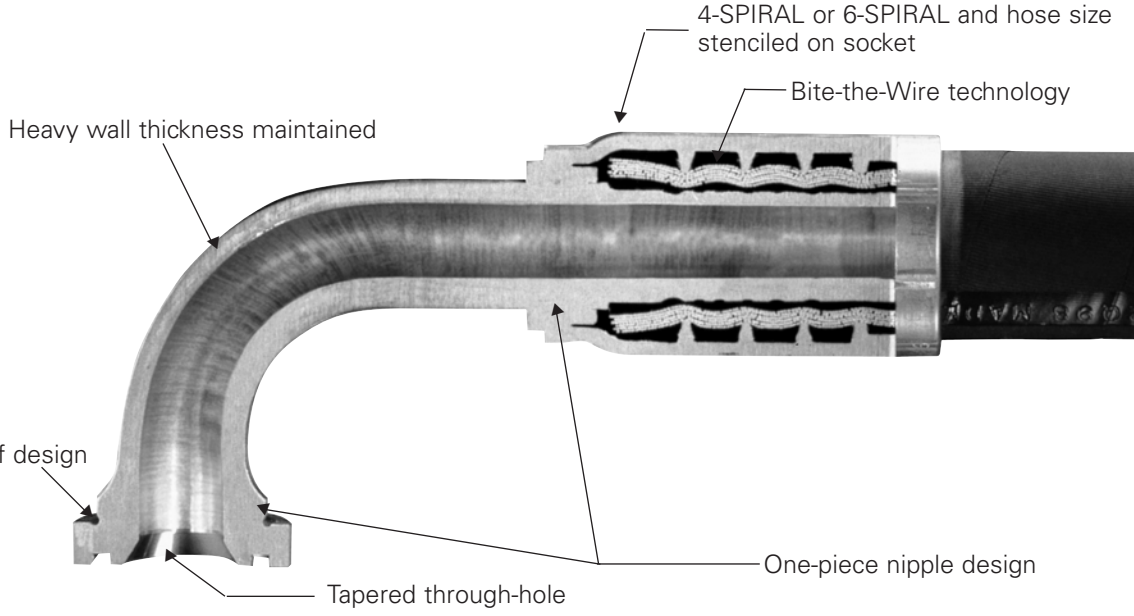


# WeatherTIGHT™ 4SP/6SP Series Hose Ends

For use with  
H464, H470, H485



FEATURES	BENEFITS
Bite the Wire technology	Skiving not required, saves time in assembly
One-piece nipple design	Stronger design, no braze joints
One-piece hose end	Easier to assemble
Stress-relief design	Maximizes durability
Heavy wall thickness	Heavy-duty construction for heavy-duty applications
Modern micro-alloy steel	Maximizes fatigue life
Tapered through-hole	Improves flow characteristics
Global design	Global availability
Stenciled socket	Hose insertion depth
Operating pressure to 6000 psi	Perfect for hydrostatic drives and other demanding applications
Available in -12, -16, -20, -24 & -32	Multiple configurations and jump sizes to fit a wide array of applications

### ⚠ WARNING

Failure to follow Eaton process and product instructions and limitations could lead to premature hose assembly failures, resulting in property damage, serious injury or death.

Eaton Hose End tolerances are engineered to match Weatherhead hose tolerances. The use of Eaton Hose Ends on hose supplied by other manufacturers and/or the use of Weatherhead hose with Hose Ends supplied by other manufacturers, may result in the production of unreliable and unsafe hose assemblies and is neither recommended nor authorized by Eaton.

Read and understand the operator's manual before attempting to operate any equipment.

Eaton hereby disclaims any obligation or liability (including incidental and consequential damages) arising from breach

of contract, warranty, or tort (under negligence or strict liability theories) should Weatherhead hose, Eaton Hose Ends or assembly equipment be used with the hose supplied by another manufacturer, or in the event that product instructions for each specified hose assembly are not followed.

### ⚠ WARNING

Eaton manufactures the terminal ends of our Hose Ends to the appropriate requirement established by SAE and other industry standards. It is possible to order a hose end with a terminal end that has a performance rating lower than the hose rating. Failure to consider the terminal end performance could lead to premature hose assembly failures, resulting in property damage, serious injury or death.

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),  
H470 (-12 & -16 only)\*

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,  
T-440-1 (-12 & -16 only)

## 6SP Hose Ends

For Use with Hose:

H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000

APPLICATION  
DATA

LOW & MEDIUM  
PRESSURE HOSE

HIGH PRESSURE HOSE

SPECIALTY HOSE

ACCESSORIES &  
ASSEMBLY INSTRUCTIONS

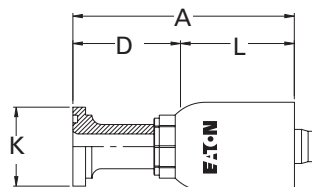
ADAPTERS & TUBE  
HOSE ENDS

HOSE ASSEMBLY  
EQUIPMENT

TECHNICAL DATA

### Straight Split Flange

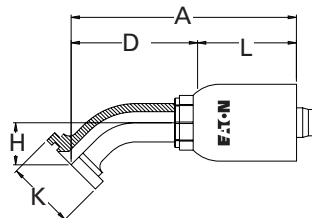
Code 61



FITTING PART NUMBER	FLANGE HEAD DIA. K		HOSE SIZE	A		D		INSERTION LENGTH L		H	
	inch	mm		inch	mm	inch	mm	inch	mm	inch	mm
<b>Straight split flange - Code 61 (SAE J518)</b>											
4SP12W-G12	1.50	38.1	-12	3.92	99.5	2.15	54.5	1.77	45.0		
4SP12W-G16	1.75	44.4	-12	3.78	96.1	2.01	51.1	1.77	45.0		
4SP16W-G16	1.75	44.4	-16	4.78	121.3	2.22	56.3	2.56	65.0		
4SP16W-G20	2.00	50.8	-16	4.94	125.5	2.38	60.5	2.56	65.0		
4SP20W-G20	2.00	50.8	-20	5.57	141.5	2.62	66.5	2.95	75.0		
4SP20W-G24	2.38	60.3	-20	6.45	163.8	3.50	88.8	2.95	75.0		
4SP24W-G24	2.38	60.3	-24	6.61	167.8	3.54	89.8	3.07	78.0		
4SP24W-G32	2.81	71.4	-24	6.73	170.9	3.66	92.9	3.07	78.0		
4SP32W-G32	2.81	71.4	-32	6.81	173.0	3.74	95.0	3.07	78.0		
6SP20W-G20	2.00	50.8	-20	5.57	141.5	2.62	66.5	2.95	75.0		
6SP24W-G24	2.38	60.3	-24	6.61	167.8	3.54	89.8	3.07	78.0		
6SP32W-G32	2.81	71.4	-32	6.81	173.0	3.74	95.0	3.07	78.0		

### 45° Elbow Split Flange

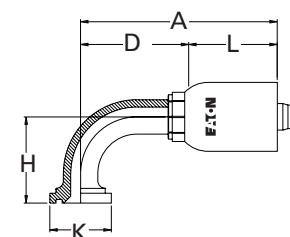
Code 61



<b>45° split flange - Code 61 (SAE J518)</b>											
4SP12W-G42	1.50	38.1	-12	4.93	125.3	3.16	80.3	1.77	45.0	1.06	27.0
4SP12W-G46	1.75	44.4	-12	5.37	136.5	3.60	91.5	1.77	45.0	1.26	32.0
4SP16W-G46	1.75	44.4	-16	6.37	161.7	3.81	96.7	2.56	65.0	1.26	32.0
4SP16W-G50	2.00	50.8	-16	6.99	177.4	4.43	112.4	2.56	65.0	1.54	39.0
4SP20W-G50	2.00	50.8	-20	7.61	193.4	4.66	118.4	2.95	75.0	1.54	39.0
4SP20W-G54	2.38	60.3	-20	8.12	206.3	5.17	131.3	2.95	75.0	1.77	45.0
4SP24W-G54	2.38	60.3	-24	8.28	210.3	5.21	132.3	3.07	78.0	1.77	45.0
4SP24W-G62	2.81	71.4	-24	9.73	247.2	6.66	169.2	3.07	78.0	2.26	57.5
4SP32W-G62	2.81	71.4	-32	9.81	249.3	6.74	171.3	3.07	78.0	2.26	57.5
6SP20W-G50	2.00	50.8	-20	7.61	193.4	4.66	118.4	2.95	75.0	1.54	39.0
6SP24W-G54	2.38	60.3	-24	8.28	210.3	5.21	132.3	3.07	78.0	1.77	45.0
6SP32W-G62	2.81	71.4	-32	9.81	249.3	6.74	171.3	3.07	78.0	2.26	57.5

### 90° Elbow Split Flange

Code 61



<b>90° split flange - Code 61 (SAE J518)</b>											
4SP12W-G72	1.50	38.1	-12	4.72	120.0	2.95	75.0	1.77	45.0	2.32	59.0
4SP12W-G76	1.75	44.4	-12	5.17	131.4	3.40	86.4	1.77	45.0	2.80	71.0
4SP16W-G76	1.75	44.4	-16	6.17	156.6	3.61	91.6	2.56	65.0	2.80	71.0
4SP16W-G80	2.00	50.8	-16	6.79	172.4	4.23	107.4	2.56	65.0	3.50	89.0
4SP20W-G80	2.00	50.8	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.50	89.0
4SP20W-G84	2.38	60.3	-20	7.92	201.1	4.96	126.1	2.95	75.0	4.09	104.0
4SP24W-G84	2.38	60.3	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0
4SP24W-G92	2.81	71.4	-24	9.59	243.6	6.52	165.6	3.07	78.0	5.43	138.0
4SP32W-G92	2.81	71.4	-32	9.67	245.7	6.60	167.7	3.07	78.0	5.43	138.0
6SP20W-G80	2.00	50.8	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.50	89.0
6SP24W-G84	2.38	60.3	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0
6SP32W-G92	2.81	71.4	-32	9.67	245.7	6.60	167.7	3.07	78.0	5.43	138.0

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),

H470 (-12 & -16 only)\*

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,

T-440-1 (-12 & -16 only)

## 6SP Hose Ends

For Use with Hose:

H470 (-20, -24, -32 only)\*

H485 (-20 & -24 only),

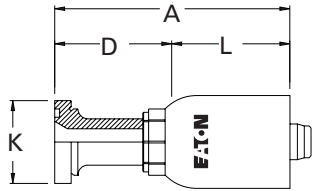
\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000

### Straight Split Flange

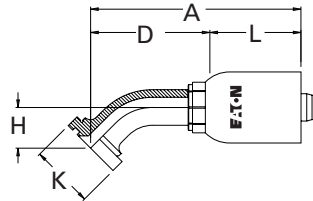
Code 62



FITTING PART NUMBER	FLANGE HEAD DIA. K		HOSE SIZE	A		D		INSERTION LENGTH		H	
	inch	mm		inch	mm	inch	mm	inch	mm	inch	mm
<b>Straight split flange - Code 62 (SAE J518)</b>											
4SP12W-D12	1.62	41.3	-12	4.16	105.8	2.39	60.8	1.77	45.0		
4SP12W-D16	1.88	47.6	-12	4.33	110.0	2.56	65.0	1.77	45.0		
4SP16W-D16	1.88	47.6	-16	5.32	135.2	2.76	70.2	2.56	65.0		
4SP16W-D20	2.12	54.0	-16	5.22	132.6	2.66	67.6	2.56	65.0		
4SP20W-D20	2.12	54.0	-20	5.85	148.6	2.90	73.6	2.95	75.0		
4SP20W-D24	2.50	63.5	-20	7.31	185.6	4.35	110.6	2.95	75.0		
4SP24W-D24	2.50	63.5	-24	7.46	189.6	4.39	111.6	3.07	78.0		
4SP24W-D32	3.13	79.4	-24	7.90	200.6	4.83	122.6	3.07	78.0		
4SP32W-D32	3.13	79.4	-32	7.98	202.7	4.91	124.7	3.07	78.0		
6SP20W-D20	2.12	54.0	-20	5.85	148.6	2.90	73.6	2.95	75.0		
6SP20W-D24	2.50	63.5	-20	7.31	185.6	4.35	110.6	2.95	75.0		
6SP24W-D24	2.50	63.5	-24	7.46	189.6	4.39	111.6	3.07	78.0		
6SP24W-D32	3.13	79.4	-24	7.90	200.6	4.83	122.6	3.07	78.0		
6SP32W-D32	3.13	79.4	-32	7.98	202.7	4.91	124.7	3.07	78.0		

### 45° Elbow Split Flange

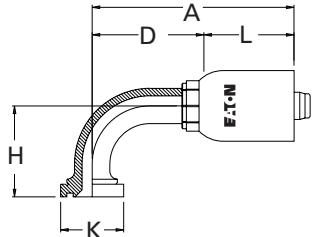
Code 62



<b>45° split flange - Code 62 (SAE J518)</b>											
4SP12W-D42	1.62	41.3	-12	4.93	125.3	3.16	80.3	1.77	45.0	1.06	27.0
4SP12W-D46	1.88	47.6	-12	5.37	136.5	3.60	91.5	1.77	45.0	1.26	32.0
4SP16W-D46	1.88	47.6	-16	6.37	161.7	3.81	96.7	2.56	65.0	1.26	32.0
4SP16W-D50	2.12	54.0	-16	6.99	177.4	4.43	112.4	2.56	65.0	1.54	39.0
4SP20W-D50	2.12	54.0	-20	7.61	193.4	4.66	118.4	2.95	75.0	1.54	39.0
4SP20W-D54	2.50	63.5	-20	8.12	206.3	5.17	131.3	2.95	75.0	1.77	45.0
4SP24W-D54	2.50	63.5	-24	8.28	210.3	5.21	132.3	3.07	78.0	1.77	45.0
4SP24W-D62	3.13	79.4	-24	9.73	247.2	6.66	169.2	3.07	78.0	2.26	57.5
4SP32W-D62	3.13	79.4	-32	9.81	249.3	6.74	171.3	3.07	78.0	2.26	57.5
6SP20W-D50	2.12	54.0	-20	7.61	193.4	4.66	118.4	2.95	75.0	1.54	39.0
6SP20W-D54	2.50	63.5	-20	8.12	206.3	5.17	131.3	2.95	75.0	1.77	45.0
6SP24W-D54	2.50	63.5	-24	8.28	210.3	5.21	132.3	3.07	78.0	1.77	45.0
6SP24W-D62	3.13	79.4	-24	9.73	247.2	6.66	169.2	3.07	78.0	2.26	57.5
6SP32W-D62	3.13	79.4	-32	9.81	249.3	6.74	171.3	3.07	78.0	2.26	57.5

### 90° Elbow Split Flange

Code 62



<b>90° split flange - Code 62 (SAE J518)</b>											
4SP12W-D72	1.62	41.3	-12	4.72	120.0	2.95	75.0	1.77	45.0	2.32	59.0
4SP12W-D76	1.88	47.6	-12	5.17	131.4	3.40	86.4	1.77	45.0	2.80	71.0
4SP16W-D76	1.88	47.6	-16	6.17	156.6	3.61	91.6	2.56	65.0	2.80	71.0
4SP16W-D80	2.12	54.0	-16	6.79	172.4	4.23	107.4	2.56	65.0	3.50	89.0
4SP20W-D80	2.12	54.0	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.50	89.0
4SP20W-D84	2.50	63.5	-20	7.92	201.1	4.96	126.1	2.95	75.0	4.09	104.0
4SP24W-D84	2.50	63.5	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0
4SP24W-D92	3.13	79.4	-24	9.59	243.6	6.52	165.6	3.07	78.0	5.43	138.0
4SP32W-D92	3.13	79.4	-32	9.67	245.7	6.60	167.7	3.07	78.0	5.43	138.0
6SP20W-D80	2.12	54.0	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.50	89.0
6SP20W-D84	2.50	63.5	-20	7.92	201.1	4.96	126.1	2.95	75.0	4.09	104.0
6SP24W-D84	2.50	63.5	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0
6SP24W-D92	3.13	79.4	-24	9.59	243.6	6.52	165.6	3.07	78.0	5.43	138.0
6SP32W-D92	3.13	79.4	-32	9.67	245.7	6.60	167.7	3.07	78.0	5.43	138.0

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),  
H470 (-12 & -16 only)\*

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,  
T-440-1 (-12 & -16 only)

## 6SP Hose Ends

For Use with Hose:

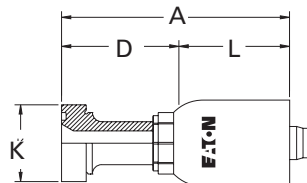
H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),

\*H470 with black cover only (2Q 2006)

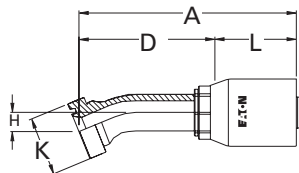
Assembled with:

ET4000

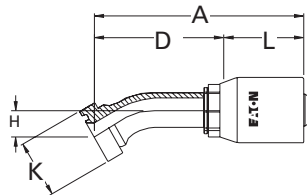
### Thick-Flange Straight



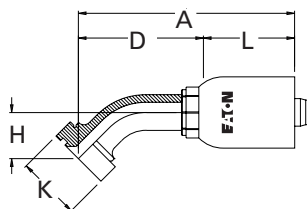
### Thick-Flange - 22.5° Elbow



### Thick-Flange - 30° Elbow



### Thick-Flange - 45° Elbow



FITTING PART NUMBER	FLANGE HEAD DIA. K		HOSE SIZE	A		D		INSERTION LENGTH L		H	
	inch	mm		inch	mm	inch	mm	inch	mm	inch	mm
<b>Thick-flange - Straight split flange</b>											
4SP12W-K12	1.62	41.3	-12	4.38	111.3	2.61	66.3	1.77	45.0		
4SP12W-K16	1.88	47.6	-12	4.51	114.7	2.74	69.7	1.77	45.0		
4SP16W-K16	1.88	47.6	-16	5.51	139.9	2.95	74.9	2.56	65.0		
4SP16W-K20	2.12	54.0	-16	5.37	136.5	2.81	71.5	2.56	65.0		
4SP20W-K20	2.12	54.0	-20	6.00	152.5	3.05	77.5	2.95	75.0		
6SP20W-K20	2.12	54.0	-20	6.00	152.5	3.05	77.5	2.95	75.0		
6SP20W-K24	2.50	63.5	-20	7.37	187.3	4.42	112.3	2.95	75.0		
6SP24W-K24	2.50	63.5	-24	7.53	191.3	4.46	113.3	3.07	78.0		
6SP24W-K32	3.13	79.4	-24	7.96	202.3	4.89	124.3	3.07	78.0		
6SP32W-K32	3.13	79.4	-32	8.05	204.4	4.98	126.4	3.07	78.0		

Compatible only with D-Ring FF90319. See page 354.

### Thick-flange - 22.5°

4SP12W-K02	1.62	41.3	-12	5.43	137.9	3.66	92.9	1.77	45.0	0.54	13.7
4SP16W-K03	1.88	47.6	-16	6.88	174.8	4.32	109.8	2.56	65.0	0.60	15.3
4SP16W-K04	2.12	54.0	-16	7.56	191.9	5.00	126.9	2.56	65.0	0.70	17.8
6SP20W-BD20	2.12	54.0	-20	8.19	207.9	5.23	132.9	2.95	75.0	0.70	17.8
6SP20W-BD24	2.50	63.5	-20	8.67	220.1	5.71	145.1	2.95	75.0	0.76	19.4
6SP24W-BD24	2.50	63.5	-24	8.82	224.1	5.75	146.1	3.07	78.0	0.76	19.4

Compatible only with D-Ring FF90319. See page 354.

### Thick-flange - 30°

4SP12W-K22	1.62	41.3	-12	5.34	135.7	3.57	90.7	1.77	45.0	0.75	19.1
4SP16W-K23	1.88	47.6	-16	6.79	172.4	4.23	107.4	2.56	65.0	0.85	21.6
4SP16W-K25	2.12	54.0	-16	7.45	189.1	4.89	124.1	2.56	65.0	1.00	25.3
6SP20W-BD50	2.12	54.0	-20	8.08	205.1	5.12	130.1	2.95	75.0	1.00	25.3
6SP20W-BD54	2.50	63.5	-20	8.55	217.1	5.59	142.1	2.95	75.0	1.09	27.7
6SP24W-BD54	2.50	63.5	-24	8.70	221.1	5.63	143.1	3.07	78.0	1.09	27.7
6SP24W-BD62	3.13	79.4	-24	10.26	260.5	7.19	182.5	3.07	78.0	1.37	34.8
6SP32W-BD62	3.13	79.4	-32	10.34	262.6	7.27	184.6	3.07	78.0	1.37	34.8

Compatible only with D-Ring FF90319. See page 354.

### Thick-flange - 45° split flange

4SP12W-K42	1.62	41.3	-12	5.08	129.2	3.31	84.2	1.77	45.0	1.22	30.9
4SP12W-K46	1.88	47.6	-12	5.50	139.8	3.73	94.8	1.77	45.0	1.39	35.3
4SP16W-K46	1.88	47.6	-16	6.50	165.0	3.94	100.0	2.56	65.0	1.39	35.3
4SP16W-K50	2.12	54.0	-16	7.10	180.2	4.54	115.2	2.56	65.0	1.65	41.8
4SP20W-K50	2.12	54.0	-20	7.72	196.2	4.77	121.2	2.95	75.0	1.65	41.8
6SP20W-K50	2.12	54.0	-20	7.72	196.2	4.77	121.2	2.95	75.0	1.65	41.8
6SP20W-K54	2.50	63.5	-20	8.17	207.5	5.22	132.5	2.95	75.0	1.82	46.2

Compatible only with D-Ring FF90319. See page 354.

APPLICATION  
DATA

LOW & MEDIUM  
PRESSURE HOSE

HIGH PRESSURE HOSE

SPECIALTY HOSE

ACCESSORIES &  
ASSEMBLY INSTRUCTIONS

ADAPTERS & TUBE  
HOSE ENDS

HOSE ASSEMBLY  
EQUIPMENT

TECHNICAL DATA

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),  
H470 (-12 & -16 only)\*  
\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,  
T-440-1 (-12 & -16 only)

## 6SP Hose Ends

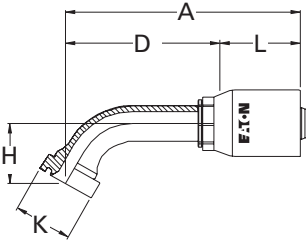
For Use with Hose:

H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),  
\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000

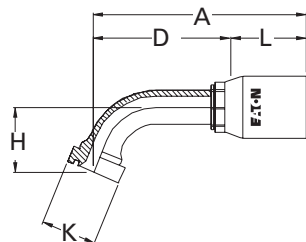
### Thick-Flange - 60° Elbow



FITTING PART NUMBER	FLANGE HEAD DIA. K		HOSE SIZE	A		D		INSERTION LENGTH L		H	
	inch	mm		inch	mm	inch	mm	inch	mm	inch	mm
<b>Thick-flange - 60°</b>											
4SP12W-K52	1.62	41.3	-12	5.83	148.1	4.06	103.1	1.77	45.0	1.66	42.3
4SP16W-K53	1.88	47.6	-16	7.45	189.3	4.89	124.3	2.56	65.0	1.92	48.7
4SP16W-K54	2.12	54.0	-16	8.36	212.4	5.80	147.4	2.56	65.0	2.33	59.3
6SP20W-BD80	2.12	54.0	-20	8.99	228.4	6.04	153.4	2.95	75.0	2.33	59.3
6SP20W-BD84	2.50	63.5	-20	9.70	246.4	6.75	171.4	2.95	75.0	2.62	66.6
6SP24W-BD84	2.50	63.5	-24	9.86	250.4	6.79	172.4	3.07	78.0	2.62	66.6
6SP24W-BD92	3.13	79.4	-24	11.94	303.2	8.87	225.2	3.07	78.0	3.44	87.3
6SP32W-BD92	3.13	79.4	-32	12.02	305.3	8.95	227.3	3.07	78.0	3.44	87.3

Compatible only with D-Ring FF90319. See below.

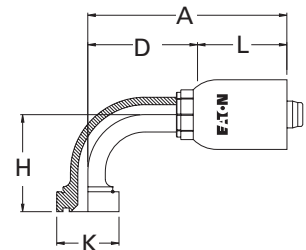
### Thick-Flange - 67.5° Elbow



<b>Thick flange - 67.5°</b>											
4SP12W-K62	1.62	41.3	-12	5.60	142.2	3.83	97.2	1.77	45.0	1.90	48.2
4SP16W-K63	1.88	47.6	-16	7.18	182.5	4.62	117.5	2.56	65.0	2.20	55.8
4SP16W-K64	2.12	54.0	-16	8.04	204.1	5.48	139.1	2.56	65.0	2.68	68.1
6SP20W-BD20	2.12	54.0	-20	8.67	220.1	5.71	145.1	2.95	75.0	2.68	68.1
6SP20W-BD24	2.50	63.5	-20	9.33	237.0	6.38	162.0	2.95	75.0	3.02	76.8

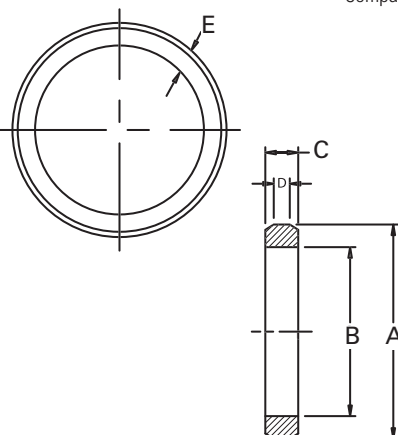
Compatible only with D-Ring FF90319. See below.

### Thick-Flange - 90° Elbow



<b>Thick Flange - 90° split flange</b>											
4SP12W-K72	1.62	41.3	-12	4.72	120.0	2.95	75.0	1.77	45.0	2.54	64.5
4SP12W-K76	1.88	47.6	-12	5.17	131.4	3.40	86.4	1.77	45.0	2.98	75.7
4SP16W-K76	1.88	47.6	-16	6.17	156.6	3.61	91.6	2.56	65.0	2.98	75.7
4SP16W-K80	2.12	54.0	-16	6.79	172.4	4.23	107.4	2.56	65.0	3.66	92.9
4SP20W-K80	2.12	54.0	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.66	92.9
6SP20W-K80	2.12	54.0	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.66	92.9
6SP20W-K84	2.50	63.5	-20	7.92	201.1	4.96	126.1	2.95	75.0	4.16	105.7
6SP24W-K84	2.50	63.5	-24	7.92	201.1	4.96	126.1	2.95	75.0	4.16	105.7
6SP24W-K92	3.13	79.4	-24	9.59	243.6	6.52	165.6	3.07	78.0	5.50	139.6
6SP32W-K92	3.13	79.4	-32	9.59	243.6	6.52	165.6	3.07	78.0	5.50	139.6

Compatible only with D-Ring FF90319. See below.



### Thick-Flange D-Ring\*

PART NUMBER	A REF		B REF		C REF		D REF		E REF	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
FF90319-12	1.27	32,3	1.00	25,4	.20	5,1	.10	2,5	.135	3,4
FF90319-16	1.52	36,6	1.25	31,8	.20	5,1	.10	2,5	.135	3,4
FF90319-20	1.77	45,0	1.50	38,1	.20	5,1	.10	2,5	.135	3,4
FF90319-24	2.03	51,6	1.76	44,7	.20	5,1	.10	2,5	.135	3,4
FF90319-32	2.78	70,6	2.52	64,0	.20	5,1	.10	2,5	.135	3,4

Temperature range: -40°F to +212°F.

Material: Nitrile (Buna-N)

\*To be used only with Thick-Flange hose ends.

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),  
H470 (-12 & -16 only)\*

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,  
T-440-1 (-12 & -16 only)

## 6SP Hose Ends

For Use with Hose:

H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000

APPLICATION  
DATA

LOW & MEDIUM  
PRESSURE HOSE

HIGH PRESSURE HOSE

SPECIALTY HOSE

ACCESSORIES &  
ASSEMBLY INSTRUCTIONS

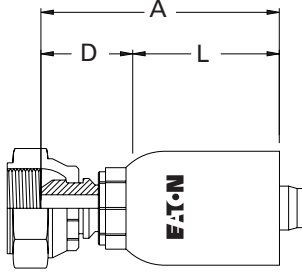
ADAPTERS & TUBE  
HOSE ENDS

HOSE ASSEMBLY  
EQUIPMENT

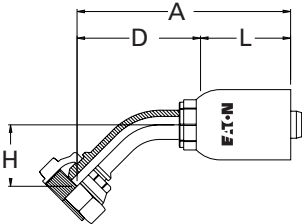
TECHNICAL DATA

FITTING PART NUMBER	THREAD	HOSE SIZE	A		D		INSERTION LENGTH L		H	
			inch	mm	inch	mm	inch	mm	inch	mm
<b>BSP/JIS Female Swivel</b>										
4SP12W-352	G 3/4	-12	3.27	83.0	1.50	38.0	1.77	45.0		
4SP12W-356	G 1	-12	3.22	81.7	1.44	36.7	1.77	45.0		
4SP16W-356	G 1	-16	4.21	106.9	1.65	41.9	2.56	65.0		
4SP16W-370	G 1 1/4	-16	4.13	104.9	1.57	39.9	2.56	65.0		
4SP20W-370	G 1 1/4	-20	4.76	120.9	1.81	45.9	2.95	75.0		
4SP24W-374	G 1 1/2	-24	6.04	153.5	2.97	75.5	3.07	78.0		
4SP32W-375	G 2	-32	6.28	159.5	3.21	81.5	3.07	78.0		
6SP24W-374	G 1 1/2	-24	6.04	153.5	2.97	75.5	3.07	78.0		
6SP32W-375	G 2	-32	6.28	159.5	3.21	81.5	3.07	78.0		

### BSPW Swivel - Straight

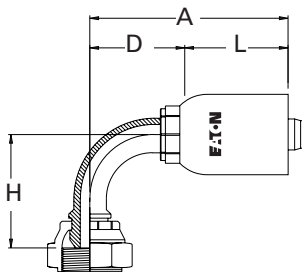


### BSPW Swivel - 45° Elbow



<b>BSP/JIS Female Swivel, 45° elbow</b>										
4SP12W-52P	G 3/4	-12	4.76	121.0	2.99	76.0	1.77	45.0	1.02	26.0
4SP12W-56P	G 1	-12	5.13	130.4	3.36	85.4	1.77	45.0	1.18	30.0
4SP16W-56P	G 1	-16	6.13	155.6	3.57	90.6	2.56	65.0	1.18	30.0
4SP16W-60P	G 1 1/4	-16	6.57	166.9	4.01	101.9	2.56	65.0	1.34	34.0
4SP20W-60P	G 1 1/4	-20	7.19	182.6	4.25	107.9	2.95	75.0	1.34	34.0
4SP24W-64P	G 1 1/2	-24	8.20	208.2	5.13	130.2	3.07	78.0	1.69	43.0
4SP32W-65P	G 2	-32	9.78	248.5	6.71	170.5	3.07	78.0	2.23	56.6
6SP24W-64P	G 1 1/2	-24	8.20	208.2	5.13	130.2	3.07	78.0	1.69	43.0
6SP32W-65P	G 2	-32	9.78	248.5	6.71	170.5	3.07	78.0	2.23	56.6

### BSPW Swivel - 90° Elbow



<b>BSP/JIS Female Swivel, 90° elbow</b>										
4SP12W-82P	G 3/4	-12	4.51	114.5	2.74	69.5	1.77	45.0	2.24	57.0
4SP12W-86P	G 1	-12	4.94	125.6	3.17	80.6	1.77	45.0	2.68	68.0
4SP16W-86P	G 1	-16	5.94	150.8	3.38	85.8	2.56	65.0	2.68	68.0
4SP16W-90P	G 1 1/4	-16	6.44	163.7	3.89	98.7	2.56	65.0	3.11	79.0
4SP20W-90P	G 1 1/4	-20	7.07	179.7	4.12	104.7	2.95	75.0	3.11	79.0
4SP24W-94P	G 1 1/2	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0
4SP32W-95P	G 2	-32	9.67	245.7	6.60	167.7	3.07	78.0	5.28	134.0
6SP24W-94P	G 1 1/2	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0
6SP32W-95P	G 2	-32	9.67	245.7	6.60	167.7	3.07	78.0	5.28	134.0

NOTE: The JIS parallel thread and BSPW connection are interchangeable.

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:  
H464, H485 (-16 only),  
H470 (-12 & -16 only)\*  
\*H470 with black cover only (2Q 2006)

Assembled with:  
ET4000,  
T-440-1 (-12 & -16 only)

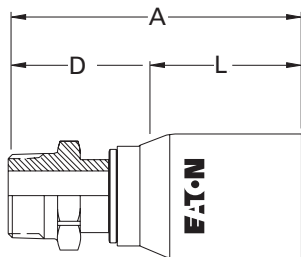
## 6SP Hose Ends

For Use with Hose:  
H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),  
\*H470 with black cover only (2Q 2006)

Assembled with:  
ET4000

FITTING PART NUMBER	THREAD	HOSE SIZE	A		D	INSERTION LENGTH L		HEX		
			inch	mm	inch	mm	inch	mm	inch	
<b>Male Pipe Rigid</b>										
	NPTF									
4SP12W-112	3/4-14	-12	3.89	98.7	2.12	53.7	1.77	45	1 1/4	
4SP16W-116	1-11 1/2	-16	4.94	125.4	2.38	60.4	2.56	65	1 1/2	
4SP20W-120	1 1/4-11 1/2	-20	5.70	144.8	2.75	69.8	2.95	75	1 7/8	
4SP24W-124	1 1/2-11 1/2	-24	5.93	150.6	2.86	72.6	3.07	78	2	
4SP32W-132	2-11 1/2	-32	6.03	153.2	2.96	75.2	3.07	78	2 5/8	
6SP20W-120	1 1/4-11 1/2	-20	5.70	144.8	2.75	69.8	2.95	75	1 7/8	
6SP24W-124	1 1/2-11 1/2	-24	5.93	150.6	2.86	72.6	3.07	78	2	
6SP32W-132	2-11 1/2	-32	6.03	153.2	2.96	75.2	3.07	78	2 5/8	

### Male Pipe Rigid



APPLICATION DATA  
LOW & MEDIUM PRESSURE HOSE  
HIGH PRESSURE HOSE  
SPECIALTY HOSE  
ACCESSORIES & ASSEMBLY INSTRUCTIONS  
ADAPTERS & HOSE ENDS  
HOSE ASSEMBLY EQUIPMENT  
TECHNICAL DATA

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),  
H470 (-12 & -16 only)\*

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,  
T-440-1 (-12 & -16 only)

## 6SP Hose Ends

For Use with Hose:

H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000

APPLICATION  
DATA

LOW & MEDIUM  
PRESSURE HOSE

HIGH PRESSURE HOSE

SPECIALTY HOSE

ACCESSORIES &  
ASSEMBLY INSTRUCTIONS

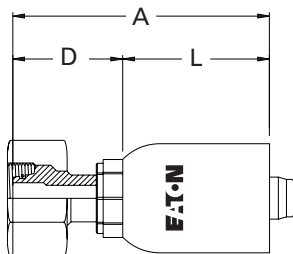
ADAPTERS & TUBE  
HOSE ENDS

HOSE ASSEMBLY  
EQUIPMENT

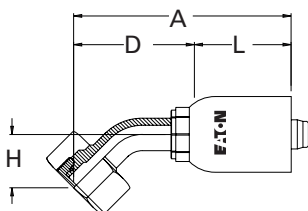
TECHNICAL DATA

FITTING PART NUMBER	THREAD SIZE	TUBE SIZE	HOSE SIZE	A		D		INSERTION LENGTH L		H	
				inch	mm	inch	mm	inch	mm	inch	mm
<b>DKO Female Swivel, Heavy Duty</b>											
4SP12W-75C	M36 x 2	25	-12	3.87	98.4	2.10	53.4	1.77	45.0		
4SP12W-80C	M42 x 2	30	-12	3.80	96.6	2.03	51.6	1.77	45.0		
4SP16W-80C	M42 x 2	30	-16	4.80	121.8	2.24	56.8	2.56	65.0		
4SP16W-88C	M52 x 2	38	-16	4.82	122.3	2.26	57.3	2.56	65.0		
4SP20W-88C	M52 x 2	38	-20	5.44	138.3	2.49	63.3	2.95	75.0		
6SP20W-88C	M52 x 2	38	-20	5.44	138.3	2.49	63.3	2.95	75.0		

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

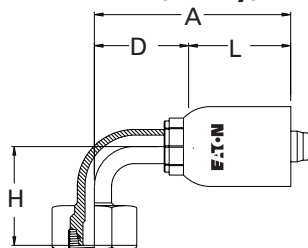


### Female Swivel DIN 24° Seat 45° Tube Elbow S.Rh. DKO (heavy)



<b>DKO Female Swivel, Heavy Duty, 45° Elbow</b>											
4SP12W-25E	M36 x 2	25	-12	5.13	130.3	3.36	85.3	1.77	45.0	1.26	32.0
4SP12W-30E	M42 x 2	30	-12	5.49	139.4	3.72	94.4	1.77	45.0	1.38	35.0
4SP16W-30E	M42 x 2	30	-16	6.48	164.6	3.92	99.6	2.56	65.0	1.38	35.0
4SP16W-38E	M52 X 2	38	-16	6.98	177.3	4.42	112.3	2.56	65.0	1.54	39.0
4SP20W-38E	M52 x 2	38	-20	7.61	193.3	4.66	118.3	2.95	75.0	1.54	39.0
6SP20W-38E	M52 x 2	38	-20	7.61	193.3	4.66	118.3	2.95	75.0	1.54	39.0

### Female Swivel DIN 24° Seat 90° Tube Elbow s.Rh. DKO (heavy)



<b>DKO Female Swivel, Heavy Duty, 90° elbow</b>											
4SP12W-75E	M36 x 2	25	-12	4.72	120.0	2.95	75.0	1.77	45.0	2.56	65.0
4SP12W-80E	M42 X 2	30	-12	5.17	131.4	3.40	86.4	1.77	45.0	2.99	76.0
4SP16W-80E	M42 x 2	30	-16	6.17	156.8	3.61	91.8	2.56	65.0	2.99	76.0
4SP16W-88E	M52 X 2	38	-16	6.79	172.4	4.23	107.4	2.56	65.0	3.50	89.0
4SP20W-88E	M52 x 2	38	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.50	89.0
6SP20W-88E	M52 x 2	38	-20	7.41	188.4	4.46	113.4	2.95	75.0	3.50	89.0

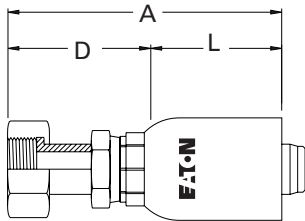


# WeatherTIGHT™

## 4SP/6SP Series

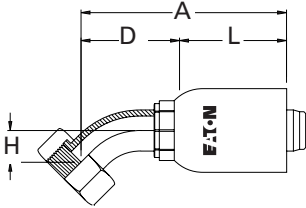
### Hose Ends

#### FOR-SEAL Swivel Straight



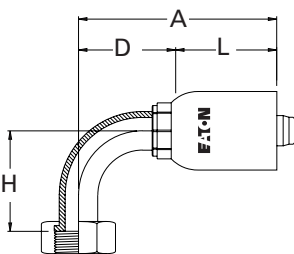
FITTING PART NUMBER	THREAD	HOSE SIZE	A		D		INSERTION LENGTH L		H	
			inch	mm	inch	mm	inch	mm	inch	mm
<b>Female FOR-SEAL Swivel, Straight</b>										
4SP12W-J72	1 3/16-12	-12	3.77	95.9	2.00	50.9	1.77	45.0		
4SP12W-J76	1 7/16-12	-12	3.33	84.6	1.56	39.6	1.77	45.0		
4SP16W-J76	1 7/16-12	-16	4.71	119.5	2.15	54.5	2.56	65.0		
4SP16W-J80	1 11/16-12	-16	4.19	106.4	1.63	41.4	2.56	65.0		
6SP16W-J80	1 11/16-12	-16	4.19	106.4	1.63	41.4	2.56	65.0		
4SP20W-J80	1 11/16-12	-20	5.38	136.7	2.43	61.7	2.95	75.0		
6SP20W-J80	1 11/16-12	-20	5.38	136.7	2.43	61.7	2.95	75.0		
4SP24W-J84	2-12	-24	5.00	126.9	1.93	48.9	3.07	78.0		
6SP24W-J84	2-12	-24	5.00	126.9	1.93	48.9	3.07	78.0		

#### FOR-SEAL Swivel 45° Elbow



<b>Female FOR-SEAL Swivel, 45° elbow</b>										
4SP12W-L72	1 3/16-12	-12	4.68	118.9	2.91	73.9	1.77	45.0	0.94	24.0
4SP12W-L76	1 7/16-12	-12	5.05	128.4	3.28	83.4	1.77	45.0	1.10	28.0
4SP16W-L76	1 7/16-12	-16	6.04	153.4	3.48	88.4	2.56	65.0	1.10	28.0
4SP16W-L80	1 11/16-12	-16	6.45	163.9	3.89	98.9	2.56	65.0	1.22	31.0
4SP20W-L80	1 11/16-12	-20	7.08	179.8	4.13	104.8	2.95	75.0	1.22	31.0
6SP20W-L80	1 11/16-12	-20	7.08	179.8	4.13	104.8	2.95	75.0	1.22	31.0

#### FOR-SEAL Swivel 90° Elbow



<b>Female FOR-SEAL Swivel, 90° elbow</b>										
4SP12W-J42	1 3/16-12	-12	4.51	114.5	2.74	69.5	1.77	45.0	2.28	58.0
4SP12W-J46	1 7/16-12	-12	4.94	125.6	3.17	80.6	1.77	45.0	2.80	71.0
4SP16W-J46	1 7/16-12	-16	5.93	150.6	3.37	85.6	2.56	65.0	2.80	71.0
4SP16W-J50	1 11/16-12	-16	6.45	163.7	3.89	98.7	2.56	65.0	3.07	78.0
4SP20W-J50	1 11/16-12	-20	7.07	179.6	4.12	104.6	2.95	75.0	3.07	78.0
6SP20W-J50	1 11/16-12	-20	7.07	179.6	4.12	104.6	2.95	75.0	3.07	78.0

#### 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),  
H470 (-12 & -16 only)\*  
\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,  
T-440-1 (-12 & -16 only)

#### 6SP Hose Ends

For Use with Hose:

H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),  
\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000

# WeatherTIGHT™ 4SP/6SP Series Hose Ends

## 4SP Hose Ends

For Use with Hose:

H464, H485 (-16 only),  
H470 (-12 & -16 only)\*

\*H470 with black cover only (2Q 2006)

Assembled with:

ET4000,  
T-440-1 (-12 & -16 only)

## 6SP Hose Ends

For Use with Hose:

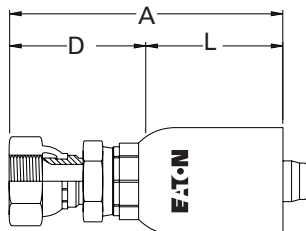
H470 (-20, -24, -32 only)\*  
H485 (-20 & -24 only),

\*H470 with black cover only (2Q 2006)

Assembled with:

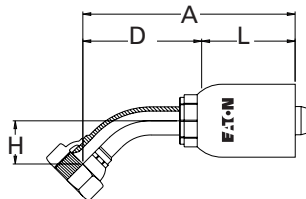
ET4000

### SAE 37° (JIC) Swivel Straight



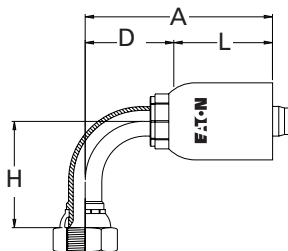
FITTING PART NUMBER	THREAD	HOSE SIZE	A		D		INSERTION LENGTH L		H	
			inch	mm	inch	mm	inch	mm	inch	mm
<b>SAE 37° (JIC) Swivel, straight</b>										
4SP12W-612	1 1/16-12	-12	4.10	104.2	2.33	59.2	1.77	45.0		
4SP12W-616	1 5/16-12	-12	4.20	106.6	2.43	61.6	1.77	45.0		
4SP16W-616	1 5/16-12	-16	5.19	131.8	2.63	66.8	2.56	65.0		
4SP16W-620	1 5/8-12	-16	5.26	133.7	2.70	68.7	2.56	65.0		
4SP20W-620	1 5/8-12	-20	5.89	149.7	2.94	74.7	2.95	75.0		
6SP20W-620	1 5/8-12	-20	5.89	149.7	2.94	74.7	2.95	75.0		
4SP20W-624	1 7/8-12	-20	6.59	167.5	3.64	92.5	2.95	75.0		
6SP20W-624	1 7/8-12	-20	6.59	167.5	3.64	92.5	2.95	75.0		
4SP24W-624	1 7/8-12	-24	6.75	171.5	3.68	93.5	3.07	78.0		
6SP24W-624	1 7/8-12	-24	6.75	171.5	3.68	93.5	3.07	78.0		
4SP32W-632	2 1/2-12	-32	7.32	186.0	4.25	108.0	3.07	78.0		
6SP32W-632	2 1/2-12	-32	7.32	186.0	4.25	108.0	3.07	78.0		

### SAE 37° (JIC) Swivel 45° Elbow



<b>SAE 37° (JIC) Swivel, 45° elbow</b>										
4SP12W-692	1 1/16-12	-12	4.80	121.9	3.03	76.9	1.77	45.0	1.06	27.0
4SP12W-696	1 5/16-12	-12	5.25	133.4	3.48	88.4	1.77	45.0	1.30	33.0
4SP16W-696	1 5/16-12	-16	6.25	158.6	3.69	93.6	2.56	65.0	1.30	33.0
4SP16W-697	1 5/8-12	-16	6.70	170.2	4.14	105.2	2.56	65.0	1.46	37.0
4SP20W-697	1 5/8-12	-20	7.33	186.2	4.38	111.2	2.95	75.0	1.46	37.0
6SP20W-697	1 5/8-12	-20	7.33	186.2	4.38	111.2	2.95	75.0	1.46	37.0
4SP24W-698	1 7/8-12	-24	8.20	208.2	5.13	130.2	3.07	78.0	1.69	43.0
6SP24W-698	1 7/8-12	-24	8.20	208.2	5.13	130.2	3.07	78.0	1.69	43.0

### SAE 37° (JIC) Swivel 90° Elbow



<b>SAE 37° (JIC) Swivel, 90° elbow</b>										
4SP12W-652	1 1/16-12	-12	4.51	114.5	2.74	69.5	1.77	45.0	2.28	58.0
4SP12W-656	1 5/16-12	-12	4.94	125.6	3.17	80.6	1.77	45.0	2.80	71.0
4SP16W-656	1 5/16-12	-16	5.94	150.8	3.38	85.8	2.56	65.0	2.80	71.0
4SP16W-657	1 5/8-12	-16	6.45	163.9	3.89	98.9	2.56	65.0	3.23	82.0
4SP20W-657	1 5/8-12	-20	7.08	179.9	4.13	104.9	2.95	75.0	3.23	82.0
6SP20W-677	1 5/8-12	-20	7.08	179.9	4.13	104.9	2.95	75.0	3.23	82.0
4SP24W-658	1 7/8-12	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0
6SP24W-678	1 7/8-12	-24	8.07	205.1	5.00	127.1	3.07	78.0	4.09	104.0