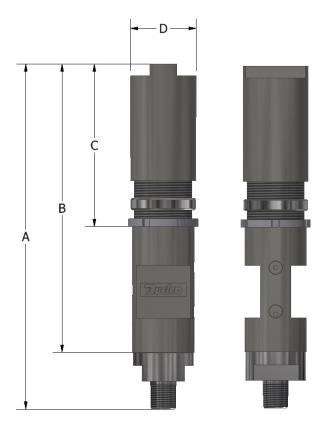
The Ruelco SS-1 Pneumatic Pressure Switch is a 3-way block - and-bleed valve that is operated by pressure acting on a piston opposing an adjustable spring force. It functions as either a normally closed or normally open valve, depending on which of the two inlet ports the instrument pressure is supplied. These ports are marked as HI IN and LO IN on the switch body. The output port, marked OUT on the switch body, is the same for either mode of operation. Pressure applied to the sense port will cause the valve to operate.



FEATURES

- 316 stainless steel construction (models to N.A.C.E MR0175 available)
- Standard base range 10-10,000 psi (with 1/4" piston option)
- Operating pressure range from .5 to 20,000 psi
- Pneumatic 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

DIMENSIONS

A (MAXIMUM)	11.75" (298.5 mm)	
B (MAXIMUM)	9.93" (252.2 mm)	
C (MAXIMUM)	6.13" (155.7 mm)	
D	2.00" (50.8 mm)	
PANEL MOUNT HOLE	1.875" (48 mm)	
INSTRUMENT CONNECTION PORTS	1/4" FNPT	

4102 PRESSURE SWITCH

PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	SPRING CAP	CF-8M ST. STL.
2	1	SPRING	ASTM-401 OR INCONEL
3	1	PARTS TUBE	ACETATE BUTYRATE
4	1	LOCK RING	316 ST. STL.
5	1	PANEL MOUNTING NUT (OPTIONAL)	CF-8M ST. STL.
6	1	SPRING PLATE	316 ST. STL.
7*	4	SHAFT O-RING	FLUOROCARBON
8*	1	CENTER SHAFT O-RING	FLUOROCARBON
9	1	SPOOL	316 ST. STL.
10	1	SHUTTLE	316 ST. STL.
11*	2	SHUTTLE O-RING	FLUOROCARBON
12	1	SLEEVE	316 ST. STL.
13*	2	SLEEVE O-RING	FLUOROCARBON
14	1	BODY	CF-8M ST. STL.
15*	1	PISTON SEAL	FLUOROCARBON

^{*} INDICATES ITEMS IN THE REPAIR KIT

SPECIFICATIONS

VALVE TYPE	3 WAY
SET POINT DEVIATION	+/- 1%
DEADBAND	3% OF RANGE
MAXIMUM INSTRUMENT	60 PSI (4.14 BAR)
CV FACTOR	0.16
AMBIENT TEMPERATURE	-20 T0 250° F
RANGE	-29 TO 122° C

REPAIR KIT

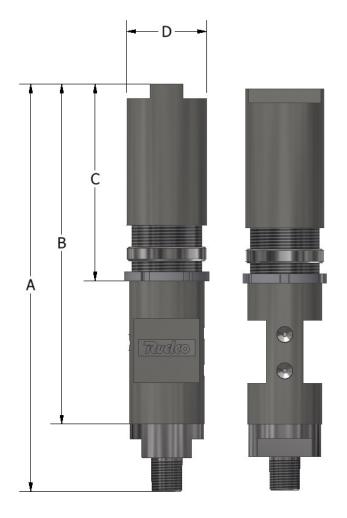
• 41-016-0B0 (FOR STANDARD #1,#2,#3 BASE)

OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST

ORDERING CODE

BODY CODE: 4102

The Ruelco SS-2 pneumatic pressure switch is a 3-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 inlet ports the instrument pressure is supplied. These ports are marked as HI IN and LO IN on the switch body. The output port, marked OUT on the switch body, is the same for either mode of operation. Pressure applied to the sense port will cause the valve to operate.



FEATURES

- 316 stainless steel construction (models to N.A.C.E MR0175 available)
- Standard base range 10-10,000 psi (with 1/4" piston option)
- Operating pressure range from .5 to 20,000 psi
- Pneumatic 3-way block-and-bleed 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

DIMENSIONS

A (MAXIMUM)	11.75" (298.5 mm)	
B (MAXIMUM)	9.93" (252.2 mm)	
C (MAXIMUM)	6.13" (155.7 mm)	
D	2.00" (50.8 mm)	
PANEL MOUNT HOLE	1.875" (48 mm)	
INSTRUMENT CONNECTION PORTS	1/4" FNPT	

4202 PRESSURE SWITCH

PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	SPRING CAP	CF-8M ST. STL.
2	1	SPRING	ASTM-401 OR INCONEL
3	1	PARTS TUBE	ACETATE BUTYRATE
4	1	LOCK RING	316 ST. STL.
5	1	PANEL MOUNTING NUT (OPTIONAL)	CF-8M ST. STL.
6	1	SPRING PLATE	316 ST. STL.
7	1	SPOOL	316 ST. STL.
8*	3	SHAFT O-RING	FLUOROCARBON
9	1	BODY	CF-8M ST. STL.
10*	1	PISTON SEAL	FLUOROCARBON

^{*} INDICATES ITEMS IN THE REPAIR KIT

SPECIFICATIONS

VALVE TYPE	3 WAY
SET POINT DEVIATION	+/- 1%
DEADBAND	5% OF RANGE
MAXIMUM INSTRUMENT	150 PSI (10.3 BAR)
CV FACTOR	0.030
AMBIENT TEMPERATURE	-20 TO 250° F
RANGE	-29 TO 122° C

REPAIR KIT

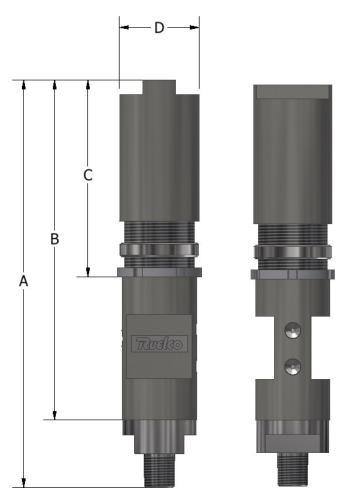
• 42-003-0B0 (FOR STANDARD #1,#2,#3 BASE)

OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST

ORDERING CODE

BODY CODE: 4202

The Ruelco SS-2 high flow hydraulic pressure switch is a 3-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 inlet ports the instrument pressure is supplied. These ports are marked as HI IN and LO IN on the switch body. The output port, marked OUT on the switch body, is the same for either mode of operation. Pressure applied to the sense port will cause the valve to operate.



FEATURES

- 316 stainless steel construction (models to N.A.C.E MR0175 available)
- Standard base range 10-10,000 psi (with 1/4" piston option)
- Operating pressure range from .5 to 20,000 psi
- Hydraulic 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

DIMENSIONS

A (MAXIMUM)	11.75" (298.5 mm)	
B (MAXIMUM)	9.93" (252.2 mm)	
C (MAXIMUM)	6.13" (155.7 mm)	
D	2.00" (50.8 mm)	
PANEL MOUNT HOLE	1.875" (48 mm)	
INSTRUMENT CONNECTION PORTS	1/4" FNPT	

PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	SPRING CAP	CF-8M ST. STL.
2	1	SPRING	ASTM-401 OR INCONEL
3	1	PARTS TUBE	ACETATE BUTYRATE
4	1	LOCK RING	316 ST. STL.
5	1	PANEL MOUNTING NUT (OPTIONAL)	CF-8M ST. STL.
6	1	SPRING PLATE	316 ST. STL.
7	1	SPOOL	316 ST. STL.
8*	3	SHAFT O-RING	FLUOROCARBON
9	1	BODY	CF-8M ST. STL.
10*	1	PISTON SEAL	FLUOROCARBON

^{*} INDICATES ITEMS IN THE REPAIR KIT

SPECIFICATIONS

VALVE TYPE	3 WAY	
SET POINT DEVIATION	+/- 1%	
DEADBAND	5% OF RANGE	
MAXIMUM HYDRAULIC	150 PSI (10.3 BAR)	
Cv FACTOR	0.090	
AMBIENT TEMPERATURE	-20 T0 250° F	
RANGE	-29 TO 122° C	

REPAIR KIT

• 42-003-0B0 (FOR STANDARD #1,#2,#3 BASE)

OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST

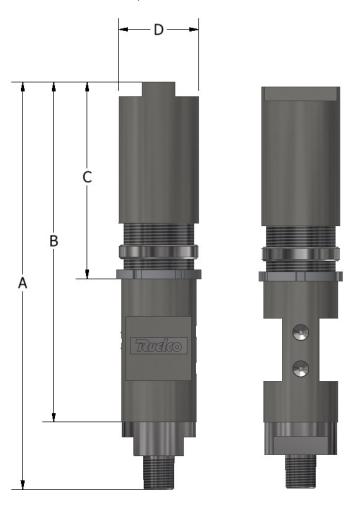
ORDERING CODE

BODY CODE: 4222

4222H HIGH PRESSURE SWITCH

OPERATION

The Ruelco SS-2 high flow, high pressure hydraulic pressure switch is a 3-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 inlet ports the instrument pressure is supplied. These ports are marked as HI IN and LO IN on the switch body. The output port, marked OUT on the switch body, is the same for either mode of operation. Pressure applied to the sense port will cause the valve to operate.



FEATURES

- 316 stainless steel construction (models to N.A.C.E MR0175 available)
- Standard base range 10-10,000 psi (with 1/4" piston option)
- Operating pressure range from .5 to 20,000 psi
- Hydraulic 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

DIMENSIONS

A (MAXIMUM)	11.75" (298.5 mm)	
B (MAXIMUM)	9.93" (252.2 mm)	
C (MAXIMUM)	613" (155.7 mm)	
D	2.00" (50.8 mm)	
PANEL MOUNT HOLE	1.875" (48 mm)	
INSTRUMENT CONNECTION PORTS	1/4" FNPT	

PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	SPRING CAP	CF-8M ST. STL.
2	1	SPRING	ASTM-401 OR INCONEL
3	1	PARTS TUBE	ACETATE BUTYRATE
4	1	LOCK RING	316 ST. STL.
5	1	PANEL MOUNTING NUT (OPTIONAL)	CF-8M ST. STL.
6	1	SPRING PLATE	316 ST. STL.
7	1	SPOOL	316 ST. STL.
8*	2	SHAFT O-RING	FLUOROCARBON
9*	1	CENTER SHAFT SEAL	URETHANE
10	1	BODY	CF-8M ST. STL.
11*	1	PISTON SEAL	FLUOROCARBON

^{*} INDICATES ITEMS IN THE REPAIR KIT

SPECIFICATIONS

VALVE TYPE	3 WAY
SET POINT DEVIATION	+/- 1%
DEADBAND	10% OF RANGE
MAXIMUM HYDRAULIC	1,500 PSI (103 BAR)
Cv FACTOR	0.090
AMBIENT TEMPERATURE	-20 T0 250° F
RANGE	-29 TO 122° C

REPAIR KIT

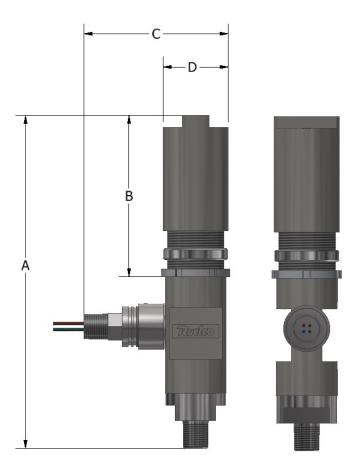
• 42-030-0H0 (FOR STANDARD #1,#2,#3 BASE)

OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST

ORDERING CODE

BODY CODE: 4222H

The Ruelco SS-E Electric Pressure Switch is a snap acting dry contact 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 electric leads are connected to the common. Pressure applied to the sense port will cause the valve to operate.



FEATURES

- 316 stainless steel construction (models to N.A.C.E MR0175 available).
- Standard base range 10-10,000 psi (with 1/4" piston option).
- Operating pressure range from .5 to 20,000 psi.
- Uses hermetically sealed, snap acting dry contact, explosion proof switch U.L. rated
- 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.

DIMENSIONS

A (MAXIMUM)	11.75" (298.5 mm)
B (MAXIMUM)	6.13" (155.7 mm)
С	1.39" (35.3 mm)
D	2.00" (50.8 mm)
PANEL MOUNT HOLE	1.875" (48 mm)
ELECTRICAL CONNECTION	1/2" MNPT

4E02 PRESSURE SWITCH

ELECTRICAL OPERATION

LEAD	COLOR	RISING LEVEL	FALLING LEVEL
NO / NO2	BLUE / PURPLE	CLOSES	OPENS
NC / NC2	RED / BLACK	OPENS	CLOSES
C /C2	BROWN / YELLOW	соммо	N LEADS
GND	GREEN	GRO	UND

ELECTRICAL SPECIFICATIONS

SPDT & DPDT SWITCH MAXIMUM	250 VAC
VOLTAGE	28 VDC
SPDT & DPDT SWITCH AMPS @ MAXIMUM VOLTAGE	5 AMPS
AMBIENT TEMPERATURE RANGE	-20 TO 158° F

ELECTRICAL CERTIFICATIONS

UNDERWRITERS LABORATORIES	CLASS I, GROUPS A,B,C,D
UNDERWRITERS LABORATORIES	CLASS II, GROUPS E,F,G
ATEX	Ex d IIC

4E02 PRESSURE SWITCH

PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	SPRING CAP	CF-8M ST. STL.
2	1	SPRING	ASTM-401 OR INCONEL
3	1	PARTS TUBE	ACETATE BUTYRATE
4	1	LOCK RING	316 ST. STL.
5	1	PANEL MOUNTING NUT (OPTIONAL)	CF-8M ST. STL.
6	1	SPRING PLATE	316 ST. STL.
7	1	SPOOL	316 ST. STL.
8*	1	SHAFT O-RING	FLUOROCARBON
9*	2	WEAR RING	DELRIN
10	1	BODY	CF-8M ST. STL.
11*	1	PISTON SEAL	FLUOROCARBON
12	1	PUSH ROD ASSEMBLY	316 ST. STL.
13A	1	SPDT SWITCH ASSEMBLY	316 ST. STL.
13B	-	DPDT SWITCH ASSEMBLY	316 ST. STL.

^{*} INDICATES ITEMS IN THE REPAIR KIT

SPECIFICATIONS

VALVE TYPE	SNAP ACTING ELECTRIC
SET POINT DEVIATION	+/- 1%
DEADBAND	5% OF RANGE
AMBIENT TEMPERATURE	-20 T0 250° F
RANGE	-29 TO 122° C

REPAIR KIT

• 4E-003-000 (FOR STANDARD #1,#2,#3 BASE)

OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST

ORDERING CODE

BODY CODE: 4E02

EXTERNAL SCALE

Any of the many Ruelco pressure switches can come with an external mounted and calibrated scale option. The scale allows the user to quickly and accurately adjust the pressure set point of the switch without the need for an additional testing or calibrating. Simply raise or lower the bottom of the lock ring to the desired pressure and adjust the cap until it meets the lock ring. The pressure switch is now set to the visible mark on the scale. The scale can be used for any field mounting or panel mounting situation.



ORDERING CODE

PRESSURE SWITCH BASI

#1 BASE - 1-1/4" PISTON



SPECIFICATIONS

MAXIMUM OPERATION	10,000 PSI (690 BAR)
BURST PRESSURE	20,000 PSI (1380 BAR)
PROCESS CONNECTION	1/2" MNPT
PROCESS CONNECTION	1/4" FNPT

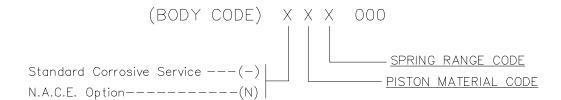
RANGE CHART

SPRING CODE	RANGE
B (BLUE) - STANDARD	10 – 110 PSI
R (RED) - STANDARD	20 - 230 PSI
S (SILVER) - STANDARD	50—450 PSI

MATERIAL (PISTON AND BASE)

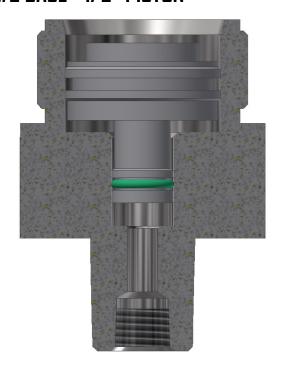
MATERIAL	PISTON CODE
316 ST. STL.	1
MONEL 400	6
INCONEL 625	В
HASTELLOY C-276	G
SUPER DUPLEX 2507	К
INCOLOY 825	Р
DUPLEX 2205	U
6 MO 254	Y

ORDERING CODE



PRESSURE SWITCH BASI

#2 BASE - 1/2" PISTON



RANGE CHART

SPRING CODE	RANGE
B (BLUE) - STANDARD	200 – 750 PSI
G (GREEN) - INCONEL	(13.8 – 51.8 BAR)
R (RED) - STANDARD	500 - 1,500 PSI
Y (YELLOW) - INCONEL	(34.5- 103.5 BAR)
S (SILVER) - STANDARD	1,000—3,000 PSI
P (PURPLE) - INCONEL	(69—207 BAR)

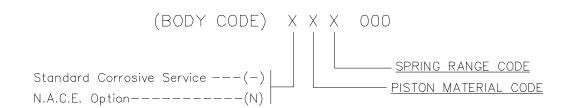
MATERIAL (PISTON AND BASE)

MATERIAL	PISTON CODE
316 ST. STL.	2
MONEL 400	7
INCONEL 625	С
HASTELLOY C-276	н
SUPER DUPLEX 2507	L
INCOLOY 825	Q
DUPLEX 2205	V
6 MO 254	Z

SPECIFICATIONS

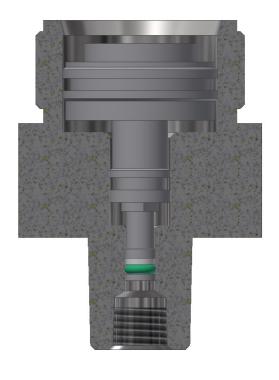
MAXIMUM OPERATION	10,000 PSI (690 BAR)
BURST PRESSURE	20,000 PSI (1380 BAR)
PROCESS CONNECTION	1/2" MNPT
PROCESS CONNECTION	1/4" FNPT

ORDERING CODE



PRESSURE SWITCH BAS

#3 BASE - 1/4" PISTON



RANGE CHART

SPRING CODE	RANGE	
B (BLUE) - STANDARD	1,000 - 3,000 PSI	
G (GREEN) - INCONEL	(69 – 207 BAR)	
R (RED) - STANDARD	2,000 - 5,000 PSI	
Y (YELLOW) - INCONEL	(138 - 345 BAR)	
S (SILVER) - STANDARD	5,000 - 10,000 PSI	
P (PURPLE) - INCONEL	(345 - 690 BAR)	

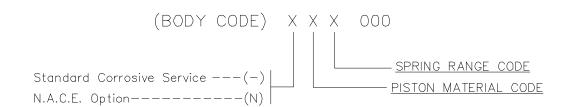
SPECIFICATIONS

MAXIMUM OPERATION	10,000 PSI (690 BAR)	
BURST PRESSURE	20,000 PSI (1380 BAR)	
PROCESS CONNECTION	1/2" MNPT	
PROCESS CONNECTION	1/4" FNPT	

MATERIAL (PISTON AND BASE)

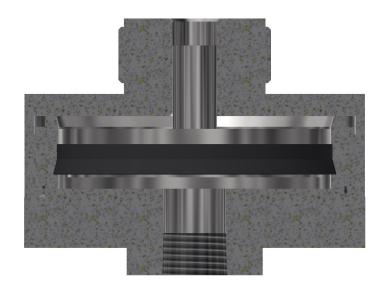
MATERIAL	PISTON CODE	
316 ST. STL.	3	
MONEL 400	8	
INCONEL 625	D	
HASTELLOY C-276	I	
SUPER DUPLEX 2507	M	
INCOLOY 825	R	
DUPLEX 2205	W	

ORDERING CODE



PRESSURE SWITCH BAS

#O BASE - 3" PISTON



RANGE CHART

SPRING CODE	RANGE	
B (BLUE) - STANDARD	.5 - 20 PSI	
G (GREEN) - INCONEL	(.03 – 1.4 BAR)	
R (RED) - STANDARD	4 - 40 PSI	
Y (YELLOW) - INCONEL	(.3 - 2.75 BAR)	
S (SILVER) - STANDARD	10 - 80 PSI	
P (PURPLE) - INCONEL	(.7 - 5.5 BAR)	

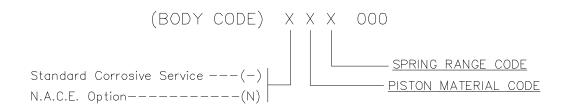
SPECIFICATIONS

MAXIMUM OPERATION	5,000 PSI (345 BAR)	
BURST PRESSURE	10,000 PSI (690 BAR)	
PROCESS CONNECTION	1/2" FNPT	

MATERIAL (PISTON AND BASE)

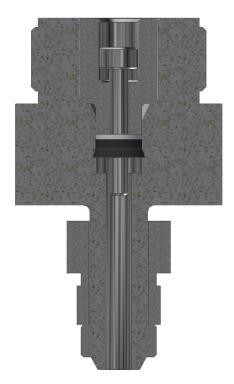
MATERIAL	PISTON CODE	
316 ST. STL.	0	
MONEL 400	5	
INCONEL 625	А	
HASTELLOY C-276	F	
SUPER DUPLEX 2507	0	
DUPLEX 2205	Т	

ORDERING CODE



PRESSURE SWITCH BASE

#4 BASE - .187" PISTON



SPECIFICATIONS

MAXIMUM OPERATION	20,000 PSI (1380 BAR)	
BURST PRESSURE	40,000 PSI (2760 BAR)	
PROCESS CONNECTION	9/16" MP CONE	

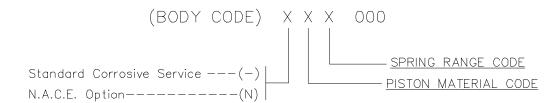
RANGE CHART

SPRING CODE	RANGE	
B (BLUE) - STANDARD	2,000 - 5,000 PSI	
G (GREEN) - INCONEL	(138 – 345 BAR)	
R (RED) - STANDARD	3,500 - 9,000 PSI	
Y (YELLOW) - INCONEL	(241 - 620 BAR)	
S (SILVER) - STANDARD	8,500 - 20,000 PSI	
P (PURPLE) - INCONEL	(586 - 1380 BAR)	

MATERIAL (PISTON AND BASE)

MATERIAL	PISTON CODE	
316 ST. STL.	4	
MONEL 400	9	
INCONEL 625	E	
HASTELLOY C-276	J	
SUPER DUPLEX 2507	N	
DUPLEX 2205	X	

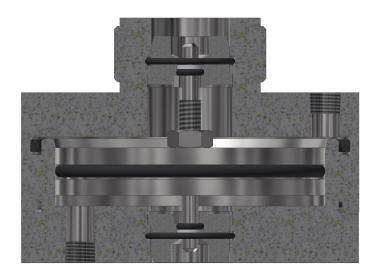
ORDERING CODE



DIFFERENTIAL - 3" PISTON

OPERATION

The Ruelco Differential Base allows any of the Ruelco pressure bodies to measure the pressure difference between the upper and lower ports. Depending on the instrument ports used, the base allows for a rising or falling pressure difference set point. Typical use would be to connect the upstream and downstream connections to the base in order to determine an undesired pressure drop or a clogged filter pressure build and to activate the safety switch.



RANGE CHART

SPRING CODE	RANGE	
B (BLUE) - STANDARD	.5 - 20 PSI	
G (GREEN) - INCONEL	(.03 – 1.4 BAR)	
R (RED) - STANDARD	4 - 40 PSI	
Y (YELLOW) - INCONEL	(.3 - 2.75 BAR)	
S (SILVER) - STANDARD	10 - 80 PSI	
P (PURPLE) - INCONEL	(.7 - 5.5 BAR)	

SPECIFICATIONS

MAXIMUM OPERATION PRESSURE	2,000 PSI (138 BAR)	
MAXIMUM DIFFERENTIAL PRESSURE	1,500 PSI (103 BAR)	
PROCESS CONNECTION	1/8" FNPT	

PRESSURE SWITCH BASE

DIFFERENTIAL - 3" PISTON

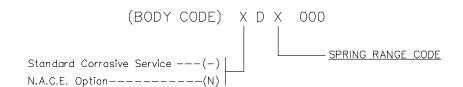
PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	UPPER HOUSING	17-4 PH ST. STL.
2	1	LOWER HOUSING	17-4 PH ST. STL.
3*	1	BODY SEAL	FLUOROCARBON
4*	1	PISTON SEAL	FLUOROCARBON
5	1	PISTON	17-4 PH ST. STL.
6*	2	GUIDE SLEEVE SEALS	FLUOROCARBON
7	2	GUIDE SLEEVE	316 ST. STL.
8	2	SEAL RETAINER	FLUOROCARBON
9*	2	SPOOL SEALS	FLUOROSILICON
10**	2	SPOOL SEAL BACKUP	TEFLON
11	2	RETAINER RING	316 ST. STL.
12	1	SPOOL	17-4 PH ST. STL.
13*	1	PISTON/ SPOOL SEAL	FLUOROCARBON
14	1	LOCK WASHER	316 ST. STL.
15	1	HEX NUT	316 ST. STL.

ORDERING CODE

REPAIR KIT

D-008-000



OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST