Switch-Tek ™

Intrusive Capacitance Switch

Features

☑ Available in short and long sensor lengths for flexible installation

☑ Compatible with Flowline alarm, controller and fitting accessories

Specifications

Orientation:	Universal
Accuracy:	± 1 mm in water
Repeatability:	± 0.5 mm in water
Dielectric range:	> 20 constants
Conductive range:	> 100 micromhos
Supply voltage:	12-36 VDC
Consumption:	25 mA maximum
Contact type:	(1) SPST relay
Contact rating:	60 VA
Contact output:	Selectable NO/NC
Process temp.:	F: -40˚ to 176˚ C: -40˚ to 80˚
Pressure:	150 psi (10 bar) @ 25˚ C., derated @ 1.667 psi (.113 bar) per ˚C. above 25˚ C.
Sensor rating:	NEMA 6 (IP68): PP NEMA 4X (IP65): PFA
Sensor material:	1__5: PP 2__5: PFA
Cable jacket mat.:	1__5: PP 2__5: PFA
Cable type:	4-conductor, #22 AWG (shielded)
Cable length:	Standard: 10' (3m) Special order: 25' (7.6m) or 50' (15.2m)
Process mount:	3/4" NPT (3/4" G / Rp)
Mount. gasket:	Viton® (G version only)
Classification:	General purpose
CE compliance:	EN 61326 EMC EN 61010-1 safety

Description

The general purpose intrusive capacitance level switch is an excellent choice for a wide range of relatively clean, aqueous based conductive liquids with non-coating and/or scaling characteristics. Media examples include hydrogen peroxide and chromic acid. The 1A relay provides a reliable switch interface with remote devices such as a PLC, SCADA or alarm. The sensor is universally mounted through the wall or inside the tank.

Capacitance Ordering

LP10-☐☐☐5

Sensor material (1)
1   PP
2   PFA
Sensor length
3   Short
4   Long
Process mount (2) (3)
0   3/4" NPT (US)
2   3/4" G / Rp (Metric)

Ordering Notes
1) To special order a 25' (7.6m) or 50' (15.2 m) sensor cable, place the cable length at the end of the part number (ie: LP10-1305-25').
2) The short Metric sensor is offered with conical Rp threads on both sides of the wrench flat. The long Metric sensor is offered with straight G threads on the sensing side and conical Rp threads on the cable side of the wrench flat.
3) The straight G thread version seals with an included Viton® mounting gasket.

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Intrusive Capacitance Switch

LP10 Long Version

RELAY
Red (+)
Black (-)
White NO/NC
Green COM
Shld

3/4" NPT (3/4" Rp)
3/4" NPT (3/4" G)
0.7" (19mm)

10' Cable (3m)
2.1" (54mm)
2.8" (70mm)
4.5" (114mm)

LP10 Short Version

RELAY
Red (+)
Black (-)
White NO/NC
Green COM
Shld

3/4" NPT (3/4" Rp)
3/4" NPT (3/4" Rp)
0.7" (19mm)

8' Cable (2.5m)
0.7" (19mm)
1.3" (32mm)
3.0" (76mm)
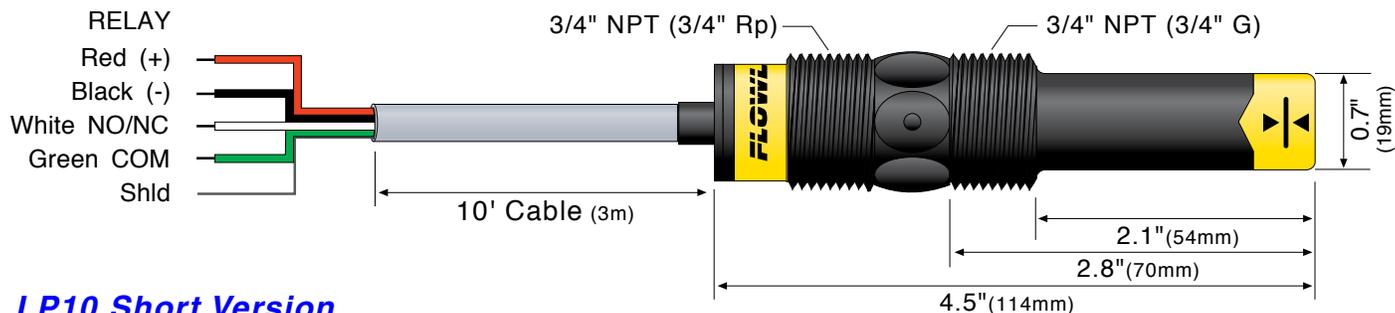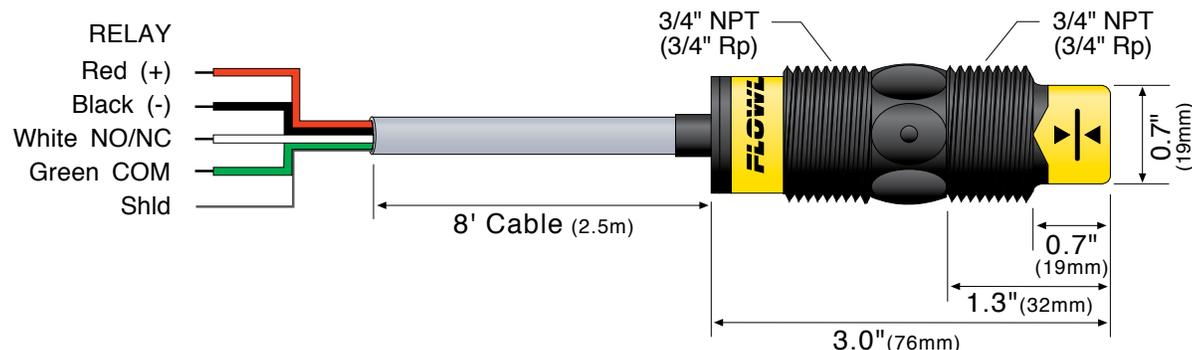
Specifications are subject to change without notice.

NO Output - DC Powered Load
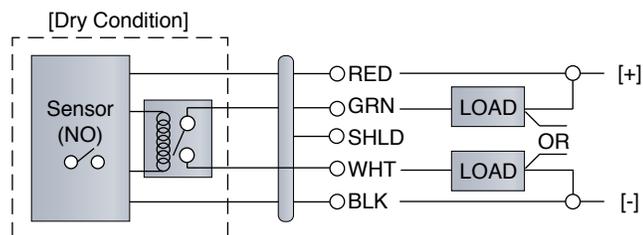
[Dry Condition]

Sensor (NO)

RED — [+]
GRN — LOAD
SHLD
OR
WHT — LOAD
BLK — [-]

SENSOR POWER
[RED & BLK Wires]
36 VDC Max.
5 ±1 mA Dry
19 ±1 mA Wet

RELAY RATING
[GRN & WHT Wires]
60 VA Max.

NC Output - DC Powered Load

[Dry Condition]

Sensor (NC)

BLK — [+]
GRN — LOAD
SHLD
OR
WHT — LOAD
RED — [-]
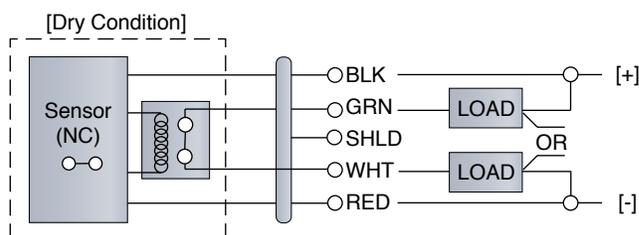
SENSOR POWER
[RED & BLK Wires]
36 VDC Max.
19 ±1 mA Dry
5 ±1 mA Wet

RELAY RATING
[GRN & WHT Wires]
60 VA Max.

NO Output - AC Powered Load
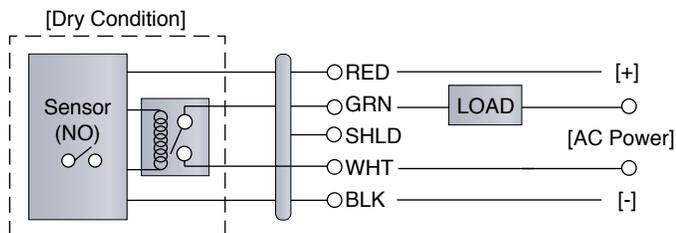
[Dry Condition]

Sensor (NO)

RED — [+]
GRN — LOAD
SHLD — [AC Power]
WHT
BLK — [-]

SENSOR POWER
[RED & BLK Wires]
36 VDC Max.
5 ±1 mA Dry
19 ±1 mA Wet

RELAY RATING
[GRN & WHT Wires]
60 VA Max.

NC Output - AC Powered Load

[Dry Condition]

Sensor (NC)

BLK — [+]
GRN — LOAD
SHLD — [AC Power]
WHT
RED — [-]

SENSOR POWER
[RED & BLK Wires]
36 VDC Max.
19 ±1 mA Dry
5 ±1 mA Wet

RELAY RATING
[GRN & WHT Wires]
60 VA Max.