



CAPACITANCE TYPE SINGLE POINT LEVEL SWITCH SERIES 114

Series 114 is a versatile Capacitance Type Single Point Level Switch which can be used in a variety of applications for detecting/controlling level of solids / liquids when used with suitable probe unit.

Level switch consists of electronic control circuit housed in cast aluminium weatherproof/sheet steel enclosure whereas probe unit consists of electrode, transducer and weatherproof / flameproof probe head to house transducer.

For selection of suitable probe unit for your application refer to leaflet LF-114-0803 (For liquids) & LF-114-0804 (For solids).



FEATURES

- Weather proof enclosure
- Surface/Pipe mounting versions
- Time delay, dead band & probe failure alarm available optionally.
- Intrinsically safe option available.

SPECIFICATIONS

- Input :
Voltage signal from transducer in probe head
- Relay contacts :
For weatherproof version
1 C/O, 6A @ 230 VAC/28 VDC (Resistive)
OR
2 C/O, 2A @ 230 VAC/28 VDC (Resistive)
For sheetsteel version
1 C/O, 5A @ 230 VAC/24 VDC (Resistive)
- Failsafe Features :
Fail Safe High (FSH) or Fail Safe Low (FSL) - user selectable
- Time delay (optional) :
12 sec -20 min. (user adjustable through potentiometer at the front)
- Controls :
Potentiometer to set Level Alarm (std.)
Potentiometer to set Time Delay (optional)
Potentiometer to set Dead Band (optional - for sheetsteel version only)
- Indications :
Red LED for Mains ON & Level Alarm (std.)
Red LED for Level Above Setpoint
Red LED for Probe Failure Alarm (optional - for sheetsteel version only)

- Sensitivity :
 $\pm 0.5\%$ of probe output
- Ambient conditions :
Temperature - 0 to 55°C
Relative humidity - 95% max (non condensing)
- Calibration :
By physically changing level in tank
- Termination :
Suitable for 2.5mm² conductor size
- Cable entry (weatherproof version only) :
3 Nos., 3/4" UNF/ET (F) OR
3 Nos., 1/2" NPT (F)
- Cabling between Switch & Probe Head :
3x1.5mm² Cu. cable - Upto 500 mtrs.
3x2.5mm² Cu. cable - Upto 1000 mtrs.
(cable resistance < 10 Ohms per line)
- Enclosures :
Weatherproof, cast aluminium polyurethane painted, conforming to IP-65 as per IS-2147 suitable for surface/pipe mounting.
OR
Sheetsteel polyurethane painted suitable for surface mounting.
- Weight :
3.2 kg (Weatherproof version)
2.2 kg (Sheetsteel version)

ORDERING CODE

1	1	4	C				
---	---	---	---	--	--	--	--

SAFETY
 Non Intrinsically Safe (NON IS) - H
 Intrinsically safe - S

VERSION
 Single point switch (1 C/O) - 1
 Single point switch (2 C/O) - 2

MOUNTING/ENCLOSURE
 Surface/Sheetsteel - 1
 Surface/Cast aluminium weatherproof - 3
 Pipe/Cast aluminium weatherproof - 5

CABLE ENTRY
 0 - No cable entry
 F - 3/4" UNF / ET
 T - 1/2" NPT

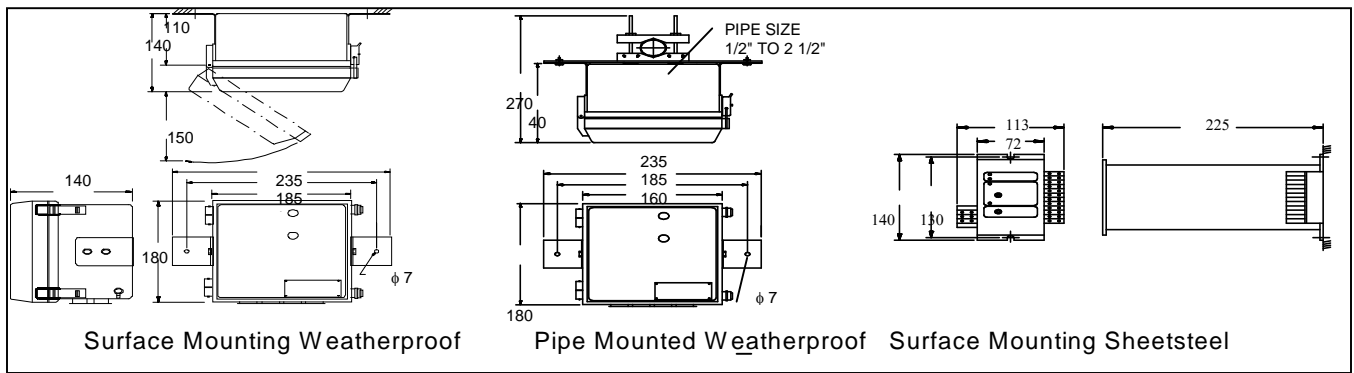
POWER SUPPLY
 1 - 115 VAC, 1 ϕ , 50 Hz
 2 - 230 VAC, 1 ϕ , 50 Hz
 3 - 24 VDC

FUNCTION
 1 - Level alarm only
 2 - Level and probe failure alarm
 3 - Level alarm with adjustable time delay
 4 - Level alarm with adjustable time delay and probe failure alarm

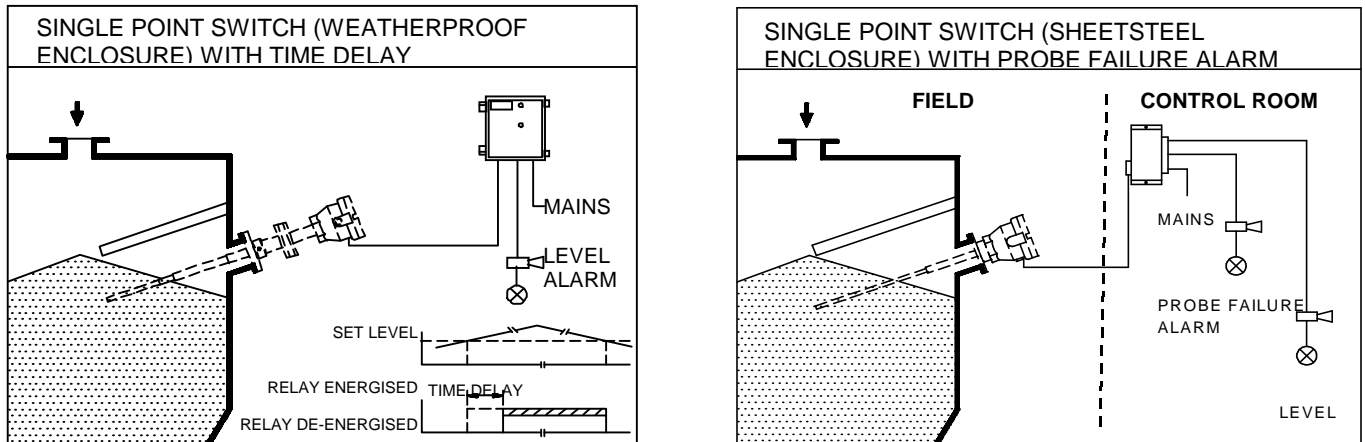
NOTE :

- 1) No probe failure alarm for weatherproof version.
- 2) Version 2 is available only in weatherproof enclosure.
- 3) All above power supply options are inbuilt in sheetsteel version & are user selectable.
- 4) Dead band is available in sheetsteel version only.
- 5) No cable entry option is for surface mounted sheetsteel enclosure only.

DIMENSIONS



DIMENSIONS



***Continuous developments may necessitate changes without notice

LF-114-0802 R3 03/02

SBEM Pvt. Ltd.

39, Electronic Co-Operative Estate, Pune-Satara Road, Pune - 411 009 (INDIA)

Tel. - 91-20-4220505, 4223375 Fax - 91-20-4215670

Email - sbemsales@sbem.co.in, sbemsales@vsnl.com

Works: Bibwewadi Industrial Estate, 691/A/2, Pune-Satara Road, Pune-411 037(India) Email: mfg@sbem.co.in

Office MUMBAI
 Tele. 91-22-5222824, 5242520
 Fax 91-22-5230236
 Email mumbai@sbem.co.in

CHENNAI
 91-44-4451235, 4412947
 91-44-4412947
chennai@sbem.co.in

NEW DELHI
 91-11-6560647, 6969679
 91-11-6969679
newdelhi@sbem.co.in