-2531R24	3.00	24	6
3	78	84-3031R24	3.500	24	6
3½	91	84-3531R24	4.000	24	6
4	103	84-4031R24	4.500	24	6
36" Radius					
2	53	84-2031R36	2.500	36	6
2½	63	84-2531R36	3.000	36	6
3	78	84-3031R36	3.500	36	6
3½	91	84-3531R36	4.000	36	6
4	103	84-4031R36	4.500	36	6
5	129	84-5031R36	5.500	36	6
6	155	84-6031R36	6.500	36	6

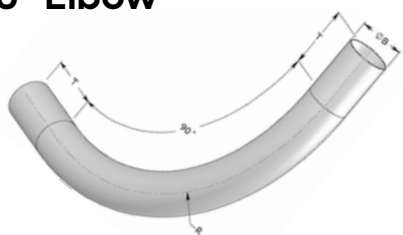
Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	84-2031R48	2.500	48	6
2½	63	84-2531R48	3.000	48	6
3	78	84-3031R48	3.500	48	6
3½	91	84-3531R48	4.000	48	6
4	103	84-4031R48	4.500	48	6
5	129	84-5031R48	5.500	48	6
6	155	84-6031R48	6.500	48	6
60" Radius					
2	53	84-2031R60	2.500	60	6
2½	63	84-2531R60	3.000	60	6
3	78	84-3031R60	3.500	60	6
3½	91	84-3531R60	4.000	60	6
4	103	84-4031R60	4.500	60	6
5	129	84-5031R60	5.500	60	6
6	155	84-6031R60	6.500	60	6
72" Radius					
2	53	84-2031R72	2.500	72	6
2½	63	84-2531R72	3.000	72	6
3	78	84-3031R72	3.500	72	6
3½	91	84-3531R72	4.000	72	6
4	103	84-4031R72	4.500	72	6
5	129	84-5031R72	5.500	72	6
6	155	84-6031R72	6.500	72	6

Phenolic System (BreathSaver®) ID Series Elbows

ID XW 90° Elbow

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[FRE Composites](#)



Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
12" Radius					
2	53	84-2030R12	2.500	12	6
2 ½	63	84-2530R12	3.000	12	6
18" Radius					
2	53	84-2030R18	2.500	18	6
2½	63	84-2530R18	3.000	18	6
3	78	84-3030R18	3.500	18	6
24" Radius					
2	53	84-2030R24	2.500	24	6
2½	63	84-2530R24	3.000	24	6
3	78	84-2530R24	3.500	24	6
3½	91	84-3530R24	4.000	24	6
4	103	84-4030R24	4.500	24	6
36" Radius					
2	53	84-2030R36	2.500	36	6
2½	63	84-2530R36	3.000	36	6
3	78	84-3030R36	3.500	36	6
3½	91	84-3530R36	4.000	36	6
4	103	84-4030R36	4.500	36	6
5	129	84-5030R36	5.500	36	6
6	155	84-6030R36	6.500	36	6

Size		Part Number	ØB	R	T
(in)	(mm)		(in)		
48" Radius					
2	53	84-2030R48	2.500	48	6
2½	63	84-2530R48	3.000	48	6
3	78	84-3030R48	3.500	48	6
3½	91	84-3530R48	4.000	48	6
4	103	84-4030R48	4.500	48	6
5	129	84-5030R48	5.500	48	6
6	155	84-6030R48	6.500	48	6
60" Radius					
2	53	84-2030R60	2.500	60	6
2½	63	84-2530R60	3.000	60	6
3	78	84-3030R60	3.500	60	6
3½	91	84-3530R60	4.000	60	6
4	103	84-4030R60	4.500	60	6
5	129	84-5030R60	5.500	60	6
6	155	84-6030R60	6.500	60	6
72" Radius					
2	53	84-2030R72	2.500	72	6
2½	63	84-2530R72	3.000	72	6
3	78	84-3030R72	3.500	72	6
3½	91	84-3530R72	4.000	72	6
4	103	84-4030R72	4.500	72	6
5	129	84-5030R72	5.500	72	6
6	155	84-6030R72	6.500	72	6



PVC ELBOWS & SWEEPS

Allied Tube & Conduit
Heritage Plastics
Queen City Plastics

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Schedule 80 Standard Radius Elbows

Schedule 80 Special Radius Elbows

Utility/C-Duct Special Radius Elbows



PVC Elbows & Sweeps

We offer a complete line of rigid PVC conduit, utility duct, and fittings which have proven durable and effective for years of maintenance free performance in underground, encased and exposed applications.

What are typical applications?

- Residential, Commercial and Industrial
- Transportation and Highway
- Airports and Marinas
- Cable, Data and Communication Lines
- Utilities

What are advantages of PVC?

- Corrosion Resistant
- Long Life
- Impact Resistant
- Labor Savings
- Lightweight
- Non Magnetic
- Self Extinguishing
- Non Galvanic

Are Schedule 80 and 40 electrical conduit and fabricated fittings suited for direct sunlight?

Schedule 40 and 80 conduit and fabricated fittings are “Sunlight Resistant” in accordance with UL 651. Refer to the Atkore Sunlight Exposure Technical Bulletin on the website for additional information.

Part Number Guide

Elbows

Schedule 40 2" x 90 x 36" Plain End
Special Radius Elbow F402009036P

F402009036P

Schedule Trade Size Degree Radius Plain End

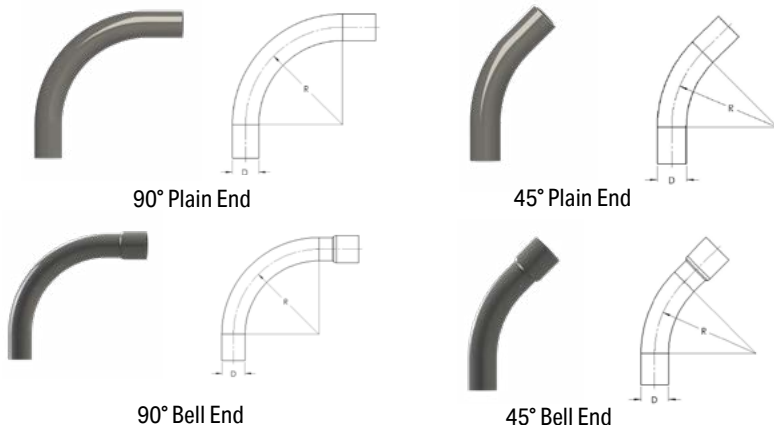


PVC Elbows & Sweeps

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Schedule 40 Standard Radius Elbows

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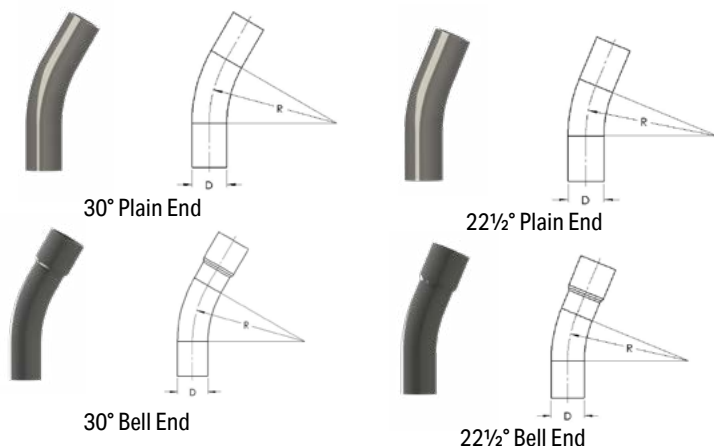
Part Number		Trade Size	Dimensions (in)		Package Quantity
Plain End	Bell End		Average Outside Diameter, D	Radius, R	
90°					
F4005090P	F4005090	½	0.840	4.00	50
F4007590P	F4007590	¾	1.050	4.50	25
F4010090P	F4010090	1	1.315	5.75	25
F4012590P	F4012590	1¼	1.660	7.25	25
F4015090P	F4015090	1½	1.900	8.25	25
F4020090P	F4020090	2	2.375	9.50	25
F4025090P	F4025090	2½	2.875	10.50	50
F4030090P	F4030090	3	3.500	13.00	50
F4035090P	F4035090	3½	4.000	15.00	25
F4040090P	F4040090	4	4.500	16.00	25
F4050090P	F4050090	5	5.563	24.00	20
F4060090P	F4060090	6	6.625	30.00	16
45°					
F4005045P	F4005045	½	0.840	4.00	50
F4007545P	F4007545	¾	1.050	4.50	25
F4010045P	F4010045	1	1.315	5.75	25
F4012545P	F4012545	1¼	1.660	7.25	25
F4015045P	F4015045	1½	1.900	8.25	25
F4020045P	F4020045	2	2.375	9.50	25
F4025045P	F4025045	2½	2.875	10.50	50
F4030045P	F4030045	3	3.500	13.00	50
F4035045P	F4035045	3½	4.000	15.00	25
F4040045P	F4040045	4	4.500	16.00	25
F4050045P	F4050045	5	5.563	24.00	20
F4060045P	F4060045	6	6.625	30.00	16

PVC Elbows & Sweeps

Schedule 40 Standard Radius Elbows

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Part Number		Trade Size	Dimensions (in)		Package Quantity
Plain End	Bell End		Average Outside Diameter, D	Radius, R	
30°					
F4007530P	F4007530	¾	1.050	4.50	25
F4010030P	F4010030	1	1.315	5.75	25
F4012530P	F4012530	1¼	1.660	7.25	25
F4015030P	F4015030	1½	1.900	8.25	25
F4020030P	F4020030	2	2.375	9.50	25
F4025030P	F4025030	2½	2.875	10.50	20
F4030030P	F4030030	3	3.500	13.00	50
F4035030P	F4035030	3½	4.000	15.00	25
F4040030P	F4040030	4	4.500	16.00	25
F4050030P	F4050030	5	5.563	24.00	20
F4060030P	F4060030	6	6.625	30.00	16
22 1/2°					
F4007522P	F4007522	¾	1.050	4.50	25
F4010022P	F4010022	1	1.315	5.75	25
F4012522P	F4012522	1¼	1.660	7.25	25
F4015022P	F4015022	1½	1.900	8.25	25
F4020022P	F4020022	2	2.375	9.50	25
F4025022P	F4025022	2½	2.875	10.50	20
F4030022P	F4030022	3	3.500	13.00	50
F4035022P	F4035022	3½	4.000	15.00	25
F4040022P	F4040022	4	4.500	16.00	25
F4050022P	F4050022	5	5.563	24.00	20
F4060022P	F4060022	6	6.625	30.00	16

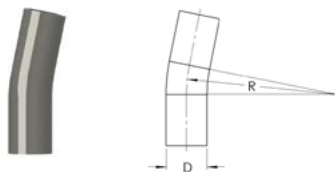
Product availability varies by region and minimum run quantities may apply
Listed to UL 651

PVC Elbows & Sweeps

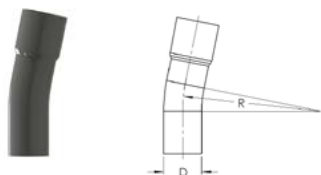
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Schedule 40 Standard Radius Elbows

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11 1/4° Plain End



11 1/4° Bell End



Part Number		Trade Size	Dimensions (in)		Package Quantity
Plain End	Bell End		Average Outside Diameter, D	Radius, R	
11 1/4°					
F4007511P	F4007511	¾	1.050	4.50	25
F4010011P	F4010011	1	1.315	5.75	25
F4012511P	F4012511	1¼	1.660	7.25	25
F4015011P	F4015011	1½	1.900	8.25	25
F4020011P	F4020011	2	2.375	9.50	25
F4025011P	F4025011	2½	2.875	10.50	20
F4030011P	F4030011	3	3.500	13.00	50
F4035011P	F4035011	3½	4.000	15.00	25
F4040011P	F4040011	4	4.500	16.00	25
F4050011P	F4050011	5	5.563	24.00	20
F4060011P	F4060011	6	6.625	30.00	16

Product availability varies by region and minimum run quantities may apply
Listed to UL 651

PVC Elbows & Sweeps

Schedule 40 Bell End Special Radius Elbows

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Part Number						Trade Size	Package Quantity
18" Radius	24" Radius	30" Radius	36" Radius	48" Radius	60" Radius		
90°							
F401009018	F401009024	F401009030	F401009036	F401009048	F401009060	1	25
F401259018	F401259024	F401259030	F401259036	F401259048	F401259060	1¼	25
F401509018	F401509024	F401509030	F401509036	F401509048	F401509060	1½	25
F402009018	F402009024	F402009030	F402009036	F402009048	F402009060	2	50
F402509018	F402509024	F402509030	F402509036	F402509048	F402509060	2½	50
F403009018	F403009024	F403009030	F403009036	F403009048	F403009060	3	50
F403509018	F403509024	F403509030	F403509036	F403509048	F403509060	3½	25
F404009018	F404009024	F404009030	F404009036	F404009048	F404009060	4	25
—	F4050090	F405009030	F405009036	F405009048	F405009060	5	20
—	—	F4060090	F406009036	F406009048	F406009060	6	16
45°							
F401004518	F401004524	F401004530	F401004536	F401004548	F401004560	1	25
F401254518	F401254524	F401254530	F401254536	F401254548	F401254560	1¼	25
F401504518	F401504524	F401504530	F401504536	F401504548	F401504560	1½	25
F402004518	F402004524	F402004530	F402004536	F402004548	F402004560	2	50
F402504518	F402504524	F402504530	F402504536	F402504548	F402504560	2½	50
F403004518	F403004524	F403004530	F403004536	F403004548	F403004560	3	50
F403504518	F403504524	F403504530	F403504536	F403504548	F403504560	3½	25
F404004518	F404004524	F404004530	F404004536	F404004548	F404004560	4	25
—	F4050045	F405004530	F405004536	F405004548	F405004560	5	20
—	—	F4060045	F406004536	F406004548	F406004560	6	16

Call for availability on 30°, 22 ½°, & 11¼° special radius elbows
Product availability varies by region and minimum run quantities may apply
Listed to UL 651

PVC Elbows & Sweeps

Schedule 40 Plain End Special Radius Elbows

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[Allied Tube & Conduit](#)
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Part Number						Trade Size	Package Quantity
18" Radius	24" Radius	30" Radius	36" Radius	48" Radius	60" Radius		
90°							
F401009018P	F401009024P	F401009030P	F401009036P	F401009048P	F401009060P	1	25
F401259018P	F401259024P	F401259030P	F401259036P	F401259048P	F401259060P	1¼	25
F401509018P	F401509024P	F401509030P	F401509036P	F401509048P	F401509060P	1½	25
F402009018P	F402009024P	F402009030P	F402009036P	F402009048P	F402009060P	2	50
F402509018P	F402509024P	F402509030P	F402509036P	F402509048P	F402509060P	2½	50
F403009018P	F403009024P	F403009030P	F403009036P	F403009048P	F403009060P	3	50
F403509018P	F403509024P	F403509030P	F403509036P	F403509048P	F403509060P	3½	25
F404009018P	F404009024P	F404009030P	F404009036P	F404009048P	F404009060P	4	25
-	F4050090P	F405009030P	F405009036P	F405009048P	F405009060P	5	20
-	-	F4060090P	F406009036P	F406009048P	F406009060P	6	16
45°							
F401004518P	F401004524P	F401004530P	F401004536P	F401004548P	F401004560P	1	25
F401254518P	F401254524P	F401254530P	F401254536P	F401254548P	F401254560P	1¼	25
F401504518P	F401504524P	F401504530P	F401504536P	F401504548P	F401504560P	1½	25
F402004518P	F402004524P	F402004530P	F402004536P	F402004548P	F402004560P	2	50
F402504518P	F402504524P	F402504530P	F402504536P	F402504548P	F402504560P	2½	50
F403004518P	F403004524P	F403004530P	F403004536P	F403004548P	F403004560P	3	50
F403504518P	F403504524P	F403504530P	F403504536P	F403504548P	F403504560P	3½	25
F404004518P	F404004524P	F404004530P	F404004536P	F404004548P	F404004560P	4	25
—	F4050045P	F405004530P	F405004536P	F405004548P	F405004560P	5	20
—	—	F4060045P	F406004536P	F406004548P	F406004560P	6	16

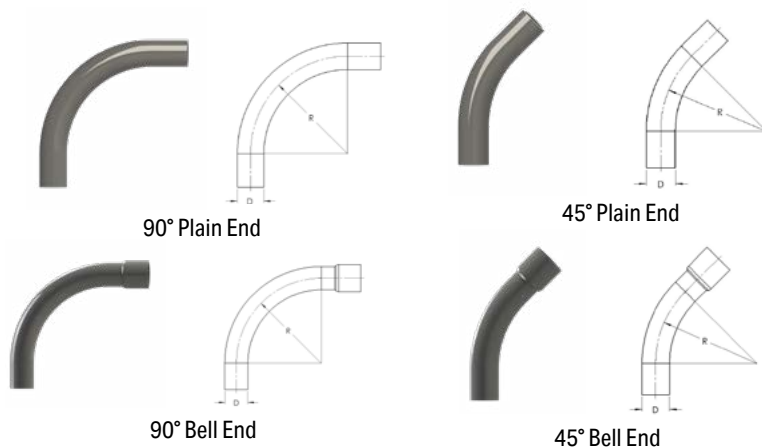
Call for availability on 30°, 22 ½° & 11¼° special radius elbows
Product availability varies by region and minimum run quantities may apply
Listed to UL 651

PVC Elbows & Sweeps

Schedule 80 Standard Radius Elbows

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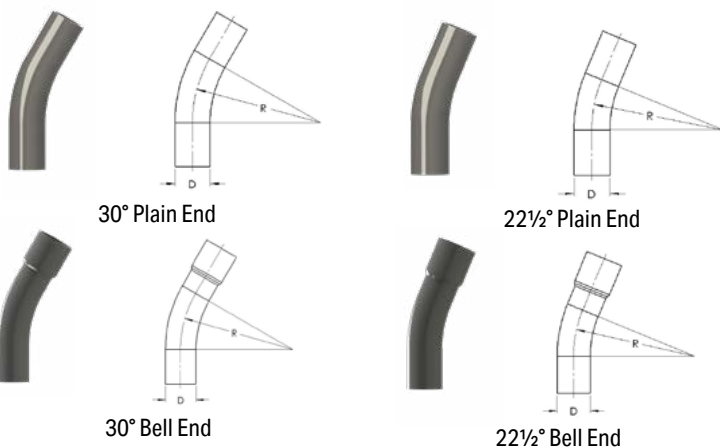
Part Number		Trade Size	Dimensions (in)		Package Quantity
Plain End	Bell End		Average Outside Diameter, D	Radius, R	
90°					
F8005090P	F8005090	½	0.840	4.00	50
F8007590P	F8007590	¾	1.050	4.50	25
F8010090P	F8010090	1	1.315	5.75	25
F8012590P	F8012590	1¼	1.660	7.25	25
F8015090P	F8015090	1½	1.900	8.25	25
F8020090P	F8020090	2	2.375	9.50	25
F8025090P	F8025090	2½	2.875	10.50	50
F8030090P	F8030090	3	3.500	13.00	50
F8035090P	F8035090	3½	4.000	15.00	25
F8040090P	F8040090	4	4.500	16.00	25
F8050090P	F8050090	5	5.563	24.00	20
F8060090P	F8060090	6	6.625	30.00	16
45°					
F8005045P	F8005045	½	0.840	4.00	50
F8007545P	F8007545	¾	1.050	4.50	25
F8010045P	F8010045	1	1.315	5.75	25
F8012545P	F8012545	1¼	1.660	7.25	25
F8015045P	F8015045	1½	1.900	8.25	25
F8020045P	F8020045	2	2.375	9.50	25
F8025045P	F8025045	2½	2.875	10.50	50
F8030045P	F8030045	3	3.500	13.00	50
F8035045P	F8035045	3½	4.000	15.00	25
F8040045P	F8040045	4	4.500	16.00	25
F8050045P	F8050045	5	5.563	24.00	20
F8060045P	F8060045	6	6.625	30.00	16

PVC Elbows & Sweeps

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[Queen City Plastics](#)

Schedule 80 Standard Radius Elbows



Part Number		Trade Size	Dimensions (in)		Package Quantity
Plain End	Bell End		Average Outside Diameter, D	Radius, R	
30°					
F8007530P	F8007530	¾	1.050	4.50	25
F8010030P	F8010030	1	1.315	5.75	25
F8012530P	F8012530	1¼	1.660	7.25	25
F8015030P	F8015030	1½	1.900	8.25	25
F8020030P	F8020030	2	2.375	9.50	25
F8025030P	F8025030	2½	2.875	10.50	20
F8030030P	F8030030	3	3.500	13.00	50
F8035030P	F8035030	3½	4.000	15.00	25
F8040030P	F8040030	4	4.500	16.00	25
F8050030P	F8050030	5	5.563	24.00	20
F8060030P	F8060030	6	6.625	30.00	16
22 1/2°					
F8007522P	F8007522	¾	1.050	4.50	25
F8010022P	F8010022	1	1.315	5.75	25
F8012522P	F8012522	1¼	1.660	7.25	25
F8015022P	F8015022	1½	1.900	8.25	25
F8020022P	F8020022	2	2.375	9.50	25
F8025022P	F8025022	2½	2.875	10.50	20
F8030022P	F8030022	3	3.500	13.00	50
F8035022P	F8035022	3½	4.000	15.00	25
F8040022P	F8040022	4	4.500	16.00	25
F8050022P	F8050022	5	5.563	24.00	20
F8060022P	F8060022	6	6.625	30.00	16

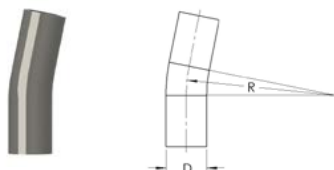
Product availability varies by region and minimum run quantities may apply
 Listed to UL 651

PVC Elbows & Sweeps

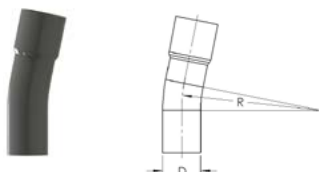
Schedule 80 Standard Radius Elbows

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11 1/4° Plain End



11 1/4° Bell End



Part Number		Trade Size	Dimensions (in)		Package Quantity
Plain End	Bell End		Average Outside Diameter, D	Radius, R	
11 1/4°					
F8007511P	F8007511	¾	1.050	4.50	25
F8010011P	F8010011	1	1.315	5.75	25
F8012511P	F8012511	1¼	1.660	7.25	25
F8015011P	F8015011	1½	1.900	8.25	25
F8020011P	F8020011	2	2.375	9.50	25
F8025011P	F8025011	2½	2.875	10.50	20
F8030011P	F8030011	3	3.500	13.00	50
F8035011P	F8035011	3½	4.000	15.00	25
F8040011P	F8040011	4	4.500	16.00	25
F8050011P	F8050011	5	5.563	24.00	20
F8060011P	F8060011	6	6.625	30.00	16

Product availability varies by region and minimum run quantities may apply
Listed to UL 651

PVC Elbows & Sweeps

Schedule 80 Special Radius Elbows

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Part Number			Trade Size	Package Quantity
24" Radius	36" Radius	48" Radius		
Plain End 90°				
F802009024P	F802009036P	F802009048P	2	50
F802509024P	F802509036P	F802509048P	2½	50
F803009024P	F803009036P	F803009048P	3	50
F804009024P	F804009036P	F804009048P	4	25
F8050090P	F805009036P	F805009048P	5	20
—	F806009036P	F806009048P	6	16
Plain End 45°				
F802004524P	F802004536P	F802004548P	2	50
F802504524P	F802504536P	F802504548P	2½	50
F803004524P	F803004536P	F803004548P	3	50
F804004524P	F804004536P	F804004548P	4	25
F8050045P	F805004536P	F805004548P	5	20
—	F806004536P	F806004548P	6	16
Bell End 90°				
F802009024	F802009036	F802009048	2	50
F802509024	F802509036	F802509048	2½	50
F803009024	F803009036	F803009048	3	50
F804009024	F804009036	F804009048	4	25
F8050090	F805009036	F805009048	5	20
—	F806009036	F806009048	6	16
Bell End 45°				
F802004524	F802004536	F802004548	2	50
F802504524	F802504536	F802504548	2½	50
F803004524	F803004536	F803004548	3	50
F804004524	F804004536	F804004548	4	25
F8050045	F805004536	F805004548	5	20
—	F806004536	F806004548	6	16

Call for availability on 30°, 22 ½° & 11¼° special radius elbows
Product availability varies by region and minimum run quantities may apply
Listed to UL 651

PVC Elbows & Sweeps

Utility/C-Duct Special Radius Elbows

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Utility Duct

Part Number				Trade Size	Package Quantity
24" Radius	36" Radius	48" Radius	60" Radius		
90°					
F121009024	F121009036	F121009048	F121009060	1	25
F122009024	F122009036	F122009048	F122009060	2	50
F123009024	F123009036	F123009048	F123009060	3	50
F124009024	F124009036	F124009048	F124009060	4	25
F125009024	F125009036	F125009048	F125009060	5	20
—	F126009036	F126009048	F126009060	6	16
45°					
F121004524	F121004536	F121004548	F121004560	1	25
F122004524	F122004536	F122004548	F122004560	2	50
F123004524	F123004536	F123004548	F123004560	3	50
F124004524	F124004536	F124004548	F124004560	4	25
F125004524	F125004536	F125004548	F125004560	5	20
—	F126004536	F126004548	F126004560	6	16
22 1/2°					
F121002224	F121002236	F121002248	F121002260	1	25
F122002224	F122002236	F122002248	F122002260	2	50
F123002224	F123002236	F123002248	F123002260	3	50
F124002224	F124002236	F124002248	F124002260	4	25
F125002224	F125002236	F125002248	F125002260	5	20
—	F126002236	F126002248	F126002260	6	16

Sweeps made from DB120, but can be used with any EB or DB duct

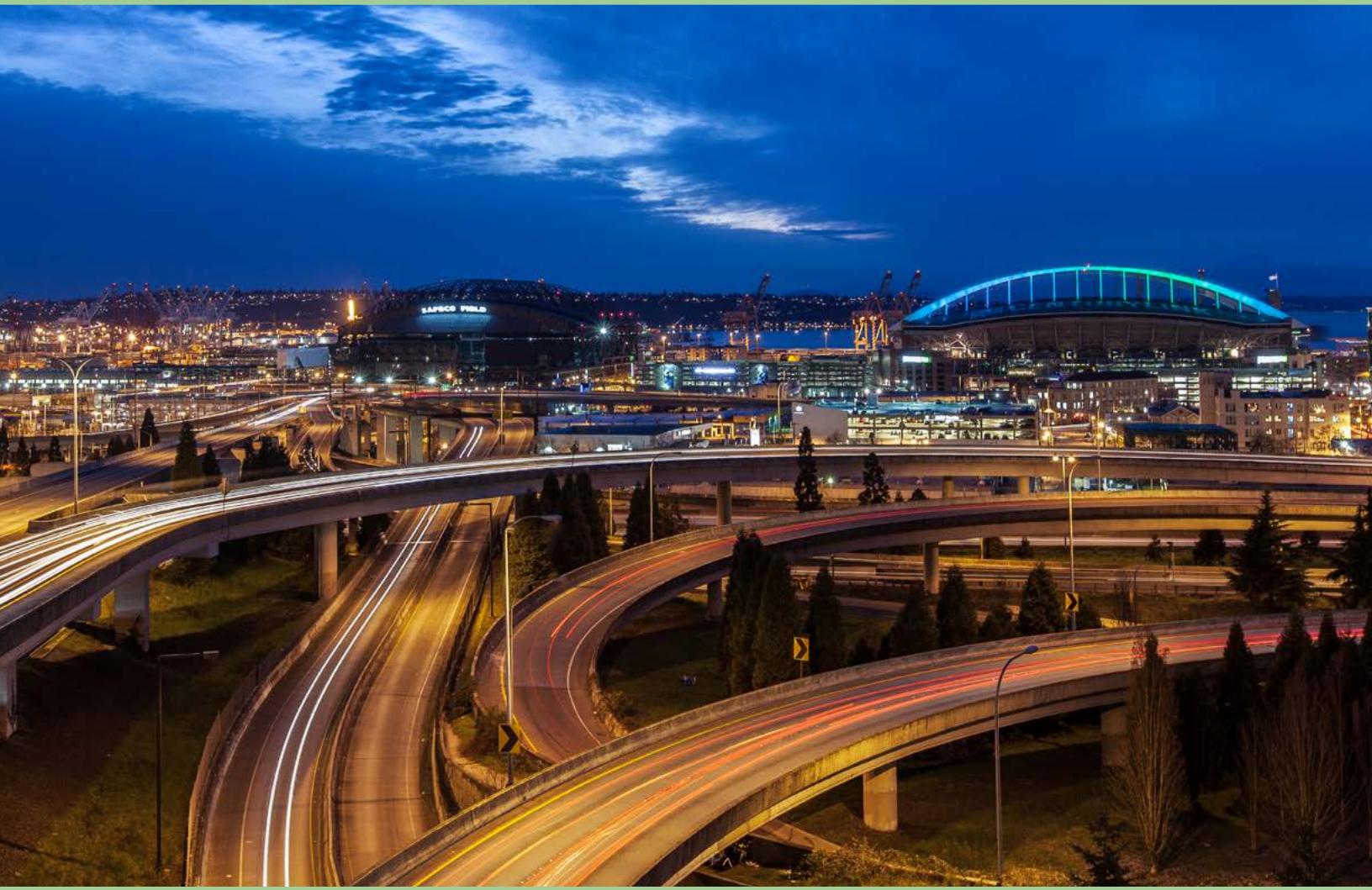
4" C-Duct

Part Number				Degree	Package Quantity
24" Radius	36" Radius	48" Radius	60" Radius		
F904001124	F904001136	F904001148	F904001160	11¼°	25
F904002224	F904002236	F904002248	F904002260	22½°	25
F904004524	F904004536	F904004548	F904004560	45°	25
F904009024	F904009036	F904009048	F904009060	90°	25

If you don't see the product you require, please call for availability
Product availability varies by region and minimum run quantities may apply



FITTINGS



Allied Tube & Conduit

FRE Composites

Heritage Plastics

Queen City Plastics

Fittings - Table of Contents

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[Fiberglass Fittings](#)
[PVC Fittings](#)



FIBERGLASS FITTINGS

[FRE Composites](#)

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Fiberglass Fittings Product Codes

Epoxy System

Introduction

IPS (Iron Pipe Size) Series

IPS SW Double Bell Coupling

IPS SW 5° Double Bell Coupling

IPS SW Sleeve (Repair Fitting)

IPS SW Single Expansion Joint

IPS SW O-Ring Expansion Joint

IPS SW Double O-Ring Expansion Joint

IPS SW O-Ring Expansion/Deflection Joint

IPS SW Wobble (for up to 3° Curvature)

IPS SW Skew Wobble (for up to 7.5° Curvature)

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Table of Contents (continued)

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Epoxy System (continued)

- IPS SW NPT Female Threaded Adapter
- IPS SW NPT Male Threaded Adapter
- IPS SW Box Connector
- IPS SW Split Stop Ring
- IPS SW Reducer
- IPS SW 11.25° Fitting
- IPS SW Riserway
- IPS SW Poleriser
- IPS SW Extended Poleriser
- IPS SW Offset Elbow
- IPS SW Radius Bell End
- IPS SW Conduit Bodies
- IPS HW Double Bell Coupling
- IPS HW 5° Double Bell Coupling
- IPS HW Sleeve (Repair Fitting)
- IPS HW Single Expansion Joint
- IPS HW O-Ring Expansion Joint
- IPS HW Double O-Ring Expansion Joint
- IPS HW O-Ring Expansion/Deflection Joint
- IPS HW Wobble (for up to 3° Curvature)
- IPS HW Skew Wobble (for up to 7.5° Curvature)
- IPS HW NPT Female Threaded Adapter
- IPS HW NPT Male Threaded Adapter
- IPS HW Box Connector
- IPS HW Split Stop Ring
- IPS HW Reducer
- IPS HW 11.25° Fitting
- IPS HW Radius Bell End
- ID (Inside Diameter) Series
 - ID SW Double Bell Coupling
 - ID SW 5° Double Bell Coupling
 - ID SW Sleeve (Repair Fitting)
 - ID SW Single Expansion Joint
 - ID SW O-Ring Expansion Joint
 - ID SW Double O-Ring Expansion Joint
 - ID SW O-Ring Expansion/Deflection Joint
 - ID SW Wobble (for up to 3° Curvature)
 - ID SW Skew Wobble (for up to 7.5° Curvature)
 - ID SW NPT Female Threaded Adapter
 - ID SW NPT Male Threaded Adapter
 - ID SW Multifit Adapter
 - ID SW Box Connector
 - ID SW Split Stop Ring

Table of Contents (continued)

↓ [Click below to view product section](#)

Epoxy System (continued)

- ID SW Reducer
- ID SW 11.25° Fitting
- ID SW “Y” Fitting
- ID SW “Y” Elbow
- ID SW Riserway
- ID SW Poleriser
- ID SW Extended Poleriser
- ID SW Offset Elbow
- ID SW Radius Bell End
- ID SW Conduit Bodies
- ID HW Double Bell Coupling
- ID HW 5° Double Bell Coupling
- ID HW Sleeve (Repair Fitting)
- ID HW Single Expansion Joint
- ID HW O-Ring Expansion Joint
- ID HW Double O-Ring Expansion Joint
- ID HW O-Ring Expansion/Deflection Joint
- ID HW Wobble (for up to 3° Curvature)
- ID HW Skew Wobble (for up to 7.5° Curvature)
- ID HW NPT Female Threaded Adapter
- ID HW NPT Male Threaded Adapter
- ID HW Multifit Adapter
- ID HW Box Connector
- ID HW Split Stop Ring
- ID HW Reducer
- ID HW 11.25° Fitting
- ID HW Radius Bell End
- Accessories
 - IPS Thermoplastic Plug
 - ID Thermoplastic Plug
 - Thermoplastic T-Strip
 - Thermoplastic H-Strip
 - Base & Intermediate Spacers
 - Cap Lock
 - Splice and Repair Kit
 - Adhesive Kit
 - Joint Calculation Table
 - Mixer Tip

Table of Contents (continued)

↓ [Click below to view product section](#)

Extra Heavy Wall Epoxy System (HazGuard®)

Introduction

IPS (Iron Pipe Size) Series

- IPS XW Double Bell Coupling
- IPS XW 5° Double Bell Coupling
- IPS XW Sleeve (Repair Fitting)
- IPS XW Single Expansion Joint
- IPS XW O-Ring Expansion Joint
- IPS XW Double O-Ring Expansion Joint
- IPS XW O-Ring Expansion/Deflection Joint
- IPS XW Wobble (for up to 3° Curvature)
- IPS XW Skew Wobble (for up to 7.5° Curvature)
- IPS XW NPT Female Threaded Adapter
- IPS XW NPT Male Threaded Adapter
- IPS XW Box Connector
- IPS XW Split Stop Ring
- IPS XW Reducer
- IPS XW 11.25° Fitting
- IPS XW Offset Elbow
- IPS XW Radius Bell End
- IPS XW Conduit Bodies

ID (Inside Diameter) Series

- ID XW Double Bell Coupling
- ID XW 5° Double Bell Coupling
- ID XW Sleeve (Repair Fitting)
- ID XW Single Expansion Joint
- ID XW O-Ring Expansion Joint
- ID XW Double O-Ring Expansion Joint
- ID XW O-Ring Expansion/Deflection Joint
- ID XW Wobble (for up to 3° Curvature)
- ID XW Skew Wobble (for up to 7.5° Curvature)
- ID XW NPT Female Threaded Adapter
- ID XW NPT Male Threaded Adapter
- ID XW Multifit Adapter
- ID XW Box Connector
- ID XW Split Stop Ring
- ID XW Reducer
- ID XW 11.25° Fitting
- ID XW Offset Elbow
- ID XW Radius Bell End
- ID XW Conduit Bodies

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↓ Click below to view product section

Extra Heavy Wall Epoxy System (HazGuard®) (continued)

Accessories

- Splice and Repair Kit
- Adhesive Kit
- Joint Calculation Table
- Mixer Tip

Phenolic System (BreathSaver®)

Introduction

IPS (Iron Pipe Size) Series

- IPS XW Double Bell Coupling
- IPS XW 5° Double Bell Coupling
- IPS XW Sleeve (Repair Fitting)
- IPS XW O-Ring Expansion Joint
- IPS XW Double O-Ring Expansion Joint
- IPS XW NPT Female Threaded Adapter
- IPS XW NPSM Female Threaded Adapter-EMT
- IPS XW NPT Male Threaded Adapter
- IPS XW Box Connector
- IPS XW Split Stop Ring
- IPS XW Reducer
- IPS XW 11.25° Fitting
- IPS XW Offset Elbow
- IPS XW Radius Bell End
- IPS XW Conduit Bodies

ID (Inside Diameter) Series

- ID XW Double Bell Coupling
- ID XW 5° Double Bell Coupling
- ID XW Sleeve (Repair Fitting)
- ID XW O-Ring Expansion Joint
- ID XW Double O-Ring Expansion Joint
- ID XW NPT Female Threaded Adapter
- ID XW NPSM Female Threaded Adapter-EMT
- ID XW NPT Male Threaded Adapter
- ID XW Multifit Adapter
- ID XW Box Connector
- ID XW Split Stop Ring
- ID XW Reducer
- ID XW 11.25° Fitting
- ID XW Offset Elbow
- ID XW Radius Bell End
- ID XW Conduit Bodies

Table of Contents (continued)

↓ Click below to view product section

Phenolic System (BreathSaver®) (continued)

Accessories

Adhesive Kit

Joint Calculation Table

Mixer Tip

Fiberglass Fittings Product Codes

Family	Product Name	Information with or without TriSeal®	Wall Thickness			
			Thin Wall TW	Standard Wall SW	Heavy Wall HW	Extra Heavy Wall XW
Epoxy System FRE® IPS	—	With TriSeal®	11-	10-	12-	—
Epoxy System FRE® ID	—	With TriSeal®	21-	20-	22-	—
Epoxy System FRE® IPS	HazGuard®	No TriSeal®	—	—	—	14-
Epoxy System FRE® ID	HazGuard®	No TriSeal®	—	—	—	24-
Phenolic System IPS	BreathSaver®	No TriSeal®	—	70-	—	74-
Phenolic System ID	BreathSaver®	No TriSeal®	—	80-	—	84-



FRE® Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 3/4" to 6" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral tapered bell and spigot end or use molded urethane push-fit TriSeal®
- Full interchangeability with existing metallic and non-metallic raceways
- Direct burial and encased burial applications

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Conduit is offered in 10' or 20' sections
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Will retain its shape after compression or impact
- Operation temperature -40°F to 230°F
- Low coefficient of friction in longer cable pulls
- Easy to install

Materials:

- Conduit, elbows and fittings shall be manufactured with continuous E or E-CR glass roving encapsulated in an internally steam cured, corrosion resistant epoxy resin system with UV inhibiting carbon black pigment dispersed homogeneously

Product Applications:

- The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Above ground and below ground applications

Relevant Certifications:

- ANSI/UL2420 (BG), ANSI/UL2515 (AG), CSA22.2 No. 2420 (BG), CSA22.2 No. 2515 (AG), NEMA TC 147



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

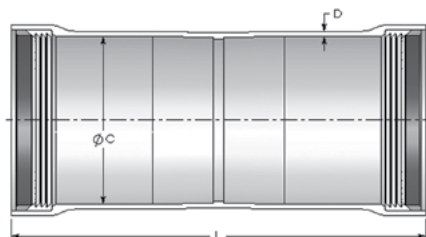
Among the different types of conduit available on the market, RTRC offers the best anti-corrosion properties, offering low installation costs and the possibility of adapting the product to specific requirements and applications.

Epoxy System · IPS Series

IPS SW Double Bell Coupling

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[FRE Composites](#)



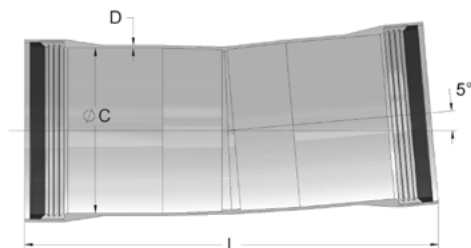
Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
¾	21	10-7510	1.086	0.066	9.750
1	27	10-1010	1.351	0.066	9.750
1¼	35	10-1210	1.698	0.066	9.750
1½	41	10-1510	1.938	0.066	9.750
2	53	10-2010	2.417	0.070	10.250
2½	63	10-2510	2.932	0.070	10.250
3	78	10-3010	3.542	0.070	10.250
4	103	10-4010	4.542	0.070	10.250
5	129	10-5010	5.610	0.095	10.250
6	155	10-6010	6.669	0.110	10.250
8*	203	10-8010	8.667	0.115	10.250

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS SW 5° Double Bell Coupling

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[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
¾	21	10-7511	1.086	0.066	9.7
1	27	10-1011	1.351	0.066	9.7
1¼	35	10-1211	1.698	0.066	9.8
1½	41	10-1511	1.938	0.066	9.8
2	53	10-2011	2.417	0.070	10.3
2½	63	10-2511	2.932	0.070	10.4
3	78	10-3011	3.542	0.070	10.4
4	103	10-4011	4.542	0.070	10.5
5	129	10-5011	5.610	0.095	10.6
6	155	10-6011	6.669	0.110	10.7
8*	203	10-8011	8.667	0.115	10.9

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System · IPS Series

IPS SW Sleeve (Repair Fitting)

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[FRE Composites](#)



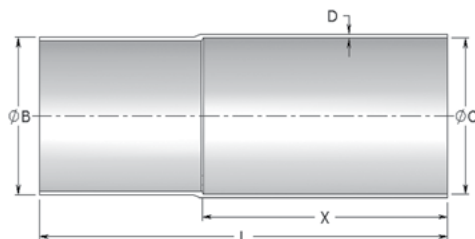
Size		Part Number	ØC	D	L
(in)	(mm)				
¾	21	10-7516	1.086	0.066	12
1	27	10-1016	1.351	0.066	12
1¼	35	10-1216	1.698	0.066	12
1½	41	10-1516	1.938	0.066	12
2	53	10-2016	2.417	0.070	12
2½	63	10-2516	2.932	0.070	12
3	78	10-3016	3.542	0.070	12
4	103	10-4016	4.542	0.070	12
5	129	10-5016	5.610	0.095	12
6	155	10-6016	6.669	0.110	12
8*	203	10-8016	8.667	0.115	12

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS SW Single Expansion Joint

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[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L
(in)	(mm)					
¾	21	10-7512	1.050	1.086	0.066	20
1	27	10-1012	1.315	1.351	0.066	20
1¼	35	10-1212	1.660	1.698	0.066	20
1½	41	10-1512	1.900	1.938	0.066	20
2	53	10-2012	2.375	2.417	0.070	20
2½	63	10-2512	2.890	2.932	0.070	20
3	78	10-3012	3.500	3.542	0.070	20
4	103	10-4012	4.500	4.542	0.070	20
5	129	10-5012	5.563	5.610	0.095	20
6	155	10-6012	6.625	6.669	0.110	20
8*	203	10-8012	8.623	8.667	0.115	20

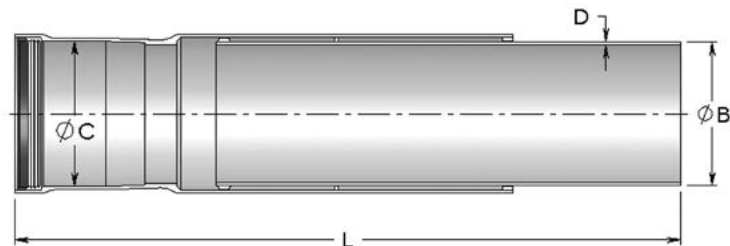
* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System · IPS Series

IPS SW O-Ring Expansion Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)						
¾	21	10-7517	1.050	1.086	0.066	24	36
1	27	10-1017	1.315	1.351	0.066	24	36
1¼	35	10-1217	1.660	1.698	0.066	24	36
1½	41	10-1517	1.900	1.938	0.066	24	36
2	53	10-2017	2.375	2.417	0.070	24	36
2½	63	10-2517	2.890	2.932	0.070	24	36
3	78	10-3017	3.500	3.542	0.070	24	36
4	103	10-4017	4.500	4.542	0.070	24	36
5	129	10-5017	5.563	5.610	0.095	24	36
6	155	10-6017	6.625	6.669	0.110	24	36
8*	203	10-8017	8.623	8.667	0.115	24	36

*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS SW Double O-Ring Expansion Joint

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[FRE Composites](#)



Size		Part Number	Ø B	Ø C	D	L MIN	L MAX
(in)	(mm)						
¾	21	10-7567	1.050	1.086	0.066	48	72
1	27	10-1067	1.315	1.351	0.066	48	72
1¼	35	10-1267	1.660	1.698	0.066	48	72
1½	41	10-1567	1.900	1.938	0.066	48	72
2	53	10-2067	2.375	2.417	0.070	48	72
2½	63	10-2567	2.890	2.932	0.070	48	72
3	78	10-3067	3.500	3.542	0.070	48	72
4	103	10-4067	4.500	4.542	0.070	48	72
5	129	10-5067	5.563	5.610	0.095	48	72
6	155	10-6067	6.625	6.669	0.110	48	72
8*	203	10-8067	8.623	8.667	0.115	48	72

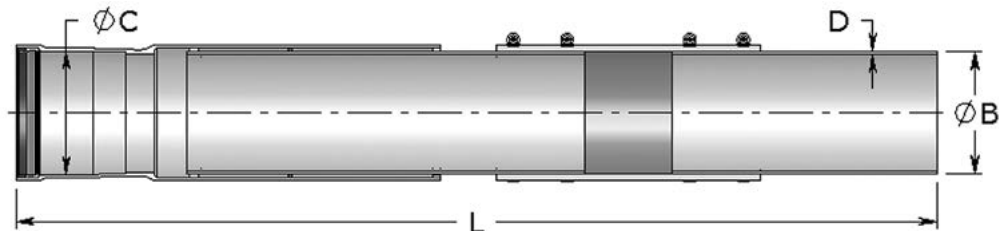
*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System · IPS Series

IPS SW O-Ring Expansion/Deflection Joint

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[FRE Composites](#)



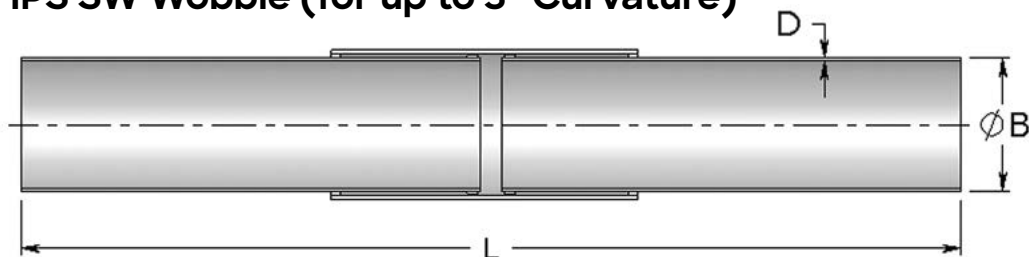
Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)						
¾	21	10-7557	1.050	1.086	0.066	40	52
1	27	10-1057	1.315	1.351	0.066	40	52
1¼	35	10-1257	1.660	1.698	0.066	40	52
1½	41	10-1557	1.900	1.938	0.066	40	52
2	53	10-2057	2.375	2.417	0.070	40	52
2½	63	10-2557	2.890	2.932	0.070	40	52
3	78	10-3057	3.500	3.542	0.070	40	52
4	103	10-4057	4.500	4.542	0.070	40	52
5	129	10-5057	5.563	5.610	0.095	40	52
6	155	10-6057	6.625	6.669	0.110	40	52
8*	203	10-8057	8.623	8.667	0.115	40	52

*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

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IPS SW Wobble (for up to 3° Curvature)

[FRE Composites](#)



Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)					
¾	21	10-7513	1.050	0.066	36	46
1	27	10-1013	1.315	0.066	36	46
1¼	35	10-1213	1.660	0.066	36	46
1½	41	10-1513	1.900	0.066	36	46
2	53	10-2013	2.375	0.070	36	46
2½	63	10-2513	2.890	0.070	36	46
3	78	10-3013	3.500	0.070	36	46
4	103	10-4013	4.500	0.070	36	46
5	129	10-5013	5.563	0.095	36	46
6	155	10-6013	6.625	0.110	36	46
8*	203	10-8013	8.623	0.115	36	46

*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

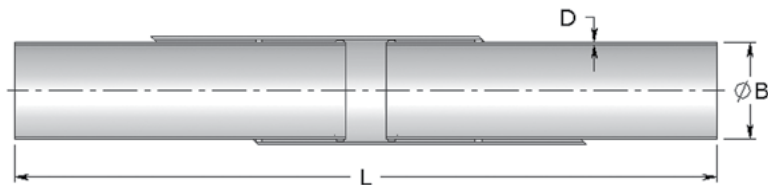
Note: Fitting is non-watertight

Epoxy System · IPS Series

IPS SW Skew Wobble (for up to 7.5° Curvature)

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[FRE Composites](#)



Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)					
¾	21	10-7514	1.050	0.066	48	56
1	27	10-1014	1.315	0.066	48	56
1¼	35	10-1214	1.660	0.066	48	56
1½	41	10-1514	1.900	0.066	48	56
2	53	10-2014	2.375	0.070	48	56
2½	63	10-2514	2.890	0.070	48	56
3	78	10-3014	3.500	0.070	48	56
4	103	10-4014	4.500	0.070	48	56
5	129	10-5014	5.563	0.095	48	56
6	155	10-6014	6.625	0.110	48	56
8*	203	10-8014	8.623	0.115	48	56

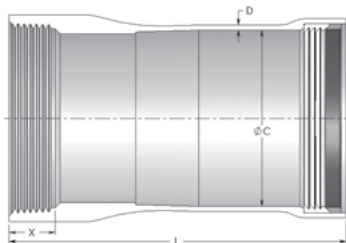
*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Note: Fitting is non-watertight

IPS SW NPT Female Threaded Adapter

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØC	D	L	X
(in)	(mm)					
¾	21	10-7544	1.086	0.066	6.75	0.553
1	27	10-1044	1.351	0.066	6.75	0.661
1¼	35	10-1244	1.698	0.066	6.75	0.681
1½	41	10-1544	1.938	0.066	6.75	0.681
2	53	10-2044	2.417	0.070	8.00	0.697
2½	63	10-2544	2.932	0.070	8.00	0.932
3	78	10-3044	3.542	0.070	8.00	1.016
4	103	10-4044	4.542	0.070	8.00	1.094
5	129	10-5044	5.610	0.095	8.00	1.187
6	155	10-6044	6.669	0.110	8.00	1.208
8*	203	10-8044	8.667	0.115	8.00	1.313

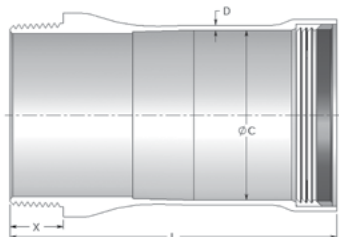
*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System · IPS Series

IPS SW NPT Male Threaded Adapter

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[FRE Composites](#)



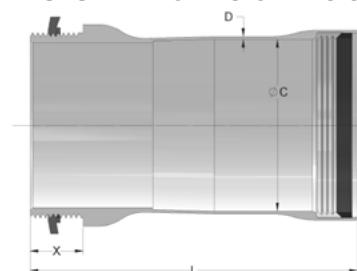
Size		Part Number	ØC	D	L	X
(in)	(mm)		(in)			
¾	21	10-7527	1.086	0.066	6.75	0.546
1	27	10-1027	1.351	0.066	6.75	0.683
1¼	35	10-1227	1.698	0.066	6.75	0.707
1½	41	10-1527	1.938	0.066	6.75	0.724
2	53	10-2027	2.417	0.070	8.00	0.757
2½	63	10-2527	2.932	0.070	8.00	1.138
3	78	10-3027	3.542	0.070	8.00	1.200
4	103	10-4027	4.542	0.070	8.00	1.300
5	129	10-5027	5.610	0.095	8.00	1.406
6	155	10-6027	6.669	0.110	8.00	1.513
8*	203	10-8027	8.667	0.115	8.00	1.713

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

[Click brand for more product info](#) ↓

[FRE Composites](#)

IPS SW Box Connector



Size		Part Number	ØC	D	L	X
(in)	(mm)		(in)			
¾	21	10-7547	1.086	0.066	6.75	0.546
1	27	10-1047	1.351	0.066	6.75	0.683
1¼	35	10-1247	1.698	0.066	6.75	0.707
1½	41	10-1547	1.938	0.066	6.75	0.724
2	53	10-2047	2.417	0.070	8.00	0.757
2½	63	10-2547	2.932	0.070	8.00	1.138
3	78	10-3047	3.542	0.070	8.00	1.200
4	103	10-4047	4.542	0.070	8.00	1.300
5	129	10-5047	5.610	0.095	8.00	1.406
6	155	10-6047	6.669	0.110	8.00	1.513
8*	203	10-8047	8.667	0.115	8.00	1.713

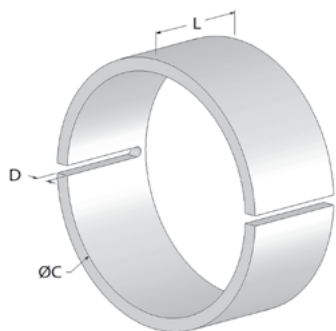
* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Epoxy System · IPS Series

IPS SW Split Stop Ring

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[FRE Composites](#)



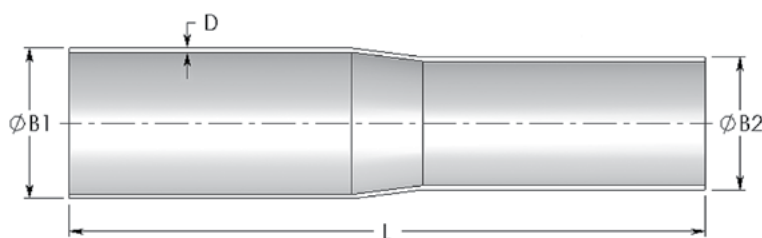
Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
¾	21	10-7564	1.086	0.185	2.0
1	27	10-1064	1.351	0.185	2.0
1¼	35	10-1264	1.698	0.185	2.0
1½	41	10-1564	1.938	0.185	2.0
2	53	10-2064	2.417	0.185	2.0
2½	63	10-2564	2.890	0.185	2.0
3	78	10-3064	3.542	0.185	2.0
4	103	10-4064	4.542	0.185	2.0
5	129	10-5064	5.610	0.185	2.0
6	155	10-6064	6.669	0.185	2.0
8*	203	10-8064	8.667	0.185	2.0

*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS SW Reducer

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[FRE Composites](#)



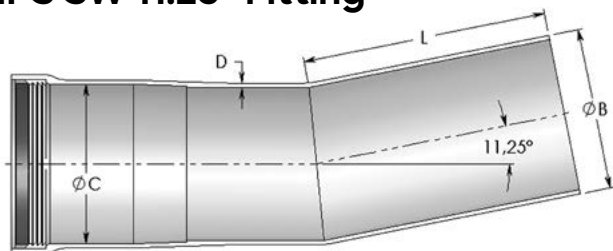
Size		Part Number	Ø B1	Ø B2	D	L
(in)	(mm)		(in)			
1	27	10-1029	1.315	1.050	0.066	18
1¼	35	10-1229	1.660	1.315	0.066	18
1½	41	10-1529	1.900	1.660	0.066	18
2	53	10-2029	2.375	1.900	0.070	18
2½	63	10-2529	2.890	2.375	0.070	18
3	78	10-3029	3.500	2.890	0.070	18
4	103	10-4029	4.500	3.500	0.070	18
5	129	10-5029	5.563	4.500	0.095	18
6	155	10-6029	6.625	5.563	0.110	18

Epoxy System · IPS Series

IPS SW 11.25° Fitting

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[FRE Composites](#)



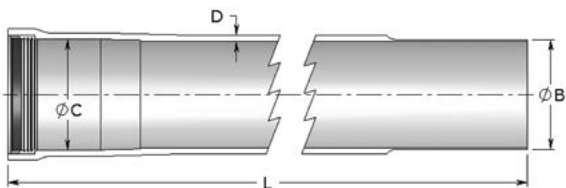
Size		Part Number	ØB	ØC	D	L
(in)	(mm)					
¾	21	10-7535	1.050	1.086	0.066	7.0
1	27	10-1035	1.315	1.351	0.066	7.0
1¼	35	10-1235	1.660	1.698	0.066	7.0
1½	41	10-1535	1.900	1.938	0.066	7.0
2	53	10-2035	2.375	2.417	0.070	7.0
2½	63	10-2535	2.890	2.932	0.070	7.0
3	78	10-3035	3.500	3.542	0.070	7.0
4	103	10-4035	4.500	4.542	0.070	7.0
5	129	10-5035	5.563	5.610	0.095	7.0
6	155	10-6035	6.625	6.669	0.110	7.0
8*	203	10-8035	8.623	8.667	0.115	7.0

*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS SW Riserway

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product info ↓

[FRE Composites](#)

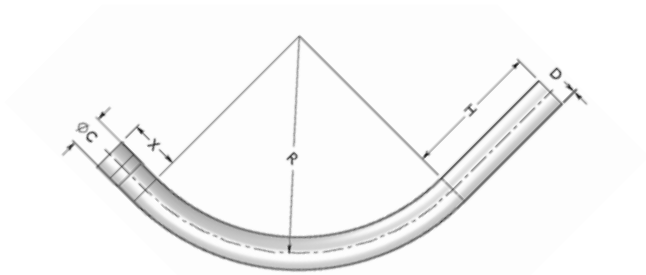


Size		Part Number	ØB	ØC	D	L
(in)	(mm)					
2	53	10-2440	2.375	2.417	0.235	118
3	78	10-3440	3.500	3.542	0.235	118
4	103	10-4440	4.500	4.542	0.235	118
6	155	10-6440	6.500	6.669	0.235	118

Epoxy System · IPS Series

IPS SW Poleriser

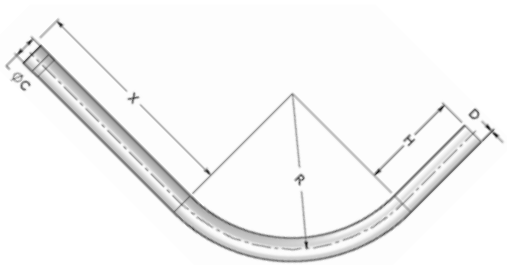
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[FRE Composites](#)



Size		Part Number	ØC	D	R	H	X
(in)	(mm)		(in)				
2	53	10-2038	2.417	0.130	30	19	8
3	78	10-3038	3.542	0.130	30	19	8
4	103	10-4038	4.542	0.130	30	19	8

IPS SW Extended Poleriser

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[FRE Composites](#)

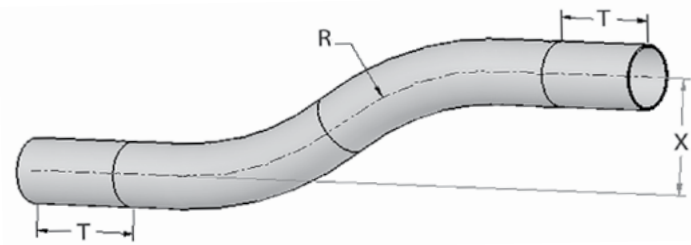


Size		Part Number	ØC	D	R	H	X
(in)	(mm)		(in)				
2	53	10-2039	2.417	0.130	30	19	42
3	78	10-3039	3.542	0.130	30	19	42
4	103	10-4039	4.542	0.130	30	19	42

Epoxy System · IPS Series

IPS SW Offset Elbow

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[FRE Composites](#)

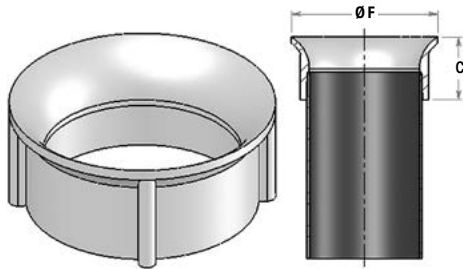


Size		Part Number
(in)	(mm)	
ALL	ALL	

Please contact our local agent for quotes and feasibility.

IPS SW Radius Bell End

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[FRE Composites](#)



Size		Part Number	C	Ø F
(in)	(mm)		(in)	
¾	21	10-7518	1.7	1.918
1	27	10-1018	1.7	2.183
1¼	35	10-1218	1.7	2.528
1½	41	10-1518	1.7	2.768
2	53	10-2018	1.7	3.235
2½	63	10-2518	1.7	3.750
3	78	10-3018	1.7	4.360
4	103	10-4018	2.162	5.360
5	129	10-5018	2.162	6.373
6	155	10-6018	2.416	7.405
8	203	10-8018	2.416	9.393

Epoxy System · IPS Series

IPS SW Conduit Bodies

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product info ↓

[FRE Composites](#)

Size		Part Number			Length	Width	Depth
(in)	(mm)				(in)		
¾	21	LB	10-7591		7.60	2.75	3.88
1	27		10-1091		7.60	2.75	3.88
1¼	35		10-1291		9.55	3.84	4.63
1½	41		10-1591		9.55	3.84	4.63
2	53		10-2091		11.63	4.38	5.47
¾	21	LL	10-7592		7.60	4.19	2.38
1	27		10-1092		7.60	4.19	2.38
1¼	35		10-1292		9.55	5.31	3.13
1½	41		10-1592		9.55	5.31	3.13
2	53		10-2092		11.63	6.09	3.59
¾	21	LR	10-7593		7.60	4.19	2.38
1	27		10-1093		7.60	4.19	2.38
1¼	35		10-1293		9.55	5.31	3.13
1½	41		10-1593		9.55	5.31	3.13
2	53		10-2093		11.63	6.09	3.59
¾	21	T	10-7594		9.00	4.19	2.38
1	27		10-1094		9.00	4.19	2.38
1¼	35		10-1294		11.00	5.31	3.13
1½	41		10-1594		11.00	5.31	3.13
2	53		10-2094		13.40	6.09	3.59
¾	21	C	10-7595		9.00	2.75	2.38
1	27		10-1095		9.00	2.75	2.38
1¼	35		10-1295		11.00	3.84	3.13
1½	41		10-1595		11.00	3.84	3.13
2	53		10-2095		13.40	4.38	3.59
¾	21	TB	10-7596		9.00	2.75	3.88
1	27		10-1096		9.00	2.75	3.88
1¼	35		10-1296		11.00	3.84	4.63
1½	41		10-1596		11.00	3.84	4.63
2	53		10-2096		13.40	4.38	5.47
¾	21	X	10-7597		9.00	5.63	2.38
1	27		10-1097		9.00	5.63	2.38
1¼	35		10-1297		11.00	3.13	6.78
1½	41		10-1597		11.00	3.13	6.78
2	53		10-2097		13.40	7.81	3.59

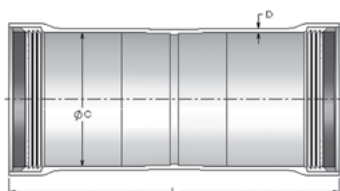
Consult factory for availability

Epoxy System · IPS Series

IPS HW Double Bell Coupling

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[FRE Composites](#)

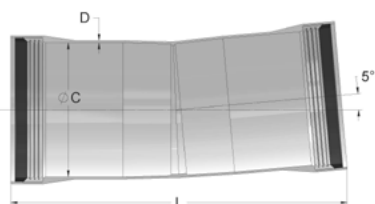


Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	12-4010	4.590	0.095	10.250
5	129	12-5010	5.643	0.115	10.250
6	155	12-6010	6.675	0.115	10.250

IPS HW 5° Double Bell Coupling

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[FRE Composites](#)

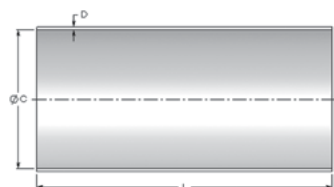


Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	12-4011	4.590	0.095	10.5
5	129	12-5011	5.643	0.115	10.6
6	155	12-6011	6.675	0.115	10.7

IPS HW Sleeve (Repair Fitting)

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[FRE Composites](#)

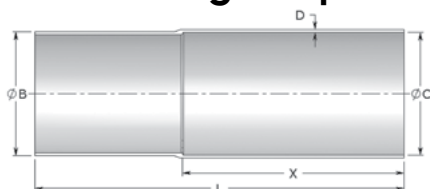


Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	12-4016	4.590	0.095	12
5	129	12-5016	5.643	0.115	12
6	155	12-6016	6.675	0.115	12

IPS HW Single Expansion Joint

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[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L	X
(in)	(mm)						
4	103	12-4012	4.550	4.590	0.095	20	12
5	129	12-5012	5.603	5.643	0.115	20	12
6	155	12-6012	6.635	6.675	0.115	20	12

Note: Fitting is non-watertight

Epoxy System · IPS Series

IPS HW O-Ring Expansion Joint

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[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)						
4	103	12-4017	4.550	4.590	0.095	24	36
5	129	12-5017	5.603	5.643	0.115	24	36
6	155	12-6017	6.635	6.675	0.115	24	36

IPS HW Double O-Ring Expansion Joint

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[FRE Composites](#)

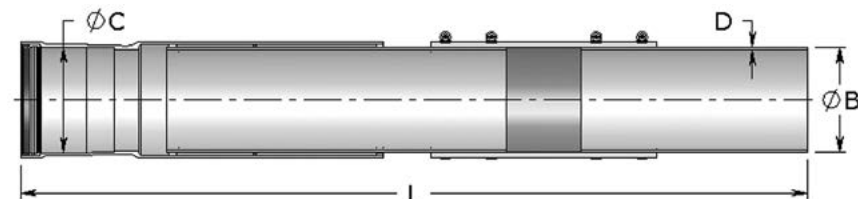


Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)						
4	103	12-4067	4.550	4.590	0.095	48	72
5	129	12-5067	5.603	5.643	0.115	48	72
6	155	12-6067	6.635	6.675	0.115	48	72

IPS HW O-Ring Expansion/Deflection Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)



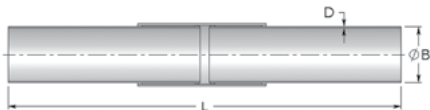
Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)						
4	103	12-4057	4.550	4.590	0.095	40	52
5	129	12-5057	5.603	5.643	0.115	40	52
6	155	12-6057	6.635	6.675	0.115	40	52

Epoxy System · IPS Series

IPS HW Wobble (for up to 3° Curvature)

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[FRE Composites](#)



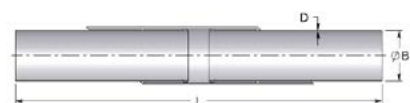
Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)				(in)	
4	103	12-4013	4.550	0.095	36	46
5	129	12-5013	5.603	0.115	36	46
6	155	12-6013	6.635	0.115	36	46

Note: Fitting is non-watertight

IPS HW Skew Wobble (for up to 7.5° Curvature)

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[FRE Composites](#)



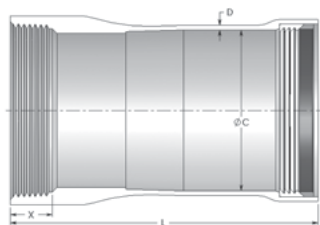
Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)				(in)	
4	103	12-4014	4.550	0.095	48	56
5	129	12-5014	5.603	0.115	48	56
6	155	12-6014	6.635	0.115	48	56

Note: Fitting is non-watertight

IPS HW NPT Female Threaded Adapter

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[FRE Composites](#)

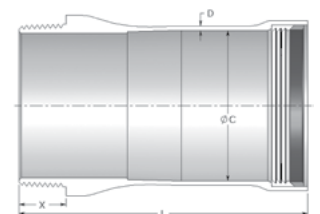


Size		Part Number	ØC	D	L	X
(in)	(mm)				(in)	
4	103	12-4044	4.590	0.095	8	1.094
5	129	12-5044	5.643	0.115	8	1.187
6	155	12-6044	6.675	0.115	8	1.208

IPS HW NPT Male Threaded Adapter

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[FRE Composites](#)



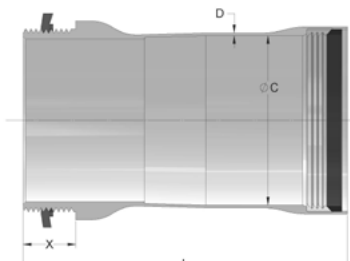
Size		Part Number	ØC	D	L	X
(in)	(mm)				(in)	
4	103	12-4027	4.590	0.095	8	1.300
5	129	12-5027	5.643	0.115	8	1.406
6	155	12-6027	6.675	0.115	8	1.513

Epoxy System · IPS Series

IPS HW Box Connector

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product info ↓

[FRE Composites](#)

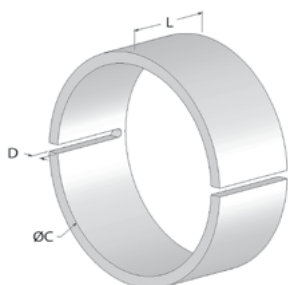


Size		Part Number	ØC	D	L	X
(in)	(mm)					
4	103	12-4047	4.590	0.095	8	1.300
5	129	12-5047	5.643	0.115	8	1.406
6	155	12-6047	6.675	0.115	8	1.513

IPS HW Split Stop Ring

Click brand for more
product info ↓

[FRE Composites](#)

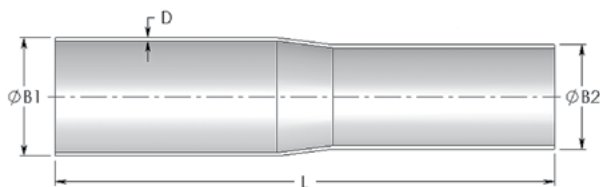


Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	12-4064	4.590	0.185	2
5	129	12-5064	5.643	0.185	2
6	155	12-6064	6.675	0.185	2

IPS HW Reducer

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product info ↓

[FRE Composites](#)



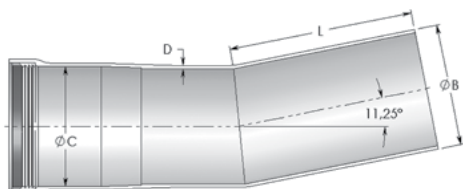
Size		Part Number	ØB1	ØB2	D	L
(in)	(mm)					
4	103	12-4029	4.550	3.550	0.095	18
5	129	12-5029	5.603	4.550	0.115	18
6	155	12-6029	6.635	5.603	0.115	18

Epoxy System · IPS Series

IPS HW 11.25° Fitting

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[FRE Composites](#)

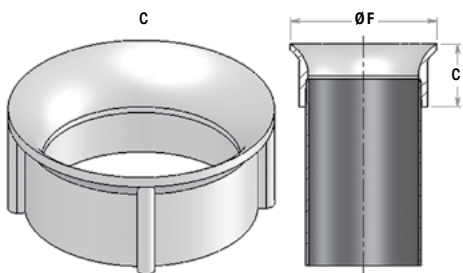


Size		Part Number	ØB	ØC	D	L
(in)	(mm)		(in)			
4	103	12-4035	4.550	4.590	0.095	7
5	129	12-5035	5.603	5.643	0.115	7
6	155	12-6035	6.635	6.675	0.115	7

IPS HW Radius Bell End

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product info ↓

[FRE Composites](#)



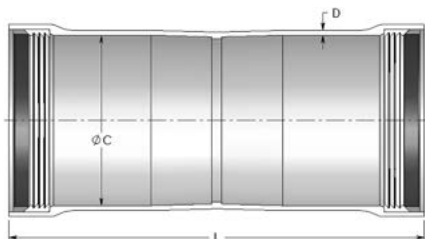
Size		Part Number	C	Ø F
(in)	(mm)		(in)	
4	103	12-4018	2.2	5.4
5	129	12-5018	2.2	6.4
6	155	12-6018	2.4	7.4

Epoxy System · ID Series

ID SW Double Bell Coupling

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[FRE Composites](#)

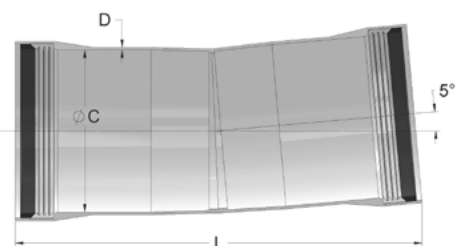


Size		Part Number	ØC	D	L
(in)	(mm)				
2	53	20-2010	2.170	0.070	10.25
2½	63	20-2510	2.670	0.070	10.25
3	78	20-3010	3.170	0.070	10.25
3½	91	20-3510	3.670	0.070	10.25
4	103	20-4010	4.170	0.070	10.25
4½	116	20-4510	4.730	0.095	10.25
5	129	20-5010	5.230	0.095	10.25
6	155	20-6010	6.230	0.095	10.25

ID SW 5° Double Bell Coupling

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[FRE Composites](#)

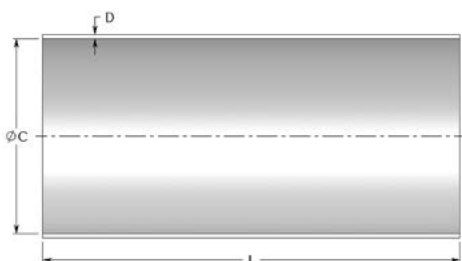


Size		Part Number	ØC	D	L
(in)	(mm)				
2	53	20-2011	2.170	0.070	10.3
2½	63	20-2511	2.670	0.070	10.4
3	78	20-3011	3.170	0.070	10.4
3½	91	20-3511	3.670	0.070	10.4
4	103	20-4011	4.170	0.070	10.5
4½	116	20-4511	4.730	0.095	10.5
5	129	20-5011	5.230	0.095	10.6
6	155	20-6011	6.230	0.095	10.7

ID SW Sleeve (Repair Fitting)

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[FRE Composites](#)



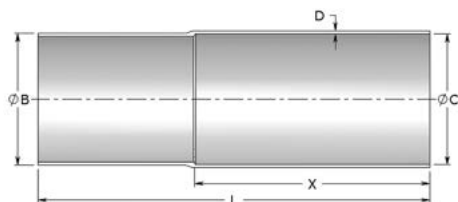
Size		Part Number	ØC	D	L
(in)	(mm)				
2	53	20-2016	2.170	0.070	12
2½	63	20-2516	2.670	0.070	12
3	78	20-3016	3.170	0.070	12
3½	91	20-3516	3.670	0.070	12
4	103	20-4016	4.170	0.070	12
4½	116	20-4516	4.730	0.095	12
5	129	20-5016	5.230	0.095	12
6	155	20-6016	6.230	0.095	12

Epoxy System · ID Series

ID SW Single Expansion Joint

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[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L	X
(in)	(mm)		(in)				
2	53	20-2012	2.140	2.170	0.070	20	12
2½	63	20-2512	2.640	2.670	0.070	20	12
3	78	20-3012	3.140	3.170	0.070	20	12
3½	91	20-3512	3.640	3.670	0.070	20	12
4	103	20-4012	4.140	4.170	0.070	20	12
4½	116	20-4512	4.690	4.730	0.095	20	12
5	129	20-5012	5.190	5.230	0.095	20	12
6	155	20-6012	6.190	6.230	0.095	20	12

Note: Fitting is non-watertight

ID SW O-Ring Expansion Joint

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[FRE Composites](#)



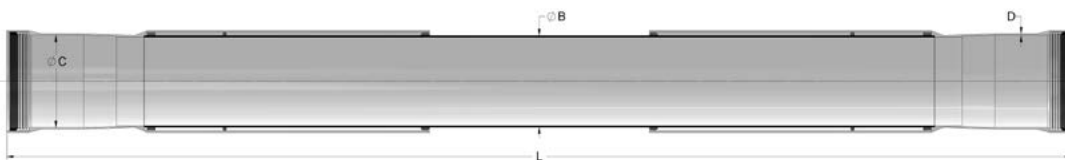
Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)		(in)				
2	53	20-2017	2.140	2.170	0.070	24	36
2½	63	20-2517	2.640	2.670	0.070	24	36
3	78	20-3017	3.140	3.170	0.070	24	36
3½	91	20-3517	3.640	3.670	0.070	24	36
4	103	20-4017	4.140	4.170	0.070	24	36
4½	116	20-4517	4.690	4.730	0.095	24	36
5	129	20-5017	5.190	5.230	0.095	24	36
6	155	20-6017	6.190	6.230	0.095	24	36

Epoxy System · ID Series

ID SW Double O-Ring Expansion Joint

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[FRE Composites](#)

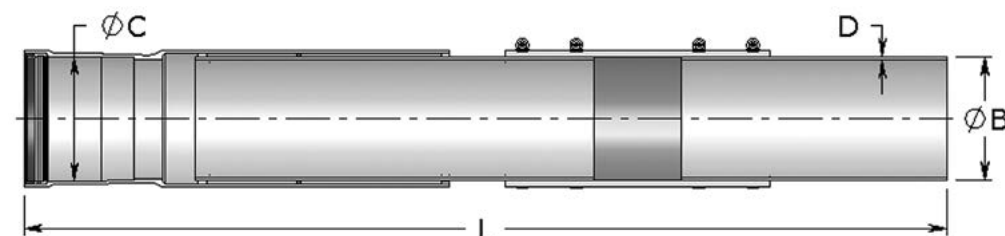


Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)		(in)				
2	53	20-2067	2.140	2.170	0.070	48	72
2½	63	20-2567	2.640	2.670	0.070	48	72
3	78	20-3067	3.140	3.170	0.070	48	72
3½	91	20-3567	3.640	3.670	0.070	48	72
4	103	20-4067	4.140	4.170	0.070	48	72
4½	116	20-4567	4.690	4.730	0.095	48	72
5	129	20-5067	5.190	5.230	0.095	48	72
6	155	20-6067	6.190	6.230	0.095	48	72

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[FRE Composites](#)

ID SW O-Ring Expansion/Deflection Joint



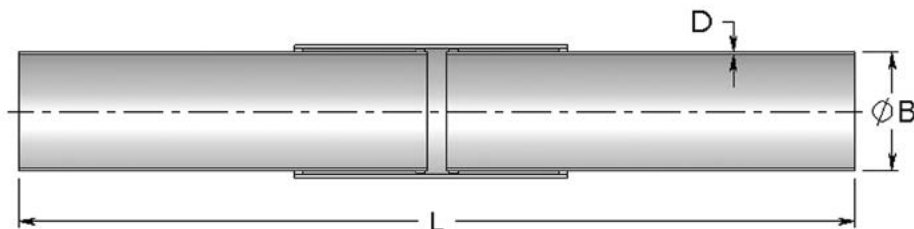
Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)		(in)				
2	53	20-2057	2.140	2.170	0.070	40	52
2½	63	20-2557	2.640	2.670	0.070	40	52
3	78	20-3057	3.140	3.170	0.070	40	52
3½	91	20-3557	3.640	3.670	0.070	40	52
4	103	20-4057	4.140	4.170	0.070	40	52
4½	116	20-4557	4.690	4.730	0.095	40	52
5	129	20-5057	5.190	5.230	0.095	40	52
6	155	20-6057	6.190	6.230	0.095	40	52

Epoxy System · ID Series

ID SW Wobble (for up to 3° Curvature)

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[FRE Composites](#)



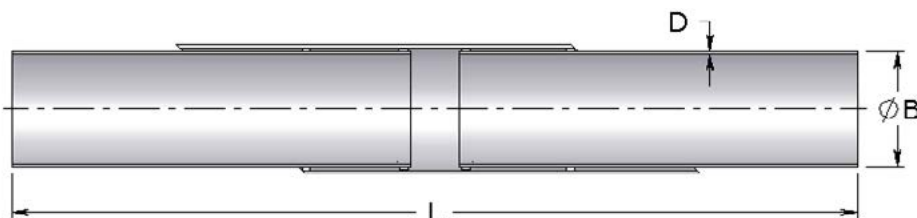
Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)					
2	53	20-2013	2.140	0.070	36	46
2½	63	20-2513	2.640	0.070	36	46
3	78	20-3013	3.140	0.070	36	46
3½	91	20-3513	3.640	0.070	36	46
4	103	20-4013	4.140	0.070	36	46
4½	116	20-4513	4.690	0.095	36	46
5	129	20-5013	5.190	0.095	36	46
6	155	20-6013	6.190	0.095	36	46

Note: Fitting is non-watertight

ID SW Skew Wobble (for up to 7.5° Curvature)

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[FRE Composites](#)



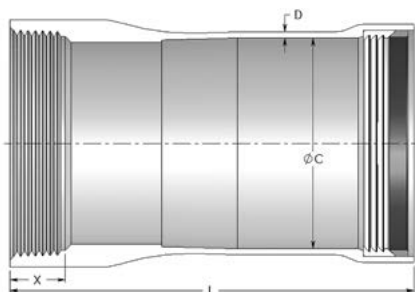
Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)					
2	53	20-2014	2.140	0.070	48	56
2½	63	20-2514	2.640	0.070	48	56
3	78	20-3014	3.140	0.070	48	56
3½	91	20-3514	3.640	0.070	48	56
4	103	20-4014	4.140	0.070	48	56
4½	116	20-4514	4.690	0.095	48	56
5	129	20-5014	5.190	0.095	48	56
6	155	20-6014	6.190	0.095	48	56

Epoxy System · ID Series

ID SW NPT Female Threaded Adapter

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product info ↓

[FRE Composites](#)

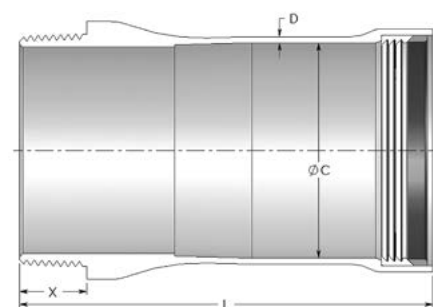


Size		Part Number	C	D	L	X
(in)	(mm)		(in)			
2	53	20-2044	2.170	0.070	8	0.697
2½	63	20-2544	2.670	0.070	8	0.932
3	78	20-3044	3.170	0.070	8	1.016
3½	91	20-3544	3.670	0.070	8	1.071
4	103	20-4044	4.170	0.070	8	1.094
5	129	20-5044	5.230	0.095	8	1.187
6	155	20-6044	6.230	0.095	8	1.208

ID SW NPT Male Threaded Adapter

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[FRE Composites](#)



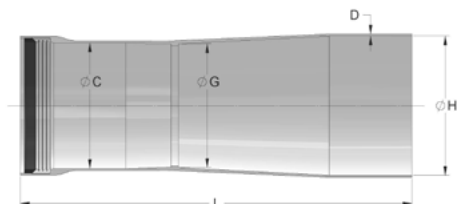
Size		Part Number	C	D	L	X
(in)	(mm)		(in)			
2	53	20-2027	2.170	0.070	8	0.757
2½	63	20-2527	2.670	0.070	8	1.138
3	78	20-3027	3.170	0.070	8	1.200
3½	91	20-3527	3.670	0.070	8	1.250
4	103	20-4027	4.170	0.070	8	1.300
5	129	20-5027	5.230	0.095	8	1.406
6	155	20-6027	6.230	0.095	8	1.513

Epoxy System · ID Series

ID SW Multifit Adapter

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[FRE Composites](#)

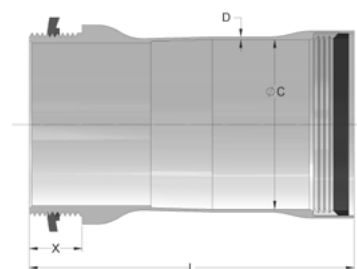


Size		Part Number	ØC	D	ØG	ØH	L
(in)	(mm)		(in)				
2	53	20-2037	2.170	0.070	2.239	2.424	13
2½	63	20-2537	2.670	0.070	2.739	2.924	13
3	78	20-3037	3.170	0.070	3.239	3.549	13
3½	91	20-3537	3.670	0.070	3.709	4.061	13
4	103	20-4037	4.170	0.070	4.109	4.620	13
4½	116	20-4537	4.730	0.095	4.750	4.831	13
5	129	20-5037	5.230	0.095	5.289	5.650	13
6	155	20-6037	6.230	0.095	6.259	6.686	13

ID SW Box Connector

Click brand for more
product info ↓

[FRE Composites](#)



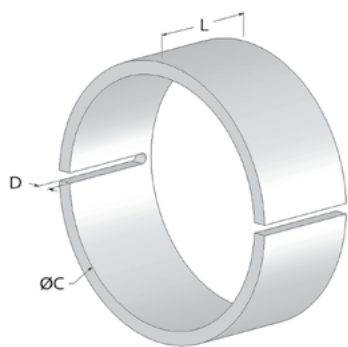
Size		Part Number	C	D	L	X
(in)	(mm)		(in)			
2	53	20-2047	2.170	0.070	8	0.757
2½	63	20-2547	2.670	0.070	8	1.138
3	78	20-3047	3.170	0.070	8	1.200
3½	91	20-3547	3.670	0.070	8	1.250
4	103	20-4047	4.170	0.070	8	1.300
5	129	20-5047	5.230	0.095	8	1.406
6	155	20-6047	6.230	0.095	8	1.513

Epoxy System · ID Series

ID SW Split Stop Ring

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[FRE Composites](#)

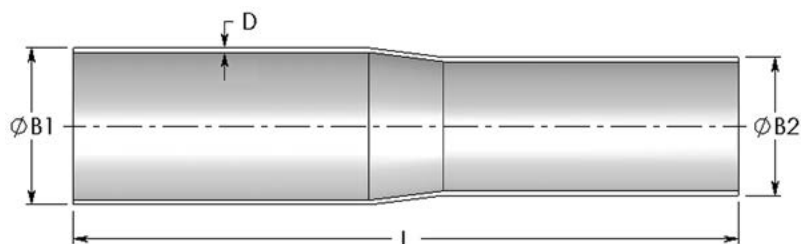


Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	20-2064	2.170	0.185	2
2½	63	20-2564	2.670	0.185	2
3	78	20-3064	3.170	0.185	2
3½	91	20-3564	3.670	0.185	2
4	103	20-4064	4.170	0.185	2
4½	116	20-4564	4.730	0.185	2
5	129	20-5064	5.230	0.185	2
6	155	20-6064	6.230	0.185	2

ID SW Reducer

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[FRE Composites](#)



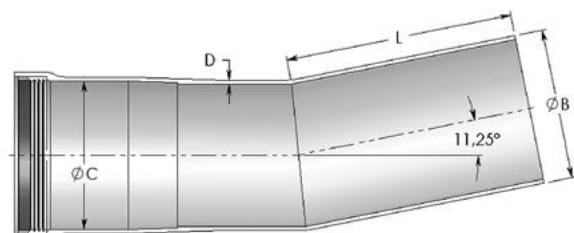
Size		Part Number	ØB1	ØB2	D	L
(in)	(mm)		(in)			
2	53	20-2029	2.140	1.900	0.070	18
2½	63	20-2529	2.640	2.140	0.070	18
3	78	20-3029	3.140	2.640	0.070	18
3½	91	20-3529	3.640	3.140	0.070	18
4	103	20-4029	4.140	3.640	0.070	18
4½	116	20-4529	4.690	4.140	0.095	18
5	129	20-5029	5.190	4.690	0.095	18
6	155	20-6029	6.190	5.190	0.095	18

Epoxy System · ID Series

ID SW 11.25° Fitting

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[FRE Composites](#)

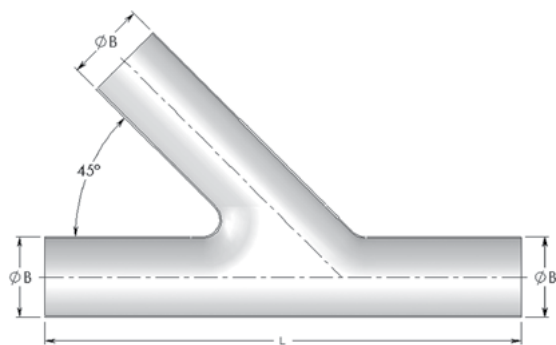


Size		Part Number	ØB	ØC	D	L
(in)	(mm)					
2	53	20-2035	2.140	2.170	0.070	7
2½	63	20-2535	2.640	2.670	0.070	7
3	78	20-3035	3.140	3.170	0.070	7
3½	91	20-3535	3.640	3.670	0.070	7
4	103	20-4035	4.140	4.170	0.070	7
4½	116	20-4535	4.690	4.730	0.095	7
5	129	20-5035	5.190	5.230	0.095	7
6	155	20-6035	6.190	6.230	0.095	7

ID SW “Y” Fitting

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[FRE Composites](#)



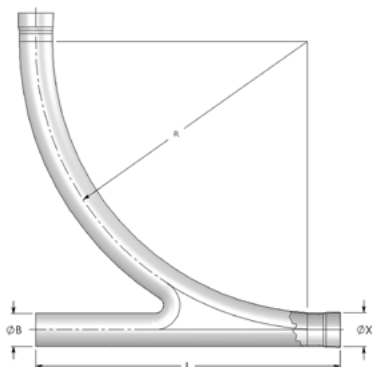
Size		Part Number	ØB	L
(in)	(mm)			
2	53	20-2015	2.140	24.50
2½	63	20-2515	2.640	24.50
3	78	20-3015	3.140	24.50
3½	91	20-3515	3.640	24.50
4	103	20-4015	4.140	24.50
4½	116	20-4515	4.690	24.50
5	129	20-5015	5.190	24.50
6	155	20-6015	6.190	24.50

Epoxy System · ID Series

ID SW “Y” Elbow

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[FRE Composites](#)

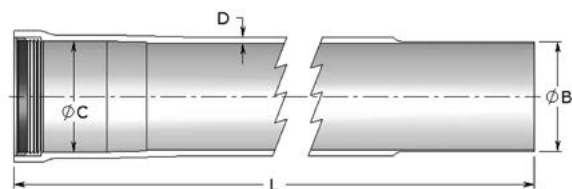


Size		Part Number	ØB	L	R	X
(in)	(mm)					
3	78	20-3025	3.140	36	36	3.275
3½	91	20-3525	3.640	36	36	3.750
4	103	20-4025	4.140	36	36	4.240

ID SW Riserway

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[FRE Composites](#)



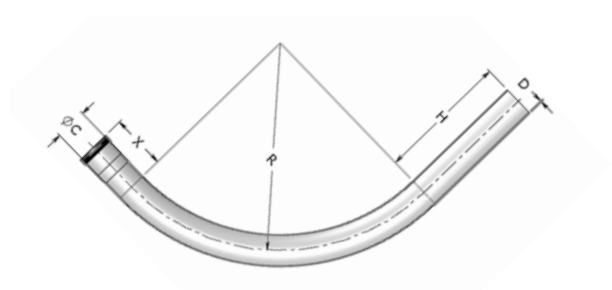
Size		Part Number	ØB	ØC	D	L
(in)	(mm)					
2*	53	20-2440	2.140	2.170	0.235	118
2½	63	20-2940	2.640	2.670	0.235	118
3*	78	20-3440	3.140	3.170	0.235	118
3½	91	20-3940	3.640	3.670	0.235	118
4*	103	20-4440	4.140	4.170	0.235	118
4½	116	20-4940	4.690	4.730	0.235	118
5*	129	20-5440	5.190	5.230	0.235	118
6*	155	20-6440	6.190	6.230	0.235	118

Epoxy System · ID Series

ID SW Poleriser

Click brand for more
product info ↓

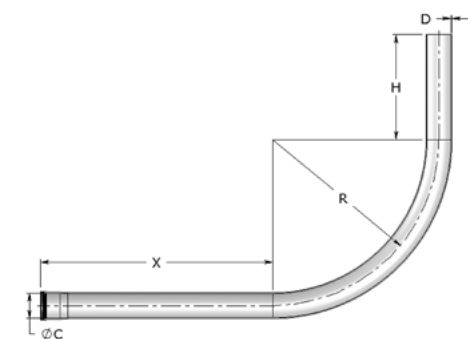
[FRE Composites](#)



Size		Part Number	Ø C	D	R	H	X
(in)	(mm)		(in)				
2	53	20-2038	2.170	0.070	30	19	8
2 1/2	63	20-2538	2.670	0.130	30	19	8
3	78	20-3038	3.170	0.130	30	19	8
3 1/2	91	20-3538	3.670	0.130	30	19	8
4	103	20-4038	4.170	0.130	30	19	8
4 1/2	116	20-4538	4.730	0.130	30	19	8
5	129	20-5038	5.230	0.130	30	19	8
6	155	20-6038	6.230	0.130	30	19	8

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product info ↓

[FRE Composites](#)

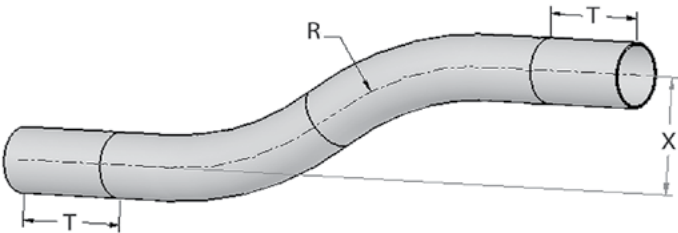


Size		Part Number	Ø C	D	R	H	X
(in)	(mm)		(in)				
2	53	20-2039	2.170	0.070	30	19	42
2 1/2	63	20-2539	2.670	0.130	30	19	42
3	78	20-3039	3.170	0.130	30	19	42
3 1/2	91	20-3539	3.670	0.130	30	19	42
4	103	20-4039	4.170	0.130	30	19	42
4 1/2	116	20-4539	4.730	0.130	30	19	42
5	129	20-5039	5.230	0.130	30	19	42
6	155	20-6039	6.230	0.130	30	19	42

Epoxy System · ID Series

ID SW Offset Elbow

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[FRE Composites](#)

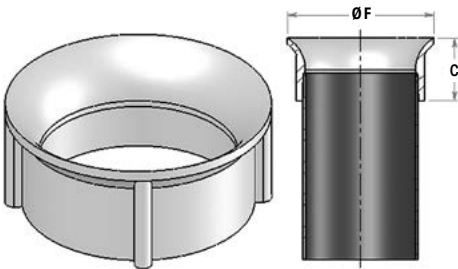


Size	Part Number
ALL	Special

Please contact our local agent for quotes and feasibility.

ID SW Radius Bell End

[Click brand for more product info](#)
[FRE Composites](#)



Size		Part Number	C	Ø F
(in)	(mm)		(in)	
2	53	20-2018	1.7	3.0
2½	63	20-2518	1.7	3.5
3	78	20-3018	1.7	4.0
3½	91	20-3518	1.7	4.5
4	103	20-4018	2.2	5.0
4½	116	20-4518	2.2	5.5
5	129	20-5018	2.2	6.0
6	155	20-6018	2.4	7.0

Epoxy System · ID Series

ID SW Conduit Bodies

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product info ↓

[FRE Composites](#)

Size		Part Number		Length	Width	Depth
(in)	(mm)			(in)		
2	53	LB	20- 	11.63	4.38	5.47
2	53	LL	; 	11.63	6.09	3.59
2	53	LR	20 	11.63	6.09	3.59
2	53	T	2C 	13.40	6.09	3.59
2	53	C	20- 	13.40	4.38	3.59
2	53	TB	20 	13.40	4.38	5.47
2	53	X	20 	13.40	7.81	3.59

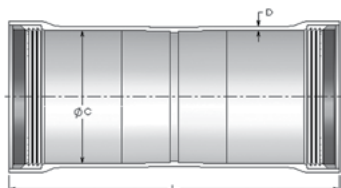
Consult factory for availability

Epoxy System · ID Series

ID HW Double Bell Coupling

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[FRE Composites](#)

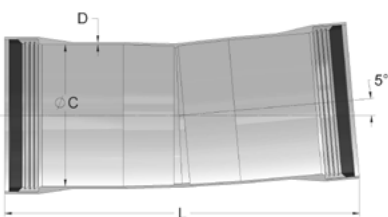


Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	22-4010	4.230	0.095	10.25
4½	116	22-4510	4.770	0.115	10.25
5	129	22-5010	5.270	0.115	10.25
6	155	22-6010	6.270	0.115	10.25

ID HW 5° Double Bell Coupling

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[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	22-4011	4.230	0.095	10.5
4½	116	22-4511	4.770	0.115	10.5
5	129	22-5011	5.270	0.115	10.6
6	155	22-6011	6.270	0.115	10.7

ID HW Sleeve (Repair Fitting)

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[FRE Composites](#)



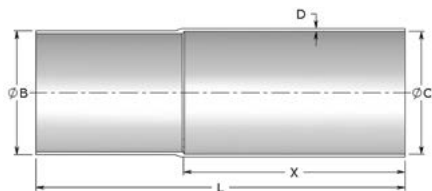
Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	22-4016	4.230	0.095	12
4½	116	22-4516	4.770	0.115	12
5	129	22-5016	5.270	0.115	12
6	155	22-6016	6.270	0.115	12

Epoxy System · ID Series

ID HW Single Expansion Joint

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[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L	X
(in)	(mm)		(in)				
4	103	22-4012	4.190	4.230	0.095	20	12
4½	116	22-4512	4.730	4.770	0.115	20	12
5	129	22-5012	5.230	5.270	0.115	20	12
6	155	22-6012	6.230	6.270	0.115	20	12

ID HW O-Ring Expansion Joint

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[FRE Composites](#)



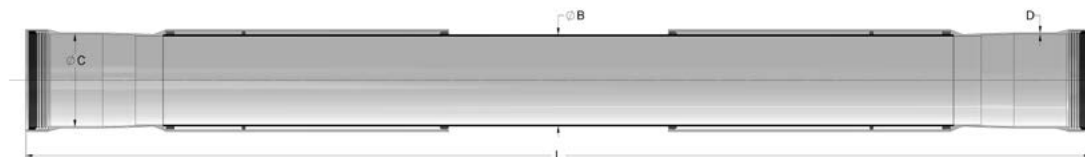
Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)		(in)				
4	103	22-4017	4.190	4.230	0.095	24	36
4½	116	22-4517	4.730	4.770	0.115	24	36
5	129	22-5017	5.230	5.270	0.115	24	36
6	155	22-6017	6.230	6.270	0.115	24	36

Epoxy System · ID Series

ID HW Double O-Ring Expansion Joint

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product info ↓

[FRE Composites](#)

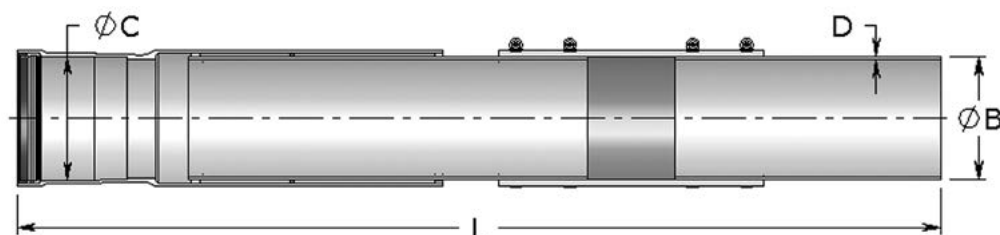


Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)						
4	103	22-4067	4.190	4.230	0.095	48	72
4½	116	22-4567	4.730	4.770	0.115	48	72
5	129	22-5067	5.230	5.270	0.115	48	72
6	155	22-6067	6.230	6.270	0.115	48	72

ID HW O-Ring Expansion/Deflection Joint

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product info ↓

[FRE Composites](#)



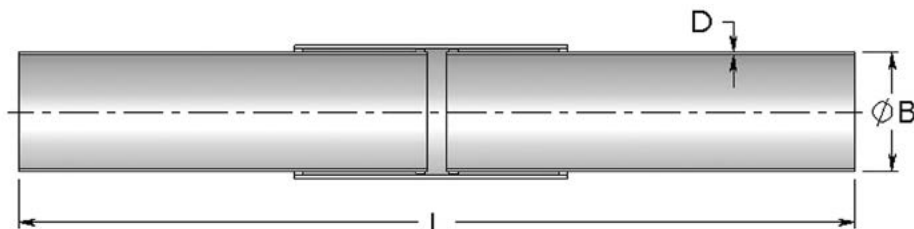
Size		Part Number	ØB	ØC	D	L (min)	L (max)
(in)	(mm)						
4	103	22-4057	4.190	4.230	0.095	40	52
4½	116	22-4557	4.730	4.770	0.115	40	52
5	129	22-5057	5.230	5.270	0.115	40	52
6	155	22-6057	6.230	6.270	0.115	40	52

Epoxy System · ID Series

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product info ↓

[FRE Composites](#)

ID HW Wobble (for up to 3° Curvature)



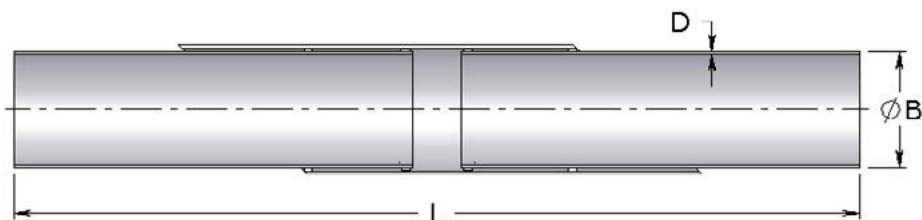
Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)					
4	103	22-4013	4.190	0.095	36	46
4½	116	22-4513	4.730	0.115	36	46
5	129	22-5013	5.230	0.115	36	46
6	155	22-6013	6.230	0.115	36	46

Note: Fitting is non-watertight

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product info ↓

[FRE Composites](#)

ID HW Skew Wobble (for up to 7.5° Curvature)



Size		Part Number	ØB	D	L (min)	L (max)
(in)	(mm)					
4	103	22-4014	4.190	0.095	48	56
4½	116	22-4514	4.730	0.115	48	56
5	129	22-5014	5.230	0.115	48	56
6	155	22-6014	6.230	0.115	48	56

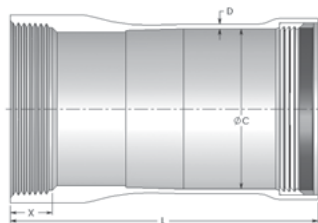
Note: Fitting is non-watertight

Epoxy System · ID Series

ID HW NPT Female Threaded Adapter

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product info ↓

[FRE Composites](#)

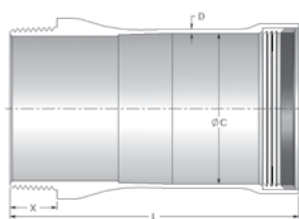


Size		Part Number	ØC	D	L	X
(in)	(mm)					
4	103	22-4044	4.230	0.095	8	1.094
5	129	22-5044	5.270	0.115	8	1.187
6	155	22-6044	6.270	0.115	8	1.208

ID HW NPT Male Threaded Adapter

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product info ↓

[FRE Composites](#)

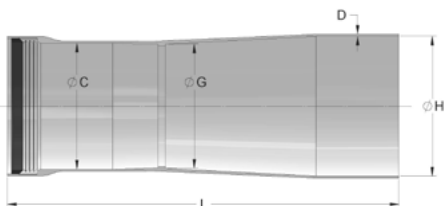


Size		Part Number	ØC	D	L	X
(in)	(mm)					
4	103	22-4027	4.230	0.095	8	1.300
5	129	22-5027	5.270	0.115	8	1.406
6	155	22-6027	6.270	0.115	8	1.513

ID HW Multifit Adapter

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product info ↓

[FRE Composites](#)



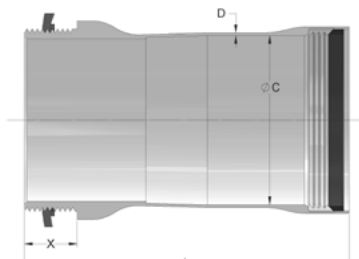
Size		Part Number	ØC	D	ØG	ØH	L
(in)	(mm)						
4	103	22-4037	4.230	0.095	4.109	4.620	13
4½	116	22-4537	4.770	0.115	4.750	4.831	13
5	129	22-5037	5.270	0.115	5.289	5.650	13
6	155	22-6037	6.270	0.115	6.259	6.686	13

Epoxy System · ID Series

ID HW Box Connector

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[FRE Composites](#)

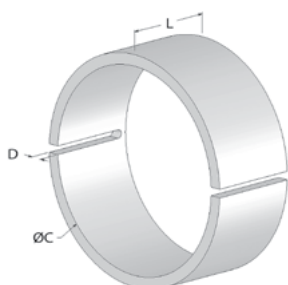


Size		Part Number	ØC	D	L	X
(in)	(mm)					
4	103	22-4047	4.230	0.095	8	1.300
5	129	22-5047	5.270	0.115	8	1.406
6	155	22-6047	6.270	0.115	8	1.513

ID HW Split Stop Ring

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[FRE Composites](#)

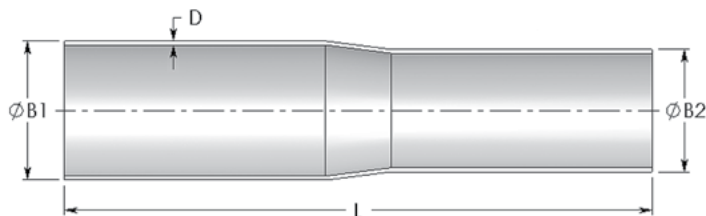


Size		Part Number	ØC	D	L
(in)	(mm)				
4	103	22-4064	4.230	0.185	2
4½	116	22-4564	4.770	0.185	2
5	129	22-5064	5.270	0.185	2
6	155	22-6064	6.270	0.185	2

ID HW Reducer

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[FRE Composites](#)



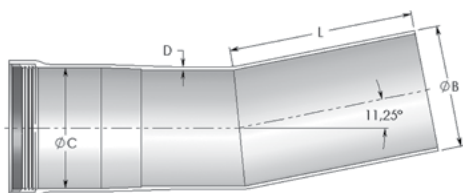
Size		Part Number	ØB1	ØB2	D	L
(in)	(mm)					
4	103	22-4029	4.190	3.690	0.095	18
4½	116	22-4529	4.730	4.190	0.115	18
5	129	22-5029	5.230	4.730	0.115	18
6	155	22-6029	6.230	5.230	0.115	18

Epoxy System · ID Series

ID HW 11.25° Fitting

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product info ↓

[FRE Composites](#)

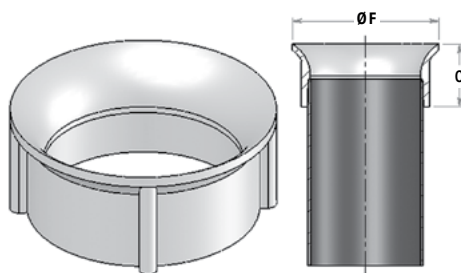


Size		Part Number	ØB	ØC	D	L
(in)	(mm)		(in)			
4	103	22-4035	4.190	4.230	7	106.4
4½	116	22-4535	4.730	4.770	7	120.1
5	129	22-5035	5.230	5.270	7	132.8
6	155	22-6035	6.230	6.270	7	158.2

ID HW Radius Bell End

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product info ↓

[FRE Composites](#)



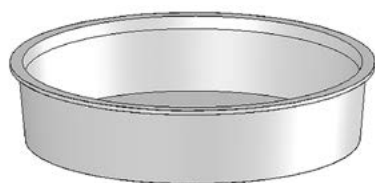
Size		Part Number	C	ØF
(in)	(mm)		(in)	
4	103	22-4018	2.2	5.0
4½	116	22-4518	2.2	5.5
5	129	22-5018	2.2	6.0
6	155	22-6018	2.4	7.0

Epoxy System · Accessories

IPS Thermoplastic Plug

[Click brand for more product info](#) ↓

[FRE Composites](#)

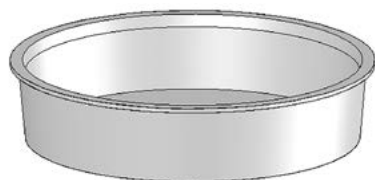


Size		Part Number	Depth
(in)	(mm)		(in)
¾	21	30-7528	0.6
1	27	30-1028	0.6
1¼	35	30-1228	0.8
1½	41	30-1528	0.8
2	53	30-2028	0.8
3	78	30-3028	0.8
4	103	30-4028	1.0
5	129	30-5028	1.0
6	155	30-6028	1.5
8	203	30-8028	1.5

ID Thermoplastic Plug

[Click brand for more product info](#) ↓

[FRE Composites](#)

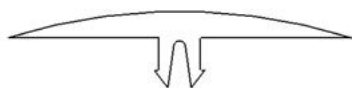


Size		Part Number	Depth
(in)	(mm)		(in)
2	53	40-2028	1.0
3	78	40-3028	1.0
3½	91	40-3528	1.0
4	103	40-4028	1.3
4½	116	40-4528	1.0
5	129	40-5028	1.0
6	155	40-6028	1.5

Thermoplastic T-Strip

[Click brand for more product info](#) ↓

[FRE Composites](#)

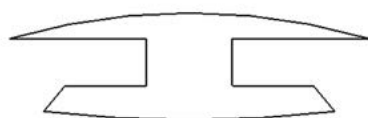


Size	Part Number
All	40-0167

Thermoplastic H-Strip

[Click brand for more product info](#) ↓

[FRE Composites](#)



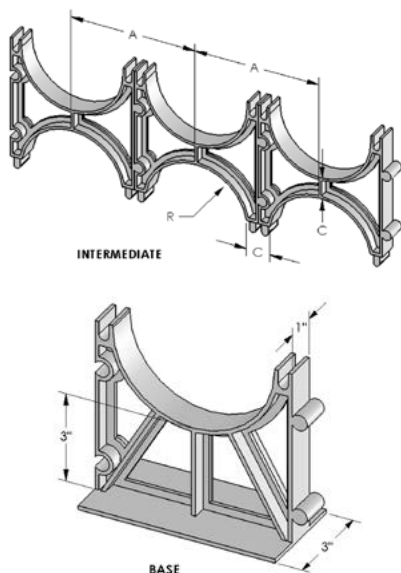
Size	Part Number
All	40-0169

Epoxy System · Accessories

Base & Intermediate Spacers

[Click brand for more product info](#) ↓

[FRE Composites](#)

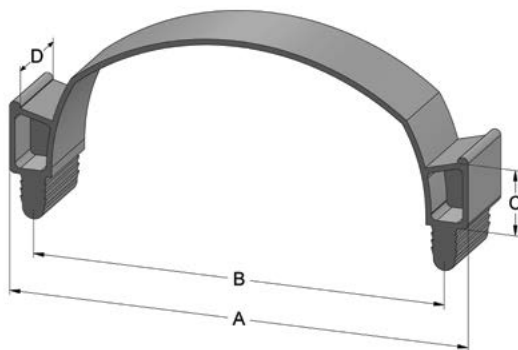


Conduit Size		Base	Intermediate	C	R	A
(in)	(mm)	Part Number	Part Number	(in)		
2	53	45-0131	45-0137	1½	1.2	4.0
3	78	45-0138	45-0139	1½	1.8	5.1
4	103	45-0115	45-0124	1½	2.3	6.1
5	129	45-0143	45-0136	1½	2.9	7.3
6	155	45-0144	45-0145	1½	3.3	8.2
8	203	45-0119	45-0146	1½	4.3	10.2
2	53	45-0109	45-0110	2	1.2	4.5
3	78	45-0104	45-0140	2	1.8	5.6
4	103	45-0103	45-0108	2	2.3	6.6
5	129	45-0116	45-0125	2	2.9	7.9
6	155	45-0117	45-0127	2	3.4	8.7
8	203	45-0128	45-0118	2	4.3	10.7
2	53	45-0123	45-0111	3	1.2	5.5
3	78	45-0121	45-0122	3	1.8	6.6
4	103	45-0105	45-0112	3	2.3	7.6
5	129	45-0101	45-0134	3	2.9	8.9
6	155	45-0135	45-0147	3	3.4	9.8

Cap Lock

[Click brand for more product info](#) ↓

[FRE Composites](#)



Conduit Size		Base	A	B	C	D
(in)	(mm)	Part Number	(in)			
2	53	45-0133	4.18	3.625	.750	1.0
3	78	45-0130	5.30	4.75	.750	1.0
4	103	45-0126	6.00	5.625	1.25	1.0
5	129	45-0129	7.43	6.875	1.25	1.0
6	155	45-0132	8.43	7.875	1.25	1.0

Epoxy System · Accessories

Splice and Repair Kit

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[FRE Composites](#)



Size	Part Number	Conduit Size		Length of Cut Mat
		(in)	(mm)	(in)
All	40-0174	2	53	10
		3	78	12
		4	103	15
		5	129	19
		6	155	23

Adhesive Kit

[Click brand for more product info](#) ↓

[FRE Composites](#)

20-0165



Size	Part Number	
All	40-0161	Epoxy Kit
All	20-0163	Dual Cartridge (Fast Cure)
All	20-0164	Dual Cartridge (Ambient Conditions)
All	20-0165	Dual Cartridge Applicator

20-0163 / 20-0164



Note: Mixing tip included

Mechanical Properties		Mechanical Properties		Mechanical Properties	
(40-0161)		(20-0163)		(20-0164)	
Shore D Hardness	81	Shore D Hardness	72	Shore D Hardness	90
Tensile Strength	3060 Psi	Tensile Strength	8000 Psi	Tensile Strength	9900 Psi
Lap Shear Strength	252 Psi	Lap Shear Strength	3500 Psi	Viscosity	40000 cP
Viscosity	3700 cP	Viscosity	13500 cP	Mix Ratio	2:1
Mix Ratio	2:1	Mix Ratio	1:1	Color	Opaque
Color	Opaque	Color	Yellow	Solid Content	100%
Solid Content	100%	Solid Content	100%		

Epoxy System · Accessories

Joint Calculation Table

[Click brand for more product info](#) ↓
[FRE Composites](#)

IPS Based			
Size		Joints Made	Pull-Out Strength
(in)	(mm)	per kit	(lbs)
¾	21	28	1700
1	27	26	2,000
1¼	35	24	2,000
1½	41	20	2,000
8*	203	3	8,000

ID Based			
Size		Joints Made	Pull-Out Strength
(in)	(mm)	per kit	(lbs)
2	53	18	2,000
2½	63	16	2,500
3	78	13	3,000
3½	91	11	3,500
4	103	10	4,000
4½	116	8	4,500
5	129	7	5,000
6	155	6	6,000

* 8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

Mixer Tip

[Click brand for more product info](#) ↓
[FRE Composites](#)

(Fast Cure Orange)

Size	Part Number
All	20-0162



Note: (Orange) use with 20-0163

(Ambient Conditions Green)

Size	Part Number
All	20-0166



Note: (Green) use with 20-0164

HazGuard®, Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 1" to 1 1/2" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral bell and spigot end
- Full interchangeability with existing metallic and non-metallic raceways
- Greater extended support distance than published by the NEC table 355.30

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Conduit is offered in 10' or 20' sections
- Suitable for Physical Damage Locations (NEC-Class 1 Division 2)
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Will retain its shape after compression or impact
- Operation temperature -40°F to 230°F
- Low coefficient of friction in longer cable pulls
- Easy to install

Materials:

- Conduit, elbows and fittings shall consist of continuous E or E-CR glass roving in a cured corrosion resistant phenolic resin system pigmented with UV inhibiting carbon black dispersed homogeneously

Product Applications:

- Conduit and fittings are Class 1, Division 2 which can be subject to physical damage per NEC®. The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Bridges, airports, telecom, transportation, and more

Relevant Certifications:

- UL2515A, CSA C22.2 No. 2515. 1-13, NEMA TC 14.XW



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

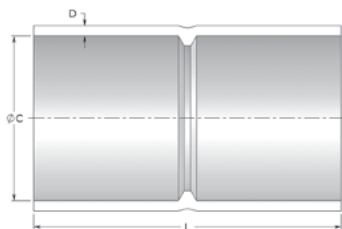
Among the different types of conduit available on the market, RTRC offers the best anti-corrosion properties, offering low installation costs and the possibility of adapting the product to specific requirements and applications.

Extra Heavy Wall Epoxy System · IPS Series

IPS XW Double Bell Coupling

[Click brand for more product info](#) ↓

[FRE Composites](#)

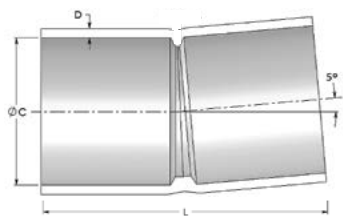


Size		Part Number	ØC	D	L
(in)	(mm)				
¾	21	14-7510	1.458	0.250	8.500
1	27	14-1010	1.723	0.250	8.500
1¼	35	14-1210	2.068	0.250	8.500
1½	41	14-1510	2.308	0.250	8.500
8*	203	14-8010	8.933	0.250	8.500

IPS XW 5° Double Bell Coupling

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)				
¾	21	14-7511	1.458	0.250	8.500
1	27	14-1011	1.723	0.250	8.500
1¼	35	14-1211	2.068	0.250	8.500
1½	41	14-1511	2.308	0.250	8.625
8*	203	14-8011	8.933	0.250	8.750

IPS XW Sleeve (Repair Fitting)

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)				
¾	21	14-7516	1.458	0.250	12
1	27	14-1016	1.723	0.250	12
1¼	35	14-1216	2.068	0.250	12
1½	41	14-1516	2.308	0.250	12
8*	203	14-8016	8.933	0.250	12

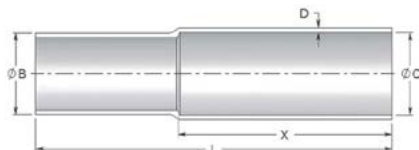
* 8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System · IPS Series

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IPS XW Single Expansion Joint

[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L	X
(in)	(mm)		(in)				
¾	21	14-7512	1.418	1.458	0.250	20.0	12.0
1	27	14-1012	1.683	1.723	0.250	20.0	12.0
1¼	35	14-1212	2.028	2.068	0.250	20.0	12.0
1½	41	14-1512	2.308	2.308	0.250	20.0	12.0
8*	203	14-8012	8.893	8.933	0.250	20.0	12.0

[Click brand for more product info](#) ↓

IPS XW O-Ring Expansion Joint

[FRE Composites](#)

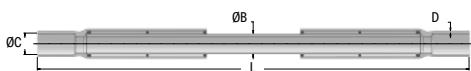


Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
¾	21	14-7517	1.418	1.458	0.250	23	35
1	27	14-1017	1.683	1.723	0.250	23	35
1¼	35	14-1217	2.028	2.068	0.250	23	35
1½	41	14-1517	2.268	2.308	0.250	23	35
8*	203	14-8017	8.893	8.933	0.250	23	35

[Click brand for more product info](#) ↓

IPS XW Double O-Ring Expansion Joint

[FRE Composites](#)

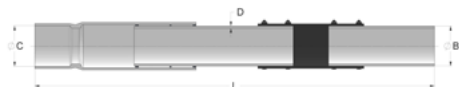


Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
¾	21	14-7567	1.418	1.458	0.250	46.5	70.5
1	27	14-1067	1.683	1.723	0.250	46.5	70.5
1¼	35	14-1267	2.028	2.068	0.250	46.5	70.5
1½	41	14-1567	2.268	2.308	0.250	46.5	70.5
8*	203	14-8067	8.893	8.933	0.250	46.5	70.5

[Click brand for more product info](#) ↓

IPS XW O-Ring Expansion/Deflection Joint

[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
¾	21	14-7557	1.418	1.458	0.250	39.0	51.0
1	27	14-1057	1.683	1.723	0.250	39.0	51.0
1¼	35	14-1257	2.028	2.068	0.250	39.0	51.0
1½	41	14-1557	2.268	2.308	0.250	39.0	51.0
8*	203	14-8057	8.893	8.933	0.250	39.0	51.0

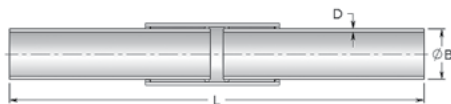
* 8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System · IPS Series

IPS XW Wobble (for up to 3° Curvature)

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[FRE Composites](#)



Size		Part Number	ØB	D	L MIN	L MAX
(in)	(mm)					
¾	21	14-7513	1.418	0.250	36	46
1	27	14-1013	1.683	0.250	36	46
1 ¼	35	14-1213	2.028	0.250	36	46
1 ½	41	14-1513	2.268	0.250	36	46
8*	203	14-8013	8.893	0.250	36	46

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[FRE Composites](#)

IPS XW Skew Wobble (for up to 7.5° Curvature)

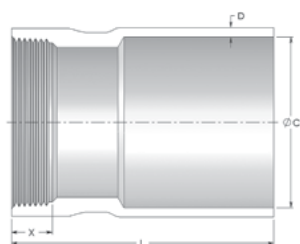


Size		Part Number	ØB	D	L MIN	L MAX
(in)	(mm)					
¾	21	14-7514	1.418	0.250	48	56
1	27	14-1014	1.683	0.250	48	56
1 ¼	35	14-1214	2.028	0.250	48	56
1 ½	41	14-1514	2.268	0.250	48	56
8*	203	14-8014	8.893	0.250	48	56

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[FRE Composites](#)

IPS XW NPT Female Threaded Adapter

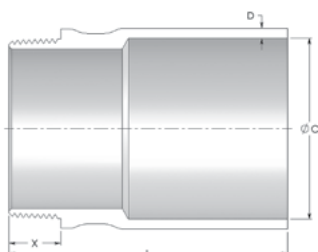


Size		Part Number	ØC	D	L	X
(in)	(mm)					
¾	21	14-7544	1.458	0.250	7	0.553
1	27	14-1044	1.723	0.250	7	0.661
1 ¼	35	14-1244	2.068	0.250	7	0.681
1 ½	41	14-1544	2.308	0.250	7	0.681
8*	203	14-8044	8.933	0.250	7	1.313

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[FRE Composites](#)

IPS XW NPT Male Threaded Adapter



Size		Part Number	ØC	D	L	X
(in)	(mm)					
¾	21	14-7527	1.458	0.250	6	0.546
1	27	14-1027	1.723	0.250	6	0.683
1 ¼	35	14-1227	2.068	0.250	6	0.707
1 ½	41	14-1527	2.308	0.250	6	0.724
8*	203	14-8027	8.933	0.250	7	1.713

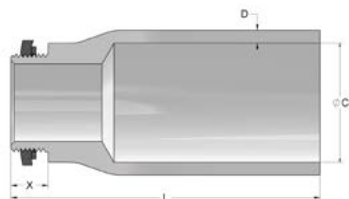
* 8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System · IPS Series

IPS XW Box Connector

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[FRE Composites](#)

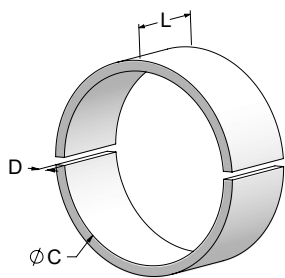


Size		Part Number	ØC	D	L	X
(in)	(mm)		(in)			
¾	21	14-7547	1.458	0.250	6	0.546
1	27	14-1047	1.723	0.205	6	0.683
1¼	35	14-1247	2.068	0.250	6	0.707
1½	41	14-1547	2.308	0.250	6	0.724
8*	203	14-8047	8.933	0.250	7	1.713

[Click brand for more product info](#) ↓

[FRE Composites](#)

IPS XW Split Stop Ring

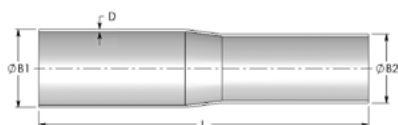


Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
¾	21	14-7564	1.458	0.250	2
1	27	14-1064	1.723	0.250	2
1¼	35	14-1264	2.068	0.250	2
1½	41	14-1564	2.308	0.250	2
8*	203	14-8064	8.933	0.250	2

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[FRE Composites](#)

IPS XW Reducer



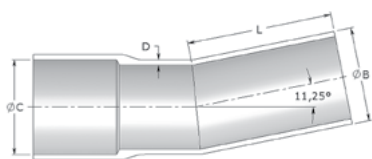
Size		Part Number	ØB1	ØB2	D	L
(in)	(mm)		(in)			
1	27	14-1029	1.683	1.418	0.250	18
1¼	35	14-1229	2.028	1.683	0.250	18
1½	41	14-1529	2.268	2.028	0.250	18

All reducers are by one trade size dimension

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[FRE Composites](#)

IPS XW 11.25° Fitting



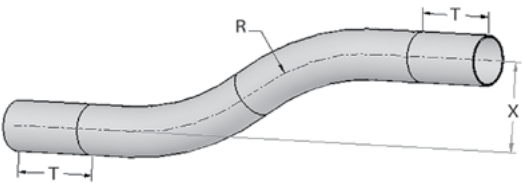
Size		Part Number	ØB	ØC	D	L
(in)	(mm)		(in)			
¾	21	14-7535	1.418	1.458	0.250	7
1	27	14-1035	1.683	1.723	0.250	7
1¼	35	14-1235	2.028	2.068	0.250	7
1½	41	14-1535	2.268	2.308	0.250	7

*8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System · IPS Series

IPS XW Offset Elbow

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[FRE Composites](#)

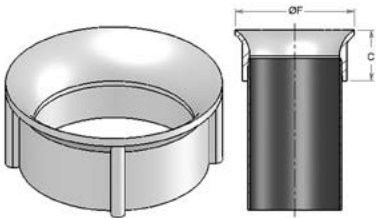


Size	Part Number
All	Special

Please contact your local agent for quotes and feasibility.

IPS XW Radius Bell End

[Click brand for more product info](#) ↓
[FRE Composites](#)



Size		Part Number	C	ØF
(in)	(mm)		(in)	
¾	21	14-7518	1.7	1.918
1	27	14-1018	1.7	2.183
1¼	35	14-1218	1.7	2.528
1½	41	14-1518	1.7	2.768
8*	203	14-8018	2.4	9.393

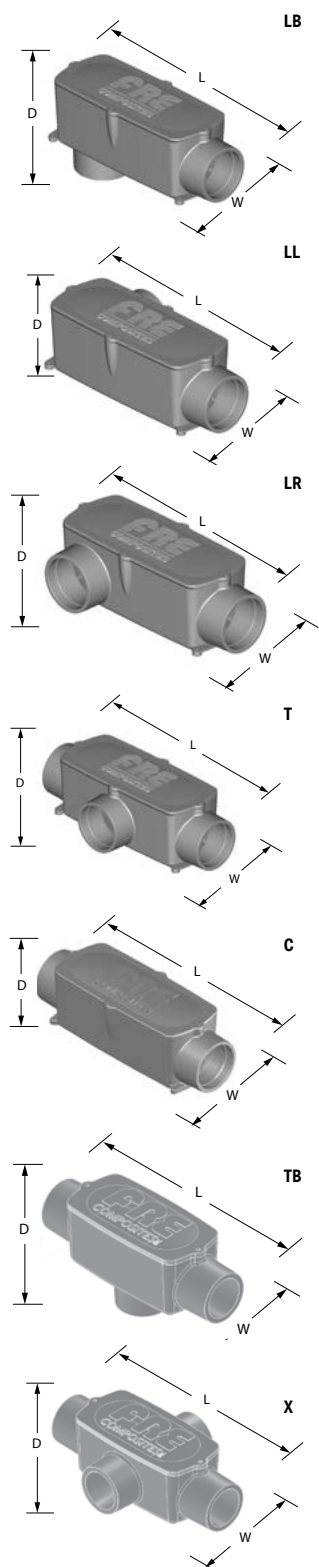
* 8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

Extra Heavy Wall Epoxy System · IPS Series

IPS XW Conduit Bodies

Click brand for more
product info ↓

[FRE Composites](#)



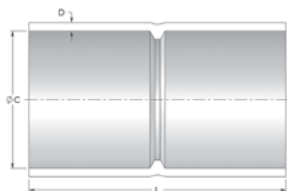
Size		Part Number	Length	Width	Depth
(in)	(mm)		(in)		
LB					
¾	21	14-7591	7.60	2.75	3.88
1	27	14-1091	7.60	2.75	3.88
1 ¼	35	14-1291	9.55	3.84	4.63
1 ½	41	14-1591	9.55	3.84	4.63
LL					
¾	21	14-7592	7.60	4.19	2.38
1	27	14-1092	7.60	4.19	2.38
1 ¼	35	14-1292	9.55	5.31	3.13
1 ½	41	14-1592	9.55	5.31	3.13
LR					
¾	21	14-7593	7.60	4.19	2.38
1	27	14-1093	7.60	4.19	2.38
1 ¼	35	14-1293	9.55	5.31	3.13
1 ½	41	14-1593	9.55	5.31	3.13
T					
¾	21	14-7594	9.00	4.19	2.38
1	27	14-1094	9.00	4.19	2.38
1 ¼	35	14-1294	11.00	5.31	3.13
1 ½	41	14-1594	11.00	5.31	3.13
C					
¾	21	14-7595	9.00	2.75	2.38
1	27	14-1095	9.00	2.75	2.38
1 ¼	35	14-1295	11.00	3.84	3.13
1 ½	41	14-1595	11.00	3.84	3.13
TB					
¾	21	14-7596	9.00	2.75	3.88
1	27	14-1096	9.00	2.75	3.88
1 ¼	35	14-1296	11.00	3.84	4.63
1 ½	41	14-1596	11.00	3.84	4.63
X					
¾	21	14-7597	9.00	5.63	2.38
1	27	14-1097	9.00	5.63	2.38
1 ¼	35	14-1297	11.00	3.13	6.78
1 ½	41	14-1597	11.00	3.13	6.78

Extra Heavy Wall Epoxy System · ID Series

ID XW Double Bell Coupling

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[FRE Composites](#)

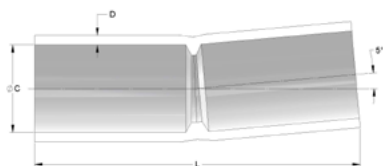


Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	24-2010	2.540	0.250	8.500
2½	63	24-2510	3.040	0.250	8.500
3	78	24-3010	3.540	0.250	8.500
3½	91	24-3510	4.040	0.250	8.500
4	103	24-4010	4.540	0.250	8.500
5	129	24-5010	5.540	0.250	8.500
6	155	24-6010	6.540	0.250	8.500

ID XW 5° Double Bell Coupling

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	24-2011	2.540	0.250	8.625
2½	63	24-2511	3.040	0.250	8.625
3	78	24-3011	3.540	0.250	8.750
3½	91	24-3511	4.040	0.250	8.750
4	103	24-4011	4.540	0.250	8.875
5	129	24-5011	5.540	0.250	9.000
6	155	24-6011	6.540	0.250	9.000

ID XW Sleeve (Repair Fitting)

[Click brand for more product info](#) ↓

[FRE Composites](#)



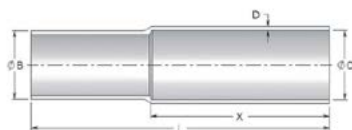
Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	24-2016	2.540	0.250	12
2½	63	24-2516	3.040	0.250	12
3	78	24-3016	3.540	0.250	12
3½	91	24-3516	4.040	0.250	12
4	103	24-4016	4.540	0.250	12
5	129	24-5016	5.540	0.250	12
6	155	24-6016	6.540	0.250	12

Extra Heavy Wall Epoxy System · ID Series

ID XW Single Expansion Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L	X
(in)	(mm)		(in)				
2	53	24-2012	2.500	2.540	0.250	20.0	12.0
2½	63	24-2512	3.000	3.040	0.250	20.0	12.0
3	78	24-3012	3.500	3.540	0.250	20.0	12.0
3½	91	24-3512	4.000	4.040	0.250	20.0	12.0
4	103	24-4012	4.500	4.540	0.250	20.0	12.0
5	129	24-5012	5.500	5.540	0.250	20.0	12.0
6	155	24-6012	6.500	6.540	0.250	20.0	12.0

ID XW O-Ring Expansion Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)

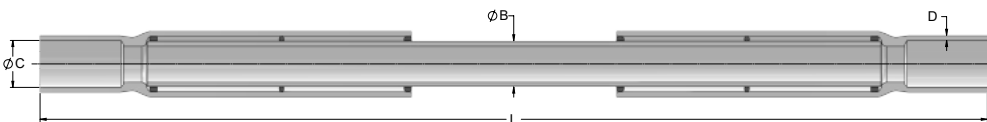


Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
2	53	24-2017	2.500	2.540	0.250	23	35
2½	63	24-2517	3.000	3.040	0.250	23	35
3	78	24-3017	3.500	3.540	0.250	23	35
3½	91	24-3517	4.000	4.040	0.250	23	35
4	103	24-4017	4.500	4.540	0.250	23	35
5	129	24-5017	5.500	5.540	0.250	23	35
6	155	24-6017	6.500	6.540	0.250	23	35

ID XW Double O-Ring Expansion Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)



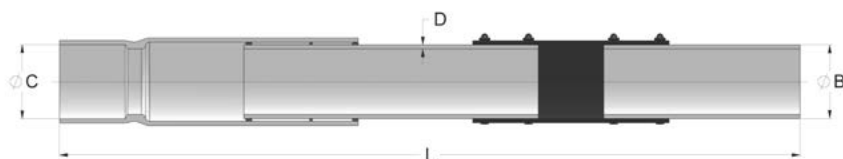
Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
2	53	24-2067	2.500	2.540	0.250	46.5	70.5
2 1/2	63	24-2567	3.000	3.040	0.250	46.5	70.5
3	78	24-3067	3.500	3.540	0.250	46.5	70.5
3 1/2	91	24-3567	4.000	4.040	0.250	46.5	70.5
4	103	24-4067	4.500	4.540	0.250	46.5	70.5
5	129	24-5067	5.500	5.540	0.250	46.5	70.5
6	155	24-6067	6.500	6.540	0.250	46.5	70.5

Extra Heavy Wall Epoxy System · ID Series

ID XW O-Ring Expansion/Deflection Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)

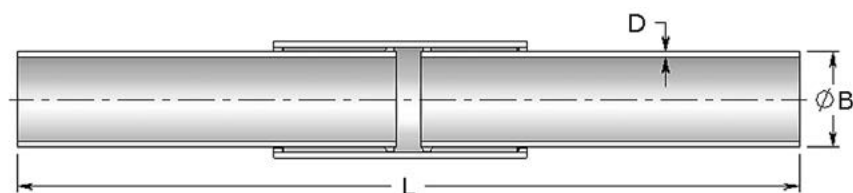


Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)						
2	53	24-2057	2.500	2.540	0.250	39.0	51.0
2 ½	63	24-2557	3.000	3.040	0.250	39.0	51.0
3	78	24-3057	3.500	3.540	0.250	39.0	51.0
3 ½	91	24-3557	4.000	4.040	0.250	39.0	51.0
4	103	24-4057	4.500	4.540	0.250	39.0	51.0
5	129	24-5057	5.500	5.540	0.250	39.0	51.0
6	155	24-6057	6.500	6.540	0.250	39.0	51.0

ID XW Wobble (for up to 3° Curvature)

[Click brand for more product info](#) ↓

[FRE Composites](#)



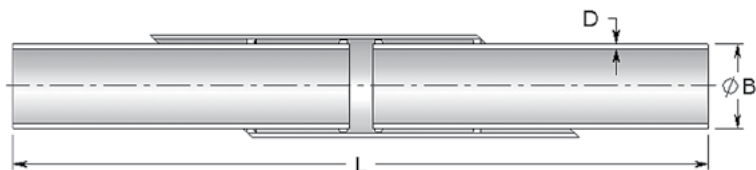
Size		Part Number	ØB	D	L MIN	L MAX
(in)	(mm)					
2	53	24-2013	2.500	0.250	36	46
2 ½	63	24-2513	3.000	0.250	36	46
3	78	24-3013	3.500	0.250	36	46
3 ½	91	24-3513	4.000	0.250	36	46
4	103	24-4013	4.500	0.250	36	46
5	129	24-5013	5.500	0.250	36	46
6	155	24-6013	6.500	0.250	36	46

Extra Heavy Wall Epoxy System · ID Series

ID XW Skew Wobble (for up to 7.5° Curvature)

[Click brand for more product info](#) ↓

[FRE Composites](#)

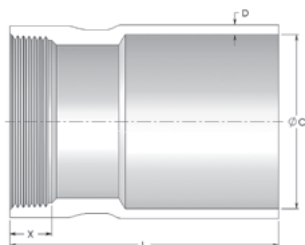


Size		Part Number	ØB	D	L MIN	L MAX
(in)	(mm)					
2	53	24-2014	2.500	0.250	48	56
2½	63	24-2514	3.000	0.250	48	56
3	78	24-3014	3.500	0.250	48	56
3½	91	24-3514	4.000	0.250	48	56
4	103	24-4014	4.500	0.250	48	56
5	129	24-5014	5.500	0.250	48	56
6	155	24-6014	6.500	0.250	48	56

ID XW NPT Female Threaded Adapter

[Click brand for more product info](#) ↓

[FRE Composites](#)

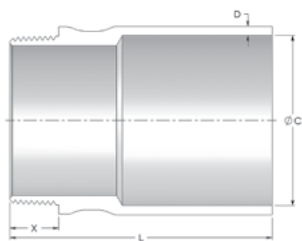


Size		Part Number	ØC	D	L	X
(in)	(mm)					
2	53	24-2044	2.540	0.250	7	0.697
2½	63	24-2544	3.040	0.250	7	0.932
3	78	24-3044	3.540	0.250	7	1.016
3½	91	24-3544	4.040	0.250	7	1.071
4	103	24-4044	4.540	0.250	7	1.094
5	129	24-5044	5.540	0.250	7	1.187
6	155	24-6044	6.540	0.250	7	1.208

ID XW NPT Male Threaded Adapter

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[FRE Composites](#)



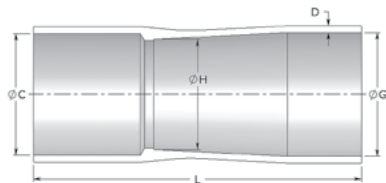
Size		Part Number	ØC	D	L	X
(in)	(mm)					
2	53	24-2027	2.540	0.250	7	0.757
2½	63	24-2527	3.040	0.250	7	1.138
3	78	24-3027	3.540	0.250	7	1.200
3½	91	24-3527	4.040	0.250	7	1.250
4	103	24-4027	4.540	0.250	7	1.300
5	129	24-5027	5.540	0.250	7	1.406
6	155	24-6027	6.540	0.250	7	1.513

Extra Heavy Wall Epoxy System · ID Series

ID XW Multifit Adapter

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[FRE Composites](#)

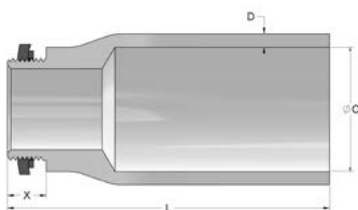


Size		Part Number	ØC	D	ØG	ØH	L
(in)	(mm)		(in)				
2	53	24-2037	2.540	0.250	2.424	2.239	12.25
2½	63	24-2537	3.040	0.250	2.924	2.739	12.25
3	78	24-3037	3.540	0.250	3.549	3.239	12.25
3½	91	24-3537	4.040	0.250	4.061	3.709	12.25
4	103	24-4037	4.540	0.250	4.620	4.109	12.25
5	129	24-5037	5.540	0.250	5.650	5.289	12.25
6	155	24-6037	6.540	0.250	6.686	6.259	12.25

ID XW Box Connector

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[FRE Composites](#)

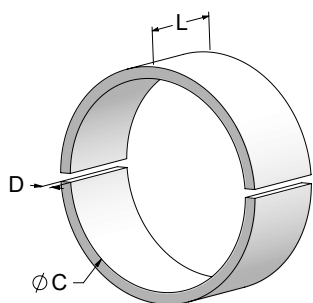


Size		Part Number	ØC	D	L	X
(in)	(mm)		(in)			
2	53	24-2047	2.540	0.250	7	0.757
2½	63	24-2547	3.040	0.250	7	1.138
3	78	24-3047	3.540	0.250	7	1.200
3½	91	24-3547	4.040	0.250	7	1.250
4	103	24-4047	4.540	0.250	7	1.300
5	129	24-5047	5.540	0.250	7	1.406
6	155	24-6047	6.540	0.250	7	1.513

ID XW Split Stop Ring

[Click brand for more product info](#) ↓

[FRE Composites](#)



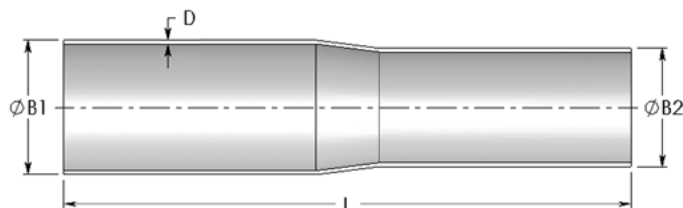
Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	24-2064	2.540	0.250	2
2½	63	24-2564	3.040	0.250	2
3	78	24-3064	3.540	0.250	2
3½	91	24-3564	4.040	0.250	2
4	103	24-4064	4.540	0.250	2
5	129	24-5064	5.540	0.250	2
6	155	24-6064	6.540	0.250	2

Extra Heavy Wall Epoxy System · ID Series

ID XW Reducer

Click brand for more
product info ↓

[FRE Composites](#)

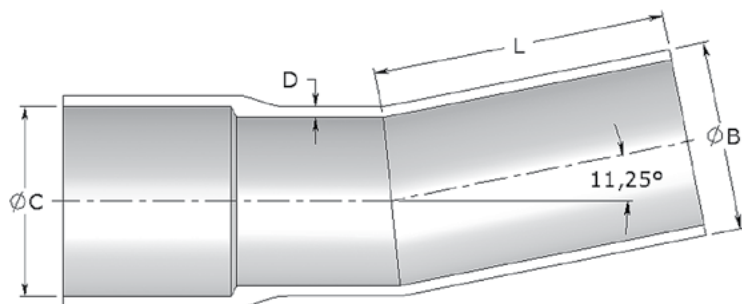


Size		Part Number	ØB1	ØB2	D	L
(in)	(mm)		(in)			
2	53	24-2029	2.500	2.268	0.250	18
2½	63	24-2529	3.000	2.500	0.250	18
3	78	24-3029	3.500	3.000	0.250	18
3½	91	24-3529	4.000	3.500	0.250	18
4	103	24-4029	4.500	4.000	0.250	18
5	129	24-5029	5.500	4.500	0.250	18
6	155	24-6029	6.500	5.500	0.250	18

ID XW 11.25° Fitting

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product info ↓

[FRE Composites](#)

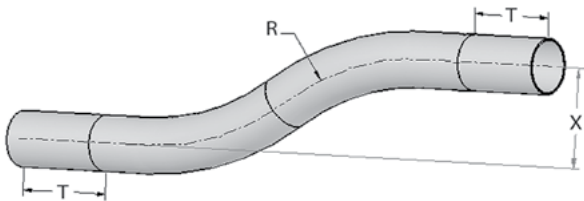


Size		Part Number	ØB	ØC	D	L
(in)	(mm)		(in)			
2	53	24-2035	2.500	2.540	0.250	7
2½	63	24-2535	3.000	3.040	0.250	7
3	78	24-3035	3.500	3.540	0.250	7
3½	91	24-3535	4.000	4.040	0.250	7
4	103	24-4035	4.500	4.540	0.250	7
5	129	24-5035	5.500	5.540	0.250	7
6	155	24-6035	6.500	6.540	0.250	7

Extra Heavy Wall Epoxy System · ID Series

ID XW Offset Elbow

Click brand for more product info ↓
[FRE Composites](#)

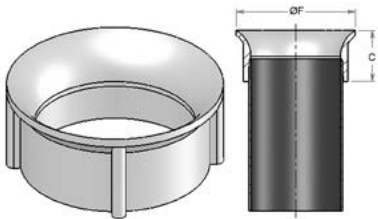


Size	Part Number
All	Special

Please contact your local agent for quotes and feasibility.

ID XW Radius Bell End

Click brand for more product info ↓
[FRE Composites](#)



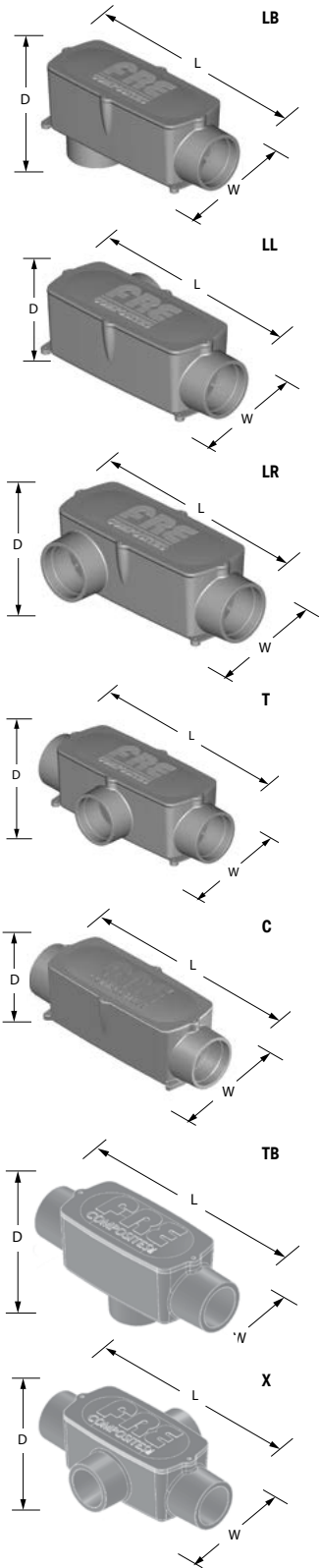
Size		Part Number	C	ØF
(in)	(mm)		(in)	
2	53	24-2018	1.7	3
2½	63	24-2518	1.7	3.5
3	78	24-3018	1.7	4
3½	91	24-3518	1.7	4.5
4	103	24-4018	2.162	5
5	129	24-5018	2.162	6
6	155	24-6018	2.416	7

Extra Heavy Wall Epoxy System • ID Series

ID XW Conduit Bodies

Click brand for more
product info ↓

[FRE Composites](#)



Size		Part Number	Length	Width	Depth
(in)	(mm)		(in)		
LB					
2	53	24-2091	11.63	4.38	5.47
LL					
2	53	24-2092	11.63	6.09	3.59
LR					
2	53	24-2093	11.63	6.09	3.59
T					
2	53	24-2094	13.40	6.09	3.59
C					
2	53	24-2095	13.40	4.38	3.59
TB					
2	53	24-2096	13.40	4.38	5.47
X					
2	53	24-2097	13.40	7.81	3.59

Extra Heavy Wall Epoxy System · Accessories

Splice and Repair Kit

Click brand for more product info ↓
[FRE Composites](#)



Size	Part Number	Conduit Size		Length of Cut Mat
		(in)	(mm)	(in)
All	40-0174	2	53	10
		3	78	12
		4	103	15
		5	129	19
		6	155	23

Adhesive Kit

Click brand for more product info ↓
[FRE Composites](#)

20-0165



Size	Part Number	
All	40-0161	Epoxy Kit
All	20-0163	Dual Cartridge (Fast Cure)
All	20-0164	Dual Cartridge (Ambient Conditions)
All	20-0165	Dual Cartridge Applicator

20-0163 / 20-0164



Note: Mixing tip included

Mechanical Properties		Mechanical Properties		Mechanical Properties	
(40-0161)		(20-0163)		(20-0164)	
Shore D Hardness	81	Shore D Hardness	72	Shore D Hardness	90
Tensile strength	3,060 Psi	Tensile strength	8,000 Psi	Tensile strength	9,900 Psi
Lap shear strength	252 Psi	Lap shear strength	3,500 Psi	Viscosity	40,000 cP
Viscosity	3,700 cP	Viscosity	13,500 cP	Mix ratio	2 : 1
Mix ratio	2 : 1	Mix ratio	1 : 1	Color	Opaque
Color	Opaque	Color	Yellow	Solid content	100%
Solid content	100%	Solid content	100%		

Extra Heavy Wall Epoxy System • Accessories

Joint Calculation Table

[Click brand for more product info](#) ↓
[FRE Composites](#)

IPS Based			
Size		Joints Made	Pull-Out Strength
(in)	(mm)	per kit	(lbs)
¾	21	28	1 700
1	27	26	2,000
1¼	35	24	2,000
1½	41	20	2,000
8*	203	3	8,000

ID Based			
Size		Joints Made	Pull-Out Strength
(in)	(mm)	per kit	(lbs)
2	53	18	2,000
2½	63	16	2,500
3	78	13	3,000
3½	91	11	3,500
4	103	10	4,000
5	129	7	5,000
6	155	6	6,000

* 8" is not a recognized trade size per electrical code (NEC/CES), therefore cannot be UL listed and CSA certified.

Mixer Tip

[Click brand for more product info](#) ↓
[FRE Composites](#)

(Fast Cure Orange)

Size	Part Number
All	20-0162



Note: (Orange) use with 20-0163

(Ambient Conditions Green)

Size	Part Number
All	20-0166



Note: (Green) use with 20-0164

BreathSaver®, Rigid Non-Metallic Fiberglass Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

Features:

- Complete line of fittings and adaptors
- Available in 3/4" to 1 1/2" IPS and 2" to 6" ID
- Fast adhesive assembly between the Integral bell and spigot end
- Full interchangeability with existing metallic and non-metallic raceways

Benefits:

- Outstanding corrosion resistance
- Non-conductive
- Lightweight: 2 to 3 times lighter than Rigid Coated Steel
- Flame resistant
- Smoke Development
- NFPA 130, NFPA 502, FHIT 25c
- Toxicity Emission
- Suitable for Physical Damage Locations (NEC-Class 1 Division 2)
- Chemical inertness, impervious to numerous chemicals
- Contains no chlorine, halogen or other toxic materials
- Two hour fire rated at 1850° F, operating temperatures up to 550° F
- Will retain its shape after compression or impact
- Easy to install

Materials:

- This product is Class 1 Division 2 and is used to protect critical circuits including, fire cable, emergency lighting, etc. It is also used in air handling spaces where circuits require "bulletproof" protection.

Product Applications:

- Conduit and fittings are Class 1, Division 2 which can be subject to physical damage per NEC®. The main application of RTRC is to protect and route electrical wiring

Environments Used in:

- Areas Exposed to physical damage, bridges, ports, oil & gas, transit, and more

Relevant Certifications:

- UL2515A, UL2196-FHIT.25C, FHIT.25D, FHIT.7.25C, CSA C22.2 No. 2515. 1-13, NEMA TC 14.XW



What differentiates this product?

RTRC conduit has been successfully used in applications requiring corrosion resistance and the strength of metallic systems. RTRC conduit is readily available in a variety of types, sizes and wall thicknesses to meet numerous design requirements. RTRC conduit is used in most industries requiring corrosion resistance pipe and a wide temperature range of operation.

Why should someone use it?

The installed cost of filament-wound conduit and fittings can be competitively priced against many metallic and thermoplastic piping systems required in difficult electrical piping applications. RTRC offers remarkable mechanical properties, which outperforms those from similar electrical conduit used in the industry.

What sets it apart from other products?

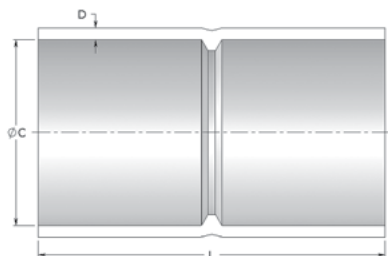
Among the different types of conduit available on the market, BreathSaver is set apart by its 2-hr fire rated UL2196 certification for both vertical and horizontal installations.

Phenolic System · IPS Series

IPS XW Double Bell Coupling

[Click brand for more product info](#) ↓

[FRE Composites](#)



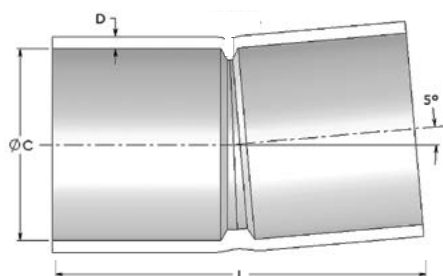
Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
¾	21	74-7510	1.458	0.250	8.500
1	27	74-1010	1.723	0.250	8.500
1¼	35	74-1210	2.068	0.250	8.500
1½	41	74-1510	2.308	0.250	8.500
8*	203	74-8010	8.933	0.250	8.500

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS XW 5° Double Bell Coupling

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
¾	21	74-7511	1.458	0.250	8.500
1	27	74-1011	1.723	0.250	8.500
1¼	35	74-1211	2.068	0.250	8.500
1½	41	74-1511	2.308	0.250	8.625
8*	203	74-8011	8.933	0.250	8.750

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS XW Sleeve (Repair Fitting)

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
¾	21	74-7516	1.458	0.250	12
1	27	74-1016	1.723	0.250	12
1¼	35	74-1216	2.068	0.250	12
1½	41	74-1516	2.308	0.250	12
8*	203	74-8016	8.933	0.250	12

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Phenolic System · IPS Series

IPS XW O-Ring Expansion Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)



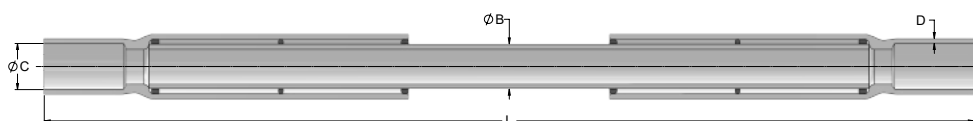
Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
¾	21	74-7517	1.418	1.458	0.250	23	35
1	27	74-1017	1.683	1.723	0.250	23	35
1¼	35	74-1217	2.028	2.068	0.250	23	35
1½	41	74-1517	2.268	2.308	0.250	23	35
8*	203	74-8017	8.893	8.933	0.250	23	35

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS XW Double O-Ring Expansion Joint

[Click brand for more product info](#) ↓

[FRE Composites](#)



Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
¾	21	74-7567	1.418	1.458	0.250	46.5	70.5
1	27	74-1067	1.683	1.723	0.250	46.5	70.5
1 1/4	35	74-1267	2.028	2.068	0.250	46.5	70.5
1 1/2	41	74-1567	2.268	2.308	0.250	46.5	70.5
8	203	74-8067	8.893	8.933	0.250	46.5	70.5

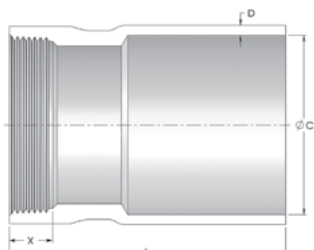
* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Phenolic System · IPS Series

IPS XW NPT Female Threaded Adapter

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[FRE Composites](#)



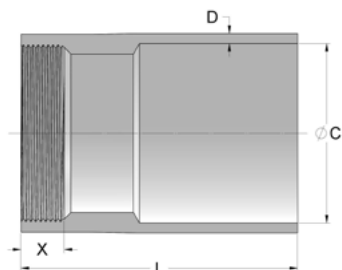
Size		Part Number	ØC	D	L	X
(in)	(mm)					
¾	21	74-7544	1.458	0.250	7	0.553
1	27	74-1044	1.723	0.250	7	0.661
1¼	35	74-1244	2.068	0.250	7	0.681
1½	41	74-1544	2.308	0.250	7	0.681
8*	203	74-8044	8.933	0.250	7	1.313

*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS XW NPSM Female Threaded Adapter-EMT

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[FRE Composites](#)

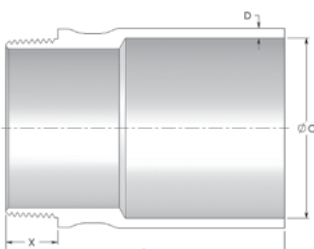


Size		Part Number	ØC	D	L	X
(in)	(mm)					
¾	21	74-7545	1.458	0.250	7	0.650
1	27	74-1045	1.723	0.250	7	0.600
1¼	35	74-1245	2.068	0.250	7	0.700
1½	41	74-1545	2.308	0.250	7	0.750

IPS XW NPT Male Threaded Adapter

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[FRE Composites](#)



Size		Part Number	ØC	D	L	X
(in)	(mm)					
¾	21	74-7527	1.458	0.250	6	0.546
1	27	74-1027	1.723	0.250	6	0.683
1¼	35	74-1227	2.068	0.250	6	0.707
1½	41	74-1527	2.308	0.250	6	0.724
8*	203	74-8027	8.933	0.250	7	1.713

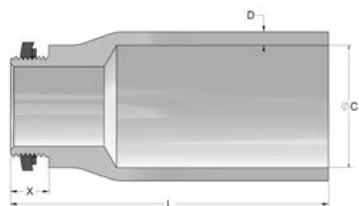
*8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Phenolic System · IPS Series

IPS XW Box Connector

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[FRE Composites](#)



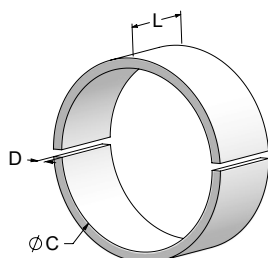
Size		Part Number	ØC	D	L	X
(in)	(mm)					
¾	21	74-7547	1.458	0.250	6	0.546
1	27	74-1047	1.723	0.250	6	0.683
1¼	35	74-1247	2.068	0.250	6	0.707
1½	41	74-1547	2.308	0.250	6	0.724
8*	203	74-8047	8.933	0.250	7	1.713

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS XW Split Stop Ring

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[FRE Composites](#)



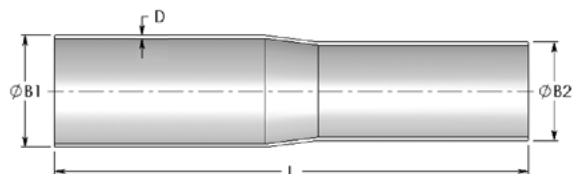
Size		Part Number	ØC	D	L
(in)	(mm)				
¾	21	74-7564	1.458	0.250	2
1	27	74-1064	1.723	0.250	2
1¼	35	74-1264	2.068	0.250	2
1½	41	74-1564	2.308	0.250	2
8*	203	74-8064	8.933	0.250	2

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

IPS XW Reducer

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[FRE Composites](#)



Size		Part Number	ØB1	ØB2	D	L
(in)	(mm)					
1	27	74-1029	1.683	1.418	0.250	18
1¼	35	74-1229	2.028	1.683	0.250	18
1½	41	74-1529	2.268	2.028	0.250	18

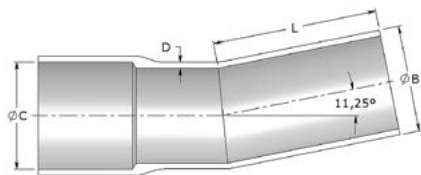
All reducers are by one trade size dimension

Phenolic System · IPS Series

IPS XW 11.25° Fitting

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product info ↓

[FRE Composites](#)

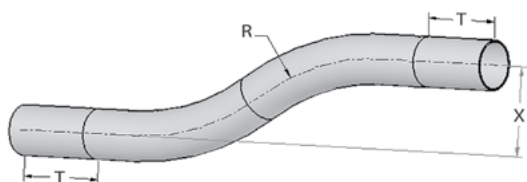


Size		Part Number	ØB	ØC	D	L
(in)	(mm)		(in)			
¾	21	74-7535	1.418	1.458	0.250	7
1	27	74-1035	1.683	1.723	0.250	7
1¼	35	74-1235	2.028	2.068	0.250	7
1½	41	74-1535	2.268	2.308	0.250	7

IPS XW Offset Elbow

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product info ↓

[FRE Composites](#)



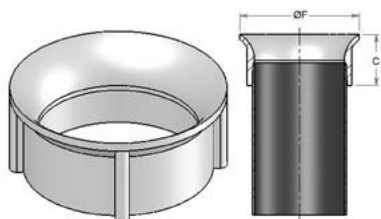
Size	Part Number
All	Special

*Please contact our local agent for quotes and feasibility.

IPS XW Radius Bell End

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product info ↓

[FRE Composites](#)



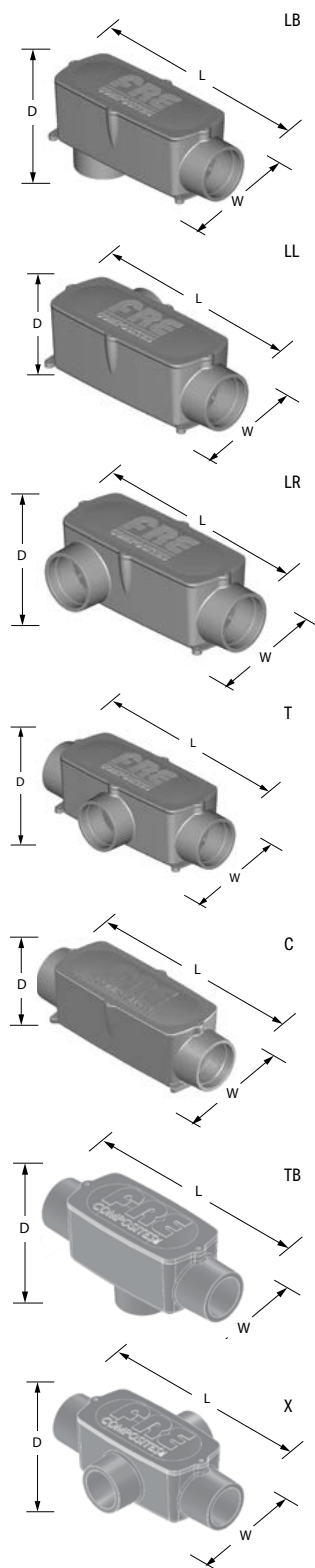
Size		Part Number	C	ØF
(in)	(mm)		(in)	
¾	21	74-7518	1.7	1.918
1	27	74-1018	1.7	2.183
1¼	35	74-1218	1.7	2.528
1½	41	74-1518	1.7	2.768
8*	203	74-8018	2.4	9.393

Phenolic System • IPS Series

IPS XW Conduit Bodies

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product info ↓

[FRE Composites](#)



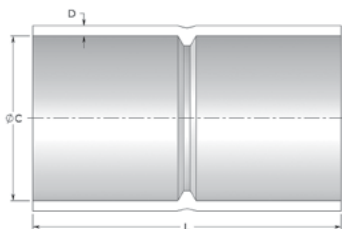
Size		Part Number	Length	Width	Depth
(in)	(mm)		(in)		
LB					
¾	21	74-7591	7.60	2.75	3.88
1	27	74-1091	7.60	2.75	3.88
1 ¼	35	74-1291	9.55	3.84	4.63
1 ½	41	74-1591	9.55	3.84	4.63
LL					
¾	21	74-7592	7.60	4.19	2.38
1	27	74-1092	7.60	4.19	2.38
1 ¼	35	74-1292	9.55	5.31	3.13
1 ½	41	74-1592	9.55	5.31	3.13
LR					
¾	21	74-7593	7.60	4.19	2.38
1	27	74-1093	7.60	4.19	2.38
1 ¼	35	74-1293	9.55	5.31	3.13
1 ½	41	74-1593	9.55	5.31	3.13
T					
¾	21	74-7594	9.00	4.19	2.38
1	27	74-1094	9.00	4.19	2.38
1 ¼	35	74-1294	11.00	5.31	3.13
1 ½	41	74-1594	11.00	5.31	3.13
C					
¾	21	74-7595	9.00	2.75	2.38
1	27	74-1095	9.00	2.75	2.38
1 ¼	35	74-1295	11.00	3.84	3.13
1 ½	41	74-1595	11.00	3.84	3.13
TB					
¾	21	74-7596	9.00	2.75	3.88
1	27	74-1096	9.00	2.75	3.88
1 ¼	35	74-1296	11.00	3.84	4.63
1 ½	41	74-1596	11.00	3.84	4.63
X					
¾	21	74-7597	9.00	5.63	2.38
1	27	74-1097	9.00	5.63	2.38
1 ¼	35	74-1297	11.00	3.13	6.78
1 ½	41	74-1597	11.00	3.13	6.78

Phenolic System · ID Series

ID XW Double Bell Coupling

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[FRE Composites](#)

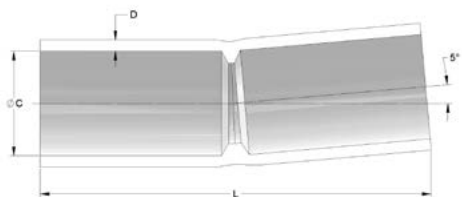


Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	84-2010	2.540	0.250	8.500
2½	63	84-2510	3.040	0.250	8.500
3	78	84-3010	3.540	0.250	8.500
3½	91	84-3510	4.040	0.250	8.500
4	103	84-4010	4.540	0.250	8.500
5	129	84-5010	5.540	0.250	8.500
6	155	84-6010	6.540	0.250	8.500

ID XW 5° Double Bell Coupling

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[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	84-2011	2.540	0.250	8.625
2½	63	84-2511	3.040	0.250	8.625
3	78	84-3011	3.540	0.250	8.750
3½	91	84-3511	4.040	0.250	8.750
4	103	84-4011	4.540	0.250	8.875
5	129	84-5011	5.540	0.250	9.000
6	155	84-6011	6.540	0.250	9.000

ID XW Sleeve (Repair Fitting)

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[FRE Composites](#)



Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	84-2016	2.540	0.250	12
2½	63	84-2516	3.040	0.250	12
3	78	84-3016	3.540	0.250	12
3½	91	84-3516	4.040	0.250	12
4	103	84-4016	4.540	0.250	12
5	129	84-5016	5.540	0.250	12
6	155	84-6016	6.540	0.250	12

Phenolic System · ID Series

ID XW O-Ring Expansion Joint

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[FRE Composites](#)

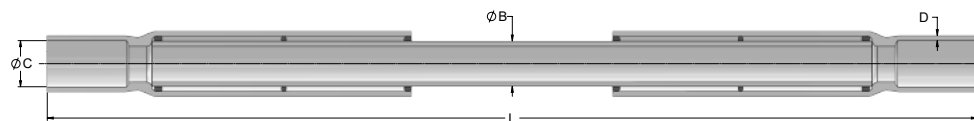


Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
2	53	84-2017	2.500	2.540	0.250	23	35
2½	63	84-2517	3.000	3.004	0.250	23	35
3	78	84-3017	3.500	3.540	0.250	23	35
3½	91	84-3517	4.000	4.040	0.250	23	35
4	103	84-4017	4.500	4.540	0.250	23	35
5	129	84-5017	5.500	5.540	0.250	23	35
6	155	84-6017	6.500	6.540	0.250	23	35

ID XW Double O-Ring Expansion Joint

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[FRE Composites](#)



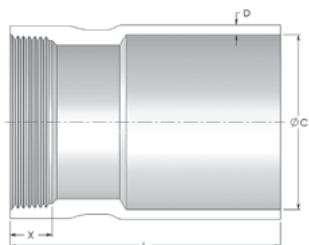
Size		Part Number	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)				
2	53	84-2067	2.500	2.540	0.250	46.5	70.5
2 1/2	63	84-2567	3.000	3.040	0.250	46.5	70.5
3	78	84-3067	3.500	3.540	0.250	46.5	70.5
3 1/2	91	84-3567	4.000	4.040	0.250	46.5	70.5
4	103	84-4067	4.500	4.540	0.250	46.5	70.5
5	129	84-5067	5.500	5.540	0.250	46.5	70.5
6	155	84-6067	6.500	6.540	0.250	46.5	70.5

Phenolic System · ID Series

ID XW NPT Female Threaded Adapter

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[FRE Composites](#)

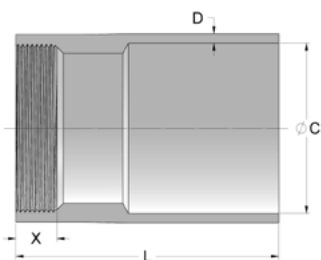


Size		Part Number	ØC	D	L	X
(in)	(mm)					
2	53	84-2044	2.540	0.250	7	0.697
2½	63	84-2544	3.040	0.250	7	0.932
3	78	84-3044	3.540	0.250	7	1.016
3½	91	84-3544	4.040	0.250	7	1.071
4	103	84-4044	4.540	0.250	7	1.094
5	129	84-5044	5.540	0.250	7	1.187
6	155	84-6044	6.540	0.250	7	1.208

ID XW NPSM Female Threaded Adapter-EMT

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[FRE Composites](#)

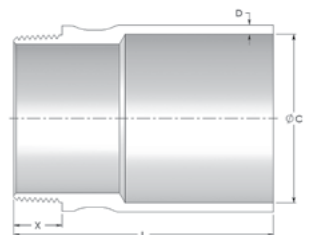


Size		Part Number	ØC	D	L	X
(in)	(mm)					
2	53	84-2045	2.540	0.250	7	0.800
2½	63	84-2545	3.040	0.250	7	0.932
3	78	84-3045	3.540	0.250	7	1.016
3½	91	84-3545	4.040	0.250	7	1.071
4	103	84-4045	4.540	0.250	7	1.094

ID XW NPT Male Threaded Adapter

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[FRE Composites](#)



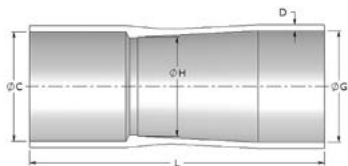
Size		Part Number	ØC	D	L	X
(in)	(mm)					
2	53	84-2027	2.540	0.250	7	0.757
2½	63	84-2527	3.040	0.250	7	1.138
3	78	84-3027	3.540	0.250	7	1.200
3½	91	84-3527	4.040	0.250	7	1.250
4	103	84-4027	4.540	0.250	7	1.300
5	129	84-5027	5.540	0.250	7	1.406
6	155	84-6027	6.540	0.250	7	1.513

Phenolic System · ID Series

ID XW Multifit Adapter

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[FRE Composites](#)

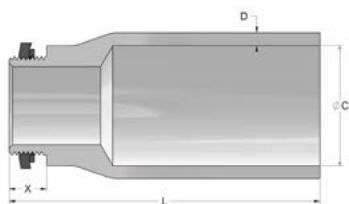


Size		Part Number	ØC	D	ØG	ØH	L
(in)	(mm)		(in)				
2	53	84-2037	2.540	0.250	2.424	2.239	12.25
2½	63	84-2537	3.040	0.250	2.924	2.739	12.25
3	78	84-3037	3.540	0.250	3.549	3.239	12.25
3½	91	84-3537	4.040	0.250	4.061	3.709	12.25
4	103	84-4037	4.540	0.250	4.620	4.109	12.25
5	129	84-5037	5.540	0.250	5.650	5.289	12.25
6	155	84-6037	6.540	0.250	6.686	6.259	12.25

ID XW Box Connector

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[FRE Composites](#)



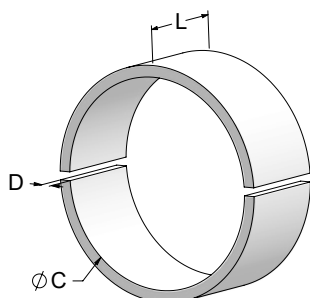
Size		Part Number	ØC	D	L	X
(in)	(mm)		(in)			
2	53	84-2047	2.540	0.250	7	0.757
2½	63	84-2547	3.040	0.250	7	1.138
3	78	84-3047	3.540	0.250	7	1.200
3½	91	84-3547	4.040	0.250	7	1.250
4	103	84-4047	4.540	0.250	7	1.300
5	129	84-5047	5.540	0.250	7	1.406
6	155	84-6047	6.540	0.250	7	1.513

Phenolic System · ID Series

ID XW Split Stop Ring

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[FRE Composites](#)

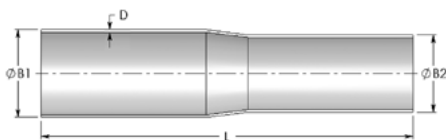


Size		Part Number	ØC	D	L
(in)	(mm)		(in)		
2	53	84-2064	2.540	0.250	2
2½	63	84-2564	3.040	0.250	2
3	78	84-3064	3.540	0.250	2
3½	91	84-3564	4.040	0.250	2
4	103	84-4064	4.540	0.250	2
5	129	84-5064	5.540	0.250	2
6	155	84-6064	6.540	0.250	2

ID XW Reducer

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[FRE Composites](#)



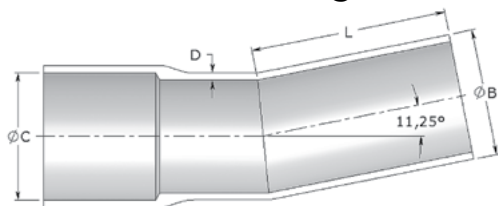
Size		Part Number	ØB1	ØB2	D	L
(in)	(mm)		(in)			
2	53	84-2029	2.500	2.268	0.250	18
2½	63	84-2529	3.000	2.500	0.250	18
3	78	84-3029	3.500	3.000	0.250	18
3½	91	84-3529	4.000	3.500	0.250	18
4	103	84-4029	4.500	4.000	0.250	18
5	129	84-5029	5.500	4.500	0.250	18
6	155	84-6029	6.500	5.500	0.250	18

Phenolic System · ID Series

ID XW 11.25° Fitting

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[FRE Composites](#)

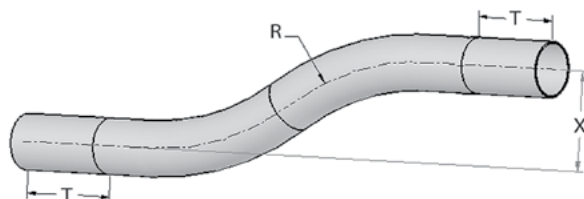


Size		Part Number	ØB	ØC	D	L
(in)	(mm)		(in)			
2	53	84-2035	2.500	2.540	0.250	7
2½	63	84-2535	3.000	3.040	0.250	7
3	78	84-3035	3.500	3.540	0.250	7
3½	91	84-3535	4.000	4.040	0.250	7
4	103	84-4035	4.500	4.540	0.250	7
5	129	84-5035	5.500	5.540	0.250	7
6	155	84-6035	6.500	6.540	0.250	7

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[FRE Composites](#)

ID XW Offset Elbow



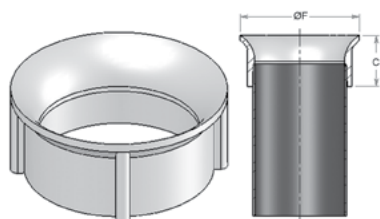
Size	Part Number
All	Special

*Please contact our local agent for quotes and feasibility.

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[FRE Composites](#)

ID XW Radius Bell End

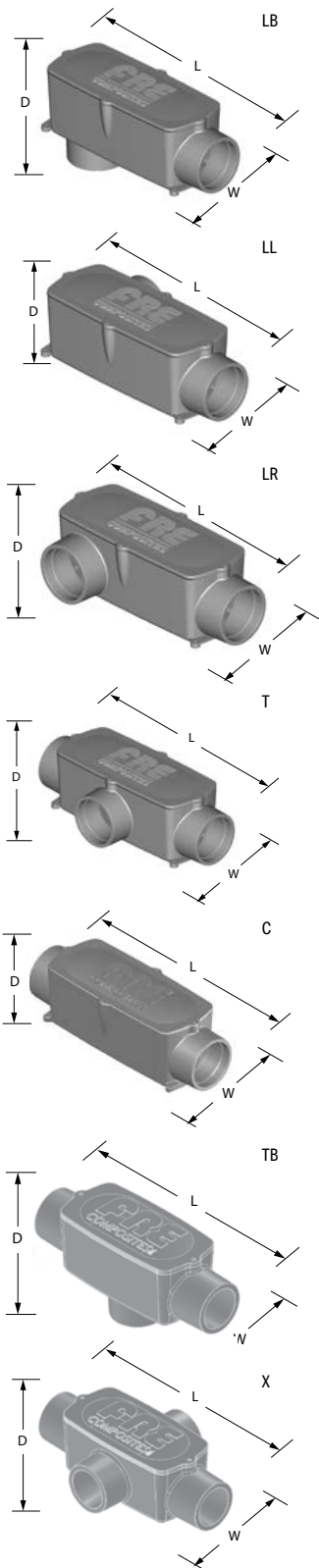


Size		Part Number	C	ØF
(in)	(mm)		(in)	
2	53	84-2018	1.700	3.000
2½	63	84-2518	1.700	3.500
3	78	84-3018	1.700	4.000
3½	91	84-3518	1.700	4.500
4	103	84-4018	2.162	5.000
5	129	84-5018	2.162	6.000
6	155	84-6018	2.416	7.000

Phenolic System • ID Series

ID XW Conduit Bodies

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product info ↓
[FRE Composites](#)



Size		Part Number	Length	Width	Depth
(in)	(mm)		(in)		
LB					
2	53	84-2091	11.63	4.38	5.47
LL					
2	53	84-2092	11.63	6.09	3.59
LR					
2	53	84-2093	11.63	6.09	3.59
T					
2	53	84-2094	13.40	6.09	3.59
C					
2	53	84-2095	13.40	4.38	3.59
TB					
2	53	84-2096	13.40	4.38	5.47
X					
2	53	84-2097	13.40	7.81	3.59

Phenolic System · Accessories

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[FRE Composites](#)

Adhesive Kit

20-0165



Size	Part Number	
All	40-0161	Epoxy Kit
All	20-0163	Adhesive Kit Dual Cartridge (Fast Cure)
All	20-0164	Dual Cartridge (Ambient Conditions)
All	20-0165	Dual Cartridge Applicator

20-0163 / 20-0164



(1) Mixer Tip is included per kit

Mechanical Properties (40-0161)		Mechanical Properties (20-0163)		Mechanical Properties (20-0164)	
Shore D Hardness	81	Shore D Hardness	72	Shore D Hardness	90
Tensile strength	3 060 Psi	Tensile strength	8,000 Psi	Tensile strength	9,900 Psi
Lap shear strength	252 Psi	Lap shear strength	3,500 Psi	Viscosity	40,000 cP
Viscosity	3 700 cP	Viscosity	13,500 cP	Mix ratio	2 : 1
Mix ratio	2 : 1	Mix ratio	1 : 1	Color	Opaque
Color	Opaque	Color	Yellow	Solid content	100%
Solid content	100%	Solid content	100%		

[Click brand for more product info](#) ↓

[FRE Composites](#)

Joint Calculation Table

Size		IPS Based	
(in)	(mm)	Joints Made per kit	Pull-Out Strength (lbs)
¾	21	28	1 700
1	27	26	2,000
1¼	35	24	2,000
1½	41	20	2,000
8*	203	3	8,000

* 8" is not a recognized trade size per electrical code (NEC/CEC), therefore cannot be UL listed and CSA certified.

Size		ID Based	
(in)	(mm)	Joints Made per kit	Pull-Out Strength (lbs)
2	53	18	2,000
2½	63	16	2,500
3	78	13	3,000
3½	91	11	3,500
4	103	10	4,000
5	129	7	5,000
6	155	6	6,000

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[FRE Composites](#)

Mixer Tip

(Fast Cure Orange)

Size	Part Number
All	20-0162



Note: (Orange) use with 20-0163

(Ambient Conditions Green)

Size	Part Number
All	20-0166



Note: (Green) use with 20-0164



PVC FITTINGS

Allied Tube & Conduit
Heritage Plastics
Queen City Plastics

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 - Repair Sleeve Couplings
 - Swedge Couplings

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- Pull Elbows
- Reducer Bushings
- Service Entrance Heads
- Slip Meter Risers
- Swedge Reducers
- Two-Hole Pipe Straps

PVC Fittings

We offer a complete line of rigid PVC conduit, utility duct, and fittings which have proven durable and effective for years of maintenance free performance in underground, encased and exposed applications.

What are typical applications?

- Residential, Commercial and Industrial
- Transportation and Highway
- Airports and Marinas
- Cable, Data and Communication Lines
- Utilities

What are advantages of PVC?

- Corrosion Resistant
- Long Life
- Impact Resistant
- Labor Savings
- Lightweight
- Non Magnetic
- Self Extinguishing
- Non Galvanic

Are Schedule 80 and 40 electrical conduit and fabricated fittings suited for direct sunlight?

Schedule 40 and 80 conduit and fabricated fittings are “Sunlight Resistant” in accordance with UL 651. Refer to the Atkore Sunlight Exposure Technical Bulletin on the website for additional information.

Part Number Guide

Fittings

4" Coupling

CP40

Product

Trade
Size



PVC Fittings

Access Fittings

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Type LB



Type T



Type LR



Type LL



Type E



Type C



Trade Size	Part Number						Package Quantity	
	LB	T	LR	LL	E	C		T Only
½	LB05	T05	LR05	LL05	E05	C05	25	25
¾	LB07	T07	LR07	LL07	E07	C07	15	15
1	LB10	T10	LR10	LL10	E10	C10	10	10
1¼	LB12	T12	LR12	LL12	E12	C12	10	10
1½	LB15	T15	LR15	LL15	E15	C15	10	10
2	LB20	T20	LR20	LL20	E20	C20	5	5
2½	LB25	T25	LR25	LL25	E25	C25	5	2
3	LB30	T30	LR30	LL30	E30	C30	5	2
3½	LB35	T35	LR35	LL35	E35	C35	4	1
4	LB40	T40	LR40	LL40	E40	C40	4	1

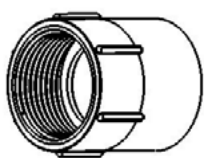
Product availability may vary by region

PVC Fittings

Adapters

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Female Adapters



Terminal Adapters



Part Number	Trade Size	Package Quantity
Female Adapters		
FA05	½	200
FA07	¾	125
FA10	1	70
FA12	1¼	40
FA15	1½	30
FA20	2	40
FA25	2½	20
FA30	3	40
FA35	3½	30
FA40	4	20
FA50	5	10
FA60	6	8
FA80	8*	2
Terminal Adapters		
TA05	½	200
TA07	¾	125
TA10	1	70
TA12	1¼	40
TA15	1½	30
TA20	2	40
TA25	2½	20
TA30	3	40
TA35	3½	30
TA40	4	20
TA50	5	10
TA60	6	8
TA80	8*	2

*8 inch products are not included in UL 651

PVC Fittings

Cement, Cleaner, Primer

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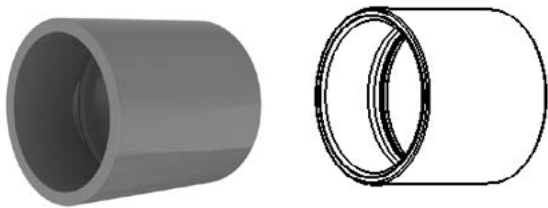
Part Number	Type	Size	Package Quantity
Cement			
CEMCR10	Regular Body - Clear	Pint	12
CEMCR20	Regular Body - Clear	Quart	12
CEMC05	Medium Body - Clear	Half Pint	24
CEMC10	Medium Body - Clear	Pint	12
CEMC20	Medium Body - Clear	Quart	12
CEMC80	Medium Body - Clear	Gallon	6
CEMG20	Medium Body - Gray	Quart	12
CEMCH20	Heavy Body - Clear	Quart	12
CWC10	All Weather - Clear	Pint	12
CWC20	All Weather - Clear	Quart	12
CWB20	All Weather - Blue	Quart	12
Cleaner			
CLN20	Clear	Quart	12
Primer			
PRMC20	Clear	Quart	12
PRMP10	Purple	Pint	12
PRMP20	Purple	Quart	12

Product availability may vary by region

PVC Fittings

Couplings

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Part Number	Trade Size	Package Quantity
CP05	1/2	200
CP07	3/4	125
CP10	1	70
CP12	1 1/4	40
CP15	1 1/2	30
CP20	2	40
CP25	2 1/2	20
CP30	3	40
CP35	3 1/2	30
CP40	4	20
CP50	5	10
CP60	6	8
CP80	8*	1

*8 inch products are not included in UL 651
Conforms to NEMA TC-3

PVC Fittings

5° Couplings

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Bell x Bell



Bell x Spigot

Part Number		Trade Size	Package Quantity
Bell x Bell	Bell x Spigot		
DB			
605EC30BB	605EC30BS	3	30
605EC40BB	605EC40BS	4	30
605EC50BB	605EC50BS	5	15
605EC60BB	605EC60BS	6	10
Schedule 40			
405EC20BB	405EC20BS	2	50
405EC30BB	405EC30BS	3	30
405EC40BB	405EC40BS	4	30
405EC50BB	405EC50BS	5	15
405EC60BB	405EC60BS	6	10
C-Duct			
C5EC40BB	C5EC40BS	4	30

Product availability may vary by region

PVC Fittings

Expansion Couplings, One Piece

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Part Number	Trade Size	Package Quantity
EJ-105	½	80
EJ-107	¾	50
EJ-110	1	50
EJ-112	1¼	25
EJ-115	1½	25
EJ-120	2	10

Product availability may vary by region

Expansion Couplings, Two Piece

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Part Number	Trade Size	Package Quantity
EJ05	½	25
EJ07	¾	25
EJ10	1	40
EJ12	1¼	20
EJ15	1½	20
EJ20	2	10
EJ25	2½	9
EJ30	3	9
EJ35	3½	5
EJ40	4	5
EJ50	5	1
EJ60	6	1

Product availability may vary by region

PVC Fittings

Long Line Couplings

Click brand for more product info ↓

- Allied Tube & Conduit
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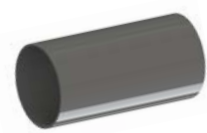
Part Number	Trade Size	Package Quantity
LLC15	1½	25
LLC20	2	20
LLC25	2½	25
LLC30	3	25
LLC40	4	15
LLC50	5	8
LLC60	6	4

*Some diameters may be fabricated causing product appearance to vary.

Repair Sleeve Couplings

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- Queen City Plastics



Part Number	Trade Size	Package Quantity
40REC10	1	50
40REC12	1¼	50
40REC15	1½	50
40REC20	2	50
40REC25	2½	30
40REC30	3	30
40REC40	4	30
40REC50	5	15
40REC60	6	10

Product availability may vary by region

PVC Fittings

Swedge Couplings

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Part Number	Trade Size	Package Quantity
DB		
60SWC15	1½	50
60SWC20	2	50
60SWC30	3	30
60SWC40	4	30
60SWC50	5	15
60SWC60	6	10
Schedule 40		
40SWC10	1	50
40SWC12	1¼	50
40SWC15	1½	50
40SWC20	2	50
40SWC25	2½	30
40SWC30	3	30
40SWC40	4	30
40SWC50	5	15
40SWC60	6	10
40SWC80	8	6
Schedule 80		
80SWC20	2	50
80SWC30	3	30
C-Duct		
C60SWC40	4 C-Duct to 4 Duct	30
CSWC40	4	30

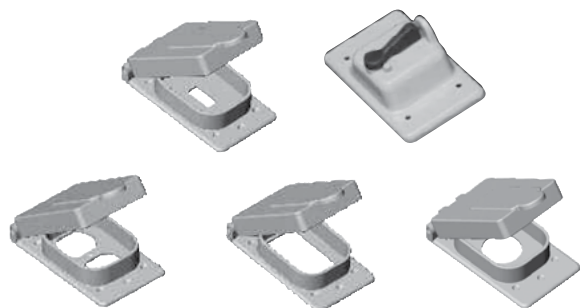
Product availability may vary by region

PVC Fittings

Covers

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Single Gang Weatherproof Covers



Single Gang Covers



Double Gang Weatherproof Covers



Double Gang Covers



Part Number	Description	Type	Package Quantity
Weatherproof Covers			
WTG 15/10	Toggle Switch	Single Gang	20
VSC 15/10	Toggle Switch with Lock	Single Gang	20
WDR 15/10	Duplex Receptacle	Single Gang	20
WGF 15/10	GFI Receptacle	Single Gang	20
WTL 15	Single Receptacle - 15 amps	Single Gang	10
VSC20-2	Double Toggle Switch with Lock	Double Gang	10
VSGG20-2*	Double GFI Receptacle	Double Gang	15
VSDD20-2*	Double Duplex Receptacle	Double Gang	15
Covers			
TSC 15/10*	Toggle Switch	Single Gang	100
DRC 15/10*	Duplex Receptacle	Single Gang	100
FSKIT	Single Blank with Gasket	Single Gang	50
TSC20-2*	Double Switch	Double Gang	50
DRC20-2*	Double Duplex	Double Gang	50
BRC20-2	Double Blank with Gasket	Double Gang	50

Product availability may vary by region

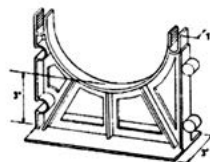
* Not listed to UL651

PVC Fittings

Duct Spacers

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Trade Size	Part Number	Package Quantity	Part Number	Package Quantity
	Intermediate Spacers		Base Spacers	
2 x 1½	IV2015	350	BV2015	250
2 x 2	IV2020	300	BV2020	225
2 x 3	IV2030	200	BV2030	225
3 x 1½	IV3015	225	BV3015	175
3 x 2	IV3020	200	BV3020	155
3 x 3	IV3030	125	BV3030	150
4 x 1	IV4010	200	BV4010	175
4 x 1½	IV4015	150	BV4015	140
4 x 2	IV4020	125	BV4020	140
4 x 3	IV4030	90	BV4030	120
5 x 1½	IV5015	100	BV5015	120
5 x 2	IV5020	100	BV5020	120
5 x 3	IV5030	80	BV5030	100
6 x 1½	IV6015	100	BV6015	100
6 x 2	IV6020	90	BV6020	100
6 x 3	IV6030	70	BV6030	95
8 x 2	IV8020	60	BV8020	50

Product appearance may vary by region
Product availability may vary by region

PVC Fittings

End Bells

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product info ↓

- Allied Tube & Conduit
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Part Number	Trade Size	Package Quantity
MEB05	1/2	100
MEB07	3/4	100
MEB10	1	50
MEB12	1 1/4	50
MEB15	1 1/2	50
MEB20	2	40
MEB25	2 1/2	30
MEB30	3	50
MEB35	3 1/2	50
MEB40	4	50
MEB50	5	25
MEB60	6	15
MEB80	8	1

Product availability may vary by region

PVC Fittings

End Caps

Click brand for more product info ↓

- Allied Tube & Conduit
- Heritage Plastics
- Queen City Plastics



Part Number	Trade Size	Package Quantity
EC05	1/2	200
EC07	3/4	150
EC10	1	100
EC12	1 1/4	40
EC15	1 1/2	40
EC20	2	20
EC25	2 1/2	15
EC30	3	10
EC35	3 1/2	25
EC40	4	12
EC50	5	5
EC60	6	10
EC80	8	1

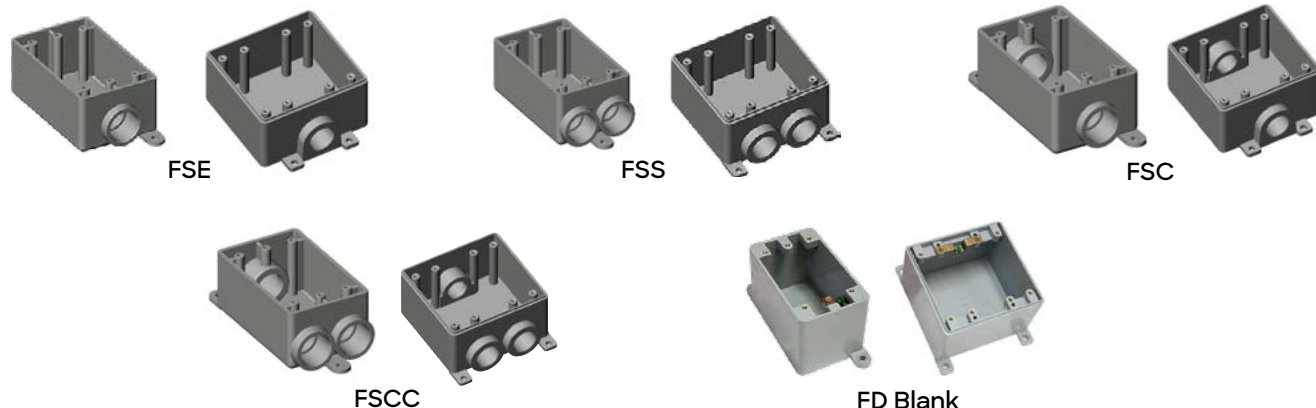
Product availability may vary by region

PVC Fittings

F-Series Boxes

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Part Number	Trade Size	Type	Package Quantity
FSE			
FSE05	1/2	Single Gang	10
FSE07	3/4	Single Gang	10
FSE10	1*	Single Gang	10
FSED050710	1/2 - 3/4 -1 Deep	Single Gang	10
FSE-2-050710	1/2 - 3/4 -1	Double Gang	5
FSS			
FSS05	1/2	Single Gang	10
FSS07	3/4	Single Gang	10
FSS10	1*	Single Gang	10
FSS-2-050710	1/2 - 3/4 -1	Double Gang	5
FSC			
FSC05	1/2	Single Gang	10
FSC07	3/4	Single Gang	10
FSC10	1*	Single Gang	10
FSCD050710	1/2 - 3/4 -1 Deep	Single Gang	10
FSC-2-050710	1/2 - 3/4 -1	Double Gang	5
FSCC			
FSCC05	1/2	Single Gang	10
FSCC07	3/4	Single Gang	10
FSCC10	1*	Single Gang	10
FSCC-2-050710	1/2 - 3/4 -1	Double Gang	5
FD Blank			
FD	Deep*	Single Gang	20
FD-2	Deep*	Double Gang	100

Product availability may vary by region

* Not listed to UL651

PVC Fittings

Junction Box Adapters

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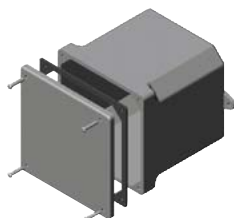
Part Number	Trade Size	Package Quantity
JBA05	1/2	100
JBA07	3/4	100
JBA10	1	100
JBA12	1 1/4	50
JBA15	1 1/2	50
JBA20	2	25
JBA25	2 1/2	10
JBA30	3	10
JBA35	3 1/2	10
JBA40	4	10

Product availability may vary by region

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Junction Boxes



Trade Size	Part Number	Package Quantity	Part Number	Package Quantity
	Self Tapping Screws		Brass Screw Inserts	
4x4x2	JB442S	10	JB442	15
4x4x4	JB444S	10	JB444	10
4x4x6	JB446S	10	JB446	8
5x5x2	JB552S	10	JB552	12
6x6x4	JB664S	10	JB664	15
6x6x6	JB666S	5	JB666	4
8x8x4	JB884S	5	JB884	4
8x8x7	JB887S	4	JB887	4
12x12x4	JB12124S	2	JB12124	2
12x12x6	JB12126S	2	JB12126	4
12x12x8	JB12128S	3	JB12128	3

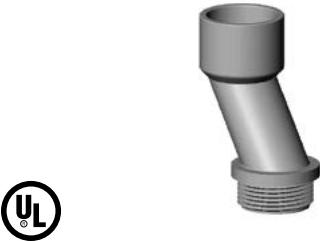
Self Tapping not listed to UL
Product appearance may vary by region
Product availability may vary by region

PVC Fittings

Meter Offsets

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- Allied Tube & Conduit
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Part Number	Trade Size	Package Quantity
M012	1¼	50
M020	2	25

Product availability may vary by region

Plugs

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- Allied Tube & Conduit
- Heritage Plastics
- Queen City Plastics



Expandable Plug

Part Number	Trade Size	Package Quantity
KW20L	2	50
KW25L	2½	30
KW30L	3	30
KW40L	4	30
KW50L	5	20

Product availability may vary by region

PVC Fittings

Plugs

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[Queen City Plastics](#)



Temporary Plug

Part Number	Trade Size	Package Quantity
UTP10	1	100
UTP12	1¼	100
UTP15	1½	100
UTP20	2	100
UTP25	2½	100
UTP30	3	80
UTP35	3½	80
UTP40	4	50
UTP50	5	40
UTP60	6	30
UTP80	8	12

Product availability may vary by region

Pull Elbows

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Part Number	Trade Size	Package Quantity
PULEL0705	½ & ¾	50

Product availability may vary by region

PVC Fittings

Reducer Bushings

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Part Number	Trade Size	Package Quantity
MR0705	3/4 x 1/2	100
MR1005	1 x 1/2	100
MR1007	1 x 3/4	100
MR1207	1 1/4 x 3/4	50
MR1210	1 1/4 x 1	50
MR1510	1 1/2 x 1	50
MR1512	1 1/2 x 1 1/4	50
MR2010	2 x 1	50
MR2012	2 x 1 1/4	25
MR2015	2 x 1 1/2	25
MR2520	2 1/2 x 2	15
MR3020	3 x 2	25
MR3025	3 x 2 1/2	15
MR4020	4 x 2	10
MR4030	4 x 3	10
MR4035	4 x 3 1/2	15

Product availability may vary by region

PVC Fittings

Service Entrance Heads

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Part Number	Trade Size	Package Quantity
MH05	½	25
MH07	¾	25
MH10	1	15
MH12	1¼	20
MH15	1½	5
MH20	2	5
MH25	2½	2
MH30	3	2
MH35	3½	2
MH40	4	2

Product availability may vary by region

Slip Meter Risers

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Part Number	Trade Size	Package Quantity
Schedule 40		
MTR40200	2	10
MTR40250	2½	8
MTR40300	3	5
MTR40400	4	3

Product availability may vary by region

PVC Fittings

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Swedge Reducers

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Swedge Reducer Spigot x Spigot

Part Number	Trade Size	Package Quantity
DB		
60SW2520SS	2½ x 2	100
60SW3020SS	3 x 2	80
60SW3025SS	3 x 2½	80
60SW4030SS	4 x 3	60
60SW5040SS	5 x 4	36
60SW6050SS	6 x 5	36
Schedule 40		
40SW1510SS	1½ x 1	25
40SW2015SS	2 x 1½	25
40SW2520SS	2½ x 2	80
40SW3020SS	3 x 2	80
40SW3025SS	3 x 2½	80
40SW4030SS	4 x 3	60
40SW5040SS	5 x 4	36
40SW6050SS	6 x 5	36
Schedule 80		
80SW3020SS	3 x 2	80
80SW4030SS	4 x 3	60
80SW5040SS	5 x 4	36

Product availability may vary by region

PVC Fittings

Two-Hole Pipe Straps

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product info ↓

- Allied Tube & Conduit
- Heritage Plastics
- Queen City Plastics



Part Number	Trade Size	Package Quantity
PS05	1/2	400
PS07	3/4	200
PS10	1	200
PS12	1 1/4	200
PS15	1 1/2	200
PS20	2	200
PS25	2 1/2	100
PS30	3	100
PS40	4	100

Product availability may vary by region



SECURITY SOLUTIONS

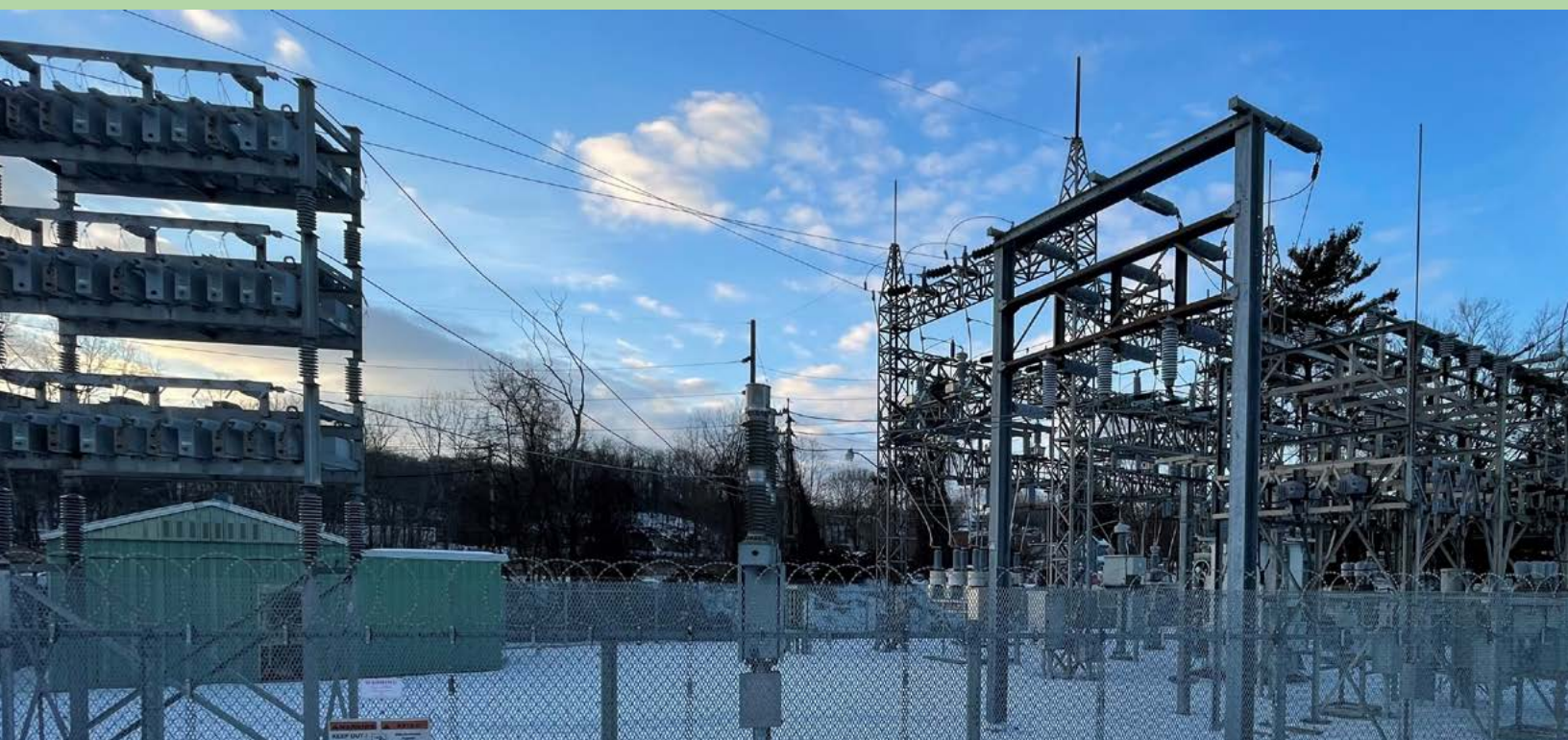
Energy, Utility and Municipal Markets

Razor Ribbon
Calpipe Security

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- RDU Magazines
- Rapid Deployment Unit Trailers
- Instabox Portable Rapid Deployment Unit
- Razor-Ribbon Razor Cage
- Razor-Ribbon Razor Cage Applications
- Base Plate Bollards and Decorative Covers
- Safety and Security Bollard Solutions
- Crash Rated Security Bollards
- Crash Test Certified to F3016-19 Bollards
- Why Atkore Razor-Ribbon



Perimeter security solutions for the Energy, Utility and Municipal Markets

Customers throughout the United States are reporting increasing issues with break-ins, vandalism, theft and loitering at their sites and have reached out to Atkore Razor-Ribbon® for solutions to prevent such intrusions. Atkore Razor-Ribbon has worked with several energy power plants, utilities and municipal customers providing different perimeter security solutions that deter, delay and protect based on each customers' specific needs.

Atkore Razor-Ribbon's Razor Mesh Panel solutions can be adapted to meet any level of security. Razor Mesh Panels come in a variety of styles that include the combination of expanded metal panels being integrated with Razor Strands or Flat Razor Wrap. Each solution is designed based on the voice of the customer to make sure all of their security needs are met.

Shown below is an example of just one solution that was developed to increase the security of a perimeter fence. The Razor Mesh Panels were installed as a retro-fit over the existing chain link fence which instantly increased the height of the fence, made the fence significantly more difficult to cut or climb, and created an imposing physical and psychological deterrent. The customer that was once experiencing several break-ins and thefts per month has reported zero intrusions since the installation of the panels several years prior.



Before



After

Key Features	Key Benefits
Not welded but cut from solid steel	- Razor Mesh Panels will never have welds that fail - Welded mesh is susceptible to rusting at the welded joints
Rigid	- Capable of withstanding wind loads - Panels can easily accommodate the weight of additional perimeter security appurtenances; including razor wire, cameras, sensor cables, etc
Anti-cut / Anti-climb properties	- Small openings make it significantly more difficult to cut or climb - Cutting requires special tools and intruder must cut a hole large enough to climb through
Easy Installation	- No springing action during installation resulting in less field work - Panels install more accurately without waste, dragging or overlapping - Panels do not require special heavy equipment or machinery to install
Flexibility	- Panels can be installed as standalone or easily integrated with any existing fence framework - Panel design can be customized to your specific security needs
Visual deterrence	The increased height, intimidating appearance, and additional layer of security deters intruders from attempting to break into your site

Introduction to Razor Ribbon

[Click brand for more product info](#) ↓

Razor Ribbon

[Razor Ribbon](#)

Atkore Razor-Ribbon is a leading manufacturer of barbed tape products and a domestic manufacturer in the United States.

The Atkore Razor-Ribbon line of barbed tape products is the optimal choice for perimeter security protection. Manufactured for use in the most secure and restricted environments, Atkore Razor-Ribbon has enhanced security protection for a variety of industrial, military, and institutional facilities.

Our Atkore Razor-Ribbon products are razor sharp and can create serious cuts on anyone trying to climb over the barrier. The products are not only used as a physical barrier but also work as a psychological deterrent. Atkore Razor-Ribbon is designed to deter, delay, and detect intruders.

What Sets Us Apart

- Nationwide and international distribution
- Superior deterrence and security
- Manufactured from exceptionally tough, high-quality stainless steel components with full traceability
- Single or double coil spiral or concertina available
- Various diameter and deployed lengths available
- Large capacity with quick turnaround
- Product workmanship warranty
- Easy-to-install
- Unparalleled customer and technical support

Barbed Tape Styles

Short Barb



Medium Barb



BTC NATO Barb



Long Barb



Instabarrier® Barb



Detainer Hook® Barb

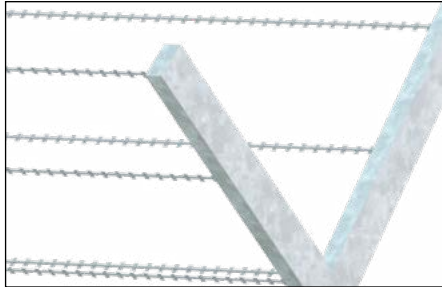


Different Forms of Barbed Tape

[Click brand for more product info](#) ↓

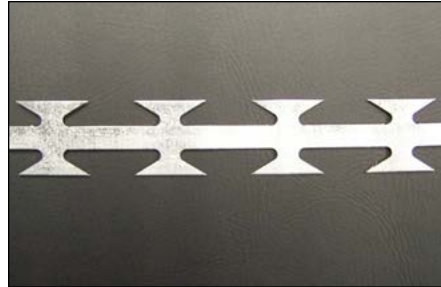
[Razor Ribbon](#)

Razor Strand™



- Wire-reinforced alternative to traditional barbed wire for low-level security applications when added psychological deterrence is desired
- Can be installed in either lineal strands per barbed wire specifications or coils may be ordered as a substitute
- Available in any barb style
- Barbed tape and core available in stainless steel or galvanized
- Razor Strand comes in a standard length of 351' (107m)

Coreless



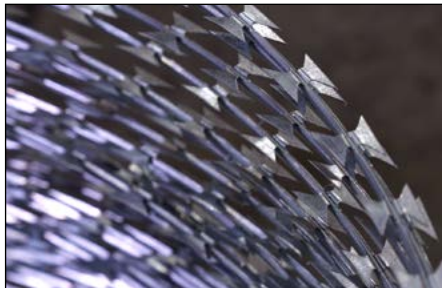
- Non-reinforced barbed tape
- Can be installed either in lineal strands or wrapped around objects to prevent climbing
- Available in any barb style in stainless steel or galvanized
- Coreless Barbed Tape comes in standard lengths of 1000' and 1500' (305m and 457m)

Helical



- Wire-reinforced helical barrier formed without clipping (slinky)
- Ideal product for low security applications
- Available in any barb style
- Barbed tape and core available in stainless steel or galvanized
- Helical coils come standard in diameters of 18", 24", 30", 36" (450mm, 600mm, 750mm, 900mm)

Concertina



- Minimum to maximum perimeter security applications
- Single coil wire-reinforced concertina additionally formed utilizing steel clips
- "Tunnel" with restricted spaces between tape
- More clips = tighter spacing = higher security
- Available in any barb style
- Concertina barbed tape and core available in galvanized or stainless steel
- Various standard diameter, coil lengths and clip configurations available

Flat Razor Wrap



- Psychological deterrence
- Installs flat providing an aesthetically pleasing perimeter security delay barrier
- Easily replaceable in case of damage
- Multiple rows of Flat Razor Wrap can be added for greater security
- Powder coated coils available for added corrosion protection
- Flat Razor Wrap coils come standard in diameters of 18", 24", 30" (450mm, 600mm, 750mm)

Rapid Deployment



- Safe and easy installation
 - Less handling of material
 - Deploys quick and easy using ancillary equipment or truck
 - Posts/pickets not required
- Significantly less time and labor to install
 - Stacked coils are preconnected
 - Installation requires only 2-3 people
 - Can install up to 480' (146m) in minutes (Triple Strand), 246' (75m) for (Six Pack)
- Versatile
 - Can be used as temporary or permanent barrier
 - Reusable

Product Selector Guide

Click brand for more
product info ↓

Razor Ribbon

Security Level	Product Name	Diameter		Loops	Clips	Loop Spacing		Length Per Roll		Weight Per Roll	
		(in)	(mm)			(in)	(mm)	(ft)	(m)	(lb)	(kg)
Commercial, Industrial, Military (Any Level)	BTC Barbed Tape Short or Medium Barb Medium available offset	18	450	56	3	16	406	37	11	17	8
		28	720	56	3	21	533	50	15	26	12
		36	900	50	5	24	600	50	15	30	14
		38	965	56	5	21	533	50	15	35	16
		40	1000	56	5	21	533	50	15	37	17
Commercial, Industrial, Military (Any Level)	BTC NATO-22 Barbed Tape BTC NATO Barb Available offset	18	450	56	3	16	406	36	11	17	8
		24	600	56	3	16	406	36	11	23	10
		28	720	56	3 (5)	21 (16)	533 (406)	50 (36)	15 (11)	27	12
		30	750	56	5	21	533	50	15	28	13
		36	900	56	5	21	533	50	15	34	16
		38	980	56	5 (7)	21 (6)	533 (150)	50 (14)	15 (4.3)	36	16
		40	1000	56	5	21	533	50	15	38	17
Warehousing, Construction, Manufacturing, Parking Lots (Low Level)	Razor-Ribbon® Helical Long Barb (Standard) Short, Medium, BTC NATO-22 or Detainer Hook available Long, Medium and BTC NATO-22 available offset	18	450	33	-	18	450	50	15	14	6
		24	600	33	-	18	450	50	15	18	8
		30	750	33	-	18	450	50	15	23	10
		36	900	33	-	18	450	50	15	28	12
Confinement, Detention, Utilities, Airports, Data Centers (Minimum to Maximum)	Maze® Long Barb Available offset	18	450	31	3	12	300	15	4.5	13	6
		24	600	31	3	16	400	20	6	18	8
		30	750	31	3	16	400	20	6	22	10
		36	900	31	3	16	400	20	6	26	12
		18/24	450/600	31/31	3	12	300	15	4.5	31	14
		24/30	600/750	31/31	3	16	400	20	6	39	18
Confinement, Detention, Utilities, Airports, Data Centers (Maximum)	Supermaze® Long Barb Available offset	30	750	51 (81)	5	12	300	25 (40)	7.5 (12)	36 (58)	16 (26)
		36	900	51 (81)	5	12	300	25 (40)	7.5 (12)	43 (69)	20 (31)
		40	1000	51 (81)	5	12	300	25 (40)	7.5 (12)	48 (77)	22 (35)
	NATO Barrier™ Long Barb Available offset	40	1000	51 (81)	7	12	300	25 (40)	7.5 (12)	49 (77)	22 (35)
		60	1500	51 (101)	9	12	300	25 (50)	7.5 (15)	73 (144)	33 (65)
Confinement, Detention, Nuclear, Petroleum/ Chemical Storage (Maximum)	Detainer Hook® Barb Detainer Hook Barb	19	483	31	3	12	300	15	4.5	15	7
		25	635	31	3	16	400	20	6	20	9
		31	787	31 (51)	3 (5)	16 (12)	400 (300)	20 (25)	6 (7.5)	26 (42)	12 (19)
		37	940	51	5	12	300	25	7.5	51	23
		41	1041	51	7	12	300	25	7.5	57	26
		61	1549	81 (101)	9	12	300	40 (50)	12 (15)	135 (168)	61 (76)
Ground Barrier for Con- finement, Detention, Nuclear, etc. (Minimum to Maximum)	Instabarrier® (Non-Reinforced) Instabarrier Barb	24	600	101	3 welds	12	300	50	15	49	22
		30	750	101	5 welds	12	300	50	15	62	28
		40	1000	101	7 welds	12	300	50	15	82	37
		60	1500	101	13 welds	12	300	50	15	124	56
Commercial, Industrial, Utilities (Any level)	Flat Razor Wrap Medium Barb (Standard) Short, NATO-22 available	18	450	133	-	9	225	50	15	22	10
		24	600	100	-	12	300	50	15	22	10
		30	750	80	-	15	375	50	15	22	10

Barb Options



Short Barb



Medium Barb



BTC NATO Barb



Long Barb



Instabarrier® Barb



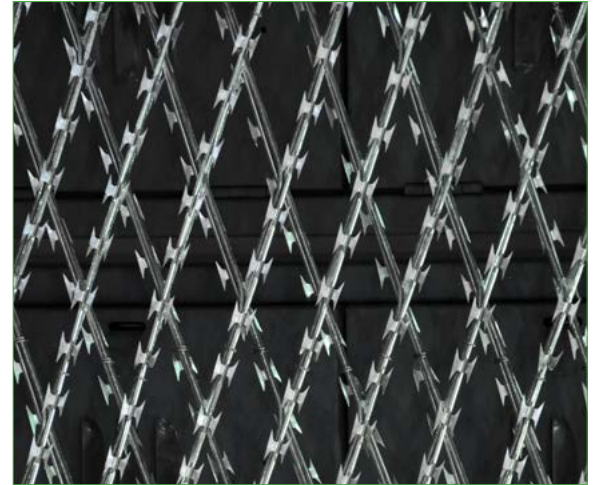
Detainer Hook® Barb

Atkore Razor-Ribbon Razor Mesh Panels

Razor Mesh Panel

Atkore Razor-Ribbon's new Razor Mesh Panel is the FIRST line of defense to secure a perimeter, from medium to high, to ultra-high security fencing.

- Expanded metal panel with strands of Atkore Razor-Ribbon® secured on the panel
- Can be attached to any fence framework for added protection
- Imposing physical deterrent designed to keep you safe
- Anti-climb properties with small openings filled with razors
- Available in galvanized or stainless steel
- Corrosion-resistant
- 72% open with razors
- Easy installation – installs more accurately without waste, dragging, or overlapping
- Can be installed new or as a retro-fit over current chain link fence or chain link fence framework
- Fittings are some of the strongest in the industry and can be locked with breakaway nuts and bolts for added security



Size Offerings

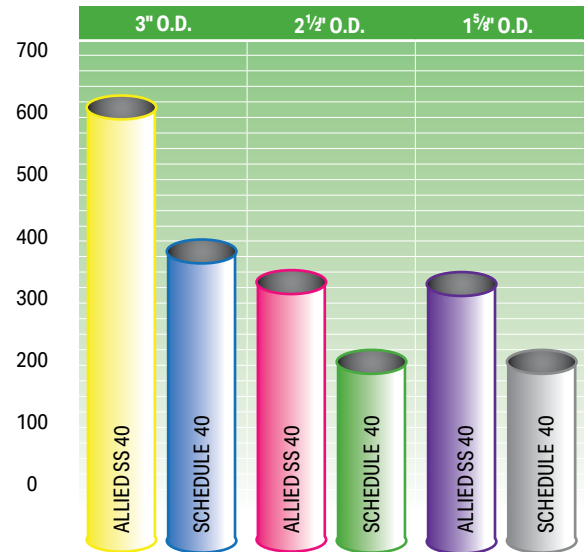
- Panel width: 4 ft (122cm), or 5 ft (152cm)
- Panel height: 6 ft (183 cm), 8 ft (244 cm), 10 ft (305 cm), or 12 ft (366 cm)
- Diamond size: 2" x 6" (51mm x 152mm) with options of 3" x 6" (76mm x 152mm), and 1" x 2" (25mm x 51mm)

Uses: airport, utilities, refineries, nuclear, energy, etc.

SS-40 Fence Framework

SS-40 is manufactured with cold-formed steel which provides high yield and tensile strength, followed by a uniform triple layer of corrosion protection. The coating consists of zinc, a conversion coating, and a clear organic top coat applied in-line by the patented continuous Flo-Coat® process from Allied Tube & Conduit®.

Bending Strength Comparison SS 40 vs Schedule 40

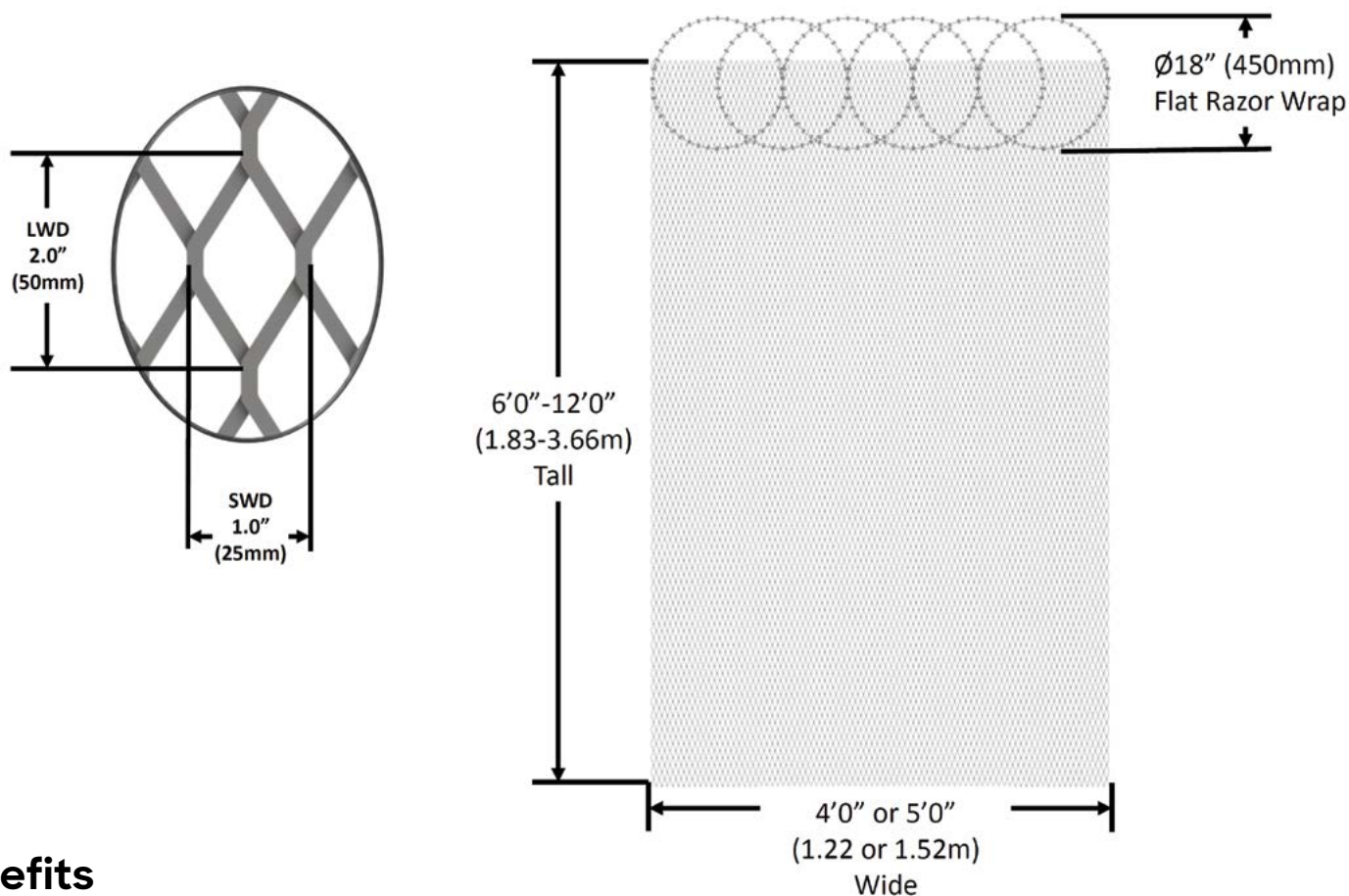
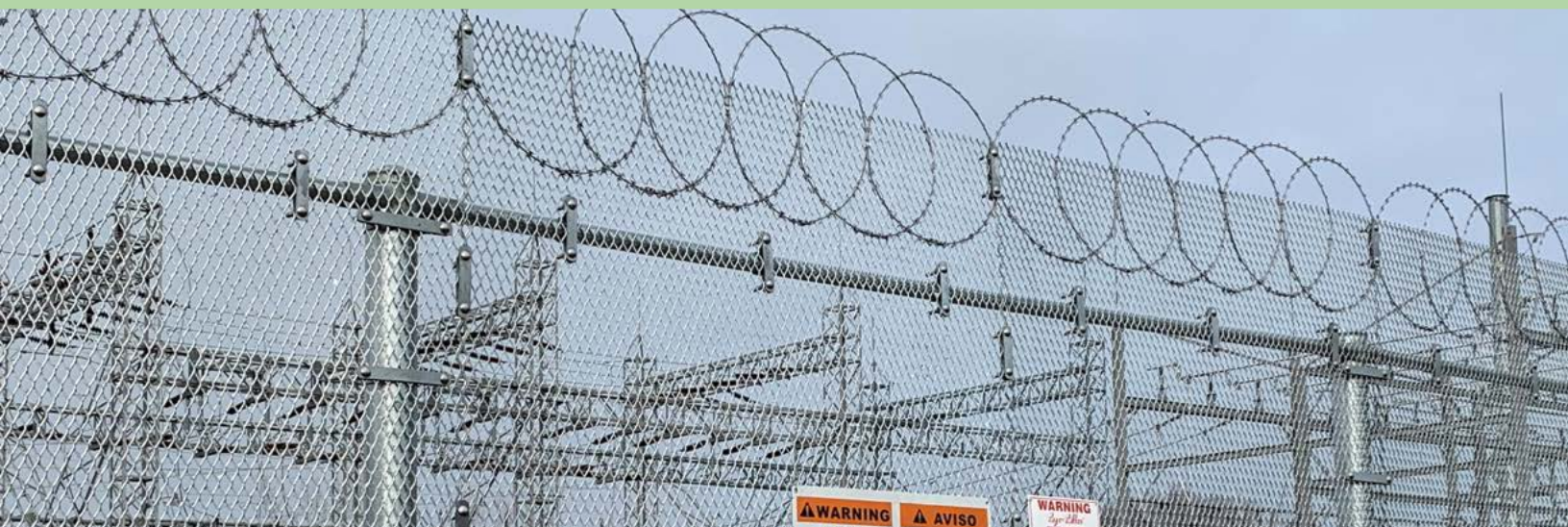


Test results are based on 6 foot cantilevered beam test and 10 foot free-supported beam test.

SS-40 Pipe Sizes

Fence Industry	Decimal O.D. Equivalent		Pipe Wall Thickness		Weight		Selection Modulus		Min. Yield Strength		Max Bending Moment		Calculated Load		
	(in)	(mm)	(in)	(mm)	(lb/ft)	(kg/m)	(in³)		(psi)		(lb/in)		10' Free Supported	Cantilever	
O.D.													(lb)	4'	6'
1 3/8	1.315	33.40	.104	2.64	1.35	2.01	.1111	x	50,000	=	5555		185	116	77
1 1/2	1.660	42.16	.111	2.82	1.84	2.74	.1961	x	50,000	=	9805		327	204	136
2	1.900	48.26	.120	3.05	2.28	3.39	.2810	x	50,000	=	14050		468	293	195
2 1/2	2.375	60.33	.130	3.30	3.12	4.64	.4881	x	50,000	=	24405		814	508	339
3	2.875	73.03	.160	4.06	4.64	6.90	.8778	x	50,000	=	43890		1463	914	610
3 1/2	3.500	88.90	.160	4.06	5.71	8.50	1.3408	x	50,000	=	67040		2235	1397	931
4	4.000	101.60	.160	4.06	6.56	9.76	1.7819	x	50,000	=	89095		2970	1856	1237

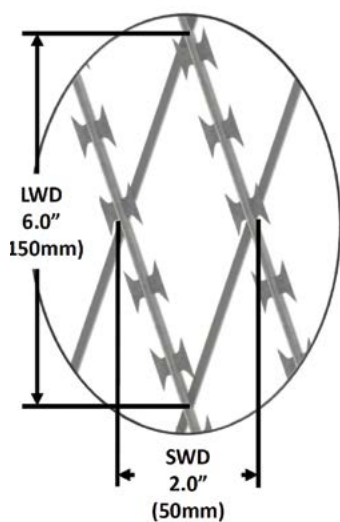
Atkore Razor-Ribbon Razor Mesh Panels



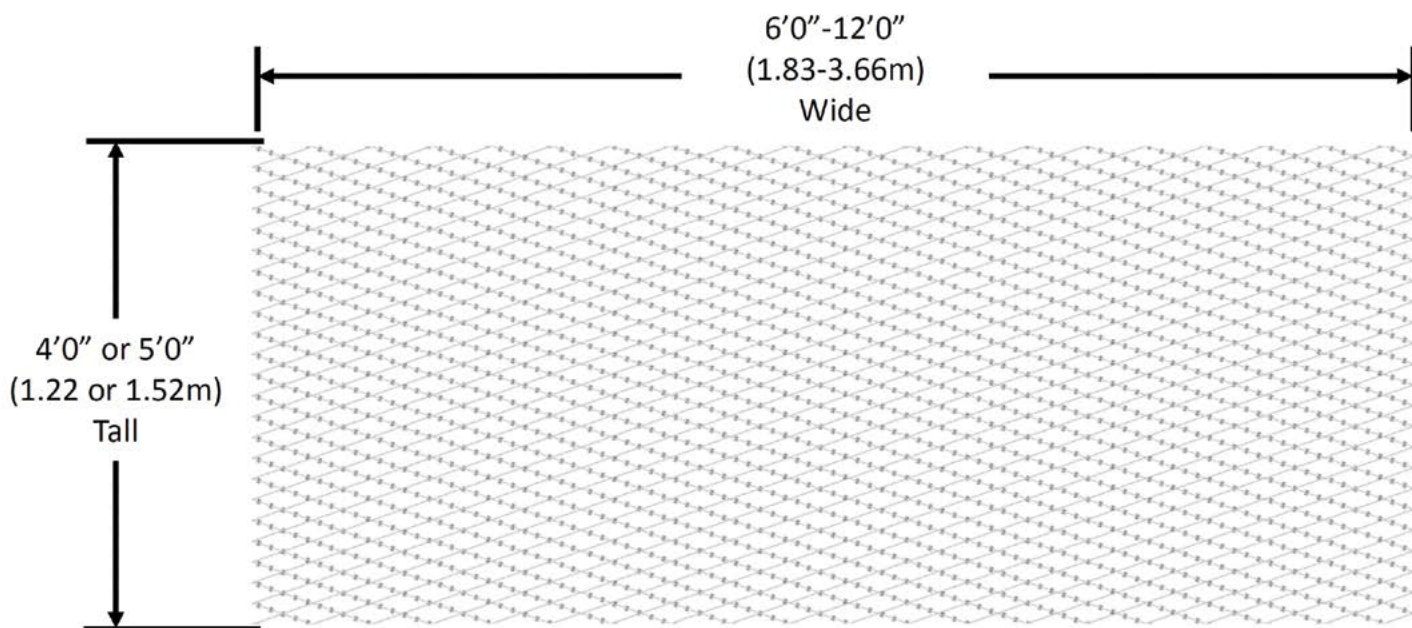
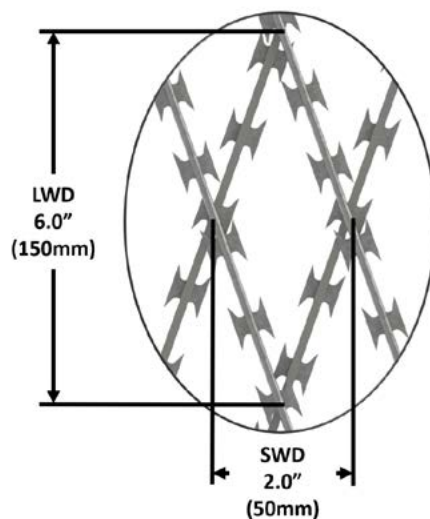
Benefits

- Anti-cut / anti-climb panels are easy to install (labor savings)
- Individual panels can be replaced if damaged, no need to replace large sections
- Domestic manufactured offering provides quick turnaround and on-time delivery per project schedule
- Flexibility of customizing panel sizes to fit all types of gates
- Panels provided with Atkore Razor-Ribbon pre-assembled
- No barb arms or barbed wire required providing installation and material savings as well as a stronger deterrence

Atkore Razor-Ribbon Razor Mesh Panels



Razor strands
attached on
one side or
both sides



Installation Accessories

[Click brand for more product info](#) ↓

[Razor Ribbon](#)

Hexarmor Gloves

These gloves were designed specifically for handling barbed tape products. These gloves are cut, puncture, and abrasion resistant.



Wire Tie Twist Tool

Used to twist wire ties in fence anchored installations.



Hog Rings

For fence anchored installations, Hog Rings are used to connect the barbed tape to the fence fabric. Available loose and in clips.



Arm/Sleeve Guard

Used to protect the installer, the arm/sleeve guard covers from the wrist to the shoulder.



Ground Stakes

Required to anchor ground based installations, usually positioned at 10 feet intervals.



Warning Signs

Used to alert unsuspecting persons of imminent danger.



Installation Accessories

Click brand for more
product info ↓

[Razor Ribbon](#)

Retro-Fit Bar Clamps

Used to connect overlapping mesh.



Hog Ring Pliers

Used to compress hog rings in fence anchored installations.



Retro-Fit C-Clamp

Used to connect mesh to line posts and rails.



Retro-Fit Band

Used to connect mesh to terminal posts. Available in various sizes for different post diameters 1" x 11ga HDG.



Wire Ties

Used to secure and anchor installations.



Carriage Bolts and Breakaway Nuts

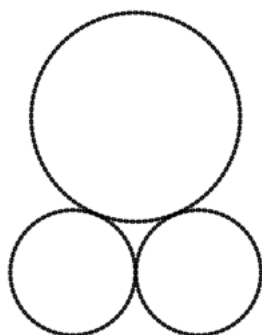
Used with Retro-Fit clamps and bands.



RDU Magazines

Features

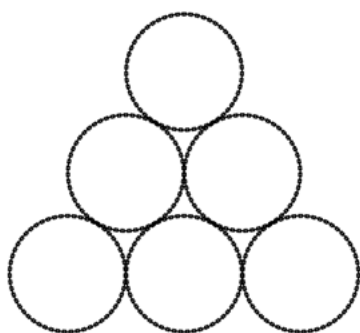
- Economical, simple, and reusable rapid deployment system
- Capacity to deploy up to 480' (146m) of Triple Strand Atkore Razor-Ribbon in just minutes. 247' (75m) capacity for Six Pack
- Coils are preconnected eliminating the need for a large crew working hours in the field and the potential hazards that go with it
- Magazines come loaded with a stack of 3 or 6 coils that create a 6'-7' (1.8m-2.1m) tall by 5'-7.5' (1.5m-2.3m) wide barrier of Atkore Razor-Ribbon barbed tape
- Coils can be loaded back onto the magazine and ready for redeployment in under 20 minutes
- Various coil diameters and barb options available upon request



Triple Strand



Triple Strand RDU w/ Magazine



Six Pack



Six Pack RDU w/ Magazine

Rapid Deployment Unit Trailers

BTC Express Trailer

Features

- Patented design
- Versatile and economical rapid deployment system
- Designed for use in difficult terrains where forklifts can't be used to deploy a Triple-Strand Rapid Deployment Unit
- Compatible with any vehicle equipped with a standard hitch
- Trailer dimensions – 12.5' (3.8m) L x 7.3' (2.2m) W x 7' (2.1m) H approx.
- Trailer features – 4,000lb (1800kg) capacity, 6' (1.8m) long forks (fixed or adjustable), 5' (1.5m) width capacity, Hydraulic controls, Powder coat finish (customizable)
- Razor barrier dimensions – 500' (150m) L x 4.6' (1.4m) W x 6' (1.8m) H
- Triple-Strand Razor Wire Barrier (customizable)
- Made in USA. Complies with Buy America Act



Rapid Deployment Unit (RDU) Covered Trailer

Features

- Patented design
- 3-pack RDU barrier housed in a covered trailer capable of deploying up to 500' (150m) in 30 seconds
- Reusable barrier – Coils can be loaded back onto the trailer and ready for redeployment in under 10 minutes
- RDU can be deployed as a temporary or permanent barrier for emerging threats
- Available in various lengths, barb styles, and configurations in stainless steel or galvanized steel
- RDU can be custom designed to fit customer's security needs
- Approved and used by the U.S. Department of Defense and other government agencies
- Made in USA. Complies with Buy America Act



Instabox Portable Rapid Deployment Unit

Features

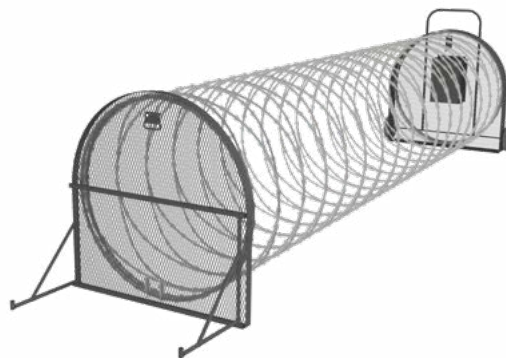
- Patent pending design provides rapid barrier for controlled, limited and exclusion areas
- Appropriate as a temporary or permanent barrier for emerging threats
- Deploys up to 75 feet (22.8m) of barbless tape or non- reinforced Instabarrier® barbed tape in under 30 seconds
- Deploys and retracts quickly and efficiently for reuse by a single person
- Removes the potentially hazardous conditions associated with field installation of coils
- Rugged design features heavy duty wheels, hot-dip galvanized panels and powder coat finish make the unit suitable for deployment in differing climates and terrain
- Lightweight, high strength and modular allowing multiple units to be easily tied together forming one continuous barrier
- Made in USA. Complies with Buy America Act



Instabox with Barbless Coil



Instabox with Instabarrier® Coil



Diameter		Coil Loops	Clips	Loop Spacing		Yield	
(in)	(mm)			(in)	(mm)	(ft)	(m)
30	762	71	3	16	406	47	14
48	1219	71	5	12	305	35	11
48	1219	101	5	12	305	50	15
60	1524	71	7	12	305	35	11

Diameter		Coil Loops	Strip Material	Cable	Welds	Yield	
(in)	(mm)					(ft)	(m)
30	762	101	SS	1	5	50	15
48	1219	151	SS	1	9	75	23

Barbless coils available powder coated for added visibility

Atkore Razor-Ribbon Razor Cage

Razor Cage

- High-quality steel structure lined with Razor Mesh Panels for added security
- Cages can be used to store high value assets or house a pyramid of concertina coils
- Cages also available with a rapid deployment unit inside for expanded barrier protection

Uses: power plants, prisons, jails, above ground, below ground, and other customers with high-security application requirements



Atkore Razor-Ribbon Razor Cage Applications

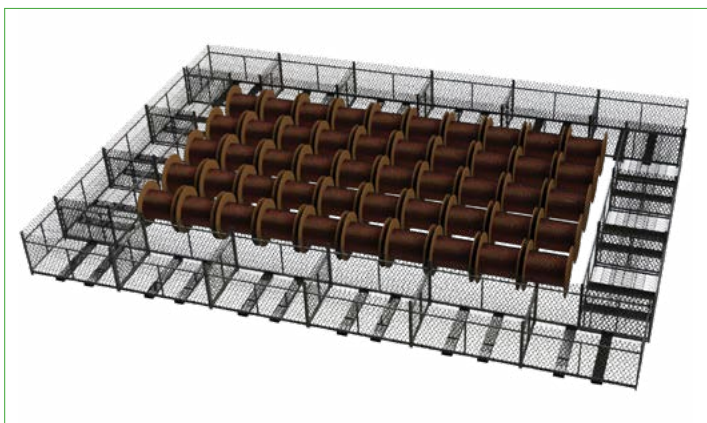
Razor Cage with swinging door for asset storage



Razor Cage with fold down door for asset storage



Razor Cage perimeter around assets



Razor Cage with Triple Strand Rapid Deployment Unit for gate and expanded barrier protection



Features

- Patented design protects a perimeter or an open space and restricts unauthorized vehicle access
- Available in hot-dip galvanized or stainless steel
- Easily moved and installed with a forklift
- Cage dimensions – 16' (4.9m) L x 6' (1.8m) W x 6' (1.8m) H (customizable)
- Specified as a permanent or temporary barrier
- Custom designed based on your security needs
- Ideal for utility or power plant applications
- Made in USA. Complies with Buy America Act

Base Plate Bollards and Decorative Covers

Click brand for more
product info ↓

[Calpipe Security](#)



Calpipe Security is proud to offer an industrial line of surface mounted base plate bollards manufactured from the highest quality ASTM A53 carbon steel or 300 series stainless steel. Base plate bollards come in a variety of diameters and offer a quick and easy bolt-down installation providing an affixed physical barrier as well as a vehicle deterrence.

Combined with Calpipe Security's Heritage line of cast iron decorative covers, designers and planners are equipped with a broad range of base plate bollard choices that provide a traditional look to any project whether it's temporary or permanent. The Heritage line offers both flexibility and aesthetics to safety and security projects where style and profile options have been limited.

Stainless Steel			Carbon Steel		
Item #	Nominal Pipe Size		Item #	Nominal Pipe Size	
	(in)	(sch)		(in)	(sch)
SSB03040	3	40	IBB03040	3	40
SSB04040	4	40	IBB04040	4	40
SSB05040	5	40	IBB05040	5	40
SSB06040	6	40	IBB06040	6	40
SSB08040	8	40	IBB08040	8	40

Various Cover Options Available



Available Materials

Stainless Steel	Carbon Steel*
SSB Series	IBB Series
	

*Carbon steel bollards available with Grey Zinc Rich Primer coating or a variety of power coated options including safety yellow and jet black.

Safety and Security Bollard Solutions

Click brand for more
product info ↓

[Calpipe Security](#)

Bollard Solutions

Lighted

Architectural Lighted Bollards provide an aesthetic appeal while illuminating the surrounding landscape within a secure perimeter. Anchored to a baseplate foundation, these bollards are easy to install in any location.

- Stainless steel
- Light duty security lighted bollards
- Medium/Heavy security lighted bollards



Fixed

Permanently embedded bollards create a physical barrier for pedestrians and buildings from oncoming vehicles.

- Light security – parking lots, entrances, retail storefronts
- Medium security – hospitals, malls, stadiums
- High security – government facilities, power plants, chemical plants



Removable

External padlocking removable bollards provide a removable perimeter defense. Allows easy access for service and police vehicles into restricted areas.

- Type 316 stainless steel versions for harsher environments
- Parking lots, fire lanes, access roads, and driveways,
- Colleges, oil refineries, municipalities



Safety and Security Bollard Solutions

Click brand for more
product info ↓

[Calpipe Security](#)

Bollard Solutions

Automatic Retractable

Designed for repetitive cycles, these bollards are ideal for high-level traffic control parking lots, access control gates, commercial building entrances, and military bases. These bollards can

- Stainless steel composition to avoid corrosion
- Operate with most existing access control systems
- Key system, guard operated, proximity card



Shallow Mount

These bollards use a shallow 12" (300mm) embedment to provide the highest level of protection found around corporate campuses, government buildings, airports, power and water plants.

- Can stop a 15,000-pound (7.5 tons) vehicle at a speed of 50 miles per hour (80.46 km per hour)
- K12/M50-rated
- Significant savings over deep mount bollard installations



Crash Rated

ASTM F3016 crash-rated bollards protect people and property that are vulnerable to low-speed vehicular impact.

- K4/M30- and K12/M50-rated options
- Fixed and removable versions
- Airports, manufacturing plants, railways, gas stations, transportation terminals



Crash Rated Security Bollards

Calpipe Security Bollards®

Calpipe Security Bollards® is a worldwide leader in manufacturing high security bollards and is a part of Atkore. Their high security K/M-rated and ASTM crash-tested bollards have been installed to protect patrons and property from accidents and vehicle attacks at pedestrian plazas, professional sports stadiums, various embassies, border crossings facilities, and military sites.



What Level of Protection Are You Looking For?

Vehicle Weight		Vehicle Speed	DOS/DOD Rating	ASTM Rating
(lb)	(t)	(mph)		
15,000	7.5	50 MPH	K12	M50
15,000	7.5	30 MPH	K4	M30

Perimeter Defense Technology Bollards:

Calpipe Security Bollards Mfg. Model #	Description	Speed Rating/ Penetration Rating	As Tested Requirement	Certifying/ Testing Agency & Test Specification
PDTDS22	Fixed Bollard-Deep Mount 10" Diameter 39" Above Grade 44" Embedded Depth	K12 / L3	Minimum Bollard Array: (2) Center on Center Spacing: 59"	DOS DOD DOS: SD-STD-02.01 Rev. A
PDTDS22R	Removable Bollard-Deep Mount 10" Diameter 39" Above Grade 44" Embedded Depth	K12 / L3	Minimum Bollard Array: (2) Center on Center Spacing: 59"	DOS DOD DOS: SD-STD-02.01 Rev. A
PDTDS22L	Deep Mount Lighted Bollard 10" Diameter 50" (FLAT CAP) 44" Embedded Depth	K12 *Engineered	Minimum Bollard Array: (2) Center on Center Spacing: 59"	DOS
PDT10080SMF	Fixed Bollard-Shallow Mount 10" Diameter 36" Above Grade 12" Embedded Depth	M50 / P2	Minimum Bollard Array: (3) Center on Center Spacing: 60"	ASTM ASTM: International Designation F2656-07
PDT10080SMR	Removable Bollard-Shallow Mount 10" Diameter 36" Above Grade 12" Embedded Depth	M50 *Engineered	Minimum Bollard Array: (3) Center on Center Spacing: 60"	ASTM ASTM: International Designation F2656-07
PDT10080SML	Shallow Mount Lighted Bollard 10" Diameter 45 3/8" (FLAT CAP) 12" Embedded Depth	M50 *Engineered	Minimum Bollard Array: (3) Center on Center Spacing: 60"	ASTM ASTM: International Designation F2656-07
PDT1200P	Pneumatic/Automatic Retractable Bollard 10" Diameter 36" Deployed Height 58" Embedded Depth	K12 / L3 PAS68:2010	Minimum Bollard Array: (3) Center on Center Spacing: 39" Single Bollard Test-PAS68	DOS - DOD BSI: V/7500(N3)/80/90:7.1/0.0 DOS: SD-STD-02.01 Rev. A
PDT1200H	Hydraulic/Automatic Retractable Bollard 10" Diameter 36" Deployed Height 58" Embedded Depth	K12 / L3 PAS68:2010	Minimum Bollard Array: (3) Center on Center Spacing: 39" Single Bollard Test-PAS68	DOS - DOD BSI: V/7500(N3)/80/90:7.1/0.0 DOS: SD-STD-02.01 Rev. A
PDT1200M	Assisted Lift - Manual Retractable 10" Diameter 36" Deployed Height 58" Embedded Depth	K12 / L3 PAS68:2010	Minimum Bollard Array: (3) Center on Center Spacing: 39" Single Bollard Test-PAS68	DOS - DOD BSI: V/7500(N3)/80/90:7.1/0.0 DOS: SD-STD-02.01 Rev. A
PDT1200A	Screw Driven - Manual Retractable 10" Diameter 36" Deployed Height 58" Embedded Depth	K12 / L3 PAS68:2010	Minimum Bollard Array: (3) Center on Center Spacing: 39" Single Bollard Test-PAS68	DOS - DOD BSI: V/7500(N3)/80/90:7.1/0.0 DOS: SD-STD-02.01 Rev. A

Crash Rated Security Bollards

Perimeter Defense Technology Bollards (Continued):

Calpipe Security Bollards Mfg. Model #	Description	Speed Rating/ Penetration Rating	As Tested Requirement	Certifying/ Testing Agency & Test Specification
PDT8080F	Fixed Bollard-Deep Mount 8" Diameter 36" Above Grade 36" Embedded Depth	M30 *Engineered	Minimum Bollard Array: (2) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT8080R	Removable Bollard-Deep Mount 8" Diameter 36" Above Grade 36" Embedded Depth	M30 *Engineered	Minimum Bollard Array: (2) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT8080L	Deep Mount Lighted Bollard 8" Diameter 45½" Above Grade 36" Embedded Depth	M30 *Engineered	Minimum Bollard Array: (2) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT8080SMF	Fixed Bollard-Shallow Mount 8" Diameter 36" Above Grade 12" Embedded Depth	M30 / P2	Minimum Bollard Array: (3) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT8080SMR	Removable Bollard-Shallow Mount 8" Diameter 36" Above Grade 12" Embedded Depth	M30 / P2	Minimum Bollard Array: (3) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT8080SML	Shallow Mount Lighted Bollard 8" Diameter 45½" Above Grade 12" Embedded Depth	M30 *Engineered	Minimum Bollard Array: (3) Center on Center Spacing: 48"	ASTM ASTM: International Designation F2656-07
PDT06080CF-S10	Fixed Bollard 6" Diameter 36" Above Grade / 24" Below Grade 32" Foundation Depth	S10 / P1	Single Bollard Test	ASTM ASTM: International Designation F3016-19
PDT06080CR-S10	Removable Bollard 6" Diameter 36" Above Grade / 24" Below Grade 32" Foundation Depth	S10 / P1	Single Bollard Test	ASTM ASTM: International Designation F3016-19
PDT06080CF-S20	Fixed Bollard 6" Diameter 36" Above Grade / 24" Below Grade 32" Foundation Depth	S20 / P2	Single Bollard Test	ASTM ASTM: International Designation F3016-19
PDT06080CR-S20	Removable Bollard 6" Diameter 36" Above Grade / 24" Below Grade 32" Foundation Depth	S20 / P2	Single Bollard Test	ASTM ASTM: International Designation F3016-19

DOS standard SD-STD-02.01 Rev. A dated 2003: The rating of a barrier is determined when a 15,000 lb. vehicle impacts a barrier from a perpendicular direction. Barriers listed on the retired DOS Certified Anti-Ram Vehicle Barriers list are considered also to be DOD Certified. The current DOD Anti-Ram Vehicle Barrier list supersedes all previous copies. The following ratings apply under this standard for vehicle impact speed ("K") and penetration distance resulting in the vehicle being arrested ("L"). ("K") indicates the DOS certified barrier speed ratings' maximum vehicle impact speed achieved when a vehicle traveling at a nominal speed is successfully arrested by the barrier from a perpendicular direction:

- K4 = 30 mph, K8 = 40 mph, K12 = 50 mph
- L3 = 3 ft. or less, L2 = 3 ft. to 20 ft., L1 = 20 ft. to 50 ft.

ASTM International Designation F2656-07 is a test method providing a structured procedure to establish a penetration rating for perimeter barriers subject to a perpendicular 15,000 lb. vehicle impact. The following ratings apply under this method for impact speed ("M") and penetration distance resulting in the vehicle being arrested ("P"):

- M30 = 30 mph, M40 = 40 mph, M50 = 50 mph
- P1 = 3.3 ft. or less, P2 = 3.3 ft. to 23 ft., P3 23.1 ft. to 98.4 ft., P4 = 98 ft. or greater

ASTM International Designation F3016-19 is a Standard Test Method for Surrogate Testing (5,000 lbs.) of Vehicle Impact Protective Devices at Low Speeds. The following ratings apply under this method for impact speed ("S") and penetration distance resulting in the vehicle being arrested ("P"):

- S10 = 10 mph, S20 = 20 mph, S30 = 30 mph
- P1 = 1 ft. or less, P2 = 1 ft. to 4 ft., Failure = Greater than 4 ft.
- The barrier penetration rating does not imply that a barrier will perform as rated in all site conditions, approach routes, and topography

PAS 68 is the British Standards Institution's ("BSI") specification for vehicle security barriers. It identifies the impact test methods, tolerances, test vehicle type, and vehicle performance criteria to be met and is considered to be the UK Standard.

* Engineered - No crash testing performed; speed rating assigned per technical specifications; penetration rating undetermined

Crash Test Certified to F3016-19 Bollards



Calpipe Security proudly introduces our new line of F3016-19 crash rated security bollards designed to mitigate the risk of vehicle-into-building impact.

Tested and certified to the American Society for Testing Material's F3016-19 standard. The ASTM F3016-19 standard quantifies the performance of a vehicle protective device in stopping a 5,000 lb. (2.5 ton) vehicle at impact speeds from 10 to 30 mph (16 to 48 kph).

Utilizing a short pile foundation design provides more versatility for the bollard's application whether it's a new installation or retrofit project. Common applications include commercial storefronts, outdoor dining, sidewalks, bus stops, and similar environments.



FEATURES AND BENEFITS:

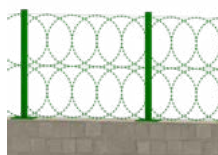
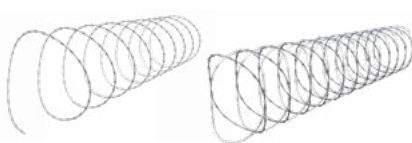
- Certified to the ASTM F3016-19 standard as a single bollard
- Fixed and removable bollard options provide versatility for any application
- Core drilled installation is both cost and time effective - up to 75% cheaper than trench footings
- Customizable with a powder coated or stainless-steel finish for an aesthetic design



Why Atkore Razor-Ribbon

Over 40 Years Proven Industry Experience Manufacturing Barbed Tape and Providing Security Solutions

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- Original Barbed Tape Design Patent Holder
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