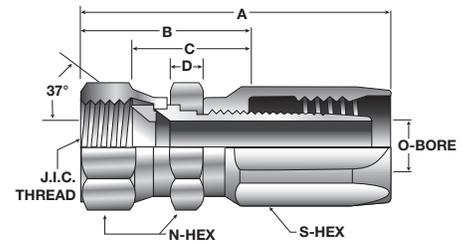




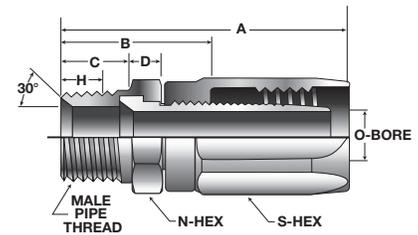
FJ
121 J.I.C. FEMALE SWIVEL
NON-MANDREL/ZINC PLATED STEEL



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	J.I.C. THREAD	FITTINGS COMP. PARTS		EA. WEIGHT	A	B	C	D	NIPPLE N HEX	O	SOCKET S HEX
				NIPPLE	SOCKET								
121-4	4	1/4	7/16-20	4121-4	4011-4	0.10	1.94	1.19	0.83	0.19	9/16	0.13	5/8
121-5	5	5/16	1/2-20	4121-5	4011-5	0.12	2.08	1.30	0.94	0.19	5/8	0.17	11/16
121-6	6	3/8	9/16-18	4121-6	4011-6	0.17	2.31	1.41	1.02	0.23	11/16	0.23	13/16
121-8	8	1/2	3/4-16	4121-8	4011-8	0.27	2.84	1.58	1.14	0.28	7/8	0.34	15/16
121-10	10	5/8	7/8-14	4121-10	4011-10	0.41	3.06	1.67	1.17	0.31	1	0.45	1 1/8
121-12	12	3/4	1 1/16-12	4121-12	4011-12	0.57	3.50	1.92	1.34	0.38	1 1/4	0.56	1 1/4
121-16	16	1	1 5/16-12	4121-16	4011-16	0.70	3.19	1.92	1.30	0.38	1 1/2	0.81	1 7/16
121-20	20	1 1/4	1 5/8-12	4121-20	4011-20	1.35	3.38	2.03	1.38	0.41	2	1.05	1 3/4
121-24	24	1 1/2	1 7/8-12	4121-24	4011-24	1.71	3.84	2.23	1.53	0.41	2 1/4	1.28	2
121-32	32	2	2 1/2-12	4121-32	4011-32	2.76	4.44	2.58	1.66	0.45	2 7/8	1.75	2 1/2

For Hose Information See Page 2f

MP
122 MALE PIPE
NON-MANDREL/ZINC PLATED STEEL

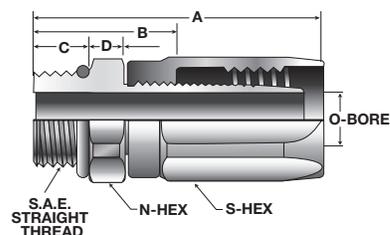


100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	MALE PIPE THREAD	FITTINGS COMP. PARTS		EA. WEIGHT	A	B	C	D	*H	NIPPLE N HEX	O	SOCKET S HEX
				NIPPLE	SOCKET									
122-2-4	4	1/4	1/8	4122-2-4	4011-4	0.08	1.67	0.92	0.39	0.19	0.28	9/16	0.13	5/8
122-4-4	4	1/4	1/4	4122-4-4	4011-4	0.10	1.86	1.11	0.56	0.19	0.38	9/16	0.13	5/8
122-4-5	5	5/16	1/4	4122-4-5	4011-5	0.11	1.97	1.19	0.56	0.19	0.38	9/16	0.17	11/16
122-4-6	6	3/8	1/4	4122-4-6	4011-6	0.14	2.17	1.23	0.56	0.22	0.38	9/16	0.23	13/16
122-6-6	6	3/8	3/8	4122-6-6	4011-6	0.15	2.20	1.27	0.56	0.25	0.41	11/16	0.23	13/16
122-6-8	8	1/2	3/8	4122-6-8	4011-8	0.23	2.48	1.33	0.56	0.25	0.41	11/16	0.34	15/16
122-8-8	8	1/2	1/2	4122-8-8	4011-8	0.26	2.72	1.56	0.75	0.31	0.53	7/8	0.34	15/16
122-8-10	10	5/8	1/2	4122-8-10	4011-10	0.36	2.86	1.59	0.75	0.28	0.53	7/8	0.45	1 1/8
122-12-10	10	5/8	3/4	4122-12-10	4011-10	0.46	2.91	1.66	0.75	0.34	0.56	1 1/16	0.45	1 1/8
122-12-12	12	3/4	3/4	4122-12-12	4011-12	0.49	3.20	1.67	0.75	0.34	0.56	1 1/16	0.56	1 1/4
122-12-16	16	1	3/4	4122-12-16	4011-16	0.50	2.80	1.53	0.75	0.39	0.56	1 3/8	0.81	1 7/16
122-16-16	16	1	1	4122-16-16	4011-16	0.63	2.98	1.72	0.94	0.39	0.66	1 3/8	0.81	1 7/16
122-20-20	20	1 1/4	1 1/4	4122-20-20	4011-20	1.08	3.19	1.83	0.97	0.47	0.69	1 3/4	1.05	1 3/4
122-24-24	24	1 1/2	1 1/2	4122-24-24	4011-24	1.23	3.36	1.92	1.00	0.53	0.69	2	1.28	2
122-32-32	32	2	2	4122-32-32	4011-32	1.81	3.91	2.06	1.03	0.63	0.75	2 1/2	1.75	2 1/2

* Hand Engagement Plus One Thread
 For Hose Information See Page 2f



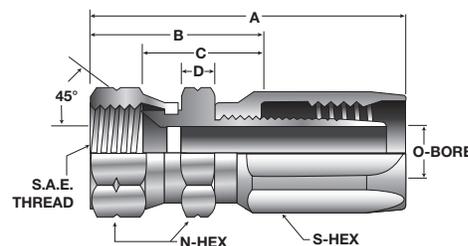
ST 118 S.A.E. MALE THREAD NON-MANDREL/ZINC PLATED STEEL



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	SAE MALE THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	D	NIPPLE N HEX	O	SOCKET S HEX
118-4	4	1/4	7/16-20	4118-4	4011-4	0.08	1.64	0.89	0.36	0.19	9/16	0.13	5/8
118-5	5	5/16	1/2-20	4118-5	4011-5	0.10	1.75	0.97	0.36	0.19	5/8	0.17	11/16
118-6	6	3/8	9/16-18	4118-6	4011-6	0.15	1.94	1.03	0.39	0.25	11/16	0.23	13/16
118-8	8	1/2	3/4-16	4118-8	4011-8	0.24	2.34	1.09	0.44	0.25	7/8	0.34	15/16
118-10	10	5/8	7/8-14	4118-10	4011-10	0.38	2.63	1.23	0.50	0.31	1	0.45	1 1/8
118-12	12	3/4	1 1/16-12	4118-12	4011-12	0.51	3.09	1.53	0.59	0.39	1 1/4	0.56	1 1/4
118-16	16	1	1 5/16-12	4118-16	4011-16	0.61	2.66	1.39	0.59	0.41	1 1/2	0.81	1 7/16
118-20	20	1 1/4	1 5/8-12	4118-20	4011-20	0.97	2.75	1.39	0.59	0.41	1 7/8	1.05	1 3/4
118-24	24	1 1/2	1 7/8-12	4118-24	4011-24	1.36	2.84	1.39	0.59	0.41	2 1/8	1.14	2

For Hose Information See Page 2f
ST Code Letters When Used On Assembly

FS 123 S.A.E. FEMALE SWIVEL NON-MANDREL/ZINC PLATED STEEL



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	S.A.E. 45 THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	D	NIPPLE N HEX	O	SOCKET S HEX
123-4	4	1/4	7/16-20	4123-4	4011-4	0.09	1.94	1.19	0.83	0.19	9/16	0.13	5/8
123-5	5	5/16	1/2-20	4123-5	4011-5	0.12	2.08	1.30	0.94	0.19	5/8	0.17	11/16
123-6	6	3/8	5/8-18	4123-6	4011-6	0.18	2.34	1.44	1.02	0.23	3/4	0.23	13/16
123-8	8	1/2	3/4-16	4123-8	4011-8	0.27	2.84	1.58	1.14	0.28	7/8	0.34	15/16
123-10	10	5/8	7/8-14	4123-10	4011-10	0.41	3.06	1.67	1.17	0.31	1	0.45	1 1/8
123-12	12	3/4	1 1/16-14	4123-12	4011-12	0.60	3.50	1.92	1.34	0.38	1 1/4	0.56	1 1/4

For Hose Information See Page 2f

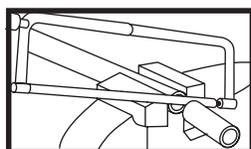
LENZ Single Wire Braid K And KR Medium Pressure Non Mandrel Type Hose Fittings

(For assembly in the Field without Mandrels or Other Special Tools)

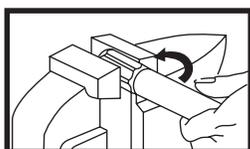
THESE FITTINGS (102, 114, 118, 121, 122, AND 123) have been designed for use with the Single Wire Braid, Medium Pressure Type K or KR Hose. They differ from the "Full Flow" fittings as shown on pages 3f-8f in that they have a longer stem and slightly smaller bore. They require no special tools or preparation for assembly, such as mandrels or skiving. They can be assembled right on the job, in the field, in the shop or on the road... quickly and easily. The J.I.C. and S.A.E. Swivels have a hex on the stem

that contributes to the ease and simplicity of assembly. These fittings are well adapted for use in assemblies where the conditions unfavorable to normal maintenance exist or are such that special tools and facilities are not always available, for example in the maintenance of agricultural, and construction equipment. (See the note and assembly instructions below).

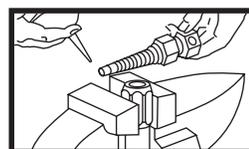
NOTE: Lenz 121, 122, and 123 fittings... These fittings can be ordered in factory made-up assemblies if specified, otherwise Lenz Mandrel Type Fittings (111, 112, & 101) will be used where available.



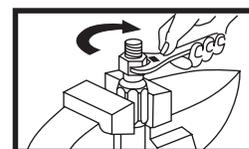
1. Cut hose square to desired length using a fine tooth hacksaw or cut-off wheel.



2. Hold socket securely with wrench or place in vise, if available, screw hose in counter-clockwise using body weight to start threading.



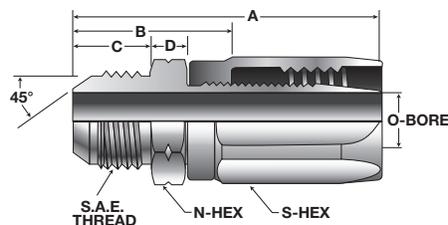
3. Oil inside of hose and socket threads. This lubrication makes assembly much easier.



4. Screw nipple into socket using wrench on hex of nipple.



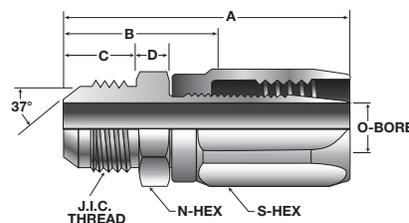
MS
102 S.A.E. MALE FLARE
NON-MANDREL/ZINC PLATED STEEL



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	SAE 45 MALE THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	D	NIPPLE N HEX	O	S HEX
102-4	4	1/4	7/16-20	4102-4	4011-4	0.08	1.80	1.03	0.50	0.19	1/2	0.13	5/8
102-5	5	5/16	1/2-20	4102-5	4011-5	0.10	1.97	1.19	0.56	0.20	9/16	0.17	11/16
102-6	6	3/8	5/8-18	4102-6	4011-6	0.15	2.19	1.28	0.63	0.25	11/16	0.23	13/16
102-8	8	1/2	3/4-16	4102-8	4011-8	0.24	2.66	1.41	0.75	0.25	13/16	0.36	15/16
102-10	10	5/8	7/8-14	4102-10	4011-10	0.38	3.00	1.59	0.88	0.31	15/16	0.45	1 1/8
102-12	12	3/4	1 1/16-14	4102-12	4011-12	0.55	3.50	1.94	1.00	0.58	1 1/8	0.58	1 1/4

For Hose Information See Page 2f

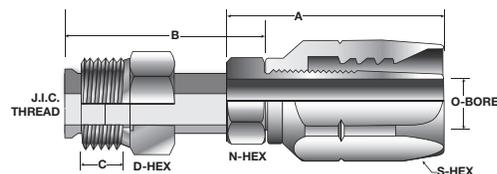
MJ
114 J.I.C. MALE FLARE
NON-MANDREL/ZINC PLATED STEEL



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	SAE 45 MALE THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	D	NIPPLE N HEX	O	S HEX
114-4	4	1/4	7/16-20	4114-4	4011-4	0.08	1.84	1.09	0.56	0.19	1/2	0.13	5/8
114-5	5	5/16	1/2-20	4114-5	4011-5	0.10	1.95	1.17	0.56	0.19	9/16	0.17	11/16
114-6	6	3/8	9/16-18	4114-6	4011-6	0.14	2.13	1.22	0.56	0.25	5/8	0.23	13/16
114-8	8	1/2	3/4-16	4114-8	4011-8	0.24	2.56	1.31	0.66	0.25	13/16	0.36	15/16
114-10	10	5/8	7/8-14	4114-10	4011-10	0.35	2.89	1.50	0.75	0.28	15/16	0.45	1 1/8
114-12	12	3/4	1 1/16-12	4114-12	4011-12	0.50	3.34	1.78	0.86	0.38	1 1/8	0.58	1 1/4
114-16	16	1	1 5/16-12	4114-16	4011-16	0.63	2.94	1.69	0.91	0.39	1 3/8	0.81	1 7/16
114-20	20	1 1/4	1 5/8-12	4114-20	4011-20	1.03	3.13	1.77	0.95	0.42	1 3/4	1.05	1 3/4
114-24	24	1 1/2	1 7/8-12	4114-24	4011-24	1.41	3.42	1.97	1.08	0.50	2	1.28	2

For Hose Information See Page 2f

115 S.A.E.
MALE INVERTED SWIVEL
NON-MANDREL/ZINC PLATED STEEL

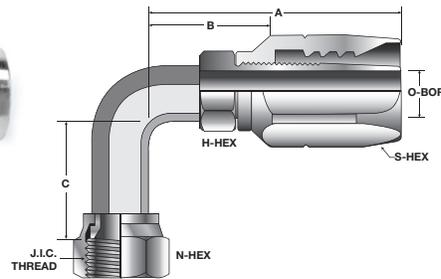


100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	SAE THREAD	FITTINGS COMP. NIPPLE	PARTS SOCKET	EA. WEIGHT	A	B	C	D	NIPPLE N HEX	O	SOCKET S HEX
115-4	4	1/4	7/16-24	4115-4	4011-4	0.09	2.47	1.72	0.38	0.25	3/8	0.13	5/8
115-5	5	5/16	1/2-20	4115-5	4011-5	0.12	2.63	1.84	0.44	0.31	7/16	0.17	11/16
115-6	6	3/8	5/8-18	4115-6	4011-6	0.17	2.72	1.81	0.44	0.31	1/2	0.23	13/16
115-8	8	1/2	3/4-18	4115-8	4011-8	0.26	3.13	1.98	0.56	0.38	5/8	0.36	15/16
115-10	10	5/8	7/8-14	4115-10	4011-10	0.41	3.65	2.38	0.85	0.38	15/16	.45	1 1/8

For Hose Information See Page 2f



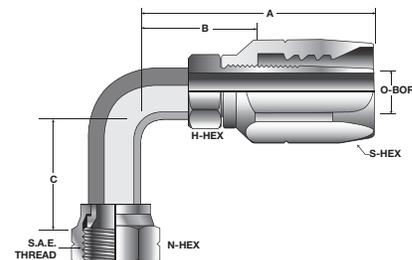
90111 FEMALE J.I.C. 90° SWIVEL ELBOW NON-MANDREL/ZINC PLATED STEEL



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	J.I.C. THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	H HEX NIPPLE	NUT N HEX	O	SOCKET S HEX
90111-4	4	1/4	7/16-20	490111-4	4011-4	0.11	1.75	1.00	0.69	9/16	9/16	0.13	5/8
90111-5	5	5/16	1/2-20	490111-5	4011-5	0.12	1.97	1.19	0.77	5/8	5/8	0.17	11/16
90111-6	6	3/8	9/16-18	490111-6	4011-6	0.17	2.13	1.23	0.84	11/16	11/16	0.23	13/16
90111-8	8	1/2	3/4-16	490111-8	4011-8	0.26	2.75	1.61	1.09	7/8	7/8	0.34	15/16
90111-10	10	5/8	7/8-14	490111-10	4011-10	0.47	2.94	1.66	1.23	1	1	0.45	1 1/8
90111-12	12	3/4	1 1/16-12	490111-12	4011-12	0.66	3.75	2.17	1.81	1 1/4	1 1/4	0.56	1 1/4
90111-16	16	1	1 5/16-12	490111-16	4011-16	0.90	3.55	2.28	2.14	1 1/2	1 1/2	0.81	1 7/16
90111-20	20	1 1/4	1 5/8-12	490111-20	4011-20	1.1	4.01	2.73	2.59	1 1/2	2	1.05	1 3/4

For Hose Information See Page 2f

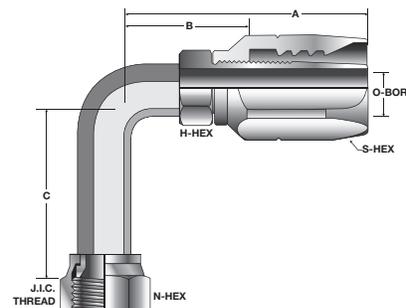
90101 FEMALE S.A.E. 90° SWIVEL ELBOW NON-MANDREL/ZINC PLATED STEEL



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	S.A.E. THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	H HEX NIPPLE	NUT N HEX	O	SOCKET S HEX
90101-4	4	1/4	7/16-20	490111-4	4011-4	0.11	1.75	1.00	0.69	9/16	9/16	0.13	5/8
90101-5	5	5/16	1/2-20	490111-5	4011-5	0.12	1.97	1.19	0.77	5/8	5/8	0.17	11/16
90101-6	6	3/8	5/8-18	490111-6	4011-6	0.17	2.13	1.23	0.84	11/16	11/16	0.23	13/16
90101-8	8	1/2	3/4-16	490111-8	4011-8	0.26	2.75	1.61	1.09	7/8	7/8	0.34	15/16
90101-10	10	5/8	7/8-14	490111-10	4011-10	0.47	2.94	1.66	1.23	1	1	0.45	1 1/8
90101-12	12	3/4	1 1/16-14	490111-12	4011-12	0.66	3.75	2.17	1.81	1 1/4	1 1/4	0.56	1 1/4
90101-16	16	1	1 5/16-14	490111-16	4011-16	0.90	3.39	2.28	2.14	1 1/2	1 1/2	0.81	1 7/16
90101-20	20	1 1/4	1 5/8-14	490111-20	4011-20	1.1	4.01	2.73	2.59	1 1/2	2	1.05	1 3/4

For Hose Information See Page 2f
Sizes 6 & 12 S.A.E. thread only

90111L FEMALE J.I.C. LONG 90° SWIVEL ELBOW NON-MANDREL/ZINC PLATED STEEL

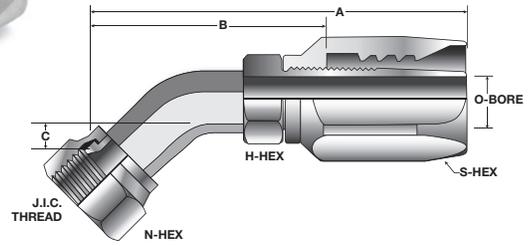


100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	J.I.C. THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	INCH C	H HEX NIPPLE	NUT N HEX	O	SOCKET S HEX
90111L-4	4	1/4	7/16-20	490111L-4	4011-4	0.12	1.75	1.00	1.80	9/16	9/16	0.13	5/8
90111L-5	5	5/16	1/2-20	490111L-5	4011-5	0.14	1.97	1.19	1.78	5/8	5/8	0.17	11/16
90111L-6	6	3/8	9/16-18	490111L-6	4011-6	0.18	2.13	1.23	2.19	11/16	11/16	0.23	13/16
90111L-8	8	1/2	3/4-16	490111L-8	4011-8	0.29	2.75	1.45	2.44	7/8	7/8	0.34	15/16
90111L-10	10	5/8	7/8-14	490111L-10	4011-10	0.5	2.94	1.66	2.56	1 1/16	1	0.45	1 1/8
90111L-12	12	3/4	1 1/16-12	490111L-12	4011-12	0.75	3.75	2.17	3.73	1 1/4	1 1/4	0.56	1 1/4
90111L-16	16	1	1 5/16-12	490111L-16	4011-16	1.04	3.39	2.28	4.33	1 1/2	1 1/2	0.81	1 7/16

For hose information see page 2f
Fitting 90111L is designed to position hose assembly ABOVE another assembly using fitting 90111



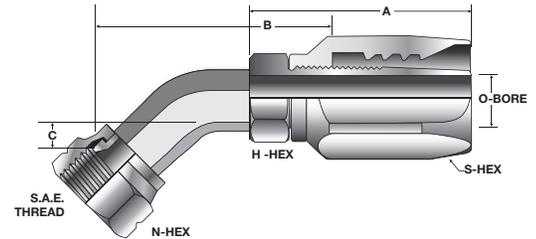
**45111 45° J.I.C.
FEMALE SWIVEL ELBOW
NON-MANDREL/ZINC PLATED STEEL**



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	J.I.C. 37° THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	H HEX NIPPLE	NUT N HEX	O	SOCKET S HEX
45111-4	4	1/4	7/16"-20	445111-4	4011-4	0.09	1.84	1.10	0.33	9/16	9/16	0.13	5/8
45111-5	5	5/16	1/2"-20	445111-5	4011-5	0.12	1.06	1.28	0.36	9/16	5/8	0.17	11/16
45111-6	6	3/8	9/16"-18	445111-6	4011-6	0.17	2.23	1.33	0.39	9/16	11/16	0.23	13/16
45111-8	8	1/2	3/4"-16	445111-8	4011-8	0.23	2.98	1.84	0.55	11/16	7/8	0.34	15/16
45111-10	10	5/8	7/8"-14	445111-10	4011-10	0.45	3.23	1.64	0.63	7/8	1	0.45	1 1/8
45111-12	12	3/4	1 1/16"-12	445111-12	4011-12	0.64	3.78	2.22	0.77	1 1/8	1 1/4	0.56	1 4/16
45111-16	16	1	1 5/16"-12	445111-16	4011-16	0.84	3.56	2.23	0.89	1 3/8	1 1/2	0.81	1 7/16
45111-20	20	1 1/4	1 5/8"-12	445111-20	4011-20	1.1	4.17	2.89	1.19	1 1/2	2	1.05	1 3/4

For Hose Information See Page 2f

**45101 45° S.A.E.
FEMALE SWIVEL ELBOW
NON-MANDREL/ZINC PLATED STEEL**

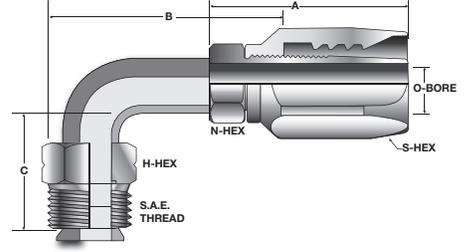


100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	S.A.E. 45° THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	H HEX NIPPLE	NUT N HEX	O	SOCKET S HEX
45101-4	4	1/4	7/16-20	445111-4	4011-4	0.09	1.84	1.10	0.33	9/16	9/16	0.13	5/8
45101-5	5	5/16	1/2-20	445111-5	4011-5	0.12	1.06	1.28	0.36	9/16	5/8	0.17	11/16
45101-6	6	3/8	5/8-18	445111-6	4011-6	0.17	2.23	1.33	0.39	9/16	11/16	0.23	13/16
45101-8	8	1/2	3/4-16	445111-8	4011-8	0.23	2.98	1.84	0.55	11/16	7/8	0.34	15/16
45101-10	10	5/8	7/8-14	445111-10	4011-10	0.45	3.23	1.64	0.63	7/8	1	0.45	1 1/8
45101-12	12	3/4	1 1/16-14	445111-12	4011-12	0.64	3.78	2.22	0.77	1 1/8	1 1/4	0.56	1 4/16
45101-16	16	1	1 5/16-14	445111-16	4011-16	0.84	3.56	2.23	0.89	1 3/8	1 1/2	0.81	1 7/16
45101-20	20	1 1/4	1 5/8-14	445111-20	4011-20	1.1	4.17	2.89	1.19	1 1/2	2	1.05	1 3/4

For Hose Information See Page 2f
Sizes 6 & 12 S.A.E. thread only



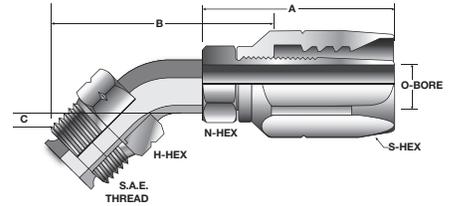
**90115 MALE INVERTED S.A.E.
45° FLARE 90° SWIVEL ELBOW
NON-MANDREL/ZINC PLATED STEEL**



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	INVERTED FLARE THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	H HEX NIPPLE	NUT N HEX	O	SOCKET S HEX
90115-4	4	1/4	7/16-24	490115-4	4011-4	0.09	2.22	1.44	1.56	9/16	7/16	0.13	5/8
90115-5	5	5/16	1/2-20	490115-5	4011-5	0.12	2.55	1.72	1.65	5/8	1/2	0.17	11/16
90115-6	6	3/8	5/8-18	490115-6	4011-6	0.17	2.67	1.69	1.69	11/16	5/8	0.23	13/16
90115-8	8	1/2	3/4-16	490115-8	4011-8	0.23	3.04	1.95	1.88	7/8	3/4	0.34	15/16

For Hose Information See Page 2f

**45115 MALE INVERTED S.A.E.
45° FLARE 45° SWIVEL ELBOW
NON-MANDREL/ZINC PLATED STEEL**



100R5 PART NO.	HOSE SIZE	O. D. TUBE SIZE	INVERTED FLARE THREAD	FITTINGS COMP. NIPPLE NUT	PARTS SOCKET	EA. WEIGHT	A	B	C	H HEX NIPPLE	NUT N HEX	O	SOCKET S HEX
45115-4	4	1/4	7/16-24	445115-4	4011-4	0.09	2.21	1.43	0.62	9/16	7/16	0.13	5/8
45115-5	5	5/16	1/2-20	445115-5	4011-5	0.12	2.39	1.56	0.70	5/8	1/2	0.17	11/16
45115-6	6	3/8	5/8-18	445115-6	4011-6	0.17	3.00	2.08	0.94	11/16	5/8	0.23	13/16
45115-8	8	1/2	3/4-16	445115-8	4011-8	0.23	3.47	2.38	1.09	7/8	3/4	0.34	15/16

For Hose Information See Page 2f