



## Valves, Fittings and Tubing for Sour Gas Applications Pressures to 30,000 psi (2,070 bar)

**MAXIMATOR** has been designing and manufacturing high pressure equipment for more than thirty years and has a worldwide reputation for quality and reliability, backed by one of the best service organizations in the industry.

### Oil & Gas Products feature:

- ▶ Rising stem design, both solid and 2piece configuration are available.
- ▶ All pressure-containing materials comply with the requirements of NACE MR0175.
- ▶ Annealed 316 L (1.4404) wetted parts for excellent corrosion resistance.
- ▶ Metal-to-metal seating achieves bubble-tight shut-off, longer stem and seat life, greater durability for repeated open and close cycles.
- ▶ PTFE and carbon packing with metal back-up rings offers reliable stem to body sealing.
- ▶ Safety weep holes for all pressure connections and packing area.
- ▶ Six different valve body patterns, with choice of vee or regulating type stem tip.

**MAXIMATOR** offers a complete line of high pressure fittings, tubing, check valves and line filters for standard oil field service where H<sub>2</sub>S is present. All high pressure valves and fittings use the high pressure style connection.

**Note:** When selecting multiple items, the pressure rating would be that of the lowest rated component.

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# MAXIMATOR®

## High Pressure Valves for Sour Gas Applications

Pressures to 22,500 psi (1,550 bar)



**MAXIMATOR Sour Gas Valves** are designed for oil and gas service where H<sub>2</sub>S is present. All pressure containing components are made from annealed 316 stainless steel material in compliance with NACE MR0175. These needle valves with metal to metal seats have a high level of safety and reliability under harsh operating conditions. These valves may be used both with gases and liquids.

Traceability is ensured through extensively documented data (batch number, maximum pressure, material number, type designation). All Sour Gas components are supplied with collars and glands unless otherwise specified.

### Ordering Information

Typical catalog number: **22V4H071-SOG**

22V	4H	07	1	SOG
<b>Valve Series</b>	<b>O.D. Tube Size</b>	<b>Stem Type</b>	<b>Body Pattern</b>	<b>SOG – Sour Gas</b>
22V	4H – 1/4" 6H – 3/8" 9H – 9/16"	00 – One piece rotating Vee stem 01 – One piece rotating Regulating stem 07 – non rotating Vee stem (on-off service) 08 – non-rotating Regulating stem (tapered tip for regulating and shutoff) 80 – One piece Vee stem with replaceable seat 81 – One piece Regulating stem with replaceable seat	1 – two-way straight 2 – two-way angle 3 – three-way, two on pressure 4 – three-way, one on pressure 5 – three-way, two-stem manifold	<b>SOGWO – Sour Gas without Glands &amp; Collars</b>

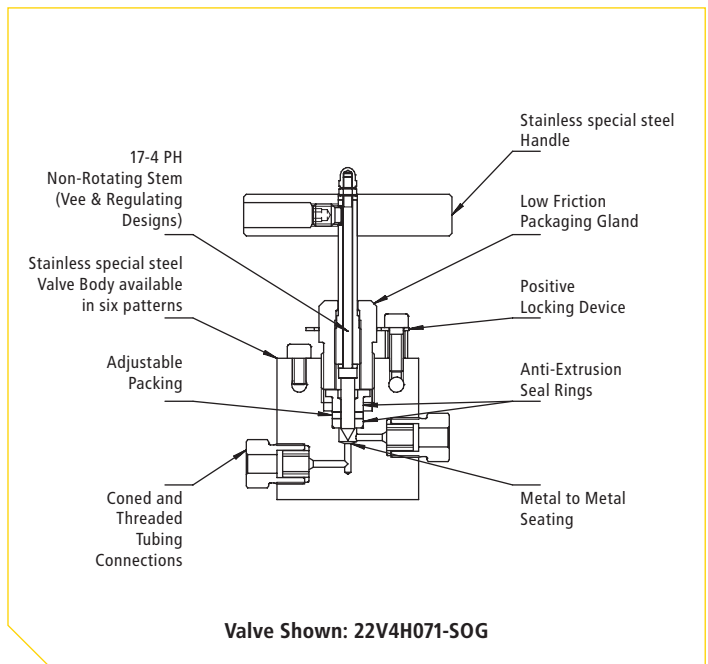
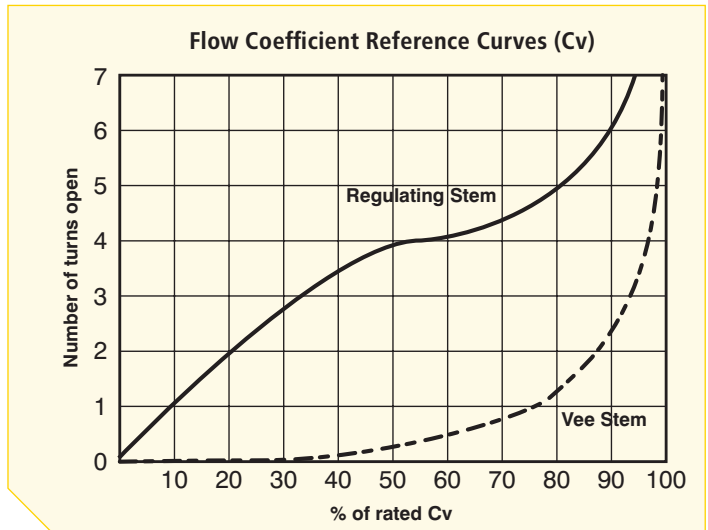
### Repair Kits

Consult your **MAXIMATOR** representative for repair kits and valve bodies. Refer to the Tools and Installation section for proper maintenance procedures.

O.D. Size in. (mm)	Connection Type	Orifice Size in. (mm)	Rated Cv*	Pressure/Temp. Rating psi @ R.T. ** (bar)
1/4 (6.35)	4HF	0.094 (2.3)	0.12	22,500 (1,550)
3/8 (9.53)	6HF	0.125 (3.2)	0.23	22,500 (1,550)
9/16 (14.3)	9HF	0.125 (3.2)	0.33	22,500 (1,550)

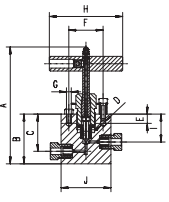
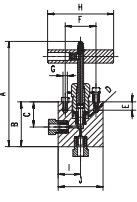
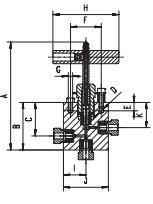
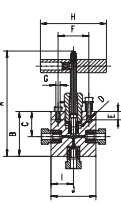
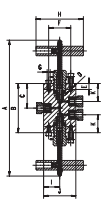
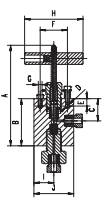
\* Cv valves shown are for 2-way straight pattern vee stem valves. For 2-way angle patterns, increase the Cv value by 50%.

\*\* See page 2 in the Technical Section for Pressure/Temperature Rating Chart.



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## High Pressure Valves for Sour Gas Applications Pressures to 22,500 psi (1,550 bar)

Valve Pattern	Catalog Number	Stem Type	O.D. Tube in.	Orifice in. (mm.)	Dimensions in. (mm)										Valve Panel Hole	Block Thickness
					A	B	C	D	E	F	H	I	J	K		
<b>2-Way Straight</b>																
	22V4H001-SOG	Vee	1/4	0.094	4.96	2.01	1.50	0.22	0.37	1.38	2.95	1.12	2.01		1.00	1.02
	22V4H081-SOG	Reg		(2.3)	(126)	(51)	(38)	(5.6)	(9.5)	(35)	(75)	(28.5)	(51)		(25.4)	(25.9)
	22V6H001-SOG	Vee	3/8	0.125	4.96	2.01	1.50	0.22	0.37	1.38	2.95	1.12	2.01		1.00	1.02
	22V6H081-SOG	Reg		(3.2)	(126)	(51)	(38)	(5.6)	(9.5)	(35)	(75)	(28.5)	(51)		(25.4)	(25.9)
	22V9H001-SOG	Vee	9/16	0.125	5.00	2.44	1.56	0.22	0.37	1.38	2.95	1.12	2.64		1.00	1.54
	22V9H081-SOG	Reg		(3.2)	(127)	(62)	(39.6)	(5.6)	(9.5)	(35)	(75)	(28.5)	(57)		(25.4)	(39.1)
<b>2-Way Angle</b>																
	22V4H002-SOG	Vee	1/4	0.094	4.96	2.01	1.12	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	22V4H082-SOG	Reg		(2.3)	(126)	(51)	(28.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	22V6H002-SOG	Vee	3/8	0.125	4.78	2.20	1.10	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	22V6H082-SOG	Reg		(3.2)	(121.5)	(56)	(28)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	22V9H002-SOG	Vee	9/16	0.125	5.00	2.44	1.12	0.22	0.37	1.38	2.95	1.32	2.64		1.00	1.54
	22V9H082-SOG	Reg		(3.2)	(127)	(62)	(28.5)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)		(25.4)	(39.1)
<b>3-Way / 2 on Pressure</b>																
	22V4H003-SOG	Vee	1/4	0.094	4.69	2.13	1.50	0.22	0.37	1.38	2.95	1.00	2.01	1.12	1.00	1.02
	22V4H083-SOG	Reg		(2.3)	(119.1)	(54.1)	(38)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(28.5)	(25.4)	(25.9)
	22V6H003-SOG	Vee	3/8	0.125	5.08	2.50	1.50	0.22	0.37	1.38	2.95	1.00	2.01	1.12	1.00	1.02
	22V6H083-SOG	Reg		(3.2)	(129)	(63.5)	(38)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(28.5)	(25.4)	(25.9)
	22V9H003-SOG	Vee	9/16	0.125	5.45	2.87	1.56	0.22	0.37	1.38	2.95	1.32	2.64	1.12	1.00	1.54
	22V9H083-SOG	Reg		(3.2)	(138.5)	(72.9)	(39.6)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)	(28.5)	(25.4)	(39.1)
<b>3-Way / 1 on Pressure</b>																
	22V4H004-SOG	Vee	1/4	0.094	4.96	2.01	1.12	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	22V4H084-SOG	Reg		(2.3)	(126)	(51)	(28.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	22V6H004-SOG	Vee	3/8	0.125	4.76	2.20	1.12	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	22V6H084-SOG	Reg		(3.2)	(121)	(56)	(28.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	22V9H004-SOG	Vee	9/16	0.125	5.00	2.44	1.12	0.22	0.37	1.38	2.95	1.32	2.64		1.00	1.54
	22V9H084-SOG	Reg		(3.2)	(127)	(62)	(28.5)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)		(25.4)	(39.1)
<b>3-Way / 2-Stem Manifold</b>																
	22V4H005-SOG	Vee	1/4	0.094	8.23	3.07	1.54	0.22	0.37	1.38	2.95	1.00	2.01	1.12	1.00	1.02
	22V4H085-SOG	Reg		(2.3)	(209)	(78)	(39.1)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(28.5)	(25.4)	(25.9)
	22V6H005-SOG	Vee	3/8	0.125	8.39	3.25	1.61	0.22	0.37	1.38	2.95	1.00	2.01	1.12	1.00	1.02
	22V6H085-SOG	Reg		(3.2)	(213)	(82.5)	(40.9)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(28.5)	(25.4)	(25.9)
	22V9H005-SOG	Vee	9/16	0.125	8.90	3.74	1.88	0.22	0.37	1.38	2.95	1.32	2.64	1.12	1.00	1.54
	22V9H085-SOG	Reg		(3.2)	(226)	(95)	(47.8)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)	(28.5)	(25.4)	(39.1)
<b>2-Way Angle / Replaceable Seat</b>																
	22V4H802-SOG	Vee	1/4	0.094	4.96	2.38	1.12	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	22V4H882-SOG	Reg		(2.3)	(126)	(60.5)	(28.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	22V6H802-SOG	Vee	3/8	0.125	4.96	2.38	1.12	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	22V6H882-SOG	Reg		(3.2)	(126)	(60.5)	(28.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	22V9H802-SOG	Vee	9/16	0.125	5.00	2.44	1.18	0.22	0.37	1.38	2.95	1.32	2.64		1.00	1.54
	22V9H882-SOG	Reg		(3.2)	(127)	(62)	(30)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)		(25.4)	(39.1)

G - Panel mounting screw thread size 10-24 UNC (screw included).  
All dimensions are for reference only and subject to change.

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## High Pressure Valves for Sour Gas Applications

Pressures to 30,000 psi (2,070 bar)



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Traceability is ensured through extensively documented data (batch number, maximum pressure, material number, type designation). All Sour Gas components are supplied with collars and glands unless otherwise specified.

### Ordering Information

Typical catalog number: **30V4H071-SOG**

30V	4H	07	1	SOG
<b>Valve Series</b>	<b>O.D. Tube Size</b>	<b>Stem Type</b>	<b>Body Pattern</b>	<b>SOG – Sour Gas</b>
30V	4H – 1/4" 6H – 3/8" 9H – 9/16"	00 – One piece rotating Vee stem 01 – One piece rotating Regulating stem 07 – non rotating Vee stem (on-off service) 08 – non-rotating Regulating stem (tapered tip for regulating and shutoff) 80 – One piece Vee stem with replaceable seat 81 – One piece Regulating stem with replaceable seat	1 – two-way straight 2 – two-way angle 3 – three-way, two on pressure 4 – three-way, one on pressure 5 – three-way, two-stem manifold	<b>SOGWO – Sour Gas without Glands &amp; Collars</b>

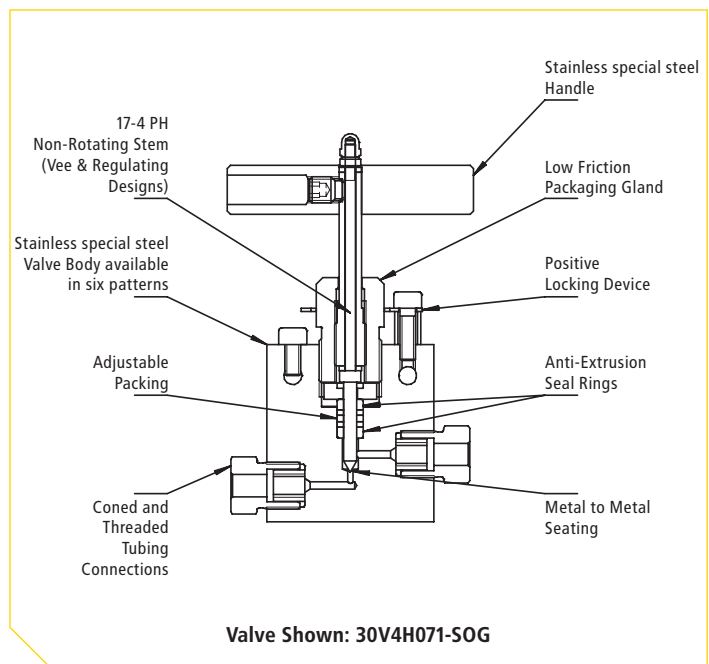
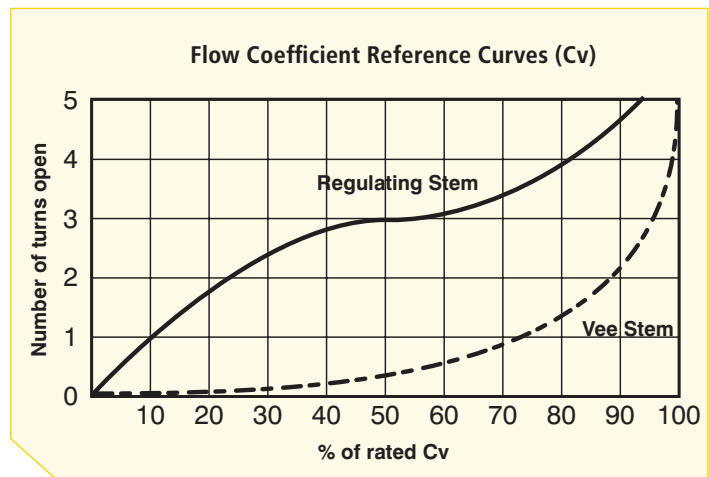
### Repair Kits

Consult your **MAXIMATOR** representative for repair kits and valve bodies. Refer to the Tools and Installation section for proper maintenance procedures.

O.D. Size in. (mm)	Connection Type	Orifice Size in. (mm)	Rated Cv*	Pressure/Temp. Rating psi @ R.T. ** (bar)
1/4 (6.35)	4HF	0.062 (1.6)	0.08	30,000 (2,070)
3/8 (9.53)	6HF	0.062 (1.6)	0.09	30,000 (2,070)
9/16 (14.3)	9HF	0.078 (2.0)	0.14	30,000 (2,070)

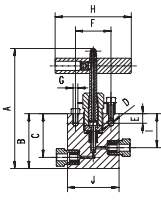
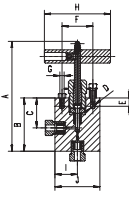
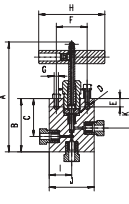
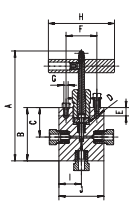
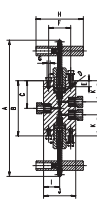
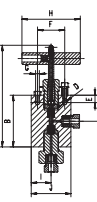
\* Cv valves shown are for 2-way straight pattern vee stem valves. For 2-way angle patterns, increase the Cv value by 50%.

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## High Pressure Valves for Sour Gas Applications Pressures to 30,000 psi (2,070 bar)

Valve Pattern	Catalog Number	Stem Type	O.D. Tube in.	Orifice in. (mm.)	Dimensions in. (mm)										Valve Panel Hole	Block Thickness
					A	B	C	D	E	F	H	I	J	K		
<b>2-Way Straight</b>																
	30V4H001-SOG	Vee	1/4	0.062	4.67	2.13	1.69	0.22	0.37	1.38	2.95	1.32	2.01		1.00	1.02
	30V4H081-SOG	Reg		(1.6)	(118.6)	(54.1)	(43)	(5.6)	(9.5)	(35)	(75)	(33.5)	(51)		(25.4)	(25.9)
	30V6H001-SOG	Vee	3/8	0.062	4.80	2.24	1.69	0.22	0.37	1.38	2.95	1.32	2.01		1.00	1.02
	30V6H081-SOG	Reg		(1.6)	(122)	(56.9)	(43)	(5.6)	(9.5)	(35)	(75)	(33.5)	(51)		(25.4)	(25.9)
	30V9H001-SOG	Vee	9/16	0.078	5.04	2.50	1.75	0.22	0.37	1.38	2.95	1.30	2.64		1.00	1.54
	30V9H081-SOG	Reg		(2)	(128)	(63.5)	(44.5)	(5.6)	(9.5)	(35)	(75)	(33)	(57)		(25.4)	(39.1)
<b>2-Way Angle</b>																
	30V4H002-SOG	Vee	1/4	0.062	4.96	2.38	1.34	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	30V4H082-SOG	Reg		(1.6)	(126)	(60.5)	(34)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	30V6H002-SOG	Vee	3/8	0.062	5.16	2.62	1.32	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	30V6H082-SOG	Reg		(1.6)	(131)	(66.5)	(33.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	30V9H002-SOG	Vee	9/16	0.078	5.35	2.80	1.32	0.22	0.37	1.38	2.95	1.32	2.64		1.00	1.54
	30V9H082-SOG	Reg		(2)	(136)	(71.1)	(33.5)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)		(25.4)	(39.1)
<b>3-Way / 2 on Pressure</b>																
	30V4H003-SOG	Vee	1/4	0.062	4.96	2.38	1.69	0.22	0.37	1.38	2.95	1.00	2.01	1.32	1.00	1.02
	30V4H083-SOG	Reg		(1.6)	(126)	(60.5)	(43)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(33.5)	(25.4)	(25.9)
	30V6H003-SOG	Vee	3/8	0.062	5.31	2.76	1.69	0.22	0.37	1.38	2.95	1.00	2.01	1.32	1.00	1.02
	30V6H083-SOG	Reg		(1.6)	(134.9)	(70.1)	(43)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(33.5)	(25.4)	(25.9)
	30V9H003-SOG	Vee	9/16	0.078	5.71	3.15	1.75	0.22	0.37	1.38	2.95	1.32	2.64	1.30	1.00	1.54
	30V9H083-SOG	Reg		(2)	(145)	(80)	(44.5)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)	(33)	(25.4)	(39.1)
<b>3-Way / 1 on Pressure</b>																
	30V4H004-SOG	Vee	1/4	0.062	4.96	2.38	1.32	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	30V4H084-SOG	Reg		(1.6)	(126)	(60.5)	(33.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	30V6H004-SOG	Vee	3/8	0.062	5.16	2.62	1.32	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	30V6H084-SOG	Reg		(1.6)	(131)	(66.5)	(33.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	30V9H004-SOG	Vee	9/16	0.078	5.35	2.80	1.32	0.22	0.37	1.38	2.95	1.32	2.64		1.00	1.54
	30V9H084-SOG	Reg		(2)	(136)	(71.1)	(33.5)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)		(25.4)	(39.1)
<b>3-Way / 2-Stem Manifold</b>																
	30V4H005-SOG	Vee	1/4	0.062	8.56	3.44	1.72	0.22	0.37	1.38	2.95	1.00	2.01	1.32	1.00	1.02
	30V4H085-SOG	Reg		(1.6)	(217.4)	(87.4)	(43.7)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(33.5)	(25.4)	(25.9)
	30V6H005-SOG	Vee	3/8	0.062	8.56	3.76	1.89	0.22	0.37	1.38	2.95	1.00	2.01	1.32	1.00	1.02
	30V6H085-SOG	Reg		(1.6)	(217.4)	(95.5)	(48)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)	(33.5)	(25.4)	(25.9)
	30V9H005-SOG	Vee	9/16	0.078	9.25	4.13	2.07	0.22	0.37	1.38	2.95	1.32	2.64	1.30	1.00	1.54
	30V9H085-SOG	Reg		(2)	(235)	(105)	(52.6)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)	(33)	(25.4)	(39.1)
<b>2-Way Angle / Replaceable Seat</b>																
	30V4H802-SOG	Vee	1/4	0.062	5.16	2.62	1.32	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	30V4H882-SOG	Reg		(1.6)	(131)	(66.5)	(33.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	30V6H802-SOG	Vee	3/8	0.062	5.16	2.62	1.32	0.22	0.37	1.38	2.95	1.00	2.01		1.00	1.02
	30V6H882-SOG	Reg		(1.6)	(131)	(66.5)	(33.5)	(5.6)	(9.5)	(35)	(75)	(25.4)	(51)		(25.4)	(25.9)
	30V9H802-SOG	Vee	9/16	0.078	5.16	2.62	1.32	0.22	0.37	1.38	2.95	1.32	2.64		1.00	1.54
	30V9H882-SOG	Reg		(2)	(131)	(66.5)	(33.5)	(5.6)	(9.5)	(35)	(75)	(33.5)	(57)		(25.4)	(39.1)

G - Panel mounting screw thread size 10-24 UNC (screw included).  
All dimensions are for reference only and subject to change.



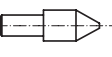

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# MAXIMATOR®

## High Pressure Fittings for Sour Gas Applications

Pressures to 30,000 psi (2,070 bar)

**MAXIMATOR** Sour Gas Fittings are designed for oil and gas services where H<sub>2</sub>S is present. All pressure containing components are made from annealed 316 stainless steel material in compliance with NACE MR0175. All High Pressure fittings are supplied with collars and glands. Mounting holes are standard on all elbows, tees, and crosses.

Tubing Size	Gland	Collar	Plug	Tubing Cap
				
1/4	30G4H-SOG	30C4H-SOG	30P4H-SOG	30TC4H-SOG
3/8	30G6H-SOG	30C6H-SOG	30P6H-SOG	30TC6H-SOG
9/16	30G9H-SOG	30C9H-SOG	30P9H-SOG	30TC9H-SOG

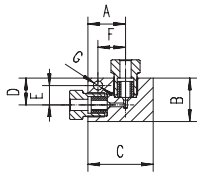


### Connection Components

All high pressure fittings are supplied with glands and collars. Refer to the adjacent chart for ordering any of the connection components individually. When using the plug, the collar is not needed.

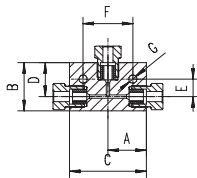
Fitting Pattern	Catalog Number	Connection Type	O.D. Tube Size in.	Orifice in. (mm)	Dimensions in. (mm)							Block Thickness
					A	B	C	D	E	F	G	

### Elbow



<b>30L4H-SOG</b>	4HF	1/4	0.094 (2.3)	0.89 (22.6)	1.02 (25.9)	1.54 (39.1)	0.63 (16)	0.46 (11.7)	0.65 (16.5)	0.22 (5.6)	1.02 (25.9)
<b>30L6H-SOG</b>	6HF	3/8	0.125 (3.2)	1.26 (32)	1.50 (38.1)	2.01 (51)	0.98 (24.9)	0.72 (18.3)	0.69 (18.3)	0.26 (6.6)	1.02 (25.9)
<b>30L9H-SOG</b>	9HF	9/16	0.188 (4.8)	1.89 (48)	1.89 (48)	2.64 (67)	1.10 (28)	0.83 (21.1)	0.94 (23.9)	0.33 (8.4)	1.54 (39.1)

### Tee

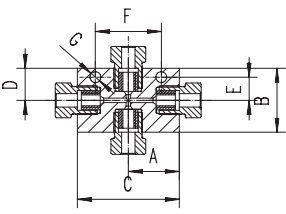
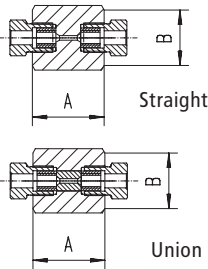
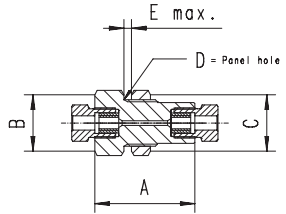


<b>30T4H-SOG</b>	4HF	1/4	0.094 (2.3)	1.00 (25.4)	1.26 (32)	2.01 (51)	0.89 (22.6)	0.46 (11.7)	1.30 (33)	0.22 (5.6)	1.02 (25.9)
<b>30T6H-SOG</b>	6HF	3/8	0.125 (3.2)	1.00 (25.4)	1.57 (39.9)	2.01 (51)	1.06 (26.9)	0.72 (18.3)	1.38 (35)	0.26 (6.6)	1.02 (25.9)
<b>30T9H-SOG</b>	9HF	9/16	0.188 (4.8)	1.32 (33.5)	2.13 (54.1)	2.64 (67)	1.38 (35)	0.83 (21.1)	1.89 (48)	0.33 (8.4)	1.54 (39.1)

See page 2 in the Technical Section for pressure/temperature rating chart.  
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## High Pressure Fittings for Sour Gas Applications Pressures to 30,000 psi (2,070 bar)

Fitting Pattern	Catalog Number	Connection Type	O.D. Tube Size in.	Orifice in. (mm)	Dimensions in. (mm)							Block Thickness
					A	B	C	D	E	F	G	
<b>Cross</b>												
	30X4H-SOG	4HF	1/4	0.094 (2.3)	1.00 (25.4)	1.26 (32)	2.01 (51.1)	0.63 (16)	0.46 (11.7)	1.30 (33)	0.22 (5.6)	1.02 (25.9)
	30X6H-SOG	6HF	3/8	0.125 (3.2)	1.00 (25.4)	2.13 (54.1)	2.01 (51.1)	1.06 (27)	0.72 (18.3)	1.38 (35)	0.26 (6.6)	1.02 (25.9)
	30X9H-SOG	9HF	9/16	0.188 (4.8)	1.32 (33.5)	2.76 (70.1)	2.64 (67)	1.38 (35)	0.83 (21.1)	1.89 (48)	0.33 (8.4)	1.54 (39.1)
<b>Straight Coupling / Union Coupling</b>												
	30F4H-SOG	4HF	1/4	0.094 (2.3)	1.38 (35)	1.06 (27)	Straight Coupling					
	30UF4H-SOG						Union Coupling					
	30F6H-SOG	6HF	3/8	0.125 (3.2)	1.77 (45)	1.06 (27)	Straight Coupling					
	30UF6H-SOG						Union Coupling					
	30F9H-SOG	9HF	9/16	0.188 (4.8)	2.19 (55.6)	1.44 (36.6)	Straight Coupling					
	30UF9H-SOG						Union Coupling					
<b>Bulkhead Coupling</b>												
	30BF4H-SOG	4HF	1/4	0.094 (2.3)	1.89 (48)	1.06 (27)	1.06 (27)	0.94 (23.9)	0.16 (4)			
	30BF6H-SOG	6HF	3/8	0.125 (3.2)	2.38 (60.5)	1.44 (36.6)	1.44 (36.6)	1.12 (28.5)	0.35 (8.9)			
	30BF9H-SOG	9HF	9/16	0.188 (4.8)	2.76 (70.1)	1.63 (41.3)	1.63 (41.3)	1.43 (36.3)	0.67 (17)			

See page 2 in the Technical Section for pressure/temperature rating chart.  
All dimensions are for reference only and are subject to change.

# MAXIMATOR®

## High Pressure Tubing for Sour Gas Applications

Pressures to 30,000 psi (2,070 bar)

**MAXIMATOR** Sour Gas Tubing is designed for oil and gas services where H<sub>2</sub>S is present. All tubing is seamless annealed 316 stainless steel material in compliance with NACE MR0175. This tubing is made under strict manufacturing and quality control standards and inspections, with dimensional tolerances to match the requirements of the high pressure coned and threaded connections.



### Tubing Tolerances

Normal Tubing Size in. (mm)	Tolerance O.D. in. (mm)
1/4 (6.35)	0.248 / 0.243 (6.299 / 6.172)
3/8 (9.53)	0.370 / 0.365 (9.398 / 9.271)
9/16 (14.29)	0.557 / 0.552 (14.148 / 14.021)

Catalog Number	Tube Material	Fits Connection Type	Tube Size in. (mm)		Working Pressure psi (bar)				
			O.D.	I.D.	-325 to 100°F (-198°C to 57°C)	200°F (93°C)	400°F (204°C)	600°F (315°C)	800°F (426°C)
30TU4H-316-SOG	316SS	4HF	1/4 (6.35)	0.083 (2.11)	30,000 (2,070)	27,000 (1,850)	24,900 (1,700)	22,800 (1,600)	21,600 (1,500)
30TU6H-316-SOG	316SS	6HF	3/8 (9.53)	0.125 (3.20)	30,000 (2,070)	27,000 (1,850)	24,900 (1,700)	22,800 (1,600)	21,600 (1,500)
30TU9H-316-SOG	316SS	9HF	9/16 (14.29)	0.188 (4.77)	30,000 (2,070)	27,000 (1,850)	24,900 (1,700)	22,800 (1,600)	21,600 (1,500)

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## Coned and Threaded Nipples for Sour Gas Applications

Pressures to 30,000 psi (2,070 bar)



**MAXIMATOR** offers a line of coned and threaded high pressure tube nipples in a variety of lengths for all standard tube sizes.

The coned and threaded high pressure tube nipples are available in annealed 316 stainless steel. See chart below for ordering information.

Special length coned and threaded nipples are available upon request. Consult **MAXIMATOR** for availability and price.

Catalog Numbers are 316 Stainless Steel material							Fits Connection Type	Tube Size in. (mm)		Working Pressure at 100°F psi (mm)
2.75" (69.85) Length	3" (76.2) Length	4" (101.6) Length	6" (152.4) Length	8" (203.2) Length	10" (254) Length	12" (304.8) Length		O.D.	I.D.	
<b>30N4H-2.75-316-SOG</b>	<b>30N4H-3-316-SOG</b>	<b>30N4H-4-316-SOG</b>	<b>30N4H-6-316-SOG</b>	<b>30N4H-8-316-SOG</b>	<b>30N4H-10-316-SOG</b>	<b>30N4H-12-316-SOG</b>	4HF	1/4	0.083 (2.11)	30,000 (2,070)
	<b>30N6H-3-316-SOG</b>	<b>30N6H-4-316-SOG</b>	<b>30N6H-6-316-SOG</b>	<b>30N6H-8-316-SOG</b>	<b>30N6H-10-316-SOG</b>	<b>30N6H-12-316-SOG</b>	6HF	3/8	0.125 (3.17)	30,000 (2,070)
		<b>30N9H-4-316-SOG</b>	<b>30N9H-6-316-SOG</b>	<b>30N9H-8-316-SOG</b>	<b>30N9H-10-316-SOG</b>	<b>30N9H-12-316-SOG</b>	9HF	9/16	0.188 (4.77)	30,000 (2,070)

*Standard nipples are not supplied with glands and collars, see Fittings on page 6 for these components.*

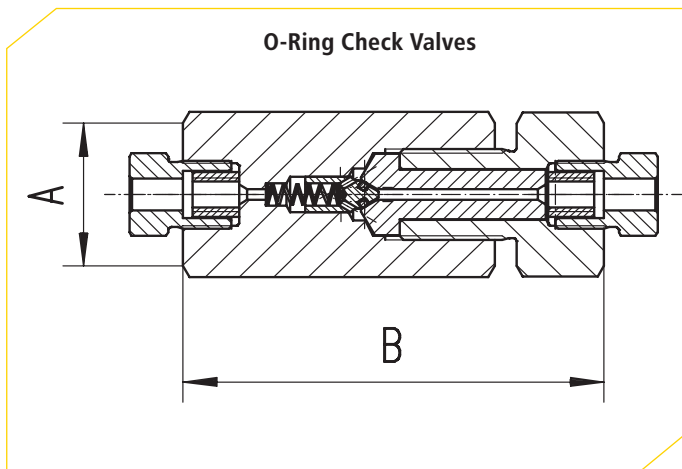
*See adjacent Tubing page 8, for pressure/temperature rating chart.*

*All dimensions are for reference only and subject to change.*

# MAXIMATOR®

## Check Valves for Sour Gas Applications

Pressures to 30,000 psi (2,070 bar)



### O-Ring Check Valves

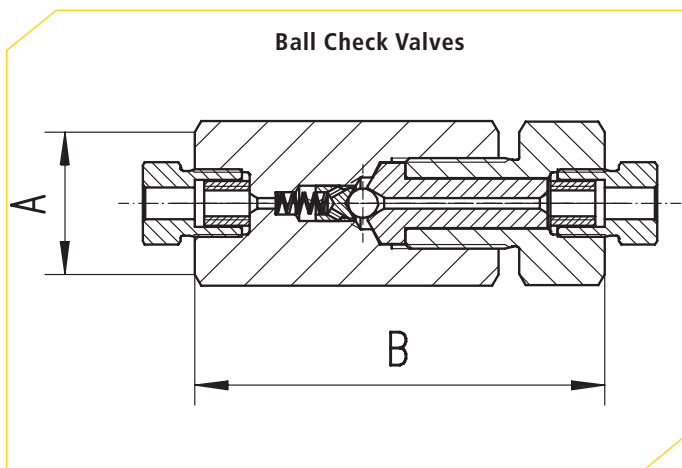
**MAXIMATOR** o-ring check valves provide high quality directional flow control and bubble tight shutoff for liquids and gases. These check valves are not to be used as a relief device. The opening pressure of the O-Ring Check Valves is approx. 10 psi (1.5 bar).

#### Materials:

Body, cover, poppet, cover gland: annealed 316 stainless steel

Spring: Inconel X-750

O-ring: Viton "A" (-4°F to 392°F)



### Ball Check Valves

**MAXIMATOR** ball check valves prevent reverse flow where bubble tight shutoff is not mandatory. These check valves are designed to operate to 660°F. These check valves are not to be used as a relief device. The opening pressure of the Ball Check Valves is approx. 10 psi (1.5 bar).

#### Materials:

Body, cover, poppet, cover gland: annealed 316 stainless steel

Ball: annealed 316 stainless steel

Spring: Inconel X-750

Catalog Number	Connection Type	Pressure Rating psi (bar)	Orifice in. (mm)	Rated (Cv)	Dimensions in. (mm)	
					A (Hex.)	B

O-Ring Check Valves							
300C4H-SOG	4HF	30,000 (2,070)	0.094 (2.3)	0.15	1.19 (30.2)	3.40 (86.4)	
300C6H-SOG	6HF	30,000 (2,070)	0.125 (3.2)	0.28	1.19 (30.2)	3.81 (96.8)	
300C9H-SOG	9HF	30,000 (2,070)	0.188 (4.8)	0.63	1.63 (41.4)	4.61 (117.1)	

Ball Check Valves							
30BC4H-SOG	4HF	30,000 (2,070)	0.094 (2.3)	0.15	1.19 (30.2)	3.40 (86.4)	
30BC6H-SOG	6HF	30,000 (2,070)	0.125 (3.2)	0.28	1.19 (30.2)	3.81 (96.8)	
30BC9H-SOG	9HF	30,000 (2,070)	0.188 (4.8)	0.63	1.63 (41.3)	4.61 (117.1)	

**CAUTION:** FREQUENT INSPECTIONS of O-Rings are necessary to ensure proper service of the check valve. O-Rings have shown satisfactory service life in testing, however different service conditions may lead to variations in cycle and shelf life.

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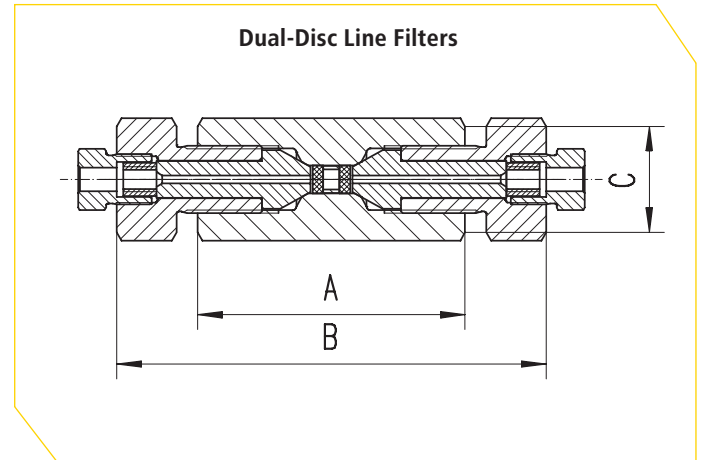
## Line Filters for Sour Gas Applications (2,070 bar)

### Dual-Disc Line Filters

MAXIMATOR dual-disc line filters are used to filter process fluids in high pressure systems. This design helps remove the large particles first through a coarse primary disc, which then allows a secondary disc to provide a smaller micron filtration. These filter elements are designed to withstand pressure surges without cracking, flaking, or rupturing. Filter elements come standard in the following micron sizes: 5/8, 8/30, 30/56 (secondary/primary). Filters are rated for temperatures -60°F to 660°F (-50°C to 350°C). All line filters come with glands and collars.

#### Materials

Body, cover, cover gland: annealed 316 series stainless steel  
Element: 300 series stainless steel

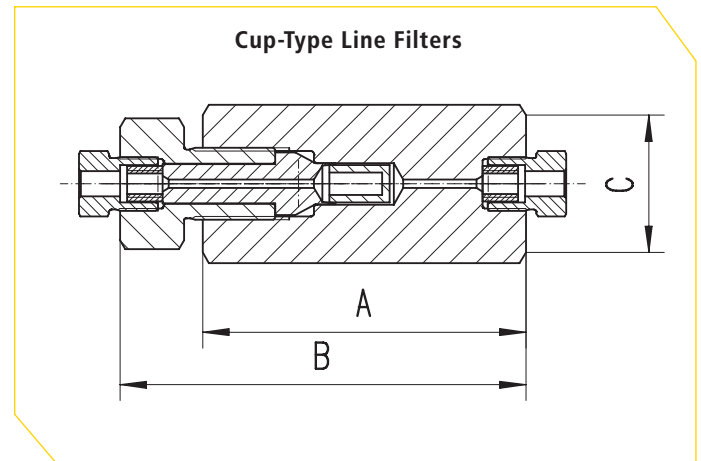


### Cup-Type Line Filters

MAXIMATOR cup-type line filters are used when maximum filtration surface area and a single micron size element is preferred. This design increases the filter area as much as 6 times the area of the disc type filter, and will permit higher flow rates with a lower pressure drop, and longer intervals between element changes. Filter elements come standard in 5, 30, or 56 micron sizes and are easily replaced. Filters are rated for temperatures -60°F to 660°F (-50°C to 350°C). All line filters come with glands and collars.

#### Materials:

Body, cover, cover gland: annealed 316 series stainless steel  
Element: 300 series stainless steel



Catalog Number	Pressure Rating psi (bar)	Orifice in. (mm)	Micron Size	Connection Type	Filter Element Areas in. <sup>2</sup> (mm <sup>2</sup> )	Dimensions in. (mm)		
						A	B	C (Hex.)
<b>Dual-Disc Line Filters</b>								
30DF4H-5/8-SOG	30,000 (2,070)	0.094 (2.3)	5/8	4HF	0.07 (50)	2.99 (76)	4.8 (121.9)	1.19 (30.2)
30DF4H-8/30-SOG			8/30					
30DF4H-30/56-SOG			30/56					
30DF6H-5/8-SOG	30,000 (2,070)	0.125 (3.2)	5/8	6HF	0.07 (50)	2.99 (76)	5.29 (134.4)	1.19 (30.2)
30DF6H-8/30-SOG			8/30					
30DF6H-30/56-SOG			30/56					
30DF9H-5/8-SOG	30,000 (2,070)	0.188 (4.8)	5/8	9HF	0.15 (95)	3.39 (86.1)	5.75 (146)	1.44 (36.6)
30DF9H-8/30-SOG			8/30					
30DF9H-30/56-SOG			30/56					
<b>Cup-Type Line Filters</b>								
30CF4H-5-SOG	30,000 (2,070)	0.094 (2.3)	5	4HF	0.82 (530)	3.39 (86.1)	4.25 (108)	1.44 (36.6)
30CF4H-30-SOG			30					
30CF4H-56-SOG			56					
30CF6H-5-SOG	30,000 (2,070)	0.125 (3.2)	5	6HF	0.82 (530)	3.39 (86.1)	4.44 (112.8)	1.44 (36.6)
30CF6H-30-SOG			30					
30CF6H-56-SOG			56					
30CF9H-5-SOG	30,000 (2,070)	0.188 (4.8)	5	9HF	0.82 (530)	4.06 (103.1)	5.28 (134.1)	1.63 (41.3)
30CF9H-30-SOG			30					
30CF9H-56-SOG			56					

*It is recommended that all fluids entering a high pressure system be thoroughly cleaned. Maximator filters are designed to remove small amounts of process particles. Pressure differential should not exceed 1000 psi across the filter elements.*

*All dimensions for reference only and are subject of change.*

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# MAXIMATOR®

## Sour Gas Adapters and Couplings

### Adapters (male to female)

#### Adapters (male to female)

MAXIMATOR sour gas adapters and couplings are designed to join a variety of pressure connections where H<sub>2</sub>S is present. All adapters are made of annealed 316 stainless steel material that meets NACE MR0175 specification.

#### Instructions

Find the male connection you want on the adapter in the "A" column and the female connection of the adapter in the "B" column. At the intersection of the two columns is the appropriate catalog number.



Pressure Series	Male Connection "A"			Female Connection "B"					
	Tube Size in.	Connection Type	Maximum Pressure psi (bar)*	Female High Pressure 30,000 psi (2,070 bar)			Female Pipe 10,000 psi (700 bar)		
				1/4" 4HF	3/8" 6HF	9/16" 9HF	1/8" FNPT	1/4" FNPT	3/8" FNPT
Male High	1/4	4HM	30,000 (2,070)		30A4H6H-SOG	30A4H9H-SOG	10A4H2P-SOG	10A4H4P-SOG	10A4H6P-SOG
	3/8	6HM	30,000 (2,070)	30A6H4H-SOG		30A6H9H-SOG	10A6H2P-SOG	10A6H4P-SOG	10A6H6P-SOG
	9/16	9HM	30,000 (2,070)	30A9H4H-SOG	30A9H6H-SOG		10A9H2P-SOG	10A9H4P-SOG	10A9H6P-SOG
Male Pipe	1/8	MNPT	10,000 (700)	10A2P4H-SOG	10A2P6H-SOG	10A2P9H-SOG			
	1/4	MNPT	10,000 (700)	10A4P4H-SOG	10A4P6H-SOG	10A4P9H-SOG			
	3/8	MNPT	10,000 (700)	10A6P4H-SOG	10A6P6H-SOG	10A6P9H-SOG			
	1/2	MNPT	10,000 (700)	10A8P4H-SOG	10A8P6H-SOG	10A8P9H-SOG			
	3/4	MNPT	10,000 (700)	10A12P4H-SOG	10A12P6H-SOG	10A12P9H-SOG			
	1	MNPT	10,000 (700)	10A16P4H-SOG	10A16P6H-SOG	10A16P9H-SOG			
Male British Standard Pipe	1/8	MBSP	10,000 (700)	10A2B4H-SOG	10A2B6H-SOG	10A2B9H-SOG			
	1/4	MBSP	10,000 (700)	10A4B4H-SOG	10A4B6H-SOG	10A4B9H-SOG			
	3/8	MBSP	10,000 (700)	10A6B4H-SOG	10A6B6H-SOG	10A6B9H-SOG			
	1/2	MBSP	10,000 (700)	10A8B4H-SOG	10A8B6H-SOG	10A8B9H-SOG			
	3/4	MBSP	10,000 (700)	10A12B4H-SOG	10A12B6H-SOG	10A12B9H-SOG			
	1	MBSP	10,000 (700)	10A16B4H-SOG	10A16B6H-SOG	10A16B9H-SOG			

\* The pressure rating of any adapter is the value of the lowest rated connection in the fitting. Note: All Maximator adapters come standard in the "one-piece" design style. Adapters with the two piece design are available by adding a suffix -2P after the part numbers listed above. Both designs are identical in length, and are interchangeable with each other.

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# MAXIMATOR®

## Sour Gas Adapters and Couplings

### Couplings and Adapters

#### Couplings (female to female)

MAXIMATOR sour gas adapters and couplings are designed to join a variety of pressure connections where H<sub>2</sub>S is present. All adapters are made of annealed 316 stainless steel material that meets NACE MR0175 specification.



Pressure Series	Female Connection "A"			Female Connection "B"					
	Tube Size in.	Connection Type	Maximum Pressure psi (bar)*	Female High Pressure 30,000 psi (2,070 bar)			Female Pipe 10,000 psi (700 bar)		
				1/4" 4HF	3/8" 6HF	9/16" 9HF	1/8" FNPT	1/4" FNPT	3/8" FNPT
Female High	1/4	4HF	30,000 (2,070)	30F4H-SOG	30F4H6H-SOG	30F4H9H-SOG	10F4H2P-SOG	10F4H4P-SOG	10F4H6P-SOG
	3/8	6HF	30,000 (2,070)		30F6H-SOG	30F6H9H-SOG	10F6H2P-SOG	10F6H4P-SOG	10F6H6P-SOG
	9/16	9HF	30,000 (2,070)			30F9H-SOG	10F9H2P-SOG	10F9H4P-SOG	10F9H6P-SOG

\* The pressure rating of any adapter is the value of the lowest rated connection in the fitting.

#### Adapters (male to male)

MAXIMATOR male to male adapters allow the joining of two different sizes and/or type of tube or pipe female connections.



Pressure Series	Male Connection "A"			Male Connection "B"					
	Tube Size in.	Connection Type	Maximum Pressure psi (bar)*	Male High Pressure 30,000 psi (2,070 bar)			Male Pipe 10,000 psi (700 bar)		
				1/4" 4HF	3/8" 6HF	9/16" 9HF	1/8" FNPT	1/4" FNPT	3/8" FNPT
Male High	1/4	4HM	30,000 (2,070)	30M4H-SOG	30M4H6H-SOG	30M4H9H-SOG	10M4H2P-SOG	10M4H4P-SOG	10M4H6P-SOG
	3/8	6HM	30,000 (2,070)		30M6H-SOG	30M6H9H-SOG	10M6H2P-SOG	10M6H4P-SOG	10M6H6P-SOG
	9/16	9HM	30,000 (2,070)			30M9H-SOG	10M9H2P-SOG	10M9H4P-SOG	10M9H6P-SOG

\* The pressure rating of any adapter is the value of the lowest rated connection in the fitting.

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## Sour Gas Adapters and Couplings (Couplings and Adapters)

		Female Connection "B"								
		Female Pipe 10,000 psi (700 bar)			Female British Standard Pipe 10,000 psi (700 bar)					
		1/2" FNPT	3/4" FNPT	1" FNPT	1/8" FBSP	1/4" FBSP	3/8" FBSP	1/2" FBSP	3/4" FBSP	1" FBSP
	<b>10F4H8P-SOG</b>	<b>10F4H12P-SOG</b>	<b>10F4H16P-SOG</b>	<b>10F4H2B-SOG</b>	<b>10F4H4B-SOG</b>	<b>10F4H6B-SOG</b>	<b>10F4H8B-SOG</b>	<b>10F4H12B-SOG</b>	<b>10F4H16B-SOG</b>	
	<b>10F6H8P-SOG</b>	<b>10F6H12P-SOG</b>	<b>10F6H16P-SOG</b>	<b>10F6H2B-SOG</b>	<b>10F6H4B-SOG</b>	<b>10F6H6B-SOG</b>	<b>10F6H8B-SOG</b>	<b>10F6H12B-SOG</b>	<b>10F6H16B-SOG</b>	
	<b>10F9H8P-SOG</b>	<b>10F9H12P-SOG</b>	<b>10F9H16P-SOG</b>	<b>10F9H2B-SOG</b>	<b>10F9H4B-SOG</b>	<b>10F9H6B-SOG</b>	<b>10F9H8B-SOG</b>	<b>10F9H12B-SOG</b>	<b>10F9H16B-SOG</b>	

\* The pressure rating of any adapter is the value of the lowest rated connection in the fitting.

		Male Connection "B"								
		Male Pipe 10,000 psi (700 bar)			Male British Standard Pipe 10,000 psi (700 bar)					
		1/2" FNPT	3/4" FNPT	1" FNPT	1/8" FBSP	1/4" FBSP	3/8" FBSP	1/2" FBSP	3/4" FBSP	1" FBSP
	<b>10M4H8P-SOG</b>	<b>10M4H12P-SOG</b>	<b>10M4H16P-SOG</b>	<b>10M4H2B-SOG</b>	<b>10M4H4B-SOG</b>	<b>10M4H6B-SOG</b>	<b>10M4H8B-SOG</b>	<b>10M4H12B-SOG</b>	<b>10M4H16B-SOG</b>	
	<b>10M6H8P-SOG</b>	<b>10M6H12P-SOG</b>	<b>10M6H16P-SOG</b>	<b>10M6H2B-SOG</b>	<b>10M6H4B-SOG</b>	<b>10M6H6B-SOG</b>	<b>10M6H8B-SOG</b>	<b>10M6H12B-SOG</b>	<b>10M6H16B-SOG</b>	
	<b>10M9H8P-SOG</b>	<b>10M9H12P-SOG</b>	<b>10M9H16P-SOG</b>	<b>10M9H2B-SOG</b>	<b>10M9H4B-SOG</b>	<b>10M9H6B-SOG</b>	<b>10M9H8B-SOG</b>	<b>10M9H12B-SOG</b>	<b>10M9H16B-SOG</b>	

\* The pressure rating of any adapter is the value of the lowest rated connection in the fitting.

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