

□ FITTINGS

Refer to the following standards for additional dimensional details:

- International Mobile Air Conditioning Association (IMACA) Standard 305 (FITTINGS AND TUBING DETAILS FOR MOBILE AIR CONDITIONING SYSTEMS)
- International Mobile Air Conditioning Association (IMACA) Standard 320 (FITTINGS, HOSE AND ASSEMBLIES FOR R134a AIR CONDITIONING SYSTEMS)
- Society of Automotive Engineers (SAE) Standard J512 (AUTOMOTIVE TUBE FITTINGS)
- Society of Automotive Engineers (SAE) Standard 639 (SAFETY AND CONTAINMENT OF REFRIGERANT FOR MECHANICAL VAPOR COMPRESSION SYSTEMS USED FOR MOBILE AIR CONDITIONING SYSTEMS). R12 and R134a charge port dimensions.
- ATCO Engineering Guide EG-1031 (FITTING AND HOSE SIZE GUIDE).

Beadlock fittings are recommended for barrier style and all-rubber hoses using bubble type crimps. Barb style fittings are recommended for all-rubber hose using face style crimps and worm gear clamps.

□ FITTING TORQUE VALUES

TUBE SIZE	THREAD SIZE		TORQUE VALUE (FT/LB)		
	INCH	METRIC	FLARES	O-RING	METRIC
1/4"	7/16"	M12	10-15	5-10	5-10
3/8"	5/8"	M16, M18	20-25	10-15	10-20
3/8"	11/16"	M20	25-30	10-15	15-25
1/2"	3/4"	M20	35-40	15-20	15-25
5/8"	7/8"	M22, M24	50-60	20-30	20-35
3/4"	1 1/16"	M27	70-80	25-35	25-40
SWITCHES	3/8"	M10, M12	5-10	5-10	5-10

The above values are "rule of thumb" and may vary for various applications.

□ HOSE AND COUPLINGS

Refer to the following standards for hose and assembly requirements:

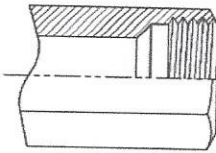
- Society of Automotive Engineers (SAE) Standard J2064 (R134a REFRIGERANT AUTOMOTIVE AIR-CONDITIONING HOSE).
- International Mobile Air Conditioning Association (IMACA) Standard 320 (FITTINGS, HOSE AND ASSEMBLIES FOR R134a AIR CONDITIONING SYSTEMS)

SIZE NO.	I.D. DIMENSIONS			O.D. DIMENSIONS	
	FRACTION	DECIMAL	METRIC	2 BRAID	REDUCED*
6	5/16"	.312"	8mm	.750"	.580"
8	13/32"	.406"	10mm	.906"	.680"
10	1/2"	.500"	12mm	1.000"	.765"
12	5/8"	.625"	16mm	1.125"	.930"
14	3/4"	.750"	19mm	N/A	1.125"

* - REDUCED O.D. DIMENSIONS refer to barrier style hose only.

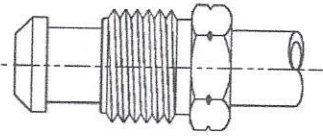
- ATCO recommends barrier style air conditioning hose to be used with beadlock fittings. All-rubber hose may also be coupled using beadlock style fittings.
- ATCO **only** recommends the use of barb fittings with all-rubber hose coupled with face style crimp or worm gear clamps. Bubble style crimps are not recommended.
- Approved crimping equipment is located in the **HOSE CRIMPERS AND TOOL** section of this catalog.

FEMALE FLARE
(FF)

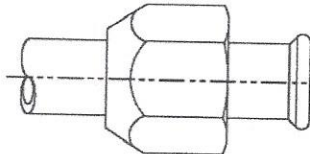


RIGID

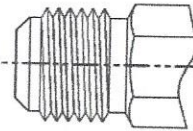
MALE FLARE
(MF)



SWIVEL

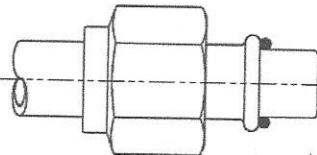


SWIVEL



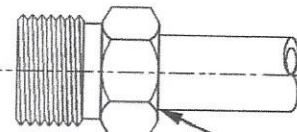
RIGID

FEMALE O-RING
(FOR)

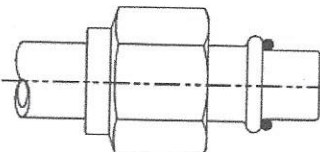


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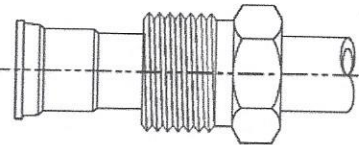
MALE INSERT O-RING
(MIO)



BRAZE/WELDED

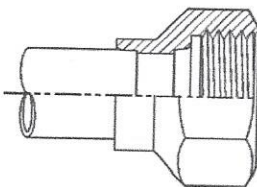


SWIVEL



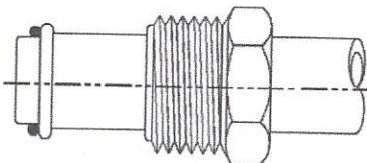
TWO PIECE

FEMALE INSERT O-RING
(FIO)



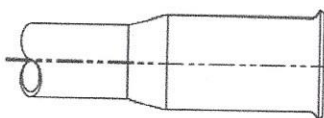
RIGID

MALE O-RING
(MOR)



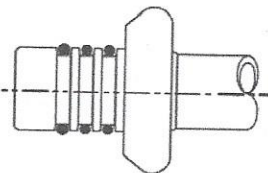
SWIVEL

FEMALE SPRINGLOCK
(FSL)



PUSH TO CONNECT

MALE SPRINGLOCK
(MSL)



PUSH TO CONNECT

BL11014-1

PREFIX

BL=BEADLOCK
(ALUM. TUBE - STEEL FERRULE)
SB=STEEL BEADLOCK
(STEEL TUBE - STEEL FERRULE)
RB=REDUCED BEADLOCK
(ALUM. TUBE - STEEL FERRULE)
SR=STEEL REDUCED BEADLOCK
(STEEL TUBE - STEEL FERRULE)

NOT APPLICABLE FOR
BARB FITTINGS OR
NON-HOSE ENDS

SUFFIX

-1 = 1/4" R12 SERVICE VALVE
-2 = 3/16" R12 SERVICE VALVE
-3 = R134a QUICK CONNECT
-4 = M10 SWITCH PORT
-5 = M12 SWITCH PORT
-9 = R134a HI SIDE S.V.-10 FTG
-SD = SHORT DROP

FIFTH DIGIT

4 = 14 HOSE
EXAMPLE:
SR13034 = 10 FTG X 14 HOSE

WHERE APPLICABLE

FIRST TWO DIGITS

11 = FEMALE FLARE
12 = MALE FLARE
13 = FEMALE O-RING
14 = MALE O-RING
17 = BULKHEAD STYLE
18 = MALE INSERT O-RING
19 = ADAPTERS
20 = COMPRESSOR ADAPTER FITTING
21 = TUBE-O & ROTALOK
22 = VIR CONVERSION FITTING
23 = COMPRESSOR BLOCKS
25 = GASKETS
26 = MISC. ADAPTERS & ORIFICE TUBE
28 = COMPRESSION ADAPTERS
29 = COMPRESSION FITTING - INCH
30 = COMPRESSION FITTING - METRIC
33,35,36,37 = CRIMPERS & TOOLS
39 = FLUSH KITS AND FITTINGS
40 = SEALS, O-RINGS,
& SERVICE VALVE CORES & CAPS
41,45 = FORD FEMALE SPRINGLOCK
43 = FORD MALE SPRINGLOCK
56 = SINGLE PAD STYLE COMP. PORT
58 = BRAZE/WELD ON BARB
61 = HOSE SPLICER
62 = AUXILIARY A/C TEE
63 = SPLICERS
64 = R-12 SERVICE ADAPTERS
65 = R134a ADAPTERS
66 = BRAZE ON BEADLOCK
71 = FEMALE DUAL O-RING - INCH
73 = FEMALE DUAL O-RING - METRIC
83 = METRIC ADAPTERS
93 = FEMALE O-RING - METRIC
94 = MALE INSERT O-RING - METRIC
H = HEATER FITTINGS

THIRD DIGIT

0 = STRAIGHT
1 = 45 DEGREE
2 = 90 DEGREE
EXCEPT WHEN
4TH DIGIT IS
A "ZERO" (RARE)

FOURTH DIGIT FOR ENGLISH THREADS

1 = 6 FTG X 6 HOSE
2 = 8 FTG X 8 HOSE
3 = 10 FTG X 10 HOSE
4 = 12 FTG X 12 HOSE
5 = 6 FTG X 8 HOSE
6 = 8 FTG X 10 HOSE
7 = 10 FTG X 12 HOSE
8 = 8 FTG X 6 HOSE
9 = 10 FTG X 8 HOSE
0 = 12 FTG X 10 HOSE*

*WHEN 4TH DIGIT IS
A "ZERO" (RARE)
THEN 3RD DIGIT MEANS:
1 = STRAIGHT
2 = 45 DEGREE
3 = 90 DEGREE

FOURTH DIGIT FOR METRIC THREADS

1 = 5 FTG X 6 HOSE
2 = M16 FTG X 6 HOSE
3 = M18 FTG X 6 HOSE
4 = M20 FTG X 6 HOSE
5 = M20 FTG X 8 HOSE
6 = M22 FTG X 10 HOSE
7 = M24 FTG X 10 HOSE
8 = M27 FTG X 12 HOSE

NOTE: PLAIN 5-DIGIT NUMBERS BEGINNING WITH "71" OR "75" ARE CRIMPER COMPONENTS / REPLACEMENT PARTS.