Level switch
Model 5715

Applications

- Solids – coal, limestone
- Dry powder
- Plugged chute detection
- Bulk solid storage

Special features

- Micro processor control
- One press calibration
- Robust construction
- Normal / failsafe alarm selection
- Pre-defined time delay option
- LED status indication

Level switch, model 5715

SWITZER level switch model 5715 is specifically designed to suit low or high level detection of material having low dielectric constant such as flyash, fine dust, powders, etc.,

The level switch work on the principle of RF capacitance sensing method. The instrument is constructed as two parts – Probe and Remote control electronics.

The probe part acts as a sensor which has three elements which are Sensing, Shield and Guard elements. Each section of probe is isolated by an insulated barrier.

The guard always is in contact with the vessel body through the process connection. This acts as a common reference electrode to measure the capacitance between sensing probe and guard.

The electronics detects the difference in capacitance and the relay is activated when the capacitance reaches the set value.

The calibration methodology is a unique concept and is a one touch calibration process utilising a micro controller without any traditional potentiometer.

The entire circuitry is housed in a IP:65 compliant weatherproof enclosure suitable for surface / wall (or) pipe mounting.

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 4 core shielded interconnecting cable of 25 meters maximum.

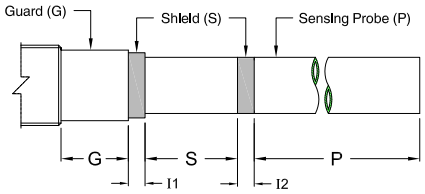
Indication
Power ON: Red LED
Visible upon removal of probe head cover

Electrical entry
1/2" NPTF – 1 No.

Probe type and construction
- Driven shield type
- 3 element, rigid rod

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

Probe length (Refer below figure)
- 220 mm minimum
- 600 mm maximum



Code	Probe length (mm)	G	I1	S	I2	P
H2	220	30	10	50	10	120
H1	270	80	10	50	10	120
A4	300	80	10	50	10	150
A5	350	130	10	50	10	150
A6	400	180	10	50	10	150
A7	450	230	10	50	10	150
A8	500	250	10	80	10	150
A9	550	300	10	80	10	150
B1	600	350	10	80	10	150

Probe diameter
32 mm, ±2 mm

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

Process connection and material
Refer ordering matrix

Permissible process pressure
0.1 bar maximum

Temperature stand-off for probe electronics
280 mm extended height

Enclosure
Aluminium pressure die cast weatherproof, RAL 5012

Ingress protection
IP65

Mounting
Top / side

Remote control unit

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

Enclosure
Aluminium pressure die cast weatherproof, RAL 5012

Ingress protection
IP65

Mounting
Surface / Wall

Ordering matrix

Basic model

Level switch three element probe — **5715**

Power supply

100 to 240V AC — **L**

18 to 36V DC — **P**

Probe insulation

PTFE — **P**

Ceramic — **C**

Probe length (*for details refer specification***)**

220 mm — **H2**

270 mm — **H1**

300 mm — **A4**

350 mm — **A5**

400 mm — **A6**

450 mm — **A7**

500 mm — **A8**

550 mm — **A9**

600 mm — **B1**

Process connection

Screwed, 1½" BSPM — **P9**

Screwed, 1½" NPTM — **P10**

Flanged, 1½" ANSI, 150 RF — **F5**

Flanged, 2" ANSI, 150 RF — **F7**

Flanged, 3" ANSI, 150 RF — **FB**

Flanged, 4" ANSI, 150 RF — **F13**

Process connection material

Mild steel — **C**

304 SS — **4**

316 SS — **2**

Interconnecting cable

Not required — **ZZ**

5 meter — **05**

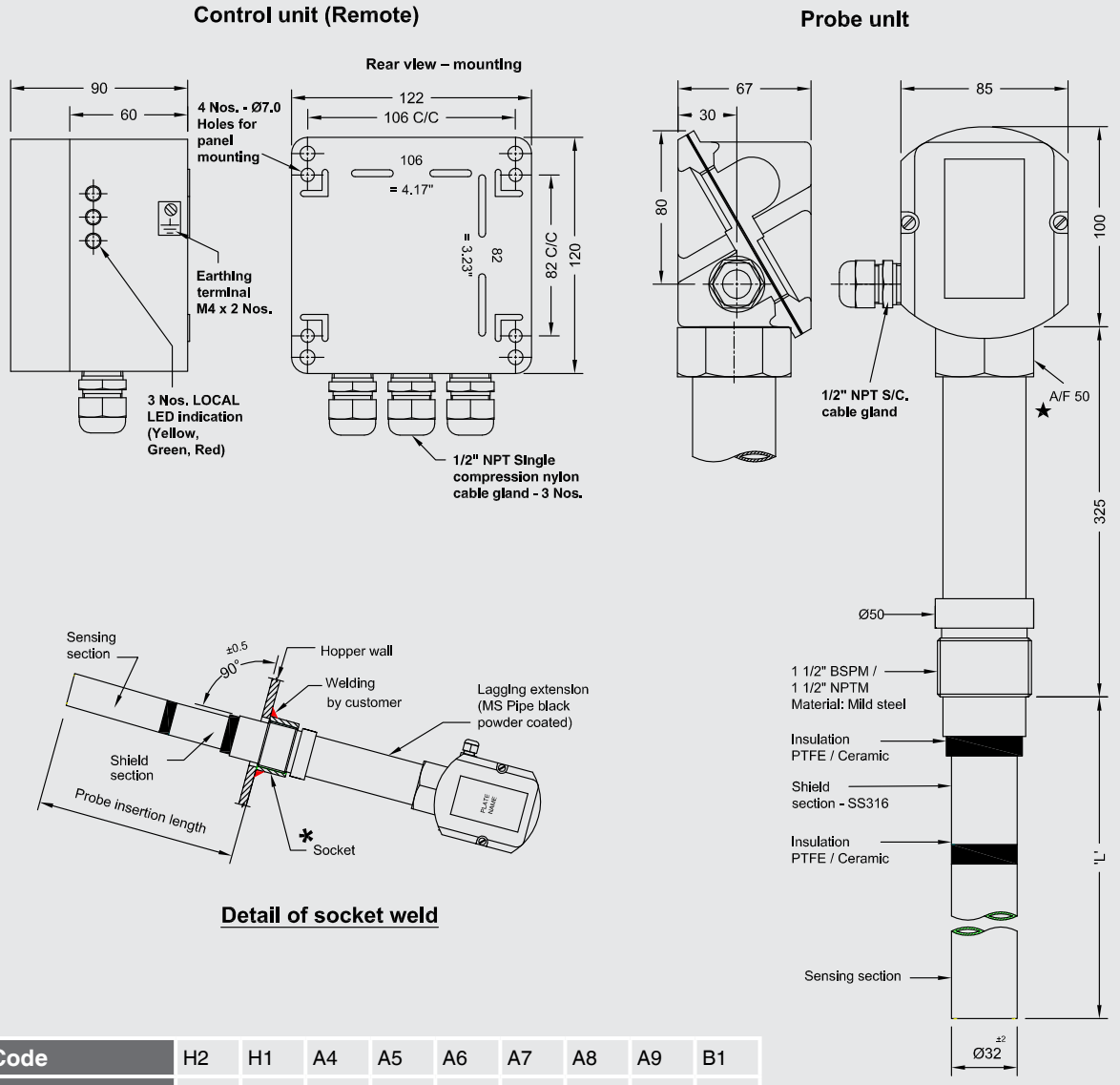
10 meter — **10**

15 meter — **15**

20 meter — **20**

25 meter — **25**

Dimensions in mm



Code	H2	H1	A4	A5	A6	A7	A8	A9	B1
Probe length 'L'	220	270	300	350	400	450	500	550	600

Ordering information

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

WIKA Instruments India Pvt. Ltd.
128 SIDCO North Phase
Ambattur Industrial Estate, Chennai 600 098
Tel. +91 44 2625 2017 / 2018 / 9840919318
switch.sales@wika.com
www.wika.co.in