



# ALUMINUM FITTINGS

## 150# Aluminum Pipe Fitting Product Specifications



- ✘ *Most Material is Cast Aluminum Alloy Type 356*
- ✘ *Some items manufactured with Aluminum 6061T6*
- ✘ *Dimensions Conform to ASME B16.3*
- ✘ *Material Conforms to ASTM A197*
- ✘ *Threads Conform to ASME B1.20.1*



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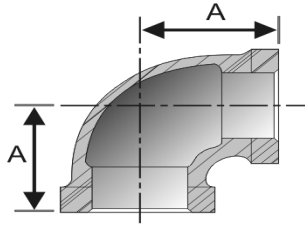
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**MSI Aluminum Pipe Fitting Specifications**

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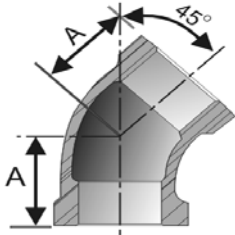
THREADS: ANSI / ASME B1.20.1 MATERIAL: ALLOY 356-F

**90° Elbows**



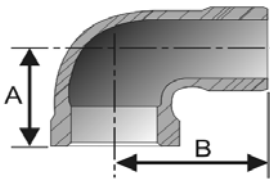
Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
1/8"	25	800	0.055	0.69	A6610002
1/4"	25	400	0.060	0.81	A6610004
3/8"	25	300	0.095	0.94	A6610006
1/2"	25	200	0.145	1.13	A6610008
3/4"	25	100	0.210	1.31	A6610012
1"	25	75	0.355	1.44	A6610016
1 1/4"	10	40	0.705	1.75	A6610020
1 1/2"	10	40	0.790	1.94	A6610024
2"	10	30	1.180	2.25	A6610032
2 1/2"	5	15	1.670	2.69	A6610040
3"	1	5	2.590	3.13	A6610048
4"	1	5	4.065	3.75	A6610064

**45° Elbows**



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
1/8"	25	800	0.040	0.69	A6610402
1/4"	25	400	0.040	0.75	A6610404
3/8"	25	300	0.075	0.94	A6610406
1/2"	25	200	0.115	0.88	A6610408
3/4"	25	100	0.200	1.00	A6610412
1"	25	75	0.260	1.12	A6610416
1 1/4"	10	40	0.455	1.31	A6610420
1 1/2"	10	40	0.605	1.44	A6610424
2"	10	30	0.970	1.69	A6610432
2 1/2"	5	15	1.420	1.94	A6610440
3"	1	5	1.925	2.19	A6610448
4"	1	5	3.335	2.63	A6610464

**90° Street Elbows**



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	"B" Inch	Item Number
1/8"	25	800	0.025	0.69	1.12	A6610602
1/4"	25	400	0.045	0.81	1.31	A6610604
3/8"	25	300	0.085	0.94	1.44	A6610606
1/2"	25	200	0.140	1.13	1.63	A6610608
3/4"	25	100	0.180	1.31	1.88	A6610612
1"	25	75	0.205	1.44	1.44	A6610616
1 1/4"	10	40	0.495	1.75	2.50	A6610620
1 1/2"	10	40	0.750	1.94	2.69	A6610624
2"	10	30	1.250	2.25	3.19	A6610632
2 1/2"	5	15	1.850	2.69	3.82	A6610640
3"	1	5	2.900	3.13	4.50	A6610648
4"						

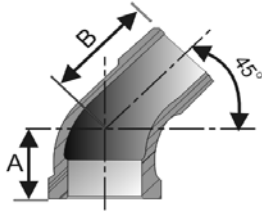


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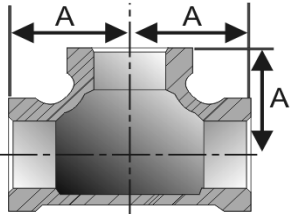
THREADS: ANSI / ASME B1.20.1 MATERIAL: ALLOY 356-F

## 45° Street Elbows



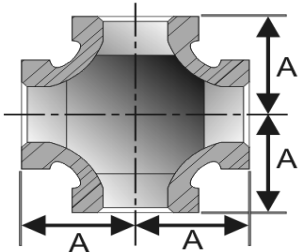
Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	"B" Inch	Item Number
1/2"	75	450	0.140	1.06	1.19	A6610808
3/4"	40	240	0.180	1.19	1.38	A6610812
1"	25	150	0.205	1.38	1.53	A6610816
1 1/4"	10	80	0.495	1.53	1.72	A6610820
1 1/2"	10	60	0.750	1.32	2.25	A6610824
2"	12	36	1.250	1.63	2.38	A6610832
2 1/2"	12	24	1.850	2.07	2.50	A6610840

## Tees



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
1/8"	80	960	0.060	0.69	A6620002
1/4"	50	600	0.070	0.82	A6620004
3/8"	30	360	0.130	0.94	A6620006
1/2"	40	240	0.180	1.12	A6620008
3/4"	35	140	0.285	1.31	A6620012
1"	20	80	0.435	1.44	A6620016
1 1/4"	14	56	0.745	1.75	A6620020
1 1/2"	15	45	1.060	1.94	A6620024
2"	10	30	1.760	2.25	A6620032
2 1/2"	8	16	2.250	2.69	A6620040
3"	6	12	3.035	3.12	A6620048
4"	2	6	5.580	3.75	A6620064

## Crosses



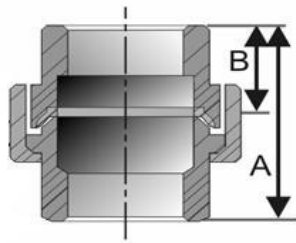
Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
1/8"	30	360	0.050	0.69	A6630202
1/4"	40	480	0.085	0.82	A6630204
3/8"	25	300	0.155	0.94	A6630206
1/2"	30	180	0.215	1.12	A6630208
3/4"	20	120	0.340	1.31	A6630212
1"	15	60	0.565	1.44	A6630216
1 1/4"	20	40	0.825	1.75	A6630220
1 1/2"	18	36	1.115	1.94	A6630224
2"	10	20	2.115	2.25	A6630232
2 1/2"	3	12	2.730	2.69	A6630240
3"	2	8	4.000	3.12	A6630248
4"	2	4	6.210	3.75	A6630264

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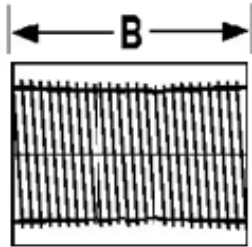
THREADS: ANSI / ASME B1.20.1 MATERIAL: ALLOY 356-F

**Unions**



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	"B" Inch	Item Number
1/8"	30	360	0.145	1.56	0.78	A6640802
1/4"	20	240	0.130	1.81	0.90	A6640804
3/8"	20	240	0.170	1.94	0.97	A6640806
1/2"	50	200	0.255	2.00	1.00	A6640808
3/4"	35	140	0.330	2.13	1.07	A6640812
1"	20	80	0.505	2.75	1.38	A6640816
1 1/4"	15	60	0.790	3.00	1.50	A6640820
1 1/2"	10	40	0.815	3.00	1.50	A6640824
2"	6	24	1.250	3.25	1.63	A6640832
2 1/2"	8	16	1.745	3.63	1.82	A6640840
3"	7	14	2.865	4.12	2.06	A6640848
4"	1	7	5.800	5.00	2.50	A6640864

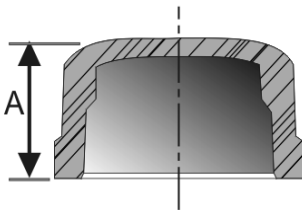
**Couplings**



6061T-6 Material

Size	Inner Carton	Master Case	Weight Ea / (lb.)	"B" Inch	Item Number
1/8"	70	840	0.020	0.94	A6630402
1/4"	40	480	0.025	1.04	A6630404
3/8"	50	600	0.035	1.16	A6630406
1/2"	40	480	0.060	1.31	A6630408
3/4"	50	300	0.100	1.56	A6630412
1"	25	150	0.135	1.82	A6630416
1 1/4"	16	128	0.230	2.06	A6630420
1 1/2"	18	72	0.310	2.31	A6630424
2"	12	48	0.500	2.56	A6630432
2 1/2"	8	32	0.730	2.88	A6630440
3"	12	24	1.015	3.06	A6630448
4"	6	12	2.040	3.44	A6630464

**Caps**

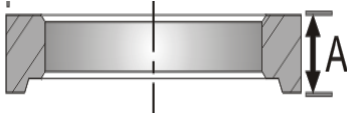


Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
1/8"	120	1440	0.015	0.59	A6640502
1/4"	80	960	0.025	0.78	A6640504
3/8"	60	720	0.050	0.84	A6640506
1/2"	75	900	0.075	1.06	A6640508
3/4"	40	480	0.100	1.16	A6640512
1"	35	280	0.150	1.25	A6640516
1 1/4"	25	200	0.290	1.31	A6640520
1 1/2"	25	150	0.350	1.47	A6640524
2"	18	108	0.450	1.56	A6640532
2 1/2"	28	56	0.760	2.03	A6640540
3"	21	42	1.435	2.06	A6640548
4"	7	21	3.080	2.19	A6640564

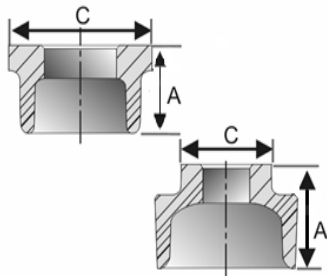
## MSI Aluminum Pipe Fitting Specifications

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THREADS: ANSI / ASME B1.20.1 MATERIAL: ALLOY 356-F

Locknuts	Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
	1/4*	125	1500	0.015	0.16	A6640604
	3/8*	125	1500	0.020	0.19	A6640606
	1/2"	100	1200	0.025	0.25	A6640608
	3/4"	60	720	0.045	0.32	A6640612
	1"	40	480	0.080	0.38	A6640616
	1 1/4"	30	360	0.105	0.43	A6640620
	1 1/2"	45	270	0.175	0.50	A6640624
	2"	25	150	0.345	0.68	A6640632
	2 1/2"	20	80	0.425	0.75	A6640640
3"	20	60	0.740	0.94	A6640648	

\* Produced in 6061T-6 Material

Bushings	Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	"C" Inch	Item Number
	1/4" x 1/8"	100	100	0.010	0.69	0.68	A664000402
	3/8" x 1/8"	100	100	0.020	0.81	0.75	A664000602
	3/8" x 1/4"	100	100	0.015	0.81	0.75	A664000604
	1/2" x 1/8"	100	100	0.045	0.94	1.00	A664000802
	1/2" x 1/4"	100	100	0.030	0.94	1.00	A664000804
	1/2" x 3/8"	100	100	0.030	0.94	1.00	A664000806
	3/4" x 1/8"	50	600	0.055	1.00	1.19	A664001202
	3/4" x 1/4"	50	600	0.055	1.00	1.19	A664001204
	3/4" x 3/8"	50	600	0.050	1.00	1.19	A664001206
	3/4" x 1/2"	50	600	0.045	1.00	1.19	A664001208
<p>* Produced in 6061T-6 Material</p>	1" x 1/4"	50	400	0.110	1.00	1.56	A664001604
	1" x 3/8"	50	400	0.105	1.00	1.56	A664001606
	1" x 1/2"	50	400	0.090	1.00	1.56	A664001608
	1" x 3/4"	50	400	0.070	1.00	1.56	A664001612
	1 1/4" x 1/4"	30	240	0.190	1.25	1.94	A664002004
	1 1/4" x 3/8"	30	240	0.170	1.25	1.94	A664002006
	1 1/4" x 1/2"	30	240	0.165	1.25	1.94	A664002008
	1 1/4" x 3/4"	30	240	0.145	1.25	1.94	A664002012
	1 1/4" x 1"	30	240	0.130	1.25	1.94	A664002016
	1 1/2" x 1/4"	25	150	0.223	1.38	2.06	A664002404
	1 1/2" x 3/8"	25	150	0.223	1.38	2.06	A664002406
	1 1/2" x 1/2"	25	150	0.215	1.38	2.06	A664002408
	1 1/2" x 3/4"	25	150	0.210	1.38	2.06	A664002412
	1 1/2" x 1"	25	150	0.205	1.38	2.06	A664002416
	1 1/2" x 1 1/4"	25	150	0.125	1.38	2.06	A664002420
	2" x 3/8"	20	120	0.370	1.58	2.56	A664003206
	2" x 1/2"	20	120	0.370	1.58	2.56	A664003208
	2" x 3/4"	20	120	0.370	1.58	2.56	A664003212
	2" x 1"	20	120	0.365	1.58	2.56	A664003216
	2" x 1 1/4"	20	120	0.325	1.58	2.56	A664003220
	2" x 1 1/2"	20	120	0.285	1.58	2.56	A664003224

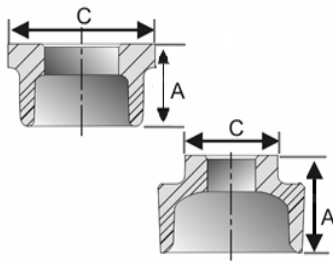
MSI Aluminum Fittings Conform to the following Specifications: ASME B16.3; ASTM A197; ASME B1.20.1

**MSI Aluminum Pipe Fitting Specifications**

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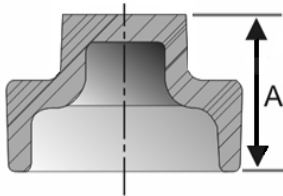
THREADS: ANSI / ASME B1.20.1 MATERIAL: ALLOY 356-F

**Bushings - Continued**



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	"C" Inch	Item Number
2 1/2" x 1/2"	15	60	0.800	~	~	A664004008
2 1/2" x 3/4"	15	60	0.800	~	~	A664004012
2 1/2" x 1"	15	60	0.785	~	~	A664004016
2 1/2" x 1 1/4"	15	60	0.755	~	~	A664004020
2 1/2" x 1 1/2"	15	60	0.715	~	~	A664004024
2 1/2" x 2"	15	60	0.605	~	~	A664004032
3" x 1"	12	48	1.120	1.81	3.88	A664004816
3" x 1 1/4"	12	48	1.095	1.81	3.88	A664004820
3" x 1 1/2"	12	48	1.015	1.81	3.88	A664004824
3" x 2"	12	48	0.895	1.14	3.28	A664004832
3" x 2 1/2"	12	48	0.705	1.14	3.86	A664004840
4" x 3/4"	5	20	0.785	1.22	4.72	A664006412
4" x 1"	5	20	1.890	1.22	-	A664006416
4" x 1 1/4"	5	20	1.860	1.22	-	A664006420
4" x 1 1/2"	5	20	1.860	1.22	-	A664006424
4" x 2"	5	20	1.720	1.22	-	A664006432
4" x 2 1/2"	5	20	1.535	1.22	-	A664006440
4" x 3"	5	20	1.255	1.22	4.62	A664006448

**Square Head Plugs**



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
1/8*	300	3600	0.010	0.63	A6650102
1/4*	150	1800	0.015	0.69	A6650104
3/8*	100	1200	0.020	0.81	A6650106
1/2"	50	600	0.030	0.88	A6650108
3/4"	30	360	0.055	1.00	A6650112
1"	20	240	0.090	1.19	A6650016
1 1/4"	40	240	0.150	1.44	A6650020
1 1/2"	30	180	0.215	1.38	A6650024
2"	20	120	0.315	1.56	A6650032
2 1/2"	16	64	0.560	1.69	A6650040
3"	16	48	0.755	1.81	A6650048
4"	8	16	1.500	2.19	A6650064

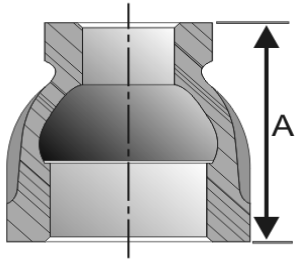
\* Produced in 6061T-6 Material

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THREADS: ANSI / ASME B1.20.1 MATERIAL: ALLOY 356-F

### Reducer Couplings



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	Item Number
1/4" x 1/8"	50	600	0.040	1.00	A663080402
3/8" x 1/8"	35	420	0.060	1.19	A663080602
3/8" x 1/4"	30	360	0.060	1.19	A663080604
1/2" x 1/8"	50	600	0.100	1.38	A663080802
1/2" x 1/4"	50	600	0.100	1.38	A663080804
1/2" x 3/8"	40	480	0.095	1.38	A663080806
3/4" x 1/8"	30	360	0.150	1.55	A663081204
3/4" x 1/4"	30	360	0.130	1.55	A663081206
3/4" x 3/8"	60	360	0.160	1.55	A663081208
3/4" x 1/2"	45	270	0.220	2.04	A663081604
1" x 3/8"	30	240	0.220	2.04	A663081606
1" x 1/2"	30	240	0.215	2.04	A663081608
1" x 3/4"	25	200	0.240	2.04	A663081612
1 1/4" x 1/2"	25	150	0.330	2.21	A663082008
1 1/4" x 3/4"	25	150	0.330	2.21	A663082012
1 1/4" x 1"	15	120	0.340	2.21	A663082016
1 1/2" x 3/8"	30	120	0.495	2.30	A663082406
1 1/2" x 1/2"	20	120	0.495	2.30	A663082408
1 1/2" x 3/4"	15	120	0.480	2.30	A663082412
1 1/2" x 1"	25	100	0.490	2.30	A663082416
1 1/2" x 1 1/4"	12	96	0.560	2.30	A663082420
2" x 3/8"	15	90	0.735	2.83	A663083206
2" x 1/2"	14	84	0.735	2.83	A663083208
2" x 3/4"	14	84	0.735	2.83	A663083212
2" x 1"	14	84	0.710	2.83	A663083216
2" x 1 1/4"	12	72	0.745	2.83	A663083220
2" x 1-1/2"	12	72	0.825	2.83	A663083224
2 1/2" x 1/2"	20	40	0.855	3.26	A663084008
2 1/2" x 3/4"	20	40	0.855	3.26	A663084012
2-1/2" x 1"	20	40	0.880	3.26	A663084016
2-1/2" x 1 1/4"	20	40	0.825	3.26	A663084020
2-1/2" x 1 1/2"	20	40	0.825	3.26	A663084024
2-1/2" x 2"	20	40	1.180	3.26	A663084032
3" x 3/4"	16	48	1.850	3.70	A663084812
3" x 1"	16	32	1.850	3.70	A663084816
3" x 1-1/4"	16	32	1.850	3.70	A663084820
3" x 1-1/2"	16	32	1.790	3.70	A663084824
3" x 2"	16	32	1.790	3.70	A663084832
3" x 2-1/2"	12	24	1.750	3.70	A663084840
4" x 1"	6	18	3.375	4.37	A663086416
4" x 1 1/4"	6	18	3.375	4.37	A663086420
4" x 1 1/2"	6	18	3.375	4.37	A663086424
4" x 2"	4	12	3.375	4.37	A663086432
4" x 2 1/2"	6	18	3.375	4.37	A663086440
4" x 3"	4	12	3.375	4.37	A663086448

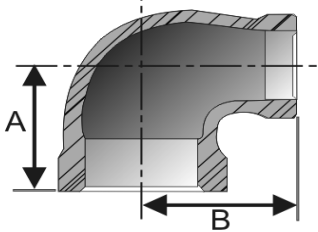
MSI Aluminum Fittings Conform to the following Specifications: ASME B16.3; ASTM A197; ASME B1.20.1

**MSI Aluminum Pipe Fitting Specifications**

800-678-2544 phone 800-678-0857 fax www.msi-products.com msisales@msi-products.com

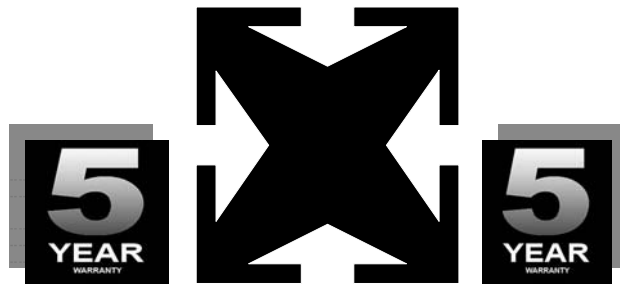
THREADS: ANSI / ASME B1.20.1 MATERIAL: ALLOY 356-F

**90° Reducing Elbows**



Size	Inner Carton	Master Case	Weight Ea / (lb.)	"A" Inch	"B" Inch	Item Number
1/4" x 1/8"	40	480	0.100	0.75	0.75	A661020402
3/8" x 1/8"	70	840	0.105	0.83	0.87	A661020602
3/8" x 1/4"	60	720	0.105	0.87	0.91	A661020604
1/2" x 1/8"	40	480	0.115	0.98	0.98	A661020804
1/2" x 3/8"	50	400	0.115	1.02	1.02	A661020806
3/4" x 1/4"	40	320	0.190	1.06	1.06	A661021204
3/4" x 3/8"	25	300	0.190	1.10	1.10	A661021206
3/4" x 1/2"	30	240	0.190	1.18	1.22	A661021208
1" x 3/8"	40	240	0.260	1.18	1.26	A661021606
1" x 1/2"	30	180	0.260	1.26	1.34	A661021608
1" x 3/4"	25	150	0.330	1.38	1.42	A661021612
1 1/4" x 1/2"	35	140	0.405	1.34	1.54	A661022008
1 1/4" x 3/4"	15	120	0.405	1.42	1.61	A661022012
1 1/4" x 1"	10	80	0.471	1.57	1.65	A661022016
1 1/2" x 1/2"	25	100	0.560	1.38	1.65	A661022408
1 1/2" x 3/4"	15	90	0.560	1.54	1.77	A661022412
1 1/2" x 1"	10	80	0.560	1.65	1.81	A661022416
1 1/2" x 1 1/4"	15	60	0.720	1.81	1.89	A661022420
2" x 1/2"	15	60	1.121	1.50	1.89	A661023208
2" x 3/4"	10	60	1.121	1.61	1.97	A661023212
2" x 1"	14	56	1.121	1.73	1.97	A661023216
2" x 1 1/4"	10	40	1.000	1.89	2.08	A661023220
2" x 1-1/2"	10	40	1.030	2.04	2.16	A661023224
2-1/2" x 3/4"	10	40	1.789	1.73	2.32	A661024012
2-1/2" x 1"	8	32	1.789	1.89	2.40	A661024016
2-1/2" x 1 1/4"	8	24	1.745	2.09	2.48	A661024020
2-1/2" x 1 1/2"	8	24	1.745	2.16	2.48	A661024024
2-1/2" x 2"	8	24	1.745	2.40	2.60	A661024032
3" x 3/4"	8	28	2.323	1.93	2.64	A661024812
3" x 1"	8	24	2.323	2.16	2.64	A661024816
3" x 1 1/4"	5	24	2.205	2.16	2.71	A661024820
3" x 1 1/2"	5	20	2.205	2.28	2.79	A661024824
3" x 2"	6	18	2.205	2.52	2.87	A661024832
3" x 2-1/2"	8	16	2.315	2.83	2.99	A661024840
4" x 1 1/2"	1	12	3.065	2.48	3.38	A661026424
4" x 2"	1	12	3.065	2.76	3.42	A661026432





# **MSI 5 YEAR LIMITED WARRANTY**

MSI warrants to its initial purchaser only, that its products which are delivered to the initial purchaser will be of the kind described in the order or price list and will be free of defects in workmanship or material for a period of (5) five years from the date of delivery to MSI's initial purchaser.

Should any failure to conform to this warranty appear within (5) five years after the date of the initial delivery to MSI's initial purchaser, MSI will, upon written notification thereof and substantiation that the goods have been stored, installed, maintained and operated in accordance with recognized engineering and piping practices and industry standards, correct such defects by suitable replacement of product at our expense upon return of the defective product to MSI.

This warranty applies only during normal use that meets the above referenced conditions of installation and operation and is absolutely void if the product has been damaged after purchase or if it has been misused, repaired, altered or modified in any manner whatsoever. MSI shall not warranty any of its products if any portion of the product including without limitation, any component, gasket, housing or bolt has been modified, altered, remanufactured or replaced in any manner by any customer, user of the product or third party.

Correction of non-conformities, in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of MSI to MSI's initial purchaser, with respect to the goods, whether based on contract, negligence, strict tort or otherwise. It is the intention of MSI that no warranty of any kind, whether expressed or implied shall pass through MSI's initial purchaser to any other person or corporation.

No returns will be permitted unless prior written permission of MSI is first obtained. Buyers shall be responsible for all costs of transportation as well as any applicable restocking fees.

This warranty is exclusively for the benefit of MSI's initial purchaser of the product from MSI and to the extent prohibited by applicable law, the foregoing warranty is in lieu of all other warranties, express or implied, including but not limited to warranties of fitness or merchantability.

## **LIMITATIONS OF LIABILITY**

MSI shall not under any circumstances be liable for special or consequential damages such as, but not limited to, damage to loss of other property or equipment, loss of profits or revenue, cost of capital, cost of purchased or replacement goods, claims of customers of our initial purchaser, any labor cost or replacement of the product or damage caused by the product.

The remedies of MSI's initial purchaser and all others, set forth herein are exclusive and the liability of MSI with respect to same shall not, except as expressly provided herein, exceed the price of the MSI products on which such liability is based.