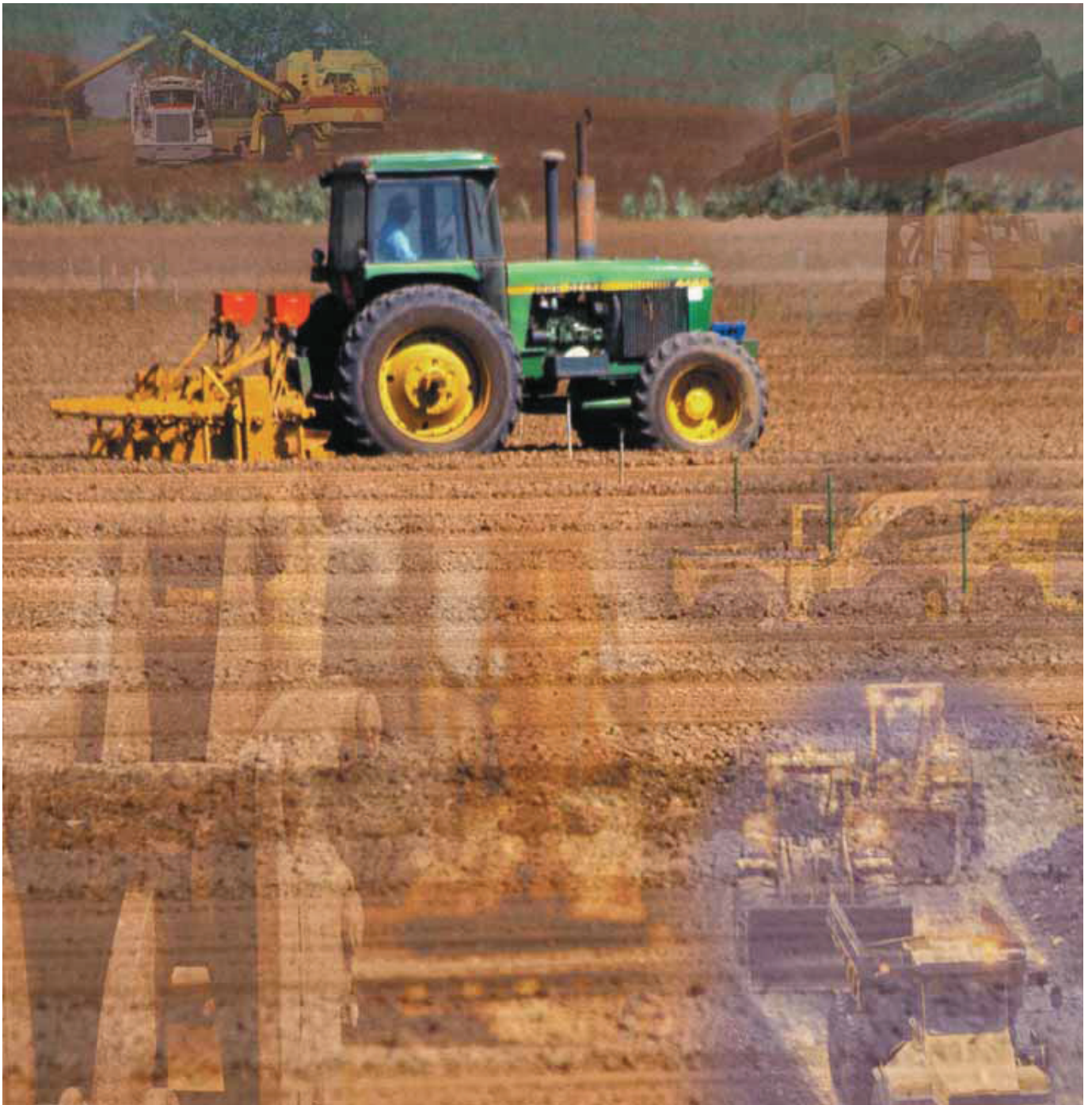
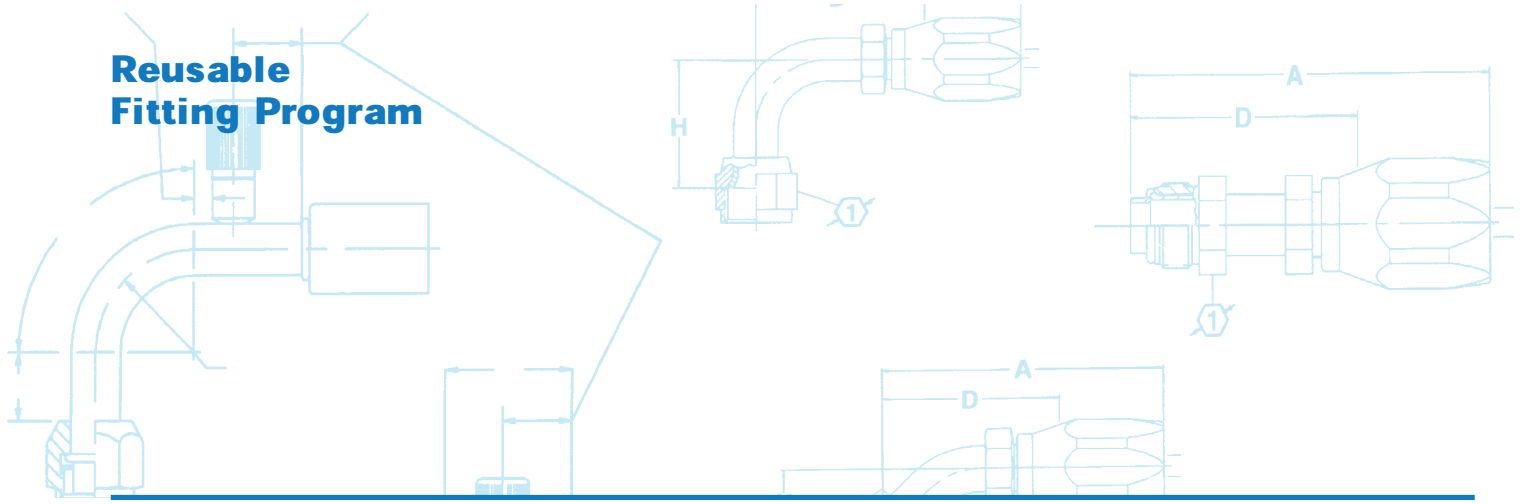


Reusable Fitting Program



Reusable Fitting Program

Hose Selection Guide and Design Guidelines

For information regarding other refrigerants and lubricants, please contact Eaton, 952-937-9800

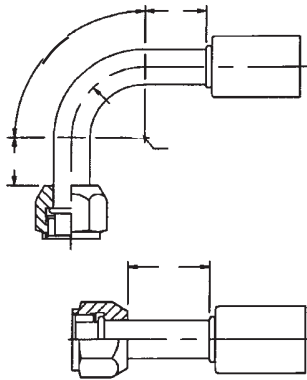
REFRIGERANT COMPATIBILITY CHART

Refrigerant	Hose Style			
	FC802	FC505	FC558	GH134
R-12	Y	Y	N	Y
R-22	Y	Y	N	Y
R-134a	Y	Y	Y	Y

LUBRICANT COMPATIBILITY CHART

Lubricant	Hose Style			
	FC802	FC505	FC558	GH134
Mineral Oil	Y	Y	N	Y
PAG	Y	Y	Y	Y
Ester Oil	Y	Y	Y	Y
Alkylbenzene	Y	Y	N	Y

Y = Compatible N = Non-compatible



Consult Eaton on fittings with more than one bend.

TUBE SIZE	L. MINIMUM	Tubing			TANGENT LENGTH	TOLERANCE
		SIZE	STYLE	WALL THICKNESS		
-6	1.1	-6	SAE J 526	0.04	0 > 12 ≤	±0.031
-8	1.62	-8	SAE J 526	0.04	12 ≤ > 36 ≤	±0.047
-10	1.62	-10	SAE J 525	0.05	36 ≤ > 72 ≤	±0.062
-1012	1.62	-1012	SAE J 525	0.05	72 ≤ >	±0.125
-12	1.38	-12	SAE J 525	0.049		

$$L = A + B + C$$

$$A = .500 \text{ Minimum}$$

$$B = .250 \text{ Minimum}$$

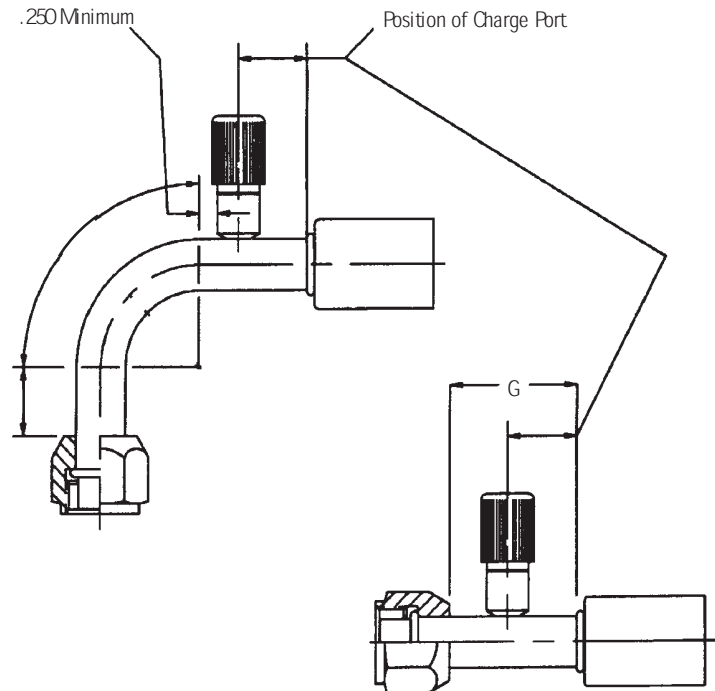
$$C = .01745 \times R \times \text{Bend Angle}$$

$$R = 2 \times \text{O.D. of Tube Minimum}$$

$$\text{Bend Angle Tolerance } \pm .30^\circ$$

$$\text{Rotation Angle Tolerance } \pm 1^\circ$$

$$\text{All Dimensions Are In Inches}$$



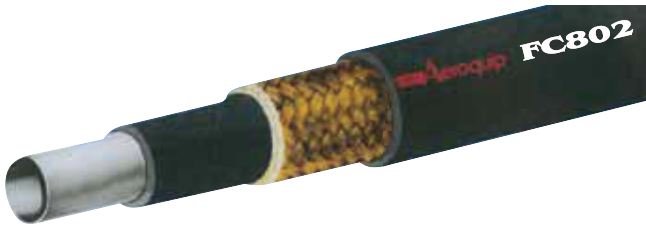
POSITION OF CHARGE PORT

High Side	.940 Minimum
Low Side	.881 Minimum

DASH SIZE	G
-6	1.54 Minimum
-8	1.63 Minimum
-10 High Side	1.69 Minimum
-10 Low Side	1.62 Minimum
-1012	1.62 Minimum
-12	1.70 Minimum

Reusable Fitting Program

FC802/FC558



Maximum Operating Pressure (bar/psi)

- 35/500

Minimum Burst Pressure (bar/psi)

- 175/2500

Temperature Range

- -40°F to +250°F (-40°C to +121°C)

HFC 134a Effusion

- .25 lbs. /ft.²/yr. at 176°F (1.21 kg/m²/yr. at 80°C)

Moisture Ingression

- .08 gm. /in.²/yr. (.013cm²/yr.)

Fittings

- SAE 100R5

R-12 Effusion

- 1.25 lbs. /ft.²/yr. at 176°F (6.07 kg/m²/yr. at 80°C)

R-401B Effusion

- 2.86 lbs. /ft.²/yr. at 176°F (13.88 kg/m²/yr. at 80°C)

R-22 Effusion

- 18.04 lbs. /ft.²/yr. at 176°F (87.55 kg/m²/yr. at 80°C)




Features

- Bromobutyl cover
- Polyamide-veneer tube
- Synthetic braid reinforcement
- Synthetic rubber backing layer
- SAE 100R5 reusable fittings

Benefits

- Excellent flexibility and heat resistance
- Maximum effusion resistance
- Superior resistance to moisture ingress
- Excellent noise and kink resistance
- Field attachable fittings
- Ease of installation and routing

Specifications and Performance (SAE J 51 Type D)

#			
PART NUMBER	HOSE I.D.	HOSE O.D.	MINIMUM BEND RADIUS
	mm/inches	mm/inches	mm/inches
FC802-04	5.1/20	13.2/52	50.8/2.0
FC802-06	8.38/33	17.3/68	63.5/2.5
FC802-08	10.67/42	19.6/77	76.2/3.0
FC802-10	13.2/52	23.4/92	88.9/3.5
FC802-12	16.51/65	27.4/108	114.3/4.5



Features

- Butyl rubber tube
- High tensile steel wire reinforcement
- Synthetic rubber insulation layer
- Polyester braid cover
- SAE 100R5 reusable fittings

Benefits

- Excellent effusion resistance
- Extended service life
- Maximum resistance to moisture ingress
- Superior abrasion resistance
- Field attachable fittings

Maximum Operating Pressure (bar/psi)

- 35/500

Minimum Burst Pressure (bar/psi)

- 175/2500

Temperature Range

- -40°F to +250°F (-40°C to +121°C)

R-134a Effusion

- 5.5 lbs. /ft.²/yr. at 176°F




Moisture Ingression

- .08 gm. /in.²/yr.

Fittings

- Standard Aeroquip SAE 100R5 reusable fittings

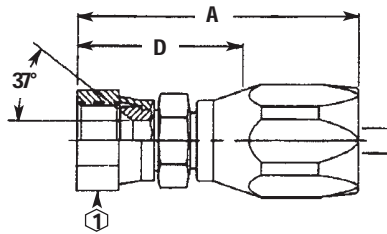
Specifications and Performance (Meets or Exceeds SAE J 2064 Type B; for R-134A Refrigerant Only)

#			
PART NUMBER	HOSE I.D.	HOSE O.D.	MINIMUM BEND RADIUS
	mm/inches	mm/inches	mm/inches
FC558-10	12.7/50	23.4/92	139/5.50
FC558-12	15.9/62	26.9/106	165/6.50
FC558-16	22.2/88	31.5/124	187/7.38
FC558-20	28.6/112	38.4/151	229/9.00
FC558-24	34.9/138	44.5/175	267/10.50

Reusable Fitting Program

FC802/FC558

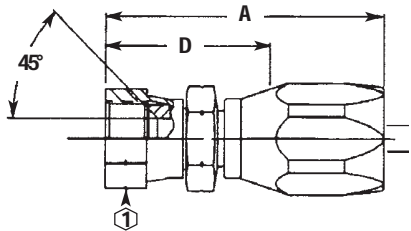
4411



S.A.E. 37° (J.I.C.) swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
4411-4S	7/16-20	4	1.97	1.23	—	—	0.69
4411-6S	9/16-18	6	2.33	1.43	—	—	0.69
4411-8S	3/4-16	8	2.78	1.62	—	—	0.88
4411-10S	7/8-14	10	3.10	1.81	—	—	1.00
4411-10-12S	7/8-14	12	3.40	1.83	—	—	1.00
4411-12S	1-1/16-12	12	3.49	1.92	—	—	1.25
4411-16S	1-5/16-12	16	3.19	1.93	—	—	1.50
4411-20S	1-5/8-12	20	3.43	2.07	—	—	2.00
4411-24S	1-7/8-12	24	3.68	2.22	—	—	2.25

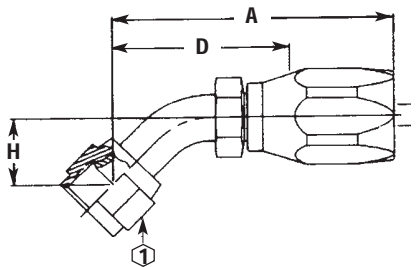
4401



S.A.E. 45° swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A SIZE	D REF	F REF	H REF	① RE
4401-4S	7/16-20	4	1.97	1.22	—	—	0.56
4401-6S	5/8-18	6	2.36	1.46	—	—	0.75
4401-8S	3/4-16	8	2.78	1.62	—	—	0.88
4401-10S	7/8-14	10	3.10	1.81	—	—	1.00
4401-12S	1-1/16-14	12	3.49	1.92	—	—	1.25

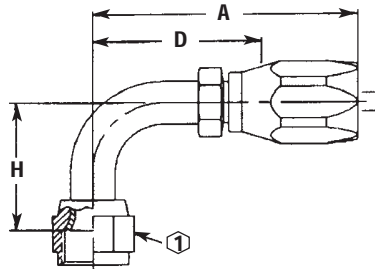
190297
190299
190265



45° Elbow 190297 universal swivel, 190299 S.A.E. 45° swivel
190265 S.A.E. 37° swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
190297-4S	7/16-20	4	1.85	1.10	—	0.33	0.56
190297-8S	3/4-16	8	2.99	1.84	—	0.55	0.88
190297-10S	7/8-14	10	3.24	1.95	—	0.64	1.00
190299-6S	5/8-18	6	2.23	1.33	—	0.39	0.75
190299-12S	1-1/16-14	12	3.78	2.21	—	0.78	1.25
190265-6S	9/16-18	6	2.23	1.33	—	0.39	0.69
190265-12S	1-1/16-12	12	3.78	2.21	—	0.78	1.25
190265-16S	1-5/16-12	16	3.74	2.47	—	1.07	1.50
190265-20S	1-5/8-12	20	4.21	2.85	—	1.22	2.00

190296
190302
190261



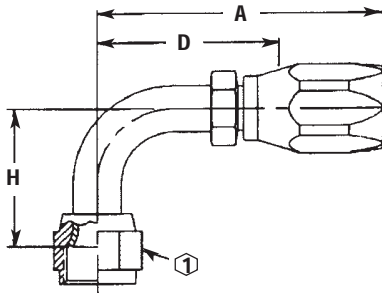
90° elbow 190296 universal swivel (short drop), 190302 S.A.E. 45° swivel
190261 S.A.E. 37° swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
190296-4S	7/16-20	4	1.74	0.99	—	0.68	0.56
190296-8S	3/4-16	8	2.76	1.61	—	1.09	0.88
190296-10S	7/8-14	10	2.94	1.65	—	1.23	1.00
190302-6S	5/8-18	6	2.13	1.23	—	0.85	0.75
190302-12S	1-1/16-14	12	3.74	2.17	—	1.82	1.25
190261-6S	9/16-18	6	2.13	1.23	—	0.85	0.69
190261-12S	1-1/16-12	12	3.74	2.17	—	1.82	1.25
190261-16S	1-5/16-12	16	3.55	2.28	—	2.39	1.50
190261-20S	1-5/8-12	20	4.02	2.65	—	2.75	2.00
190261-20-24S	1-5/8-12	24	4.11	2.66	—	2.75	2.00

Reusable Fitting Program

FC802/FC558

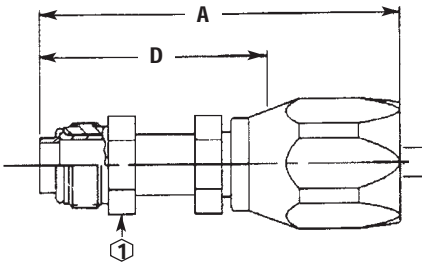
190295
190301
190260



90° elbow 190295 universal swivel (long drop), 190301 S.A.E. 45° swivel
190260 S.A.E. 37° swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	H REF	① REF
190295-4S	7/16-20	4	1.74	0.99	1.80	0.56
190295-8S	3/4-16	8	2.76	1.73	2.43	0.88
190295-10S	7/8-14	10	2.94	1.90	2.57	1.00
190295-10-12S	7/8-14	12	3.49	1.92	2.57	1.00
190301-6S	5/8-18	6	2.13	1.23	2.18	0.75
190301-12S	1-1/16-14	12	3.74	2.17	3.73	1.25
190260-6S	9/16-18	6	2.13	1.23	2.18	0.69
190260-12S	1-1/16-12	12	3.74	2.17	3.73	1.25
190260-16S	1-5/16-12	16	3.55	2.28	4.58	1.50
190260-20S	1-5/8-12	20	4.02	2.65	5.53	2.00

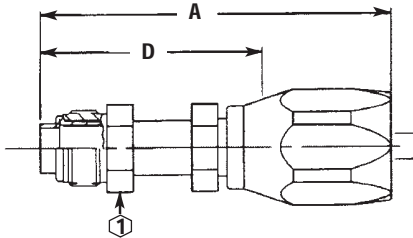
FJ 7646



Male O-ring pilot (short)

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FC7646-0606S	5/8-18	6	3.03	2.13	—	—	0.62
FC7646-0808S	3/4-18	8	3.43	2.28	—	—	0.75
FC7646-1010S	7/8-18	10	3.85	2.56	—	—	0.88

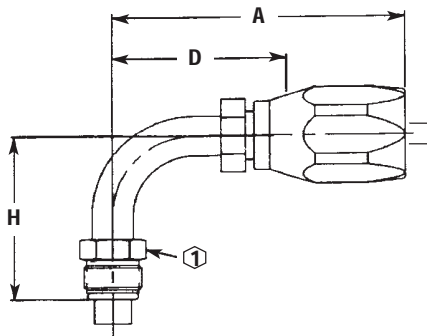
FC7049



Male O-ring pilot (long)

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FC7049-0606S	5/8-18	6	3.03	2.13	—	—	0.62
FC7049-0808S	3/4-18	8	3.63	2.48	—	—	0.75
FC7049-1010S	7/8-18	10	3.85	2.56	—	—	0.88

FC7662



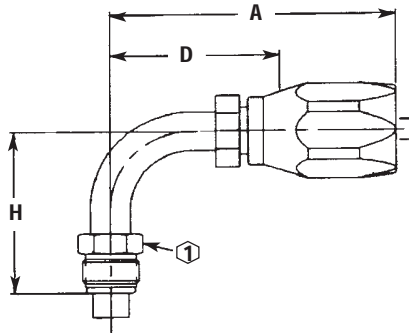
90° Male O-ring pilot (short)

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FC7662-0606S	5/8-18	6	2.47	1.57	—	1.77	0.62
FC7662-1010S	7/8-18	10	3.28	1.99	—	2.07	0.88
FC7662-1012S	7/8-18	12	3.57	2.00	—	2.07	1.06

Reusable Fitting Program

FC802/FC558

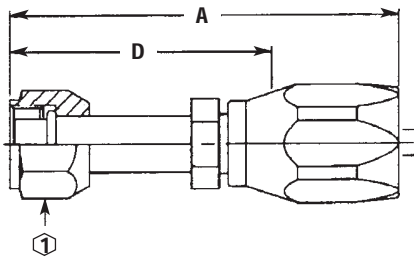
FC7474



90° Male O-ring pilot (long)

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FC7474-0606S	5/8-18	6	272	1.82	—	202	0.62
FC7474-0808S	3/4-18	8	313	1.98	—	262	0.75
FC7474-1010S	7/8-18	10	328	1.99	—	245	0.88
FC7474-1012S	7/8-18	12	358	201	—	245	0.88

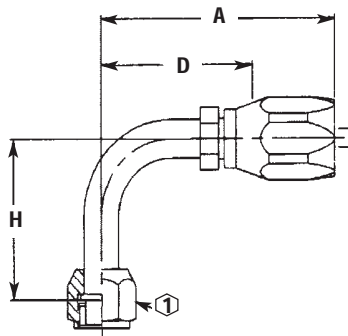
FC7049



Female O-ring pilot (long)

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FC7048-0606S	5/8-18	6	267	1.77	—	—	0.75
FC7048-0808S	3/4-16	8	327	2.12	—	—	0.88
FC7048-1010S	7/8-14	10	361	2.32	—	—	1.06
FC7048-1212S	1-1/16-14	12	400	2.44	—	—	1.25

FC7573



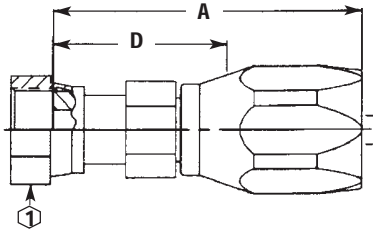
90° Female O-ring pilot (long)

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FC7573-0606S	5/8-18	6	272	1.82	—	1.17	0.75
FC7573-0808S	3/4-16	8	350	2.35	—	1.24	0.88
FC7573-1010S	7/8-14	10	422	2.93	—	1.50	1.06
FC7573-1210S	1-1/16-14	10	469	3.40	—	1.99	1.25
FC7573-1212S	1-1/16-14	12	499	3.42	—	1.99	1.25

Reusable Fitting Program

FC802/FC558

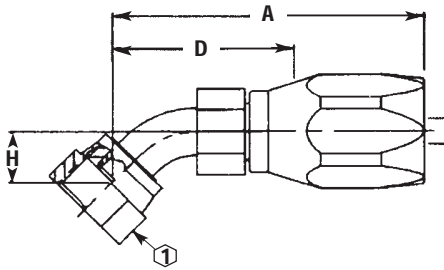
FJ 9706



ORS female swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FJ 9706-0404S	9/16-18	4	209	1.34	—	—	0.69
FJ 9706-0606S	11/16-16	6	243	1.53	—	—	0.81
FJ 9706-0808S	13/16-16	8	313	1.98	—	—	0.94
FJ 9706-1010S	1-14	10	337	2.08	—	—	1.12
FJ 9706-1212S	1-3/16-12	12	368	2.11	—	—	1.38
FJ 9706-1616S	1-7/16-12	16	350	2.23	—	—	1.62
FJ 9706-2020S	1-11/16-12	20	364	2.28	—	—	1.88
FJ 9706-2424S	2-12	24	386	2.40	—	—	2.25

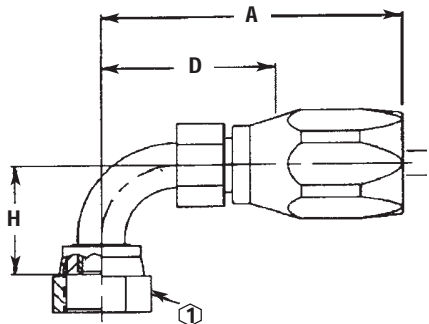
FJ 9707



45° ORS female swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FJ 9707-0404S	9/16-18	4	1.96	1.21	—	0.41	0.69
FJ 9707-0606S	11/16-16	6	2.27	1.37	—	0.43	0.81
FJ 9707-0808S	13/16-16	8	3.03	1.88	—	0.59	0.94
FJ 9707-1010S	1-14	10	3.38	2.08	—	0.65	1.12
FJ 9707-1212S	1-3/16-12	12	3.84	2.27	—	0.83	1.38
FJ 9707-1616S	1-7/16-12	16	3.62	2.35	—	0.94	1.62
FJ 9707-2020S	1-11/16-12	20	4.09	2.72	—	1.00	1.88
FJ 9707-2424S	2-12	24	4.32	2.87	—	1.07	2.25

FJ 9708



90° ORS female swivel

PART NUMBER	TH'D "T"	HOSE SIZE	A REF	D REF	F REF	H REF	① REF
FJ 9708-0404S	9/16-18	4	1.80	1.05	—	0.82	0.69
FJ 9708-0606S	11/16-16	6	2.13	1.23	—	0.90	0.81
FJ 9708-0808S	13/16-16	8	2.76	1.61	—	1.15	0.94
FJ 9708-1010S	1-14	10	3.03	1.74	—	1.27	1.12
FJ 9708-1212S	1-3/16-12	12	3.74	2.17	—	1.88	1.38
FJ 9708-1616S	1-7/16-12	16	3.55	2.28	—	2.21	1.62
FJ 9708-2020S	1-11/16-12	20	4.02	2.65	—	2.51	1.88
FJ 9708-2424S	2-12	24	4.42	2.97	—	2.70	2.25