

Level switch technical detail

LFIA intelligent RF admittance microwave level switch generate Alarm when preset microwave frequency and medium microwave frequency match, Microwave field generate when measuring point inserting few millimeters in to the medium, also its not effect by foam condensate and residue, also its measuring point has no dead end and is hygienic so level switch is suitable for CIP (Clean-in-Place), WIP (Wash-in-Place) and SIP (Sterilization-in-Place), available with different process connection as per industries requirement, and different temperature version for set up to 200 deg C

Process connection:

Mounting position: Any, top, bottom, side
Wetted Part material: PEEK natura,
: 304/ 316 Stainless Steel
Size:G1/2,
Working Frequency: 40Mhz~170Mhz,

Performance characteristics:

Hysteresis : 3% of Range
Repeatability : ±1mm (water)
Response time : 0.3s
Damping : 0~5 adjustable
Delay : 0~10s adjustable,

Power Supply:

Voltage range :12-33VDC
Consumption current(no load): 33 mA
Power-up time: < 3s
Reverse protection: Yes

Output:

Output Signal: PNP+NO, PNP+NC,
: NPN+NO, NPN+NC
Voltage drop : PNP: < 1.5V, RLOAD≥2kΩ
NPN : < 1.5V, RLOAD≥2kΩ
Current rating: 100mA
Off leak current: <100uA, max
Short circuit protection: Yes



Process conditions:

Process temperature: -40°C to +115
continuously (Tamp< 100 °C)
Process pressure: -1~3bar

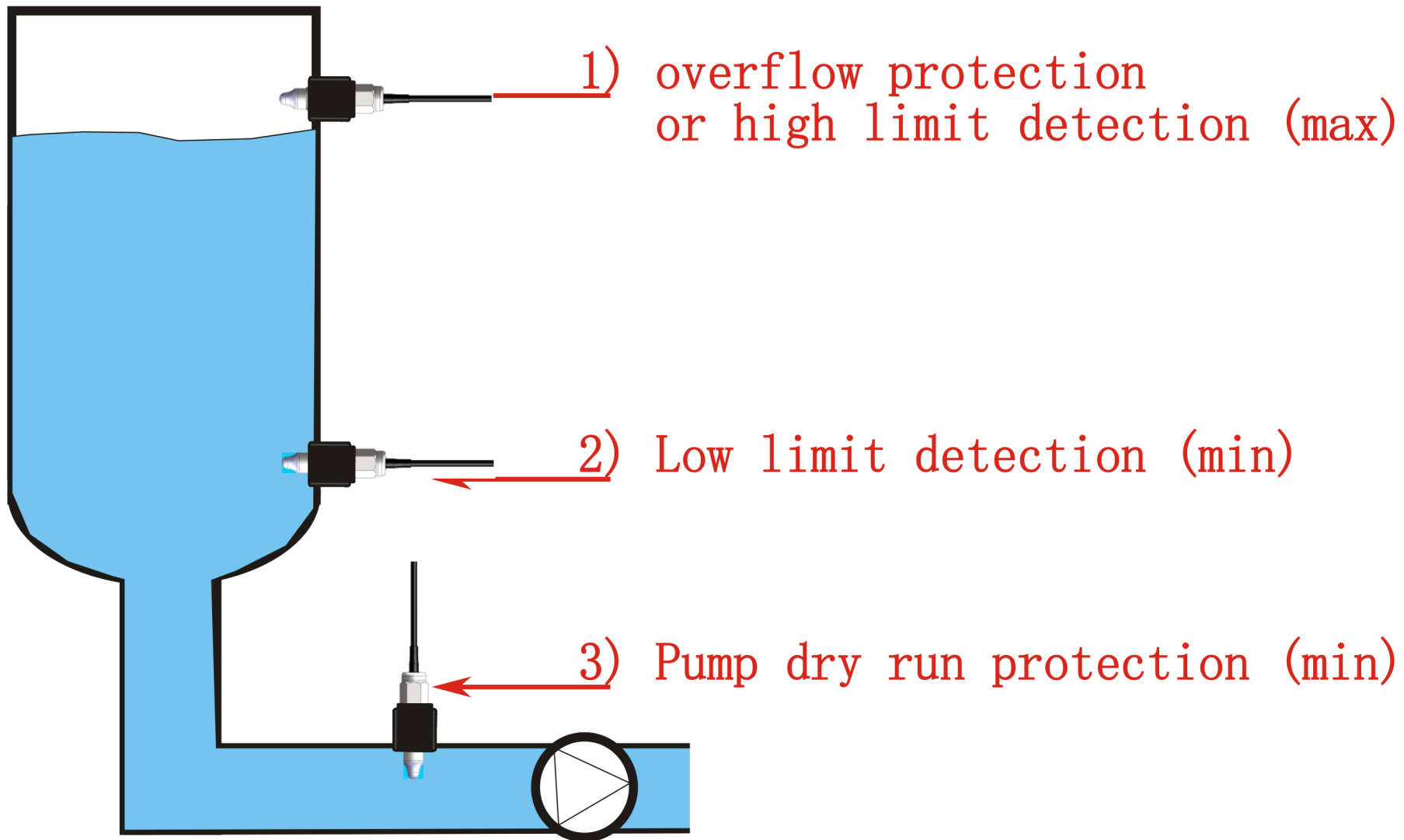
Ambient conditions:

Ambient temperature:-40 to +85 °C
Storage temperature: -40 to +85 °C
Protection grade: Ip68(PEEK part),
: IP66(Cable outlet)
Humidity: < 98%RH, condensing

Special future compare with competitor :

10ms power off interruption not effect level switch
stabilize within 0.3s after power off and restart
Same working condition radiation level half
insulation voltage : 1000 V

Level switch installation drawing



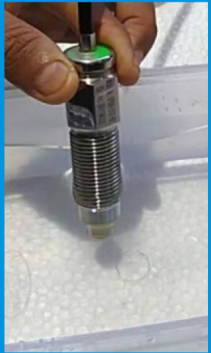
LFIA switch detect and control : Water base media, oil base media, powder, granules, jelly, high viscous and pasty media, Food, beverage and pharma base Hygienic liquid, Liquid with foam, Dirty liquid like ETP, HTP, Bio-toilet, gohar (human and animal waste) fuel plant

Low (Min.) and high (max.) level control at tank, mixture, conveyor belt, hopper

Layer separation detection

Leakage detection

Level switch Application for all media



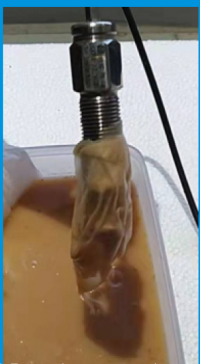
Water and low viscous liquid



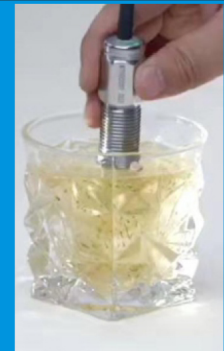
Solid Granules



Powder like: cement, silica, coal/fly ash



Waste water, dung water, human waste



Jelly liquid,

jam, honey



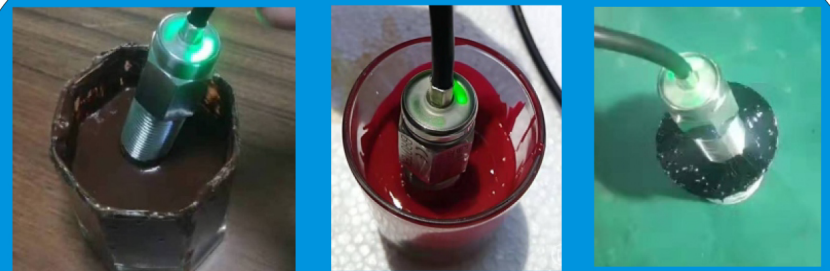
Oil, fuel and petroleum product



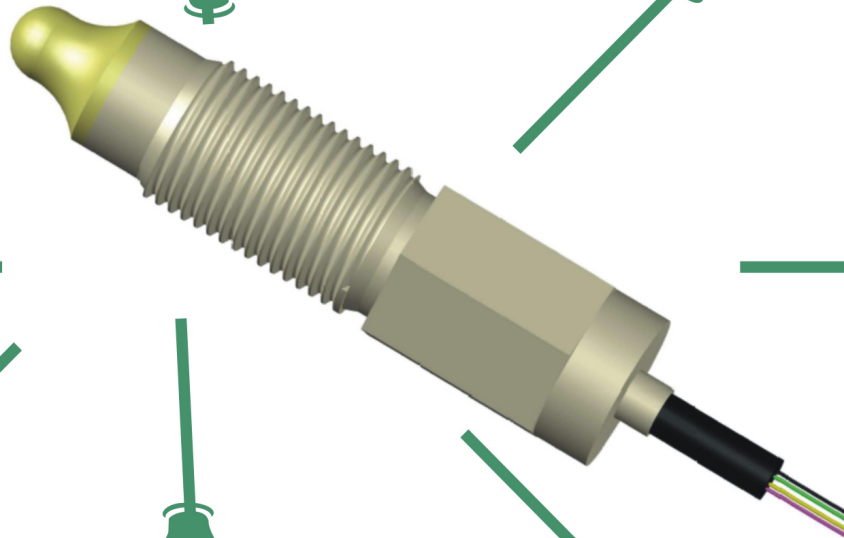
Oil with water



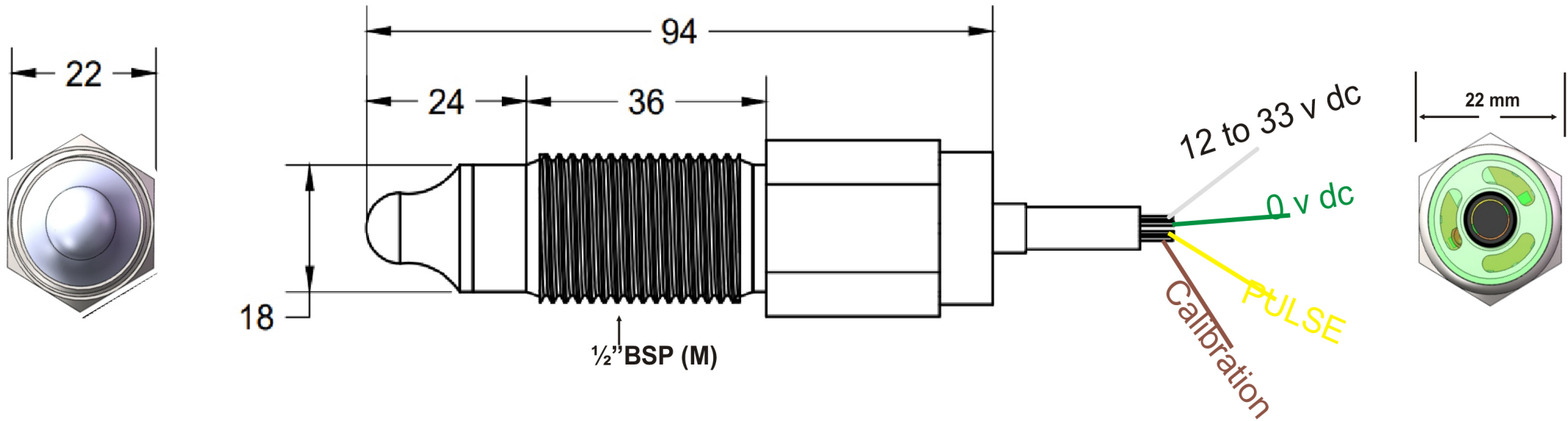
**Liquid with foam
Layer separations detection**



High viscous, sticky liquid and paste



Level switch Dimension drawing



Level switch Output diagram

NPN output



PNP output

