

PIPE



Pipe Size	1/16	1/8	1/4	3/8	1/2	3/4	1
Thread Size	1/16-27	1/8-27	1/4-18	3/8-18	1/2-14	3/4-14	1-11 ^{1/2}
Working Pressure	1200	1200	1200	1200	1200	1000	1000
Thread OD	1/4	3/8	1/2	5/8	3/4	1	1-1/4

•Typical Application

Grease, fuels, LP and Natural gas (available on special order), refrigeration, instrumentation and hydraulic systems.

•Pressure

Operating pressure up to 1200 PSI.

•Vibration

Fair resistance.

•Temperature Range

-65°F to +250°F (-53°C to +121°C).

•Used With

Brass, bronze, copper, steel, aluminum and iron pipe.

•Tolerance

+/- .02 on all dimensions. Dimension Data can change without notice. Please call us when dimensions are critical.

•Conformance

Meets specifications and standards of ASA, ASME and SAE

•Not lead free

•“L” at the end of a Part# means Light Pattern

- these fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

•Assembly Instructions

- 1- Tighten approximately 2-1/2 turns past hand tight.
- 2- Fittings with Everseal tighten two turns past hand tight. Brittle materials require special cautions.



• see page 310-312 for plastic pipe fittings.



• Lead Free Fittings

see pages 162-164



• For Bronze & Larger Sizes

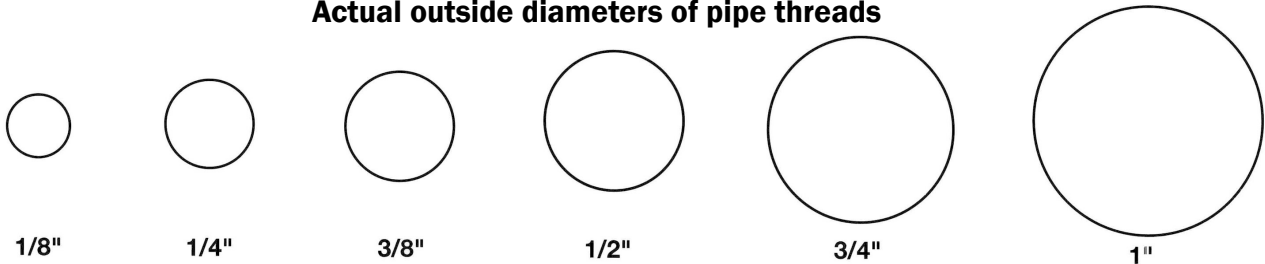
see pages 224-232



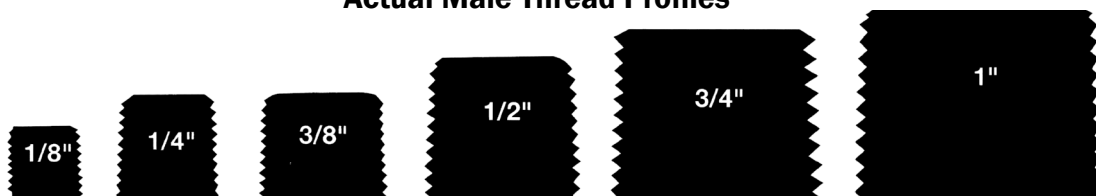
• For BSPT/ BSPP

see pages 117-118

Actual outside diameters of pipe threads



Actual Male Thread Profiles

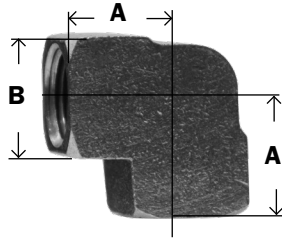


PIPE

BRASS FITTINGS

90° FEMALE ELBOW

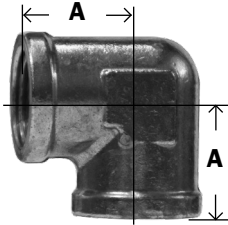
SAE# 130238



Part #	Thread Size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-001	1/8"	0.55	0.56	0.09	2.99
28-002	1/4"	0.78	0.68	0.13	4.55
28-003	3/8"	0.84	0.81	0.16	5.95
28-004	1/2"	1.09	1.00	0.34	8.56
28-005	3/4"	1.16	1.25	0.60	17.69

100 2200P 3500 302 200

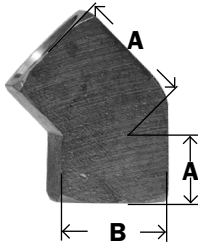
90° FORGED FEMALE ELBOW



Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	List Price
28-009	1/8"	0.57	0.50	0.04	3.20
28-010	1/4"	0.70	0.68	0.10	4.34
28-011	3/8"	0.81	0.81	0.12	6.21
28-012	1/2"	1.00	1.00	0.23	10.38
28-013	3/4"	1.13	1.25	0.42	22.31
28-014	1/4" x 1/8"	0.72	0.69	0.12	6.84
28-015	3/8" x 1/4"	0.81	0.81	0.15	5.45
28-016	1/2" x 3/8"	1.00	1.00	0.28	14.97
28-017	1"	1.42	1.50	0.75	25.71

1200P E7 100AF 100B

45° FEMALE ELBOW

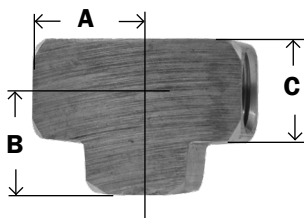


Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-018	1/8"	0.45	0.56	0.06	4.69
28-019	1/4"	0.66	0.68	0.12	6.13
28-020	3/8"	0.69	0.81	0.16	9.07

129 2201P 205 23355 45EZ 105 100-45A

UNION TEE

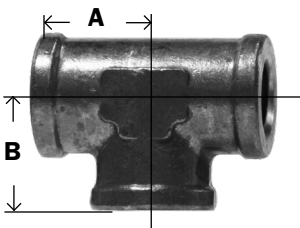
SAE# 130438



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-024	1/8"	0.55	0.55	0.56	0.08	3.38
28-025	1/4"	0.78	0.78	0.68	0.17	4.99
28-026	3/8"	0.84	0.84	0.81	0.22	7.89
28-027	1/2"	1.09	1.09	1.00	0.43	12.67
28-028	3/4"	1.16	1.16	1.25	0.64	23.81

311 101A 322 2203P 3700 203

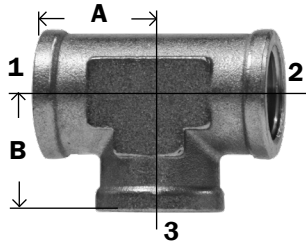
UNION FORGED TEE



Part #	Thread size NPTF	A & B	Body Width	Approx. Wt. Lbs.	List Price
28-032	1/8"	0.56	0.50	0.06	3.18
28-033	1/4"	0.71	0.68	0.13	5.12
28-034	3/8"	0.81	0.81	0.16	6.06
28-035	1/2"	1.00	1.00	0.27	12.06
28-036	3/4"	1.16	1.25	0.53	18.46
28-023	1"	1.42	1.50	.924	37.15

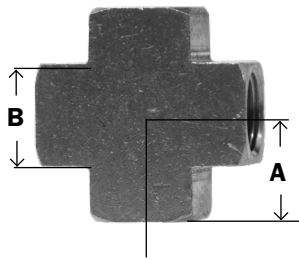
1203P LT7 101AF 101B

REDUCING FORGED TEES



Part #	1 NPT	2 NPT	3 NPT	A & B	Body Width	Approx. Wt. Lbs.	List Price
28-029	1/8"	1/8"	1/4"	0.72	0.69	0.16	8.61
28-030	1/4"	1/4"	1/8"	0.72	0.69	0.14	6.99
28-031	1/4"	1/4"	3/8"	0.81	0.81	0.21	14.12
28-038	3/8"	1/4"	3/8"	0.81	0.81	0.18	12.48
28-039	3/8"	3/8"	1/4"	0.81	0.81	0.18	13.17
28-046	1/2"	1/2"	3/8"	1.00	1.00	0.30	13.60
28-048	3/4"	3/4"	1/2"	1.16	1.25	0.59	34.71

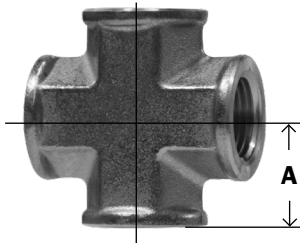
CROSS



Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-041	1/8"	0.55	0.56	0.10	7.62
28-042	1/4"	0.78	0.68	0.21	7.59
28-043	3/8"	0.84	0.81	0.25	9.19
28-044	1/2"	1.09	1.00	0.51	18.10
28-045	3/4"	1.16	1.25	0.75	26.72

2205P 3950 228 102A 102BE

FORGED CROSS

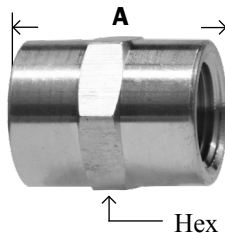


Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	List Price
28-049	1/8"	0.56	0.50	0.06	6.40
28-050	1/4"	0.72	0.69	0.15	8.06
28-051	3/8"	0.81	0.81	0.18	11.54
28-052	1/2"	1.00	1.00	0.34	18.37

C7 105 102AF 102B

COUPLING

SAE# 130138



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-058L	1/8"	0.75	0.50	0.02	0.88
28-058	1/8"	0.75	0.56	0.03	1.88
28-059L	1/4"	0.88	0.63	0.03	1.32
28-059	1/4"	1.12	0.75	0.09	3.03
28-060L	3/8"	1.00	0.81	0.06	2.22
28-060	3/8"	1.12	0.87	0.10	3.97
28-061L	1/2"	1.19	0.93	0.09	4.19
28-061	1/2"	1.50	1.06	0.19	6.48
28-062L	3/4"	1.19	1.25	0.18	6.25
28-062	3/4"	1.53	1.25	0.24	15.89
28-063	1"	1.89	1.50	.357	18.54

207P 371 3300 103AH 103B



* For larger sizes, see bronze fittings on pg. 224-232



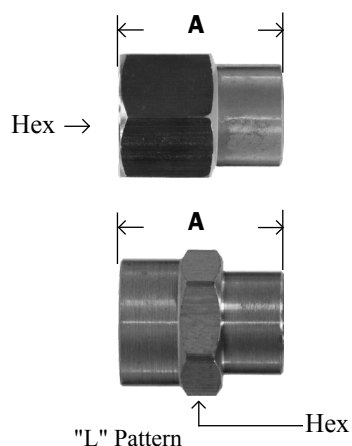
See hydraulic pipe fittings pg 420

PIPE

BRASS FITTINGS

REDUCING COUPLING

SAE# 130138

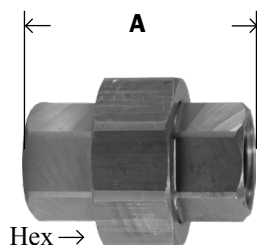


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-181L	1/4" x 1/8"	0.94	0.62	0.04	1.93
28-181	1/4" x 1/8"	0.97	0.75	0.08	2.71
28-182	3/8" x 1/8"	0.94	0.87	0.10	5.68
28-183L	3/8" x 1/4"	1.00	0.81	0.06	2.76
28-183	3/8" x 1/4"	1.16	0.87	0.12	4.03
28-180*	1/2" x 1/8"	1.19	0.93	0.15	14.52
28-184L	1/2" x 1/4"	1.11	1.00	0.10	5.86
28-184	1/2" x 1/4"	1.28	1.06	0.20	7.87
28-185L	1/2" x 3/8"	1.19	0.93	0.10	5.26
28-185	1/2" x 3/8"	1.38	1.06	0.20	9.86
28-188*	3/4" x 3/8"	1.32	1.37	0.20	24.45
28-189*	3/4" x 1/2"	1.19	1.18	0.14	10.04

*Not to SAE specs

377 3300 208P 108 119B 119AH

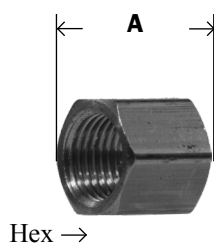
UNION



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-067	1/8"	1.25	0.94	0.13	22.77
28-068	1/4"	1.31	1.06	0.18	20.82
28-069	3/8"	1.75	1.25	0.33	44.46
28-070	1/2"	1.79	1.56	0.50	30.35

3250 212P 104A 104B

CAP

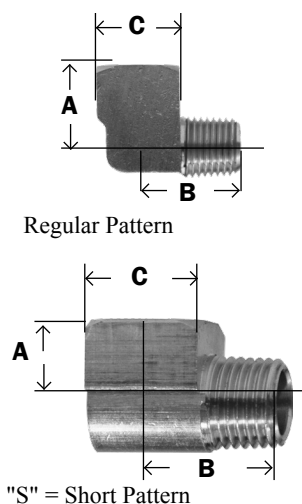


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-075	1/8"	0.47	0.56	0.03	0.94
28-076	1/4"	0.60	0.68	0.04	1.83
28-077	3/8"	0.69	0.81	0.06	2.58
28-078	1/2"	0.78	0.93	0.08	4.00
28-079	3/4"	0.94	1.25	0.16	8.63
28-080	1"	1.13	1.50	0.23	12.22

3129 213P 23129 108A 108B

90° STREET ELBOW

SAE# 130239



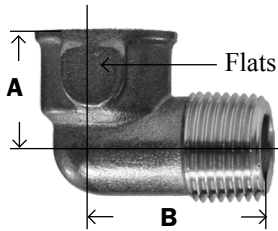
Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-156	1/8"	0.48	0.66	0.56	0.05	2.20
28-156S	1/8" short	0.34	0.57	0.50	0.03	1.46
28-157	1/4"	0.72	0.91	0.68	0.09	3.58
28-157S	1/4" short	0.45	0.78	0.68	0.07	2.57
28-158	3/8"	0.78	0.97	0.81	0.16	5.30
28-159	1/2"	1.03	1.25	1.00	0.33	9.17
28-160	3/4"	1.12	1.38	1.25	0.52	17.58

2202P 304 115 202 3400 116A



See hydraulic pipe fittings pg 420

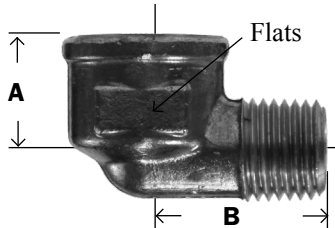
FORGED 90° STREET ELBOW



Part #	Thread size NPTF	A	B	Wrench Flats	Approx. Wt. Lbs.	List Price
28-165	1/8"	0.61	0.85	0.62	0.06	3.50
28-166	1/4"	0.50	0.86	0.72	0.08	3.30
28-167	3/8"	0.70	1.00	0.88	0.10	5.09
28-168	1/2"	0.96	1.43	1.00	0.20	7.63
28-169	3/4"	0.90	1.40	1.25	0.25	12.11

5E8 1202P 116AF 116B

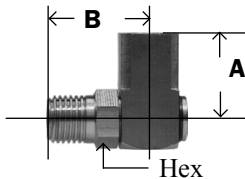
FORGED REDUCING 90° STREET ELBOW



Part #	Thread size NPTF FxM	A	B	Wrench flats	Approx. Wt. Lbs.	List Price
28-260	1/8" x 1/4"	0.50	0.87	0.71	0.08	4.90
28-261B*	1/4" x 1/8"	0.53	0.72	0.69	0.07	3.44
28-261	1/4" x 1/8"	0.50	0.81	0.72	0.06	4.92
28-262	1/4" x 3/8"	0.93	1.06	0.59	0.12	6.16
28-263	3/8" x 1/4"	0.58	0.94	0.81	0.07	8.11
28-264	3/8" x 1/2"	0.97	1.36	1.00	0.28	12.94
28-265	1/2" x 3/8"	0.96	1.37	1.00	0.22	14.27

*Barstock

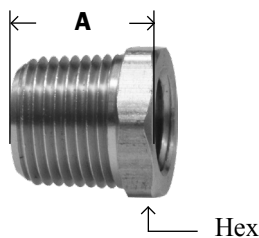
PIPE SWIVEL 90° STREET ELBOW



Part #	Thread size NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
28-430	1/4"	1.18	1.25	.625	0.22	33.92

HEX BUSHING

SAE# 130140



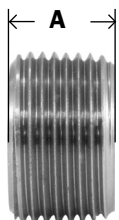
Part #	Thread size NPTF MxF	A	Hex	Approx. Wt. Lbs.	List Price
28-102L	1/4" x 1/8"	0.62	0.56	0.02	0.70
28-102	1/4" x 1/8"	0.75	0.56	0.04	1.12
28-103	3/8" x 1/8"	0.75	0.68	0.05	1.83
28-104L	3/8" x 1/4"	0.69	0.68	0.03	1.25
28-104	3/8" x 1/4"	0.75	0.75	0.05	1.99
28-105L	1/2" x 1/8"	0.81	0.81	0.08	2.90
28-105	1/2" x 1/8"	1.00	0.87	0.10	3.71
28-106L	1/2" x 1/4"	0.81	0.81	0.08	2.42
28-106	1/2" x 1/4"	1.00	0.87	0.11	3.44
28-107L	1/2" x 3/8"	0.81	0.81	0.05	1.75
28-107	1/2" x 3/8"	1.00	0.87	0.10	2.60
28-108	3/4" x 1/8"	0.94	1.06	0.20	10.66
28-109L	3/4" x 1/4"	0.94	1.06	0.18	4.33
28-110L	3/4" x 3/8"	0.94	1.06	0.15	5.10
28-111L	3/4" x 1/2"	0.94	1.06	0.11	3.71
28-111	3/4" x 1/2"	1.00	1.12	0.14	4.98
28-112	1" x 1/4"	1.15	1.37	0.32	10.21
28-113	1" x 3/8"	1.12	1.37	0.30	9.64
28-114	1" x 1/2"	1.31	1.44	0.29	9.48
28-115	1" x 3/4"	1.31	1.37	0.20	7.44

373 3220 209P 110A 110B

PIPE

BRASS FITTINGS

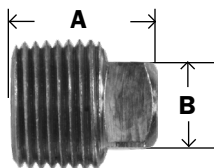
FACE BUSHING



Part #	Thread size NPTF MxF	A	Approx. Wt. Lbs.	List Price
28-121	1/4" x 1/8"	0.45	0.01	2.16
28-122	3/8" x 1/8"	0.50	0.03	2.58
28-116	3/8" x 1/4"	0.50	0.02	2.68
28-090	1/2" x 1/8"	0.56	0.06	5.23
28-128	1/2" x 1/4"	0.56	0.05	3.75
28-117	1/2" x 3/8"	0.56	0.03	2.26
28-129	3/4" x 1/4"	0.62	0.11	7.73
28-130	3/4" x 3/8"	0.62	0.08	7.04
28-118	3/4" x 1/2"	0.64	0.03	5.92
28-119	1" x 3/4"	0.77	0.10	12.31

SQUARE HEAD PLUG

1/8 - 1/2 Solid



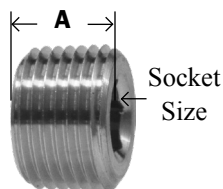
Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-084	1/8"	0.58	0.27	0.02	0.82
28-085	1/4"	0.80	0.37	0.03	1.15
28-086	3/8"	0.80	0.43	0.06	2.03
28-087	1/2"	1.07	0.55	0.13	3.13
28-088**	3/4"	1.11	0.61	0.20	4.77
28-089**	1"	1.24	0.81	0.35	11.06

** Cored

3151 211P 109A 109B

COUNTERSUNK HEX PLUG

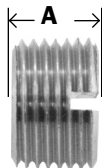
3/4" taper thread



Part #	Thread size NPTF	A	Socket size	Approx. Wt. Lbs.	List Price
28-092	1/16"	0.30	0.12	0.01	1.16
28-093	1/8"	0.30	0.18	0.01	0.93
28-094	1/4"	0.45	0.26	0.02	1.01
28-095	3/8"	0.45	0.31	0.03	1.23
28-096	1/2"	0.61	0.39	0.05	2.39
28-097	3/4"	0.62	0.56	0.10	4.20

3153 219P 109CS 118

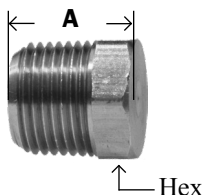
SLOTTED-HEAD PLUG



Part #	Thread size NPTF	A	Approx. Wt. Lbs.	List Price
28-174	1/8"	0.31	0.01	0.99
28-175	1/4"	0.42	0.02	1.22
28-176	3/8"	0.45	0.05	3.01

220P 3150 117A 117B

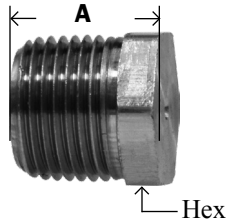
CORED HEX PLUGS



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-201	1/8"	0.55	0.43	0.01	0.65
28-202	1/4"	0.62	0.56	0.02	1.10
28-203	3/8"	0.72	0.68	0.06	1.52
28-204	1/2"	0.81	0.87	0.09	2.85
28-205	3/4"	0.94	1.06	0.16	4.08
28-206	1"	1.16	1.37	0.28	13.67

218P 3152 121A 103 121B PPH 218P

SOLID HEX HEAD PLUGS

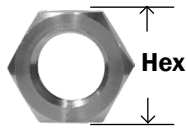


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-201S	1/8"	0.55	0.43	0.02	1.60
28-202S	1/4"	0.75	0.56	0.05	1.73
28-203S	3/8"	0.66	0.68	0.07	3.32
28-204S	1/2"	0.81	0.87	0.12	3.31
28-205S	3/4"	0.92	1.06	0.24	6.82
28-206S	1"	1.00	1.31	0.38	19.01

121AS

LOCKNUT

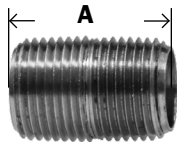
- Jam Nuts
- Straight pipe thread



Part #	Thread size NPSL	Hex	Thickness	Approx. Wt. Lbs.	List Price
28-123	1/8"	0.68	0.19	0.02	0.97
28-124	1/4"	0.87	0.25	0.04	1.33
28-125	3/8"	1.00	0.31	0.04	1.62
28-126	1/2"	1.125	0.25	0.04	2.07

210P 21102 111A 111B

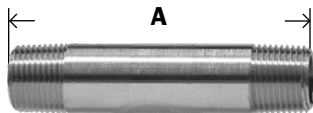
CLOSE NIPPLE



Part #	Thread size NPTF	A	Approx. Wt. Lbs.	List Price
28-131	1/8"	0.75	0.01	0.57
28-132	1/4"	0.88	0.02	1.07
28-133	3/8"	1.00	0.05	1.90
28-134	1/2"	1.12	0.06	2.20
28-135	3/4"	1.31	0.11	4.10

165 215PN 3326 112A 112B

LONG NIPPLE



- NOTE: For longer lengths and larger diameters, see our red brass nipples section, pg. 216-222



Part #	Thread size NPTF	A Length	Approx. Wt. Lbs.	List Price
28-140	1/8"	1.50	0.03	1.42
28-141	1/8"	2.00	0.04	1.52
28-142	1/8"	2.50	0.06	2.69
28-143	1/8"	3.00	0.06	2.94
28-475	1/8"	3.50	0.07	6.31
28-144	1/4"	1.50	0.03	1.97
28-145	1/4"	2.00	0.05	2.18
28-146	1/4"	2.50	0.08	3.80
28-147	1/4"	3.00	0.10	5.00
28-481	1/4"	3.50	0.12	8.79
28-148	3/8"	1.50	0.06	2.53
28-149	3/8"	2.00	0.10	3.84
28-150	3/8"	2.50	0.10	4.95
28-151	3/8"	3.00	0.13	4.98
28-487	3/8"	3.50	0.17	13.26
28-152	1/2"	1.50	0.08	2.71
28-153	1/2"	2.00	0.12	4.19
28-154	1/2"	2.50	0.16	5.91
28-155	1/2"	3.00	0.20	7.66
28-493	1/2"	3.50	0.24	8.79
28-136	3/4"	1.50	0.12	8.64
28-497	3/4"	2.00	0.18	12.68
28-498	3/4"	2.50	0.23	16.21
28-499	3/4"	3.00	0.28	21.37

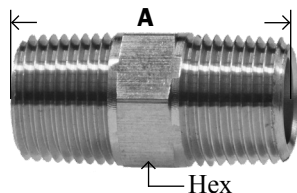
113B 113A 166 3327, 3328, 3329, 3330 3331 215PNL

PIPE

BRASS FITTINGS

HEX NIPPLE

SAE# 130137

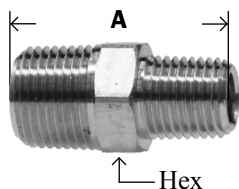


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-211L	1/8"	0.91	0.43	0.02	0.99
28-211	1/8"	0.97	0.43	0.03	0.99
28-212L	1/4"	1.12	0.56	0.04	1.27
28-212	1/4"	1.38	0.56	0.06	1.69
28-213L	3/8"	1.25	0.68	0.07	1.95
28-213	3/8"	1.41	0.68	0.07	2.67
28-214L	1/2"	1.50	0.87	0.11	3.38
28-214	1/2"	1.81	0.87	0.17	4.11
28-215	3/4"	1.96	1.13	0.23	7.69
28-216	1"	2.30	1.37	0.43	12.93

216P 3325 379 122AH 122B

REDUCING HEX NIPPLE

SAE# 130137



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-220L	1/4" x 1/8"	1.00	0.56	0.04	1.31
28-220	1/4" x 1/8"	1.19	0.56	0.04	1.69
28-221L	3/8" x 1/8"	1.11	0.68	0.06	3.11
28-221	3/8" x 1/8"	1.22	0.68	0.07	3.01
28-222L	3/8" x 1/4"	1.19	0.68	0.06	1.80
28-222	3/8" x 1/4"	1.41	0.68	0.07	2.50
28-223L	1/2" x 1/4"	1.34	0.87	0.09	3.22
28-223	1/2" x 1/4"	1.62	0.87	0.12	3.50
28-224L	1/2" x 3/8"	1.41	0.87	0.11	3.78
28-224	1/2" x 3/8"	1.62	0.87	0.12	4.15
28-225	3/4" x 1/2"	1.50	1.06	0.15	5.83

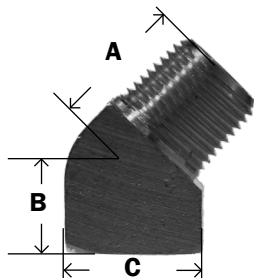


See page 420 for steel hydraulic pipe adapters

216P 3325 379 122AH 122B

45° STREET ELBOW

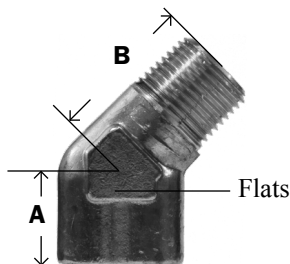
SAE# 130339



Part #	Thread size NPTF	B	A	C	Approx. Wt. Lbs.	List Price
28-230	1/8"	0.38	0.50	0.56	0.03	2.58
28-231	1/4"	0.56	0.72	0.68	0.09	3.43
28-232	3/8"	0.56	0.78	0.81	0.12	5.95
28-233	1/2"	0.75	1.00	1.00	0.20	9.09
28-234	3/4"	0.75	1.06	1.25	0.34	29.77

306 3350 2214P 224

45° FORGED STREET ELBOW



Part #	Thread size NPTF	A	B	Wrench flats	Approx. Wt. Lbs.	List Price
28-238	1/8"	0.63	0.81	0.56	0.05	5.13
28-239	1/4"	0.63	1.06	0.81	0.11	6.52
28-240	3/8"	0.72	1.06	0.93	0.17	9.29

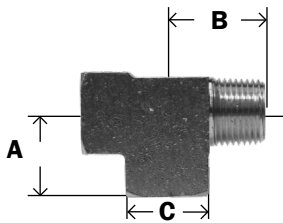
45E8 124B

BRASS FITTINGS

PIPE

STREET TEE/ SERVICE TEE/ MALE RUN TEE

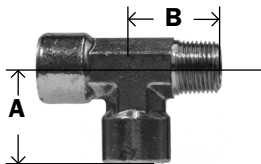
SAE# 130424



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-245	1/8"	0.55	0.66	0.56	0.08	3.23
28-246	1/4"	0.78	0.91	0.68	0.17	6.12
28-247	3/8"	0.84	0.97	0.81	0.22	6.79
28-248	1/2"	1.09	1.25	1.00	0.40	12.46
28-249	3/4"	1.16	1.39	1.25	0.60	20.03

225 2225P 3750 326 225 127A

FORGED STREET TEE

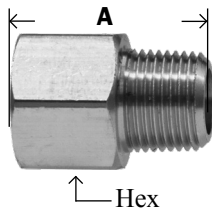


Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-253	1/8"	0.56	0.75	0.50	0.05	4.96
28-254	1/4"	1.03	1.00	0.46	0.13	5.51
28-255	3/8"	1.19	1.09	0.68	0.24	7.10
28-256	1/2"	1.52	1.40	0.88	0.45	21.51
28-257	3/4"	1.34	1.73	1.25	0.65	51.66

107 T8 127B

EXTENDER ADAPTER

SAE# 130139

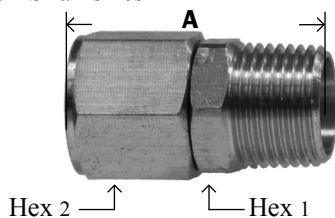


Part #	Thread size NPTF FxM	A	Hex	Approx. Wt. Lbs.	List Price
28-190L	1/8" x 1/8"	0.83	0.50	0.03	1.63
28-190	1/8" x 1/8"	0.88	0.56	0.04	1.27
28-191L	1/4" x 1/8"	0.94	0.62	0.04	1.31
28-191	1/4" x 1/8"	1.06	0.75	0.07	3.07
28-192L	1/4" x 1/4"	1.00	0.62	0.04	1.45
28-192	1/4" x 1/4"	1.25	0.75	0.07	2.99
28-198	3/8" x 1/8"	1.00	0.81	0.06	4.15
28-193L	3/8" x 1/4"	1.12	0.81	0.08	2.44
28-193	3/8" x 1/4"	1.25	0.87	0.09	3.96
28-194L	3/8" x 3/8"	1.24	0.81	0.10	3.25
28-194	3/8" x 3/8"	1.25	0.87	0.11	3.62
28-199	1/2" x 1/4"	1.46	1.06	0.08	4.86
28-195L	1/2" x 3/8"	1.19	0.93	0.09	4.53
28-195	1/2" x 3/8"	1.47	1.06	0.18	6.99
28-196	1/2" x 1/2"	1.66	1.06	0.12	6.49
28-207	3/4" x 3/8"	1.59	1.25	0.26	14.76
28-208	3/4" x 1/2"	1.69	1.37	0.14	14.76
28-208L	3/4" x 1/2"	1.22	1.25	0.13	14.76
28-209	3/4" x 3/4"	1.69	1.37	0.34	20.15

375 222P 3200 R1 120AH 120B

PIPE SWIVEL ADAPTER

*300 PSI all sizes



Part #	Thread size NPTF FxM	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
28-424	1/8"	1.10	0.43	0.50	0.05	4.58
28-425	1/4"	1.34	0.56	0.62	0.06	10.29
28-426	3/8"	1.36	0.68	0.75	0.08	22.57
28-427	1/2"	1.87	0.87	0.95	0.10	30.69

Male NPT x Female NPT

- 360° Turning
- Swivels



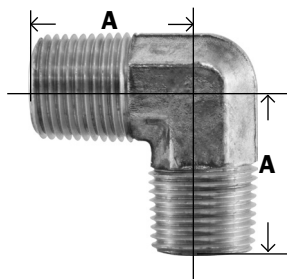
Part #	Size	List Price
320-061	1/4	10.99

344R 3183

PIPE

BRASS FITTINGS

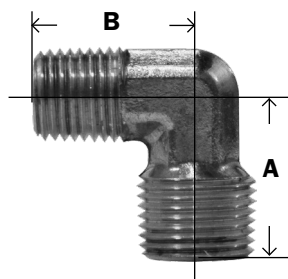
FORGED 90° MALE ELBOW



Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	List Price
28-266	1/8"	0.79	0.38	0.04	3.23
28-267	1/4"	0.87	0.45	0.06	3.24
28-268	3/8"	1.00	0.59	0.12	6.22
28-269	1/2"	1.38	0.78	0.21	8.65

LE5 3455 116AMF

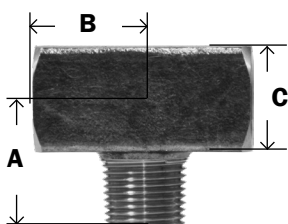
FORGED 90° MALE REDUCING ELBOW



Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-274	1/4" x 1/8"	0.88	0.78	0.47	0.06	4.65
28-275	3/8" x 1/4"	0.90	0.90	0.46	0.06	4.78
28-276	1/2" x 3/8"	1.12	1.00	0.59	0.12	8.57

MALE BRANCH TEE

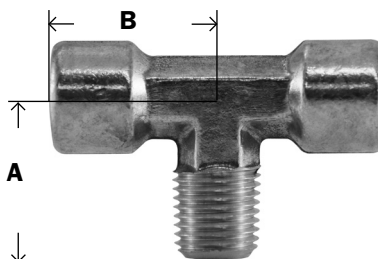
SAE# 130425



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-281	1/8"	0.66	0.55	0.56	0.08	3.33
28-282	1/4"	0.91	0.78	0.68	0.15	6.06
28-283	3/8"	0.97	0.84	0.81	0.22	7.99
28-284	1/2"	1.25	1.09	1.00	0.40	17.83
28-285	3/4"	1.38	1.16	1.25	0.62	23.47

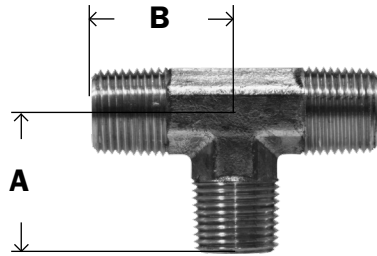
T9 X106 23601 3600 2224P 226 329 128

FORGED MALE BRANCH TEE



Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-281F	1/8"	0.75	0.56	0.50	0.06	4.50
28-282F	1/4"	1.00	1.03	0.46	0.12	7.36

T9

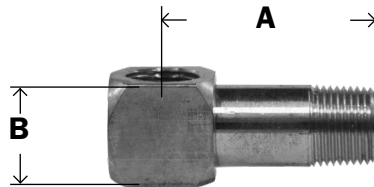
BRASS FITTINGS**PIPE****FORGED ALL MALE TEE**

Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-290	1/8"	0.75	0.75	0.43	0.06	4.99
28-291	1/4"	0.86	0.86	0.43	0.08	4.89
28-292	3/8"	1.09	1.09	0.60	0.16	8.15
28-293	1/2"	1.22	1.22	0.68	0.22	9.76
28-294	3/4"	1.43	1.43	0.87	0.38	31.18

T12 M101

LONG STREET ELLS

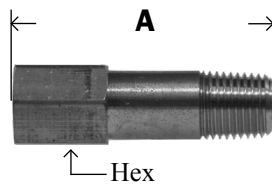
D.O.T. Approved



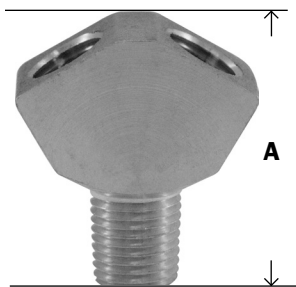
Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-440	1/8"	1-3/16"	0.50	0.06	10.30
28-441	1/8"	1-7/16"	0.50	0.06	5.12
28-442	1/8"	1-11/16"	0.50	0.06	8.51
28-443	1/8"	1-7/8"	0.50	0.16	14.95
28-328	1/4"	1-3/16"	0.75	0.12	17.29
28-329	1/4"	1-7/16"	0.75	0.14	14.08
28-330	1/4"	1-11/16"	0.75	0.15	14.05
28-331	1/4"	1-7/8"	0.62	0.09	13.30
28-332	1/4"	2-1/4"	0.75	0.17	19.15
28-333	3/8"	1-3/4"	0.87	0.22	21.93

LONG EXTENSION ADAPTERS

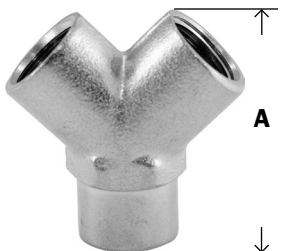
D.O.T. Approved



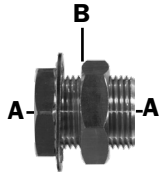
Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-335	1/8"	1-1/4"	0.50	0.04	11.33
28-336	1/8"	1-3/4"	0.50	0.05	12.33
28-337	1/8"	3"	0.50	0.09	22.22
28-338	1/4"	1-9/16"	0.62	0.07	6.80
28-339	1/4"	1-13/16"	0.62	0.08	8.66
28-340	1/4"	2-1/16"	0.62	0.10	8.04

PIPE WYE FIP x MIP

Part #	Thread Size NPT	A	Approx. Wt. Lbs.	List Price
28-295	1/4"	1.56	.15	7.00

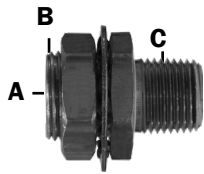
PIPE WYE FIP x FIP - NICKEL PLATED

Part #	Thread Size NPT	A	Approx. Wt. Lbs.	List Price
28-298	1/4	1.4	.12	5.76

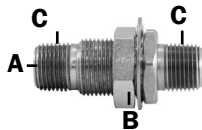
BULKHEAD/ ANCHOR FRAME COUPLINGS**BRASS FITTINGS****BULKHEAD / ANCHOR / FRAME COUPLINGS****FEMALE PIPE X
FEMALE PIPE**

NEW	28-299	1/8-27 NPTF	5/8-18 UNS	----	0.96	19.28
	28-300	1/8-27 NPTF	5/8-18 UNS	----	1-1/2	7.36
	28-301	1/4-18 NPTF	3/4-16 UNS	----	15/16	7.04
	28-302	1/4-18 NPTF	3/4-16 UNS	----	1-1/2	7.92
	28-315*	1/4-18 NPTF	3/4-16 UNS	----	1-1/2	9.81
	28-303	3/8-18 NPTF	1-14 UNS	----	1-5/16	10.40
	28-304	1/2-14 NPTF	1-1/8-14 UNS	----	1-1/2	13.04
	28-311	3/4-14 NPTF	1-5/16-12	----	1-1/2	95.55
NEW	28-316**	1-11/1/2	1-5/8-14		1.68	251.47

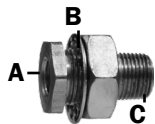
* Same as 28-302 except with a larger mounting nut. **Without washer

**FEMALE PIPE X MALE PIPE**

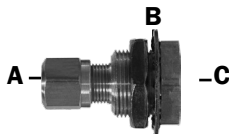
28-317	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2-1/8	29.43
28-318	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-11/16	15.46
28-319	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-29/32	15.40

**FEMALE PIPE X MALE PIPE**

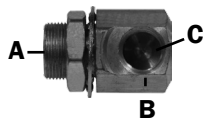
28-313	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2-7/8	29.14
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**FEMALE PIPE X MALE PIPE**

28-346	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-7/8	19.27
28-347	1/2-14 NPTF	1-14 UNS	1/2-14 NPTF	2-3/8	26.86

**TUBE X FEMALE PIPE**

28-321	1/2-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	1-5/16	13.34
28-322	3/8-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	1-3/8	12.70

**FEMALE PIPE X CLAMPING STUD ELBOW**

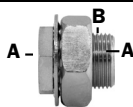
28-348	3/8-18 NPTF	7/8-20 UNEF	3/8-18 NPTF	2-5/16	20.02
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CROSSOVER NUMBERS

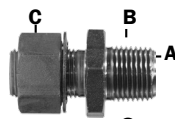
28-300	207x2	129A-A	50004	55207							1495B-A	ACBH207-2	207ACBH-2					
28-301	207X4	129AS-B		55611		S611	114-44	1345	382-44S	392C-94		ACBHS207-4						
28-302	207X4	129A-B	50005	55661			114B-44	1344	382-44L		035081	ACBH207-4	207ACBH-4			11306		90648
28-303	207X6	129A-C	50006	55607		S661/S607	114-66	1346	382-66		035087	ACBH207-6	207ACBH-6			11307	17709	
28-304	207X8	129A-D	50007	55807		S807	114-88	1351				ACBH207-8	207ACBH-8					
28-317				55615		S615	117-84											
28-318				55620		S620			381-86S						11304			
28-319			50001				115-86				035079	1496-DC						
28-313			50010	55600		S664	115-88	1342	380-84	5730	035021				11300	55X6		
28-346			50013	55613		S613												
28-347			50012	55629		S629					035039							
28-321						391-86/1347	S608											
28-322						391-66	S609											
28-348				55616														

BRASS FITTINGS**BULKHEAD/ ANCHOR/ FRAME COUPLINGS****Terminal Bolts/ Frame**

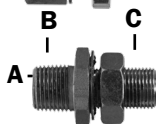
Part #	A	B	C	Length (in.)	List
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STEEL BULKHEAD FITTINGS

28-306	1/4-18 NPTF	3/4 - 16 UNS		0.94	10.70
28-307	1/4-18 NPTF	3/4 - 16 UNS		1.50	10.95
28-308	3/8-18 NPTF	1 - 14 UNS		1.31	12.54

FEMALE PIPE X MALE PIPE

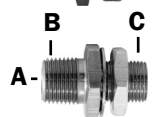
28-309	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2.16	21.37
28-310	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2.53	38.40



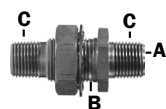
28-345*	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2-5/32	20.78
28-324	3/8-18NPTF	1-14 UNS	1/2-14 NPTF	1-11/16	26.22

NEW

* Steel

FEMALE PIPE X MALE PIPE

28-325	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	1-11/16	22.45
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28-312	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2.94	26.50
28-320	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	3-15/16	41.46

NEW**BRASS MARINE BULKHEAD FITTINGS**

46-540	5/16 Hose ID	----	----	2.37	12.97
46-541	3/8 Hose ID	----	----	2.37	22.98

**BULKHEAD JAM NUTS**

Part #	Size	Weight	List Price
28-301J	3/4-16UNEF	0.05 ea.	2.60
28-321J*	7/8-20UNEF	0.0244 ea.	2.93
28-317J	1-14UNS	0.07 ea.	3.93
28-304J	1-1/8-14UNS	0.07 ea.	6.94

* Zinc Dichromate

**BULKHEAD LOCK WASHERS**

Part #	Size	Material	QTY	Weight	List Price
28-301W	3/4"	Steel	25	0.70 per 100	0.46
28-321W	7/8"	Steel	25	0.90 per 100	0.74
28-317W	1"	Steel	25	1.4 per 100	1.31
28-304W	1-1/8"	Steel	25	1.7 per 100	1.35

CROSSOVER NUMBERS

28-306	55611STL	W21204	114-44		
28-307	55661STL	W05465	114B44		
28-308	55607STL	017709	114-66		
28-309	55689	V05498	1340	381-84S	390FC5
28-310		W05499			
28-345	55689STL	W05498	1340	381-84S	390FC5
28-324	55620STL				
28-325	55612STL		S612	392-84	
28-312	55600STL	W05730	115-88	005760	1342
28-320	55664	W23464		380-84L	391FC3

HOSE BARB FITTINGS



• Temperature and Working Pressure Ranges

From -40°F to +160°F at 150 PSI maximum.

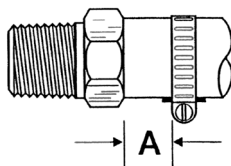
• Tolerance

+/- .02 on all dimensions. Dimension Data can change without notice. Please call us when dimensions are critical.

Note: These fittings are intended for use with hose clamp, similar type clamp or a crimped ferrule.

• Assembly Instructions

- 1- Cut hose cleanly and squarely to length.
- 2- Slide clamp on hose.
- 3- Lubricate hose. Push hose on fitting until hose bottoms against stop ring or hex.
- 4- Position hose clamp as shown below and secure with a screwdriver or wrench. Maintain "A" dimension noted below for proper clamp positioning.



• For Lead Free AB1953 Compliant Fittings
see pages 164-165



Other Barbs available

See page 312-316 for plastic hose barb fittings



See page 26-27 for stainless steel hose barbs



See page 327 for King Nipples

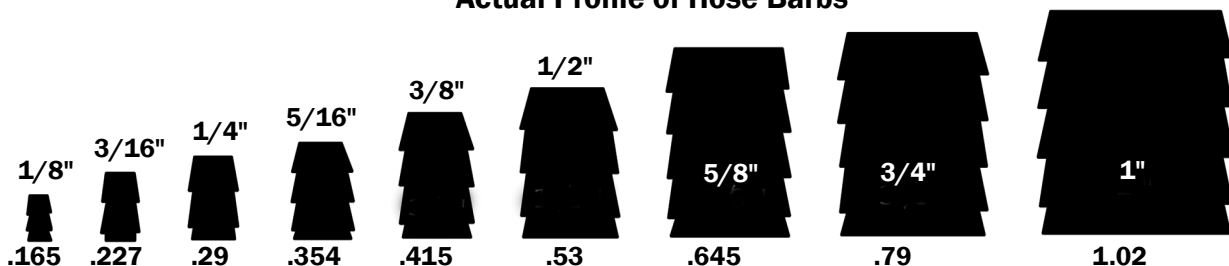


Stainless Steel hose barbs for beverage service available -

See beverage fitting section, pg. 27

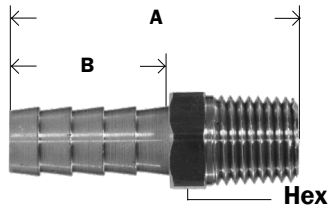
Hose Size	A
3/16"	1/4"
1/4"	1/4"
5/16"	1/4"
3/8"	1/8"
1/2"	1/8"
5/8"	1/8"
3/4"	1/8"

Actual Profile of Hose Barbs



RIGID MALE ADAPTER

- These are not Lead Free



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-001 *	1/8" x 1/8"	1.19	0.69	0.43	0.02	0.99
32-027	1/8" x 1/4"	1.16	0.46	0.56	0.02	1.36
32-002 *	3/16" x 1/8"	1.19	0.75	0.43	0.02	0.94
32-003 *	3/16" x 1/4"	1.37	0.69	0.56	0.04	1.62
32-301	1/4" x 1/16"	1.44	0.88	0.43	0.02	2.95
32-004 *	1/4" x 1/8"	1.47	0.97	0.43	0.02	1.19
32-005 *	1/4" x 1/4"	1.72	0.97	0.56	0.04	1.33
32-006 *	1/4" x 3/8"	1.72	0.97	0.68	0.05	1.98
32-007	1/4" x 1/2"	1.72	0.81	0.87	0.10	3.49
32-008 *	5/16" x 1/8"	1.47	0.97	0.43	0.02	1.12
32-009 *	5/16" x 1/4"	1.72	0.97	0.56	0.04	1.55
32-010 *	5/16" x 3/8"	1.76	0.97	0.68	0.06	2.07
32-390	5/16" x 1/2"	1.88	0.95	0.87	0.10	3.90
32-011 *	3/8" x 1/8"	1.53	0.97	0.56	0.03	1.45
32-012 *	3/8" x 1/4"	1.75	0.97	0.56	0.05	1.35
32-013 *	3/8" x 3/8"	1.72	0.96	0.68	0.06	1.88
32-014 *	3/8" x 1/2"	1.97	0.97	0.87	0.09	3.40
32-026 *	3/8" x 3/4"	1.97	0.97	1.06	0.16	4.55
32-302	1/2" x 1/8"	1.57	0.95	0.56	0.06	3.76
32-015 *	1/2" x 1/4"	1.72	0.97	0.56	0.04	1.94
32-016 *	1/2" x 3/8"	1.76	0.97	0.68	0.07	2.25
32-017 *	1/2" x 1/2"	1.87	0.96	0.87	0.11	2.99
32-018 *	1/2" x 3/4"	1.94	0.97	1.06	0.16	4.56
32-303	1/2" x 1"	2.31	0.99	1.37	0.33	14.05
32-304	5/8" x 1/4"	1.67	0.92	0.68	0.06	4.60
32-019 *	5/8" x 3/8"	1.76	0.97	0.68	0.08	2.59
32-020 *	5/8" x 1/2"	1.87	0.96	0.87	0.11	3.22
32-021 *	5/8" x 3/4"	1.87	0.96	1.06	0.14	4.47
32-305	5/8" x 1"	2.31	0.96	1.37	0.36	17.26
32-306	3/4" x 3/8"	1.65	0.87	0.81	0.12	5.65
32-022 *	3/4" x 1/2"	1.87	0.96	0.87	0.14	4.10
32-023 *	3/4" x 3/4"	1.87	0.96	1.06	0.15	5.39
32-316	3/4" x 1"	2.55	1.15	1.37	0.38	12.44
32-307	1" x 1/2"	1.80	0.87	1.06	0.18	7.52
32-024 *	1" x 3/4"	2.19	1.19	1.06	0.32	6.71
32-025 *	1" x 1"	2.48	1.19	1.37	0.39	10.73
32-029	1-1/4" x 3/4"	2.37	1.19	1.37	0.35	15.77
32-028	1-1/4" x 1"	2.55	1.19	1.37	0.46	14.99

4244 PGH 101 102 201A 125HBL 105B-1 KF-PS MPB



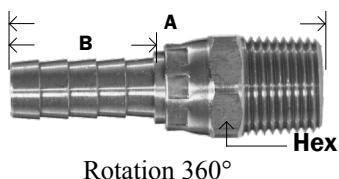
* See page 26 for stainless steel.



See page 27 for beverage #303 stainless fittings

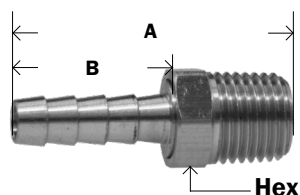
HOSE BARB**BRASS FITTINGS****BRASS RIGID MALE BSPT BARB ADAPTER**

Part #	Hose I.D. x MALE BSPT	List Price
32-450	1/4" x 1/8"	1.40
32-451	1/4" x 1/4"	2.04
32-452	3/8" x 1/4"	2.23
32-453	3/8" x 3/8"	5.63
32-454	3/8" x 1/2"	4.12
32-455	1/2" x 3/8"	3.17
32-456	1/2" x 1/2"	4.57
32-457	3/4" x 3/4"	7.11
32-458	1" x 1"	14.66

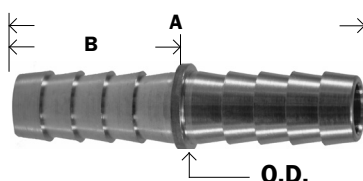
SWIVEL MALE ADAPTER

Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-329	3/16" x 1/8"	1.95	0.78	0.56	0.06	5.44
32-331	3/16" x 1/4"	1.90	0.78	0.56	0.06	5.54
32-332	1/4" x 1/8"	2.19	0.97	0.56	0.06	5.09
32-349	1/4" x 1/4"	2.12	0.97	0.56	0.06	4.73
32-351	3/8" x 1/8"	2.12	0.97	0.56	0.07	5.26
32-201	3/8" x 1/4"	2.12	0.97	0.56	0.07	4.06
32-360	3/8" x 3/8"	2.12	0.97	0.69	0.08	5.58
32-355	1/2" x 3/8"	2.12	0.97	0.68	0.10	6.00
32-356	1/2" x 1/2"	2.33	0.97	0.87	0.14	8.19
32-357	3/4" x 3/4"	2.33	0.97	1.06	0.20	10.58
32-386	1" x 1"	3.43	1.19	1.38	0.40	72.18

SMS 103



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-200	1/4" x 1/4"	1.65	.89	0.56	0.04	3.96
32-202	3/8" x 3/8"	1.75	1.00	0.68	0.08	4.99

MENDER/ SPLICER

Part #	Hose I.D. x Hose I.D.	A	B	O.D.	Approx. Wt. Lbs.	List Price
32-091 *	1/8"	0.98	0.45	0.31	0.01	1.30
32-092	3/16"	1.62	0.77	0.36	0.02	1.73
32-093 *	1/4"	2.00	0.96	0.37	0.02	1.44
32-079 *	1/4" x 1/8"	1.50	0.97	0.37	0.02	3.31
32-094 *	5/16"	2.00	0.96	0.39	0.02	1.37
32-090 *	5/16" x 1/4"	2.00	0.97	0.39	0.03	2.41
32-095 *	3/8"	2.00	0.94	0.51	0.04	1.46
32-080 **	3/8" x 1/4"	2.06	0.97	0.56	0.03	3.98
32-375 *	3/8" x 5/16"	2.00	0.97	0.56	0.03	2.34
32-096 *	1/2"	2.00	0.96	0.62	0.06	2.11
32-087 *	1/2" x 3/8"	2.06	0.97	0.71	0.06	6.01
32-097	5/8"	2.05	0.96	0.75	0.08	2.85
32-088	5/8" x 3/8"	2.06	0.97	0.75	0.06	6.60
32-376	5/8" x 1/2"	2.06	0.97	0.75	0.07	6.78
32-098 *	3/4"	2.50	1.15	0.87	0.10	4.84
32-089	3/4" x 1/2"	2.28	1.19	0.87	0.10	9.43
32-379	3/4" x 5/8"	2.50	1.19	0.87	0.10	5.44
32-380	1" x 3/4"	2.58	1.19	1.12	0.18	5.94
32-099	1"	3.00	1.44	1.02	0.23	12.79



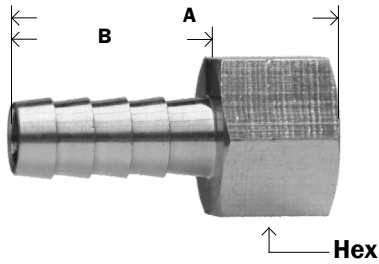
* Add SS to the end of the part number for Stainless.

MSB 122HBL HM 129 178 73 108



** See hose splicers on page 27 for Stainless.

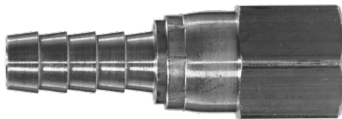
RIGID FEMALE ADAPTER



Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-050	1/8" x 1/8"	0.96	0.46	0.50	0.02	1.54
32-317	1/8" x 1/4"	1.15	0.46	0.62	0.04	5.14
32-051	3/16" x 1/8"	1.10	0.68	0.50	0.02	1.39
32-062	3/16" x 1/4"	1.44	0.75	0.62	0.04	5.56
32-052	1/4" x 1/8"	1.35	0.93	0.50	0.02	1.69
32-053	1/4" x 1/4"	1.60	0.97	0.62	0.06	1.79
32-054	1/4" x 3/8"	1.65	1.03	0.75	0.04	2.53
32-441	1/4" x 1/2"	1.66	0.97	0.93	0.08	8.17
32-055	5/16" x 1/8"	1.47	0.97	0.56	0.04	2.79
32-056	5/16" x 1/4"	1.66	0.97	0.62	0.04	2.36
32-318	5/16" x 3/8"	1.66	0.97	0.75	0.06	5.47
32-320	5/16" x 1/2"	1.67	0.96	0.93	0.08	6.50
32-057	3/8" x 1/8"	1.47	0.97	0.56	0.04	2.37
32-058	3/8" x 1/4"	1.61	0.97	0.62	0.06	2.10
32-059	3/8" x 3/8"	1.63	1.00	0.81	0.08	2.30
32-063	3/8" x 1/2"	1.72	0.94	0.93	0.12	4.35
32-442	3/8" x 3/4"	1.97	0.97	1.18	0.20	14.65
32-064	1/2" x 1/4"	1.66	0.96	0.62	0.08	2.61
32-060	1/2" x 3/8"	1.66	0.97	0.75	0.08	5.25
32-061	1/2" x 1/2"	1.76	0.96	0.93	0.12	4.18
32-443	1/2" x 3/4"	1.97	0.97	1.18	0.26	14.91
32-444	5/8" x 3/8"	1.66	0.97	0.75	0.08	6.18
32-445	5/8" x 1/2"	1.66	0.97	0.93	0.10	8.27
32-446	5/8" x 3/4"	1.97	0.97	1.18	0.21	14.80
32-447	3/4" x 1/2"	1.88	1.19	0.93	0.13	9.25
32-065	3/4" x 3/4"	2.19	1.21	1.18	0.22	7.14
32-049	1" x 3/4"	2.19	1.19	1.18	0.26	18.83
32-321	1" x 1"	2.32	1.19	1.44	0.35	25.29
32-448	1-1/4" x 1"	2.32	1.19	1.43	0.44	24.67

209A 128 29A 29F 126HB 126 FPB 105B-2 KF-RS 104 144

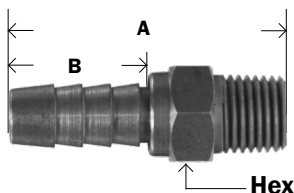
SWIVEL FEMALE ADAPTER NPTF



Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-470	1/4" x 1/4"	1.80	0.97	0.62	0.06	10.22
32-472	3/8" x 1/4"	1.80	0.97	0.62	0.06	10.50
32-473	3/8" x 3/8"	1.82	0.97	0.75	0.09	10.89
32-475	1/2" x 3/8"	1.82	0.97	0.75	0.09	12.06
32-476	1/2" x 1/2"	1.86	0.97	0.93	0.14	12.99

HIGH VOLUME MALE SWIVEL

- 300 PSI
- Nitrile Buna (NBR) O-Ring



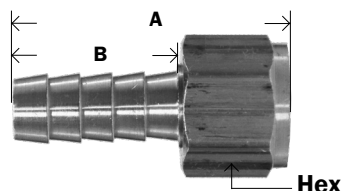
Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-781	3/8" x 1/4"	1.83	0.87	0.62	0.07	17.80

4065

HOSE BARB**BRASS FITTINGS****SWIVEL FEMALE ADAPTER - With Gasket**

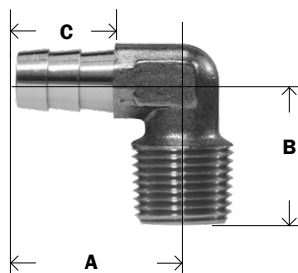
• NPSM Thread

National Pipe Straight Gasket Seal Swivel



Part #	Hose I.D. x Female NPSM	A	B	Hex	Approx. Wt. Lbs.	List Price
32-131	1/8" x 1/8"	0.90	0.46	0.50	0.02	6.65
32-132	3/16" x 1/8"	1.19	0.75	0.50	0.03	6.41
32-133	3/16" x 1/4"	1.28	0.75	0.62	0.04	6.93
32-120	1/4" x 1/8"	1.41	0.97	0.50	0.02	7.95
32-121	1/4" x 1/4"	1.50	0.97	0.62	0.02	3.00
32-129	1/4" x 3/8"	1.63	0.97	0.75	0.04	7.96
32-130	5/16" x 1/4"	1.50	0.97	0.62	0.04	9.22
32-122	3/8" x 1/4"	1.54	1.00	0.62	0.06	4.95
32-123	3/8" x 3/8"	1.60	0.97	0.75	0.06	8.35
32-354	3/8" x 1/2"	1.66	0.97	0.93	0.10	11.30
32-124	1/2" x 3/8"	1.60	0.97	0.75	0.08	10.03
32-125	1/2" x 1/2"	1.66	0.97	0.93	0.12	8.07
32-117	1/2" x 3/4"	1.82	1.19	1.18	0.16	11.98
32-118	5/8" x 3/4"	1.82	1.19	1.18	0.18	12.76
32-119	3/4" x 3/4"	1.82	1.19	1.18	0.14	8.29

130 126 29FSG KF-RN NPSM Gasket Seat

FORGED HOSE BARB 90° ELBOW

32-045

Grooved End Barb



32-330

Square Body

Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
32-308	3/16" x 1/8"	0.95	0.70	0.66	0.37	0.02	2.80
32-391	3/16" x 1/4"	1.00	0.84	0.63	0.46	0.10	3.59
32-038 *	1/4" x 1/8"	1.01	0.81	0.71	0.47	0.06	2.40
32-039 *	1/4" x 1/4"	1.01	0.87	0.63	0.47	0.06	3.32
32-309 ***	1/4" x 3/8"	1.08	0.97	0.73	0.69	0.12	4.20
32-036	5/16" x 1/8"	1.01	0.81	0.63	0.47	0.04	2.93
32-040	5/16" x 1/4"	1.01	0.87	0.63	0.47	0.06	3.87
32-310	5/16" x 3/8"	1.06	0.94	0.63	0.50	0.06	6.31
32-046 *	3/8" x 1/8"	1.01	0.81	0.63	0.47	0.06	2.61
32-041 *	3/8" x 1/4"	1.02	0.88	0.65	0.47	0.06	3.33
32-042 *	3/8" x 3/8"	1.09	0.93	0.68	0.50	0.08	4.00
32-047 *	3/8" x 1/2"	1.11	1.09	0.63	0.59	0.10	4.28
32-048	1/2" x 1/4"	1.06	1.00	0.68	0.59	0.10	4.08
32-043 *	1/2" x 3/8"	1.06	1.09	0.69	0.59	0.10	4.95
32-311 *	1/2" x 1/2"	1.31	1.19	0.87	0.56	0.12	6.16
32-044	5/8" x 3/8"	1.12	1.06	0.61	0.56	0.12	6.69
32-045**	5/8" x 1/2"	1.12	1.12	0.66	0.59	0.14	6.39
32-312	5/8" x 3/4"	1.46	1.26	0.93	1.06	0.32	10.90
32-313	3/4" x 1/2"	1.31	1.28	0.87	0.85	0.22	8.33
32-314 *	3/4" x 3/4"	1.46	1.26	0.91	1.06	0.32	13.36
32-330***	3/4" x 1"	1.57	1.64	0.90	1.34	0.64	25.04
32-315	1" x 3/4"	1.60	1.40	0.95	1.06	0.32	12.29
32-319	1" x 1"	1.69	1.64	0.98	1.34	0.43	50.26

129 HBE1 KF-PS90 HE-1 29E 146

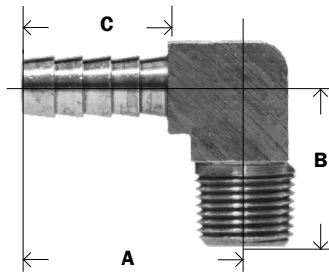


* Add SS to the end of the part number for Stainless. See page 26.

** Grooved End Barbs

*** Square Body

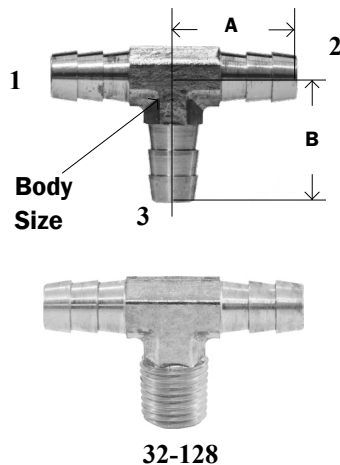
BARSTOCK HOSE BARB 90° ELBOW



Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
32-038B	1/4" X 1/8"	1.00	0.75	0.75	0.50	0.02	5.25
32-039B	1/4" X 1/4"	1.02	0.91	0.74	0.56	0.04	6.00
32-041B	3/8" X 1/4"	1.32	0.89	0.97	0.58	0.08	8.33
32-042B	3/8" X 3/8"	1.50	1.06	0.97	0.75	0.14	14.20
32-043B	1/2" X 3/8"	1.53	1.07	0.97	0.72	0.16	13.70

129HB

HOSE BARB TEES

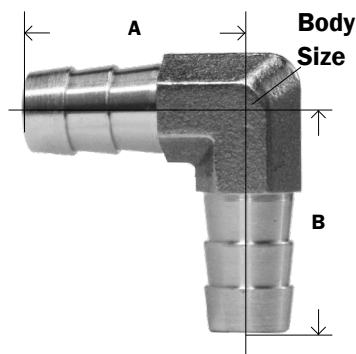


Part #	Hose Barb Size 1 x 2 x 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-367 *	1/8"	0.84	0.83	0.25	0.02	3.81
32-368	3/16"	1.02	1.02	0.37	0.03	3.55
32-365 **	1/4"	1.00	1.00	0.44	0.06	3.21
32-350 *	1/4" x 1/8"	0.94	0.94	0.44	0.04	8.09
32-366	5/16"	1.00	1.00	0.44	0.06	3.99
32-126 **	3/8"	1.01	1.01	0.43	0.06	4.02
32-400 *	1/2"	1.02	1.00	0.43	0.08	4.88
32-352 *	1/2" x 3/8"	1.26	1.26	0.43	0.10	13.81
32-361	5/8"	1.26	1.26	0.75	0.16	18.62
32-363	3/4"	1.26	1.26	0.88	0.18	25.62
32-353	3/4" x 1/2"	1.41	1.41	0.88	0.23	28.32
32-128 *	3/8" HB x 1/4" MIP	1.00	0.94	0.43	0.06	11.27

* Add SS to the end of the part number for Stainless.

** See page 27 for stainless steel.

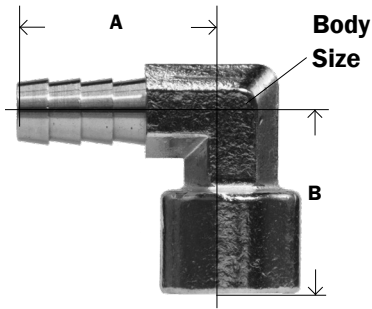
90° HOSE BARB ELBOW



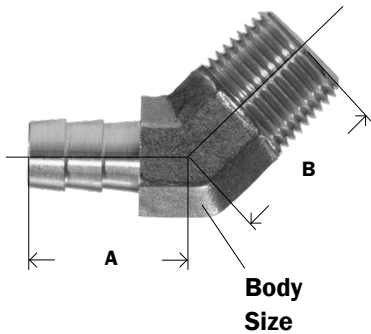
Part #	Hose I.D. x Hose I.D.	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-429	1/8" x 1/8"	0.55	0.55	0.37	0.03	7.02
32-433	3/16" x 3/16"	0.90	0.90	0.37	0.03	5.90
32-412	1/4" x 1/8"	1.02	1.02	0.44	0.04	3.67
32-413 *	1/4" x 1/4"	1.01	1.01	0.44	0.04	3.69
32-425	5/16" x 5/16"	1.15	1.15	0.48	0.05	9.03
32-414	3/8" x 1/8"	1.01	1.01	0.44	0.04	5.05
32-415	3/8" x 1/4"	1.00	1.00	0.44	0.04	4.20
32-416 *	3/8" x 3/8"	1.02	1.02	0.44	0.04	6.63
32-417	3/8" x 1/2"	1.24	1.10	0.50	0.06	5.55
32-418	1/2" x 1/4"	1.24	1.08	0.50	0.06	5.31
32-419	1/2" x 3/8"	1.22	1.09	0.50	0.06	9.69
32-420 *	1/2" x 1/2"	1.24	1.24	0.50	0.06	5.56
32-434	5/8" x 5/8"	1.20	1.20	0.75	0.16	20.27
32-435	3/4" x 1/2"	1.41	1.41	0.88	0.21	21.08
32-436	3/4" x 3/4"	1.41	1.41	0.88	0.21	25.22

* Add SS to the end of the part number for Stainless.

See beverage fittings on page 27

HOSE BARB**BRASS FITTINGS****90° FEMALE HOSE BARB ELBOW**

Part #	Hose I.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-401	1/4" x 1/8"	1.01	0.82	0.47	0.06	4.88
32-402	1/4" x 1/4"	1.13	0.91	0.56	0.10	5.95
32-403	3/8" x 1/8"	1.01	0.82	0.47	0.06	5.77
32-404	3/8" x 1/4"	1.15	0.91	0.56	0.10	6.29
32-405	3/8" x 3/8"	1.15	1.11	0.68	0.14	14.02
32-406	3/8" x 1/2"	1.26	1.39	0.75	0.20	10.82
32-407	1/2" x 1/4"	1.26	0.91	0.56	0.10	6.89
32-410	1/2" x 3/8"	1.24	1.11	0.68	0.14	10.15
32-411	1/2" x 1/2"	1.37	1.39	0.75	0.20	10.67
32-409	3/4" x 3/4"	1.52	1.75	0.81	0.50	15.43

45° ELBOW

Part #	Hose I.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-110	1/4" x 1/8"	0.91	0.62	0.53	0.04	3.69
32-109*	1/4" x 1/4"	1.00	0.62	0.57	0.06	7.56
32-111	3/8" x 1/8"	0.83	0.66	0.53	0.04	5.23
32-112	3/8" x 1/4"	0.82	0.84	0.53	0.06	4.69
32-113	3/8" x 3/8"	0.93	0.87	0.59	0.08	6.00
32-346	1/2" x 1/4"	1.00	0.84	0.59	0.08	9.49
32-114	1/2" x 3/8"	1.00	0.88	0.59	0.08	7.87
32-116	1/2" x 1/2"	1.15	0.94	0.59	0.12	13.61
32-115	5/8" x 3/8"	0.97	0.88	0.59	0.10	8.37
32-345	3/4" x 1/2"	1.15	0.94	0.81	0.13	24.16

* Barstock

140 HE145 139HB KF-PS45 13945

CROSSES

Part #	Hose ID	List Price
32-608	1/4	3.50
32-609	5/16	4.07
32-610	3/8	5.21

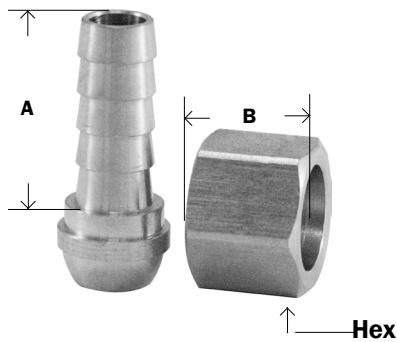
HOSE WYES AVAILABLE WITH EXTENDED LEAD TIME.

BRASS FITTINGS

HOSE BARB

BALL END SWIVEL

NPSM - Ball seat type

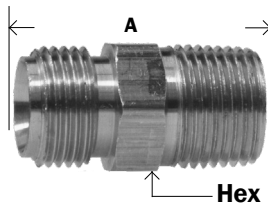


Part #	Hose I.D. x NPSM	A	B	Hex	Approx. Wt. Lbs.	List Price
32-066	1/8" x 1/8"	0.46	0.44	0.50	0.03	5.34
32-067	3/16" x 1/8"	0.75	0.44	0.50	0.03	4.45
32-068	3/16" x 1/4"	0.75	0.52	0.62	0.04	2.90
32-069	1/4" x 1/8"	0.97	0.44	0.50	0.04	2.67
32-070	1/4" x 1/4"	0.97	0.53	0.62	0.06	2.63
32-078	1/4" x 3/8"	0.97	0.63	0.75	0.06	6.32
32-071	5/16" x 1/4"	0.97	0.52	0.62	0.05	3.33
32-389	5/16" x 3/8"	0.97	0.63	0.75	0.07	7.50
32-072	3/8" x 1/4"	0.97	0.53	0.62	0.06	2.49
32-073	3/8" x 3/8"	0.97	0.59	0.75	0.08	2.99
32-074	3/8" x 1/2"	0.97	0.69	0.94	0.14	9.38
32-075	1/2" x 3/8"	0.97	0.59	0.75	0.08	2.97
32-076	1/2" x 1/2"	0.97	0.69	0.94	0.10	3.99
32-077	3/4" x 3/4"	0.97	0.70	1.12	0.14	6.73

128HBLSV 29FS 209AS 124 131

BALLSEAT MALE ADAPTER

Beveled seat

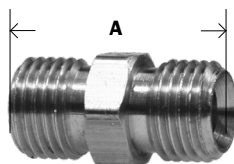


30° Seat

Part #	NPSM x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
32-359	1/8" x 1/8"	0.94	0.43	0.03	4.78
32-034	1/4" x 1/8"	1.06	0.56	0.04	3.90
32-030	1/4" x 1/4"	1.25	0.56	0.06	3.51
32-362	3/8" x 1/4"	1.28	0.68	0.08	6.12
32-031	3/8" x 3/8"	1.30	0.68	0.08	4.90
32-392	3/8" x 1/2"	1.47	0.88	0.13	10.00
32-364	1/2" x 3/8"	1.35	0.87	0.10	8.65
32-032	1/2" x 1/2"	1.53	0.87	0.14	6.54
32-033	3/4" x 3/4"	1.53	1.06	0.20	10.44

172 134 127HB 122AS

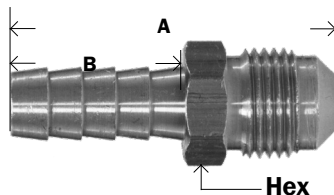
BALLSEAT UNION



30° Seat

Part #	NPSM x NPSM	A	Hex	Approx. Wt. Lbs.	List Price
32-460	1/8"	0.79	0.43	0.02	4.15
32-461	1/4"	1.09	0.56	0.04	5.07
32-462	3/8"	1.19	0.68	0.07	8.02
32-463	1/2"	1.31	0.87	0.10	8.71

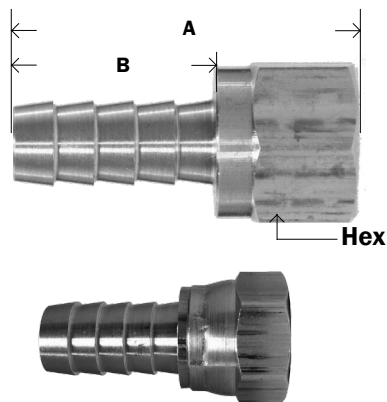
45° FLARE ADAPTER



Part #	Hose I.D. x 45° Flare	Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-322	3/16" x 1/4"	7/16-20	1.5	0.75	0.43	0.03	5.93
32-081 *	1/4" x 1/4"	7/16-20	1.72	0.97	0.43	0.03	3.62
32-082 *	1/4" x 3/8"	5/8-18	1.82	0.97	0.62	0.07	4.62
32-083	5/16" x 5/16"	1/2-20	1.75	0.97	0.50	0.08	6.07
32-084 *	3/8" x 3/8"	5/8-18	1.82	0.97	0.62	0.08	5.00
32-085	3/8" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	7.23
32-086	1/2" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	6.99

* Add SS to the end of the part number for Stainless.

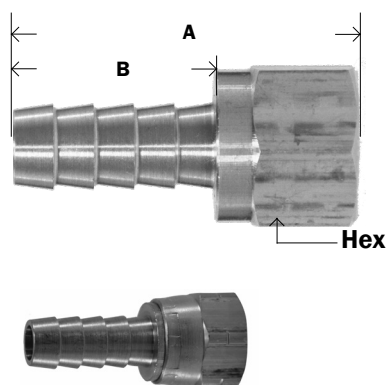
142 201BF KF-MS KDS

HOSE BARB**BRASS FITTINGS****DUAL 45° / 37° FLARE SWIVEL****CRIMP STYLE**

Part #	Hose ID x Dual Seat	Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-107	3/16" x 1/4"	7/16-20	1.34	0.75	0.56	0.04	3.35
32-107C**	3/16 X 1/4	7/16-20	1.42	0.78	0.56	0.04	3.18
32-337	1/4" x 1/4"	7/16-20	1.56	0.97	0.56	0.04	2.73
32-337C**	1/4" X 1/4"	7/16-20	1.60	0.97	0.56	0.04	2.66
32-102	1/4" x 5/16"	1/2-20	1.53	0.97	0.62	0.06	2.82
32-339	5/16" x 5/16"	1/2-20	1.60	0.97	0.62	0.06	3.49
32-340	3/8" x 1/2"	3/4-16	1.68	0.97	0.87	0.10	5.52
32-341	1/2" x 1/2"	3/4-16	1.68	0.97	0.87	0.10	4.69
32-341C**	1/2" X 1/2"	3/4-16	1.75	0.97	0.87	0.09	5.21
32-342	1/2" x 5/8"	7/8-14	1.76	0.97	1.00	0.12	7.07
32-394	5/8" x 5/8"	7/8-14	1.76	0.97	1.00	0.14	7.57

** Swivel crimp style

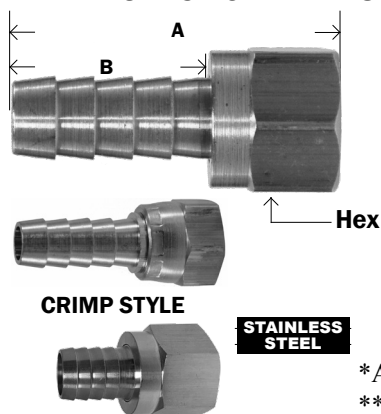
KDS

FEMALE 45° FLARE SWIVEL**CRIMP STYLE**

Part #	Hose I.D. x Female 45° Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-326	3/16" x 3/16"	3/8-24	1.19	0.75	0.43	0.04	7.11
30-295**	3/16" x 3/8"	5/8-18	1.82	0.90	0.75	0.04	4.26
32-101	1/4" x 1/4"	7/16-20	1.57	0.97	0.56	0.04	2.16
32-103	1/4" x 3/8"	5/8-18	1.64	0.97	0.75	0.08	2.60
32-104	5/16" x 5/16"	1/2-20	1.58	0.97	0.62	0.05	4.90
32-327	5/16" x 3/8"	5/8-18	1.64	0.97	0.75	0.08	3.61
32-105	3/8" x 3/8"	5/8-18	1.64	0.97	0.75	0.08	3.22
32-105C**	3/8" x 3/8"	5/8-18	1.71	0.97	0.75	0.07	4.28
32-106	3/8" x 1/2"	3/4-16	1.81	0.97	0.87	0.10	8.85
32-100	1/2" x 1/2"	3/4-16	1.68	0.97	0.87	0.12	4.14
32-328	3/4" x 3/4"	1-1/16-14	2.00	0.97	1.25	0.20	18.10

29SAE 209ASF 146HBLFSV KF-NS 128 FSS 146 144

** Swivel crimp style (crimped on the outside of fitting)

FEMALE 37° J.I.C. FLARE SWIVEL**CRIMP STYLE****STAINLESS STEEL**

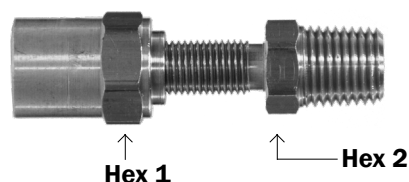
32338SS

Part #	Hose ID x Female 37° Flare	Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-334	1/4" x 3/8"	9/16-18	1.60	0.97	0.68	0.06	3.62
32-335	5/16" x 3/8"	9/16-18	1.60	0.97	0.68	0.06	3.75
32-336	3/8" x 3/8"	9/16-18	1.60	0.97	0.68	0.10	3.26
32-336C**	3/8" X 3/8"	9/16-18	1.66	0.97	0.68	0.06	3.39
32-338*	3/4" x 3/4"	1-1/16-12	2.00	0.97	1.25	0.20	19.56
32-338SS	3/4" x 3/4"	1-1/16-12	2.00	0.97	1.25	0.24	23.94
32-397*	1" x 1"	1-5/16-12	2.54	1.19	1.50	0.33	18.14

KJS

*Available in swivel crimp style - add a "C" at the end of the part # (100 piece minimum)

** Swivel crimp style

1/4" MALE THREAD ID x OD**Reusable Hose Couplings**

Hex 1

Hex 2

Part #	1/4" Male Thread ID x OD	Length	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
32-725	3/8" x 3/4"(23/32)	1.97	0.87	0.56	0.14	9.08
32-726	1/4" x 5/8"	1.86	0.81	0.56	0.13	10.20
32-727	1/4" x 1/2"	1.86	0.69	0.56	0.11	9.12
32-728	1/4" x 9/16"	1.86	0.75	0.56	0.12	12.27
32-741	5/16" x 5/8"	1.97	0.81	0.56	0.13	11.88
32-742	3/8" x 5/8"	1.97	0.81	0.56	0.14	13.16

Many more sizes and shapes available...just ask!

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BRASS FUEL HOSE BARBS

Typical Application: Low pressure air, fuel and oil applications. Generally used for automotive, light truck, and small engine fuel lines. Use with fuel hose SAE 30R7 & SAE 30R9.

Advantages: Easy to assemble, just push the fitting into the hose & clamp. Good selection of configurations at reasonable cost.

MALE CONNECTOR

HOSE BARB X MALE PIPE



Part #	Hose ID	Size	Ind #	List Price
38-800	3/16	1/8	1541	2.54
38-802	1/4	1/8	1537	2.08
32-377	1/4	1/4	1581	2.11
38-806	5/16	1/8	1551	2.76
38-808	5/16	1/4	1555	2.57
38-810	3/8	1/8	1565	3.72
32-381	3/8	1/4	1564	2.39
32-382	3/8	3/8	1566	4.70
32-383	1/2	3/8		3.36
32-384	1/2	1/2		5.31
32-182*	5/8	3/8	1411	6.17
32-385	5/8	1/2	1431	7.32
32-387	3/4	1/2	1430	6.08
32-388	3/4	3/4		8.45
32-185*	1	3/4		17.14

* Bubble Barb

68HB

INVERTED FLARE MALE CONNECTOR

HOSE BARB X INVERTED FLARE



Part #	Hose ID	Inv. Flare	Ind #	List Price
38-828	5/16	1/4	1598	4.01
38-830	5/16	5/16	1560	2.95
38-832	5/16	3/8	1561	5.00
38-834	3/8	5/16	1568	4.41
38-836	3/8	3/8	1570	7.59

90° MALE ELBOW

HOSE BARB X MALE PIPE



Part #	Hose ID	Size	Ind #	List Price
38-860	1/4	1/8	1582	6.00
38-862	5/16	1/8	1556	10.02
38-864	5/16	1/4	1557	6.72
38-866	3/8	1/8	1572	10.62
38-868	3/8	1/4	1571	6.43

269HB

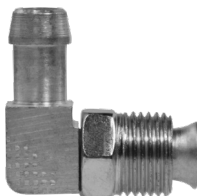
BUBBLE BARB



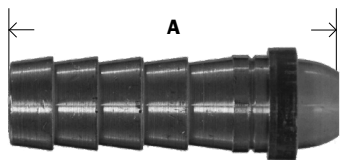
Part #	Hose ID	Size	List Price
32-186	3/8	3/8	10.85
32-187	1/2	3/8	15.37
32-191	1/2	1/2	20.79
32-188	5/8	3/8	10.56
32-189	5/8	1/2	12.26
32-190	3/4	1/2	17.32

INVERTED FLARE MALE SWIVEL 90° ELBOW

HOSE BARB X TUBE O.D.



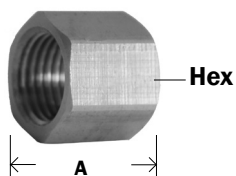
Part #	Hose ID	Inv. Flare	Ind #	List Price
38-873	5/16	5/16	1405	42.84
38-874	3/8	3/8	1407	14.34

WELDING HOSE FITTINGS**BRASS FITTINGS****STEM ONLY - WELDING HOSE CONNECTOR**

Part #	Hose I.D.	A	Approx. Wt. Lbs.	List Price
30-410	3/16"	1.43	0.02	1.77
30-411	1/4"	1.43	0.02	1.71
30-413	3/8"	1.43	0.04	2.20

Assemble with nuts below.

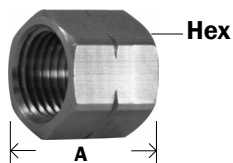
201RWA WRS WLS

RIGHT HAND 9/16 - 18 FOR OXYGEN LINE - WELDING HOSE NUT

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-420	R.H. Nut only	0.63	0.68	0.04	2.04

Assemble with stem above.

201RWA WRS KF-PE 152

LEFT HAND 9/16 - 18 FOR ACETYLENE LINE - WELDING HOSE NUT

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-421	L.H. Nut only	0.63	0.68	0.04	1.90

Assemble with stem above.

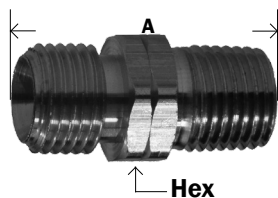
209LWA WLS 154 KF-RE

RIGHT HAND 9/16 - 18 #122RWA - WELDING HOSE CONNECTOR

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-401	1/4"-18	1.30	0.62	0.06	2.88
32-437	3/8"-18	1.30	0.68	0.09	5.94
32-438*	9/16"-18	1.25	0.68	0.07	5.65

* Right UNF thread

156

LEFT HAND 9/16 - 18 #122LWA - WELDING HOSE CONNECTOR

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-406	1/4"-18	1.30	0.62	0.06	2.99
32-439	3/8"-18	1.30	0.68	0.09	6.48
32-440*	9/16"-18	1.25	0.68	0.07	6.28

* Left UNF thread

158

BRASS FITTINGS

BARBED FOR PLASTIC TUBING

BRASS BARBS FOR POLYETHYLENE TUBING

- Quick connecting fittings that do not require tube preparations for hand assembly. Inexpensive with excellent resistance to vibration.
- All sizes are tube O.D. (I.D.)

	.25	.375	.50
OD	1/4	3/8	1/2
			
ID	1/8	1/4	3/8
	.125	.25	.375

UNION



TUBE O.D. (TUBE I.D.) X TUBE O.D. (TUBE I.D.)

Part #	Size	List Price
21-003	1/4(1/8) x 1/4(1/8)	4.12
21-007	3/8(1/4) x 1/4(1/8)	7.63
21-009	3/8(1/4) x 3/8(1/4)	3.29

1062 962

MALE ADAPTER

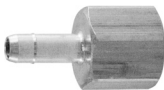


TUBE O.D. (TUBE I.D.) X MALE PIPE

Part #	Size	List Price
21-021	1/4(1/8) x 1/16	6.78
21-023	1/4(1/8) x 1/8	2.45
21-025	1/4(1/8) x 1/4	7.14
21-027	3/8(1/4) x 1/8	5.14

1068 968 688

FEMALE ADAPTER



TUBE O.D. (TUBE I.D.) X FEMALE PIPE

Part #	Size	List Price
21-043	1/4(1/8) x 1/8	19.54

1066 966 26 668

BULKHEAD UNION



TUBE O.D. (TUBE I.D.)

Part #	Size	List Price
21-082	1/4(1/8)	19.62
21-083	3/8(1/4)	37.60

1074

UNION ELBOW

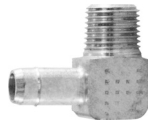


1065
965

TUBE O.D. (I.D.)

Part #	Size	List Price
21-095	1/4(1/8)	10.24
21-097	3/8(1/4)	10.82
21-099	1/2(3/8)	20.05

MALE 90° ELBOW

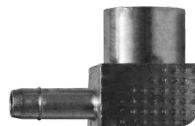


TUBE O.D. (I.D.) X MALE PIPE

Part #	Size	List Price
21-111	1/4(1/8) x 1/16	19.53
21-113	1/4(1/8) x 1/8	3.60
21-115	1/4(1/8) x 1/4	10.00
21-117	3/8(1/4) x 1/8	8.75
21-119	3/8(1/4) x 1/4	4.96
21-121	1/2(3/8) x 3/8	32.64

1069 969 229

FEMALE 90° ELBOW



TUBE O.D. (I.D.) X FEMALE PIPE

Part #	Size	List Price
21-133	1/4(1/8) x 1/8	14.00

1070 970 230

UNION TEE



O.D. (I.D.) X O.D. (I.D.) X O.D. (I.D.)

Part #	Size	List Price
21-151	1/4(1/8)	7.73
21-153	3/8(1/4)X 3/8(1/4)X1/4(1/8)	10.73
21-155	3/8(1/4)	1.70
21-159	1/2(3/8)X1/2(3/8)X3/8(1/4)	66.38
21-161	1/2(3/8)	18.69

1064 964 224

MALE BRANCH TEE

3

1 2

O.D. (I.D.) X O.D. (I.D.) X MALE PIPE

Part #	Size	List Price
21-193	1/4(1/8) x 1/4(1/8) x 1/8	5.60
21-195	3/8(1/4) x 3/8(1/4) x 1/8	12.17
21-197	3/8(1/4) x 3/8(1/4) x 1/4	15.17

1072 972 232

FEMALE BRANCH TEE

3

1 2

O.D. (I.D.) X O.D. (I.D.) X FEMALE PIPE

Part #	Size	List Price
21-207	1/4(1/8) x 1/4(1/8) x 1/8	14.36

1077 978

TWO BARB FITTINGS

More Sizes Available - Please Ask!

	.25	.375	.50
OD	1/4	3/8	1/2
			
ID	1/8	1/4	3/8
	.17	.25	.375

MALE ADAPTER PIPE



TUBE O.D. (I.D.) X MALE PIPE

Part #	Size	List Price
32-150	1/4(1/8) x 1/8	4.08
32-151	1/4(1/8) x 1/4	9.00
32-153	3/8(1/4) x 1/4	8.30

28

UNION TEE



Part #	Tube O.D. (I.D.)	List Price
32-159	1/4(1/8 ID)	6.96
32-160	3/8(1/4 ID)	11.94

90° ELBOW

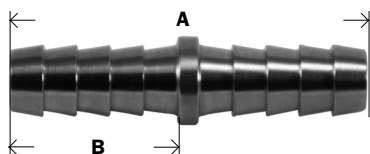


Part #	Tube O.D. (I.D.)	List Price
32-170	1/4(1/8 ID)	7.20
32-171	3/8(1/4 ID)	13.26

225

HOSE BARB**316 STAINLESS STEEL MACHINED RIGID MALE ADAPTER**

Part #	Hose I.D. x NPT	List Price
32-001SS	1/8" x 1/8"	6.86
32-002SS	3/16" x 1/8"	7.39
32-003SS	3/16" x 1/4"	9.83
32-004SS	1/4" x 1/8"	8.91
32-005SS	1/4" x 1/4"	9.90
32-006SS	1/4" x 3/8"	18.46
32-008SS	5/16" x 1/8"	8.00
32-009SS	5/16" x 1/4"	10.89
32-010SS	5/16" x 3/8"	15.15
32-011SS	3/8" x 1/8"	8.92
32-012SS	3/8" x 1/4"	10.97
32-013SS	3/8" x 3/8"	14.06
32-014SS	3/8" x 1/2"	23.52
32-015SS	1/2" x 1/4"	12.21
32-016SS	1/2" x 3/8"	19.07
32-017SS	1/2" x 1/2"	18.47
32-018SS	1/2" x 3/4"	25.08
32-019SS	5/8" x 3/8"	13.68
32-020SS	5/8" x 1/2"	22.11
32-021SS	5/8" x 3/4"	29.04
32-022SS	3/4" x 1/2"	19.56
32-023SS	3/4" x 3/4"	27.90
32-024SS	1" x 3/4"	28.12

316 STAINLESS STEEL SPLICER

Part #	Hose I.D. x Hose I.D.	A	B	List Price
32-093SS	1/4"	2.03	0.97	5.13
32-095SS	3/8"	2.06	0.97	6.30
32-096SS	1/2"	2.06	0.97	10.23
32-098SS	3/4"	2.50	1.19	15.13

316 STAINLESS STEEL BARB ELBOW

Part #	Hose I.D. x NPT	List Price
32-038SS	1/4 x 1/8	14.92
32-039SS	1/4 x 1/4	14.92
32-041SS	3/8 x 1/4	16.77
32-042SS	3/8 x 3/8	16.77
32-043SS	1/2" x 3/8"	28.85
32-311SS	1/2 x 1/2	19.15
32-314SS	3/4" x 3/4"	80.72

BARSTOCK STAINLESS STEEL**304 STAINLESS STEEL HOSE NIPPLES**

• Cast

Part #	Hose I.D. x Male Pipe	List Price
73-951	1/4"	6.38
73-952	3/8"	10.88
73-953	1/2"	11.92
73-954	3/4"	14.33
73-955	1"	17.01
73-956	1-1/4"	27.73
73-957	1-1/2"	31.31
73-958	2"	44.31
73-959	2-1/2"	104.00
73-960	3"	119.24

304 STAINLESS STEEL REDUCING HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	List Price
73-970	1/4" X 1/8"	6.89
73-971	3/8" X 1/4"	8.00
73-972	1/2" X 3/8"	11.22
73-973	1/2" X 1/4"	11.59
73-974	3/4" X 1/2"	15.69
73-975	1" X 3/4"	17.65
73-976	1" X 1/2"	28.75
73-977	1-1/4" X 1"	26.93
73-979	1-1/2" X 1-1/4"	44.87
73-980	1-1/2" X 1"	32.47
73-981	2" X 1-1/2"	56.00
73-982	2" X 1-1/4"	44.78

316 STAINLESS STEEL HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	List Price
973-951	1/4"	7.14
973-952	3/8"	10.16
973-953	1/2"	16.35
973-954	3/4"	18.89
973-955	1"	20.58
973-956	1-1/4"	27.96
973-957	1-1/2"	48.61
973-958	2"	51.79
973-959	2-1/2"	133.67
973-990	3"	164.70
973-991	4"	204.55



• See King nipples on page 327

BEVERAGE FITTINGS

SPECIFICATIONS

• Our stainless steel fittings are made from a combination of 303 and 304 materials. Type 303 is certified to either ASTM A581/ A582 or AMS 5640. Type 304 is certified to AMS 5639 or ASTM A479. In cases where tubing is used, it is 304 stainless steel certified to ASTM A269.

• All stainless steel fittings are passivated to meet the standards of major food and beverage companies.

• All fittings are made of stainless steel except the swivel nuts which are nickel plated brass.

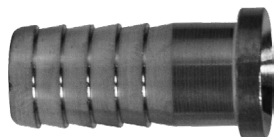
• All male threads are rolled rather than cut. No exceptions.

SWIVEL NUT (NICKEL PLATED BRASS)



Part #	Size	List Price
34-500	1/4"	1.41
34-512	3/8"	2.31
34-513	1/2"	4.47

SWIVEL HOSE STEM



Part #	Size	List Price
34-503	1/4"	2.47
34-515	3/8"	3.00
34-516	1/2"	5.33

1/4 stem for 1/4 nut

3/8 stem for 3/8 nut

1/2 stem for 1/2 nut

SWIVEL ELBOWS

90° SWIVEL ELBOW



HOSE ID x FEMALE 45° FLARE

Part #	Size	List Price
34-525	1/4" x 1/4"	5.88
34-529	3/8" x 3/8"	11.64

BARB SPLICERS

HOSE SPLICER (STRAIGHT)



ID HOSE

Part #	Size	List Price
34-533	1/4"	3.84
34-535	3/8"	4.67
34-543	3/8" x 1/4"	4.67

90° BARB SPLICER



ID HOSE

Part #	Size	List Price
34-551	1/4"	4.60
34-552	3/8"	7.35

TEES

BARB HOSE TEES



ID HOSE

Part #	Size	List Price
34-562	1/4"	12.59
34-563	3/8"	14.38

ADAPTERS

BARB TO MALE FLARE ADAPTER



HOSE ID x 45° FLARE

Part #	Size	List Price
34-579	1/4" x 1/4"	5.89
34-583	3/8" x 1/4"	8.17
34-584	1/4" x 3/8"	7.68
34-585	3/8" x 3/8"	8.37

HOSE BARB

BARB TO MALE PIPE ADAPTER

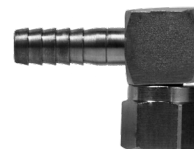


HOSE ID x MALE NPT

Part #	Size	List Price
34-587	1/4" x 1/8"	7.28
34-588	1/4" x 1/4"	6.78
34-589	1/4" x 3/8"	9.34
34-590	3/8" x 1/8"	9.38
34-591	3/8" x 1/4"	7.42
34-592	3/8" x 3/8"	9.34
34-595	3/8" x 1/2"	14.76
34-597	1/2" x 3/4"	21.48

SWIVEL ELBOWS

BARB TO SWIVEL ELBOW



HOSE ID x FEMALE 45° FLARE

Part #	Size	List Price
34-600	1/4" x 1/4"	12.47

ADAPTERS

NPT ELBOWS



HOSE ID x MALE NPTF

Part #	Size	List Price
34-610	1/4" x 1/8"	14.41
34-611	3/8" x 1/4"	14.73
34-612	3/8" x 3/8"	16.05
34-613	1/2" x 1/2"	33.74

PUSH ON BARB FITTINGS



Typical Application: Low Pressure Air, Fuel, Lube, and Oil Lines

- Pressure determined by tube material and hardness. Parts have been tested to max 150 PSI.

Advantages: Easy assembly. No clamps needed!!

• **Assembly Instructions**

- 1- Lubricate insert.
- 2- Hold hose at angle as shown & push on and up over first barb.
- 3- Continue to push straight on until hose is seated under protective plastic cap. Keep hands back from hose end area so that hose can expand.

• **Disassembling Instructions**

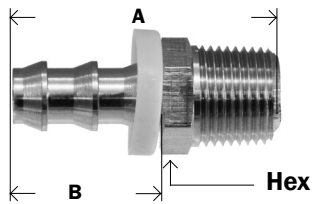
- 1- Split hose. Do not cut completely through hose. Sealing edge of barb could be damaged.
- 2- Bend hose and remove with a quick pull.

See lead free section for lead free push-on barb fittings.
Stainless steel available at the end of this section.

Actual Profile of Push On Barbs



MALE ADAPTER

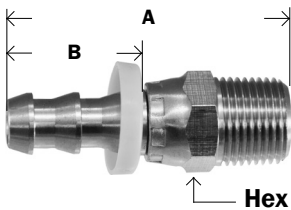


Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
30-200 *	1/4" x 1/8"	1.43	0.87	0.50	0.04	1.36
30-201 *	1/4" x 1/4"	1.66	0.87	0.56	0.06	1.93
30-211	1/4" x 3/8"	1.66	0.87	0.68	0.06	2.80
30-212	5/16" x 1/8"	1.42	0.77	0.43	0.04	2.99
30-213	5/16" x 1/4"	1.66	0.87	0.56	0.06	2.98
30-202	3/8" x 1/8"	1.53	0.97	0.50	0.04	2.08
30-203 *	3/8" x 1/4"	1.69	0.89	0.56	0.07	2.20
30-204 *	3/8" x 3/8"	1.76	0.97	0.68	0.08	2.67
30-205	3/8" x 1/2"	1.97	0.97	0.87	0.10	4.80
30-392	3/8" x 3/4"	1.97	0.92	1.06	0.16	13.28
30-216	1/2" x 1/4"	1.76	0.97	0.68	0.08	2.83
30-206 *	1/2" x 3/8"	1.76	0.97	0.68	0.09	2.79
30-207 *	1/2" x 1/2"	1.97	0.97	0.87	0.14	4.63
30-217	1/2" x 3/4"	1.97	0.97	1.06	0.16	6.25
30-219	5/8" x 3/8"	2.34	1.50	0.75	0.12	7.45
30-209	5/8" x 1/2"	2.45	1.45	0.87	0.16	6.39
30-214	5/8" x 3/4"	2.45	1.45	1.06	0.18	7.60
30-215 *	3/4" x 1/2"	2.45	1.45	0.87	0.21	7.85
30-210 *	3/4" x 3/4"	2.45	1.45	1.06	0.20	7.35
30-238	1" x 3/4"	2.93	1.50	1.25	0.43	27.29
30-239	1" x 1"	3.11	1.50	1.37	0.49	29.94

• See page 34 for Stainless

301 P990A HLM 100B-1 KA-MB 272 29PO 725 625 BPN 941 30182

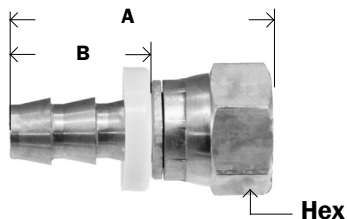
MALE SWIVEL



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
30-422	1/4" x 1/8"	2.07	0.87	0.56	0.06	5.35
30-385	1/4" x 1/4"	2.02	0.87	0.56	0.06	5.28
30-423	3/8" x 1/8"	2.12	0.97	0.56	0.07	5.00
30-386	3/8" x 1/4"	2.12	0.97	0.56	0.08	6.08
30-387	3/8" x 3/8"	2.12	0.97	0.68	0.08	6.81
30-388	1/2" x 3/8"	2.12	0.97	0.68	0.10	6.70
30-389	1/2" x 1/2"	2.33	0.97	0.87	0.14	7.96
30-424	5/8" x 1/2"	2.80	1.45	0.88	0.18	11.06
30-390	3/4" x 3/4"	2.80	1.45	1.06	0.24	11.13

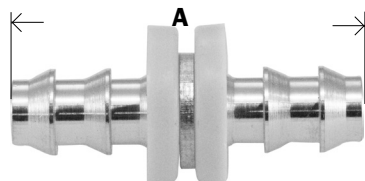
921 HMS 285 31382

FEMALE GASKET SEAL SWIVEL - NPSM



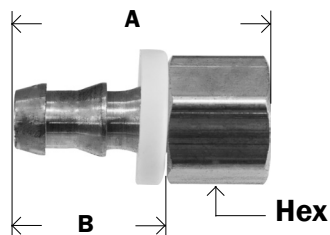
Part #	Hose I.D. x Gasket Swivel (NPSM)	A	B	Hex	Approx. Wt. Lbs.	List Price
30-359	1/4" x 1/8"	1.39	0.77	0.50	0.03	11.28
30-358	1/4" x 1/4"	1.47	0.82	0.68	0.06	6.17
30-360	3/8" x 1/4"	1.61	1.00	0.68	0.06	5.97
30-361	3/8" x 3/8"	1.77	0.97	0.81	0.08	9.79
30-362	3/8" x 1/2"	1.80	0.92	0.93	0.09	15.12
30-363	1/2" x 1/2"	1.88	1.02	0.93	0.11	12.64
30-366	3/4" x 3/4"	2.36	1.55	1.18	0.32	25.27

280

PUSH ON HOSE BARB**BRASS FITTINGS****HOSE SPLICER**

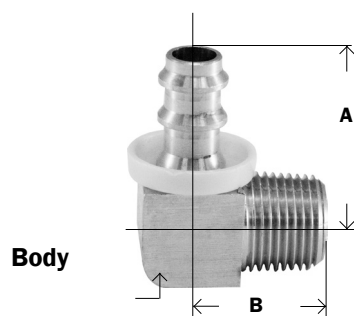
Part #	Hose I.D.	A	Approx. Wt. Lbs.	List Price
30-300	1/4"	1.87	0.04	1.69
30-305	5/16"	1.80	0.04	2.80
30-301	3/8"	2.00	0.06	2.10
30-302	1/2"	2.01	0.08	3.20
30-303	5/8"	3.03	0.14	7.34
30-304	3/4"	3.03	0.14	7.69
30-306	1"	3.21	0.28	21.22

BPM 696 29SPO 296 915 729 100B-Y KA-RM MHL 296 38282

RIGID FEMALE ADAPTER

Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
30-220	1/4" x 1/8"	1.35	0.87	0.50	0.02	2.44
30-221	1/4" x 1/4"	1.51	0.87	0.62	0.06	2.03
30-384	1/4" x 3/8"	1.51	0.77	0.75	0.06	7.15
30-391	5/16" x 1/8"	1.32	0.77	0.50	0.03	5.66
30-222	5/16" x 1/4"	1.51	0.87	0.62	0.06	3.51
30-393	3/8" x 1/8"	1.47	0.92	0.56	0.06	6.66
30-224	3/8" x 1/4"	1.61	0.97	0.62	0.06	2.42
30-225	3/8" x 3/8"	1.63	0.97	0.75	0.06	3.45
30-394	3/8" x 1/2"	1.66	0.92	0.93	0.12	8.31
30-397	3/8" x 3/4"	1.97	0.97	1.18	0.20	17.58
30-223	1/2" x 1/4"	1.76	1.02	0.68	0.08	12.17
30-226	1/2" x 3/8"	1.63	0.97	0.75	0.08	3.92
30-227	1/2" x 1/2"	1.77	0.97	0.93	0.14	6.72
30-396	1/2" x 3/4"	2.07	1.02	1.18	0.20	17.62
30-398	5/8" x 3/8"	2.24	1.55	0.75	0.10	9.15
30-229	5/8" x 1/2"	2.24	1.48	0.93	0.11	8.48
30-399	3/4" x 1/2"	2.24	1.50	0.93	0.14	11.28
30-395	3/4" x 3/4"	2.55	1.50	1.18	0.24	16.68
30-400	1" x 3/4"	2.55	1.55	1.18	0.25	23.09
30-402	1" x 1"	2.68	1.55	1.43	0.37	30.49

30282 29FPO HLF 626 274 726 940

MALE ELBOW

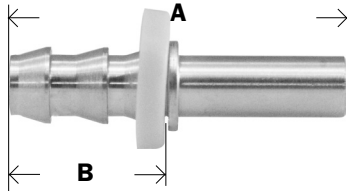
Part #	Hose I.D. x Male NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
30-372	1/4" x 1/8"	0.98	0.75	0.50	0.04	7.77
30-373	1/4" x 1/4"	1.04	0.95	0.56	0.06	7.50
30-374	5/16" x 1/8"	1.02	0.94	0.50	0.06	18.95
30-375	5/16" x 1/4"	1.09	0.94	0.56	0.08	10.03
30-370	3/8" x 1/8"	1.11	0.75	0.50	0.10	5.39
30-371	3/8" x 1/4"	1.13	0.90	0.56	0.10	5.02
30-376	3/8" x 3/8"	1.21	0.92	0.70	0.12	5.63
30-377	3/8" x 1/2"	1.30	1.19	0.87	0.22	20.13
30-382	1/2" x 3/8"	1.32	1.02		0.13	13.35
30-378	1/2" x 1/2"	1.50	1.19	0.87	0.22	12.00
30-379	5/8" x 1/2"	1.98	1.19	0.87	0.26	16.69
30-383	3/4" x 1/2"	2.15			0.25	35.35
30-381	3/4" x 3/4"	2.07	1.28	1.06	0.34	17.25

100-C 29EPO 273

BRASS FITTINGS

PUSH ON HOSE BARB

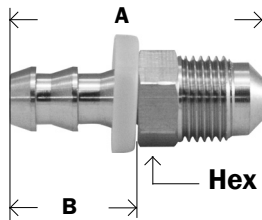
RIGID TUBE ADAPTER



Part #	Hose I.D. x O.D. Tube	A	B	Approx. Wt. Lbs.	List Price
30-290	1/4" x 3/16"	1.68	0.77	0.04	6.16
30-291	1/4" x 1/4"	1.88	0.77	0.04	1.95
30-292	1/4" x 5/16"	1.88	0.77	0.04	6.35
30-293	5/16" x 5/16"	1.91	0.79	0.04	4.37
30-294	3/8" x 3/8"	2.03	0.92	0.06	3.38
30-426	3/8" x 1/2"	1.81	0.97	0.04	5.00
30-297	1/2" x 1/2"	2.13	1.02	0.06	7.51
30-298	5/8" x 5/8"	2.61	1.50	0.10	10.18
30-299	3/4" x 3/4"	2.61	1.50	0.25	13.86

294 100B-X KA-RL 303 732 694

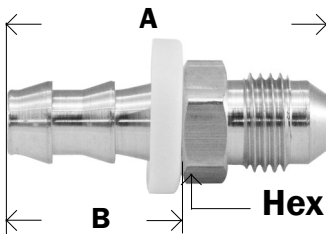
MALE SAE FLARE ADAPTER



Part #	Hose I.D. x 45° Male Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-240	1/4" x 1/4"	7/16-20	1.45	0.75	0.43	0.04	4.20
30-241	1/4" x 5/16"	1/2-20	1.59	0.84	0.50	0.04	4.91
30-249	5/16" x 5/16"	1/2-20	1.60	0.80	0.50	0.06	3.82
30-271	3/8" x 5/16"	1/2-20	1.64	0.86	0.50	0.08	3.96
30-243	3/8" x 3/8"	5/8-18	1.83	0.92	0.62	0.08	4.20
30-245	1/2" x 1/2"	3/4-16	1.98	1.02	0.875	0.10	10.86
30-246	5/8" x 5/8"	7/8-14	2.73	1.50	0.87	0.19	13.29
30-247	3/4" x 3/4"	1-1/16-14	2.98	1.50	1.06	0.32	19.69

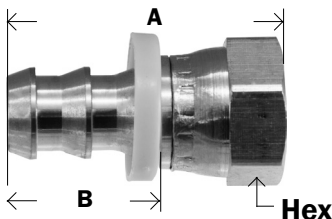
100B-3 KA-MS 727 945 682 302 282

37° MALE JIC FLARE ADAPTER



Part #	Hose I.D. x Male JIC	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-900	1/4" x 1/4"	7/16-20	1.57	0.84	0.50	0.04	5.26
32-901	1/4" x 5/16"	1/2-20	1.60	0.83	0.56	0.04	6.18
32-906	1/4" x 3/8"	9/16-18	1.63	0.77	0.62	0.05	7.84
32-902	3/8" x 3/8"	9/16-18	1.78	0.97	0.62	0.06	8.27
32-903	1/2" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	13.80
32-907	5/8" x 5/8"	7/8-14	2.62	1.50	0.93	0.19	13.44
32-905	3/4" x 3/4"	1-1/16-12	2.79	1.50	1.12	0.29	19.79

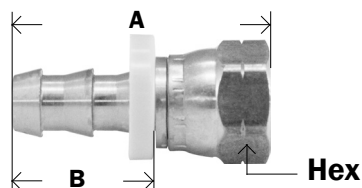
SAE/JIC DUAL 45°/37° FEMALE SWIVEL



Part #	Hose I.D. x Dual Seat	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-230 *	1/4" x 1/4"	7/16-20	1.53	0.87	0.56	0.06	2.32
30-231	1/4" x 5/16"	1/2-20	1.57	0.87	0.62	0.04	3.37
30-232	5/16" x 5/16"	1/2-20	1.56	0.87	0.62	0.04	3.50
30-427	3/8" x 5/16"	1/2-20		0.87	0.62	0.06	10.62
30-233	3/8" x 1/2"	3/4-16	1.79	0.97	0.87	0.10	4.99
30-234 *	1/2" x 1/2"	3/4-16	1.77	0.97	0.87	0.10	4.57
30-235	1/2" x 5/8"	7/8-14	1.84	0.97	1.00	0.12	7.55
30-236	5/8" x 1/2"	3/4-16	2.27	1.45	0.87	0.18	8.62
30-237	5/8" x 5/8"	7/8-14	2.33	1.45	1.00	0.14	7.85
30-428	3/4" x 5/8"	7/8-14		1.45	1.00	0.20	9.86

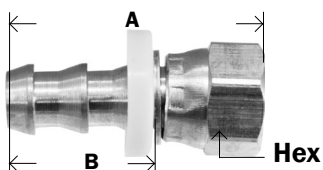
* See page 34 for stainless

29FDS 287 HDF 309 735 690 P990-K 305 935/934

PUSH ON HOSE BARB**BRASS FITTINGS****45° SAE FLARE FEMALE SWIVEL**

Part #	Hose I.D. x 45° Female Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-250	1/4" x 1/4"	7/16-20	1.54	0.87	0.56	0.04	2.45
30-251	1/4" x 5/16"	1/2-20	1.57	0.87	0.62	0.04	3.79
30-253	1/4" x 3/8"	5/8-18	1.63	0.87	0.75	0.06	3.85
30-254	5/16" x 5/16"	1/2-20	1.58	0.87	0.68	0.06	16.54
30-260	5/16" x 3/8"	5/8-18	1.63	0.87	0.75	0.08	5.20
30-252	3/8" x 3/8"	5/8-18	1.73	0.97	0.75	0.10	3.72
30-257	3/8" x 1/2"	3/4-16	1.85	0.87	0.87	0.10	9.69
30-261	1/2" x 3/8"	5/8-18	1.92	1.05	0.75	0.10	7.69
30-255	1/2" x 1/2"	3/4-16	1.77	0.97	0.87	0.12	6.12
30-258	5/8" x 5/8"	7/8-14	2.35	1.45	1.00	0.14	10.30
30-259	3/4" x 3/4"	1-1/16-14	2.42	1.45	1.25	0.22	10.01

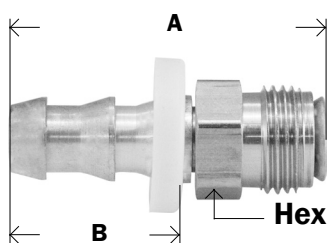
30882 728 P990-H 29AEPO 307 284 100S-4 KA-NS HSF 684 934

FEMALE 37° JIC FLARE SWIVEL

Part #	Hose I.D. x Female JIC	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-265	1/4" x 1/4"	7/16-20	1.54	0.87	0.56	0.04	2.20
30-264	1/4" x 3/8"	9/16-18	1.60	0.87	0.68	0.06	3.96
30-270	5/16" x 3/8"	9/16-18	1.60	0.82	0.68	0.06	3.56
30-266 *	3/8" x 3/8"	9/16-18	1.70	0.97	0.68	0.08	3.47
30-267	1/2" x 1/2"	3/4-16	1.78	0.97	0.87	0.10	5.36
30-268	5/8" x 5/8"	7/8-14	2.33	1.45	1.00	0.14	7.32
30-269 *	3/4" x 3/4"	1-1/16-12	2.40	1.45	1.25	0.22	9.61
30-429	1" x 1"	1-5/16-12		1.45	1.50	0.39	27.59

* See page 34 for stainless

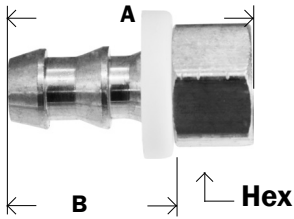
JF 944/934 29J1CPO HJF 688 738 288 100B-6 308 P990-F 30682 KA-NJ

INVERTED FLARE MALE SWIVEL

Part #	Hose I.D. x Male INV Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-275	1/4" x 3/16"	3/8-24	1.52	0.87	0.37	0.04	8.47
30-276	1/4" x 1/4"	7/16-24	1.56	0.87	0.43	0.04	4.11
30-277	1/4" x 5/16"	1/2-20	1.62	0.87	0.50	0.04	4.49
30-278	5/16" x 1/4"	7/16-24	1.56	0.87	0.43	0.06	6.31
30-280	5/16" x 5/16"	1/2-20	1.62	0.87	0.50	0.06	5.84
30-283	5/16" x 3/8"	5/8-18	1.63	0.87	0.62	0.06	8.83
30-284	3/8" x 5/16"	1/2-20	1.72	0.97	0.50	0.06	5.45
30-279	3/8" x 3/8"	5/8-18	1.76	0.97	0.62	0.06	5.18
30-282	1/2" x 1/2"	3/4-18	1.84	0.97	0.75	0.10	9.01
30-286	5/8" x 5/8"	7/8-18	2.50	1.57	0.87	0.14	18.98

290 100B-B KA-MF 1MS 947

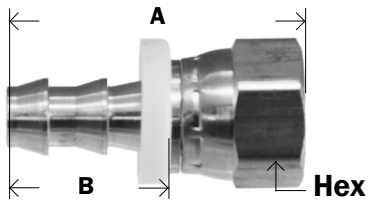
INVERTED FLARE FEMALE ADAPTER



Part #	Hose I.D. x Female INV Flare	A	B	Hex	Approx. Wt. Lbs.	List Price
30-310	1/4" x 3/16"	1.12	0.84	0.50	0.02	7.51
30-311	1/4" x 1/4"	1.14	0.84	0.56	0.02	5.45
30-312	1/4" x 5/16"	1.18	0.82	0.62	0.02	8.80
30-316	5/16" x 5/16"	1.25	0.81	0.62	0.04	6.90
30-313	3/8" x 5/16"	1.32	0.87	0.62	0.04	8.78
30-314	3/8" x 3/8"	1.35	0.95	0.75	0.06	5.42
30-315	1/2" x 1/2"	1.73	1.04	0.87	0.12	21.85

306 100B-A KA-NG 292 P990-J 736 692 946

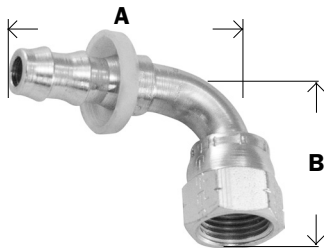
FEMALE BALLSEAT SWIVEL



Part #	Hose I.D. x Female NPSM	A	B	Hex	Approx. Wt. Lbs.	List Price
30-340	1/4" X 1/8"	1.39	0.85	0.50	0.06	10.42
30-341	1/4" X 1/4"	1.47	0.80	0.68	0.06	7.98
30-342	1/4" x 3/8"	1.40	0.77	0.68	0.09	8.44
30-343	3/8" X 1/4"	1.61	0.97	0.68	0.08	11.51
30-344	3/8" X 3/8"	1.75	0.95	0.81	0.10	10.86
30-430	3/8" x 1/2"	1.79	0.97	0.93	0.11	11.24
30-346	1/2" X 1/2"	1.88	1.09	0.93	0.12	15.54
30-345	1/2" x 3/4"	2.36	1.02	1.18	0.18	18.03
30-349	3/4" X 3/4"	2.36	1.55	1.18	0.22	22.83

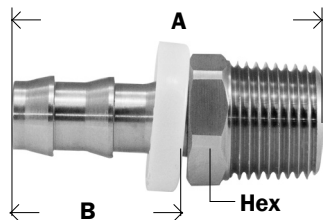
628 278 295PO 731 NPSM

SAE/ JIC 37° / 45° FEMALE SWIVEL 90° ZINC PLATED STEEL

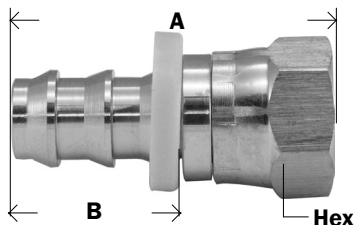


Part #	Hose I.D. x Female 37°/45°	UNF Thread	A	B	Approx. Wt. Lbs.	List Price
30-480	1/4"	7/16-20	1.55	0.83	.064	39.00
30-482	3/8"	9/16-18	1.85	0.91	.095	36.60
30-483*	3/8"	5/8-18	1.98	0.85	.095	52.68
30-484	1/2"	3/4-16	2.33	1.09	.171	43.22
30-486	3/4"	1-1/16-12	3.26	1.81	.281	115.97

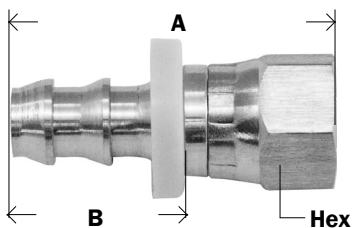
* SAE

STAINLESS STEEL PUSH ON 316 HOSE BARB**STAINLESS STEEL****316 STAINLESS STEEL MALE ADAPTERS**

Part #	Hose I.D. x NPT	A	B	Hex	Approx. Wt. Lbs.	List Price
30-200SS	1/4" x 1/8"	1.42	0.77	0.44	0.027	9.99
30-201SS	1/4" x 1/4"	1.61	0.77	0.56	0.043	10.00
30-203SS	3/8" x 1/4"	1.76	0.92	0.56	0.053	11.20
30-204SS	3/8" x 3/8"	1.76	0.92	0.69	0.067	12.25
30-206SS	1/2" x 3/8"	1.86	1.02	0.69	0.071	12.41
30-207SS	1/2" x 1/2"	2.07	1.02	0.88	0.119	27.38
30-215SS	3/4" x 1/2"	2.55	1.50	0.88	0.20	31.30
30-210SS	3/4" x 3/4"	2.55	1.50	1.06	0.194	30.41

316 STAINLESS STEEL SAE/ JIC 45° / 37° FEMALE SWIVEL

Part #	Hose I.D. x Female 45°/37°	A	B	Hex	Approx. Wt. Lbs.	List Price
30-230SS	1/4" x 1/4"	1.48	0.74	0.56	0.023	27.14
30-234SS	1/2" x 1/2"	1.93	1.03	0.88	0.04	50.50

316 STAINLESS STEEL FEMALE 37° JIC FLARE SWIVEL

Part #	Hose I.D. x Female 37°	A	B	Hex	Approx. Wt. Lbs.	List Price
30-266SS	3/8" x 3/8"	1.75	.92	0.68	0.065	35.90
30-269SS	3/4" x 3/4"	2.53	1.50	1.25	0.259	80.20

GARDEN HOSE FITTINGS



• Temperature and Working Pressure Ranges

From +35°F to +100°F at 75 PSI maximum or the recommended working pressure of the garden hose. (Not to exceed 150 PSI.)

Note: All female connector ends should have a rubber washer inserted prior to usage.

FGH = Female Garden Hose threads

MGH = Male Garden Hose threads

Male garden hose threads are all 3/4" with an outside diameter of 1.0625 and 11-1/2" threads per inch.



Male Garden Hose Profile

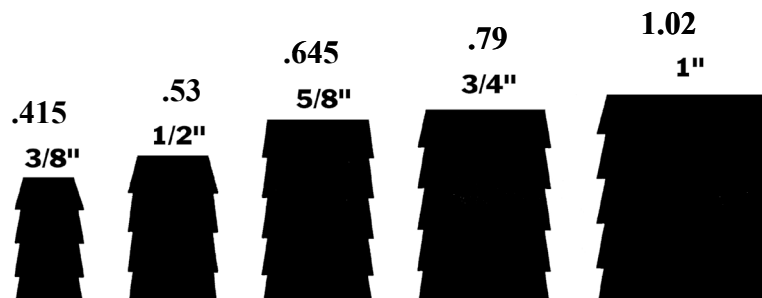


See Plastic section for Plastic Garden Hose Fittings



See page 165 for lead free Garden Hose

Actual Profile of Garden Hose Barbs



GARDEN HOSE

BRASS FITTINGS

SWIVEL - MGH X FGH

•WASHER INCLUDED

Internal Hex →



Part #	MGH X FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-000**	3/4" x 3/4"	1.03	0.50*	0.26	5.33

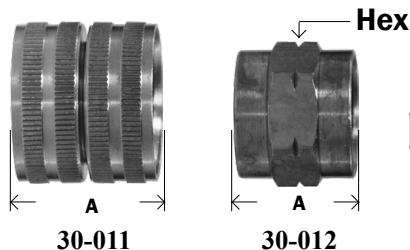
* Internal Hex

* Not a live swivel

** available in swivel crimp style

SWIVEL - FGH X FGH

•WASHER INCLUDED



Part #	FGH X FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-011	3/4" x 3/4"	1.03	1.18 O.D.	0.24	4.99
30-012	No Swivel	1.08	1.19	0.24	9.06

HUS 91 203W GSU 101GH5V 22AS 506 FS66

SWIVEL - FGH X FEMALE PIPE

•WASHER INCLUDED



Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-001	3/4" x 1/2"	1.20	1.00	0.11	5.61
30-006	3/4" x 3/4"	1.11	1.12	0.11	5.23

S1 HSU11 91Z 197S 98GH5V 5AS 21517 502 FS65

RIGID - FGH X FEMALE PIPE

•WASHER INCLUDED



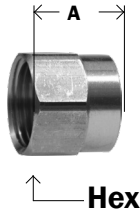
Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-016	3/4" x 1/8"	1.02	1.18	0.08	11.41
30-017	3/4" x 1/4"	0.65	1.12	0.07	4.60
30-018	3/4" x 3/8"	1.19	1.18	0.11	4.69

95GH 501



30-017

RIGID - FGH X FEMALE PIPE

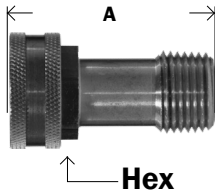


Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-078	3/4" x 1/2"	1.06	1.18	0.10	4.10
30-083	3/4" x 3/4"	1.06	1.18	0.12	5.36

FS67 198 HU11 21507 501 99GH 5A H15PP

SWIVEL - FGH X MALE PIPE

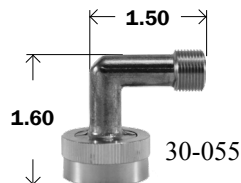
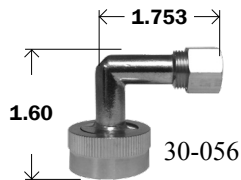
•WASHER INCLUDED



Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-047	3/4" x 1/4"	2.04	0.75	0.13	6.00
30-048	3/4" x 3/8"	2.06	0.75	0.14	5.10
30-049	3/4" x 1/2"	2.06	0.87	0.18	6.81

504 89GH W1 62H4 88GH W1

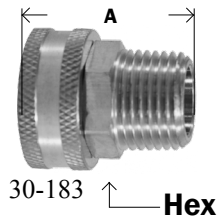
3/8" Comp 3/4" FGH DISHWASHER 90° ELBOW



Part #	3/4 Female Garden Hose Thread x 3/8 Compression	List Price
30-055	3/4" x 3/8" Body Only	9.21
30-056	3/4" x 3/8" w/ nut & sleeve	10.10

SWIVEL - FGH X MALE PIPE

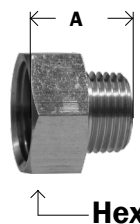
•WASHER INCLUDED



* Crimp style

Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-181*	3/4" x 1/4"	1.43	1.18	0.13	5.40
30-184*	3/4" x 3/8"	1.43	1.18	0.15	5.02
30-183	3/4" x 1/2"	1.32	0.81	0.11	7.27
30-182*	3/4" x 3/4"	1.43	1.18	0.14	15.35

RIGID - FGH X MALE PIPE



Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-087	3/4" x 3/8"	1.37	1.18	0.11	4.76
30-088	3/4" x 1/2" (1/2" SWT)**	1.06	1.18	0.09	6.45
30-093	3/4" x 3/4"	1.06	1.18	0.11	4.62
30-094	3/4" x 3/4" (1/2" FIP)	1.17	1.18	0.11	5.75
30-093L*	3/4" x 3/4"	1.22	1.18	0.14	14.59

* Long pattern

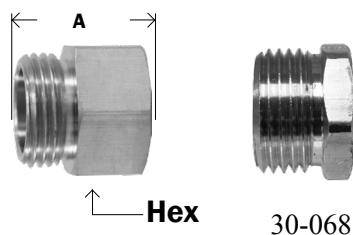
** 1/2 Swt = 5/8 O.D.

21505 503 83GH 20A HU21 199 H7

GARDEN HOSE

BRASS FITTINGS

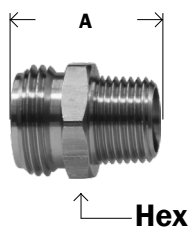
RIGID - MGH X FEMALE PIPE



Part #	MGH X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-066	3/4" x 1/4"	1.10	1.06	0.09	5.39
30-067	3/4" x 3/8"	1.09	1.06	0.12	6.60
30-068	3/4" x 1/2"	0.81	1.06	0.10	3.40
30-073	3/4" x 3/4"	1.12	1.18	0.10	4.20

197 18R HU12 H11PP 18A 507 18H 81GH 21503 MF67

RIGID - MGH X MALE PIPE



Part #	MGH X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-053	3/4" x 3/8"	1.25	1.06	0.10	3.73
30-058*	3/4" x 1/2"	1.31	1.06	0.12	3.92
30-063**	3/4" x 3/4" x 1/2"	1.31	1.06	0.13	4.61
30-063BE***	3/4" x 3/4"	1.31	1.06	0.15	6.72
30-063S	3/4" x 3/4" Short	1.10	1.06	0.10	4.36
30-064	3/4" x 1"	1.62	1.37	0.35	11.93

No Tap

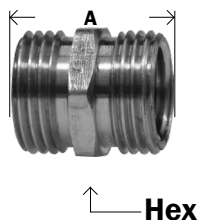
19R 196 H530 21501 508 HU22 514 71GH 19A

* (1/2 Swt = 5/8 O.D.)

** (Tapped 1/2 FIP)

*** (Tapped 1/2 FIP Both ends)

RIGID - MGH X MGH

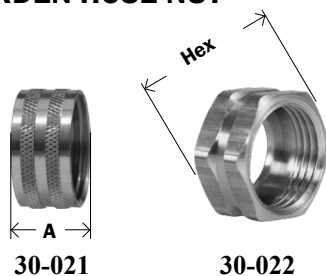


Part #	MGH X MGH	A	Hex	Approx. Wt. Lbs.	List Price
30-098	3/4" x 3/4" (1/2" FIP)	1.22	1.06	0.13	4.88
30-099	3/4" x 3/4"	1.22	1.06		4.65
30-100*	1" x 3/4"	1.31	1.37	0.21	7.30

* 1-11-1/2

21500 509 75GH 23A H8 19R

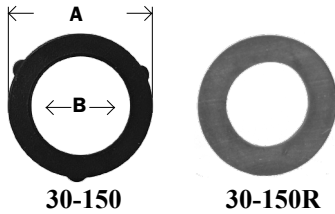
GARDEN HOSE NUT



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-021	Knurled	0.61	1.37 O.D.	0.08	2.91
30-022	Hex Nut	0.51	1.12	0.08	3.90

94GH GHN1 HNR 21514

GARDEN HOSE WASHERS

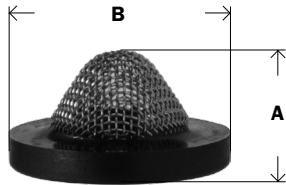


Part #	Size	A	B	Thickness	Approx. Wt. Lbs.	List Price
30-149	recessed washer	1.02	0.49	0.18	0.01	0.37
30-150	black*	0.98	0.68	0.13	0.01	0.22
30-150R	red	1.00	0.68	0.13	0.01	0.19
30-150B	black rubber	1.00	0.68	0.13	0.01	0.28
30-151	1"	1.27	0.86	0.16	0.01	0.53

GHW 901GH

* plasticized rubber

GARDEN HOSE FILTER WASHER

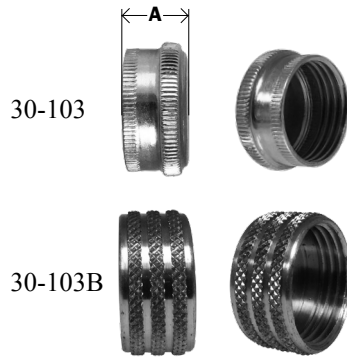


• 300 Series Stainless Steel Screen

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-180	30 Mesh	0.52	1.00	0.02	1.03
30-180F	60 Mesh	0.52	1.00	0.02	1.12

LA662

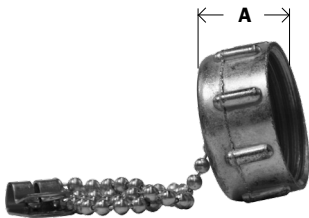
GARDEN HOSE CAP



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-103	3/4" Die Cast	0.58	0.04	1.62
30-103B	3/4" Barstock	0.60	0.048	5.04

513 96GH GHN5 HC1 LA215 21518 200-W

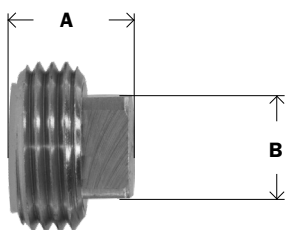
GARDEN HOSE CAP WITH CHAIN



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-142	3/4" w/ 12" Chain	0.58	0.06	8.17

* Zinc die cast

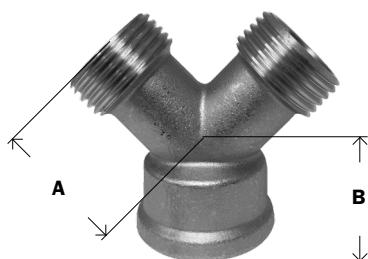
GARDEN HOSE PLUG



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-026	3/4"	0.69	0.61	0.12	9.05

GARDEN HOSE**BRASS FITTINGS****CAST BRASS HOSE - "Y" CONNECTOR**

•WASHER INCLUDED



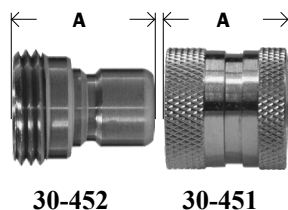
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-140	3/4"	1.40	0.67	0.22	10.44

• See more Garden Hose "Y"'s on page 45

86Y 21A

QUICK DISCONNECT GARDEN HOSE COUPLERS

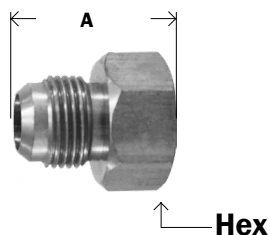
•WASHER INCLUDED



- Unvalved construction allows maximum Flow
- 150 PSI
- NBR Seals

Part #	Size	A	Approx. Wt. Lbs.	List Price
30-450	Complete	-----	0.24	15.69
30-451	Female end	1.14	0.12	8.98
30-452	Male end	1.26	0.12	3.87

LA73C

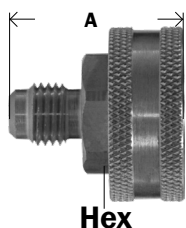
MALE FLARE X FGH RIGID

Part #	Male Flare x FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-123	3/8" x 3/4"	1.31	1.18	0.10	8.16
30-128	1/2" x 3/4"	1.38	1.18	0.12	7.37
30-133	5/8" x 3/4"	1.53	1.18	0.14	10.64

190 46WH HFU21

MALE FLARE x FGH SWIVEL

•WASHER INCLUDED



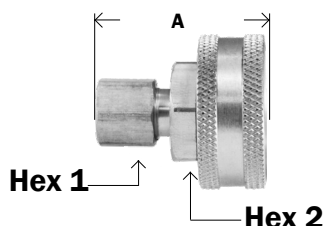
Part #	Male Flare x FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-052	1/4" x 3/4"	1.24	0.75	0.10	4.87
30-138	3/8" x 3/4"	1.25	0.25*	0.12	13.16
30-139	1/2" x 3/4"	1.49	0.81	0.14	9.32

* Internal Hex

50GHSV 51GHSV W1 68H 191

COMPRESSION X FGH

•WASHER INCLUDED

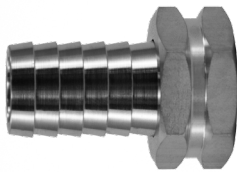
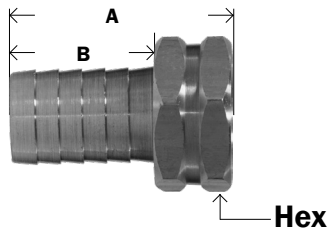


Part #	Compression x FGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
30-050	1/4" x 3/4"	1.02	0.50	0.75	0.09	8.38
30-051	3/8" x 3/4"	1.04	0.62	0.75	0.12	7.72

BARSTOCK BRASS GARDEN HOSE COUPLINGS

FEMALE SWIVEL ONLY

•WASHER INCLUDED



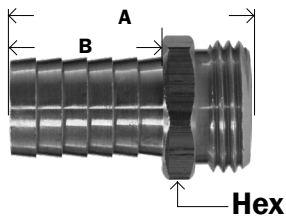
BRASS

Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-031	3/8" x 3/4"	1.82	1.19	1.18	0.11	4.64
30-032	1/2" x 3/4"	1.82	1.19	1.18	0.12	4.60
30-033	5/8" x 3/4"	1.82	1.19	1.18	0.13	4.91
30-034	3/4" x 3/4"	1.82	1.19	1.18	0.15	5.16
30-044	1" x 3/4"	2.10	1.19	1.18	0.18	7.63
30-035	1" x 1"	2.28	1.47	1.50	0.18	14.92

STAINLESS STEEL 316

30-032SS	1/2" x 3/4"	1.82	1.19	1.18	0.12	27.41
30-033SS	5/8" x 3/4"	1.82	1.19	1.18	0.13	27.41
30-034SS	3/4" x 3/4"	1.82	1.19	1.18	0.15	31.94

MALE END ONLY



BRASS

Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-039	3/8" x 3/4"	1.88	1.19	1.06	0.12	4.21
30-040	1/2" x 3/4"	1.88	1.19	1.06	0.12	3.78
30-041	5/8" x 3/4"	1.88	1.19	1.06	0.12	4.17
30-042	3/4" x 3/4"	1.88	1.19	1.06	0.13	4.09
30-045	1" x 3/4"	1.94	1.19	1.06	0.21	6.22
30-043	1" x 1"	2.34	1.47	1.37	0.26	14.29

STAINLESS STEEL 316

30-040SS	1/2" x 3/4"	1.88	1.19	1.06	0.12	22.91
30-041SS	5/8" x 3/4"	1.88	1.19	1.06	0.12	22.91
30-042SS	3/4" x 3/4"	1.88	1.19	1.06	0.13	26.36

GARDEN HOSE COUPLING

•WASHER INCLUDED

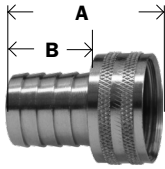


BRASS

Part #	Hose Barb	List Price
30-025	3/8"	8.90
30-027	1/2"	9.86
30-028	5/8"	10.24
30-029	3/4"	9.44
30-046	1"(3/4" threads)	30.06
30-030	1"	29.03

STAINLESS STEEL 316

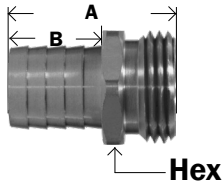
30-027SS	1/2"	55.34
30-028SS	5/8"	55.34
30-029SS	3/4"	59.21

GARDEN HOSE**BRASS FITTINGS****FEMALE SWIVEL ONLY - Short Shank Knurled Nut**

Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	List Price
30-466	1/2" x 3/4"	1.50	0.88	0.08	5.41
30-467	5/8" x 3/4"	1.50	0.88	0.09	4.46
30-468	3/4" x 3/4"	1.47	0.88	0.10	4.80

FEMALE END ONLY - Short Shank w/ hex

Part #	Hose x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-453	1/2" x 3/4"	1.63	1.00	1.18	0.11	4.19
30-454	5/8" x 3/4"	1.63	1.00	1.18	0.11	4.38
30-455	3/4" x 3/4"	1.63	1.00	1.18	0.13	4.83

MALE END ONLY - Short Shank

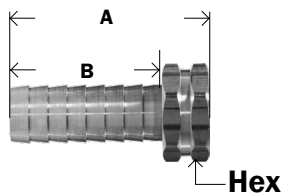
Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-471	1/2" x 3/4"	1.55	0.88	1.06	0.11	5.65
30-472	5/8" x 3/4"	1.56	0.88	1.06	0.12	4.68
30-473	3/4" x 3/4"	1.56	0.88	1.06	0.13	5.56

GARDEN HOSE COUPLING SETS - Short Shank with Knurled Nut

Part #	Hose Barb	List Price
30-461	1/2"	10.68
30-462	5/8"	10.68
30-463	3/4"	10.89

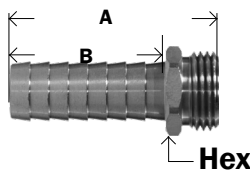
GARDEN HOSE COUPLING SETS - Short Shank w/ hex nut

Part #	Hose Barb	List Price
30-457	1/2"	9.26
30-458	5/8"	9.26
30-459	3/4"	9.90

FEMALE SWIVEL ONLY - 2" SHANK**•WASHER INCLUDED**

Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-505	1/2" x 3/4"	2.55	2.04	1.18	0.13	6.58
30-506	5/8" x 3/4"	2.56	2.04	1.18	0.16	6.34
30-507	3/4" x 3/4"	2.67	2.04	1.18	0.17	5.89
30-508	1" x 1"	2.84	2.03	1.43	0.29	9.90

GHFL 594

MALE END ONLY - 2" SHANK

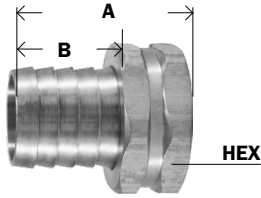
Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-510	1/2" x 3/4"	2.72	2.04	1.06	0.16	7.22
30-511	5/8" x 3/4"	2.72	2.04	1.06	0.17	9.90
30-512	3/4" x 3/4"	2.72	2.04	1.06	0.20	6.82
30-513	1" x 1"	2.90	2.03	1.37	0.28	10.79

GHML 593

GARDEN HOSE COUPLING SETS - 2" SHANK

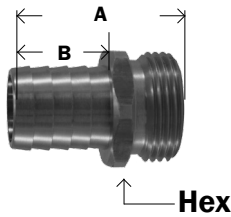
Part #	Hose x FGH	List Price
30-516	1/2"	13.64
30-517	5/8"	13.64
30-518	3/4"	17.01
30-519	1"	49.63

NPSM FEMALE SHORT SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-545	1/2	3/4"	1.45	0.88	1.18	4.62
30-546	5/8	3/4"	1.47	0.88	1.18	4.69
30-547	3/4	3/4"	1.47	0.88	1.18	5.67
30-548	1	1"	1.50	1.00	1.50	9.90

NPSM MALE SHORT SHANK



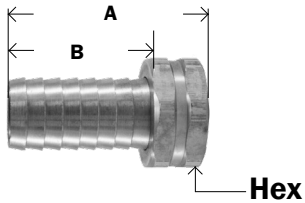
Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-550	1/2	3/4"	1.56	0.88	1.06	4.88
30-551	5/8	3/4"	1.56	0.88	1.06	4.55
30-552	3/4	3/4"	1.56	0.88	1.06	5.22
30-553	1	1"	1.77	0.98	1.30	9.64

NPSM SHORT SHANK SETS



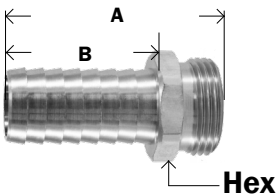
Part #	Size	List Price
30-540	1/2"	9.11
30-541	5/8"	9.31
30-542	3/4"	9.50
30-543	1"	19.60

NPSM FEMALE LONG SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-565	1/2	1/2"	2.09	1.50	0.94	3.97
30-566	5/8	3/4"	2.09	1.50	1.18	6.67
30-567	3/4	3/4"	2.09	1.50	1.18	6.11
30-568	1	1"	2.12	1.53	1.50	15.38

NPSM MALE LONG SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-570	1/2	1/2"	2.18	1.50	0.87	4.52
30-571	5/8	3/4"	2.18	1.50	1.06	6.13
30-572	3/4	3/4"	2.18	1.50	1.06	6.45
30-573	1	1"	2.32	1.53	1.30	13.66

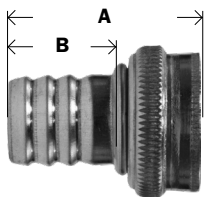
NPSM LONG SHANK SETS



Part #	Size	List Price
30-560	1/2"	8.58
30-561	5/8"	12.61
30-562	3/4"	12.74
30-563	1"	29.04

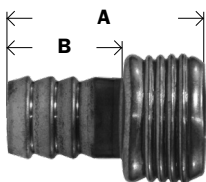
GARDEN HOSE VALVES/ FITTINGS**BRASS FITTINGS****WROUGHT BRASS****WROUGHT BRASS - Female end only**

•WASHER INCLUDED



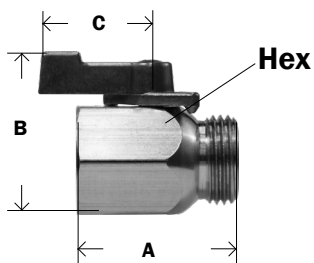
Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	List Price
30-526	5/8" x 3/4"	1.58	0.91	0.05	4.66
30-527	3/4" x 3/4"	1.50	0.84	0.06	4.68

85L

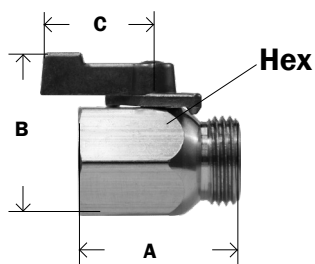
WROUGHT BRASS COUPLINGS - Male end only

Part #	Hose Barb x MGH	A	B	Approx. Wt. Lbs.	List Price
30-530	1/2" x 3/4"	1.50	0.88	0.02	4.49

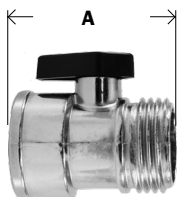
85M

GARDEN HOSE VALVES**ONE WAY BRASS BALL VALVE - FGH x MGH**

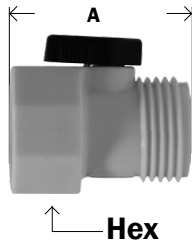
Part #	FGH x MGH	A	B	C	Hex	Approx. Wt. Lbs.	List Price
30-161	3/4" x 3/4"	1.55	1.89	1.31	1.06	0.42	54.70

ONE WAY BRASS BALL VALVE - Female Pipe x MGH

Part #	Female NPTF x MGH	A	B	C	Hex	Approx. Wt. Lbs.	List Price
30-162	3/4" x 3/4"	1.55	1.89	1.31	1.06	0.42	57.65

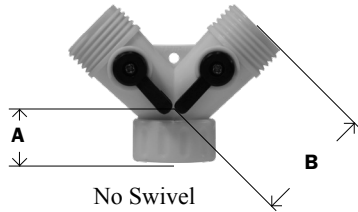
ZINC ALLOY HOSE SHUT-OFF W/ ONE LEVER

Part #	FGH x MGH	A	Approx. Wt. Lbs.	List Price
30-631	3/4" x 3/4"	1.67	0.08	4.47

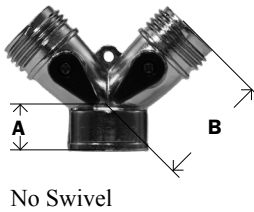
PLASTIC GARDEN HOSE VALVE • CYCOLAC BODY & BALL

Part #	FGH x MGH	A	Hex	Approx. Wt. Lbs.	List Price
30-163	3/4" x 3/4"	1.75	1.25	0.04	6.39

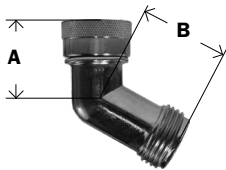
LA450C

PLASTIC, NON-CORROSIVE, 2-WAY HOSE SHUT-OFF "Y"

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-160	3/4"	0.74	1.87	0.08	3.48

"Y" SHAPE ZINC ALLOY CONNECTOR W/ TWO LEVERS

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-626	3/4"	0.60	1.66	0.10	8.62

ZINC ALLOY SWIVEL HOSE CONNECTOR

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-629	3/4"	1.31	1.50	0.08	4.68

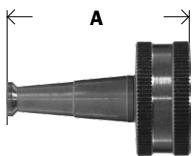
"Y" SHAPE BRASS CONNECTOR W/ 2-WAY SHUT OFF

Part #	Size	Description	Approx. Wt. Lbs.	List Price
30-627	3/4"	3/4 Double Y valve, swivel inlet	0.56	54.07

GARDEN HOSE NOZZLES

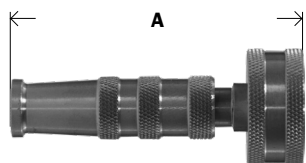
BRASS FITTINGS

2-1/2" BRASS NOZZLE



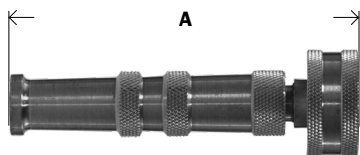
Part #	Size	A	Approx. Wt. Lbs.	List Price
30-637	3/4"	2.50	0.14	6.67

3" CROSSED PATTERN BRASS NOZZLE



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-640	3/4"	2.89	0.25	9.68

4" CROSSED PATTERN BRASS NOZZLE



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-638	3/4"	3.80	0.50	12.74



Adjustable Spray

Part #	Size	Zinc Alloy spray nozzle with insulated handle soft grip and front thread protector	List Price
30-600	5-1/2"		17.27

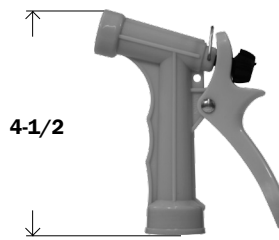


Lead Free

Part #	Size	Zinc Alloy spray nozzle	List Price
30-620	4-1/4"		6.69

Lead Free
Adjustable Spray

Part #	Size	Zinc Alloy spray nozzle with easily adjustable brass head and plastic grip	List Price
30-609	5-1/4"		17.71



Part #	Size	Plastic spray nozzle	List Price
30-630	4-1/2"		3.31

SAE 45° FLARE



Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4
Thread Size-B	5/16-24	3/8-24	7/16-20	1/2-20	5/8-18	11/16-16	3/4-16	7/8-14	1-1/16-14

•Typical Application

LP and natural gas, flammable liquids, instrumentation, refrigeration, power steering, hydraulic and pneumatic systems.

•Working Pressure Ranges

Temperature and type of tubing used are important factors. However, the following table is a good guide for proper selection. Temperature 73°F with copper tubing:

PSI	Tube O.D. (in.)	Tube Wall (in.)
2800	1/8	.030
1900	3/16	.030
1400	1/4	.030
1200	5/16	.032
1000	3/8	.032
750	1/2	.032
650	5/8	.035
550	3/4	.035
450	7/8	.035

•Vibration

Good resistance - use long nut when greater vibration resistance is required.

•Temperature Range

-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures.

•Used With

Copper, brass, aluminum and steel hydraulic tubing that can be flared.

•Tolerance

+/- .03 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

•Conformance

Meets specifications and standards of ASA, ASME, SAE and MS (Military standards).

Assembly Instructions

- 1- Cut tubing to desired length. Make sure all burrs are removed and ends are cut square.
- 2- Slide nut on tube. Threaded end "A" of nut must face out.
- 3- Flare end of tube with a 45° flaring tool.
 - a- Measure flare diameter.
 - b- Examine flare for excessive thin out.
- 4- Lubricate threads and assemble to fitting body. Nut should be turned hand tight.
- 5- Tighten assembly with wrench until a solid feeling is encountered. From that point, apply a one-sixth turn.

Note: Do not over-torque as it may damage the fitting or split the tubing at the flare.



• See Lead Free Flare Fittings page 166

Actual O.D. of Flare Fittings

1/8"

3/16"

1/4"

5/16"

3/8"

1/2"

5/8"

3/4"

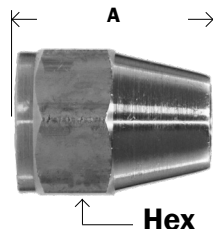
7/8"

SAE 45° FLARE

BRASS FITTINGS

SHORT ROD NUT

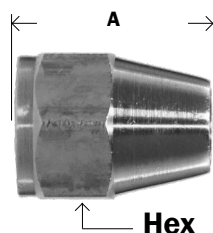
SAE# 010110



Part #	Thread Size UNF	Thread	A	Hex	Approx. Wt. Lbs.	List Price
10-013	1/8"	5/16-24	0.50	0.37	0.01	2.09
10-014	3/16"	3/8-24	0.62	0.43	0.02	1.00
10-015	1/4"	7/16-20	0.75	0.56	0.03	1.40
10-015L	1/4"	7/16-20	0.75	0.50	0.03	0.95
10-016	5/16"	1/2-20	0.88	0.62	0.04	2.30
10-017L	3/8"	5/8-18	0.77	0.75	0.05	1.20
10-017	3/8"	5/8-18	1.00	0.75	0.04	2.30
10-018	7/16"	11/16-16	1.06	0.81	0.06	9.27
10-019L	1/2"	3/4-16	0.93	0.87	0.06	1.70
10-019	1/2"	3/4-16	1.12	0.87	0.09	2.95
10-020L	5/8"	7/8-14	1.08	1.00	0.10	3.20
10-020	5/8"	7/8-14	1.31	1.06	0.15	8.42
10-021	3/4"	1-1/16-14	1.50	1.25	0.24	7.79
10-022	7/8"	1-1/4-12	1.62	1.50	0.36	15.52
10-026	1"	1-3/8-12	1.81	1.62	0.44	21.76

20910 41FS 1110 N1 41FX 441S 'L'

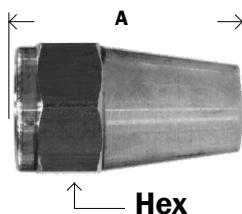
REDUCING SHORT ROD NUT



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-023	3/8" x 1/4"	0.74	0.81	0.06	10.98
10-024	1/2" x 3/8"	0.86	0.94	0.10	11.94
10-025	5/8" x 1/2"	0.99	1.06	0.12	16.49

LONG ROD NUT

SAE# 010111



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-001	1/8"	0.75	0.37	0.01	6.30
10-002	3/16"	0.81	0.43	0.02	2.48
10-003	1/4"	0.94	0.56	0.03	2.29
10-004	5/16"	1.12	0.62	0.04	4.50
10-005	3/8"	1.31	0.75	0.06	4.09
10-006	1/2"	1.62	0.87	0.12	6.85
10-007	5/8"	1.88	1.06	0.20	10.70
10-008	3/4"	2.19	1.25	0.34	48.18

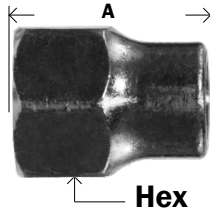
41FL N2 241 441 41

**"L" means light pattern.**

-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

LONG FORGED NUT

SAE# 010167

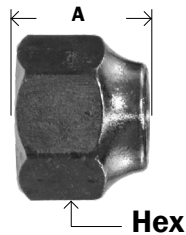


Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-028	1/4"	0.94	0.62	0.05	4.18
10-030	3/8"	1.06	0.81	0.08	6.34
10-031	1/2"	1.19	0.94	0.12	6.74
10-032	5/8"	1.44	1.06	0.26	11.88
10-033	3/4"	1.75	1.31	0.35	15.75

41FF 39 N4 14FL 641

SHORT FORGED NUT

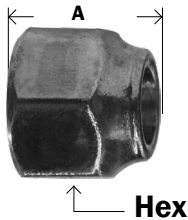
SAE# 010166



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-038	3/16"	0.56	0.50	0.02	5.27
10-039	1/4"	0.60	0.62	0.04	1.70
10-040	5/16"	0.66	0.69	0.04	3.23
10-041	3/8"	0.70	0.81	0.06	2.27
10-042	1/2"	0.82	0.94	0.08	3.20
10-043	5/8"	0.95	1.06	0.12	5.15
10-044	3/4"	1.16	1.31	0.22	10.71
10-045	7/8"	1.18	1.38	0.30	13.84

14FS 41FFS 40 641-S 1116 NS4

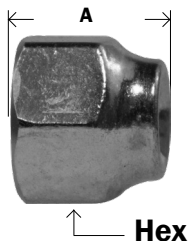
EXTRA HEAVY SHORT FORGED NUT



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-046	1/4"	0.63	0.75	0.04	3.28
10-047	3/8"	0.72	0.88	0.06	3.63
10-048	1/2"	0.88	1.00	0.08	4.43
10-049	5/8"	0.98	1.12	0.12	6.76

NSA

FORGED REDUCING NUT



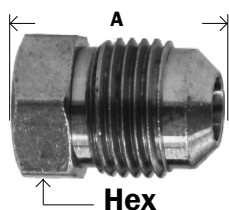
Part #	Female Flare x OD	A	Hex	Approx. Wt. Lbs.	List Price
10-051	5/16" x 1/4"	0.66	0.75	0.06	12.33
10-052	3/8" x 1/4"	0.72	0.81	0.06	4.98
10-053	3/8" x 5/16"	0.72	0.81	0.08	4.70
10-054	1/2" x 3/8"	0.81	0.94	0.08	4.19
10-055	5/8" x 3/8"	0.96	1.12	0.15	12.15
10-056	5/8" x 1/2"	0.97	1.06	0.12	7.20
10-058	3/4" x 5/8"	1.17	1.31	0.30	16.65

NSR4 14FS 41FRS 40R 662-S

SAE 45° FLARE

BRASS FITTINGS

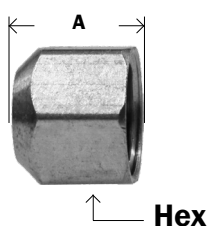
FLARED PLUG



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-063	3/16"	0.59	0.50	0.02	4.95
10-064 *	1/4"	0.69	0.43	0.02	1.32
10-065 *	5/16"	0.78	0.50	0.04	2.75
10-066 *	3/8"	0.88	0.62	0.06	2.22
10-067	1/2"	1.06	0.75	0.10	3.72
10-068	5/8"	1.19	0.87	0.14	3.30
10-069	3/4"	1.32	1.06		16.66

* Available in Stainless Steel. Add SS to the part# 58 639F PF 57 P2 2229 439

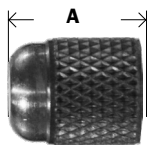
FLARED CAP



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-074	3/16"	0.47	0.50	0.02	3.52
10-075 *	1/4"	0.48	0.50	0.02	0.77
10-076	5/16"	0.62	0.62	0.04	2.68
10-077 *	3/8"	0.58	0.75	0.03	1.92
10-078	1/2"	0.69	0.81	0.14	1.97
10-079	5/8"	0.81	0.94	0.20	2.94
10-080	3/4"	1.17	1.37	0.30	11.05

* Available in Stainless Steel. Add SS to the part# 640F 41FC 56 N5 2129 54 440

FINGER TIGHTENING CAP



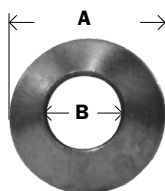
- Neoprene
- O-Ring Included

Part #	Thread Size UNF	A	Approx. Wt. Lbs.	List Price
10-081	1/4"	0.62	0.02	1.52

NFT5

COPPER GASKET

SAE# 010113

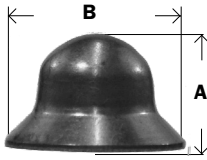


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
10-084	3/16"	0.31	0.12	0.01	0.73
10-085	1/4"	0.36	0.19	0.01	0.40
10-086	5/16"	0.42	0.22	0.01	1.09
10-087	3/8"	0.55	0.28	0.01	0.81
10-088	1/2"	0.66	0.41	0.01	1.08
10-089	5/8"	0.77	0.50	0.01	1.40
10-090	3/4"	0.95	0.62	0.01	1.64

B2 2GF 6251 FG 157 59 46

COPPER BONNET

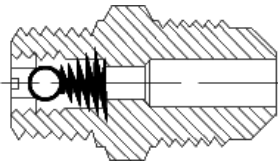
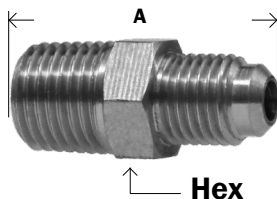
SAE# 010114



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
10-094	3/16"	0.16	0.31	0.01	2.46
10-095	1/4"	0.22	0.36	0.01	2.10
10-097	3/8"	0.34	0.55	0.01	2.22
10-098	1/2"	0.41	0.66	0.01	2.97
10-099	5/8"	0.44	0.77	0.01	2.78
10-100	3/4"	0.56	0.95	0.01	6.30

B1 3GF 64C 57 156 FB 695 464

MALE BALL CHECK CONNECTOR



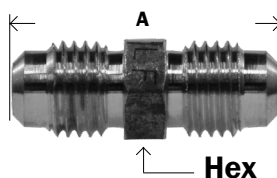
Part #	Male UNF x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-131*	1/4" x 1/8"	1.06	0.43		31.20
10256WC	1/4" x 1/4"	1.24	0.6	0.04	2.94
10-133*	3/8" x 1/4"	1.31	0.62	0.08	28.79

43A

* Note: Ball & Spring position may be reversed to change flow/check position. Min working pressure 3 PSI.

UNION

SAE# 010101



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-104	1/8"	0.91	0.31	0.02	7.10
10-105	3/16"	1.06	0.37	0.02	4.55
10-106L	1/4"	1.19	0.43	0.03	1.33
10-106 *	1/4"	1.19	0.43	0.03	2.47
10-107	5/16"	1.34	0.50	0.05	2.69
10-108L	3/8"	1.50	0.62	0.09	4.43
10-108 *	3/8"	1.50	0.62	0.09	3.11
10-109L	1/2"	1.67	0.75	0.12	5.60
10-109	1/2"	1.81	0.75	0.14	6.20
10-110L	5/8"	2.00	0.87	0.20	6.36
10-110	5/8"	2.12	0.87	0.20	6.23
10-111	3/4"	2.44	1.06	0.35	12.27
10-112	7/8"	2.72	1.25	0.52	47.22

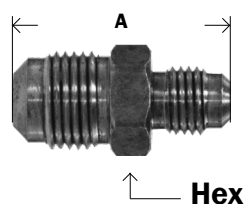
* Available in Stainless Steel. Add SS to the part#

42F U2



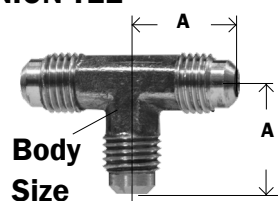
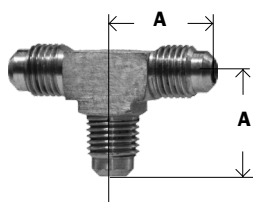
"L" means light pattern.

-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

SAE 45° FLARE**BRASS FITTINGS****REDUCING UNION**

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-117	5/16" x 1/4"	1.28	0.50	0.04	6.04
10-118	3/8" x 1/4"	1.38	0.62	0.06	4.51
10-119	3/8" x 5/16"	1.44	0.62	0.08	8.28
10-120	1/2" x 1/4"	1.53	0.75	0.10	7.26
10-121	1/2" x 3/8"	1.69	0.75	0.10	6.62
10-122	5/8" x 3/8"	1.88	0.87	0.17	12.00
10-123	5/8" x 1/2"	1.87	0.87	0.14	5.89

656F UR2 42-R

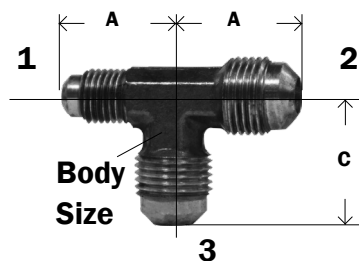
UNION TEE**Forged Tee****Barstock Tee****SAE# 010401**

Part #	Thread Size UNF	A	Body Size	Approx. Wt. Lbs.	List Price
10-157	1/8"	0.67	0.36	0.04	7.65
10-158	3/16"	0.75	0.36	0.06	4.41
10-159 **	1/4"	0.78	0.36	0.06	4.88
10-159B*	1/4"	0.88	0.50	0.08	14.94
10-160 **	5/16"	0.91	0.44	0.10	6.55
10-161 **	3/8"	1.00	0.44	0.12	6.64
10-162	1/2"	1.16	0.59	0.19	6.84
10-163	5/8"	1.41	0.69	0.30	12.55
10-164	3/4"	1.64	0.88	0.53	26.68
10-165	7/8"	1.75	1.25	0.93	54.22

* Barstock

244F T2 144F

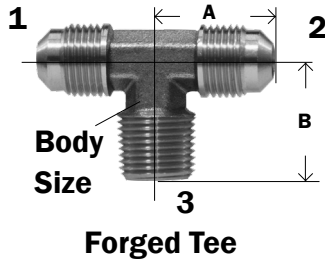
** Available in Stainless Steel. Add SS to the part#

REDUCING TEE 1 x 2 x 3

Part #	Thread Size UNF 1x2x3	A	C	Body Size	Approx. Wt. Lbs.	List Price
10-170	1/4" x 1/4" x 3/8"	0.91	1.00	0.44	0.10	7.22
10-171	5/16" x 5/16" x 1/4"	0.94	0.94	0.44	0.12	10.80
10-172	3/8" x 1/4" x 1/4"	0.91	1.00	0.44	0.10	8.63
10-173	3/8" x 1/4" x 3/8"	1.00	0.91	0.44	0.12	10.76
10-174	3/8" x 3/8" x 1/4"	1.00	0.88	0.44	0.11	7.75
10-175	3/8" x 3/8" x 1/2"	1.00	1.19	0.59	0.14	10.80
10-176	3/8" x 3/8" x 5/8"	1.16	1.44	0.69	0.16	20.85
10-178	1/2" x 3/8" x 3/8"	1.16	1.12	0.59	0.18	8.36
10-179	1/2" x 3/8" x 1/2"	1.16	1.09	0.59	0.18	10.01
10-180	1/2" x 1/2" x 1/4"	1.16	0.97	0.59	0.18	13.85
10-181	1/2" x 1/2" x 3/8"	1.16	1.12	0.59	0.19	9.07
10-182	1/2" x 1/2" x 5/8"	1.28	1.41	0.69	0.28	13.20
10-187	5/8" x 1/2" x 5/8"	1.44	1.33	0.69	0.27	20.46
10-188	5/8" x 5/8" x 3/8"	1.38	1.16	0.69	0.30	17.82
10-189	5/8" x 5/8" x 1/2"	1.38	1.28	0.69	0.28	25.43
10-197	3/4" x 3/4" x 5/8"	1.66	1.50	0.88	0.36	44.43

144F TR2 659F 684F 44R

MALE BRANCH TEE



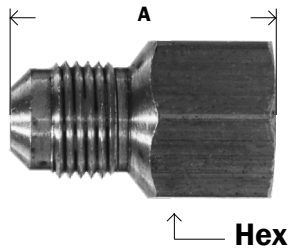
SAE# 010425

Part #	Male Flare x Male NPT (1&2)x3	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-203	3/16" x 1/8"	0.75	0.75	0.36	0.10	5.21
10-204	1/4" x 1/8"	0.78	0.75	0.36	0.05	5.21
10-205	1/4" x 1/4"	0.88	0.88	0.44	0.08	5.52
10-206	1/4" x 3/8"	0.92	1.00	0.47	0.10	8.94
10-207	5/16" x 1/8"	0.89	0.78	0.44	0.08	6.36
10-208	5/16" x 1/4"	0.94	0.94	0.44	0.08	7.31
10-209	3/8" x 1/8"	1.00	0.91	0.44	0.14	10.63
10-210	3/8" x 1/4"	1.00	0.94	0.44	0.12	7.02
10-211 **	3/8" x 3/8"	1.00	1.00	0.47	0.13	8.49
10-212 **	3/8" x 1/2"	1.12	1.22	0.69	0.22	12.70
10-213	1/2" x 1/4"	1.16	1.00	0.59	0.20	18.71
10-214	1/2" x 3/8"	1.16	1.14	0.59	0.19	13.23
10-215	1/2" x 1/2"	1.22	1.22	0.69	0.24	12.52
10-216	1/2" x 3/4"	1.38	1.41	0.88	0.22	24.95
10-217	5/8" x 3/8"	1.38	1.25	0.69	0.24	21.25
10-218	5/8" x 1/2"	1.41	1.31	0.69	0.29	16.65
10-219	5/8" x 3/4"	1.41	1.41	0.88	0.36	25.10
10-220	3/4" x 1/2"	1.63	1.59	0.88	0.49	31.46
10-221	3/4" x 3/4"	1.63	1.44	0.88	0.48	32.35

** Available in Stainless Steel. Add SS to the part#

T1 145F 45

FEMALE ADAPTER

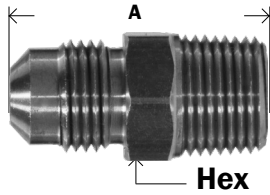


SAE# 010103

Part #	Male Flare x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-227	3/16" x 1/8"	0.97	0.56	0.03	4.60
10-228L	1/4" x 1/8"	1.03	0.56	0.03	1.44
10-228	1/4" x 1/8"	1.03	0.56	0.04	2.98
10-229L	1/4" x 1/4"	1.06	0.68	0.06	3.73
10-229	1/4" x 1/4"	1.23	0.68	0.07	1.69
10-230	1/4" x 3/8"	1.18	0.81	0.08	4.20
10-231	1/4" x 1/2"	1.31	0.94	0.06	6.83
10-232	5/16" x 1/8"	1.06	0.56	0.05	16.77
10-233	5/16" x 1/4"	1.28	0.68	0.08	3.99
10-234	3/8" x 1/8"	1.09	0.62	0.08	4.17
10-235L	3/8" x 1/4"	1.25	0.68	0.08	3.08
10-235	3/8" x 1/4"	1.31	0.81	0.08	4.71
10-236L	3/8" x 3/8"	1.25	0.81	0.08	4.03
10-236	3/8" x 3/8"	1.25	0.81	0.10	6.75
10-237L	3/8" x 1/2"	1.31	0.94	0.08	3.51
10-237	3/8" x 1/2"	1.60	1.00	0.16	10.16
10-238	3/8" x 3/4"	1.41	1.18	0.11	9.49
10-239	1/2" x 1/4"	1.37	0.75	0.10	4.75
10-240L	1/2" x 3/8"	1.38	0.81	0.12	4.22
10-240	1/2" x 3/8"	1.50	0.81	0.14	8.30
10-241L	1/2" x 1/2"	1.42	0.94	0.10	6.02
10-241	1/2" x 1/2"	1.75	1.00	0.12	11.10
10-242	1/2" x 3/4"	1.60	1.12	0.16	5.83
10-243	5/8" x 3/8"	1.24	0.87	0.12	9.58
10-244	5/8" x 1/2"	1.62	0.94	0.12	5.74
10-245	5/8" x 3/4"	1.65	1.12	0.17	7.50
10-246	3/4" x 1/2"	1.74	1.18	0.32	19.86
10-247	3/4" x 3/4"	1.75	1.18	0.22	20.42
10-248	7/8" x 3/4"	1.94	1.31	0.26	20.08

🔑 **"L" means light pattern.**

-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

SAE 45° FLARE**BRASS FITTINGS****MALE ADAPTER****SAE# 010102**

Part #	Male Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-253	1/8" x 1/8"	0.92	0.43	0.02	3.69
10-254	3/16" x 1/8"	1.00	0.43	0.03	1.96
10-255L	1/4" x 1/8"	1.06	0.43	0.03	1.33
10-255 *	1/4" x 1/8"	1.06	0.43	0.04	1.22
10-256L	1/4" x 1/4"	1.15	0.56	0.03	1.59
10-256 *	1/4" x 1/4"	1.25	0.56	0.04	1.60
10-257 *	1/4" x 3/8"	1.31	0.68	0.06	2.44
10-258	1/4" x 1/2"	1.44	0.87	0.11	5.79
10-259L	5/16" x 1/8"	1.15	0.50	0.04	2.75
10-259	5/16" x 1/8"	1.16	0.50	0.04	2.59
10-260L	5/16" x 1/4"	1.31	0.56	0.06	3.30
10-260	5/16" x 1/4"	1.34	0.56	0.06	3.04
10-261 *	5/16" x 3/8"	1.38	0.68	0.08	5.77
10-262	3/8" x 1/8"	1.25	0.62	0.07	2.13
10-263L	3/8" x 1/4"	1.31	0.62	0.06	2.42
10-263 *	3/8" x 1/4"	1.44	0.62	0.08	2.29
10-264L	3/8" x 3/8"	1.37	0.68	0.09	2.89
10-264 *	3/8" x 3/8"	1.44	0.68	0.09	2.70
10-265L	3/8" x 1/2"	1.44	0.89	0.12	3.19
10-265 *	3/8" x 1/2"	1.69	0.87	0.14	5.83
10-266	3/8" x 3/4"	1.81	1.06	0.18	7.39
10-267	1/2" x 1/4"	1.60	0.75	0.11	3.55
10-268L	1/2" x 3/8"	1.46	0.75	0.10	3.26
10-268	1/2" x 3/8"	1.62	0.75	0.12	3.65
10-269L	1/2" x 1/2"	1.62	0.87	0.13	3.47
10-269	1/2" x 1/2"	1.79	0.87	0.15	5.12
10-270	1/2" x 3/4"	1.75	1.06	0.22	6.86
10-271	5/8" x 1/4"	1.81	0.87	0.14	10.33
10-272L	5/8" x 3/8"	1.67	0.87	0.14	4.80
10-272	5/8" x 3/8"	1.81	0.87	0.18	7.87
10-273L	5/8" x 1/2"	1.80	0.87	0.11	4.92
10-273	5/8" x 1/2"	2.00	0.87	0.20	8.05
10-274	5/8" x 3/4"	1.85	1.06	0.21	5.70
10-275	3/4" x 1/2"	2.19	1.06	0.28	13.01
10-276	3/4" x 3/4"	2.08	1.06	0.28	8.46
10-277	7/8" x 1/2"	2.22	1.25	0.52	33.69
10-278	7/8" x 3/4"	2.35	1.25	0.41	22.63
10-279	1" x 3/4"	2.44	1.43	0.53	25.42
10-280	1" x 1"	2.44	1.43	0.53	31.21

* Available in Stainless Steel. Add SS to the part#

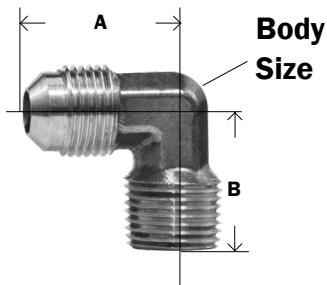
U1 48

**"L" means light pattern.**

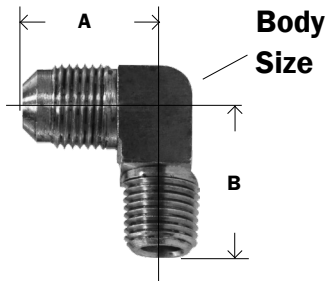
-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

90° MALE ELBOW

SAE# 010202



Forged Elbow



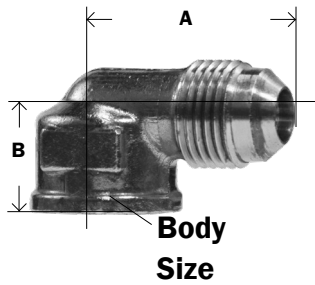
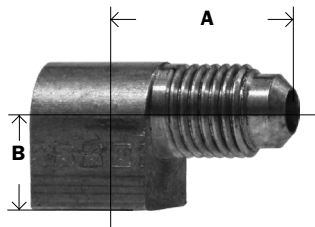
Barstock Elbow

Part #	Male Flare x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-283	1/8" x 1/8"	0.63	0.73	0.37	0.04	9.57
10-283B*	1/8" x 1/8"	0.62	0.69	0.43	0.04	35.27
10-284	3/16" x 1/8"	0.75	0.75	0.44	0.04	7.98
10-284B*	3/16" x 1/8"	0.75	0.75	0.43	0.06	5.28
10-285	3/16" x 1/4"	0.81	0.88	0.44	0.08	6.04
10-286	1/4" x 1/8"	0.84	0.78	0.38	0.04	3.30
10-286B*	1/4" x 1/8"	0.81	0.78	0.47	0.05	2.36
10-287 **	1/4" x 1/4"	0.81	0.88	0.44	0.05	3.00
10-287B*	1/4" x 1/4"	0.91	0.93	0.59	0.08	4.09
10-288 **	1/4" x 3/8"	0.91	0.91	0.47	0.08	5.24
10-289	1/4" x 1/2"	1.03	1.09	0.59	0.10	6.59
10-290	5/16" x 1/8"	0.91	0.88	0.44	0.06	2.69
10-290B*	5/16" x 1/8"	0.91	0.78	0.52	0.06	7.10
10-291	5/16" x 1/4"	0.98	0.96	0.44	0.08	2.78
10-291B*	5/16" x 1/4"	0.95	0.92	0.62	0.08	8.10
10-292	5/16" x 3/8"	1.06	1.09	0.59	0.08	6.01
10-293	3/8" x 1/8"	1.00	0.91	0.53	0.08	6.07
10-293B*	3/8" x 1/8"	1.03	0.91	0.65	0.08	8.30
10-294	3/8" x 1/4"	1.01	0.89	0.48	0.08	3.52
10-294B*	3/8" x 1/4"	0.97	1.04	0.68	0.11	6.00
10-295 **	3/8" x 3/8"	1.00	0.88	0.47	0.10	3.66
10-295B*	3/8" x 3/8"	1.06	1.09	0.69	0.12	7.38
10-296 **	3/8" x 1/2"	1.10	1.09	0.59	0.12	5.23
10-297	3/8" x 3/4"	1.25	1.31	0.81	0.12	13.64
10-298	1/2" x 1/4"	1.19	1.00	0.59	0.12	5.06
10-298B*	1/2" x 1/4"	1.22	1.19	0.81	0.12	13.44
10-299	1/2" x 3/8"	1.10	1.00	0.59	0.13	5.02
10-299B*	1/2" x 3/8"	1.22	1.12	0.77	0.18	9.67
10-300	1/2" x 1/2"	1.16	1.13	0.59	0.14	5.80
10-300B*	1/2" x 1/2"	1.26	1.36	0.94	0.26	12.00
10-301	1/2" x 3/4"	1.42	1.25	0.81	0.24	10.52
10-311	5/8" x 1/4"	1.34	1.13	0.72	0.28	10.98
10-302	5/8" x 3/8"	1.35	1.22	0.72	0.20	9.50
10-302B*	5/8" x 3/8"	1.41	1.25	0.94	0.20	24.76
10-303	5/8" x 1/2"	1.35	1.22	0.72	0.20	7.81
10-303B*	5/8" x 1/2"	1.41	1.38	0.94	0.20	16.43
10-304	5/8" x 3/4"	1.44	1.31	0.81	0.25	13.19
10-305	3/4" x 1/2"	1.67	1.50	0.88	0.34	16.27
10-306	3/4" x 3/4"	1.67	1.63	0.88	0.30	14.77
10-306B*	3/4" x 3/4"	1.60	1.62	0.91	0.32	27.88
10-307	7/8" x 3/4"	1.75	1.68	1.00	0.44	43.22
10-308	1" x 3/4"	1.94	1.69	1.31	0.75	50.02
10-309	1" x 1"	1.94	1.75	1.25	0.78	44.48

* Barstock

** Available in Stainless Steel. Add SS to the part#

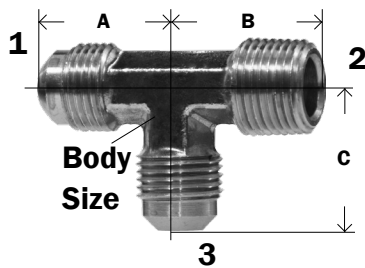
249F 49 E1 149F

SAE 45° FLARE**BRASS FITTINGS****90° FEMALE ELBOW****SAE# 010203****Forged Elbow****Barstock Elbow**

Part #	Male Flare x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-312	3/16" x 1/8"	0.81	0.44	0.56	0.05	6.80
10-313	1/4" x 1/8"	0.90	0.46	0.56	0.06	4.13
10-313B*	1/4" x 1/8"	0.88	0.47	0.56	0.06	5.47
10-314	1/4" x 1/4"	0.97	0.59	0.75	0.08	5.81
10-315	1/4" x 3/8"	1.03	0.57	0.81	0.09	8.11
10-333	1/4" x 1/2"	1.08	0.66	1.00	0.12	10.39
10-316	5/16" x 1/8"	0.94	0.88	0.45	0.08	7.16
10-317	5/16" x 1/4"	1.03	0.58	0.75	0.06	11.64
10-318	3/8" x 1/8"	1.00	0.88	0.47	0.10	7.57
10-319	3/8" x 1/4"	1.06	0.59	0.75	0.09	3.53
10-319B*	3/8" x 1/4"	1.09	0.69	0.75	0.10	26.50
10-320	3/8" x 3/8"	1.06	0.57	0.81	0.10	5.33
10-321	3/8" x 1/2"	1.16	0.66	1.00	0.14	6.68
10-322	3/8" x 3/4"	1.28	0.72	1.25	0.12	11.58
10-323	1/2" x 1/4"	1.25	0.70	0.88	0.13	10.10
10-324	1/2" x 3/8"	1.25	0.70	0.88	0.12	7.51
10-325	1/2" x 1/2"	1.29	0.72	1.00	0.18	7.91
10-326	1/2" x 3/4"	1.41	0.72	1.25	0.20	10.78
10-327	5/8" x 3/8"	1.35	1.22	0.72	0.22	13.46
10-328	5/8" x 1/2"	1.38	0.75	1.00	0.20	11.79
10-329	5/8" x 3/4"	1.50	0.76	1.25	0.28	11.92
10-330	3/4" x 1/2"	1.63	1.06	1.06	0.42	22.52
10-331	3/4" x 3/4"	1.88	1.06	1.31	0.40	35.30

* Barstock

E3 50 150F

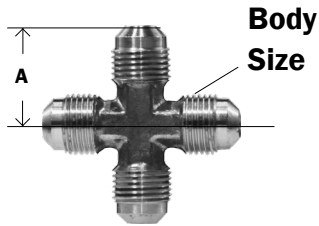
FORGED MALE RUN TEE

Part #	Male Flare x Male NPTF (1&3) x 2	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
10-361	3/16" x 5/16" x 1/8"	0.87	0.78	0.97	0.44	0.08	5.57
10-343	3/16" x 1/8"	0.75	0.75	0.75	0.37	0.05	6.71
10-344	1/4" x 1/8"	0.78	0.75	0.78	0.37	0.06	5.78
10-345	1/4" x 1/4"	0.88	0.88	0.88	0.44	0.08	7.09
10-347	5/16" x 1/8"	0.88	0.80	0.88	0.44	0.08	6.18
10-348	5/16" x 1/4"	0.94	0.94	0.94	0.44	0.08	9.07
10-350	3/8" x 1/4"	1.00	0.94	1.00	0.44	0.12	9.07
10-351	3/8" x 3/8"	1.00	1.00	1.00	0.47	0.10	12.57
10-340	3/8" x 1/2" x 3/8"	1.09	1.09	1.16	0.59	0.18	11.65
10-352	3/8" x 1/2"	1.12	1.22	1.12	0.69	0.12	17.65
10-353	1/2" x 3/8" x 1/2"	1.22	1.22	1.15	0.69	0.22	13.82
10-354	1/2" x 3/8"	1.16	1.09	1.16	0.59	0.18	15.27
10-355	1/2" x 1/2"	1.22	1.22	1.22	0.69	0.22	14.27
10-357	5/8" x 1/2"	1.41	1.31	1.41	0.69	0.28	18.93
10-359	3/4" x 1/2"	1.63	1.59	1.63	0.88	0.48	37.27
10-360	3/4" x 3/4"	1.62	1.44	1.62	0.88	0.48	32.92

T3 151F 51

FORGED FLARE CROSS

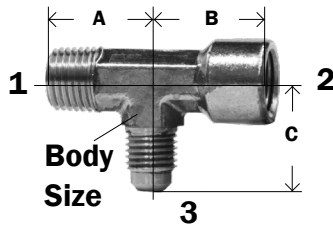
SAE# 010501



Part #	Thread Size UNF	A	Body Size	Approx. Wt. Lbs.	List Price
10-373	1/4"	0.88	0.44	0.10	13.64
10-374	5/16"	0.92	0.44	0.10	13.36
10-375	3/8"	1.00	0.44	0.16	12.75
10-376	1/2"	1.16	0.59	0.24	15.02

455 C1 147F 52

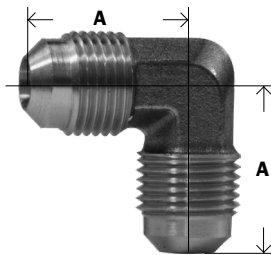
FORGED ADAPTER TEE / SERVICE TEE



Part #	Size 1 x 2 x 3	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
10-382	1/8" x 1/8" x 1/4"	0.72	0.53	0.80	0.47	0.08	7.02
10-383	1/4" x 1/4" x 1/4"	0.88	1.00	0.91	0.47	0.11	8.88

T17 53

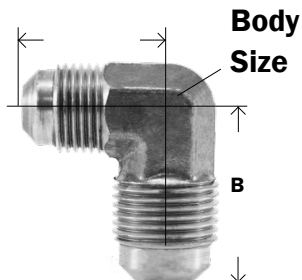
FORGED 90° FLARE ELBOW



Part #	Thread Size UNF	A	Approx. Wt. Lbs.	List Price
10-404	1/8"	0.64	0.04	16.39
10-405	3/16"	0.75	0.06	10.91
10-406	1/4"	0.81	0.08	1.90
10-407	5/16"	0.91	0.10	5.96
10-408	3/8"	1.00	0.10	5.01
10-409	1/2"	1.16	0.14	7.57
10-410	5/8"	1.41	0.22	12.29
10-411	3/4"	1.66	0.68	24.66
10-412	7/8"	1.81	0.82	45.16

E2 155F

FORGED REDUCING ELBOW



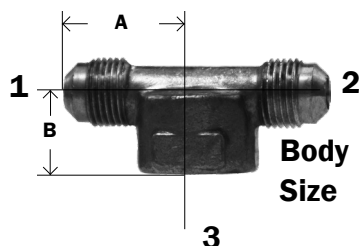
Part #	Male Flare x Male Flare	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-416	3/8" x 1/4"	1.00	0.88	0.47	0.08	6.07
10-419	1/2" x 3/8"	1.19	1.02	0.59	0.14	7.71
10-421	5/8" x 1/2"	1.34	1.23	0.72	0.21	12.33

ER2 657F 55R

SAE 45° FLARE/ GAS RANGE FITTINGS

BRASS FITTINGS

FORGED FEMALE BRANCH TEE

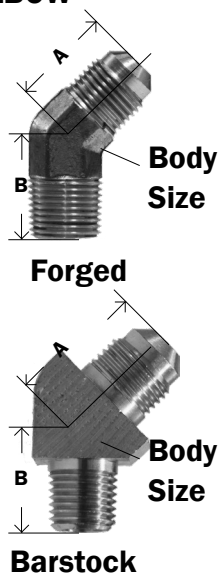


Part #	Male Flare x Female NPTF (1&2) x 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-429	1/4" x 1/4"	0.97	0.75	0.69	0.12	10.38
10-430	3/8" x 1/4"	1.00	1.03	0.47	0.14	9.69
10-431	3/8" x 3/8"	1.17	0.69	1.05	0.22	14.99
10-432	3/8" x 1/2"	1.16	0.69	1.05	0.19	13.47
10-434	1/2" x 1/2"	1.31	0.69	1.06	0.22	22.52

TF1 136 T4 36 58FP

45° ELBOW

SAE# 010302



Part #	Male Flare x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-448	1/4" x 1/8"	0.67	0.64	0.41	0.04	3.14
10-448B*	1/4" x 1/8"	0.67	0.64	0.44	0.04	11.22
10-449	1/4" x 1/4"	0.75	0.86	0.53	0.07	3.69
10-450	5/16" x 1/8"	0.78	0.64	0.53	0.06	3.70
10-451	5/16" x 1/4"	0.81	0.86	0.53	0.07	6.68
10-452	3/8" x 1/4"	0.91	0.86	0.53	0.09	5.95
10-452B*	3/8" x 1/4"	0.89	0.86	0.64	0.12	10.63
10-453	3/8" x 3/8"	0.93	0.94	0.59	0.11	6.16
10-454	3/8" x 1/2"	0.99	1.17	0.75	0.19	8.94
10-455	1/2" x 3/8"	1.07	0.88	0.59	0.12	7.01
10-455B*	1/2" x 3/8"	1.06	0.94	0.76	0.18	23.82
10-456	1/2" x 1/2"	1.12	1.18	0.75	0.20	10.18
10-460	5/8" x 3/8"	1.13	0.95	0.81	0.22	14.78
10-457	5/8" x 1/2"	1.12	1.17	0.78	0.18	11.09
10-458	3/4" x 1/2"	1.28	1.16	0.88	0.26	17.72
10-459	3/4" x 3/4"	1.41	1.20	0.88	0.31	18.16

* Barstock

E145 54 159F 654F 59FF 254 47 4945

BRASS GAS RANGE FITTINGS

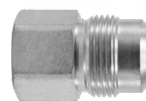
BRASS MALE ADAPTERS



15/16-16 FLARE THREAD

Part #	Male Flare x Male NPTF	List Price
35-132	1/2" x 1/2" (3/8" FIP TAP)	6.60
35-134	15/16" x 1/2"	6.33
35-135	15/16" x 3/4" (1/2" FIP TAP)	10.26

BRASS FEMALE ADAPTERS



Part #	Flare x FIP	List Price
35-136	15/16" x 1/2"	9.31
35-142	15/16" x 3/4"	11.25

DRUM ADAPTERS

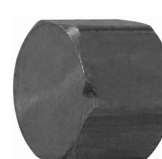


- Straight Thread

SAE# 010165

Part #	Male Flare x FIP	List Price
50-011	1/4" x 1/2"	28.35
50-001	1/4" x 3/4"	13.73

CAP



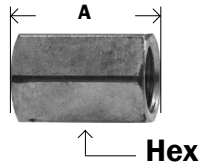
Part #	Size	List Price
35-186	15/16"	26.56

RD IF K1

FEMALE 45° FLARE FITTINGS

UNION

• Use with Copper Gasket



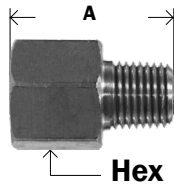
SAE# 010107

Part #	Female Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
10-135	1/4"	1.00	0.62	0.06	11.52
10-136	3/8"	1.25	0.81	0.14	20.01
10-137	1/2"	1.43	0.94	0.18	25.57

2310 U4 660HD 32

FEMALE FLARE ADAPTER

SAE# 010106

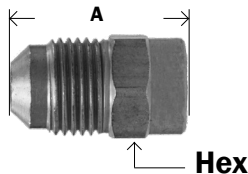


Part #	Female Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-440	1/4" x 1/8"	0.91	0.62	0.05	3.99
10-441	1/4" x 1/4"	1.01	0.62	0.06	5.85
10-442	3/8" x 1/4"	1.28	0.81	0.10	6.06
10-443	1/2" x 3/8"	1.36	0.94	0.14	25.44
10-444	1/2" x 1/2"	1.46	0.94	0.14	4.38

U5 664FHD 33 48-FF

FLARE REDUCER

SAE# 010105



Part #	Male Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
10-462	1/4" x 3/8"	1.22	0.81	0.10	2.70
10-461	1/4" x 1/2"	1.36	0.94	0.14	21.12
10-463 *	3/8" x 1/4"	1.12	0.62	0.06	4.69
10-464	3/8" x 1/2"	1.44	0.94	0.14	7.55
10-473	3/8" x 5/8"	1.63	1.12	0.16	16.95
10-467	1/2" x 3/8"	1.41	0.81	0.13	7.28
10-468	1/2" x 5/8"	1.68	1.06	0.20	34.38
10-469	5/8" x 1/2"	1.63	1.00	0.17	19.92
10-470	5/8" x 3/4"	1.97	1.31	0.31	20.34
10-471	3/4" x 5/8"	1.75	1.18	0.32	22.20

* Available in Stainless Steel. Add SS to the part#

UR3 661FHD 227 46-FF

SPACE HEATER FITTINGS

NUT

9/16-24 FINE THREAD FLARE

MALE ADAPTER

#M-82SH



#M-83SH



Part #	Size	List Price
14-001	3/8	3.50

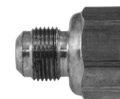
Part #	Size	List Price
14-016	3/8 x 3/8	6.43
14-017	3/8 x 1/2	6.95

UNION

#M-80SH

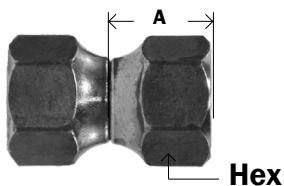


FEMALE ADAPTER



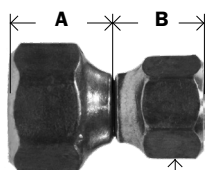
Part #	Size	List Price
14-018	3/8 x 3/8	6.56
14-025	3/8 x 1/2	3.32

Part #	Size	List Price
14-011	3/8	5.64

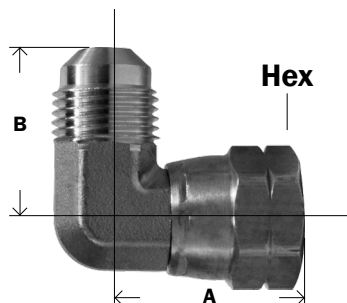
SAE 45° FLARE**BRASS FITTINGS****BRASS FLARE SWIVEL FITTINGS****FORGED SWIVEL****SAE# 010108**

Part #	Female Flare UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-481	1/4"	0.59	0.62	0.04	6.14
10-482	5/16"	0.62	0.68	0.06	8.79
10-483	3/8"	0.69	0.81	0.10	6.54
10-484	1/2"	0.81	0.94	0.16	8.98
10-485	5/8"	0.94	1.06	0.24	11.05
10-486	3/4"	1.12	1.31	0.34	35.52

1350 US4 14FSV 34

REDUCING SWIVELS**Hex 1****Hex 2**

Part #	Female Flare UNF	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
10-487	3/8" x 1/4"	0.72	0.60	0.81	0.62	0.08	13.37
10-488	1/2" x 3/8"	0.84	0.70	0.94	0.81	0.12	16.33
10-489	5/8" x 1/2"	0.98	0.82	1.03	0.94	0.22	19.96

FORGED SWIVEL ELBOWS

Part #	Male Flare x Female Flare	A	B	Hex	Approx. Wt. Lbs.	List Price
10-493	1/4"	0.93	0.86	.563	0.12	14.55
10-494	3/8"	1.12	1.0	.75	0.20	23.44
10-495	1/2"	1.29	1.20	.88	0.25	32.70
10-496	5/8"	1.50	1.30	1.00	0.37	39.56
10-497	3/4"	1.83	1.60	1.25	0.54	70.28

ES4

BRASS FITTINGS

JIC 37° FLARE

BRASS

STRAIGHT



Part #	JIC Thread	Pipe Size	List Price
28-701	7/16-20	1/8	2.98
28-702	7/16-20	1/4	6.03
28-703	7/16-20	3/8	15.90
28-704	1/2-20	1/8	46.20
28-705	1/2-20	1/4	20.91
28-706	9/16-18	1/8	6.98
28-707	9/16-18	1/4	6.21
28-708	9/16-18	3/8	4.98
28-709	9/16-18	1/2	9.90
28-710	3/4-16	1/4	12.35
28-711	3/4-16	3/8	9.73
28-712	3/4-16	1/2	13.32
28-713	3/4-16	3/4	28.86
28-714	7/8-14	3/8	21.78
28-715	7/8-14	1/2	20.19
28-716	7/8-14	3/4	22.28
28-717	1-1/16-12	3/4	21.58
28-748	1-1/16-1/2	1/2	28.64
28-749	1-1/16-1	1	45.84
28-718	1-5/16-12	1	40.56

FTXB

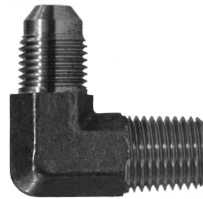
45° FORGED ELBOW



Part #	JIC Thread	Pipe Size	List Price
28-722F	7/16-20	1/8	8.52
28-724F	7/16-20	1/4	11.41
28-728F	1/2-20	1/4	4.65
28-729F	9/16-18	1/8	28.62
28-731F	9/16-18	1/4	8.84
28-733F	9/16-18	3/8	8.01
28-734F	9/16-18	1/2	17.23
28-736F	3/4-16	3/8	11.96
28-738F	3/4-16	1/2	37.05
28-740F	7/8-14	1/2	19.53
28-742F	1-1/16-12	3/4	64.52

VTXB

90° FORGED ELBOW



Part #	JIC Thread	Pipe Size	List Price
28-760F	7/16-20	1/8	7.74
28-762F	7/16-20	1/4	7.00
28-766F	1/2-20	1/4	12.65
28-768F	9/16-18	1/8	20.00
28-770F	9/16-18	1/4	7.10
28-772F	9/16-18	3/8	13.66
28-773F	9/16-18	1/2	23.10
28-774F	3/4-16	3/8	19.92
28-777F	3/4-16	1/2	17.02
28-778F	3/4-16	3/4	42.72
28-780F	7/8-14	1/2	28.15
28-781F	1-1/16-12	1/2	57.38
28-783F	1-1/16-12	3/4	31.13
28-784F	1-5/16-12	3/4	50.11
28-786F	1-5/16-12	1	60.96

CTXB

STRAIGHT SWIVEL ADAPTER

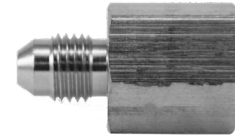


Part #	JIC Thread	Pipe Size	List Price
28-753	9/16-18	1/4	12.77
28-754	9/16-18	3/8	19.44
28-756	3/4-16	1/2	20.33

Thread Chart

Size	JIC Thread
1/8	5/16-24
3/16	3/8-24
1/4	7/16-20
5/16	1/2-20
3/8	9/16-18
1/2	3/4-16
5/8	7/8-14
3/4	1-1/16-12
1	1-5/16-12

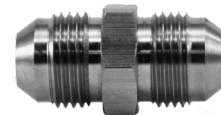
FEMALE STRAIGHT ADAPTER



Part #	JIC Thread	Pipe Size	List Price
28-957	7/16-20	1/8	8.04
28-958	7/16-20	1/4	10.19
28-959	9/16-18	1/4	22.98
28-960	9/16-18	3/8	16.75
28-961	3/4-16	3/8	8.94
28-962	3/4-16	1/2	25.27
28-963	7/8-14	1/2	18.61
28-964	1-1/16-12	3/4	44.20

GTXB

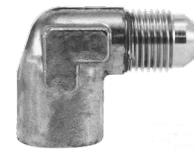
STRAIGHT TUBE UNION



Part #	Tube (JIC Thread)	List Price
28-966	1/4(7/16-20)	8.37
28-969	3/8(9/16-18)	10.59
28-970	1/2(3/4-16)	12.85
28-971	3/4(1-1/16-12)	63.05
28-972	1(1-5/16-12)	38.42

HTXB

FEMALE ELBOW (FORGED BODY)



Part #	JIC Thread	Pipe Size	List Price
28-973	7/16-20	1/8	14.33
28-974	7/16-20	1/4	21.86
28-975	9/16-18	1/4	20.83

DTXB

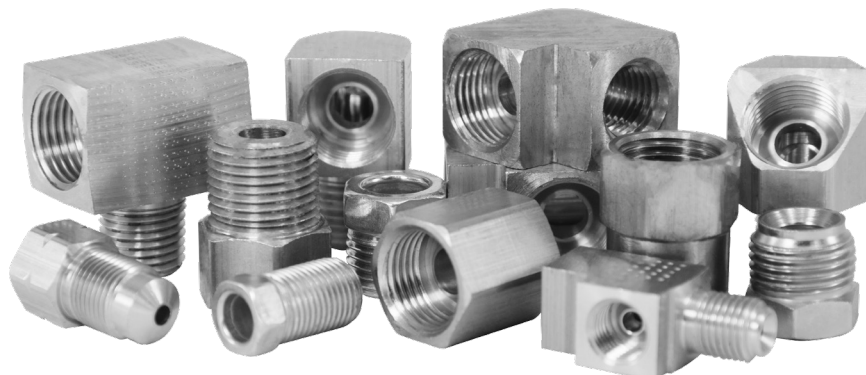
 See page 414 for steel 37° JIC straights

 See page 416 for steel 37° JIC shapes

INVERTED FLARE

BRASS FITTINGS

INVERTED FLARE



Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
Thread O.D. threads per inch	5/16-28	3/8-24	7/16-24	1/2-20	5/8-18	1 1/16-18	3/4-18	7/8-18	1-1/16-16	1-3/16-16	1-5/16-16

•Typical Application

Hydraulic brake, power steering, fuel lines and transmission cooler lines, LP and natural gas.

•Working Pressure Ranges

Temperature and type of tubing used are important factors. However, the following table is a good guide for proper selection. Temperature 73°F with copper tubing:

PSI	Tube O.D. (in.)	Tube Wall (in.)
2800	1/8	.030
1900	3/16	.030
1400	1/4	.030
1200	5/16	.032
1000	3/8	.032
750	1/2	.032
650	5/8	.035
550	3/4	.035

•Vibration

Excellent resistance.

•Temperature Range

-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures.

•Used With

Copper, brass, aluminum and steel hydraulic tubing that can be flared.

•Advantages

Very low cost and reusable. Seats and threads are internal and protected. Compact, excellent vibration life. Short nut affords very close tube bends. Steel or brass tube nut.

•Tolerance

+/- .03 on all dimensions.

•Conformance

Meets specifications and standards of ASA, ASME, SAE and MS (Military Standards).

•Assembly Instructions

- 1-Cut tubing to desired length. Make sure all burrs are removed and the ends are cut square.
- 2- Slide nut on tube. Threaded end "A" of nut must face out.
- 3- Flare end of tube with a 45° flaring tool.
 - a- Measure flare diameter.
 - b- Examine flare for excessive thin out.
 - c- On thin wall, welded or brazed tubing, use double flare to prevent pinch-off and cracked flares.
- 4- Lubricate threads and assemble to fitting body. Nut should be turned hand tight.
- 5- Tighten assembly with wrench until a solid feeling is encountered. From that point, apply a one-sixth turn.

Note: Do not over-torque as it may damage the fitting or split the tubing at the flare.

STANDARD METRIC THREADS

Description Tube Size	Thread O.D.	Crest (Pitch)	Thread Description
Japanese 3/16"	10mm	1.0mm	M10 x 1.0
European 3/16"	10mm	1.0mm	M10 x 1.0
GM 6mm	12mm	1.0mm	M12 x 1.0
Fuel 5/16"	14mm	1.5mm	M14 x 1.5
Fuel 3/8"	16mm	1.5mm	M16 x 1.5

Measuring Metric Threads: Measure the O.D. of the threads and the crest to crest distance (pitch) in millimeters between threads.

Actual O.D. of male inverted flare threads

5/16"-28 2800 PSI	3/8"-24 1900 PSI	7/16"-24 1400 PSI	1/2"-20 1200 PSI	5/8"-18 1000 PSI	3/4"-18 750 PSI	7/8"-18 650 PSI	1-1/16"-16 550 PSI
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1/8"

3/16"

1/4"

5/16"

3/8"

1/2"

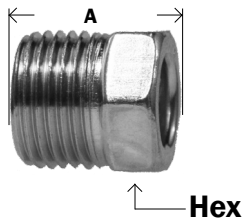
5/8"

3/4"

BRASS FITTINGS

INVERTED FLARE

ZINC CHROMATE STEEL NUT

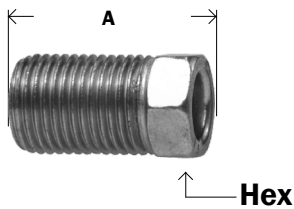


SAE# 040110

Part #	Size	Thread	A	Hex	Approx. Wt. Lbs.	List Price
12-001	1/8"	5/16-28	0.52	0.31	0.01	2.82
12-002	3/16"	3/8-24	0.56	0.37	0.02	0.41
12-018	3/16"	7/16-24				1.98
12-003	1/4"	7/16-24	0.56	0.43	0.02	0.46
12-004	5/16"	1/2-20	0.62	0.50	0.02	0.53
12-005	3/8"	5/8-18	0.66	0.62	0.03	0.89
12-000	7/16"	11/16-18	0.68	0.68	0.04	5.40
12-011	3/8"	11/16-18	0.66	0.68	0.05	6.36
12-006	1/2"	3/4-18	0.74	0.75	0.08	2.94
12-007	5/8"	7/8-18	0.80	0.87	0.10	3.37
12-008	3/4"	1-1/16-16	0.88	1.06	0.10	5.98

121XXX 2105 411FS 105 41W

LONG STEEL NUT



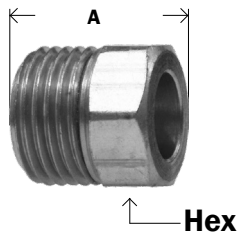
for Domestic lines

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-009	3/16"	0.84	0.37	0.02	1.50
12-010	1/4"	0.81	0.43	0.02	1.71

7896

INVERTED FLARE BRASS NUT

SAE# 040110



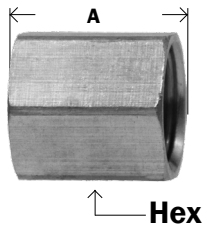
Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-012	1/8"	0.52	0.31	0.01	2.90
12-013	3/16"	0.56	0.37	0.01	1.78
12-014	1/4"	0.56	0.43	0.02	0.62
12-015	5/16"	0.62	0.50	0.03	1.25
12-016	3/8"	0.66	0.62	0.04	1.63
12-017	1/2"	0.74	0.75	0.05	4.41

2100 411F 100 411B

ZINC STEEL METRIC TUBE NUTS



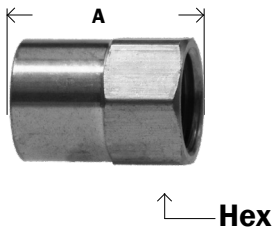
Part #	Tube size	Thread	Ref#	List Price
12-260	3/16 British	3/8-24 Bubble	---	2.04
12-261	3/16 European	M10 x 1.0 Bubble	276110	1.98
12-262	3/16 Japanese	M10 x 1.0 Inv.	121050	1.98
12-263	3/16 Domestic	1/2 x 20 Inv.	---	2.52
12-264	3/16 Domestic	9/16 - 18 Inv.	121039	2.52
12-265	3/16 Imported	M11 x 1.5 Bubble	276011	2.52
12-266	3/16 Imported	M12 x 1.0 Bubble	276012	2.46
12-267	3/16 Imported	M13 x 1.5 Bubble	276013	2.58
12-268	1/4 Domestic	9/16 x 18 Inv.	121049	2.46
12-269	1/4 Domestic	1/2 x 20 Inv.	121045	2.58
12-270	6mm Imported	M12 x 1.0 Bubble		2.58
12-271	6mm GM	M12 x 1.0 Bubble		2.58
12-272	6mm GM	M12 x 1.5 Bubble		2.64
12-273	6mm GM	M14 x 1.5 Bubble		2.64
12-274	5/16 Domestic	M14 x 1.5 Surface Seal	121069	7.80
12-275	3/8 Domestic	M16 x 1.5 Surface Seal	121070	8.16

INVERTED FLARE**BRASS FITTINGS****UNION INTERNAL****SAE# 040101**

Part #	Inv. Flare X Inv. Flare	A	Hex	Approx. Wt. Lbs.	List Price
12-022	1/8"	0.59	0.40	0.02	2.40
12-023	3/16"	0.62	0.47	0.02	0.80
12-024	1/4"	0.62	0.50	0.03	1.70
12-025	5/16"	0.70	0.56	0.04	2.50
12-026	3/8"	0.80	0.75	0.08	3.02
12-027	1/2"	0.91	0.90	0.10	8.18

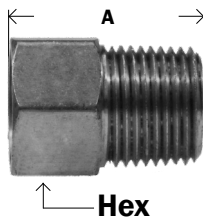
see page 69 for metric unions

302 2300 42IFHD

FEMALE ADAPTER**SAE# 040103**

Part #	Inv. Flare X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
12-032	3/16" x 1/8"	0.75	0.50	0.02	3.00
12-033	1/4" x 1/8"	0.75	0.53	0.02	1.89
12-034	5/16" x 1/8"	0.78	0.59	0.04	5.84
12-035	3/8" x 1/4"	1.03	0.75	0.08	6.30
12-036	1/2" x 3/8"	1.10	0.90	0.12	13.04

46IFHD 252 46W

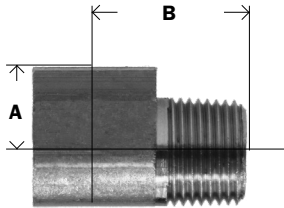
MALE ADAPTER**SAE# 040102**

Part #	Inv. Flare X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
12-041	1/8" x 1/8"	0.63	0.40	0.02	2.69
12-042	3/16" x 1/8"	0.70	0.43	0.02	1.03
12-043	1/4" x 1/8"	0.74	0.50	0.03	1.00
12-044	1/4" x 1/4"	0.89	0.56	0.04	1.50
12-045	5/16" x 1/8"	0.79	0.56	0.03	2.00
12-046	5/16" x 1/4"	0.98	0.56	0.05	2.05
12-047	3/8" x 1/8"	0.88	0.72	0.05	2.75
12-048	3/8" x 1/4"	1.02	0.75	0.06	2.27
12-049	3/8" x 3/8"	1.02	0.75	0.08	4.58
12-038	1/2" x 1/4"	0.97	0.87	0.10	5.20
12-050	1/2" x 3/8"	1.06	0.87	0.08	6.24
12-051	1/2" x 1/2"	1.06	0.87	0.11	6.02
12-052	5/8" x 1/2"	1.32	1.06	0.15	5.25
12-040	3/4" x 3/4"	1.39	1.25	0.24	27.06

2200 48IFHD 202 48W 200

ELBOW

SAE# 040202



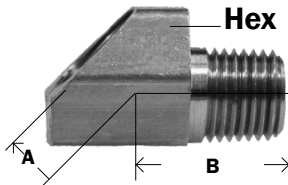
Part #	Inv. Flare X Male NPTF	A	B	Approx. Wt. Lbs.	List Price
12-057	1/8" x 1/8"	0.26	0.59	0.03	8.83
12-058	3/16" x 1/8"	0.26	0.61	0.03	2.81
12-059	1/4" x 1/8"	0.33	0.65	0.04	1.60
12-054*	1/4" x 1/8"	0.33	0.65	0.04	28.67
12-060	1/4" x 1/4"	0.28	0.82	0.06	3.20
12-061	5/16" x 1/8"	0.47	0.68	0.05	2.20
12-062	5/16" x 1/4"	0.45	0.85	0.08	3.20
12-063	3/8" x 1/8"	0.54	0.76	0.14	5.26
12-064	3/8" x 1/4"	0.53	0.92	0.14	4.73
12-065	3/8" x 3/8"	0.50	0.94	0.12	10.12
12-066	1/2" x 3/8"	0.59	1.03	0.16	6.60
12-067	1/2" x 1/2"	0.66	1.22	0.25	8.60
12-056	5/8" x 3/8"	0.67	1.09	0.20	16.93
12-068	5/8" x 1/2"	0.67	1.29	0.18	9.43
12-069	3/4" x 1/2"	0.80	1.39	0.42	54.98
12-080	7/8" x 3/4"	0.94	1.43	0.48	86.82
12-081	1" x 1"	1.02	1.69	0.60	101.88

* Restricted pipe end .062

400 2400 249IFHD 402 249IF 49W

45° ELBOW

SAE# 040302

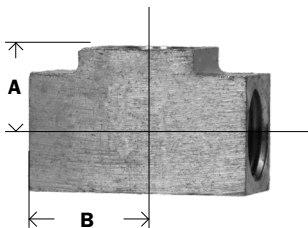


Part #	Inv. Flare X Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
12-072	3/16" x 1/8"	0.25	0.55	0.53	0.02	8.16
12-073	1/4" x 1/8"	0.27	0.58	0.56	0.04	3.91
12-074	5/16" x 1/8"	0.36	0.56	0.62	0.06	6.03
12-075	5/16" x 1/4"	0.23	0.83	0.62	0.06	17.34
12-076	3/8" x 1/4"	0.51	0.84	0.78	0.09	12.67
12-077	1/2" x 3/8"	0.38	0.91	0.84	0.11	13.14
12-079	5/8" x 1/2"	0.44	1.00	1.06	0.21	56.26

154 2352 259IFHD 352 94W

UNION TEE

SAE# 040401

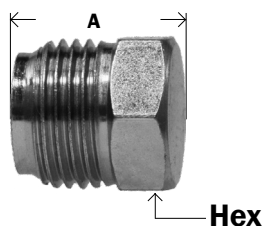


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
12-085	1/8"	0.33	0.47	0.04	13.13
12-086	3/16"	0.39	0.55	0.04	4.12
12-087	1/4"	0.42	0.56	0.08	6.63
12-088	5/16"	0.45	0.63	0.09	7.77
12-089	3/8"	0.56	0.74	0.17	12.69
12-090	1/2"	0.67	0.88	0.24	30.74

244IFHD 702 44I

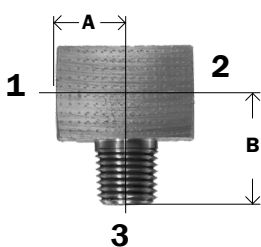
INVERTED FLARE**BRASS FITTINGS****STEEL PLUG**

• cored

SAE# 040109

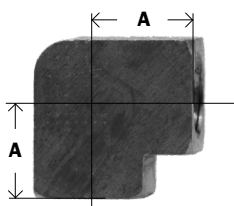
Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-091	3/16"	0.53	0.37	0.01	0.83
12-092	1/4"	0.54	0.43	0.02	1.04
12-093	5/16"	0.59	0.50	0.03	1.15
12-094	3/8"	0.66	0.62	0.04	2.69

106 41IP 131 2131

MALE BRANCH TEE**SAE# 040425**

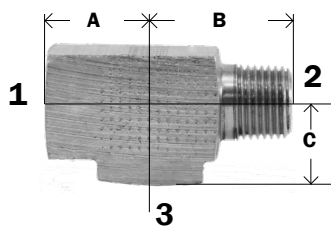
Part #	Inv. Flare x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
12-100	3/16" x 1/8"	0.41	0.60	0.04	4.69
12-101	1/4" x 1/8"	0.42	0.64	0.06	6.56
12-102	5/16" x 1/8"	0.47	0.68	0.07	10.86
12-103	3/8" x 1/4"	0.58	0.93	0.15	34.17

145 245IFHD 602 2600 600

FEMALE ELBOW**SAE# 040203**

Part #	Inv. Flare x Female NPTF	A	Approx. Wt. Lbs.	List Price
12-110	1/4" x 1/8"	0.55	0.07	11.11
12-111	5/16" x 1/8"	0.51	0.08	22.53
12-112	3/8" x 1/4"	0.68	0.10	12.12

450

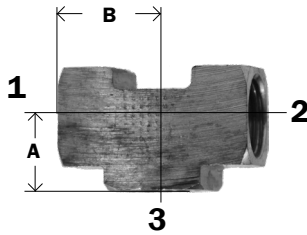
MALE RUN TEE**SAE# 040424**

Part #	Inv. Flare x Male NPTF (1&3)x2	A	B	C	Approx. Wt. Lbs.	List Price
12-118	3/16" x 1/8"	0.53	0.72	0.39	0.06	36.97
12-119	1/4" x 1/8"	0.56	0.75	0.42	0.08	37.71
12-120	5/16" x 1/8"	0.62	0.85	0.45	0.10	11.90
12-121	3/8" x 1/4"	0.75	1.08	0.56	0.14	33.71

251IFHD 752 550 151

FEMALE BRANCH TEE

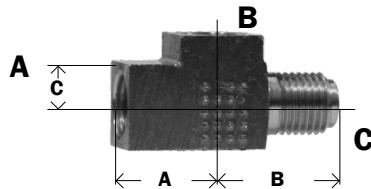
SAE# 040427



Part #	Inv. Flare x Female NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
12-127	3/16" x 1/8"	0.39	0.55	0.06	15.55
12-129	5/16" x 1/8"	0.45	0.63	0.12	32.34
12-130	3/8" x 1/4"	0.56	0.74	0.17	25.25

252IFHD 652 136

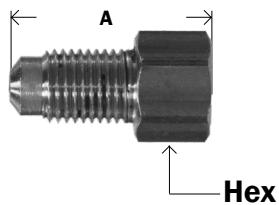
TOWED TRAILER BRAKE TEE



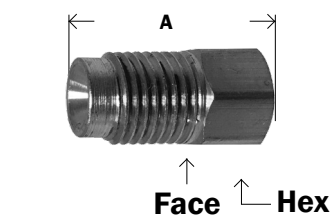
Part #	A	B	C	Reference #	Approx. Wt. Lbs.	List Price
12-147	3/16" 0.57	3/16" 0.76	3/16" 0.42	7900	0.08	7.00
12-145	3/16" (1/2-20) 0.68	3/16" (3/8-24) 0.94	3/16" (1/2-20) 0.47	7906	0.17	36.78
12-148	3/16" (9/16-18)	3/16" (3/8-24)	3/16" (9/16-18)	7933	0.10	14.10
12-144	3/16" (9/16-20) 0.82	3/16" (3/8-24) 0.94	3/16" (9/16-20) 0.47	7905	0.18	53.52
12-146	3/16" (7/16-24) 0.54	3/16" (3/8-24) 0.78	1/4" (7/16-24) 0.42	7914	0.08	31.38
12-150	1/4" 0.56	3/16" 0.77	1/4" 0.43	7901	0.10	29.82
12-149	1/4" (9/16-18) 0.81	3/16" (3/8-24) 0.93	1/4" (9/16-18) 0.50	7904	0.10	47.36
12-151	1/4" 0.56	1/4" 0.77	1/4" 0.43	7898	0.12	17.28

INVERTED FLARE AUTO FITTINGS

DUAL MASTER CYLINDER ADAPTER



Part #	Male Flare x Female Inv.	A	Hex	Reference #	Approx. Wt. Lbs.	List Price
12-200	3/16" x 3/16"	1.00	0.50	1441	0.03	3.89
12-202	5/16" x 3/16"	0.96	0.68	7897	0.07	9.30

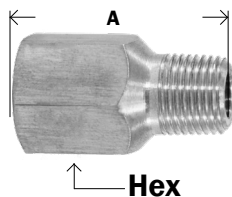
INVERTED FLARE**BRASS FITTINGS****DUAL MASTER CYLINDER ADAPTER**

* Seals on hex face



Part #	Male Inverted Thread	Female Inverted Thread	Ref#	List Price
12-206	3/16(9/16-18)	3/16	7911	7.25
12-209	3/16(9/16-18)	3/16(1/2-20)	7913	6.71
12-207	3/16(9/16-20)	3/16	7910	6.02
12-210	3/16	1/4	7828	2.96
12-212	1/4	3/16	7818	2.69
12-214*	7/16-20	1/4	7732	8.09
12-211	1/4(9/16-18)	1/4	7908	6.91
12-217	1/4	5/16	7917	11.76
12-213*	5/16	3/16	7817	19.32
12-216	5/16	3/16	7909	5.03
12-208	5/16	3/16(9/16-18)	7912	6.63
12-218*	5/16	1/4	7727	7.55
12-220	5/16	1/4	7829	5.45
12-222*	5/16	5/16	1074	2.18
12-221	5/16	3/8	7915	7.63
12-224	3/8" NPTF	5/16	7771	17.33
12-217	3/8	5/16	7916	11.76

47W

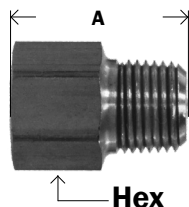
CARBURETOR TO FUEL LINE ADAPTER - FORD

Part #	Female Tube OD x Male NPTF	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-230	1/4"(1/2-20) x 1/8"	1.06	0.56	1513	0.04	18.50

1513

RESTRICTION PIPE ADAPTER

(.0625 ORIFICE)



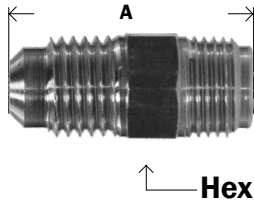
Part #	Size FIP x MIP	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-310	1/8"	0.75	0.50	1512	0.02	7.63

1510

BRASS FITTINGS

INVERTED FLARE

SAE FLARE X INVERTED FLARE

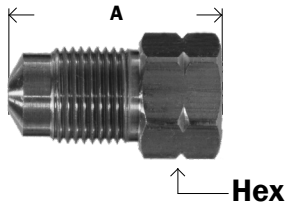


Part #	SAE Flare x Inv. Flare	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-250	1/4" x 3/16"	1.03	0.43	1518	0.02	13.20
12-252	1/4" x 1/4"	1.03	0.43	1522	0.03	2.69
12-254	3/8" x 5/16"	1.34	0.63	1553	0.08	24.33
12-256	3/8" x 3/8"	1.37	0.63	1563	0.09	11.55
12-257	3/8" x 7/16"	1.40	0.68	1554	0.10	21.53

4205

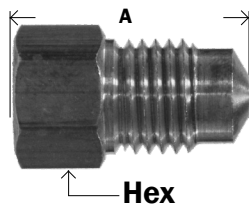
METRIC HYDRAULIC BRAKE FITTINGS

METRIC ADAPTER



Part #	Bubble Male Thread	Tube O.D./ Female Thread	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-335	M10x1.0	3/16"(3/8-24)	1.02	0.50	1442	0.02	3.90
12-326	M11x1.5	3/16"(M10x1.0)	1.06	0.50	7935	0.02	17.96
12-327	M12x1.0	3/16"(M10x1.0)	1.02	0.53	7936	0.04	17.33
12-328	M16x1.5	3/16"(M10x1.0)	1.02	0.56	7937	0.06	18.39

ADAPTER STANDARD TO METRIC BUBBLE



Part #	Female Inv. Flare Seat	Male Metric Bubble Flare	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-336	3/16" (3/8-24)	11x1.5			7973		11.22
12-337	3/16" (3/8-24)	(3/16") (10x1.25)	1.00	0.50	7970	0.02	20.16
12-339	3/16" (3/8-24)	13x1.5	1.03	0.56	7972	0.04	22.07
12-341	3/16" (3/8-24)	12x1.0	1.02	0.53	7974	0.04	18.13

FEMALE X MALE ADAPTERS



Part #	Female Standard Flare Seat	Male Bubble Flare	Material	List Price
12-330	3/8-24 (3/16)	7/16-20	Steel	6.18

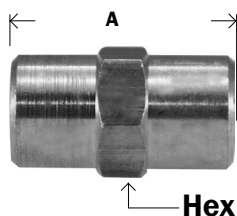


Part #	Tube OD/ Female Thread	Inverted Male Thread	Ref #	List Price
12-205	3/16 (3/8-24)	M10 x 1.0	1443	4.68



Part #	Female Standard Flare	Inverted Male Thread	Material	List Price
12-329	3/8-24 (3/16)	M9 x 1.0	Steel	9.18

METRIC UNION



Part #	Size	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-342	British Brake Lines 3/16 (3/8-24 Bubble)	0.87	0.50	1594	0.03	7.32
12-343	European Brake Lines 3/16"(10.0MM)	1.04	0.56	7975	0.04	17.04
12-344	Japanese Brake Lines 3/16 (M10 x 1.0) Inverted	1.00	0.50	7934A	0.04	7.32
12-345	GM Brake Lines 6mm M12 x 1.0 Bubble	1.11	0.63		0.06	7.20

HEAVY DUTY TRUCK & TRAILER

ENTIRELY NEW TRUCK AND TRAILER SECTION PGS.380-401



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POL & ACME FITTINGS

p.459-467

REGULATORS

p.468-477



TANK EQUIPMENT

p.478-490

BULK STORAGE & TRUCK EQUIPMENT

p.492-499



COMPRESSION FITTINGS



These are NOT Lead Free

See pages 161-169 for Lead Free products



• Steel and SS Compression Fittings on pages 441-443

Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8
Thread Size-B	5/16-24	3/8-24	7/16-24	1/2-24	9/16-24	5/8-24	11/16-20	13/16-18	1-18	1-1/8-18
Working Pressure	400	400	300	300	200	200	200	150	100	75

• Typical Application

Use with copper, aluminum and thermoplastic tubing. Not recommended for steel tubing. Manufactured for low and medium pressure tubing connection work where excessive vibration or tube movement is not involved. Not recommended for application using gaseous media.

• Pressure

See table above for working pressures at 73°F.

• Vibration

Fair resistance - use long nut when greater vibration resistance is needed.

• Temperature Range

-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures. (Refer to tubing temperature range.)

• Used With

Aluminum, copper, brass and plastic tubing. Plastic tubing requires insert. Not recommended for steel tubing.

• Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

• Conformance

Meets specifications and standards of ASA, ASME and SAE.

• Assembly Instructions

- 1- Cut tubing to desired length.
- 2- Slide nut and then sleeve on tube. Threaded end "A" of nut must face toward fitting.
- 3- Insert tubing into fitting body. Be sure tubing is bottomed on fitting shoulder.
- 4- Lubricate threads and assemble nut to fitting body.
- 5- Tighten nut hand tight. From that point, tighten with a wrench the number of turns indicated in the chart below.

Tube Size	Additional Turns from Hand Tight
1/8" thru 1/4"	1-1/4"
5/16"	1-3/4"
3/8" thru 1"	2-1/4"

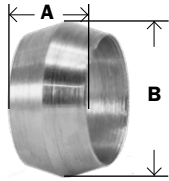
• "L" at the end of a Part# means **Light Pattern** - These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

Actual Profile of Compression Threads

5/16"-24	3/8"-24	7/16"-24	1/2"-24	9/16"-24	11/16"-20	13/16"-18	1"-18	1-1/8"-18 75 PSI
1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"

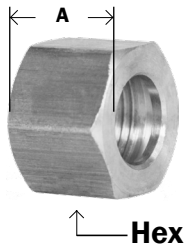
COMPRESSION**BRASS FITTINGS****BRASS SLEEVE**

• FERRULES

SAE# 060115

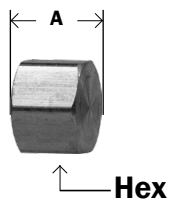
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-001	1/8"	0.19	0.19	0.01	0.29
18-002	3/16"	0.22	0.27	0.01	0.20
18-003	1/4"	0.25	0.34	0.01	0.24
18-004	5/16"	0.25	0.41	0.01	0.19
18-005	3/8"	0.25	0.47	0.02	0.23
18-006	7/16"	0.31	0.53	0.02	0.56
18-007	1/2"	0.38	0.59	0.02	0.57
18-008	5/8"	0.38	0.71	0.03	0.61
18-009	3/4"	0.44	0.87	0.03	1.60
18-010	7/8"	0.41	0.99	0.03	1.02

60 260

BRASS NUT**SAE# 060110**

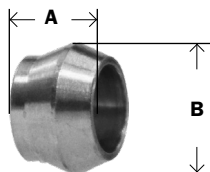
Part #	Size	Thread	A	Hex	Approx. Wt. Lbs.	List Price
18-033	1/8"	5/16-24	0.38	0.37	0.01	0.88
18-034	3/16"	3/8-24	0.41	0.43	0.01	0.52
18-035L	1/4"	7/16-24	0.44	0.50	0.02	0.57
18-035	1/4"	7/16-24	0.44	0.50	0.02	0.77
18-036	5/16"	1/2-24	0.44	0.56	0.02	0.83
18-037L	3/8"	9/16-24	0.47	0.62	0.04	0.86
18-037	3/8"	9/16-24	0.47	0.62	0.04	1.33
18-038	7/16"	5/8-24	0.50	0.68	0.04	3.87
18-039L	1/2"	11/16-20	0.56	0.75	0.04	1.75
18-039	1/2"	11/16-20	0.62	0.81	0.04	2.68
18-040L	5/8"	13/16-18	0.56	0.87	0.06	1.80
18-040	5/8"	13/16-18	0.62	0.94	0.06	3.10
18-041	3/4"	1-18	0.68	1.12	0.08	3.86
18-042	7/8"	1-1/8 - 18	0.62	1.25	0.10	4.75

61 261

CAP

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-047	1/4"	0.44	0.50	0.02	1.39
18-048	3/8"	0.40	0.62	0.04	1.58
18-049	1/2"	0.48	0.75	0.06	3.64
18-050	5/8"	0.56	0.94	0.10	6.17

61-CC N5CT

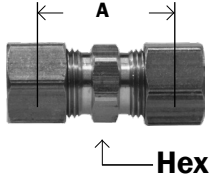
COMPRESSION PLUG

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-029	3/8"	0.31	0.47	0.04	2.04
18-030	1/2"	0.34	0.59	0.06	2.83

CSP

UNION

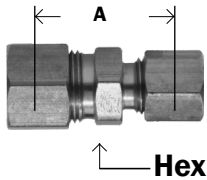
SAE# 060101BA



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-062	1/8"	0.64	0.31	0.03	4.59
18-063	3/16"	0.75	0.37	0.04	2.28
18-064L	1/4"	0.79	0.43	0.06	2.43
18-064	1/4"	0.81	0.43	0.06	2.76
18-065	5/16"	0.88	0.50	0.06	3.54
18-066L	3/8"	0.96	0.56	0.09	3.55
18-066	3/8"	0.98	0.56	0.10	3.47
18-067	7/16"	1.02	0.62	0.12	19.44
18-068L	1/2"	1.06	0.68	0.16	7.30
18-068	1/2"	1.25	0.68	0.16	8.73
18-069L	5/8"	1.43	0.81	0.24	8.16
18-069	5/8"	1.25	0.81	0.26	11.55
18-070	3/4"	1.41	1.00	0.35	20.69
18-071L	7/8"	1.03	1.12	0.34	17.33
18-071	7/8"	1.00	1.12	0.36	17.12

M-62

REDUCING UNION

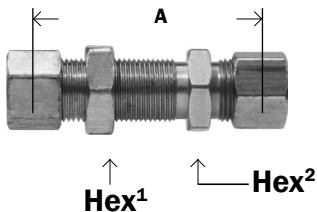


Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-076	1/4" x 1/8"	0.73	0.44	0.04	4.20
18-077	1/4" x 3/16"	0.78	0.44	0.06	7.99
18-078	5/16" x 1/4"	0.81	0.50	0.06	4.75
18-079	3/8" x 1/4"	0.90	0.56	0.10	7.20
18-080	3/8" x 5/16"	0.94	0.56	0.10	7.13
18-081	1/2" x 3/8"	1.03	0.68	0.12	8.12
18-082	5/8" x 3/8"	1.03	0.81	0.15	8.00
18-083	5/8" x 1/2"	1.10	0.81	0.15	9.20
18-084	7/8" x 5/8"	1.23	1.18	0.20	29.44

62-R

BULKHEAD UNIONS

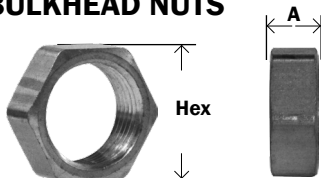
SAE# 060101



Part #	Size	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
18-088	1/4"	1.58	0.56	0.56	0.10	8.21
18-090	3/8"	1.76	0.68	0.68	0.14	22.16

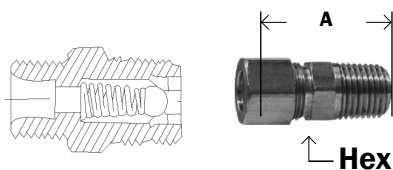
62BH 75 274

BULKHEAD NUTS



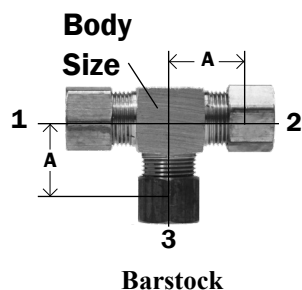
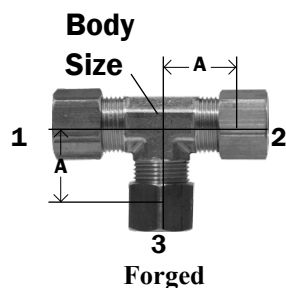
Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-097	1/4"	0.25	0.56	0.02	5.41
18-099	3/8"	0.25	0.68	0.04	6.03
18-100	1/2"	0.38	0.94	0.06	26.91

20102

COMPRESSION**BRASS FITTINGS****BALL CHECK VALVE - Min. Working pressure 3 psi.**

Part #	Tube OD x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-092	1/8" x 1/8"	0.78	0.44	0.04	11.63
18-094	1/4" x 1/8"	0.88	0.44	0.04	12.20
18-096	3/8" x 1/4"	1.16	0.56	0.08	16.11

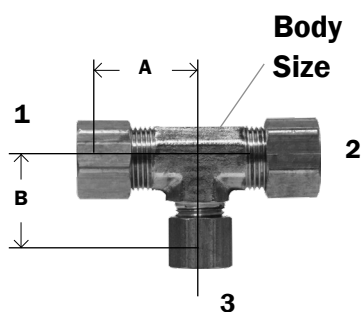
63 263 63A

TEE**SAE# 060401**

Part #	Size	A	Body Size	Approx. Wt. Lbs.	List Price
18-101	1/8"	0.61	0.37	0.04	12.96
18-101B*	1/8"	0.62	0.33	0.04	11.29
18-102	3/16"	0.59	0.36	0.08	5.80
18-102B*	3/16"	0.60	0.38	0.08	8.20
18-103	1/4"	0.63	0.36	0.10	5.35
18-103B*	1/4"	0.62	0.49	0.10	10.20
18-104	5/16"	0.72	0.50	0.13	8.49
18-104B*	5/16"	0.60	0.50	0.14	13.33
18-105	3/8"	0.75	0.50	0.16	6.67
18-105B*	3/8"	0.73	0.59	0.16	12.84
18-106	1/2"	0.94	0.59	0.22	13.61
18-106B*	1/2"	0.94	0.69	0.24	29.29
18-107	5/8"	1.06	0.69	0.28	14.51
18-108	3/4"	1.22	0.88	0.32	47.28
18-109	7/8"	1.25	0.94	0.34	37.98

* Barstock

64 264C

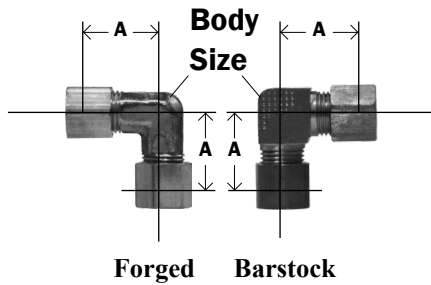
FORGED REDUCING TEE

Part #	Size 1 x 2 x 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-114	1/4" x 1/4" x 1/8"	0.62	0.59	0.38	0.09	7.28
18-110	1/4" x 1/4" x 3/8"	0.69	0.75	0.50	0.14	16.10
18-111	3/8" x 1/4" x 1/4"	0.75	0.69	0.50	0.12	9.90
18-115	3/8" x 3/8" x 1/4"	0.75	0.69	0.50	0.14	7.27
18-116	1/2" x 1/2" x 1/4"	0.94	0.81	0.59	0.16	13.74
18-117	1/2" x 1/2" x 3/8"	0.94	0.81	0.59	0.24	14.79
18-118	5/8" x 5/8" x 3/8"	1.06	0.94	0.69	0.28	17.69
18-119	5/8" x 5/8" x 1/2"	1.06	1.06	0.69	0.30	19.58

64-R

UNION ELBOW

SAE# 060201



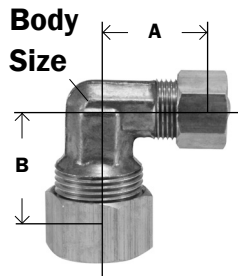
Forged
Barstock

Part #	Size	A	Body Size	Approx. Wt. Lbs.	List Price
18-122B*	1/8"	0.62	0.35	0.04	7.89
18-123	3/16"	0.61	0.37	0.06	7.05
18-123B*	3/16"	0.62	0.41	0.06	7.14
18-124	1/4"	0.66	0.38	0.08	4.55
18-124B*	1/4"	0.60	0.48	0.08	7.89
18-125	5/16"	0.69	0.47	0.09	7.50
18-125B*	5/16"	0.62	0.52	0.09	10.08
18-126	3/8"	0.72	0.43	0.12	6.00
18-127	1/2"	0.94	0.59	0.19	9.67
18-127B*	1/2"	0.94	0.71	0.19	19.50
18-128	5/8"	1.06	0.72	0.26	10.15
18-129	3/4"	1.19	0.94	0.48	25.67
18-130	7/8"	1.25	0.94	0.44	28.44

* Barstock

65 BSE2 165C 265C

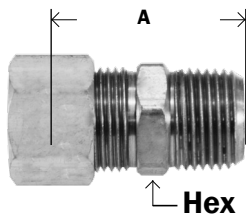
REDUCING ELBOW - Forged



Part #	Size	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-135	3/8" x 1/4"	0.69	0.75	0.47	0.12	10.02
18-136	1/2" x 3/8"	0.88	0.94	0.59	0.15	11.02
18-137	5/8" x 3/8"	0.88	0.97	0.56	0.18	15.26
31-137	3/8" OD x 5/8" OD	Chrome Plated				9.06

65-R

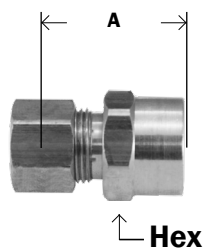
TANK ADAPTER DRILLED THRU (NO STOP)



Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-208	1/4" x 1/8"	0.88	0.43	0.04	3.17
18-209	1/4" x 1/4"	0.99	0.56	0.05	2.38
18-210	3/8" x 1/4"	1.16	0.56	0.05	4.44
18-211	3/8" x 3/8"	1.09	0.68	0.08	3.68
18-212	3/8" x 1/2"	1.19	0.87	0.10	5.90
18-213	1/2" x 3/8"	1.22	0.68	0.12	7.96
18-214	1/2" x 1/2"	1.09	0.81	0.14	6.44
18-215	5/8" x 1/2"	1.12	0.81	0.18	7.59

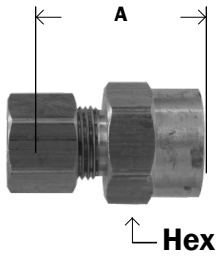
68-T 682C 80F

COMP X SWEAT ADAPTER



Part #	Comp. X Sweat Adapter	A	Hex	Approx. Wt. Lbs.	List Price
18-171	3/8" x 1/2" nom.swt.	0.98	0.75	0.08	6.24
31-171	3/8" OD x 1/2" SWT	Chrome Plated			5.79

66-S

COMPRESSION**BRASS FITTINGS****FEMALE ADAPTER****SAE# 060103**

Part #	Comp. X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-142	1/8" x 1/8"	0.75	0.56	0.02	3.25
18-143	3/16" x 1/8"	0.78	0.56	0.04	4.22
18-144	3/16" x 1/4"	0.96	0.68	0.04	9.88
18-145L	1/4" x 1/8"	0.84	0.50	0.05	1.86
18-145	1/4" x 1/8"	0.78	0.56	0.05	2.67
18-146L	1/4" x 1/4"	0.88	0.62	0.09	3.69
18-146	1/4" x 1/4"	1.03	0.68	0.09	6.07
18-148	1/4" x 1/2"	1.02	0.87	0.12	9.06
18-149	5/16" x 1/8"	0.81	0.56	0.05	3.74
18-150	5/16" x 1/4"	0.91	0.62	0.06	5.53
18-152	3/8" x 1/8"	0.88	0.56	0.06	3.69
18-153L	3/8" x 1/4"	0.97	0.62	0.08	4.70
18-153	3/8" x 1/4"	1.06	0.68	0.08	4.98
18-154L	3/8" x 3/8"	1.03	0.75	0.08	3.14
18-154	3/8" x 3/8"	1.06	0.81	0.10	7.08
18-155	3/8" x 1/2"	1.12	1.00	0.08	5.30
18-156	3/8" x 3/4"	1.19	1.16	0.14	16.01
18-157	1/2" x 1/4"	1.09	0.68	0.10	9.82
18-158L	1/2" x 3/8"	0.94	0.81	0.12	8.01
18-158	1/2" x 3/8"	1.12	0.81	0.12	8.01
18-159L	1/2" x 1/2"	1.19	1.00	0.12	6.36
18-159	1/2" x 1/2"	1.31	1.00	0.12	13.09
18-160	1/2" x 3/4"	1.25	1.16	0.18	15.31
18-162L	5/8" x 1/2"	1.20	0.94	0.18	6.99
18-162	5/8" x 1/2"	1.38	1.00	0.18	11.43
18-163	5/8" x 3/4"	1.20	1.12	0.22	10.03
18-164	3/4" x 1/2"	1.25	1.06	0.26	18.10
18-165	3/4" x 3/4"	1.28	1.19	0.28	26.19
18-167	7/8" x 1/2"	1.28	1.19	0.32	17.43
18-166	7/8" x 3/4"	1.31	1.12	0.34	20.94

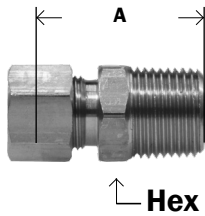
66

DRILLED THRU UNION - NO STOP

Part #	Size	List Price
18-066D	3/8"	5.42
18-069D	5/8"	12.68
18-071D	7/8"	29.06

MALE ADAPTER

SAE# 060102



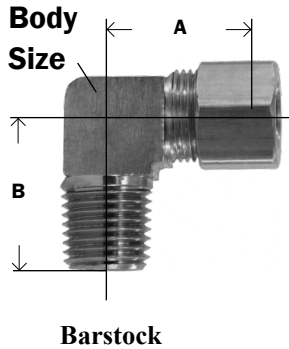
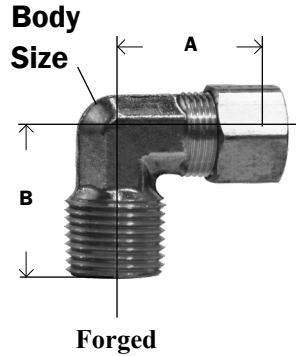
Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-175	1/8" x 1/16"	0.78	0.37	0.02	8.05
18-176	1/8" x 1/8"	0.78	0.43	0.04	2.13
18-177	3/16" x 1/8"	0.84	0.43	0.04	1.85
18-178	3/16" x 1/4"	0.94	0.56	0.06	4.74
18-179L	1/4" x 1/8"	0.88	0.56	0.04	1.96
18-179	1/4" x 1/8"	0.88	0.43	0.04	1.91
18-180L	1/4" x 1/4"	0.94	0.56	0.05	1.68
18-180	1/4" x 1/4"	1.06	0.56	0.06	3.11
18-181	1/4" x 3/8"	1.03	0.68	0.08	3.06
18-182	1/4" x 1/2"	1.09	0.81	0.10	4.23
18-183	5/16" x 1/8"	0.91	0.50	0.05	2.60
18-184L	5/16" x 1/4"	1.01	0.56	0.06	3.36
18-184	5/16" x 1/4"	1.09	0.56	0.06	3.11
18-185	5/16" x 3/8"	1.06	0.68	0.07	5.65
18-186	5/16" x 1/2"	1.14	0.87	0.10	8.82
18-187L	3/8" x 1/8"	0.94	0.56	0.06	2.91
18-187	3/8" x 1/8"	0.97	0.56	0.06	4.01
18-188L	3/8" x 1/4"	1.03	0.56	0.06	3.16
18-188	3/8" x 1/4"	1.16	0.56	0.07	3.38
18-189L	3/8" x 3/8"	1.09	0.68	0.08	3.26
18-189	3/8" x 3/8"	1.14	0.69	0.08	4.35
18-190L	3/8" x 1/2"	1.19	0.88	0.12	5.00
18-190	3/8" x 1/2"	1.34	0.87	0.13	5.55
18-191	3/8" x 3/4"	1.29	1.06	0.16	10.96
18-192	7/16" x 1/4"	1.06	0.62	0.10	10.30
18-204	7/16" x 3/8"	1.10	0.68	0.12	8.42
18-193L	1/2" x 1/4"	1.09	0.69	0.11	6.00
18-193	1/2" x 1/4"	1.22	0.68	0.11	6.00
18-194L	1/2" x 3/8"	1.16	0.68	0.12	4.41
18-194	1/2" x 3/8"	1.16	0.69	0.12	4.75
18-195L	1/2" x 1/2"	1.09	0.81	0.12	5.41
18-195	1/2" x 1/2"	1.41	0.87	0.19	7.67
18-196	1/2" x 3/4"	1.38	1.06	0.22	7.67
18-197	5/8" x 3/8"	1.22	0.87	0.24	6.03
18-198	5/8" x 1/2"	1.12	0.81	0.24	6.90
18-199	5/8" x 3/4"	1.31	1.06	0.26	7.11
18-200	3/4" x 1/2"	1.44	1.00	0.26	11.36
18-201	3/4" x 3/4"	1.50	1.06	0.26	11.39
18-202	7/8" x 1/2"	1.18	1.12	0.26	17.87
18-203	7/8" x 3/4"	1.22	1.12	0.28	10.11
18-205	7/8" x 1"	1.67	1.37	0.32	53.28

COMPRESSION

BRASS FITTINGS

MALE ELBOW

SAE# 060202

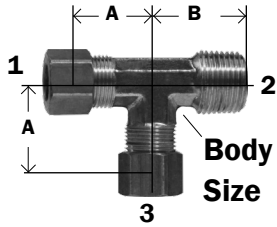


Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-220	1/8" x 1/8"	0.59	0.75	0.34	0.02	3.40
18-220B*	1/8" x 1/8"	0.60	0.67	0.43	0.04	3.42
18-221	3/16" x 1/8"	0.63	0.72	0.34	0.04	4.20
18-221B*	3/16" x 1/8"	0.62	0.69	0.43	0.06	3.24
18-223	3/16" x 1/4"	0.60	0.81	0.39	0.05	4.92
18-224	1/4" x 1/8"	0.60	0.75	0.37	0.06	3.50
18-224B*	1/4" x 1/8"	0.62	0.75	0.43	0.06	2.86
18-225	1/4" x 1/4"	0.65	0.94	0.36	0.08	3.33
18-225B*	1/4" x 1/4"	0.61	0.81	0.56	0.08	3.42
18-226	1/4" x 3/8"	0.75	0.91	0.47	0.08	4.57
18-227	1/4" x 1/2"	0.81	1.13	0.56	0.12	7.39
18-228	5/16" x 1/8"	0.66	0.75	0.47	0.06	4.85
18-228B*	5/16" x 1/8"	0.62	0.75	0.42	0.06	4.00
18-229	5/16" x 1/4"	0.66	0.81	0.47	0.07	4.81
18-229B*	5/16" x 1/4"	0.69	0.84	0.57	0.08	6.31
18-230	5/16" x 3/8"	0.75	0.91	0.47	0.10	5.66
18-231	5/16" x 1/2"	0.84	1.12	0.56	0.12	9.08
18-232	3/8" x 1/8"	0.72	0.66	0.39	0.06	3.88
18-232B*	3/8" x 1/8"	0.69	0.69	0.57	0.06	6.65
18-233	3/8" x 1/4"	0.75	0.82	0.46	0.08	5.11
18-233B*	3/8" x 1/4"	0.75	0.94	0.57	0.08	5.13
18-234	3/8" x 3/8"	0.81	0.94	0.46	0.10	5.36
18-234B*	3/8" x 3/8"	0.71	0.83	0.69	0.10	9.04
18-235	3/8" x 1/2"	0.87	1.12	0.56	0.14	11.01
18-235B*	3/8" x 1/2"	0.88	1.16	0.94	0.14	17.83
18-248	3/8" x 3/4"	1.03	1.19	0.81	0.18	11.48
18-247	7/16" x 1/4"	0.84	1.00	0.56	0.14	9.75
18-236	1/2" x 1/4"	0.88	0.97	0.56	0.14	7.87
18-237	1/2" x 3/8"	0.88	1.03	0.56	0.19	7.00
18-237B*	1/2" x 3/8"	0.94	1.12	0.70	0.19	10.09
18-238	1/2" x 1/2"	0.94	1.13	0.59	0.17	7.90
18-238B*	1/2" x 1/2"	0.94	1.31	0.86	0.17	16.01
18-239	1/2" x 3/4"	1.16	1.25	0.81	0.18	13.95
18-240	5/8" x 3/8"	1.06	1.12	0.68	0.18	8.58
18-241	5/8" x 1/2"	1.06	1.16	0.68	0.20	9.29
18-241B*	5/8" x 1/2"	1.06	1.31	0.86	0.20	16.06
18-242	5/8" x 3/4"	1.16	1.31	0.81	0.24	14.76
18-243	3/4" x 1/2"	1.19	1.31	0.94	0.26	15.91
18-245	3/4" x 3/4"	1.19	1.38	0.94	0.30	18.00
18-246	7/8" x 3/4"	1.25	1.38	0.94	0.35	27.58

* Barstock

69 269C BSE1 169C

FORGED MALE RUN TEE

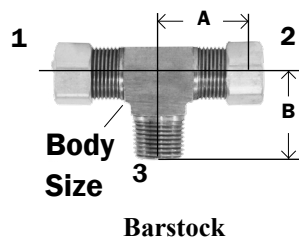
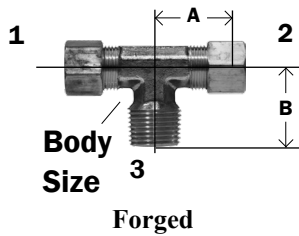


Part #	Comp. X Male NPTF (1&3) X 2	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-272	1/8" x 1/8"	0.63	0.69	0.36	0.06	6.30
18-273	3/16" x 1/8"	0.63	0.69	0.36	0.07	6.30
18-274	1/4" x 1/8"	0.63	0.75	0.36	0.08	5.43
18-275	1/4" x 1/4"	0.69	0.88	0.44	0.10	6.43
18-276	5/16" x 1/8"	0.72	0.75	0.50	0.10	8.46
18-277	5/16" x 1/4"	0.75	0.88	0.44	0.10	8.22
18-278	3/8" x 1/8"	0.75	0.75	0.50	0.14	9.10
18-279	3/8" x 1/4"	0.79	0.87	0.44	0.18	7.04
18-280	3/8" x 3/8"	0.88	1.00	0.47	0.20	10.85
18-281	1/2" x 3/8"	0.94	1.09	0.59	0.24	13.21
18-282	1/2" x 1/2"	0.97	1.19	0.69	0.26	17.24
18-283	5/8" x 1/2"	1.06	1.31	0.69	0.28	16.09
18-284	3/4" x 1/2"	1.22	1.34	0.88	0.30	38.16

71 171C BST3

MALE BRANCH TEE

SAE# 060203



Part #	Comp. X Male NPTF (1&2) X 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-290	3/16" x 1/8"	0.63	0.69	0.36	0.08	8.21
18-291	1/4" x 1/8"	0.62	0.75	0.36	0.10	5.88
18-291B*	1/4" x 1/8"	0.64	0.73	0.45	0.10	10.06
18-292	1/4" x 1/4"	0.69	0.86	0.44	0.10	6.81
18-293	5/16" x 1/8"	0.72	0.75	0.50	0.11	6.81
18-294	5/16" x 1/4"	0.75	0.88	0.44	0.12	7.61
18-295	3/8" x 1/8"	0.75	0.75	0.50	0.14	9.09
18-296	3/8" x 1/4"	0.78	0.88	0.44	0.16	6.97
18-297	3/8" x 3/8"	0.78	0.97	0.47	0.18	10.21
18-298	3/8" x 1/2"	0.88	1.22	0.69	0.20	15.63
18-304	1/2" x 1/4"	0.94	0.97	0.59	0.22	13.52
18-299B*	1/2" x 3/8"	0.96	1.09	0.70	0.24	25.38
18-299	1/2" x 3/8"	0.94	1.12	0.59	0.24	12.94
18-300	1/2" x 1/2"	0.97	1.19	0.69	0.30	16.35
18-301	5/8" x 1/2"	1.06	1.31	0.69	0.32	18.42
18-302	3/4" x 1/2"	1.22	1.34	0.88	0.50	40.93
18-303	3/4" x 3/4"	1.25	1.50	0.88	0.54	38.54

* Barstock

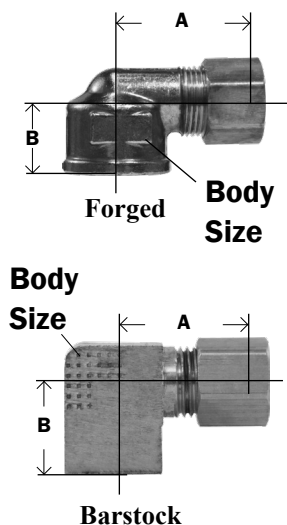
72 BST1 172C

COMPRESSION

BRASS FITTINGS

FEMALE ELBOW

SAE# 060203

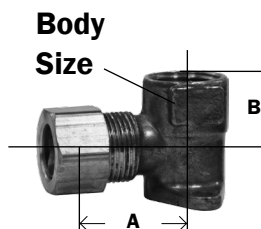


Part #	Comp. X Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-251	1/8" x 1/8"	0.69	0.56	0.56	0.04	8.02
18-252	3/16" x 1/8"	0.69	0.47	0.56	0.04	4.75
18-253	1/4" x 1/8"	0.69	0.47	0.56	0.06	4.72
18-253B*	1/4" x 1/8"	0.69	0.56	0.56	0.06	5.69
18-254	1/4" x 1/4"	0.75	0.50	0.72	0.08	5.35
18-267	1/4" x 3/8"	0.81	0.58	0.81	0.08	7.57
18-268	1/4" x 1/2"	0.89	0.66	1.00	0.10	10.02
18-255	5/16" x 1/8"	0.72	0.84	0.47	0.08	8.73
18-256	5/16" x 1/4"	0.78	0.50	0.72	0.09	6.81
18-257	3/8" x 1/8"	0.75	0.84	0.47	0.10	5.63
18-258	3/8" x 1/4"	0.84	0.59	0.75	0.10	6.00
18-259	3/8" x 3/8"	0.88	0.58	0.81	0.12	6.93
18-260	3/8" x 1/2"	0.97	0.66	1.00	0.14	7.95
18-250	3/8" x 3/4"	1.09	0.72	1.25	0.18	12.68
18-261	1/2" x 1/4"	1.06	0.70	0.88	0.18	11.05
18-262	1/2" x 3/8"	1.00	0.70	0.88	0.16	9.22
18-263	1/2" x 1/2"	1.03	0.72	1.00	0.20	9.52
18-270	1/2" x 3/4"	1.16	0.72	1.25	0.23	13.67
18-269	5/8" x 3/8"	1.09	0.77	1.00	0.20	13.99
18-264	5/8" x 1/2"	1.09	0.77	1.00	0.22	10.88
18-265	5/8" x 3/4"	1.22	0.77	1.25	0.24	14.93
18-266	3/4" x 1/2"	1.25	1.25	0.94	0.28	24.45

* Barstock

70 270C BSE3 170C

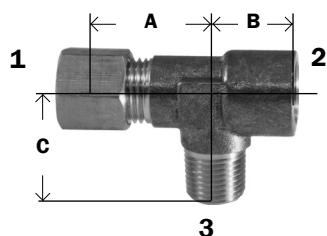
FORGED DROP-EAR ELBOW



Part #	Comp. X Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-271	5/8" x 1/2"	1.18	0.72	1.00	0.18	20.32

BSE3-DE

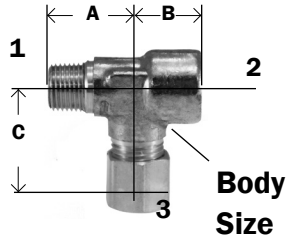
FORGED TEE



Part #	Comp. X Female NPTF x Male NPTF 1x(2&3)	A	B	C	Approx. Wt. Lbs.	List Price
18-307	1/4" x 1/8"	0.72	0.53	0.72	0.20	7.33

71 171C BST3

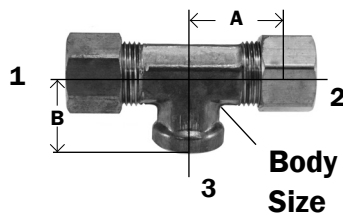
ADAPTER TEE



Part #	Male NPTF x Female NPTF x Comp. 3x (1&2)	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
18-314	1/8" x 1/4"	0.72	0.53	0.72	0.47	0.08	8.11
18-316	3/8" x 1/4"	0.84	0.97	0.81	0.47	0.10	9.45

76 176C

FEMALE BRANCH FORGED TEE

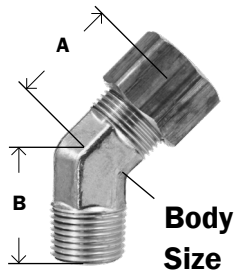


Part #	Comp. X Female NPTF (1&2)x3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-321	1/4" x 1/8"	0.78	0.75	0.45	0.10	6.99
18-328	1/4" x 1/4"	0.78	0.75	0.44	0.12	10.91
18-325	3/8" x 1/8"	0.75	0.63	0.50	0.12	9.07
18-322	3/8" x 1/4"	0.81	0.97	0.47	0.14	10.99
18-323	3/8" x 3/8"	0.97	0.69	1.05	0.16	16.42
18-326	1/2" x 1/8"	0.94	0.75	0.59	0.20	14.38
18-324	1/2" x 3/8"	1.00	0.72	0.88	0.22	21.62
18-327	5/8" x 1/8"	1.06	0.81	0.69	0.26	19.50

78 BST4 77 177C 2908

45° ELBOW

SAE# 060302

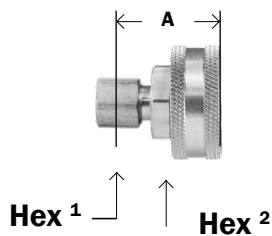


Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-329	3/16" x 1/8"	0.40	0.63	0.41	0.04	5.42
18-330	1/4" x 1/8"	0.40	0.61	0.41	0.04	4.99
18-336	1/4" x 1/4"	0.59	0.84	0.53	0.06	7.31
18-331	5/16" x 1/8"	0.59	0.65	0.53	0.06	8.03
18-332	5/16" x 1/4"	0.59	0.83	0.53	0.08	8.49
18-333	3/8" x 1/4"	0.62	0.83	0.53	0.08	6.53
18-338	3/8" x 3/8"	0.75	0.95	0.59	0.10	17.77
18-334	1/2" x 3/8"	0.75	0.88	0.59	0.14	8.08
18-339	1/2" x 1/2"	0.94	1.14	0.75	0.14	15.68
18-335	5/8" x 1/2"	0.78	1.14	0.78	0.14	16.68

6945 45BSE1 74 179C 273 77

GARDEN HOSE SWIVEL

•WASHER INCLUDED

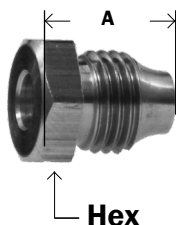


Part #	Compression x FGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
30-050	1/4" x 3/4"	1.02	0.50	0.75	0.09	8.38
30-051	3/8" x 3/4"	1.04	0.62	0.75	0.12	7.72

COMPRESSION**BRASS FITTINGS****DOUBLE COMPRESSION THREADED SLEEVE FITTINGS**

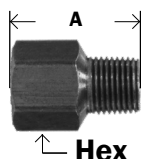
- Use with aluminum and copper tubing or plastic tubing with internal tube support. Not recommended for steel tubing.
- Easy to assemble, no flaring, two piece construction.
- For use on oil, air, water and grease lubrication systems.
- When design makes a dimension critical, contact us for information.

Tube OD	1/8	3/16	1/4	5/16	3/8
Thread	5/16-24	3/8-24	7/16-24	1/2-20	9/16-20
Working Pressure	500	500	500	250	250

NUT

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
16-001	1/8"	0.50	0.37	0.02	1.12
16-002	3/16"	0.53	0.43	0.02	2.09
16-003	1/4"	0.56	0.50	0.04	2.77
16-004	5/16"	0.61	0.56	0.04	3.21
16-005	3/8"	0.61	0.62	0.04	3.64

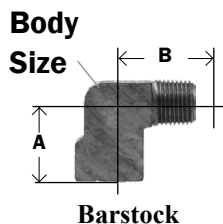
181 6100 11

MALE ADAPTER

Part #	THRD Sleeve x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
16-117	1/8" x *	0.62	0.43	0.02	12.57
16-118	1/8" x 1/8"	0.62	0.43	0.02	2.48
16-119	3/16" x 1/8"	0.69	0.43	0.02	3.13
16-121	1/4" x 1/8"	0.75	0.50	0.04	2.78
16-122	5/16" x 1/8"	0.89	0.56	0.04	5.42
16-123	3/8" x 1/4"	0.84	0.62	0.06	7.85

* 1/4 - 28 Male Thread Tapered.

188 6200 12

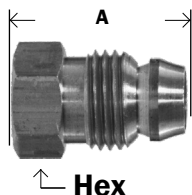
90° ELBOW

Barstock

Part #	THRD Sleeve x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
16-127	1/8" x *	0.50	0.52	0.41	0.02	9.59
16-128	1/8" x 1/8"	0.50	0.66	0.43	0.02	14.16
16-129	3/16" x 1/8"	0.56	0.62	0.44	0.02	31.94
16-130	1/4" x 1/8"	0.52	0.62	0.50	0.04	22.33

* 1/4 - 28 Male Thread Tapered

189 6400 15

BREAK-AWAY NUT

- 1-Piece Fiting

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
16-090	3/16"	0.57	0.37	0.02	7.98
16-010	1/4"	0.62	0.43	0.02	1.98

* Threaded sleeve fittings on page 85.

181-BA 21604 99LB 81LB

BRASS SPLIT SLEEVE D.O.T. FITTINGS (5/32 O.D.)

TRANSMISSION BRASS FITTINGS

APPLICATIONS: Used with SAE J844 Type A nylon tube in pressure protected air transmission applications.

TECHNICAL DATA: Maximum working pressure up to 150 PSI. Fittings will withstand variations from -40°F to +220°F (-40°C to + 104°C)

Ideally suited for use in passive protected air transmission applications. A specially designed slotted sleeve helps eliminate notch stress related to over torque.

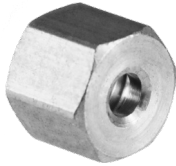
COLLET



Part #	Tube O.D.	List Price
38-711	5/32"	1.56
25-001	1/8"	1.57

1460 90791 280 90946

NUT



Part #	Tube O.D.	List Price
38-732	5/32"	1.88
25-033	1/8"	1.77

1461 90790 281 90885

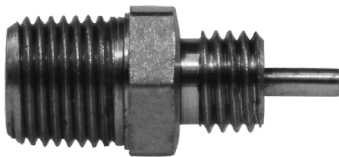
DOUBLE END UNION



Part #	Tube O.D.	List Price
38-761	5/32"	14.36
25-062	1/8"	8.38

1462 90792 283 90891

CONNECTOR WITH NUT AND SLEEVE



Part #	Tube O.D.	Pipe Thread	List Price
38-769	5/32"	1/16"	9.49
38-770	5/32"	1/8"	8.99
25-175	1/8"	1/16"	9.48
25-176	1/8"	1/8"	8.59

• Shipped with nut and split sleeve, picture shows insert

1468 90794 282 90985

ELBOW



Part #	Tube O.D.	Pipe Thread	List Price
38-718	5/32"	1/8"	10.04
25-220	1/8"	1/8"	8.42

SPECIAL COMPRESSION ASSEMBLIES**BRASS FITTINGS**

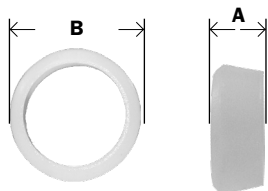
To purchase special compression assemblies, delete the 18 prefix on part# and add the prefix of the type of special assembly you desire. Pricing and availability upon request.

22 - Plastic sleeve (inserts should be ordered separately)

24 - Long nut compression

26 - Captive sleeve (parts listed on following pages)

27 - Self align sleeve (parts listed on following pages)

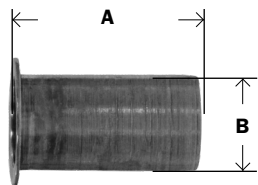
DELTRIN SLEEVE

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-015	1/4"	0.19	0.37	0.01	0.07
18-016	5/16"	0.19	0.43	0.01	1.03
18-017	3/8"	0.19	0.50	0.02	0.22
18-018	1/2"	0.25	0.63	0.02	0.14
18-019	5/8"	0.22	0.74	0.02	0.20

60-P

BRASS INSERT

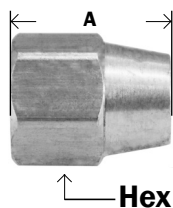
• SLEEVE



Part #	Size	A	B	Approx. Wt. Lbs.	Wall	List Price
22-008	1/8"	0.46	0.080	0.01	.016	0.69
22-009	3/16"	0.45	0.135	0.01	.025	0.76
22-009A	3/16"	0.52	0.095	0.01	.040	0.78
22-010	1/4"	0.50	0.163	0.02	.04	0.39
22-010A	1/4"	0.59	0.125	0.02	.04	1.10
22-010B	1/4"	0.53	0.172	0.02	.03	1.80
22-011A	5/16"	0.50	0.232	0.02	.04	1.67
22-011	5/16"	0.53	0.187	0.02	.062	0.69
22-012	3/8"	0.56	0.250	0.03	.062	0.61
22-013	1/2"	0.72	0.370	0.03	.062	0.79
22-014	5/8"	0.72	0.483	0.03	.062	1.60
22-015	3/4"	1.03	0.563	0.03		4.78

See lead free insert on page 167

63-BI 60AE 2030 63PT

LONG NUT COMPRESSION - Can be assembled on any compression fitting**NEW****NEW**

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
10-013	1/8"	0.50	0.37	0.01	2.09
24-002	3/16"	0.62	0.43	0.01	1.62
24-003	1/4"	0.75	0.50	0.02	1.85
24-004	5/16"	0.84	0.56	0.02	1.43
24-005	3/8"	0.97	0.62	0.04	2.79
24-006	1/2"	1.06	0.81	0.06	7.20
24-007	5/8"	1.19	0.94	0.11	7.15
24-008	3/4"	1.50	1.25	0.14	14.59

161

BRASS FITTINGS

CAPTIVE SLEEVE COMPRESSION

CAPTIVE SLEEVE NUT



Part #	Size	List Price
26-001	1/8"	1.50
26-002	3/16"	1.57
26-003	1/4"	1.27
26-004	5/16"	1.75
26-005	3/8"	1.64
26-007	1/2"	3.28
26-008	5/8"	5.87
NEW 26-015	3/4"	13.44
NEW 26-016	7/8"	34.38
NEW 26-009	1"	34.77

CS61 61CA

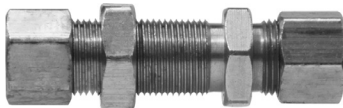
UNION



Part #	Size	List Price
26-062	1/8"	4.59
26-063	3/16"	2.40
26-064	1/4"	3.05
26-077	1/4" x 3/16"	8.94
26-065	5/16"	3.54
26-066	3/8"	3.54
26-079	3/8" x 1/4"	7.30
26-068	1/2"	8.73
26-069	5/8"	11.26
26-082	5/8" x 3/8"	8.20

CS62 62CA

BULKHEAD UNIONS



Part #	Size	List Price
26-088	1/4"	8.20
26-090	3/8"	22.16

C262L 62CABA

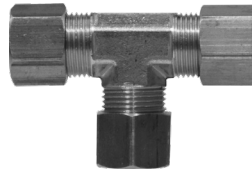
BALL CHECK VALVE



Part #	Tube OD x Male NPTF	List Price
26-092	1/8" x 1/8"	12.05

CS863

TEE



Part #	Size	List Price
26-101	1/8"	13.25
26-102	3/16"	6.76
26-103	1/4"	6.76
26-104	5/16"	8.49
26-105	3/8"	7.30
26-115	3/8" x 3/8" x 1/4"	7.58
26-106	1/2"	14.05
26-107	5/8"	15.89

CS64 164CA

UNION ELBOW



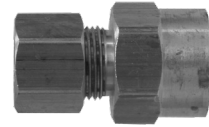
Part #	Size	List Price
26-123	3/16"	7.45
26-124	1/4"	5.31
26-125	5/16"	7.50
26-126	3/8"	6.00
26-127	1/2"	9.67
26-128	5/8"	11.15

CS65 165CA

Interchangeable with compress-align fittings.

These are NOT Lead Free
Lead Free products
available upon request

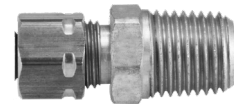
FEMALE ADAPTER



Part #	Comp. X Female NPTF	List Price
26-142	1/8" x 1/8"	3.54
26-143	3/16" x 1/8"	4.62
26-144	3/16" x 1/4"	10.50
26-145	1/4" x 1/8"	3.18
26-146	1/4" x 1/4"	6.54
26-149	5/16" x 1/8"	4.15
26-150	5/16" x 1/4"	5.78
26-152	3/8" x 1/8"	3.89
26-153	3/8" x 1/4"	5.50
26-154	3/8" x 3/8"	7.74
26-155	3/8" x 1/2"	5.87
26-156	3/8" x 3/4"	16.01
26-157	1/2" x 1/4"	10.20
26-158	1/2" x 3/8"	8.25
26-159	1/2" x 1/2"	13.56

CS66 66CA

MALE ADAPTER



Part #	Comp. X Male NPTF	List Price
26-175	1/8" x 1/16"	8.43
26-176	1/8" x 1/8"	2.40
26-177	3/16" x 1/8"	2.64
26-178	3/16" x 1/4"	4.82
26-179	1/4" x 1/8"	2.51
26-180	1/4" x 1/4"	3.42
26-180L	1/4" x 1/4"	2.40
26-181	1/4" x 3/8"	3.30
26-182	1/4" x 1/2"	4.42
26-183	5/16" x 1/8"	3.18
26-184	5/16" x 1/4"	3.24
26-187	3/8" x 1/8"	4.25
26-188	3/8" x 1/4"	3.66
26-189	3/8" x 3/8"	4.32
26-190	3/8" x 1/2"	5.70
26-193	1/2" x 1/4"	7.20
26-194	1/2" x 3/8"	5.55
26-195	1/2" x 1/2"	7.67
26-196	1/2" x 3/4"	7.67
26-197	5/8" x 3/8"	6.76
26-198	5/8" x 1/2"	6.90

CS68 68CA

CAPTIVE SLEEVE COMPRESSION**MALE ELBOW**

Part #	Comp. X Male NPTF	List Price
26-220	1/8" x 1/8"	5.46
26-220B	1/8" x 1/8"	4.14
26-221	3/16" x 1/8"	4.56
26-221B	3/16" x 1/8"	3.34
26-223	3/16" x 1/4"	5.23
26-224B	1/4" x 1/8"	2.71
26-224	1/4" x 1/8"	3.42
26-225	1/4" x 1/4"	4.25
26-225B	1/4" x 1/4"	3.25
26-226	1/4" x 3/8"	4.68
26-228	5/16" x 1/8"	4.95
26-229	5/16" x 1/4"	4.81
26-230	5/16" x 3/8"	5.66
26-232	3/8" x 1/8"	3.88
26-233	3/8" x 1/4"	5.11
26-233B	3/8" x 1/4"	4.91
26-234	3/8" x 3/8"	5.76
26-235	3/8" x 1/2"	11.01
26-236	1/2" x 1/4"	7.87
26-237	1/2" x 3/8"	7.68
26-238	1/2" x 1/2"	7.51
26-240	5/8" x 3/8"	9.06
26-241	5/8" x 1/2"	10.86

CS69 169CA

FEMALE ELBOW

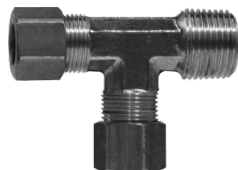
Part #	Comp. X Female NPTF	List Price
26-251	1/8" x 1/8"	9.25
26-252	3/16" x 1/8"	5.35
26-253	1/4" x 1/8"	5.35
26-254	1/4" x 1/4"	5.96
26-258	3/8" x 1/4"	6.10
26-262	1/2" x 3/8"	9.22
26-270	1/2" x 3/4"	13.67
26-269	5/8" x 3/8"	13.99

CS70 170CA

MALE BRANCH TEE

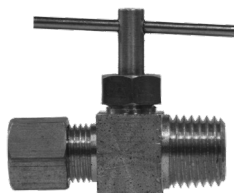
Part #	Comp. X Male NPTF (1&2) X 3	List Price
26-291	1/4" x 1/8"	6.45
26-292	1/4" x 1/4"	7.56
26-293	5/16" x 1/8"	7.56
26-294	5/16" x 1/4"	8.56
26-295	3/8" x 1/8"	9.89
26-296	3/8" x 1/4"	8.52
26-297	3/8" x 3/8"	10.80
26-299	1/2" x 3/8"	13.74

CS72 172CA

FORGED MALE RUN TEE

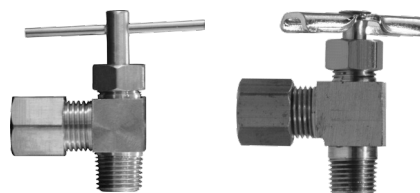
Part #	Comp. X Male NPTF (1&3) X 2	List Price
26-272	1/8" x 1/8"	6.74
26-274	1/4" x 1/8"	6.83
26-275	1/4" x 1/4"	7.02
26-279	3/8" x 1/4"	9.20
26-280	3/8" x 3/8"	11.45
26-281	1/2" x 3/8"	14.04

CS71 171CA

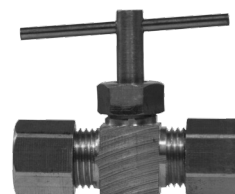
CAPTIVE SLEEVE x MALE PIPE NEEDLE VALVE

Part #	Comp X Male Pipe	List Price
26-031	3/16" x 1/8"	26.60
26-032X*	1/4" x 1/8"	16.45

* Heavy Pattern

BRASS FITTINGS**CAPTIVE SLEEVE x MALE PIPE ANGLE NEEDLE VALVE**

Part #	Comp X Male Pipe	List Price
26-010	3/16" x 1/8"	23.76
26-011	1/4" x 1/8"	6.76
26-011X	Heavy Pattern	18.90
26-012	1/4" x 1/4"	17.02
26-013	5/16" x 1/8"	19.56
26-014	5/16" x 1/4"	46.38

CAPTIVE SLEEVE x CAPTIVE SLEEVE NEEDLE VALVE

Part #	Comp X Comp	List Price
26-020	3/16"	25.19
26-021	1/4"	6.80
26-022	5/16"	18.84
26-023	3/8"	11.10

- More sizes available
- Lead Free - add LF to part #
- Tube inserts - page 96 & 167

BRASS FITTINGS

• Use with copper, brass, aluminum and plastic tubing. Soft plastic tubing requires support inside. Not recommended for steel tubing.

• Application: water, air and lubrication system

SELF-ALIGN SLEEVE



Part #	Size	List Price
27-001	1/8"	0.30
27-002	3/16"	0.93
27-003	1/4"	0.36

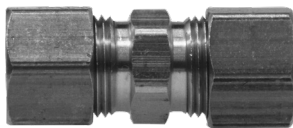
860 601



Part #	Size	List Price
27-005	3/8"	0.90
27-006	1/2"	2.13

860

UNION



Part #	Size	List Price
27-062	1/8"	4.98
27-063	3/16"	4.28
27-064	1/4"	3.76
27-066	3/8"	4.56
27-068	1/2"	9.73
27-081	1/2" x 3/8"	10.12

862 621

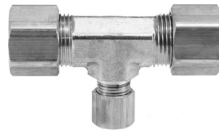
BALL CHECK VALVE



Part #	Tube OD x Male NPTF	List Price
27-092	1/8" x 1/8"	12.84
27-094	1/4" x 1/8"	13.20
27-096	3/8" x 1/4"	17.11

863 631

TEE



Part #	Size	List Price
27-102	3/16"	6.80
27-103	1/4"	6.35
27-105	3/8"	11.28
27-115	3/8"x3/8"x1/4"	10.27
27-116	1/2"x1/2"x1/4"	16.86
27-117	1/2"x1/2"x3/8"	17.79

864 641

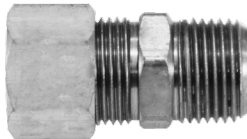
UNION ELBOW



Part #	Size	List Price
27-126	3/8"	7.74
27-127	1/2"	12.00

865 651

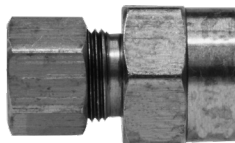
TANK ADAPTER DRILLER THRU (NO STOP)



Part #	Size	List Price
27-208	1/4"x1/8"	3.25
27-209	1/4"x1/4"	2.56
27-211	3/8"x3/8"	4.98
27-213	1/2"x3/8"	9.00

863 631

FEMALE ADAPTER

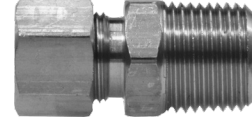


Part #	Comp. X Female NPTF	List Price
27-142	1/8" x 1/8"	3.56
27-145	1/4" x 1/8"	2.98
27-147	1/4" x 3/8"	4.21
27-148	1/4" x 1/2"	5.09
27-153	3/8" x 1/4"	6.56
27-158	1/2" x 3/8"	9.01

866 661

SELF-ALIGN COMPRESSION

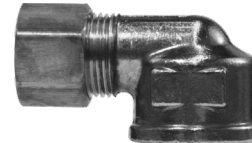
MALE ADAPTER



Part #	Comp. X Male NPTF	List Price
27-175	1/8" x 1/16"	8.56
27-176	1/8" x 1/8"	2.70
27-177	3/16" x 1/8"	3.30
27-179	1/4" x 1/8"	1.91
27-180	1/4" x 1/4"	3.36
27-187	3/8" x 1/8"	5.01
27-188	3/8" x 1/4"	4.50
27-189	3/8" x 3/8"	5.22
27-190	3/8" x 1/2"	6.70
27-193	1/2" x 1/4"	7.80
27-194	1/2" x 3/8"	6.55
27-195	1/2" x 1/2"	8.67
27-196	1/2" x 3/4"	8.67

868 681

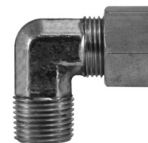
FEMALE ELBOW



Part #	Comp. X Female NPTF	List Price
27-253	1/4" x 1/8"	7.68
27-254	1/4" x 1/4"	6.52
27-258	3/8" x 1/4"	7.00
27-262	1/2" x 3/8"	10.85
27-263	1/2" x 1/2"	11.05

870 201

MALE ELBOW



Part #	Comp. X Male NPTF	List Price
27-220	1/8" x 1/8"	5.25
27-221	3/16" x 1/8"	6.00
27-224	1/4" x 1/8"	3.34
27-225	1/4" x 1/4"	4.51
27-226	1/4" x 3/8"	4.57
27-232	3/8" x 1/8"	4.88
27-233	3/8" x 1/4"	6.42
27-234	3/8" x 3/8"	6.72
27-235	3/8" x 1/2"	9.04
27-236	1/2" x 1/4"	8.88
27-237	1/2" x 3/8"	8.24
27-238	1/2" x 1/2"	9.00
27-239	1/2" x 3/4"	15.30

869 691

Flareless

Flareless Brass Tube Fittings are Interchangeable with Poly-Flo®, Poly-Tite® and Poly-Line® and Poly-Fit®



Built-in SS
Tube Support

Tube O.D.	1/8	3/16	1/4	5/16	3/8	1/2
Thread Size-B	5/16-24	3/8-24	3/8-24	7/16-24	1/2-24	1 1/16-20

•Typical Application

Pneumatic instrumentation circuits, lubricant and cooling lines.

•Working Pressure and Temperature Ranges

Up to 150 PSI from 0°F to + 150°F with thermoplastic tubing. Up to 300 PSI from 0°F to + 175°F with soft metal tubing.

•Maximum allowable metal tube wall thickness for use with Poly-Tite fittings:

1/8", 3/16" O.D. --no limitation,
1/4" O.D.--.035 5/16", 3/8", 1/2" O.D.--.049

•Vibration

Excellent Resistance.

•Temperature Range

Depends on tubing used. -65°F to +250°F
(-53°C to +121°C) with brass sleeve, -40°F to +150°F
(-40°C to +66°C) with plastic sleeve. (Refer to tubing temperature range.)

•Material

CA360 Brass body, plastic or brass sleeve.
Stainless Steel Tube Support

•Used With

Aluminum & copper tubing. Hard plastic tubing requires brass sleeve. Not recommended for steel tubing.

• Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

•Advantages

No flaring of tubing required. Easy installation, captive sleeve, pre-assembled for installation and can be reassembled. Nuts rotate around the sleeve during tightening, preventing twisting of tubing.

•Assembly Instructions

- 1- Cut tubing to desired length.
- 2- Slide nut/sleeve assembly on tube. Threaded end "A" of nut must face toward fitting.
- 3- Bottom tubing into fitting.
- 4- Plastic sleeve - Tighten nut hand tight.
Brass Sleeve - Tighten nut hand tight, then an additional 3/4 turn.

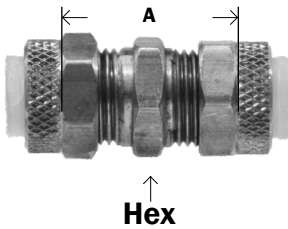
NUT AND PLASTIC SLEEVE ASSEMBLY



Part #	Tube O.D.	Thread	A	Hex (Dia.)	Approx. Wt. Lbs.	List Price
20-211	1/4"	3/8-24	0.34	0.43	0.02	1.44
20-212	5/16"	7/16-24	0.45	0.50	0.02	2.58
20-213	3/8"	1/2-24	0.38	0.56	0.04	1.89
20-214	1/2"	11/16-20	0.42	0.81	0.04	3.37

261PF 1261 61PN

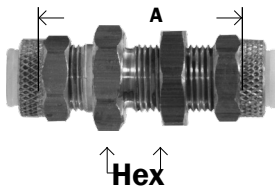
UNION



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-240	1/8"	0.66	0.31	0.02	7.85
20-241	3/16"	0.75	0.37	0.04	8.59
20-242	1/4"	0.69	0.37	0.04	3.39
20-243	5/16"	0.69	0.44	0.04	10.03
20-244	3/8"	0.72	0.50	0.10	10.08
20-200	3/8" x 1/4"	0.72	0.50	0.08	14.63
20-245	1/2"	0.84	0.69	0.14	14.69

262PF 1262 62P 262P

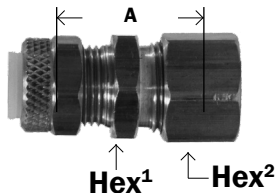
BULKHEAD UNION



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-337	1/4"	1.25	0.56	0.06	11.45
20-338	5/16"	1.25	0.62	0.08	14.11
20-339	3/8"	1.31	0.69	0.10	16.01

62PBH 329P 282P

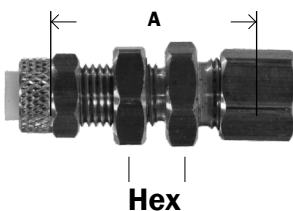
UNION TUBE #M62C - FLARELESS X STANDARD COMPRESSION



Part #	Tube O.D.	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
20-235	1/4"	0.75	0.44	0.50	0.04	9.14
20-237	3/8"	0.84	0.62	0.62	0.08	13.90

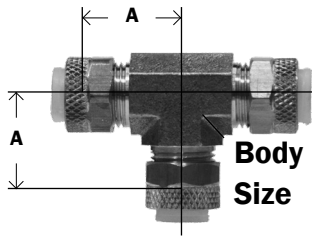
262S 62PCA 262PC

BULKHEAD UNION - FLARELESS X COMPRESSION



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-333	1/4"	1.31	0.56	0.07	12.15
20-334	3/8"	1.44	0.69	0.12	15.54

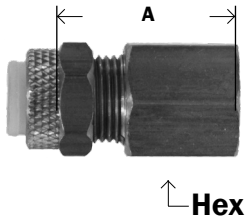
1274

FLARELESS**BRASS FITTINGS****UNION TEE**

Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-248	1/8"	0.62	0.31	0.02	14.56
20-249	3/16"	0.62	0.31	0.04	12.69
20-250	1/4"	0.73	0.44	0.06	10.00
20-251	5/16"	0.62	0.37	0.08	14.50
20-252	3/8"	0.86	0.56	0.08	11.25
20-330*	3/8" x 1/4"	0.72	0.44	0.08	21.48
20-253	1/2"	0.81	0.62	0.24	31.03

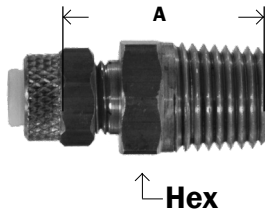
* Reducing Branch

1264 164P 264P

FEMALE CONNECTOR

Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-256	1/8" x 1/8"	0.75	0.56	0.03	6.99
20-257	3/16" x 1/8"	0.78	0.56	0.05	7.08
20-258	3/16" x 1/4"	0.97	0.69	0.05	20.58
20-259	1/4" x 1/8"	0.76	0.50	0.04	8.06
20-260	1/4" x 1/4"	1.08	0.62	0.05	7.21
20-261	5/16" x 1/8"	0.75	0.50	0.03	7.62
20-265	3/8" x 1/8"	0.77	0.56	0.05	14.67
20-262	3/8" x 1/4"	0.94	0.62	0.05	8.23
20-263	1/2" x 3/8"	1.00	0.81	0.12	12.45

1266 66P 266P

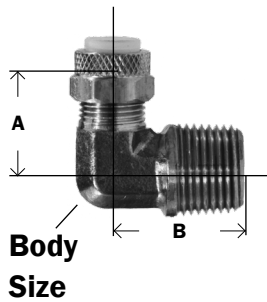
MALE CONNECTOR

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-267	1/8" x 10-32*	0.59	0.37	0.02	18.25
20-268	1/8" x 1/8"	0.80	0.34	0.04	5.11
20-269	3/16" x 1/8"	0.86	0.44	0.04	4.52
20-280	1/4" x 1/16"	0.81	0.43	0.03	15.71
20-270	1/4" x 10-32*	0.75	0.37	0.02	8.53
20-271	1/4" x 1/8"	0.82	0.44	0.03	3.49
20-272	1/4" x 1/4"	1.00	0.56	0.05	4.23
20-273	1/4" x 3/8"	1.03	0.69	0.08	7.88
20-274	5/16" x 1/8"	0.81	0.44	0.04	4.86
20-275	5/16" x 1/4"	1.00	0.56	0.05	5.44
20-276	3/8" x 1/8"	0.84	0.50	0.06	5.26
20-277	3/8" x 1/4"	1.03	0.56	0.08	6.48
20-278	3/8" x 3/8"	1.03	0.69	0.10	7.76
20-279	1/2" x 3/8"	1.09	0.69	0.16	9.18
20-282	1/2" x 1/2"	1.33	0.88	0.18	14.46

* Furnished with gasket.

1268 68P 268P

MALE ELBOW

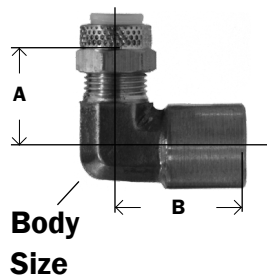


Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-287	1/8" x 1/8"	0.62	0.69	0.31	0.02	5.27
20-288	3/16" x 1/8"	0.62	0.69	0.37	0.04	5.31
20-289*	1/4" x 1/8"	0.53	0.73	0.50	0.04	4.43
20-290	1/4" x 1/4"	0.66	0.94	0.37	0.06	6.93
20-291	1/4" x 3/8"	0.75	1.03	0.50	0.10	11.54
20-292	5/16" x 1/8"	0.62	0.75	0.41	0.04	5.57
20-293	3/8" x 1/8"	0.91	0.81	0.56	0.08	7.18
20-294	3/8" x 1/4"	0.72	0.94	0.44	0.10	8.28
20-295	3/8" x 3/8"	0.78	1.03	0.50	0.14	10.54
20-296	1/2" x 3/8"	1.09	1.10	0.73	0.16	8.50

* Barstock

1269 169P
269P

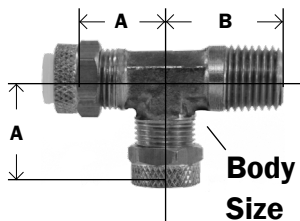
FEMALE ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-300	1/8" x 1/8"	0.69	0.55	0.56	0.02	7.98
20-301	3/16" x 1/8"	0.72	0.55	0.56	0.02	9.03
20-302	1/4" x 1/8"	0.62	0.75	0.37	0.08	8.62
20-303	1/4" x 1/4"	0.72	0.88	0.50	0.10	9.49
20-304	3/8" x 1/4"	0.72	0.88	0.50	0.12	9.13
20-305	1/2" x 3/8"	0.91	0.94	0.63	0.16	18.46

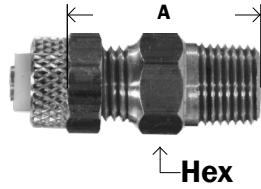
1270 170P

MALE RUN TEE



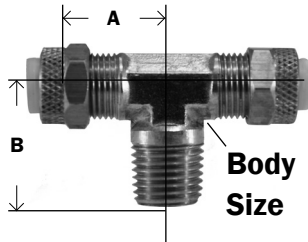
Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-308	1/8" x 1/8"	0.62	0.69	0.31	0.04	11.61
20-309	3/16" x 1/8"	0.62	0.69	0.31	0.04	11.22
20-310	1/4" x 1/8"	0.62	0.75	0.37	0.08	10.45
20-311	1/4" x 1/4"	0.66	0.94	0.37	0.10	13.94
20-312	5/16" x 1/8"	0.62	0.75	0.37	0.08	11.49
20-313	3/8" x 1/4"	0.66	0.94	0.44	0.10	14.66
20-314	1/2" x 3/8"	0.81	1.06	0.63	0.16	19.18

1271 171P

FLARELESS**BRASS FITTINGS****QUICK DISCONNECT FITTING**

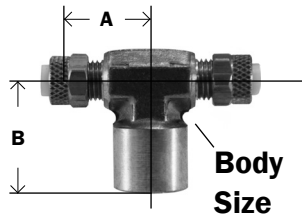
Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-344	1/4" x 1/8"	0.87	0.44	0.06	30.40

292P

MALE BRANCH TEE

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-317	1/8" x 1/8"	0.63	0.69	0.31	0.04	16.04
20-318	3/16" x 1/8"	0.63	0.69	0.31	0.04	11.32
20-319	1/4" x 1/8"	0.63	0.75	0.37	0.07	10.18
20-320	1/4" x 1/4"	0.66	0.94	0.37	0.09	13.07
20-321	5/16" x 1/8"	0.63	0.75	0.37	0.10	11.75
20-322	3/8" x 1/8"	0.63	0.75	0.44	0.08	18.05
20-323	3/8" x 1/4"	0.66	0.94	0.44	0.11	14.53
20-324	1/2" x 3/8"	0.81	1.06	0.63	0.21	30.76

1272 172P 272P

FEMALE BRANCH TEE

Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-327	1/4" x 1/8"	0.66	0.94	0.37	0.12	21.24
20-328	1/4" x 1/4"	0.84	1.16	0.56	0.16	17.79

1277 177P 277P

BRASS FITTINGS**FLARELESS****UNIVERSAL NUT AND BRASS SLEEVE ASSEMBLY**

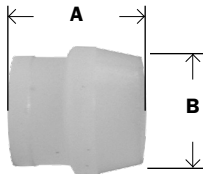
Part #	Tube O.D.	Thread	A	Hex	Approx. Wt. Lbs.	List Price
20-227	1/8"	5/16-24	0.37	0.37	0.02	1.84
20-228	3/16"	3/8-24	0.41	0.44	0.02	2.20
20-229	1/4"	3/8-24	0.34	0.43	0.02	2.01
20-230	5/16"	7/16-24	0.34	0.50	0.02	2.16
20-231	3/8"	1/2-24	0.37	0.56	0.04	3.08
20-232	1/2"	11/16-20	0.42	0.81	0.04	4.18

261PFB 1261B 61PB 261UB

NUT

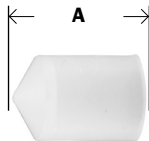
Part #	Tube O.D.	Thread	A	Hex (Dia.)	Approx. Wt. Lbs.	List Price
20-218	1/8"	5/16-24	0.37	0.37	0.01	1.33
20-219	3/16"	3/8-24	0.41	0.44	0.01	1.20
20-220	1/4"	3/8-24	0.34	0.44	0.02	1.40
20-221	5/16"	7/16-24	0.34	0.50	0.02	0.98
20-222	3/8"	1/2-24	0.38	0.56	0.04	2.00
20-223	1/2"	11/16-20	0.42	0.81	0.06	2.55

61PN 1261 261FPN

PLASTIC SLEEVE

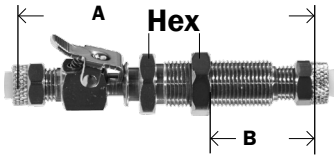
Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-205	1/4"	0.34	0.26	0.01	0.31
20-206	5/16"	0.39	0.32	0.01	0.35
20-207	3/8"	0.41	0.38	0.01	0.74
20-208	1/2"	0.44	0.51	0.01	1.07

260FF 1260 60P 260P

PLASTIC CAP

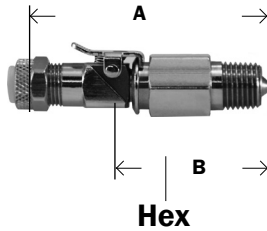
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-201	1/4"	0.50	0.01	2.09
20-203	3/8"	0.56	0.01	1.60
20-204	1/2"	0.59	0.01	2.65

1229 59P 259P

FLARELESS**BRASS FITTINGS****QUICK DISCONNECT COUPLERS****TUBE X TUBE - Single end Shut-Off**

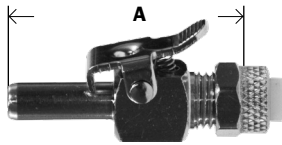
Part #	Tube O.D.	A	B	Hex	Approx. Wt. Lbs.	List Price
20-401	1/4"	3.00	1.72	0.62	0.06	85.88
20-403	3/8"	3.56	1.92	0.81	0.10	84.71

349P

TUBE TO MALE THREAD - Single end Shut-Off, Connector, Quick Coupler.

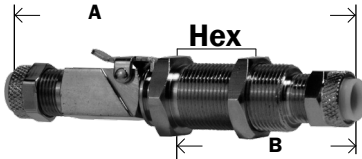
Part #	Tube O.D. x Male Pipe	A	B	Hex	Approx. Wt. Lbs.	List Price
20-409	1/4" x 1/8"	2.31	1.28	0.50	0.12	62.36
20-411	1/4" x 1/4"	2.31	1.28	0.56	0.14	74.09
20-413	3/8" x 1/4"	2.63	1.42	0.62	0.18	85.78

398P 391P + 393P

INSERT ONLY - Thru type insert. No Shut-Off.

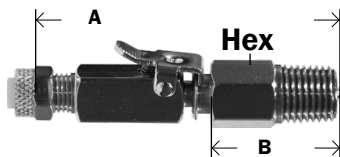
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-417	1/4"	1.69	0.04	30.21
20-419	3/8"	1.93	0.06	34.41

393P

TUBE TO TUBE - Double end Shut-Off Type.

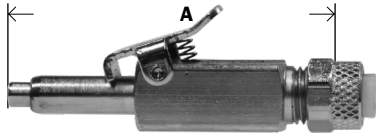
Part #	Tube O.D.	A	B	Hex	Approx. Wt. Lbs.	List Price
20-425	1/4"	3.67	1.79	0.62	0.18	99.99
20-427	3/8"	3.82	1.97	0.81	0.26	110.15

394P 392P + 393PD

TUBE X MALE PIPE - Double End Shut-Off, Connector, Quick coupler.

Part #	Tube O.D. x Male Pipe	A	B	Hex	Approx. Wt. Lbs.	List Price
20-435	1/4" x 1/8"	2.89	1.28	0.50	0.14	84.47
20-437	1/4" x 1/4"	2.91	1.27	0.56	0.18	96.99
20-439	3/8" x 1/4"	3.02	1.40	0.62	0.24	97.63

398PD 393PD + 391P

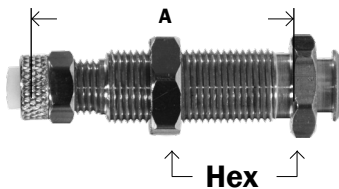
BRASS FITTINGS**FLARELESS****INSERT ONLY - Double End Shut-Off**

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-445	1/4"	2.40	0.08	50.25

393PD

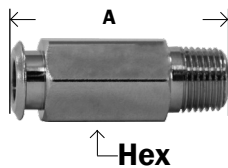
CHROME PLATED NUT AND PLASTIC SLEEVE

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-451	1/4"	0.34	0.43	0.01	2.08
20-453	3/8"	0.38	0.56	0.01	2.80

TUBE CONNECTION - Single end or Double end Shut-Off Type body only.

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-455	1/4"	1.79	0.62	0.10	53.59
20-457	3/8"	1.97	0.81	0.16	68.15

392P

MALE PIPE CONNECTION - Internal Shut-Off

Part #	Tube O.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
20-461	1/4" x 1/8"	1.28	0.50	0.06	35.39
20-463	1/4" x 1/4"	1.27	0.56	0.08	42.33
20-465	3/8" x 1/4"	1.40	0.62	0.08	51.36

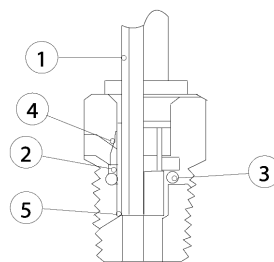
391P

BRASS PUSH-IN FITTINGS



ENGINEERING AND DESIGN

- **QUICK CONNECT**, simply push tubing in, no tools. Saves up to 75% of assembly time of standard compression fittings.
- **QUICK DISCONNECT**, hold two fingers on insert and pull tubing out, no tools required.
- **REUSEABLE**, connect and disconnect numerous times.
- **FULL FLOW DESIGN**, provides up to 60% more flow area than conventional fittings with internal tube supports.
- **POSITIVE SEAL**, no leaks. After tubing is inserted, seal is made.
- **VERSATILE**, BunaN "O" rings standard. Other materials of "O" rings available.
- **SECURE TUBE RETENTION**, pulling on tubing only serves to tighten the connection.
- **SELF CONTAINED ASSEMBLY**, no loose parts, brass body and insert.
- **BRASS CONSTRUCTION**, elbows and tees are forged brass.
- **CHOICE** of convenient swivel or economical stationary elbows and tees.
- **STRAIGHT CONNECTORS** have interior hex for Allen key tightening where space is limited...no need to use a wrench.
- **PRE-APPLIED TEFLON®** based pipe sealant on all male pipe threads, saving customer additional labor.
- **METRIC SIZES AVAILABLE**: Metric tube sizes from 2mm through 12mm in both standard NPT and metric pipe sizes are available on a special order basis.
- **WORKING PRESSURE**:
The fitting is suitable for use up to the maximum working pressure of the plastic tubing used.
- **WORKING TEMPERATURE**:
-10°F to 200°F (other ranges available on request).
- **PIPE THREAD**: NPTF with Teflon® based sealant pre-applied.

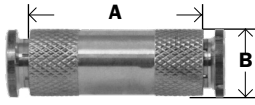


When tubing (1) is inserted into the fitting, it first passes through the gripping teeth (2). Just beyond the gripping teeth is the o-ring (3) which provides the leak proof seal against the OD of the tube. The gripping teeth grab the tube, which

expands the insert. Pulling back on the tube only tightens the grip as the insert moves onto the camming surface (4). Pressure through the tube also serves to tighten the grip. The tube bottoms against a positive tube stop (5) in a cavity providing tube support to prevent leakage.

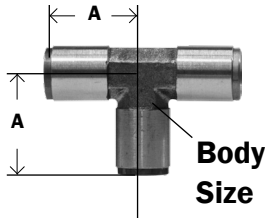
• Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

BRASS FITTINGS**BRASS PUSH-IN FITTINGS****UNION CONNECTOR**

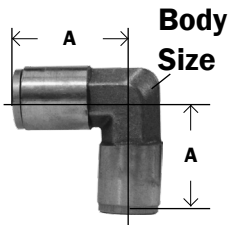
Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-017	1/8"	1.07	0.38	0.03	5.55
20-018	5/32"	1.07	0.38	0.03	7.26
20-019	1/4"	1.50	0.44	0.05	6.91
20-022	3/8" x 1/4"	1.46	0.56	0.05	9.33
20-020	3/8"	1.44	0.56	0.06	9.60
20-021	1/2"	1.63	0.81	0.18	14.05

AQ62 6580 3106 62PL KQH 12-020 50-562 262-OF 1162 262PP

UNION TEE

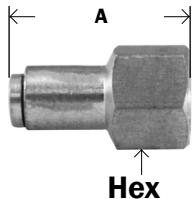
Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-025	1/8"	0.65	0.31	0.04	6.34
20-026	5/32"	0.67	0.31	0.04	7.89
20-027	3/16"	0.75	0.37	0.06	14.19
20-028	1/4"	0.92	0.37	0.09	9.57
20-031	5/16"	0.89	0.49	0.10	27.15
20-029	3/8"	0.98	0.50	0.13	13.15
20-030	1/2"	1.16	0.62	0.24	20.19

KQT 12-060 50-564 264OF 264PP 1164 AQ64 6540 3140

UNION ELBOW

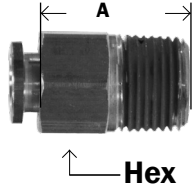
Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-150	1/8"	0.65	0.31	0.02	11.66
20-151	5/32"	0.67	0.31	0.04	10.55
20-152	1/4"	0.87	0.37	0.06	10.41
20-155	5/16"	0.91	0.47	0.08	32.54
20-153	3/8"	0.97	0.50	0.09	13.09
20-154	1/2"	1.15	0.62	0.18	18.51

AQ65 6550 3102 165PL KQL 12-040 50-565 265-OF

FEMALE CONNECTOR

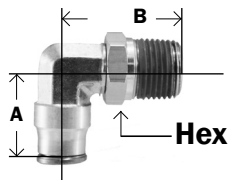
Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-032	1/8" x 1/8"	0.96	0.56	0.04	9.94
20-038	1/8" x 1/4"	1.04	0.67	0.04	27.78
20-012	5/32" x 1/8"	1.09	0.56	0.05	14.45
20-034	1/4" x 1/8"	1.23	0.56	0.06	6.69
20-035	1/4" x 1/4"	1.42	0.75	0.09	11.99
20-036	3/8" x 1/4"	1.32	0.75	0.09	16.96
20-037	3/8" x 3/8"	1.31	0.87	0.12	10.35

266PP AQ66 6463 3114 66PL 12-426 50-566 266-OF 1166

BRASS PUSH-IN FITTINGS**BRASS FITTINGS****MALE CONNECTOR**

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-047	1/8" x 10-32"*	0.69	0.37	0.02	5.44
20-045	1/8" x 1/16"	0.68	0.37	0.02	11.03
20-048	1/8" x 1/8"	0.61	0.43	0.02	3.80
20-023	1/8" x 1/4"	0.98	0.56	0.04	5.57
20-049	5/32" x 10-32"*	0.67	0.37	0.02	5.99
20-050	5/32" x 1/8"	0.67	0.43	0.03	4.62
20-046	5/32" x 1/4"	0.85	0.56	0.05	9.77
20-051	3/16" x 10-32"*	0.80	0.37	0.02	2.69
20-052	3/16" x 1/8"	0.93	0.43	0.03	5.74
20-053	1/4" x 10-32"*	0.70	0.43	0.03	4.10
20-039	1/4" x 1/16"	0.92	0.43	0.06	10.49
20-054	1/4" x 1/8"	0.93	0.43	0.06	4.44
20-055	1/4" x 1/4"	0.93	0.56	0.10	5.24
20-056	1/4" x 3/8"	0.94	0.68	0.08	7.47
20-530	5/16" x 1/8"	1.07	0.56	0.05	17.71
20-531	5/16" x 1/4"	0.98	0.56	0.10	18.64
20-532	5/16" x 3/8"	1.06	0.75	0.08	20.97
20-057	3/8" x 1/8"	1.10	0.56	0.06	7.31
20-058	3/8" x 1/4"	1.11	0.56	0.05	6.79
20-059	3/8" x 3/8"	1.02	0.68	0.08	7.25
20-062	3/8" x 1/2"	1.02	0.87	0.08	12.50
20-060	1/2" x 1/4"	1.36	0.81	0.11	9.41
20-061	1/2" x 3/8"	1.30	0.81	0.12	10.82
20-063	1/2" x 1/2"	1.23	0.87	0.14	13.65

* Furnished with gaskets 268PP AQ68 6510 3115 68PL KQH 12-425 50-568 268-OF 1168

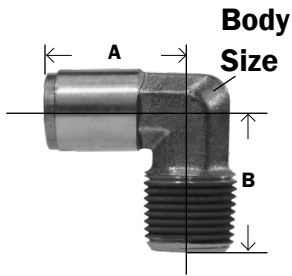
SWIVEL MALE ELBOW

Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-079	1/8" x 1/8"	0.69	0.98	0.43	0.07	7.15
20-535*	1/8" x 1/4"	0.76	0.87	0.56	0.06	21.44
20-076**	5/32" x 10-32"	0.67	0.71	0.37	0.04	15.07
20-080	5/32" x 1/8"	0.68	0.89	0.43	0.05	7.85
20-077	5/32" x 1/4"	0.68	1.08	0.56	0.07	11.77
20-078**	1/4" x 10-32"	0.86	0.79	0.31	0.05	10.91
20-081	1/4" x 1/8"	0.90	0.93	0.37	0.08	6.98
20-082	1/4" x 1/4"	0.90	0.99	0.56	0.10	7.90
20-086	1/4" x 3/8"	0.98	1.14	0.68	0.09	15.26
20-538*	5/16" x 1/4"	0.91	0.85	0.56	0.07	23.79
20-539*	5/16" x 3/8"	0.91	0.87	0.75	0.08	36.26
20-087	3/8" x 1/8"	0.94	1.08	0.50	0.09	12.74
20-083	3/8" x 1/4"	0.99	1.15	0.56	0.10	9.72
20-084	3/8" x 3/8"	1.00	1.24	0.68	0.20	11.12
20-088	3/8" x 1/2"	1.00	1.54	0.87	0.19	18.12
20-085	1/2" x 3/8"	1.16	1.34	0.68	0.18	14.00
20-092	1/2" x 1/2"	1.16	1.61	0.62	0.24	20.91

* Nickel Plated

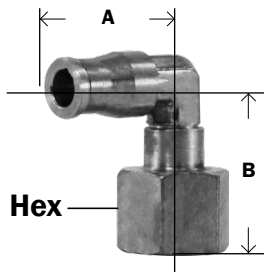
aq69-ps 56520 3109 169pl kql 12-447 50-579 269-OFs 11695

** Furnished with gaskets

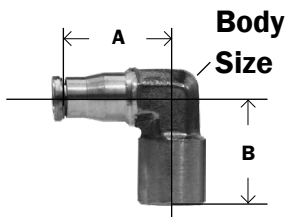
BRASS FITTINGS**BRASS PUSH-IN FITTINGS****FIXED MALE ELBOW**

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-065	1/8" x 1/8"	0.69	0.69	0.31	0.03	7.32
20-066	5/32" x 1/8"	0.68	0.68	0.31	0.03	11.46
20-067	3/16" x 1/8"	0.75	0.71	0.37	0.04	8.15
20-068	1/4" x 1/8"	0.89	0.75	0.37	0.06	5.99
20-069	1/4" x 1/4"	0.95	0.96	0.37	0.08	5.83
20-070	1/4" x 3/8"	1.00	0.98	0.50	0.10	11.66
20-071	3/8" x 1/8"	0.99	0.80	0.50	0.06	9.89
20-072	3/8" x 1/4"	0.98	0.98	0.50	0.09	7.85
20-073	3/8" x 3/8"	0.97	0.98	0.50	0.12	14.57
20-074	1/2" x 1/4"	1.15	1.05	0.62	0.15	12.57
20-075	1/2" x 3/8"	1.18	1.05	0.62	0.22	12.24
20-064	1/2" x 1/2"	1.16	1.66	0.62	0.20	14.39

269PP AQ69-P 6500 169PLNS 12-445 1169

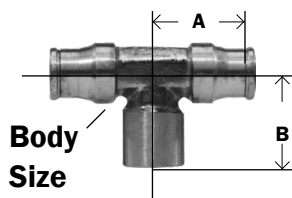
FEMALE SWIVEL ELBOW

Part #	Tube O.D. x Female NPTF	A	B	Hex	List Price
20-094S	5/32" x 1/8"	0.76	1.06	0.56	15.59
20-089S	1/4" x 1/8"	0.98	1.08	0.56	15.32
20-090S	1/4" x 1/4"	0.98	1.26	0.75	13.82
20-091S	3/8" x 1/4"	1.07	1.48	0.75	20.22

FEMALE ELBOW

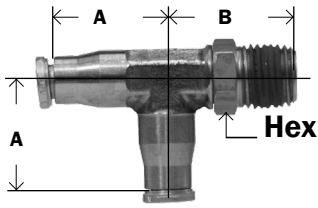
Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-192	1/8" x 1/8"	0.78	0.82	0.31	0.02	8.38
20-094	5/32" x 1/8"	0.68	0.82	0.37	0.02	9.93
20-089	1/4" x 1/8"	0.91	0.75	0.37	0.06	11.26
20-090	1/4" x 1/4"	1.03	1.03	0.50	0.11	13.35
20-091	3/8" x 1/4"	0.98	0.95	0.50	0.16	20.39

AQ70-P 3009

FEMALE BRANCH TEE

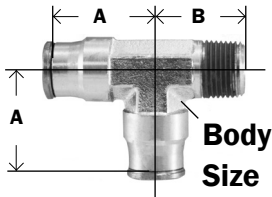
Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-130	1/4" x 1/8"	0.89	0.75	0.43	0.06	18.43
20-132	3/8" x 1/4"	0.96	0.98	0.50	0.12	23.89

AQ77-P 3008 177PL

BRASS PUSH-IN FITTINGS**BRASS FITTINGS****SWIVEL MALE RUN TEE**

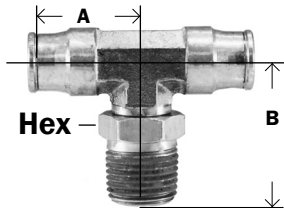
Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-160	1/8" x 1/8"	0.65	0.86	0.43	0.08	11.29
20-161	5/32" x 1/8"	0.67	1.04	0.43	0.09	13.50
20-162	1/4" x 1/8"	0.92	1.04	0.44	0.09	12.56
20-163	1/4" x 1/4"	0.92	1.13	0.56	0.11	14.10
20-164	3/8" x 1/4"	0.94	1.19	0.56	0.11	15.05
20-165	3/8" x 3/8"	0.96	1.24	0.50	0.12	23.42
20-174	1/2" x 1/4"	1.12	1.18	0.51	0.16	63.44
20-166	1/2" x 3/8"	1.14	1.31	0.68	0.14	26.77
20-167	1/2" x 1/2"	1.14	1.61	0.87	0.16	33.76

AQ71-PS 56440 3103 171PL KQY 12-468 50-571 271-OFS 11715

FIXED MALE RUN TEE

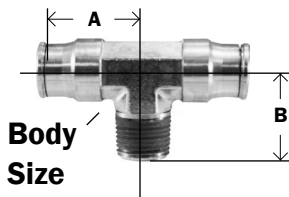
Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-095	1/8" x 1/8"	0.65	0.72	0.31	0.04	13.01
20-097	3/16" x 1/8"	0.75	0.73	0.37	0.06	16.74
20-098	1/4" x 1/8"	0.92	0.74	0.37	0.08	12.29
20-093	1/4" x 1/4"	0.92	0.92	0.43	0.10	13.99
20-099	3/8" x 1/8"	0.94	0.82	0.50	0.14	15.04
20-100	3/8" x 1/4"	0.98	0.98	0.50	0.12	17.97
20-101	3/8" x 3/8"	1.05	1.05	0.62	0.10	18.13
20-102	1/2" x 3/8"	1.14	1.05	0.62	0.18	26.90

AQ71-P

SWIVEL MALE BRANCH TEE

Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-103	1/8" x 1/8"	0.65	0.81	0.31	0.04	18.87
20-104	5/32" x 10-32"*	0.65	0.71	0.31	0.04	24.76
20-109	5/32" x 1/8"	0.67	0.94	0.37	0.06	15.54
20-105	1/4" x 1/8"	0.92	0.97	0.37	0.08	15.33
20-106	1/4" x 1/4"	0.92	1.09	0.55	0.10	11.51
20-107	3/8" x 1/4"	0.96	1.14	0.56	0.18	15.83
20-108	3/8" x 3/8"	0.96	1.23	0.69	0.16	21.46
20-110	1/2" x 3/8"	1.16	1.34	0.69	0.24	26.02
20-111	1/2" x 1/2"	1.16	1.64	0.87	0.28	31.20

* Furnished with gaskets

FIXED MALE BRANCH TEE

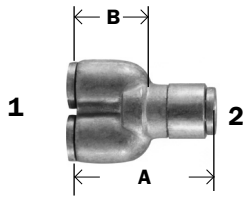
Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-112	1/8" x 1/8"	0.69	0.72	0.31	0.04	12.64
20-113	5/32" x 1/8"	0.69	0.65	0.31	0.04	14.44
20-115	1/4" x 1/8"	0.92	0.74	0.37	0.12	13.07
20-116	1/4" x 1/4"	0.91	0.93	0.37	0.10	14.06
20-117	3/8" x 1/8"	0.98	0.80	0.50	0.08	16.72
20-118	3/8" x 1/4"	0.98	0.97	0.50	0.12	17.71
20-119	3/8" x 3/8"	0.98	0.97	0.50	0.14	18.39
20-120	1/2" x 3/8"	1.16	1.05	0.62	0.18	25.54

AQ72-P

BRASS FITTINGS

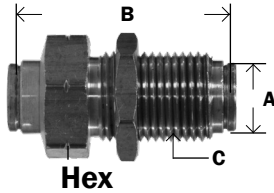
BRASS PUSH-IN FITTINGS

UNION "Y"



Part #	Tube O.D. 1 X 2	A	B	Approx. Wt. Lbs.	List Price
20-551	5/32" x 5/32"	1.36	0.81	0.11	57.95
20-552	1/4" x 1/8"	1.61	1.06	0.12	40.05
20-553	1/4" x 1/4"	1.81	1.16	0.14	37.39

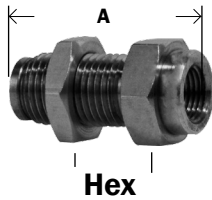
BULKHEAD UNION



Part #	Tube O.D. A	B	C	Hex	Approx. Wt. Lbs.	List Price
20-124	1/8"	1.12	7/16-20	0.62	0.03	27.41
20-125	5/32"	1.12	7/16-20	0.62	0.03	30.03
20-126	3/16"	1.27	1/2-20	0.68	0.04	27.24
20-127	1/4"	1.69	1/2-20	0.68	0.06	18.10
20-128	3/8"	1.69	3/4-16	0.81	0.13	22.79
20-129	1/2"	1.85	15/16-20	1.12	0.16	36.84

AQ82-P 6590 62PLBH KQE 12-029 50-582 282-OF 1174

FEMALE BULKHEAD UNION

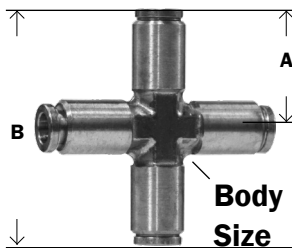


Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-170	1/4" x 1/8"	1.19	0.68	0.08	15.79
20-171	1/4" x 1/4"	1.36	0.75	0.10	22.45
20-172	3/8" x 1/4"	1.71	0.75	0.14	24.49

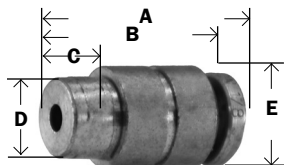
AQ86-P 1166BH

Dimension data can change without notice. Please call us when dimensions are critical.

CROSS



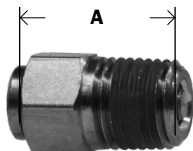
Size	Size	A	B	Body Size	List Price
20-142	1/4"	1.03	2.06	0.37	25.94
20-143	3/8"	1.06	2.12	0.50	25.41

BRASS PUSH-IN FITTINGS**BRASS FITTINGS****PRESS-IN CARTRIDGE**

Part #	Tube O.D.	A	B	C	D	E	List Price
20-040	1/8"	0.67	0.59	0.20	0.30	0.38	9.59
20-041	5/32"	0.67	0.59	0.20	0.30	0.38	3.17
20-043	1/4"	0.93	0.85	0.26	0.38	0.50	5.89
20-044	3/8"	1.21	1.13	0.26	0.38	0.63	9.97

QUICK DISCONNECT

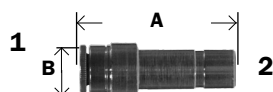
When tube is disconnected, flow shuts off automatically.



Hex ↗

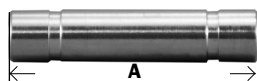
Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-133	1/4" x 1/8"	0.92	0.43	0.10	36.22
20-134	1/4" x 1/4"	0.92	0.56	0.12	25.86

AQ92-P 6500 169PLNS

REDUCER - NICKEL PLATED - TUBE OD X STUD

Part #	Tube O.D. 1 X 2	A	B	Approx. Wt. Lbs.	List Price
20-510	1/8" x 1/4"	1.38	0.39	0.02	16.06
20-511	5/32" x 1/4"	1.33	0.35	0.02	16.20
20-512	1/4" x 3/8"	1.50	0.51	0.04	19.22

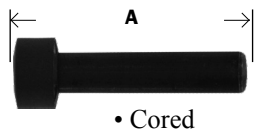
67PPL 286PP

DOUBLE MALE UNION - NICKEL PLATED

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-004	1/8"	1.28	0.01	7.37
20-005	5/32"	1.28	0.01	16.94
20-006	1/4"	1.40	0.02	9.46
20-007	5/16"	1.59	0.02	9.28
20-008	3/8"	1.81	0.02	10.71
20-000	1/2"	1.89	0.03	22.70

(For polyurethane or other soft plastic tubing)

AQ34

PLASTIC PLUG

• Cored

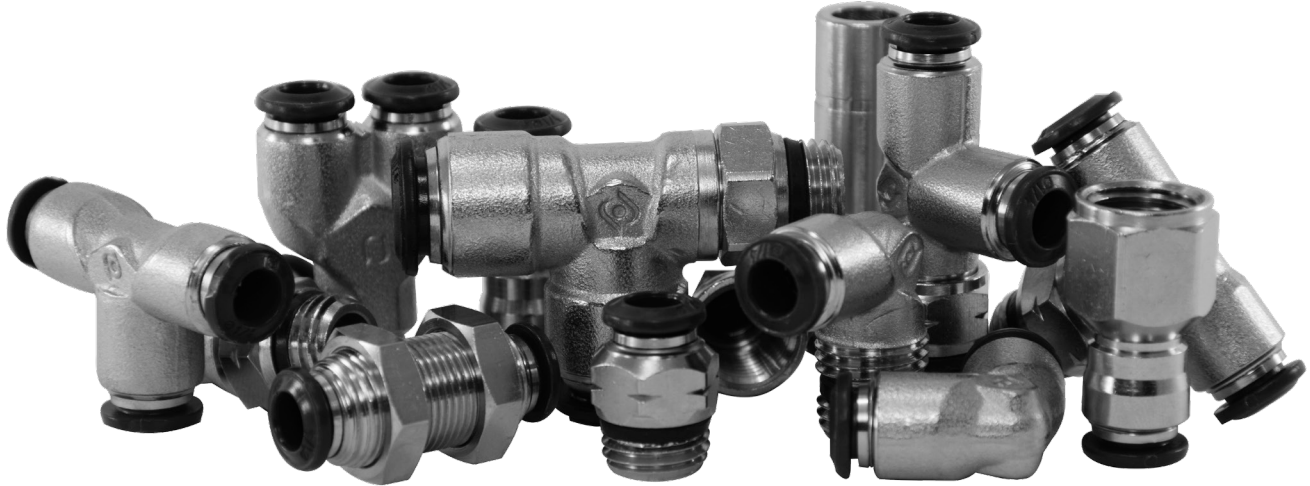
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-009	5/32"	1.16	0.01	1.46
20-010	1/4"	1.40	0.01	1.81
20-011	3/8"	1.40	0.02	3.52
20-013	1/2"	1.50	0.02	4.55

284PP AQ59 209-OF 1129 6900 639PL 12-004 50-526

NICKEL PLATED PUSH-IN FITTINGS

with GLOBAL THREAD

• NPTF • BSPP • BSPT • ISO 7 • ISO 228 • G THREAD • J THREAD



- Saves time and money
- No stripped threads
- No stripped parts
- Reduce inventory
- Completely reusable
- Quick installation
- No pitch identification

Component Parts and Materials	
Body	Brass - Nickel Plated
Thrust Ring	Acetalic Resin/ Glass filled Nylon
Sleeve	Brass - Nickel Plated
Gripper Collet	Stainless Steel
Safety Ring	PA66
Lip Seal (1/8 O-Ring Seal)	NBR 70
Thread Seal	NBR 70

Max Operating Pressure: 0-250 psi (17 bar) Vacuum service.

Min Temperature: 0°F (-18°C)

Max Temperature: 160°F (+70°C)

Tubing: Nylon, Polyethylene, Polyurethane.

- For best results use 95 Durometer

Media: Compressed air, water.

• Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

GLOBAL THREAD

Works With Inch or Metric Threads



“Global Thread” fittings can be assembled with female threads produced to the following standards: Tapered NPTF

Parallel (BSPP, BSP, ISO 7)

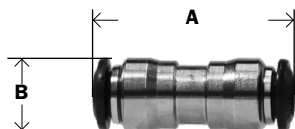
Tapered (BSPT, PT, ISO 7, ISO 228)

NICKEL PLATED PUSH-IN FITTINGS

BRASS FITTINGS

NICKEL PLATED PUSH-IN FITTINGS

UNION CONNECTOR



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-017N	1/8"	1.06	0.34	0.03	7.54
20-018N	5/32"	1.20	0.41	0.03	7.62
20-016N	5/32" x 1/4"	1.20	0.40	0.04	8.13
20-019N	1/4"	1.38	0.49	0.05	7.32
20-015N	5/16"	1.46	0.57	0.06	8.22
20-020N	3/8"	1.69	0.69	0.06	10.90
20-022N	3/8" x 1/4"	1.69	0.68	0.06	10.98
20-021N	1/2"	1.93	0.81	0.18	15.09
20-024N	1/2" x 3/8"	1.84	0.80	0.17	13.01

62PL 88040

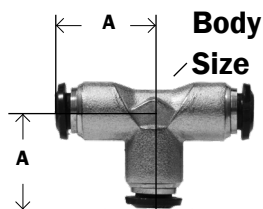
REDUCER



Part #	Tube O.D. 2	Tube O.D. 1	A	List Price
20-510N	1/4"	1/8"	1.142	5.39
20-511N	1/4"	5/32"	1.181	5.63
20-512N	3/8"	1/4"	1.496	7.30
20-513N	1/2"	1/4"	1.693	7.30
20-514N	1/2"	3/8"	1.693	9.26

67PPL 88700

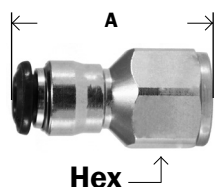
UNION TEE



Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-025N	1/8"	0.67	0.35	0.04	11.10
20-026N	5/32"	0.67	0.35	0.04	21.26
20-028N	1/4"	0.83	0.43	0.09	11.77
20-031N	5/16"	0.87	0.51	0.10	16.22
20-029N	3/8"	1.04	0.63	0.13	16.21
20-030N	1/2"	1.20	0.74	0.24	22.46

164PL 88230

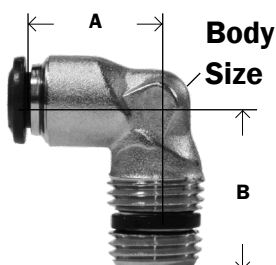
FEMALE CONNECTOR



Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-032N	1/8" x 1/8"	0.93	0.51	0.04	12.42
20-038N	1/8" x 1/4"	1.14	0.63	0.04	11.28
20-034N	1/4" x 1/8"	1.06	0.51	0.06	9.94
20-035N	1/4" x 1/4"	1.26	0.63	0.09	10.90
20-036N	3/8" x 1/4"	1.38	0.71	0.09	18.60
20-037N	3/8" x 3/8"	1.38	0.79	0.12	18.24

66PL 88030

FIXED MALE ELBOW



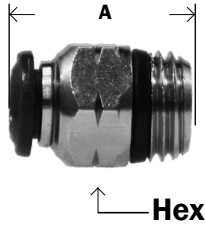
Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-068N	1/4" x 1/8"	0.83	0.73	0.43	0.06	6.30
20-069N	1/4" x 1/4"	0.83	0.91	0.43	0.08	6.89
20-072N	3/8" x 1/4"	1.04	1.04	0.63	0.09	10.88
20-073N	3/8" x 3/8"	1.04	1.00	0.63	0.12	11.77

W169PLNS 8100

BRASS FITTINGS

NICKEL PLATED PUSH-IN FITTINGS

MALE CONNECTOR

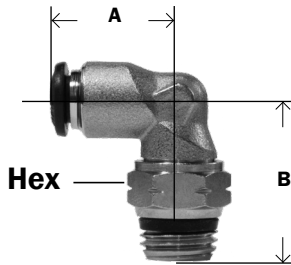


internal hex

Part #	Tube O.D. x Male Global Thread	A	Hex	Approx. Wt. Lbs.	List Price
20-047N	1/8" x 10-32"	0.75	0.31	0.02	6.02
20-048N	1/8" x 1/8"	0.77	0.43	0.02	5.48
20-023N	1/8" x 1/4"	0.97	0.55	0.04	5.36
20-049N	5/32" x 10-32"	0.83	0.39	0.02	5.91
20-050N	5/32" x 1/8"	0.83	0.43	0.03	4.58
20-046N	5/32" x 1/4"	0.98	0.55	0.05	7.14
20-053N	1/4" x 10-32"	0.97	0.51	0.03	6.73
20-054N	1/4" x 1/8"	0.98	0.51	0.06	4.71
20-055N	1/4" x 1/4"	0.98	0.55	0.10	5.39
20-056N	1/4" x 3/8"	0.98	0.71	0.08	6.89
20-530N	5/16" x 1/8"	0.98	0.55	0.05	7.87
20-531N	5/16" x 1/4"	1.08	0.55	0.10	7.82
20-532N	5/16" x 3/8"	1.08	0.71	0.08	9.60
20-057N	3/8" x 1/8"	1.38	0.67	0.06	7.82
20-058N	3/8" x 1/4"	1.32	0.67	0.05	7.28
20-059N	3/8" x 3/8"	1.32	0.71	0.08	8.11
20-062N	3/8" x 1/2"	1.32	0.87	0.08	14.58
20-060N	1/2" x 1/4"	1.54	0.79	0.11	10.52
20-061N	1/2" x 3/8"	1.42	0.79	0.12	12.80
20-063N	1/2" x 1/2"	1.58	0.87	0.14	15.69

68PL 87000

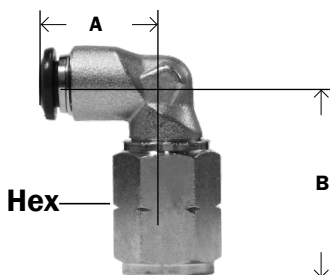
SWIVEL MALE ELBOW



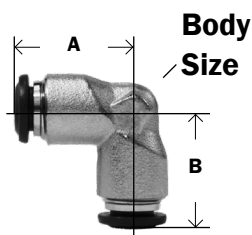
Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
20-079N	1/8" x 1/8"	0.67	0.78	0.51	0.07	7.96
20-535N	1/8" x 1/4"	0.67	0.95	0.59	0.06	10.04
20-076N	5/32" x 10-32"	0.67	0.95	0.59	0.04	9.17
20-080N	5/32" x 1/8"	0.67	0.79	0.51	0.05	8.49
20-081N	1/4" x 1/8"	0.83	0.87	0.51	0.08	7.81
20-082N	1/4" x 1/4"	0.83	0.98	0.59	0.10	8.71
20-086N	1/4" x 3/8"	0.83	1.10	0.67	0.09	14.49
20-538N	5/16" x 1/4"	0.89	1.02	0.59	0.07	11.28
20-539N	5/16" x 3/8"	0.87	1.10	0.67	0.08	13.65
20-087N	3/8" x 1/8"	1.04	1.02	0.51	0.09	13.38
20-083N	3/8" x 1/4"	1.04	1.10	0.59	0.10	11.31
20-084N	3/8" x 3/8"	1.04	1.18	0.67	0.20	14.06
20-088N	3/8" x 1/2"	1.04	1.30	0.83	0.19	19.11
20-085N	1/2" x 3/8"	1.20	1.24	0.59	0.18	17.77
20-092N	1/2" x 1/2"	1.20	1.42	0.83	0.24	19.97

W169PL 87110

FEMALE SWIVEL ELBOW

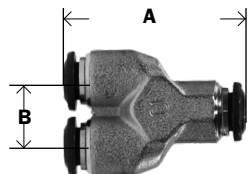


Part #	Tube O.D. x Female NPTF	A	B	Hex	List Price
20-094N	5/32" x 1/8"	0.669	0.994	0.354	9.97
20-089N	1/4" x 1/8"	0.826	1.023	0.433	11.80
20-090N	1/4" x 1/4"	0.826	1.200	0.433	11.62
20-762N	3/8" x 1/8"	0.885	1.082	0.511	12.69
20-091N	3/8" x 1/4"	0.885	1.240	0.511	13.45

NICKEL PLATED PUSH-IN FITTINGS**BRASS FITTINGS****UNION ELBOW**

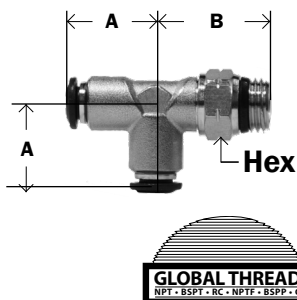
Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-150N	1/8"	0.67	0.35	0.02	10.26
20-151N	5/32"	0.67	0.35	0.04	8.51
20-152N	1/4"	0.83	0.43	0.06	8.79
20-155N	5/16"	0.87	0.51	0.08	10.80
20-153N	3/8"	1.04	0.63	0.09	13.12
20-154N	1/2"	1.20	0.75	0.18	18.93

165PL 88130

UNION "Y"

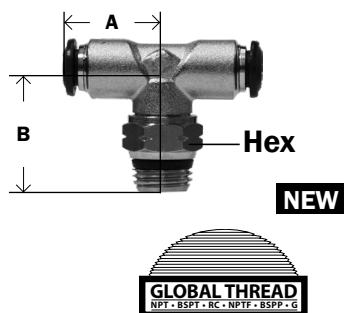
Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-553N	1/4" x 1/4"	1.44	0.53	0.14	24.98

662PL 88310

SWIVEL MALE RUN TEE

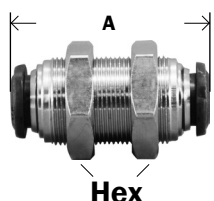
Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
20-162N	1/4" x 1/8"	0.83	0.87	0.51	0.09	12.99
20-163N	1/4" x 1/4"	0.83	0.98	0.59	0.11	13.85
20-168N	3/8" x 1/4"	1.04	1.10	0.59		20.18
20-164N	1/4" x 3/8"	0.83	1.10	0.59	0.11	15.05
20-165N	3/8" x 3/8"	1.04	1.18	0.67	0.12	22.54
20-174N	1/2" x 1/4"	1.20	1.24	0.59	0.16	28.51
20-166N	1/2" x 3/8"	1.20	1.30	0.67	0.14	27.08

W171PL 87222

SWIVEL MALE BRANCH TEE

Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
20-103N	1/8" x 1/8"	0.67	0.78	0.51	0.04	11.89
20-104N	5/32" x 10-32"	0.67	0.79	0.31	0.04	12.64
20-105N	1/4" x 1/8"	0.83	0.87	0.51	0.08	12.99
20-106N	1/4" x 1/4"	0.83	0.98	0.59	0.10	12.99
20-156N	1/4" x 3/8"	1.043	1.10	0.59	0.18	15.05
20-107N	3/8" x 1/4"	1.04	1.10	0.59	0.18	17.88
20-108N	3/8" x 3/8"	1.04	1.18	0.67	0.16	21.25
20-158N	3/8" x 1/2"	1.04	1.30	0.82		24.68
20-110N	1/2" x 3/8"	1.20	1.30	0.67	0.24	27.08
20-111N	1/2" x 1/2"	1.20	1.42	0.82	0.28	28.44

W172PL 87210

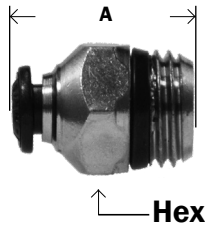
BULKHEAD UNION

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-127N	1/4"	1.38	0.67	0.06	13.48
20-123N	5/16"	1.45	0.74	0.08	17.11
20-128N	3/8"	1.69	0.94	0.13	19.28

62PLBH 88050

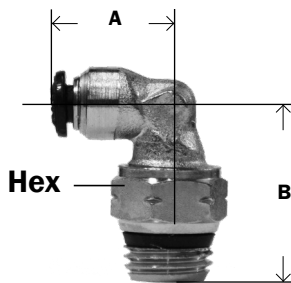
NICKEL PLATED METRIC PUSH-IN FITTINGS

METRIC TUBE STRAIGHT MALE

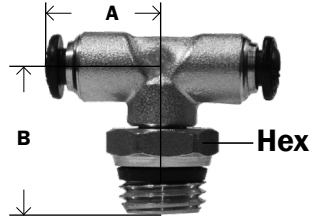


Part #	Tube O.D. (mm)	Global Thread	A	Hex	List Price
20-630N	4	1/8"	0.702	0.429	4.51
20-631N	4	1/4"	0.760	0.546	5.87
20-700N	5	1/8"	0.78	0.429	5.27
20-701N	5	1/4"	0.78	0.546	5.65
20-632N	6	1/8"	0.78	0.546	5.27
20-633N	6	1/4"	0.819	0.546	5.65
20-702N	8	1/8"	0.955	0.546	5.84
20-634N	8	1/4"	0.858	0.546	5.91
20-635N	8	3/8"	0.897	0.663	6.53
20-703N	8	1/2"	0.897	0.663	7.87
20-636N	10	1/4"	1.092	0.663	7.68
20-637N	10	3/8"	1.092	0.663	8.27
20-704N	10	1/2"	1.014	0.663	8.95
20-801N	12	1/4"	1.267	0.78	9.21
20-638N	12	3/8"	1.267	0.78	9.97
20-705N	12	1/2"	1.209	0.78	10.09
20-706N	14	3/8"	1.287	0.858	11.74
20-707N	14	1/2"	1.248	0.858	12.69

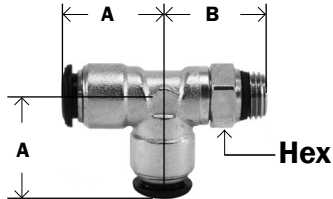
METRIC TUBE SWIVEL MALE ELBOW



Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	List Price
20-708N	4	1/8"	0.663	0.780	0.507	9.14
20-709N	4	1/4"	0.663	0.936	0.585	9.97
20-710N	5	1/8"	0.780	0.858	0.507	9.21
20-642N	6	1/8"	0.819	0.858	0.507	8.73
20-803N	6	1/4"	0.819	0.975	0.585	9.97
20-711N	8	1/8"	0.878	0.917	0.507	10.17
20-805N	8	1/4"	0.878	1.014	0.585	11.13
20-655N	8	3/8"	0.878	1.092	0.663	14.48
20-712N	8	1/2"	0.878	1.404	0.819	15.68
20-656N	10	1/4"	1.034	1.092	0.585	14.03
20-657N	10	3/8"	1.034	1.170	0.663	15.68
20-713N	10	1/2"	1.034	1.287	0.819	18.22
20-658N	12	3/8"	1.190	1.287	0.663	18.08
20-659N	12	1/2"	1.190	1.404	0.819	20.63
20-714N	14	3/8"	1.268	1.404	0.663	21.77
20-715N	14	1/2"	1.268	1.443	0.819	23.10

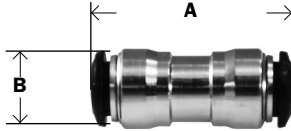
NICKEL PLATED METRIC PUSH-IN FITTINGS**BRASS FITTINGS****METRIC TUBE SWIVEL MALE BRANCH TEE**

Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	List Price
20-680N	4	1/8"	0.663	0.780	0.507	12.76
20-716N	4	1/4"	0.663	0.936	0.585	13.90
20-717N	5	1/8"	0.78	0.858	0.507	12.76
20-682N	6	1/8"	0.819	0.858	0.507	12.76
20-683N	6	1/4"	0.819	0.975	0.585	13.90
20-809N	8	1/8"	0.877	0.917	0.507	15.49
20-684N	8	1/4"	0.877	1.014	0.585	15.81
20-686N	10	1/4"	1.033	1.092	0.585	20.56
20-687N	10	3/8"	1.033	1.170	0.663	21.77
20-810N	10	1/2"	1.033	1.287	0.819	23.10
20-688N	12	3/8"	1.189	1.287	0.663	24.12
20-689N	12	1/2"	1.189	1.404	0.819	26.08
20-718N	14	3/8"	1.267	1.404	0.663	30.15
20-719N	14	1/2"	1.267	1.443	0.819	32.49

METRIC TUBE SWIVEL MALE RUN TEE

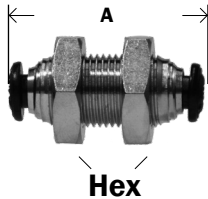
Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	List Price
20-670N	4	1/8"	0.663	0.780	0.507	12.76
20-720N	4	1/4"	0.663	0.936	0.585	13.90
20-721N	5	1/8"	0.780	0.858	0.507	12.76
20-672N	6	1/8"	0.819	0.858	0.507	12.76
20-673N	6	1/4"	0.819	0.975	0.585	13.90
20-811N	8	1/8"	0.819	0.917	0.507	15.49
20-674N	8	1/4"	0.878	1.014	0.585	15.81
20-676N	10	1/4"	0.878	1.092	0.585	20.56
20-677N	10	3/8"	1.034	1.170	0.663	21.77
20-722N	10	1/2"	1.034	1.287	0.819	23.10
20-678N	12	3/8"	1.190	1.287	0.663	24.12
20-679N	12	1/2"	1.190	1.404	0.819	26.08

BULKHEAD UNION



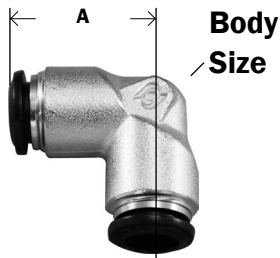
Part #	Tube O.D. (mm)	Tube O.D. (mm)	A	B	List Price
20-723N	3		1.014	0.332	11.87
20-600N	4		1.190	0.410	8.32
20-724N	5		1.287	0.449	8.64
20-725N	6	4	1.248	0.488	8.64
20-601N	6		1.326	0.488	8.64
20-726N	8	6	1.365	0.566	9.46
20-727N	8		1.404	0.566	9.65
20-728N	10	8	1.638	0.683	11.87
20-603N	10		1.638	0.683	11.87
20-729N	12	10	1.833	0.800	14.75
20-604N	12		1.833	0.800	14.03
20-730N	14		1.911	0.839	21.01

BULKHEAD

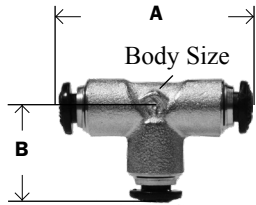


Part #	Tube O.D. (mm)	M	A	Hex	List Price
20-731N	3	M10x1	1.014	0.546	19.29
20-732N	4	M12x1	1.229	0.663	16.56
20-733N	5	M14x1	1.287	0.663	14.16
20-734N	6	M14x1	1.365	0.663	14.16
20-735N	8	M16x1	1.443	0.741	15.49
20-736N	10	M20x1	1.677	0.936	20.50
20-737N	12	M22x1	1.872	1.014	24.56

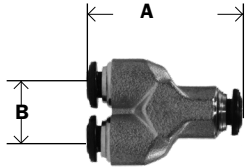
UNION ELBOW



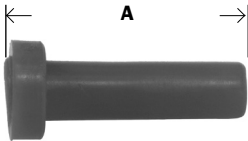
Part #	Tube O.D. (mm)	A	Body Size	List Price
20-738N	3	0.663	0.51	11.87
20-206N	4	0.663	0.351	9.21
20-739N	5	0.780	0.429	9.33
20-660N	6	0.780	0.429	9.33
20-661N	8	0.878	0.507	10.98
20-807N	10	1.034	0.624	13.52
20-808N	12	1.190	0.741	17.78
20-740N	14	1.268	0.741	21.90

NICKEL PLATED METRIC PUSH-IN FITTINGS**BRASS FITTINGS****UNION TEE**

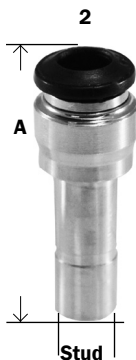
Part #	Tube O.D. (mm)	A	B	Body Size	List Price
20-741N	3	1.326	0.663	0.351	16.50
20-610N	4	1.326	0.663	0.351	12.69
20-742N	5	1.560	0.780	0.429	13.39
20-611N	6	1.638	0.819	0.429	13.39
20-612N	8	1.755	0.878	0.507	15.49
20-613N	10	2.067	1.034	0.624	20.12
20-614N	12	2.379	1.190	0.741	24.95
20-743N	14	2.379	2.535	0.741	32.06

UNION Y

Part #	Tube O.D. (mm)	B	A	List Price
20-744N	3	0.390	1.131	23.35
20-813N	4	0.429	1.248	17.52
20-745N	5	0.527	1.365	18.54
20-814N	6	0.527	1.424	18.54
20-815N	8	0.605	1.599	21.01
20-746N	10	0.728	1.890	29.65

PLUG

Part #	Tube O.D. (mm)	A	List Price
20-748N	4	0.917	1.14
20-749N	5	0.956	1.14
20-750N	6	0.956	1.14
20-751N	8	1.014	1.40
20-752N	10	1.112	1.42
20-753N	12	1.190	1.43

REDUCER

Part #	Stud (mm)	Tube O.D. 2 (mm)	A	List Price
20-754N	4	3	1.053	10.09
20-755N	5	4	1.131	5.27
20-756N	6	4	1.170	5.27
20-757N	6	5	1.248	5.27
20-758N	8	6	1.326	5.59
20-759N	10	8	1.482	5.91
20-760N	12	8	1.521	6.35

Composite Body Push-In Fittings



• For Food Grade,
see page 318

Specifications

Fluid admitted	Air
Working pressure range	0-150 PSI (10BAR)
Min. Burst pressure	340PSI (23BAR)
Working Temperature range	-104°F ~180°F

Materials of Construction:

1	Body	Composite Polyacetal (hemopolymer, copolymer)
2	Body	Brass
3	Tube Release	Acetal Resin
4	Retainer	Brass
5	Gripper Ring	Stainless Steel
6	Spacer	Brass
7	O-Ring	NBR 70
8	Threads	Brass w/ white sealant

The latest generation of composite material is used in the body construction in addition to brass on threaded components and stainless steel on the tube gripper.

• Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

COMPOSITE BODY PUSH-IN FITTINGS**BRASS FITTINGS****UNION**

	Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
NEW	20-017C	1/8"	0.01	6.73
	20-018C	5/32"	0.01	6.75
NEW	20-001C	3/16"	0.01	9.89
	20-019C	1/4"	0.01	3.44
NEW	20-015C	5/16"	0.01	7.41
	20-020C	3/8"	0.02	4.40
	20-021C	1/2"	0.03	7.55
NEW	20-022C	3/8" x 1/4"	0.01	8.16
NEW	20-024C	1/2" x 3/8"	0.03	19.77

PQ62P

UNION TEE

	Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
NEW	20-025C	1/8"	0.01	9.69
NEW	20-026C	5/32"	0.01	9.00
	20-028C	1/4"	0.02	2.75
NEW	20-031C	5/16"	0.02	10.88
	20-029C	3/8"	0.02	5.46
	20-030C	1/2"	0.08	10.39

PQ64P

FEMALE CONNECTOR

- Brass

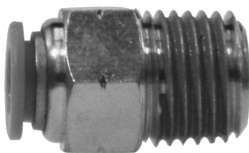


Part #	Tube O.D. x Female NPT	Approx. Wt. Lbs.	List Price
20-034C	1/4" x 1/8"	0.02	6.89
20-035C	1/4" x 1/4"	0.04	6.23
20-036C	3/8" x 1/4"	0.04	5.11
20-037C	3/8" x 3/8"	0.06	4.08

PQ66P

MALE CONNECTOR

- Nickel Plated



	Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
NEW	20-050C	5/32" x 1/8"	0.02	5.05
NEW	20-053C	1/4" x 10-32"	0.02	6.31
	20-054C	1/4" x 1/8"	0.02	3.59
	20-055C	1/4" x 1/4"	0.02	2.21
	20-056C	1/4" x 3/8"	0.04	4.46
NEW	20-530C	5/16" x 1/8"	0.05	6.59
NEW	20-531C	5/16" x 1/4"	0.05	5.73
NEW	20-057C	3/8" x 1/8"	0.05	6.88
	20-058C	3/8" x 1/4"	0.06	3.51
	20-059C	3/8" x 3/8"	0.06	3.63
	20-062C	3/8" x 1/2"	0.08	6.69
	20-060C	1/2" x 1/4"	0.06	6.72
	20-061C	1/2" x 3/8"	0.08	6.01
	20-063C	1/2" x 1/2"	0.10	6.48

PQ68P

BRASS FITTINGS**COMPOSITE BODY PUSH-IN FITTINGS****SWIVEL MALE ELBOW**

- Swivels for installation only.
- Not a live swivel

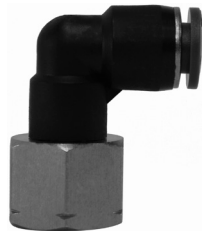


	Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
NEW	20-079C	1/8" x 1/8"	0.01	7.38
NEW	20-078C	1/4" x 10-32	0.01	6.72
	20-081C	1/4" x 1/8"	0.02	3.94
	20-082C	1/4" x 1/4"	0.04	3.75
	20-086C	1/4" x 3/8"	0.06	4.79
NEW	20-537C	5/16" x 1/8"	0.04	8.72
NEW	20-538C	5/16" x 1/4"	0.04	7.02
	20-087C	3/8" x 1/8"	0.04	4.98
	20-083C	3/8" x 1/4"	0.08	5.20
	20-084C	3/8" x 3/8"	0.10	4.96
	20-088C	3/8" x 1/2"	0.12	8.65
NEW	20-184C	1/2" x 1/4"	0.14	10.77
	20-085C	1/2" x 3/8"	0.16	10.42
	20-092C	1/2" x 1/2"	0.18	13.20

PQ69PS

LONG PATTERN MALE ELBOWS

	Part #	Tube O.D. x Thread	Approx. Wt. Lbs.	List Price
NEW	20-572C	1/4 X 1/8	0.03	15.34
	20-573C	1/4 X 1/4	0.05	15.06
	20-574C	1/4 X 3/8	0.06	24.09
	20-579C	3/8 X 1/4	0.09	25.10
	20-580C	3/8 X 3/8	0.12	25.10
	20-581C	3/8 X 1/2	0.14	40.73
	20-582C	1/2 X 1/4	0.16	37.59
	20-583C	1/2 X 3/8	0.18	40.45
	20-584C	1/2 X 1/2	0.20	40.45

FEMALE SWIVEL ELBOWS

	Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
NEW	20-089C	1/4 X 1/8	0.05	17.35
	20-090C	1/4 X 1/4	0.06	18.93
	20-591C	1/4 X 3/8	0.07	21.91
	20-091C	3/8 X 1/4	0.10	27.97
	20-595C	3/8 X 3/8	0.14	27.97
	20-596C	3/8 X 1/2	0.15	34.16
	20-597C	1/2 X 3/8	0.20	32.96
	20-092C	1/2 X 1/2	0.23	13.20

45° SWIVELS

	Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
NEW	20-139C	1/4 X 1/8	0.04	8.60
	20-140C	1/4 X 1/4	0.05	7.37

COMPOSITE BODY PUSH-IN FITTINGS**BRASS FITTINGS****90° UNION ELBOW****NEW**

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
20-150C	1/8	0.01	6.72
20-151C	5/32	0.01	6.44
20-152C	1/4"	0.02	5.13
20-155C	5/16	0.02	8.89
20-153C	3/8"	0.02	6.03
20-154C	1/2	0.02	7.20

PQ65P

SWIVEL MALE RUN TEE

- Swivels for installation only.
- Not a live swivel

**NEW****NEW****NEW**

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-162C	1/4" x 1/8"	0.04	9.06
20-163C	1/4" x 1/4"	0.04	5.16
20-099C	3/8" x 1/8"	0.06	6.22
20-100C	3/8" x 1/4"	0.08	5.77
20-165C	3/8" x 3/8"	0.10	6.86
20-181C	3/8 x 1/2	0.12	16.92
20-174C	1/2 x 1/4	0.12	16.53
20-166C	1/2 x 3/8	0.14	16.92
20-167C	1/2 x 1/2	0.16	19.89

PQ71PS

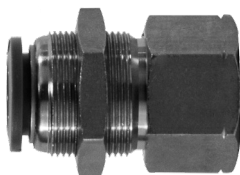
SWIVEL MALE BRANCH TEE

- Swivels for installation only.
- Not a live swivel

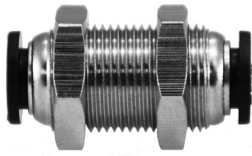
**NEW****NEW****NEW****NEW**

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-105C	1/4" x 1/8"	0.04	9.13
20-106C	1/4" x 1/4"	0.06	5.69
20-121C	1/4" x 3/8"	0.08	6.11
20-107C	3/8" x 1/4"	0.10	10.45
20-108C	3/8" x 3/8"	0.12	10.07
20-158C	3/8 X 1/2	0.14	16.92
20-138C	1/2 X 1/4	0.14	16.53
20-110C	1/2 X 3/8	0.16	16.92
20-111C	1/2 X 1/2	0.21	19.83

PQ72PS

BULKHEAD FEMALES**NEW**

Part #	Tube O.D. x Thread	Approx. Wt. Lbs.	List Price
20-170C	1/4 X 1/8	0.04	21.51
20-171C	1/4 X 1/4	0.04	16.58
20-172C	3/8 X 1/4	0.06	39.30
20-173C	3/8 X 3/8	0.07	35.57
20-175C	1/2 X 1/4	0.07	51.49
20-176C	1/2 X 3/8	0.09	41.74
20-179C	1/2 X 1/2	0.10	44.89

BRASS FITTINGS**COMPOSITE BODY PUSH-IN FITTINGS****BULKHEAD UNION****NEW**

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
20-127C	1/4"	0.04	8.44
20-128C	3/8"	0.06	6.67
20-129C	1/2"	0.10	10.74

PQ82P

UNION "Y" CONNECTOR**NEW****NEW****NEW**

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
20-551C	5/32"	0.01	11.10
20-553C	1/4"	0.02	3.69
20-182C	5/16"	0.02	11.97
20-555C	3/8"	0.02	9.55
20-185C	1/2	0.07	16.92

PQ89P

SWIVEL "Y" CONNECTOR

• Swivels for installation only. • Not a live swivel

**NEW**

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-187C	1/4 X 1/8	0.02	12.36
20-557C	1/4" x 1/4"	0.02	10.89
20-188C	3/8 X 1/4	0.04	14.59
20-189C	3/8 X 3/8	0.04	16.13
20-193C	3/8 X 1/2	0.07	19.26
20-194C	1/2 X 3/8	0.06	19.09
20-195C	1/2 X 1/2	0.09	22.34

PQ88PS

IN-LINE NEEDLE VALVE**NEW****NEW**

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
20-487C	1/4"	0.04	26.80
20-488C	5/16"	0.05	26.39
20-489C	3/8"	0.06	33.00

PQ310C

RIGHT ANGLE FLOW CONTROL METER IN**NEW**

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-727C	1/4 X 1/8	0.04	33.36
20-728C	1/4" x 1/4"	0.04	23.33
20-780C	3/8 X 1/4	0.06	31.80
20-781C	3/8 X 3/8	0.06	49.36
20-782C	1/2 X 1/2	0.10	63.78

JPQ

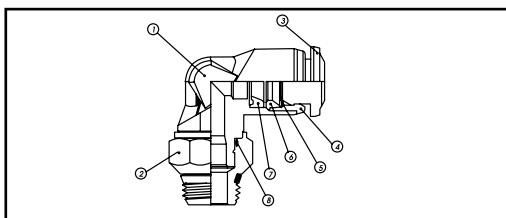
RIGHT ANGLE FLOW CONTROL METER OUT**NEW**

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-785C	1/4 x 1/8	0.04	31.69
20-786C	1/4 x 1/4	0.04	35.28
20-787C	3/8 x 1/4	0.06	31.80
20-788C	3/8 x 3/8	0.06	41.89
20-789C	1/2 x 1/2	0.10	74.44

METRIC COMPOSITE BODY PUSH-IN FITTINGS

BRASS FITTINGS

Technical Characteristics



PART 1	BODY	COMPOSITE
PART 2	BODY	NICKEL PLATED BRASS
PART 3	TUBE RELEASE	ACETAL RESIN
PART 4	RETAINER	NICKEL PLATED BRASS
PART 5	GRIPPER RING	STAINLESS STEEL
PART 6	SPACER	COMPOSITE
PART 7	THREAD PACKING	NBR 70
PART 8	O-RING	NBR 70
PART 9	THREAD SEAL	NBR70

Operating Range

Pressure: 0 to 220 PSI (15 bar)

Vacuum: 0 to 29hg (-.99 bar)

Temperature

-5° F to + 175° F (-20° C to + 80° C)

Media

Compressed air.

Non-toxic fluids (water)

Materials

The latest generation of composite material is used in the body construction in addition to nickel-plated brass on threaded components and stainless steel on the tube gripper.



Part #	Tube OD (mm)	BSPT Thread	List Price
20-630	4	1/8"	5.90
20-631	4	1/4"	6.82
20-632	6	1/8"	6.69
20-633	6	1/4"	6.21
20-634	8	1/4"	3.69
20-635	8	3/8"	8.40
20-636	10	1/4"	8.88
20-637	10	3/8"	9.70
20-801	12	1/4"	11.41
20-638	12	3/8"	12.33

3175



Part #	Tube O.D. (mm)	List Price
20-600	4	6.69
20-601	6	2.50
20-602	8	6.00
20-603	10	8.43
20-604	12	4.16



Part #	Tube OD (mm)	BSPT Thread	List Price
20-642	6	1/8"	6.45
20-803	6	1/4"	9.69
20-805	8	1/4"	14.35
20-655	8	3/8"	18.42
20-656	10	1/4"	13.27
20-657	10	3/8"	18.88
20-658	12	3/8"	21.83
20-659	12	1/2"	24.09



Part #	Tube O.D. (mm)	List Price
20-806	4	6.69
20-660	6	4.80
20-661	8	7.12
20-807	10	16.76
20-808	12	22.21

3102



Part #	Tube OD (mm)	BSPT Thread	List Price
20-680	4	1/8"	12.41
20-682	6	1/8"	12.03
20-683	6	1/4"	14.01
20-809	8	1/8"	14.55
20-684	8	1/4"	20.50
20-685	8	3/8"	24.27
20-686	10	1/4"	19.66
20-687	10	3/8"	28.88
20-810	10	1/2"	28.89
20-688	12	3/8"	21.58
20-689	12	1/2"	25.99



Part #	Tube O.D. (mm)	List Price
20-610	4	16.31
20-611	6	5.55
20-612	8	5.69
20-613	10	25.20
20-614	12	25.63

3104



Part #	Tube OD (mm)	BSPT Thread	List Price
20-670	4	1/8"	12.29
20-672	6	1/8"	13.31
20-673	6	1/4"	12.35
20-811	8	1/8"	14.95
20-674	8	1/4"	14.61
20-675	8	3/8"	16.04
20-676	10	1/4"	27.14
20-677	10	3/8"	28.89
20-678	12	3/8"	23.03
20-679	12	1/2"	25.08



Part #	Tube OD (mm)	List Price
20-813	4	21.43
20-814	6	14.55
20-815	8	25.65

BRASS FITTINGS

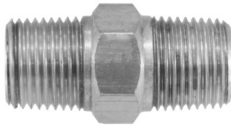
BSPT/ BSPP FITTINGS

MALE BSPP NIPPLE



Part #	Size	List Price
28-800	1/8 X 1/8	12.93
28-801	1/4 X 1/8	14.60
28-802	1/4 X 1/4	17.18
28-803	3/8 X 1/8	18.47
28-804	3/8 X 1/4	17.26
28-805	3/8 X 3/8	24.13
28-806	1/2 X 1/4	41.15
28-807	1/2 X 3/8	41.15
28-808	1/2 X 1/2	32.31
28-810	3/4 X 1/2	58.05
28-811	3/4 X 3/4	63.64
28-812	1 X 3/4	69.77
28-813	1 X 1	72.64
28-814	1-1/2 X 1-1/4	250.66

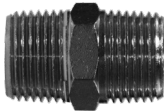
MALE NIPPLE



BSPT X MALE NPT

Part #	Size	List Price
28-815	1/8 X 1/8	33.53
28-816	1/4 X 1/4	29.37
28-817	3/8 X 3/8	33.43
28-818	1/2 X 1/2	55.81
28-819	3/4 X 3/4	110.31
28-839	1 X 1	158.69

MALE BSPT NIPPLE



Part #	Size	List Price
28-820	1/8 X 1/8	11.15
28-821	1/4 X 1/8	13.99
28-822	1/4 X 1/4	12.35
28-823	3/8 X 1/8	23.31
28-824	3/8 X 1/4	18.07
28-825	3/8 X 3/8	16.10
28-826	1/2 X 1/8	37.54
28-827	1/2 X 1/4	37.67
28-828	1/2 X 3/8	28.69
28-829	1/2 X 1/2	29.13
28-832	3/4 X 1/2	73.16
28-833	3/4 X 3/4	54.26
28-945	1 X 3/4	100.14
28-910	1 X 1	105.15

MALE BSPP X MALE NPT



Part #	Size	List Price
28-976	1/4 X 1/4	12.93
28-977	3/8 X 1/4	14.60
28-978	3/8 X 3/8	17.18
28-979	1/2 X 1/2	18.47

BSPP COUNTERSUNK SEALED PLUG



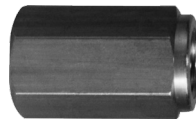
Part #	Size	List Price
28-835	1/8	12.04
28-836	1/4	16.78
28-837	3/8	15.24
28-838	1/2	35.92

BSPT HEX COUNTERSUNK PLUG



Part #	Size	List Price
28-840	1/8	4.79
28-841	1/4	8.88
28-842	3/8	21.44
28-843	1/2	27.59
28-844	3/4	53.80

FEMALE BSP CAP



BSP seals w/ both BSPT & BSPP

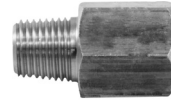
Part #	Size	List Price
28-855	1/8	14.04
28-856	1/4	18.05
28-857	3/8	18.40
28-858	1/2	48.80
28-859	3/4	37.07

BARB X FE BSPP SWIVEL



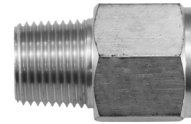
Part #	Size	List Price
28-851	1/4 X 1/4	12.93
28-852	3/8 X 3/8	14.60
28-853	1/2 X 1/2	17.18
28-854	3/4 X 3/4	18.47

BSPT MALE X FEMALE NPT



Part #	Size	List Price
28-860	1/8 X 1/8	12.76
28-861	1/4 X 1/4	25.61
28-862	3/8 X 3/8	37.99
28-863	1/2 X 1/2	99.97
28-864	3/4 X 3/4	109.31
28-866	1 X 1	184.63

NPT MALE X FEMALE BSP



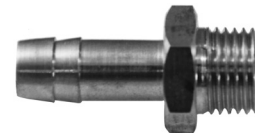
Part #	Size	List Price
28-867	1/8 X 1/8	17.27
28-868	1/4 X 1/4	23.22
28-869	3/8 X 3/8	52.75
28-870	1/2 X 1/2	84.30
28-871	3/4 X 3/4	114.38

BUSHING BSPT MALE X BSP FEMALE



Part #	Size	List Price
28-872	1/8 X 1/8	11.04
28-845	1/8 X 3/8	23.03
28-873	1/4 X 1/8	9.59
28-846	1/4 X 3/8	22.25
28-847	1/4 X 1/2	32.56
28-874	3/8 X 1/8	15.30
28-875	3/8 X 1/4	14.92
28-848	3/8 X 3/8	23.71
28-876	1/2 X 1/4	20.12
28-877	1/2 X 3/8	22.28
28-878	3/4 X 1/2	32.43
28-879	1 X 3/4	69.77

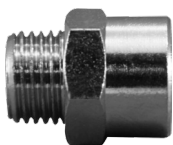
BARB X BSPP



Part #	Size	List Price
29-122	3/8 X 1/4	34.15
29-123	1/2 X 1/4	34.93

BSPT/ BSPP FITTINGS**BRASS RIGID MALE BARB ADAPTER**

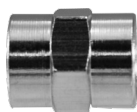
Part #	Hose I.D. x BSPT	List Price
32-450	1/4" x 1/8"	1.40
32-451	1/4" x 1/4"	2.04
32-452	3/8" x 1/4"	2.23
32-453	3/8" x 3/8"	5.63
32-454	3/8" x 1/2"	4.12
32-455	1/2" x 3/8"	3.17
32-456	1/2" x 1/2"	4.57
32-457	3/4" x 3/4"	7.11
32-458	1" x 1"	14.66
28-968	1/2 X 3/4	33.88

MALE BSPP X FEMALE BSP ADAPTER

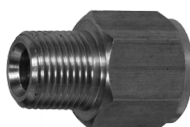
Part #	Size	List Price
28-880	1/8 X 1/8	14.16
28-881	1/8 X 1/4	13.10
28-882	1/4 X 1/8	12.35
28-883	1/4 X 1/4	18.90
28-884	1/4 X 3/8	21.30
28-885	3/8 X 1/8	25.56
28-886	3/8 X 1/4	17.49
28-887	3/8 X 3/8	35.26
28-888	3/8 X 1/2	34.17
28-889	1/2 X 1/4	28.54
28-890	1/2 X 3/8	33.82
28-891	1/2 X 1/2	55.17
28-951	1/2 X 1/8	23.80
28-892	3/4 X 1/4	59.33
28-893	3/4 X 1/2	42.50

FE BSPP X FE NPT

Part #	Size	List Price
29-111	1/8 X 1/8	41.04
29-112	1/4 X 1/4	38.35
29-113	3/8 X 1/4	56.18
29-114	3/8 X 3/8	49.89
29-115	1/2 X 1/4	53.35
29-116	1/2 X 1/2	80.30
29-119	1-1/2 X 1-1/2	276.34
29-120	2 X 2	520.02

FEMALE BSP COUPLING

Part #	Size	List Price
28-894	1/8 X 1/8	15.87
28-895	1/4 X 1/8	21.70
28-896	1/4 X 1/4	16.90
28-897	3/8 X 1/8	31.06
28-898	3/8 X 1/4	37.67
28-899	3/8 X 3/8	26.56
28-900	1/2 X 1/4	39.94
28-901	1/2 X 3/8	54.99
28-902	1/2 X 1/2	45.57
28-903	3/4 X 3/4	55.72

MALE NPT X FE BSPT

Part #	Size	List Price
29-104	1/8 X 1/8	30.64
29-105	1/4 X 1/4	31.74
29-106	3/8 X 3/8	34.47
29-107	1/2 X 1/2	54.77
29-108	3/4 X 3/4	84.63
29-109	1 X 1	113.95
29-110	1-1/4 X 1-1/4	163.75

90° BSPT MALE ELBOW

Part #	Size	List Price
28-905	1/8 X 1/8	23.42
28-906	1/4 X 1/4	27.64
28-907	3/8 X 3/8	48.93
28-908	1/2 X 1/2	87.97
28-909	3/4 X 3/4	79.16

MALE BSPT X FEMALE BSP 90° ELBOW

Part #	Size	List Price
28-911	1/8 X 1/8	21.76
28-912	1/4 X 1/4	33.14
28-944	3/8 X 3/8	37.80
28-915	3/4 X 3/4	79.16

BRASS FITTINGS**BSP FEMALE 90° ELBOW**

Part #	Size	List Price
28-917	1/8 X 1/8	23.93
28-918	1/4 X 1/4	42.05
28-919	3/8 X 3/8	39.80
28-920	1/2 X 1/2	99.55
28-921	3/4 X 3/4	79.16

BSPT TEE

Part #	Size	List Price
28-927	1/2	86.18
28-928	3/4	106.38

BSP FEMALE TEE

Part #	Size	List Price
28-930	1/8	29.85
28-931	1/4	45.98
28-932	3/8	99.43
28-933	1/2	104.86
28-934	3/4	101.32

BSP MALE RUN TEE

Part #	Size	List Price
28-947	1/8	26.55
28-948	1/4	35.83
28-949	3/8	58.89
28-950	1/2	111.93

45° MALE BSPT X FE BSPT

Part #	Size	List Price
28-965	1/8 X 1/8	25.65

FE BSP BRANCH TEE

Part #	Size	List Price
29-129	1/4	37.26

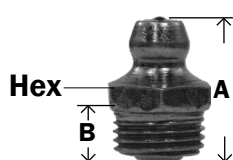
BRASS FITTINGS**STEEL GREASE FITTINGS**

- 8000 PSI max. pressure
- Exceeds 12hr salt spray

Meets SAE #J-534C

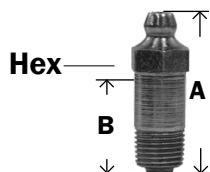
- Assortments also available

Many types available on special order.

PIPE THREAD**BALL CHECK**

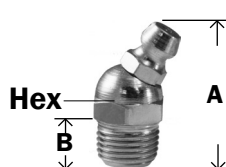
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-110	1/8" -27 NPTF	0.66	0.28	0.437	0.01	0.95
36-110SS	303 SS	0.68	0.29	0.437	0.01	4.26
36-111	Thread Forming	0.62	0.23	0.437	0.01	1.18

#610 1610 2800 1720 5000

PIPE THREAD**BALL CHECK**

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-112	1/8" -27 NPTF	1.25	0.22	0.437	0.02	3.71
36-113	1/8" -27 NPTF	1.75	1.26	0.437	0.02	2.70

#607 1607 2800 1669 5003

PIPE THREAD**30° ANGLE BALL CHECK**

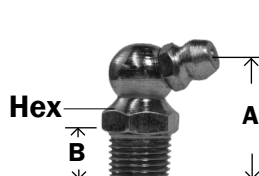
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-114	1/8" -27 NPTF	0.90	0.30	0.437	0.01	1.49

#611 1611 2830 5100

PIPE THREAD**45° ANGLE BALL CHECK**

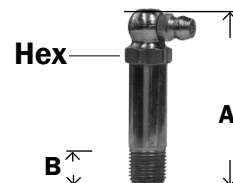
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-116	1/8" -27 NPTF	0.88	0.22	0.437	0.01	1.59
36-116SS	303 SS	0.95	0.29	0.437	0.01	7.36

#688 1688 2845 5200

PIPE THREAD**65° ANGLE BALL CHECK**

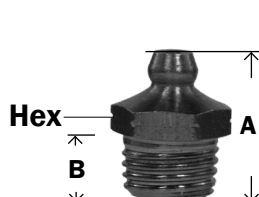
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-118	1/8" -27 NPTF	0.86	0.30	0.437	0.01	1.42

#612 1612 2865 5300

PIPE THREAD**90° ANGLE BALL CHECK**

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-120	1/8" -27 NPTF	0.84	0.30	0.437	0.01	1.41
36-120SS	303 SS	0.84	0.29	0.437	0.01	7.36
36-121	1/8" -27 NPTF	1.81	1.25	0.437	0.01	4.84

#613 1613 2890 5400 5407

PIPE THREAD**BALL CHECK**

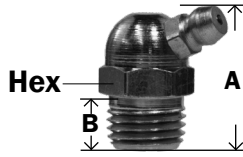
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-130	1/4" -18 NPTF	0.84	0.30	0.437	0.02	1.58
36-130SS	303 SS	0.87	0.42	0.437	0.02	11.31

#627 1627 2900K 5050

STEEL GREASE FITTINGS

BRASS FITTINGS

PIPE THREAD

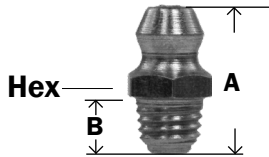


65° ANGLE BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-132	1/4"-18 NPTF	0.97	0.34	0.56	0.02	2.43

#629 1629 2965 5350

1/4-28 TAPER THREAD

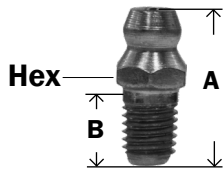


SHORT BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-140	1/4"-28 NPTF	0.54	0.18	0.31	0.01	0.54
36-140SS	303 SS	0.54	0.18	0.31	0.01	1.95
36-141	Thread Forming	0.55	0.10	0.31	0.01	0.53

#641 1641 2400 3038 5010

1/4-28 TAPER THREAD

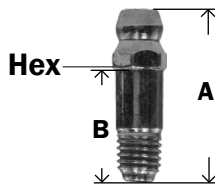


LONG BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-142	1/4"-28 Taper Thread	0.69	0.34	0.312	0.01	0.73

#652 1652 2400 5013

1/4-28 TAPER THREAD

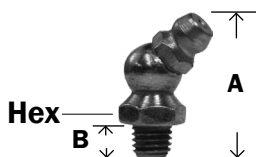


EXTRA LONG BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-144	1/4"-28 Taper Thread	0.92	1.63	0.312	0.02	1.15

#680 1680 2400 5014

1/4-28 TAPER THREAD

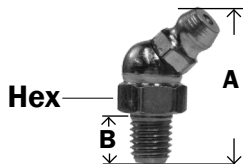


SHORT 45° BALL CHECK

Part #	Size	Angle	A	B	Hex	Approx. Wt. Lbs.	List Price
36-146	1/4"-28 Taper Thread	45°	0.82	0.20	0.375	0.02	1.25
36-146SS	303 SS	45°	0.81	0.20	0.375	0.02	5.17
36-147	1/4"-28 Taper Thread	65°	0.78	0.20	0.375	0.02	1.32

#637 1637 2445 1665 2465 3010 5210

1/4-28 TAPER THREAD

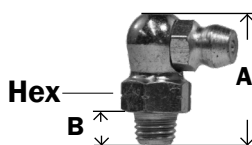


LONG 45° BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-148	1/4"-28 Taper Thread	0.94	0.30	0.375	0.02	2.07

#636 1630 2445

1/4-28 TAPER THREAD



90° ANGLE BALL CHECK

SAE# A515002

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-150	1/4"-28 Taper Thread	0.75	0.10	0.375	0.02	1.06
36-150SS	303 SS	0.75	0.20	0.375	0.02	5.17
36-152	Thread Forming	0.75	0.16	0.375	0.02	2.35

#911 1911 2490 3054 5410

BRASS FITTINGS

STEEL GREASE FITTINGS

DRIVE TYPE

BALL CHECK

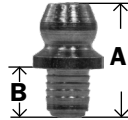


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-160	5/16"	0.55	0.25	0.01	0.79

#608 1608 5021

DRIVE TYPE

BALL CHECK

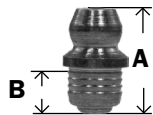


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-164	3/16"	0.52	0.25	0.01	0.71
36-164SS	303 SS	0.51	0.25	0.01	2.58

#728 1728 2316 5033

DRIVE TYPE

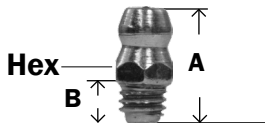
BALL CHECK



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-166	1/4"	0.55	0.23	0.01	0.59
36-166SS	303 SS	0.55	0.23	0.01	2.58

#743 1743 214 5029

METRIC



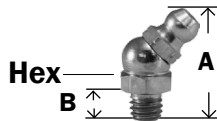
Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-168	6MM x 1	16	3.7	7	0.01	0.92

(Diameter x Pitch)

#711 6000 2106 2M6 5175

METRIC

45° ANGLE

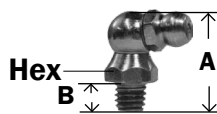


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-170	6MM x 1	21	3.7	9	0.02	1.24

#712 6045 2107 5176

METRIC

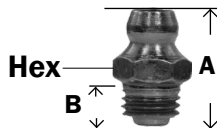
90° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-172	6MM x 1	18	3.7	9	0.02	1.30

#713 6090 2108 ZM906 5177

METRIC

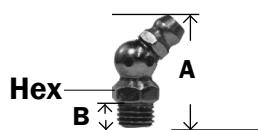


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-174	8MM x 1	16	3.7	9	0.02	0.78

#811 8000 2103 ZM58 5178

METRIC

45° ANGLE

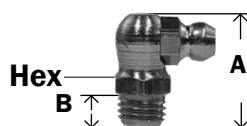


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-176	8MM x 1	21	3.7	9	0.02	1.35

#812 8045 2104 ZM458 5179

METRIC

90° ANGLE



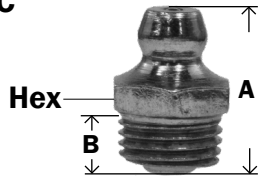
Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-178	8MM x 1	18	3.7	9	0.02	1.52

#813 8090 2105 ZM908 5180

STEEL GREASE FITTINGS

BRASS FITTINGS

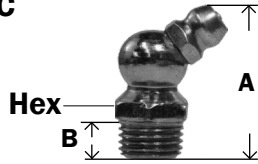
METRIC



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-180	10MM x 1	16	3.7	11	0.02	1.17

• Diameter x pitch (extra fine) #911 9000 2109 ZM510 5181

METRIC

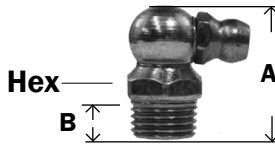


45° ANGLE

Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-182	10MM x 1	21	3.7	11	0.02	1.71

#912 9045 2110 ZM4510

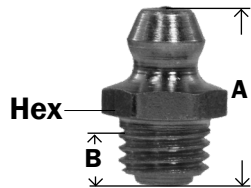
METRIC



90° ANGLE

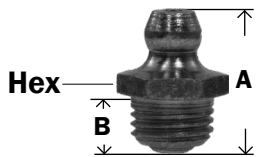
Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-184	10MM x 1	18	3.7	11	0.02	1.52

#913 9090 2111 ZM9010 5183



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-186	5/16"-24	0.65	0.12	0.375	0.02	0.94

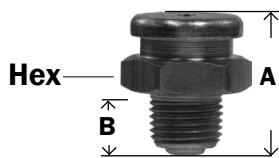
#711-B 1711 2500



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-188	3/8"-24	0.65	0.14	0.437	0.01	1.55

#710-B 1710 2600

BUTTON HEAD



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-200	1/8"-27 PTF	0.75	0.34	0.625	0.03	3.74
36-205	1/4"-18 NPT	0.83	0.44	0.625	0.03	3.98

1184 1186

WHIP HOSE - EXCEEDS SAE 100R1-AT - use with hand grease guns only

10,000 PSI Burst Pressure Rubber Hose



1/8" NPT Solid Base

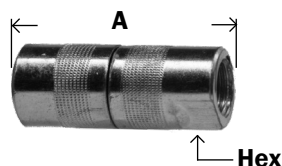
3/16" ID

3,000 PSI Working pressure

Part #	Length	List Price
36-210	12" RUBBER	36.93
36-212	18" RUBBER	24.68
36-214	24" RUBBER	30.79
36-216	36" RUBBER	46.72

4 JAW GREASE GUN COUPLER

Provides quick, positive, leakproof connection w/ grease fittings.



1/8" NPTF

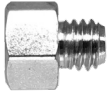
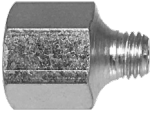
Part #	A	Hex	Approx. Wt. Lbs.	List Price
36-220	1.50	0.56	0.05	16.43

ADAPTERS

ADAPTERS FOR GREASE FITTINGS

• CARBON STEEL, ZINC COATED

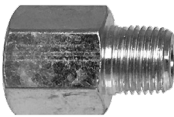
NEW



Part #	Female	Male	L	H	Weight	List Price
36300	1/8"-27 NPTF	1/4"-28 SAE-LT	.75	1/2	0.02	2.22
36301	1/8"-27 NPTF	1/4"-28 SAE-LT	.87	1/2	0.02	8.27

Part #	Female English to Male English		L	H	Weight	List Price
36304	1/4"-28 UNF	M6 x 1.0	.43	9mm	0.01	3.48
36305	1/4"-28 UNF	M8 x 1.0	.45	3/8	0.01	3.71
36306	1/4"-28 UNF	M10 x 1.0	.32	7/16	0.01	3.71

EXTENSIONS



Part #	Female English to Male English		L	H	Weight	List Price
36307	1/4"-28 UNF	1/4"-28 SAE-LT	1.34	-	0.01	4.28
36308	1/8"-27 NPTF	1/8"-27 NPTF	.75	1/2	0.02	2.09
36309*	1/8"-27 NPTF	1/8"-27 NPTF	.82	1/2	0.02	3.83
36310	1/8"-27 NPTF	1/8"-27 NPTF	.94	9/16	0.04	3.12
36311	1/8"-27 NPTF	1/8"-27 NPTF	1.25	1/2	0.04	3.76

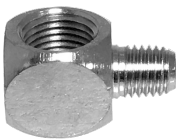
*BRASS PLATED

45° ANGLE ELBOWS



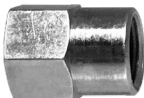
Part #	Female	Male	L	H	Weight	List Price
36360	1/8"-27 NPTF	1/4"-28 SAE-LT	.81	1/2	0.02	3.16
36362	1/8"-27 NPTF	1/8"-27 PTF SAE Short	1.00	1/2	0.03	3.76

90° ANGLE ELBOWS



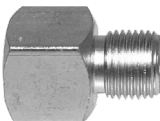
Part #	Female	Male	L	H	Weight	List Price
36370	1/8"-27 NPTF	1/4"-28 SAE-LT	.81	1/2	0.03	3.12
36371	1/8"-27 NPTF	1/4"-28 SAE-LT	1.04	1/2	0.03	13.28
36372	1/8"-27 NPTF	1/4"-18 PTF SAE Short	1.19	9/16	0.06	7.64
36374	1/8"-27 NPTF	1/8"-27 PTF SAE Short	1.00	1/2	0.03	3.20
36375	1/8"-27 NPTF	1/8"-27 NPTF	1.13	1/2	0.03	6.44
36377	1/4"-18 NPTF	1/4"-18 NPTF	1.34	11/16	0.08	10.37
36376	1/8"-27 NPTF	1/8"-27 NPTF	1.50	5/8	0.07	5.02
36373	1/8"-27 PTF SPL Extra Short	1/8"-27 PTF SPL Extra Short	.82	1/2	0.03	3.15

COUPLING



Part #	Female	Female	L	H	Weight	List Price
36340	1/4"-28 UNF	1/8"-27 NPTF	.65	1/2	0.02	3.20

BULKHEAD CONNECTOR



Part #	Female	Male (Female)	L	H	Weight	List Price
36350	1/8"-27 NPTF	1/8"-27 NPSM (1/4"-28 UNF)	.88	1/2	0.03	3.85

D.O.T. PUSH-IN TUBE FITTINGS



Meets D.O.T. FMVSS 571.106 SAE J1131 Air Brake System Requirements

Benefits for Cost Savings & Engineering Project

- **Fast assembly:** No tools required. Simply push tubing in. Saves up to 75% of assembly time compared to standard air compression fittings. No loose parts to handle.
- **Fast disconnect:** Hold the collet collar with two fingers and pull out tube. No tools required.
- **Reusable:** Can be connected and disconnected several times.
- **Reliable sealing:** Using recommended tubing, full sealing is guaranteed.
- **Versatility:** Buna N O'ring standard. Viton and others available per request. Secure tube retention. Pulling on tubing only serves to tighten the connection.
- **Pre-Applied Teflon®** based pipe sealant on all male pipe threads, saving customer additional labor.
- **Full Flow Design,** provides more flow area than conventional fittings with internal tube supports even in the swivels.

DOT Fittings are constructed with an all brass captive eyelet which allows for maximum flow. The brass captive eyelet with extended length is floating and has a machined top end radius for easy installation of tubing. All male threads have a pre-applied Teflon® based pipe sealant to provide for easy assembly and leak proof seal.

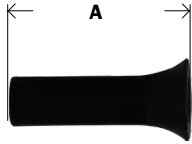
• Materials:

Brass
"O" Ring: Buna - Nitrile (90 Durometer)
EP (Ethylene Propylene)

• Working Pressures & Temperature Ranges

Vacuum to 150 PSI
-40°F to 200° F (-40°C to +93°C)

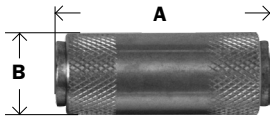
PLUG



Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
595320	5/32"	1.16	0.01	1.16
590400	1/4"	0.81	0.02	2.43
590600	3/8"	1.34	0.02	2.25
590800	1/2"	0.99	0.04	4.15

1829 DQ59DOT 639PMT

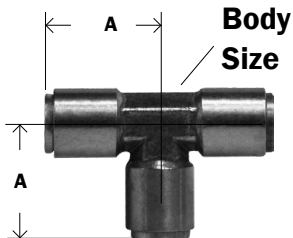
UNION



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
620532	5/32"	1.18	0.39	0.06	9.45
620400	1/4"	1.22	0.47	0.06	11.27
620600	3/8"	1.77	0.67	0.13	10.98
620604	3/8" x 1/4"	1.85	0.67	0.15	28.80
620800	1/2"	2.01	0.81	0.19	10.87
621000	5/8"	2.42	1.00	0.30	25.19
621200	3/4"	2.48	1.18	0.44	47.89

AQ62DOT 62PMT 1862 DQ62DOT

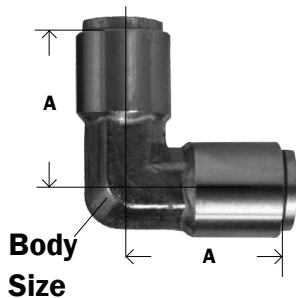
UNION TEE



Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
640400	1/4"	1.01	0.37	0.09	16.51
640600	3/8"	1.07	0.50	0.16	20.26
640800	1/2"	1.26	0.62	0.25	27.81
641000	5/8"	1.32	0.69	0.32	43.10
641200	3/4"	1.46	0.71	0.36	87.34

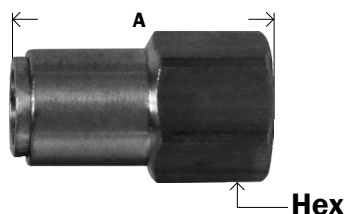
AQ64DOT 164 PMT 1864 DQ64DOT

UNION ELBOW



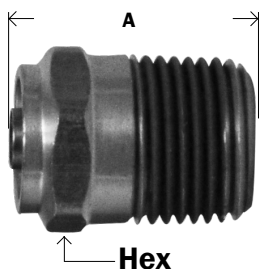
Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
655320	5/32"	0.66	0.29	0.03	22.85
650400	1/4"	1.05	0.50	0.06	11.60
650600	3/8"	1.10	0.50	0.12	15.93
650800	1/2"	1.26	0.62	0.18	21.41

AQ65DOT 165 PMT 1865 DQ65DOT

D.O.T. PUSH-IN**BRASS FITTINGS****FEMALE CONNECTOR**

Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
660402	1/4" x 1/8"	1.31	0.56	0.06	10.80
660404	1/4" x 1/4"	1.59	0.68	0.10	13.89
660602	3/8" x 1/8"	1.40	0.68	0.11	34.53
660604	3/8" x 1/4"	1.40	0.68	0.11	12.87
660606	3/8" x 3/8"	1.66	0.87	0.17	22.56
660804	1/2" x 1/4"	1.66	0.87	0.14	49.44
660806	1/2" x 3/8"	1.59	0.87	0.16	27.49
660808	1/2" x 1/2"	2.11	0.68	0.25	31.16

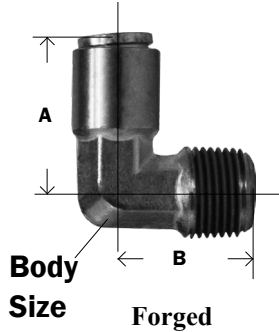
AQ66DOT 66PMT 1866 DQ66DOT

MALE CONNECTOR

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
685320	5/32" x 10/32"	0.90	0.37	0.02	11.75
685321	5/32" x 1/16"	0.78	0.37	0.02	8.15
685322	5/32" x 1/8"	0.79	0.43	0.02	9.07
680302	3/16" x 1/8"	1.02	0.50	0.02	10.54
680421	1/4" x 1/16"	1.17	0.44	0.02	12.44
680402	1/4" x 1/8"	0.96	0.44	0.03	5.16
680404	1/4" x 1/4"	0.88	0.56	0.04	5.55
680406	1/4" x 3/8"	1.20	0.68	0.07	9.75
680602	3/8" x 1/8"	1.16	0.68	0.06	7.83
680604	3/8" x 1/4"	1.19	0.68	0.07	7.06
680606	3/8" x 3/8"	1.00	0.68	0.06	7.68
680608	3/8" x 1/2"	1.10	0.87	0.13	13.57
680804	1/2" x 1/4"	1.68	0.87	0.11	16.55
680806	1/2" x 3/8"	1.64	0.87	0.12	9.81
680808	1/2" x 1/2"	1.72	0.87	0.14	10.16
681006	5/8" x 3/8"	1.87	1.06	0.18	18.75
681008	5/8" x 1/2"	2.12	1.06	0.18	20.38
681208	3/4" x 1/2"	2.11	1.18	0.20	26.11
681212	3/4" x 3/4"	2.03	1.18	0.20	32.31

AQ68DOT 68PM 1868 DQ68DOT 68PMT

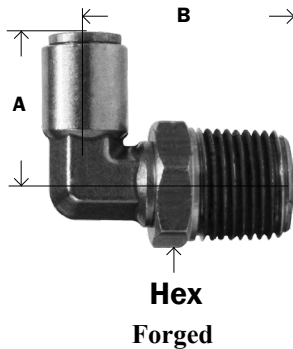
MALE ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
695302	5/32" x 1/16"	0.75	0.59	0.32	0.03	14.54
695322	5/32" x 1/8"	0.78	0.69	0.32	0.03	9.82
690302	3/16" x 1/8"	0.81	0.75	0.47	0.03	19.00
690402	1/4" x 1/8"	1.02	1.02	0.55	0.08	8.65
690404	1/4" x 1/4"	0.87	1.02	0.71	0.06	9.09
690406	1/4" x 3/8"	0.94	1.10	0.87	0.11	11.49
690602	3/8" x 1/8"	1.08	0.87	0.90	0.08	12.47
690604	3/8" x 1/4"	1.01	1.02	0.90	0.09	10.86
690606	3/8" x 3/8"	1.14	1.10	0.90	0.11	11.95
690608	3/8" x 1/2"	1.14	1.38	0.94	0.20	20.01
690804	1/2" x 1/4"	1.22	1.14	0.87	0.22	17.13
690806	1/2" x 3/8"	1.26	1.14	0.87	0.22	17.02
690808	1/2" x 1/2"	1.28	1.38	0.94	0.24	22.21
691006	5/8" x 3/8"	1.44	1.22	0.87	0.30	24.66
691008	5/8" x 1/2"	1.54	1.42	1.18	0.32	25.61
691208	3/4" x 1/2"	1.52	1.48	0.94	0.32	34.44
691212	3/4" x 3/4"	1.59	1.50	1.18	0.34	41.60

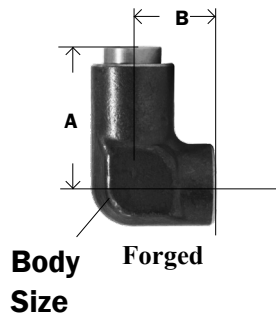
AQ69DOT 169PMTNS 1869 DQ69DOT

MALE SWIVEL ELBOW



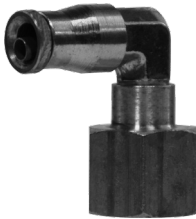
Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
695322S	5/32" x 1/8"	0.79	0.88	0.44	0.07	11.99
690402S	1/4" x 1/8"	0.98	0.91	0.43	0.06	11.07
690404S	1/4" x 1/4"	1.02	0.88	0.56	0.10	15.69
690406S	1/4" x 3/8"	1.02	1.13	0.68	0.10	20.01
690602S	3/8" x 1/8"	1.21	1.05	0.43	0.10	12.47
690604S	3/8" x 1/4"	1.15	1.05	0.65	0.11	14.27
690606S	3/8" x 3/8"	1.10	1.23	0.59	0.12	14.77
690608S	3/8" x 1/2"	1.07	1.52	0.87	0.20	21.75
690804S	1/2" x 1/4"	1.27	1.27	0.87	0.16	39.00
690806S	1/2" x 3/8"	1.27	1.42	0.87	0.18	18.41
690808S	1/2" x 1/2"	1.27	1.62	0.87	0.26	24.09
691006S	5/8" x 3/8"	1.54	1.41	0.68	0.28	24.08
691008S	5/8" x 1/2"	1.54	1.71	0.87	0.30	28.71
691208S	3/4" x 1/2"	1.40	2.04	1.06	0.50	92.84
691212S	3/4" x 3/4"	1.40	1.60	1.06	0.56	51.47

AQ69DOTS 169PMT 1869 DQ69DOTS

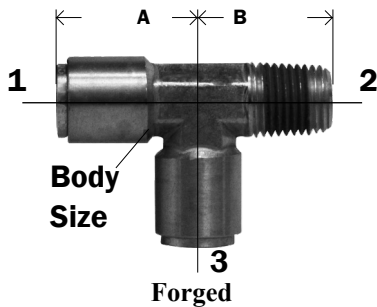
D.O.T. PUSH-IN**BRASS FITTINGS****FEMALE ELBOW**

Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
700402	1/4" x 1/8"	0.94	0.71	0.55	0.06	9.95
700404	1/4" x 1/4"	1.13	1.03	0.50	0.10	12.39
700406	1/4" x 3/8"	1.27	0.98	0.62	0.16	15.68
700602	3/8" x 1/8"	1.11	0.96	0.71	0.15	52.28
700604	3/8" x 1/4"	1.08	0.98	0.50	0.12	12.44
700606	3/8" x 3/8"	1.08	1.05	0.62	0.17	17.30
700806	1/2" x 3/8"	1.22	1.11	0.82	0.26	42.70
700808	1/2" x 1/2"	1.37	1.31	0.62	0.30	50.78

AQ70DOTS 1870 DQ70DOTS 170PMTNS

FEMALE SWIVEL ELBOW

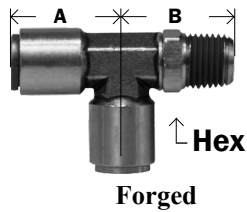
Part #	Tube O.D. x Female NPTF	List Price
700404S	1/4" x 1/4"	9.86

MALE RUN TEE

Part #	Tube O.D. x Male NPTF (1 x 3) x 2	A	B	Body Size	Approx. Wt. Lbs.	List Price
710402	1/4" x 1/8"	0.88	0.79	0.55	0.06	13.99
71040604	(1/4" x 3/8") x 1/4"	0.89	0.96	0.71	0.20	79.25
710404	1/4" x 1/4"	0.25	0.96	0.43	0.08	14.94
710604	3/8" x 1/4"	1.09	0.96	0.71	0.20	18.41
71060404	(3/8" x 1/4") x 1/4"	1.09	0.96	0.71	0.20	50.95
710606	3/8" x 3/8"	1.06	1.10	0.50	0.17	17.60
71060406	(3/8" x 1/4") x 3/8"	1.14	1.10	0.87	0.20	68.75
710608	3/8" x 1/2"	1.09	1.11	0.94	0.14	61.95
710806	1/2" x 3/8"	1.30	1.14	0.87	0.28	28.58

AQ71DOT 171PMTNS 1871 DQ71DOT

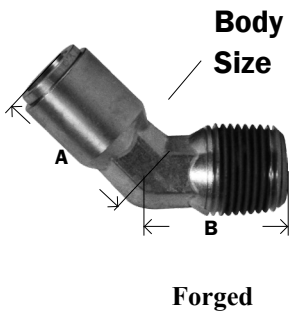
MALE SWIVEL RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
710402S	1/4" x 1/8"	1.01	1.01	0.43	0.09	15.69
710404S	1/4" x 1/4"	0.88	1.23	0.56	0.11	17.61
710604S	3/8" x 1/4"	1.07	1.07	0.56	0.15	21.07
710606S	3/8" x 3/8"	1.06	1.17	0.50	0.14	22.04
710804S	1/2" x 1/4"	1.21	1.22	0.56	0.24	92.78
710806S	1/2" x 3/8"	1.24	1.28	0.62	0.24	35.74
710808S	1/2" x 1/2"	1.24	1.58	0.62	0.30	37.48

AQ71DOTS 171PMT 1871 DQ71DOTS

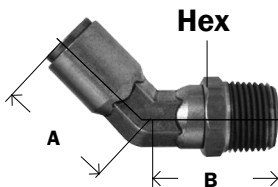
MALE 45° ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
540402	1/4" x 1/8"	0.87	0.81	0.56	0.06	11.85
540404	1/4" x 1/4"	0.89	0.98	0.56	0.06	12.88
540602	3/8" x 1/8"	1.02	0.93	0.75	0.08	12.75
540604	3/8" x 1/4"	1.06	1.10	0.50	0.09	14.66
540606	3/8" x 3/8"	1.10	1.12	0.50	0.11	16.70
540608	3/8" x 1/2"	1.14	1.30	0.87	0.15	18.10
540804	1/2" x 1/4"	1.22	1.10	0.87	0.13	24.93
540806	1/2" x 3/8"	1.26	1.12	0.87	0.16	17.90
540808	1/2" x 1/2"	1.30	1.30	0.87	0.18	25.62
541006	5/8" x 3/8"	1.46	1.02	1.06	0.22	48.70
541008	5/8" x 1/2"	1.46	1.22	1.06	0.21	26.92
541208	3/4" x 1/2"	1.52	1.30	1.00	0.28	34.59
541212	3/4" x 3/4"	1.36	1.18	0.94	0.32	40.98

AQ54DOT 179MTNS 1880 DQ54DOT

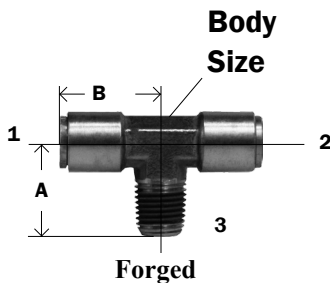
MALE 45° SWIVEL ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
540402S	1/4" x 1/8"	0.99	0.98	0.43	0.06	17.75
540404S	1/4" x 1/4"	0.77	0.94	0.55	0.09	19.09
540602S	3/8" x 1/8"	1.07	1.08	0.43	0.10	16.47
540604S	3/8" x 1/4"	1.07	1.13	0.56	0.11	16.55
540606S	3/8" x 3/8"	1.08	1.23	0.68	0.13	17.37
540804S	1/2" x 1/4"	1.22	1.22	0.56	0.14	31.38
540806S	1/2" x 3/8"	1.20	1.31	0.68	0.16	27.72
540808S	1/2" x 1/2"	1.20	1.61	0.88	0.18	24.39
541008S	5/8" x 1/2"	1.39	1.68	0.87	0.24	39.75

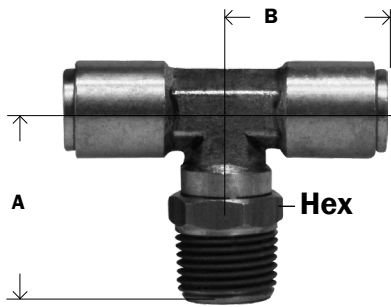
AQ54DOTS 179PMT 1880 DQ54DOTS

MALE BRANCH TEE



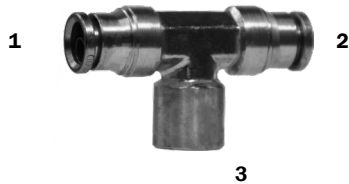
Part #	Tube O.D. x Male NPTF (1 x 2) x 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
720302	3/16" x 1/8"	0.64	0.75	0.41	0.07	30.29
720402	1/4" x 1/8"	0.79	0.85	0.55	0.10	14.20
720404	1/4" x 1/4"	0.96	0.89	0.43	0.10	14.73
720604	3/8" x 1/4"	0.96	1.08	0.71	0.14	20.14
72060404	(3/8" x 1/4") x 1/4"	0.96	0.89	0.71	0.20	58.93
720606	3/8" x 3/8"	1.10	1.14	0.77	0.15	28.00
720804	1/2" x 1/4"	1.14	1.22	0.87	0.20	30.92
720806	1/2" x 3/8"	1.07	1.26	0.62	0.24	27.09
720808	1/2" x 1/2"	1.42	1.34	0.94	0.32	39.58
72100808	(5/8" x 1/2") x 1/2"	1.46	1.30	1.18	0.20	72.89

AQ72DOT 172PMTNS 1872 DQ72DOT

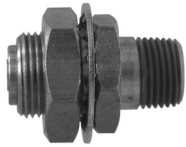
D.O.T. PUSH-IN**BRASS FITTINGS****MALE SWIVEL BRANCH TEE**

Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
720402S	1/4" x 1/8"	0.91	0.83	0.43	0.12	17.30
720404S	1/4" x 1/4"	1.04	1.01	0.56	0.14	16.93
720602S	3/8" x 1/8"	1.07	1.08	0.43	0.19	18.67
720604S	3/8" x 1/4"	1.10	1.10	0.55	0.15	22.39
720606S	3/8" x 3/8"	1.25	1.06	0.68	0.17	22.12
720804S	1/2" x 1/4"	1.39	1.28	0.87	0.30	32.88
720806S	1/2" x 3/8"	1.26	1.31	0.68	0.34	31.38
720808S	1/2" x 1/2"	1.26	1.61	0.87	0.22	34.86

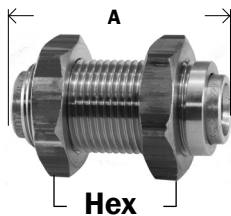
AQ72DOTS 172PMT 1872 DQ72DOTS

FEMALE BRANCH TEE**(RUN) BRANCH**

Part #	(1 & 2) x 3	List Price
770402	1/4" x 1/8"	17.91
770404	1/4" x 1/4"	22.59
770604	3/8" x 1/4"	17.68

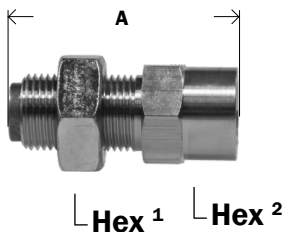
GLADHAND BULKHEAD CONNECTOR**TUBE OD x MALE NPTF**

Part #	Size	List Price
830808	1/2" x 1/2"	55.94

BULKHEAD UNION

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
820400	1/4"	1.90	0.68	0.16	20.88
820600	3/8"	1.55	1.06	0.21	35.89
820800	1/2"	1.82	1.18	0.14	39.32
821000	5/8"	2.42	1.25	0.30	47.15

AQ82DOT 62PMTBH 1874 DQ82DOT

FEMALE BULKHEAD UNION

Part #	Tube O.D. x Female NPTF	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
860402	1/4" x 1/8"	1.31	0.87	0.79	0.08	13.44
860404	1/4" x 1/4"	1.59	0.94	0.87	0.10	13.64
860604	3/8" x 1/4"	1.87	0.94	0.94	0.14	15.13
860606	3/8" x 3/8"	2.16	1.12	0.94	0.31	21.01
860808	1/2" x 1/2"	2.64	1.31	1.06	0.32	35.52

• Jam nuts not available separately

AQ86DOT 1873 DQ86DOT 66PMTBH

COMPOSITE BODY DOT AIRBRAKE FITTINGS

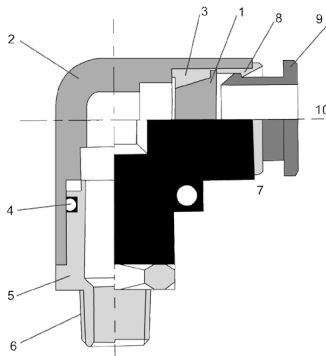
NEW



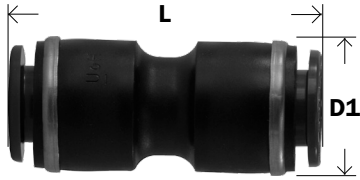
- One touch connection reduces installation time and cost.
- Rugged ultraviolet and vibration resistant composite body.
- Various shapes and configurations to meet vehicle applications and make installations easier.

Specifications for FMVSS (D.O.T.) and SAE Compliant Fittings

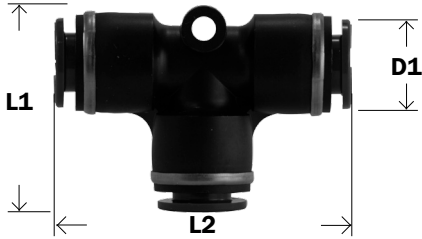
Operating Fluid	Air						
Max. Operating Pressure	145psi (1.0MPa)						
Proof Pressure	Size	5/32"	1/4"	3/8"	1/2"	5/8"	3/4"
	At 75°F (24°C)	1200psi	1200psi	1400psi	950psi	900psi	800psi
	At 200 °F (93°C)	450psi (3.1MPa)					
Recommended Fluid and Ambient Temperature*	-40°F to 140°F (-40°C to 60°C)						
Leak Rate at -40°F (-40°C)	7 Ncm ³ /min. or less						
Thread	Thread Portion	ANSI/ASME B1.20.1, 1983 R1992					
	Nut	JIS B 0208 (Unified fine thread) ISO 263					
Thread Sealant	Fluorine/ Acrylic						
Applicable Standards	D.O.T. FMVSS 49 CFR 571.106, SAE J2494-3						
Applicable Tubing	Tubing conforming to both SAE J844 and D.O.T. FMVSS 49 CFR 571.106. Material: Nylon12						
Tube O.D.	5/32", 1/4", 3/8", 1/2", 5/8", 3/4"						
Fitting Dimensions	All dimensions reference only and subject to change without notification						



1. Chuck	Stainless steel or Brass
2. Body	Polybutylene Terephthalate (PBT), Brass
3/4. Tube seal, O-Ring	Buna-N, Nitrile Rubber
5. Stud	Brass
6. Sealant	Fluorine/ Acrylic
7. Guide	Stainless Steel or Polyacetal (Acetal)
8. Stabilization Ring	Stainless Steel
9. Release Button	Polyacetal, POM (Acetal)
10. Tube support	Stainless Steel/ Brass

COMPOSITE BODY**NEW DOT PUSH-IN****STRAIGHT UNION**

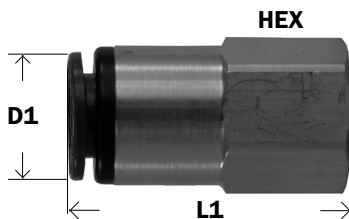
Part #	Tube OD (inch)	D1	L	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
620532C	5/32	0.41	1.28	0.06	0.01	22.23
620400C	1/4	0.52	1.36	0.14	0.01	6.42
620600C	3/8	0.70	1.68	0.21	0.03	9.50
620800C	1/2	0.85	1.76	0.33	0.05	12.85
621000C	5/8	1.04	2.10	0.39	0.08	37.92

UNION TEE

Part #	Tube OD (inch)	D1	L1	L2	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
640400C	1/4	0.52	0.81	1.62	0.14	0.02	9.27
640600C	3/8	0.70	1.03	2.06	0.21	0.05	14.95
640800C	1/2	0.85	1.13	2.27	0.33	0.07	18.17
641000C	5/8	1.04	1.31	2.63	0.39	0.13	29.66

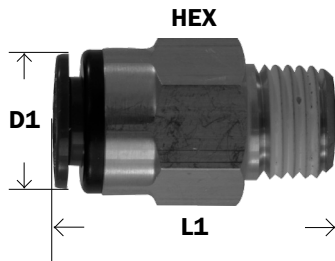
UNION 90° ELBOW

Part #	Tube OD (inch)	D1	L	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
655320C	5/32	0.41	0.72	0.06	0.01	35.12
650400C	1/4	0.52	0.81	0.14	0.02	9.91
650600C	3/8	0.70	1.03	0.21	0.04	12.42
650800C	1/2	0.85	1.14	0.33	0.05	19.92

FEMALE CONNECTOR

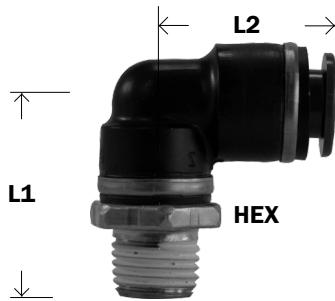
Part #	Tube OD (inch)	Thread NPT	Hex	D1	L1	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
660402C	1/4	1/8-27	0.56	0.49	1.08	0.14	0.04	9.91
660404C	1/4	1/4-18	0.69	0.49	1.23	0.14	0.06	10.71
660406C	1/4	3/8-18	0.88	0.49	1.31	0.14	0.10	11.48
660602C	3/8	1/8-27	0.69	0.69	1.21	0.21	0.07	16.85
660604C	3/8	1/4-18	0.69	0.69	1.36	0.21	0.07	16.85
660606C	3/8	3/8-18	0.88	0.69	1.44	0.21	0.11	16.98
660608C	3/8	1/2-14	0.94	0.69	1.60	0.21	0.12	15.63
660802C	1/2	1/8-27	0.88	0.83	1.24	0.33	0.11	13.92
660804C	1/2	1/4-18	0.88	0.83	1.39	0.33	0.13	14.13
660806C	1/2	3/8-18	0.88	0.83	1.43	0.33	0.12	23.90
660808C	1/2	1/2-14	0.94	0.83	1.61	0.33	0.13	23.49

STRAIGHT MALE CONNECTOR



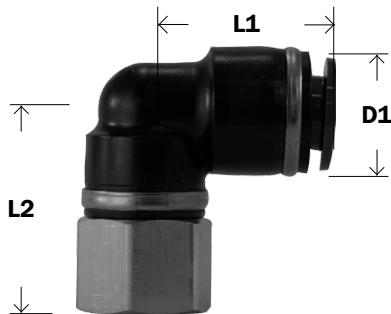
Part #	App. Tube OD (inch)	Thread NPT	Hex	L	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
680402C	1/4	1/8-27	0.5	0.87	0.14	0.02	4.53
680404C	1/4	1/4-18	0.56	0.89	0.14	0.03	4.86
680406C	1/4	3/8-18	0.69	0.85	0.14	0.05	6.21
680602C	3/8	1/8-27	0.69	1.21	0.21	0.05	9.42
680604C	3/8	1/4-18	0.69	1.31	0.21	0.06	7.31
680606C	3/8	3/8-18	0.69	1.13	0.21	0.06	7.65
680608C	3/8	1/2-14	0.88	1.03	0.21	0.09	12.20
680804C	1/2	1/4-18	0.88	1.35	0.33	0.09	12.78
680806C	1/2	3/8-18	0.88	1.29	0.33	0.09	13.49
680808C	1/2	1/2-14	0.88	1.17	0.33	0.09	16.34
681006C	5/8	3/8-18	1	1.52	0.39	0.15	24.18
681008C	5/8	1/2-14	1	1.49	0.39	0.13	23.32

90° MALE ELBOW

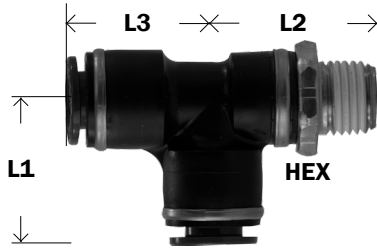


Part #	Tube OD (inch)	Thread NPT	Hex	L1	L2	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
695322SC	5/32	1/8-27	0.56	0.8	0.92	0.06	0.03	15.82
690402SC	1/4	1/8-27	0.56	0.8	0.92	0.14	0.03	6.27
690404SC	1/4	1/4-18	0.56	0.8	1.08	0.14	0.04	6.42
690406SC	1/4	3/8-18	0.69	0.8	1.16	0.14	0.07	11.17
690602SC	3/8	1/8-27	0.75	1.03	1.05	0.21	0.07	12.60
690604SC	3/8	1/4-18	0.75	1.03	1.17	0.21	0.06	10.43
690606SC	3/8	3/8-18	0.75	1.03	1.24	0.21	0.08	12.85
690608SC	3/8	1/2-14	0.88	1.03	1.40	0.21	0.14	16.06
690804SC	1/2	1/4-18	0.75	1.13	1.24	0.33	0.07	17.55
690806SC	1/2	3/8-18	0.75	1.13	1.24	0.33	0.09	16.49
690808SC	1/2	1/2-14	0.88	1.13	1.48	0.33	0.14	16.77
691006SC	5/8	3/8-18	0.94	1.31	1.49	0.39	0.14	24.27
691008SC	5/8	1/2-14	0.94	1.31	1.61	0.39	0.18	24.14
691208SC	3/4	1/2-14	1.12	1.74	1.79	0.50	0.26	27.73

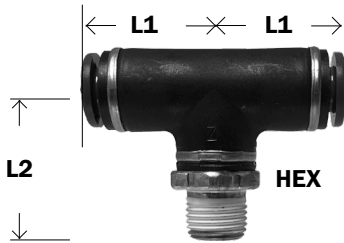
90° FEMALE ELBOW



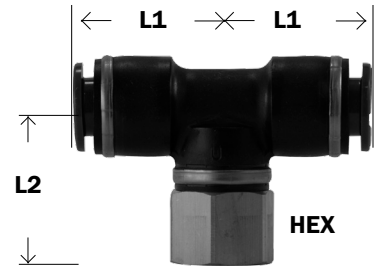
Part #	Tube OD (inch)	Thread NPT	Hex	D1	L1	L2	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
700402SC	1/4	1/8-27	0.56	0.52	0.8	0.87	0.14	0.03	8.35
700404SC	1/4	1/4-18	0.69	0.52	0.8	1.00	0.14	0.05	13.43
700406SC	1/4	3/8-18	0.88	0.52	0.8	1.02	0.14	0.08	14.92
700604SC	3/8	1/4-18	0.69	0.70	1.03	1.09	0.21	0.07	15.42
700606SC	3/8	3/8-18	0.88	0.70	1.03	1.11	0.21	0.09	18.42
700608SC	3/8	1/2-14	0.94	0.70	1.03	1.27	0.21	0.10	16.45
700806SC	1/2	3/8-18	0.88	0.85	1.13	1.19	0.33	0.10	24.20
700808SC	1/2	1/2-14	0.94	0.85	1.13	1.34	0.33	0.11	26.41

COMPOSITE BODY**NEW DOT PUSH-IN****MALE RUN TEE**

Part #	Tube OD (inch)	Thread NPT	Hex	L1	L2	L3	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
710402SC	1/4	1/8-27	0.56	0.8	0.92	0.8	0.14	0.04	12.77
710404SC	1/4	1/4-18	0.56	0.8	1.08	0.8	0.14	0.05	12.77
710604SC	3/8	1/4-18	0.75	1.03	1.17	1.03	0.21	0.08	16.98
710606SC	3/8	3/8-18	0.75	1.03	1.24	1.03	0.21	0.10	18.57
710608SC	3/8	1/2-14	0.83	1.03	1.24	1.03	0.21	0.15	23.22
710806SC	1/2	3/8-18	0.75	1.13	1.24	1.13	0.33	0.11	28.12

MALE BRANCH TEE

Part #	Tube OD (inch)	Thread NPT	Hex	L1	L2	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
720402SC	1/4	1/8-27	0.56	0.8	0.92	0.14	0.04	11.17
720404SC	1/4	1/4-18	0.56	0.8	1.08	0.14	0.05	12.06
720406SC	1/4	3/8-18	0.69	0.8	1.16	0.14	0.08	22.05
720604SC	3/8	1/4-18	0.75	1.03	1.17	0.21	0.08	15.76
720606SC	3/8	3/8-18	0.75	1.03	1.24	0.21	0.10	17.84
720806SC	1/2	3/8-18	0.75	1.13	1.32	0.33	0.11	22.12
720808SC	1/2	1/2-14	0.88	1.13	1.48	0.33	0.17	30.90

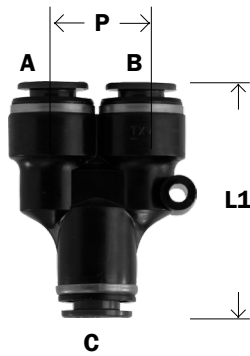
FEMALE BRANCH TEE

Part #	Tube OD (inch)	Thread NPT	Hex	L1	L2	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
770402C	1/4	1/8-27	0.56	0.8	0.87	0.14	0.06	15.05
770404C	1/4	1/4-18	0.69	0.8	1.00	0.14	0.08	17.56
770604C	3/8	1/4-18	0.69	1.03	1.09	0.23	0.08	24.14

45° MALE ELBOW

Part #	Tube OD (inch)	Thread NPT	Hex	L1	L2	A*	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
540402SC	1/4	1/8-27	0.56	0.75	0.8	1.33	0.14	0.03	10.71
540404SC	1/4	1/4-18	0.56	0.75	0.96	1.43	0.14	0.04	12.63
540602SC	3/8	1/8-27	0.75	0.8	1.05	1.84	0.21	0.06	14.28
540604SC	3/8	1/4-18	0.75	0.8	1.17	1.89	0.21	0.06	14.28
540606SC	3/8	3/8-18	0.75	0.8	1.24	1.96	0.21	0.08	23.56
540608SC	3/8	1/2-14	0.88	0.8	1.4	2.04	0.21	0.13	19.98
540804SC	1/2	1/4-18	0.94	1.13	1.28	2.13	0.33	0.08	23.99
540806SC	1/2	3/8-18	0.94	1.13	1.24	2.17	0.33	0.10	23.56
540808SC	1/2	1/2-14	0.94	1.13	1.48	2.24	0.33	0.15	23.19
541006SC	5/8	3/8-18	0.94	1.17	1.26	2.20	0.39	0.14	41.55
541008SC	5/8	1/2-14	0.94	1.17	1.38	2.24	0.39	0.17	31.61
541208SC	3/4	1/2-14	1.12	1.54	1.65	2.82	0.50	0.26	29.77

UNION "Y"



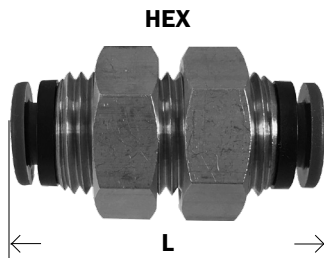
Part #	A&B Tube OD (inch)	C Tube OD (inch)	L1	P	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
620553C	1/4	1/4	1.61	0.60	0.14	0.03	17.02
620409C	1/4	3/8	1.83	0.60	0.14	0.03	18.84
620555C	3/8	3/8	2.09	0.79	0.21	0.05	20.99
620559C	3/8	1/4	2.19	0.79	0.14	0.07	23.99
620557C	1/2	1/2	2.20	0.94	0.33	0.08	26.66

MALE BRANCH "Y"



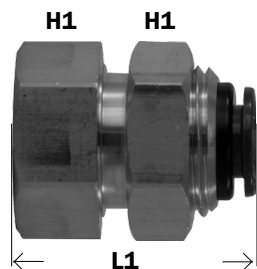
Part #	Tube OD (inch)	Thread NPT	Hex	L1	P	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
620604C	3/8	1/4-18	0.75	0.71	0.79	0.21	0.09	24.63
620606C	3/8	3/8-18	0.75	0.71	0.79	0.21	0.12	25.59
620806C	1/2	3/8-18	0.94	0.87	0.94	0.33	0.13	39.73
620808C	1/2	1/2-14	0.94	0.87	0.94	0.33	0.15	40.80

BULKHEAD UNION



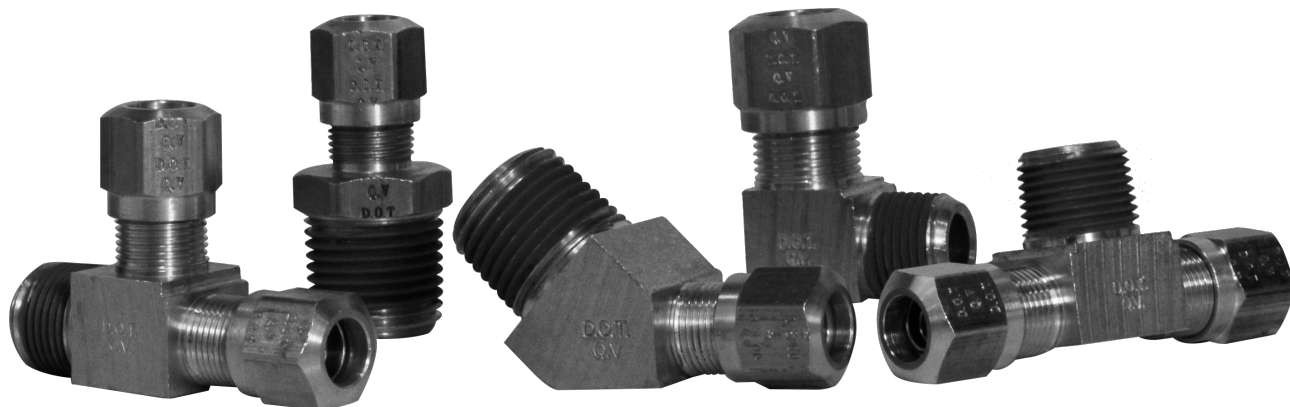
Part #	Tube OD (inch)	Thread (UNF)	Hex	L	Mtg. Hole	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
820400C	1/4	9/16-18	0.69	1.34	0.59	0.14	0.07	11.88
820600C	3/8	7/8-14	1	1.66	0.91	0.21	0.19	17.62
820800C	1/2	1-12	1.12	1.74	1.02	0.33	0.26	26.62
821000C	5/8	1 1/8-12	1.31	1.97	1.14	0.39	0.42	66.33

FEMALE BULKHEAD CONNECTOR



Part #	App. Tube OD (inch)	Thread NPT	T (UNF)	H1 (Hex)	L1	Min. Flow Dia.	Approx. Wt. Lbs.	List Price
860402C	1/4	1/8-27	9/16-18	0.69	1.18	0.14	0.01	16.70
860404C	1/4	1/4-18	9/16-18	0.69	1.28	0.14	0.08	24.31
860604C	3/8	1/4-18	7/8-14	1	1.36	0.21	0.20	24.95
860606C	3/8	3/8-18	7/8-14	1	1.45	0.21	0.20	25.48
860806C	1/2	3/8-18	1-12	1.12	1.46	0.33	0.26	28.91
860808C	1/2	1/2-14	1-12	1.12	1.62	0.33	0.27	30.09

D.O.T. AIR BRAKE - NYLON TUBING



Tube O.D	1/4	3/8	1/2	5/8	3/4
Thread Size-B	7/16-24	17/32-24	11/16-20	13/16-18	1-18

•Typical Application

Air brake systems except where temperatures exceed +200°F or where battery acid can drip on tubing.

•Pressure

Maximum operating pressure of 150 PSI.

•Vibration

Fair resistance.

•Temperature Range

-40°F to +200°F (-40°C to +93°C).

•Material

Brass

•Used With

NT Nylon Tubing - SAE J844 Type A and B.

•Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

•Advantages

Easy to assemble (no tube preparation or flaring required.) Built in tube support. Fittings utilize a ribbed sleeve for compression and positive grip. May be used with copper tubing by replacing nut, sleeve and insert with long nut and spherical sleeve. Insert should be removed for copper tubing use.

•Conformance

Meets specifications and standards of SAE and DOT FMVSS 571,106.

•Assembly Instructions

- 1- Cut tubing to desired length.
- 2-Slide nut and then sleeve on tubing. Threaded end of nut "A" must face toward fitting body.
- 3-Insert tubing into the preassembled fitting. Be sure tubing is bottomed in fitting.
- 4- Tighten nut to required torque as indicated on chart.

Disassembling: Remove nut and pull tubing out of fitting body. Insert will remain in tubing.

Reassembly: Push tubing and insert into fitting body until it bottoms. Thread nut onto fitting body and torque as in step 4.

Tube Size	Additional Number of Turns from Hand-Tight
1/4	3
3/8, 1/2	4
5/8, 3/4	3-1/2

SLEEVE

SAE# 100115

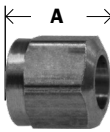


Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-001	1/4"	0.30	0.01	0.41
38-002	3/8"	0.39	0.01	0.54
38-003	1/2"	0.43	0.01	0.75
38-004	5/8"	0.48	0.01	1.20
38-005	3/4"	0.53	0.01	2.15

60NAB 60NTA 1460

NUT

SAE# 100110



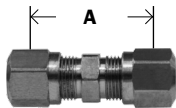
Hex

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-010	1/4"	0.45	0.56	0.02	0.84
38-011	3/8"	0.63	0.62	0.03	1.07
38-012	1/2"	0.72	0.81	0.05	2.64
38-013	5/8"	0.77	0.94	0.06	2.78
38-014	3/4"	0.81	1.12	0.09	4.68

61NAB 61NTA 1461

UNION

SAE# 100101BA

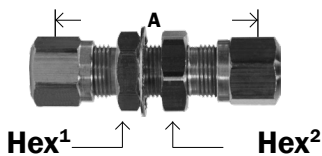


Hex

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-019	1/4"	0.85	0.43	0.07	5.65
38-020	3/8"	1.10	0.56	0.11	6.83
38-021	1/2"	1.31	0.68	0.20	11.00
38-022	5/8"	1.43	0.81	0.25	23.01
38-023	3/4"	1.60	1.00	0.40	34.89

62NAB 62NTA 1462

BULKHEAD UNION



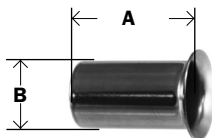
Part #	Tube O.D.	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
38-028	1/4"	1.38	0.56	0.56	0.11	15.05
38-029	3/8"	1.61	0.69	0.75	0.16	18.50
38-030	1/2"	1.88	0.81	0.87	0.26	30.00

62NBH 1474 475

STAINLESS STEEL INSERT

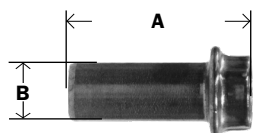
• 300 series stainless

• For SAE# J844 TUBING



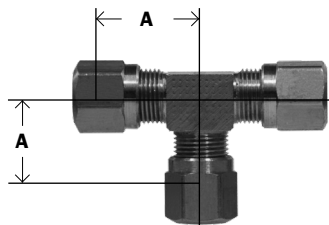
Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
38-035	1/4"	0.66	0.16	0.01	1.04
38-036	3/8"	0.64	0.24	0.01	0.79
38-037	1/2"	0.81	0.37	0.01	1.38
38-038	5/8"	0.86	0.43	0.01	3.46
38-039	3/4"	1.04	0.56	0.01	4.02

59A 63NTA

D.O.T. AIR BRAKE - NYLON TUBING**BRASS FITTINGS****BRASS INSERT**

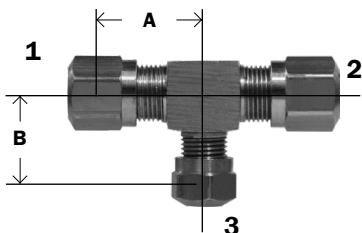
Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
38-040	1/4"	0.66	0.15	0.01	0.83
38-041	3/8"	0.84	0.24	0.01	0.83
38-042	1/2"	1.00	0.37	0.01	1.64
38-043	5/8"	1.06	0.43	0.01	1.77
38-048	3/4"	1.27	0.56	0.02	2.82

1484 463

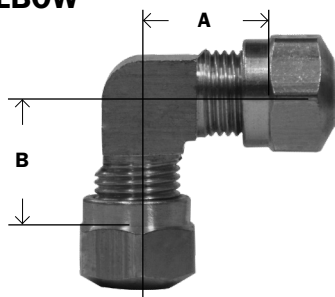
TEE**SAE# 100401BA**

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-044	1/4"	0.61	0.12	12.27
38-045	3/8"	0.78	0.19	11.76
38-046	1/2"	0.92	0.36	18.65
38-047	5/8"	1.09	0.48	40.20

64NAB 264NTA 1464

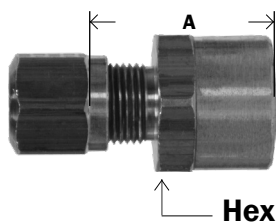
REDUCING BRANCH TEE

Part #	Tube O.D. (1&2) x 3	A	B	Approx. Wt. Lbs.	List Price
38-049	3/8" x 1/4"	0.72	0.69	0.24	44.94
38-057	1/2" x 3/8"	0.92	0.85	0.30	23.72

ELBOW**SAE# 100201BA**

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-052	1/4"	0.61	0.09	12.58
38-053	3/8"	0.78	0.13	9.99
38-054	1/2"	0.92	0.15	24.42
38-055	5/8"	1.09	0.36	29.00

65NAB 265NTA 1465

FEMALE ADAPTER**SAE# 100103BA**

Part #	Tube O.D. x Female NPT	A	Hex	Approx. Wt. Lbs.	List Price
38-060	1/4" x 1/8"	0.85	0.55	0.06	4.76
38-061	1/4" x 1/4"	1.08	0.68	0.08	6.58
38-062	3/8" x 1/8"	1.00	0.56	0.07	6.36
38-063	3/8" x 1/4"	1.18	0.68	0.10	7.98
38-064	3/8" x 3/8"	1.18	0.87	0.14	9.00
38-065	1/2" x 3/8"	1.27	0.87	0.16	12.35
38-066	1/2" x 1/2"	1.43	1.06	0.20	18.46
38-067	5/8" x 3/8"	1.31	0.87	0.28	19.76
38-068	5/8" x 1/2"	1.50	1.06	0.28	23.30

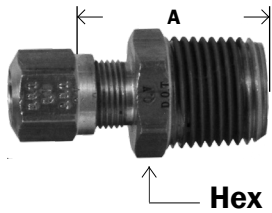
66NAB 66NTA 1466 66NBH

BRASS FITTINGS

D.O.T. AIR BRAKE - NYLON TUBING

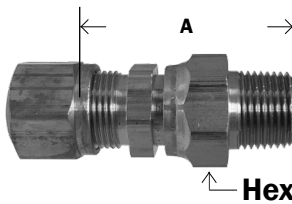
MALE ADAPTER

SAE# 100102BA



SWIVEL MALE ADAPTER

NEW



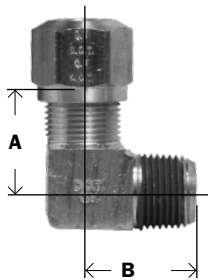
Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-072	1/4" x 1/16"	0.90	0.43	0.05	18.89
38-073	1/4" x 1/8"	0.88	0.43	0.05	3.84
38-074	1/4" x 1/4"	1.09	0.56	0.06	6.50
38-075	1/4" x 3/8"	1.07	0.68	0.08	8.03
38-076	3/8" x 1/8"		0.56	0.07	4.33
38-077	3/8" x 1/4"	1.20	0.56	0.08	4.58
38-078	3/8" x 3/8"	1.24	0.68	0.10	5.12
38-079	3/8" x 1/2"	1.43	0.87	0.14	7.48
38-080	1/2" x 1/4"		0.68	0.13	7.58
38-081	1/2" x 3/8"	1.32	0.68	0.14	6.54
38-082	1/2" x 1/2"	1.51	0.87	0.18	8.45
38-087	1/2" x 3/4"	1.57	1.06	0.23	31.54
38-083	5/8" x 3/8"	1.39	0.81	0.17	16.02
38-084	5/8" x 1/2"		0.87	0.21	13.72
38-088	5/8" x 3/4"		1.06	0.25	19.49
38-085	3/4" x 1/2"	1.68	1.00	0.28	19.02
38-086	3/4" x 3/4"	1.71	1.06	0.30	22.72

68NAB 68NTA 1468

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-078S	3/8" x 3/8"	1.83	0.87	0.18	28.56
38-081S	1/2" x 3/8"	1.94	0.87	0.22	30.96

MALE ELBOW

SAE# 100202BA



SWIVEL MALE ELBOW

NEW



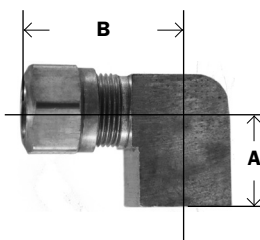
Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-091	1/4" x 1/8"	0.61	0.65	0.06	4.82
38-092	1/4" x 1/4"	0.67	0.86	0.08	6.07
38-093	1/4" x 3/8"	0.72	0.85	0.13	6.55
38-094	3/8" x 1/8"	0.72	0.73	0.09	6.78
38-095	3/8" x 1/4"	0.80	0.93	0.11	6.44
38-090	3/8" x 1/4" LONG	0.80	1.44	0.14	20.42
38-101	3/8" x 3/8"	0.83	0.90	0.14	7.46
38-102	3/8" x 1/2"	0.93	1.09	0.20	9.69
38-103	1/2" x 1/4"	0.85	0.98	0.16	9.42
38-104	1/2" x 3/8"	0.92	0.98	0.20	10.26
38-109	1/2" x 3/8" LONG	0.94	1.38	0.26	44.88
38-105	1/2" x 1/2"	1.02	1.17	0.29	11.02
38-106	5/8" x 3/8"	1.00	1.05	0.26	18.66
38-107	5/8" x 1/2"	1.10	1.25	0.32	17.60
38-110	5/8" x 3/4"	1.09	1.24	0.40	27.52
38-108	3/4" x 1/2"	1.19	1.33	0.43	27.99

269NTA 1469

Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-101S	3/8" x 3/8"	1.06	1.80	0.28	39.66
38-104S	1/2" x 3/8"	1.14	1.86	0.32	42.36

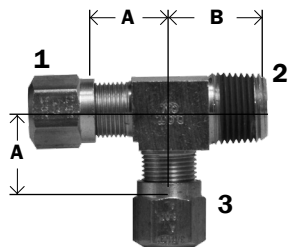
FEMALE ELBOW

SAE# 100203BA



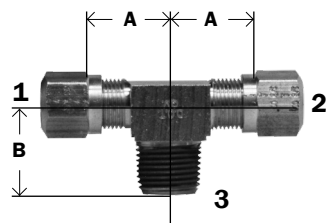
Part #	Tube O.D. x Female NPTF	A	B	Approx. Wt. Lbs.	List Price
38-113	1/4" x 1/8"	0.68	0.52	0.08	7.31
38-114	1/4" x 1/4"	0.77	0.70	0.12	14.60
38-115	3/8" x 1/8"	0.82	0.58	0.14	19.88
38-116	3/8" x 1/4"	0.88	0.76	0.10	12.98
38-117	3/8" x 3/8"	0.93	0.76	0.12	16.93
38-118	1/2" x 3/8"	1.02	0.81	0.23	18.50
38-119	1/2" x 1/2"	1.13	1.01	0.36	28.04
38-120	5/8" x 1/2"	1.19	1.07	0.38	39.14

70NAB 1470 270NTA

D.O.T. AIR BRAKE - NYLON TUBING**BRASS FITTINGS****MALE RUN TEE****SAE# 100424BA**

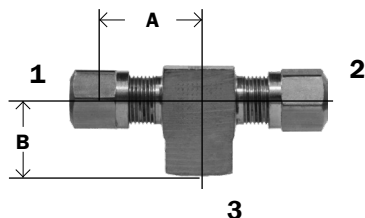
Part #	Tube O.D. x Male NPTF x Tube O.D. 1x2x3	A	B	Approx. Wt. Lbs.	List Price
38-125	1/4" x 1/8" x 1/4"	0.61	0.65	0.10	13.80
38-126	1/4" x 1/4" x 1/4"	0.68	0.86	0.13	11.44
38-124	3/8" x 1/4" x 1/4"	0.72	0.69	0.14	30.16
38-127	3/8" x 1/4" x 3/8"	0.78	0.91	0.17	11.56
38-128	3/8" x 3/8" x 3/8"	0.83	0.90	0.20	10.01
38-129	1/2" x 3/8" x 1/2"	0.92	0.98	0.30	13.05

71NAB 271NTA 1471

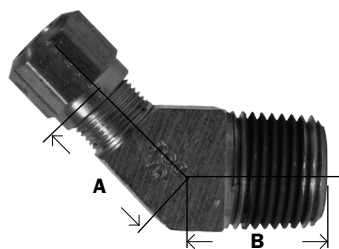
MALE BRANCH TEE**SAE# 100425BA**

Part #	Tube O.D. x Tube O.D. x Male NPTF 1x2x3	A	B	Approx. Wt. Lbs.	List Price
38-136	1/4" x 1/4" x 1/8"	0.61	0.65	0.10	9.60
38-137	1/4" x 1/4" x 1/4"	0.67	0.86	0.13	18.41
38-138	3/8" x 3/8" x 1/8"	0.71	0.73	0.14	16.12
38-132	3/8" x 1/4" x 1/4"	0.80	0.93	0.15	49.96
38-139	3/8" x 3/8" x 1/4"	0.78	0.91	0.17	11.24
38-133	1/2" x 1/2" x 1/4"	0.87	1.00	0.26	28.69
38-140	3/8" x 3/8" x 3/8"	0.83	0.90	0.21	11.65
38-134	1/2" x 3/8" x 3/8"	0.94	1.00	0.26	37.75
38-141	1/2" x 1/2" x 3/8"	0.92	0.98	0.30	14.76
38-142	1/2" x 1/2" x 1/2"	1.02	1.17	0.37	23.35
38-143	5/8" x 5/8" x 1/2"	1.09	1.24	0.44	52.50

72NAB 272NTA 1472

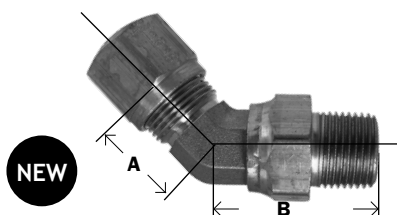
FEMALE BRANCH TEE

Part #	Tube O.D. x Tube O.D. x Female NPTF 1x2x3	A	B	Approx. Wt. Lbs.	List Price
38-144	3/8" x 3/8" x 1/4"	0.90	0.78	0.21	51.36
38-146	5/8" x 5/8" x 1/4"	1.04	0.89	0.48	79.36

45° ELBOW**SAE# 100302BA**

Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-148	1/4" x 1/8"	0.49	0.63	0.06	10.10
38-149	1/4" x 1/4"	0.60	0.85	0.08	11.27
38-150	3/8" x 1/8"	0.71	0.67	0.09	22.46
38-151	3/8" x 1/4"	0.72	0.86	0.11	8.19
38-152	3/8" x 3/8"	0.76	0.95	0.14	11.59
38-153	3/8" x 1/2"	0.78	1.20	0.24	19.03
38-157	1/2" x 1/4"	0.85	0.95	0.18	28.44
38-154	1/2" x 3/8"	0.84	0.94	0.19	13.35
38-155	1/2" x 1/2"	0.87	1.16	0.25	18.27
38-156	5/8" x 1/2"	1.00	1.20	0.30	21.33
38-158	3/4" x 1/2"	1.10	1.18	0.38	44.04

6945NAB 279NTA 1480

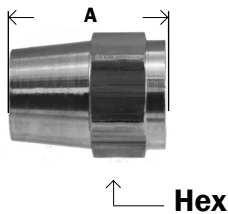
SWIVEL 45° ELBOW

Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-152S	3/8" x 3/8"	0.77	1.37	0.20	50.58
38-154S	1/2" x 3/8"	0.82	1.44	0.24	53.22

BRASS FITTINGS**D.O.T. AIR BRAKE - COPPER TUBING****SLEEVE****SAE# 120115BA**

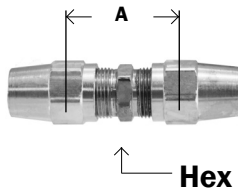
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-161	1/4"	0.25	0.01	0.55
38-162	3/8"	0.31	0.02	0.81
38-163	1/2"	0.38	0.02	0.83
38-164	5/8"	0.44	0.02	1.38
38-165	3/4"	0.50	0.04	3.57

60AB 1360

NUT**SAE# 120111BA**

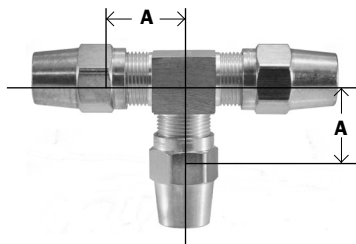
Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-170	1/4"	0.75	0.56	0.02	1.79
38-171	3/8"	1.13	0.62	0.04	2.10
38-172	1/2"	1.25	0.81	0.08	4.51
38-173	5/8"	1.38	0.94	0.12	4.70
38-174	3/4"	1.56	1.12	0.18	10.04

20961 61AB 1361

UNION**SAE# 120101BA**

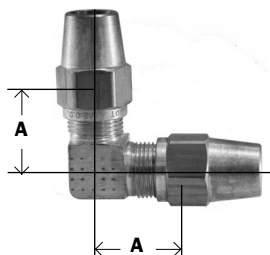
Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-179	1/4"	0.81	0.44	0.08	6.18
38-180	3/8"	1.10	0.56	0.14	7.79
38-181	1/2"	1.07	0.69	0.24	15.73
38-182	5/8"	1.41	0.81	0.34	20.35

62AB 1362

TEE**SAE# 120401BA**

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-188	1/4"	0.62	0.16	14.40
38-189	3/8"	0.82	0.24	15.19
38-190	1/2"	0.94	0.48	28.41

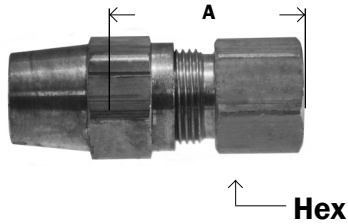
264AB 1364

ELBOW**SAE# 120201BA**

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-196	1/4"	0.62	0.10	16.03
38-197*	3/8"	0.78	0.16	11.61
38-198	1/2"	0.92	0.28	33.35
38-199	5/8"	1.10	0.42	102.36

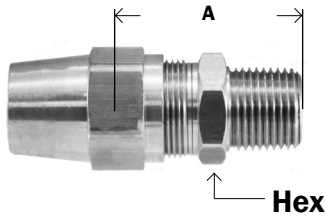
* Forged

265AB 1365

D.O.T. AIR BRAKE - COPPER TUBING**BRASS FITTINGS****FEMALE ADAPTER****SAE# 120103BA**

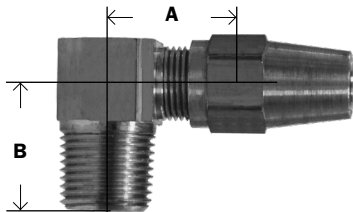
Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-204	1/4" x 1/8"	0.84	0.56	0.08	5.69
38-205	1/4" x 1/4"	1.07	0.68	0.10	9.50
38-206	3/8" x 1/8"	1.00	0.56	0.10	25.56
38-207	3/8" x 1/4"	1.19	0.68	0.12	7.31
38-208	3/8" x 3/8"	1.18	0.87	0.16	8.28
38-209	1/2" x 3/8"	1.27	0.87	0.18	40.62
38-210	1/2" x 1/2"	1.44	1.06	0.20	17.39
38-212	5/8" x 1/2"	1.50	1.06	0.26	25.84

66AB 1366

MALE ADAPTER**SAE# 120102BA**

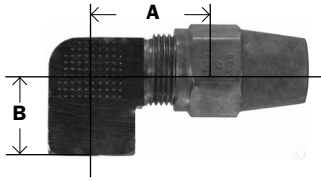
Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-217	1/4" x 1/8"	0.88	0.43	0.06	3.68
38-218	1/4" x 1/4"	0.97	0.56	0.08	5.19
38-220	3/8" x 1/8"	1.02	0.56	0.08	8.32
38-221	3/8" x 1/4"	1.09	0.56	0.10	5.82
38-222	3/8" x 3/8"	1.19	0.69	0.12	6.25
38-223	3/8" x 1/2"	1.45	0.87	0.18	6.67
38-224	1/2" x 1/4"	1.32	0.69	0.16	12.88
38-225	1/2" x 3/8"	1.35	0.69	0.18	9.47
38-226	1/2" x 1/2"	1.51	0.87	0.24	15.66
38-227	5/8" x 3/8"	1.39	0.81	0.22	16.08
38-228	5/8" x 1/2"	1.57	0.87	0.24	19.34
38-229	3/4" x 1/2"	1.67	1.00	0.34	19.85

68AB 368

90° MALE ELBOW**SAE# 120202BA**

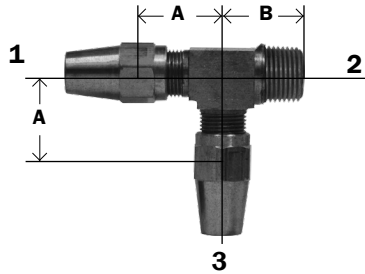
Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-235	1/4" x 1/8"	0.64	0.76	0.08	5.96
38-236	1/4" x 1/4"	0.69	0.88	0.10	9.78
38-237	1/4" x 3/8"	0.73	0.86	0.14	12.10
38-238	3/8" x 1/8"	0.73	0.75	0.12	10.23
38-239	3/8" x 1/4"	0.80	0.93	0.12	8.65
38-240	3/8" x 3/8"	0.83	0.90	0.16	9.52
38-242	1/2" x 1/4"	0.85	0.98	0.24	20.09
38-243	1/2" x 3/8"	0.92	0.98	0.22	12.47
38-244	1/2" x 1/2"	1.04	1.19	0.30	22.27
38-245	5/8" x 3/8"	1.01	1.06	0.34	20.05
38-246	5/8" x 1/2"	1.10	1.25	0.36	26.10
38-247	3/4" x 1/2"	1.19	1.32	0.44	28.95

269AB 1369

BRASS FITTINGS**D.O.T. AIR BRAKE - COPPER TUBING****90° FEMALE ELBOW****SAE# 120203BA**

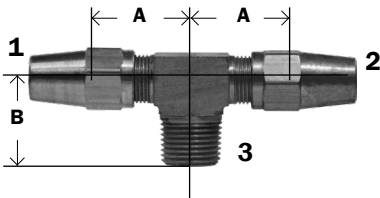
Part #	Tube O.D. x Female NPTF	A	B	Approx. Wt. Lbs.	List Price
38-256	3/8" x 3/8"	0.93	0.77	0.18	17.51
38-257	1/2" x 3/8"	1.03	0.82	0.26	35.78

270AB 1370

MALE RUN TEE**SAE# 120424BA**

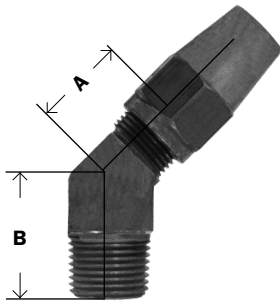
Part #	Tube O.D. x Male NPTF (1&3)x2	A	B	Approx. Wt. Lbs.	List Price
38-264	1/4" x 1/8"	0.62	0.66	0.12	20.21
38-266	3/8" x 1/4"	0.79	0.92	0.20	19.73

271AB 1371

MALE BRANCH TEE**SAE# 120425BA**

Part #	Tube O.D. x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
38-278	3/8" x 1/4"	0.78	0.91	0.18	19.63
38-279	3/8" x 3/8"	0.85	0.92	0.24	12.09

272AB 1372

45° MALE ELBOW**SAE# 120302BA**

Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-287	1/4" x 1/8"	0.49	0.63	0.08	8.41
38-288	1/4" x 1/4"	0.60	0.85	0.10	15.48
38-290	3/8" x 1/4"	0.72	0.86	0.18	7.60
38-291	3/8" x 3/8"	0.75	0.94	0.20	14.29
38-293*	1/2" x 3/8"	0.82	0.94	0.18	27.36
38-294	1/2" x 1/2"	0.87	1.16	0.24	26.88

* Forged

279AB 1380

D.O.T. AIR BRAKE REUSABLE HOSE/ FITTINGS



•Typical Application

Air Brake hose connections.
Meets SAE & DOT specifications
(FMVCS 10 GAL)

•Pressure

Determined by maximum working pressure for hose size.
Up to 125 psi

•Material

Brass.
Temperature: -40°F to +120° F (-40°C to +48°C)

•Advantages

Can be used for nearly any brake line. Easy to assemble with a good selection of hose end configurations. Brass material offers excellent resistance against corrosion.

•Tolerance

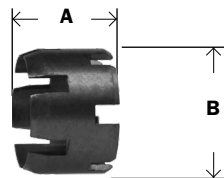
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

•Assembly Instructions

- 1- Slide nut and sleeve onto hose. Make sure bevel edge of sleeve faces out toward fitting.
- 2- Push hose into fitting until it bottoms.
- 3- Screw nut until contact is made with body hex.

NOTE: When reassembling fitting, body and nut should be inspected. Only reuse if in proper condition. Sleeves should never be reused.

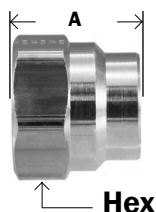
SLEEVE FERRULE



Part #	Hose I.D. Size	A	B	Approx. Wt. Lbs.	List Price
38-300	3/8"	0.69	0.90	0.02	2.19
38-301	1/2"	0.64	1.03	0.02	3.74

#60HC 3380-A 0903610 367 60RB

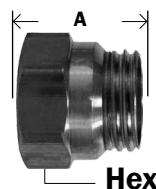
NUT



Part #	Hose I.D. Size	A	Hex	Approx. Wt. Lbs.	List Price
38-306	3/8"	1.26	1.03	0.04	7.30
38-307	1/2"	1.20	1.25	0.06	5.88

61RB #61HC 369 3380-B 0903624

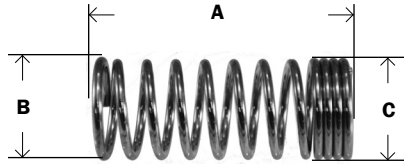
NUT FOR USE WITH SPRING



Part #	Hose I.D. Size	Thread	A	Hex	Approx. Wt. Lbs.	List Price
38-312	3/8"	31/32-20	1.25	1.03	0.04	4.60
38-313	1/2"	1-3/32-20	1.20	1.25	0.06	6.02

#61HCS 0903613 3380-D 61RBSG

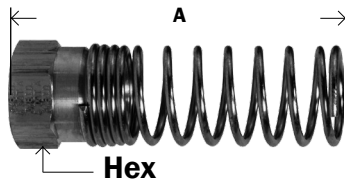
SPRING



Part #	Hose I.D.	A	B	C	Approx. Wt. Lbs.	List Price
38-351	3/8"	2.75	0.84	0.78	0.20	1.93
38-352	1/2"	2.75	1.10	1.10	0.22	3.55

#60SG 0901045 3380-C 377

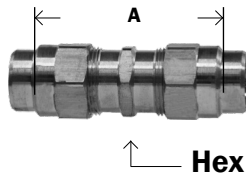
NUT AND SPRING ASSEMBLY



Part #	Hose I.D. Size	A	Hex	Approx. Wt. Lbs.	List Price
38-015	3/8"	3.55	1.03	0.18	4.90
38-016	1/2"	3.50	1.25	0.24	8.54

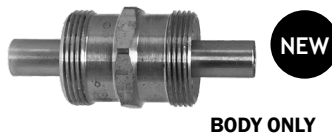
379 67RBSG 0999999

UNION



Part #	Hose I.D.	Thread	A	Hex	Approx. Wt. Lbs.	List Price
38-318	3/8"	31/32-30	2.55	0.97	0.32	29.11
38-319	1/2"	1-1/8-20	2.55	1.12	0.48	46.82

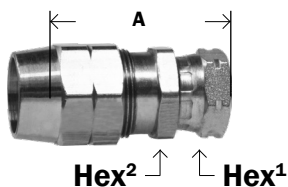
#62HC 3380B-Y0 362



BODY ONLY

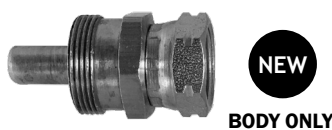
Part #	Hose I.D.	Thread	A	Hex	Approx. Wt. Lbs.	List Price
39-318	3/8"	31/32-30	2.55	0.97	0.32	11.11
39-319	1/2"	1-1/8-20	2.55	1.12	0.48	16.82

FEMALE CONNECTOR HOSE



Part #	Hose I.D. x Female ABS	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
38-357	3/8" x 3/4-20	1.96	0.87	0.97	0.24	32.85
38-358	1/2" x 7/8-20	2.1	1.00	1.12	0.39	44.32

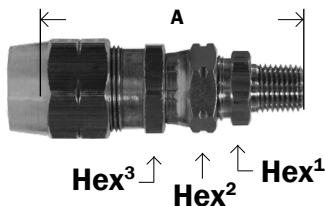
#66ABS 66RBSV 3380B-Y7 386



BODY ONLY

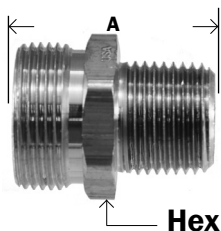
Part #	Hose I.D. x Female ABS	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
39-357	3/8" x 3/4-20	1.96	0.87	0.97	0.24	12.85
39-358	1/2" x 7/8-20	2.1	1.06	1.12	0.38	14.32

MALE CONNECTOR



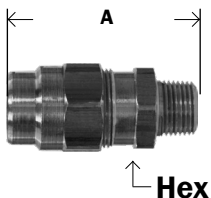
Part #	Hose I.D. x Male Pipe	A	Hex 1	Hex 2	Hex 3	Approx. Wt. Lbs.	List Price
38-363	3/8" x 1/4"	2.90	0.75	0.87	0.97	0.38	37.04
38-364	1/2" x 3/8"	2.96	0.87	1.06	1.12	0.46	86.88

#68ABS 09155 3380B-Y8 387

D.O.T. AIR BRAKE - HOSE/ ENDS**BRASS FITTINGS****ADAPTER FOR SWIVEL TYPE REUSABLE AND CRIMPED ON**

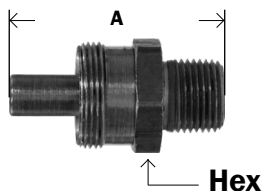
Part #	Male ABS x Male Pipe	ABS Thread	A	Hex	Approx. Wt. Lbs.	List Price
38-369	3/8" x 1/4"	3/4-20	1.06	0.75	0.05	3.63
38-368	3/8" x 3/8"	3/4-20	1.14	0.75	0.08	3.40
38-372	3/8" x 1/2"	3/4-20	1.37	0.87	0.12	5.47
38-370	1/2" x 3/8"	7/8-20	1.18	0.87	0.10	6.81
38-371	1/2" x 1/2"	7/8-20	1.38	0.87	0.12	11.42

#68ABS 1390 76RB 388

MALE ADAPTER

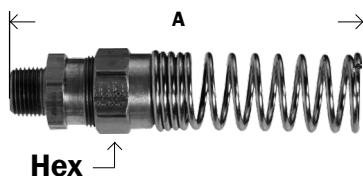
Part #	Hose I.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
38-333	3/8" x 1/4"	1.91	0.97	0.22	11.35
38-334	3/8" x 3/8"	1.94	0.97	0.24	12.81
38-335	3/8" x 1/2"	2.12	0.97	0.26	14.51
38-336	1/2" x 3/8"	2.07	1.12	0.33	17.26
38-337	1/2" x 1/2"	2.07	1.12	0.36	18.77

#68HC 368 3380B-Y2 68RB

ADAPTER BODY

Part #	Hose I.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
38-324	3/8" x 1/4"	1.93	0.97	0.12	5.56
38-325	3/8" x 3/8"	1.92	0.97	0.14	5.69
38-326	3/8" x 1/2"	2.02	1.00	0.20	6.14
38-327	1/2" x 3/8"	2.07	1.12	0.18	16.31
38-328	1/2" x 1/2"	2.06	1.12	0.20	9.36

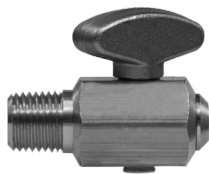
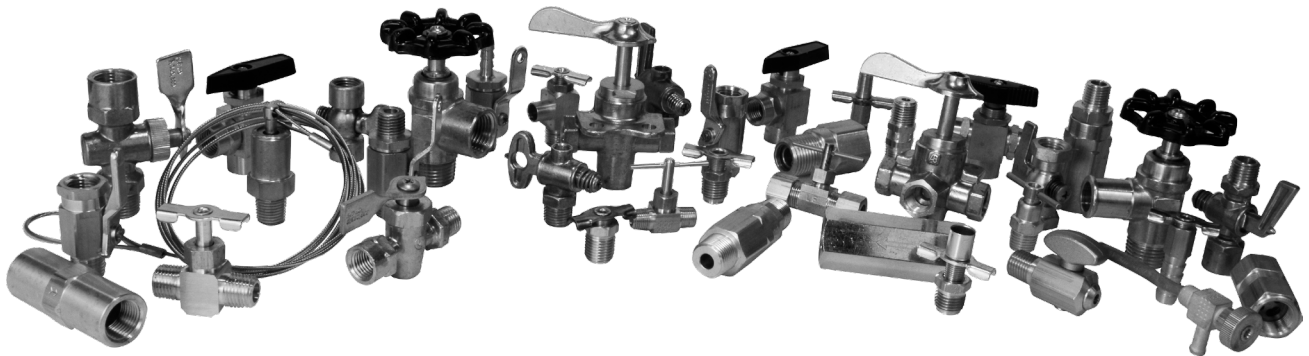
#68B W1391Z

MALE ADAPTER

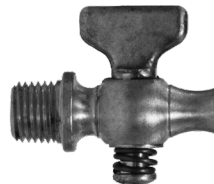
Part #	Hose I.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
38-342	3/8" x 1/4"	4.91	1.00	0.32	13.31
38-343	3/8" x 3/8"	4.96	1.00	0.34	13.56
38-344	3/8" x 1/2"	5.53	1.00	0.38	15.02
38-345	1/2" x 3/8"	4.75	1.12	0.48	18.99
38-346	1/2" x 1/2"	4.88	1.12	0.52	22.00

#68HCS 3380B-Y3 68RBSG 378

SPECIALTY VALVES AND COCKS



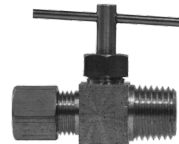
DRAIN COCKS
PAGE 148-149



AIR COCKS
PAGE 151-153



3, 4 AND 6 WAY
PAGE 157-158



NEEDLE
PAGE 154-155



ANTI-SIPHON
PAGE 158



PANEL MOUNT BALL VALVES
PAGE 159



TRUCK
PAGE 156



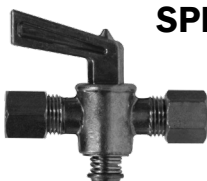
USA MINI
PAGE 159



SOLID BOTTOM SHUT-OFF
PAGE 156



CHECK
PAGE 160



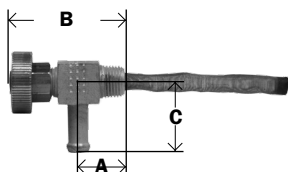
SPRING BOTTOM SHUT-OFF
PAGE 150

See our valve section for much, much more!

DRAIN COCKS**BRASS FITTINGS****DRAIN COCKS**

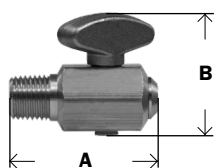
- For use with low pressure air, water and fluids.
- Designed for a working pressure of 150 psi @ 250°.
- Hand-tightening provides a metal-to-metal seal.
- Not intended for natural gas, LPG, nuclear or aircraft applications.

Install on your tank for easy draining

GASOLINE SHUT OFF w/ SCREEN FILTER

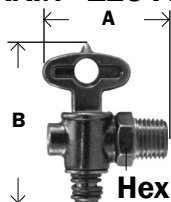
Part #	Barb X Male Pipe	A	B	C	Approx. Wt. Lbs.	List Price
46-064	1/4" x 1/8"	0.55	1.34	0.66	0.06	81.74

827

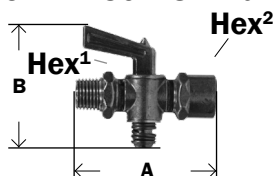
DRAIN COCK 150 PSI - Trunk Air Tank

Part #	Male Pipe	A	B	Approx. Wt. Lbs.	List Price
46-066	1/4"	1.73	1.41	0.22	26.18

DCR601-4

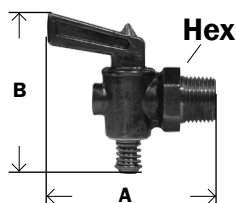
TRUCK DRAIN - 125 P.S.I.G

Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	List Price
46-067	1/8"		1.53	1.95	0.62	0.14	18.94
46-068	1/4"	W15310	1.53	1.95	0.62	0.18	18.95

SHUT OFF - 150 P.S.I max.

Part #	Male Pipe x Female Pipe	Industry Number	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
46-069	1/4"	W20332	1.96	1.96	0.75	0.62	0.20	29.77

#60HC 3380-A 0903610 367

LEVER HANDLE

Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	List Price
46-070	1/8"	M-41-P	1.99	1.80	0.62	0.04	15.12
46-071	1/4"	M-42-P	2.06	1.81	0.62	0.06	15.12
46-072	3/8"	M-43-P	2.30	2.29	0.81	0.08	18.48
46-073	1/2"	M-44-P	3.00	2.50	0.87	0.16	51.46

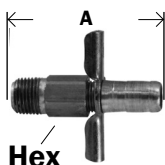
840 41D DC601

- 30 psi

*Valve is closed when handle is in the position of the picture

AIR TANK DRAIN PULL VALVE

Part #	Size	Description	List Price
39595	1/4" male	5ft nylon coated pull cable	12.77
39596	1/4" male	4ft nylon coated pull cable	11.94
39597	1/4" male	3ft nylon coated pull cable	11.77
39600	1/4" male	Air valve only	11.54

BRASS FITTINGS**DRAIN COCKS****INTERNAL SEAT**

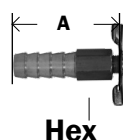
Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-079	1/8"	6783	1.63	0.40	0.02	34.91

DC602 808 400A 1800A

INTERNAL SEAT

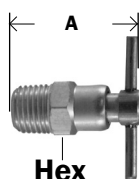
Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-074	1/8"	130	0.92	0.40	0.04	10.78
46-075	1/4"	140	0.94	0.56	0.06	6.00
46-077	3/8"	230	1.34	0.68	0.08	13.91

HB - 5/16 803 305A

LONG INTERNAL SEAT

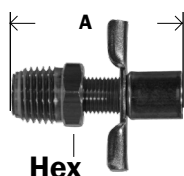
Part #	Size	Ind #	A	Hex	Approx. Wt. Lbs.	List Price
46-076	3/8" Hose I.D.		1.65	0.43	0.02	13.31

809

TEE HANDLE - Internal Seat

Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-080	1/8"	M-200-P	1.22	0.50	0.04	17.18
46-081	1/4"	M-201-P	1.31	0.56	0.06	12.26
46-082	3/8"	M-202-P	1.69	0.68	0.12	23.31

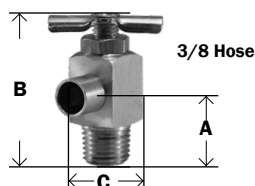
DC603 802

EXTERNAL SEAT w/ SPOUT

Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-084*	1/4"	6788	1.56	0.56	0.02	9.98

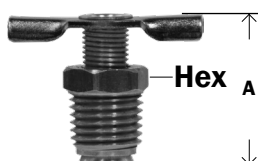
* Replaces GM # 511771 & Chrysler #836015

200A 239 DC606 807

BIBB NEEDLE VALVE

Part #	Male Pipe	Industry Number	A	B	C	Approx. Wt. Lbs.	List Price
46-088	1/8"	150	0.55	1.19	0.38	0.04	28.74
46-089	1/4"	120	0.82	1.76	0.66	0.06	49.20
46-089A	1/4"	6660	0.55	1.34	0.66	0.06	8.15

804 DC607 2019 201DH

RADIATOR TYPE - External Seat

Part #	Male Pipe	Industry Number	Ind #	A	Hex	Approx. Wt. Lbs.	List Price
46-085	1/8"	M-320-P	135	0.90	0.43	0.02	3.56
46-086	1/4"	M-321-P	145	1.00	0.56	0.04	3.51
46-087	3/8"	M-322-P	270	1.25	0.68	0.08	10.45
46-083	1/2"	108	108	1.52	0.87	0.12	32.17

320D 240 DC604 801

SHUT-OFF COCKS

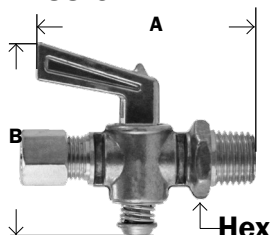
- Designed for working pressure of 30 PSI.
- Forged brass bodies and brass handles.

BRASS FITTINGS

- Instantaneous off-on operation with 360° rotation.
- Not good for gasoline.

COMPRESSION X MALE PIPE

* See pg. 73-74 to order nut and sleeve separately.

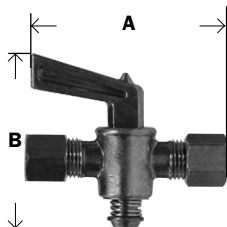


Part #	Comp X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-130	1/4" x 1/8"	27-C	1.87	1.81	0.51	0.14	17.08
46-131	1/4" x 1/4"	227-C	2.05	1.86	0.62	0.15	21.52
46-132	5/16" x 1/8"	29-C	2.05	1.90	0.50	0.16	17.08
46-134	3/8" x 1/4"	57-C	2.05	1.83	0.62	0.15	18.06

868 V304C 2068 133C VC206

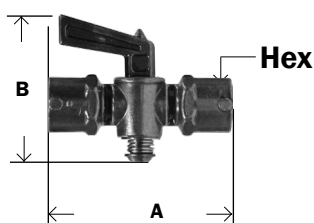
COMPRESSION X COMPRESSION

* See pg. 73-74 to order nut and sleeve separately.



Part #	Comp X Comp	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-140	1/4"	28-C	1.82	1.84	0.12	19.29
46-141	5/16"	30-C	1.84	1.88	0.14	20.19
46-142	3/8"	58-C	1.87	1.80	0.14	21.12
46-143	1/2"	68-C	2.21	2.32	0.22	30.08

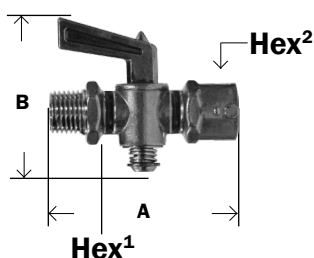
V3030F 2062 134C

FEMALE X FEMALE PIPE

Part #	Female Pipe X Female Pipe	A	B	Hex	Approx. Wt. Lbs.	List Price
46-151	1/8"	1.77	1.79	0.56	0.12	15.18
46-152	1/4"	2.28	1.82	0.69	0.20	16.04
46-152T*	1/4"	2.28	2.00	0.68	0.20	23.92
46-153	3/8"	2.44	2.28	0.81	0.30	25.89

* 150 PSI

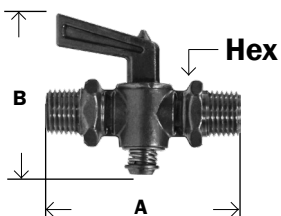
V403P 132C 875

MALE PIPE X FEMALE

Part #	Male Pipe X Female Pipe	Ind. #	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
46-160	1/8"	48-P	2.03	1.84	0.50	0.56	0.14	15.34
46-161	1/4"	49-P	2.26	1.84	0.69	0.69	0.18	16.04
46-161T*	1/4"		2.26	1.98	0.69	0.69	0.20	21.75
46-162	3/8"	50-P	2.33	2.28	0.82	0.82	0.28	25.89

* 150 PSI

880 V402P 130C

MALE PIPE X MALE PIPE

Part #	Male Pipe X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-165	1/8"	76-P	2.09	1.77	0.50	0.12	16.24
46-166	1/4"	77-P	2.22	1.84	0.70	0.17	17.19
46-166T*	1/4"		2.23	2.00	0.68	0.18	22.44
46-167	3/8"	78-P	2.43	2.24	0.82	0.22	30.15

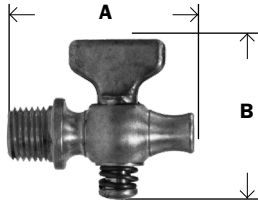
* 150 PSI

1V401P 890

- For use on low pressure air systems.
- Designed for working pressure of 80 PSI at moderate temperatures.
- Spring-key type cocks of all brass construction with stainless steel springs.
- Machine finish is standard. Polished or plated finish available at extra cost.

MIP X BIBB

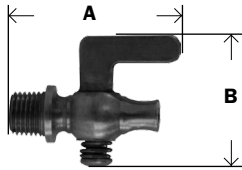
- tee handle
- no hex



Part #	MIP x BIBB	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-300	1/8"	6	1.53	1.55	0.12	23.88
46-301	1/4"	7	1.61	1.54	0.14	30.77

MIP X BIBB

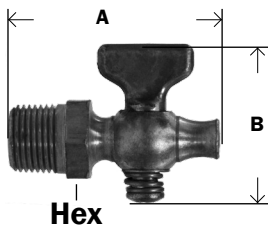
- lever handle
- no hex



Part #	MIP x BIBB	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-305	1/8"	12	2.01	1.71	0.14	23.72
46-306	1/4"	13	2.09	1.66	0.14	27.01

MIP X BIBB

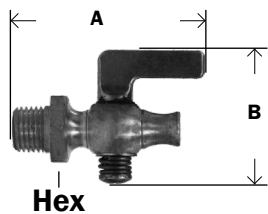
- tee handle
- hex



Part #	MIP x BIBB	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-310	1/8"	63	1.64	1.51	0.56	0.14	32.64
46-311	1/4"	64	1.69	1.54	0.62	0.14	29.40

MIP X BIBB

- lever handle
- hex



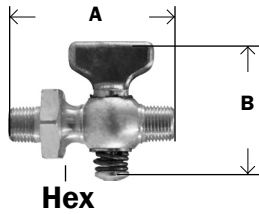
Part #	MIP x BIBB	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-315	1/8"	65	2.11	1.71	0.62	0.14	29.04
46-316	1/4"	66	2.16	1.71	0.62	0.16	31.06

BRASS AIR COCKS

BRASS FITTINGS

MIP X MIP

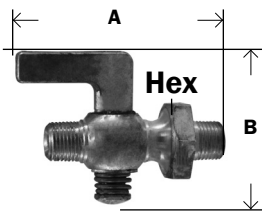
- tee handle
- hex



Part #	MIP X MIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-320	1/8"	18	1.81	1.51	0.75	0.14	29.14
46-321	1/4"	19	1.92	1.55	0.62	0.16	40.88

MIP X MIP

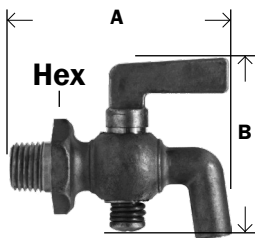
- lever handle
- hex



Part #	MIP X MIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-324	1/8"	22	2.09	1.69	0.56	0.14	33.83
46-325	1/4"	23	2.18	1.69	0.62	0.16	36.13
46-326	3/8"	24	2.26	1.72	0.75	0.20	36.06

MIP X BIBB NOSE

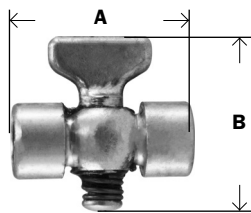
- lever handle
- hex



Part #	MIP X BIBB NOSE	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-335	1/8"	29	2.25	1.68	0.56	0.14	44.48
46-336	1/4"	30	2.20	1.67	0.56	0.17	35.38
46-337	3/8"	31	2.25	1.72	0.87	0.20	58.45
46-338	1/2"	32	2.31	1.71	0.87	0.22	71.59

FIP X FIP

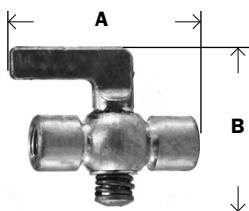
- tee handle
- no hex



Part #	FIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-340	1/8"	37	1.62	1.50	0.14	27.41
46-341	1/4"	38	1.93	1.56	0.16	28.94
46-342	3/8"	39	2.00	1.55	0.20	36.34

FIP X FIP

- lever handle
- no hex



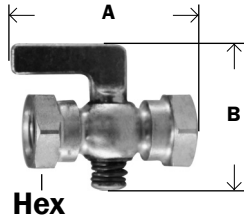
Part #	FIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-345	1/8"	43	1.94	1.68	0.14	30.13
46-346	1/4"	44	2.10	1.71	0.16	31.70
46-347	3/8"	45	2.14	1.69	0.20	40.72

BRASS FITTINGS

BRASS AIR COCKS

FIP X FIP

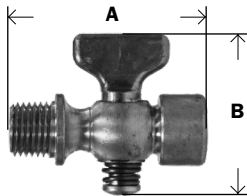
- lever handle
- hex



Part #	FIP X FIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-355	1/8"	58	1.97	1.70	0.56	0.15	31.18
46-356	1/4"	59	2.10	1.71	0.75	0.18	28.94
46-357	3/8"	60	2.10	1.69	0.81	0.20	48.70

MIP X FIP

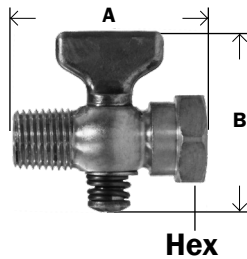
- tee handle
- no hex



Part #	MIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-360	1/8"	40	1.70	1.55	0.14	25.60
46-361	1/4"	41	1.94	1.55	0.16	28.53
46-362	3/8"	42	2.06	1.50	0.20	38.70

MIP X FIP

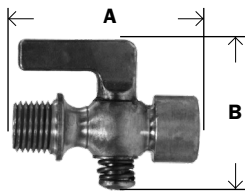
- tee handle
- hex



Part #	MIP X FIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-370	1/8"	49	1.81	1.55	0.56	0.14	37.69
46-371	1/4"	50	2.06	1.55	0.75	0.20	31.20

MIP X FIP

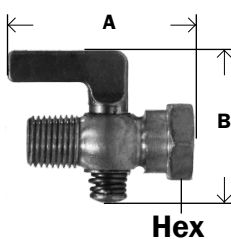
- lever handle
- no hex



Part #	MIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-365	1/8"	46	1.94	1.72	0.14	30.17
46-366	1/4"	47	2.10	1.65	0.16	32.12

MIP X FIP

- lever handle
- hex



Part #	MIP X FIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-375	1/8"	52	1.93	1.69	0.56	0.16	37.09
46-376	1/4"	53	2.06	1.76	0.75	0.20	39.36
46-377	3/8"	54	2.13	1.71	0.81	0.22	46.65
46-378	1/2"	54A	2.65	1.96	1.00	0.28	55.12

NEEDLE VALVES

BRASS FITTINGS

NEEDLE VALVES

THESE ARE NOT LEAD FREE SEE PAGES 169-182 FOR LEAD FREE PRODUCTS

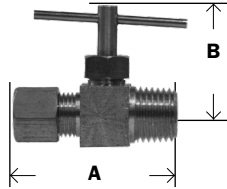
Made with either pin handle or pressed on handle.

Please specify if you have a preference.

- Used on instrumentation, hydraulic, and pneumatic systems.
- Designed for a maximum working pressure of 150 PSI.

- Provided with steel handles and metal-to-metal seats with fine-thread screwdown.
- Not designed for natural gas, LPG, nuclear or aircraft applications.
- Always install with pressure against the seat.

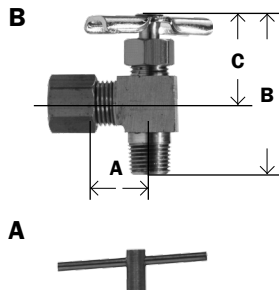
COMP X MALE PIPE



Part #	Comp X Male Pipe	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-002	1/4" x 1/8"	M-101-C	1.29	1.12	0.07	20.68
46-003	1/4" x 1/4"	M-101-C	1.27	1.14	0.10	9.36

NV106C 2205 820 3068

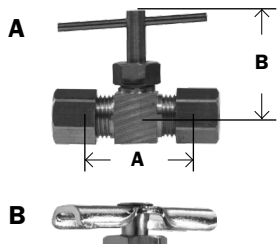
COMP X MALE PIPE-ANGLE



Part #	Comp X Male Pipe	Handle	Ind. #	A	B	C	Approx. Wt. Lbs.	List Price
46-011	1/4" x 1/8"	A	M-103-C	0.56	1.48	0.93	0.08	6.36
46-011X	Heavy Pattern	B	M-103-C	0.53	1.53	0.83	0.08	19.60
46-012	1/4" x 1/4"	B	M-104-C	0.62	1.67	0.90	0.13	16.91
46-013	5/16" x 1/8"	B	M-104-C	0.63	1.63	0.95	0.10	22.49
46-016	3/8" x 1/4"	A	M-303-C	0.65	1.71	0.92	0.16	14.02

NV104C 2203 821 3069

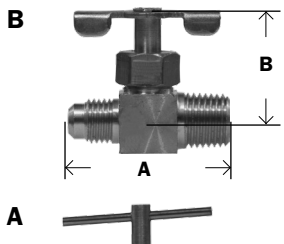
COMP X COMP



Part #	Comp X Comp	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-020	3/16"	B	M-105-C	1.06	0.88	0.08	84.95
46-021	1/4"	A	M-106-C	1.17	1.12	0.10	7.27
46-022	5/16"	A	M-107-C	1.22	1.08	0.12	19.15
46-023	3/8"	B	M-113-C	1.31	1.15	0.13	11.88

NV105C 3062 2201 822

FLARE X MALE PIPE



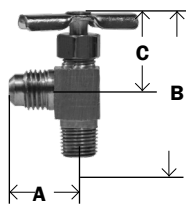
Part #	Male Flare X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-028	1/4" x 1/8"	A	M-104-SAE	1.35	1.12	0.07	18.65
46-029	1/4" x 1/4"	B	M-1040-SAE	1.38	0.88	0.09	25.62
46-031	3/8" x 1/4"	B	M-108-SAE	1.73	1.22	0.18	86.87

NV103F 2405 823 3048

BRASS FITTINGS

NEEDLE VALVES

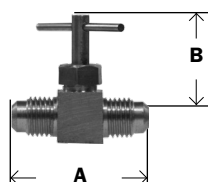
FLARE X MALE PIPE



Part #	Male Flare X Male Pipe	Ind. #	A	B	C	Approx. Wt. Lbs.	List Price
46-036	1/4" x 1/8"	M-103-SAE	0.68	1.54	0.86	0.08	14.56
46-038	5/16" x 1/8"	M-203-SAE	0.88	1.59	0.94	0.11	49.91
46-039	5/16" x 1/4"	M-204-SAE	0.90	1.94	1.00	0.14	21.70
46-040	3/8" x 1/4"	M-303-SAE	0.97	1.84	0.90	0.17	73.23

NV101F 2403 824 3049

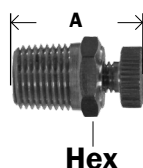
FLARE X FLARE



Part #	Male Flare X Male Flare	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-045	1/4"	M-110-SAE	1.48	1.20	0.18	5.39
46-046	3/8"	M-115-SAE	1.79	1.19	0.20	23.63

NV102F 3042 825 2401

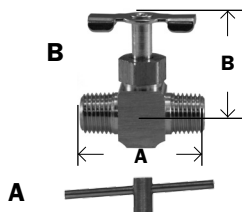
MULTI-PURPOSE AIR VENT



Part #	Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
46-048	1/8"	0.78	0.43	0.02	3.56

705

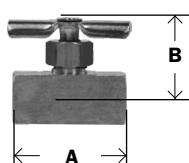
MALE PIPE TO MALE PIPE



Part #	Male Pipe X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-050	1/8"	A	M-108-P	1.25	1.09	0.08	23.63
46-051	1/4"	B	M-110-P	1.69	1.00	0.16	18.11

NV107P 2301 826 3122

FEMALE PIPE X FEMALE PIPE

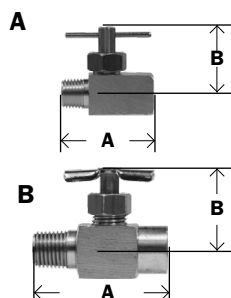


Part #	Female Pipe X Female Pipe	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-055*	1/8"	M-304-P	1.18	0.84	0.18	19.99
46-056	1/4"	M-3044-P	1.60	1.24	0.21	9.66
46-056P*	1/4" Heavy	M-3044-P	1.62	2.53	0.20	14.83

* Pressed on handle

6800 NV109P 2304 817 3103

MALE X FEMALE PIPE



NBR seals -30°C to 120°C

Part #	Male Pipe X Female Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-060	1/8"	A	M-305-P	1.18	1.09	0.10	6.68
46-061	1/4"	A	M-3055-P	1.60	1.14	0.18	10.59
46-061L	1/4" Light Pattern	B	M-3055-P	1.88	1.09	0.21	36.84

NV108P 2305 818 3120

SPECIALTY VALVES

BRASS TRUCK VALVES

- Used in heavy duty truck, trailer and mobile markets.
- Used on water, oil and coolant lines.
- Forged brass construction with steel handle.
- Temperature range -40° - 250°
- Max pressure 250 psi
- Metal to metal seats for high heat/fluid compatibility
- Fine thread screw down to afford flow control ability and a positive seal.
- Not intended for natural gas, LPG, Nuclear or aircraft applications

200 PSI



HOSE TO MALE PIPE

Part #	Size	List Price
46-450	3/8 x 3/8	17.90
46-451	5/8 x 3/8	17.89

404V



HOSE TO MALE PIPE

Part #	Size	List Price
46-455	5/8 x 1/2	35.78
46-457	3/4 x 3/8	44.59
46-456	3/4 x 1/2	37.69

404V



FEMALE TO MALE PIPE

Part #	Size	List Price
46-465	3/8 x 3/8	22.46
46-466	3/8 x 1/2	46.47
46-467	1/2 x 1/2	30.00

405V



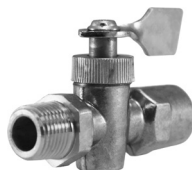
FLARE TO MALE PIPE

Part #	Size	List Price
46-475	1/2 x 1/2	66.65
46-476	5/8 x 1/2	30.07

409V

SOLID BOTTOM VALVES

- Designed for instantaneous on-off operation.
- 360° rotation standard.
- 30 PSI
- Packed with grease.



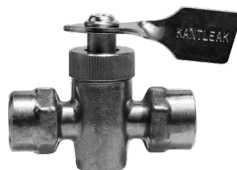
8875

O-RING SEALED MIP X FIP

Part #	Size	List Price
46-400	1/8	29.19
46-401	1/4	26.78
46-402	3/8	29.60

1035D M-70-SBV

- Good for Propane



#M-72-SBV

FIP x FIP

Part #	Size	List Price
46-411	1/4	31.71

BRASS FITTINGS

SOLID BOTTOM FUEL VALVES

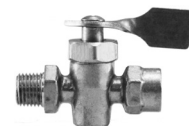
- Approved for use on Motorcraft fuel lines.
- Pointer lever.
- 90° turn stop mechanism to assure positive location of the on and off positions.
- Corrosion proofed internal construction assures maximum salt atmosphere protection.
- Port hole is 1/4 (.250) diameter.
- UL listed for use in fuel oils no. 1 & no. 2, LP gas and utility gas.



PIPE MALE X FEMALE

Part #	Size	List Price
46-400M	1/8 x 1/8	49.23
46-401M	1/4 x 1/4	36.40
46-402M	3/8 x 3/8	43.20

8980



PIPE

MALE x MALE

Part #	Size	List Price
46-406M	1/4 x 1/4	44.95

8990

- Good for Propane



FEMALE X FEMALE

Part #	Size	List Price
46-411M	1/4 x 1/4	43.79

8975



MALE PIPE X FLARE

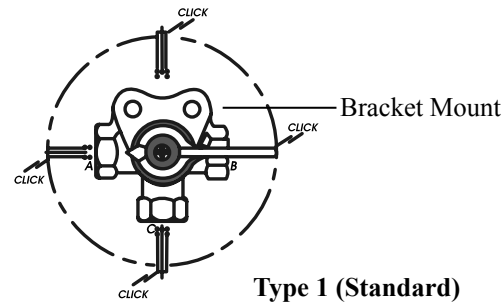
Part #	Size	List Price
46-429M	1/4 x 3/8	41.00
46-430M	3/8 x 3/8	66.28

8948

GROUND PLUG SHUT-OFF COCKS

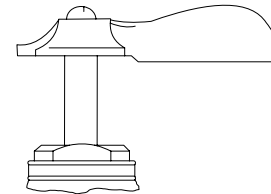
NON-LUBRICATED PLUG VALVES are designed to operate in systems where INSTANTANEOUS PORT SELECTION is desired. Since LUBRICANTS ARE NOT USED, relubrication is not required. There is no lubricant to freeze and lock the valve or to contaminate fine fluids. The O-RING SEALED CAP and STEM eliminate leakage to atmosphere. The mating BRASS BODY and CELCON PLUG produce a fine seal that WILL NOT SEIZE OR GALL.

Designed for PANEL or BRACKET MOUNTING. They are generally recommended for operation in GASOLINE, OIL, AIR, WATER and DETERGENT systems from minus 40° to 180°F, at a maximum operating pressure of 30 p.s.i.g. The fluid port size is 9/32 (.281) diameter for 1/8 and 1/4 sizes, 5/16 (.312) diameter for the 3/8 size. (Consult factory for applications requiring a higher pressure).

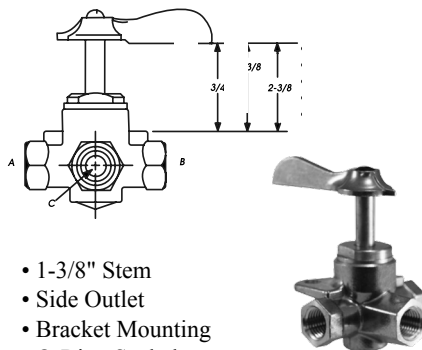


Type 1 (Standard)

A pronounced "click" may be felt at each position. Handle travel is not restricted.



PANEL MOUNTING AVAILABLE

THREE-WAY VALVES
(Side Outlet)

- 1-3/8" Stem
- Side Outlet
- Bracket Mounting
- O-Ring Sealed
- 4-way celcon roter standard

LESS CLICK

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-247	1/4	1-3/8"	35.71
46-248	3/8	1-3/8"	42.08

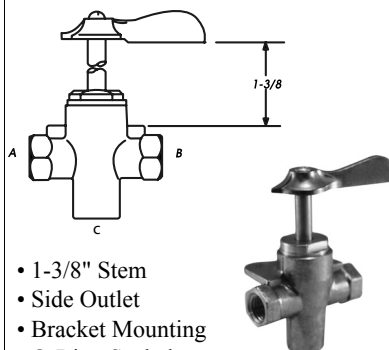
M-108-MID WITH CLICK 360°

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-250	1/8	1-3/8"	37.19
46-251	1/4	1-3/8"	36.35
46-252	3/8	1-3/8"	42.78

V406P 6749

Openings:

Handle Pointer over A.....Valve Open A-C
 Handle Pointer over C.....Valve Open B-C
 Handle Pointer over B.....Valve "OFF"
 Handle Pointer over Bracket.....Valve "OFF"

THREE-WAY VALVES
(Bottom Outlet)

- 1-3/8" Stem
- Side Outlet
- Bracket Mounting
- O-Ring Sealed
- 4-way celcon roter standard

LESS CLICK

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-241	1/4	1-3/8"	37.25

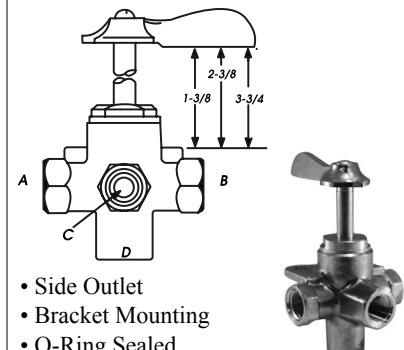
WITH CLICK 360°

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-243	1/8	1-3/8"	43.35
46-244	1/4	1-3/8"	38.96

Openings:

Handle Pointer over A.....Valve Open A-C
 Handle Pointer over B.....Valve Open B-C
 Handle Pointer over Bracket.....Valve "OFF"

FOUR-WAY VALVES



- Side Outlet
- Bracket Mounting
- O-Ring Sealed
- 4-way celcon roter standard

LESS CLICK

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-257	1/4	1-3/8"	34.96

M-114-MID WITH CLICK (360°)

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-255	1/4	1-3/8"	39.50
46-256	3/8	1-3/8"	47.15

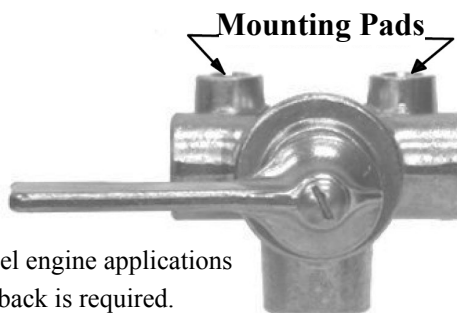
WITH 2-3/8" LONG STEM M-115-MID

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-260	1/4	2-3/8"	39.93

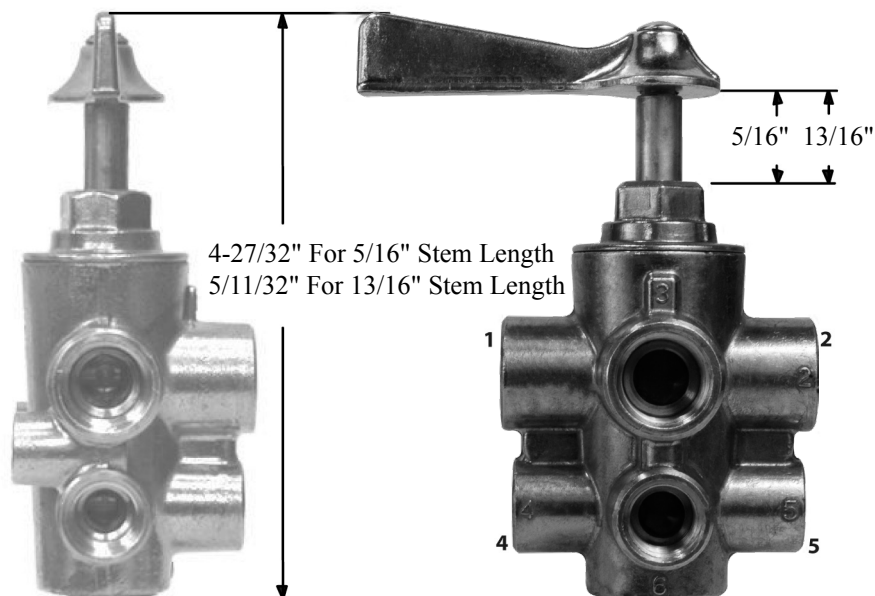
V407P

Openings:

Handle Pointer over A.....Valve Open A-D
 Handle Pointer over C.....Valve Open C-D
 Handle Pointer over B.....Valve Open B-D
 Handle Pointer over Bracket.....Valve "OFF"

SPECIALTY VALVES**BRASS FITTINGS****SIX PORT VALVES**

- Designed primarily for diesel engine applications where a fuel return or spill back is required.



Maximum Handle Travel 180° Mounting Pads for Bolt Mounting Openings

With Handle Lever over 1:
(All Ports Closed)

With Handle Lever over 2:

(Open: 2-3 and 5-6, Closed: 1 and 4)

With Handle Lever over 3:

(Open: 1-3 and 4-6, Closed: 2 and 5)

Part #	Ind. #	Female Pipe Thread of 1-2-3 4-5-6	Stem	Length Type	List Price
46-238	SK-1036	1/2 x 3/8	13/16	1	731.87

MARINE FITTINGS

- Calibrated to support 30" column of gasoline.

- Flo direction <-

**BRASS ANTI-SIPHON VALVES**

NPT X NPT

Part #	Size	List Price
46-520	1/4 x 1/4	18.56
46-521	3/8 x 3/8	30.97

**BRASS ANTI-SIPHON VALVES**

BARB X NPT

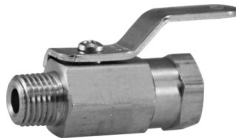
Part #	Size	List Price
46-530	5/16 x 1/4	17.93
46-531	3/8 x 1/4	16.37
46-532	3/8 x 3/8	30.05
46-533	1/2 x 3/8	30.05

Aluminum Valves
available upon request

BRASS FITTINGS

BRASS DOMESTIC MINIATURE BALL VALVES

- Working Pressure up to 1000 P.S.I.G.
- ASTM B-16 Corrosion Resistant Brass Body.
- Non-Adjusting Viton O-Ring Stem Seal Design Never Needs Tightening.
- Highly Inert Teflon Seats.
- Long Life Nickel Plated Brass Ball.
- Blow-Out Proof Stem for Safety.
- Temperature: -40°F to 300°F
- 1/4 Turn Instantaneous On-Off Operation.
- Quarter Turn Handle Design.
- Water, Oil, and Air Pressure Systems.
- Ideal for tight, confined areas, or when routing aesthetics are desired. Applications include instrumentation, gas sampling systems, high pressure gauges, test stands, hydraulic and pneumatic service lines on capital equipment.
- Not good for steam.
- Good for propane, gas and diesel.



MALE X FEMALE

Part #	Size	List Price
46-900	1/8 x 1/8	25.15
46-903	1/4 x 1/4	25.13



MALE X MALE

Part #	Size	List Price
46-910	1/8 x 1/8	27.86
46-912	1/4 x 1/4	27.19



MALE PIPE X HOSE BARB

Part #	Size	List Price
47-042	1/8 x 1/4	33.91
46-980	1/4 x 1/4	25.36
46-981	1/4 x 3/8	23.77

FEMALE X FEMALE



Part #	Size	List Price
46-920	1/8 x 1/8	25.78
46-921	1/8 x 1/4	29.04
46-922	1/4 x 1/4	25.01



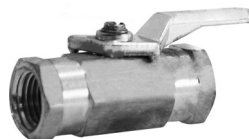
Part #	Size	List Price
46-922A	1/4 x 1/4	19.27
46-923	3/8 x 3/8	31.75



Part #	Size	List Price
46-924	1/2 x 1/2	51.10
46-925	3/4 x 3/4	51.50

U.L. TWO WAY VALVES

- Buna-N Seal, Teflon Seat Plated metal handle, plated brass ball.
- 250 PSI Working Pressure



U.L. TWO WAY VALVES FNPT X FNPT

Part #	Size	List Price
46-440	1/4 x 1/4	26.49



U.L. TWO WAY VALVES MNPT X FNPT

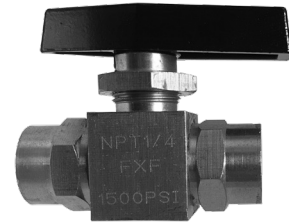
Part #	Size	List Price
46-443	1/4 x 1/4	26.49

MINIATURE BALL VALVES

PANEL MOUNT BRASS BALL VALVES

- Working pressure: 1500 psi wog for 1/8" to 1/4", 1000 psi wog for 3/8" to 1/2"
- Vacuum rating: 29.92" Hg
- Working temp: -40°F to +300°F
- Panel mount hole is 9/16" Dia.
- Brass body cap, PTFE ball seats, Viton stem sealing, Brass chrome plated ball

FEMALE X FEMALE



Part #	Size	List Price
46-830	1/8 x 1/8	58.70
46-832	1/4 x 1/4	58.75
46-833	3/8 x 3/8	115.00
46-834	1/2 x 1/2	130.75

FEMALE X FEMALE



Part #	Size	List Price
46-875	1/8 x 1/8	57.75
46-878	1/4 x 1/4	58.00



Part #	Size	List Price
46-951	1/8 FPT	61.45
46-956	1/4 FPT	61.55

CHECK VALVES

BRASS CHECK VALVES

- 500 PSI
- 180° temp rating
- 1 PSI Cracking Pressure
- Buna-N Seal for water, air and inert gas
- Viton Seal for oil, gas and diesel fuel



FIP X FIP BUNA-N

Part #	Size	List
46-560	1/8"	27.19
46-561	1/4"	30.27
46-562	3/8"	43.96
46-563	1/2"	53.67
46-564	3/4"	86.57

FIP X FIP VITON

Part #	Size	List
46-560V	1/8"	27.19
46-561V	1/4"	30.27
46-562V	3/8"	43.96
46-563V	1/2"	53.67
46-564V	3/4"	86.57



FEMALE X MALE BUNA-N

Part #	Size	List Price
46-565	1/8"	27.19
46-566	1/4"	26.04
46-567	3/8"	32.55
46-568	1/2"	39.69
46-569	3/4"	93.39

FEMALE X MALE VITON

Part #	Size	List Price
46-565V	1/8"	27.19
46-566V	1/4"	26.04
46-567V	3/8"	32.55
46-568V	1/2"	39.69
46-569V	3/4"	93.39



MALE X MALE

Part #	Size	Buna-N List
46-570	1/8"	27.19
46-571	1/4"	26.04
46-572	3/8"	32.55
46-573	1/2"	39.69

MALE X MALE

Part #	Size	Viton Price
46-570V	1/8"	27.19
46-571V	1/4"	26.04
46-572V	3/8"	32.55
46-573V	1/2"	39.69



MALE X FEMALE

Part #	Size	Buna-N Price
46-575	1/8"	27.19
46-576	1/4"	26.04
46-577	3/8"	32.55
46-578	1/2"	39.69

Part #	Size	Viton Price
46-575V	1/8"	27.19
46-576V	1/4"	26.04
46-577V	3/8"	32.55
46-578V	1/2"	39.69

HIGH PRESSURE CHECK VALVES

MAX. 2500 PSI
Cracking Pressure 1 PSI

- Opening diameter .187
- 180° max operating temp.
- SS ball and spring

MNPT X MNPT

Part #	Size	Opening Dia.	List Price
46-500	1/4 x 1/4	0.187	24.36

MAX. 2500 PSI

- Flo direction ->
- Opening diameter .187
- 180° max operating temp.
- Buna Seal
- SS ball and spring

MNPT X FNPT

Part #	Size	Opening Dia.	List Price
46-505	1/4 x 1/4	0.187	23.25

MAX. 1200 PSI

- O-Ring poppet seal Bubble tight operation
- 180°F max operating temp.

FNPT X FNPT

Part #	Size	Opening Dia.	List Price
46-510	1/4 x 1/4	0.25	27.09
46-511	3/8 x 3/8	0.375	32.65
46-512	1/2 x 1/2	0.437	42.80

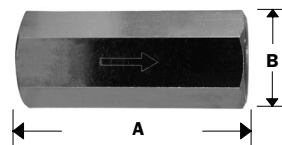
BRASS FITTINGS

PNEUMATIC CHECK VALVES

- Max Operating Pressure: 220 psi
- Working Pressure: 14.5-145 psi
- Cracking Pressure: 2.8 psi
- Maximum Temperatures: 140° F

Materials

Body	Chrome plated Brass
Spring	Steel
O-Ring	NBR Rubber

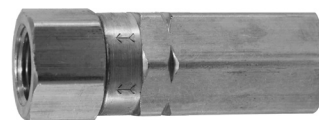


NPT- Inlet NPSM - Outlet

Part #	Size	Dimensions (In.)		List Price
		A	B	
46-200	1/4	1.97	0.67	18.03
46-201	3/8	1.97	0.83	18.75
46-202	1/2	2.48	0.98	38.69

HIGH PRESSURE CHECK VALVES

- Operates in any position, and is available in mixed or matched end combinations.
- Standard cracking pressure 1 p.s.i. with a maximum operating pressure of 3000 p.s.i. and a maximum operating temperature of 180°F using Buna-N seals.
- Buna-N seals standard, other seals available.
- Guided 316 stainless steel ball + spring.
- Fixed ringed seat prevents extrusion of seal.
- Opening diameter .28
- Approximate CV 1.2
- Brass
- Water G.P.M. @ 10 p.s.i. is 4.0
- Good for air



FEMALE X FEMALE

Part #	Size	List Price
46-513	1/4	51.42
46-517	3/8	57.16

- Flo direction ->



FEMALE X MALE

Part #	Size	List Price
46-514	1/4	51.42
46-518	3/8	57.16