

Fiberglass Conduit System For Below Ground Applications



AtkoreTM
FRE Composites



Atkore's FRE Composites produces the highest quality epoxy and phenolic fiberglass conduit products for worldwide installations. Having manufactured fiberglass products since 1958, FRE Composites is focused exclusively on the design, engineering, and production of composite filament-wound fiberglass conduit products and accessories. We serve numerous markets including, electrical, telecom, water and wastewater, data centers, utilities, transportation, commercial, and industrial.

FRE Composites Below Ground Fiberglass Conduit Systems are the preferred choice in commercial and industrial markets and power and telecommunications utilities. All fiberglass products are UL Listed and CSA Certified, and offer the highest strength to weight ratio of any conduit assuring a safe system for both Direct Burial and Encased Burial applications. As a long-lasting alternative to PVC, HDPE and other types of rigid conduit, fiberglass conduit systems are light weight, flexible, resistant to corrosion and feature high temperature ratings, and a low coefficient of friction, assuring easy installations with reduced maintenance costs.

Other safety features include:

- Superior impact and crush resistance
- Rot and rodent proof
- No chlorine, halogen or other toxic materials
- TriSeal™ watertight joints eliminate the need for adhesive, saving time and money during installation

Headquarters

Atkore

16100 S. Lathrop Ave

Harvey, IL 60426

Tel: 708-339-1610

Toll Free: 800-825-5422

Manufacturing

Canada

75 Rue Wales

Saint-Andre-d'Argenteuil, QC

J0V 1X0, Canada

Tel: 450-537-3311

Toll Free: 1-888-849-9909

USA

60 Greenhorn Dr

Pueblo, CO

USA 81004

Tel: 719-565-3311



Conduit System Chart

WALL THICKNESSES

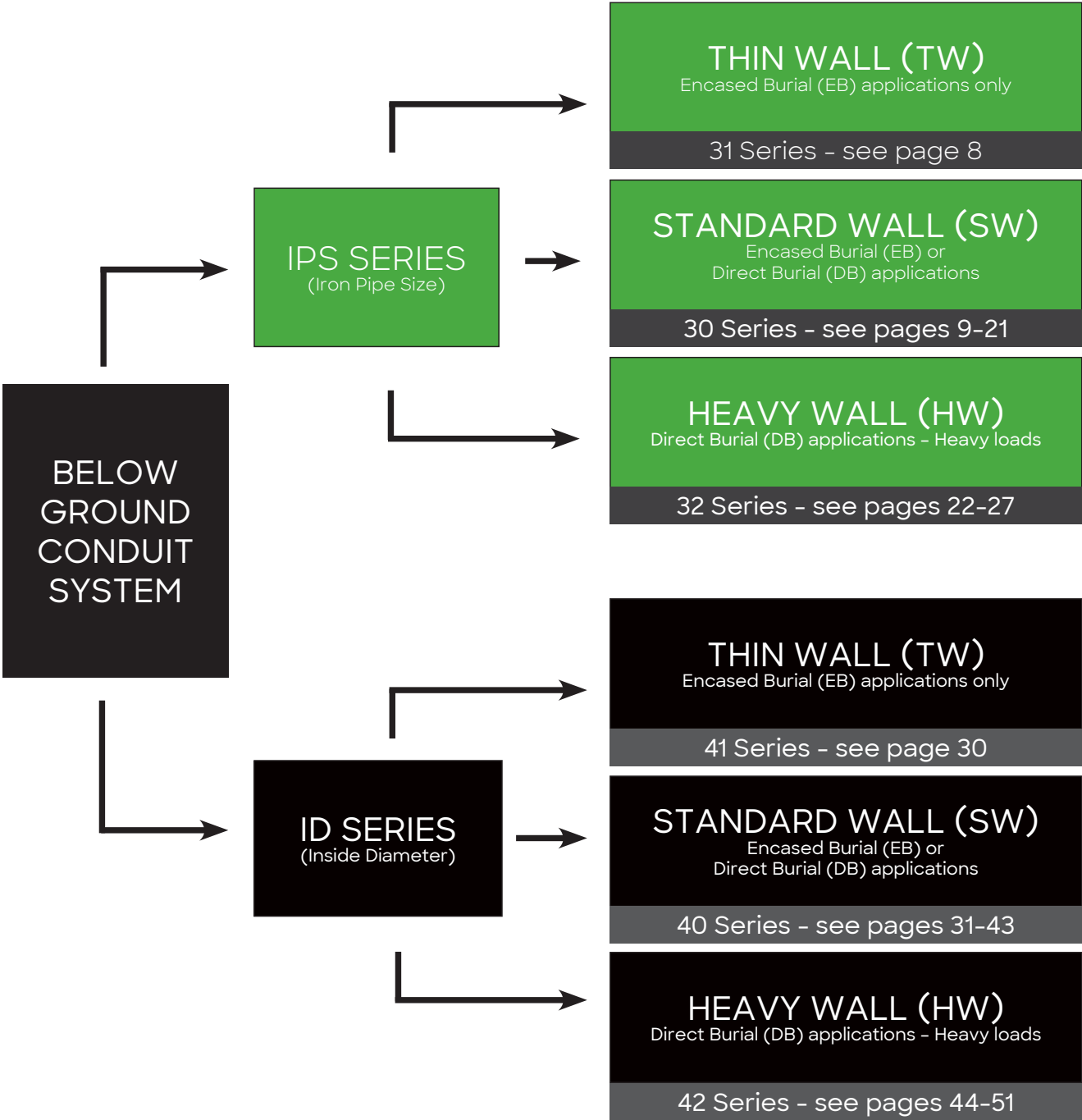


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Why should you consider FRE[®] conduit?

Fiberglass conduit offers many advantages over other commonly used conduit, such as steel and PVC, as listed below:

Ease of Assembly

Epoxy fiberglass conduit is easy to install, partly resulting from its light weight, which facilitates handling. Fitting sections together using the push-fit spigot and bell design further facilitates assembly. Alternatively, fiberglass conduit can be joined through the application of epoxy adhesive, but this is usually not necessary. Contractors report that joining by way of FRE[®] Conduit push-fit TriSeal[™] connections results in considerable labour savings.

Lightweight

Epoxy fiberglass conduit weighs considerably less than PVC or steel, resulting in cost savings through reduced handling time, reduced assembly time, reduced requirements for mechanized handling, reduced freight charges, reduced system weight, and lower costs of support. By way of example, 2" (53 mm) FRE[®] conduit weighs 34 pounds (15 kg) per 100 ft (30 m), compared with 71 (32 kg) to 100 pounds (45 kg) for an identical length of PVC conduit, or about 330 pounds (150 kg) for a conduit made of steel. One hundred ft. of 4" (103 mm) FRE[®] conduit weighs in at 76 pounds (34 kg), compared with 230 pounds (104 kg) (Schedule 40) to 286 pounds (130 kg) (Schedule 80) for PVC and almost 1 000 pounds (454 kg) for steel.

Low Coefficient Of Friction

The coefficient of friction of epoxy fiberglass is lower than that of steel, and considerably lower than that of PVC. This means that electrical cables are easier to pull through, resulting in labour savings, less stress on cables, and reduces the number of costly manholes. As FRE[®]'s minimum resin content is higher than industry standards, FRE[®]'s coefficient of friction is the lowest in the industry.

Temperature Range

FRE[®] Conduit can withstand a wide array of temperature ranging from -40°F to 230°F (-40°C to 110°C). Unlike PVC which is extremely brittle in cold temperature (+40°F) and malleable in heat, FRE[®] Conduit maintains its unique characteristics.

No Burn-Through

Unlike rigid PVC, epoxy fiberglass bends and elbows have a strong resistance to being cavitated or pierced as a result of rope pull.

Cable Fusion

Fiberglass is an excellent insulator. Unlike fiberglass conduit, steel conduit will weld with cable, and PVC conduit may fuse or melt under electrical fault conditions.

Flexible And Impact Resistant

The flexibility of epoxy fiberglass conduit allows it to conform to mildly uneven surfaces. Epoxy fiberglass conduit has tended to survive the stresses of earthquakes better than PVC or steel.

Corrosion Resistant

Epoxy fiberglass is not affected by the effects of water or most other chemicals. Contact the factory for further information, if specific information is required.

Non-Toxic

Unlike PVC, epoxy fiberglass is low halogen and does not release bromine or chlorine.

Why should you specify FRE® conduit made by FRE® Composites?

There are a number of reasons why FRE® conduit offers the industry the most for its money. Our **experience** and **quality record** speak for themselves. We live and breathe quality: quality is the number one priority to which everything else is subordinate. After nearly fifty years in the business, we know how to do things right, and we know how to ensure that we keep doing them right.

Our **total production capacity** is the largest in the industry enabling us to produce large volumes of product within tight delivery deadlines, and product is available from **stocking distributors** throughout Canada, the United States and elsewhere around the world.

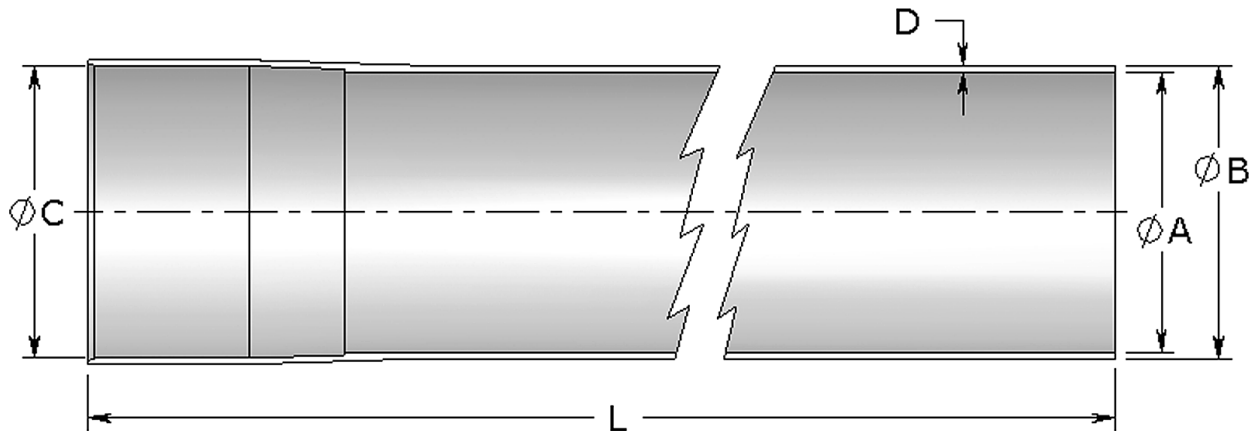
To ensure that your project will benefit from the highest quality conduit products, specify FRE® conduit:

Specification Points:

- Shall comply with the latest applicable UL / CSA / NEMA standards.
- Conduit shall bear UL Listing #E53373 and CSA Certification #028032S.
- Shall be manufactured from E or E-CR glass and epoxy resin with no fillers.
- Shall have a glass content of 68%, plus or minus 3%.
- All joints shall be inside tapered bell end and of even socket depth through out the raceway (conduits & fittings).
- Can be equipped with one-piece injection molded TriSeal™ push-fit integral bell and spigot.
- Union made.
- Multiple locations to better serve your needs.



FOR MORE INFORMATION,
PLEASE CONTACT US : 1 888 849-9909.



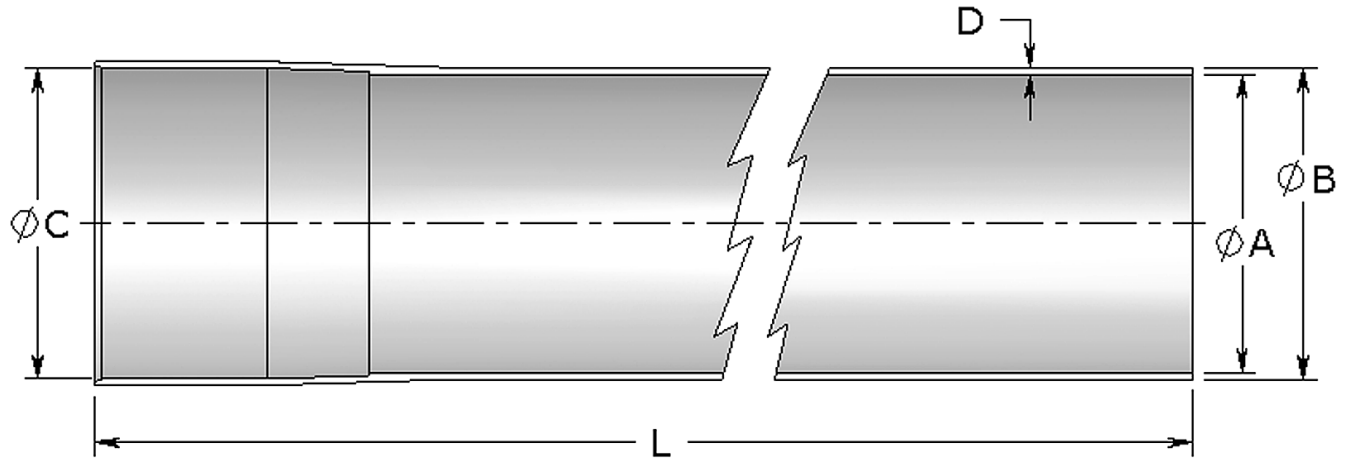
IPS Thin Wall (TW) Conduit

Size		Part Number	ØA	ØB	ØC	D	L	ØA	ØB	ØC	D	L
(in)	(mm)		(in)					(mm)				
4	103	31-4000	4.360	4.470	4.542	0.055	236.25	110.7	113.5	115.4	1.4	6
5	129	31-5000	5.373	5.513	5.610	0.070	236.25	136.5	140.0	142.5	1.8	6
6	155	31-6000	6.405	6.575	6.669	0.085	236.25	162.7	167.0	169.4	2.2	6
8*	203	31-8000	8.393	8.573	8.667	0.095	236.25	213.2	217.8	220.1	2.4	6

• Standard length is 19.68 ft. (6m). Also available in 9.84 ft. section (3m), if required.
*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards



IPS Standard Wall



IPS Standard Wall (SW) Conduit

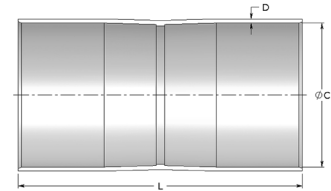
Size		Part Number	ØA	ØB	ØC	D	L	ØA	ØB	ØC	D	L
(in)	(mm)		(in)					(mm)				
¾	21	30-7500	0.918	1.050	1.086	0.066	118.25	23.3	26.7	27.6	1.7	3
1	27	30-1000	1.183	1.315	1.351	0.066	118.25	30.0	33.4	34.3	1.7	3
1¼	35	30-1200	1.528	1.660	1.698	0.066	118.25	38.8	42.2	43.1	1.7	3
1½	41	30-1500	1.768	1.900	1.938	0.066	118.25	44.9	48.3	49.2	1.7	3
2	53	30-2000	2.235	2.375	2.417	0.070	236.25	56.8	60.3	61.4	1.8	6
2½	63	30-2500	2.750	2.890	2.932	0.070	236.25	69.9	73.4	74.5	1.8	6
3	78	30-3000	3.360	3.500	3.542	0.070	236.25	85.3	88.9	90.0	1.8	6
4	103	30-4000	4.360	4.500	4.542	0.070	236.25	110.7	114.3	115.4	1.8	6
5	129	30-5000	5.373	5.563	5.610	0.095	236.25	136.5	141.3	142.5	2.4	6
6	155	30-6000	6.405	6.625	6.669	0.110	236.25	162.7	168.3	169.4	2.8	6
8*	203	30-8000	8.393	8.623	8.667	0.115	236.25	213.2	219.0	220.1	2.9	6

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

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards

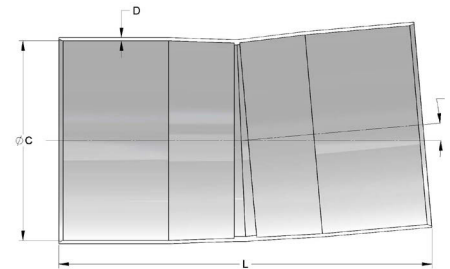
IPS SW Double Bell Coupling

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
¾	21	30-7510	1.086	0.066	8.250	27.6	1.7	209.6
1	27	30-1010	1.351	0.066	8.250	34.3	1.7	209.6
1¼	35	30-1210	1.698	0.066	8.250	43.1	1.7	209.6
1½	41	30-1510	1.938	0.066	8.250	49.2	1.7	209.6
2	53	30-2010	2.417	0.070	8.250	61.4	1.8	209.6
2 ½	63	30-2510	2.932	0.070	8.250	74.5	1.8	209.6
3	78	30-3010	3.542	0.070	8.250	90.0	1.8	209.6
4	103	30-4010	4.542	0.070	8.250	115.4	1.8	209.6
5	129	30-5010	5.610	0.095	8.250	142.5	2.4	209.6
6	155	30-6010	6.669	0.110	8.250	169.4	2.8	209.6
8*	203	30-8010	8.667	0.115	8.250	220.1	2.9	209.6



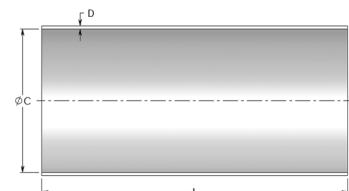
IPS SW 5° Double Bell Coupling

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
¾	21	30-7511	1.086	0.066	8.2	27.6	1.7	208.3
1	27	30-1011	1.351	0.066	8.2	34.3	1.7	208.3
1¼	35	30-1211	1.698	0.066	8.3	43.1	1.7	210.8
1½	41	30-1511	1.938	0.066	8.3	49.2	1.7	210.8
2	53	30-2011	2.417	0.070	8.3	61.4	1.8	210.8
2 ½	63	30-2510	2.932	0.070	8.3	74.5	1.8	210.8
3	78	30-3011	3.542	0.070	8.4	90.0	1.8	213.4
4	103	30-4011	4.542	0.070	8.5	115.4	1.8	215.9
5	129	30-5011	5.610	0.095	8.6	142.5	2.4	218.4
6	155	30-6011	6.669	0.110	8.7	169.4	2.8	221.0
8*	203	30-8011	8.667	0.115	8.9	220.1	2.9	226.1



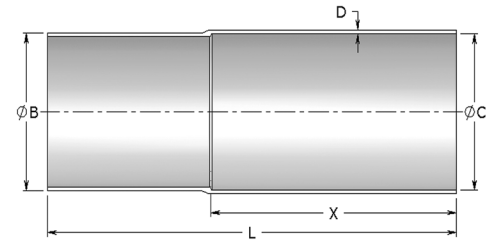
IPS SW Sleeve (repair fitting)

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
¾	21	30-7516	1.086	0.066	12	27.6	1.7	304.8
1	27	30-1016	1.351	0.066	12	34.3	1.7	304.8
1¼	35	30-1216	1.698	0.066	12	43.1	1.7	304.8
1½	41	30-1516	1.938	0.066	12	49.2	1.7	304.8
2	53	30-2016	2.417	0.070	12	61.4	1.8	304.8
2 ½	63	30-2516	2.932	0.070	12	74.5	1.8	304.8
3	78	30-3016	3.542	0.070	12	90.0	1.8	304.8
4	103	30-4016	4.542	0.070	12	115.4	1.8	304.8
5	129	30-5016	5.610	0.095	12	142.5	2.4	304.8
6	155	30-6016	6.669	0.110	12	169.4	2.8	304.8
8*	203	30-8016	8.667	0.115	12	220.1	2.9	304.8



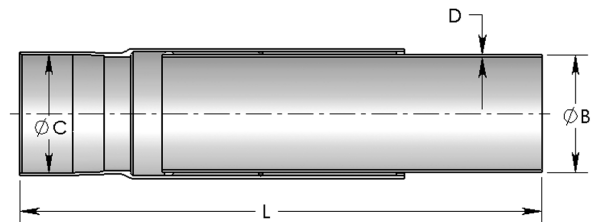
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IPS Standard Wall



IPS SW Single Expansion Joint

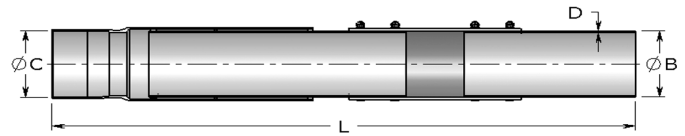
Size		Part Number	ØB	ØC	D	L	X	ØB	ØC	D	L	X
(in)	(mm)		(in)					(mm)				
¾	21	30-7512	1.050	1.086	0.066	20	12	26.7	27.6	1.7	508.0	304.8
1	27	30-1012	1.315	1.351	0.066	20	12	33.4	34.3	1.7	508.0	304.8
1¼	35	30-1212	1.660	1.698	0.066	20	12	42.2	43.1	1.7	508.0	304.8
1½	41	30-1512	1.900	1.938	0.066	20	12	48.3	49.2	1.7	508.0	304.8
2	53	30-2012	2.375	2.417	0.070	20	12	60.3	61.4	1.8	508.0	304.8
2 ½	63	30-2512	2.890	2.932	0.070	20	12		74.5	1.8	508.0	304.8
3	78	30-3012	3.500	3.542	0.070	20	12	88.9	90.0	1.8	508.0	304.8
4	103	30-4012	4.500	4.542	0.070	20	12	114.3	115.4	1.8	508.0	304.8
5	129	30-5012	5.563	5.610	0.095	20	12	141.3	142.5	2.4	508.0	304.8
6	155	30-6012	6.625	6.669	0.110	20	12	168.3	169.4	2.8	508.0	304.8
8*	203	30-8012	8.623	8.667	0.115	20	12	219.0	220.1	2.9	508.0	304.8



IPS SW O-Ring Expansion Joint

Size		Part Number	ØB	ØC	D	L MIN	L MAX	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)					(mm)				
¾	21	30-7517	1.050	1.086	0.066	23	35	26.7	27.6	1.7	584	889
1	27	30-1017	1.315	1.351	0.066	23	35	33.4	34.3	1.7	584	889
1¼	35	30-1217	1.660	1.698	0.066	23	35	42.2	43.1	1.7	584	889
1½	41	30-1517	1.900	1.938	0.066	23	35	48.3	49.2	1.7	584	889
2	53	30-2017	2.375	2.417	0.070	23	35	60.3	61.4	1.8	584	889
2½	63	30-2517	2.890	2.932	0.070	23	35	73.4	74.4	1.7	584	889
3	78	30-3017	3.500	3.542	0.070	23	35	88.9	90.0	1.8	584	889
4	103	30-4017	4.500	4.542	0.070	23	35	114.3	115.4	1.8	584	889
5	129	30-5017	5.563	5.610	0.095	23	35	141.3	142.5	2.4	584	889
6	155	30-6017	6.625	6.669	0.110	23	35	168.3	169.4	2.8	584	889
8*	203	30-8017	8.623	8.667	0.115	23	35	219.0	220.1	2.9	584	889

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards

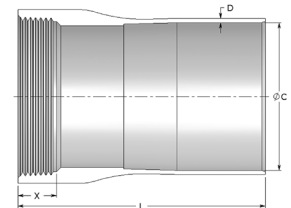


IPS SW O-Ring Expansion / Deflection Joint

Size		Part Number	ØB	ØC	D	L MIN	L MAX	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)					(mm)				
¾	21	30-7557	1.050	1.086	0.066	39	51	26.7	27.6	1.7	990.6	1295.4
1	27	30-1057	1.315	1.351	0.066	39	51	33.4	34.3	1.7	990.6	1295.4
1¼	35	30-1257	1.660	1.698	0.066	39	51	42.2	43.1	1.7	990.6	1295.4
1½	41	30-1557	1.900	1.938	0.066	39	51	48.3	49.2	1.7	990.6	1295.4
2	53	30-2057	2.375	2.417	0.070	39	51	60.3	61.4	1.8	990.6	1295.4
2 ½	63	30-2557	2.890	2.932	0.070	39	51	73.4	74.5	1.8	990.6	1295.4
3	78	30-3057	3.500	3.542	0.070	39	51	88.9	90.0	1.8	990.6	1295.4
4	103	30-4057	4.500	4.542	0.070	39	51	114.3	115.4	1.8	990.6	1295.4
5	129	30-5057	5.563	5.610	0.095	39	51	141.3	142.5	2.4	990.6	1295.4
6	155	30-6057	6.625	6.669	0.110	39	51	168.3	169.4	2.8	990.6	1295.4
8*	203	30-8057	8.623	8.667	0.115	39	51	219.0	220.1	2.9	990.6	1295.4

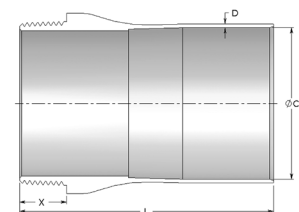
IPS SW NPT Female Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
¾	21	30-7544	1.086	0.066	6	0.553	27.6	1.7	152.4	14.0
1	27	30-1044	1.351	0.066	6	0.661	34.3	1.7	152.4	16.8
1¼	35	30-1244	1.698	0.066	6	0.681	43.1	1.7	152.4	17.3
1½	41	30-1544	1.938	0.066	6	0.681	49.2	1.7	152.4	17.3
2	53	30-2044	2.417	0.070	7	0.697	61.4	1.8	177.8	17.7
2 ½	63	30-2544	2.932	0.070	7	0.932	74.5	1.8	177.8	23.6
3	78	30-3044	3.542	0.070	7	1.016	90.0	1.8	177.8	25.8
4	103	30-4044	4.542	0.070	7	1.094	115.4	1.8	177.8	27.8
5	129	30-5044	5.610	0.095	7	1.187	142.5	2.4	177.8	30.1
6	155	30-6044	6.669	0.110	7	1.208	169.4	2.8	177.8	30.7
8*	203	30-8044	8.667	0.115	7	1.313	220.1	2.9	177.8	33.4



IPS SW NPT Male Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
¾	21	30-7527	1.086	0.066	6	0.546	27.6	1.7	152.4	13.9
1	27	30-1027	1.351	0.066	6	0.683	34.3	1.7	152.4	17.3
1¼	35	30-1227	1.698	0.066	6	0.707	43.1	1.7	152.4	18.0
1½	41	30-1527	1.938	0.066	6	0.724	49.2	1.7	152.4	18.4
2	53	30-2027	2.417	0.070	7	0.757	61.4	1.8	177.8	19.2
2 ½	63	30-2527	2.932	0.070	7	1.138	74.5	1.8	177.8	28.9
3	78	30-3027	3.542	0.070	7	1.200	90.0	1.8	177.8	30.5
4	103	30-4027	4.542	0.070	7	1.300	115.4	1.8	177.8	33.0
5	129	30-5027	5.610	0.095	7	1.406	142.5	2.4	177.8	35.7
6	155	30-6027	6.669	0.110	7	1.513	169.4	2.8	177.8	38.4
8*	203	30-8027	8.667	0.115	7	1.713	220.1	2.9	177.8	43.5

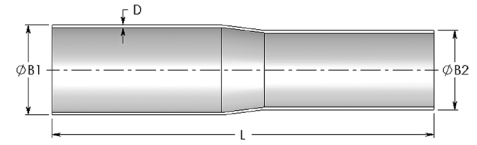


*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards

IPS Standard Wall

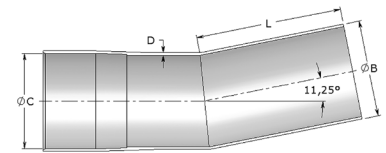
IPS SW Reducer

Size		Part Number	ØB1	ØB2	D	L	ØB1	ØB2	D	L
(in)	(mm)		(in)				(mm)			
1	27	30-1029	1.315	1.050	0.066	18	33.4	26.7	1.7	457.2
1¼	35	30-1229	1.660	1.315	0.066	18	42.2	33.4	1.7	457.2
1½	41	30-1529	1.900	1.660	0.066	18	48.3	42.2	1.7	457.2
2	53	30-2029	2.375	1.900	0.070	18	60.3	48.3	1.8	457.2
2½	63	30-2529	2.890	2.375	0.07	18	73.4	60.3	1.8	457.2
3	78	30-3029	3.500	2.375	0.070	18	88.9	60.3	1.8	457.2
4	103	30-4029	4.500	3.500	0.070	18	114.3	88.9	1.8	457.2
5	129	30-5029	5.563	4.500	0.095	18	141.3	114.3	2.4	457.2
6	155	30-6029	6.625	5.563	0.110	18	168.3	141.3	2.8	457.2

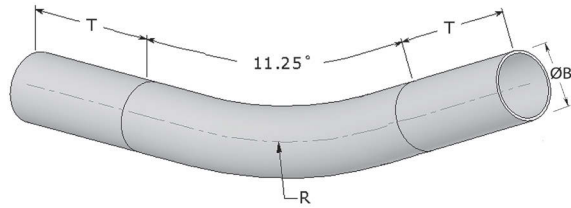


IPS SW 11.25° Fitting

Size		Part Number	ØB	ØC	D	L	ØB	ØC	D	L
(in)	(mm)		(in)				(mm)			
¾	21	30-7535	1.050	1.086	0.066	7	26.7	27.6	1.7	177.8
1	27	30-1035	1.315	1.351	0.066	7	33.4	34.3	1.7	177.8
1¼	35	30-1235	1.660	1.698	0.066	7	42.2	43.1	1.7	177.8
1½	41	30-1535	1.900	1.938	0.066	7	48.3	49.2	1.7	177.8
2	53	30-2035	2.375	2.417	0.070	7	60.3	61.4	1.8	177.8
3	78	30-3035	3.500	3.542	0.070	7	88.9	90.0	1.8	177.8
4	103	30-4035	4.500	4.542	0.070	7	114.3	115.4	1.8	177.8
5	129	30-5035	5.563	5.610	0.095	7	141.3	142.5	2.4	177.8
6	155	30-6035	6.625	6.669	0.110	7	168.3	169.4	2.8	177.8
8*	203	30-8035	8.623	8.667	0.115	7	219	220.1	2.9	177.8



*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards



IPS SW 11.25° Elbow

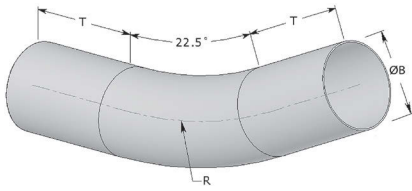
Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
¾	21	30-7535R12	1.050	12	6	26.7	304.8	152.4
1	27	30-1035R12	1.315	12	6	33.4	304.8	152.4
1¼	35	30-1235R12	1.660	12	6	42.2	304.8	152.4
1½	41	30-1535R12	1.900	12	6	48.3	304.8	152.4
2	53	30-2035R12	2.375	12	6	60.3	304.8	152.4
2½	63	30-2535R12	2.890	12	6	73.4	304.8	152.4
18" Radius								
¾	21	30-7535R18	1.050	18	6	26.7	457.2	152.4
1	27	30-1035R18	1.315	18	6	33.4	457.2	152.4
1 ¼	35	30-1235R18	1.660	18	6	42.2	457.2	152.4
1 ½	41	30-1535R18	1.900	18	6	48.3	457.2	152.4
2	53	30-2035R18	2.375	18	6	60.3	457.2	152.4
2 ½	63	30-2535R18	2.890	18	6	73.4	457.2	152.4
3	63	30-3035R18	3.500	18	6	88.9	457.2	152.4
24" Radius								
¾	21	30-7535R24	1.050	24	6	26.7	609.6	152.4
1	27	30-1035R24	1.315	24	6	33.4	609.6	152.4
1¼	35	30-1235R24	1.660	24	6	42.2	609.6	152.4
1½	41	30-1535R24	1.900	24	6	48.3	609.6	152.4
2	53	30-2035R24	2.375	24	6	60.3	609.6	152.4
2½	63	30-2535R24	2.890	24	6	73.4	609.6	152.4
3	78	30-3035R24	3.500	24	6	88.9	609.6	152.4
4	103	30-4035R24	4.500	24	6	114.3	609.6	152.4
36" Radius								
¾	21	30-7535R36	1.050	36	6	26.7	914.4	152.4
1	27	30-1035R36	1.315	36	6	33.4	914.4	152.4
1¼	35	30-1235R36	1.660	36	6	42.2	914.4	152.4
1½	41	30-1535R36	1.900	36	6	48.3	914.4	152.4
2	53	30-2035R36	2.375	36	6	60.3	914.4	152.4
2½	63	30-2535R36	2.890	36	6	73.4	914.4	152.4
3	78	30-3035R36	3.500	36	6	88.9	914.4	152.4
4	103	30-4035R36	4.500	36	6	114.3	914.4	152.4
5	129	30-5035R36	5.563	36	6	141.3	914.4	152.4
6	155	30-6035R36	6.625	36	6	168.3	914.4	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
48" Radius								
¾	21	30-7535R48	1.050	48	6	26.7	1219.2	152.4
1	27	30-1035R48	1.315	48	6	33.4	1219.2	152.4
1¼	35	30-1235R48	1.660	48	6	42.2	1219.2	152.4
1½	41	30-1535R48	1.900	48	6	48.3	1219.2	152.4
2	53	30-2035R48	2.375	48	6	60.3	1219.2	152.4
2½	63	30-2535R48	2.890	48	6	73.4	1219.2	152.4
3	78	30-3035R48	3.500	48	6	88.9	1219.2	152.4
4	103	30-4035R48	4.500	48	6	114.3	1219.2	152.4
5	129	30-5035R48	5.563	48	6	141.3	1219.2	152.4
6	155	30-6035R48	6.625	48	6	168.3	1219.2	152.4
60" Radius								
¾	21	30-7535R60	1.050	60	6	26.7	1524.0	152.4
1	27	30-1035R60	1.315	60	6	33.4	1524.0	152.4
1¼	35	30-1235R60	1.660	60	6	42.2	1524.0	152.4
1½	41	30-1535R60	1.900	60	6	48.3	1524.0	152.4
2	53	30-2035R60	2.375	60	6	60.3	1524.0	152.4
2½	63	30-2535R60	2.890	60	6	73.4	1524.0	152.4
3	78	30-3035R60	3.500	60	6	88.9	1524.0	152.4
4	103	30-4035R60	4.500	60	6	114.3	1524.0	152.4
5	129	30-5035R60	5.563	60	6	141.3	1524.0	152.4
6	155	30-6035R60	6.625	60	6	168.3	1524.0	152.4
72" Radius								
¾	21	30-7535R72	1.050	72	6	26.7	1828.8	152.4
1	27	30-1035R72	1.315	72	6	33.4	1828.8	152.4
1¼	35	30-1235R72	1.660	72	6	42.2	1828.8	152.4
1½	41	30-1535R72	1.900	72	6	48.3	1828.8	152.4
2	53	30-2035R72	2.375	72	6	60.3	1828.8	152.4
2½	63	30-2535R72	2.890	72	6	73.4	1828.8	152.4
3	78	30-3035R72	3.500	72	6	88.9	1828.8	152.4
4	103	30-4035R72	4.500	72	6	114.3	1828.8	152.4
5	129	30-5035R72	5.563	72	6	141.3	1828.8	152.4
6	155	30-6035R72	6.625	72	6	168.3	1828.8	152.4
8*	203	30-8035R72	8.623	72	6	219.0	1828.8	152.4
84" Radius								
8*	203	30-8035R84	8.623	84	6	219.0	2133.6	152.4
96" Radius								
8*	203	30-8035R96	8.623	96	6	219.0	2438.4	152.4
108" Radius								
8*	203	30-8035R108	8.623	108	6	219.0	2743.2	152.4

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards



IPS Standard Wall



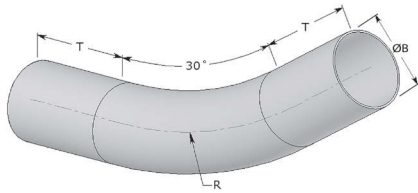
IPS SW 22.5° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
¾	21	30-7534R12	1.050	12	6	26.7	304.8	152.4
1	27	30-1034R12	1.315	12	6	33.4	304.8	152.4
1¼	35	30-1234R12	1.660	12	6	42.2	304.8	152.4
1½	41	30-1534R12	1.900	12	6	48.3	304.8	152.4
2	53	30-2034R12	2.375	12	6	60.3	304.8	152.4
2½	63	30-2534R12	2.890	12	6	73.4	304.8	152.4
18" Radius								
¾	21	30-7534R18	1.050	18	6	26.7	457.2	152.4
1	27	30-1034R18	1.315	18	6	33.4	457.2	152.4
1 ¼	35	30-1234R18	1.660	18	6	42.2	457.2	152.4
1 ½	41	30-1534R18	1.900	18	6	48.3	457.2	152.4
2	53	30-2034R18	2.375	18	6	60.3	457.2	152.4
2 ½	63	30-2534R18	2.890	18	6	73.4	457.2	152.4
3	63	30-3034R18	3.500	18	6	88.9	457.2	152.4
24" Radius								
¾	21	30-7534R24	1.050	24	6	26.7	609.6	152.4
1	27	30-1034R24	1.315	24	6	33.4	609.6	152.4
1¼	35	30-1234R24	1.660	24	6	42.2	609.6	152.4
1½	41	30-1534R24	1.900	24	6	48.3	609.6	152.4
2	53	30-2034R24	2.375	24	6	60.3	609.6	152.4
2½	63	30-2534R24	2.890	24	6	73.4	609.6	152.4
3	78	30-3034R24	3.500	24	6	88.9	609.6	152.4
4	103	30-4034R24	4.500	24	6	114.3	609.6	152.4
36" Radius								
¾	21	30-7534R36	1.050	36	6	26.7	914.4	152.4
1	27	30-1034R36	1.315	36	6	33.4	914.4	152.4
1¼	35	30-1234R36	1.660	36	6	42.2	914.4	152.4
1½	41	30-1534R36	1.900	36	6	48.3	914.4	152.4
2	53	30-2034R36	2.375	36	6	60.3	914.4	152.4
2½	63	30-2534R36	2.890	36	6	73.4	914.4	152.4
3	78	30-3034R36	3.500	36	6	88.9	914.4	152.4
4	103	30-4034R36	4.500	36	6	114.3	914.4	152.4
5	129	30-5034R36	5.563	36	6	141.3	914.4	152.4
6	155	30-6034R36	6.669	36	6	169.4	914.4	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
48" Radius								
¾	21	30-7534R48	1.050	48	6	26.7	1219.2	152.4
1	27	30-1034R48	1.315	48	6	33.4	1219.2	152.4
1¼	35	30-1234R48	1.660	48	6	42.2	1219.2	152.4
1½	41	30-1534R48	1.900	48	6	48.3	1219.2	152.4
2	53	30-2034R48	2.375	48	6	60.3	1219.2	152.4
2½	63	30-2534R48	2.890	48	6	73.4	1219.2	152.4
3	78	30-3034R48	3.500	48	6	88.9	1219.2	152.4
4	103	30-4034R48	4.500	48	6	114.3	1219.2	152.4
5	129	30-5034R48	5.563	48	6	141.3	1219.2	152.4
6	155	30-6034R48	6.625	48	6	168.3	1219.2	152.4
60" Radius								
¾	21	30-7534R60	1.050	60	6	26.7	1524.0	152.4
1	27	30-1034R60	1.315	60	6	33.4	1524.0	152.4
1¼	35	30-1234R60	1.660	60	6	42.2	1524.0	152.4
1½	41	30-1534R60	1.900	60	6	48.3	1524.0	152.4
2	53	30-2034R60	2.375	60	6	60.3	1524.0	152.4
2½	63	30-2534R60	2.890	60	6	73.4	1524.0	152.4
3	78	30-3034R60	3.500	60	6	88.9	1524.0	152.4
4	103	30-4034R60	4.500	60	6	114.3	1524.0	152.4
5	129	30-5034R60	5.563	60	6	141.3	1524.0	152.4
6	155	30-6034R60	6.625	60	6	168.3	1524.0	152.4
72" Radius								
¾	21	30-7534R72	1.050	72	6	26.7	1828.8	152.4
1	27	30-1034R72	1.315	72	6	33.4	1828.8	152.4
1¼	35	30-1234R72	1.660	72	6	42.2	1828.8	152.4
1½	41	30-1534R72	1.900	72	6	48.3	1828.8	152.4
2	53	30-2034R72	2.375	72	6	60.3	1828.8	152.4
2½	63	30-2534R72	2.890	72	6	73.4	1828.8	152.4
3	78	30-3034R72	3.500	72	6	88.9	1828.8	152.4
4	103	30-4034R72	4.500	72	6	114.3	1828.8	152.4
5	129	30-5034R72	5.563	72	6	141.3	1828.8	152.4
6	155	30-6034R72	6.625	72	6	168.3	1828.8	152.4
8	203	30-8034R72	8.623	72	6	219.0	1828.8	152.4
84" Radius								
8*	203	30-8034R84	8.623	84	6	219.0	2133.6	152.4
96" Radius								
8*	203	30-8034R96	8.623	96	6	219.0	2438.4	152.4
108" Radius								
8*	203	30-8034R108	8.623	108	6	219.0	2743.2	152.4

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards





IPS SW 30° Elbow

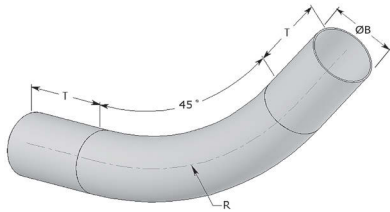
Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
¾	21	30-7533R12	1.050	12	6	26.7	304.8	152.4
1	27	30-1033R12	1.315	12	6	33.4	304.8	152.4
1¼	35	30-1233R12	1.660	12	6	42.2	304.8	152.4
1½	41	30-1533R12	1.900	12	6	48.3	304.8	152.4
2	53	30-2033R12	2.375	12	6	60.3	304.8	152.4
2½	63	30-2533R12	2.890	12	6	73.4	304.8	152.4
18" Radius								
¾	21	30-7533R18	1.050	18	6	26.7	457.2	152.4
1	27	30-1033R18	1.315	18	6	33.4	457.2	152.4
1 ¼	35	30-1233R18	1.660	18	6	42.2	457.2	152.4
1 ½	41	30-1533R18	1.900	18	6	48.3	457.2	152.4
2	53	30-2033R18	2.375	18	6	60.3	457.2	152.4
2 ½	63	30-2533R18	2.890	18	6	73.4	457.2	152.4
3	63	30-3033R18	3.500	18	6	88.9	457.2	152.4
24" Radius								
¾	21	30-7533R24	1.050	24	6	26.7	609.6	152.4
1	27	30-1033R24	1.315	24	6	33.4	609.6	152.4
1¼	35	30-1233R24	1.660	24	6	42.2	609.6	152.4
1½	41	30-1533R24	1.900	24	6	48.3	609.6	152.4
2½	63	30-2533R24	2.890	24	6	73.4	609.6	152.4
2	53	30-2033R24	2.375	24	6	60.3	609.6	152.4
3	78	30-3033R24	3.500	24	6	88.9	609.6	152.4
4	103	30-4033R24	4.500	24	6	114.3	609.6	152.4
36" Radius								
¾	21	30-7533R36	1.050	36	6	26.7	914.4	152.4
1	27	30-1033R36	1.315	36	6	33.4	914.4	152.4
1¼	35	30-1233R36	1.660	36	6	42.2	914.4	152.4
1½	41	30-1533R36	1.900	36	6	48.3	914.4	152.4
2	53	30-2033R36	2.375	36	6	60.3	914.4	152.4
2½	63	30-2533R36	2.890	36	6	73.4	914.4	152.4
3	78	30-3033R36	3.500	36	6	88.9	914.4	152.4
4	103	30-4033R36	4.500	36	6	114.3	914.4	152.4
5	129	30-5033R36	5.563	36	6	141.3	914.4	152.4
6	155	30-6033R36	6.625	36	6	168.3	914.4	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
48" Radius								
¾	21	30-7533R48	1.050	48	6	26.7	1219.2	152.4
1	27	30-1033R48	1.315	48	6	33.4	1219.2	152.4
1¼	35	30-1233R48	1.660	48	6	42.2	1219.2	152.4
1½	41	30-1533R48	1.900	48	6	48.3	1219.2	152.4
2	53	30-2033R48	2.375	48	6	60.3	1219.2	152.4
2½	63	30-2533R48	2.890	48	6	73.4	1219.2	152.4
3	78	30-3033R48	3.500	48	6	88.9	1219.2	152.4
4	103	30-4033R48	4.500	48	6	114.3	1219.2	152.4
5	129	30-5033R48	5.563	48	6	141.3	1219.2	152.4
6	155	30-6033R48	6.625	48	6	168.3	1219.2	152.4
60" Radius								
¾	21	30-7533R60	1.050	60	6	26.7	1524.0	152.4
1	27	30-1033R60	1.315	60	6	33.4	1524.0	152.4
1¼	35	30-1233R60	1.660	60	6	42.2	1524.0	152.4
1½	41	30-1533R60	1.900	60	6	48.3	1524.0	152.4
2	53	30-2033R60	2.375	60	6	60.3	1524.0	152.4
2½	63	30-2533R60	2.890	60	6	73.4	1524.0	152.4
3	78	30-3033R60	3.500	60	6	88.9	1524.0	152.4
4	103	30-4033R60	4.500	60	6	114.3	1524.0	152.4
5	129	30-5033R60	5.563	60	6	141.3	1524.0	152.4
6	155	30-6033R60	6.625	60	6	168.3	1524.0	152.4
72" Radius								
¾	21	30-7533R72	1.050	72	6	26.7	1828.8	152.4
1	27	30-1033R72	1.315	72	6	33.4	1828.8	152.4
1¼	35	30-1233R72	1.660	72	6	42.2	1828.8	152.4
1½	41	30-1533R72	1.900	72	6	48.3	1828.8	152.4
2	53	30-2033R72	2.375	72	6	60.3	1828.8	152.4
2½	63	30-2533R72	2.890	72	6	73.4	1828.8	152.4
3	78	30-3033R72	3.500	72	6	88.9	1828.8	152.4
4	103	30-4033R72	4.500	72	6	114.3	1828.8	152.4
5	129	30-5033R72	5.563	72	6	141.3	1828.8	152.4
6	155	30-6033R72	6.625	72	6	168.3	1828.8	152.4
8	203	30-8033R72	8.623	72	6	219.0	1828.8	152.4
84" Radius								
8*	203	30-8033R84	8.623	84	6	219.0	2133.6	152.4
96" Radius								
8*	203	30-8033R96	8.623	96	6	219.0	2438.4	152.4
108" Radius								
8*	203	30-8033R108	8.623	108	6	219.0	2743.2	152.4

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards



IPS Standard Wall



IPS SW 45° Elbow

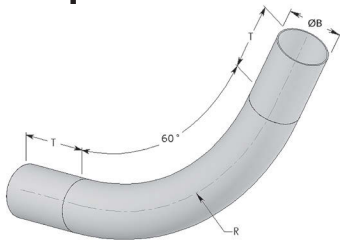
Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
¾	21	30-7532R12	1.050	12	6	26.7	304.8	152.4
1	27	30-1032R12	1.315	12	6	33.4	304.8	152.4
1¼	35	30-1232R12	1.660	12	6	42.2	304.8	152.4
1½	41	30-1532R12	1.900	12	6	48.3	304.8	152.4
2	53	30-2032R12	2.375	12	6	60.3	304.8	152.4
2½	63	30-2532R12	2.890	12	6	73.4	304.8	152.4
18" Radius								
¾	21	30-7532R18	1.050	18	6	26.7	457.2	152.4
1	27	30-1032R18	1.315	18	6	33.4	457.2	152.4
1 ¼	35	30-1232R18	1.660	18	6	42.2	457.2	152.4
1 ½	41	30-1532R18	1.900	18	6	48.3	457.2	152.4
2	53	30-2032R18	2.375	18	6	60.3	457.2	152.4
2 ½	63	30-2532R18	2.890	18	6	73.4	457.2	152.4
3	63	30-3032R18	3.500	18	6	88.9	457.2	152.4
24" Radius								
¾	21	30-7532R24	1.050	24	6	26.7	609.6	152.4
1	27	30-1032R24	1.315	24	6	33.4	609.6	152.4
1¼	35	30-1232R24	1.660	24	6	42.2	609.6	152.4
1½	41	30-1532R24	1.900	24	6	48.3	609.6	152.4
2	53	30-2032R24	2.375	24	6	60.3	609.6	152.4
2½	63	30-2532R24	2.890	24	6	73.4	609.6	152.4
3	78	30-3032R24	3.500	24	6	88.9	609.6	152.4
4	103	30-4032R24	4.500	24	6	114.3	609.6	152.4
36" Radius								
¾	21	30-7532R36	1.050	36	6	26.7	914.4	152.4
1	27	30-1032R36	1.315	36	6	33.4	914.4	152.4
1¼	35	30-1232R36	1.660	36	6	42.2	914.4	152.4
1½	41	30-1532R36	1.900	36	6	48.3	914.4	152.4
2	53	30-2032R36	2.375	36	6	60.3	914.4	152.4
2½	63	30-2532R36	2.890	36	6	73.4	914.4	152.4
3	78	30-3032R36	3.500	36	6	88.9	914.4	152.4
4	103	30-4032R36	4.500	36	6	114.3	914.4	152.4
5	123	30-5032R36	5.563	36	6	141.3	914.4	152.4
6	155	30-6032R36	6.625	36	6	168.3	914.4	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
48" Radius								
¾	21	30-7532R48	1.050	48	6	26.7	1219.2	152.4
1	27	30-1032R48	1.315	48	6	33.4	1219.2	152.4
1¼	35	30-1232R48	1.660	48	6	42.2	1219.2	152.4
1½	41	30-1532R48	1.900	48	6	48.3	1219.2	152.4
2	53	30-2032R48	2.375	48	6	60.3	1219.2	152.4
2½	63	30-2532R48	2.890	48	6	73.4	1219.2	152.4
3	78	30-3032R48	3.500	48	6	88.9	1219.2	152.4
4	103	30-4032R48	4.500	48	6	114.3	1219.2	152.4
5	129	30-5032R48	5.563	48	6	141.3	1219.2	152.4
6	155	30-6032R48	6.625	48	6	168.3	1219.2	152.4
60" Radius								
¾	21	30-7532R60	1.050	60	6	26.7	1524.0	152.4
1	27	30-1032R60	1.315	60	6	33.4	1524.0	152.4
1¼	35	30-1232R60	1.660	60	6	42.2	1524.0	152.4
1½	41	30-1532R60	1.900	60	6	48.3	1524.0	152.4
2	53	30-2032R60	2.375	60	6	60.3	1524.0	152.4
2½	63	30-2535R60	2.890	60	6	73.4	1524.0	152.4
3	78	30-3032R60	3.500	60	6	88.9	1524.0	152.4
4	103	30-4032R60	4.500	60	6	114.3	1524.0	152.4
5	129	30-5032R60	5.563	60	6	141.3	1524.0	152.4
6	155	30-6032R60	6.625	60	6	168.3	1524.0	152.4
72" Radius								
¾	21	30-7532R72	1.050	72	6	26.7	1828.8	152.4
1	27	30-1032R72	1.315	72	6	33.4	1828.8	152.4
1¼	35	30-1232R72	1.660	72	6	42.2	1828.8	152.4
1½	41	30-1532R72	1.900	72	6	48.3	1828.8	152.4
2	53	30-2032R72	2.375	72	6	60.3	1828.8	152.4
2½	63	30-2532R72	2.890	72	6	73.4	1828.8	152.4
3	78	30-3032R72	3.500	72	6	88.9	1828.8	152.4
4	103	30-4032R72	4.500	72	6	114.3	1828.8	152.4
5	129	30-5032R72	5.563	72	6	141.3	1828.8	152.4
6	155	30-6032R72	6.625	72	6	168.3	1828.8	152.4
8*	203	30-8032R72	8.623	72	6	219.0	1828.8	152.4
84" Radius								
8*	203	30-8032R84	8.623	84	6	219.0	2133.6	152.4
96" Radius								
8*	203	30-8032R96	8.623	96	6	219.0	2438.4	152.4
108" Radius								
8*	203	30-8032R108	8.623	108	6	219.0	2743.2	152.4

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards



IPS Standard Wall



IPS SW 60° Elbow

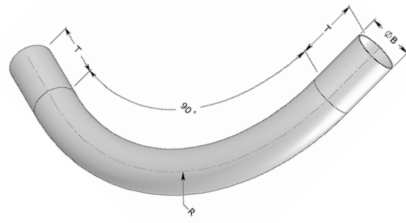
Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
¾	21	30-7531R12	1.050	12	6	26.7	304.8	152.4
1	27	30-1031R12	1.315	12	6	33.4	304.8	152.4
1¼	35	30-1231R12	1.660	12	6	42.2	304.8	152.4
2	53	30-2031R12	2.375	12	6	60.3	304.8	152.4
1½	41	30-1531R12	1.900	12	6	48.3	304.8	152.4
2½	63	30-2531R12	2.890	12	6	73.4	304.8	152.4
18" Radius								
¾	21	30-7531R18	1.050	18	6	26.7	457.2	152.4
1	27	30-1031R18	1.315	18	6	33.4	457.2	152.4
1 ¼	35	30-1231R18	1.660	18	6	42.2	457.2	152.4
1 ½	41	30-1531R18	1.900	18	6	48.3	457.2	152.4
2	53	30-2031R18	2.375	18	6	60.3	457.2	152.4
2 ½	63	30-2531R18	2.890	18	6	73.4	457.2	152.4
3	63	30-3031R18	3.500	18	6	88.9	457.2	152.4
24" Radius								
¾	21	30-7531R24	1.050	24	6	26.7	609.6	152.4
1	27	30-1031R24	1.315	24	6	33.4	609.6	152.4
1¼	35	30-1231R24	1.660	24	6	42.2	609.6	152.4
1½	41	30-1531R24	1.900	24	6	48.3	609.6	152.4
2	53	30-2031R24	2.375	24	6	60.3	609.6	152.4
2½	63	30-2531R24	2.890	24	6	73.4	609.6	152.4
3	78	30-3031R24	3.500	24	6	88.9	609.6	152.4
4	103	30-4031R24	4.500	24	6	114.3	609.6	152.4
36" Radius								
¾	21	30-7531R36	1.050	36	6	26.7	914.4	152.4
1	27	30-1031R36	1.315	36	6	33.4	914.4	152.4
1¼	35	30-1231R36	1.660	36	6	42.2	914.4	152.4
1½	41	30-1531R36	1.900	36	6	48.3	914.4	152.4
2	53	30-2031R36	2.375	36	6	60.3	914.4	152.4
2½	63	30-2531R36	2.890	36	6	73.4	914.4	152.4
3	78	30-3031R36	3.500	36	6	88.9	914.4	152.4
4	103	30-4031R36	4.500	36	6	114.3	914.4	152.4
5	129	30-5031R36	5.563	36	6	141.3	914.4	152.4
6	155	30-6031R36	6.625	36	6	168.3	914.4	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
48" Radius								
¾	21	30-7531R48	1.050	48	6	26.7	1219.2	152.4
1	27	30-1031R48	1.315	48	6	33.4	1219.2	152.4
1¼	35	30-1231R48	1.660	48	6	42.2	1219.2	152.4
1½	41	30-1531R48	1.900	48	6	48.3	1219.2	152.4
2	53	30-2031R48	2.375	48	6	60.3	1219.2	152.4
2½	63	30-2531R48	2.890	48	6	73.4	1219.2	152.4
3	78	30-3031R48	3.500	48	6	88.9	1219.2	152.4
4	103	30-4031R48	4.500	48	6	114.3	1219.2	152.4
5	129	30-5031R48	5.563	48	6	141.3	1219.2	152.4
6	155	30-6031R48	6.625	48	6	168.3	1219.2	152.4
60" Radius								
¾	21	30-7531R60	1.050	60	6	26.7	1524.0	152.4
1	27	30-1031R60	1.315	60	6	33.4	1524.0	152.4
1¼	35	30-1231R60	1.660	60	6	42.2	1524.0	152.4
1½	41	30-1531R60	1.900	60	6	48.3	1524.0	152.4
2	53	30-2031R60	2.375	60	6	60.3	1524.0	152.4
2½	63	30-2531R60	2.890	60	6	73.4	1524.0	152.4
3	78	30-3031R60	3.500	60	6	88.9	1524.0	152.4
4	103	30-4031R60	4.500	60	6	114.3	1524.0	152.4
5	129	30-5031R60	5.563	60	6	141.3	1524.0	152.4
6	155	30-6031R60	6.625	60	6	168.3	1524.0	152.4
72" Radius								
¾	21	30-7531R72	1.050	72	6	26.7	1828.8	152.4
1	27	30-1031R72	1.315	72	6	33.4	1828.8	152.4
1¼	35	30-1231R72	1.660	72	6	42.2	1828.8	152.4
1½	41	30-1531R72	1.900	72	6	48.3	1828.8	152.4
2	53	30-2031R72	2.375	72	6	60.3	1828.8	152.4
2½	63	30-2531R72	2.890	72	6	73.4	1828.8	152.4
3	78	30-3031R72	3.500	72	6	88.9	1828.8	152.4
4	103	30-4031R72	4.500	72	6	114.3	1828.8	152.4
5	129	30-5031R72	5.563	72	6	141.3	1828.8	152.4
6	155	30-6031R72	6.625	72	6	168.3	1828.8	152.4
8*	203	30-8031R72	8.623	72	6	219.0	1828.8	152.4
84" Radius								
8*	203	30-8031R84	8.623	84	6	219.0	2133.6	152.4
96" Radius								
8*	203	30-8031R96	8.623	96	6	219.0	2438.4	152.4
108" Radius								
8*	203	30-8031R108	8.623	108	6	219.0	2743.2	152.4

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards



IPS Standard Wall

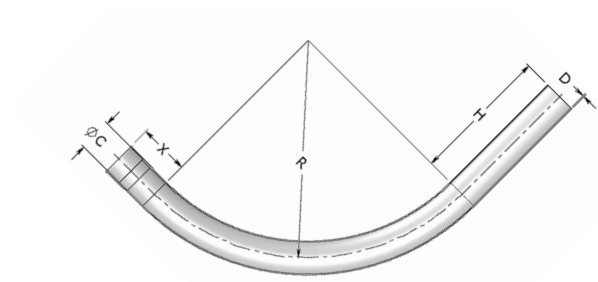


IPS SW 90° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
¾	21	30-7530R12	1.050	12	6	26.7	304.8	152.4
1	27	30-1030R12	1.315	12	6	33.4	304.8	152.4
1¼	35	30-1230R12	1.660	12	6	42.2	304.8	152.4
1½	41	30-1530R12	1.900	12	6	48.3	304.8	152.4
2	53	30-2030R12	2.375	12	6	60.3	304.8	152.4
2½	63	30-2530R12	2.890	12	6	73.4	304.8	152.4
18" Radius								
¾	21	30-7530R18	1.050	18	6	26.7	457.2	152.4
1	27	30-1030R18	1.315	18	6	33.4	457.2	152.4
1 ¼	35	30-1230R18	1.660	18	6	42.2	457.2	152.4
1 ½	41	30-1530R18	1.900	18	6	48.3	457.2	152.4
2	53	30-2030R18	2.375	18	6	60.3	457.2	152.4
2 ½	63	30-2530R18	2.890	18	6	73.4	457.2	152.4
3	63	30-3030R18	3.500	18	6	88.9	457.2	152.4
24" Radius								
¾	21	30-7530R24	1.050	24	6	26.7	609.6	152.4
1	27	30-1030R24	1.315	24	6	33.4	609.6	152.4
1¼	35	30-1230R24	1.660	24	6	42.2	609.6	152.4
1½	41	30-1530R24	1.900	24	6	48.3	609.6	152.4
2	53	30-2030R24	2.375	24	6	60.3	609.6	152.4
2½	63	30-2530R24	2.890	24	6	73.4	609.6	152.4
3	78	30-3030R24	3.500	24	6	88.9	609.6	152.4
4	103	30-4030R24	4.500	24	6	114.3	609.6	152.4
36" Radius								
¾	21	30-7530R36	1.050	36	6	26.7	914.4	152.4
1	27	30-1030R36	1.315	36	6	33.4	914.4	152.4
1¼	35	30-1230R36	1.660	36	6	42.2	914.4	152.4
1½	41	30-1530R36	1.900	36	6	48.3	914.4	152.4
2	53	30-2030R36	2.375	36	6	60.3	914.4	152.4
2½	63	30-2530R36	2.890	36	6	73.4	914.4	152.4
3	78	30-3030R36	3.500	36	6	88.9	914.4	152.4
4	103	30-4030R36	4.500	36	6	114.3	914.4	152.4
5	129	30-5030R36	5.563	36	6	141.3	914.4	152.4
6	155	30-6030R36	6.625	36	6	168.3	914.4	152.4

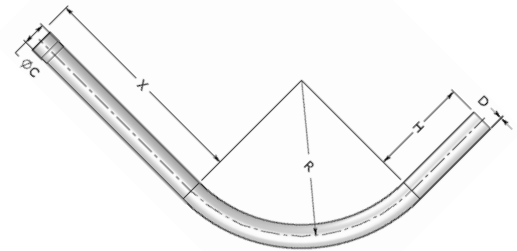
Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
48" Radius								
¾	21	30-7530R48	1.050	48	6	26.7	1219.2	152.4
1	27	30-1030R48	1.315	48	6	33.4	1219.2	152.4
1¼	35	30-1230R48	1.660	48	6	42.2	1219.2	152.4
1½	41	30-1530R48	1.900	48	6	48.3	1219.2	152.4
2	53	30-2030R48	2.375	48	6	60.3	1219.2	152.4
2½	63	30-2530R48	2.890	48	6	73.4	1219.2	152.4
3	78	30-3030R48	3.500	48	6	88.9	1219.2	152.4
4	103	30-4030R48	4.500	48	6	114.3	1219.2	152.4
5	129	30-5030R48	5.563	48	6	141.3	1219.2	152.4
6	155	30-6030R48	6.625	48	6	168.3	1219.2	152.4
60" Radius								
¾	21	30-7530R60	1.050	60	6	26.7	1524.0	152.4
1	27	30-1030R60	1.315	60	6	33.4	1524.0	152.4
1¼	35	30-1230R60	1.660	60	6	42.2	1524.0	152.4
1½	41	30-1530R60	1.900	60	6	48.3	1524.0	152.4
2	53	30-2030R60	2.375	60	6	60.3	1524.0	152.4
2½	63	30-2530R60	2.890	60	6	73.4	1524.0	152.4
3	78	30-3030R60	3.500	60	6	88.9	1524.0	152.4
4	103	30-4030R60	4.500	60	6	114.3	1524.0	152.4
5	129	30-5030R60	5.563	60	6	141.3	1524.0	152.4
6	155	30-6030R60	6.625	60	6	168.3	1524.0	152.4
72" Radius								
2	53	30-2030R72	2.375	72	6	60.3	1828.8	152.4
2½	63	30-2530R72	2.890	72	6	73.4	1828.8	152.4
3	78	30-3030R72	3.500	72	6	88.9	1828.8	152.4
4	103	30-4030R72	4.500	72	6	114.3	1828.8	152.4
5	129	30-5030R72	5.563	72	6	141.3	1828.8	152.4
6	155	30-6030R72	6.625	72	6	168.3	1828.8	152.4
8*	203	30-8030R72	8.623	72	6	219.0	1828.8	152.4
84" Radius								
8*	203	30-8030R84	8.623	84	6	219.0	2133.6	152.4
96" Radius								
8*	203	30-8030R96	8.623	96	6	219.0	2438.4	152.4
108" Radius								
8*	203	30-8030R108	8.623	108	6	219.0	2743.2	152.4

*Trade Size is not recognized by NEC/CEC hence not Certified to any applicable RTRC standards



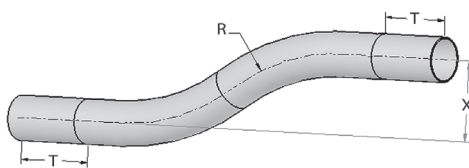
IPS SW Poleriser

Size		Part Number	ØC	D	R	H	X	ØC	D	R	H	X
(in)	(mm)		(in)					(mm)				
2	53	30-2038	2.417	0.130	30	19	8	61.4	3.3	762.0	482.6	203.2
3	78	30-3038	3.542	0.130	30	19	8	90.0	3.3	762.0	482.6	203.2
4	103	30-4038	4.542	0.130	30	19	8	115.4	3.3	762.0	482.6	203.2



IPS SW Extended Poleriser

Size		Part Number	ØC	D	R	H	X	ØC	D	R	H	X
(in)	(mm)		(in)					(mm)				
2	53	30-2039	2.417	0.130	30	19	42	61.4	3.3	762.0	482.6	1066.8
3	78	30-3039	3.542	0.130	30	19	42	90.0	3.3	762.0	482.6	1066.8
4	103	30-4039	4.542	0.130	30	19	42	115.4	3.3	762.0	482.6	1066.8

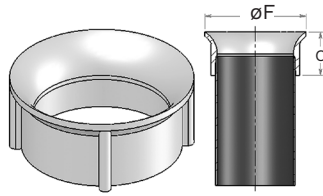


IPS SW Offset Elbow

Size		Part Number
(in)	(mm)	
all		special

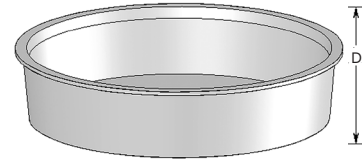
Please contact our local agent for quotes and feasibility

IPS Standard Wall



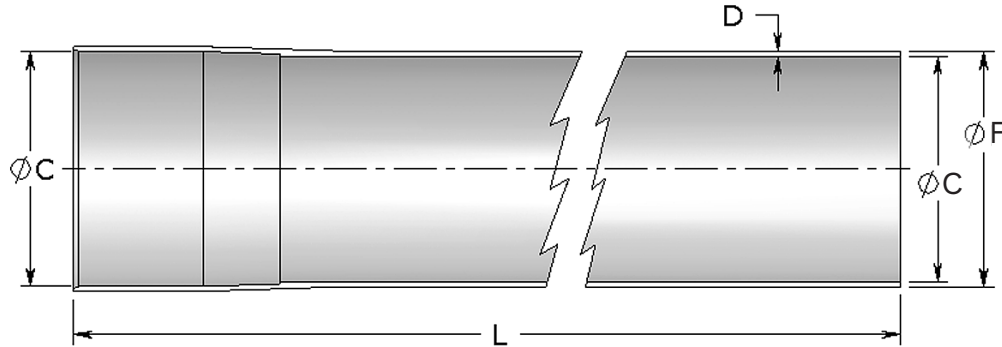
IPS SW Radius Bell End

Size		Part Number	C	Ø F	C	Ø F
(in)	(mm)		(in)	(mm)	(in)	(mm)
¾	21	10-7518	1.7	1.918	43.2	48.72
1	27	10-1018	1.7	2.183	43.2	55.45
1¼	35	10-1218	1.7	2.528	43.2	64.21
1½	41	10-1518	1.7	2.768	43.2	70.31
2	53	10-2018	1.7	3.235	43.2	82.17
2½	63	10-2518	1.7	3.750	43.2	95.25
3	78	10-3018	1.7	4.360	43.2	110.74
4	103	10-4018	2.162	5.360	54.9	136.14
5	129	10-5018	2.162	6.373	54.9	161.87
6	155	10-6018	2.416	7.405	61.4	188.09
8	203	10-8018	2.416	9.393	61.4	238.58



IPS Thermoplastic Plug

Size		Part Number	Depth	
(in)	(mm)		(in)	(mm)
¾	21	30-7528	0.6	15.2
1	27	30-1028	0.6	15.2
1¼	35	30-1228	0.8	20.3
1½	41	30-1528	0.8	20.3
2	53	30-2028	0.8	20.3
2½	63	30-2528	0.8	20.3
3	78	30-3028	0.8	20.3
4	103	30-4028	1.0	25.4
5	129	30-5028	1.0	25.4
6	155	30-6028	1.5	38.1
8	203	30-8028	1.5	38.1

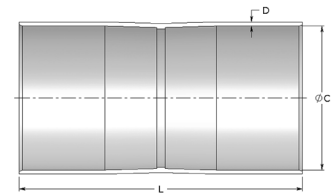


IPS Heavy Wall (HW) Conduit

Size		Part Number	ØA	ØB	ØC	D	L	ØA	ØB	ØC	D	L
(in)	(mm)		(in)					(mm)				
4	103	32-4000	4.360	4.550	4.590	0.095	236.25	110.7	115.6	116.6	2.4	6
5	129	32-5000	5.373	5.603	5.643	0.115	236.25	136.5	142.3	143.3	2.9	6
6	155	32-6000	6.405	6.635	6.675	0.115	236.25	162.7	168.5	169.5	2.9	6

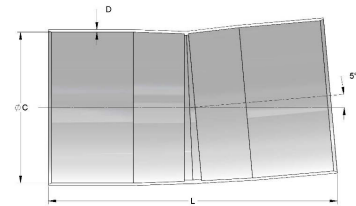
IPS HW Double Bell Coupling

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
4	103	32-4010	4.590	0.095	8.250	116.6	2.4	209.6
5	129	32-5010	5.643	0.115	8.250	143.3	2.9	209.6
6	155	32-6010	6.675	0.115	8.250	169.5	2.9	209.6



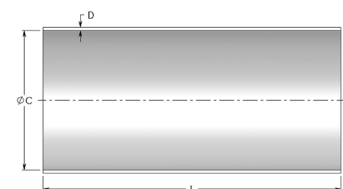
IPS HW 5° Double Bell Coupling

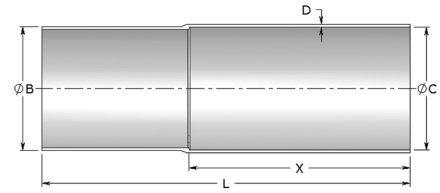
Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
4	103	32-4011	4.590	0.095	8.500	116.6	2.4	215.9
5	129	32-5011	5.643	0.115	8.625	143.3	2.9	219.0
6	155	32-6011	6.675	0.115	8.700	169.5	2.9	221.0



IPS HW Sleeve (repair fitting)

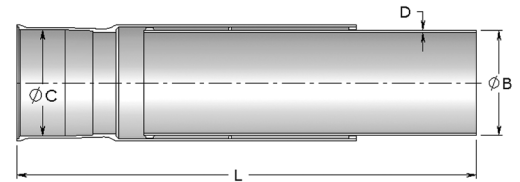
Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
4	103	32-4016	4.590	0.095	12	116.6	2.4	304.8
5	129	32-5016	5.643	0.115	12	143.3	2.9	304.8
6	155	32-6016	6.675	0.115	12	169.5	2.9	304.8





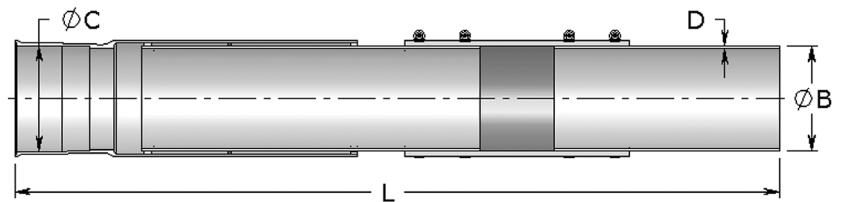
IPS HW Single Expansion Joint

Size		Part Number	ØB	ØC	D	L	X	ØB	ØC	D	L	X
(in)	(mm)		(in)					(mm)				
4	103	32-4012	4.550	4.590	0.095	20	12	115.6	116.6	2.4	508.0	304.8
5	129	32-5012	5.603	5.643	0.115	20	12	142.3	143.3	2.9	508.0	304.8
6	155	32-6012	6.635	6.675	0.115	20	12	168.5	169.5	2.9	508.0	304.8



IPS HW O-Ring Expansion Joint

Size		Part Number	ØB	ØC	D	L MIN	L MAX	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)					(mm)				
4	103	32-4017	4.550	4.590	0.095	23	35	115.6	116.6	2.4	584.2	889.0
5	129	32-5017	5.603	5.643	0.115	23	35	142.3	143.3	2.9	584.2	889.0
6	155	32-6017	6.635	6.675	0.115	23	35	168.5	169.5	2.9	584.2	889.0

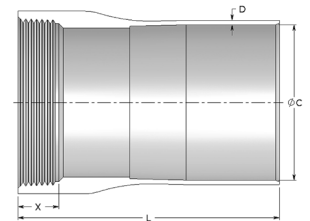


IPS HW O-Ring Expansion / Deflection Joint

Size		Part Number	ØB	ØC	D	L MIN	L MAX	ØB	ØC	D	L MIN	L MAX
(in)	(mm)		(in)					(mm)				
4	103	32-4057	4.550	4.590	0.095	39	51	115.6	116.6	2.4	990.6	1295.4
5	129	32-5057	5.603	5.643	0.115	39	51	142.3	143.3	2.9	990.6	1295.4
6	155	32-6057	6.635	6.675	0.115	39	51	168.5	169.5	2.9	990.6	1295.4

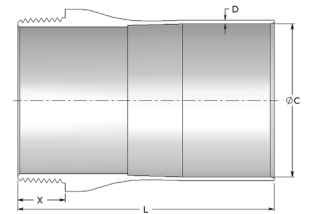
IPS HW NPT Female Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
4	103	32-4044	4.590	0.095	7	1.094	116.6	2.4	177.8	27.8
5	129	32-5044	5.643	0.115	7	1.187	143.3	2.9	177.8	30.1
6	155	32-6044	6.675	0.115	7	1.208	169.5	2.9	177.8	30.7



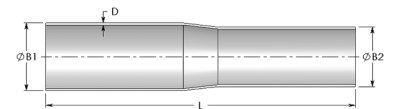
IPS HW NPT Male Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
4	103	32-4027	4.590	0.095	7	1.300	116.6	2.4	177.8	33.0
5	129	32-5027	5.643	0.115	7	1.406	143.3	2.9	177.8	35.7
6	155	32-6027	6.675	0.115	7	1.513	169.5	2.9	177.8	38.4



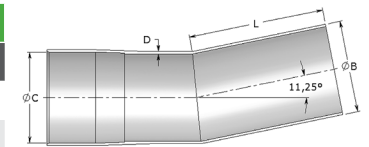
IPS HW Reducer

Size		Part Number	ØB1	ØB2	D	L	ØB1	ØB2	D	L
(in)	(mm)		(in)				(mm)			
4	103	32-4029	4.550	3.550	0.095	18	115.6	90.2	2.4	457.2
5	129	32-5029	5.603	4.550	0.115	18	142.3	115.6	2.9	457.2
6	155	32-6029	6.635	5.603	0.115	18	168.5	142.3	2.9	457.2



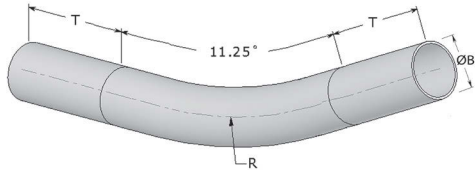
IPS HW 11.25° Fitting

Size		Part Number	ØB	ØC	D	L	ØB	ØC	D	L
(in)	(mm)		(in)				(mm)			
4	103	32-4035	4.550	4.590	0.095	7	115.6	116.6	2.4	177.8
5	129	32-5035	5.603	5.643	0.115	7	142.3	143.3	2.9	177.8
6	155	32-6035	6.635	6.675	0.115	7	168.5	169.5	2.9	177.8



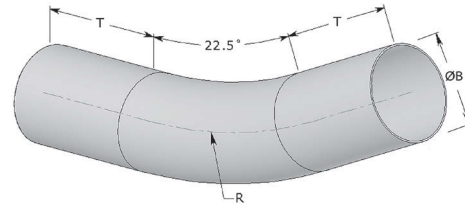
Atkore™ FRE Composites

IPS Heavy Wall



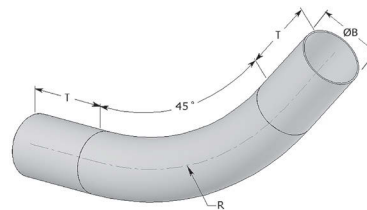
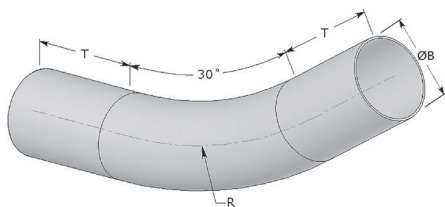
IPS HW 11.25° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	32-4035R24	4.550	24	6	115.6	609.6	152.4
36" Radius								
4	103	32-4035R36	4.550	36	6	115.6	914.4	152.4
5	129	32-5035R36	5.603	36	6	142.3	914.4	152.4
6	155	32-6035R36	6.635	36	6	168.5	914.4	152.4
48" Radius								
4	103	32-4035R48	4.550	48	6	115.6	1219.2	152.4
5	129	32-5035R48	5.603	48	6	142.3	1219.2	152.4
6	155	32-6035R48	6.635	48	6	168.5	1219.2	152.4
60" Radius								
4	103	32-4035R60	4.550	60	6	115.6	1524.0	152.4
5	129	32-5035R60	5.603	60	6	142.3	1524.0	152.4
6	155	32-6035R60	6.635	60	6	168.5	1524.0	152.4
72" Radius								
4	103	32-4035R72	4.550	72	6	115.6	1828.8	152.4
5	129	32-5035R72	5.603	72	6	142.3	1828.8	152.4
6	155	32-6035R72	6.635	72	6	168.5	1828.8	152.4



IPS HW 22.5° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	32-4034R24	4.550	24	6	115.6	609.6	152.4
36" Radius								
4	103	32-4034R36	4.550	36	6	115.6	914.4	152.4
5	129	32-5034R36	5.603	36	6	142.3	914.4	152.4
6	155	32-6034R36	6.635	36	6	168.5	914.4	152.4
48" Radius								
4	103	32-4034R48	4.550	48	6	115.6	1219.2	152.4
5	129	32-5034R48	5.603	48	6	142.3	1219.2	152.4
6	155	32-6034R48	6.635	48	6	168.5	1219.2	152.4
60" Radius								
4	103	32-4034R60	4.550	60	6	115.6	1524.0	152.4
5	129	32-5034R60	5.603	60	6	142.3	1524.0	152.4
6	155	32-6034R60	6.635	60	6	168.5	1524.0	152.4
72" Radius								
4	103	32-4034R72	4.550	72	6	115.6	1828.8	152.4
5	129	32-5034R72	5.603	72	6	142.3	1828.8	152.4
6	155	32-6034R72	6.635	72	6	168.5	1828.8	152.4



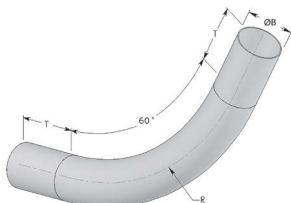
IPS HW 30° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	32-4033R24	4.550	24	6	115.6	609.6	152.4
36" Radius								
4	103	32-4033R36	4.550	36	6	115.6	914.4	152.4
5	129	32-5033R36	5.603	36	6	142.3	914.4	152.4
6	155	32-6033R36	6.635	36	6	168.5	914.4	152.4
48" Radius								
4	103	32-4033R48	4.550	48	6	115.6	1219.2	152.4
5	129	32-5033R48	5.603	48	6	142.3	1219.2	152.4
6	155	32-6033R48	6.635	48	6	168.5	1219.2	152.4
60" Radius								
4	103	32-4033R60	4.550	60	6	115.6	1524.0	152.4
5	129	32-5033R60	5.603	60	6	142.3	1524.0	152.4
6	155	32-6033R60	6.635	60	6	168.5	1524.0	152.4
72" Radius								
4	103	32-4033R72	4.550	72	6	115.6	1828.8	152.4
5	129	32-5033R72	5.603	72	6	142.3	1828.8	152.4
6	155	32-6033R72	6.635	72	6	168.5	1828.8	152.4

IPS HW 45° Elbow

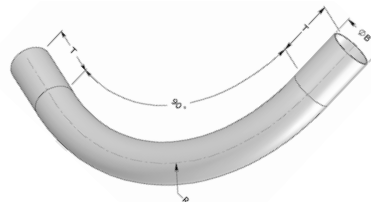
Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	32-4032R24	4.550	24	6	115.6	609.6	152.4
36" Radius								
4	103	32-4032R36	4.550	36	6	115.6	914.4	152.4
5	129	32-5032R36	5.603	36	6	142.3	914.4	152.4
6	155	32-6032R36	6.635	36	6	168.5	914.4	152.4
48" Radius								
4	103	32-4032R48	4.550	48	6	115.6	1219.2	152.4
5	129	32-5032R48	5.603	48	6	142.3	1219.2	152.4
6	155	32-6032R48	6.635	48	6	168.5	1219.2	152.4
60" Radius								
4	103	32-4032R60	4.550	60	6	115.6	1524.0	152.4
5	129	32-5032R60	5.603	60	6	142.3	1524.0	152.4
6	155	32-6032R60	6.635	60	6	168.5	1524.0	152.4
72" Radius								
4	103	32-4032R72	4.550	72	6	115.6	1828.8	152.4
5	129	32-5032R72	5.603	72	6	142.3	1828.8	152.4
6	155	32-6032R72	6.635	72	6	168.5	1828.8	152.4





IPS HW 60° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24” Radius								
4	103	32-4031R24	4.550	24	6	115.6	609.6	152.4
36” Radius								
4	103	32-4031R36	4.550	36	6	115.6	914.4	152.4
5	129	32-5031R36	5.603	36	6	142.3	914.4	152.4
6	155	32-6031R36	6.635	36	6	168.5	914.4	152.4
48” Radius								
4	103	32-4031R48	4.550	48	6	115.6	1219.2	152.4
5	129	32-5031R48	5.603	48	6	142.3	1219.2	152.4
6	155	32-6031R48	6.635	48	6	168.5	1219.2	152.4
60” Radius								
4	103	32-4031R60	4.550	60	6	115.6	1524.0	152.4
5	129	32-5031R60	5.603	60	6	142.3	1524.0	152.4
6	155	32-6031R60	6.635	60	6	168.5	1524.0	152.4
72” Radius								
4	103	32-4031R72	4.550	72	6	115.6	1828.8	152.4
5	129	32-5031R72	5.603	72	6	142.3	1828.8	152.4
6	155	32-6031R72	6.635	72	6	168.5	1828.8	152.4

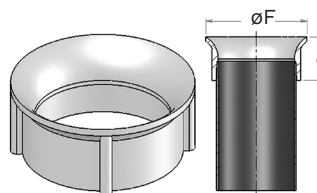


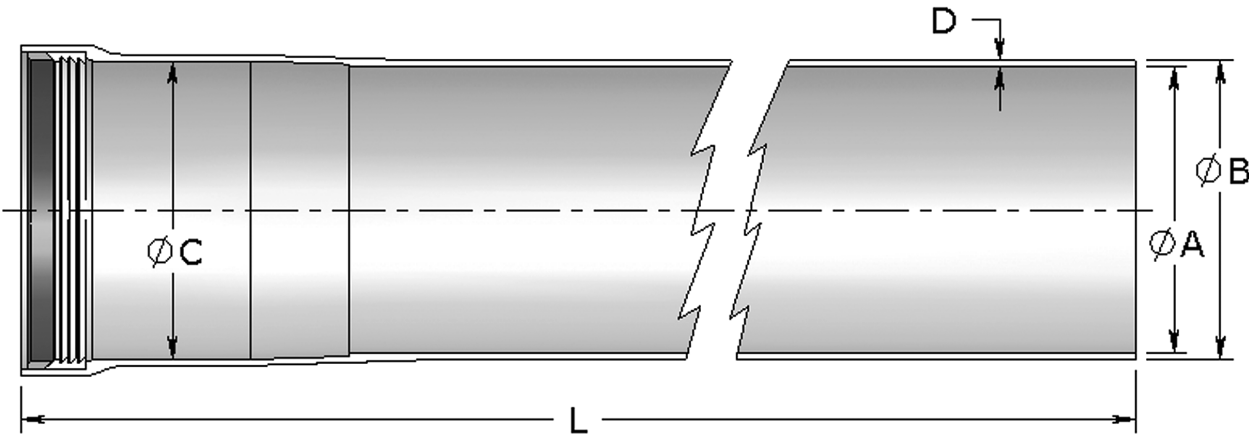
IPS HW 90° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	32-4030R24	4.550	24	6	115.6	609.6	152.4
36" Radius								
4	103	32-4030R36	4.550	36	6	115.6	914.4	152.4
5	129	32-5030R36	5.603	36	6	142.3	914.4	152.4
6	155	32-6030R36	6.635	36	6	168.5	914.4	152.4
48" Radius								
4	103	32-4030R48	4.550	48	6	115.6	1219.2	152.4
5	129	32-5030R48	5.603	48	6	142.3	1219.2	152.4
6	155	32-6030R48	6.635	48	6	168.5	1219.2	152.4
60" Radius								
4	103	32-4030R60	4.550	60	6	115.6	1524.0	152.4
5	129	32-5030R60	5.603	60	6	142.3	1524.0	152.4
6	155	32-6030R60	6.635	60	6	168.5	1524.0	152.4
72" Radius								
4	103	32-4030R72	4.550	72	6	115.6	1828.8	152.4
5	129	32-5030R72	5.603	72	6	142.3	1828.8	152.4
6	155	32-6030R72	6.635	72	6	168.5	1828.8	152.4

IPS HW Radius Bell End

Size		Part Number	C	Ø F	C	Ø F
(in)	(mm)		(in)		(mm)	
4	103	12-4018	2.2	5.4	54.9	137.2
5	129	12-5018	2.2	6.4	54.9	162.6
6	155	12-6018	2.4	7.4	61.4	188.0





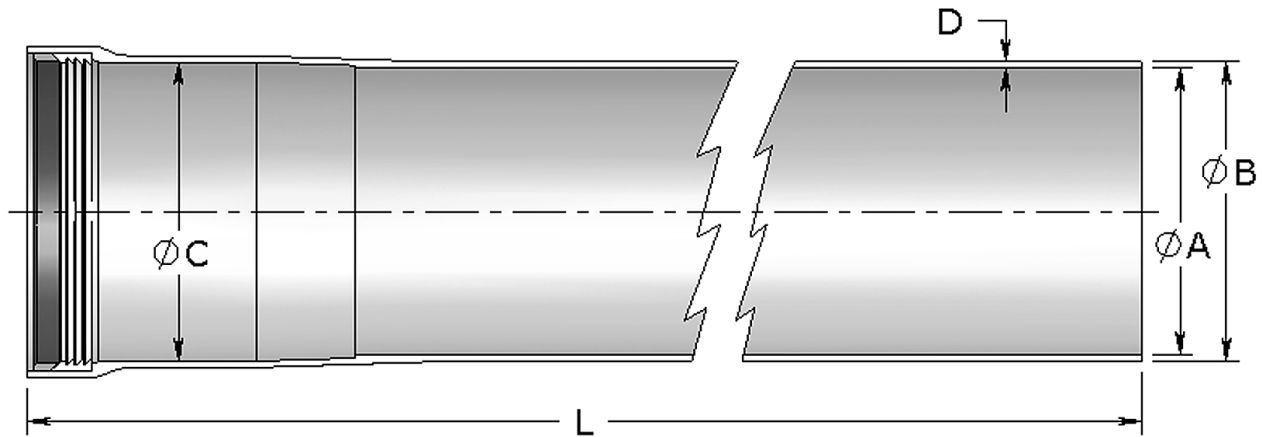
ID Thin Wall (TW) Conduit

Size		Part Number	ØA	ØB	ØC	D	L	ØA	ØB	ØC	D	L
(in)	(mm)		(in)					(mm)				
4	103	41-4000	4.000	4.110	4.170	0.055	236.25	101.6	104.4	105.9	1.4	6
4½	116	41-4500	4.500	4.640	4.730	0.070	236.25	114.3	117.9	120.1	1.8	6
5	129	41-5000	5.000	5.140	5.230	0.070	236.25	127.0	130.6	132.8	1.8	6
6	155	41-6000	6.000	6.140	6.230	0.070	236.25	152.4	156.0	158.2	1.8	6

- All our ID Below Ground products are offered with a TriSeal™ for a push-fit assembly.
- Standard length is 19.68 ft. (6m), but can also be available in 9.84 ft. section (3m), if required.



ID Standard Wall



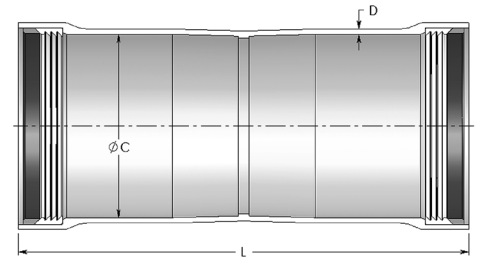
ID Standard Wall (SW) Conduit

Size		Part Number	ØA	ØB	ØC	D	L	ØA	ØB	ØC	D	L
(in)	(mm)		(in)					(mm)				
2	53	40-2000	2.000	2.140	2.170	0.070	236.25	50.8	54.4	55.1	1.8	6
2½	63	40-2500	2.500	2.640	2.670	0.070	236.25	63.5	67.1	67.8	1.8	6
3	78	40-3000	3.000	3.140	3.170	0.070	236.25	76.2	79.8	80.5	1.8	6
3½	91	40-3500	3.500	3.640	3.670	0.070	236.25	88.9	92.5	93.2	1.8	6
4	103	40-4000	4.000	4.140	4.170	0.070	236.25	101.6	105.2	105.9	1.8	6
4½	116	40-4500	4.500	4.690	4.730	0.095	236.25	114.3	119.1	120.1	2.4	6
5	129	40-5000	5.000	5.190	5.230	0.095	236.25	127.0	131.8	132.8	2.4	6
6	155	40-6000	6.000	6.190	6.230	0.095	236.25	152.4	157.2	158.2	2.4	6

- All our ID Below Ground products are offered with a TriSeal™ for a push-fit assembly.
- Adhesives are available, if required.
- Standard length is 19.68 ft. (6m), but can also be available in 9.84 ft. section (3m), if required.

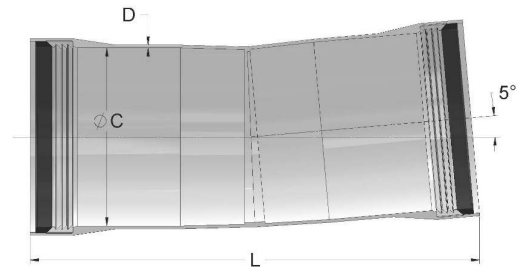
ID SW Double Bell Coupling

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
2	53	40-2010	2.170	0.070	10.25	55.1	1.8	260.4
2½	63	40-2510	2.670	0.070	10.25	67.8	1.8	260.4
3	78	40-3010	3.170	0.070	10.25	80.5	1.8	260.4
3½	91	40-3510	3.670	0.070	10.25	93.2	1.8	260.4
4	103	40-4010	4.170	0.070	10.25	105.9	1.8	260.4
4½	116	40-4510	4.730	0.095	10.25	120.1	2.4	260.4
5	129	40-5010	5.230	0.095	10.25	132.8	2.4	260.4
6	155	40-6010	6.230	0.095	10.25	158.2	2.4	260.4



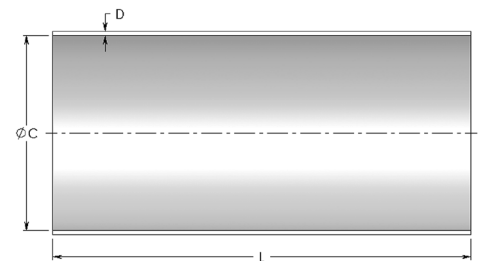
ID SW 5° Double Bell Coupling

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
2	53	40-2011	2.170	0.070	10.3	55.1	1.8	261.6
2½	63	40-2511	2.670	0.070	10.4	67.8	1.8	264.2
3	78	40-3011	3.170	0.070	10.4	80.5	1.8	264.2
3½	91	40-3511	3.670	0.070	10.4	93.2	1.8	264.2
4	103	40-4011	4.170	0.070	10.5	105.9	1.8	266.7
4½	116	40-4511	4.730	0.095	10.5	120.1	2.4	266.7
5	129	40-5011	5.230	0.095	10.6	132.8	2.4	269.2
6	155	40-6011	6.230	0.095	10.7	158.2	2.4	271.8

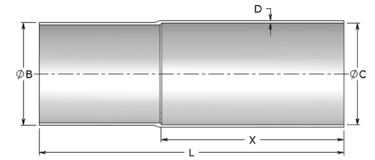


ID SW Sleeve (repair fitting)

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
2	53	40-2016	2.170	0.070	12	55.1	1.8	304.8
2½	63	40-2516	2.670	0.070	12	67.8	1.8	304.8
3	78	40-3016	3.170	0.070	12	80.5	1.8	304.8
3½	91	40-3516	3.670	0.070	12	93.2	1.8	304.8
4	103	40-4016	4.170	0.070	12	105.9	1.8	304.8
4½	116	40-4516	4.730	0.095	12	120.1	2.4	304.8
5	129	40-5016	5.230	0.095	12	132.8	2.4	304.8
6	155	40-6016	6.230	0.095	12	158.2	2.4	304.8

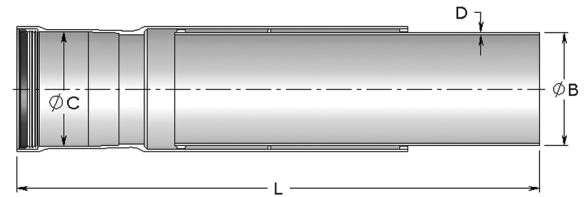


ID Standard Wall



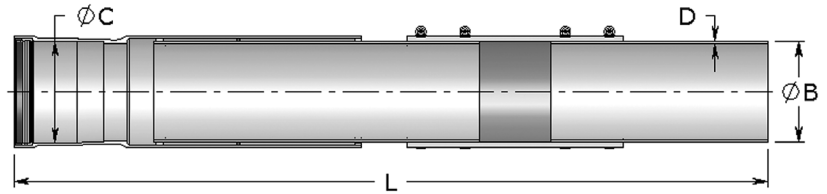
ID SW Single Expansion Joint

Size		Part Number	ØB	ØC	D	L	X	ØB	ØC	D	L	X
(in)	(mm)		(in)					(mm)				
2	53	40-2012	2.140	2.170	0.070	20	12	54.4	55.1	1.8	508.0	304.8
2½	63	40-2512	2.640	2.670	0.070	20	12	67.1	67.8	1.8	508.0	304.8
3	78	40-3012	3.140	3.170	0.070	20	12	79.8	80.5	1.8	508.0	304.8
3½	91	40-3512	3.640	3.670	0.070	20	12	92.5	93.2	1.8	508.0	304.8
4	103	40-4012	4.140	4.170	0.070	20	12	105.2	105.9	1.8	508.0	304.8
4½	116	40-4512	4.690	4.730	0.095	20	12	119.1	120.1	2.4	508.0	304.8
5	129	40-5012	5.190	5.230	0.095	20	12	131.8	132.8	2.4	508.0	304.8
6	155	40-6012	6.190	6.230	0.095	20	12	157.2	158.2	2.4	508.0	304.8



ID SW O-Ring Expansion Joint

Size		Part Number	ØB	ØC	D	L min	L max	ØB	ØC	D	L min	L max
(in)	(mm)		(in)					(mm)				
2	53	40-2017	2.140	2.170	0.070	24	36	54.4	55.1	1.8	609.6	914.4
2½	63	40-2517	2.640	2.670	0.070	24	36	67.1	67.8	1.8	609.6	914.4
3	78	40-3017	3.140	3.170	0.070	24	36	79.8	80.5	1.8	609.6	914.4
3½	91	40-3517	3.640	3.670	0.070	24	36	92.5	93.2	1.8	609.6	914.4
4	103	40-4017	4.140	4.170	0.070	24	36	105.2	105.9	1.8	609.6	914.4
4½	116	40-4517	4.690	4.730	0.095	24	36	119.1	120.1	2.4	609.6	914.4
5	129	40-5017	5.190	5.230	0.095	24	36	131.8	132.8	2.4	609.6	914.4
6	155	40-6017	6.190	6.230	0.095	24	36	157.2	158.2	2.4	609.6	914.4

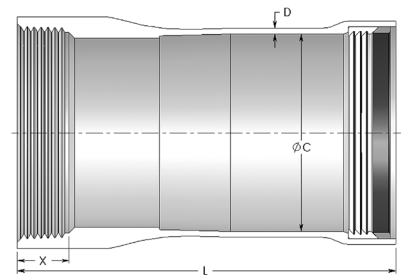


ID SW O-Ring Expansion / Deflection Joint

Size		Part Number	ØB	ØC	D	L min	L max	ØB	ØC	D	L min	L max
(in)	(mm)		(in)				(mm)					
2	53	40-2057	2.140	2.170	0.070	40	52	54.4	55.1	1.8	1016.0	1320.8
2½	63	40-2557	2.640	2.670	0.070	40	52	67.1	67.8	1.8	1016.0	1320.8
3	78	40-3057	3.140	3.170	0.070	40	52	79.8	80.5	1.8	1016.0	1320.8
3½	91	40-3557	3.640	3.670	0.070	40	52	92.5	93.2	1.8	1016.0	1320.8
4	103	40-4057	4.140	4.170	0.070	40	52	105.2	105.9	1.8	1016.0	1320.8
4½	116	40-4557	4.690	4.730	0.095	40	52	119.1	120.1	2.4	1016.0	1320.8
5	129	40-5057	5.190	5.230	0.095	40	52	131.8	132.8	2.4	1016.0	1320.8
6	155	40-6057	6.190	6.230	0.095	40	52	157.2	158.2	2.4	1016.0	1320.8

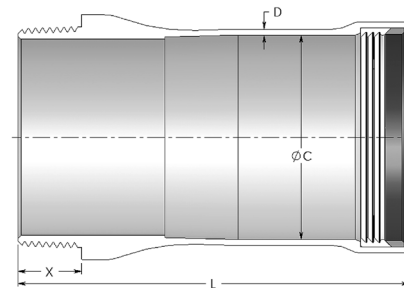
ID SW NPT Female Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
2	53	40-2044	2.170	0.070	8	0.697	55.1	1.8	203.2	17.7
2½	63	40-2544	2.670	0.070	8	0.932	67.8	1.8	203.2	23.7
3	78	40-3044	3.170	0.070	8	1.016	80.5	1.8	203.2	25.8
3½	91	40-3544	3.670	0.070	8	1.071	93.2	1.8	203.2	27.2
4	103	40-4044	4.170	0.070	8	1.094	105.9	1.8	203.2	27.8
5	129	40-5044	5.230	0.095	8	1.187	132.8	2.4	203.2	30.1
6	155	40-6044	6.230	0.095	8	1.208	158.2	2.4	203.2	30.7

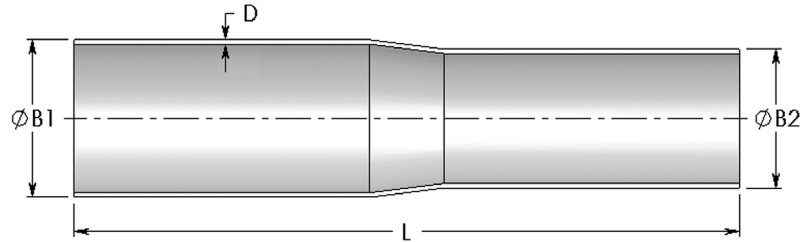


ID SW NPT Male Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
2	53	40-2027	2.170	0.070	8	0.757	55.1	1.8	203.2	19.2
2½	63	40-2527	2.670	0.070	8	1.138	67.8	1.8	203.2	28.9
3	78	40-3027	3.170	0.070	8	1.200	80.5	1.8	203.2	30.5
3½	91	40-3527	3.670	0.070	8	1.250	93.2	1.8	203.2	31.8
4	103	40-4027	4.170	0.070	8	1.300	105.9	1.8	203.2	33.0
5	129	40-5027	5.230	0.095	8	1.406	132.8	2.4	203.2	35.7
6	155	40-6027	6.230	0.095	8	1.513	158.2	2.4	203.2	38.4

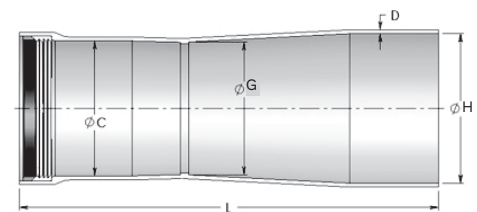


ID Standard Wall



ID SW Reducer

Size		Part Number	ØB1	ØB2	D	L	ØB1	ØB2	D	L
(in)	(mm)		(in)				(mm)			
2	53	40-2029	2.140	1.900	0.070	18	54.4	48.3	1.8	457.2
2½	63	40-2529	2.640	2.140	0.070	18	67.1	54.4	1.8	457.2
3	78	40-3029	3.140	2.640	0.070	18	79.8	67.1	1.8	457.2
3½	91	40-3529	3.640	3.140	0.070	18	92.5	79.8	1.8	457.2
4	103	40-4029	4.140	3.640	0.070	18	105.2	92.5	1.8	457.2
4½	116	40-4529	4.690	4.140	0.095	18	119.1	105.2	2.4	457.2
5	129	40-5029	5.190	4.690	0.095	18	131.8	119.1	2.4	457.2
6	155	40-6029	6.190	5.190	0.095	18	157.2	131.8	2.4	457.2

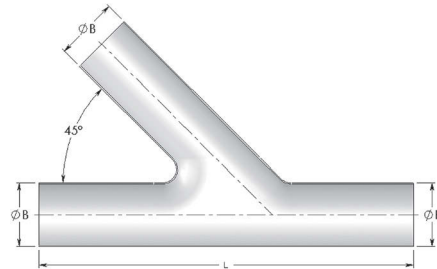


ID SW Multifit Adapter

Size		Part Number	ØC	D	ØG	ØH	L	ØC	D	ØG	ØH	L
(in)	(mm)		(in)					(mm)				
2	53	40-2037	2.170	0.070	2.239	2.424	13	55.1	1.8	56.9	61.6	330.2
2½	63	40-2537	2.670	0.070	2.739	2.924	13	67.8	1.8	69.6	74.3	330.2
3	78	40-3037	3.170	0.070	3.239	3.549	13	80.5	1.8	82.3	90.1	330.2
3½	91	40-3537	3.670	0.070	3.709	4.061	13	93.2	1.8	94.2	103.1	330.2
4	103	40-4037	4.170	0.070	4.109	4.620	13	105.9	1.8	104.4	117.3	330.2
4½	116	40-4537	4.730	0.095	4.750	4.831	13	120.1	2.4	120.7	122.7	330.2
5	129	40-5037	5.230	0.095	5.289	5.650	13	132.8	2.4	134.3	143.5	330.2
6	155	40-6037	6.230	0.095	6.259	6.686	13	158.2	2.4	159.0	169.8	330.2

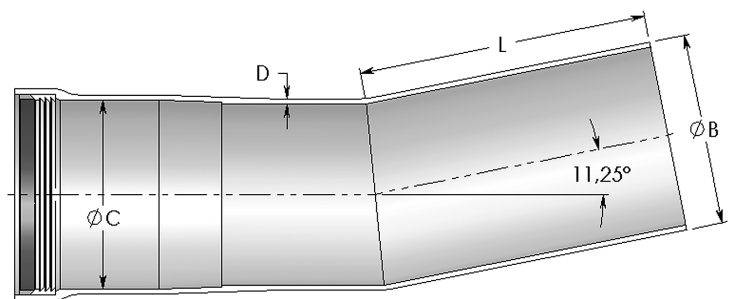
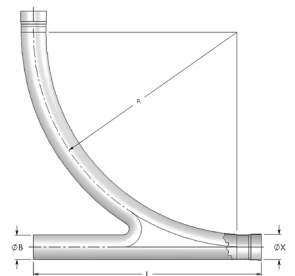
"Y" FITTING

Size		Part Number	ØB	L	ØB	L
(in)	(mm)		(in)		(mm)	
2	53	40-2015	2.140	24.50	54.4	622.3
2½	63	40-2515	2.640	24.50	67.1	622.3
3	78	40-3015	3.140	24.50	79.8	622.3
3½	91	40-3515	3.640	24.50	92.5	622.3
4	103	40-4015	4.140	24.50	105.2	622.3
4½	116	40-4515	4.690	24.50	119.1	622.3
5	129	40-5015	5.190	24.50	131.8	622.3
6	155	40-6015	6.190	24.50	157.2	622.3



"Y" ELBOW

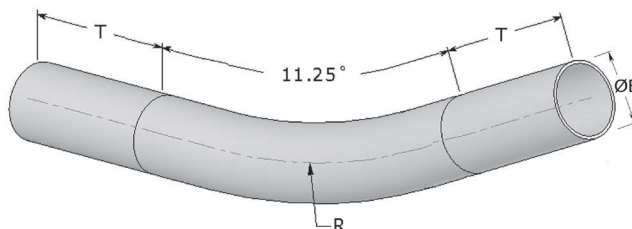
Size		Part Number	ØB	L	R	X	ØB	L	R	X
(in)	(mm)		(in)				(mm)			
3	78	40-3025	3.140	36	36	3.275	79.756	914.4	914.4	83.185
3½	91	40-3525	3.640	36	36	3.750	92.456	914.4	914.4	95.250
4	103	40-4025	4.140	36	36	4.240	105.156	914.4	914.4	107.696



ID SW 11.25° Fitting

Size		Part Number	ØB	ØC	D	L	ØB	ØC	D	L
(in)	(mm)		(in)				(mm)			
2	53	40-2035	2.140	2.170	0.070	7	54.4	55.1	1.8	177.8
2½	63	40-2535	2.640	2.670	0.070	7	67.1	67.8	1.8	177.8
3	78	40-3035	3.140	3.170	0.070	7	79.8	80.5	1.8	177.8
3½	91	40-3535	3.640	3.670	0.070	7	92.5	93.2	1.8	177.8
4	103	40-4035	4.140	4.170	0.070	7	105.2	105.9	1.8	177.8
4½	116	40-4535	4.690	4.730	0.095	7	119.1	120.1	2.4	177.8
5	129	40-5035	5.190	5.230	0.095	7	131.8	132.8	2.4	177.8
6	155	40-6035	6.190	6.230	0.095	7	157.2	158.2	2.4	177.8

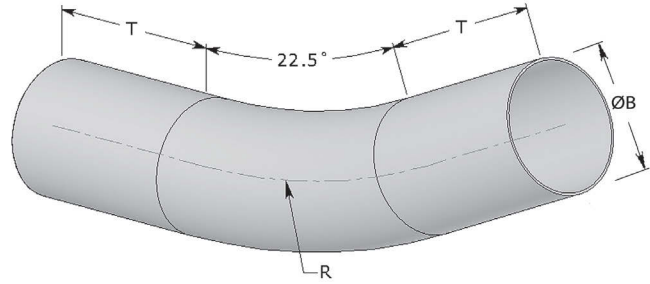
ID Standard Wall



ID SW 11.25° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
2	53	40-2035R12	2.140	12	6	54.4	304.8	152.4
2½	63	40-2535R12	2.640	12	6	67.1	304.8	152.4
18" Radius								
2	53	40-2035R18	2.140	18	6	54.4	457.2	152.4
2 ½	63	40-2535R18	2.640	18	6	67.1	457.2	152.4
3	78	40-3035R18	3.140	18	6	79.8	457.2	152.4
24" Radius								
2	53	40-2035R24	2.140	24	6	54.4	609.6	152.4
2½	63	40-2535R24	2.640	24	6	67.1	609.6	152.4
3	78	40-3035R24	3.140	24	6	79.8	609.6	152.4
3½	91	40-3535R24	3.640	24	6	92.5	609.6	152.4
4	103	40-4035R24	4.140	24	6	105.2	609.6	152.4
36" Radius								
2	53	40-2035R36	2.140	36	6	54.4	914.4	152.4
2½	63	40-2535R36	2.640	36	6	67.1	914.4	152.4
3	78	40-3035R36	3.140	36	6	79.8	914.4	152.4
3½	91	40-3535R36	3.640	36	6	92.5	914.4	152.4
4	103	40-4035R36	4.140	36	6	105.2	914.4	152.4
4½	116	40-4535R36	4.690	36	6	119.1	914.4	152.4
5	129	40-5035R36	5.190	36	6	131.8	914.4	152.4
6	155	40-6035R36	6.190	36	6	157.2	914.4	152.4
48" Radius								
2	53	40-2035R48	2.140	48	6	54.4	1219.2	152.4
2½	63	40-2535R48	2.640	48	6	67.1	1219.2	152.4
3	78	40-3035R48	3.140	48	6	79.8	1219.2	152.4
3½	91	40-3535R48	3.640	48	6	92.5	1219.2	152.4
4	103	40-4035R48	4.140	48	6	105.2	1219.2	152.4
4½	116	40-4535R48	4.690	48	6	119.1	1219.2	152.4
5	129	40-5035R48	5.190	48	6	131.8	1219.2	152.4
6	155	40-6035R48	6.190	48	6	157.2	1219.2	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
60" Radius								
2	53	40-2035R60	2.140	60	6	54.4	1524.0	152.4
2½	63	40-2535R60	2.640	60	6	67.1	1524.0	152.4
3	78	40-3035R60	3.140	60	6	79.8	1524.0	152.4
3½	91	40-3535R60	3.640	60	6	92.5	1524.0	152.4
4	103	40-4035R60	4.140	60	6	105.2	1524.0	152.4
4½	116	40-4535R60	4.690	60	6	119.1	1524.0	152.4
5	129	40-5035R60	5.190	60	6	131.8	1524.0	152.4
6	155	40-6035R60	6.190	60	6	157.2	1524.0	152.4
72" Radius								
2	53	40-2035R72	2.140	72	6	54.4	1828.8	152.4
2½	63	40-2535R72	2.640	72	6	67.1	1828.8	152.4
3	78	40-3035R72	3.140	72	6	79.8	1828.8	152.4
3½	91	40-3535R72	3.640	72	6	92.5	1828.8	152.4
4	103	40-4035R72	4.140	72	6	105.2	1828.8	152.4
4½	116	40-4535R72	4.690	72	6	119.1	1828.8	152.4
5	129	40-5035R72	5.190	72	6	131.8	1828.8	152.4
6	155	40-6035R72	6.190	72	6	157.2	1828.8	152.4

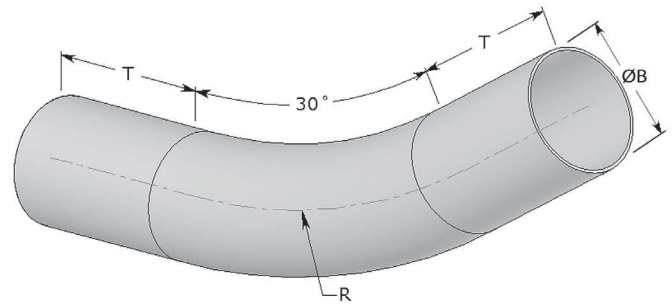


ID SW 22.5° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12" Radius								
2	53	40-2034R12	2.140	12	6	54.4	304.8	152.4
2½	63	40-2534R12	2.640	12	6	67.1	304.8	152.4
18" Radius								
2	53	40-2034R18	2.140	18	6	54.4	457.2	152.4
2 ½	63	40-2534R18	2.640	18	6	67.1	457.2	152.4
3	78	40-3034R18	3.140	18	6	79.8	457.2	152.4
24" Radius								
2	53	40-2034R24	2.140	24	6	54.4	609.6	152.4
2½	63	40-2534R24	2.640	24	6	67.1	609.6	152.4
3	78	40-3034R24	3.140	24	6	79.8	609.6	152.4
3½	91	40-3534R24	3.640	24	6	92.5	609.6	152.4
4	103	40-4034R24	4.140	24	6	105.2	609.6	152.4
36" Radius								
2	53	40-2034R36	2.140	36	6	54.4	914.4	152.4
2½	63	40-2534R36	2.640	36	6	67.1	914.4	152.4
3	78	40-3034R36	3.140	36	6	79.8	914.4	152.4
3½	91	40-3534R36	3.640	36	6	92.5	914.4	152.4
4	103	40-4034R36	4.140	36	6	105.2	914.4	152.4
4½*	116	40-4534R36	4.690	36	6	119.1	914.4	152.4
5	129	40-5034R36	5.190	36	6	131.8	914.4	152.4
6	155	40-6034R36	6.190	36	6	157.2	914.4	152.4
48" Radius								
2	53	40-2034R48	2.140	48	6	54.4	1219.2	152.4
2½	63	40-2534R48	2.640	48	6	67.1	1219.2	152.4
3	78	40-3034R48	3.140	48	6	79.8	1219.2	152.4
3½	91	40-3534R48	3.640	48	6	92.5	1219.2	152.4
4	103	40-4034R48	4.140	48	6	105.2	1219.2	152.4
4½	116	40-4534R48	4.690	48	6	119.1	1219.2	152.4
5	129	40-5034R48	5.190	48	6	131.8	1219.2	152.4
6	155	40-6034R48	6.190	48	6	157.2	1219.2	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
60" Radius								
2	53	40-2034R60	2.140	60	6	54.4	1524.0	152.4
2½	63	40-2534R60	2.640	60	6	67.1	1524.0	152.4
3	78	40-3034R60	3.140	60	6	79.8	1524.0	152.4
3½	91	40-3534R60	3.640	60	6	92.5	1524.0	152.4
4	103	40-4034R60	4.140	60	6	105.2	1524.0	152.4
4½	116	40-4534R60	4.690	60	6	119.1	1524.0	152.4
5	129	40-5034R60	5.190	60	6	131.8	1524.0	152.4
6	155	40-6034R60	6.190	60	6	157.2	1524.0	152.4
72" Radius								
2	53	40-2034R72	2.140	72	6	54.4	1828.8	152.4
2½	63	40-2534R72	2.640	72	6	67.1	1828.8	152.4
3	78	40-3034R72	3.140	72	6	79.8	1828.8	152.4
3½	91	40-3534R72	3.640	72	6	92.5	1828.8	152.4
4	103	40-4034R72	4.140	72	6	105.2	1828.8	152.4
4½	116	40-4534R72	4.690	72	6	119.1	1828.8	152.4
5	129	40-5034R72	5.190	72	6	131.8	1828.8	152.4
6	155	40-6034R72	6.190	72	6	157.2	1828.8	152.4

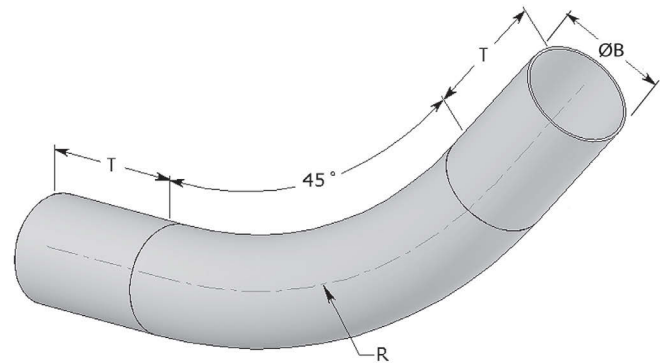
ID Standard Wall



ID SW 30° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12” Radius								
2	53	40-2033R12	2.140	12	6	54.4	304.8	152.4
2½	63	40-2533R12	2.640	12	6	67.1	304.8	152.4
18” Radius								
2	53	40-2033R18	2.140	18	6	54.4	457.2	152.4
2 ½	63	40-2533R18	2.640	18	6	67.1	457.2	152.4
3	78	40-3033R18	3.140	18	6	79.8	457.2	152.4
24” Radius								
2	53	40-2033R24	2.140	24	6	54.4	609.6	152.4
2½	63	40-2533R24	2.640	24	6	67.1	609.6	152.4
3	78	40-3033R24	3.140	24	6	79.8	609.6	152.4
3½	91	40-3533R24	3.640	24	6	92.5	609.6	152.4
4	103	40-4033R24	4.140	24	6	105.2	609.6	152.4
36” Radius								
2	53	40-2033R36	2.140	36	6	54.4	914.4	152.4
2½	63	40-2533R36	2.640	36	6	67.1	914.4	152.4
3	78	40-3033R36	3.140	36	6	79.8	914.4	152.4
3½	91	40-3533R36	3.640	36	6	92.5	914.4	152.4
4	103	40-4033R36	4.140	36	6	105.2	914.4	152.4
4½*	116	40-4533R36	4.690	36	6	119.1	914.4	152.4
5	129	40-5033R36	5.190	36	6	131.8	914.4	152.4
6	155	40-6033R36	6.190	36	6	157.2	914.4	152.4
48” Radius								
2	53	40-2033R48	2.140	48	6	54.4	1219.2	152.4
2½	63	40-2533R48	2.640	48	6	67.1	1219.2	152.4
3	78	40-3033R48	3.140	48	6	79.8	1219.2	152.4
3½	91	40-3533R48	3.640	48	6	92.5	1219.2	152.4
4	103	40-4033R48	4.140	48	6	105.2	1219.2	152.4
4½	116	40-4533R48	4.690	48	6	119.1	1219.2	152.4
5	129	40-5033R48	5.190	48	6	131.8	1219.2	152.4
6	155	40-6033R48	6.190	48	6	157.2	1219.2	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
60" Radius								
2	53	40-2033R60	2.140	60	6	54.4	1524.0	152.4
2½	63	40-2533R60	2.640	60	6	67.1	1524.0	152.4
3	78	40-3033R60	3.140	60	6	79.8	1524.0	152.4
3½	91	40-3533R60	3.640	60	6	92.5	1524.0	152.4
4	103	40-4033R60	4.140	60	6	105.2	1524.0	152.4
4½	116	40-4533R60	4.690	60	6	119.1	1524.0	152.4
5	129	40-5033R60	5.190	60	6	131.8	1524.0	152.4
6	155	40-6033R60	6.190	60	6	157.2	1524.0	152.4
72" Radius								
2	53	40-2033R72	2.140	72	6	54.4	1828.8	152.4
2½	63	40-2533R72	2.640	72	6	67.1	1828.8	152.4
3	78	40-3033R72	3.140	72	6	79.8	1828.8	152.4
3½	91	40-3533R72	3.640	72	6	92.5	1828.8	152.4
4	103	40-4033R72	4.140	72	6	105.2	1828.8	152.4
4½	116	40-4533R72	4.690	72	6	119.1	1828.8	152.4
5	129	40-5033R72	5.190	72	6	131.8	1828.8	152.4
6	155	40-6033R72	6.190	72	6	157.2	1828.8	152.4

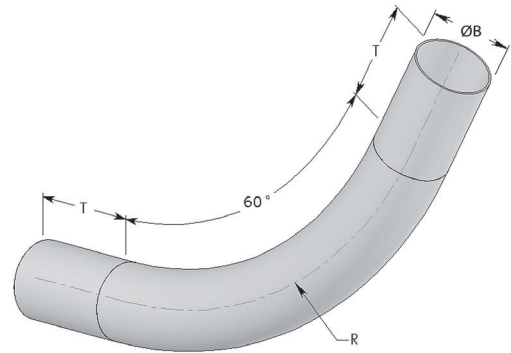


ID SW 45° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12” Radius								
2	53	40-2032R12	2.140	12	6	54.4	304.8	152.4
2½	63	40-2532R12	2.640	12	6	67.1	304.8	152.4
18” Radius								
2	53	40-2032R18	2.140	18	6	54.4	457.2	152.4
2 ½	63	40-2532R18	2.640	18	6	67.1	457.2	152.4
3	78	40-3032R18	3.140	18	6	79.8	457.2	152.4
24” Radius								
2	53	40-2032R24	2.140	24	6	54.4	609.6	152.4
2½	63	40-2532R24	2.640	24	6	67.1	609.6	152.4
3	78	40-3032R24	3.140	24	6	79.8	609.6	152.4
3½	91	40-3532R24	3.640	24	6	92.5	609.6	152.4
4	103	40-4032R24	4.140	24	6	105.2	609.6	152.4
36” Radius								
2	53	40-2032R36	2.140	36	6	54.4	914.4	152.4
2½	63	40-2532R36	2.640	36	6	67.1	914.4	152.4
3	78	40-3032R36	3.140	36	6	79.8	914.4	152.4
3½	91	40-3532R36	3.640	36	6	92.5	914.4	152.4
4	103	40-4032R36	4.140	36	6	105.2	914.4	152.4
4½	116	40-4532R36	4.690	36	6	119.1	914.4	152.4
5	129	40-5032R36	5.190	36	6	131.8	914.4	152.4
6	155	40-6032R36	6.190	36	6	157.2	914.4	152.4
48” Radius								
2	53	40-2032R48	2.140	48	6	54.4	1219.2	152.4
2½	63	40-2532R48	2.640	48	6	67.1	1219.2	152.4
3	78	40-3032R48	3.140	48	6	79.8	1219.2	152.4
3½	91	40-3532R48	3.640	48	6	92.5	1219.2	152.4
4	103	40-4032R48	4.140	48	6	105.2	1219.2	152.4
4½	116	40-4532R48	4.690	48	6	119.1	1219.2	152.4
5	129	40-5032R48	5.190	48	6	131.8	1219.2	152.4
6	155	40-6032R48	6.190	48	6	157.2	1219.2	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
60" Radius								
2	53	40-2032R60	2.140	60	6	54.4	1524.0	152.4
2½	63	40-2532R60	2.640	60	6	67.1	1524.0	152.4
3	78	40-3032R60	3.140	60	6	79.8	1524.0	152.4
3½	91	40-3532R60	3.640	60	6	92.5	1524.0	152.4
4	103	40-4032R60	4.140	60	6	105.2	1524.0	152.4
4½	116	40-4532R60	4.690	60	6	119.1	1524.0	152.4
5	129	40-5032R60	5.190	60	6	131.8	1524.0	152.4
6	155	40-6032R60	6.190	60	6	157.2	1524.0	152.4
72" Radius								
2	53	40-2032R72	2.140	72	6	54.4	1828.8	152.4
2½	63	40-2532R72	2.640	72	6	67.1	1828.8	152.4
3	78	40-3032R72	3.140	72	6	79.8	1828.8	152.4
3½	91	40-3532R72	3.640	72	6	92.5	1828.8	152.4
4	103	40-4032R72	4.140	72	6	105.2	1828.8	152.4
4½	116	40-4532R72	4.690	72	6	119.1	1828.8	152.4
5	129	40-5032R72	5.190	72	6	131.8	1828.8	152.4
6	155	40-6032R72	6.190	72	6	157.2	1828.8	152.4

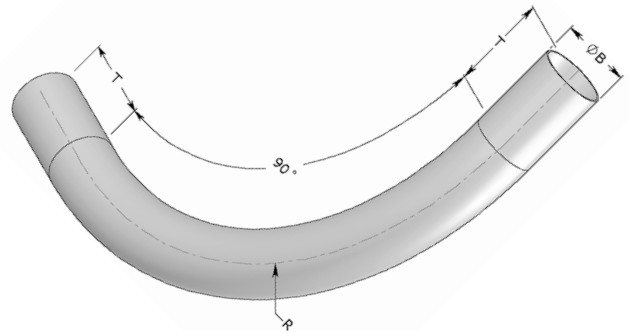
ID Standard Wall



ID SW 60° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12” Radius								
2	53	40-2031R12	2.140	12	6	54.4	304.8	152.4
2½	63	40-2531R12	2.640	12	6	67.1	304.8	152.4
18” Radius								
2	53	40-2031R18	2.140	18	6	54.4	457.2	152.4
2 ½	63	40-2531R18	2.640	18	6	67.1	457.2	152.4
3	78	40-3031R18	3.140	18	6	79.8	457.2	152.4
24” Radius								
2	53	40-2031R24	2.140	24	6	54.4	609.6	152.4
2½	63	40-2531R24	2.640	24	6	67.1	609.6	152.4
3	78	40-3031R24	3.140	24	6	79.8	609.6	152.4
3½	91	40-3531R24	3.640	24	6	92.5	609.6	152.4
4	103	40-4031R24	4.140	24	6	105.2	609.6	152.4
36” Radius								
2	53	40-2031R36	2.140	36	6	54.4	914.4	152.4
2½	63	40-2531R36	2.640	36	6	67.1	914.4	152.4
3	78	40-3031R36	3.140	36	6	79.8	914.4	152.4
3½	91	40-3531R36	3.640	36	6	92.5	914.4	152.4
4	103	40-4031R36	4.140	36	6	105.2	914.4	152.4
4½	116	40-4531R36	4.690	36	6	119.1	914.4	152.4
5	129	40-5031R36	5.190	36	6	131.8	914.4	152.4
6	155	40-6031R36	6.190	36	6	157.2	914.4	152.4
48” Radius								
2	53	40-2031R48	2.140	48	6	54.4	1219.2	152.4
2½	63	40-2531R48	2.640	48	6	67.1	1219.2	152.4
3	78	40-3031R48	3.140	48	6	79.8	1219.2	152.4
3½	91	40-3531R48	3.640	48	6	92.5	1219.2	152.4
4	103	40-4031R48	4.140	48	6	105.2	1219.2	152.4
4½	116	40-4531R48	4.690	48	6	119.1	1219.2	152.4
5	129	40-5031R48	5.190	48	6	131.8	1219.2	152.4
6	155	40-6031R48	6.190	48	6	157.2	1219.2	152.4

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
60" Radius								
2	53	40-2031R60	2.140	60	6	54.4	1524.0	152.4
2½	63	40-2531R60	2.640	60	6	67.1	1524.0	152.4
3	78	40-3031R60	3.140	60	6	79.8	1524.0	152.4
3½	91	40-3531R60	3.640	60	6	92.5	1524.0	152.4
4	103	40-4031R60	4.140	60	6	105.2	1524.0	152.4
4½	116	40-4531R60	4.690	60	6	119.1	1524.0	152.4
5	129	40-5031R60	5.190	60	6	131.8	1524.0	152.4
6	155	40-6031R60	6.190	60	6	157.2	1524.0	152.4
72" Radius								
2	53	40-2031R72	2.140	72	6	54.4	1828.8	152.4
2½	63	40-2531R72	2.640	72	6	67.1	1828.8	152.4
3	78	40-3031R72	3.140	72	6	79.8	1828.8	152.4
3½	91	40-3531R72	3.640	72	6	92.5	1828.8	152.4
4	103	40-4031R72	4.140	72	6	105.2	1828.8	152.4
4½	116	40-4531R72	4.690	72	6	119.1	1828.8	152.4
5	129	40-5031R72	5.190	72	6	131.8	1828.8	152.4
6	155	40-6031R72	6.190	72	6	157.2	1828.8	152.4

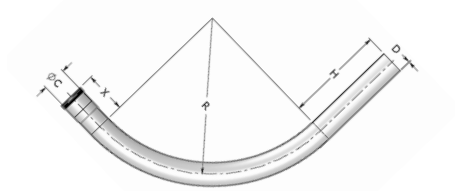


ID SW 90° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
12” Radius								
2	53	40-2030R12	2.140	12	6	54.4	304.8	152.4
2½	63	40-2530R12	2.640	12	6	67.1	304.8	152.4
18” Radius								
2	53	40-2030R18	2.140	18	6	54.4	457.2	152.4
2 ½	63	40-2530R18	2.640	18	6	67.1	457.2	152.4
3	78	40-3030R18	3.140	18	6	79.8	457.2	152.4
24” Radius								
2	53	40-2030R24	2.140	24	6	54.4	609.6	152.4
2½	63	40-2530R24	2.640	24	6	67.1	609.6	152.4
3	78	40-3030R24	3.140	24	6	79.8	609.6	152.4
3½	91	40-3530R24	3.640	24	6	92.5	609.6	152.4
4	103	40-4030R24	4.140	24	6	105.2	609.6	152.4
36” Radius								
2	53	40-2030R36	2.140	36	6	54.4	914.4	152.4
2½	63	40-2530R36	2.640	36	6	67.1	914.4	152.4
3	78	40-3030R36	3.140	36	6	79.8	914.4	152.4
3½	91	40-3530R36	3.640	36	6	92.5	914.4	152.4
4	103	40-4030R36	4.140	36	6	105.2	914.4	152.4
4½	116	40-4530R36	4.690	36	6	119.1	914.4	152.4
5	129	40-5030R36	5.190	36	6	131.8	914.4	152.4
6*	155	40-6030R36	6.190	36	6	157.2	914.4	152.4
48” Radius								
2	53	40-2030R48	2.140	48	6	54.4	1219.2	152.4
2½	63	40-2530R48	2.640	48	6	67.1	1219.2	152.4
3	78	40-3030R48	3.140	48	6	79.8	1219.2	152.4
3½	91	40-3530R48	3.640	48	6	92.5	1219.2	152.4
4	103	40-4030R48	4.140	48	6	105.2	1219.2	152.4
4½	116	40-4530R48	4.690	48	6	119.1	1219.2	152.4
5	129	40-5030R48	5.190	48	6	131.8	1219.2	152.4
6	155	40-6030R48	6.190	48	6	157.2	1219.2	152.4

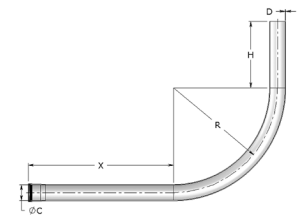
Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
60" Radius								
2	53	40-2030R60	2.140	60	6	54.4	1524.0	152.4
2½	63	40-2530R60	2.640	60	6	67.1	1524.0	152.4
3	78	40-3030R60	3.140	60	6	79.8	1524.0	152.4
3½	91	40-3530R60	3.640	60	6	92.5	1524.0	152.4
4	103	40-4030R60	4.140	60	6	105.2	1524.0	152.4
4½	116	40-4530R60	4.690	60	6	119.1	1524.0	152.4
5	129	40-5030R60	5.190	60	6	131.8	1524.0	152.4
6	155	40-6030R60	6.190	60	6	157.2	1524.0	152.4
72" Radius								
2	53	40-2030R72	2.140	72	6	54.4	1828.8	152.4
2½	63	40-2530R72	2.640	72	6	67.1	1828.8	152.4
3	78	40-3030R72	3.140	72	6	79.8	1828.8	152.4
3½	91	40-3530R72	3.640	72	6	92.5	1828.8	152.4
4	103	40-4030R72	4.140	72	6	105.2	1828.8	152.4
4½	116	40-4530R72	4.690	72	6	119.1	1828.8	152.4
5	129	40-5030R72	5.190	72	6	131.8	1828.8	152.4
6	155	40-6030R72	6.190	72	6	157.2	1828.8	152.4

ID Standard Wall



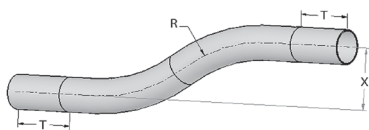
ID SW Poleriser

Size		Part Number	Ø C	D	R	H	X	Ø C	D	R	H	X
(in)	(mm)		(in)					(mm)				
2	53	40-2038	2.170	0.070	30	19	8	55.1	1.8	762.0	482.6	203.2
2 1/2	63	40-2538	2.670	0.130	30	19	8	67.8	3.3	762.0	482.6	203.2
3	78	40-3038	3.170	0.130	30	19	8	80.5	3.3	762.0	482.6	203.2
3 1/2	91	40-4038	3.670	0.130	30	19	8	93.2	3.3	762.0	482.6	203.2
4	103	40-5038	4.170	0.130	30	19	8	105.9	3.3	762.0	482.6	203.2
4 1/2	116	40-4538	4.730	0.130	30	19	8	120.1	3.3	762.0	482.6	203.2
5	129	40-5038	5.230	0.130	30	19	8	132.8	3.3	762.0	482.6	203.2
6	155	40-6038	6.230	0.130	30	19	8	158.2	3.3	762.0	482.6	203.2



ID SW Extended Poleriser

Size		Part Number	Ø C	D	R	H	X	Ø C	D	R	H	X
(in)	(mm)		(in)					(mm)				
2	53	40-2039	2.170	0.070	30	19	42	55.1	1.8	762.0	482.6	203.2
2 1/2	63	40-2539	2.670	0.130	30	19	42	67.8	3.3	762.0	482.6	203.2
3	78	40-3039	3.170	0.130	30	19	42	80.5	3.3	762.0	482.6	203.2
3 1/2	91	40-4039	3.670	0.130	30	19	42	93.2	3.3	762.0	482.6	203.2
4	103	40-5039	4.170	0.130	30	19	42	105.9	3.3	762.0	482.6	203.2
4 1/2	116	40-4539	4.730	0.130	30	19	42	120.1	3.3	762.0	482.6	203.2
5	129	40-5039	5.230	0.130	30	19	42	132.8	3.3	762.0	482.6	203.2
6	155	40-6039	6.230	0.130	30	19	42	158.2	3.3	762.0	482.6	203.2



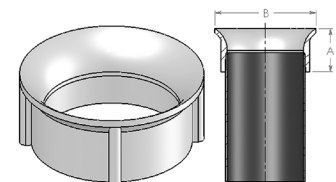
ID SW Offset Elbow

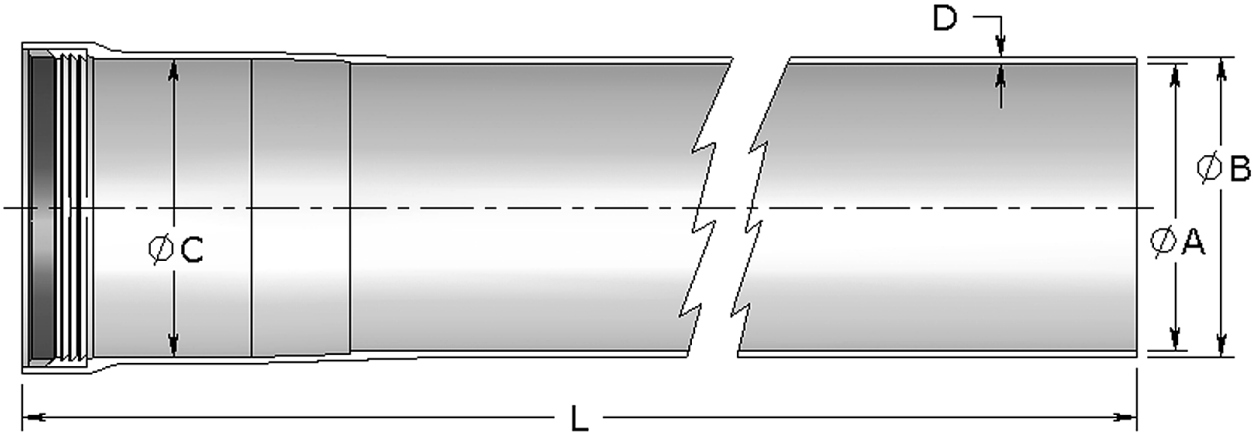
Size	Part Number
All	Special

Please contact our local agent for quotes and feasibility.

ID SW Radius Bell End

Size		Part Number	C	Ø F	C	Ø F
(in)	(mm)		(in)	(mm)	(mm)	(mm)
2	53	20-2018	1.7	3.0	43.2	76.2
2½	63	20-2518	1.7	3.5	43.2	88.9
3	78	20-3018	1.7	4.0	43.2	101.6
3½	78	20-3518	1.7	4.5	43.2	114.3
4	103	20-4018	2.2	5.0	55.9	127.0
4½	103	20-4518	2.2	5.5	55.9	139.7
5	129	20-5018	2.2	6.0	55.9	152.4
6	155	20-6018	2.4	7.0	61.0	177.8





ID Heavy Wall (HW) Conduit

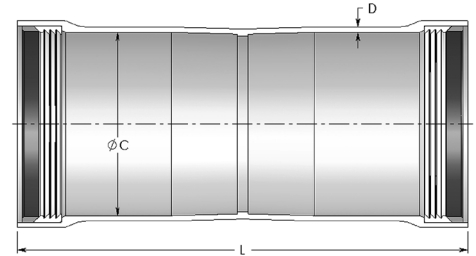
Size		Part Number	ØA	ØB	ØC	D	L	ØA	ØB	ØC	D	L
(in)	(mm)		(in)					(mm)				
4	103	42-4000	4.000	4.190	4.230	0.095	236.25	101.6	106.4	107.4	2.4	6
4½	116	42-4500	4.500	4.730	4.770	0.115	236.25	114.3	120.1	121.2	2.9	6
5	129	42-5000	5.000	5.230	5.270	0.115	236.25	127.0	132.8	133.9	2.9	6
6	155	42-6000	6.000	6.230	6.270	0.115	236.25	152.4	159.3	159.0	2.9	6

- All our ID Below Ground Parts are offered with a TriSeal™ for push-fit assembly.
- Standard length is 19.68 ft. (6m), but can also be available in 9.84 ft. section (3m), if required.



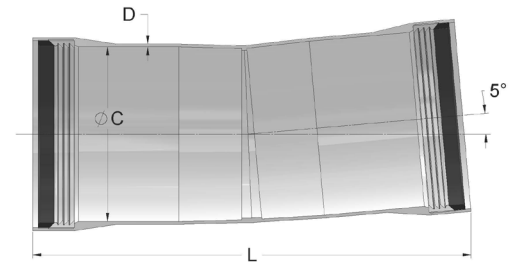
ID HW Double Bell Coupling

Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
4	103	42-4010	4.230	0.095	10.25	107.4	2.4	260.4
4½	116	42-4510	4.770	0.115	10.25	121.2	2.9	260.4
5	129	42-5010	5.270	0.115	10.25	133.9	2.9	260.4
6	155	42-6010	6.270	0.115	10.25	159.3	2.9	260.4



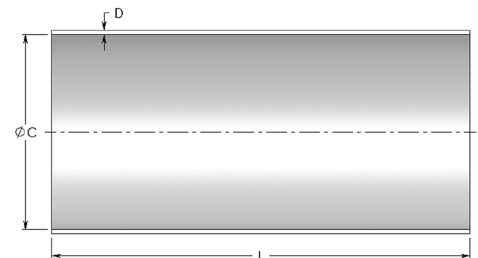
ID HW 5° Double Bell Coupling

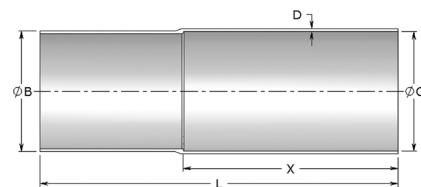
Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
4	103	42-4011	4.230	0.095	10.5	107.4	2.4	266.7
4½	116	42-4511	4.770	0.115	10.5	121.2	2.9	266.7
5	129	42-5011	5.270	0.115	10.6	133.9	2.9	269.2
6	155	42-6011	6.270	0.115	10.7	159.3	2.9	271.8



ID HW Sleeve (repair fitting)

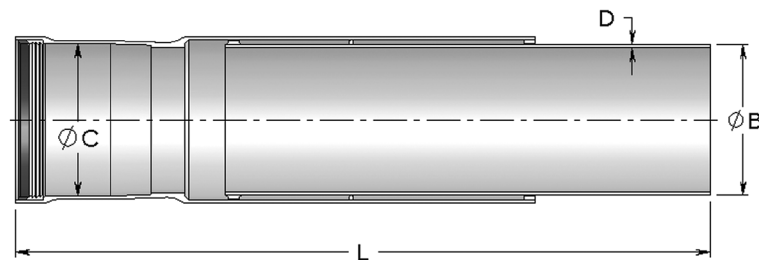
Size		Part Number	ØC	D	L	ØC	D	L
(in)	(mm)		(in)			(mm)		
4	103	42-4016	4.230	0.095	12	107.4	2.4	304.8
4½	116	42-4516	4.770	0.115	12	121.2	2.9	304.8
5	129	42-5016	5.270	0.115	12	133.9	2.9	304.8
6	155	42-6016	6.270	0.115	12	159.3	2.9	304.8





ID HW Single Expansion Joint

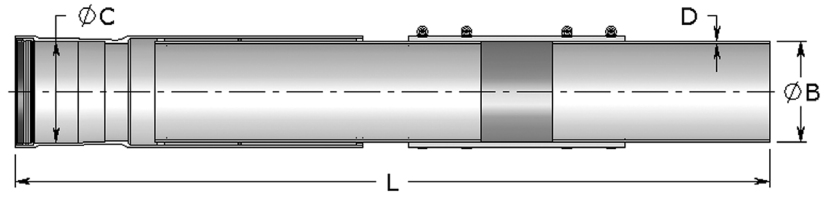
Size		Part Number	ØB	ØC	D	L	X	ØB	ØC	D	L	X
(in)	(mm)		(in)					(mm)				
4	103	42-4012	4.190	4.230	0.095	20	12	106.4	107.4	2.4	508.0	304.8
4½	116	42-4512	4.730	4.770	0.115	20	12	120.1	121.2	2.9	508.0	304.8
5	129	42-5012	5.230	5.270	0.115	20	12	132.8	133.9	2.9	508.0	304.8
6	155	42-6012	6.230	6.270	0.115	20	12	158.2	159.3	2.9	508.0	304.8



ID HW O-Ring Expansion Joint

Size		Part Number	ØB	ØC	D	L min	L max	ØB	ØC	D	L min	L max
(in)	(mm)		(in)					(mm)				
4	103	42-4017	4.190	4.230	0.095	24	36	106.4	107.4	2.4	609.6	914.4
4½	116	42-4517	4.730	4.770	0.115	24	36	120.1	121.2	2.9	609.6	914.4
5	129	42-5017	5.230	5.270	0.115	24	36	132.8	133.9	2.9	609.6	914.4
6	155	42-6017	6.230	6.270	0.115	24	36	158.2	159.3	2.9	609.6	914.4



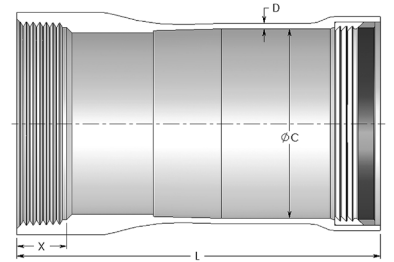


ID HW O-Ring Expansion / Deflection Joint

Size		Part Number	ØB	ØC	D	L min	L max	ØB	ØC	D	L min	L max
(in)	(mm)		(in)					(mm)				
4	103	42-4057	4.190	4.230	0.095	40	52	106.4	107.4	2.4	1016.0	1320.8
4½	116	42-4557	4.730	4.770	0.115	40	52	120.1	121.2	2.9	1016.0	1320.8
5	129	42-5057	5.230	5.270	0.115	40	52	132.8	133.9	2.9	1016.0	1320.8
6	155	42-6057	6.230	6.270	0.115	40	52	158.2	159.3	2.9	1016.0	1320.8

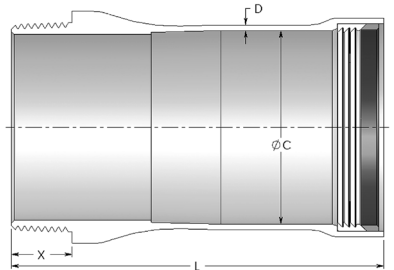
ID HW NPT Female Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
4	103	42-4044	4.230	0.095	8	1.094	107.4	2.4	203.2	27.8
5	129	42-5044	5.270	0.115	8	1.187	133.9	2.9	203.2	30.1
6	155	42-6044	6.270	0.115	8	1.208	159.3	2.9	203.2	30.7

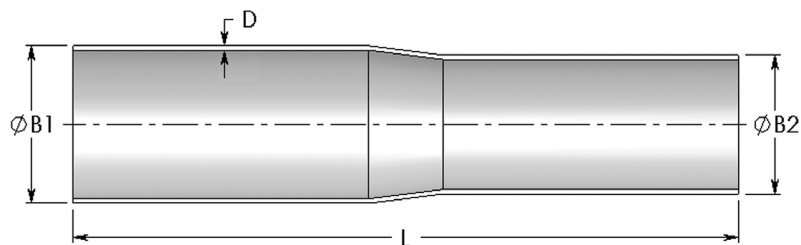


ID HW NPT Male Threaded Adapter

Size		Part Number	ØC	D	L	X	ØC	D	L	X
(in)	(mm)		(in)				(mm)			
4	103	42-4027	4.230	0.095	8	1.300	107.4	2.4	203.2	33.0
5	129	42-5027	5.270	0.115	8	1.406	133.9	2.9	203.2	35.7
6	155	42-6027	6.270	0.115	8	1.513	159.3	2.9	203.2	38.4

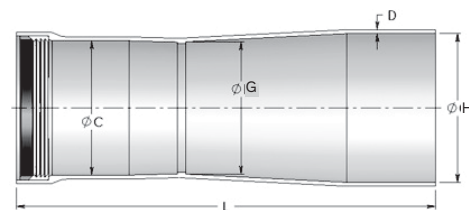


ID Heavy Wall



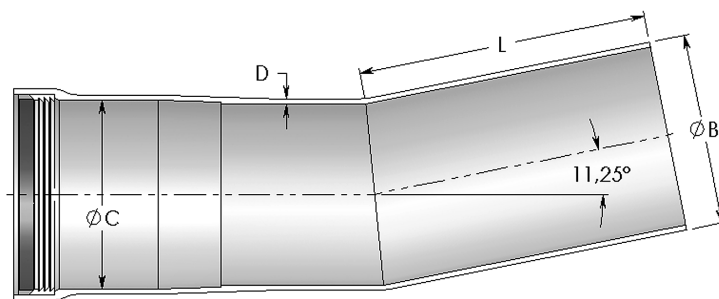
ID HW Reducer

Size		Part Number	ØB1	ØB2	D	L	ØB1	ØB2	D	L
(in)	(mm)		(in)				(mm)			
4	103	22-4029	4.190	3.690	0.095	18	106.4	93.7	2.4	457.2
4½	116	22-4529	4.730	4.190	0.115	18	120.1	106.4	2.9	457.2
5	129	22-5029	5.230	4.730	0.115	18	132.8	120.1	2.9	457.2
6	155	22-6029	6.230	5.230	0.115	18	158.2	132.8	2.9	457.2



ID HW Multifit Adapter

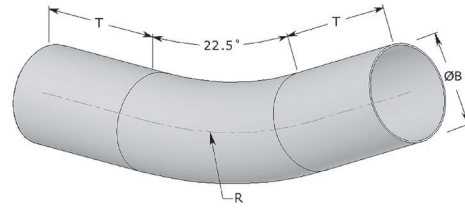
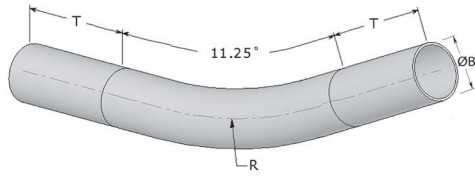
Size		Part Number	ØC	D	ØG	ØH	L	ØC	D	ØG	ØH	L
(in)	(mm)		(in)					(mm)				
4	103	42-4037	4.230	0.095	4.109	4.620	13	107.4	2.4	104.4	117.3	330.2
4½	116	42-4537	4.770	0.115	4.750	4.831	13	121.2	2.9	120.7	122.7	330.2
5	129	42-5037	5.270	0.115	5.289	5.650	13	133.9	2.9	134.3	143.5	330.2
6	155	42-6037	6.270	0.115	6.259	6.686	13	159.3	2.9	159.0	169.8	330.2



ID HW 11.25° Fitting

Size		Part Number	ØB	ØC	D	L	ØB	ØC	D	L
(in)	(mm)		(in)				(mm)			
4	103	42-4035	4.190	4.230	0.095	7	106.4	107.4	2.4	177.8
4½	116	42-4535	4.730	4.770	0.115	7	120.1	121.2	2.9	177.8
5	129	42-5035	5.230	5.270	0.115	7	132.8	133.9	2.9	177.8
6	155	42-6035	6.230	6.270	0.115	7	158.2	159.3	2.9	177.8

ID Heavy Wall

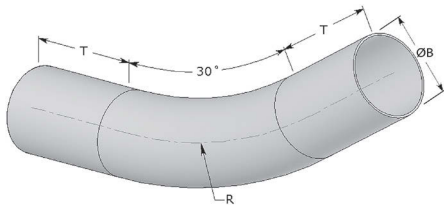


ID HW 11.25° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	42-4035R24	4.190	24	6	106.4	609.6	152.4
36" Radius								
4	103	42-4035R36	4.190	36	6	106.4	914.4	152.4
4½	116	42-4535R36	4.730	36	6	120.1	914.4	152.4
5	129	42-5035R36	5.230	36	6	132.8	914.4	152.4
6	155	42-6035R36	6.230	36	6	158.2	914.4	152.4
48" Radius								
4	103	42-4035R48	4.190	48	6	106.4	1219.2	152.4
4½	116	42-4535R48	4.730	48	6	120.1	1219.2	152.4
5	129	42-5035R48	5.230	48	6	132.8	1219.2	152.4
6	155	42-6035R48	6.230	48	6	158.2	1219.2	152.4
60" Radius								
4	103	42-4035R60	4.190	60	6	106.4	1524.0	152.4
4½	116	42-4535R60	4.730	60	6	120.1	1524.0	152.4
5	129	42-5035R60	5.230	60	6	132.8	1524.0	152.4
6	155	42-6035R60	6.230	60	6	158.2	1524.0	152.4
72" Radius								
4	103	42-4035R72	4.190	72	6	106.4	1828.8	152.4
4½	116	42-4535R72	4.730	72	6	120.1	1828.8	152.4
5	129	42-5035R72	5.230	72	6	132.8	1828.8	152.4
6	155	42-6035R72	6.230	72	6	158.2	1828.8	152.4

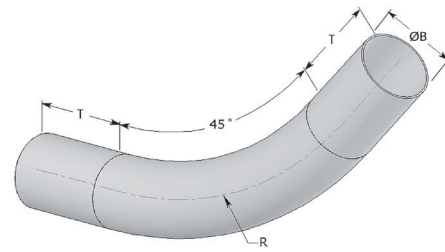
ID HW 22.5° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	42-4034R24	4.190	24	6	106.4	609.6	152.4
36" Radius								
4	103	42-4034R36	4.190	36	6	106.4	914.4	152.4
4½	116	42-4534R36	4.730	36	6	120.1	914.4	152.4
5	129	42-5034R36	5.230	36	6	132.8	914.4	152.4
6	155	42-6034R36	6.230	36	6	158.2	914.4	152.4
48" Radius								
4	103	42-4034R48	4.190	48	6	106.4	1219.2	152.4
4½	116	42-4534R48	4.730	48	6	120.1	1219.2	152.4
5	129	42-5034R48	5.230	48	6	132.8	1219.2	152.4
6	155	42-6034R48	6.230	48	6	158.2	1219.2	152.4
60" Radius								
4	103	42-4034R60	4.190	60	6	106.4	1524.0	152.4
4½	116	42-4534R60	4.730	60	6	120.1	1524.0	152.4
5	129	42-5034R60	5.230	60	6	132.8	1524.0	152.4
6	155	42-6034R60	6.230	60	6	158.2	1524.0	152.4
72" Radius								
4	103	42-4034R72	4.190	72	6	106.4	1828.8	152.4
4½	116	42-4534R72	4.730	72	6	120.1	1828.8	152.4
5	129	42-5034R72	5.230	72	6	132.8	1828.8	152.4
6	155	42-6034R72	6.230	72	6	158.2	1828.8	152.4



ID HW 30° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	42-4033R24	4.190	24	6	106.4	609.6	152.4
36" Radius								
4	103	42-4033R36	4.190	36	6	106.4	914.4	152.4
4½	116	42-4533R36	4.730	36	6	120.1	914.4	152.4
5	129	42-5033R36	5.230	36	6	132.8	914.4	152.4
6	155	42-6033R36	6.230	36	6	158.2	914.4	152.4
48" Radius								
4	103	42-4033R48	4.190	48	6	106.4	1219.2	152.4
4½	116	42-4533R48	4.730	48	6	120.1	1219.2	152.4
5	129	42-5033R48	5.230	48	6	132.8	1219.2	152.4
6	155	42-6033R48	6.230	48	6	158.2	1219.2	152.4
60" Radius								
4	103	42-4033R60	4.190	60	6	106.4	1524.0	152.4
4½	116	42-4533R60	4.730	60	6	120.1	1524.0	152.4
5	129	42-5033R60	5.230	60	6	132.8	1524.0	152.4
6	155	42-6033R60	6.230	60	6	158.2	1524.0	152.4
72" Radius								
4	103	42-4033R72	4.190	72	6	106.4	1828.8	152.4
4½	116	42-4533R72	4.730	72	6	120.1	1828.8	152.4
5	129	42-5033R72	5.230	72	6	132.8	1828.8	152.4
6	155	42-6033R72	6.230	72	6	158.2	1828.8	152.4

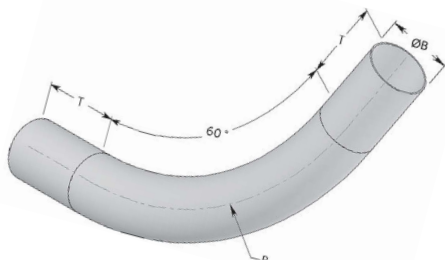


ID HW 45° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	42-4032R24	4.190	24	6	106.4	609.6	152.4
36" Radius								
4	103	42-4032R36	4.190	36	6	106.4	914.4	152.4
4½	116	42-4532R36	4.730	36	6	120.1	914.4	152.4
5	129	42-5032R36	5.230	36	6	132.8	914.4	152.4
6	155	42-6032R36	6.230	36	6	158.2	914.4	152.4
48" Radius								
4	103	42-4032R48	4.190	48	6	106.4	1219.2	152.4
4½	116	42-4532R48	4.730	48	6	120.1	1219.2	152.4
5	129	2-5032R48	5.230	48	6	132.8	1219.2	152.4
6	155	42-6032R48	6.230	48	6	158.2	1219.2	152.4
60" Radius								
4	103	42-4032R60	4.190	60	6	106.4	1524.0	152.4
4½	116	42-4532R60	4.730	60	6	120.1	1524.0	152.4
5	129	42-5032R60	5.230	60	6	132.8	1524.0	152.4
6	155	2-6032R60	6.230	60	6	158.2	1524.0	152.4
72" Radius								
4	103	42-4032R72	4.190	72	6	106.4	1828.8	152.4
4½	116	42-4532R72	4.730	72	6	120.1	1828.8	152.4
5	129	42-5032R72	5.230	72	6	132.8	1828.8	152.4
6	155	42-6032R72	6.230	72	6	158.2	1828.8	152.4

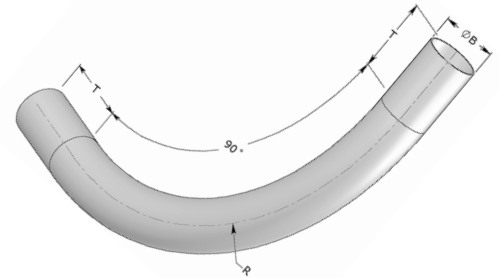
ID Heavy Wall

Atkore™
FRE Composites



ID HW 60° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24” Radius								
4	103	42-4031R24	4.190	24	6	106.4	609.6	152.4
36” Radius								
4	103	42-4031R36	4.190	36	6	106.4	914.4	152.4
4½	116	42-4531R36	4.730	36	6	120.1	914.4	152.4
5	129	42-5031R36	5.230	36	6	132.8	914.4	152.4
6	155	42-6031R36	6.230	36	6	158.2	914.4	152.4
48” Radius								
4	103	42-4031R48	4.190	48	6	106.4	1219.2	152.4
4½	116	42-4531R48	4.730	48	6	120.1	1219.2	152.4
5	129	42-5031R48	5.230	48	6	132.8	1219.2	152.4
6	155	42-6031R48	6.230	48	6	158.2	1219.2	152.4
60” Radius								
4	103	42-4031R60	4.190	60	6	106.4	1524.0	152.4
4½	116	42-4531R60	4.730	60	6	120.1	1524.0	152.4
5	129	42-5031R60	5.230	60	6	132.8	1524.0	152.4
6	155	42-6031R60	6.230	60	6	158.2	1524.0	152.4
72” Radius								
4	103	42-4031R72	4.190	72	6	106.4	1828.8	152.4
4½	116	42-4531R72	4.730	72	6	120.1	1828.8	152.4
5	129	42-5031R72	5.230	72	6	132.8	1828.8	152.4
6	155	42-6031R72	6.230	72	6	158.2	1828.8	152.4

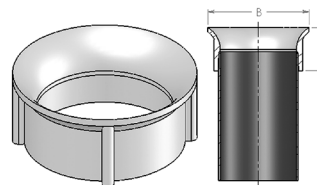


ID HW 90° Elbow

Size		Part Number	ØB	R	T	ØB	R	T
(in)	(mm)		(in)			(mm)		
24" Radius								
4	103	42-4030R24	4.190	24	6	106.4	609.6	152.4
36" Radius								
4	103	42-4030R36	4.190	36	6	106.4	914.4	152.4
4½	116	42-4530R36	4.730	36	6	120.1	914.4	152.4
5	129	42-5030R36	5.230	36	6	132.8	914.4	152.4
6	155	42-6030R36	6.230	36	6	158.2	914.4	152.4
48" Radius								
4	103	42-4030R48	4.190	48	6	106.4	1219.2	152.4
4½	116	42-4530R48	4.730	48	6	120.1	1219.2	152.4
5	129	42-5030R48	5.230	48	6	132.8	1219.2	152.4
6	155	42-6030R48	6.230	48	6	158.2	1219.2	152.4
60" Radius								
4	103	42-4030R60	4.190	60	6	106.4	1524.0	152.4
4½	116	42-4530R60	4.730	60	6	120.1	1524.0	152.4
5	129	42-5030R60	5.230	60	6	132.8	1524.0	152.4
6	155	42-6030R60	6.230	60	6	158.2	1524.0	152.4
72" Radius								
4	103	42-4030R72	4.190	72	6	106.4	1828.8	152.4
4½	116	42-4530R72	4.730	72	6	120.1	1828.8	152.4
5	129	42-5030R72	5.230	72	6	132.8	1828.8	152.4
6	155	42-6030R72	6.230	72	6	158.2	1828.8	152.4

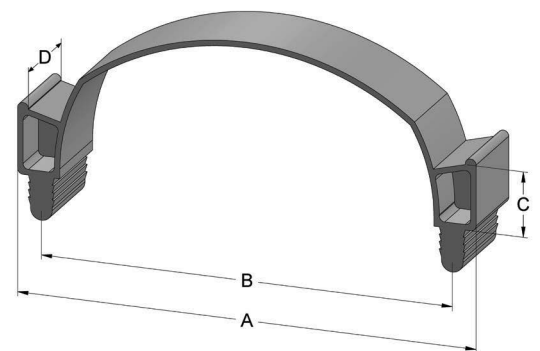
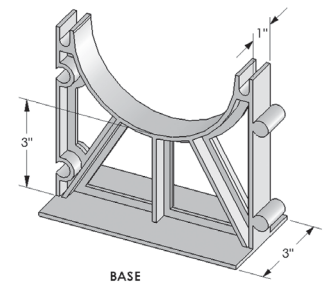
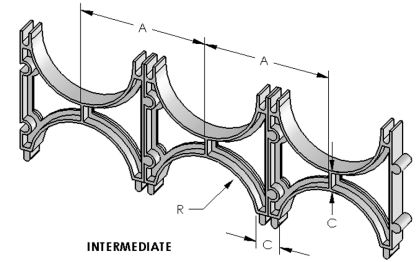
ID HW Radius Bell End

Size		Part Number	C	Ø F	C	Ø F
(in)	(mm)		(in)		(mm)	
4	103	22-4018	2.2	5.0	55.9	127.0
4½	116	22-4518	2.2	5.5	55.9	139.7
5	129	22-5018	2.2	6.0	55.9	152.4
6	155	22-6018	2.4	7.0	61.0	177.8



Base & Intermediate Spacer

Conduit Size		Base	Intermediate	C	R	A	C	R	A
(in)	(mm)	Spacer Number	Spacer Number	(in)			(mm)		
2	53	45-0131	45-0137	1½	1.2	4.0	38.1	30.5	101.6
3	78	45-0138	45-0139	1½	1.8	5.1	38.1	45.7	129.5
4	103	45-0115	45-0124	1½	2.3	6.1	38.1	58.4	154.9
5	129	45-0143	45-0136	1½	2.9	7.3	38.1	73.7	185.4
6	155	45-0144	45-0145	1½	3.3	8.2	38.1	83.8	208.3
8	203	45-0119	45-0146	1½	4.3	10.2	38.1	109.2	259.1
2	53	45-0109	45-0110	2	1.2	4.5	50.8	30.5	114.3
3	78	45-0104	45-0140	2	1.8	5.6	50.8	45.7	142.2
4	103	45-0103	45-0108	2	2.3	6.6	50.8	58.4	167.6
5	129	45-0116	45-0125	2	2.9	7.9	50.8	73.7	200.7
6	155	45-0117	45-0127	2	3.4	8.7	50.8	83.8	221.0
8	203	45-0128	45-0118	2	4.3	10.7	50.8	109.2	271.8
2	53	45-0123	45-0111	3	1.2	5.5	76.2	30.5	139.7
3	78	45-0121	45-0122	3	1.8	6.6	76.2	45.7	167.6
4	103	45-0105	45-0112	3	2.3	7.6	76.2	58.4	193.0
5	129	45-0101	45-0134	3	2.9	8.9	76.2	73.7	226.1
6	155	45-0135	45-0147	3	3.4	9.8	76.2	83.8	248.9



Cap Lock

Conduit Size		Base	A	B	C	D	A	B	C	D
(in)	(mm)	Spacer Number	(in)				(mm)			
2	53	45-0133	4.18	3.625	.750	1.0	106.2	92.1	19.1	25.4
3	78	45-0130	5.30	4.75	.750	1.0	134.6	120.7	19.1	25.4
4	103	45-0126	6.00	5.625	1.25	1.0	152.4	142.9	31.8	25.4
5	129	45-0129	7.43	6.875	1.25	1.0	188.7	174.6	31.8	25.4
6	155	45-0132	8.43	7.875	1.25	1.0	214.1	200.0	31.8	25.4

Accessories

Splice & Repair Kit

Size	Part Number	Conduit Size		Length of Cut Mat		Splices Per Kit
		(in)	(mm)	(in)	(cm)	(kg)
All	40-0174	2	53	10	25	14
		3	78	12	31	11
		4	103	15	38	9
		5	129	19	48	7
		6	155	23	59	6



Adhesive Kit

Size	Part Number	
All	40-0161	Epoxy Kit
All	20-0163	Dual Cartridge
All	20-0164	Dual Cartridge
All	20-0165	Dual Cartridge Applicator

Mechanical Properties (40-0161)	
Shore D Hardness	81
Tensile strength	3 060 Psi
Viscosity	3 700 cP
Mix ratio	2 : 1
Color	Opaque
Solid content	100%

Mechanical Properties (20-0163)	
Shore D Hardness	72
Tensile strength	8 000 Psi
Lap shear strength	3 500 Psi
Viscosity	13 500 cP
Mix ratio	1 : 1
Color	Yellow
Solid content	100%

Mechanical Properties (20-0164)	
Shore D Hardness	90
Tensile strength	9 900 Psi
Viscosity	40 000 cP
Mix ratio	2 : 1
Color	Opaque
Solid content	100%



20-0165



20-0163 / 20-0164

Note: Mixing tip included

Joint Calculation Table (Adhesive Kit)

ID Based				
Size		Joints Made	Pull-Out Strength	
(in)	(mm)	per kit	(lbs)	(kg)
2	53	18	2000	907
2½	63	16	2500	1134
3	78	13	3000	1360
3½	91	11	3500	1587
4	103	10	4000	1814
4½	116	8	4500	2041
5	129	7	5000	2268
6	155	6	6000	2722

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

Material	Test Results	Test Protocol
Resin	Epoxy (no fillers)	
Glass	Fiberglass (E or E-CR Glass)	CSA C22.2 No. 2420
Toxicity (Toxic Gas Emission)	< 0.2% halogens by weight	UL 2420
Physical Properties	Test Results	Test Protocol
Glass Content	68% ± 3%	API 15LR
Specific Gravity	1.94 g/cm ³	ASTM D792
Barcol Hardness	54 ± 2	ASTM D2583
U.V. Resistance	> 3 500 Hrs (Xenon Arc)	CSA C22.2 Number 2420
Water Absorption	≤ 1%	ASTM D570
Mechanical Data	Test Results	Test Protocol
Tensile Strength (axial)	≥ 7 000 psi (48.26 MPa)	ASTM D638
Elasticity Modulus (4") (103 mm)	1.3 E6 psi (8 963 MPa)	ASTM D2105
TriSeal [™] Joint Pull-Out Load	500 lbs (227 kg)	ASTM D2105
Adhesive Joint Pull-Out Load	1 000 lbs (454 kg) per inch trade size	ASTM D2105
Surface Finish	Test Results	Test Protocol
Exterior (average)	< 2 000 microinches (50.8 micrometers)	
Interior (average)	< 125 microinches (3.2 micrometers)	
Color	Black (standard)	
Thermal Properties	Test Results	Test Protocol
Coefficient of Thermal Expansion	1.37 E-5 in./in./°F (2.47 E-5 m./m./°C)	ASTM D696
Thermal Conductivity	2 Btu.in/ft ² .h. °F (0.288 W / m.K)	ASTM D335
Thermal Resistivity	0.5°F. ft ² .h/Btu.in (3.47 m.K / W)	ASTM D335
Flammability	HB Rating	ASTM D2105
Heat Deflection Temperature (HDT)	> 312°F (> 156°C)	ASTM D2105
Coefficient Of Friction	Test Results	Test Protocol
Cross Linked Polyethylene Cable	0.233 ± .02	CSA B196.1
PVC Jacketed Cable	0.385 ± .06	CSA B196.1
Concentric Neutral Cable	0.160 ± .03	CSA B196.1
Teck (Armoured) Cable	0.161 ± .03	CSA B196.1
Electrical Data	Test Results	Test Protocol
Dielectric Strength	500 volts/mil	ASTM D149
Dielectric Breakdown Voltage	29.7 kV	ASTM D149
Dissipation Factor	0.5%	ASTM D150

Chemical Resistance

Chemical Resistance

	After 45 Days	After 90 Days	After 45 Days	After 90 Days	
Sodium chloride, 10% aq. sin.	E	E	Nitric acid, 10% aq. sin.	E	E
Diesel fuel	E	E	Sodium carbonate, 10% aq. sin.	E	E
Unleaded gasoline	E	E	Benzene	NR	NR
Jet fuel	E	E	Toluene	E	E
Hydrochloric acid, 10% aq. sin.	E	E	Xylene	E	E
Sulfuric acid, 10% aq. sin.	E	E	Acetone	NR	NR

E: excellent chemical resistance

NR: not recommended for long term contact.

Note: Chemical resistance tests reported here were conducted according to UL-651 section 38. Samples were immersed in the specified chemical reagent for 45 and 90 days, respectively. Weight gains or weight losses at the end of the immersion period were recorded. Mechanical integrity was determined by the parallel plate crush (ASTM D2412) test. Loads were measured at 5% deflection and at failure at the end of the immersion period and compared to the reference values of control specimens not exposed to any chemical attack. Weight gains or losses above 2% and drops in crushing resistance (load at 5% deflection or load at failure) above 15% were considered as evidence of insufficient chemical resistance.

IPS Thin Wall (for Encased Burial (EB))

Size		Wall		Weight		Failure Load (ASTM D2412)		Impact (ASTM D2444)		Field Bending Radius at 0.2% strain		Moment of Inertia	
in	mm	in	mm	lbs/ft.	kg/m	lbs/ft.	kg/m	lbs/ft.	kg/m	ft.	m	in ⁴	cm ⁴
4	102	.070	1.8	.64	.95	1 500	2 232	80	11.07	n/a	n/a	1.859	77.37
5	127	.070	1.8	1.01	1.50	2 200	3 273	100	13.84	n/a	n/a	4.433	184.5
6	152	.095	2.4	1.64	2.44	2 100	3 125	120	16.61	n/a	n/a	10.247	426.5

IPS Standard Wall (for Encased Burial (EB) or Direct Burial (DB))

Size		Wall		Weight		Failure Load (ASTM D2412)		Impact (ASTM D2444)		Field Bending Radius at 0.2% strain		Moment of Inertia	
in	mm	in	mm	lbs/ft.	kg/m	lbs/ft.	kg/m	lbs/ft.	kg/m	ft.	m	in ⁴	cm ⁴
¾	21	.066	1.7	.17	.25	5 000	7 439	25	3.46	42	13	0.024	1.0
1	27	.066	1.7	.22	.32	4 200	6 249	30	4.15	42	13	0.050	2.1
1¼	35	.066	1.7	.28	.41	3 800	5 654	30	4.15	46	14	0.103	4.3
1½	41	.066	1.7	.32	.46	3 500	5 207	35	4.84	54	16	0.157	6.5
2	53	.070	1.8	.42	.63	3 000	4 463	80	11.07	68	21	0.337	14.0
3	78	.070	1.8	.63	.94	2 300	3 422	120	16.60	100	30	1.110	46.2
4	103	.070	1.8	.82	1.22	2 000	2 976	160	22.14	132	40	2.390	99.5
5	129	.095	2.4	1.39	2.07	3 000	4 463	200	27.67	160	49	6.101	253.9
6	155	.110	2.8	1.89	2.82	2 800	4 166	240	33.21	190	58	11.948	478.6
8	203	.115	2.9	2.61	3.88	2 400	3 571	280	38.75	235	72	27.818	1157.9

IPS Heavy Wall (for Direct Burial (DB))

Size		Wall		Weight		Failure Load (ASTM D2412)		Impact (ASTM D2444)		Field Bending Radius at 0.2% strain		Moment of Inertia	
in	mm	in	mm	lbs/ft.	kg/m	lbs/ft.	kg/m	lbs/ft.	kg/m	ft.	m	in ⁴	cm ⁴
4	103	.095	1.8	.82	1.22	2 700	4 018	160	22.14	n/a	n/a	3.300	137.4
5	129	.115	2.4	1.39	2.07	3 700	5 506	200	27.68	n/a	n/a	7.468	310.8
6	155	.115	2.8	1.89	2.82	2 900	4 315	240	33.22	n/a	n/a	12.521	521.2

Impact resistance tests were carried out at -40°C, as required by UL 2515/CSA C22.2 Number 2515, and at 23°C. The values reported here are the lowest of the two measurements (normally those taken at -40°C).

Representative Performance Specs

ID Thin Wall (for Encased Burial (EB))

Size		Wall		Weight		Failure Load (ASTM D2412)		Impact (ASTM D2444)		Field Bending Radius at 0.2% strain		Moment of Inertia	
in	mm	in	mm	lbs/ft.	kg/m	lbs/ft.	kg/m	lbs/ft.	kg/m	ft.	m	in ⁴	cm ⁴
4	103	.055	1.4	.59	.88	1 600	3 381	80	11.07	n/a	n/a	1.440	59.9
4½	116	.070	1.8	.85	1.27	2 500	3 720	90	12.46	n/a	n/a	2.624	109.2
5	129	.070	1.8	.95	1.41	2 800	4 166	100	13.84	n/a	n/a	3.583	149.1
6	155	.070	1.8	1.52	2.26	2 600	3 869	100	13.84	n/a	n/a	6.149	255.9

ID Standard Wall (for Encased Burial (EB) or Direct Burial (DB))

Size		Wall		Weight		Failure Load (ASTM D2412)		Impact (ASTM D2444)		Field Bending Radius at 0.2% strain		Moment of Inertia	
in	mm	in	mm	lbs/ft.	kg/m	lbs/ft.	kg/m	lbs/ft.	kg/m	ft.	m	in ⁴	cm ⁴
2	53	.070	1.8	.38	.57	3 200	4 761	60	8.30	68	21	0.244	10.2
2½	63	.070	1.8	.48	.71	2 700	4 017	80	11.06	80	24	0.467	19.4
3	78	.070	1.8	.57	.85	2 400	3 571	120	16.60	100	30	0.796	33.1
3½	91	.070	1.8	.66	.98	2 200	3 273	140	19.37	116	35	1.251	52.1
4	103	.070	1.8	.75	1.12	2 100	3 124	160	22.14	132	40	1.854	77.2
4½	116	.095	2.4	1.16	1.72	3 400	5 059	180	24.90	150	46	3.621	150.7
5	129	.095	2.4	1.28	1.90	3 800	5 654	200	27.67	166	51	4.936	205.4
6	155	.095	2.4	1.53	2.28	3 600	5 356	200	27.67	198	60	8.449	351.7

ID Heavy Wall (for Encased Burial (EB))

Size		Wall		Weight		Failure Load (ASTM D2412)		Impact (ASTM D2444)		Field Bending Radius at 0.2% strain		Moment of Inertia	
in	mm	in	mm	lbs/ft.	kg/m	lbs/ft.	kg/m	lbs/ft.	kg/m	ft.	m	in ⁴	cm ⁴
4	103	.095	2.4	1.03	1.53	2 800	4 166	160	22.14	n/a	n/a	2.563	106.7
4½	116	.115	2.4	1.16	1.72	3 900	5 803	180	24.91	n/a	n/a	4.442	184.9
5	129	.115	2.4	1.28	1.90	4 200	6 250	200	27.68	n/a	n/a	6.047	251.7
6	155	.115	2.4	1.53	2.28	4 000	5 952	200	27.68	n/a	n/a	10.330	429.9

Note: Impact resistance tests were carried out at -40°C, as required by UL 2515/CSA C22.2 Number 2515, and at 23°C. The values reported here are the lowest of the two measurements (normally those taken at -40°C).

Flexural Data

IPS Thin Wall (for Encased Burial (EB))					
Size		Stiffness Factor (SF)		Pipe Stiffness (PS)	
in	mm	lbs/ft.	kg/m	lbs/ft. 2	MPa
4	103	30.50	0.35	19.03	0.13
5	129	62.88	0.73	20.94	0.14
6	155	157.19	1.81	30.73	0.21

IPS Heavy Wall (For Direct Burial (DB) Heavy Loads))					
Size		Stiffness Factor (SF)		Pipe Stiffness (PS)	
in	mm	lbs/ft.	kg/m	lbs/ft. 2	MPa
4	103	157.19	1.81	95.45	0.66
5	129	278.83	3.21	90.57	0.63
6	155	278.83	3.21	54.01	0.37

ID Thin Wall (for Encased Burial (EB))					
Size		Stiffness Factor (SF)		Pipe Stiffness (PS)	
in	mm	lbs/ft.	kg/m	lbs/ft. 2	MPa
4	103	30.50	0.35	24.56	0.17
4½	116	62.88	0.73	35.37	0.24
5	129	62.88	0.73	25.91	0.18
6	155	62.88	0.73	15.10	0.10

ID Heavy Wall (For Direct Burial (DB) Heavy Loads))					
Size		Stiffness Factor (SF)		Pipe Stiffness (PS)	
in	mm	lbs/ft.	kg/m	lbs/ft. 2	MPa
4	103	157.19	1.81	122.90	0.85
4½	116	278.83	3.21	152.31	1.05
5	129	278.83	3.21	111.87	0.77
6	155	278.83	3.21	65.47	0.45

IPS Standard Wall (for Encased Burial (EB) or Direct Burial (DB))					
Size		Stiffness Factor (SF)		Pipe Stiffness (PS)	
in	mm	lbs/ft.	kg/m	lbs/ft. 2	MPa
¾	21	52.71	0.61	2 970.24	20.50
1	27	52.71	0.61	1 452.41	10.03
1¼	35	52.71	0.61	698.73	4.82
1½	41	52.71	0.61	458.75	3.17
2	53	62.88	0.73	275.69	1.90
2.5	63	62.88	0.73	150.55	1.04
3	78	62.88	0.73	83.67	0.58
4	103	62.88	0.73	38.84	0.27
5	129	157.19	1.81	51.62	0.36
6	155	244.02	2.81	47.38	0.33
8	203	278.83	3.21	24.31	0.17

ID Standard Wall (for Encased Burial (EB) or Direct Burial (DB))					
Size		Stiffness Factor (SF)		Pipe Stiffness (PS)	
in	mm	lbs/ft.	kg/m	lbs/ft. 2	MPa
2	53	62.88	0.73	380.65	2.63
2½	63	62.88	0.73	198.90	1.37
3	78	62.88	0.73	116.69	0.81
3½	91	62.88	0.73	74.21	0.51
4	103	62.88	0.73	50.08	0.35
4½	116	157.19	1.81	86.99	0.60
5	129	157.19	1.81	63.81	0.44
6	155	157.19	1.81	37.27	0.26

Conduit Deflection Data

Deflection Data Below Ground IPS SW (for Encased Burial (EB) or Direct Burial (DB))

Burial Depth (ft)		2	3	4	5	6	7	8	9	10
Soil Mod. (Psi)	Diameter (in)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)
E' = 200	¾	0.005	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005
	1	0.011	0.010	0.009	0.009	0.010	0.010	0.011	0.012	0.013
	1¼	0.027	0.024	0.022	0.023	0.024	0.025	0.027	0.029	0.032
	1½	0.044	0.038	0.036	0.037	0.038	0.041	0.044	0.047	0.051
	2	0.077	0.066	0.063	0.064	0.067	0.071	0.077	0.083	0.089
	2½	0.135	0.117	0.112	0.113	0.119	0.126	0.136	0.147	0.158
	3	0.216	0.186	0.178	0.180	0.189	0.200	0.217	0.233	0.251
	4	0.351	0.304	0.290	0.294	0.308	0.326	0.354	0.380	0.409
	5	0.404	0.349	0.333	0.338	0.354	0.375	0.406	0.437	0.470
	6	0.492	0.426	0.407	0.412	0.432	0.457	0.495	0.533	0.573
	8	0.737	0.638	0.609	0.617	0.647	0.685	0.742	0.798	0.859
E' = 400	¾	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005
	1	0.010	0.009	0.009	0.009	0.009	0.010	0.010	0.011	0.012
	1¼	0.023	0.020	0.019	0.020	0.021	0.022	0.024	0.025	0.027
	1½	0.036	0.031	0.029	0.030	0.031	0.033	0.036	0.039	0.042
	2	0.058	0.050	0.048	0.049	0.051	0.054	0.059	0.063	0.068
	2½	0.093	0.080	0.077	0.078	0.081	0.086	0.093	0.100	0.108
	3	0.134	0.116	0.111	0.112	0.118	0.125	0.135	0.145	0.156
	4	0.199	0.172	0.164	0.166	0.174	0.185	0.200	0.215	0.231
	5	0.236	0.204	0.195	0.197	0.207	0.219	0.237	0.255	0.274
	6	0.284	0.246	0.235	0.238	0.249	0.264	0.286	0.308	0.331
	8	0.401	0.346	0.331	0.335	0.351	0.372	0.403	0.433	0.466
E' = 700	¾	0.004	0.004	0.003	0.003	0.004	0.004	0.004	0.005	0.005
	1	0.009	0.008	0.008	0.008	0.008	0.009	0.009	0.010	0.011
	1¼	0.019	0.017	0.016	0.016	0.017	0.018	0.020	0.021	0.023
	1½	0.028	0.024	0.023	0.023	0.024	0.026	0.028	0.030	0.033
	2	0.043	0.037	0.035	0.036	0.038	0.040	0.043	0.046	0.050
	2½	0.063	0.054	0.052	0.053	0.055	0.058	0.063	0.068	0.073
	3	0.086	0.074	0.071	0.072	0.075	0.080	0.086	0.093	0.100
	4	0.120	0.104	0.099	0.101	0.106	0.112	0.121	0.130	0.140
	5	0.145	0.125	0.120	0.121	0.127	0.135	0.146	0.157	0.169
	6	0.174	0.151	0.144	0.146	0.153	0.162	0.175	0.188	0.203
	8	0.238	0.205	0.196	0.199	0.208	0.221	0.239	0.257	0.277

Conduit Deflection Data

Deflection Data Below Ground IPS SW (for Encased Burial (EB) or Direct Burial (DB))										
Soil Mod. (Psi)	Burial Depth (ft)	2	3	4	5	6	7	8	9	10
	Diameter (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)
E' = 1000	¾	0.004	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.005
	1	0.008	0.007	0.007	0.007	0.007	0.008	0.008	0.009	0.010
	1¼	0.017	0.014	0.014	0.014	0.014	0.015	0.017	0.018	0.019
	1½	0.023	0.020	0.019	0.019	0.020	0.021	0.023	0.025	0.027
	2	0.034	0.029	0.028	0.028	0.030	0.031	0.034	0.037	0.039
	2½	0.048	0.041	0.039	0.040	0.042	0.044	0.048	0.052	0.055
	3	0.063	0.054	0.052	0.053	0.055	0.058	0.063	0.068	0.073
	4	0.086	0.075	0.071	0.072	0.076	0.080	0.087	0.093	0.100
	5	0.105	0.091	0.086	0.088	0.092	0.097	0.105	0.113	0.122
	6	0.125	0.108	0.104	0.105	0.110	0.117	0.126	0.136	0.146
	8	0.169	0.146	0.140	0.141	0.148	0.157	0.170	0.183	0.197
E' = 2000	¾	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004
	1	0.006	0.006	0.005	0.005	0.006	0.006	0.006	0.007	0.007
	1¼	0.011	0.010	0.009	0.009	0.010	0.010	0.011	0.012	0.013
	1½	0.014	0.012	0.012	0.012	0.013	0.013	0.014	0.016	0.017
	2	0.020	0.017	0.016	0.017	0.017	0.018	0.020	0.022	0.023
	2½	0.026	0.023	0.022	0.022	0.023	0.024	0.026	0.028	0.031
	3	0.033	0.029	0.028	0.028	0.029	0.031	0.034	0.036	0.039
	4	0.044	0.038	0.037	0.037	0.039	0.041	0.045	0.048	0.052
	5	0.054	0.047	0.045	0.046	0.048	0.051	0.055	0.059	0.063
	6	0.065	0.056	0.054	0.054	0.057	0.060	0.065	0.070	0.076
	8	0.086	0.074	0.071	0.072	0.075	0.080	0.087	0.093	0.100



Conduit Deflection Data

Deflection Data Below Ground IPS HW (for Direct Burial (DB))										
	Burial Depth (ft)	2	3	4	5	6	7	8	9	10
Soil Mod. (Psi)	Diameter (in)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)
E' = 200	4	0.303	0.262	0.250	0.254	0.266	0.281	0.305	0.328	0.353
	5	0.353	0.305	0.291	0.295	0.309	0.328	0.355	0.382	0.411
	6	0.488	0.422	0.403	0.408	0.428	0.453	0.491	0.528	0.568
E' = 400	4	0.176	0.152	0.146	0.147	0.154	0.164	0.177	0.191	0.205
	5	0.211	0.183	0.175	0.177	0.185	0.196	0.213	0.229	0.246
	6	0.275	0.238	0.227	0.230	0.241	0.255	0.277	0.297	0.320
E' = 700	4	0.108	0.094	0.089	0.091	0.095	0.101	0.109	0.117	0.126
	5	0.132	0.114	0.109	0.111	0.116	0.123	0.133	0.143	0.154
	6	0.166	0.144	0.137	0.139	0.146	0.154	0.167	0.180	0.193
E' = 1000	4	0.078	0.068	0.065	0.065	0.068	0.073	0.079	0.085	0.091
	5	0.096	0.083	0.079	0.080	0.084	0.089	0.097	0.104	0.112
	6	0.119	0.103	0.098	0.100	0.104	0.110	0.120	0.129	0.139
E' = 2000	4	0.041	0.035	0.033	0.034	0.036	0.038	0.041	0.044	0.047
	5	0.050	0.043	0.042	0.042	0.044	0.047	0.051	0.054	0.059
	6	0.061	0.053	0.051	0.051	0.054	0.057	0.062	0.066	0.071

Conduit Deflection Data

Deflection Data Below Ground ID SW (for Encased Burial (EB) or Direct Burial (DB))										
Burial Depth (ft)		2	3	4	5	6	7	8	9	10
Soil Mod. (Psi)	Diameter (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)
E' = 200	2	0.055	0.048	0.045	0.046	0.048	0.051	0.055	0.059	0.064
	2½	0.105	0.091	0.087	0.088	0.092	0.098	0.106	0.114	0.123
	3	0.167	0.145	0.138	0.140	0.147	0.155	0.168	0.181	0.195
	3½	0.235	0.203	0.194	0.196	0.206	0.218	0.236	0.254	0.273
	4	0.303	0.262	0.250	0.254	0.266	0.281	0.305	0.328	0.353
	4½	0.285	0.246	0.235	0.238	0.249	0.264	0.286	0.308	0.331
	5	0.353	0.305	0.291	0.295	0.309	0.328	0.355	0.382	0.411
	6	0.488	0.422	0.403	0.408	0.428	0.453	0.491	0.528	0.568
E' = 400	2	0.044	0.038	0.036	0.037	0.038	0.041	0.044	0.047	0.051
	2½	0.076	0.065	0.063	0.063	0.066	0.070	0.076	0.082	0.088
	3	0.110	0.095	0.091	0.092	0.096	0.102	0.110	0.119	0.128
	3½	0.144	0.124	0.119	0.120	0.126	0.133	0.145	0.155	0.167
	4	0.176	0.152	0.146	0.147	0.154	0.164	0.177	0.191	0.205
	4½	0.178	0.154	0.147	0.149	0.156	0.165	0.179	0.193	0.208
	5	0.211	0.183	0.175	0.177	0.185	0.196	0.213	0.229	0.246
	6	0.275	0.238	0.227	0.230	0.241	0.255	0.277	0.297	0.320
E' = 700	2	0.034	0.029	0.028	0.028	0.030	0.031	0.034	0.036	0.039
	2½	0.053	0.046	0.044	0.045	0.047	0.049	0.054	0.058	0.062
	3	0.072	0.063	0.060	0.061	0.064	0.067	0.073	0.078	0.084
	3½	0.091	0.078	0.075	0.076	0.080	0.084	0.091	0.098	0.106
	4	0.108	0.094	0.089	0.091	0.095	0.101	0.109	0.117	0.126
	4½	0.114	0.099	0.094	0.096	0.100	0.106	0.115	0.124	0.133
	5	0.132	0.114	0.109	0.111	0.116	0.123	0.133	0.143	0.154
	6	0.166	0.144	0.137	0.139	0.146	0.154	0.167	0.180	0.193



Conduit Deflection Data

Deflection Data Below Ground ID SW (for Encased Burial (EB) or Direct Burial (DB))										
Soil Mod. (Psi)	Burial Depth (ft)	2	3	4	5	6	7	8	9	10
	Diameter (in)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)
E' = 1000	2	0.027	0.024	0.023	0.023	0.024	0.025	0.028	0.030	0.032
	2½	0.041	0.035	0.034	0.034	0.036	0.038	0.041	0.044	0.048
	3	0.054	0.047	0.045	0.045	0.047	0.050	0.054	0.058	0.063
	3½	0.066	0.057	0.055	0.056	0.058	0.062	0.067	0.072	0.077
	4	0.078	0.068	0.065	0.065	0.068	0.073	0.079	0.085	0.091
	4½	0.084	0.073	0.069	0.070	0.074	0.078	0.085	0.091	0.098
	5	0.096	0.083	0.079	0.080	0.084	0.089	0.097	0.104	0.112
	6	0.119	0.103	0.098	0.100	0.104	0.110	0.120	0.129	0.139
E' = 2000	2	0.017	0.015	0.014	0.014	0.015	0.016	0.017	0.018	0.020
	2½	0.023	0.020	0.019	0.019	0.020	0.022	0.023	0.025	0.027
	3	0.029	0.025	0.024	0.024	0.026	0.027	0.029	0.032	0.034
	3½	0.035	0.030	0.029	0.029	0.031	0.032	0.035	0.038	0.041
	4	0.041	0.035	0.033	0.034	0.036	0.038	0.041	0.044	0.047
	4½	0.045	0.039	0.037	0.037	0.039	0.041	0.045	0.048	0.052
	5	0.050	0.043	0.042	0.042	0.044	0.047	0.051	0.054	0.059
	6	0.061	0.053	0.051	0.051	0.054	0.057	0.062	0.066	0.071

Conduit Deflection Data

Deflection Data Below Ground ID HW (for Direct Burial (DB))										
	Burial Depth (ft)	2	3	4	5	6	7	8	9	10
Soil Mod. (Psi)	Diameter (in)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)	Deflection (in.)
E' = 200	4	0.218	0.188	0.180	0.182	0.191	0.202	0.219	0.236	0.254
	4½	0.220	0.190	0.182	0.184	0.193	0.205	0.222	0.238	0.256
	5	0.284	0.246	0.235	0.238	0.249	0.264	0.286	0.308	0.331
	6	0.420	0.363	0.347	0.351	0.368	0.390	0.422	0.454	0.489
E' = 400	4	0.144	0.125	0.119	0.121	0.126	0.134	0.145	0.156	0.168
	4½	0.151	0.131	0.125	0.126	0.132	0.140	0.152	0.163	0.176
	5	0.185	0.160	0.153	0.155	0.162	0.172	0.186	0.201	0.216
	6	0.252	0.218	0.209	0.211	0.221	0.234	0.254	0.273	0.294
E' = 700	4	0.096	0.083	0.079	0.080	0.084	0.089	0.096	0.103	0.111
	4½	0.103	0.089	0.085	0.086	0.090	0.095	0.103	0.111	0.120
	5	0.122	0.105	0.101	0.102	0.107	0.113	0.122	0.132	0.142
	6	0.158	0.137	0.131	0.132	0.139	0.147	0.159	0.171	0.184
E' = 1000	4	0.072	0.062	0.059	0.060	0.063	0.066	0.072	0.077	0.083
	4½	0.078	0.067	0.064	0.065	0.068	0.072	0.078	0.084	0.091
	5	0.091	0.078	0.075	0.076	0.079	0.084	0.091	0.098	0.106
	6	0.115	0.099	0.095	0.096	0.101	0.107	0.116	0.124	0.134
E' = 2000	4	0.039	0.034	0.032	0.033	0.034	0.036	0.039	0.042	0.045
	4½	0.043	0.037	0.036	0.036	0.038	0.040	0.043	0.047	0.050
	5	0.049	0.042	0.040	0.041	0.043	0.045	0.049	0.053	0.057
	6	0.060	0.052	0.050	0.050	0.053	0.056	0.061	0.065	0.070

Pulling Tension For Cables

The cable manufacturer must be consulted for the maximum pull permitted on a selected cable. Other data such as lubrication restrictions should also be obtained from the cable manufacturer. The total pulling force required for a cable in a conduit depends upon the cable weight, length of conduit, number and location of the elbows and the coefficient of friction. The following formula is published to aid in obtaining tension values: $T_i = T_{i-1}e^{(fL)} + wL \cos \phi + wL \sin \phi$

T_i = Tension at the point towards end of run (lbs)

f = Coefficient of friction

L = Length of conduit subjected to cable weight (ft.)

e = Napirian Logarithm base = 2.718

T_{i-1} = Tension at point towards beginning of run (lbs)

w = Cable weight per foot (lbs/ft.)

a = Elbow angle (°)

ϕ = Angle (°) of run with regards to the horizontal

- positive if run moves upwards

- negative if run moves downwards

- equal zero (0) if run is horizontal

Example: Parameters - $f = .25$ $w = 10$ lbs/ft. $r = 36$ inches = Elbow radius (used to calculate elbow length)

i) Pulling from point "0" to point "7"

Point	ϕ	a	L	$e^{(fL)}$	T_i
i	(°)	(°)	(ft.)		lbs
0	-	-	-	-	0.0
1	0.0	0.0	10.0	1.00	25.00
2	0.0	45.0	3.4	1.22	38.81
3	0.0	0.0	5.0	1.00	51.31
4	0.0	45	0 3.4	1.22	70.84
5	0.0	0.0	8.0	1.00	90.84
6	0.0	90.0	5.7	1.48	148.81
7	0.0	0.0	3.0	1.00	156.31

ii) Pulling from point "7" to point "0"

Point	ϕ	a	L	$e^{(fL)}$	T_i
i	(°)	(°)	(ft.)		lbs
7	-	-	-	-	0.0
6	0.0	0.0	3.0	1.00	7.50
5	0.0	90.0	5.7	1.48	25.39
4	0.0	0.0	8.0	1.00	45.39
3	0.0	45.0	3.4	1.22	63.63
2	0.0	0.0	5.0	1.00	76.13
1	0.0	45.0	3.4	1.22	101.03
0	0.0	0.0	10.0	1.00	126.03

ϕ : This value is always zero until the run is directed other than completely horizontal.

Elbow Angle	For $f =$	For $f =$	For $f =$	For $f =$
°	0.25	0.35	0.45	0.55
11.25°	1.050	1.071	1.092	1.114
22.5°	1.103	1.147	1.193	1.241
30°	1.140	1.201	1.266	1.334
45°	1.217	1.316	1.424	1.540
60°	1.299	1.443	1.602	1.779
90°	1.481	1.733	2.028	2.372

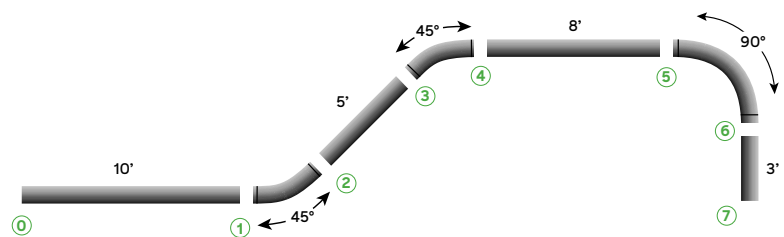
The following table is published to aid in solving the values for $e^{(fL)}$

MAXIMUM TENSION ALLOWED AT ELBOWS:

The maximum pulling tension at an elbow must not exceed the calculated value of $300 \times r$ (Radius of the conduit elbow in feet). The above equations are used to determine what tension will occur at an elbow. This is to avoid cable damage.

* In general, it is preferred to pull in the direction which results in the lowest tension. To do this, the pay-off reel should be placed at the end nearest the elbow.

*For safe pulling tension, to avoid cable damage, consult cable manufacturers for tension per cable type.



Wire Fill

Maximum allowable percentage wire fill from National Electrical Code (NEC) and Canadian Electrical Code (CEC).

Imperial

Trade Size IPS	Inside Diameter	Total Area	Number of Conductors Percent of Cross Section of Conduit for Conductors		
			1	2	3
	(in)	100% (in ²)	53% Fill (in ²)	31% Fill (in ²)	40% Fill (in ²)
¾	0.918	0.662	0.351	0.205	0.265
1	1.183	1.099	0.583	0.341	0.440
1¼	1.528	1.834	0.972	0.568	0.733
1½	1.768	2.455	1.301	0.761	0.982
2	2.235	3.923	2.079	1.216	1.569
2½	2.750	5.940	3.148	1.841	2.376
3	3.360	8.867	4.699	2.749	3.547
4	4.360	14.930	7.913	4.628	5.972
5	5.373	22.674	12.017	7.029	9.070
6	6.405	32.220	17.077	9.988	12.888
8*	8.393	55.325	29.323	17.151	22.130

Metric

Trade Size IPS	Inside Diameter	Total Area	Number of Conductors Percent of Cross Section of Conduit for Conductors		
			1	2	3
	(mm)	100% (mm ²)	53% Fill (mm ²)	31% Fill (mm ²)	40% Fill (mm ²)
21	23	415	220	129	166
27	30	707	375	219	283
35	39	1195	633	370	478
41	45	1590	843	493	636
53	57	2552	1352	791	1021
63	70	3832	2031	1188	1533
78	85	5675	3007	1759	2270
103	111	9677	5129	3000	3871
129	136	14527	7699	4503	5811
155	163	20867	11060	6469	8347
203	213	35633	18885	11046	14253

Wire Fill - ID Sizes

Wire Fill

Maximum allowable percentage wire fill from National Electrical Code (NEC) and Canadian Electrical Code (CEC).

Imperial

Trade Size ID	Inside Diameter	Total Area	Number of Conductors Percent of Cross Section of Conduit for Conductors		
	(in)	100% (in²)	1 53% Fill (in²)	2 31% Fill (in²)	3 40% Fill (in²)
2	2.000	3.142	1.665	0.974	1.257
2½	2.500	4.909	2.602	1.522	1.964
3	3.000	7.069	3.746	2.191	2.827
3.5	3.500	9.621	5.099	2.983	3.848
4	4.000	12.566	6.660	3.896	5.027
4½	4.500	15.904	8.429	4.930	6.362
5	5.000	19.635	10.407	6.087	7.854
6	6.000	28.274	14.985	8.765	11.310
5	5.373	22.674	12.017	7.029	9.070
6	6.405	32.220	17.077	9.988	12.888

Metric

Trade Size ID	Inside Diameter	Total Area	Number of Conductors Percent of Cross Section of Conduit for Conductors		
	(mm)	100% (mm²)	1 53% Fill (mm²)	2 31% Fill (mm²)	3 40% Fill (mm²)
53	50.8	2027	1074	628	811
63	63.5	3167	1678	982	1267
78	76.2	4560	2417	1414	1824
91	88.9	6207	3290	1924	2483
103	101.6	8107	4297	2513	3243
116	114.3	10261	5438	3181	4104
129	127	12668	6714	3927	5067
155	152.4	18242	9668	5655	7297

Note: Impact resistance tests were carried out at -40°C, as required by UL 2515/CSA C22.2 Number 2515, and at 23°C. The values reported here are the lowest of the two measurements (normally those taken at -40°C).

Standard Conduit Packaging

IPS Thin Wall (TW)

Size		Length		Weight per Stick		Weight per Crate		Sticks per Crate	Footage per Crate		Crate per Truck	Footage per Truck		Weight per Truck		Width per Crate		Height per Crate	
(in)	(mm)	(ft)	(m)	(lb)	(kg)	(lb)	(kg)		(ft)	(m)		(ft)	(m)	(lb)	(kg)	(in)	(mm)	(in)	(mm)
4	103	19.68	6	13.00	5.90	574	260	43	846	258	16	13 540	4 127	9 184	4 166	45	1 143	24	610
5	129	19.68	6	22.00	9.98	675	306	30	590	180	16	9 446	2 879	10 800	4 899	45	1 143	24	610
6	155	19.68	6	24.00	10.89	495	225	20	394	120	16	6 298	1 920	7 920	3 592	45	1 143	24	610
8	203	19.68	6	44.00	19.96	455	206	10	197	60	16	3 149	960	7 280	3 302	45	1 143	24	610

IPS Standard Wall (SW)

Size		Length		Weight per Stick		Weight per Crate		Sticks per Crate	Footage per Crate		Crate per Truck	Footage per Truck		Weight per Truck		Width per Crate		Height per Crate	
(in)	(mm)	(ft)	(m)	(lb)	(kg)	(lb)	(kg)		(ft)	(m)		(ft)	(m)	(lb)	(kg)	(in)	(mm)	(in)	(mm)
¾	21	9.84	3	1.5	0.68	307	139	200	1 968	600	80	157 440	47 988	24 560	11 140	45	1 143	8	203
1	27	9.84	3	2.20	1.00	337	153	150	1 476	450	80	118 080	35 991	26 960	12 229	45	1 143	10	254
1¼	35	9.84	3	2.60	1.18	397	180	150	1 476	450	80	118 080	35 991	31 760	14 406	45	1 143	10	254
1½	41	9.84	3	3.10	1.41	472	214	150	1 476	450	80	118 080	35 991	37 760	17 128	45	1 143	10	254
2	53	19.68	6	8.80	3.99	596	270	66	1 299	396	40	51 955	15 836	23 832	10 810	45	1 143	10	254
3	78	19.68	6	13.10	5.94	1 076	488	81	1 594	486	16	25 505	7 774	17 218	7 810	45	1 143	24	610
4	103	19.68	6	16.90	7.67	742	336	43	846	258	16	13 540	4 127	11 867	5 383	45	1 143	24	610
5	129	19.68	6	28.30	12.84	864	392	30	590	180	16	9 446	2 879	13 824	6 271	45	1 143	24	610
6	155	19.68	6	39.00	17.69	795	361	20	394	120	16	6 298	1 920	12 720	5 770	45	1 143	24	610
8	203	19.68	6	53.30	24.18	548	249	9	177	54	16	2 834	864	7 888	3 578	45	1 143	24	610

IPS Standard Wall (SW)

IPS Heavy Wall (HW)

Size		Length		Weight per Stick		Weight per Crate		Sticks per Crate	Footage per Crate		Crate per Truck	Footage per Truck		Weight per Truck		Width per Crate		Height per Crate	
(in)	(mm)	(ft)	(m)	(lb)	(kg)	(lb)	(kg)		(ft)	(m)		(ft)	(m)	(lb)	(kg)	(in)	(mm)	(in)	(mm)
4	103	19.68	6	23.00	10.43	1 004	455	43	846	258	16	13 540	4 127	16 064	7 287	45	1 143	24	610
5	129	19.68	6	34.30	15.56	1 044	474	30	590	180	16	9 446	2 879	16 704	7 577	45	1 143	24	610
6	155	19.68	6	40.80	18.51	831	377	20	394	120	16	6 298	1 920	13 296	6 031	45	1 143	24	610



Standard Conduit Packaging

ID Thin Wall (TW)

Size		Length		Weight per Stick		Weight per Crate		Sticks per Crate	Footage per Crate		Crate per Truck	Footage per Truck		Weight per Truck		Width per Crate		Height per Crate	
(in)	(mm)	(ft)	(m)	(lb)	(kg)	(lb)	(kg)		(ft)	(m)		(ft)	(m)	(lb)	(kg)	(in)	(mm)	(in)	(mm)
4	102	19.68	6	12.00	5.44	699	317	57	1 122	342	16	17 948	5 471	11 184	5 073	45	1 143	24	610
4½	114	19.68	6	18.00	8.16	789	358	43	846	258	16	13 540	4 127	12 624	5 726	45	1 143	24	610
5	127	19.68	6	20.00	9.07	775	352	38	748	228	16	11 965	3 647	12 400	5 625	45	1 143	24	610
6	152	19.68	6	24.00	10.89	639	290	26	512	156	16	8 187	2 495	10 224	4 638	45	1 143	24	610

ID Standard Wall (SW)

Size		Length		Weight per Stick		Weight per Crate		Sticks per Crate	Footage per Crate		Crate per Truck	Footage per Truck		Weight per Truck		Width per Crate		Height per Crate	
(in)	(mm)	(ft)	(m)	(lb)	(kg)	(lb)	(kg)		(ft)	(m)		(ft)	(m)	(lb)	(kg)	(in)	(mm)	(in)	(mm)
2	53	19.68	6	6.81	3.09	519	235	74	1 456	444	40	58 253	17 756	20 758	9 416	45	1 143	10	254
2½	63	19.68	6	8.40	3.81	1 317	597	155	3 050	930	16	48 806	14 876	21 072	9 558	45	1 143	24	610
3	78	19.68	6	11.24	5.10	1 139	517	100	1 968	600	16	31 488	9 598	18 224	8 266	45	1 143	24	610
3½	91	19.68	6	12.80	5.81	962	436	74	1 456	444	16	23 301	7 102	15 395	6 983	45	1 143	24	610
4	103	19.68	6	15.18	6.89	880	399	57	1 122	342	16	17 948	5 471	14 084	6 389	45	1 143	24	610
4½	116	19.68	6	20.70	9.39	905	411	43	846	258	16	13 540	4 127	14 482	6 569	45	1 143	24	610
5	129	19.68	6	25.22	11.44	973	442	38	748	228	16	11 965	3 647	15 574	7 064	45	1 143	24	610
6	155	19.68	6	31.30	14.20	829	376	26	512	156	16	8 187	2 495	13 261	6 015	45	1 143	24	610

ID Heavy Wall (HW)

Size		Length		Weight per Stick		Weight per Crate		Sticks per Crate	Footage per Crate		Crate per Truck	Footage per Truck		Weight per Truck		Width per Crate		Height per Crate	
(in)	(mm)	(ft)	(m)	(lb)	(kg)	(lb)	(kg)		(ft)	(m)		(ft)	(m)	(lb)	(kg)	(in)	(mm)	(in)	(mm)
4	103	19.68	6	22.00	9.98	1 269	576	57	1 122	342	16	17 948	5 471	20 304	9 210	45	1 143	24	610
4½	116	19.68	6	28.00	12.70	1 219	553	43	846	258	16	13 540	4 127	19 504	8 847	45	1 143	24	610
5	129	19.68	6	32.00	14.52	1 231	558	38	748	228	16	11 965	3 647	19 696	8 934	45	1 143	24	610
6	155	19.68	6	39.00	17.69	1 029	467	26	512	156	16	8 187	2 495	16 464	7 468	45	1 143	24	610

Standard Accessories Packaging

Product	Size		Amount	Package	Product	Size		Amount	Package	Product	Size		Amount	Package
	(in)	(mm)				(in)	(mm)				(in)	(mm)		
Coupling	2	53	20	Bag	O-Ring	2	53	10	Bag	Adapters	2	53	20	Bag
Coupling	3-5	78-129	10	Bag	O-Ring	3-5	78-129	5	Bag	Adapters	3-6	78-155	10	Bag
Wobble	2	53	10	Bag	Expansion Joint	2-6	53-129	5	Bundle	Bends	3-6	78-155	5	Bundle



General

RTRC (Reinforced Thermosetting Resin Conduit)

An industry acronym for conduits that are manufactured using a mineral reinforcement such as fiberglass in a fully cured thermoset resin.

IPS (Iron Pipe Size)

Dimensional standard widely utilized in North America for both metallic (such as RMC, EMT, IMC) and rigid non-metallic (RTRC, PVC and HDPE) electrical conduit. This trade size has established its Outside Diameter as the constant value.

ID (Inside Diameter)

Dimensional standard widely utilized in North America for electrical and telecommunication raceways. This trade size has established its Inside Diameter as the constant value.

FRE® Conduit

Fiberglass conduit manufactured by FRE Composites. FRE® is a registered trademark in Canada, United States and elsewhere in the world, and is a recognized and trusted name worldwide since 1970's for superior quality advanced composite products.

Conduit

Straight section available in 9.84 ft (3m) or 19.68 ft (6m) length, and in standard diameters from ¾" to 8" (21 to 203 mm).

Wall Thicknesses

Standard Wall (SW) conduit

Conduit built with a standard wall thickness that varies based on the conduit diameter and is recommended for exposed non-hazardous locations.

Thin Wall (TW) conduit

Conduit built with a thinner wall thickness that varies based on the conduit diameter and is only recommended for Encased Burial (EB) installations.

Heavy Wall (HW) conduit

Conduit built with a heavier wall thickness that varies based on the conduit diameter and is recommended for Direct Burial (DB) where heavy loads need to be considered.

Key Products

Split conduit (Patented design)

Section of fiberglass conduit cut completely on its longitudinal axis while being hinged at 180° to the longitudinal cut. It can be opened and closed, allowing its installation over existing cables to protect them without having to remove them. The original Split conduit invention was issued to General Electric of Canada (CGE), our former parent company, under U.S. Patent Number 4175593 and Canadian Patent Number 1043277.

H strip

Thermoplastic strip utilized to seal the split side of a split conduit.

T strip

Thermoplastic strip utilized to seal the hinged side of a split conduit.

Sleeve

Oversized section (12" or 305 mm in length) of straight conduit used to repair a damaged section of a conduit.

O-Ring Expansion Joint

Section of conduit including a deep socket unthreaded female section and a gasketed male section of conduit. It is designed to accommodate the thermal expansion and contraction of long sections of straight conduit resulting from ambient temperature variation. This guarantees the water tightness of the joint and no dislocation of the fitting.

O-Ring Expansion/Deflection Joint

Similar to O-Ring expansion joint described above, but designed to accommodate slight vertical changes in the direction of the incoming conduit by means of a flexible neoprene sleeve located at the exit of the expansion joint.

Key Technical Descriptions

Glass content

Weight percent of glass fiber present in the conduit, as % of total weight.

Span distance

Distance between conduit supports which varies based on the selected cable weight and conduit trade size.

Deflection

Deformation of conduit due to the weight of the cable installed inside it. Deflection is a function of the diameter and weight of the cables, and of the distance between conduit supports. Measured in inches.

Coefficient of thermal expansion

Ratio representing the change in linear dimension of a section of conduit resulting from changes in temperature (ΔT).

Coefficient of friction

Ratio of the force tending to maintain contact between two surfaces and the force which opposes the sliding of the surfaces one along the other.

Our Elbows Get Around More Than You Know



FRE Composites fiberglass elbows provide a number of benefits to raceway installations no matter what type of conduit you are using. With our unique glass to resin ratio, FRE fiberglass has the lowest coefficient of friction of any material currently available on the market.

BURN-THROUGH

Epoxy fiberglass bends and elbows have a strong resistance to being cavitated or pierced due to rope pull.

LOW COEFFICIENT OF FRICTION

Lower coefficient of friction than steel and considerably lower than PVC. Less friction allows electrical cables to be pulled through easier, resulting in labor-savings

LIGHTWEIGHT

Considerably lighter than steel conduit and PVC coated conduit

CORROSION RESISTANT

Epoxy fiberglass is not affected by water and does not degrade in corrosive environments

COST-EFFECTIVE

Lower cost of shipping and installation, compared with steel elbows



Learn more here - [Atkore.com/FRE](https://www.atkore.com/FRE)

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16100 South Lathrop Avenue
Harvey, IL 60426

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