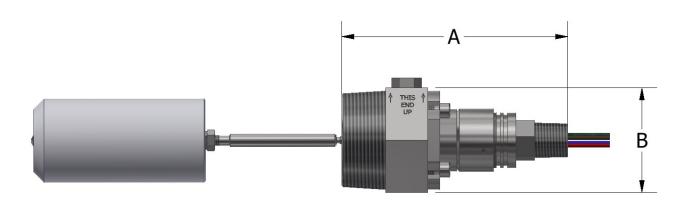
OPERATION

The Ruelco Model 38C2 is a liquid level switch designed to meet the growing industry demand for durable, easy to maintain and accurate, electrical discreet point liquid level indication. Its non-externally adjustable set point makes it ideal for safety level switches and redundant back-up switches. It can provide control for simple local systems up to the most sophisticated process control systems. The direct action of the flex level design ensures trouble free operation in the process fluids with specific gravities as low as 0.6 without any fine tuning or other adjustments.

FEATURES

- 316 stainless steel construction (models to N.A.C.E. MR0175 available)
- Design has no deep cavities or recesses exposed to the process fluids for debris accumulation and is excellent for dirty fluid applications
- Uses a patented pivot seal mechanism to transmit liquid buoyancy to the valve operation mechanism with the pivot completely isolated from the process fluid
- Uses hermetically sealed, snap acting dry contact, explosion proof switch U.L. rated
- Level adjustments cannot be easily tampered with after installation, making this switch well suited for critical applications



DIMENSIONS

А	5.44" (138.2 mm)
В	2.50" HEX (63.5 mm)
ELECTRICAL CONNECTION	1/2" MNPT
ELECTRICAL LEADS	18" (457.2 mm)
WEIGHT	3.8 LBS (1.7 kg)

SPECIFICATIONS

MAXIMUM WORKING PRESSURE	2,160 PSI (149 BAR)
AMDIENT TEMPERATURE RANCE	-20 TO 158° F
AMBIENT TEMPERATURE RANGE	-29 TO 70° C
MINIMUM SPECIFIC GRAVITY	0.6

ELECTRICAL OPERATION

LEAD	COLOR RISING LEVEL		FALLING LEVEL
NO / NO2	BLUE / PURPLE	CLOSES	OPENS
NC / NC2	RED / BLACK OPENS		CLOSES
C /C2	BROWN / YELLOW	COMMON LEADS	
GND	GREEN	GROUND	

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

PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	DISPLACER ASSEMBLY	POLYPROPYLENE OR 316 ST. STL.
2	1	FLOAT ROD	316 ST. STL.
3	1	BODY SEAL RETAINER	316 ST. STL.
4*	1	BODY SEAL	FLUOROCARBON
5	1	BODY	316 ST. STL.
6	1	SPRING CAP	316 ST. STL.
7	1	SPRING	INCONEL
8	1	SPRING GUIDE	316 ST. STL.
9	4	SOCKET HEAD CAP SCREW	316 ST. STL.
10	1	ELECTRIC VALVE BODY	CF-8M
11*	2	WEAR BANDS	DELRIN
12	1	ELECTRIC POPPET	316 ST. STL.
13*	1	REMOVABLE PIVOT	17-4 PH ST. STL.
14	1	CONE	17-4 PH ST. STL.
15	1	FLOAT ROD NUT	316 ST. STL.
16	1	PUSH ROD ASSEMBLY	316 ST. STL.
17A	1	SPDT SWITCH	316 ST. STL.
17B	-	DPDT SWITCH	316 ST. STL.

^{*} INDICATES ITEMS IN THE REPAIR KIT

REPAIR KIT

38-016-000

OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST

ORDERING CODE

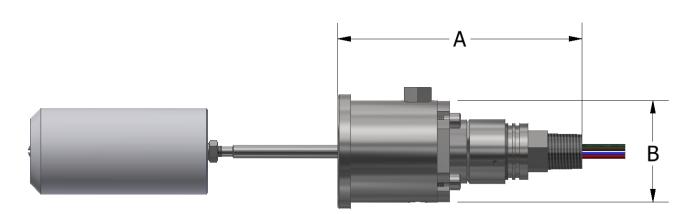
BODY CODE: 38C2

OPERATION

The Ruelco Model 39C2 is a liquid level switch designed to meet the growing industry demand for durable, easy to maintain and accurate, electrical discreet point liquid level indication. Its non-externally adjustable set point makes it ideal for safety level switches and redundant back-up switches. It can provide control for simple local systems up to the most sophisticated process control systems. The direct action of the flex level design ensures trouble free operation in the process fluids with specific gravities as low as 0.6 without any fine tuning or other adjustments.

FEATURES

- 316 stainless steel construction (models to N.A.C.E. MR0175 available)
- Design has no deep cavities or recesses exposed to the process fluids for debris accumulation and is excellent for dirty fluid applications
- Uses a patented pivot seal mechanism to transmit liquid buoyancy to the valve operation mechanism with the pivot completely isolated from the process fluid
- Uses hermetically sealed, snap acting dry contact, explosion proof switch U.L. rated
- Level adjustments cannot be easily tampered with after installation, making this switch well suited for critical applications



DIMENSIONS

А	5.72" (145.3 mm)
В	2.37" (60.2 mm)
ELECTRICAL CONNECTION	1/2" MNPT
ELECTRICAL LEADS	18" (457.2 mm)
WEIGHT	3.8 LBS (1.7 kg)

SPECIFICATIONS

MAXIMUM WORKING PRESSURE	2,160 PSI (149 BAR)
AMBIENT TEMPERATURE RANGE	-20 TO 158° F
AIVIBIENT TEIVIPERATURE KANGE	-29 TO 70° C
MINIMUM SPECIFIC GRAVITY	0.6

ELECTRICAL OPERATION

LEAD	COLOR RISING LEVEL		FALLING LEVEL
NO / NO2	BLUE / PURPLE	CLOSES	OPENS
NC / NC2	RED / BLACK OPENS		CLOSES
C /C2	BROWN / YELLOW	COMMON LEADS	
GND	GREEN	GROUND	

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

PARTS LIST

ITEM	QUANTITY	DESCRIPTION	MATERIAL
1	1	DISPLACER ASSEMBLY	POLYPROPYLENE OR 316 ST. STL.
2	1	FLOAT ROD	316 ST. STL.
3	1	BODY SEAL RETAINER	316 ST. STL.
4*	1	BODY SEAL	FLUOROCARBON
5	1	FLANGE BODY	316 ST. STL.
6	1	SPRING CAP	316 ST. STL.
7	1	SPRING	INCONEL
8	1	SPRING GUIDE	316 ST. STL.
9	4	SOCKET HEAD CAP SCREW	316 ST. STL.
10	1	ELECTRIC VALVE BODY	CF-8M
11*	2	WEAR BANDS	DELRIN
12	1	ELECTRIC POPPET	316 ST. STL.
13*	1	REMOVABLE PIVOT	17-4 PH ST. STL.
14	1	CONE	17-4 PH ST. STL.
15	1	FLOAT ROD NUT	316 ST. STL.
16	1	PUSH ROD ASSEMBLY	316 ST. STL.
17A	1	SPDT SWITCH	316 ST. STL.
17B	-	DPDT SWITCH	316 ST. STL.

^{*} INDICATES ITEMS IN THE REPAIR KIT

REPAIR KIT

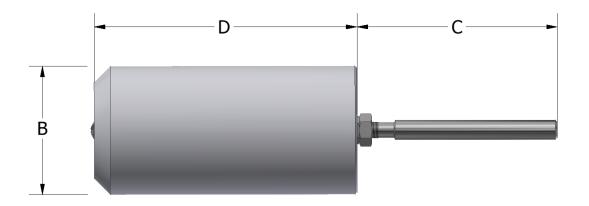
38-016-000

OTHER TEMPERATURE RANGES AND SEAL COMPOUNDS AVAILABLE UPON REQUEST

ORDERING CODE

BODY CODE: 39C2

POLYPROPYLENE 3" ROD

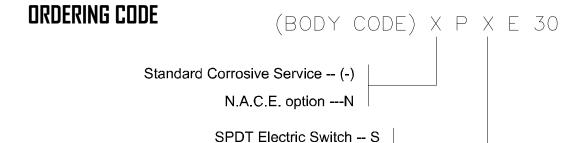


DIMENSIONS

В	2.00" (50.8 mm)
С	3.25" (82.6 mm)
D	4.10" (104.14 mm)

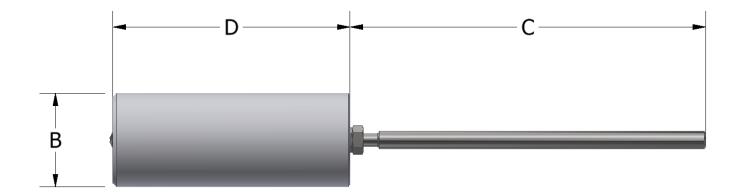
SPECIFICATIONS

MAXIMUM WORKING PRESSURE	2,160 PSI (149 BAR)
AMBIENT TEMPERATURE DANCE	-20 TO 250° F
AMBIENT TEMPERATURE RANGE	-29 TO 122° C
MAXIMUM PROCESS TEMPERATURE	200°F (93°C)



DPDT Electric Switch -- D

POLYPROPYLENE 6" ROD



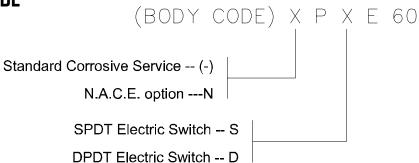
DIMENSIONS

В	1.62" (41.3 mm)
С	6.50" (165.1 mm)
D	4.10" (104.14 mm)

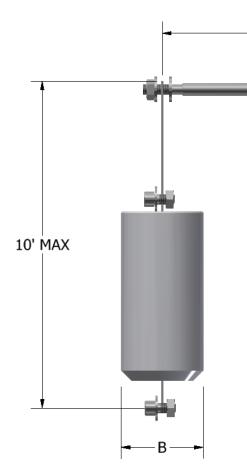
SPECIFICATIONS

MAXIMUM WORKING PRESSURE	2,160 PSI (149 BAR)
AAADIENIT TEMADED ATLIDE DANGE	-20 TO 250° F
AMBIENT TEMPERATURE RANGE	-29 TO 122° C
MAXIMUM PROCESS TEMPERATURE	200°F (93°C)

ORDERING CODE



POLYPROPYLENE 10' HANGDOWN



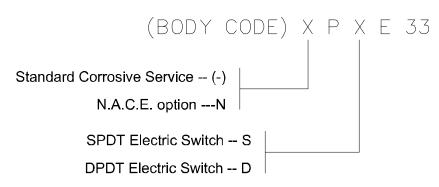
DIMENSIONS

В	2.00" (50.8 mm)
С	4.50" (114.3 mm)

SPECIFICATIONS

MAXIMUM WORKING PRESSURE	2,160 PSI (149 BAR)
	-20 TO 250° F
AMBIENT TEMPERATURE RANGE	-29 TO 122° C
MAXIMUM PROCESS TEMPERATURE	200° F (93°C)

ORDERING CODE



POLYPROPYLENE EXTENDED ROD

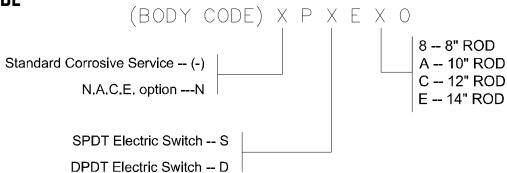


DIMENSIONS	8" ROD	10" ROD	12" ROD	14" ROD
В	1.62" (41.3 mm)	1.62" (41.3 mm)	1.62" (41.3 mm)	1.50" (38.1 mm)
С	6.72" (170.7 mm)	9.95" (252.7 mm)	12.19" (309.6 mm)	13.75" (349.3 mm)
D	3.00" (76.2 mm)	2.55" (64.8 mm)	2.12" (53.8 mm)	2.30" (58.4 mm)

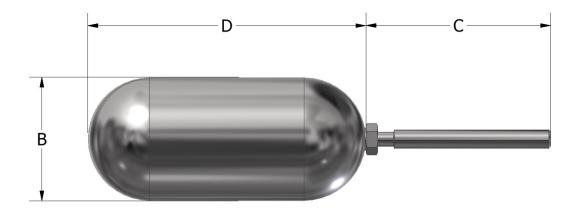
SPECIFICATIONS

MAXIMUM WORKING PRESSURE	2,160 PSI (149 BAR)
ANADISAIT TEAADED AT LIDE DANIGE	-20 TO 250° F
AMBIENT TEMPERATURE RANGE	-29 TO 122° C
MAXIMUM PROCESS TEMPERATURE	200°F (93°C)

ORDERING CODE



316 ST. STL. 3" ROD



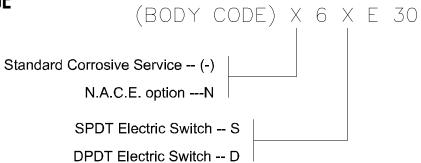
DIMENSIONS

В	2.00" (50.8 mm)
С	3.25" (82.6 mm)
D	4.50" (114.3 mm)

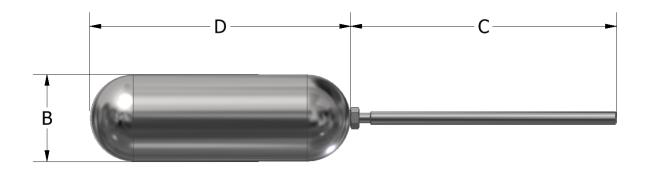
SPECIFICATIONS

MAXIMUM WORKING PRESSURE	2,160 PSI (149 BAR)
ANADIENT TEMPEDATURE DANCE	-20 TO 300° F
AMBIENT TEMPERATURE RANGE	-29 TO 148°C
MAXIMUM PROCESS TEMPERATURE	300°F (148°C)

ORDERING CODE



316 ST. STL. 6" ROD



DIMENSIONS

В	2.00" (50.8 mm)
С	6.50" (165.1 mm)
D	6.00" (152.4 mm)

SPECIFICATIONS

MAXIMUM WORKING PRESSURE	300 PSI (20.68 BAR)
AAADIENIT TEMADED ATLIDE DANGE	-20 TO 300° F
AMBIENT TEMPERATURE RANGE	-29 TO 148°C
MAXIMUM PROCESS TEMPERATURE	300°F (148°C)

ORDERING CODE

