

# Ruelco



# SS-2 Differential Pressure Switch

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# SS-2 Differential

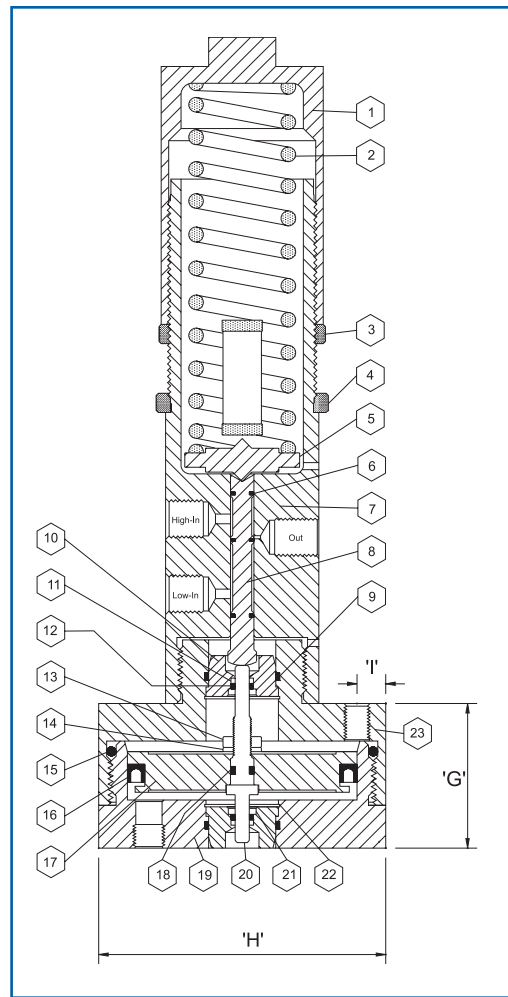
## Pneumatic Differential Pressure Switch

### FEATURES

- 316 stainless steel construction (models to N.A.C.E. MR0175 available).
- Differential pressure range from .5 to 80 psi.
- 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 should a piston seal leak develop.
- Optional tamper proof lock-out device available.
- Optional mounting brackets available.

#### GENERAL DESCRIPTION:

The Ruelco 'SS-2' pneumatic differential 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 which of the two ports the instrument pressure is supplied through. These ports are marked as 'HI IN' or 'LO IN' on the switch body. The output port, marked 'OUT' on the switch body, is the same for either mode of operation. The difference between the pressures acting on the upstream and downstream sensing ports is the differential pressure which causes the valve to operate.



### Parts List For Differential Pressure Switch Model 4202

Item	Qty.	Description	Material	Part No.
1	1	Spring Cap	316L or ASTM-A-351 S.S.	41-009-0A0
2A	1	Spring (Blue)	ASTM-401	41-012-000
2B	---	Spring (Red)	ASTM-401	41-013-000
2C	---	Spring (Silver)	ASTM-401	41-014 -000
2D	---	Spring (Green) optional	Inconel X-750	41-019-000
2E	---	Spring (Yellow) optional	Inconel X-750	41-020-000
2F	---	Spring (Purple) optional	Inconel X-750	41-021-000
3	1	Lock Ring	AISI 316 St. Std.	42-015-000
4	1	Panel Mnt. Ring (Optional)	AISI 316 St. Std.	41-023-000
5	1	Spring Plate	AISI 316 St. Std.	41-008-0A0
6*	3	Spool O-ring	Viton	VO-008-75T
7	1	Body For SS-2	CF-8M St. Std.	42-001-0B0
8	1	Spool For SS-2	17-4 PH St. Std.	42-004 -0A0
9*	2	Sleeve Seal	Viton	VO-020-75H
10	2	Guide Sleeve	AISI 316 St. Std.	4D-004-000
11*	2	Back-Up Ring	Teflon	TB-008-00C
12*	2	Shaft Seal	Fluorosilicone	FO-008-70T
13	2	Hex Nut	AISI 316 St. Std.	T6-08K-0G3
14	1	Lock Washer	AISI 316 St. Std.	WA-0X0-H43
15*	1	Base Seal	Viton	VO-237-75H
16*	1	Piston Seal	Viton	VU-334-75T
17	1	Piston	17-4 PH St. Std.	4D-003-000
18*	1	Piston / Shaft Seal	Viton	VO-008-75H
19	1	Lower Housing	17-4 PH St. Std.	4D-002-000
20	1	Shaft	17-4 PH St. Std.	4D-005-000
21	2	Seal Retainer	AISI 316 St. Std.	4D-006-000
22*	2	Retainer Ring	302 St. Std.	S2-910-903
23	1	Upper Housing	17-4 PH St. Std.	4D-001-0A0
24	---	Repair Kit	* Items	4D-008-000

#### Dimensions Inch (MM)

G	1.62 (41.1)
H	3.75 (95.3)
I	.375 (9.5)
SENSE PORTS	1/8" NPT(F)
VALVE PORTS	1/4" NPT(F)
ASSY.WT.	8.7 LBS. (3.95 KG.)

#### Spring Codes (COLOR)

		RANGE CHART		
		DIFFERENTIAL PRESSURE RANGE		
		PSI (BAR)		
STANDARD SPRING	INCONEL SPRING	5-20 (.03-1.4)	4-40 (.3-2.75)	10-80 (.7-5.5)
B (Blue)	G (Green)	X		
R (Red)	Y (Yellow)		X	
S (Silver)	P (Purple)			X

#### Specifications

MAX. Sensor Test Press. PSI (BAR) @ 100 deg. F (37 deg. C)	MAX. Sensor Operating Pressure PSI (BAR) @ 100 deg. F (37 deg. C)	Ambient Temperature Range	Max. Process Fluid Temperature	Set Point Range PSI (BAR)	C <sub>v</sub> Factor
2000 (138)	6000 (414)	-20 to 250 deg. F (-29 to 122 deg. C)	250 deg. F (122 deg. C)	5-80 (.034-5.52)	0.030

### Ordering Code: 4202 X D X 0 0 0

BASE MODEL NUMBER

MATERIAL OPTIONS

Standard Corrosive Service - (-)  
N.A.C.E. Option - N

SPRING CODE (see range chart)