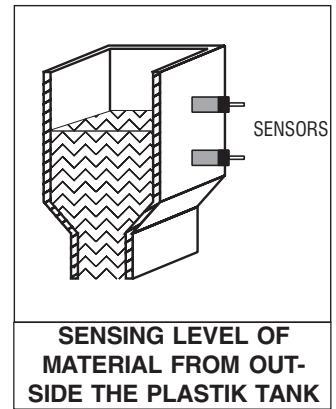
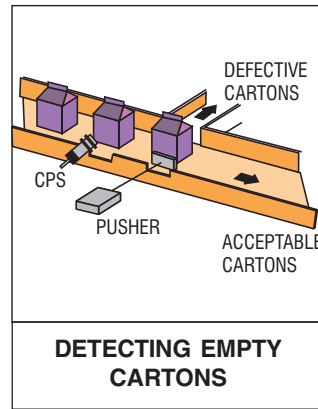
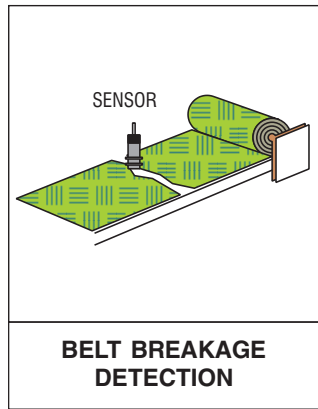
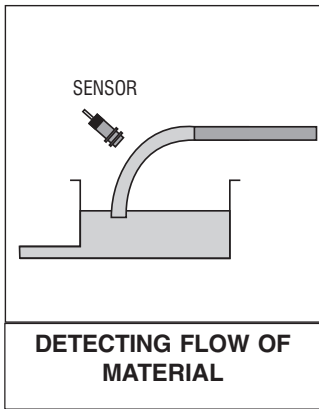


**APPLICATION SKETCHES : CAPACITIVE PROXIMITY SWITCH**



**CAPACITIVE PROXIMITY SWITCH**

**CPS**

**SOLID STATE SENSOR FOR : PLASTIC - GLASS - CERAMIC- WOOD - LEATHER - OIL - DIESEL - WATER - METALS.**

Capacitive Proximity Switch is a solid state device to sense position or level of any material.

**Position Sensing** : Plastic pouches, tablets, cardboard boxes, bottles Paper

**Level Sensing** : Solid, liquid, granules, Flour.

**Counting** : Number of bottles, boxes, pouches, etc

Available sizes		M18	M30	DIA. 50	Mounting
Sensing distance in mm	For object connected to earth	3	20	30	Non Flush
	For object not connected to earth	3	20	30	Non Flush
	For object connected to earth	3	20	30	Flush
	For object not connected to earth	3	20	30	Flush

Above sensing distances related to mild steel target. Apply following correction factor for object other than mild steel.

OBJECT	WATER	PVC	GLASS	PAPER	OIL	WOOD	METAL
<b>Correction factor</b>	<b>1</b>	<b>0.6</b>	<b>0.5</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2-0.7</b>	<b>1</b>

**SENSITIVITY ADJUSTMENT :**

Capacitive Proximity Switch senses all metals and nonmetals. The sensitivity of switch also depends on the surrounding environment. Therefore each switch is to be adjusted at site to get best results. A multi turn potentiometer is to be adjusted to increase or decrease the sensitivity. Slowly turn the potentiometer clockwise to increase the sensitivity. Extreme sensitivity is achieved when load and 'LED Lamp' remains continuously 'ON' irrespective of object. This is max. limit of the sensitivity. Reduce the sensitivity by at least 2-3 turns than max. value. When switch is used for controlling level, sensitivity is to be set to minimum applicable so as to avoid false tripping by thin layer of powder deposited on the switch.

**SALIENT FEATURE :**

- 1) Hysteresis : 5-20 % of set sensitivity
- 2) Grade of Protection : IP 65 / IP67
- 3) Enclosure : Metallic ( Nickel plated brass ) / Stainless Steel / Plastic.
- 4) LED Indication : Provided.

**THREE WIRE SWITCHES**

**CPS D3**

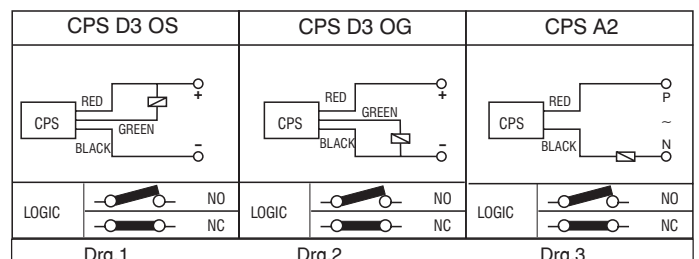
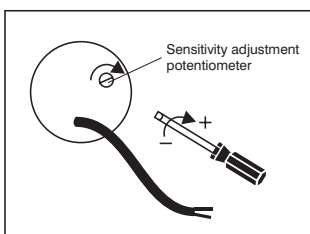
**COMMON SPECIFICATIONS**

- SUPPLY VOLTAGE : 10-30 V DC
- MAX. LOAD CURRENT : 200 m Amp.
- SWITCHING FREQUENCY : 10 HZ.

Sensing range mentioned is for M.S. Object (grounded / earthed) apply correction factor for other objects. sensitivity is adjustable by potentiometer.

OPERATING TEMP. : -25 TO 60 degree centigrade.

- Cable length per switch : 2 Mtrs.
- PROTECTIONS TRANSIENT NOISE PROTECTION : Provided,
- REVERSE POLARITY PROTECTION : Provided
- SHORT CIRCUIT PROTECTION : Provided



**TUBULAR THREADED ENCLOSURE**

**CPS D3 M**

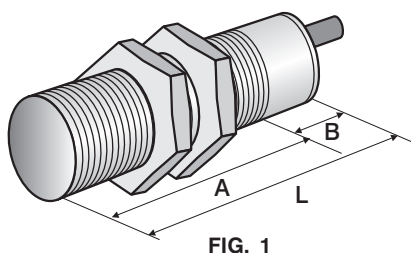


FIG. 1

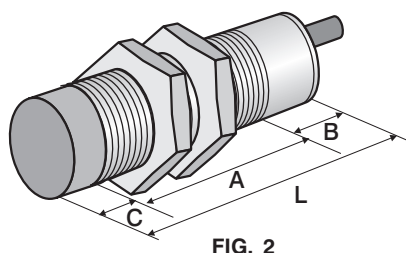


FIG. 2

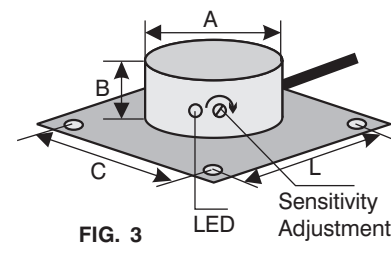


FIG. 3

SIZE	SENSING RANGE	LOAD CONN.	LOGIC	MOUNTING	HOUSING	FIG. NO	DIMENSIONS				WIRING DRG.	TYPE NO
							A	B	C	L		
							mm					
M18x1	6	PNP	NO	NON FLUSH	PLASTIC	1	60	20	-	80	2	CPS D3 OG NO M18P
	6	NPN	NO	NON FLUSH	PLASTIC	1	60	20	-	80	1	CPS D3 OS NO M18P
M30x1.5	20	PNP	NO	NON FLUSH	PLASTIC	1	60	20	-	80	2	CPS D3 OG NO M30P
	20	NPN	NO	NON FLUSH	PLASTIC	1	60	20	-	80	1	CPS D3 OS NO M30P
M18x1	6	PNP	NO	NON FLUSH	METAL	2	50	20	10	80	2	CPS D3 OG NO M18N
	6	NPN	NO	NON FLUSH	METAL	2	50	20	10	80	1	CPS D3 OS NO M18N
M30x1.5	20	PNP	NO	NON FLUSH	METAL	2	50	20	15	85	2	CPS D3 OG NO M30N
	20	NPN	NO	NON FLUSH	METAL	2	50	20	15	85	1	CPS D3 OS NO M30N

**ROUND TYPE HOUSING WITH MOUNTING BASE PLATE**

**CPS D3**

**D**

DIA.	SENSING RANGE	LOAD CONN.	LOGIC	MOUNTING	HOUSING	FIG. NO	A	B	C	L	WIRING DRG.	TYPE NO
50	30	PNP	NO	NON FLUSH	PLASTIC	3	50	30	75	75	2	CPS D3 OG NO D50N
	30	NPN	NO	NON FLUSH	PLASTIC	3	50	30	75	75	1	CPS D3 OS NO D50N

**TWO WIRE AC SWITCHES**

**CPS A2**

**COMMON SPECIFICATIONS:**

SUPPLY VOLTAGE : 90-230V AC, 50 HZ  
 MAX. LOAD CURRENT : 250 m AMP. MAX. OPERATING FREQUENCY : 1 HZ.  
 Sensing range specified is for M.S. Objects Apply correction factor for other object.  
 Sensitivity adjustable by Potentiometer.

**CYLINDRICAL / THREADED ENCLOSURE**

**CPS A2**

**M**

Enclosure material: Cylindrical switches Plastic /Nickel plated brass (other materials like S.S : on request)

SIZE	SENSING RANGE	LOGIC	MOUNTING	HOUSING	FIG. NO	DIMENSIONS				WIRING DRG.	TYPE NO	
							A	B	C	L		
							mm					
M18x1	6	NO	NON FLUSH	PLASTIC	3	60	20	-	80	3	CPS A2 NO M18P	
M30x1.5	20	NO	NON FLUSH	PLASTIC	3	60	20	-	80	3	CPS A2 NO M30P	
M18x1	6	NO	NON FLUSH	METAL	3	50	20	10	80	3	CPS A2 NO M18N	
M30x1.5	20	NO	NON FLUSH	METAL	3	50	20	15	85	3	CPS A2 NO M30N	

**ROUND HOUSING WITH MOUNTING BASE PLATE**

**CPS A2**

**D**

DIA	SENSING RANGE	LOGIC	MOUNTING	HOUSING	FIG. NO	A	B	C	L	WIRING DRG.	TYPE NO
50	30	NO	NON FLUSH	PLASTIC	3	50	30	75	75	3	CPS A2 NO D50N

NC logic is available. Derive Type No. by replacing logic NO by NC. For example : CPS D3 OS NC M18N  
 Switch available with quick disconnect style connector.