



PNEUMATIC CONVEYING COMPONENTS

TUBING, PIPE, BENDS,
COUPLINGS & FITTINGS

Processing Equipment Inc.

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Certified to ISO 9001:2008

Table of Contents

SERVICES

Products, Special Services,
Delivery, and Pricing.....2-3

Tube & Pipe Dimensions
& Bending.....4-5

TUBING

Standard Tubing.....6-7

Tube Bends.....8-19

Tube Fittings.....20-25

PIPE

Standard Pipe.....26-27

Pipe Bends.....28-31

Pipe Fittings.....32-35

METHODS OF JOINING

Instalok™ Couplings.....36-37

Compression Couplings.....38-43

Eliminators.....44-45

Eliminator Kits.....46

Super Grips.....47

Cam & Groove Couplings.....48-51

ACCESSORIES

Vacuum Wands, Sight Glasses,
Blast Gates, Hoses & Clamps52-57

Installation Components.....58-61

Requesting Special
Fabrication.....62-63

SPECIAL SERVICES

- *Shot Peening*
- *Spiral Grooving*
- *Porcelain Lining*
- *Ceramic Coating*
- *Part Variations*

PRODUCTS

Tube & Pipe

Our tubing ranges from 1-1/2" through 10" OD in 11, 12, 14 and 16 gauge wall thickness. We also have the capability of supplying tube up to 14" OD.

Standard pipe is available in schedule 5, 10, 40, and 80 wall thickness, and ranges from 1" through 8" NPS.

Both tube and pipe are available in Carbon, Stainless Steel, Aluminum, and Galvanized Steel. Standard lengths are 20' but we can cut to your specifications.

Bends & Bending Capabilities

Our inventories include a wide range of parts: *Short Radius* (1-1/2 times OD / NPS), Standard Radius (2-1/2 times OD / NPS) and *Long Radius Bends* (up through 60" center line). Available in *Carbon, Stainless Steel and Aluminum*.

Zinc-Coated (Galvanized) bends are available upon request.

Fittings

We offer a wide variety of laterals, wyes, tees, adapters, and flanges for connecting both pipe and tube. Available in Carbon, Stainless Steel, and Aluminum.

Methods of Joining

The INSTALOK™ Coupling, developed for the plastics industry, is available in 1-1/2" through 4" OD for tube and 2" through 3-1/2" NPS for pipe. This coupling reduces installation time and provides superior grip strength and end pull.

The Compression Coupling is available in 1-1/2" through 14" OD and 1-1/4" through 12" NPS in pipe. The G-90 Galvanized Exterior Coating provides superior corrosion resistance.

We also offer a wide variety of gaskets, eliminators, super grips, cam and groove components.

Accessories

Vacuum-Tubing offers an extensive selection of the accessories you need to complete your system. We carry everything from you need from vacuum wands, sight glasses and blast gates to hose and installation components.

SPECIAL SERVICES

Special Requests & Catalog Part Variations

If our standard catalog items don't meet your needs, please contact us at 1-800-860-TUBE(8823) for assistance with making alterations of standard parts, or to fabricate a custom part to your exact specification. We have extensive custom tube fabrication services available to help you meet your required specifications.

Directional Shot Peening

Transported resin pellets tend to degrade when contact is made with internal tube or pipe surfaces. The velocity of the pellets result in friction and heat, which can cause them to smear within tubing and elbows. When these smeared pellets are dislodged from the interior of tube or pipe they can easily clog material lines and hoppers. The result is potential lost production time.

Directional shot peening produces a dimpling effect that has been found to reduce the formation of fines, fluff, and streamers within pneumatic conveying systems. The directional surface finish has the added benefit of hardening the tube or pipe, extending its life over non-treated surfaces. Shot peening has been reported to result in one third the fines or angel hair typical in non-treated systems.

Porcelain Lining

Porcelain lining is used due to its resistance to corrosive attack, atmospheric pollution, extreme weather conditions, and abrasion. In these extreme environments, standard steel tube, pipe, and elbows can have a limited service life.

Porcelain enamel is a glassy compound that is adhered to the inside diameter of tube or pipe. This compound is applied as a liquid slurry to the interior of carbon or stainless steel. When baked, the result is a glassy interior surface that is rated at 6 to 7 on the Moh's scale of hardness; diamonds are the hardest at a rating of 10. The surface will easily resist scratching from a steel blade.

Porcelain lining is available in single or double coat, and the thickness of the coating is checked before shipment. Single coating is .004-.007" thick, and double coating is .008-.012" thick. Tube or pipe up to 10' in length can be porcelain lined.

Spiral Grooving

Streamers, angel hair or snakeskins are formed as transferred plastic resins melt and smear along the walls of transfer tubing. With time, the melted plastic accumulates and forms large ribbons or streamers that flake off in the moving pellet stream. This can cause down time when these ribbons collect to block lines and equipment.

Spiral grooving the tube or pipe ID creates turbulence in the conveying air stream, which minimizes the frequency of impact and reduces pellet smearing. Spiral grooving can be applied to stainless steel and aluminum tubing with a minimum 2" OD and 14GA (.083") wall thickness. The resulting groove depth varies from .015-.020" deep. The finish is cut into the surface of stainless steel, and rolled into aluminum. Straight length tubing up to 20' can be processed, and bends can be processed after grooving. Mandrel bending after the grooves have been applied may reduce the consistency of the grooves.

Ceramic Coating

In extreme industrial environments where abrasive materials are pneumatically conveyed, unprotected elbows can wear out in just a few weeks.

Ceramic coating is composed of a proprietary matrix of high alumina ceramic beads and fillers. This matrix is then covered in a fiberglass wrap that adds structure and additional wear resistance. Once the original substrate wears through, the ceramic coating adds additional service life. Coating can be added to all materials offered and in almost any part configuration.

DELIVERY & PRICING

Fast fulfillment is available by freight or delivery service on a wide selection of in-stock products. We'll also make a diligent effort to meet emergency requirements for non-stock items.

All prices are FOB factory

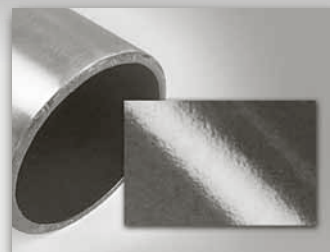
Terms: Net 30 days with Approved Credit

Prices are in U.S. dollars

Prices and specifications are subject to change without notice, and without obligation. All material is invoiced at the price in effect at time of shipment. All prices and discounts are based on one shipment to one destination. Please see current price list for pricing.

Need something Special?

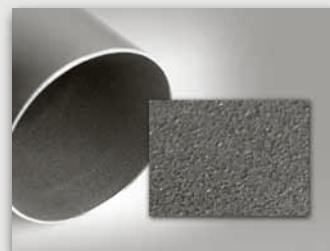
Our sales engineers will assist you in working out a cost-effective solution. Just call!



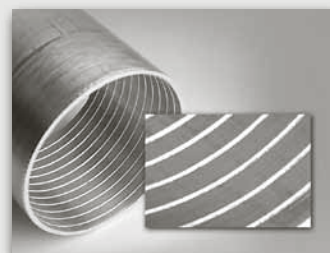
Porcelain Lining



Ceramic Coating



Shot Peening



Spiral Grooving

TERMINOLOGY

CLR	= Center Line Radius
ERW	= Electric Resistance Welded
FNPT	= Female National Pipe Thread
ID	= Inside Diameter
MNPT	= Male National Pipe Thread
NPS	= Nominal Pipe Size
OD	= Outside Diameter
SCH	= Schedule

All reference dimensions are nominal.

Tube Dimensions & Bending

TUBING

Our standard catalog tube sizes range from 1-1/2" through 10" OD in *Carbon, Stainless Steel, and Aluminum*. Please ask about our additional bending & fabricating capabilities in tubing sizes up through 14" OD.

Zinc-Coated (Galvanized) tubing and bends are available as a special order.

Tube Dimensions

WALL THICKNESS	INCHES
16 Gauge	.065
14 Gauge	.083
12 Gauge	.109
11 Gauge	.120

Tube Bending Capabilities

OD (IN.)	CENTER LINE RADIUS (IN.)	GAUGE
1-1/2	1-3/4, 2-1/2, 3, 4, 6, 7-1/2, 9, 12, 15, 18, 24, 30, 36	11, 14, 16, 18
1-5/8	2-1/8, 2-1/2	16, 18
1-3/4	2-1/2, 3, 4, 4-1/2, 6, 8, 9, 12, 15, 24, 30, 36	11, 14, 16
2	2, 2-1/2, 3, 3-1/2, 4, 5, 6, 8, 9, 10, 12, 15, 18, 24, 30, 36, 48	11, 14, 16, 18, 20
2-1/8	2-7/8, 3-1/2, 5, 12, 20, 24, 36	11, 16
2-1/4	2-1/2, 3, 4, 5-1/2, 8, 9, 12, 15, 18, 24, 30, 36, 42	11, 13, 14, 16, 18, 20
2-3/8	2-3/8, 3, 6, 8, 12, 18, 24, 30, 36, 48	16, 18
2-1/2	2-1/2, 3, 3-1/4, 3-3/4, 4, 5, 6, 9, 12, 15, 18, 24, 30, 36, 48	11, 13, 14, 16
2-3/4	2-3/4, 3-7/8, 15, 24, 30	11, 14, 16, 18
2-7/8	3-3/4, 9, 10, 12, 24, 30, 36, 48, 60	11, 14, 16
3	3, 4, 4-1/2, 6, 7-1/2, 9, 12, 15, 18, 24, 30, 36, 38, 48, 60	11, 14, 16, 18
3-1/8	6	16
3-1/2	3-1/2, 4, 4-1/2, 5, 6, 7-1/2, 8, 8-3/4, 12, 13, 15, 18, 24, 30, 36, 48, 60	11, 14, 15, 16, 18
4	4, 6, 8, 9, 10, 12, 18, 24, 30, 36, 48, 60	10, 11, 14, 16, 18
4-1/4	60	11, 13, 14
4-1/2	6, 9, 12, 16, 20, 24, 30, 36, 48, 60	11, 14, 16
5	5, 5-1/2, 7-1/2, 12-1/2, 18, 24, 30, 36, 48, 60	10, 11, 14, 16
6	7, 9, 15, 24, 30, 36, 48, 60	10, 11, 14, 16
8	12, 20, 32, 48	11, 14
10	20, 32, 48	11, 12

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

PIPE

We offer standard pipe sizes from 1" to 8" NPS in *Aluminum, Carbon and Stainless Steel*.

Pipe Dimensions

NPS (INCHES)	OD (INCHES)	SCH 5	SCH 10	SCH 40	SCH 80
1"	1.315	.065	.109	.133	.179
1-1/4"	1.660	.065	.109	.140	.191
1-1/2"	1.900	.065	.109	.145	.200
2"	2.375	.065	.109	.154	.218
2-1/2"	2.875	.083	.120	.203	.276
3"	3.500	.083	.120	.216	.300
3-1/2"	4.000	.083	.120	.226	.318
4"	4.500	.083	.120	.237	.337
5"	5.563	.109	.134	.258	.375
6"	6.625	.109	.134	.280	.432
8"	8.625	.109	.148	.322	.500

Pipe Bending Capabilities

NPS (INCHES)	OD (INCHES)	CENTER LINE RADIUS (INCHES)	SCHEDULE (INCHES)				
			5	10	40	80	OTHER
1-1/2	1.900	6, 9, 12, 18, 36	-	-	.145	.200	-
2	2.375	2-3/8, 3, 6, 8, 12, 18, 24, 30, 36, 48	.065	.109	.154	.218	-
2-1/2	2.875	3-3/4, 9, 10, 12, 24, 30, 36, 48, 60	.083	.120	.203	.276	-
3	3.500	4, 4-1/2, 5, 6, 7-1/2, 8, 8-3/4, 12, 13, 15, 18, 24, 30, 36, 48, 60	.083	.120	.216	.300	.188
3-1/2	4.000	4, 6, 8, 9, 10, 12, 18, 24, 30, 36, 48, 60	.083	.120	-	.300	-
4	4.500	6, 9, 12, 16, 20, 24, 30, 36, 48, 60	.083	.120	.237	.337	.188
5	5.563	24, 30, 36, 48, 60	-	.134	.258	.375	-
6	6.625	24	-	.134	.280	-	.188, .250
8	8.625	32	-	.148	.322	-	.188, .250

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Order by Product ID Number

Aluminum

OD (IN.)	GAUGE	PRODUCT ID
1-1/2"	16	16ST150A
1-1/2"	14	14ST150A
1-1/2"	11	11ST150A
1-3/4"	16	16ST175A
1-3/4"	14	14ST175A
1-3/4"	11	11ST175A
2"	16	16ST200A
2"	14	14ST200A
2"	11	11ST200A
2-1/8"	16	16ST212A
2-1/8"	11	11ST212A
2-1/4"	16	16ST225A
2-1/4"	14	14ST225A
2-1/4"	11	11ST225A
2-1/2"	16	16ST250A
2-1/2"	14	14ST250A
2-1/2"	11	11ST250A
3"	16	16ST300A
3"	14	14ST300A
3"	11	11ST300A
3-1/2"	16	16ST350A
3-1/2"	14	14ST350A
3-1/2"	11	11ST350A
4"	16	16ST400A
4"	14	14ST400A
4"	11	11ST400A
4-1/2"	14	14ST450A
4-1/2"	11	11ST450A
5"	14	14ST500A
5"	11	11ST500A
6"	14	14ST600A
6"	11	11ST600A
8"	14	14ST800A
8"	11	11ST800A
10"	12	12ST1000A

Carbon Steel

OD (IN.)	GAUGE	PRODUCT ID
1-1/2"	16	16WT150C
1-1/2"	14	14WT150C
1-1/2"	11	11WT150C
1-3/4"	16	16WT175C
1-3/4"	14	14WT175C
1-3/4"	11	11WT175C
2"	16	16WT200C
2"	14	14WT200C
2"	11	11WT200C
2-1/8"	16	16WT212C
2-1/8"	11	11WT212C
2-1/4"	16	16WT225C
2-1/4"	11	11WT225C
2-1/2"	16	16WT250C
2-1/2"	14	14WT250C
2-1/2"	11	11WT250C
3"	16	16WT300C
3"	14	14WT300C
3"	11	11WT300C
3-1/2"	16	16WT350C
3-1/2"	14	14WT350C
3-1/2"	11	11WT350C
4"	16	16WT400C
4"	14	14WT400C
4"	11	11WT400C
4-1/2"	14	14WT450C
4-1/2"	11	11WT450C
5"	14	14WT500C
5"	11	11WT500C
6"	14	14WT600C
6"	11	11WT600C
8"	14	14WT800C
8"	11	11WT800C
10"	12	12WT1000C

Tube Specifications

- 1-1/2" through 10" OD.
Up to 14" special order!
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Standard length is 20'
But we will cut to your specifications!

Material type

A = Aluminum
C = Carbon
S = Stainless
Z = Galvanized

NPS TO OD CONVERSION

3" NPS Sch 5 = 3-1/2" OD 14 Gauge
3" NPS Sch 10 = 3-1/2" OD 11 Gauge
3-1/2" NPS Sch 5 = 4" OD 14 Gauge
3-1/2" NPS Sch 10 = 4" OD 11 Gauge
4" NPS Sch 5 = 4-1/2" OD 14 Gauge
4" NPS Sch 10 = 4-1/2" OD 11 Gauge

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Order by Product ID Number

Stainless Steel

OD (IN.)	GAUGE	PRODUCT ID
1-1/2"	16	16WT150S
1-1/2"	14	14WT150S
1-1/2"	11	11WT150S
1-3/4"	16	16WT175S
1-3/4"	14	14WT175S
1-3/4"	11	11WT175S
2"	16	16WT200S
2"	14	14WT200S
2"	11	11WT200S
2-1/8"	16	16WT212S
2-1/8"	11	11WT212S
2-1/4"	16	16WT225S
2-1/4"	14	14WT225S
2-1/4"	11	11WT225S
2-1/2"	16	16WT250S
2-1/2"	14	14WT250S
2-1/2"	11	11WT250S
3"	16	16WT300S
3"	14	14WT300S
3"	11	11WT300S
3-1/2"	16	16WT350S
3-1/2"	14	5WP300S
3-1/2"	11	10WP300S
4"	16	16WT400S
4"	14	5WP350S
4"	11	10WP350S
4-1/2"	14	5WP400S
4-1/2"	11	10WP400S
5"	14	14WT500S
5"	11	11WT500S
6"	14	14WT600S
6"	11	11WT600S
8"	14	14WT800S
8"	11	11WT800S
10"	12	12WT1000S

Zinc Coated (Galvanized)

OD (IN.)	GAUGE	PRODUCT ID
1-1/2"	16	16WT150Z
1-1/2"	11	11WT150Z
2"	16	16WT200Z
2-1/8"	16	16WT212Z
2-1/8"	11	11WT212Z
2-1/2"	16	16WT250Z
2-1/2"	11	11WT250Z
3"	16	16WT300Z
3"	11	11WT300Z
3-1/2"	16	16WT350Z
3-1/2"	11	11WT350Z
4"	16	16WT400Z
4"	11	11WT400Z
5"	14	14WT500Z
5"	11	11WT500Z
6"	14	14WT600Z
6"	11	11WT600Z
8"	14	14WT800Z
8"	11	11WT800Z
10"	12	12WT1000Z

Tube Specifications

- 1-1/2" through 10" OD.
Up to 14" special order!
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Standard length is 20'
But we will cut to your specifications!

Material type

A = Aluminum
C = Carbon
S = Stainless
Z = Galvanized

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Tube Bends

To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless

Tube Bend Specifications

- 1-1/2" through 8" OD
- Radius Options:
 - *Short Radius*
(1-1/2" times OD)
 - *Standard Radius*
(2-1/2" times OD)
 - *Long Radius Bends*
(up through 60" CLR)
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Aluminum, Carbon & Stainless

1-1/2" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
1-1/2"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	90	150252
1-1/2"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	60	150256
1-1/2"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	45	150251
1-1/2"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	30	150253
1-1/2"	16A, 16S, 14A, 14S, 11A, 11S	6"	90	150062
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	60	150066
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	45	150061
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	30	150063
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	150092
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	150096
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	150091
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	150093
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	150122
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	150126
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	150121
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	150123
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	150182
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	150186
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	150181
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	150183
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	150242
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	150246
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	150241
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	150243
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	150302
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	150306
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	150301
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	150303
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	150362
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	150366
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	150361
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	150363

• Nominal standard tangent is two times OD, 6" minimum.

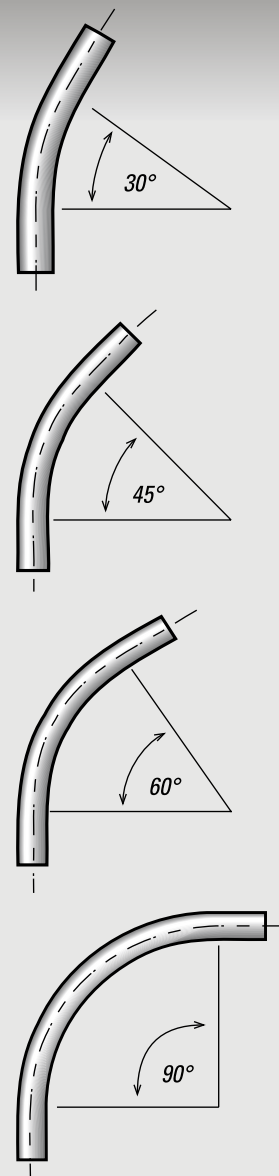
SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

1-3/4" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
1-3/4"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	90	175252
1-3/4"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	60	175256
1-3/4"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	45	175251
1-3/4"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	30	175253
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	175092
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	175096
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	175091
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	175093
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	175122
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	175126
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	175121
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	175123
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	175182
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	175186
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	175181
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	175183
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	175242
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	175246
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	175241
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	175243
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	175302
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	175306
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	175301
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	175303
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	175362
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	175366
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	175361
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	175363

• Nominal standard tangent is two times OD, 6" minimum.



TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Tube Bends

To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless

Tube Bend Specifications

- 1-1/2" through 8" OD
- Radius Options:
 - *Short Radius*
(1-1/2" times OD)
 - *Standard Radius*
(2-1/2" times OD)
 - *Long Radius Bends*
(up through 60" CLR)
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Aluminum, Carbon & Stainless

SPECIAL SERVICES

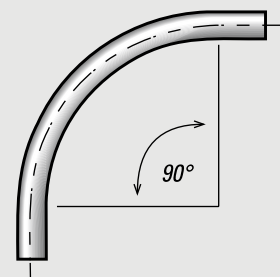
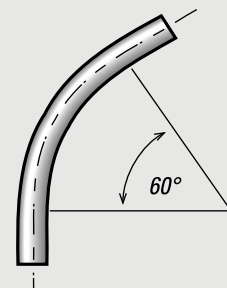
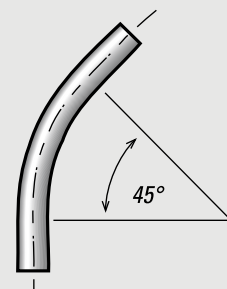
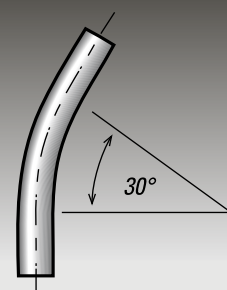
- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

2" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
2"	16A, 16S, 14A, 14S, 11A, 11S	3"	90	200032
2"	16A, 16S, 14A, 14S, 11A, 11S	3"	60	200036
2"	16A, 16S, 14A, 14S, 11A, 11S	3"	45	200031
2"	16A, 16S, 14A, 14S, 11A, 11S	3"	30	200033
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	90	200062
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	60	200066
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	45	200061
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	30	200063
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	200092
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	200096
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	200091
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	200093
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	200122
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	200126
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	200121
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	200123
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	200182
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	200186
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	200181
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	200183
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	200242
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	200246
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	200241
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	200243
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	200302
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	200306
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	200301
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	200303
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	200362
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	200366
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	200361
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	200363

2-1/4" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
2.25"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	90	225042
2.25"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	60	225046
2.25"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	45	225041
2.25"	16A, 16S, 14A, 14S, 11A, 11S	2.5"	30	225043
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	225092
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	225096
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	225091
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	225093
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	225122
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	225126
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	225121
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	225123
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	225182
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	225186
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	225181
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	225183
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	225242
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	225246
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	225241
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	225243
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	225302
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	225306
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	225301
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	225303
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	225362
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	225366
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	225361
2.25"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	225363



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Tube Bends

To determine your part number when ordering:

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Tube Bend Specifications

- 1-1/2" through 8" OD
- Radius Options:
 - *Short Radius*
(1-1/2" times OD)
 - *Standard Radius*
(2-1/2" times OD)
 - *Long Radius Bends*
(up through 60" CLR)
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Aluminum, Carbon & Stainless

SPECIAL SERVICES

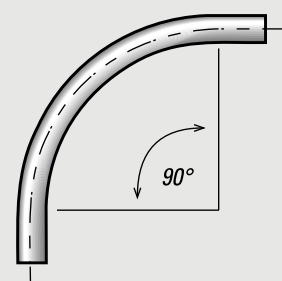
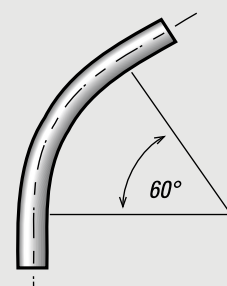
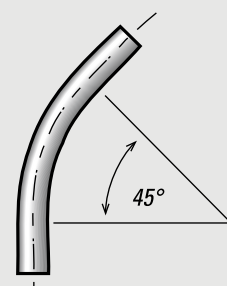
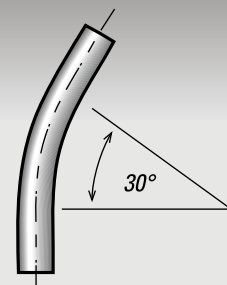
- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

2-1/2" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
2.5"	16A, 16S, 14A, 14S, 11A, 11S	4"	90	250042
2.5"	16A, 16S, 14A, 14S, 11A, 11S	4"	60	250046
2.5"	16A, 16S, 14A, 14S, 11A, 11S	4"	45	250041
2.5"	16A, 16S, 14A, 14S, 11A, 11S	4"	30	250043
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	90	250062
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	60	250066
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	45	250061
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	6"	30	250063
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	250092
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	250096
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	250091
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	250093
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	250122
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	250126
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	250121
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	250123
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	250182
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	250186
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	250181
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	250183
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	250242
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	250246
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	250241
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	250243
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	250302
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	250306
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	250301
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	250303
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	250362
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	250366
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	250361
2.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	250363

3" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
3.0"	16A, 16S, 14A, 14S, 11A, 11S	4.5"	90	300452
3.0"	16A, 16S, 14A, 14S, 11A, 11S	4.5"	60	300456
3.0"	16A, 16S, 14A, 14S, 11A, 11S	4.5"	45	300451
3.0"	16A, 16S, 14A, 14S, 11A, 11S	4.5"	30	300453
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	90	300752
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	60	300756
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	45	300751
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	30	300753
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	300092
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	300096
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	300091
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	300093
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	300122
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	300126
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	300121
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	300123
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	300182
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	300186
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	300181
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	300183
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	300242
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	300246
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	300241
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	300243
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	300302
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	300306
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	300301
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	300303
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	300362
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	300266
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	300361
3.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	300363



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(2-1/2" times OD)
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(up through 60" CLR)
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Aluminum, Carbon & Stainless

SPECIAL SERVICES

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- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

3-1/2" OD

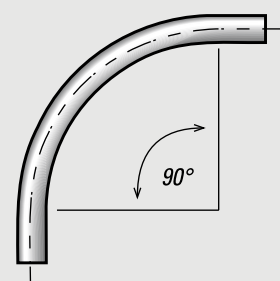
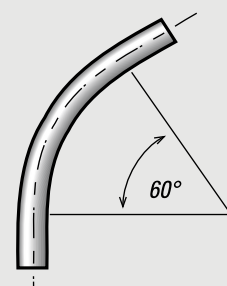
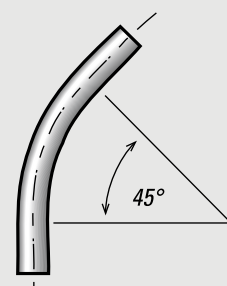
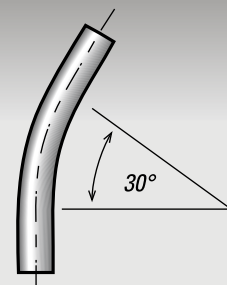
OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
3.5"	16A, 16S, 14A, 14S, 11A, 11S	5"	90	350052
3.5"	16A, 16S, 14A, 14S, 11A, 11S	5"	60	350056
3.5"	16A, 16S, 14A, 14S, 11A, 11S	5"	45	350051
3.5"	16A, 16S, 14A, 14S, 11A, 11S	5"	30	350053
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	350092
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	350096
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	350091
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	350093
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	350122
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	350126
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	350121
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	350123
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	350182
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	350186
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	350181
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	350183
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	350242
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	350246
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	350241
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	350243
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	350302
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	350306
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	350301
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	350303
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	350362
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	350366
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	350361
3.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	350363

• Nominal standard tangent is two times OD, 6" minimum.

4" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
4.0"	16A, 16S, 14A, 14S, 11A, 11S	6"	90	400062
4.0"	16A, 16S, 14A, 14S, 11A, 11S	6"	60	400066
4.0"	16A, 16S, 14A, 14S, 11A, 11S	6"	45	400061
4.0"	16A, 16S, 14A, 14S, 11A, 11S	6"	30	400063
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	400092
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	400096
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	400091
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	400093
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	400122
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	400126
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	400121
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	400123
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	400182
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	400186
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	400181
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	400183
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	400242
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	400246
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	400241
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	400243
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	400302
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	400306
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	400301
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	400303
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	400362
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	400366
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	400361
4.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	400363

• Nominal standard tangent is two times OD, 6" minimum.



TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Tube Bends

To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless

Tube Bend Specifications

- 1-1/2" through 8" OD
- Radius Options:
 - *Short Radius*
(1-1/2" times OD)
 - *Standard Radius*
(2-1/2" times OD)
 - *Long Radius Bends*
(up through 60° CLR)
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Aluminum, Carbon & Stainless

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

4-1/2" OD

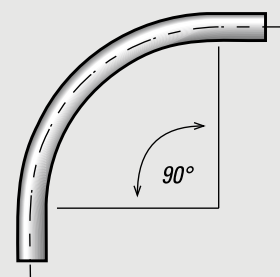
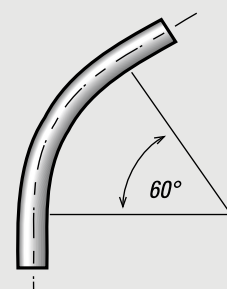
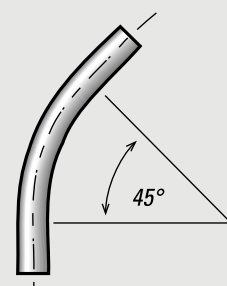
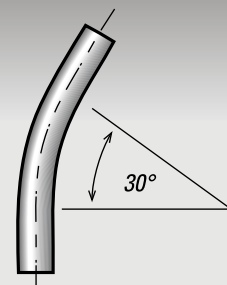
OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	90	450092
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	60	450096
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	45	450091
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	9"	30	450093
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	90	450122
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	60	450126
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	45	450121
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12"	30	450123
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	450182
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	450186
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	450181
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	450183
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	90	450242
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	60	450246
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	45	450241
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	24"	30	450243
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	90	450302
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	60	450306
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	45	450301
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30"	30	450303
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	90	450362
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	60	450366
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	45	450361
4.5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	36"	30	450363

• Nominal standard tangent is two times OD, 6" minimum.

5" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	90	500752
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	60	500756
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	45	500751
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	7.5"	30	500753
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12.5"	90	500122
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12.5"	60	500126
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12.5"	45	500121
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	12.5"	30	500123
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	90	500182
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	60	500186
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	45	500181
5.0"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	30	500183
5.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	90	500242
5.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	60	500246
5.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	45	500241
5.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	30	500243
5.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	90	500302
5.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	60	500306
5.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	45	500301
5.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	30	500303
5.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	90	500362
5.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	60	500366
5.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	45	500361
5.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	30	500363

• Nominal standard tangent is two times OD, 6" minimum.



TERMINOLOGY

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ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Tube Bends

To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless

Tube Bend Specifications

- 1-1/2" through 8" OD
- Radius Options:
 - *Short Radius*
(1-1/2" times OD)
 - *Standard Radius*
(2-1/2" times OD)
 - *Long Radius Bends*
(up through 60" CLR)
- Wall Thickness: 16, 14, 12 & 11 Gauge
- Aluminum, Carbon & Stainless

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

6" OD

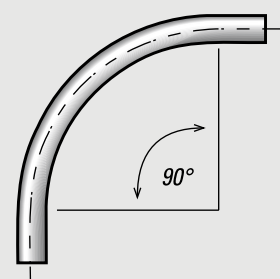
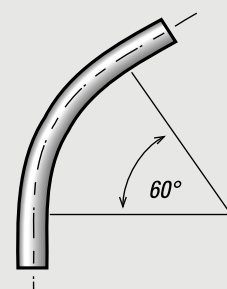
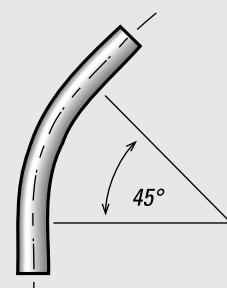
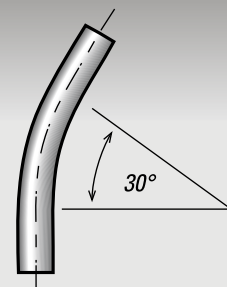
OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
6.0"	14A, 14C, 14S, 11A, 11C, 11S	9"	90	600092
6.0"	14A, 14C, 14S, 11A, 11C, 11S	9"	60	600096
6.0"	14A, 14C, 14S, 11A, 11C, 11S	9"	45	600091
6.0"	14A, 14C, 14S, 11A, 11C, 11S	9"	30	600093
6.0"	14A, 14C, 14S, 11A, 11C, 11S	15"	90	600152
6.0"	14A, 14C, 14S, 11A, 11C, 11S	15"	60	600156
6.0"	14A, 14C, 14S, 11A, 11C, 11S	15"	45	600151
6.0"	14A, 14C, 14S, 11A, 11C, 11S	15"	30	600153
6.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	90	600242
6.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	60	600246
6.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	45	600241
6.0"	14A, 14C, 14S, 11A, 11C, 11S	24"	30	600243
6.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	90	600302
6.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	60	600306
6.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	45	600301
6.0"	14A, 14C, 14S, 11A, 11C, 11S	30"	30	600303
6.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	90	600362
6.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	60	600366
6.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	45	600361
6.0"	14A, 14C, 14S, 11A, 11C, 11S	36"	30	600363
6.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	90	600482
6.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	60	600486
6.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	45	600481
6.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	30	600483

• Nominal standard tangent is two times OD, 6" minimum.

8" OD

OD	GAUGE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
8.0"	14A, 14C, 14S, 11A, 11C, 11S	12"	90	800122
8.0"	14A, 14C, 14S, 11A, 11C, 11S	12"	60	800126
8.0"	14A, 14C, 14S, 11A, 11C, 11S	12"	45	800121
8.0"	14A, 14C, 14S, 11A, 11C, 11S	12"	30	800123
8.0"	14A, 14C, 14S, 11A, 11C, 11S	20"	90	800202
8.0"	14A, 14C, 14S, 11A, 11C, 11S	20"	60	800206
8.0"	14A, 14C, 14S, 11A, 11C, 11S	20"	45	800201
8.0"	14A, 14C, 14S, 11A, 11C, 11S	20"	30	800203
8.0"	14A, 14C, 14S, 11A, 11C, 11S	32"	90	800322
8.0"	14A, 14C, 14S, 11A, 11C, 11S	32"	60	800326
8.0"	14A, 14C, 14S, 11A, 11C, 11S	32"	45	800321
8.0"	14A, 14C, 14S, 11A, 11C, 11S	32"	30	800323
8.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	90	800482
8.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	60	800486
8.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	45	800481
8.0"	14A, 14C, 14S, 11A, 11C, 11S	48"	30	800483

• Nominal standard tangent is two times OD, 6" minimum.



TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Tube Fittings

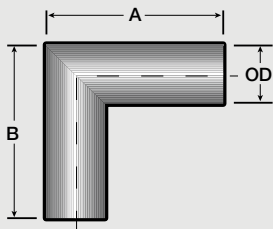
To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless



Mitered Elbow Specifications

- 1-1/2" through 8" OD
- Wall Thickness: 16, 14 & 11 Gauge
- Aluminum, Carbon & Stainless

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Mitered Elbows

OD	GAUGE (Wall Thickness) & MATERIAL	A/B	PRODUCT ID
1-1/2"	16A,16C,16S,11A,11C,11S	6"	MIT150
2"	16A,16C,16S,11A,11C,11S	6"	MIT200
2-1/2"	16A,16C,16S,11A,11C,11S	6"	MIT250
3"	16A,16C,16S,11A,11C,11S	6"	MIT300
3-1/2"	16A,16C,16S,11A,11C,11S	7"	MIT350
4"	16A,16C,16S,11A,11C,11S	8"	MIT400
5"	14A,14C,14S,11A,11C,11S	10"	MIT500
6"	14A,14C,14S,11A,11C,11S	12"	MIT600
8"	14A,14C,14S,11A,11C,11S	16"	MIT800

Tube Laterals

OD	GAUGE (Wall Thickness) & MATERIAL	DEGREE	A	B	PRODUCT ID
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	16"	LAT1503
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	16"	LAT1501
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	16"	LAT1753
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	16"	LAT1751
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	16"	LAT2003
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	16"	LAT2001
2-1/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	16"	LAT2253
2-1/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	16"	LAT2251
2-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	16"	LAT2503
2-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	16"	LAT2501
3"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	10"	20"	LAT3003
3"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	16"	LAT3001
3-1/2"	14A, 14C, 14S, 11A, 11C, 11S	30	10"	20"	LAT3503
3-1/2"	14A, 14C, 14S, 11A, 11C, 11S	45	8"	16"	LAT3501
4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	12"	24"	LAT4003
4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	10"	20"	LAT4001
4-1/2"	14A, 14C, 14S, 11A, 11C, 11S	30	12"	24"	LAT4503
4-1/2"	14A, 14C, 14S, 11A, 11C, 11S	45	10"	20"	LAT4501
5"	14A, 14C, 14S, 11A, 11C, 11S	30	15"	30"	LAT5003
5"	14A, 14C, 14S, 11A, 11C, 11S	45	12"	24"	LAT5001
6"	14A, 14C, 14S, 11A, 11C, 11S	30	18"	36"	LAT6003
6"	14A, 14C, 14S, 11A, 11C, 11S	45	15"	30"	LAT6001

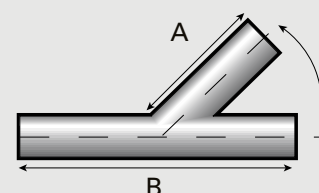
To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless



Lateral Specifications

- 1-1/2" through 6" OD.
Up to 14" special order!
- Wall Thickness: 16, 14 & 11 Gauge
- Aluminum, Carbon & Stainless

Also available with Cam & Groove adapter/coupler welded to branch...
CALL!



TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

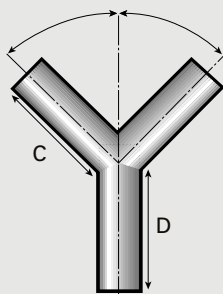
To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless



Tube Wye Specifications

- 1-1/2" through 6" OD
- Wall Thickness: 16, 14 & 11 Gauge
- Aluminum, Carbon & Stainless

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Tube Wyes

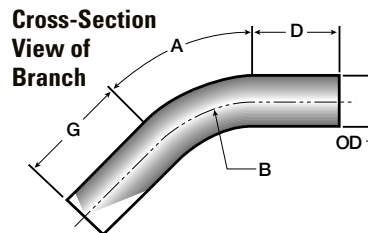
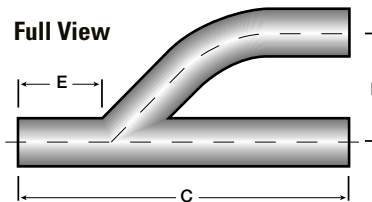
OD	GAUGE (Wall Thickness) & MATERIAL	DEGREE	C	D	PRODUCT ID
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE1503
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE1501
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE1753
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE1751
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE2003
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE2001
2-1/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE2253
2-1/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE2251
2-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE2503
2-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE2501
3"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE3003
3"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE3001
3-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE3503
3-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE3501
4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	30	8"	8"	WYE4003
4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	45	8"	8"	WYE4001
4-1/2"	14A, 14C, 14S, 11A, 11C, 11S	30	10"	10"	WYE4503
4-1/2"	14A, 14C, 14S, 11A, 11C, 11S	45	10"	10"	WYE4501
5"	14A, 14C, 14S, 11A, 11C, 11S	30	11"	11"	WYE5003
5"	14A, 14C, 14S, 11A, 11C, 11S	45	11"	11"	WYE5001
6"	14A, 14C, 14S, 11A, 11C, 11S	30	12"	12"	WYE6003
6"	14A, 14C, 14S, 11A, 11C, 11S	45	12"	12"	WYE6001

Parallel Wyes

OD	GAUGE (Wall Thickness) & MATERIAL	DEGREE	PRODUCT ID
1-1/2"	16A, 16S	45	PWYE1501
1-3/4"	16A, 16S	45	PWYE1751
2"	16A, 16S	45	PWYE2001
2-1/4"	16A, 16S	45	PWYE2251
2-1/2"	16A, 16S	45	PWYE2501
3"	16A, 16S	45	PWYE3001
4"	16A, 16S	45	PWYE4001
5"	14A, 14S	45	PWYE5001
6"	14A, 14S	45	PWYE6001

Branch dimensions

OD	A	B	C	D	E	F	G
1.5	45	4	19.94	6	6	6	6.81
2	45	5	20.5	6	6	6	6.44
2.5	45	6	21	6	6	6	6
3	45	7.5	21.75	6	6	6	5.38
4	45	10	29	8	8	8	7.19
5	45	12.5	36.19	10	10	10	8.94
6	45	15	39.44	10	10	12	10.75



Tube Tees

OD	GAUGE (Wall Thickness) & MATERIAL	E	F	PRODUCT ID
1-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE150
1-3/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE175
2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE200
2-1/4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE225
2-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE250
3"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE300
3-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE350
4"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	16"	8"	TEE400
4-1/2"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	9"	TEE450
5"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	18"	9"	TEE500
6"	16A, 16C, 16S, 14A, 14C, 14S, 11A, 11C, 11S	20"	10"	TEE600

To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless

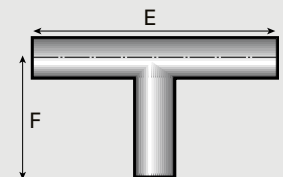
Parallel Wye Specifications

- 1-1/2" through 6" OD
- Wall Thickness: 14 & 16 Gauge
- Aluminum & Stainless
- 30 Degree available upon request!

Typically used in single line pneumatic conveying systems to allow drops to multiple stations.

Tee Specifications

- 1-1/2" through 6" OD
- Wall Thickness: 16, 14 & 11 Gauge
- Aluminum, Carbon & Stainless



TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

All reference dimensions are nominal.

Adapter Specifications

- 1-1/2" through 8" OD
- Wall Thickness: 14 & 16 Gauge
- Aluminum, Carbon & Stainless

For joining tube to pipe

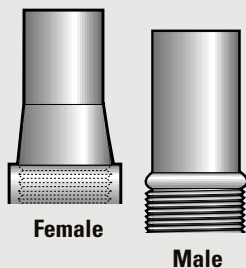
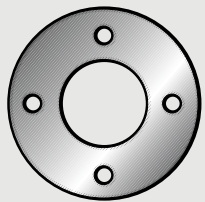


Plate Flange Specifications

- 2" through 12" OD sizes available
- Slip-on, flat face style
- 1/2" thick, 150 lb. drilling
- All bolt pattern dimensions meet ANSI Standards
- Aluminum, Carbon & Stainless



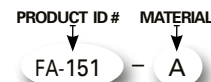
SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Female Adapters

OD	FNPT	LENGTH	GAUGE	PRODUCT ID	MATERIAL
1-1/2"	1-1/2"	6"	16	FA-151	A, C, S
2"	2"	6"	16	FA-201	A, C, S
2-1/2"	2-1/2"	6"	16	FA-251	A, C, S
3"	3"	6"	16	FA-301	A, C, S
3-1/2"	3-1/2"	6"	16	FA-351	A, C, S
4"	4"	6-1/2"	16	FA-401	A, C, S
5"	5"	6-3/4"	14	FA-501	A, C, S
6"	6"	7"	14	FA-601	A, C, S
8"	8"	9-1/2"	14	FA-801	A, C, S

To determine your part number...



Material type

C = carbon
S = stainless
A = aluminum

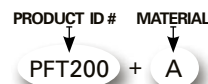
Male Adapters

OD	MNPT	LENGTH	GAUGE	PRODUCT ID	MATERIAL
1-1/2"	1-1/2"	6"	16	MA-152	A, C, S
2"	2"	6"	16	MA-202	A, C, S
2-1/2"	2-1/2"	6"	16	MA-252	A, C, S
3"	3"	6"	16	MA-302	A, C, S
3-1/2"	3-1/2"	6"	16	MA-352	A, C, S
4"	4"	6"	16	MA-402	A, C, S
5"	5"	6-1/2"	14	MA-502	A, C, S
6"	6"	7"	14	MA-602	A, C, S
8"	8"	8-1/2"	14	MA-802	A, C, S

Plate Flanges

OD	PRODUCT ID	MATERIAL
2"	PFT200	A, C, S
2-1/8"	PFT212	A, C, S
2-1/2"	PFT250	A, C, S
3"	PFT300	A, C, S
4"	PFT400	A, C, S
5"	PFT500	A, C, S
6"	PFT600	A, C, S
8"	PFT800	A, C, S
10"	PFT1000	A, C, S
12"	PFT1200	A, C, S

To determine your part number...



Material type

C = carbon
S = stainless
A = aluminum

Slip Couplings

FOR TUBE OD	LENGTH	GAUGE	PRODUCT ID	MATERIAL
1-1/2"	3"	16	SC-153	A, C, S
2"	3"	16	SC-203	A, C, S
2-1/2"	3-1/2"	16	SC-253	A, C, S
3"	3"	16	SC-303	A, C, S
3-1/2"	4-1/2"	16	SC-353	A, C, S
4"	5"	16	SC-403	A, C, S
5"	6"	14	SC-503	A, C, S
6"	7"	14	SC-603	A, C, S
8"	8"	14	SC-803	A, C, S
10"	10"	12	SC-1003	A, C, S
12"	12"	12	SC-1203	A, C, S

Used for joining the two straight ends of fittings or tubing. The slip coupling is a solid sleeve that fits the OD of the joint which can then be glued, brazed, welded or covered by shrink sleeves.

To determine your part number when ordering:

Use **Gauge** plus **Product ID** plus **Material type**.

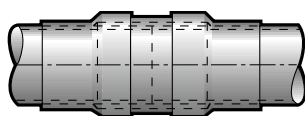
PRODUCT ID # MATERIAL
SC-153 - A

Material type

A = Aluminum
C = Carbon
S = Stainless

Shrink Sleeves

FOR TUBE OD SIZE	PRODUCT ID
1-1/2"	SS-150
2" to 2-1/8"	SS-212
2-1/2" to 3"	SS-300
3-1/2" to 4"	SS-400
5"	SS-500
6"	SS-600
8"	SS-800
10"	SS-1000
12"	SS-1200
14"	SS-1400



Order by
Product ID Number
Only

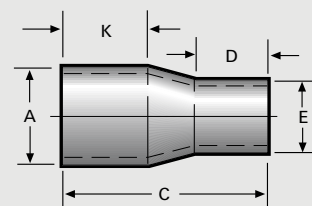
A heat shrinkable polyolefin band that literally shrinks and encircles the connection giving it mechanical strength and a positive seal. It can be used in conjunction with a slip coupling or when using expanded fittings. Gluing, brazing and welding operations are eliminated.

For use in systems under 15 PSIG.



Slip Coupling Specifications

- 1-1/2" through 6" OD
- Wall Thickness: 16 & 14 Gauge
- Aluminum, Carbon & Stainless



Reducer Coupling Specifications

- 1-1/2" through 4" OD
- Wall Thickness: 16 Gauge
- Aluminum

Offer longer tangent lengths so connection is possible with INSTALOK™ or compression couplings

Long-Tangent Reducer Couplings

SIZE	GAUGE	A (OD)	E (OD)	C	D/K	PRODUCT ID
1-1/2" x 2"	16	2"	1-1/2"	6-15/16"	3	RCLT-15X20-3AS
1-1/2" x 2-1/4"	16	2-1/4"	1-1/2"	7-3/8"	3	RCLT-15X225-3AS
1-1/2" x 2-1/2"	16	2-1/2"	1-1/2"	7-7/8"	3	RCLT-15X25-3AS
1-1/2" x 3"	16	3"	1-1/2"	8-13/16"	3	RCLT-15X30-3AS
1-3/4" x 2"	16	2"	1-3/4"	6-7/16"	3	RCLT-175X20-3AS
1-3/4" x 2-1/2"	16	2-1/2"	1-3/4"	7-3/8"	3	RCLT-175X25-3AS
2" x 2-1/4"	16	2-1/4"	2"	6-7/16"	3	RCLT-20X225-3AS
2" x 2-1/2"	16	2-1/2"	2"	6-15/16"	3	RCLT-20X25-3AS
2" x 3"	16	3"	2"	6"	2	RCLT-20X30-3AS
2-1/4" x 2-1/2"	16	2-1/2"	2-1/4"	6-7/16"	3	RCLT-225X25-3AS
2-1/2" x 3"	16	3"	2-1/2"	7-1/2"	3	RCLT-25X30-3AS
2-1/2" x 4"	16	4"	2-1/2"	14-1/4"	4	RCLT-25X40-4AS*

*Welded construction

Order by
Product ID Number
Only

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Order by Product ID Number

Aluminum

NPS	SCHEDULE	PRODUCT ID
2"	5	16ST237A
2"	10	10SP200A
2"	40	40SP200A
2-1/2"	10	10SP250A
2-1/2"	40	40SP250A
3"	10	11ST350A
3"	40	40SP300A
3-1/2"	5	14ST400A
3-1/2"	10	11ST400A
3-1/2"	40	40SP350A
4"	10	11ST450A
4"	40	40SP400A
5"	10	10SP500A
5"	40	40SP500A
6"	10	10SP600A
6"	40	40SP600A
8"	10	10SP800A
8"	40	40SP800A

Pipe Specifications

- 1" through 8" NPS
- Wall Thickness: Schedule 5, 10, 40, 80
- Standard length is 20' or 21' But we will cut to your specifications!

Material type

A = Aluminum
C = Carbon
S = Stainless

Carbon Steel

NPS	SCHEDULE	PRODUCT ID
1"	40	40WP100C
1"	80	80WP100C
1-1/4"	40	40WP125C
1-1/4"	80	80WP125C
1-1/2"	40	40WP150C
2"	5	5WP200C
2"	10	10WP200C
2"	40	40WP200C
2"	80	80WP200C
2-1/2"	5	5WP250C
2-1/2"	10	10WP250C
2-1/2"	40	40WP250C
2-1/2"	80	80WP250C
3"	5	14WT350C
3"	10	11WT350C
3"	40	40WP300C
3"	80	80WP300C
3-1/2"	5	14WT400C
3-1/2"	10	11WT400C
3-1/2"	40	40WP350C
3-1/2"	80	80WP350C
4"	5	14WT450C
4"	10	11WT450C
4"	40	40WP400C
4"	80	80WP400C
5"	10	10WP500C
5"	40	40WP500C
5"	80	80WP500C
6"	10	10WP600C
6"	40	40WP600C
6"	80	80WP600C
8"	10	10WP800C
8"	40	40WP800C
8"	80	80WP800C

NPS TO OD CONVERSION

3" NPS Sch 5 = 3-1/2" OD 14 Gauge
3" NPS Sch 10 = 3-1/2" OD 11 Gauge
3-1/2" NPS Sch 5 = 4" OD 14 Gauge
3-1/2" NPS Sch 10 = 4" OD 11 Gauge
4" NPS Sch 5 = 4-1/2" OD 14 Gauge
4" NPS Sch 10 = 4-1/2" OD 11 Gauge

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Can't Find What You Need? Call Us!
Catalog Part Variations Available Upon Request.

Order by Product ID Number

Stainless Steel

NPS	SCHEDULE	PRODUCT ID
1"	10	10WP100S
1"	40	40WP100S
1"	80	80WP100S
1-1/4"	40	40WP125S
1-1/4"	80	80WP125S
1-1/2"	10	10WP150S
1-1/2"	40	40WP150S
1-1/2"	80	80WP150S
2"	5	16WT237S
2"	10	10WP200S
2"	40	40WP200S
2"	80	80WP200S
2-1/2"	5	5WP250S
2-1/2"	10	10WP250S
2-1/2"	40	40WP250S
3"	5	5WP300S
3"	10	10WP300S
3"	40	40WP300S
3"	80	80WP300S
3-1/2"	5	5WP350S
3-1/2"	10	10WP350S
3-1/2"	40	40WP350S
4"	5	5WP400S
4"	10	10WP400S
4"	40	40WP400S
4"	80	80WP400S
5"	5	5WP500S
5"	10	10WP500S
5"	40	40WP500S
6"	10	10WP600S
6"	40	40WP600S
8"	10	10WP800S
8"	40	40WP800S

Pipe Specifications

- 1" through 8" NPS
- Wall Thickness:
Schedule 5, 10, 40, 80
- Standard length is 20' or 21'
But we will cut to your specifications!

Material type

A = Aluminum
C = Carbon
S = Stainless

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Pipe Bends

To determine your part number when ordering:

Use **Schedule** plus **Product ID** plus **Material type**.

SCHEDULE PRODUCT ID # MATERIAL

5P - 200122 - A

Material type

A = Aluminum
C = Carbon
S = Stainless

Pipe Bend Specifications

- 2" through 6" NPS
- Radius Options:
 - Short Radius
(1-1/2" times NPS)
 - Standard Radius
(2-1/2" times NPS)
 - Long Radius Bends
(up through 60" CLR)
- Wall Thickness:
Schedule 5, 10 & 40
(Sch. 80 available)
- Aluminum, Carbon
& Stainless

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

2" NPS

OD	SCHEDULE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	12	90	200122
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	12	60	200126
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	12	45	200121
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	12	30	200123
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	18	90	200182
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	18	60	200186
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	18	45	200181
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	18	30	200183
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	90	200242
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	60	200246
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	45	200241
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	30	200243
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	90	200302
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	60	200306
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	45	200301
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	30	200303
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	90	200362
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	60	200366
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	45	200361
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	30	200363

• Nominal standard tangent is two times NPS, 6" minimum.

2-1/2" NPS

OD	SCHEDULE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	90	250242
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	60	250246
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	45	250241
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	30	250243
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	90	250302
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	60	250306
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	45	250301
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	30	250303
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	90	250362
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	60	250366
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	45	250361
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	30	250363

• Nominal standard tangent is two times NPS, 6" minimum.

Can't Find What You Need? Call Us!
Catalog Part Variations Available Upon Request.

3" NPS

OD	SCHEDULE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
3"	40P A, 40P C, 40P S	24	90	300242
3"	40P A, 40P C, 40P S	24	60	300246
3"	40P A, 40P C, 40P S	24	45	300241
3"	40P A, 40P C, 40P S	24	30	300243
3"	40P A, 40P C, 40P S	30	90	300302
3"	40P A, 40P C, 40P S	30	60	300306
3"	40P A, 40P C, 40P S	30	45	300301
3"	40P A, 40P C, 40P S	30	30	300303
3"	40P A, 40P C, 40P S	36	90	300362
3"	40P A, 40P C, 40P S	36	60	300366
3"	40P A, 40P C, 40P S	36	45	300361
3"	40P A, 40P C, 40P S	36	30	300363

• Nominal standard tangent is two times NPS, 6" minimum.

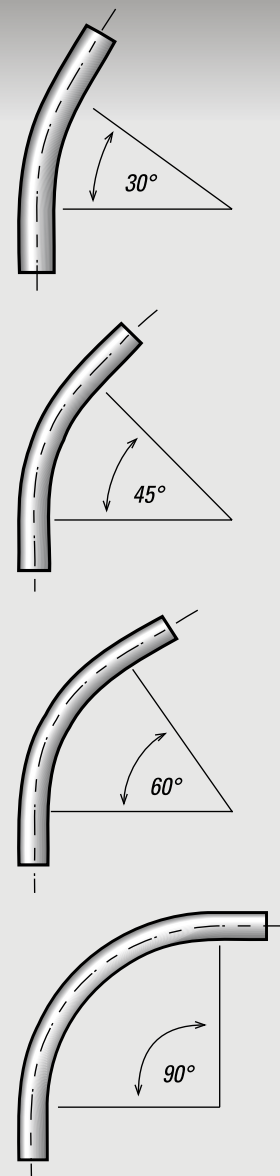
3-1/2" NPS

OD	SCHEDULE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
3.5"	40P A, 40P C, 40P S	24	90	350242
3.5"	40P A, 40P C, 40P S	24	60	350246
3.5"	40P A, 40P C, 40P S	24	45	350241
3.5"	40P A, 40P C, 40P S	24	30	350243
3.5"	40P A, 40P C, 40P S	30	90	350302
3.5"	40P A, 40P C, 40P S	30	60	350306
3.5"	40P A, 40P C, 40P S	30	45	350301
3.5"	40P A, 40P C, 40P S	30	30	350303
3.5"	40P A, 40P C, 40P S	36	90	350362
3.5"	40P A, 40P C, 40P S	36	60	350366
3.5"	40P A, 40P C, 40P S	36	45	350361
3.5"	40P A, 40P C, 40P S	36	30	350363

• Nominal standard tangent is two times NPS, 6" minimum.

NPS TO OD CONVERSION

3" NPS Sch 5 = 3-1/2" OD 14 Gauge
 3" NPS Sch 10 = 3-1/2" OD 11 Gauge
 3-1/2" NPS Sch 5 = 4" OD 14 Gauge
 3-1/2" NPS Sch 10 = 4" OD 11 Gauge
 4" NPS Sch 5 = 4-1/2" OD 14 Gauge
 4" NPS Sch 10 = 4-1/2" OD 11 Gauge



TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Pipe Bends

To determine your part number when ordering:

Use **Schedule** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless

Pipe Bend Specifications

- 2" through 6" NPS
- Radius Options:
 - *Short Radius*
(1-1/2" times NPS)
 - *Standard Radius*
(2-1/2" times NPS)
 - *Long Radius Bends*
(up through 60" CLR)
- Wall Thickness:
Schedule 5, 10 & 40
(Sch. 80 available)
- Aluminum, Carbon
& Stainless

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

4" NPS

OD	SCHEDULE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
4"	40P A, 40P C, 40P S	24	90	400242
4"	40P A, 40P C, 40P S	24	60	400246
4"	40P A, 40P C, 40P S	24	45	400241
4"	40P A, 40P C, 40P S	24	30	400243
4"	40P A, 40P C, 40P S	30	90	400302
4"	40P A, 40P C, 40P S	30	60	400306
4"	40P A, 40P C, 40P S	30	45	400301
4"	40P A, 40P C, 40P S	30	30	400303
4"	40P A, 40P C, 40P S	36	90	400362
4"	40P A, 40P C, 40P S	36	60	400366
4"	40P A, 40P C, 40P S	36	45	400361
4"	40P A, 40P C, 40P S	36	30	400363

• Nominal standard tangent is two times NPS, 6" minimum.

5" NPS

OD	SCHEDULE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	90	500242
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	60	500246
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	45	500241
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	30	500243
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	90	500302
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	60	500306
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	45	500301
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	30	500303
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	90	500362
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	60	500366
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	45	500361
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	30	500363
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	90	500482
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	60	500486
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	45	500481
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	30	500483

• Nominal standard tangent is two times NPS, 6" minimum.

Can't Find What You Need? Call Us!
Catalog Part Variations Available Upon Request.

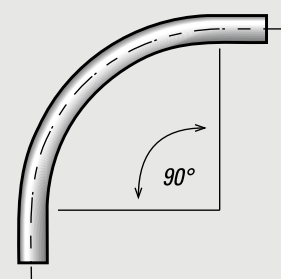
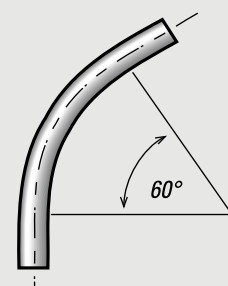
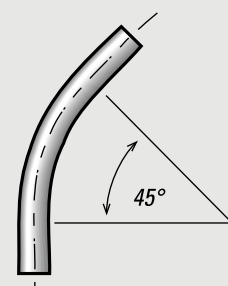
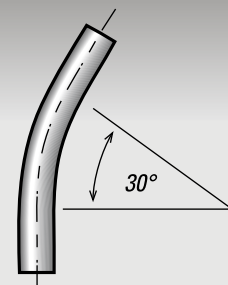
6" NPS

OD	SCHEDULE (Wall Thickness) & MATERIAL	CLR	DEGREE	PRODUCT ID
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	90	600242
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	60	600246
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	45	600241
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24	30	600243
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	90	600302
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	60	600306
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	45	600301
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	30	600303
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	90	600362
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	60	600366
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	45	600361
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	36	30	600363
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	90	600482
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	60	600486
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	45	600481
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	48	30	600483

• Nominal standard tangent is two times NPS, 6" minimum.

NPS TO OD CONVERSION

3" NPS Sch 5 = 3-1/2" OD 14 Gauge
 3" NPS Sch 10 = 3-1/2" OD 11 Gauge
 3-1/2" NPS Sch 5 = 4" OD 14 Gauge
 3-1/2" NPS Sch 10 = 4" OD 11 Gauge
 4" NPS Sch 5 = 4-1/2" OD 14 Gauge
 4" NPS Sch 10 = 4-1/2" OD 11 Gauge



TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

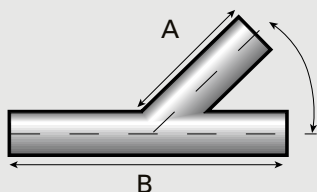
To determine your part number when ordering:

Use **Schedule** plus **Product ID** plus **Material type**.



Material type

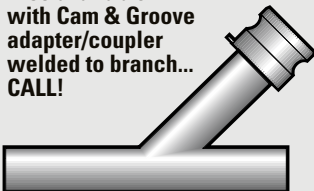
A = Aluminum
C = Carbon
S = Stainless



Lateral Specifications

- 2" through 6" NPS
- Wall Thickness: Schedule 5, 10 & 40 (Sch. 80 available)
- Aluminum, Carbon & Stainless

Also available with Cam & Groove adapter/coupler welded to branch...
CALL!



SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Pipe Laterals

NPS	SCHEDULE (Wall Thickness) & MATERIAL	DEGREE	A	B	PRODUCT ID
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	8"	16"	LAT2003
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	8"	16"	LAT2001
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	8"	16"	LAT2503
2.5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	8"	16"	LAT2501
3"	40P A, 40P C, 40P S	30	10"	20"	LAT3003
3"	40P A, 40P C, 40P S	45	8"	16"	LAT3001
3.5"	40P A, 40P C, 40P S	30	10"	20"	LAT3503
3.5"	40P A, 40P C, 40P S	45	8"	16"	LAT3501
4"	40P A, 40P C, 40P S	30	12"	24"	LAT4003
4"	40P A, 40P C, 40P S	45	10"	20"	LAT4001
5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	15"	30"	LAT5003
5"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	12"	24"	LAT5001
6"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	18"	36"	LAT6003
6"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	15"	30"	LAT6001

Pipe Wyes

OD	SCHEDULE (Wall Thickness) & MATERIAL	DEGREE	C	D	PRODUCT ID
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	8"	8"	WYE2003
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	8"	8"	WYE2001
2-1/2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	8"	8"	WYE2503
2-1/2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	8"	8"	WYE2501
3"	40P A, 40P C, 40P S	30	8"	8"	WYE3003
3"	40P A, 40P C, 40P S	45	8"	8"	WYE3001
4"	40P A, 40P C, 40P S	30	8"	8"	WYE4003
4"	40P A, 40P C, 40P S	45	8"	8"	WYE4001
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	11"	11"	WYE5003
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	11"	11"	WYE5001
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	12"	12"	WYE6003
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	12"	12"	WYE6001
8"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	30	14"	14"	WYE8003
8"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	45	14"	14"	WYE8001

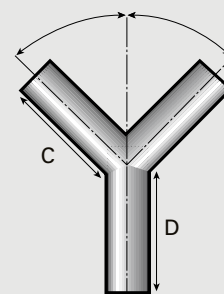
To determine your part number when ordering:

Use **Schedule** plus **Product ID** plus **Material type**.



Material type

A = Aluminum
C = Carbon
S = Stainless



Wye Specifications

- 2" through 8" NPS
- Wall Thickness:
Schedule 5, 10 & 40
(Sch. 80 available)
- Aluminum, Carbon
& Stainless

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

To determine your part number when ordering:

Use **Schedule** plus **Product ID** plus **Material type**.

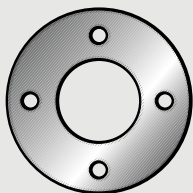


Material type

A = Aluminum
C = Carbon
S = Stainless

Plate Flange Specifications

- 2" through 8" NPS sizes
- Slip-on, flat face style
- 1/2" thick, 150 lb. drilling
- All bolt pattern dimensions meet ANSI Standards
- Aluminum, Carbon & Stainless



SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Pipe Tees

OD	SCHEDULE (Wall Thickness) & MATERIAL	E	F	PRODUCT ID
2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	16"	8"	TEE200
2-1/2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	16"	8"	TEE250
3"	40P A, 40P C, 40P S	16"	8"	TEE300
3-1/2"	5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S	16"	8"	TEE350
4"	40P A, 40P C, 40P S	16"	8"	TEE400
5"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	18"	9"	TEE500
6"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	20"	10"	TEE600
8"	10P A, 10P C, 10P S, 40P A, 40P C, 40P S	24"	12"	TEE800

Tee Specifications

- 2" through 8" NPS
- Wall Thickness:
Schedule 5, 10 & 40
(Sch. 80 available)
- Aluminum, Carbon & Stainless

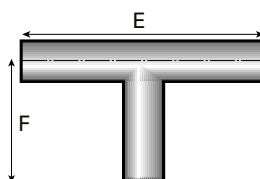
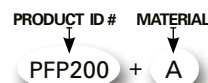


Plate Flanges

OD	PRODUCT ID	MATERIAL
2"	PFP200	A, C, S
3"	PFP300	A, C, S
4"	PFP400	A, C, S
5"	PFP500	A, C, S
6"	PFP600	A, C, S
8"	PFP800	A, C, S

To determine your part number...



Material type

A = Aluminum
C = Carbon
S = Stainless

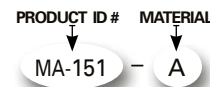
Female Adapters

OD	FNPT	LENGTH	GAUGE	PRODUCT ID	MATERIAL
1-1/2"	1-1/2"	6"	16	FA-151	A, C, S
2"	2"	6"	16	FA-201	A, C, S
2-1/2"	2-1/2"	6"	16	FA-251	A, C, S
3"	3"	6"	16	FA-301	A, C, S
3-1/2"	3-1/2"	6"	16	FA-351	A, C, S
4"	4"	6-1/2"	16	FA-401	A, C, S
5"	5"	6-3/4"	14	FA-501	A, C, S
6"	6"	7"	14	FA-601	A, C, S
8"	8"	9-1/2"	14	FA-801	A, C, S

Male Adapters

OD	MNPT	LENGTH	GAUGE	PRODUCT ID	MATERIAL
1-1/2"	1-1/2"	6"	16	MA-152	A, C, S
2"	2"	6"	16	MA-202	A, C, S
2-1/2"	2-1/2"	6"	16	MA-252	A, C, S
3"	3"	6"	16	MA-302	A, C, S
3-1/2"	3-1/2"	6"	16	MA-352	A, C, S
4"	4"	6"	16	MA-402	A, C, S
5"	5"	6-1/2"	14	MA-502	A, C, S
6"	6"	7"	14	MA-602	A, C, S
8"	8"	8-1/2"	14	MA-802	A, C, S

To determine your part number...



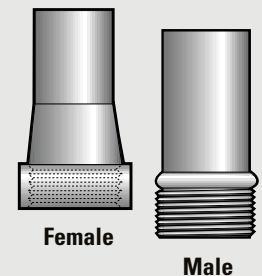
Material type

A = Aluminum
C = Carbon
S = Stainless

Adapter Specifications

- 1-1/2" through 8" OD
- Wall Thickness:
- Aluminum, Carbon & Stainless

For joining tube to pipe



TERMINOLOGY

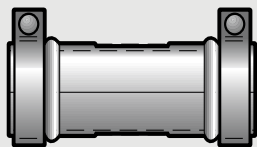
CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

H-P Instalok

INSTALOK™ Specifications

- 1-1/2" OD to 4" OD
- 20% Lower cost than traditional couplings
- 30% Quicker installation
- Couplings have a unique clamping design that offers unparalleled strength and grip
- Made with Grade 5 stress relieved bolts to ensure durability
- Standard O-ring is black nitrile
- Galvanized Steel Construction

We also offer replacement O-rings, nuts, bolts and clamps



OD	NPS	O-RING	LENGTH	PRODUCT ID
1-1/2"		Black	4"	CP15042B-16Z
1-1/2"		White	4"	CP15042W-16Z
1-1/2"		Black	6"	CP15062B-16Z
1-1/2"		White	6"	CP15062W-16Z
1-3/4"		Black	4"	CP17542B-16Z
1-3/4"		White	4"	CP17542W-16Z
1-3/4"		Black	6"	CP17562B-16Z
1-3/4"		White	6"	CP17562W-16Z
2"		Black	4"	CP20042B-16Z
2"		White	4"	CP20042W-16Z
2"		Black	6"	CP20062B-16Z
2"		White	6"	CP20062W-16Z
2-1/8"		Black	4"	CP21242B-16Z
2-1/8"		White	4"	CP21242W-16Z
2-1/8"		Black	6"	CP21262B-16Z
2-1/8"		White	6"	CP21262W-16Z
2-1/4"		Black	4"	CP22542B-16Z
2-1/4"		White	4"	CP22542W-16Z
2-1/4"		Black	6"	CP22562B-16Z
2-1/4"		White	6"	CP22562W-16Z
2-3/8"	2"	Black	4"	CP237542B-16Z
2-3/8"	2"	White	4"	CP237542W-16Z
2-3/8"	2"	Black	6"	CP237562B-16Z
2-3/8"	2"	White	6"	CP237562W-16Z
2-3/8"	2"	Black	8"	CP237582B-16Z
2-3/8"	2"	White	8"	CP237582W-16Z
2-1/2"		Black	4"	CP25042B-16Z
2-1/2"		White	4"	CP25042W-16Z
2-1/2"		Black	6"	CP25062B-16Z
2-1/2"		White	6"	CP25062W-16Z
2-1/2"		Black	8"	CP25082B-16Z
2-1/2"		White	8"	CP25082W-16Z
2-7/8"	2-1/2"	Black	4"	CP287542B-16Z
2-7/8"	2-1/2"	White	4"	CP287542W-16Z
2-7/8"	2-1/2"	Black	6"	CP287562B-16Z
2-7/8"	2-1/2"	White	6"	CP287562W-16Z
2-7/8"	2-1/2"	Black	8"	CP287582B-16Z
2-7/8"	2-1/2"	White	8"	CP287582W-16Z

*Order by
Product ID
Number
Only*

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Can't Find What You Need? Call Us!
Catalog Part Variations Available Upon Request.

Instalok

OD	NPS	O-RING	LENGTH	PRODUCT ID
3"		Black	4"	CP30042B-16Z
3"		White	4"	CP30042W-16Z
3"		Black	6"	CP30062B-16Z
3"		White	6"	CP30062W-16Z
3"		Black	8"	CP30082B-16Z
3"		White	8"	CP30082W-16Z
3-1/2"	3"	Black	4"	CP35042B-16Z
3-1/2"	3"	White	4"	CP35042W-16Z
3-1/2"	3"	Black	6"	CP35062B-16Z
3-1/2"	3"	White	6"	CP35062W-16Z
3-1/2"	3"	Black	8"	CP35082B-16Z
3-1/2"	3"	White	8"	CP35082W-16Z
4"	3-1/2"	Black	4"	CP40042B-16Z
4"	3-1/2"	White	4"	CP40042W-16Z
4"	3-1/2"	Black	6"	CP40062B-16Z
4"	3-1/2"	White	6"	CP40062W-16Z
4"	3-1/2"	Black	8"	CP40082B-16Z
4"	3-1/2"	White	8"	CP40082W-16Z

*Order by
Product ID
Number
Only*

Instalok Dust Caps

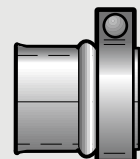
OD	NPS	O-RING	LENGTH	PRODUCT ID
1-1/2"		Black	3"	DC-150-B
1-3/4"		Black	3"	DC-175-B
2"		Black	3"	DC-200-B
2-1/4"		Black	3"	DC-225-B
2-1/2"		Black	3"	DC-250-B
3"		Black	3"	DC-300-B
4"	3-1/2"	Black	3"	DC-400-B

*Order by
Product ID
Number
Only*

INSTALOK™ Dust Cap Specifications

- 1-1/2" OD to 4" OD
- Utilizes the same unique clamping design as the INSTALOK Coupling
- Great for sealing exposed/unused material handling lines
- Non-permanent and completely reusable

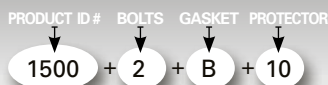
We also offer replacement O-rings, nuts, and bolts



Compression Couplings

To determine your part number when ordering:

Use **Product ID** plus **Bolts** plus **Gasket** plus **Protector**.



We Also Carry...

Replacement
Gaskets
Gasket Protectors
Static Strips
Nuts & Bolts

Please Call For Pricing
& Information!

Compression couplings are available with and without gasket protectors.

In the protector column:
11 = with gasket protector
10 = no gasket protector

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

SIZE	ID	NPS SIZE	METRIC	PRODUCT ID	BOLTS	GASKET	PROTECTOR	LENGTH
1-1/2"	1.500		38.1	1500	2	B	10	4
	1.500		38.1	1500	2	B	11	4
	1.500		38.1	1500	2	W	10	4
	1.500		38.1	1500	2	W	11	4
	1.500		38.1	1500	3	B	10	6
	1.500		38.1	1500	3	B	11	6
	1.500		38.1	1500	3	W	10	6
	1.500		38.1	1500	3	W	11	6
1-3/4"	1.750		44.45	1750	2	B	10	4
	1.750		44.45	1750	2	B	11	4
	1.750		44.45	1750	2	W	10	4
	1.750		44.45	1750	2	W	11	4
	1.750		44.45	1750	3	B	10	6
	1.750		44.45	1750	3	B	11	6
	1.750		44.45	1750	3	W	10	6
	1.750		44.45	1750	3	W	11	6
1-29/32"	1.900	1-1/2"	48.26	1900	2	B	10	4
	1.900	1-1/2"	48.26	1900	2	B	11	4
	1.900	1-1/2"	48.26	1900	2	W	10	4
	1.900	1-1/2"	48.26	1900	2	W	11	4
	1.900	1-1/2"	48.26	1900	3	B	10	6
	1.900	1-1/2"	48.26	1900	3	B	11	6
	1.900	1-1/2"	48.26	1900	3	W	10	6
	1.900	1-1/2"	48.26	1900	3	W	11	6
2"	2.000		50.8	2000	2	B	10	4
	2.000		50.8	2000	2	B	11	4
	2.000		50.8	2000	2	W	10	4
	2.000		50.8	2000	2	W	11	4
	2.000		50.8	2000	3	B	10	6
	2.000		50.8	2000	3	B	11	6
	2.000		50.8	2000	3	W	10	6
	2.000		50.8	2000	3	W	11	6
2-1/8"	2.125		53.975	2125	2	B	10	4
	2.125		53.975	2125	2	B	11	4
	2.125		53.975	2125	2	W	10	4
	2.125		53.975	2125	2	W	11	4
	2.125		53.975	2125	3	B	10	6
	2.125		53.975	2125	3	B	11	6
	2.125		53.975	2125	3	W	10	6
	2.125		53.975	2125	3	W	11	6
	2.125		53.975	2125	3	R	10	6
	2.125		53.975	2125	3	R	11	6
2-1/4"	2.250		57.15	2250	3	B	10	6
	2.250		57.15	2250	3	B	11	6
	2.250		57.15	2250	3	W	10	6
	2.250		57.15	2250	3	W	11	6

Can't Find What You Need? Call Us!
Catalog Part Variations Available Upon Request.

Compression Couplings

SIZE	ID	NPS SIZE	METRIC	PRODUCT ID	BOLTS	GASKET	PROTECTOR	LENGTH
2-3/8"	2.375	2"	60.325	2375	3	B	10	6
	2.375	2"	60.325	2375	3	B	11	6
	2.375	2"	60.325	2375	3	W	10	6
	2.375	2"	60.325	2375	3	W	11	6
	2.375	2"	60.325	2375	4	B	10	8
	2.375	2"	60.325	2375	4	B	11	8
	2.375	2"	60.325	2375	4	W	10	8
	2.375	2"	60.325	2375	4	W	11	8
2-1/2"	2.500		63.5	2500	2	B	10	4
	2.500		63.5	2500	2	B	11	4
	2.500		63.5	2500	2	W	10	4
	2.500		63.5	2500	2	W	11	4
	2.500		63.5	2500	3	B	10	6
	2.500		63.5	2500	3	B	11	6
	2.500		63.5	2500	3	R	10	6
	2.500		63.5	2500	3	R	11	6
	2.500		63.5	2500	3	W	10	6
	2.500		63.5	2500	3	W	11	6
	2.500		63.5	2500	4	B	10	8
	2.500		63.5	2500	4	B	11	8
	2.500		63.5	2500	4	W	10	8
	2.500		63.5	2500	4	W	11	8
2-7/8"	2.875	2.5"	73.025	2875	3	B	10	6
	2.875	2.5"	73.025	2875	3	B	11	6
	2.875	2.5"	73.025	2875	3	W	10	6
	2.875	2.5"	73.025	2875	3	W	11	6
3"	3.000		76.2	3000	2	B	10	4
	3.000		76.2	3000	2	B	11	4
	3.000		76.2	3000	2	W	10	4
	3.000		76.2	3000	2	W	11	4
	3.000		76.2	3000	3	B	10	6
	3.000		76.2	3000	3	B	11	6
	3.000		76.2	3000	3	W	10	6
	3.000		76.2	3000	3	W	11	6
	3.000		76.2	3000	3	R	10	6
	3.000		76.2	3000	3	R	11	6
	3.000		76.2	3000	4	B	10	8
	3.000		76.2	3000	4	B	11	8
	3.000		76.2	3000	4	W	10	8
	3.000		76.2	3000	4	W	11	8
3-1/2"	3.500	3	88.9	3500	3	B	10	6
	3.500	3	88.9	3500	3	B	11	6
	3.500	3	88.9	3500	3	W	10	6
	3.500	3	88.9	3500	3	W	11	6
	3.500	3	88.9	3500	4	B	10	8

Coupling Specifications

- 1-1/2" through 14" OD for tube
- 1-1/2" through 8" NPS for pipe
- Heavy 16 gauge outer shell on all couplings over 3-1/4" in diameter provides added strength and dimensional stability.
- G90 galvanized exterior coating provides superior corrosion resistance.
- Reinforcement bars are zinc plated steel to provide additional strength and stability.
- Grade 5 stress relieved bolts ensure durability.
- Industry compatible, precision die cut black neoprene gasket ensures a tight seal.
- Stainless steel strip guards against static electricity build-up.

Stainless steel compression couplings available upon request.

Stainless steel gasket protectors are also available.

Other gaskets:

White Nitrile
Red Rubber
Silicone
EPDM
Viton

Call for information!

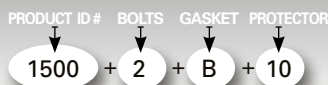
TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Compression Couplings

To determine your part number when ordering:

Use **Product ID** plus **Bolts** plus **Gasket** plus **Protector**.



We Also Carry...

Replacement
Gaskets
Gasket Protectors
Static Strips
Nuts & Bolts

Please Call For Pricing
& Information!

Compression couplings are available with and without gasket protectors.

In the protector column:

11 = with gasket protector

10 = no gasket protector

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

SIZE	ID	NPS SIZE	METRIC	PRODUCT ID	BOLTS	GASKET	PROTECTOR	LENGTH
3-1/2"	3.500	3	88.9	3500	4	B	11	8
	3.500	3	88.9	3500	4	W	10	8
	3.500	3	88.9	3500	4	W	11	8
4"	4.000	3.5	101.6	4000	2	B	10	4
	4.000	3.5	101.6	4000	2	B	11	4
	4.000	3.5	101.6	4000	2	W	10	4
	4.000	3.5	101.6	4000	2	W	11	4
	4.000	3.5	101.6	4000	3	B	10	6
	4.000	3.5	101.6	4000	3	B	11	6
	4.000	3.5	101.6	4000	3	R	10	6
	4.000	3.5	101.6	4000	3	R	11	6
	4.000	3.5	101.6	4000	3	W	10	6
	4.000	3.5	101.6	4000	3	W	11	6
	4.000	3.5	101.6	4000	4	B	10	8
	4.000	3.5	101.6	4000	4	B	11	8
4-1/2"	4.500	4	114.3	4500	2	B	10	4
	4.500	4	114.3	4500	2	B	11	4
	4.500	4	114.3	4500	2	W	10	4
	4.500	4	114.3	4500	2	W	11	4
	4.500	4	114.3	4500	3	B	10	6
	4.500	4	114.3	4500	3	B	11	6
	4.500	4	114.3	4500	3	W	10	6
	4.500	4	114.3	4500	3	W	11	6
	4.500	4	114.3	4500	4	B	10	8
	4.500	4	114.3	4500	4	B	11	8
	4.500	4	114.3	4500	4	W	10	8
	4.500	4	114.3	4500	4	W	11	8
5"	5.000		127	5000	2	B	10	4
	5.000		127	5000	2	B	11	4
	5.000		127	5000	2	W	10	4
	5.000		127	5000	2	W	11	4
	5.000		127	5000	3	B	10	6
	5.000		127	5000	3	B	11	6
	5.000		127	5000	3	R	10	6
	5.000		127	5000	3	R	11	6
	5.000		127	5000	3	W	10	6
	5.000		127	5000	3	W	11	6
	5.000		127	5000	4	B	10	8
	5.000		127	5000	4	B	11	8
	5.000		127	5000	4	W	10	8
	5.000		127	5000	4	W	11	8
5-9/16"	5.563	5	141.3	5563	3	B	10	6
	5.563	5	141.3	5563	3	B	11	6
	5.563	5	141.3	5563	3	W	10	6
	5.563	5	141.3	5563	3	W	11	6

Can't Find What You Need? Call Us!

Catalog Part Variations Available Upon Request.

Compression Couplings

SIZE	ID	NPS SIZE	METRIC	PRODUCT ID	BOLTS	GASKET	PROTECTOR	LENGTH
5-9/16"	5.563	5	141.3	5563	4	B	10	8
	5.563	5	141.3	5563	4	B	11	8
	5.563	5	141.3	5563	4	W	10	8
	5.563	5	141.3	5563	4	W	11	8
6"	6.000		152.4	6000	2	B	10	4
	6.000		152.4	6000	2	B	11	4
	6.000		152.4	6000	2	W	10	4
	6.000		152.4	6000	2	W	11	4
	6.000		152.4	6000	3	B	10	6
	6.000		152.4	6000	3	B	11	6
	6.000		152.4	6000	3	R	10	6
	6.000		152.4	6000	3	R	11	6
	6.000		152.4	6000	3	W	10	6
	6.000		152.4	6000	3	W	11	6
	6.000		152.4	6000	4	B	10	8
	6.000		152.4	6000	4	B	11	8
	6.000		152.4	6000	4	R	10	8
	6.000		152.4	6000	4	R	11	8
	6.000		152.4	6000	4	W	10	8
	6.000		152.4	6000	4	W	11	8
	6.000		152.4	6000	5	B	10	10
	6.000		152.4	6000	5	B	11	10
	6.000		152.4	6000	5	W	10	10
	6.000		152.4	6000	5	W	11	10
6-5/8"	6.625	6	168.3	6625	3	B	10	6
	6.625	6	168.3	6625	3	B	11	6
	6.625	6	168.3	6625	3	W	10	6
	6.625	6	168.3	6625	3	W	11	6
	6.625	6	168.3	6625	4	B	10	8
	6.625	6	168.3	6625	4	B	11	8
	6.625	6	168.3	6625	4	W	10	8
	6.625	6	168.3	6625	4	W	11	8
	6.625	6	168.3	6625	5	B	10	10
	6.625	6	168.3	6625	5	B	11	10
	6.625	6	168.3	6625	5	W	10	10
	6.625	6	168.3	6625	5	W	11	10
7"	7.000		177.8	7000	3	B	10	8
	7.000		177.8	7000	3	B	11	8
	7.000		177.8	7000	3	W	10	8
	7.000		177.8	7000	3	W	11	8
	7.000		177.8	7000	4	B	10	10
	7.000		177.8	7000	4	B	11	10
	7.000		177.8	7000	4	W	10	10
	7.000		177.8	7000	4	W	11	10
8"	8.000		203.2	8000	2	B	10	6
	8.000		203.2	8000	2	B	11	6

Coupling Specifications

- 1-1/2" through 14" OD for tube
- 1-1/2" through 8" NPS for pipe
- Heavy 16 gauge outer shell on all couplings over 3-1/4" in diameter provides added strength and dimensional stability.
- G90 galvanized exterior coating provides superior corrosion resistance.
- Reinforcement bars are zinc plated steel to provide additional strength and stability.
- Grade 5 stress relieved bolts ensure durability.
- Industry compatible, precision die cut black neoprene gasket ensures a tight seal.
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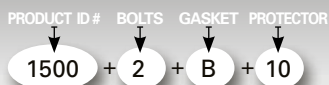
TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Methods of Joining

To determine your part number when ordering:

Use **Product ID** plus **Bolts** plus **Gasket** plus **Protector**.



We Also Carry...

Replacement
Gaskets
Gasket Protectors
Static Strips
Nuts & Bolts

Please Call For Pricing
& Information!

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SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Compression Couplings

SIZE	ID	NPS SIZE	METRIC	PRODUCT ID	BOLTS	GASKET	PROTECTOR	LENGTH
8"	8.000		203.2	8000	2	W	10	6
	8.000		203.2	8000	2	W	11	6
	8.000		203.2	8000	3	B	10	8
	8.000		203.2	8000	3	B	11	8
	8.000		203.2	8000	3	R	10	8
	8.000		203.2	8000	3	R	11	8
	8.000		203.2	8000	3	W	10	8
	8.000		203.2	8000	3	W	11	8
	8.000		203.2	8000	4	B	10	10
	8.000		203.2	8000	4	B	11	10
	8.000		203.2	8000	4	R	10	10
	8.000		203.2	8000	4	R	11	10
	8.000		203.2	8000	4	W	10	10
	8.000		203.2	8000	4	W	11	10
	8.000		203.2	8000	5	B	10	12
	8.000		203.2	8000	5	B	11	12
8-5/8"	8.625	8	219.1	8625	3	B	10	8
	8.625	8	219.1	8625	3	W	10	8
	8.625	8	219.1	8625	4	B	10	10
	8.625	8	219.1	8625	4	W	10	10
9"	9.000		228.6	9000	3	B	10	8
10"	10.000		254.0	10000	3	B	10	8
	10.000		254.0	10000	3	B	11	8
	10.000		254.0	10000	3	R	10	8
	10.000		254.0	10000	3	R	11	8
	10.000		254.0	10000	3	W	10	8
	10.000		254.0	10000	3	W	11	8
	10.000		254.0	10000	4	B	10	10
	10.000		254.0	10000	4	B	11	10
	10.000		254.0	10000	4	R	10	10
	10.000		254.0	10000	4	R	11	10
	10.000		254.0	10000	4	W	10	10
	10.000		254.0	10000	4	W	11	10
	10.000		254.0	10000	5	B	10	12
	10.000		254.0	10000	5	B	11	12
12"	12.000		304.8	12000	3	B	10	8
	12.000		304.8	12000	3	B	11	8
	12.000		304.8	12000	3	W	10	8
	12.000		304.8	12000	4	B	10	10
	12.000		304.8	12000	4	B	11	10
	12.000		304.8	12000	4	W	10	10
	12.000		304.8	12000	4	W	11	10
	12.000		304.8	12000	5	B	10	12
	12.000		304.8	12000	5	B	11	12

Can't Find What You Need? Call Us!

Catalog Part Variations Available Upon Request.

Compression Couplings

SIZE	ID	NPS SIZE	METRIC	PRODUCT ID	BOLTS	GASKET	PROTECTOR	LENGTH
14"	14.000		355.6	14000	4	B	10	10
	14.000		355.6	14000	4	B	11	10
	14.000		355.6	14000	4	W	10	10
	14.000		355.6	14000	4	W	11	10
	14.000		355.6	14000	5	B	10	12

Coupling Specifications

- 1-1/2" through 14" OD for tube
- 1-1/2" through 8" NPS for pipe
- Heavy 16 gauge outer shell on all couplings over 3-1/4" in diameter provides added strength and dimensional stability.
- G90 galvanized exterior coating provides superior corrosion resistance.
- Reinforcement bars are zinc plated steel to provide additional strength and stability.
- Grade 5 stress relieved bolts ensure durability.
- Industry compatible, precision die cut black neoprene gasket ensures a tight seal.
- Stainless steel strip guards against static electricity build-up.

Stainless steel compression couplings available upon request.

Stainless steel gasket protectors are also available.

Other gaskets:

White Nitrile
Red Rubber
Silicone
EPDM
Viton

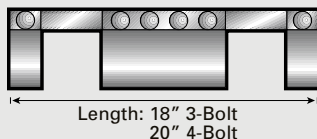
Call for information!

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Eliminators

Order by
Product ID Number Only



Eliminator Specifications

The Eliminator, with its extra holding power, is ideal for higher pressure systems. Bands at either end of the Eliminator provide metal to metal "gripping" to eliminate end pull.

- 2" to 12" OD for Tube
- 2" to 12" NPS for Pipe
- Standard gasket is black neoprene

Kits are available to convert existing couplings into eliminators (see next section)

Other gaskets:

White Nitrile
Red Rubber
Silicone
EPDM
Viton

Call for information!

SPECIAL SERVICES

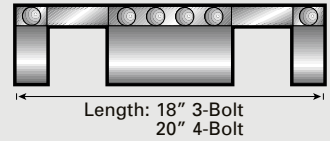
- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

OD	NPS	LENGTH	BOLTS	GASKET	PRODUCT ID
2"		18"	3	Black Gasket	20003B10EL
2"		18"	3	White Gasket	20003W10EL
2-3/8"	2"	18"	3	Pipe Black Gasket	23753B10EL
2-3/8"	2"	18"	3	Pipe White Gasket	23753W10EL
2-1/2"		18"	3	Black Gasket	25003B10EL
2-1/2"		18"	3	White Gasket	25003W10EL
2-7/8"	2-1/2"	18"	3	Pipe Black Gasket	28753B10EL
2-7/8"	2-1/2"	18"	3	Pipe White Gasket	28753W10EL
3"		18"	3	Black Gasket	30003B10EL
3"		18"	3	White Gasket	30003W10EL
3"		20"	4	Black Gasket	30004B10EL
3"		20"	4	White Gasket	30004W10EL
3-1/2"	3"	18"	3	Tube/Pipe Black Gasket	35003B10EL
3-1/2"	3"	18"	3	Tube/Pipe White Gasket	35003W10EL
3-1/2"	3"	20"	4	Tube/Pipe Black Gasket	35004B10EL
3-1/2"	3"	20"	4	Tube/Pipe White Gasket	35004W10EL
4"	3-1/2"	18"	3	Black Gasket	40003B10EL
4"	3-1/2"	18"	3	White Gasket	40003W10EL
4"	3-1/2"	20"	4	Black Gasket	40004B10EL
4"	3-1/2"	20"	4	White Gasket	40004W10EL
4-1/2"	4"	18"	3	Pipe Black Gasket	45003B10EL
4-1/2"	4"	18"	3	Pipe White Gasket	45003W10EL
4-1/2"	4"	20"	4	Pipe Black Gasket	45004B10EL
4-1/2"	4"	20"	4	Pipe White Gasket	45004W10EL
5"		18"	3	5" Black Gasket	50003B10EL
5"		18"	3	5" White Gasket	50003W10EL
5"		20"	4	5" White Gasket	50004W10EL
5-9/16"	5"	18"	3	5" Pipe Black Gasket	55633B10EL
5-9/16"	5"	18"	3	5" Pipe White Gasket	55633W10EL
5-9/16"	5"	20"	4	5" Pipe Black Gasket	55634B10EL
5-9/16"	5"	20"	4	5" Pipe White Gasket	55634W10EL
6"		18"	3	Black Gasket	60003B10EL
6"		18"	3	White Gasket	60003W10EL
6"		20"	4	Black Gasket	60004B10EL
6"		20"	4	White Gasket	60004W10EL
6-5/8"	6"	18"	3	Pipe Black Gasket	66253B10EL
6-5/8"	6"	18"	3	Pipe White Gasket	66253W10EL
6-5/8"	6"	20"	4	Pipe Black Gasket	66254B10EL
6-5/8"	6"	20"	4	Pipe White Gasket	66254W10EL
8"		18"	3	Black Gasket	80003B10EL
8"		18"	3	White Gasket	80003W10EL
8"		20"	4	Black Gasket	80004B10EL
8"		20"	4	White Gasket	80004W10EL
8-5/8"	8"	18"	3	Pipe Black Gasket	86253B10EL

Eliminators

Order by
Product ID Number Only

OD	NPS	LENGTH	BOLTS	GASKET	PRODUCT ID
8-5/8"	8"	18"	3	Pipe White Gasket	86253W10EL
8-5/8"	8"	20"	4	Pipe Black Gasket	86254B10EL
8-5/8"	8"	20"	4	Pipe White Gasket	86254W10EL
10"		18"	3	Black Gasket	100003B10EL
10"		18"	3	White Gasket	100003W10EL
10"		20"	4	Black Gasket	100004B10EL
10"		20"	4	White Gasket	100004W10EL
10-3/4"	10"	18"	3	Pipe Black Gasket	107503B10EL
10-3/4"	10"	18"	3	Pipe White Gasket	107503W10EL
10-3/4"	10"	20"	4	Pipe Black Gasket	107504B10EL
10-3/4"	10"	20"	4	Pipe White Gasket	107504W10EL
12"		18"	3	Black Gasket	120003B10EL
12"		18"	3	White Gasket	120003W10EL
12"		20"	4	White Gasket	120004W10EL
12"		20"	4	Black Gasket	120004B10EL
12-3/4"	12"	18"	3	Pipe Black Gasket	127503B10EL
12-3/4"	12"	18"	3	Pipe White Gasket	127503W10EL
12-3/4"	12"	20"	4	Pipe Black Gasket	127504B10EL
12-3/4"	12"	20"	4	Pipe White Gasket	127504W10EL



Eliminator Specifications

The Eliminator, with its extra holding power, is ideal for higher pressure systems. Bands at either end of the Eliminator provide metal to metal "gripping" to eliminate end pull.

- 2" to 12" OD for Tube
- 2" to 12" NPS for Pipe
- Standard gasket is black neoprene

Kits are available to convert existing couplings into eliminators

Other gaskets:

White Nitrile
Red Rubber
Silicone
EPDM
Viton

Call for information!

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Eliminator Kits

OD	NPS	LENGTH	BOLTS	PRODUCT ID
2"		18"	3	20003ELK
2-3/8"	2"	18"	3	23753ELK
2-1/2"		18"	3	25003ELK
2-7/8"	2-1/2"	18"	3	28753ELK
3"		18"	3	30003ELK
3"		20"	4	30004ELK
3-1/2"	3"	18"	3	35003ELK
3-1/2"	3"	20"	4	35004ELK
4"	3-1/2"	18"	3	40003ELK
4"	3-1/2"	20"	4	40004ELK
4-1/2"	4"	18"	3	45003ELK
4-1/2"	4"	20"	4	45004ELK
5"		18"	3	50003ELK
5"		20"	4	50004ELK
5-9/16"	5"	18"	3	55633ELK
5-9/16"	5"	20"	4	55634ELK
6"		18"	3	60003ELK
6"		20"	4	60004ELK
6-5/8"	6"	18"	3	66253ELK
6-5/8"	6"	20"	4	66254ELK
8"		18"	3	80003ELK
8"		20"	4	80004ELK
8-5/8"	8"	18"	3	86253ELK
8-5/8"	8"	20"	4	86254ELK
10"		18"	3	100003ELK
10"		20"	4	100004ELK
10-3/4"	10"	18"	3	107503ELK
10-3/4"	10"	20"	4	107504ELK
12"		18"	3	120003ELK
12"		20"	4	120004ELK
12-3/4"	12"	18"	3	127503ELK
12-3/4"	12"	20"	4	127504ELK

Order by
Product ID Number Only

Eliminator Kit Specifications

Eliminator Kits are used to convert existing compression couplings into eliminators. This conversion, when complete, gives you the same benefits as our Standard Eliminators.

Call for information!

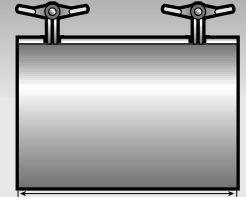
SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Super Grips

OD	NPS	LENGTH	DESCRIPTION	PRODUCT ID
1-1/2"		4"	1-Clamp	SG-15501
1-21/32"	1-1/4"	4"	Pipe 1-Clamp	SG-16601
1-3/4"		4"	1-Clamp	SG-17501
1-29/32"	1-1/2"	4"	Pipe 1-Clamp	SG-19001
2"		4"	1-Clamp	SG-20001
2-1/8"		4"	1-Clamp	SG-21251
2-1/4"		4"	1-Clamp	SG-22501
2-3/8"	2"	4"	Pipe 1-Clamp	SG-23751
2-1/2"		4"	1-Clamp	SG-25001
2-3/4"		4"	1-Clamp	SG-27501
2-7/8"	2-1/2"	4"	Pipe 1-Clamp	SG-28751
3"		4"	1-Clamp	SG-30001
3-1/4"		4"	1-Clamp	SG-32501
3-1/2"	3"	4"	Tube/Pipe 1-Clamp	SG-35001
3-3/4"		4"	1-Clamp	SG-37501
4"	3-1/2"	4"	Tube/Pipe 1-Clamp	SG-40001
4"	3-1/2"	9-1/2"	Tube/Pipe 2-Clamp	SG-40002
4-1/4"		4"	1-Clamp	SG-42501
4-1/2"	4"	4"	Tube/Pipe 1-Clamp	SG-45001
4-1/2"	4"	9-1/2"	Tube/Pipe 2-Clamp	SG-45002
5"		4"	1-Clamp	SG-50001
5"		9-1/2"	2-Clamp	SG-50002
5-9/16"	5"	4"	Pipe 1-Clamp	SG-55631
6"		4"	1-Clamp	SG-60001
6"		9-1/2"	2-Clamp	SG-60002
6-1/4"		4"	1-Clamp	SG-62501
6-5/8"	6"	4"	Pipe 1-Clamp	SG-66251
6-5/8"	6"	9-1/2"	Pipe 2-Clamp	SG-66252
8"		4"	1-Clamp	SG-80001
8"		9-1/2"	2-Clamp	SG-80002
8-5/8"	8"	4"	Pipe 1-Clamp	SG-86251
8-5/8"	8"	9-1/2"	Pipe 2-Clamp	SG-86252
9"		4"	1-Clamp	SG-90001
10"		4"	1-Clamp	SG-100001
10"		9-1/2"	2-Clamp	SG-100002
10-3/4"	10"	4"	Pipe 1-Clamp	SG-107501
10-3/4"	10"	9-1/2"	Pipe 2-Clamp	SG-107502
12"		4"	1-Clamp	SG-120001
12"		9-1/2"	2-Clamp	SG-120002
12-3/4"	12"	4"	Pipe 1-Clamp	SG-127501
12-3/4"	12"	9-1/2"	Pipe 2-Clamp	SG-127502

Order by
Product ID
Number Only



4" lengths are single handle

9-1/2" lengths are
2 handle

Super Grip Specifications

The Super Grip was devised as a quick coupler for dry bulk transport tank tubing. This unique coupling slides onto the tubing or wraps around it and is tightened by hand in seconds, and it provides better support than rubber hose and band clamps. Our exclusive fail-safe clamping action keeps its hold despite expansion, contraction and vibration. And because it's made of 100% Stainless Steel, it will not corrode due to harsh weather or road conditions.

- 100% Stainless steel with stainless steel grounding strip standard
- FDA approved gum rubber gasket comes standard
- 1-1/2" Through 12" OD for tube
- 1-1/4" Through 12" NPS for pipe

TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Methods of Joining

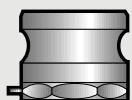
Order by Product ID Number

Adapter & Coupler Specifications

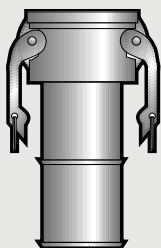
- 1-1/2" through 6"
- Aluminum & Stainless
- 8" available upon request

Security chains available

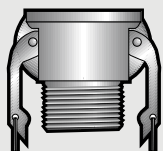
Other sizes and materials available. Please Call!



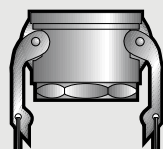
**Part A - Adapter X
Female NPT Thread**



**Part C - Coupler X
Hose Shank**



**Part B - Coupler X
Male NPT Thread**



**Part D - Coupler X
Female NPT
Thread**

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Standard Part A Adapter X Female NPT Thread

OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.25	A150FAL
1-1/2"	Stainless Steel	0.81	A150FSS
2"	Aluminum	0.37	A200FAL
2"	Stainless Steel	1.06	A200FSS
2-1/2"	Aluminum	0.56	A250FAL
2-1/2"	Stainless Steel	1.56	A250FSS
3"	Aluminum	0.75	A300FAL
3"	Stainless Steel	2.0	A300FSS
4"	Aluminum	1.56	A400FAL
4"	Stainless Steel	4.12	A400FSS
5"	Aluminum	1.81	A500FAL
6"	Aluminum	2.44	A600FAL

Standard Part C Coupler X Hose Shank

OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.78	C150FAL
1-1/2"	Stainless Steel	1.84	C150FSS
2"	Aluminum	1.16	C200FAL
2"	Stainless Steel	2.31	C200FSS
2-1/2"	Aluminum	1.56	C250FAL
2-1/2"	Stainless Steel	3.12	C250FSS
3"	Aluminum	2	C300FAL
3"	Stainless Steel	4.87	C300FSS
4"	Aluminum	3.37	C400FAL
4"	Stainless Steel	8.25	C400FSS
5"	Aluminum	4.19	C500FAL
6"	Aluminum	6.06	C600FAL

Standard Part B Coupler X Male NPT Thread

OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.75	B150FAL
1-1/2"	Stainless Steel	1.56	B150FSS
2"	Aluminum	0.94	B200FAL
2"	Stainless Steel	2.06	B200FSS
2-1/2"	Aluminum	1.25	B250FAL
2-1/2"	Stainless Steel	2.94	B250FSS
3"	Aluminum	1.75	B300FAL
3"	Stainless Steel	4	B300FSS
4"	Aluminum	2.5	B400FAL
4"	Stainless Steel	6.5	B400FSS
5"	Aluminum	3.75	B500FAL
6"	Aluminum	5.37	B600FAL

Standard Part D Coupler X Female NPT Thread

OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.84	D150FAL
1-1/2"	Stainless Steel	1.81	D150FSS
2"	Aluminum	1	D200FAL
2"	Stainless Steel	2.37	D200FSS
2-1/2"	Aluminum	1.41	D250FAL
2-1/2"	Stainless Steel	3.16	D250FSS
3"	Aluminum	1.78	D300FAL
3"	Stainless Steel	4.09	D300FSS
4"	Aluminum	2.81	D400FAL
4"	Stainless Steel	7	D400FSS
5"	Aluminum	4.37	D500FAL
6"	Aluminum	6	D600FAL

Order by Product ID Number

Standard Part E Adapter X Hose Shank

OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.37	E150FAL
1-1/2"	Stainless Steel	1.65	E150FSS
2"	Aluminum	0.84	E200FAL
2"	Stainless Steel	2.75	E200FSS
2-1/2"	Aluminum	0.91	E250FAL
2-1/2"	Stainless Steel	3.5	E250FSS
3"	Aluminum	1.47	E300FAL
3"	Stainless Steel	4.06	E300FSS
4"	Aluminum	2.5	E400FAL
4"	Stainless Steel	7.81	E400FSS
5"	Aluminum	2.69	E500FAL
6"	Aluminum	4.56	E600FAL

Standard Part V Coupler Dust Cap

OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.81	V150FAL
1-1/2"	Stainless Steel	1.5	V150FSS
2"	Aluminum	0.94	V200FAL
2"	Stainless Steel	2.06	V200FSS
2-1/2"	Aluminum	1.19	V250FAL
2-1/2"	Stainless Steel	2.84	V250FSS
3"	Aluminum	1.78	V300FAL
3"	Stainless Steel	3.75	V300FSS
4"	Aluminum	2.5	V400FAL
4"	Stainless Steel	5.31	V400FSS
5"	Aluminum	3.19	V500FAL
6"	Aluminum	5.19	V600FAL

Standard Part F Adapter X Male NPT Thread

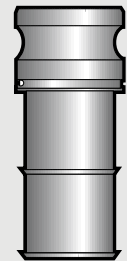
OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.5	F150FAL
1-1/2"	Stainless Steel	1.28	F150FSS
2"	Aluminum	0.53	F200FAL
2"	Stainless Steel	1.75	F200FSS
2-1/2"	Aluminum	0.81	F250FAL
2-1/2"	Stainless Steel	3.25	F250FSS
3"	Aluminum	1.37	F300FAL
3"	Stainless Steel	4.5	F300FSS
4"	Aluminum	2.28	F400FAL
4"	Stainless Steel	7	F400FSS
5"	Aluminum	2.72	F500FAL
6"	Aluminum	4.31	F600FAL

Standard Part W Adapter Dust Plug

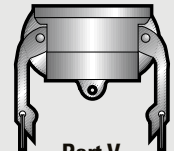
OD	MATERIAL	WEIGHT	PRODUCT ID
1-1/2"	Aluminum	0.22	W150FAL
1-1/2"	Stainless Steel	1	W150FSS
2"	Aluminum	0.34	W200FAL
2"	Stainless Steel	1.44	W200FSS
2-1/2"	Aluminum	0.44	W250FAL
2-1/2"	Stainless Steel	2	W250FSS
3"	Aluminum	0.87	W300FAL
3"	Stainless Steel	2.62	W300FSS
4"	Aluminum	1.37	W400FAL
4"	Stainless Steel	5.25	W400FSS
5"	Aluminum	1.5	W500FAL
6"	Aluminum	2.31	W600FAL

Adapter & Coupler Specifications

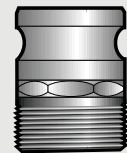
- 1-1/2" through 6"
- Aluminum & Stainless
- Security chains available**
- Other sizes and materials available. Please Call!**



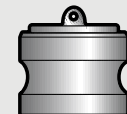
**Part E - Adapter X
Hose Shank**



**Part V
Coupler Dust Cap**



**Part F - Adapter X
Male NPT Thread**



**Part W
Adapter Dust Plug**

Why Buy Our Cam & Groove Parts?

- Pressure tested with published ratings
- Will handle full vacuum applications
- **All sizes, except 5" & 8" comply with MIL Spec A-A-59326**
Compliance to this specification allows industry interchangeability

Please Call For Pricing & Information!

TERMINOLOGY

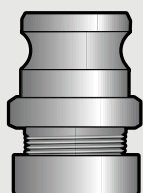
- CLR** = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

All reference dimensions are nominal.

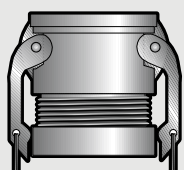
Methods of Joining

Compression Nut Quick Adapters & Couplers

- Designed for quick assembly, with a compression nut, to 1-1/2" to 3" tubing.
- Aluminum with Buna Gasket



Part FC Adapter



Part BC Coupler

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Order by Product ID Number

Part BC - Compression Nut Quick Couplers

Coupler X Tubing Fitting

OD	MATERIAL	PRODUCT ID
1-1/2"	Aluminum	BC150AL
2"	Aluminum	BC200AL
2-1/2"	Aluminum	BC250AL
3"	Aluminum	BC300AL

Part FC - Compression Nut Quick Adapters

Adapter X Tubing Fitting

OD	MATERIAL	PRODUCT ID
1-1/2"	Aluminum	FC150AL
2"	Aluminum	FC200AL
2-1/2"	Aluminum	FC250AL
3"	Aluminum	FC300AL

Security Chains

Brass Chain With Hooks or Rings For Standard Cam & Groove

OD	MATERIAL	CHAIN ENDS	PRODUCT ID
6"	0.25	Hook	BRCHAIN6H
6"	0.25	Ring	BRCHAIN6R
12"	0.5	Hook	BRCHAIN12H
12"	0.5	Ring	BRCHAIN12R

Why Buy Our Cam & Groove Parts?

- Pressure tested with published ratings
- Will handle full vacuum applications
- **All sizes, except 5" & 8" comply with MIL Spec A-A-59326**
Compliance to this specification allows industry interchangeability

Please Call For Pricing & Information!

Order by Product ID Number

Tube Quick Adapters

OD	GAUGE	PRODUCT ID
2"	16	AWS200AL-16A
2"	14	AWS200AL-14A
2"	11	AWS200AL-11A
2-1/2"	16	AWS250AL-16A
2-1/2"	14	AWS250AL-14A
2-1/2"	11	AWS250AL-11A
3"	16	AWS300AL-16A
3"	14	AWS300AL-14A
3"	11	AWS300AL-11A
4"	16	AWS400AL-16A
4"	14	AWS400AL-14A
4"	11	AWS400AL-11A
5"	14	AWS500AL-14A
5"	11	AWS500AL-11A
6"	14	AWS600AL-14A
6"	11	AWS600AL-11A

Tube Quick Couplers

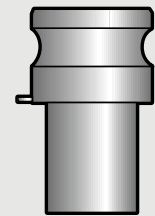
OD	GAUGE	PRODUCT ID
2"	16	DWS200AL-16A
2"	14	DWS200AL-14A
2"	11	DWS200AL-11A
2-1/2"	16	DWS250AL-16A
2-1/2"	14	DWS250AL-14A
2-1/2"	11	DWS250AL-11A
3"	16	DWS300AL-16A
3"	14	DWS300AL-14A
3"	11	DWS300AL-11A
4"	16	DWS400AL-16A
4"	14	DWS400AL-14A
4"	11	DWS400AL-11A
5"	14	DWS500AL-14A
5"	11	DWS500AL-11A
6"	14	DWS600AL-14A
6"	11	DWS600AL-11A

Specifications

Our Quick Adapter (AWS) and Coupler (DWS) are welded to a short length of tube or pipe for easy installation or dismantling.

- 2" through 6" OD, 16, 14, 11 Gauge Stubs
- 2" through 6" NPS, Schedule 10, 40 Stubs (SCH 5 available)
- Aluminum

Security chains available



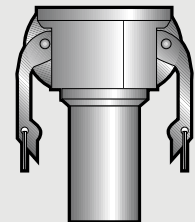
Part AWS Adapter

Pipe Quick Adapters

OD	SCHEDULE	PRODUCT ID
2"	10	AWSP200AL-10A
2"	40	AWSP200AL-40A
3"	10	AWSP300AL-10A
3"	40	AWSP300AL-40A
4"	10	AWSP400AL-10A
4"	40	AWSP400AL-40A
5"	10	AWSP500AL-10A
5"	40	AWSP500AL-40A
6"	10	AWSP600AL-10A
6"	40	AWSP600AL-40A

Pipe Quick Couplers

OD	SCHEDULE	PRODUCT ID
2"	10	DWSP200AL-10A
2"	40	DWSP200AL-40A
3"	10	DWSP300AL-10A
3"	40	DWSP300AL-40A
4"	10	DWSP400AL-10A
4"	40	DWSP400AL-40A
5"	10	DWSP500AL-10A
5"	40	DWSP500AL-40A
6"	10	DWSP600AL-10A
6"	40	DWSP600AL-40A



Part DWS Coupler

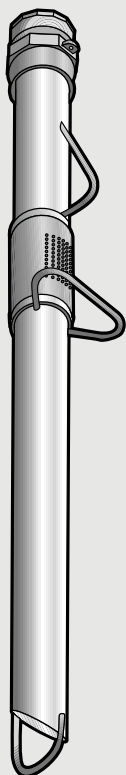
TERMINOLOGY

CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

All reference dimensions are nominal.

Wand Specifications

- Adjustable air relief is constructed of durable PVC
- Premium wands come with handles and end protectors
- Sizes range from 1-1/2" OD to 4" OD
- Available in Aluminum and Stainless Steel



Order by Product ID Number

Premium Vacuum Gaylord Wands

Without Cam and Groove Coupling

OD	GAUGE	LENGTH	MATERIAL	PRODUCT ID
1-1/2"	11	51"	Aluminum	11VW150A
1-1/2"	14	51"	Stainless	14VW150S
2"	11	51"	Aluminum	11VW200A
2"	14	51"	Stainless	14VW200S
2-1/2"	11	51"	Aluminum	11VW250A
2-1/2"	14	51"	Stainless	14VW250S
3"	11	51"	Aluminum	11VW300A
3"	14	51"	Stainless	14VW300S
4"	11	51"	Aluminum	11VW400A
4"	14	51"	Stainless	14VW400S

With Cam and Groove Coupling

OD	GAUGE	LENGTH	MATERIAL	PRODUCT ID
1-1/2"	11	57	Aluminum	11VW150A - CG
1-1/2"	14	57	Stainless	14VW150S - CG
2"	11	57	Aluminum	11VW200A - CG
2"	14	57	Stainless	14VW200S - CG
2-1/2"	11	57	Aluminum	11VW250A - CG
2-1/2"	14	57	Stainless	14VW250S - CG
3"	11	57	Aluminum	11VW300A - CG
3"	14	57	Stainless	14VW300S - CG
4"	11	57	Aluminum	11VW400A - CG
4"	14	57	Stainless	14VW400S - CG

Basic Vacuum Gaylord Wands

OD	GAUGE	LENGTH	MATERIAL	PRODUCT ID
1-1/2"	11	50"	Aluminum	11VWB150A
2"	11	50"	Aluminum	11VWB200A
2-1/2"	11	50"	Aluminum	11VWB250A
3"	11	50"	Aluminum	11VWB300A

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Can't Find What You Need? Call Us!
Catalog Part Variations Available Upon Request.

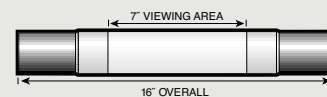
Order by Product ID Number

*Tube Sight Glasses

OD	GAUGE	TUBE ENDS	PRODUCT ID
1-1/2"	16	Alumium	150016ALUSG
2"	16	Alumium	200016ALUSG
2"	11	Alumium	200011ALUSG
2-1/4"	16	Alumium	225016ALUSG
2-1/2"	16	Alumium	250016ALUSG
2-1/2"	11	Alumium	250011ALUSG
3"	16	Alumium	300016ALUSG
3"	11	Alumium	300011ALUSG
3-1/2"	16	Alumium	350016ALUSG
3-1/2"	11	Alumium	350011ALUSG
4"	16	Alumium	400016ALUSG
4"	11	Alumium	400011ALUSG
4-1/2"	16	Alumium	450016ALUSG
4-1/2"	11	Alumium	450011ALUSG
5"	14	Alumium	500014ALUSG
5"	11	Alumium	500011ALUSG
6"	11	Alumium	600011ALUSG

*Pipe Sight Glasses

OD	GAUGE	TUBE ENDS	PRODUCT ID
2"	40	Aluminum	200040APUSG
2"	40	Carbon	200040CSUSG
2-1/2"	40	Aluminum	250040APUSG
2-1/2"	40	Carbon	250040CSUSG
3"	40	Aluminum	300040APUSG
3"	40	Carbon	300040CSUSG
3-1/2"	40	Aluminum	350040ASUSG
3-1/2"	40	Carbon	350040CPUSG
4"	40	Aluminum	400040ASUSG
4"	40	Carbon	400040CPUSG
5"	40	Aluminum	500040ASUSG
5"	40	Carbon	500040CPUSG
6"	40	Aluminum	600040APUSG
6"	40	Carbon	600040CSUSG



Sight Glasses

The Acrylic Sight Glass (ASG) allows you to see at a glance the material flowing through your conveying system. It's precision made by aligning the acrylic with the tube or pipe to insure smooth material flow with no turbulence. A stainless steel ground strip is included to eliminate static build up. The ASG is easy to install in new or existing lines by using two Couplings.

- Tube or pipe ends are made of carbon steel or aluminum. Stainless or Galvanized are available upon request.
- Wall Thickness:
Tube - 16, 14 & 11 Gauge
Pipe - Schedule 5, 10, 40 & 80
- Overall Length is 16"
- 7" Viewing Area

Special sight glasses are available upon request

***NOT RECOMMENDED FOR APPLICATIONS OVER 180° (F)**

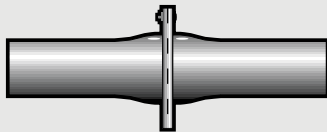
TERMINOLOGY

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MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

Blast Gate Specifications

Blast Gate consists of an aluminum, full gate, casting with a zinc-coated (galvanized) slide and aluminum stubs (straight ends).

- Available in 2" - 8" Tube OD Sizes



Order by Product ID Number

*Blast Gate Assemblies

OD	STUB GAUGE	STUB LENGTH	WEIGHT	PRODUCT ID
2"	16	6"	0.99	BG162000ZA
2-1/8"	16	6"	1.02	BG162125ZA
2-1/2"	16	6"	1.05	BG162500ZA
3"	16	6"	1.5	BG163000ZA
3-1/2"	16	6"	1.91	BG163500ZA
4"	16	6"	2.49	BG164000ZA
4-1/2"	16	6"	2.58	BG164500ZA
5"	14	7"	3.55	BG145000ZA
6"	14	7"	4.4	BG146000ZA
8"	14	8"	6.62	BG148000ZA

***NOT AIR-TIGHT**

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Metal Flexible Hose

Please call with specifications and we'll be happy to quote!

Here is the information we will need to accurately quote metal flex hose:

- **S**ize (ID)
- **T**emperature required
- **A**pplication
- **M**aterial conveyed
- **P**ressure
- **E**nd treatments
- **D**irection of material flow



Specifications

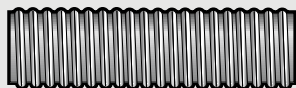
- 1-1/2" - 14" ID sizes are made from stainless or galvanized steel
- Variety of material thicknesses are available
- Unlined (rough bore) or lined (smooth bore)
- Packing options include cotton, stainless steel wire, apyrous, elastomeric (gas tight) and silicone
- We offer a wide selection of end fittings, including Cam & Groove, Flanges, Tube Stubs and Pipe Nipples
- Raw coils available in multiples of 25'; shorter lengths available as custom assemblies

TERMINOLOGY

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MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

PVC Specifications

- Counter clockwise spiral
- Service temp. Range: -4°F to 150° F



Order by Product ID Number

Standard Duty PVC Clear Food Grade Hose

ID	STD LENGTH (FT)	WEIGHT PER FOOT (LBS/FT)	TOTAL WEIGHT (LBS)	PRODUCT ID
1-1/2"	100	0.32	32	EHC150-100
1-1/2"	25	0.32	8	EHC150-25
2"	100	0.50	50	EHC200-100
2"	125	0.50	12.5	EHC200-25
2-1/2"	100	0.73	73	EHC250-100
2-1/2"	25	0.73	18.25	EHC250-25
3"	100	1.04	104	EHC300-100
3"	25	1.04	26	EHC300-25
3-1/2"	100	1.47	147	EHC350-100
4"	100	1.65	165	EHC400-100
4"	10	1.65	16.5	EHC400-10

Standard Duty PVC Clear Food Grade Hose With Static Wire

ID	STD LENGTH (FT)	WEIGHT PER FOOT (LBS/FT)	TOTAL WEIGHT (LBS)	PRODUCT ID
1-1/2"	100	0.31	31	EHCE150-100
1-1/2"	25	0.31	7.75	EHCE150-25
2"	100	0.60	60	EHCE200-100
2"	25	0.60	15	EHCE200-25
2-1/2"	100	0.73	73	EHCE250-100
2-1/2"	25	0.73	18.25	EHCE250-25
3"	100	1.02	102	EHCE300-100
3"	25	1.02	25.5	EHCE300-25
3-1/2"	100	1.54	154	EHCE350-100
4"	100	1.77	177	EHCE400-100
4"	10	1.77	17.7	EHCE400-10

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Order by Product ID Number

Heavy Duty PVC Clear Food Grade Hose

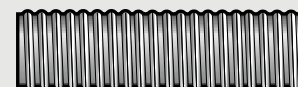
ID	STD LENGTH (FT)	WEIGHT PER FOOT (LBS/FT)	TOTAL WEIGHT (LBS)	PRODUCT ID
1-1/2"	50	0.35	17.5	WT150-50
1-1/2"	100	0.35	35.0	WT150-100
2"	50	0.56	28.0	WT200-50
2"	100	0.56	56.0	WT200-100
2-1/2"	50	0.77	38.5	WT250-50
2-1/2"	100	0.77	77.0	WT250-100
3"	50	1.1	55.0	WT300-50
3"	100	1.1	110.0	WT300-100
3-1/2"	50	1.4	70.0	WT350-50
3-1/2"	100	1.4	140.0	WT350-100
4"	50	1.8	90.0	WT400-50
4"	100	1.8	180.0	WT400-100
5"	20	2.36	47.2	WT500-20
5"	100	2.36	236.0	WT500-100
6"	20	3.54	70.8	WT600-20
6"	50	3.54	177.0	WT600-50
6"	100	3.54	354.0	WT600-100
8"	20	5.1	102.0	WT800-20

Heavy Duty PVC Clear Food Grade Hose With Static Wire

ID	STD LENGTH (FT)	WEIGHT PER FOOT (LBS/FT)	TOTAL WEIGHT (LBS)	PRODUCT ID
1-1/2"	50	0.43	25.8	WE150-50
2"	50	0.58	34.8	WE200-50
2-1/2"	50	0.88	52.8	WE250-50
3"	50	1.25	75	WE300-50
4"	50	1.93	115.8	WE400-50
5"	20	2.4	48	WE500-20
5"	60	2.4	144	WE500-60
6"	20	3.7	74	WE600-20
6"	60	3.7	222	WE600-60

PVC Specifications

- Counter clockwise spiral
- Service temp. Range: -4°F to 150°F



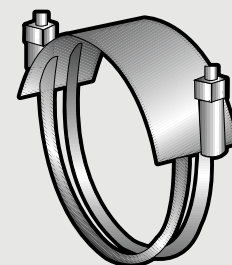
Double Bolt Clamps Counter clockwise spiral for use on PVC hose

FITS HOSE ID	WEIGHT	PRODUCT ID
1-1/2"	0.18	SDBC150
2"	0.36	SDBC200
2-1/2"	0.48	SDBC250
3"	0.66	SDBC300
4"	1.02	SDBC400
5"	1.76	SDBC500
6"	2.00	SDBC600
8"	2.76	SDBC800

Clamp Specifications

- 1-1/2" Through 8"
- Zinc-coated (galvanized)
- For use on counter clockwise spiral, PVC hose

Note: two clamps are recommended for each end on 5" ID hose and larger



TERMINOLOGY

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NPS = Nominal Pipe Size
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SCH = Schedule

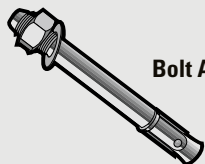
Installation Components

Order by Product ID Number

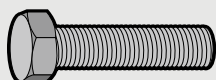
Vacuum-Tubing gives you everything you need to get your system up and running, all in one complete installation package. If you're searching for a particular installation component, we'll be glad to help you find whatever you're looking for. Our "one-stop-shopping" will help you lower your inventory costs and spend less time looking for parts. And, when it's time for installation, you'll have all the components you need on-the-spot.

DESCRIPTION	SIZE	MATERIAL	PKGD.	PRODUCT ID
Anchor, Hilti®	3/8" x 1-9/16" (Length)	Zinc	50 pc.	ANC-0380
Bolt Anchor, Includes Washer and Hex Nut	3/8" x 3-3/4" (Overall Length) 1-1/8" Thread Length	Zinc	100 pc.	ANC-0381
Features: Comprehensive performance testing in concrete, lightweight concrete, and grout-filled block base materials. Can be installed in a bottomless hole. Anchor size is same as hole size for easy installation. Hilti® Kwik Bolt II Stud Anchor System.				
Hex Head Cap Screw "More Length When You Need It"	3/8" x 1-1/4" (Length)	Zinc	50 pc.	HCS-0381
Hex Nut	3/8"	Zinc	50 pc.	HXN-0380
Flat Washer	3/8"	Zinc	50 pc.	FW-0380
Split Lock Washer	3/8"	Zinc	50 pc.	LKW-0380
Threaded Rod	3/8" x 6' (Length)	Zinc	each	ATR-100
Eye Nut, Maximum Allowable Load is 610 lbs. "Works Great With our Tube Hangers"	3/8" Tapped Hole	Malleable Iron - Plain.	each	EN-0380
Coupler Nut	3/8" x 1-3/4" (Length)	Zinc	each	CN-0380
Beam Clamp with Zinc Set Screw and Lock Nut. Maximum Allowable Load, in top or bottom position, is 550 lbs.	3/8" Tapped Hole	Malleable Iron - Galv.	each	BC-037T
Beam Clamp with Set Screw and Lock Nut. Maximum Allowable Load, in top position, is 500 lbs.; in bottom position, 250 lbs. "The Cost-Effective Solution When You Don't Need Our Heavy-Duty Beam Clamp (BC-037T)"	3/8" Tapped Hole	Malleable Iron - Plain	each	BC-100

Anchor



Bolt Anchor



Hex Head Cap Screw
3/8" x 1-1/4"



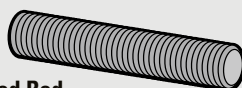
Hex Nut



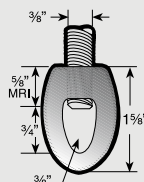
Flat Washer



Split Lock Washer



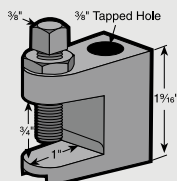
Threaded Rod



Eye Nut



Coupler Nut

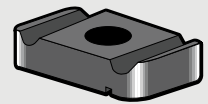


Beam Clamp

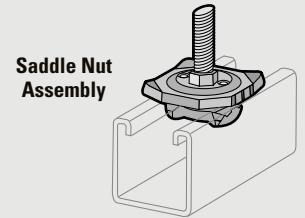
Installation Components

Order by Product ID Number

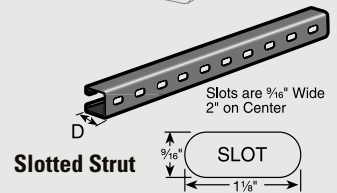
DESCRIPTION	SIZE	MATERIAL	PKGD.	PRODUCT ID
Channel Nut , without spring	3/8"	Zinc	each	CHN-0380
Saddlenut Assembly <i>"Replaces Square Washer Plate and a Channel Nut Combination"</i>		Zinc	25	SN-0380
Slotted Strut, 14 Gauge	13/16"(D) x 1-5/8", 10' Length	Zinc	each	UN-100
Slotted Strut, 14 Gauge <i>"An Economical Alternative When You Don't Require Our Heavy-Duty Strut (UN-202)"</i>	1-5/8"(D) x 1-5/8", 10' Length	Zinc	each	UN-201
Slotted Strut, 12 Gauge	1-5/8"(D) x 1-5/8", 10' Length	Zinc	each	UN-202
90° Strut Bracket	2 x 2, 9/16" Holes	Zinc	each	BRKT-0900
90° Strut Bracket	2 x 1, 9/16" Holes	Zinc	each	BRKT-0901
45° Strut Bracket	9/16" Holes	Zinc	each	BRKT-0450
Square Washer Plate	7/16" Hole for 3/8" Bolt Size	Zinc	100 pc.	SQW-0380
Tube Hanger , includes Bolt and Nut	For 1-1/2" OD Tube	Zinc	each	TH-150
Tube Hanger , includes Bolt and Nut	For 2" OD Tube	Zinc	each	TH-200
Tube Hanger , includes Bolt and Nut	For 2-1/8" and 2-1/4" OD Tube	Zinc	each	TH-212
Tube Hanger , includes Bolt and Nut	For 2-1/2" OD Tube	Zinc	each	TH-250
Tube Hanger , includes Bolt and Nut	For 3" OD Tube	Zinc	each	TH-300
Tube Hanger , includes Bolt and Nut	For 3-1/2" OD Tube	Zinc	each	TH-350
Tube Hanger , includes Bolt and Nut	For 4" OD Tube	Zinc	each	TH-400
Tube Hanger , includes Bolt and Nut	For 4-1/2" OD Tube	Zinc	each	TH-450
Tube Hanger , includes Bolt and Nut	For 5" OD Tube	Zinc	each	TH-500
Tube Hanger , includes Bolt and Nut	For 6" OD Tube	Zinc	each	TH-600
Tube Hanger , includes Bolt and Nut	For 8" OD Tube	Zinc	each	TH-800
Tube Hanger , includes Bolt and Nut	For 10" OD Tube	Zinc	each	TH-1000
Tube Hanger , includes Bolt and Nut	For 12" OD Tube	Zinc	each	TH-1200
Tube Hanger , includes Bolt and Nut	For 14" OD Tube	Zinc	each	TH-1400



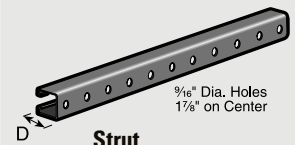
Channel Nut



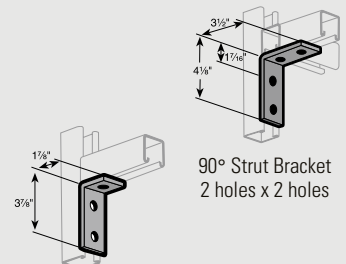
Saddlenut Assembly



Slotted Strut

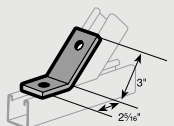


Strut

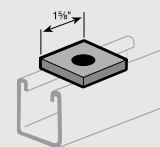


90° Strut Bracket
2 holes x 2 holes

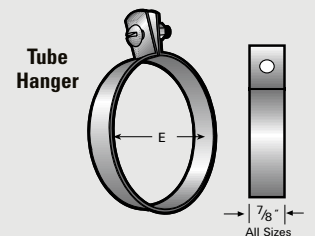
90° Strut Bracket
2 holes x 1 hole



45° Strut Bracket



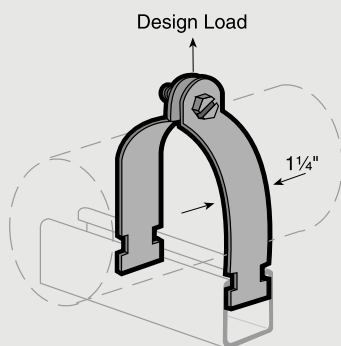
Square Washer Plate



Tube Hanger

Installation Components

Order by Product ID Number



Tube/Pipe Clamp

NOTE:

Tube Clamps are now available in 50 packs!

To order, simply add -50 to the end of the Product ID!

SPECIAL SERVICES

- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

DESCRIPTION	SIZE	MATERIAL	PKGD.	PRODUCT ID
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 1-1/2" Pipe Size	Zinc	4 pc.	PCL-150
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 2" Pipe Size	Zinc	4 pc.	PCL-200
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 2-1/2" Pipe Size	Zinc	4 pc.	PCL-250
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 3" Pipe Size	Zinc	4 pc.	TCL-350*
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 3-1/2" Pipe Size	Zinc	4 pc.	TCL-400*
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 4" Pipe Size	Zinc	4 pc.	TCL-450*
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 5" Pipe Size	Zinc	4 pc.	PCL-500
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 6" Pipe Size	Zinc	4 pc.	PCL-600
Pipe Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 8" Pipe Size	Zinc	4 pc.	PCL-800
* Tube Clamp also fits this pipe size.				
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 600 lbs.	For 1-1/2" OD Tube	Zinc	4 pc.	TCL-150
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 2" OD Tube	Zinc	4 pc.	TCL-200
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 2-1/8" OD Tube	Zinc	4 pc.	TCL-212
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 2-1/2" OD Tube	Zinc	4 pc.	TCL-250
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 3" OD Tube	Zinc	4 pc.	TCL-300
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 800 lbs.	For 3-1/2" OD Tube	Zinc	4 pc.	TCL-350
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 4" OD Tube	Zinc	4 pc.	TCL-400
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 4-1/2" OD Tube	Zinc	4 pc.	TCL-450
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 5" OD Tube	Zinc	4 pc.	TCL-500
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 6" OD Tube	Zinc	4 pc.	TCL-600
Tube Clamp , includes Slotted Hex Head Screw and Nut, Design Load 1000 lbs.	For 8" OD Tube	Zinc	4 pc.	TCL-800**

** 2 piece package

Order by Product ID Number

DESCRIPTION	SIZE	MATERIAL	PKGD.	PRODUCT ID
Firestop Sealant A non-sag silicone which remains flexible after curing for simple metal pipe penetrations and fire-rated joints where the ability to absorb movement and/or vibration is required. Features: Just 1/4" layer provides up to a 3-hour fire rating when backed with 4" of mineral wool. Superior adhesion characteristics. Resistant to smoke and water. Excellent elongation/compression properties. Distributed by Hilti®.	4-gallon Bucket	-	each	FSB-100
Firestop Sealant An aluminum-colored, medium viscosity, synthetic rubber sealant with excellent adhesion to many metal, glass, wood and other surfaces. Features: Adheres to metal, wood and glass. Seals metal to glass in windows and doors. Resists weather, water, oil and gasoline. Solids wt. approx. 46%, Flash Point (closed cup) 0° F, heavy liquid consistency, aluminum color (dry), brush or flow application. Drying time is 24 hours (1/8" dia. bead), service temp. range of -30° to 200° F. 3M Scotch-Seal™ 2084 Metal Sealant repackaged for sale.	10.5-oz. Tube	-	each	FST-100
Metal Sealant An aluminum-colored, medium viscosity, synthetic rubber sealant with excellent adhesion to many metal, glass, wood and other surfaces. Features: Adheres to metal, wood and glass. Seals metal to glass in windows and doors. Resists weather, water, oil and gasoline. Solids wt. approx. 46%, Flash Point (closed cup) 0° F, heavy liquid consistency, aluminum color (dry), brush or flow application. Drying time is 24 hours (1/8" dia. bead), service temp. range of -30° to 200° F. 3M Scotch-Seal™ 2084 Metal Sealant repackaged for sale.	Quart Can	-	each	2084-QT



Firestop Sealant



Metal Sealant

"Surface dries tack-free in approx. 5 min."

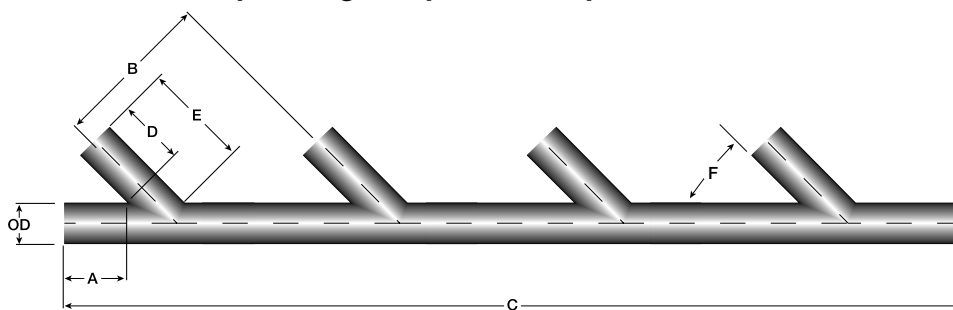
Requesting Special Fabrications

We can help with your special fabrication needs!

Show us your design and/or specifications and one of our sales engineers will assist you in working out a cost-effective solution. Quotes are typically turned around in 24 hours.

We are here to help... Just Call!

A Few Frequently Requested Specials



Manifolds

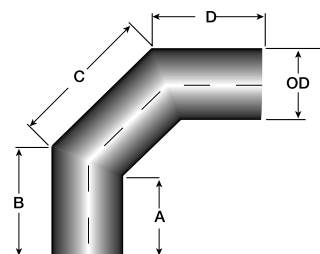
OD	A	B	C	D	E	F
2.00	6.00	8.00	50.25	6.00	8.00	45.00
2.50	6.00	10.00	60.00	5.50	8.00	45.00
3.00	6.00	12.00	69.25	5.00	8.00	45.00
4.00	6.00	16.00	87.50	6.00	10.00	45.00

Typically used for multiple pick up points in vacuum conveying applications

Segmented Elbow

OD	A	B	C	D	E
1.50	6.00	6.625	7.25	6.625	11.75
2.00	6.00	6.875	7.75	6.875	12.25
2.50	6.00	7.125	8.125	7.125	12.75
3.00	6.00	7.25	8.50	7.25	13.25
3.50	6.00	7.50	8.875	7.5	13.75
4.00	6.00	7.75	9.375	7.75	14.25
5.00	6.00	8.125	10.125	8.125	15.25
6.00	8.00	10.50	11.00	10.50	18.25
8.00	8.00	11.375	12.375	11.375	20.25

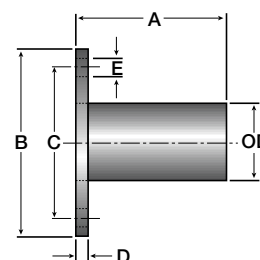
Used on vacuum lines for non-conveying applications or for use in air/dust collection



Flanged Stub

OD	A	B	C	D	E
1.5	6	5	3.875	0.5	0.625
2	6	6	4.75	0.5	0.75
2.5	6	7	5.5	0.5	0.75
3	6	7.5	6	0.5	0.75
3.5	6	7.5	6	0.5	0.75
4	6	9	7.5	0.5	0.75
5	6	10	8.5	0.5	0.875
6	6	11	9.5	0.5	0.875
8	6	13.5	11.75	0.5	0.875

For connecting tube to flanged connections. Use our compression coupling to connect tube ends.



A Few Frequently Requested Specials

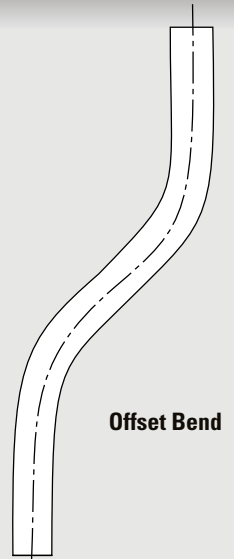
Offset Bends

What we need to know...

When calling for a quote please let us know the following:

- OD (outer diameter)
- Wall Thickness
- Material
- Center to Center dimension
- Overall length

We are here to help...Just Call!



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859.543.8534 (Fax)
www.vacuum-tubing.com