

PNEUMATIC CONVEYING COMPONENTS

TUBING, PIPE, BENDS, COUPLINGS & FITTINGS



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H-P Products

A HIGH-PERFORMANCE COMPANY

H-P Products is certified to ISO 9001:2008



H-P Products specializes in supplying pneumatic conveying components for a variety of material handling applications.

H-P's commitment to superior customer service is strengthened by new product developments such as the Instalok Coupling and improved ordering and fulfillment systems. Our commitment to continual improvement has established H-P as a leader in the pneumatic conveying industry.

Our mission is simple: provide superior products and deliver customer service that consistently yields on-time delivery allowing our customers to be successful and more competitive in their markets.

We're looking forward to your next order!

Sincerely,
The Customer Service Team at H-P

H-P Products is an ISO 9001:2008 certified supplier of tube and pipe components for pneumatic conveying systems.

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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

H-P Products 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.

NEED SOMETHING SPECIAL?

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

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.

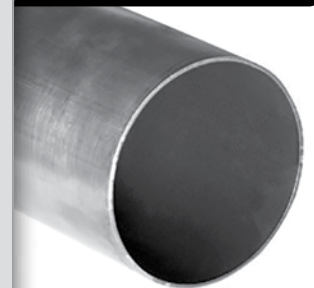
All prices are FOB factory, Louisville, Ohio
Terms: Net 30 days
Prices are in U.S. dollars

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.

SHOT PEENING



PORCELAIN LINING



SPIRAL GROOVING



CERAMIC COATING



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 DIMENSIONS & BENDING

All reference dimensions are nominal

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 |
| 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 |
| 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, 14, 16, 18 |
| 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, 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 |
| 3-1/2 | 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, 16, 18 |
| 4 | 4, 6, 8, 9, 10, 12, 18, 24, 30, 36, 48, 60 | 11, 14, 16, 18 |
| 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 | 11, 14, 16 |
| 6 | 7, 9, 15, 24, 30, 36, 48, 60 | 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

PLEASE CONTACT H-P REGARDING SPECIAL MATERIALS, GAUGE & RADII

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 |

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

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 |

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

TUBING

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

All reference dimensions are nominal

1-1/2" OD

To determine your part number when ordering:

Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

| 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

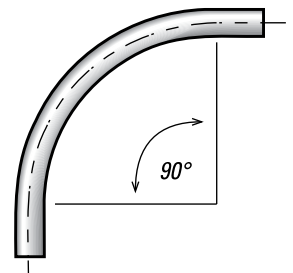
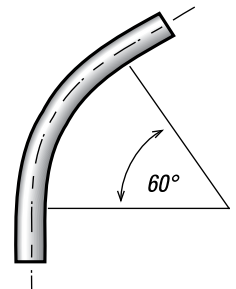
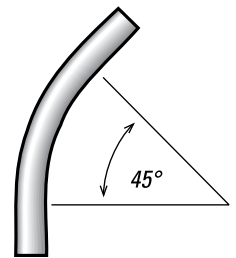
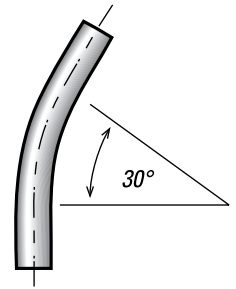
- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Catalog Part Variations Available Upon Request

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

All reference dimensions are nominal

2" OD

To determine your part number when ordering:

Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

| 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 |

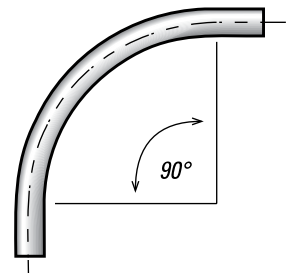
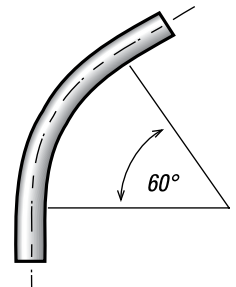
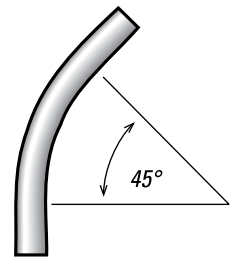
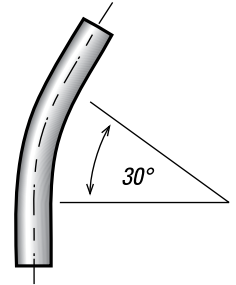
SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

2-1/4" OD

| OD | GAUGE (WALL THICKNESS) & MATERIAL | CLR | DEGREE | PRODUCT ID |
|-------|---|-----|--------|------------|
| 2.25" | 16A, 16S, 14A, 14S, 11A, 11S | 4" | 90 | 225042 |
| 2.25" | 16A, 16S, 14A, 14S, 11A, 11S | 4" | 60 | 225046 |
| 2.25" | 16A, 16S, 14A, 14S, 11A, 11S | 4" | 45 | 225041 |
| 2.25" | 16A, 16S, 14A, 14S, 11A, 11S | 4" | 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 |



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

All reference dimensions are nominal

2-1/2" OD

To determine your part number when ordering:

Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

| 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 |

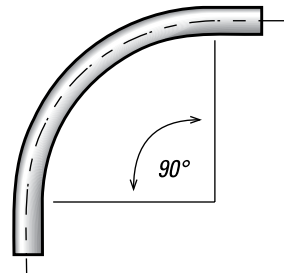
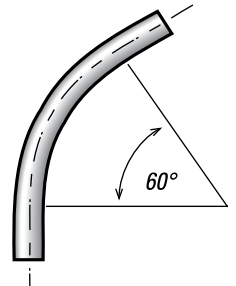
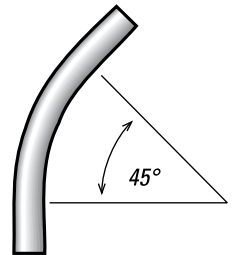
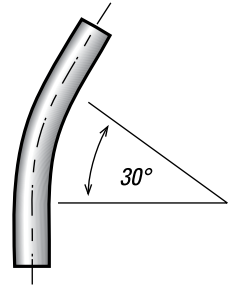
SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

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 | 300366 |
| 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 |



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

All reference dimensions are nominal

3-1/2" OD

To determine your part number when ordering:

Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

| 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.

SPECIAL SERVICES

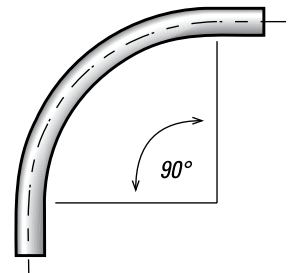
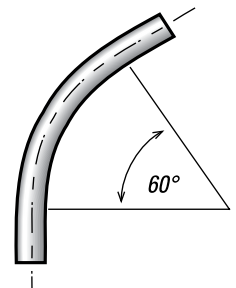
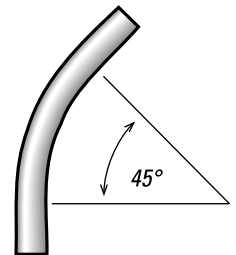
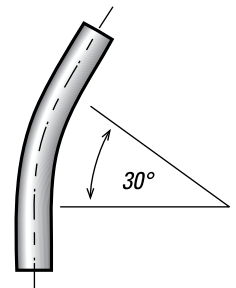
- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Catalog Part Variations Available Upon Request

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

All reference dimensions are nominal

4-1/2" OD

To determine your part number when ordering:

Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

| 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.

SPECIAL SERVICES

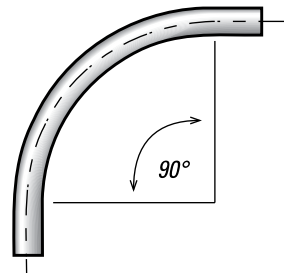
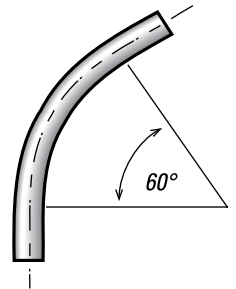
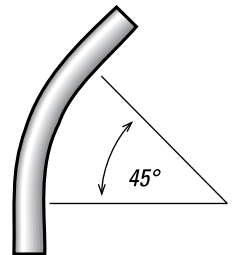
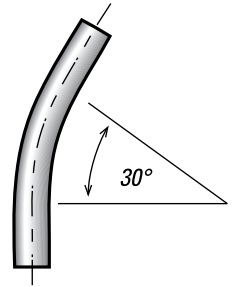
- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Catalog Part Variations Available Upon Request

5" OD

| OD | GAUGE (WALL THICKNESS) & MATERIAL | CLR | DEGREE | PRODUCT ID |
|------|-----------------------------------|-------|--------|------------|
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 7.5" | 90 | 500752 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 7.5" | 60 | 500756 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 7.5" | 45 | 500751 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 7.5" | 30 | 500753 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 12.5" | 90 | 500122 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 12.5" | 60 | 500126 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 12.5" | 45 | 500121 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 12.5" | 30 | 500123 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 18" | 90 | 500182 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 18" | 60 | 500186 |
| 5.0" | 14A, 14C, 14S, 11A, 11C, 11S | 18" | 45 | 500181 |
| 5.0" | 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

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

All reference dimensions are nominal

6" OD

To determine your part number when ordering:

Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

| 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.

SPECIAL SERVICES

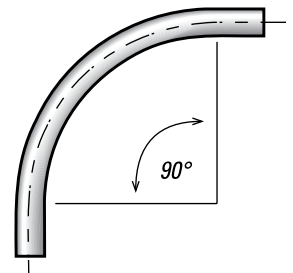
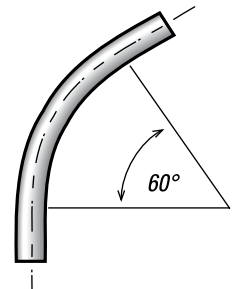
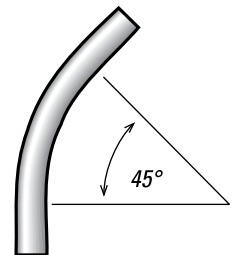
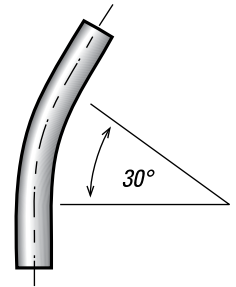
- Shot Peening
- Spiral Grooving
- Porcelain Lining
- Ceramic Coating
- Part Variations

Catalog Part Variations Available Upon Request

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

All reference dimensions are nominal

MITERED ELBOWS

To determine your part number when ordering:

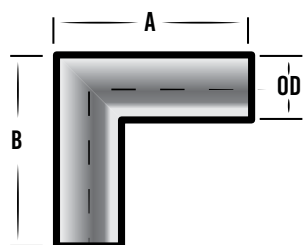
Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A



Mitered Elbow Specifications

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

| 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 |

SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

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:

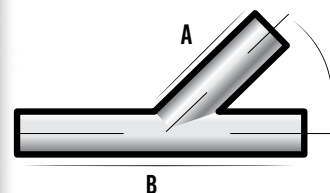
Use GAUGE

plus PRODUCT ID

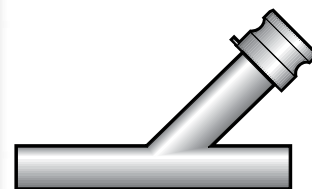
plus MATERIAL TYPE

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

**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

TUBE FITTINGS

All reference dimensions are nominal

To determine your part number when ordering:

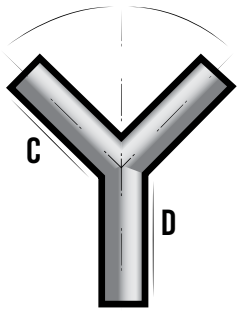
Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A



Tube Wye Specifications

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

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 |

SPECIAL SERVICES

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

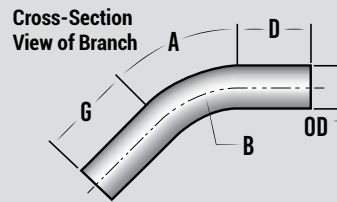
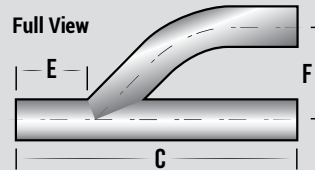
Catalog Part Variations Available Upon Request

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 |

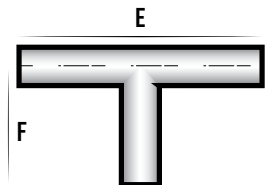
BRANCH DIMENSIONS

| 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" | 14A, 14C, 14S, 11A, 11C, 11S | 18" | 9" | TEE500 |
| 6" | 14A, 14C, 14S, 11A, 11C, 11S | 20" | 10" | TEE600 |



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

To determine your part number when ordering:

Use **GAUGE**
 plus **PRODUCT ID**
 plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE
 16 — 150252 — A

Parallel Wye Specifications

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

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

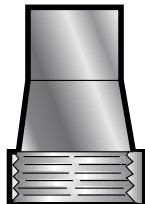
TUBE FITTINGS

All reference dimensions are nominal

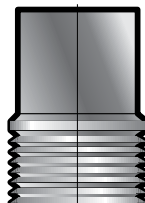
Adapter Specifications

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

for joining tube to pipe



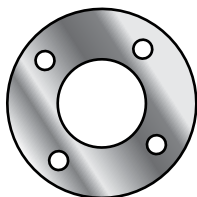
Female



Male

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 |

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 |

Catalog Part Variations Available Upon Request

Give us a call if you can't find exactly what you need!

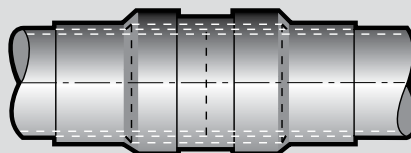
SLIP COUPLINGS

| 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.

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 |



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.

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" | 7-7/8" | 3" | 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

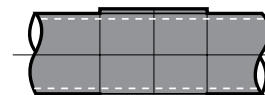
To determine your part number when ordering:

Use GAUGE

plus PRODUCT ID

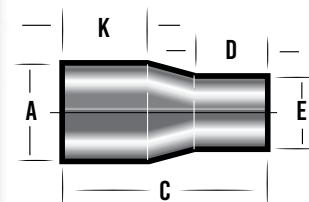
plus MATERIAL TYPE

| GAUGE | PRODUCT ID | MATERIAL TYPE |
|-------|------------|---------------|
| 16 | 150252 | A |



Slip Coupling Specifications

- 1-1/2" through 6" OD
- Wall Thickness: 14 & 16 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

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

All reference dimensions are nominal

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 specs!
- Aluminum, Carbon & Stainless

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 |

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 |

SPECIAL SERVICES

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

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

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 specs!
- 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

PIPE BENDS

All reference dimensions are nominal

To determine your part number when ordering:

Use GAUGE

plus PRODUCT ID

plus MATERIAL TYPE

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

2" NPS

| NPS | 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

| NPS | 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.

SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

3" NPS

| NPS | 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.

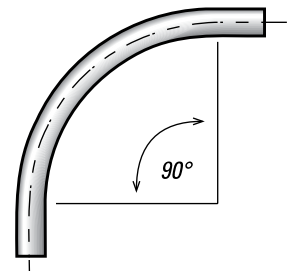
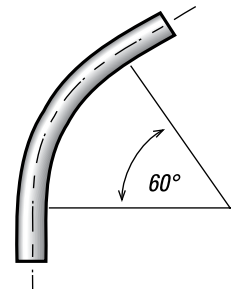
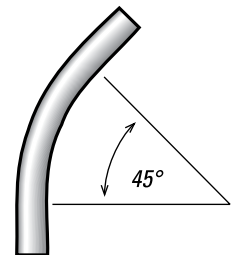
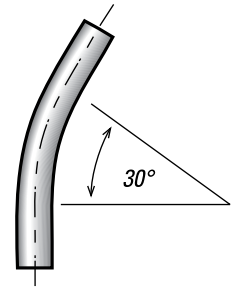
3-1/2" NPS

| NPS | 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

All reference dimensions are nominal

To determine your part number when ordering:

Use **GAUGE**

plus **PRODUCT ID**

plus **MATERIAL TYPE**

GAUGE PRODUCT ID MATERIAL TYPE

16 — 150252 — A

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

| NPS | 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

| NPS | 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.

Catalog Part Variations Available Upon Request

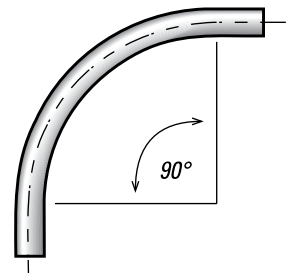
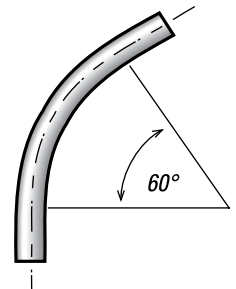
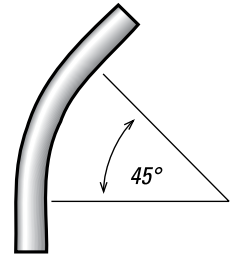
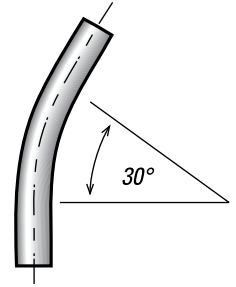
6" NPS

| NPS | 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 |

• 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

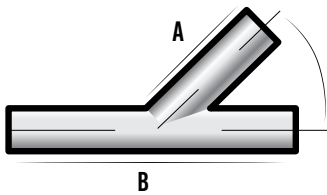
PIPE FITTINGS

All reference dimensions are nominal

To determine your part number when ordering:

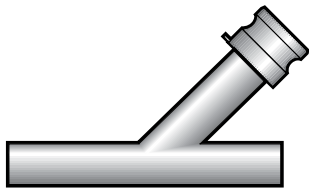
Use **SCHEDULE**
plus **PRODUCT ID**
plus **MATERIAL TYPE**

SCHEDULE PRODUCT ID MATERIAL TYPE
5P — 150252 — A



Lateral Specifications

- 2 through 8" 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 |

Catalog Part Variations Available Upon Request

Give us a call if you can't find exactly what you need!

PIPE WYES

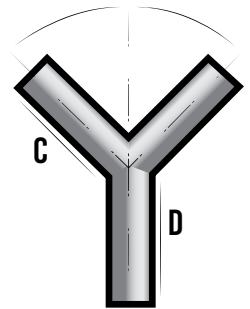
| NPS | SCHEDULE (WALL THICKNESS) & MATERIAL | DEGREE | C | D | PRODUCT ID |
|--------|--|--------|-----|-----|------------|
| 2" | 5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S | 30 | 8" | 8" | WYE2003 |
| 2" | 5P A, 5P C, 5P S, 10P A, 10P C, 10P S, 40P A, 40P C, 40P S | 45 | 8" | 8" | 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**

SCHEDULE PRODUCT ID MATERIAL TYPE

5P — WYE2003 — A

**Pipe 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

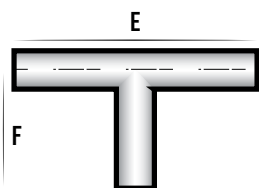
PIPE FITTINGS

All reference dimensions are nominal

To determine your part number when ordering:

Use **SCHEDULE**
plus **PRODUCT ID**
plus **MATERIAL TYPE**

SCHEDULE PRODUCT ID MATERIAL TYPE
5P — 150252 — A

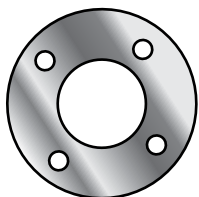


Tee Specifications

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

| NPS | 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 |

PLATE FLANGES

| NPS P | 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 |

Catalog Part Variations Available Upon Request

Give us a call if you can't find exactly what you need!

H-P INSTALOK

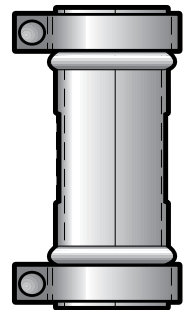
| OD | NPS | O-RING | LENGTH | PRODUCT ID |
|--------|--------|--------|--------|---------------|
| 1-1/2" | | Black | 4" | CP15042B-16Z |
| 1-1/2" | | White | 4" | CP15042W-16Z |
| 1-1/2" | | Black | 6" | CP15062B-16Z |
| 1-1/2" | | White | 6" | CP15062W-16Z |
| 1-3/4" | | Black | 4" | CP17542B-16Z |
| 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

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

**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

All reference dimensions are nominal

H-P INSTALOK

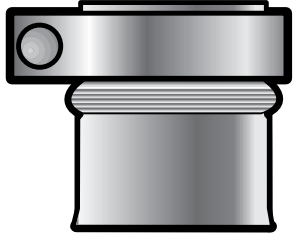
INSTALOK™

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



| 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

H-P 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 |
| 3-1/2" | 3" | Black | 3" | DC-350-B |
| 4" | 3-1/2" | Black | 3" | DC-400-B |

Order by
Product ID
Number
Only

SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

COMPRESSION COUPLINGS

| 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 | W | 11 | 6 |
| | 2.125 | | 53.975 | 2125 | 3 | R | 10 | 6 |
| | 2.125 | | 53.975 | 2125 | 3 | R | 11 | 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 |

To determine your part number when ordering:

Use **PRODUCT ID**
plus **BOLTS**
plus **GASKET**
plus **PROTECTOR**

PRODUCT ID BOLTS GASKET PROTECTOR

1500 — 2 — B — 10

WE ALSO CARRY...

- Replacement Gaskets
- Gasket Protection
- Static Strips
- Nuts & Bolts

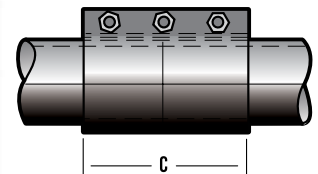
Please call for pricing

Compression couplings are available with and without gasket protectors.

In the protector column:

11 = with gasket protector

10 = no gasket protector



COMPRESSION COUPLING

Additional sizes available upon request

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

All reference dimensions are nominal

COMPRESSION COUPLINGS

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!

| 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 |
| 2-7/8" | 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 |
| 3-1/2" | 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 |

SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

Give us a call if you can't find exactly what you need!

COMPRESSION COUPLINGS

| 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 |
| | 4.000 | 3.5 | 101.6 | 4000 | 4 | W | 10 | 8 |
| | 4.000 | 3.5 | 101.6 | 4000 | 4 | W | 11 | 8 |
| | 4.000 | 3.5 | 101.6 | 4000 | 4 | W | 11 | 8 |
| | 4.000 | 3.5 | 101.6 | 4000 | 4 | W | 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 |
| | 5.000 | | 127 | 5000 | 4 | W | 11 | 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 |

To determine your part number when ordering:

Use **PRODUCT ID**
plus **BOLTS**
plus **GASKET**
plus **PROTECTOR**

PRODUCT ID BOLTS GASKET PROTECTOR

1500 — 2 — B — 10

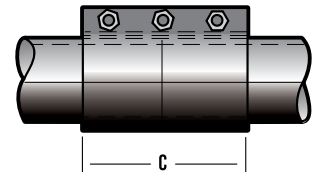
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- Replacement Gaskets
- Gasket Protection
- Static Strips
- Nuts & Bolts

Please call for pricing

Compression couplings are available with and without gasket protectors.

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



COMPRESSION COUPLING
Additional sizes available upon request

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

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!

SPECIAL SERVICES

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

| 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 |
| 6-5/8" | 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" | 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 |
| 8" | 8.000 | | 203.2 | 8000 | 2 | B | 10 | 6 |
| | 8.000 | | 203.2 | 8000 | 2 | B | 11 | 6 |

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 |
| | | | | | | | | |
| 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 |
| | | | | | | | | |

To determine your part number when ordering:

Use **PRODUCT ID**
plus **BOLTS**
plus **GASKET**
plus **PROTECTOR**

PRODUCT ID BOLTS GASKET PROTECTOR

1500 — 2 — B — 10

WE ALSO CARRY...

- Replacement Gaskets
- Gasket Protection
- Static Strips
- Nuts & Bolts

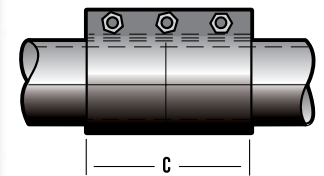
Please call for pricing

Compression couplings are available with and without gasket protectors.

In the protector column:

11 = with gasket protector

10 = no gasket protector



COMPRESSION COUPLING

Additional sizes available upon request

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

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!

| 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 |

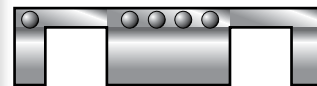
SPECIAL SERVICES

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

ELIMINATORS

Order by
Product ID Number Only

| 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 |



Length: 18" 3-Bolt 20" 4-Bolt

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!

TERMINOLOGY

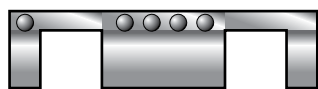
CLR = Center Line Radius
ERW = Electric Resistance Welded
FNPT = Female National Pipe Thread
ID = Inside Diameter
MNPT = Male National Pipe Thread
NPS = Nominal Pipe Size
OD = Outside Diameter
SCH = Schedule

METHODS OF JOINING

All reference dimensions are nominal

ELIMINATORS

Order by
Product ID Number Only



Length: 18" 3-Bolt 20" 4-Bolt

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!

| 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 |

SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

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**

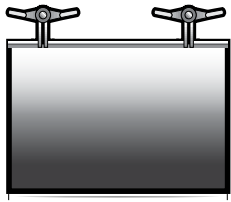
Eliminator Kits are used to convert existing compression couplings into eliminators. This conversion, when complete, gives you the same benefits as our Standard Eliminators.

Call for information!

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

SUPER GRIPS



4" lengths are single handle
9-1/2" lengths are 2 handle

Order by
Product ID
Number
Only

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 failsafe 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

Call for information!

| OD | NPS | LENGTH | DESCRIPTION | PRODUCT ID |
|----------|--------|--------|-------------------|------------|
| 1-1/2" | | 4" | 1-Clamp | SG-15001 |
| 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 |

SPECIAL SERVICES

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

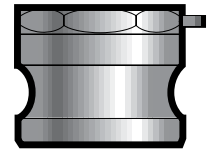
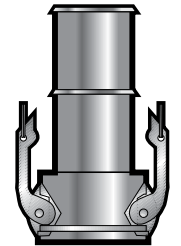
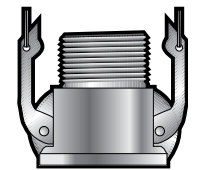
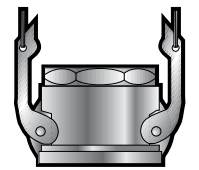
Order by Product ID Number

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 |

**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****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 |

**Adapter & Coupler
Specifications**

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

Security chains available
Other sizes and materials available.

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

METHODS OF JOINING

All reference dimensions are nominal

Order by Product ID Number

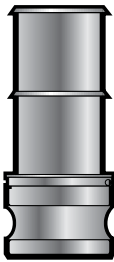
Adapter & Coupler

Specifications

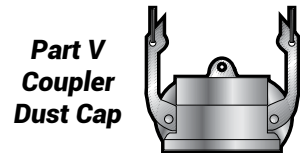
- 1-1/2" through 6"
- Aluminum & Stainless
- 8" available upon request

Security chains available
Other sizes and materials available.

Call for information!



Part E
Adapter X
Hose Shank



Part V
Coupler
Dust Cap



Part F - Adapter X
Male NPT Thread



Part W - Coupler
Adapter Dust Plug

SPECIAL SERVICES

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

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 |

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!**

Catalog Part Variations Available Upon Request

Order by Product ID Number

**PART BC - COMPRESSION
NUT QUICK COUPLERS***Coupler X Tubing Fitting*

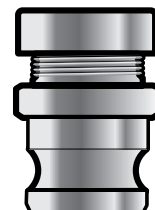
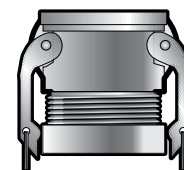
| OD | MATERIAL | PRODUCT ID |
|--------|----------|------------|
| 1-1/2" | Aluminum | BC150AL |
| 2" | Aluminum | BC200AL |
| 2-1/2" | Aluminum | BC250AL |
| 3" | Aluminum | BC300AL |

**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 |

**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****SECURITY CHAINS***Brass Chain With Hooks or Rings
For Standard Cam & Groove*

| Length | Weight | Type | Product ID |
|--------|--------|------|------------|
| 6" | 0.25 | Hook | BRCHAIN6H |
| 6" | 0.25 | Ring | BRCHAIN6R |
| 12" | 0.5 | Hook | BRCHAIN12H |
| 12" | 0.5 | Ring | BRCHAIN12R |

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

All reference dimensions are nominal

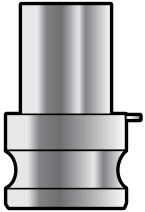
Order by Product ID Number

Specifications

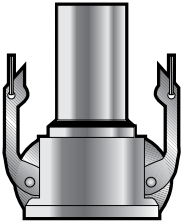
Our Quick Adapter (AWS) and Coupler (DWS) are welded to a short length of tube or pipe for easy installation or dismantling.

- 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



Part DWS Coupler

SPECIAL SERVICES

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

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 |

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 |

Catalog Part Variations Available Upon Request

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

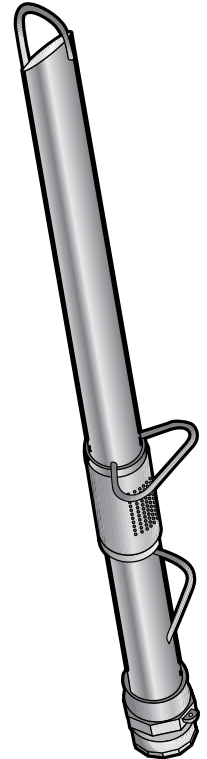
| OD | GAUGE | LENGTH | MATERIAL | PRODUCT ID |
|--------|-------|--------|-----------|---------------|
| 1-1/2" | 11 | 57 | Aluminum | 11VW150A - CG |
| 1-1/2" | 14 | 57 | Stainless | 14VW150S - CG |
| 2" | 11 | 57 | Aluminum | 11VW200A - CG |
| 2" | 14 | 57 | Stainless | 14VW200S - CG |
| 2-1/2" | 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 |

ACCESSORIES**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

**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

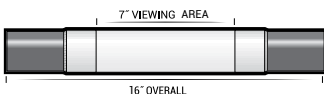
*TUBE SIGHT GLASSES

| 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 |

*NOT RECOMMENDED FOR APPLICATIONS OVER 180° (F)

*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 | 350040APUSG |
| 3-1/2" | 40 | Carbon | 350040CSUSG |
| 4" | 40 | Aluminum | 400040APUSG |
| 4" | 40 | Carbon | 400040CSUSG |
| 5" | 40 | Aluminum | 500040APUSG |
| 5" | 40 | Carbon | 500040CSUSG |
| 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

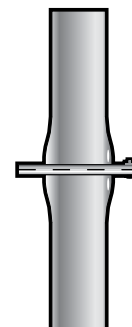
SPECIAL SERVICES

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

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****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

TERMINOLOGY

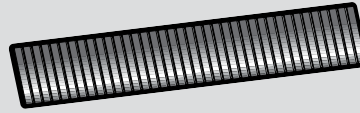
CLR = Center Line Radius
 ERW = Electric Resistance Welded
 FNPT = Female National Pipe Thread
 ID = Inside Diameter
 MNPT = Male National Pipe Thread
 NPS = Nominal Pipe Size
 OD = Outside Diameter
 SCH = Schedule

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:

- Size (ID)
- Temperature required
- Application
- Material conveyed
- Pressure
- End treatments
- Direction 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

SPECIAL SERVICES

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

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 |
| 4" | 100 | 1.65 | 165 | EHC400-100 |
| 4" | 10 | 1.65 | 16.5 | EHC400-10 |

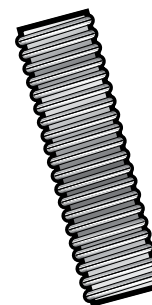
Standard Duty PVC CLEAR FOOD GRADE HOSE

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 |
| 4" | 100 | 1.77 | 177 | EHCE400-100 |
| 4" | 10 | 1.77 | 17.7 | EHCE400-10 |

PVC Specifications

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



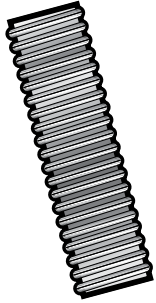
TERMINOLOGY

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

PVC Specifications

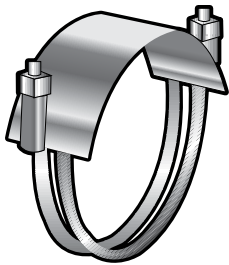
- Counter clockwise spiral
- Service temp. Range:
-4°F to 150° F



Clamp Specifications

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

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



SPECIAL SERVICES

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

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 |

DOUBLE BOLT CLAMPS

Counter clockwise spiral for use on PVC hose

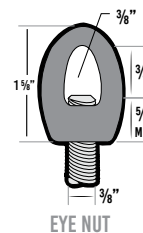
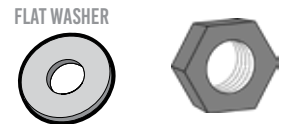
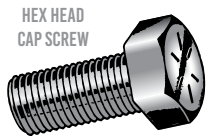
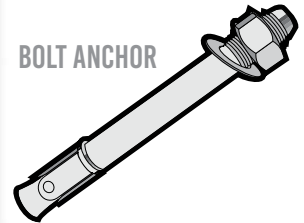
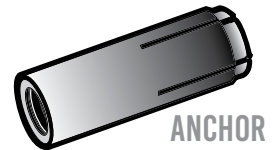
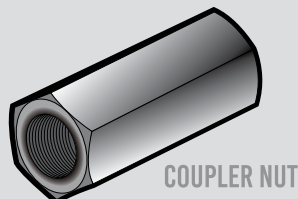
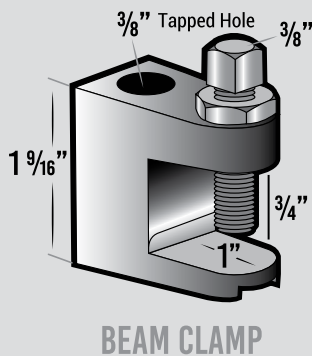
| FITS HOSE ID | WEIGHT | PRODUCT ID |
|--------------|--------|------------|
| 1-1/2" | 0.18 | SDBC150 |
| 2" | 0.36 | SDBC200 |
| 2-1/2" | 0.48 | SDBC250 |
| 3" | 0.66 | SDBC300 |
| 4" | 1.02 | SDBC400 |
| 5" | 1.76 | SDBC500 |
| 6" | 2.00 | SDBC600 |
| 8" | 2.76 | SDBC800 |

Catalog Part Variations Available Upon Request

Order by Product ID Number

H-P Products 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 |
| <i>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.</i> | | | | |
| 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 |



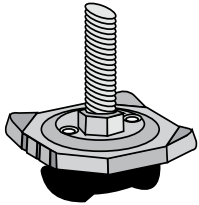
TERMINOLOGY

CLR = Center Line Radius
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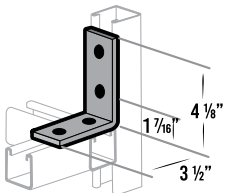
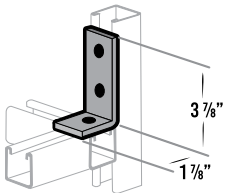
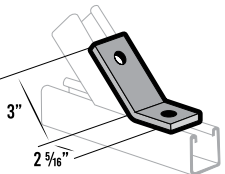
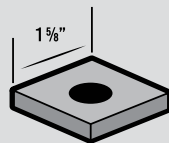
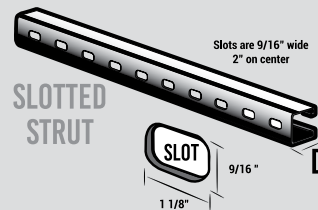
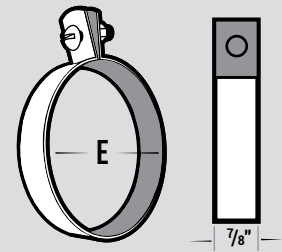
Order by Product ID Number



CHANNEL NUT



SADDLE NUT ASSEMBLY

90° STRUT BRACKET
2 HOLES X 2 HOLES90° STRUT BRACKET
2 HOLES X 1 HOLES45° STRUT BRACKET
1 HOLES X 1 HOLESSQUARE WASHER
PLATESLOTTED
STRUT

STANDARD TUBE HANGER

SPECIAL SERVICES

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

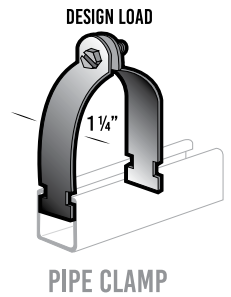
| DESCRIPTION | SIZE | MATERIAL | PKGD | PRODUCT ID |
|---|--------------------------------|----------|---------|------------|
| Channel Nut, without spring | 3/8" | Zinc | each | CHN-0380 |
| Saddlenut Assembly "Replaces Square Washer Plate and a Channel Nut Combination" | | Zinc | 25 | SN-0380 |
| Slotted Strut, 14 Gauge | 13/16"(D) x 1-5/8", 10' Length | Zinc | each | UN-100 |
| Slotted Strut, 14 Gauge "An Economical Alternative When You Don't Require Our Heavy-Duty Strut (UN-202)" | 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 |

Catalog Part Variations Available Upon Request

Give us a call if you can't find exactly what you need!

Order by Product ID Number

| 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 2-1/4" OD Tube | Zinc | 4 pc. | TCL-225 |
| 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 | 2 pc. | TCL-800** |
| ** 2 piece package | | | | |

**NOTE:**

Tube Clamps are now available in 50 packs! To order, simply add 50 to the end of the Part Number!

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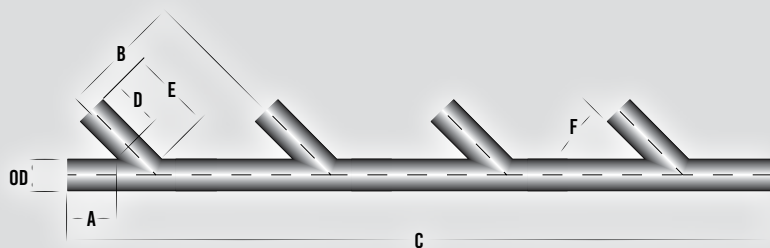
Order by Product ID Number

| DESCRIPTION | SIZE | MATERIAL | PKGD | PRODUCT ID |
|--|-----------|----------|------|------------|
| 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 by H-P Products. | Quart Can | - | each | 2084-QT |

SPECIAL SERVICES

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

A Few Frequently Requested Specials



Manifolds

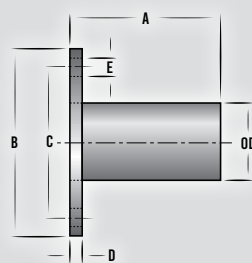
| OD | A | B | C | D | E | F |
|------|------|-------|-------|------|-------|-------|
| 2.00 | 6.00 | 8.00 | 50.25 | 6.00 | 8.00 | 45.00 |
| 2.50 | 6.00 | 10.00 | 60.00 | 5.50 | 8.00 | 45.00 |
| 3.00 | 6.00 | 12.00 | 69.25 | 5.00 | 8.00 | 45.00 |
| 4.00 | 6.00 | 16.00 | 87.50 | 6.00 | 10.00 | 45.00 |

Typically used for multiple pick up points in vacuum conveying applications

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 |

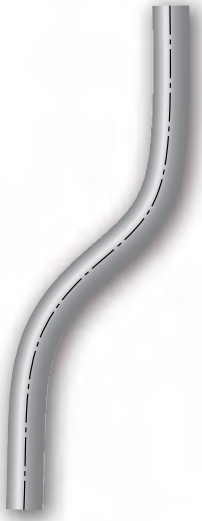
For connecting tube to flanged connections. Use our compression coupling to connect tube ends.



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

A Few Frequently Requested Specials



Offset Bend

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!

SPECIAL SERVICES

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

Catalog Part Variations Available Upon Request

NOTES



H-P Products

Controlled Air Design - Raleigh, NC
www.controlledairdesign.com
(800) 635 0298
sales@controlledairdesign.com