

Level switch Model 5716

Switzer data sheet LS-5716

Applications

- Powders
- Pellets and chips
- Granules
- Ash handling
- Sand

Special features

- Micro processor control
- One press calibration
- Robust construction
- High or low alarm selection
- Delay time selection
- LED status indication



Level switch, model 5716

Switzer level switch model 5716 is suitable for detecting high or low level of bulk solids, in storage applications. The level detection is done based on RF capacitance principle using micro processor based measuring circuit.

The sensing probe unit is built with two elements of positive and negative electrode as a single rigid rod construction. The separation of the electrodes are done by using either PTFE or ceramic material depending on the temperature of the media.

The negative element of probe called GUARD is always in contact with vessel wall through process

connection. The tip of the probe acts as the sensing element.

Whenever the process media comes into contact with the sensing part, capacitance value changes which will lead to actuation of relay.

The probe part will have pulse amplifier circuit on the probe head which is connected to the remote control circuit through 2-core cable.

Both the circuits are housed in a IP65 compliant weatherproof aluminium enclosure.

Standard version

General

Working principle

RF capacitance

Construction

Remote type

Environmental

- Ambient: 10 ... 60°C
- Humidity: 95% RH max.

Probe unit

Power

From control unit through 2 core shielded interconnecting cable of 25 meters maximum.

Indication

Power ON: Red LED
Visible upon removal of probe head cover

Electrical entry

1/2" NPTF – 1 No.

Probe type and construction

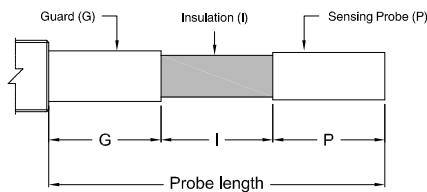
- Guarded type
- 2 element, rigid rod

Probe Insulation

- PTFE: Upto 210°C
- Ceramic: 211°C ... 500°C

Probe length (Refer below figure)

- 250 mm minimum
- 1000 mm maximum



Code	G	I	P
250	100	50	100
300	100	100	100
350	150	100	100
400	200	100	100
450	250	100	100
500	300	100	100
550	350	100	100
600	400	100	100
650	450	100	100
700	500	100	100
800	550	100	150
900	650	100	150
1000	750	100	150

Probe diameter

32 mm, ±2 mm

Wetted parts

- Sensing element: 316 SS
- Insulation
 - PTFE – Process temperature below 200°C
 - Ceramic – Process temperature above 200°C upto 500°C
- Guard with process connection: Refer ordering matrix

Process connection and material

Refer ordering matrix

Permissible process pressure

0.5 bar maximum

Temperature stand-off for probe electronics

280 mm extended height

Enclosure

Aluminium pressure die cast weatherproof, RAL 7035

Ingress protection

IP65

Mounting

Top / side

Control unit (Remote)

Power

- 100 to 240V AC
- 18 to 36V DC (option)

Input

Pulse signal from probe unit

No. of setpoint

One

Setpoint Calibration

Through push button

Setpoint On-Off Differential

Pre-fixed 2 to 10 pF. Selectable through DIP switch

Alarm Mode

- Low or High
- Selectable through DIP switch

Relay Mode

- Normal or failsafe
- Selectable through DIP switch

Time delay

- Pre-fixed 0, 3, 6, 9 seconds
- Selectable through DIP switch

Output

DPDT relay

Contact Rating

5A @ 250V AC / 28V DC

Indications

- Power ON: Red LED
- Material Present: Green LED
- Delay ON: Yellow LED Blinking
- Relay ON: Yellow LED Stable

Electrical Connection (Probe, Power, Relay)

- 11 Position screw clamp terminals through PVC cable gland to accommodate 2.5 sq. mm wires
- 1/2" NPT – 3 Nos.
- Other electrical entry consult sales

Enclosure

Aluminium pressure die cast weatherproof, RAL 7035

Ingress protection

IP65

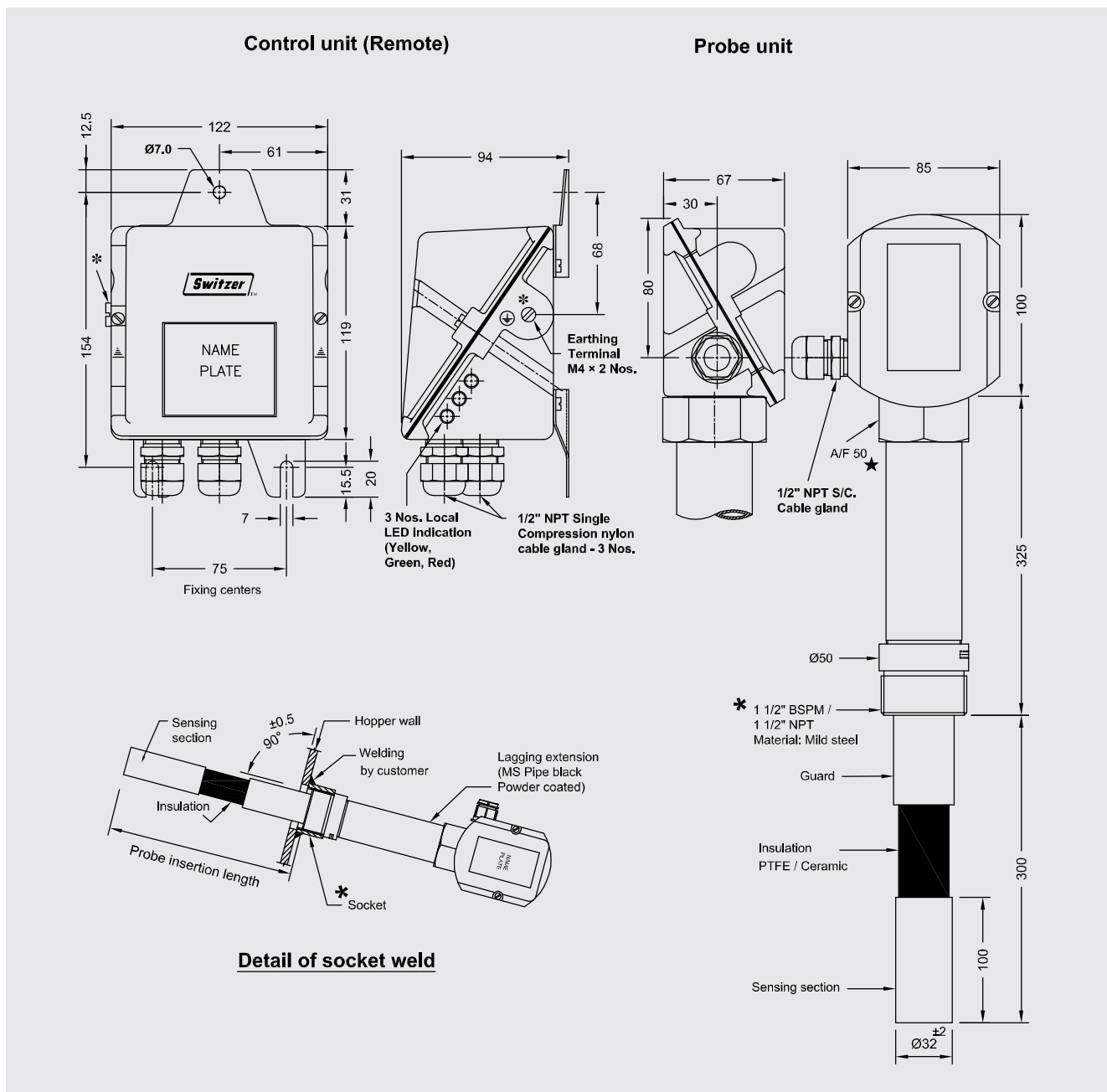
Mounting

Surface / Wall

Ordering matrix

Basic model					
Level switch (Guarded type)	5716				
Power supply					
100 to 240V AC		L			
18 to 36V DC		P			
Probe insulation					
PTFE			P		
Ceramic			C		
Probe length					
250 mm (for details refer specification)				250	
300 mm				300	
350 mm				350	
400 mm				400	
450 mm				450	
500 mm				500	
550 mm				550	
600 mm				600	
650 mm				650	
700 mm				700	
800 mm				800	
900 mm				900	
1000 mm				1000	
Process connection					
Screwed, 1½" BSPM with socket, material mild steel					SA
Screwed, 1½" NPTM with socket, material mild steel					SB
Screwed, 1½" BSPM with socket, material 316 SS					SC
Screwed, 1½" NPTM with socket, material 316 SS					SD
Flanged, 1½" ANSI, 150 RF, material mild steel					FA
Flanged, 2" ANSI, 150 RF, material mild steel					FB
Flanged, 3" ANSI, 150 RF, material mild steel					FC
Flanged, 4" ANSI, 150 RF, material mild steel					FD
Flanged, 1½" ANSI, 150 RF, material 304 SS					FE
Flanged, 2" ANSI, 150 RF, material 304 SS					FF
Flanged, 3" ANSI, 150 RF, material 304 SS					FG
Flanged, 4" ANSI, 150 RF, material 304 SS					FH
Flanged, 1½" ANSI, 150 RF, material 316 SS					FI
Flanged, 2" ANSI, 150 RF, material 316 SS					FJ
Flanged, 3" ANSI, 150 RF, material 316 SS					FK
Flanged, 4" ANSI, 150 RF, material 316 SS					FL
Interconnecting cable					
Not required					00
5 meter					05
10 meter					10
15 meter					15
20 meter					20
25 meter					25

Dimensions in mm



Ordering information

Basic model / Power supply / Probe insulation / Probe length / Process connection / Interconnecting cable

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Switzer Process Instruments Pvt. Ltd.
 128 SIDCO North Phase, Ambattur Estates,
 Chennai 600 050
 Tel. +91 44 2625 2017 / 2018 / 4991 / 4324
 sales@switzerprocess.co.in
 www.switzerprocess.co.in