



- Magnetic pilot opens fully, instantly, at set pressure with no overpressure required
- Heavy duty design suitable for severe environments
- Stainless steel construction NOT affected by low temperature variations
- Adjustable blowdown pilot design provides adjustment for extremely low blowdown
- Full area bellows provides for high lift and excellent flow
- Vacuum capability

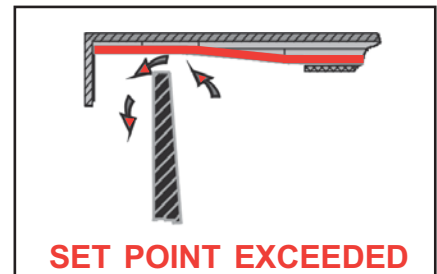
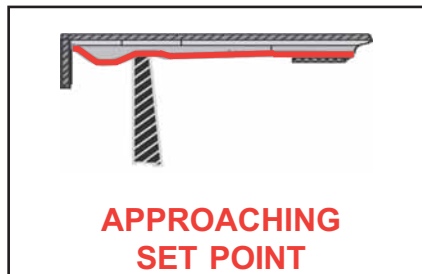
## The Shand & Jurs Model 94630 Pilot Operated Relief Valves (Magnetic Pilot)

The Shand & Jurs Model 94630 Pilot Operated Relief Valves are designed to meet low pressure applications within a relief range from 1.0 psi thru 15 psi. These **Magnavalves** are ideally suited for land or marine use, specifically marine cargo tankers transporting LNG, cryogenic or low temperature liquids.

Available in 2" through 12" sizes, the 94630 provides extreme reliability by utilizing a magnetic pilot design.

The magnetic pilot assures positive pressure relief at set pressure with no overpressure required and resets itself at the preset blowdown.

The main valve consists of a stainless steel bellows, which is not affected by temperature variations as are conventional diaphragm relief valves. The full area bellows provides for high lift and excellent flow characteristics. Provisions are also available for vacuum relief.



Shand & Jurs "Expand-Seal" is a standard feature on all pressure pallet assemblies. This feature significantly reduces leakage. The ballooning effect of the teflon diaphragm effectively seals the valve. The "Expand-Seal" feature ensures less than .5 SCFH of leakage at 95% of the set point.

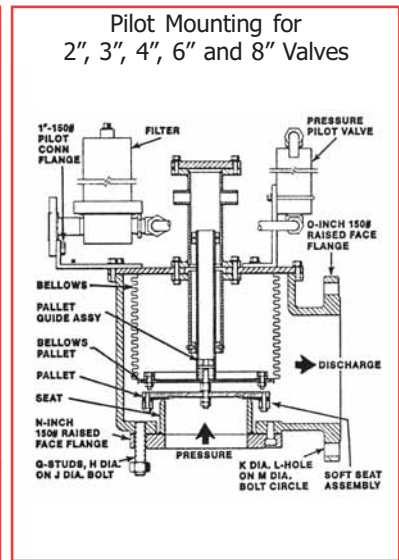
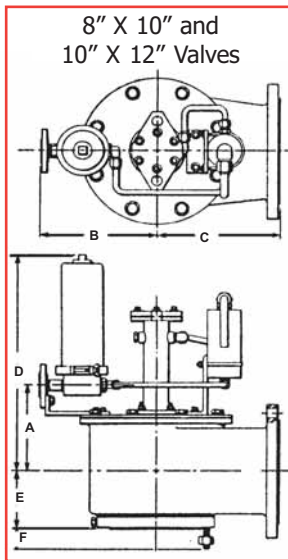
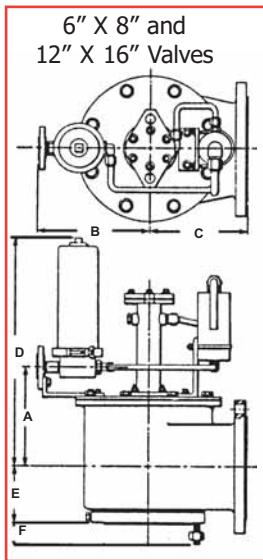
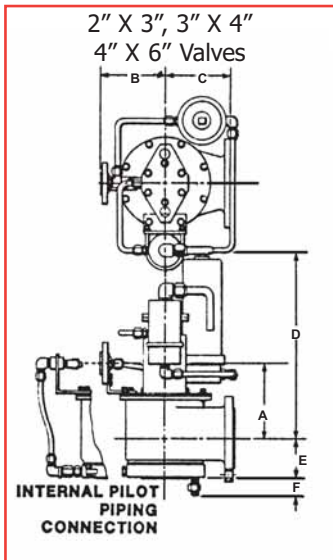
### SPECIFICATIONS:

- Pressure Setting: ..... 1.0 psi to 15 psi
- Accuracy: ..... 1.0 psi to 9.9 psi ± 0.1 psi
- Accuracy: ..... 10.0 psi to 15.0 psi ± 0.2 psi
- Reset Pressure Range:
- External Pilot Valve Supply (1 to 4psi): ..... 0.2 to 0.4 psi less than nominal set pressure
- External Pilot Valve Supply (4 to 15psi): ..... 90%-95% of nominal set pressure
- Internal Pilot Valve Supply (1 to 15psi): ..... 85% to 95% of nominal set pressure
- Standard Blowdown: ..... 5%
- Temperature Range: ..... -300°F to +450°F (-20°F Steel)
- Body Construction: ..... Aluminum, Steel, Stainless Steel
- Bellows: ..... Stainless Steel
- Type of Seal: ..... Soft Seat
- Flange Connection: ..... 150 lb. ANSI, DIN sizes available
- Leakage, Max.: ..... 0.2 SCFH, Soft Seat

\*Vacuum Operation: This relief valve may operate under vacuum conditions, unless the vacuum preventer option is selected. The 94630 may be mounted on top of a specially configured 94110 vacuum relief valve where precise vacuum control is desired. Consult Factory for specific vacuum setting requirements.

Approximate Dimensions in Inches						
Valve Size	A	B	C	D	E	F
2 X 3	8 3/4	6 9/16	6 1/8	23 1/2	3 1/2	1 9/16
3 X 4	8 1/8	6 9/16	7 1/8	23	4 1/8	1 13/16
4 X 6	10 7/8	8 1/8	8 1/4	25 3/4	5 3/8	2
6 X 8	10 3/16	10 11/16	9 3/4	24 1/2	6	3 1/8
8 X 10	12 3/4	11 11/16	13	26 3/4	7 1/8	2 3/16
10 X 12	10 3/16	12 3/8	15 3/8	25 7/8	8 1/8	2 3/16
12 X 16	11 1/2	12 1/16	18 1/2	25 3/4	10 5/16	2 1/4

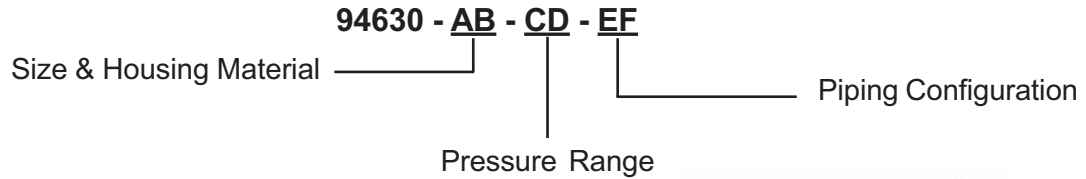
Pressure Flange				Discharge Flange				Approximate Weight
G	H	J	N	K	L	M	O	
4	5/8	4 3/4	2	3/4	4	6	3	90
4	5/8	6	3	3/4	8	7 1/2	4	135
8	5/8	7 1/2	4	7/8	8	9 1/2	6	150
8	3/4	9 1/2	6	7/8	8	11 1/2	8	195
8	3/4	11 3/4	8	1	12	14 1/2	10	245
12	7/8	14 1/2	10	1	12	17	12	375
12	7/8	17	12	1 1/8	16	21 1/4	16	520



All designs subject to change. Certified dimensions and specifications available upon request.

### MODEL NUMBER SELECTION:

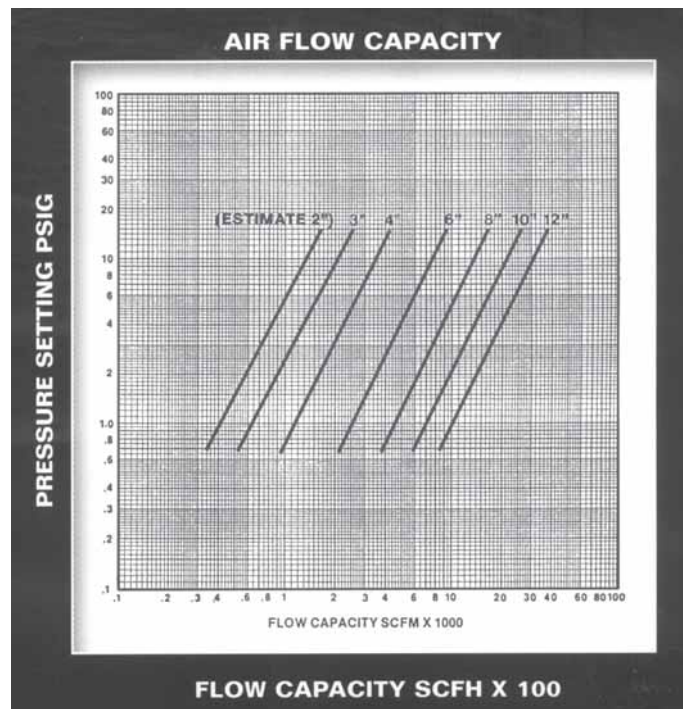
The model number will consist of a base number 94630 followed by three 2 digit numbers which represent the options listed in the following tables.



### ORDERING INFORMATION

Specify:

1. Model 94630 Pilot Operated Relief Valve
2. Type of Product
3. Valve and Inlet and Outlet Size
4. Temperature Range of Product
5. Body Material
6. Set Point
7. Internal or External Connection
8. Need for a Vacuum Preventer
9. Need for a Test Connection



**TABLE (AB) - SIZE/HOUSING MATERIAL**

OPTION #	SIZE	PRESSURE RANGE (PSI)		HOUSING MATERIAL
		MIN	MAX	
03	2" x 3"	1.0	6.0	CAST STEEL
05	2" x 3"	1.0	6.0	316 STAINLESS STEEL
08	2" x 3"	6.1	15.0	CAST STEEL
10	2" x 3"	6.1	15.0	316 STAINLESS STEEL
11	3" x 4"	1.0	6.0	ALUMINUM
13	3" x 4"	1.0	6.0	CAST STEEL
15	3" x 4"	1.0	6.0	316 STAINLESS STEEL
16	3" x 4"	6.1	15.0	ALUMINUM
18	3" x 4"	6.1	15.0	CAST STEEL
20	3" x 4"	6.1	15.0	316 STAINLESS STEEL
21	4" x 6"	1.0	6.0	ALUMINUM
23	4" x 6"	1.0	6.0	CAST STEEL
25	4" x 6"	1.0	6.0	316 STAINLESS STEEL
26	4" x 6"	6.1	15.0	ALUMINUM
28	4" x 6"	6.1	15.0	CAST STEEL
30	4" x 6"	6.1	15.0	316 STAINLESS STEEL
31	6" x 8"	1.0	6.0	ALUMINUM
33	6" x 8"	1.0	6.0	CAST STEEL
35	6" x 8"	1.0	6.0	316 STAINLESS STEEL
36	6" x 8"	6.1	15.0	ALUMINUM
38	6" x 8"	6.1	15.0	CAST STEEL
40	6" x 8"	6.1	15.0	316 STAINLESS STEEL
41	8" x 10"	1.0	6.0	ALUMINUM
43	8" x 10"	1.0	6.0	CAST STEEL
45	8" x 10"	1.0	6.0	316 STAINLESS STEEL
46	8" x 10"	6.1	15.0	ALUMINUM
48	8" x 10"	6.1	15.0	CAST STEEL
50	8" x 10"	6.1	15.0	316 STAINLESS STEEL
51	10" x 12"	1.0	6.0	ALUMINUM
53	10" x 12"	1.0	6.0	CAST STEEL
55	10" x 12"	1.0	6.0	316 STAINLESS STEEL
56	10" x 12"	6.1	15.0	ALUMINUM
58	10" x 12"	6.1	15.0	CAST STEEL
60	10" x 12"	6.1	15.0	316 STAINLESS STEEL
61	12" x 16"	1.0	6.0	ALUMINUM
63	12" x 16"	1.0	6.0	CAST STEEL
65	12" x 16"	1.0	6.0	316 STAINLESS STEEL
66	12" x 16"	6.1	15.0	ALUMINUM
68	12" x 16"	6.1	15.0	CAST STEEL
70	12" x 16"	6.1	15.0	316 STAINLESS STEEL

**TABLE (CD) - PRESSURE RANGE**

OPTION #	PRESSURE RANGE (PSI)
01	0.50 - 1.49
02	1.50 - 2.49
03	2.50 - 6.00
04	6.01 - 10.00
05	10.01 - 15.00

**TABLE (EF) - PIPING CONFIGURATION**

OPTION #	SIZE	PIPING	TEST CONNECTION	VACUUM PREVENTER	
01	2" x 3", 3" x 4" and 4" x 6"	STEEL INTERNAL	NO	NO	
02		STEEL INTERNAL	YES	NO	
04		STEEL INTERNAL	YES	YES	
05		STEEL EXTERNAL	NO	NO	
06		STEEL EXTERNAL	YES	NO	
08		STEEL EXTERNAL	YES	YES	
11		316 STAINLESS STEEL INTERNAL	NO	NO	
12		316 STAINLESS STEEL INTERNAL	YES	NO	
14		316 STAINLESS STEEL INTERNAL	YES	YES	
15		316 STAINLESS STEEL EXTERNAL	NO	NO	
16		316 STAINLESS STEEL EXTERNAL	YES	NO	
18		316 STAINLESS STEEL EXTERNAL	YES	YES	
21		6" x 8", 8" x 10", 10" x 12" and 12" x 16"	STEEL INTERNAL	NO	NO
22			STEEL INTERNAL	YES	NO
24			STEEL INTERNAL	YES	YES
25			STEEL EXTERNAL	NO	NO
26			STEEL EXTERNAL	YES	NO
28			STEEL EXTERNAL	YES	YES
31	316 STAINLESS STEEL INTERNAL		NO	NO	
32	316 STAINLESS STEEL INTERNAL		YES	NO	
34	316 STAINLESS STEEL INTERNAL		YES	YES	
35	316 STAINLESS STEEL EXTERNAL		NO	NO	
36	316 STAINLESS STEEL EXTERNAL		YES	NO	
38	316 STAINLESS STEEL EXTERNAL		YES	YES	