

WARNING!

Selection of Hose

Selection of the proper Weatherhead hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of the hose for your application can result in hose leakage, bursting, or other failure which can cause serious bodily injury or property damage from spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog. Some of the factors which are involved in the selection of the proper hose are:

- hose size
- hose length
- hose ends
- fluid conveyed
- bends
- temperature
- hose pressure
- static head pressure
- installation design.

These factors and the other information in this catalog should be considered by you in selecting the proper hose for your application.

If you have any questions regarding the proper hose for your application, please contact the Boston Weatherhead Division of Dana Corporation.

Proper Selection of Hose Ends

Selection of the proper Weatherhead end fittings for the hose end application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to the selection of the end fittings for your application can result in hose leakage, bursting, or other failure which can cause serious bodily injury or property damage from spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of the wrong end fitting, you should carefully review the information in this catalog. Some of the factors which are involved in the selection of the proper hose ends are:

- fluid compatibility
- temperature
- installation design
- hose size
- corrosion requirements
- fluid conveyed.

These factors and the other information in this catalog should be considered by you in selecting the proper hose end fitting for your application.

If you have any questions regarding the proper hose for your application, please contact the Boston Weatherhead Division of Dana Corporation Technical Support at 1-800-PRO-DANA.

**WARNING!****Hose Installation**

Proper installation of the hose is essential to the proper operation and safe use of the hose and related equipment. Improper installation of the hose can result in serious injury or property damage caused by spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from improper installation of the hose, you should carefully review the information in this catalog regarding hose installation. Some of the factors you must consider in installing the hose properly are:

- changes in length
- protection from high temperature sources
- twisting
- proper bend radius
- elbows and adapters to relieve strain
- rubbing or abrasion
- improper hose movement.

These factors and the other information in this catalog regarding hose installation should be considered by you before installing the hose.

If you have any questions regarding proper hose installation, please contact the Boston Weatherhead Division of Dana Corporation Technical Support at 1-800-PRO-DANA.

Hose Maintenance

Proper maintenance of the hose is essential to the safe use of the hose and related equipment. Hose should be stored in a dry place. Hose should also be visually inspected. Any hose that has a cut or gouge in the cover that exposes the reinforcement should be retired from service. Hoses should also be inspected for kinking or broken reinforcement. If the outside diameter of the hose is reduced by 20% at the spot where it is bent then the hose should be retired from service. Inadequate attention to maintenance of the hose can result in hose leakage, bursting, or other failure which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

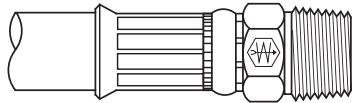
Hose and Field Attachable Hose Ends

Weatherhead® Hose and Field Attachable Hose Ends have been engineered and designed as a complete hose assembly system. Component compatibility along with the use of quality components insures the production of reliable hose assemblies when assembled properly. The use or intermixing of ends and hose not specifically engineered and designed for use with each other may result in the production of unsafe or unreliable hose assemblies. This can result in hose assembly leakage, hose separation or other failures which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances. The Weatherhead® warranty is limited to apply only when Weatherhead® Field Attachable Hose Ends are used on compatible Weatherhead® hose. See back inside cover for warranty information.

Coll-O-Crimp® Hose, Hose Ends and Assembly Equipment Compatibility

The Coll-O-Crimp® Equipment Package, Coll-O-Crimp® Hose Ends and Coll-O-Crimp® Hose have been engineered and designed as a complete hose assembly system. Each component of the Coll-O-Crimp® hose assembly system is compatible with other Coll-O-Crimp® components to which it relates. Component compatibility, along with the use of quality components, insures the production of reliable hose assemblies when assembled properly. The use or intermixing of fittings and hose not specifically engineered and designed for use with each other and Coll-O-Crimp® equipment is not recommended and may result in the production of unsafe or unreliable hose assemblies. This can result in hose assembly leakage, hose separation or other failures which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances. The Weatherhead® warranty is limited to apply only when Coll-O-Crimp® Hose Ends and compatible Coll-O-Crimp® Hose are used with Coll-O-Crimp® assembly equipment.

Use Hose H03924, 32; H430; H439



Hose End Series: 430 'E' Series

Typical Application: Very high pressure hydraulic lines, subjected to pressure surges and flexing. Some applications include mining, construction, farming, and high pressure performance industrial equipment.

Compatible Hose: H03924, H03932; H430 and H439.

Hose must be skived prior to assembly. See page 20 for skiving instructions.

Pressure: Determined by maximum working pressure for hose size and hose end configuration whichever is lesser. See page 12 for working pressure ratings for hose end configurations.

Plating: Zinc; yellow dichromate finish

Advantages: Excellent selection of hose ends. Compatible with Caterpillar, John Deere, and most major manufacturers of equipment using high pressure applications.

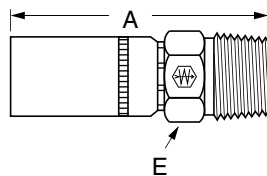
Assemble With: T-410-1 Coll-O-Crimp® II, T420-1 Coll-O-Crimp® Super I, T-440-1 Coll-O-Crimp II Plus or T-480.

Ordering Information: Order individually by catalog number. O-rings not supplied with flange hose ends. Order o-rings by catalog number; reference individual hose end listings for details. For split flange kits, reference page 205-206.

Label Set: FS-1300

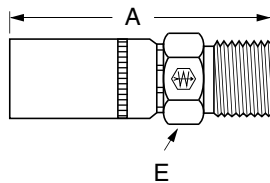
NOTE: Refer to current price list for availability of cataloged items. Configurations and dimensions subject to change without notice.

Male Pipe Rigid



Hose I.D.	Pipe Size	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E
1/2	1/2	43008E-108	1/2-14	3.01	1.38	.37	1
1/2	3/4	43008E-112	3/4-14	3.04	1.44	.37	1-1/16
3/4	3/4	43012E-112	3/4-14	3.23	1.50	.61	1-1/4
3/4	1	43012E-116	1-11-1/2	3.46	1.75	.61	1-3/8
1	1	43016E-116	1-11-1/2	4.13	2.00	.81	1-3/8
1	1-1/4	43016E-120	1-1/4-11-1/2	4.16	2.06	.81	1-11/16
1-1/4	1-1/4	43020E-120	1-1/4-11-1/2	4.67	2.31	1.02	1-11/16
1-1/2	1-1/2	43024E-124	1-1/2-11-1/2	5.04	2.50	1.28	2
2	2	43032E-132	2-11-1/2	5.55	2.63	1.75	2-1/2

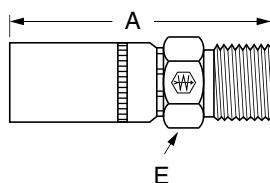
British Standard BSPP 60° Cone Male Pipe Rigid



Hose I.D.	BSPP Pipe Size	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E
3/4	3/4	43012E-P62	G-3/4-14*	3.28	1.56	.61	1-1/8
1	1	43016E-P66	G-1-11*	3.81	1.63	.81	1-3/8
1-1/4	1-1/4	43020E-P67	G-1 1/4-11*	4.50	2.13	1.02	1-3/4

*G As Part of Thread Size is ISO Designation for Parallel Thread.

FOR-SEAL® Male Rigid



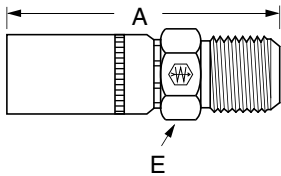
Does not include O-Ring. See page 172 for O-Ring.

Hose I.D.	Tube Size	Catalog Number	O-Ring	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E
1/2	1/2	43008E-E68	4629x8	13/16-16	2.79	1.19	.38	7/8
3/4	3/4	43012E-E72	4629x12	1-13/16-12	3.20	1.50	.61	1-1/4
1	1	43016E-E76	4629x16	1-7/16-12	3.63	1.50	.81	1-1/2
1-1/4	1-1/4	43020E-E80	4629x20	1-11/16-12	4.14	1.75	1.02	1-3/4

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

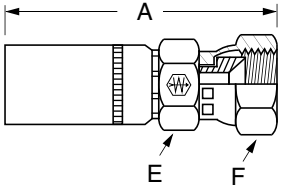
Use Hose H03924, 32; H430; H439

SAE 37° Male Rigid



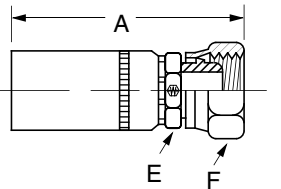
Hose I.D.	Tube Size	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E
1/2	1/2	43008E-508	3/4-16	2.95	1.31	.38	1
1/2	5/8	43008E-510	7/8-14	3.05	1.38	.38	1
3/4	3/4	43012E-512	1-1/16-12	3.38	1.69	.61	1-1/8
3/4	7/8	43012E-514	1-3/16-12	3.41	1.69	.61	1 1/4
1	1	43016E-516	1-5/16-12	4.10	2.00	.81	1-3/8
1-1/4	1-1/4	43020E-520	1-5/8-12	4.66	2.31	1.02	1-11/16
1-1/2	1-1/2	43024E-524	1-7/8-12	5.11	2.50	1.31	2
2	2	43032E-532	2-1/2-12	5.61	2.63	1.78	2-5/8

SAE 37° Female Swivel
(Refer to Footnotes)



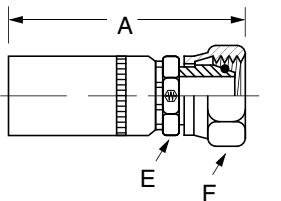
Hose I.D.	Tube Size	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E	Hex F
1/2	3/8	43008E-606 ^c	9/16-18	3.07	1.44	.30	1	11/16
1/2	1/2	43008E-608 ^a	3/4-16	3.19	1.56	.38	1	7/8
1/2	5/8	43008E-610 ^a	7/8-14	3.23	1.63	.38	1	1
1/2	3/4	43008E-612 ^c	1-1/16-12	3.37	1.75	.38	1	1-1/4
3/4	3/4	43012E-612 ^c	1-1/16-12	3.56	1.81	.61	1-1/8	1-1/4
3/4	7/8	43012E-614 ^c	1-13/16-12	3.57	1.81	.61	1 1/4	1 3/8
3/4	1	43012E-616 ^c	1-5/16-12	3.69	2.00	.61	1-1/4	1-1/2
1	1	43016E-616 ^c	1-5/16-12	4.36	2.25	.81	1-1/4	1-1/2
1	1-1/4	43016E-620 ^c	1-5/8-12	4.20	2.13	.81	1-5/8	2
1-1/4	1-1/4	43020E-620 ^c	1-5/8-12	4.96	2.63	1.02	1-11/16	2
1-1/4	1-1/2	43020E-624 ^c	1-7/8-12	5.12	2.75	1.02	1-7/8	2-1/4
1-1/2	1-1/2	43024E-624 ^c	1-7/8-12	5.45	2.88	1.28	2	2-1/4
2	2	43032E-632 ^c	2-1/2-12	6.08	3.13	1.75	2-1/2	3

Female Swivel DIN
Universal Seat
I. Rh. (Light)



Hose I.D.	Tube Size (mm)	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E	Hex F
3/4	22	43012E-22C	M30x2.0	3.43	1.69	.61	1-1/4	1-7/16

Female Swivel DIN 24°
Seat s. Rh. DKO (Heavy)



O-ring included.

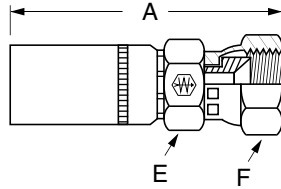
Hose I.D.	Tube Size (mm)	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E	Hex F
3/4	25	43012E-75C	M36x2.0	3.86	2.13	.61	1-1/4	1-5/8
1-1/4	30	43020E-80C	M42x2.0	4.33	2.00	.84	1-5/8	2

† To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

^a Swivel nuts are universal – both SAE 37° and 45° connections. ^c SAE 37° flare connection only.

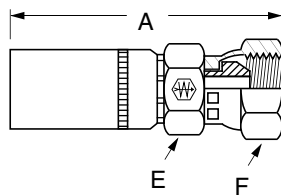
Use Hose H03924, 32; H430; H439

Female Swivel 30° Flare (Komatsu, Linkbelt)



Hose I.D.	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E	Hex F
1/2	43008E-22K	M22x1.5	3.41	1.75	.38	7/8	1-1/16
3/4	43012E-30K	M30x1.5	4.10	2.38	.61	1-1/4	1-7/16
1	43016E-33K	M33x1.5	4.43	2.25	.81	1-1/4	1-5/8
1-1/4	43020E-36K	M36x1.5	5.28	2.94	1.02	1-5/8	1-3/4

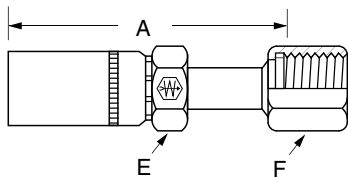
British Standard (BSPP) 60° Cone Female Pipe Swivel



Hose I.D.	BSPP Pipe Size	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E	Hex F
1/2	1/2	43008E-358	G-1/2-14*	3.53	1.88	.38	7/8	1-1/16
3/4	3/4	43012E-362	G-3/4-14*	3.84	1.94	.61	1-1/4	1-5/16
1	1	43016E-366	G-1-11*	4.37	2.18	.81	1-1/4	1-1/2
1-1/4	1-1/4	43020E-370	G-1-1/4-11*	4.50	2.19	1.02	1-5/8	1-7/8

*G As Part of Thread Size is ISO Designation for Parallel Thread.

Female FOR-SEAL® Swivel Straight

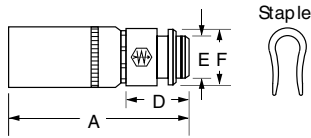


Hose I.D.	Tube Size	Catalog Number	Thread Size	A	Hose Cut-Off Factor†	Hole Dia.	Hex E	Hex F
1/2	1/2	43008E-S68	13/16-16	3.43	1.81	.36	7/8	15/16
1/2	5/8	43008E-S70	1-14	3.54	1.94	.45	1	1-1/8
3/4	5/8	43012E-S70	1-14	3.78	2.06	.46	1-1/8	1-1/8
3/4	3/4	43012E-S72	1-3/16-12	3.88	2.19	.60	1-1/8	1-3/8
3/4	1	43012E-S76	1-7/16-12	3.87	2.19	.61	1-1/8	1-5/8
1	1	43016E-S76	1-7/16-12	4.78	2.69	.78	1-1/4	1-5/8
1	1-1/4	43016E-S80	1-11/16-12	4.43	2.31	.81	1-1/2	1-7/8
1-1/4	1-1/4	43020E-S80	1-11/16-12	4.60	2.19	1.04	1-5/8	1-7/8
1-1/2	1-1/2	43024E-S84	2-12	4.84	2.25	1.19	2	2-1/4

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

Use Hose H03924, 32; H430; H439

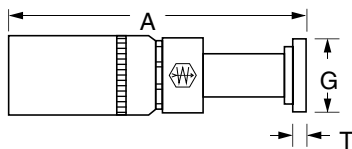
READY LOK® Male Connector
(For Deep Mining Markets)



(For READY-LOK® staple, backup ring and o-ring, see page 204.)

Hose I.D.	Conn. Size	Catalog Number	A	Hose Cut-Off Factor†	Hole Dia.	Length D	Dia. E	Dia. F
1/2	1/2	43008E-08S	3.06	1.44	.36	1.13	.70	.94
3/4	3/4	43012E-12S	3.25	1.50	.61	1.13	.94	1.13
1	1	43016E-16S	3.84	1.69	.81	1.34	1.22	1.53
1-1/4	1-1/4	43020E-20S	4.23	1.75	1.06	1.34	1.49	1.80
1-1/2	1-1/2	43024E-24S	5.22	2.63	1.25	1.47	1.63	2.25

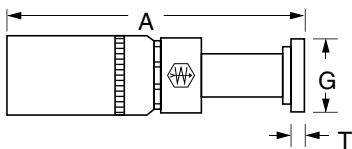
Split Flange Straight (SAE Code 61)



(For Split Flange Kits, see page 205.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-G08	8x252	3.87	2.25	.38	1.19 (30mm)	.265
1/2	3/4	43008E-G12	12x252	3.93	2.31	.38	1.50 (38mm)	.265
3/4	3/4	43012E-G12	12x252	4.13	2.44	.61	1.50 (38mm)	.265
3/4	1	43012E-G16	16x252	3.62	1.94	.61	1.75 (44mm)	.315
3/4	1-1/4	43012E-G20	20x252	3.62	1.94	.61	2.00 (51mm)	.315
1	1	43016E-G16	16x252	4.48	2.38	.77	1.75 (44mm)	.315
1	1-1/4	43016E-G20	20x252	4.48	2.38	.77	2.00 (51mm)	.315
1	1-1/2	43016E-G24	24x252	4.54	2.44	.77	2.38 (60mm)	.315
1-1/4	1-1/4	43020E-G20	20x252	5.10	2.75	1.02	2.00 (51mm)	.315
1-1/4	1-1/2	43020E-G24	24x252	5.16	2.81	1.02	2.38 (60mm)	.315
1-1/4	2	43020E-G32	32x252	5.22	2.88	1.02	2.81 (71mm)	.375
1-1/2	1-1/2	43024E-G24	24x252	5.57	2.99	1.19	2.38 (60mm)	.315
1-1/2	2	43024E-G32	32x252	5.77	3.19	1.19	2.81 (71mm)	.375
2	1-1/2	43032E-G24	24x252	6.38	3.44	1.19	2.38 (60mm)	.315
2	2	43032E-G32	32x252	5.94	2.99	1.62	2.81 (71mm)	.375

Split Flange Straight (SAE Code 62)



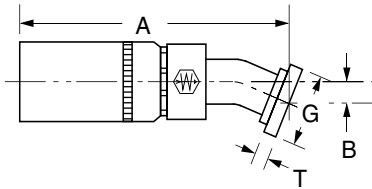
(For Split Flange Kits, see page 206.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-D08	8x252	3.94	2.31	.44	1.25	.305
1/2	3/4	43008E-D12	12x252	3.96	2.31	.44	1.62	.345
3/4	3/4	43012E-D12	12x252	4.20	2.50	.72	1.62	.345
3/4	1	43012E-D16	16x252	4.23	2.50	.72	1.88	.375
1	1	43016E-D16	16x252	4.54	2.44	.77	1.88	.375
1	1-1/4	43016E-D20	20x252	4.57	2.50	.77	2.12	.405
1-1/4	1-1/4	43020E-D20	20x252	5.19	2.81	1.02	2.12	.405
1-1/4	1-1/2	43020E-D24	24x252	5.30	2.94	1.02	2.50	.495
1-1/2	1-1/2	43024E-D24	24x252	5.71	3.13	1.19	2.50	.495
2	2	43032E-D32	32x252	7.04	4.09	1.62	3.12	.495

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

Use Hose H03924, 32; H430; H439

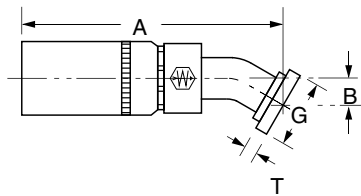
Split Flange 22-1/2° Tube Elbow (SAE Code 61)



(For Split Flange Kits, see page 205.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-H01	8x252	4.29	.38	2.69	.46	1.19 (30mm)	.265
1/2	3/4	43008E-H02	12x252	4.34	.40	2.75	.46	1.50 (38mm)	.265
3/4	3/4	43012E-H02	12x252	4.48	.44	2.75	.69	1.50 (38mm)	.265
3/4	1	43012E-H03	16x252	4.47	.44	2.75	.69	1.75 (44mm)	.315
1	1	43016E-H03	16x252	5.17	.45	3.06	.76	1.75 (44mm)	.315
1	1-1/4	43016E-H04	20x252	5.17	.45	2.89	.76	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-H04	20x252	5.25	.50	2.94	1.02	2.00 (51mm)	.315
1-1/4	1-1/2	43020E-H05	24x252	5.30	.52	2.94	1.01	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-H05	24x252	6.05	.64	3.44	1.19	2.38 (60mm)	.315
1-1/2	2	43024E-H06	32x252	6.24	.71	3.69	1.19	2.81 (71mm)	.375
2	2	43032E-H06	32x252	7.52	.94	4.56	1.62	2.81 (71mm)	.375

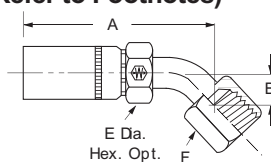
Split Flange 30° Tube Elbow (SAE Code 61)



(For Split Flange Kits, see page 205.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-H21	8x252	4.24	.50	2.63	.46	1.18 (30mm)	.265
1/2	3/4	43008E-H22	12x252	4.30	.50	2.69	.46	1.50 (38mm)	.265
3/4	3/4	43012E-H22	12x252	4.54	.59	2.81	.69	1.50 (38mm)	.265
3/4	1	43012E-H23	16x252	4.54	.59	2.81	.69	1.75 (44mm)	.315
1	1	43016E-H23	16x252	5.17	.64	3.06	.76	1.75 (44mm)	.315
1	1-1/4	43016E-H24	20x252	5.09	.64	3.00	.76	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-H24	20x252	5.42	.72	3.06	1.02	2.00 (51mm)	.315
1-1/4	1-1/2	43020E-H25	24x252	5.47	.75	3.13	1.02	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-H25	24x252	6.26	.91	3.69	1.19	2.38 (60mm)	.315
1-1/2	2	43024E-H26	32x252	6.44	1.01	3.88	1.19	2.81 (71mm)	.375
2	2	43032E-H26	32x252	7.72	1.31	4.75	1.62	2.81 (71mm)	.375

SAE 37° Female Swivel 45° Tube Elbow (Refer to Footnotes)



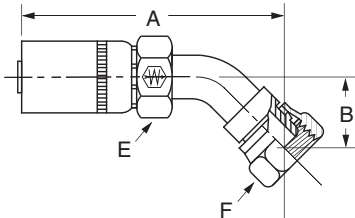
Hose I.D.	Tube Size	Catalog Number	Thread Size	A	B	Hose Cut-Off Factor†	Hole Dia.	E	Hex F
1/2	1/2	43008E-688 ^a	3/4-16	4.35	1.14	2.69	.34	13/16	7/8
1/2	5/8	43008E-690 ^a	7/8-14	4.31	1.14	2.68	.48	1	1
3/4	3/4	43012E-692 ^c	1-1/16-12	5.20	1.25	3.50	.58	1/8	1-1/4
1	1	43016E-696 ^c	1-5/16-12	5.94	1.53	3.81	.76	1-1/4	1-1/2

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

^a Swivel nuts are universal – both SAE 37° and 45° connections. ^c SAE 37° flare connection only.

Use Hose H03924, 32; H430; H439

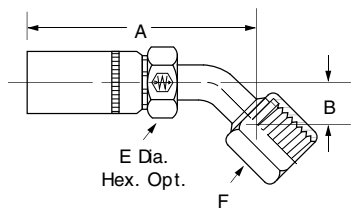
**British Standard (BSPP)
60° Cone Female Swivel
45° Elbow**



Hose I.D.	Tube Size	Catalog Number	Thread Size	A	B	Cut-Off Factor†	Hose Hole Dia.	Dia. E	Hex F
3/4	3/4	43012E-52P	G-3/4-14*	5.02	1.24	3.31	.56	1-1/8	1-1/4
1	1	43016E-56P	G-1-11*	5.12	1.36	3.06	.76	1-1/4	1-1/2

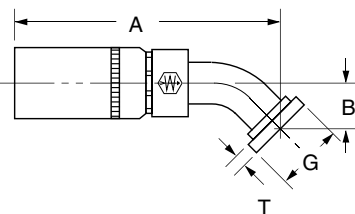
*G As Part of Thread Size is ISO Designation for Parallel Thread.

**Female FOR-SEAL®
Swivel 45° Tube Elbow**



Hose I.D.	Tube Size	Catalog Number	Thread Size	A	B	Cut-Off Factor†	Hose Hole Dia.	Dia. E	Hex F
1/2	1/2	43008E-L68	13/16-16	4.08	.60	2.44	.36	7/8	15/16
1/2	5/8	43008E-L70	1-14	3.91	.65	2.25	.46	1	1-1/8
3/4	3/4	43012E-L72	1-3/16-12	4.61	.84	2.88	.55	1-1/8	1-3/8
1	1	43016E-L76	1-7/16-12	5.19	.95	3.06	.76	1-1/4	1-5/8
1-1/4	1-1/4	43020E-L80	1-11/16-12	5.11	1.07	2.75	1.01	1-5/8	1-7/8
1-1/2	1-1/2	43024E-L84	2-12	6.08	1.07	3.50	1.19	2	2-1/4

**Split Flange 45° Tube
Elbow (SAE Code 61)**



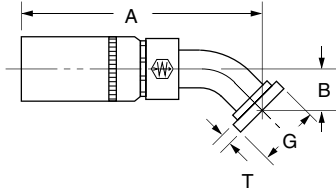
Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-G41	8x252	4.08	.78	2.44	.38	1.19 (30mm)	.265
1/2	3/4	43008E-G42	12x252	4.12	.84	2.50	.38	1.50 (38mm)	.265
1/2	1	43008E-G46	16x252	3.98	.78	2.38	.38	1.75 (44mm)	.315
3/4	3/4	43012E-G42	12x252	4.84	1.00	3.12	.61	1.50 (38mm)	.265
3/4	1	43012E-G46	16x252	4.74	1.00	3.02	.61	1.75 (44mm)	.315
1	1	43016E-G46	16x252	4.90	1.06	2.06	.77	1.75 (44mm)	.315
1	1-1/4	43016E-G50	20x252	4.90	1.06	2.06	.77	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-G50	20x252	5.19	1.15	2.81	1.02	2.00 (51mm)	.315
1-1/4	1-1/2	43020E-G54	24x252	5.23	1.19	2.88	1.02	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-G54	24x252	6.26	1.41	3.68	1.19	2.38 (60mm)	.315
1-1/2	2	43024E-G62	32x252	6.41	1.55	3.81	1.19	2.81 (71mm)	.375
2	2	43032E-G62	32x252	8.18	2.08	5.25	1.62	2.81 (71mm)	.375

(For Split Flange Kits, see page 205.)

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

Use Hose H03924, 32; H430; H439

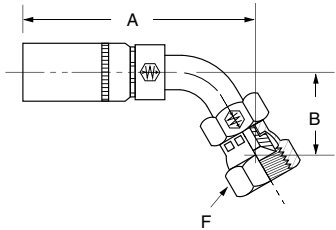
Split Flange 45° Tube Elbow (SAE Code 62)



(For Split Flange Kits, see page 206.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-D41	8x252	4.11	.94	2.50	.44	1.25	.305
1/2	3/4	43008E-D42	12x252	4.11	1.00	2.50	.44	1.62	.345
3/4	3/4	43012E-D42	12x252	5.04	1.27	3.31	.72	1.62	.345
3/4	1	43012E-D46	12x252	5.15	1.29	3.44	.72	1.88	.375
1	1	43016E-D46	16x252	5.73	1.34	3.63	.77	1.88	.375
1	1-1/4	43016E-D50	20x252	5.86	1.44	3.75	.77	2.12	.405
1-1/4	1-1/4	43020E-D50	20x252	6.69	1.68	4.31	1.02	2.12	.405
1-1/4	1-1/2	43020E-D54	24x252	6.76	1.75	4.44	1.02	2.50	.495
1-1/2	1-1/2	43024E-D54	24x252	7.19	1.86	4.63	1.19	2.50	.495
2	2	43032E-D62	32x252	8.58	2.25	5.63	1.62	3.12	.495

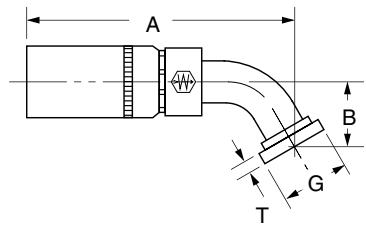
SAE 37° Female Swivel 60° Tube Elbow



Hose I.D.	Tube Size	Catalog Number	Thread Size	A	B	Hose Cut-Off Factor†	Hole Dia.	Hex F
1/2	5/8	43008E-C60	7/8-14	4.30	1.52	2.69	.48	1
3/4	3/4	43012E-C62	1-1/16-12	4.96	1.71	3.25	.61	1-1/4
1	1	43016E-C66#	1-5/16-12	5.82	1.53	3.69	.76	1-1/2

Captive swivel nut design.

Split Flange 60° Tube Elbow (SAE Code 61)



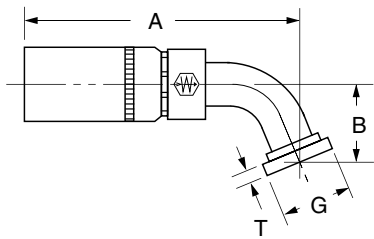
(For Split Flange Kits, see page 205.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-H51	8x252	3.92	1.09	2.31	.46	1.19	.265
1/2	3/4	43008E-H52	12x252	3.92	1.09	2.31	.46	1.50	.265
3/4	3/4	43012E-H52	12x252	4.80	1.38	3.06	.69	1.50	.265
3/4	1	43012E-H53	16x252	4.80	1.38	3.06	.69	1.75	.315
1	1	43016E-H53	16x252	5.65	1.51	3.56	.76	1.75	.315
1	1-1/4	43016E-H54	20x252	5.66	1.51	3.56	.76	2.00	.315
1-1/4	1-1/4	43020E-H54	20x252	5.66	1.69	3.31	1.02	2.00	.315
1-1/4	1-1/2	43020E-H55	24x252	5.69	1.74	3.31	1.02	2.38	.315
1-1/2	1-1/2	43024E-H55	24x252	6.45	2.03	3.88	1.19	2.38	.315
1-1/2	2	43024E-H56	32x252	6.55	2.26	3.94	1.19	2.81	.375
2	2	43032E-H56	32x252	8.34	3.00	5.38	1.62	2.81	.375

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

Use Hose H03924, 32; H430; H439

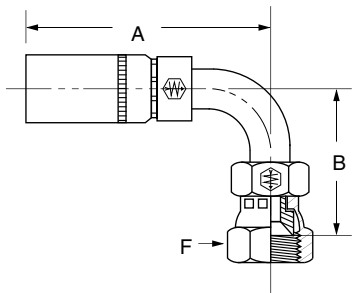
Split Flange 67-1/2° Tube Elbow (SAE Code 61)



Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-H61	8x252	4.33	1.25	2.69	.46	1.19 (30mm)	.265
1/2	3/4	43008E-H62	12x252	4.02	1.25	2.38	.46	1.50 (38mm)	.265
1/2	1	43008E-H63	16x252	4.32	1.25	2.69	.46	1.75 (44mm)	.315
3/4	3/4	43012E-H62	12x252	4.78	1.59	3.06	.69	1.50 (38mm)	.265
3/4	1	43012E-H63	16x252	4.78	1.59	3.06	.69	1.75 (44mm)	.315
3/4	1-1/4	43012E-H64	20x252	4.78	1.59	3.06	.69	2.00 (51mm)	.315
1	1	43016E-H63	16x252	5.44	1.76	3.94	.76	1.75 (44mm)	.315
1	1-1/4	43016E-H64	20x252	5.45	1.76	3.31	.76	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-H64	20x252	5.64	1.94	3.25	1.02	2.00 (51mm)	.315
1-1/4	1-1/2	43020E-H65	24x252	5.66	2.00	3.31	1.02	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-H65	24x252	6.38	2.40	3.81	1.19	2.38 (60mm)	.315
1-1/2	2	43024E-H66	32x252	6.39	2.31	3.81	1.19	2.81 (71mm)	.375
2	2	43032E-H66	32x252	8.18	3.25	5.23	1.75	2.81 (71mm)	.375

(For Split Flange Kits, see page 205.)

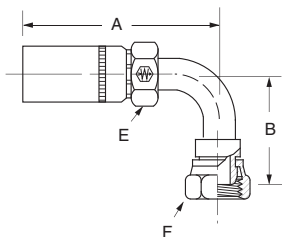
SAE 37° Female Swivel 90° Tube Elbow (Refer to Footnotes)



Hose I.D.	Tube Size	Catalog Number	Thread Size	A	B	Hose Cut-Off Factor†	Hole Dia.	Hex F
1/2	1/2	43008E-648L36 ^a	3/4-16	3.61	3.63	1.94	.37	7/8
1/2	1/2	43008E-648L45 ^a	3/4-16	3.61	4.50	1.94	.37	7/8
1/2	1/2	43008E-668# ^a	3/4-16	3.90	2.12	2.25	.37	7/8
1/2	5/8	43008E-650 ^a	7/8-14	3.79	3.26	2.13	.48	1
1/2	5/8	43008E-670 ^a	7/8-14	3.61	2.12	1.94	.48	1
3/4	3/4	43012E-652 ^c	1-1/16-12	4.62	3.62	2.94	.61	1-1/4
3/4	3/4	43012E-672# ^c	1-1/16-12	4.58	2.50	2.88	.61	1-1/4
1	1	43016E-656L33 ^c	1-5/16-12	5.08	3.37	3.00	.76	1-1/2
1	1	43016E-656L56 ^c	1-5/16-12	5.08	5.62	3.00	.76	1-1/2
1	1	43016E-676# ^c	1-5/16-12	5.35	3.00	3.25	.76	1-1/2
1-1/4	1-1/4	43020E-677 ^c	1-5/8-12	5.35	3.31	3.00	1.00	2.00

Captive swivel nut design.

British Standard (BSPP) 60° Cone Female Pipe Swivel 90° Elbow



Hose I.D.	BSPP Size	Catalog Number	Thread Size	A	B	Hose Cut-Off Factor†	Hole Dia.	Hex E	Hex F
3/4	3/4	43012E-82P	G-3/4-14*	4.69	2.49	2.94	.56	1-1/8	1-1/4
1	1	43016E-86P	G-1-11*	5.13	2.98	3.00	.76	1-1/4	1-1/2

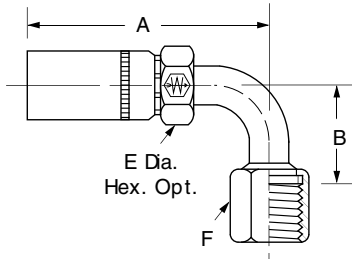
*G As Part of Thread Size is ISO Designation for Parallel Thread.

† To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

^a Swivel nuts are universal – both SAE 37° and 45° connections. ^c SAE 37° flare connection only.

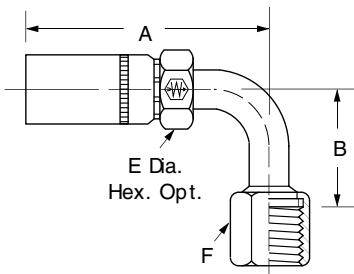
Use Hose H03924, 32; H430; H439

Female FOR-SEAL® Swivel 90° Short Drop Tube Elbow



Hose I.D.	Tube Size	Catalog Number	Thread Size	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. E	Hex F
1/2	1/2	43008E-A28	13/16-16	3.53	1.15	1.88	.33	7/8	15/16
1/2	5/8	43008E-A30	1-14	3.70	1.27	2.06	.38	1	1-1/8
3/4	5/8	43012E-A30	1-14	3.94	1.27	2.19	.46	1-1/8	1-1/8
3/4	3/4	43012E-A32	1-3/16-12	4.42	1.88	2.69	.55	1-1/8	1-3/8
1	1	43016E-A36	1-7/16-12	5.03	2.21	2.94	.76	1-1/4	1-5/8
1-1/4	1-1/4	43020E-A40	1-11/16-12	5.35	2.51	3.00	1.02	1-5/8	1-7/8
1-1/4	1-1/2	43020E-A44	2-12	5.35	2.55	3.00	1.02	1-5/8	2-1/4
1-1/2	1-1/2	43024E-A44	2-12	6.17	2.70	3.56	1.19	2	2-1/4

Female FOR-SEAL® Swivel 90° Long Drop Tube Elbow

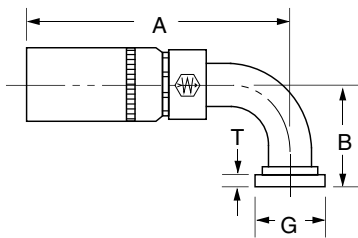


Hose I.D.	Tube Size	Catalog Number	Thread Size	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. E	Hex F
1/2	1/2	43008E-A68	13/16-16	3.41	2.51	1.81	.38	7/8	15/16
1/2	5/8	43008E-A70	1-14	3.70	2.76	2.06	.38	1	1-1/8
3/4	3/4	43012E-A72	1-3/16-12	4.37	3.78	2.69	.56	1-1/8	1-3/8
1	1	43016E-A76	1-7/16-12	5.24	4.50	3.14	.76	1-1/4	1-5/8
1-1/4	1-1/4	43020E-A80	1-11/16-12	5.35	5.09	3.00	1.01	1-5/8	1-7/8
1-1/2	1-1/2	43024E-A84	2-12	6.17	5.54	3.56	1.19	2	2-1/4

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

Use Hose H03924, 32; H430; H439

**Split Flange 90°
Tube Elbow (SAE Code 61)**



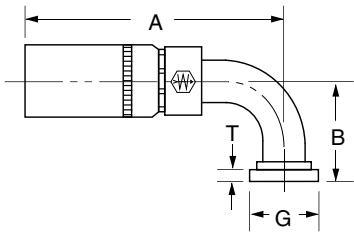
Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-G71	8x252	3.61	1.62	2.00	.38	1.19 (30mm)	.265
1/2	1/2	43008E-G71L32	8x252	3.61	3.25	2.00	.46	1.19 (30mm)	.265
1/2	3/4	43008E-G72	12x252	3.73	1.68	2.13	.38	1.50 (38mm)	.265
1/2	1	43008E-G76	16x252	3.79	1.63	2.13	.38	1.75 (44mm)	.315
3/4	3/4	43012E-G72	12x252	4.37	2.12	2.63	.56	1.50 (38mm)	.265
3/4	3/4	43012E-G72L37	12x252	4.62	3.75	2.94	.68	1.50 (38mm)	.265
3/4	3/4	43012E-G72L50	12x252	4.62	5.00	2.94	.68	1.50 (38mm)	.265
3/4	1	43012E-G76	16x252	4.37	2.12	2.63	.56	1.75 (44mm)	.315
3/4	1	43012E-G76L31	16x252	4.62	3.12	2.94	.67	1.75 (44mm)	.315
3/4	1-1/4	43012E-G80	20x252	5.37	2.12	2.63	.56	2.00 (51mm)	.315
1	1	43016E-G76	16x252	5.29	2.38	3.19	.76	1.75 (44mm)	.315
1	1	43016E-G76L21	16x252	5.27	2.12	3.19	.76	1.75 (44mm)	.315
1	1	43016E-G76L46	16x252	5.23	4.62	3.13	.76	1.75 (41mm)	.315
1	1-1/4	43016E-G80	20x252	5.29	2.38	3.19	.76	2.00 (51mm)	.315
1	1-1/4	43016E-G80L46	20x252	5.20	4.62	3.13	.76	2.00 (51mm)	.315
1	1-1/2	43016E-G84	24x252	5.23	2.44	3.13	.76	2.38 (60mm)	.315
1-1/4	1-1/4	43020E-G80	20x252	5.35	2.62	3.00	1.02	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-G80L31	20x252	5.35	3.12	3.00	1.02	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-G80L40	20x252	5.35	4.00	3.00	1.02	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-G80L51	20x252	5.35	5.12	3.00	1.02	2.00 (51mm)	.315
1-1/4	1-1/4	43020E-G80L66	20x252	5.35	6.62	3.00	1.02	2.00 (51mm)	.315
1-1/4	1-1/2	43020E-G84	24x252	5.35	2.68	3.00	1.02	2.38 (60mm)	.315
1-1/4	1-1/2	43020E-G84L46	24x252	5.35	4.68	3.00	1.02	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-G84	24x252	5.97	3.12	3.38	1.19	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-G84L58	24x252	6.09	5.80	3.50	1.31	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-G84L67	24x252	6.09	6.75	3.50	1.31	2.38 (60mm)	.315
1-1/2	2	43024E-G92	32x252	5.97	3.32	3.38	1.19	2.81 (71mm)	.375
1-1/2	2	43024E-G92L45	32x252	6.09	4.50	3.50	1.31	2.81 (71mm)	.375
1-1/2	2	43024E-G92L67	32x252	6.09	6.75	3.50	1.31	2.81 (71mm)	.375
2	1-1/2	43032E-G84	24x252	6.78	3.12	3.81	1.19	2.38 (60mm)	.315
2	2	43032E-G92	32x252	7.79	4.64	4.81	1.62	2.81 (71mm)	.375
2	2	43032E-G92L65	32x252	7.75	6.50	4.81	1.75	2.81 (71mm)	.375
2	2	43032E-G92L80	32x252	7.75	8.00	4.81	1.75	2.81 (71mm)	.375

(For Split Flange Kits, see page 205.)

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

Use Hose H03924, 32; H430; H439

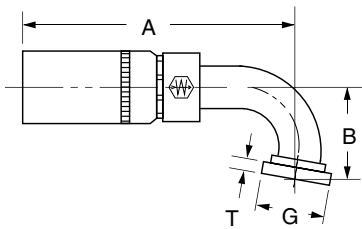
Split Flange 90° Tube Elbow (SAE Code 62)



(For Split Flange Kits, see page 206.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-D71	8x252	3.86	1.72	2.25	.38	1.25	.305
1/2	3/4	43008E-D72	12x252	4.02	1.90	2.38	.38	1.62	.345
3/4	3/4	43012E-D72	12x252	4.64	2.41	2.94	.61	1.62	.345
3/4	1	43012E-D76	16x252	4.64	2.70	2.94	.61	1.88	.375
1	1	43016E-D76	16x252	5.60	2.75	3.38	.77	1.88	.375
1	1-1/4	43016E-D80	20x252	5.39	2.90	3.25	.77	2.12	.405
1-1/4	1-1/4	43020E-D80	20x252	5.84	3.24	3.50	1.02	2.12	.405
1-1/4	1-1/2	43020E-D84	24x252	5.84	3.35	3.50	1.02	2.50	.405
1-1/2	1-1/2	43024E-D84	24x252	6.05	3.70	3.47	1.19	2.50	.495
1-1/2	2	43024E-D92	32x252	6.05	4.26	3.47	1.19	3.12	.495
2	2	43032E-D92	32x252	7.65	4.84	4.69	1.62	3.12	.495

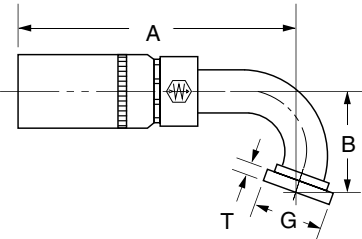
Split Flange 100° Tube Elbow (SAE Code 61)



(For Split Flange Kits, see page 205.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
3/4	3/4	43012E-H72	12x252	4.50	2.33	2.81	.61	1.50 (38mm)	.265
3/4	1	43012E-H73	16x252	4.50	2.33	2.81	.61	1.75 (44mm)	.315

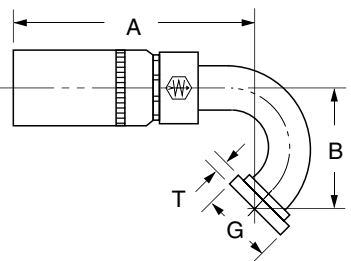
Split Flange 110° Tube Elbow (SAE Code 61)



(For Split Flange Kits, see page 205.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1	1	43016E-H83	16x252	4.54	2.89	2.44	.76	1.75 (44mm)	.315
1-1/4	1-1/4	43020E-H84	20x252	4.91	3.12	2.50	1.01	2.00 (51mm)	.315
1-1/4	1-1/2	43020E-H85	24x252	4.89	3.17	2.50	1.01	2.38 (60mm)	.315
1-1/2	1-1/2	43024E-H85	24x252	5.44	3.69	2.88	1.19	2.38 (60mm)	.315
2	2	43032E-H86	32x252	7.11	5.64	4.19	1.62	2.81 (71mm)	.375

Split Flange 135° Tube Elbow (SAE Code 61)



(For Split Flange Kits, see page 205.)

Hose I.D.	Nominal Flange Size	Catalog Number	Replacement O-Ring (Not Included)	A	B	Hose Cut-Off Factor†	Hole Dia.	Dia. G	T Nominal
1/2	1/2	43008E-H91	8x252	2.96	2.12	1.38	.37	1.19 (30mm)	.265
3/4	3/4	43012E-H92	12x252	3.70	3.00	2.00	.61	1.50 (38mm)	.265

†To determine the correct length of hose, subtract the cut-off factor for each end fitting from the overall length of assembly.

HOSE ENDS