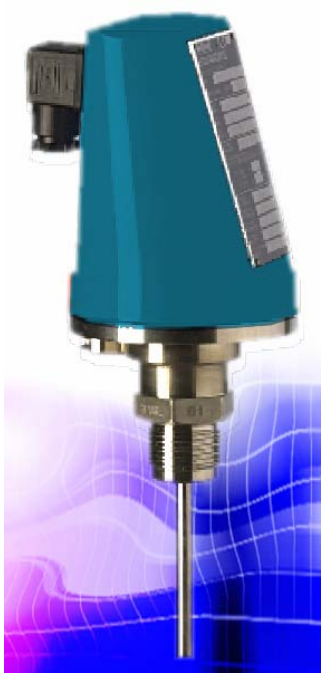
TDR Radar Level 6200

2 WIRE LOOP POWERED

benefits

- 24m Measuring Range
- 24 VDC Loop Powered
- 4/20mA Output
- Pressure up to 40 Bar
- Flange temperature up to 200°C
- HART Protocol standard
- ATEX EExia Intrinsically Safe
- Multiple probe options
- 316 Stainless Steel Probe
- Liquids and Solids
- Accuracy +/- 15mm



The 6200 VF Series range of TDR (Time-Domain Reflectometry) products is ideal for the measurement of liquids, powders and granules to a range of 24m. Unaffected by pressure, temperature, viscosity, vacuum, foam, dust, changes in dielectric constant or coating of the probe, the VF Series can measure virtually any product in Direct mode utilising any one of its seven probe types.

Pulses of low power microwaves are guided along the probe. At the point where the waves meet the product surface they are reflected back. The intensity of the reflection is relative to the dielectric constant of the product being measured. The higher the dielectric constant the stronger the reflection will be.

Probe types and their application

The coaxial probe type is mainly used for clean liquids with a very low dielectric, such as LPG, LNG, solvents, NH_3, Foam, alchohol, oil/water separators. Suitable for a maximum tank height of 6 metres.

The coaxial probe is tolerant of liquid agitation or flow, and can be used in situations where there is liquid or vapour spray present.

The mono rod and mono cable types are suitable for higher viscosity clean liquids or waste liquids and fine powders.

Cement, limestone, flyash, Alumina. Highly viscous liquids, plastic powders & plastic granules.

The twin cable types are used for the higher range applications, tanks and silos with liquids and granules. They are suitable for tanks with no head clearance and can be mounted close to the tank wall. They are suitable for products with a high or low dielectric. Tank farms, plastic granule silos, light powders, LPG, LNG, LH_3, spheres, alcohol and water storage level.

Specifications

Measuring range:
Flexible probe—24m
Coaxial probe—6 metres
Rod probe—3m

Accuracy
L‹ 15m: +/- 15mm
L› 15m: +/- 0.1% of measured distance value
Powders: +/- 20mm

Repeatability: 1mm

Dielectric Constant:
Mono probe › 2.3
Twin Probe › 1.8
Coax probe: › 1.6

Probe Materials:
Flexible probe - flexible cable AISI 316L, FEP coated AISI 316
Coaxial probe AISI 316L
Rod—AISI 316L

Operating Pressure: Atmospheric, optional 16 bar or 40 bar

Operating Temperature:
Flange Temperature— -30 to +90 deg C
(200 deg C option)
Product temperature— -50 to +600 deg C

Temperature drift— 0.01%/deg C
Ambient temperature:
Standard — -30 to +55 deg C
Ex version— -20 to +55 deg C

Process connection: 1" BSP standard
Other options available

Environmental protection : IP 66

Power Supply: 18 to 35Vdc ‹28V for EX version

Output: 4 to 20mA current loop to max 750 ohms

Communication Hart for PC-STAR

Approvals: ATEX II 1 G or II 1/2D T100C. EExia IIc T6...T3 or EExia IIB T6 ...T3 EMCEN 50082-2, EN50018-1

Housing: Aluminium with Epoxy coating

Wetted Parts: Stainless Steel 316L / 316, PTFE

Gaskets: Viton, optional Kalrez 4079.

Weight: 2Kgs without probe.

PSM

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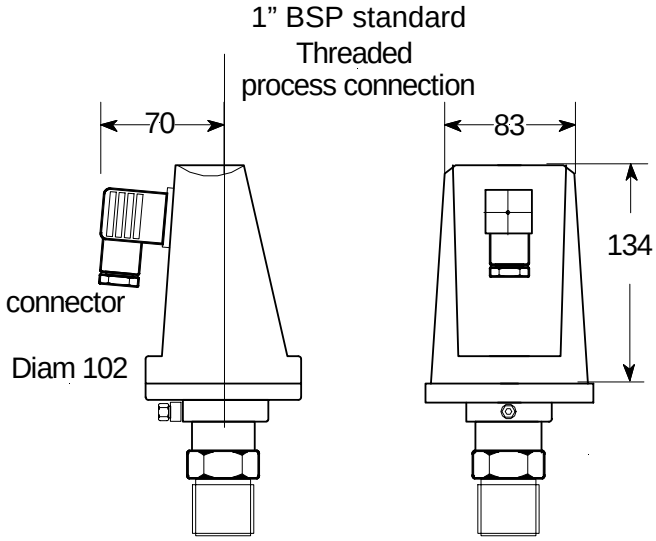
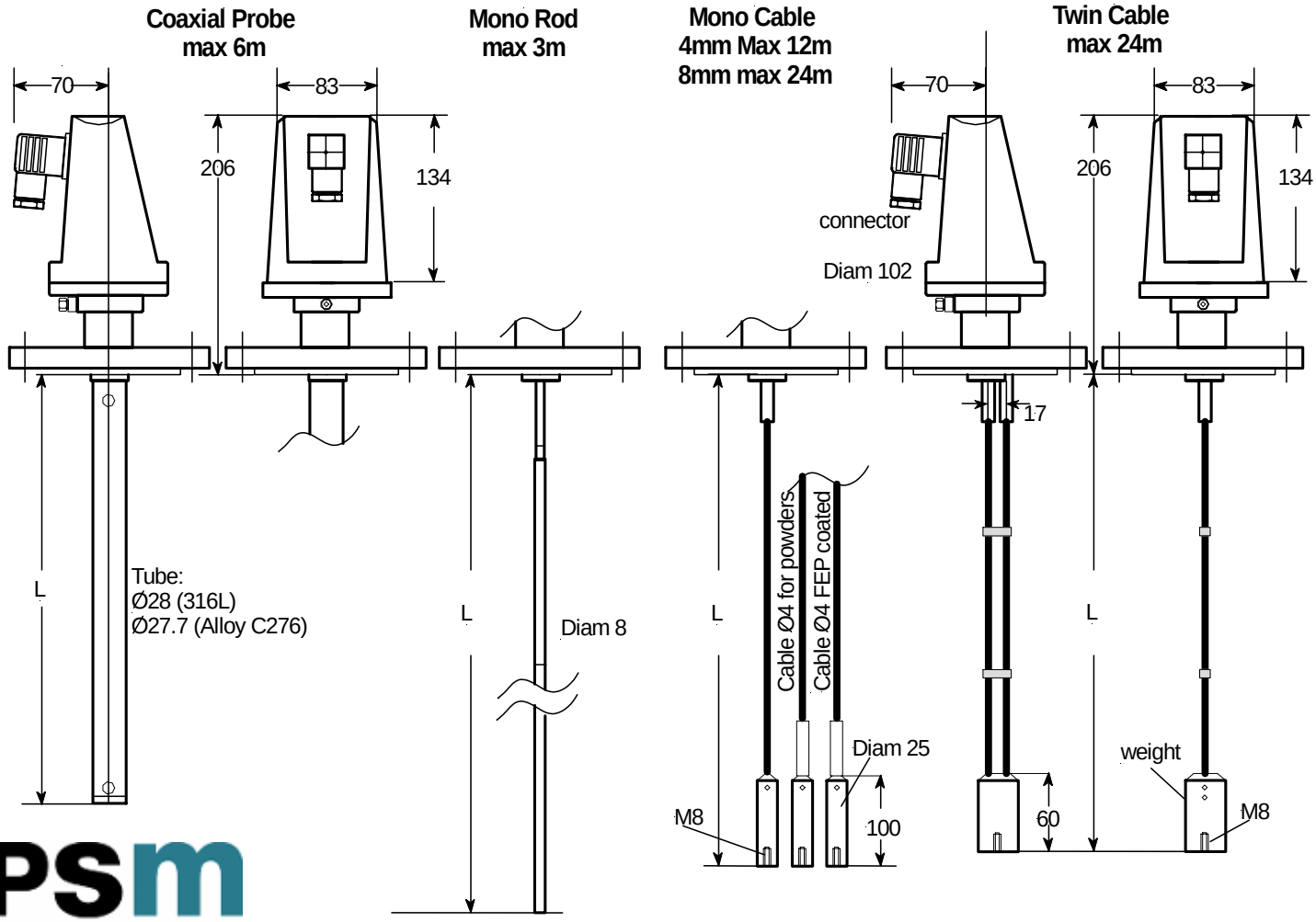
6200





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