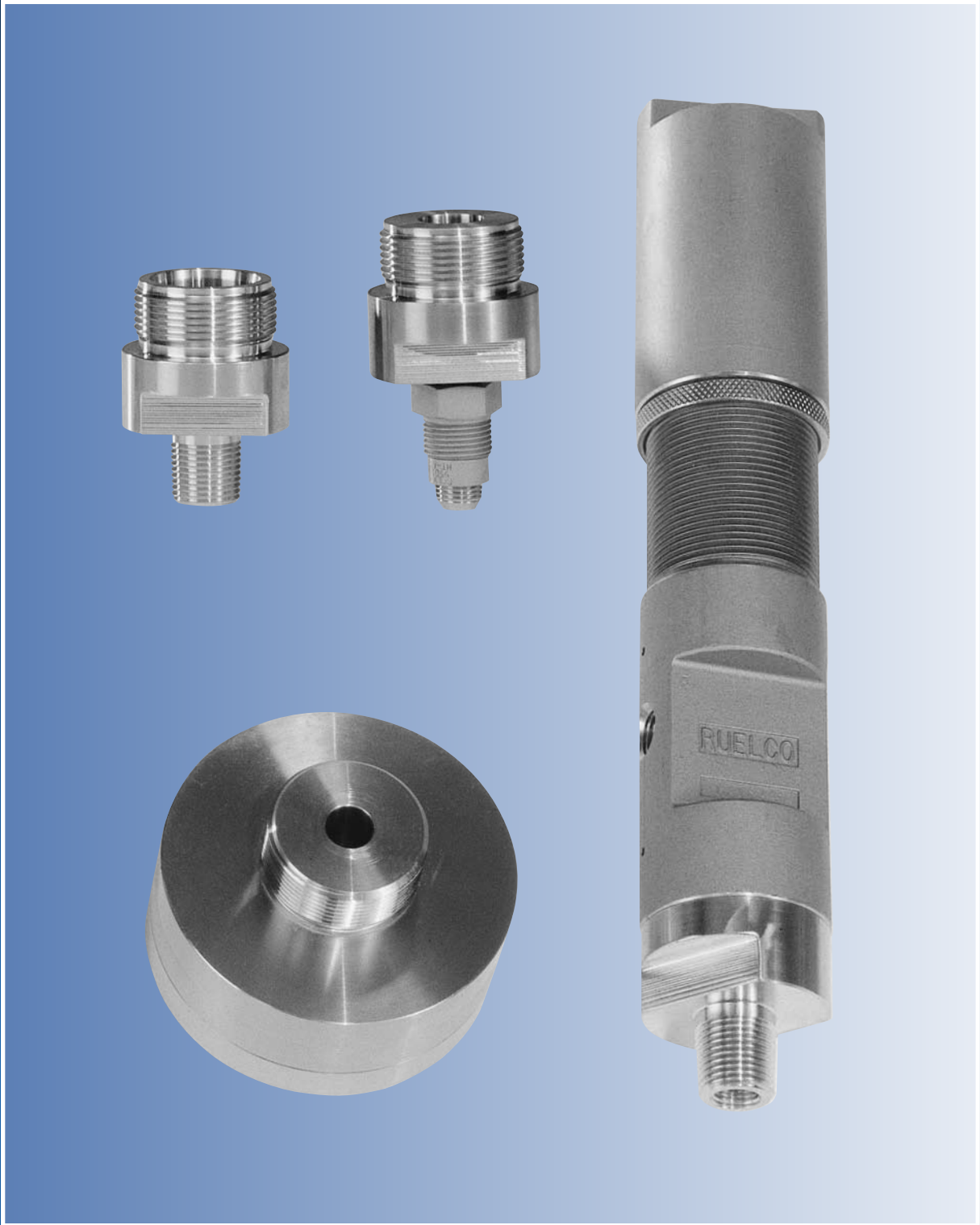


Ruelco



SS-2 High Flow Pressure Switch

Model 4222

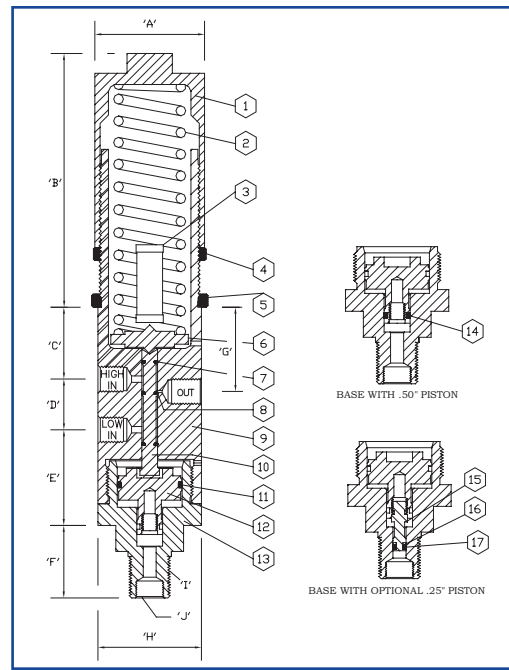
1-800-229-7835
ruelco@ruelco.com

SS-2

High Flow Pneumatic and Hydraulic Pressure Switch

FEATURES

- 316 stainless steel construction (models to N.A.C.E. MR0175 available).
- Standard base range 10-10,000 PSI.
- Operating pressure range from .5 to 20,000 PSI.
- Cv factor of .090.
- Block and bleed 3-way valve.
- Holds constant and accurate set points.
- Designed for 1% plus or minus repeatability on set points.
- Minimum deadband between trip and reset pressure.
- Spring may be replaced with instrument and sensing pressure present in the sensor.
- Vent above sensing piston prevents high pressure from entering instrument supply.
- Optional tamper proof lockout device available.
- Optional indicating scale available (Model 4223).
- ATEX Certified models available.



GENERAL DESCRIPTION:

The Ruelco SS-2 high flow pressure switch is a three way block and bleed valve that is operated by pressure acting on a piston opposing an adjustable spring force. It functions as either a normally closed or normally open valve, depending on through which of the two ports the instrument pressure (either pneumatic or hydraulic) is supplied. The output port is the same for either mode of operation. Pressure applied to the sense port will cause the valve to operate.

Parts List For Pressure Switch Model SS-2

Item	Qty.	Description	Material
1	1	Spring Cap	316L or ASTM-A-351 S.S.
2A	1	Spring (Blue)	ASTM-401
2B	---	Spring (Red)	ASTM-401
2C	---	Spring (Silver)	ASTM-401
2D	---	Spring (Green) optional	Inconel X-750
2E	---	Spring (Yellow) optional	Inconel X-750
2F	---	Spring (Purple) optional	Inconel X-750
3	1	Parts Tube	Acetate Butyrate
4	1	Lock Ring	AISI 316 St. Stl.
5	1	Panel Mnt. Ring (Optional)	AISI 316 St. Stl.
6	1	Spring Plate	AISI 316 St. Stl.
7	2	Shaft O-ring	Viton
8A	1	Center Shaft O-ring	Viton
8B*	1	Center Shaft O-ring	Urethane
9	1	Body	CFM-8M St. Stl.
10	1	Spool For SS-2	17-4 PH St. Stl.
11	1	O-ring For 1.25" Piston	Viton
12	1	1.25"/.50" Piston	AISI 316 St. Stl.
13	1	1.25"/.50"/.25" Sensor Base	AISI 316 St. Stl.
14	1	O-ring For .5" Piston	Viton
15	1	.25" Piston (Optional)	AISI 316 St. Stl.
16	1	Backup For .25" Piston	Teflon
17	1	O-ring For .25" Piston	Viton
18	---	Repair Kit	Items 7, 8, 11, 14, 16, 17

Parts Tube Not Supplied With Switches Using 3.0" or .187" Sensor Base

*High Instrument Pressure Model Only

High Instrument Specifications

Valve Type	3 Way
Set Point Deviation	± 1%
Deadband	10% of Range
Max. Instr. Press.	1500 PSI.
Cv Factor	.090
Ambient Temp. Range	-20 TO 250° F / -29 TO 122° C

Switch Specifications

Valve Type	3 or 2 Way
Set Point Deviation	± 1%
Deadband	3 Way 3% of Range 2 Way 5% of Range
Max. Instr. Press.	3 Way 60 PSI 2 Way 150 PSI
Cv Factor	0.090
Ambient Temp. Range	-20 to 250 deg. F -29 to 122 deg. C

1.25"/.50"/.25" Switch Sensor Specifications

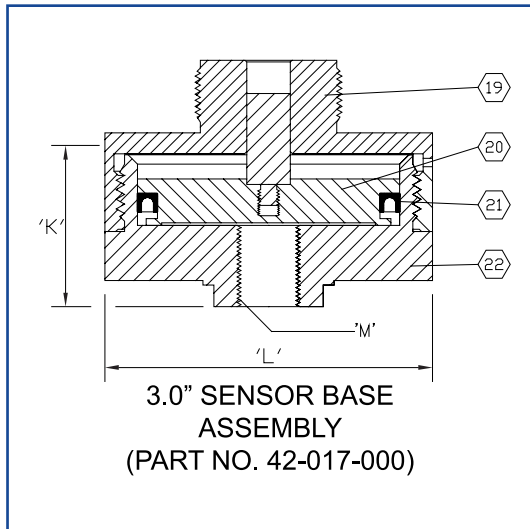
Sensor Type	Piston
Max. Oper. Press.	10,000 PSI (690 BAR)
Burst Pressure	20,000 PSI (1380 BAR)
Temperature Range	-20 to 250 Deg. F -29 to 122 Deg. C

Dimensions Inch (MM)

A	2.12 (53.8)
B (Max)	6.13 (155.7)
C	1.32 (33.5)
D	.96(24.9)
E	1.22 (31.0)
F	1.82 (46.2)
G	1.23 (31.2)
H	2.0 (50.8)
I	1/2" MNPT
J	1/4" MNPT
Panel Mount Hole	1.875 (48.0)
Valve Ports	1/4" FNPT
Weight*	4.9 lbs. (2.3Kg)

* For Switch and 1.25/50/25 Sensor Base.

Spring Codes (COLOR)		Available Ranges - PSI (BAR)														
		5-20 (.03-1.4)	4-40 (.3-2.75)	10-80 (.7-5.5)	10-115 (.7-7.9)	20-230 (1.4-15.8)	50-450 (3.4-31)	200-750 (13.8-51.8)	500-1500 (34.5-103.5)	1000-3000 (69-207)	1000-3000 (69-207)	2000-5000 (138-345)	5000-10000 (345-689)	2000-5000 (138-345)	3500-9000 (241-620)	8500-20000 (586-1380)
STANDARD SPRING	INCONEL SPRING															
B (Blue)	G (Green)	X			X			X			X			X		
R (Red)	Y (Yellow)		X			X			X		X				X	
S (Silver)	P (Purple)			X			X			X		X				X
Piston Diameter		3.0"	3.0"	3.0"	1.25"	1.25"	1.25"	.50"	.50"	.50"	.25"	.25"	.25"	.187"	.187"	.187"
Piston Code		0	0	0	1	1	1	2	2	2	3	3	3	4	4	4
		OPTIONAL BASE					OPTIONAL PISTON					OPTIONAL BASE				



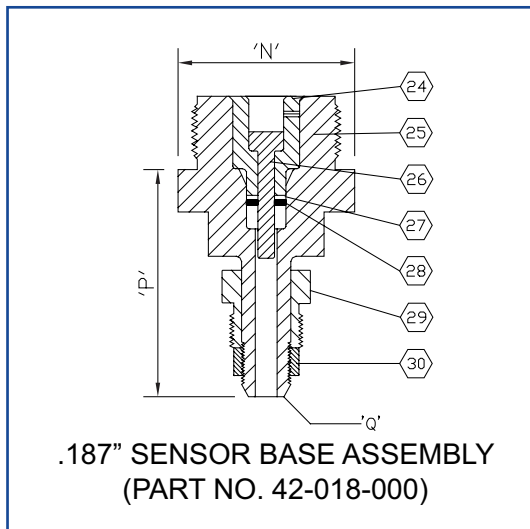
3.0" Sensor Base

ITEM	QTY.	DESCRIPTION	MATERIAL
19	1	Upper Housing	17-4 P.H. St. Stl.
20	1	Piston Assembly	17-4 P.H. St. Stl.
21	1	Seal	Viton
22	1	Lower Housing	17-4 P.H. St. Stl.
23	—	Rep. Kit F/ 3.0" Base	Items 7, 8, 21

Sensor Type	Piston
Max. Oper. Press.	5,000 PSI (345 BAR)
Burst Pressure	10,000 PSI (690 BAR)
Temperature Range	-20 to 250 Deg. F -29 to 122 Deg. C

K	2.0 IN. (50.8 MM)
L	3.75 IN. (95.2 MM)
M	1/2" FNPT
Weight*	8.5 lbs. (3.7 Kg.)

* For Switch and 3.0" Sensor Base



.187" Sensor Base

ITEM	QTY.	DESCRIPTION	MATERIAL
24	1	Retainer Sleeve	AISI 316 St. Stl.
25	1	.187" Sensor Base	17-4 P.H. St. Stl.
26	1	.187" Piston	17-4 P.H. St. Stl.
27	1	Back -Up Ring	Glass Filled Teflon
28	1	Seal	Viton
29	1	9/16" Gland Nut	AISI 316 St. Stl.
30	1	9/16" Gland Collar	AISI 316 St. Stl.
31	—	Rep. Kit F/ .187" Base	Items 7, 8, 27, 28

Sensor Type	Piston
Max. Oper. Press.	20,000 PSI (1380 BAR)
Burst Pressure	40,000 PSI (2760 BAR)
Temperature Range	-20 to 250 Deg. F -29 to 122 Deg. C

N	2.0 IN. (50.8 MM)
P	2.57 IN. (65.3 MM)
Q	9/16/ M/P Autoclave
Weight*	5.0 lbs. (2.3 Kg.)

* For Switch and .187" Sensor Base

Ordering Code: 4222 X X X 0 0 0

BASE MODEL NUMBER

Standard Corrosive Service - (-)
N.A.C.E. Option - N
High Instr. Press. Option - H

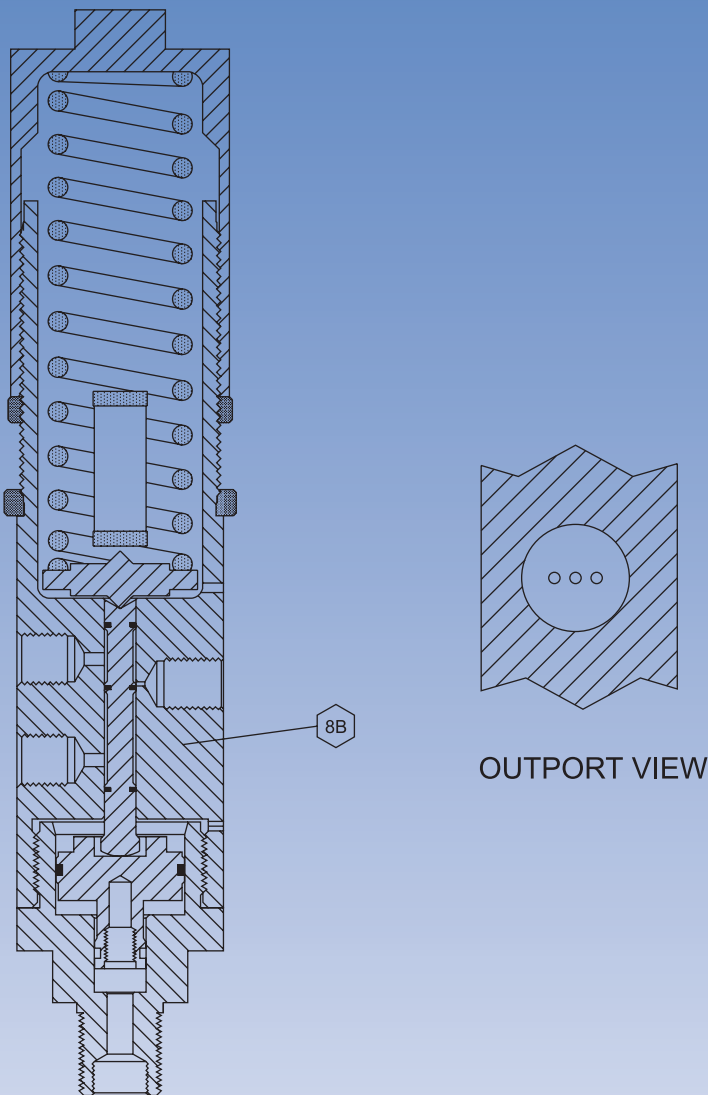
SPRING CODE (see range chart)

PISTON CODE (see range chart)

Ruelco

SS-2 High Flow

Pressure Switch



Model 4222 (Cv Factor .090)

Ruelco SS Series

Pressure Switches

SS-1
High Flow

SS-2
Standard

SS-2
High Flow

SS-1
Differential

SS-2
Differential

SS-4
Hydraulic Bleed

SS-E
Electric

SS-E
Electric Differential