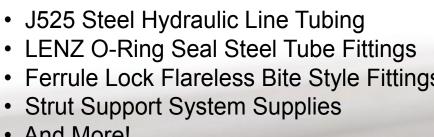


J525 Steel Hydraulic Line Tubing

USES: OIL • GREASE • ANTI-FREEZE • AND MORE!









SVI International, Inc.

Whether you're planning a new fluid delivery system or adding on to an existing one, SVI has the steel hydraulic line tubing, fittings and strut you need for the right price with fast delivery. We stock a variety of tube fittings including LENZ O-ring seal steel hydraulic tube fittings, Ferrule Lock, steel flare tube fittings, and standard steel pipe fittings. Our tubing is provided in easy-to-use 20-foot lengths in a full spectrum of gauges, sizes, and PSI specifications. We also regularly fill custom tubing orders for your unique requirements. Combine tube sizes in one order for maximum price advantage. If you're looking for SAE J525 Steel Hydraulic Tubing for use with Oil, Grease, Anti-Freeze and more, SVI is the one to call!

SVI offers same-day shipping on most in-stock repair parts with regionally located offices to cover the entire country with affordable, fast delivery. Orders for non-stock sizes and large quantities are processed quickly.

TABLE OF CONTENTS

Reddi-Crate™ Protective Packaging	3
Deburring Cutters	3
Steel Hydraulic Line Tubing	4–5
LENZ O-Ring Seal Steel	
Hydraulic Tube Fittings	6–18
LENZ Standard Steel Pipe Fittings	19
Ferrule Lock Flareless Bite Fittings	20–25
Strut Support System Supplies	26–38

SVI International, Inc.

155 Harvestore Drive • DeKalb, IL 60115

800-321-8173 815-748-0200

For more information on the products we offer and the industries we serve, please check out our website:

www.sviinternational.com

TOLL FREE: 800-321-8173



SVI carefully handles and packages your order to ensure your steel hydraulic line tubing is delivered safely!

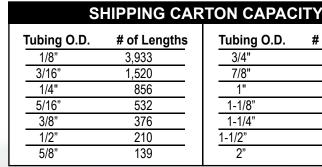
Reddi-Crate™

The simple, low cost solution to product protection.

Protective Packaging for Shipping (pictured below)

20-1/2" ft. long • 3/16" thick 10" wide x 6" tall **SVI # BL-5000C**





Tubing O.D.	# of Lengths
3/4"	87
7/8"	63
1"	50
1-1/8"	38
1-1/4"	33
1-1/2"	22
2"	12

PREVENT PRODUCT DAMAGE • ECONOMICAL TROUBLE-FREE TRANSPORTATION

Reddi-Crate™ laminated paperboard packaging helps prevent product damage that can occur during shipping and handling. An economical replacement product for expensive wooden crates that are ideally suited for trouble free steel hydraulic line tubing transportation, its preformed profiles and two end closures form a shipping container that provides superior strength and protection at a very reasonable cost.

Reddi-Crate[™] has a smooth surface and interior that is non-abrasive to products. Its standard exterior is a white clay coat. Reddi-Crate™ end plugs are typically 2 by 6 wood boards stapled in place to secure the ends and your tubing in place.

SVI's nesting-style Reddi-Crate™ is dimensional 20' 6" long by 10" wide by 6" tall. It is ideal protection to help protect your tubing shipments from the rigors of transportation.



Deburring Cutters

SVI Part #	Description	
BL-5004-10	Outside Deburring Cutter	5/8"
BL-5004-09	Outside Deburring Cutter	3/4"
BL-5004-08	Outside Deburring Cutter	1/2"
BL-5004-07	Outside Deburring Cutter	7/8"
BL-5004-06		3/8"
BL-5004-05	Outside Deburring Cutter	5/16"



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Steel Hydraulic Line Tubing

TUBE SIZES MAY BE COMBINED FOR MAXIMUM PRICE ADVANTAGE.



SVI offers competitive pricing on Steel Hydraulic Line Tubing!

Need a Smaller or Larger Sized Tube than those listed? *Call for Details*. Most any size you may need for an application is available. Stainless Steel Tubing is also available.

- **SAE J525** This SAE Standard covers normalized electric-resistance welded, cold-drawn, single-wall, low-carbon steel pressure tubing intended for use as pressure lines and in other applications requiring tubing of a quality suitable for bending, flaring, forming, and brazing.
- Stock Lengths: 20 Feet
- Priced per Length by Number of Lengths Ordered.
- Protective Packaging for Shipping Available.

<u>Caution</u>: Tubing should not be buried below grade without suitable protection from Electrolysis, Soil Condition or other factors that will corrode steel.

Note: When operating pressures <u>do not exceed 1500 psi maximum</u>, advantages of using larger I.D. tubing are greater for the delivery of Oils, Anti-Freeze and other Non-Corrosive liquids with lower pressure pumps.

Save Cost: Always use tube bending equipment to make 45°, 90°, etc. bends to reduce the number of tube fittings needed for installation. SVI can provide you with the proper bending equipment, tube fittings and strut system supports. Check out the rest of this catalog for a variety of options. If you don't see what you need, or for more information, call SVI today!

_	SVI Part #	Size	OD	Gauge	Wall	ID	Area	PRES Working	SURE Burst	Lbs. per Foot
	BL-5000-01	1/8"	0.125	22	.028	.069	0.0037	5,040	20,160	0.029
	BL-5000-02	3/16"	0.1875	20	.035	.118	0.0108	4,188	16,755	0.057
	BL-5000-03	1/4"	0.250	22	.028	.194	0.0296	2,520	10,080	0.067
	BL-5000-04	1/4"	0.250	20	.035	.180	0.0254	3,150	12,600	0.080
	BL-5000-05	1/4"	0.250	18	.049	.152	0.0181	4,410	17,640	0.105
	BL-5000-06	5/16"	0.3125	20	.035	.243	0.0462	2,515	10,063	0.104
	BL-5000-07	5/16"	0.3125	18	.049	.215	0.0361	3,522	14,089	0.138
	BL-5000-08	3/8"	0.375	20	.035	.305	0.0730	2,100	8,400	0.127
	BL-5000-09	3/8"	0.375	18	.049	.277	0.0602	2,940	11,760	0.171
) .	BL-5000-10	3/8"	0.375	16	.065	.245	0.0471	3,900	15,600	0.215
	BL-5000-11	1/2"	0.500	20	.035	.430	0.1452	1,575	6,300	0.174
	BL-5000-12	1/2"	0.500	19	.042	.416	0.1359	1,890	7,560	0.205
١ [BL-5000-13	1/2"	0.500	18	.049	.402	0.1269	2,205	8,820	0.236
,	BL-5000-14	1/2"	0.500	16	.065	.370	0.1075	2,925	11,700	0.302
	BL-5000-15	1/2"	0.500	14	.083	.334	0.0876	3,735	14,940	0.370





Steel Hydraulic Line Tubing

TUBE SIZES MAY BE COMBINED FOR MAXIMUM PRICE ADVANTAGE.

SVI Part #	Size	OD	Gauge	Wall	ID	Area	PRES: Working	SURE Burst	Lbs. per Foot
BL-5000-16	5/8"	0.625	20	.035	.555	0.2418	1,260	5,040	0.221
BL-5000-17	5/8"	0.625	18	.049	.527	0.2180	1,764	7,056	0.301
BL-5000-18	5/8"	0.625	16	.065	.495	0.1923	2,340	9,360	0.388
BL-5000-19	5/8"	0.625	14	.083	.459	0.1654	2,987	11,950	0.481
BL-5000-20	5/8"	0.625	13	.095	.435	0.1485	3,240	12,960	0.538
BL-5000-21	3/4"	0.750	20	.035	.680	0.3632	1,050	4,200	0.267
BL-5000-22	3/4"	0.750	18	.049	.652	0.3337	1,470	5,880	0.367
BL-5000-23	3/4"	0.750	16	.065	.620	0.3018	1,950	7,800	0.476
BL-5000-24	3/4"	0.750	14	.083	.584	0.2677	2,490	9,960	0.591
BL-5000-25	3/4"	0.750	13	.095	.560	0.2462	2,850	11,400	0.665
BL-5000-26	3/4"	0.750	11	.120	.510	0.2043	3,600	14,400	0.807
BL-5000-27A	7/8"	0.875	18	.049	.777	0.4739	1,285	5,140	0.431
BL-5000-27	7/8"	0.875	16	.065	.745	0.4357	1,670	6,680	0.562
BL-5000-28	7/8"	0.875	14	.083	.709	0.3946	2,132	8,530	0.7021
BL-5000-29	7/8"	0.875	13	.095	.685	0.3683	2,442	9,770	0.791
BL-5000-30	7/8"	0.875	12	.109	.657	0.3388	2,802	11,210	0.892
BL-5000-31	1"	1.000	18	.049	.902	0.6387	1,102	4,410	0.498
BL-5000-32	1"	1.000	16	.065	.870	0.5942	1,462	5,850	0.649
BL-5000-33	1"	1.000	14	.083	.834	0.5460	1,867	7,470	0.813
BL-5000-34	1"	1.000	13	.095	.810	0.5150	2,137	8,550	0.918
BL-5000-35	1"	1.000	12	.109	.782	0.4801	2,452	9,810	1.037
BL-5000-36	1"	1.000	11	.120	.760	0.4534	2,700	10,800	1.128
BL-5000-37	1-1/8"	1.125	16	.065	.995	0.7776	1,300	5,200	0.736
BL-5000-38	1-1/4"	1.250	18	.049	1.152	1.0418	880	3,520	0.629
BL-5000-39	1-1/4"	1.250	16	.065	1.120	0.9847	1,170	4,680	0.823
BL-5000-40	1-1/4"	1.250	14	.083	1.084	0.9224	1,492	5,970	1.034
BL-5000-41	1-1/4"	1.250	13	.095	1.060	0.8820	1,710	6,840	1.172
BL-5000-42	1-1/4"	1.250	12	.109	1.032	0.8360	1,960	7,840	1.328
BL-5000-43	1-1/4"	1.250	11	.120	1.010	0.8008	2,160	8,640	1.448
BL-5000-44	1-1/2"	1.500	16	.065	1.370	1.4734	975	3,900	.9962
BL-5000-45	1-1/2"	1.500	13	.095	1.310	1.3471	1,425	5,700	1.426
BL-5000-46	1-1/2"	1.500	11	.120	1.260	1.2463	1,800	7,200	1.769
BL-5000-47	2"	2.000	16	.065	1.870	2.7451	730	2,920	1.343
BL-5000-48	2"	2.000	14	.083	1.834	2.6404	933	3,735	1.699
BL-5000-49	2"	2.000	13	.095	1.810	2.5717	1,375	5,500	1.933
BL-5000-50	2"	2.000	11	.120	1.760	2.4316	1,718	6,875	2.409

FITTINGS

What's YOUR preference?

See the following pages for a sampling of options. Don't see what you need? Call 800-321-8173 Many sizes and other fittings available!



LENZ O-RING SEAL FITTINGS



FLARELESS FERRULE LOCK BITE FITTINGS

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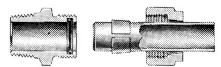


Installation Instructions - O-Ring Seal Tube Fittings are Installed as easy as 1-2-3



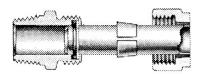
1. Deburr the Tube

Prevents cutting the "O-Ring Seal". Not necessary to cut the tube square.



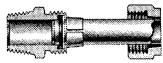
2. Slide Nut and Tapered Split Ring on Tube

The large end of the tapered ring should face the fitting.



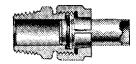
Oil the O-Ring

Then insert the tube past the O-Ring.



Slide Tapered Split Ring

Slide up to the fitting.



5. Tighten Nut Hand Tight

Then with wrench tighten one turn or until the rear of the tapered ring is flush with the nut.

How the Split Ring Grips

Note the taper. As nut is tightened the ring is wrapped around the tube, gripping it in like manner to a locking collet in a chuck. This principle grips and locks tighter and stronger as the pressure increases. Note that the nut has nothing to do with the seal...It is separate!

Stainless tubing being 55% stronger than steel tubing allows lighter walls and is therefore commonly used for higher pressures without constricting flow. Stainless tubing does require the use of stainless sleeves even when used with steel fittings.

The Pressure is the Sealing Force



At Zero Pressure. When the tube is inserted in the fitting past the O-Ring there is a slight compression and the resiliency of the O-Ring makes a secure, lasting seal.

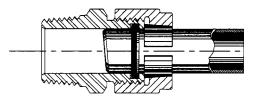


Under Pressure. The pressure is the sealing force, pushing the O-Ring to the edge of the groove. As pressure increases against the O-Ring it makes the seal tighter.



Under Vacuum or Suction.

If vacuum or suction is applied the O-Ring responds to the condition and reverses its action to seal just as tightly.



- **Teflon Backup Washer**
- The O-Ring Seals the Tube. The Higher the Pressure the Tighter the Seal
- J.I.C. Approved, Meets All S.A.E. Standards
- A Hacksaw and File or Emory Cloth are the Only Tools Needed to Prepare Tube Ends
- **No Exact Tube Length Necessary**
- **Not Necessary to Cut Tube End Square**
- No Metal to Metal Seal
- Seal is Not Dependent on Tightness of Nut
- The Tapered Split Ring Collet Grips the Tube -The Higher the Pressure the Stronger the Grip
- Seal and Grip are Separate Grips Over a Wide Area, Does Not Bite in Like a Ferrule
- **Every Part can be Reused**
- No Concentration of Stresses because of Flares or Ferrules
- **Unaffected by Vibration**

Pressure Ratings of Tube Fittings

The pressure rating for fittings depends upon the size and the safety factor desired. In tube fittings from size 2 thru size 32, it has been generally found that the fitting itself is stronger than the tubing. Listed below are the LENZ pressure ratings for O-Ring Seal Tube Fittings. Thus the safety factor of the tubing governs the limiting factor for the assembly. Typical recommended maximum static working pressure for the tube fittings with SAE J525 (1010) steel tubing with a 4:1 safety factor are:

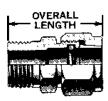
	SVI Dash #	PRESSURE
	4	4,500 psi
	5	4,000 psi
	6	4,000 psi
	8	4,000 psi
	10	3,000 psi
Example:	12	3,000 psi
SVI Part #	14	2,500 psi
BL-5104 -16	16	2,500 psi
Union	20	2,000 psi
	24	1,500 psi
	32	1,125 psi



LENZ O-Ring Seal Steel Hydraulic Tube Fittings

5100 MALE CONNECTOR **TUBE END - MALE PIPE END**

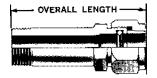




Part #	Tube O.D.	MPT	O.A.L.
BL-5100-0202	1/8"	1/8"	1-1/8"
BL-5100-0402	1/4"	1/8"	1-11/32"
BL-5100-0404	1/4"	1/4"	1-1/2"
BL-5100-0502	5/16"	1/8"	1-11/32"
BL-5100-0504	5/16"	1/4"	1-1/2"
BL-5100-0602	3/8"	1/8"	1-7/16"
BL-5100-0604	3/8"	1/4"	1-19/32"
BL-5100-0606	3/8"	3/8"	1-5/8"
BL-5100-0608	3/8"	1/2"	1-13/16"
BL-5100-0804	1/2"	1/4"	1-7/8"
BL-5100-0806	1/2"	3/8"	1-7/8"

Part #	Tube O.D.	MPT	O.A.L.
BL-5100-0808	1/2"	1/2"	2-1/16"
BL-5100-0812	1/2"	3/4"	2-1/16"
BL-5100-1004	5/8"	1/4"	2"
BL-5100-1006	5/8"	3/8"	2"
BL-5100-1008	5/8"	1/2"	2-3/16"
BL-5100-1012	5/8"	3/4"	2-7/32"
BL-5100-1208	3/4"	1/2"	2-3/8"
BL-5100-1212	3/4"	3/4"	2-3/8"
BL-5100-1412	7/8"	3/4"	2-13/32"
BL-5100-1612	1"	3/4"	2-9/16"
BL-5100-1616	1"	1"	2-3/4"
BL-5100-1816	1-1/8"	1"	2-7/8"
BL-5100-2016	1-1/4"	1"	3-1/16"
BL-5100-2020	1-1/4"	1-1/4"	3-1/16"
BL-5100-2024	1-1/4"	1-1/2"	3-1/8"
BL-5100-2420	1-1/2"	1-1/4"	3-1/4"
BL-5100-2424	1-1/2"	1-1/2"	3-1/4"
BL-5100-2824	1-3/4"	1-1/2"	3-1/4"
BL-5100-2832	1-3/4"	2"	3-29/32"
BL-5100-3220	2"	1-1/4"	3-27/32"
BL-5100-3224	2"	1-1/2"	3-27/32"
BL-5100-3232	2"	2"	3-29/32"

5101 **LONG MALE CONNECTOR TUBE END - MALE PIPE END**



Tube O.D.	MPT	O.A.L.
1/4"	1/8"	2"
5/16"	1/8"	2-1/8"
3/8"	1/4"	2-15/32"
1/2"	3/8"	3-5/32"
5/8"	1/2"	3-1/2"
3/4"	3/4"	3-29/32"
7/8"	3/4"	4-5/32"
1"	1"	4-1/2"
1-1/4"	1-1/4"	5-7/32"
1-1/2"	1-1/2"	5-19/32"
	1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 7/8" 1" 1-1/4"	1/4" 1/8" 5/16" 1/8" 3/8" 1/4" 1/2" 3/8" 5/8" 1/2" 3/4" 3/4" 7/8" 3/4" 1" 1" 1-1/4" 1-1/4"

5102 **EXTRA LONG MALE CONNECTOR TUBE END - MALE PIPE END**

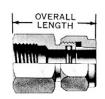


Part #	Tube O.D.	MPT	O.A.L.
BL-5102-0402	1/4"	1/8"	2-3/4"
BL-5102-0502	5/16"	1/8"	3"
BL-5102-0604	3/8"	1/4"	3-15/32"
BL-5102-0806	1/2"	3/8"	4-11/32"
BL-5102-1008	5/8"	1/2"	4-3/4"
BL-5102-1212	3/4"	3/4"	5-13/32"
BL-5102-1412	7/8"	3/4"	5-25/32"
BL-5102-1616	1"	1"	6-1/4"
BL-5102-2020	1-1/4"	1-1/4"	7-7/32"
BL-5102-2424	1-1/2"	1-1/2"	7-27/32"



5103 FEMALE CONNECTOR TUBE END - FEMALE PIPE END





Part #	Tube O.D.	FPT	O.A.L.
BL-5103-0402	1/4"	1/8"	1-11/32"
BL-5103-0404	1/4"	1/4"	1-15/32"
BL-5103-0502	5/16"	1/8"	1-11/32"
BL-5103-0504	5/16"	1/4"	1-15/32"
BL-5103-0602	3/8"	1/8"	1-7/32"
BL-5103-0604	3/8"	1/4"	1-17/32"
BL-5103-0606	3/8"	3/8"	1-21/32"
BL-5103-0804	1/2"	1/4"	1-19/32"

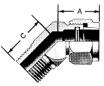
5104 UNION TUBE BOTH ENDS





5105 MALE 45 DEGREE ELBOW TUBE END - MALE PIPE END



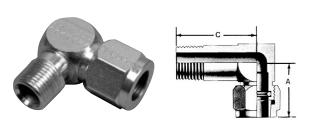


Part #	Tube O.D.	FPT	O.A.L.
BL-5103-0806	1/2"	3/8"	1-7/8"
BL-5103-0808	1/2"	1/2"	2-1/6"
BL-5103-1004	5/8"	1/4"	1-23/32"
BL-5103-1006	5/8"	3/8"	1-23/32"
BL-5103-1008	5/8"	1/2"	2-5/32"
BL-5103-1208	3/4"	1/2"	2-1/16"
BL-5103-1212	3/4"	3/4"	2-5/16"
BL-5103-1412	7/8"	3/4"	2-5/16"
BL-5103-1420	7/8"	1-1/4"	2-11/16"
BL-5103-1612	1"	3/4"	2-7/32"
BL-5103-1616	1"	1"	2-23/32"
BL-5103-1624	1"	1-1/2"	2-29/32"
BL-5103-1816	1-1/8"	1"	2-11/16"
BL-5103-2020	1-1/4"	1-1/4"	3"
BL-5103-2424	1-1/2"	1-1/2"	3-5/32"
BL-5103-2420	1-1/2"	1-1/4"	2-25/32"
BL-5103-3232	2"	2"	3-19/32"

Part #	Tube O.D.	O.A.L.
BL-5104-02	1/8"	1-5/16"
BL-5104-04	1/4"	1-11/16"
BL-5104-05	5/16"	1-11/16"
BL-5104-06	3/8"	1-13/16"
BL-5104-08	1/2"	2-9/32"
BL-5104-10	5/8"	2-9/16"
BL-5104-12	3/4"	2-7/8"
BL-5104-14	7/8"	2-15/16"
BL-5104-16	1"	3-3/16"
BL-5104-20	1-1/4"	3-3/4"
BL-5104-24	1-1/2"	4-1/16"
BL-5104-32	2"	4-15/16"

Part #	Tube O.D.	MPT	"A"	"C"
BL-5105-0402	1/4"	1/8"	25/32"	5/8"
BL-5105-0502	5/16"	1/8"	7/8"	5/8"
BL-5105-0604	3/8"	1/4"	1"	27/32"
BL-5105-0606	3/8"	3/8"	1"	15/16"
BL-5105-0804	1/2"	1/4"	1-7/32"	15/16"
BL-5105-0806	1/2"	3/8"	1-7/32"	15/16"
BL-5105-0808	1/2"	1/2"	1-15/32"	1-5/32"
BL-5105-1008	5/8"	1/2"	1-15/32"	1-5/32"
BL-5105-1208	3/4"	1/2"	1-5/8"	1-5/32"
BL-5105-1212	3/4"	3/4"	1-5/8"	1-3/16"
BL-5105-1412	7/8"	3/4"	1-9/16"	1-1/4"
BL-5105-1612	1"	3/4"	1-13/16"	1-15/32"
BL-5105-1616	1"	1"	1-13/16"	1-15/32"
BL-5105-2020	1-1/4"	1-1/4"	2-7/32"	1-21/32"
BL-5105-2424	1-1/2"	1-1/2"	2-13/32"	1-3/4"
BL-5105-3232	2"	2"	2-15/16"	2-1/32"

5106 MALE ELBOW TUBE END - MALE PIPE END



Part #	Tube O.D.	MPT	"A"	"C"
BL-5106-0202	1/8"	1/8"	25/32"	25/32"
BL-5106-0402	1/4"	1/8"	1"	25/32"
BL-5106-0404	1/4"	1/4"	1-1/16"	1-3/32"
BL-5106-0502	5/16"	1/8"	1-1/32"	25/32"
BL-5106-0504	5/16"	1/4"	1-1/32"	1-3/32"
BL-5106-0602	3/8"	1/8"	1-1/8"	7/8"
BL-5106-0604	3/8"	1/4"	1-1/8"	1-3/32"
BL-5106-0606	3/8"	3/8"	1-3/16"	1-7/32"
BL-5106-0608	3/8"	1/2"	1-1/4"	1-15/32"
BL-5106-0804	1/2"	1/4"	1-15/32"	1-5/32"

Part #	Tube O.D.	MPT	"A"	"C"
BL-5106-0806	1/2"	3/8"	25/32"	25/32"
BL-5106-0808	1/2"	1/2"	1-15/32"	1-15/32"
BL-5106-0812	1/2"	3/4"	1-19/32"	1-9/16"
BL-5106-1004	5/8"	1/4"	1-21/32"	1-5/16"
BL-5106-1006	5/8"	3/8"	1-21/32"	1-3/8"
BL-5106-1008	5/8"	1/2"	1-21/32"	1-15/32"
BL-5106-1012	5/8"	3/4"	1-23/32"	1-19/32"
BL-5106-1208	3/4"	1/2"	1-27/32"	1-9/16"
BL-5106-1212	3/4"	3/4"	1-27/32"	1-19/32"
BL-5106-1412	7/8"	3/4"	1-15/16"	1-11/16"
BL-5106-1612	1"	3/4"`	2-7/32"	1-23/32"
BL-5106-1616	1"	1"	2-7/32"	1-31/32"
BL-5106-1816	1-1/8"	1"	2-13/32"	2-1/8"
BL-5106-2016	1-1/4"	1"	2-19/32"	2-3/8"
BL-5106-2020	1-1/4"	1-1/4"	2-19/32"	2-3/8"
BL-5106-2024	1-1/4"	1-1/2"	2-23/32"	2-5/8"
BL-5106-2420	1-1/2"	1-1/4"	2-29/32"	2-5/8"
BL-5106-2424	1-1/2"	1-1/2"	2-29/32"	2-5/8"
BL-5106-3224	2"	1-1/2"	3-19/32"	3"
BL-5106-3232	2"	2"	3-19/32"	3"

5107 LONG MALE ELBOW TUBE END - MALE PIPE END



Part #	Tube O.D.	MPT	"A"	"C"
BL-5107-0402	1/4"	1/8"	1"	1-3/16"
BL-5107-0502	5/16"	1/8"	1-1/32"	1-1/4"
BL-5107-0604	3/8"	1/4"	1-1/8"	1-21-32"
BL-5107-0806	1/2"	3/8"	1-15/32"	1-27/32"
BL-5107-1008	5/8"	1/2"	1-21/32"	2-7/32"
BL-5107-1212	3/4"	3/4"	1-27/32"	2-15/32"
BL-5107-1412	7/8"	3/4"	1-15/16"	2-23/32"
BL-5107-1616	1"	1"	2-7/32"	3-1/16"
BL-5107-2020	1-1/4"	1-1/4"	2-19/32"	3-11/16"

5108 EXTRA LONG MALE ELBOW TUBE END - MALE PIPE END

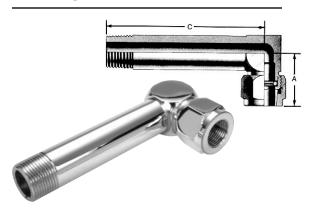


Part #	Tube O.D.	MPT	"A"	"C"
BL-5108-0402	1/4"	1/8"	1"	1-17/32"
BL-5108-0502	5/16"	1/8"	1-1/32"	1-5/8"
BL-5108-0604	3/8"	1/4"	1-1/8"	2-3/32"
BL-5108-0806	1/2"	3/8"	1-15/32"	2-1/2"
BL-5108-1008	5/8"	1/2"	1-21/32"	3"
BL-5108-1212	3/4"	3/4"	1-27/32"	3-11/32"
BL-5108-1412	7/8"	3/4"	1-15/16"	3-5/8"
BL-5108-1616	1"	1"	2-7/32"	4-3/16"
BL-5108-2020	1-1/4"	1-1/4"	2-19/32"	4-7/8"

9



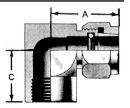
5109 EXTRA EXTRA LONG MALE ELBOW TUBE END - MALE PIPE END



Part #	Tube O.D.	MPT	"A"	"C"
BL-5109-0402	1/4"	1/8"	1"	2-5/16"
BL-5109-0502	5/16"	1/8"	1-1/32"	2-9/16"
BL-5109-0604	3/8"	1/4"	1-1/8"	3-1/16"
BL-5104-0806	1/2"	3/8"	1-15/32"	3-3/4"
BL-5109-1008	5/8"	1/2"	1-21/32"	4-1/2"
BL-5109-1212	3/4"	3/4"	1-27/32"	5-1/32"
BL-5109-1412	7/8"	3/4"	1-15/16"	5-9/16"
BL-5109-1616	1"	1"	2-7/32"	6-3/8"
BL-5109-2020	1-1/4"	1-1/4"	2-19/32"	7-3/8"

5110 FEMALE ELBOW TUBE END - FEMALE PIPE END



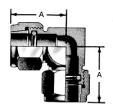


Part #	Tube O.D.	FPT	"A"	"C"
BL-5110-0202	1/8"	1/8"	27/32"	21/32"
BL-5110-0402	1/4"	1/8"	1-1/16"	21/32"
BL-5110-0404	1/4"	1/4"	1-3/16"	29/32"
BL-5110-0502	5/16"	1/8"	1-1/32"	21/32"
BL-5110-0504	5/16"	1/4"	1-5/32"	29/32"
BL-5110-0602	3/8"	1/8"	1-1/8"	21/32"
BL-5110-0604	3/8"	1/4"	1-1/4"	29/32"
BL-5110-0606	3/8"	3/8"	1-5/16"	31/32"

Part #	Tube O.D.	FPT	"A"	"C"
BL-5110-0608	3/8"	1/2"	1-3/8"	1-1/4"
BL-5110-0804	1/2"	1/4"	1-15/32"	29/32"
BL-5110-0806	1/2"	3/8"	1-17/32"	31/32"
BL-5110-0808	1/2"	1/2"	1-19/32"	1-1/4"
BL-5110-1004	5/8"	1/4"	1-21/32"	31/32"
BL-5110-1006	5/8"	3/8"	1-21/32"	31/32"
BL-5110-1008	5/8"	1/2"	1-23/32"	1-1/4"
BL-5110-1208	3/4"	1/2"	1-27/32"	1-1/4"
BL-5110-1212	3/4"	3/4"	1-31/32"	1-11/32"
BL-5110-1412	7/8"	3/4"	2"	1-11/32"
BL-5110-1612	1"	3/4"	2-7/32"	1-15/32"
BL-5110-1616	1"	1"	2-11/32"	1-5/8"
BL-5110-2016	1-1/4"	1"	2-19/32"	1-5/8"
BL-5110-2020	1-1/4"	1-1/4"	2-25/32"	1-11/16"
BL-5110-2424	1-1/2"	1-1/2"	3-3/32"	2-1/16"
BL-5110-3232	2"	2"	3-25/32"	2-3/8"

5111 ELBOW UNION TUBE END - BOTH OPENINGS

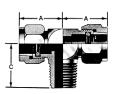




Part #	Tube O.D.	"A"	
BL-5111-02	1/8"	25/32"	
BL-5111-04	1/4"	1"	
BL-5111-05	5/16"	1-1/32"	
BL-5111-06	3/8"	1-1/8"	
BL-5111-08	1/2"	1-15/32"	
BL-5111-10	5/8"	1-21/32"	
BL-5111-12	3/4"	1-27/32"	
BL-5111-14	7/8"	1-15/16"	
BL-5111-16	1"	2-7/32"	
BL-5111-20	1-1/4"	2-19/32"	
BL-5111-24	1-1/2"	2-29/32"	
BL-5111-32	2"	3-19/32"	

5112 MALE BRANCH TEE / TUBE END - TUBE END MALE PIPE SIDE OUTLET



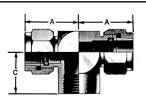


Part #	Tube O.D.	MPT	"A"	"C"
BL-5112-020202	1/8"	1/8"	25/32"	25/32"
BL-5112-040402	1/4"	1/8"	1"	25/32"
BL-5112-040404	1/4"	1/4"	1-1/16"	1-3/32"
BL-5112-050502	5/16"	1/8"	1-1/32"	25/32"
BL-5112-050504	5/16"	1/4"	1-1/32"	1-3/32"
BL-5112-060602	3/8"	1/8"	1-1/8"	7/8"
BL-5112-060604	3/8"	1/4"	1-1/8"	1-3/32"
BL-5112-060606	3/8"	3/8"	1-3/16"	1-7/32"

Part #	Tube O.D.	MPT	"A"	"C"
BL-5112-060608	3/8"	1/2"	1-1/4"	1-15/32"
BL-5112-080804	1/2"	1/4"	1-15/32"	1-5/32"
BL-5112-080806	1/2"	3/8"	1-15/32"	1-7/32"
BL-5112-080808	1/2"	1/2"	1-15/32"	1-15/32"
BL-5112-101006	5/8"	3/8"	1-21/32"	1-3/8"
BL-5112-101008	5/8"	1/2"	1-21/32"	1-15/32"
BL-5112-101012	5/8"	3/4"	1-23/32"	1-19/32"
BL-5112-121208	3/4"	1/2"	1-27/32"	1-9/16"
BL-5112-121212	3/4"	3/4"	1-27/32"	1-19/32"
BL-5112-141412	7/8"	3/4"	1-15/16"	1-5/8"
BL-5112-161612	1"	3/4"	2-7/32"	1-23/32"
BL-5112-161616	1"	1"	2-7/32"	1-31/32"
BL-5112-202016	1-1/4"	1"	2-19/32"	2-3/8"
BL-5112-202020	1-1/4"	1-1/4"	2-19/32"	2-3/8"
BL-5112-242420	1-1/2"	1-1/4"	2-29/32"	2-5/8"
BL-5112-242424	1-1/2"	1-1/2"	2-29/32"	2-5/8"
BL-5112-323232	2"	2"	3-19/32"	3"

5113 FEMALE BRANCH TEE / TUBE END - TUBE END -FEMALE PIPE SIDE OUTLET



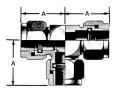


Part #	Tube O.D.	FPT	"A"	"C"
BL-5113-020202	1/8"	1/8"	27/32"	21/32"
BL-5113-040402	1/4"	1/8"	1-1/16"	21/32"
BL-5113-040404	1/4"	1/4"	1-3/16"	29/32"
BL-5113-050502	5/16"	1/8"	1-1/16"	21/32"
BL-5113-050504	5/16"	1/4"	1-5/32"	29/32"

"C" Tube O.D. **FPT** "A" Part # BL-5113-060602 3/8" 1/8" 21/32" 1-1/8" BL-5113-060604 3/8" 1/4" 1-1/4" 29/32" BL-5113-080804 1/2" 1/4" 1-15/32" 29/32" BL-5113-080806 1/2" 3/8" 1-17/32" 31/32" BL-5113-080808 1/2" 1/2" 1-1/4" 1-19/32" BL-5113-101004 5/8" 1/4" 1-21/32" 31/32" BL-5113-101008 5/8" 1/2" 1-23/32" 1-1/4" 1-27/32" BL-5113-121208 3/4" 1/2" 1-1/4" BL-5113-121212 3/4" 3/4" 1-31/32" 1-11/32" BL-5113-141412 7/8" 3/4" 1-11/32' 1" BL-5113-161616 1" 2-11/32" 1-5/8" 2-25/32" BL-5113-202020 1-1/4" 1-1-4" 1-11/16' BL-5113-242424 1-1/2" 2-1/16" 1-1/2" 3-3/32" 2" BL-5113-323232 3-25/32" 2-3/8"

5114 TEE UNION TUBE END - ALL OPENINGS





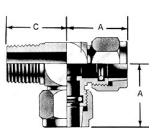
Part #	Tube O.D.	"A"	
BL-5114-02	1/8"	25/32"	
BL-5114-04	1/4"	1"	
BL-5114-05	5/16"	1-1/32"	
BL-5114-06	3/8"	1-1/8"	
BL-5114-08	1/2"	1-15/32"	
BL-5114-10	5/8"	1-21/32"	
BL-5114-12	3/4"	1-27/32"	
BL-5114-14	7/8"	1-15/16"	
BL-5114-16	1"	2-7/32"	
BL-5114-20	1-1/4"	2-19/32"	
BL-5114-24	1-1/2"	2-29/32"	
BL-5114-32	2"	3-19/32"	

P



5115 MALE RUN TEE /
TUBE END - MALE PIPE END TUBE SIDE OUTLET

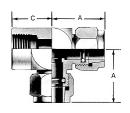




Part #	Tube O.D.	MPT	"A"	"C"
BL-5115-020202	1/8"	1/8"	25/32"	25/32"
BL-5115-040204	1/4"	1/8"	1"	25/32"
BL-5115-050205	5/16"	1/8"	1-1/32"	25/32"
BL-5115-060406	3/8"	1/4"	1-1/8"	1-3/32"
BL-5115-060206	3/8"	1/8"	1-1/8"	7/8"
BL-5115-080608	1/2"	3/8"	1-15/32"	1-7/32"
BL-5115-100810	5/8"	1/2"	1-21/32"	1-15/32"
BL-5115-121212	3/4"	3/4"	1-27/32"	1-19/32"
BL-5115-141214	7/8"	3/4"	1-15/16"	1-5/8"
BL-5115-161616	1"	1"	2-7/32"	1-31/32"
BL-5115-202020	1-1/4"	1-1/4"	1-19/32"	2-3/8"
BL-5115-242424	1-1/2"	1-1/2"	2-29/32"	2-5/8"
BL-5115-323232	2"	2"	3-19/32"	3"

5116 FEMALE RUN TEE /
TUBE END - FEMALE PIPE END TUBE SIDE OUTLET

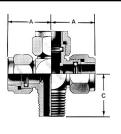




Part #	Tube O.D.	FPT	"A"	"C"
BL-5116-020202	1/8"	1/8"	27/32"	21/32"
BL-5116-040204	1/4"	1/8"	1-1/16"	21/32"
BL-5116-050205	5/16"	1/8"	1-1/32"	21/32"
BL-5116-060406	3/8"	1/4"	1-1/4"	29/32"
BL-5116-060206	3/8"	1/8"	1-1/8"	21/32"
BL-5116-080608	1/2"	3/8"	1-17/32"	31/32"
BL-5116-080808	1/2"	1/2"	1-19/32"	1-1/4"
BL-5116-100810	5/8"	1/2"	1-23/32"	1-1/4"
BL-5116-121212	3/4"	3/4"	1-31/32"	1-11/32"
BL-5116-141214	7/8"	3/4"	2"	1-11/32"
BL-5116-161616	1"	1"	2-11/32"	1-5/8"
BL-5116-202020	1-1/4"	1-1/4"	2-25/32"	1-11/16"
BL-5116-242424	1-1/2"	1-1/2"	3-3/32"	2-1/16"
BL-5116-323232	2"	2"	3-25/32"	2-3/8"

5117 MALE CROSS /
TUBE END - TUBE END TUBE END - MALE PIPE END





Part # Tu	ıbe O.D.	MPT	"A"	"C"
BL-5117-04040402	1/4"	1/8"	1"	25/32"
BL-5117-05050502	5/16"	1/8"	1-1/32"	25/32"
BL-5117-06060604	3/8"	1/4"	1-1/8"	1-3/32"
BL-5117-08080806	1/2"	3/8"	1-15/32"	1-7/32"
BL-5117-10101008	5/8"	1/2"	1-21/32"	1-15/32"
BL-5117-12121212	3/4"	3/4"	1-27/32"	1-19/32"
BL-5117-14141412	7/8"	3/4"	1-15/16"	1-5/8"
BL-5117-16161616	1"	1"	2-7/32"	1-31/32"
BL-5117-20202020	1-1/4"	1-1/4"	2-19/32"	2-3/8"
BL-5117-24242424	1-1/2"	1-1/2"	2-29/32"	2-5/8"
BL-5117-32323232	2"	2"	3-19/32"	3"



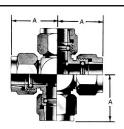
5118 FEMALE CROSS / **TUBE END - TUBE END -TUBE END - FEMALE PIPE END**





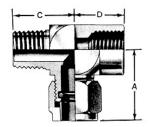
5119 **TUBE CROSS TUBE END - ALL OPENINGS**





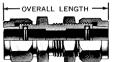
5120 **GAUGE TEE / FEMALE PIPE END -MALE PIPE END -TUBE SIDE OUTLET**





5121 **BULKHEAD UNION TUBE BOTH ENDS**





Part # Tu	ube O.D.	FPT	"A"	"C"
BL-5118-04040402	1/4"	1/8"	1-1/16"	21/32"
BL-5118-05050502	5/16"	1/8"	1-1/32"	21/32"
BL-5118-06060604	3/8"	1/4"	1-1/4"	29/32"
BL-5118-08080806	1/2"	3/8"	1-17/32"	31/32"
BL-5118-10101008	5/8"	1/2"	1-23/32"	1-1/4"
BL-5118-12121212	3/4"	3/4"	1-31/32"	1-11/32"
BL-5118-14141412	7/8"	3/4"	2"	1-11/32"
BL-5118-16161616	1"	1"	2-11/32"	1-5/8"
BL-5118-20202020	1-1/4"	1-1/4"	2-25/32"	1-11/16"
BL-5118-24242424	1-1/2"	1-1/2"	3-3/32"	2-1/16"
BL-5118-32323232	2"	2"	3-25/32"	2-3/8"

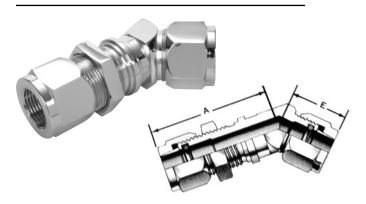
Part #	Tube O.D.	"A"
BL-5119-04	1/4"	1"
BL-5119-05	5/16"	1-1/32"
BL-5119-06	3/8"	1-1/8"
BL-5119-08	1/2"	1-15/32"
BL-5119-10	5/8"	1-21/32"
BL-5119-12	3/4"	1-27/32"
BL-5119-14	7/8"	1-15/16"
BL-5119-16	1"	2-7/32"
BL-5119-20	1-1/4"	2-19/32"
BL-5119-24	1-1/2"	2-29/32"
BL-5119-32	2"	3-19/32"

Part #	Tube O.D.	MFPT	"A"	"C"	"D"
BL-5120-040202	2 1/4"	1/8"	1-1/16"	25/32	21/32"
BL-5120-060404	4 3/8"	1/4"	1-1/4"	1-3/32"	29/32"
BL-5120-080600	6 1/2"	3/8"	1-17/32"	1-7/32"	31/32"
BL-5120-100808	8 5/8"	1/2"	1-23/32"	1-15/32"	1-1/4"
BL-5120-121212	2 3/4"	3/4"	1-31/32"	1-15/32"	1-11/32"
BL-5120-141212	2 7/8"	3/4"	2"	1-5/8"	1-11/32"
BL-5120-16161	3 1"	1"	2-11/32"	1-31/32"	1-5/8"

Part #	Tube O.D.	Hole Dia.	O.A.L.	
BL-5121-0404	1/4"	17/32"	2-7/16"	•
BL-5121-0505	5/16"	19/32"	2-7/16"	
BL-5121-0606	3/8"	21/32"	2-5/8"	-
BL-5121-0808	1/2"	29/32"	3-5/32"	-
BL-5121-1008	5/8" to 1/2" BH	29/32"	3-9/32"	P
BL-5121-1010	5/8"	1-1/32"	3-1/2"	'
BL-5121-1212	3/4"	1-5/32"	3-13/16"	a
BL-5121-1414	7/8"	1-9/32"	3-7/8"	g
BL-5121-1616	1"	1-17/32"	4-1/8"	
BL-5121-2016	1-1/4"	1-25/32"	4-5/8"	е
BL-5121-2020	1-1/4" to 1" BH	1-17/32"	4-13/32"	•
BL-5121-2424	1-1/2"	2-1/32"	4-7/8"	12
BL-5121-3232	2"	2-21/32"	5-3/4"	13

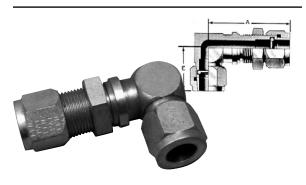


5122 BULKHEAD 45° UNION ELBOW TUBE BOTH OPENINGS



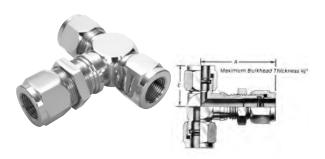
Part #	Tube O.D.	Hole	"A"	"E"
BL-5122-04	1/4"	17/32"	2-1/8"	29/32"
BL-5122-05	5/16"	19/32"	2-5/32"	7/8"
BL-5122-06	3/8"	21/32"	2-9/32"	1"
BL-5122-08	1/2"	29/32"	2-19/32"	1-7/32"
BL-5122-10	5/8"	1-1/32"	2-27/32"	1-7/16"
BL-5122-12	3/4"	1-5/32"	3-3/32"	1-19/32"
BL-5122-16	1"	1-17/32"	3-9/32"	1-13/16"
BL-5122-20	1-1/4"	1-25/32"	3-23/32"	2-7/32"

5123 BULKHEAD UNION ELBOW TUBE BOTH OPENINGS



Part #	Tube O.D.	Hole	"A"	"E"
BL-5123-04	1/4"	17/32"	2-5/32"	1"
BL-5123-05	5/16"	19/32"	2-7/32"	1-1/32"
BL-5123-06	3/8"	21/32"	2-13/32"	1-1/8"
BL-5123-08	1/2"	29/32"	2-3/4"	1-15/32"
BL-5123-10	5/8"	1-1/32"	3-3/32"	1-21/32"
BL-5123-12	3/4"	1-5/32"	3-11/32"	1-27/32"
BL-5123-14	7/8"	1-9/32"	3-7/16"	1-15/16"
BL-5123-16	1"	1-17/32"	3-3/4"	2-7/32"
BL-5123-20	1-1/4"	1-25/32"	4-3/16"	2-19/32"
BL-5123-24	1-1/2"	2-1/32"	4-15/32"	2-29/32"

5124 BULKHEAD TEE TUBE END ALL OPENINGS



		Bulkhead		
Part #	Tube O.D	.Hole Dia.	"A"	"E"
BL-5124-040404	1/4"	17/32"	2-5/32"	1"
BL-5124-050505	5/16"	19/32"	2-7/32"	1-1/32"
BL-5124-060606	3/8"	21/32"	2-13/32"	1-1/8"
BL-5124-080808	1/2"	29/32"	2-3/4"	1-15/32"
BL-5124-101010	5/8"	1-1/32"	3-3/32"	1-21/32"
BL-5124-121212	3/4"	1-5/32"	3-11/32"	1-27/32"
BL-5124-161616	1"	1-17/32"	3-3/4"	2-7/32"
BL-5124-202020	1-1/4"	1-25/32"	4-3/16"	2-19/32"



5125 FEMALE BULKHEAD TUBE END TO FEMALE PIPE END



		Bulkhead		
Part #	Tube O.D.	.Hole Dia.	FPT	O.A.L.
BL-5125-0402	1/4"	17/32"	1/8"	2-3/32"
BL-5125-0404	1/4"	17/32"	1/4"	2-1/4"
BL-5125-0502	5/16"	19/32"	1/8"	2-3/32"
BL-5125-0604	3/8"	21/32"	1/4"	2-3/8"
BL-5125-0606	3/8"	21/32"	3/8"	2-3/8"
BL-5125-0806	1/2"	29/32"	3/8"	2-11/16"
BL-5125-0808	1/2"	29/32"	1/2"	2-7/8"
BL-5125-1008	5/8"	1-1/32"	1/2"	3-1/32"
BL-5125-1212	3/4"	1-5/32"	3/4"	3-9/32"
BL-5125-1412	7/8"	1-9/32"	3/4"	3-5/16"
BL-5125-1616	1"	1-17/32"	1"	3-11/16"
BL-5125-2020	1-1/4"	1-25/32"	1-1/4"	3-15/16"
BL-5125-2424	1-1/2"	2-1/32"	1-1/2"	4-1/16"
BL-5125-3232	2"	2-21/32"	2"	4-17/32"

5140 MALE CONNECTOR • TUBE END SAE STRAIGHT THREAD END



Part #	Tube O.D.	Straight Thread	O.A.L.
BL-5140-0202	1/8"	5/16"-24	1-1/32"
BL-5140-0404	1/4"	7/16"-20	1-9/32"
BL-5140-0405	1/4"	1/2"-20	1-9/32"
BL-5140-0406	1/4"	9/16"-18	1-11/32"
BL-5140-0505	5/16"	1/2"-20	1-9/32"
BL-5140-0606	3/8"	9/16"-18	1-13/32"
BL-5140-0608	3/8"	3/4"-16	1-15/32"
BL-5140-0806	1/2"	9/16"-18	1-21/32"
BL-5140-0808	1/2"	3/4"-16	1-11/16"
BL-5140-0810	1/2"	7/8"-14	1-25/32"
BL-5140-0812	1/2"	1-1/16"-12	1-15/16"
BL-5140-1008	5/8"	3/4"-16	1-7/8"
BL-5140-1010	5/8"	7/8"-14	1-15/16"

Part #	Tube O.D.	Straight Thread	O.A.L.
BL-5140-1012	5/8"	1-1/16"	2-3/32"
BL-5140-1208	3/4"	3/4"-16	2"
BL-5140-1210	3/4"	7/8"-14	2-1/8"
BL-5140-1212	3/4"	1-1/16"-12	2-7/32"
BL-5140-1214	3/4"	1-3/16"-12"	2-7/32"
BL-5140-1216	3/4"	1-5/16"-12"	2-7/32"
BL-5140-1414	7/8"	1-3/16"-12	2-1/4"
BL-5140-1416	7/8"	1-5/16"-12	2-1/4"
BL-5140-1612	1"	1-1/16"-12	2-3/8"
BL-5140-1616	1"	1-5/16"-12	2-3/8"
BL-5140-1620	1"	1-5/8"-12	2-3/8"
BL-5140-2016	1-1/4"	1-5/16"-12	2-11/16"
BL-5140-2020	1-1/4"	1-5/8"-12	2-5/8"
BL-5140-2024	1-1/4"	1-7/8"-12	2-5/8"
BL-5140-2420	1-1/2"	1-5/8"-12	2-25/32"
BL-5140-2424	1-1/2"	1-7/8"-12	2-3/4"
BL-5140-3232	2"	2-1/2"-12	3-5/32"

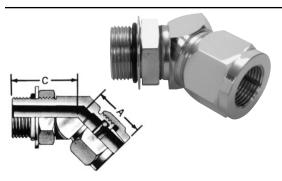


5141 LONG MALE CONNECTOR • TUBE END SAE STRAIGHT THREAD END Part:



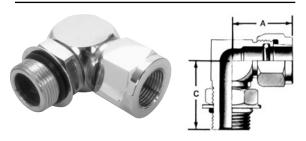
Part #	Tube O.D.	Straight Thread	O.A.L.
BL-5141-0202	1/8"	5/16"-24	2-1/32"
BL-5141-0404	1/4"	7/16"-20	2-1/4"
BL-5141-0505	5/16"	1/2"-20	2-5/16"
BL-5141-0606	3/8"	9/16"-18	2-19/32"
BL-5141-0808	1/2"	3/4"-16	3-1/32"
BL-5141-1010	5/8"	7/8"-14	3-15/32"
BL-5141-1212	3/4"	1-1/16"-12	4-1/32"
BL-5141-1414	7/8"	1-3/16"-12	4-7/32"
BL-5141-1616	1"	1-5/16"-12	4-15/32"
BL-5141-2020	1-1/4"	1-5/8"-12	5-7/32"
BL-5141-2424	1-1/2"	1-7/8"-12	5-3/4"
BL-5141-3232	2"	2-1/2"-12	6-31/32"

5142 MALE 45° ELBOW • TUBE END SAE STRAIGHT THREAD END



		Straight		
Part #	Tube O.D.	Thread	"A"	"C"
BL-5142-04	1/4"	7/16"-20	29/32"	1-1/32"
BL-5142-05	5/16"	1/2"-20	7/8"	1-1/32"
BL-5142-06	3/8"	9/16"-18	1"	1-3/32"
BL-5142-08	1/2"	3/4"-16	1-3/16"	1-9/32"
BL-5142-10	5/8"	7/8"-14	1-7/16"	1-1/2"
BL-5142-12	3/4"	1-1/16"-12	1-19/32"	1-23/32"
BL-5142-14	7/8"	1-3/16"-12	1-17/32"	1-25/32"
BL-5142-16	1"	1-5/16"-12	1-13/16"	1-27/32"
BL-5142-20	1-1/4"	1-5/8"-12	2-7/32"	1-7/8"
BL-5142-24	1-1/2"	1-7/8"-12	2-13/32"	1-7/8"
BL-5142-32	2"	2-1/2"-12	2-15/16"	1-7/8"

5143 MALE 90° ELBOW • TUBE END SAE STRAIGHT THREAD END



		Straight		
Part #	Tube O.D.	Thread	"A"	"C"
BL-5143-0404	1/4"	7/16"-20	1"	1-1/64"
BL-5143-0406	1/4"	9/16"-18	1-1/16"	1-15/64"
BL-5143-0505	5/16"	1/2"-20	1-1/32"	1-5/64"
BL-5143-0606	3/8"	9/16"-18	1-1/8"	1-15/64"
BL-5143-0608	3/8"	3/4"-16	1-3/16"	1-7/16"
BL-5143-0806	1/2"	9/16"-18	1-15/32"	1-23/64"
BL-5143-0808	1/2"	3/4"-16	1-15/32"	1-7/16"
BL-5143-0810	1/2"	7/8"-14	1-15/32"	1-21/32"
BL-5143-1008	5/8"	3/4"-16	1-21/32"	1-1/2"
BL-5143-1010	5/8"	7/8"-14	1-21/32"	1-11/16"
BL-5143-1012	5/8"	1-1/16"-12	1-23/32"	1-59/64"
BL-5143-1208	3/4"	3/4"-16	1-27/32"	1-9/16"
BL-5143-1210	3/4"	7/8"-14	1-27/32"	1-25/32"
BL-5143-1212	3/4"	1-1/16"-12	1-27/32"	1-59/64"
BL-5143-1216	3/4"	1-5/16"-12	2-1/16"	2-1/32"
BL-5143-1414	7/8"	1-3/16"-12	1-15/16"	1-63/64"
BL-5143-1612	1"	1-1/16"-12	2-7/32"	2-3/32"
BL-5143-1616	1"	1-5/16"-12	2-7/32"	2-1/32"
BL-5143-1620	1"	1-5/8"-12	2-11/32"	2-15/64"
BL-5143-2016	1-1/4"	1-5/16"-12	2-19/32"	2-5/32"
BL-5143-2020	1-1/4"	1-5/8"-12	2-19/32"	2-15/64"
BL-5143-2024	1-1/4"	1-7/8"-12	2-23/32"	2-3/8"
BL-5143-2424	1-1/2"	1-7/8"-12	2-29/32"	2-3/8"
BL-5143-3232	2"	2-1/2"-12	3-19/32"	2-7/8"

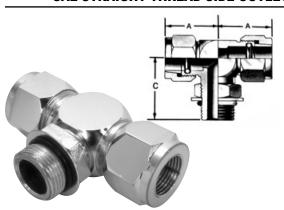
a g e

 This catalog is a sampling of sizes and
 BL-5143-2424
 1-1/2"
 1-7/8"-12

 16 fittings. Many others available—just ask!
 BL-5143-3232
 2"
 2-1/2"-12



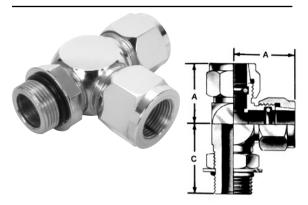
MALE BRANCH TEE 5144 **TUBE END - TUBE END** SAE STRAIGHT THREAD SIDE OUTLET



		Straight		
Part #	Tube O.D.	Thread	"A"	"C"
BL-5144-04	1/4"	7/16"-20	1"	1-1/64"
BL-5144-05	5/16"	1/2"-20	1-1/32"	1-5/64"
BL-5144-06	3/8"	9/16"-18	1-1/8"	1-15/64"
BL-5144-08	1/2"	3/4"-16	1-15/32"	1-7/16"
BL-5144-10	5/8"	7/8"-14	1-21/32"	1-11/16"
BL-5144-12	3/4"	1-1/16"	1-27/32"	1-59/64"
BL-5144-14	7/8"	1-3/16"	1-15/16"	1-63/64"
BL-5144-16	1"	1-5/16"-12	2-7/32"	2-1/32"
BL-5144-20	1-1/4"	1-5/8"-12	2-19/32"	2-15/64"
BL-5144-24	1-1/2"	1-7/8"-12	2-29/32"	2-3/8"
BL-5144-32	2"	2-1/2"-12	3-19/32"	2-7/8"

Straight

5145 **MALE RUN TEE • TUBE END -SAE STRAIGHT THREAD END -TUBE SIDE OUTLET**



		Straight		
Part #	Tube O.D.	Thread	"A"	"C"
BL-5145-04	1/4"	7/16"-20	1"	1-1/64"
BL-5145-05	5/16"	1/2"-20	1-1/32"	1-5/64"
BL-5145-06	3/8"	9/16"-18	1-1/8"	1-15/64"
BL-5145-08	1/2"	3/4"-16	1-15/32"	1-7/16"
BL-5145-10	5/8"	7/8"-14	1-21/32"	1-11/16"
BL-5145-12	3/4"	1-1/16"-12	1-27/32"	1-59/64"
BL-5145-14	7/8"	1-3/16"	1-15/16"	1-63/64"
BL-5145-16	1"	1-5/16"	2-7/32"	2-1/32"
BL-5145-20	1-1/4"	1-5/8"-12	2-19/32"	2-15/64"
BL-5145-24	1-1/2"	1-7/8"-12	2-29/32"	2-3/8"
BL-5145-32	2"	2-1/2"-12	3-19/32"	2-7/8"

5146 **REPLACEMENT O-RINGS FOR TUBE FITTINGS**

Part #

BL-5146-02

BL-5146-04

BL-5146-05

BL-5146-06

BL-5146-08

BL-5146-10

BL-5146-12

BL-5146-14

BL-5146-16

BL-5146-20

BL-5146-24

BL-5146-32

Tube O.D.

1/8"

1/4"

5/16"

3/8"

1/2"

5/8"

3/4"

7/8"

1-1/4"

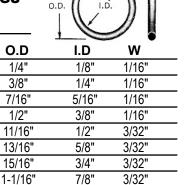
1-1/2"

1-1/4"

1-1/2"

1-3/4"

2-1/4"



1-1/4"

1-1/2'

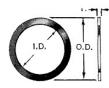
1/8"

1/8"

1/8"

"O-RINGS" W. →

REPLACEMENT BACK-UPS FOR TUBE FITTINGS

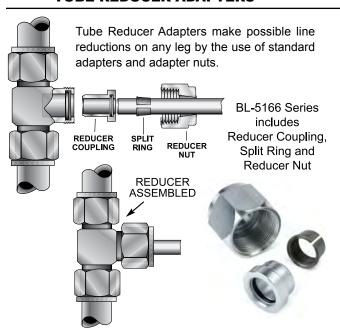


Part #	Tube O.D.	I.D	O.D	Width
BL-5148-06	3/8"	3/8"	1/2"	1/32"
BL-5148-08	1/2"	1/2"	11/16"	1/32"
BL-5148-10	5/8"	5/8"	13/16"	1/32"
BL-5148-12	3/4"	3/4"	15/16"	1/32"
BL-5148-14	7/8"	7/8"	1-1/16"	1/32"
BL-5148-16	1"	1"	1-1/4"	1/32"
BL-5148-20	1-1/4"	1-1/4"	1-1/2"	1/32"
BL-5148-24	1-1/2"	1-1/2"	1-3/4"	1/32"
BL-5148-32	2"	2"	2-1/4"	1/32"

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5166 "O-RING SEAL" **TUBE REDUCER ADAPTERS**



Part #	Tube End Reduction	Hex Nut	Change In Fitting Length
BL-5166-0604	3/8" - 1/4"	3/4"	9/32"
BL-5166-0605	3/8" - 5/16"	3/4"	9/32"
BL-5166-0804	1/2" - 1/4"	1"	No Change
BL-5166-0805	1/2" - 5/16"	1"	3/16"
BL-5166-0806	1/2" - 3/8"	1"	3/16"
BL-5166-1004	5/8" - 1/4"	1-1/8"	1/16" shorter
BL-5166-1005	5/8" - 5/16"	1-1/8"	1/16" shorter
BL-5166-1006	5/8" - 3/8"	1-1/8"	1/16" shorter
BL-5166-1008	5/8" - 1/2"	1-1/8"	5/16"
BL-5166-1204	3/4" - 1/4"	1-1/4"	1/16" shorter

Part #	Tube End Reduction	Hex Nut	Change In Fitting Length
BL-5166-1205	3/4" - 5/16"	1-1/4"	1/16" shorter
BL-5166-1206	3/4" - 3/8"	1-1/4"	1/16" shorter
BL-5166-1208	3/4" - 1/2"	1-1/4"	9/32"
BL-5166-1210	3/4" - 5/8"	1-1/4"	11/32"
BL-5166-1406	7/8" - 3/8"	1-3/8"	3/32" shorter
BL-5166-1408	7/8" - 1/2"	1-3/8"	1/32"
BL-5166-1410	7/8" - 5/8"	1-3/8"	5/16"
BL-5166-1412	7/8" - 3/4"	1-3/8"	11/32" longer
BL-5166-1606	1" - 3/8"	1-5/8"	3/16" shorter
BL-5166-1608	1" - 1/2"	1-5/8"	1/16" shorter
BL-5166-1610	1" - 5/8"	1-5/8"	No Change
BL-5166-1612	1" - 3/4"	1-5/8"	1/4"
BL-5166-1614	1" - 7/8"	1-5/8"	9/32"
BL-5166-2006	1-1/4" - 3/8"	2"	5/16" shorter
BL-5166-2008	1-1/4" - 1/2"	2" 2" 2" 2" 2"	3/16" shorter
BL-5166-2010	1-1/4" - 5/8"	2"	1/8" shorter
BL-5166-2012	1-1/4" - 3/4"	2"	3/32" shorter
BL-5166-2014	1-1/4" - 7/8"	2"	1/16" shorter
BL-5166-2016	1-1/4" - 1"		11/32"
BL-5166-2408	1-1/2" - 1/2"	2-1/4"	5/16" shorter
BL-5166-2410	1-1/2" - 5/8"	2-1/4"	1/4" shorter
BL-5166-2412	1-1/2" - 3/4"	2-1/4"	7/32" shorter
BL-5166-2414	1-1/2" - 7/8"	2-1/4"	3/16" shorter
BL-5166-2416	1-1/2" - 1"	2-1/4"	3/32" shorter
BL-5166-2420	1-1/2" - 1-1/4"	2-1/4"	11/32"
BL-5166-3208	2-1/2"	3"	1/2" shorter
BL-5166-3210	2-5/8"	3"	7/16" shorter
BL-5166-3212	2-3/4"	3"	13/32" shorter
BL-5166-3214	2-7/8"	3"	3/8" shorter
BL-5166-3216	2" - 1"	3"	5/16" shorter
BL-5166-3220	2" - 1-1/4"	3"	3/16" shorter
BL-5166-3224	2" - 1-1/2"	3"	1/16" shorter

5163 **TUBE NUT (USED WITH 5165 SLEEVE)**



•			,	
Part #	Tube O.D.	Thread	Hex	O.A.L.
BL-5163-02	1/8"	3/8"-24	1/2"	15/32"
BL-5163-04	1/4"	1/2"-20	5/8"	41/64"
BL-5163-05	5/16"	9/16"-18	11/16"	41/64"
BL-5163-06	3/8"	5/8"-18	3/4"	11/16"
BL-5163-08	1/2"	7/8"-14	1"	29/32"
BL-5163-10	5/8"	1"-14	1-1/8"	1"
BL-5163-12	3/4"	1-1/8"-12	1-1/4"	1-3/32"
BL-5163-14	7/8"	1-1/4"-12	1-3/8"	1-1/8"
BL-5163-16	1"	1-1/2"-12	1-5/8"	1-1/4"
BL-5163-20	1-1/4"	1-3/4"-12	2"	1-7/16"
BL-5163-24	1-1/2"	2"-12	2-1/4"	1-5/8"
BL-5163-32	2"	2-5/8"-12	3"	2-1/32"

5165 **TUBE SLEEVE** (USED WITH 5163 NUT)



Part #	O.D.	Length
BL-5165-10	5/8"	17/32"
BL-5165-12	3/4"	9/16"
BL-5165-14	7/8"	19/32"
BL-5165-16	1"	21/32"

TUBE CAP-5167 **TO CAP TUBING**



Part #	O.D.	Length
BL-5167-10	5/8"	1-7/8"
BL-5167-12	3/4"	1-19/32"
BL-5167-14	7/8"	1-21/32"
BL-5167-16	1"	1-13/16"





LENZ Standard Steel Pipe Fittings

5231 **HEX BUSHINGS • HB**

Part #	MPT	FPT	Hex Size	Length
BL-5231-0402	1/4"	1/8"	5/8"	27/32"
BL-5231-0602	3/8"	1/8"	3/4"	27/32"
BL-5231-0604	3/8"	1/4"	3/4"	27/32"
BL-5231-0802	1/2"	1/8"	7/8"	1-7/64"
BL-5231-0804	1/2"	1/4"	7/8"	1-7/64"
BL-5231-0806	1/2"	3/8"	7/8"	1-7/64"
BL-5231-1202	3/4"	1/8"	1-1/8"	1-3/16"
BL-5231-1204	3/4"	1/4"	1-1/8"	1-3/16"
BL-5231-1206	3/4"	3/8"	1-1/8"	1-3/16"
BL-5231-1208	3/4"	1/2"	1-1/8"	1-11/64"
BL-5231-1604	1"	1/4"	1-3/8"	1-23/64"
BL-5231-1606	1"	3/8"	1-3/8"	1-23/64"
BL-5231-1608	1"	1/2"	1-3/8"	1-23/64"
BL-5231-1612	1"	3/4"	1-3/8"	1-23/64"
BL-5231-2004	1-1/4"	1/4"	1-3/4"	1-15/32"
BL-5231-2006	1-1/4"	3/8"	1-3/4"	1-15/32"
BL-5231-2008	1-1/4"	1/2"	1-3/4"	1-15/32"
BL-5231-2012	1-1/4"	3/4"	1-3/4"	1-15/32"
BL-5231-2016	1-1/4"	1"	1-3/4"	1-15/32"
BL-5231-2404	1-1/2"	1/4"	2"	1-37/64"
BL-5231-2406	1-1/2"	3/8"	2"	1-37/64"
BL-5231-2408	1-1/2"	1/2"	2"	1-37/64"
BL-5231-2412	1-1/2"	3/4"	2"	1-37/64"
BL-5231-2416	1-1/2"	1"	2"	1-37/64"
BL-5231-2420	1-1/2"	1-1/4"	2"	1-37/64"
BL-5231-3206	2"	3/8"	2-1/2"	1-3/4"
BL-5231-3208	2"	1/2"	2-1/2"	1-3/4"
BL-5231-3212	2"	3/4"	2-1/2"	1-3/4"
BL-5231-3216	2"	1"	2-1/2"	1-3/4"
BL-5231-3220	2"	1-1/4"	2-1/2"	1-3/4"
BL-5231-3224	2"	1-1/2"	2-1/2"	1-3/4"

5232 REDUCING PIPE NIPPLES

3232 KEI	JUCING I	PIPE NIPP	LES	
Part #	"A" MPT	"B" MPT	Hex Size	Length
BL-5232-0204	1/8"	1/4"	9/16"	1-7/32"
BL-5232-0206	1/8"	3/8"	11/16"	1-1/4"
BL-5232-0406	1/4"	3/8"	11/16"	1-13/32"
BL-5232-0408	1/4"	1/2"	7/8"	1-5/8"
BL-5232-0608	3/8"	1/2"	7/8"	1-5/8"
BL-5232-0612	3/8"	3/4"	1-1/16"	1-11/16"
BL-5232-0812	1/2"	3/4"	1-1/16"	1-7/8"
BL-5232-0816	1/2"	1"	1-3/8"	2-3/32"
BL-5232-1216	3/4"	1"	1-3/8"	2-3/32"
BL-5232-1220	3/4"	1-1/4"	1-3/4"	2-5/32"
BL-5232-1620	1"	1-1/4"	1-3/4"	2-11/32"
BL-5232-1624	1"	1-1/2"	2"	2-7/16"
BL-5232-2024	1-1/4"	1-1/2"	2"	2-15/32"
BL-5232-2032	1-1/4"	2"	2-1/2"	2-21/32"
BL-5232-2432	1-1/2"	2"	2-1/2"	2-11/16"

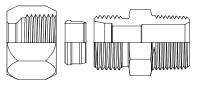
5233 REDUCING PIPE CONNECTORS

Part #	MPT	FPT	Hex Size	Length
BL-5233-0204	1/8"	1/4"	3/4"	1-3/32"
BL-5233-0206	1/8"	3/8"	7/8"	1-9/32"
BL-5233-0402	1/4"	1/8"	5/8"	1"
BL-5233-0404	1/4"	1/4"	3/4"	1-5/16"
BL-5233-0406	1/4"	3/8"	7/8"	1-1/2"
BL-5233-0408	1/4"	1/2"	1-1/8"	1-5/8"
BL-5233-0604	3/8"	1/4"	3/4"	1-1/4"
BL-5233-0606	3/8"	3/8"	7/8"	1-3/8"
BL-5233-0608	3/8"	1/2"	1-1/8"	1-5/8"
BL-5233-0612	3/8"	3/4"	1-3/8"	1-3/4"
BL-5233-0804	1/2"	1/4"	7/8"	1-1/2"
BL-5233-0806	1/2"	3/8"	7/8"	1-11/16"
BL-5233-0808	1/2"	1/2"	1-1/8"	1-13/16"
BL-5233-0812	1/2"	3/4"	1-3/8"	1-15/16"
BL-5233-0816	1/2"	1"	1-5/8"	2-3/16"
BL-5233-1206	3/4"	3/8"	1-1/16"	1-1/2"
BL-5233-1208	3/4"	1/2"	1-1/8"	1-9/16"
BL-5233-1212	3/4"	3/4" 1"	1-3/8"	1-27/32"
BL-5233-1216	3/4"	1"	1-5/8"	2-3/16"
BL-5233-1220	3/4"	1-1/4"	2"	2-11/32"
BL-5233-1608	1"	1/2"	1-3/8"	1-5/8"
BL-5233-1612	1"	3/4"	1-3/8"	1-15/16"
BL-5233-1616	1"	1"	1-5/8"	2-1/4"
BL-5333-1620	1"	1-1/4"	2"	2-13/32"
BL-5333-2012	1-1/4"	3/4"	1-3/4"	2"
BL-5333-2016	1-1/4"	1"	1-3/4"	2-1/8"
BL-5333-2020	1-1/4"	1-1/4"	2"	2-3/8"
BL-5333-2024	1-1/4"	1-1/2"	2-3/8"	2-19/16"
BL-5333-2420	1-1/2"	1-1/4"	2"	2-1/4"
BL-5333-2424	1-1/2"	1-1/2"	2-3/8"	2-13/32"
BL-5333-2432	1-1/2"	2"	3"	2-3/4"
BL-5333-3220	2"	1-1/4"	2-1/2"	2-3/8"
BL-5333-3232	2"	2"	3"	2-3/4"

5234 PIPE NIPPLES • PN

Part #	MPT	Hex Size	Length	Bore
BL-5234-04	1/4"	9/16"	1-3/8"	9/32"
BL-5234-06	3/8"	11/16"	1-13/32"	13/32"
BL-5234-08	1/2"	7/8"	1-13/16"	35/64"
BL-5234-12	3/4"	1-1/16"	1-7/8"	23/32"
BL-5234-16	1"	1-3/8"	2-7/32"	15/16"
BL-5234-20	1-1/4"	1-3/4"	2-13/32"	1-1/4"
BL-5234-24	1-1/2"	2"	2-19/32"	1-15/32"
BL-5234-32	2"	2-1/2"	2-13/16"	1-3/4"





CONSTRUCTION

SVI's Ferrule Lock Flareless Bite Fittings consist of three main components—Bodies, Nuts, and Sleeves.

BODIES: Straight bodies are machined from bar stock. Shape fittings (elbows, tees, & crosses) are machined

from forgings. These Ferrule Lock Flareless Bite Fittings are machined with NPTF - Dryseal Pipe Threads and SAE straight threads for easy installation.

TUBE NUTS: Tube Nuts in sizes 1/4", 5/16 ', 3/8", 1/2", 5/8", 3/4", 1" are cold formed in 1010 Steel. Tube Nuts in sizes 1 1/4", 1 1/2", & 2" are hot forged from 1045.

TUBE SLEEVES: Flareless Tube Sleeves are machined from cold drawn 12L14 bar stock and are available in both SAE

"A" and "B" styles (see tube sleeve drawings to view the "A" and "B" style sleeves). After machining and inspection

the tube sleeves are heat treated to provide them with the necessary hardness.

CAUTION: Stainless steel sleeves must be preset into tubing during installation.

APPLICATIONS

For use with applications such as: Construction Machinery, Textile Machinery, Machine Tools, Chemical, Marine, Military, and most other high pressure hydraulic applications. Applications using thick wall tubing where flaring is not practical.

CAUTION: SVI's Ferrule Lock Flareless Bite Fittings are NOT RECOMMENDED for use in instrumentation applications where toxic and noxious gases are present.

PRESSURE RATINGS

Working Pressure up to 8000 PSI.

CAUTION: Working pressures will vary depending on tube and fitting size. (For applications using extreme pressures at 5000 PSI or above (or) for application with extreme pressure fluctuations, contact SVI.)

MATERIAL

Steel - Forged Bodies 1045

Straight Bodies 12L14, 1045

Cold Formed Nuts 1010

Bar Stock Nut 12L14

Flareless Sleeves 12L14

Stainless Steel - Forged Bodies 316

Stainless Steel - Straight Bodies 316

Stainless Steel – Bar Stock Nuts 316

Stainless Steel - Flareless Sleeves 17-4PH

PLATING

Glear Zinc Trivalent. Alternate plating finishes are available upon request. Contact SVI for details.

TEMPERATURE RANGE

-30 Degrees Fahrenheit to +450 Degrees Fahrenheit Straight thread fittings which use "O" Rings to seal are restricted to the temperature range of the material used to construct the "O" Ring.

HOW TO ORDER

Tubing sizes are measured in sixteenths of an inch. Available sizes are 1/8" through 2". When ordering, the tube end of the fitting must be specified first followed by the pipe thread or straight thread end. All fittings in this section are ordered as assemblies only unless otherwise specified by customers when ordering. (Contact SVI when ordering fittings as bodies only or configurations which are non-standard.)

CONFORMANCE

SVI's Ferrule Lock Flareless Bite Fittings meet SAE J514 and MS (Military Specifications).

ASSEMBLY INSTRUCTIONS

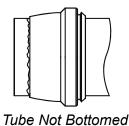
Using a presetting tool, the flareless sleeve should be preset and inspected before final assembly of the fittings is made. All Stainless Sleeves must be preset before final installation.

- Cut the tubing to the desired length making sure the ends are square. (Refer to the tube penetration chart when measuring tube length.) Remove all burrs and foreign matter from the end of the tubing and clean thoroughly.
- Lubricate the threads of the preset body, tube nut, and outer edge of both ends of the flareless sleeve.
- Slide the tube nut and the flareless sleeve onto the tubing making sure the open end of the nut and the leading "bite" edge of the sleeve are facing the end of the tubing.
- 4. Insert the tubing into the preset body until it hits the bottom or shoulder of the tool. Bring the flareless sleeve and tube nut down to the preset tool and tighten the nut to the fingertight position.
- 5. Using a marker make a reference line on the tubing and tube nut. Holding the tubing firmly in the preset tool and using a wrench, tighten the tube nut an additional 1-3/4 turns past the finger-tight position. Disassemble the nut from the preset tool and inspect the flareless sleeve for the proper bite into the tube. (Refer to example drawings for correct and incorrect preset sleeves.)
- 6. Should the preset sleeve look acceptable, insert the tube with the preset sleeve into the fitting body to be assembled. Tighten the tube nut to the finger-tight position. Then using a wrench tighten the nut until a sudden rise in torque is felt. From the point where the sudden rise in torque started turn the nut an additional 1/3 to 1/4 turn. Your assembly is now ready for use. (Refer to the assembly torque charts during installation of these ferrule lock flareless bite fittings from the port and thread assemblies section.)



INCORRECT TUBE / SLEEVE ASSEMBLY



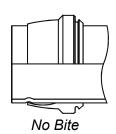


In Fitting

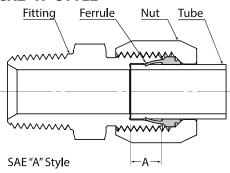


Cocked





CORRECT ASSEMBLY SAE "A" STYLE



IL A Style		т. А	
	VVV		_
	~~~~	N O	
	← A→		

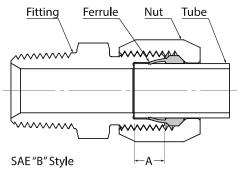
Tube Length Allowance

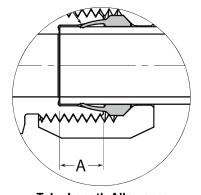
Tube O.D.	A
1/8	0.19
3/16	0.23
1/4	0.23
5/16	0.25
3/8	0.25
1/2	0.31
5/8	0.35
3/4	0.35
7/8	0.35
1	0.42
1-1/4	0.42
1-1/2	0.49
2	0.49

Nominal

TUBE LENGTH ALLOWANCE TABLE

CORRECT ASSEMBLY SAE "B" STYLE





Tube Length Allowance

The above example shows an assembly using the SAE "A" Style flareless sleeve. When assembled properly, the SAE "A"style flareless sleeve assembly will exhibit the following characteristics.

- 1. A slight indentation around the end of the tube which indicates that the tube was fully inserted during installation.
- 2. A visible metal lip will have been raised 75% to 100% of the thickness of the sleeves lead biting edge all the way around the tube. (See illustration above.)
- 3. The midsection of the sleeve behind the leading edge has a slight bow to provide contact with the internal taper of the fitting body and form a sealing point.
- 4. The back (tail) end of the sleeve will be in firm contact with the O.D. of the tube.

The above example shows an assembly using the SAE "B" Style flareless sleeve. When assembled properly, the SAE "B" style flareless sleeve assembly will exhibit the following characteristics.

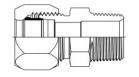
- 1. A slight indentation around the end of the tube which indicates that the tube was fully inserted during installation.
- 2. A metal lip will have been raised 75% to 100% of the thickness of the sleeves biting edge which is hidden under the leading end of the sleeve. (See illustration above.)
- 3. The midsection of the sleeve behind the leading edge 9has a slight bow to provide contact with the internal \bigcirc taper of the fitting body and form a sealing point.
- 4. The back (tail) end of the sleeve will be in firm contact 21 with the O.D. of the tube.



5240 MALE CONNECTOR
TUBE END - MALE PIPE END

SAE 080102





Part #	Tube O.D.	MPT	Hex
BL-5240-1006	5/8"	3/8"	15/16"
BL-5240-1008	5/8"	1/2"	15/16"
BL-5240-1212	3/4"	3/4"	1-1/8"
BL-5240-1208	3/4"	1/2"	1-1/8"
BL-5240-1412	7/8"	3/4"	1-1/4"
BL-5240-1616	1"	1"	1-3/8"
BL-5240-1612	1"	3/4"	1-3/8"

Equivalent to Parker FBU

5241 **PLUG**





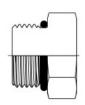
Part #	Tube O.D	Hex	
BL-5241-10	5/8"	15/16"	
BL-5241-12	3/4"	1-1/8"	
BL-5241-16	1"	1-3/8"	

Equivalent to Parker PNU

5242 HEX HEAD O-RING PLUG

SAE 090109A





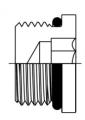
Part #	Port Size	Hex	
BL-5242-10	5/8"	1"	
BL-5242-12	3/4"	1-1/4"	
BL-5242-14	7/8"	1-3/8"	
BL-5242-16	1"	1-1/2"	

Equivalent to Parker P50N

5243 HOLLOW HEX O-RING PLUG

SAE 090109B



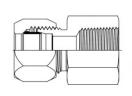


Part #	Port Size	Hex	
BL-5243-10	5/8"	3/8"	
BL-5243-12	3/4"	9/16"	
BL-5243-14	7/8"	9/16"	
BL-5243-16	1"	5/8"	

Equivalent to Parker HP50N

5244 FEMALE CONNECTOR
TUBE END - FEMALE PIPE END





Part #	Tube O.D.	FPT	Hex
BL-5244-1008	5/8"	1/2"	1-1/8"
BL-5244-1212	3/4"	3/4"	1-3/8"
BL-5244-1412	7/8"	3/4"	1-3/8"
BL-5244-1616	1"	1"	1-5/8"

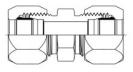
Equivalent to Parker GBU



5245 UNION

SAE 080101





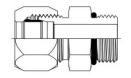
Part #	Tube O.D.	Tube O.D.	Hex
BL-5245-1010	5/8"	5/8"	15/16"
BL-5245-1212	3/4"	3/4"	1-1/8"
BL-5245-1414	7/8"	7/8"	1-1/4"
BL-5245-1616	1"	1"	1-3/8"

Equivalent to Parker HBU

5246 STRAIGHT THREAD O-RING MALE CONNECTOR

SAE 080120





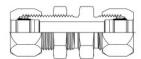
Part #	Tube O.D.	Port Size	Hex
BL-5246-1010	5/8"	5/8"	1"
BL-5246-1212	3/4"	3/4"	1-1/4"
BL-5246-1216	3/4"	1"	1-1/2"
BL-5246-1616	1"	1"	1-1/2"
BL-5246-1612	1"	3/4"	1-3/8"

Equivalent to Parker F5BU

5247 BULKHEAD UNION

SAE 080120





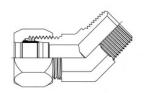
Part #	Tube O.D.	Hex	
BL-5247-12	3/4"	1-3/8"	
BL-5247-14	7/8"	1-1/2"	
BL-5247-16	1"	1-5/8"	_

Equivalent to Parker F5BU

5248 **45° MALE ELBOW TUBE END - MALE PIPE END**

SAE 080302





Part #	Tube O.D.	MPT	
BL-5248-1008	5/8"	1/2"	
BL-5248-1212	3/4"	3/4"	_

Equivalent to Parker VBU

5249 STRAIGHT THREAD O-RING 45° ELBOW

SAE 080320



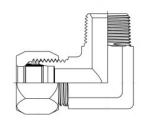
Part #	Tube O.D.	Port Size	
BL-5249-1616	1"	1"	

Equivalent to Parker V5BU



90° MALE ELBOW 5250



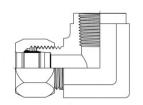


Part #	Tube O.D.	MPT	
BL-5250-1008	5/8"	1/2"	_
BL-5250-1006	5/8"	3/8"	
BL-5250-1212	3/4"	3/4"	
BL-5250-1208	3/4"	1/2"	
BL-5250-1412	7/8"	3/4"	
BL-5250-1616	1"	1"	
BL-5250-1612	1"	3/4"	

Equivalent to Parker CBU

5251 90° FEMALE ELBOW



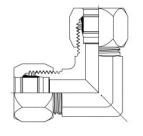


Part #	Tube O.D.	FPT	
BL-5251-1008	5/8"	1/2"	
BL-5251-1212	3/4"	3/4"	
BL-5251-1412	7/8"	3/4"	
BL-5251-1616	1"	1"	

Equivalent to Parker DBU

90° UNION ELBOW 5252



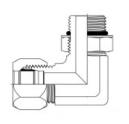


Part #	Tube O.D.	
BL-5252-10	5/8"	
BL-5252-12	3/4"	
BL-5252-14	7/8"	
BL-5252-16	1"	

Equivalent to Parker EBU

5253 **STRAIGHT THREAD O-RING** 90° ELBOW



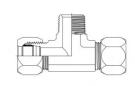


Part #	Tube O.D.	Port Size	
BL-5253-1010	5/8"	5/8"	
BL-5253-1212	3/7"	3/4"	
BL-5253-1616	1"	1"	-

Equivalent to Parker C5BU

MALE BRANCH TEE 5254



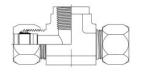


Part #	Tube O.D.	MPT	
BL-5254-101008	5/8"	1/2"	
BL-5254-121212	3/4"	3/4"	
BL-5254-161616	1"	1"	

Equivalent to Parker SBU

5255 FEMALE BRANCH TEE





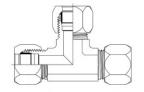
Part #	Tube O.D.	FPT	
BL-5255-101008	5/8"	1/2"	
BL-5255-121212	3/4"	3/4"	
BL-5255-161616	1"	1"	

Equivalent to Parker OBU

5256 UNION TEE

SAE 080401





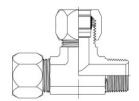
Part #	Tube O.D.	
BL-5256-10	5/8"	
BL-5256-12	3/4"	
BL-5256-14	7/8"	
BL-5256-16	1"	

Equivalent to Parker JBU

5257 MALE RUN TEE

SAE 080424





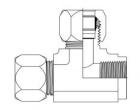
Part #	Tube O.D.	MPT	
BL-5257-101008	5/8"	1/2"	
BL-5257-121212	3/4"	3/4"	
BL-5257-161616	1"	1"	

Equivalent to Parker RBU

5258 FEMALE RUN TEE

SAE 080426

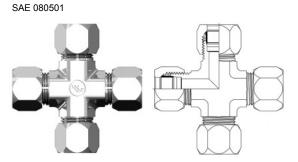




Part #	Tube O.D.	MPT	
BL-5258-101008	5/8"	1/2"	
BL-5258-121212	3/4"	3/4"	
BL-5258-141214	7/8"	3/4"	

Equivalent to Parker MBU

5259 UNION CROSS



Part #	Tube O.D.	
BL-5259-10	5/8"	

Equivalent to Parker KBU

25

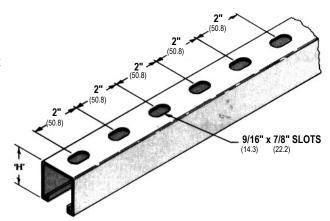


METAL FRAMING CHANNEL - Cold formed in modern rolling mills from 14 gauge low carbon steel strips. A continuous channel with inturned lips provides the ability to make attachments at any point.

LENGTHS - Metal Framing Channel is available in 10 and 20 foot standard lengths.

FINISH - Channel is supplied with a special green epoxy finish.

CHANNEL HOLE PATTERN - Both BH-5400-04 and BH-5400-09 series come with slotted holes. Holes are located every 2" on center and are 9/16" wide by 7/8" long making installation location easy.



5400 METAL FRAMING CHANNEL

- Versatile
- Economical
- Easy to Install

Part #	Height	Width	Steel	Length	per foot
BL-5400-04	1-5/8"	1-5/8"	14 Ga.	20 feet	1.4 lbs.
BL-5400-04A	1-5/8"	1-5/8"	14 Ga.	10 feet	1.4 lbs.
BL-5400-09	13/16"	1-5/8"	14 Ga.	20 feet	.97 lbs.
BL-5400-09A	13/16"	1-5/8"	14 Ga.	10 feet	.97 lbs.

Note: Other styles and sizes of channel are available! Call for details and minimums.

CHANNEL NUTS (use with BL-5400-04 series channel)

Channel Nuts are one of the main components of the metal framing system. Each is designed to provide essential gripping power and ease during installation. Channel Nuts are press formed, machined and hardened from steel which meets the requirements of ASTM A576, ASTM A675 and ASTM A108.

Recommended Torque

3/8"-16 19 foot/lbs. 1/2"-13 50 foot/lbs.

Note: Other thread size channel nuts are available call for details and minimums

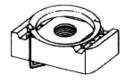




Channel Nut Without Spring



TWIRL NUT PICTURED



Twirl-Nut®

SVI PART NUMBERS

			Thread		Weight p	er 100
With Spring	Without Spring	Twirl Nut	Size	Thickness	Lbs.	Kg Kg
BL-5401-06	BL-5401-17	BL-5401-28	3/8-16	3/8"	9.3	4.22
BL-5401-08	BL-5401-19	BL-5401-30	1/2-13	1/2"	11.6	5.26

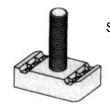


Channel Nuts

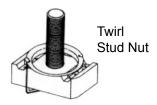
CHANNEL STUD NUTS (use with BL-5400-04 series channel)



Stud Nut With Spring



Stud Nut Without Spring



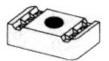
SVI PART NUMBERS

With Spring	Without Spring	Twirl Nut	Thread Size	Stud Length	Weight լ Lbs.	per 100 Kg
BL-5401-44	BL-5401-56	BL-5401-68	3/8-16	3/4"	12.0	5.44
BL-5401-45	BL-5401-57	BL-5401-69	3/8-16	1"	12.6	5.71
BL-5401-48	BL-5401-60	BL-5401-72	1/2-13	3/4"	16.5	7.48
BL-5401-49	BL-5401-61	BL-5401-73	1/2-13	1"	17.6	7.98
BL-5401-50	BL-5401-62	BL-5401-74	1/2-13	1-1/4"	18.7	8.48

CHANNEL NUTS (use with BL-5400-09 series channel)



Spring Nut



Nut Without Spring

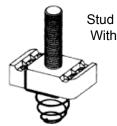


Twirl-Nut®

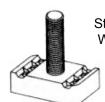
SVI PART NUMBERS

			Thread		Weight	per 100
With Spring	Without Spring	Twirl Nut	Size	Thickness	Lbs.	Kg
BL-5402-06	BL-5401-17	BL-5401-28	3/8-16	3/8"	9.3	4.22
BL-5402-08	BL-5401-19	BL-5401-30	1/2-13	3/8"	8.8	3.99

CHANNEL STUD NUTS (use with BL-5400-09 series channel)



Stud Nut With Spring



Stud Nut Without Spring



Twirl Stud Nut

SVI PART NUMBERS

OTITAL NOMBER			. Thread	Stud	Weight _I	ner 100	
With Spring	Without Spring	Twirl Nut	Size	Length	Lbs.	Kg	ı
BL-5402-34	BL-5401-56	BL-5401-68	3/8-16	3/4"	12.0	5.44	
BL-5402-35	BL-5401-57	BL-5401-69	3/8-16	1"	12.6	5.71	
BL-5402-38	BL-5401-60	BL-5401-72	1/2-13	3/4"	13.7	6.21	
BL-5402-39	BL-5401-61	BL-5401-73	1/2-13	1"	14.8	6.71	(
BL-5402-40	BL-5401-62	BL-5401-74	1/2-13	1-1/4"	18.7	8.48	

a



Fastener Hardware

HEX HEAD CAP SCREWS



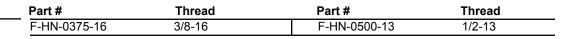
Part #	Thread	Length	Part #	Thread	Length
F-HC-0375-16-0750	3/8-16	3/4"	F-HC-0500-13-0750	1/2-13	3/4"
F-HC-0375-16-1000	3/8-16	1"	F-HC-0500-13-0875	1/2-13	7/8"
F-HC-0375-16-1250	3/8-16	1-1/4"	F-HC-0500-13-1000	1/2-13	1"
F-HC-0375-16-1500	3/8-16	1-1/2"	F-HC-0500-13-1250	1/2-13	1-1/4"
F-HC-0375-16-1750	3/8-16	1-3/4"	F-HC-0500-13-1500	1/2-13	1-1/2"
F-HC-0375-16-2000	3/8-16	2"	F-HC-0500-13-1750	1/2-13	1-3/4"
F-HC-0375-16-2250	3/8-16	2-1/4"	F-HC-0500-13-2000	1/2-13	2"
			F-HC-0500-13-2500	1/2-13	2-1/2"

MACHINE SCREWS SLOTTED ROUND HEAD



Part #	Thread	Length	Part #	Thread	Length
F-MS-0375-16-0750	3/8-16	3/4"	F-MS-0500-13-1000	1/2-13	1"
F-MS-0375-16-1000	3/8-16	1"	F-MS-0500-13-1250	1/2-13	1-1/4"
F-MS-0375-16-1250	3/8-16	1-1/4"	F-MS-0500-13-1500	1/2-13	1-1/2"
F-MS-0375-16-1500	3/8-16	1-1/2"	F-MS-0500-13-1750	1/2-13	1-3/4"
F-MS-0375-16-1750	3/8-16	1-3/4"	F-MS-0500-13-2000	1/2-13	2"
F-MS-0375-16-2000	3/8-16	2"	F-MS-0500-13-2250	1/2-13	2-1/4"
F-MS-0375-16-2500	3/8-16	2-1/2"	F-MS-0500-13-2500	1/2-13	2-1/2"

HEX NUTS





LOCK WASHERS

Part #	Size	Part #	Size	
F-LW-0375	3/8"	F-LW-0500	1/2"	



ALL THREADED ROD (ATR)



Part #	Thread	Length	Part #	Thread	Length
F-TR-0375-16-036	3/8-16	36"	F-TR-0500-13-036	1/2-13	36"
F-TR-0375-16-072	3/8-16	72"	F-TR-0500-13-072	1/2-13	72"
F-TR-0375-16-120	3/8-16	120"	F-TR-0500-13-120	1/2-13	120"
F-TR-0375-16-144	3/8-16	144"	F-TR-0500-13-144	1/2-13	144"

ROD COUPLING

Part #	Thread	Length	Part #	Thread	Length
F-RC-0375-16-1125	3/8-16	1-1/8"	F-RC-0500-13-1750	1/2-13	1-3/4"

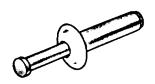




Note: SVI has many other fasteners available. If you do not see a size you are looking for, please call.

Fastener Hardware & Drill Bits

NAILINS - PIN BOLT DRIVE



Part #	Dia.	Length	
F-NP-250-1000	1/4"	1"	
F-NP-250-1250	1/4"	1-1/4"	
F-NP-250-1500	1/4"	1-1/2"	

MASONRY PINGRIPS - UNIVERSAL HEAD



Part #	Dia.	Size	
F-MP-250-0375	1/4"	3/8"	
F-MP-250-0500	1/4"	1/2"	
F-MP-250-0875	1/4"	7/8"	

SPLIT DRIVE ANCHOR - ROUND HEAD



Part #	Dia.	Length	
F-DA-250-1250	1/4"	1-1/4"	
F-DA-250-1500	1/4"	1-1/2"	
F-DA-250-2000	1/4"	2"	
F-DA-375-2000	3/8"	2"	
F-DA-375-2500	3/8"	2-1/2"	

MASONRY SDS DRILL BITS - CARBIDE TIPPED

Drilling in Concrete, Brick, Stone and any other Masonry material.



Part #	Dia.	Usable Length	Total Length	
H-DC-250-02-04500	1/4"	2"	4-1/2"	
H-DC-250-04-06250	1/4"	4"	6-1/4"	
H-DC-250-06-08500	1/4"	6"	8-1/2"	
H-DC-375-04-06250	3/8"	4"	6-1/4"	
H-DC-375-08-10500	3/8"	8"	10-1/2"	

MASONRY DRILL BITS - HEAVY DUTY - STRAIGHT SHANK

Drills quickly and easily into Masonry, Concrete, Rock and artificial Stone.

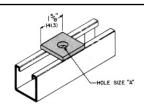


Part #	Dia.	Shank Diameter	Total Length	
H-DB-250-04-04000	1/4"	1/4"	4"	
H-DB-250-06-06000	1/4"	1/4"	6"	
H-DB-375-06-06000	3/8"	3/8"	6"	
H-DB-375-08-08000	3/8"	3/8"	8"	
H-DB-375-12-10500	3/8"	3/8"	12"	

LOOKING FOR OTHER DRILL BITS? GIVE US A CALL! 800-321-8173

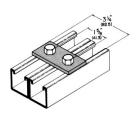


Flat Plate Fittings

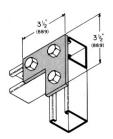


Square Washer

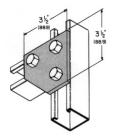
Part #	"A"	Bolt
BL-5410-02	7/16"	3/8"
BL-5410-03	9/16"	1/2"



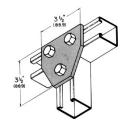
BL-5410-12 2 Hole Splice



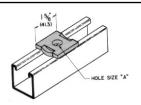
BL-5410-21 3 Hole Corner



BL-5410-25 3 Hole Corner Gusset

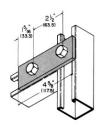


BL-5410-29 3 Hole Tee Gusset

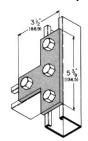


No Twist Square Washer

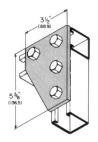
Part #	"A"	Bolt
BL-5410-07	7/16"	3/8"
BL-5410-08	9/16"	1/2"



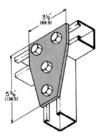
BL-5410-13 2 Hole Splice



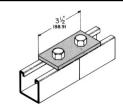
BL-5410-23 4 Hole Tee



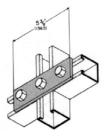
BL-5410-26 4 Hole Corner Gusset



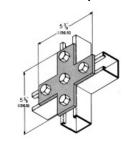
BL-5410-31 4 Hole Tee Gusset



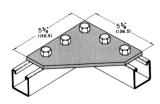
BL-5410-11 2 Hole Splice



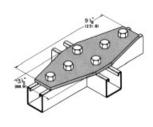
BL-5410-14 3 Hole Splice



BL-5410-24 5 Hole Cross



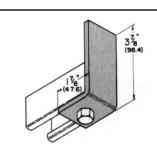
BL-5410-28 5 Hole Corner Gusset



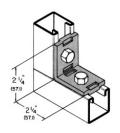
BL-5410-34 6 Hole Cross Gusset



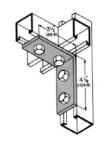
90° Angle Fittings



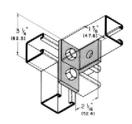
BL-5411-01 1 Hole Corner



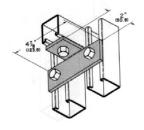
BL-5411-07 2 Hole No Twist Corner



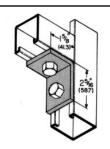
BL-5411-16 4 Hole Corner



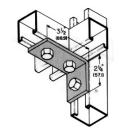
BL-5411-20 3 Hole LH Offset



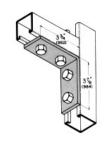
BL-5411-23 3 Hole Offset Bent Tee



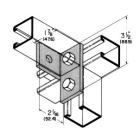
BL-5411-05 2 Hole Corner



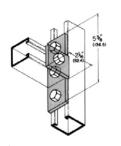
BL-5411-11 3 Hole Corner



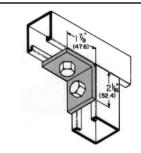
BL-5411-17 4 Hole Corner



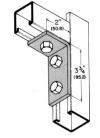
BL-5411-21 3 Hole RH Offset



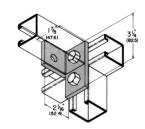
BL-5411-24 4 Hole Offset Bent Tee



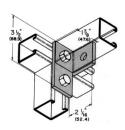
BL-5411-06 2 Hole Corner



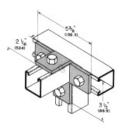
BL-5411-14 3 Hole Corner



BL-5411-19 3 Hole RH Offset



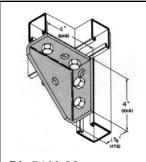
BL-5411-22 3 Hole LH Offset



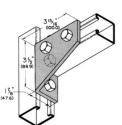
BL-5411-27 5 Hole Offset Bent Tee

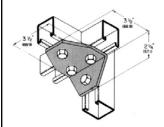


90° Angle Fittings

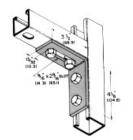


BL-5411-28 Universal Shelf Bracket

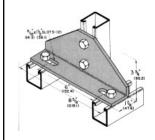




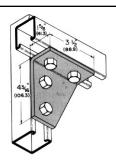
BL-5411-38 4 Hole Gussetted 3-Way



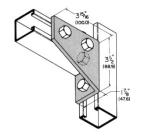
BL-5411-48 3 Hole Adjustable Corner



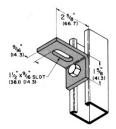
BL-5411-51 4 Hole Adjustable Corner | BL-5411-52 2 Hole Tapped Corner



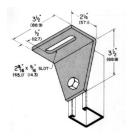
BL-5411-30 4 Hole RH Corner Gusset



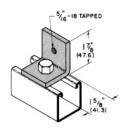
BL-5411-32 4 Hole RH Corner Gusset BL-5411-33 4 Hole LH Corner Gusset

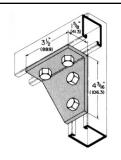


BL-5411-44 2 Hole Adjustable Corner

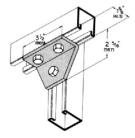


BL-5411-49 2 Hole Adjustable Corner

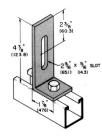




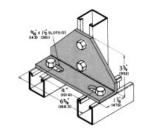
BL-5411-31 4 Hole LH Corner Gusset



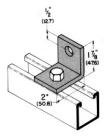
BL-5411-34 3 Hole Gussetted Shelf



BL-5411-46 2 Hole Adjustable Corner



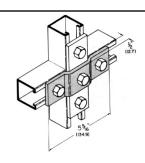
BL-5411-50 4 Hole Adjustable Corner



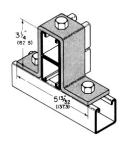
BL-5411-53 2 Hole Bus Duct



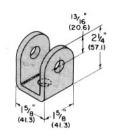
"U" Fittings



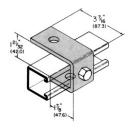
BL-5413-09 3 Hole Offset Plate



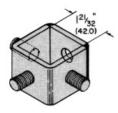
BL-5413-16 3 Hole "U" Support



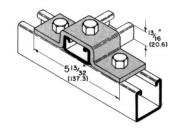
BL-5413-20 3 Hole Swivel Clevis



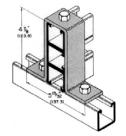
BL-5413-33 3 Hole Suspension Clevis



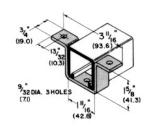
BL-5413-37 3 Stud Ring Connect



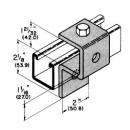
BL-5413-10 3 Hole "U" Support



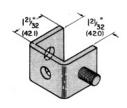
BL-5413-17 3 Hole "U" Support



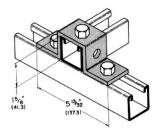
BL-5413-21 3 Hole "U" Support LW



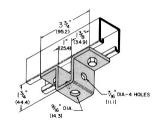
BL-5413-34 3 Hole Support Cup



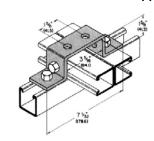
BL-5413-38 1 Stud Ring Connect



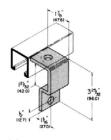
BL-5413-15 3 Hole "U" Support



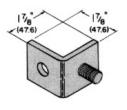
BL-5413-19 5 Hole "U" Support



BL-5413-23 6 Hole "U" Support



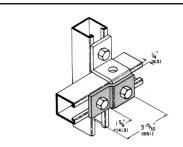
BL-5413-36 2 Hole Bus Duct Connect



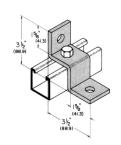
BL-5413-39 1 Stud Ring Connect



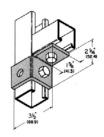
"Z" Fittings, Wing Fittings & Brackets



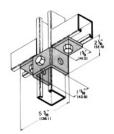
BL-5414-01 2 Hole Offset "Z"



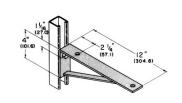
BL-5414-14 3 Hole Sheath Corner



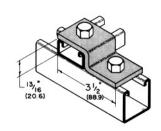
BL-5415-01 3 Hole RH Single Corner



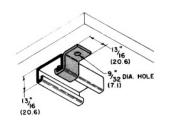
BL-5415-12 5 Hole Double Wing



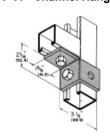
BL-5417-02 Bracket



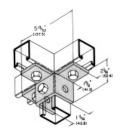
BL-5414-02 2 Hole "Z" Support



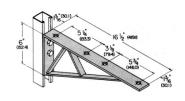
BL-5414-17 Channel Hanger Bracket



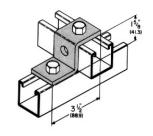
BL-5415-02 3 Hole LH Single Corner



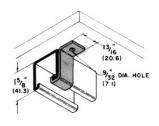
BL-5415-15 6 Hole Triple Wing



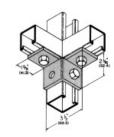
BL-5417-09 Bracket



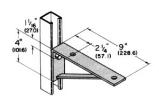
BL-5414-06 3 Hole "Z" Support



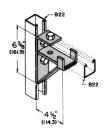
BL-5414-19 Channel Hanger Bracket



BL-5415-09 4 Hole Double Corner



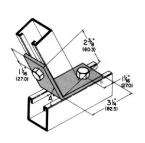
BL-5417-01 Bracket



BL-5417-23 Bracket for BL-5400-04

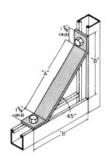


Miscellaneous Fittings



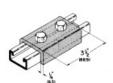
2 Hole Open Angular Fitting

SVI Part#	"A"
BL-5412-01A	82.5°
BL-5412-01B	75°
BL-5412-01C	67.5°
BL-5412-01D	60°
BL-5412-01E	52.5°
BL-5412-01F	37.5°

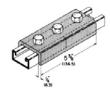


2 Hole 45° Knee Brace

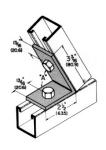
SVI Part #	"A"	"B"
BL-5412-14A	12"	10-1/8"
BL-5412-14B	16.5/8"	13-3/8"
BL-5412-14C	18"	14-3/8"



BL-5413-01 2 Hole Splice Clevis

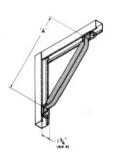


BL-5413-02 3 Hole Splice Clevis



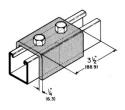
2 Hole Closed Angular Fitting

SVI Part #	"A"
BL-5412-06A	82.5°
BL-5412-06B	75°
BL-5412-06C	67.5°
BL-5412-06D	60°
BL-5412-06E	52.5°
BL-5412-06F	37.5°

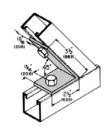


2 Hole 45° Tubing Knee Brace

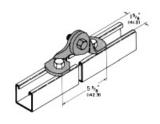
SVI Part#	"A"
BL-5412-15A	18"
BL-5412-15B	24"
BL-5412-15C	30"
BL-5412-15D	36"
BL-5412-15E	42"
BL-5412-15F	48"



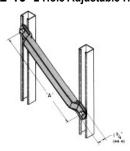
BL-5413-04 2 Hole Splice Clevis



BL-5412-07 2 Hole Closed Angle

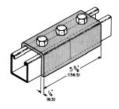


BL-5412-10 2 Hole Adjustable Hinge



2 Hole Straight Tubing Brace

SVI Part#	"A"
BL-5412-16A	18"
BL-5412-16B	24"
BL-5412-16C	30"
BL-5412-16D	36"
BL-5412-16E	42"
BL-5412-16F	48"

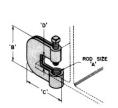


BL-5413-05 3 Hole Splice Clevis



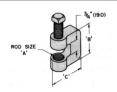
Beam & Pipe Clamps

The Beam attachments and pipe supports offered are designed to provide support without drilling or welding. The complete selection of Beam Clamps, Pipe Clamps, Supports and Accessories are designed for use with the channel listed earlier in this booklet and offer many installation advantages.



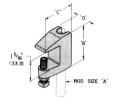
Steel C-Clamp

Part #	"A"	"B"	"C"	"D"	Max Load
BL-5420-00A	3/8-16	2-3/8"	2-3/8"	3/4"	400 lbs.
BL-5420-00B	1/2-13	2-3/8"	2-3/8"	3/4"	400 lbs.



Malleable Iron C-Clamp

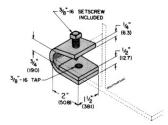
Part #	"A"	"B"	"C"	Max Load
BL-5420-00K	3/8-16	1-3/4"	1-3/4"	400 lbs.
BL-5420-00L	1/2-13	1-3/4"	1-3/4"	400 lbs.



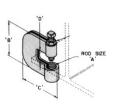
Wide Jaw Wedge C-Clamp

(set screw and locknut included)

Part #	"A"	"B"	"C"	"D"	Max Load
BL-5420-01A	3/8-16	2-1/8"	1-15/16"	15/16"	500 lbs.
BL-5420-01B	1/2-13	2-1/8"	2-15/16"	15/16"	700 lbs.

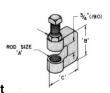


BL-5420-03 Beam Clamp Design Load 300 lbs.



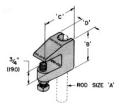
Steel C-Clamp with Locknut

Part #	"A"	"B"	"C"	"D"	Max Load
BL-5420-00F	3/8-16	2-3/8"	2-3/8"	3/4"	400 lbs.
BL-5420-00G	1/2-13	2-3/8"	2-3/8"	3/4"	400 lbs.



Malleable Iron C-Clamp with Locknut

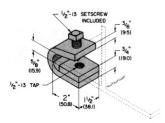
Part #	"A"	"B"	"C"	Max Load
BL-5420-00O	3/8-16	1-3/4"	1-3/4"	400 lbs.
BL-5420-00P	1/2-13	1-3/4"	1-3/4"	400 lbs.



Wedge C-Clamp

(set screw and locknut included)

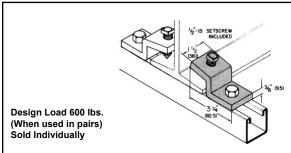
Part #	"A"	"B"	"C"	"D"	Max Load
BL-5420-02A	3/8-16	1-7/16"	1-3/4"	3/4"	400 lbs.
BL-5420-02B	1/2-13	1-9/16"	2"	1"	700 lbs.



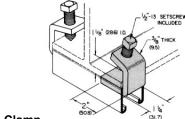
BL-5420-04 Beam Clamp Design Load 800 lbs.



Beam, Pipe & Tubing Clamps

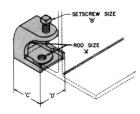


BL-5420-05 Zee Beam Clamp



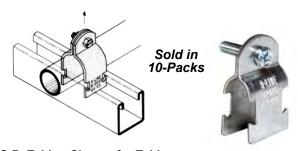
Design Load 1000 lbs. (When used in pairs) Sold in Individually

BL-5420-07 I Beam Clamp



Rod Support

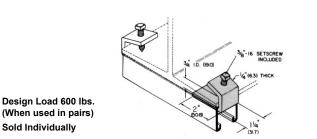
Part #	"A"	"B"	"C"	"D"	Max Loa	d
BL-5420)-14C	3/8-16	1/2-16	2"	1-3/4"	350 lbs.
BL-5420)-14D	1/2-13	1/2-13	2"	1-3/4"	350 lbs.



O.D. Tubing Clamps for Tubing

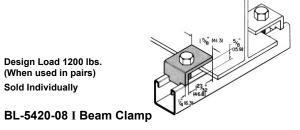
Sold in 10-Packs:

Part#	O.D.	Gauge	Design Load	# of Pieces
BL-5420-50C-10	1/2"	16	400 lbs.	10-Pack
BL-5420-50D-10	5/8"	16	400 lbs.	10-Pack
BL-5420-50E-10	3/4"	16	400 lbs.	10-Pack
BL-5420-50F-10	7/8"	16	400 lbs.	10-Pack
BL-5420-50G-10	1"	14	600 lbs.	10-Pack
BL-5420-50I-10	1-1/4"	14	600 lbs.	10-Pack
BL-5420-50K-10	1-1/2"	14	600 lbs.	10-Pack

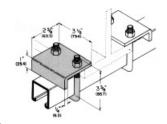


BL-5420-06 I Beam Clamp

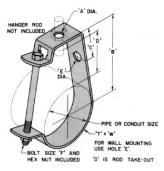
Sold Individually



Design Load 1200 lbs. (When used in pairs) Sold Individually for use with BH-9400-04 or BH-9400-09 channel



BL-5420-26 Beam Clamp

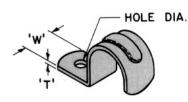


Adjustable "J" Pipe Hanger

Part #	Size	"A"	"B"	"C"	"D"	
BL-5420)-60A	1/2"	13/32"	2-5/8"	1"	1-3/4"
BL-5420)-60B	3/4"	13/32"	2-7/8"	1"	2"
BL-5420)-60C	1"	13/32"	3-1/16"	1"	2"
BL-5420)-60D	1-1/4"	13/32"	3-5/16"	1-1/16"	2"
BL-5420)-60E	1-1/2"	13/32"	3-9/16"	1-1/16"	2"
BL-5420)-60F	2"	13/32"	3-3/4"	1-1/8"	2"

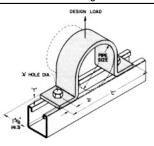


Beam, Pipe & Tubing Clamps



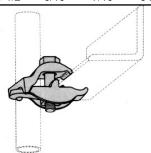
1 Hole Rigid Pipe Strap

Part #	Size	"T"	"W"	Hole Dia	a
BL-5420)-54C	1/2"	.050	7/8"	9/32"
BL-5420)-54D	3/4"	.050	7/8"	9/32"
BL-5420)-54E	1"	.065	1"	9/32"
BL-5420)-54F	1-1/4"	.065	1-1/4"	21/64"
BL-5420)-54G	1-1/2"	11 ga.	1"	.380



Standard Pipe Strap

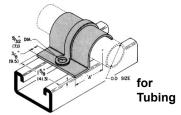
Part #	Size	"A"	"B"	"C"	"T"	
BL-5420	-56A	1/2"	5/16"	7/16"	2-13/16"	10 ga.
BL-5420	-56B	3/4"	5/16"	7/16"	3"	10 ga.
BL-5420	-56C	1"	5/16"	7/16"	3-17/32"	10 ga.
BL-5420	-56D	1-1/4"	5/16"	7/16"	3-3/4"	10 ga.
BL-5420	-56E	1-1/2"	5/16"	7/16"	3-25/32"	10 ga.



Edge Pipe Clamp

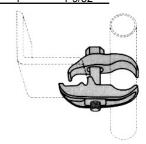
Part #	Size
BL-5420-59A	1/2"
BL-5420-59B	3/4"
BL-5420-59C	1"
BL-5420-59D	1-1/4"
BL-5420-59E	1-1/2"

Use to support pipe or rigid conduit perpendicular to the edge of a beam or angle iron.



1 Hole O.D. Tubing Clamp

Part #	Size	"A"	
BL-5420	-55D	1/2"	1-1/32"
BL-5420	-55E	5/8"	1-3/32"
BL-5420	-55F	3/4"	1-5/32"
BL-5420	-55G	7/8"	1-7/32"
RI -5420	1-55H	1"	1-9/32"



Parallel Pipe Clamp

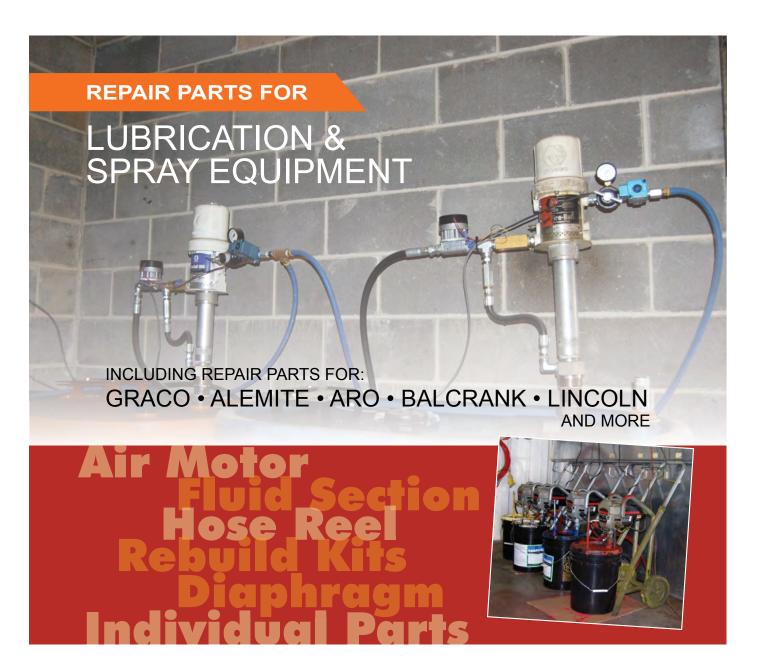
Part #	Size
BL-5420-58B	1/2"
BL-5420-58C	3/4"
BL-5420-58D	1"
BL-5420-58E	1-1/4"
BI -5420-58F	1-1/2"

Use to support pipe or rigid conduit parallel to the edge of a beam or angle iron.



Part #	Size	"A"	"B"	
BL-5420)-67A	1/2"	3/8-16	2-1/8"
BL-5420)-67B	3/4"	3/8-16	7/16"
BL-5420)-67C	1"	3/8-16	7/16"
BL-5420)-67D	1-1/4"	3/8-16	7/16"
BL-5420)-67E	1-1/2"	3/8-16	7/16"

Use to suspend noninsulated stationary pipe allowing for vertical adjustment.



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BP-1525 for 3/8" ID x 5/8" to 3/4" OD Hose

BP-1526 for 1/2" ID x 7/8" OD Hose

BP-1527 for 1/4" ID x 1/2" OD Hose

WIDE STYLE (L-Style)

BP-1525L for 3/8" ID Hose x 5/8" to 3/4" OD Hose

BP-1526L for 1/2" ID x 7/8" OD Hose

BP-1527L for 1/4" ID x 1/2" OD Hose

BP-1528L for 11/16" ID x 1-3/8" OD Hose

BP-1529L for 29/32" ID x 1-3/4" OD Hose

*Hose Sizes Can Vary Slightly

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TERMS AND CONDITIONS OF THE SALES ORDER FOR SVI INTERNATIONAL, INC.

- 1. <u>GENERAL</u>. The terms and conditions of sales order outlined herein shall apply to the sale by SVI_INTERNATIONAL, INC. (hereinafter referred to as "Company") of the items described on the facing page (hereinafter referred to as "Merchandise") to Purchaser.
- 2. <u>DELIVERY</u>. Delivery shall be deemed to be complete when the Merchandise has been shipped F.O.B. Company's plants in DeKalb, Illinois, Montclair, California; and Hanover, Maryland ("Company's plants"). Shipments are subject to delays from causes or contingencies beyond the reasonable control of the Company. When otherwise not specified, shipments will be made in standard containers via carrier which, in the judgment of the Company, will result in the most practical method. Title and right of possession will pass to the Purchaser upon receipt by the carrier at the shipping point. If a customer of the Company should specify a specific carrier's method of shipment (i.e. UPS Next Day Air) and that carrier does not perform to the customer's expectations, freight credit to a customer's account will not be issued unless the Company can first obtain a credit.
- 3. <u>RISK OF LOSS</u>. Identification of the Merchandise under Uniform Commercial Code (hereinafter referred to as "UCC") Section 2-501 shall take place at the moment of shipment F.O.B. Company's plants. Risk of loss shall pass to the Purchaser when the Merchandise is shipped from the Company's plants.
- 4. <u>TITLE</u>. Title to the merchandise shall transfer to the Purchaser when the Merchandise is shipped from the Company's plants.
- 5. WARRANTIES. The Company guarantees its products to be free from defects in workmanship and raw materials for a period of one year from date of purchase. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL WARRANTIES EXPRESS OR IMPLIED. COMPANY DOES NOT WARRANT THE MERCHANDISE IS MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE. Company's liability for breach of the terms of this Agreement, including any warranty, is limited to either refund of the invoice price of the Merchandise or at Company's option, replacement of the Merchandise free of charge, including transportation charges but not including the cost of labor. Purchaser has not relied on any statement or upon the conduct of Company with respect to the prospective use of the merchandise. Company shall not be liable for and Purchaser waives any and all claims for any loss or damage, directly or indirectly, arising from the use of the Merchandise and for punitive, incidental or consequential damages, including, but not limited to, damages to property, for loss of use, loss of time, loss of profit or loss of income. The Company does not authorize the sale of our products under any other warranty, expressed or implied. Please note: Electrical components and cylinder or shaft seals are not covered under warranty.
- **6.** <u>SETOFF.</u> All claims for money due or to become due from the Company shall be subject to deduction by the Company for any setoff or counterclaim arising out of this or any other claims of the Company or its affiliated companies, whether such setoff or counterclaim arose before or after any assignment by Purchaser.
- 7. INDEMNIFICATION. Purchaser agrees to indemnify the Company and hold it harmless from and against all claims, liability, loss, damage or expense, including reasonable counsel fees, arising from or by reason of any modifications or alterations made by Purchaser. If a customer of the Company modifies or alters any part, in any manner whatsoever, or uses any part in departure from recommended performance specifications, said customer agrees to indemnify and hold the Company harmless from and against all liability and expenses based on damage to property or injury to or death of any person arising out of or attributable to such modified or altered part. Further, the Company will not accept any such modified or altered part for credit to a customer's account.
- **8.** FREIGHT POLICY. Freight charges are prepaid and added to invoice or collect FOB shipping point. Note: All customers are responsible for all carrier shipping costs, fees, surcharges, etc. including order refusal and return fees.
- **9.** RETURN POLICY. To return a part for credit or inspection, Purchaser must first contact our Main Office in Illinois, to obtain a Return Merchandise Form. Once Purchaser has obtained this form, the parts can be returned freight prepaid only. The Return form must be included with the shipment. Parts returned to the Company without the approved form will be returned freight collect to the shipper or refused. Returns must be initiated within 30 days of the invoice date. The Return Forms are valid for 30 days, from the date of issue. All Returns are subject to restocking charges. Return parts brought into our remote warehouses, will not be accepted by our personnel, without a Return Merchandise Form from the Main Office. Parts which have been used in any way or manner, including any installation or incorporation into a lift, hoist, or other equipment, shall NOT be eligible for return whether or not a Return form has been assigned. Please note: Electrical parts or components are not returnable for credit. This includes all switches, pushbuttons, relays, electric motors, capacitors, fuses, solenoids, power units with wiring issues or any other electrical items. Custom, built to order, special order, and non-stocked genuine parts are non-returnable.
- 10. <u>RESTOCK CHARGE</u>. Returns are subject to a restocking charge. Refusals are subject to the same restocking charge plus the cost of outbound and return freight charges and/or fees incurred by the Company due to shipment refusal.
- 11. PRICES AND PAYMENTS. All prices are subject to change without notice. All prices are F.O.B. shipping point. The Company standard terms are net 30 days, C.O.D. company check, C.O.D. cash, VISA, MasterCard, Discover or American Express. However, if in the judgment of the Company, the financial condition of the Purchaser at any time does not justify shipment according to standard terms of payment, the Company may require full or partial payment in advance.
- 12. <u>INTERPRETATION</u>. This sales order is intended by the parties as a complete and exclusive statement of the terms of their agreement. It supersedes all prior agreements, written or oral. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any terms used in this sales order. Acceptance or acquiescence in a course of performance rendered under this purchase order shall not be relevant to determine the meaning of this sales order even though the accepting or acquiescing party has knowledge of the nature of the performance and opportunity for objection. Whenever a term defined by the UCC is used in this sales order the definition contained in the UCC shall control.
- 13. MODIFICATION. This sales order can be modified or rescinded only by a writing signed by both parties.
- **14.** <u>WAIVER</u>. No claim or right arising out of a breach of this sales order can be discharged in whole or in part by a waiver or renunciation of the claim or right unless such waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party.
- **15.** <u>ASSIGNMENT</u>. No right or interest in this sales order shall be assigned by either party without the written consent of the other and no delegation of any obligation owed, or of the performance of any obligation by either the Company or Purchaser shall be made without the written consent of the other party. Any attempted assignment or delegation not made in conformity with this paragraph shall be wholly void and totally ineffective for all purposes.
- 16. <u>TIME TO PERFORM AND BRING ACTION</u>. Time is of the essence of this sales order. Any action for breach of this sales order shall be commenced within two (2) years after the cause of action has accrued. Any party who loses any litigation shall reimburse the other party for costs including reasonable attorney's fees. The exclusive jurisdiction for any legal action shall be the Circuit Court of DeKalb County, Illinois.
- 17. APPLICABLE LAW. This sales order shall be governed by the UCC of Illinois as effective and in force on the date of this sales order.

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