# Techtrol Guided Wave Radar Transmitter 'G-TROL'



It is contact type guided wave radar suitable for level measurement of liquids, slurries or solid particles.

# Operating Principle:

It consists of a probe connected to an enclosure containing signal converting electronics powered by 24 VDC supply. Low power electromagnetic pulses are sent along the probe length down to the product surface. The pulses are partially reflected back to the electronics. The intensity of pulses reflected back depend upon dielectric constant of the product. Transit time of emitted and reflected pulse is proportional to distance, which is then converted by electronics into 4-20 mA signal output.

#### Salient Features:

- ☑ Level measurement is not affected by steam, foam, temp, pressure, humidity or dust.
- ☑ Easy to install and retrofit with wide range of process connections.
- ☑ Measuring range upto 30 mtrs.

#### Specifications:

Measuring Mode : Level

Probe type x Range : Mono rod probe (Ø8mm) - 6 mtrs

: Mono cable probe (Ø4mm) - 30mtrs

Dead Band : Top dead band - 400mm

: Bottom dead band -100mm

Dielectric constant :  $\geq 1.9$ 

Liquid Viscosity :  $\leq 500 \text{ cst}$ 

Frequency Range : 100MHz ~ 1.8 GHz

Accuracy : +/- 5mm
Repeatability : +/- 2mm

Supply : 24VDC (+/- 10 %)

Output : 4-20 mA with HART (2 wire)

Display : 3 digit LCD

Enclosure : Aluminium, WP IP67

Cable entries : 2 nos - M20 x 1.5 mm

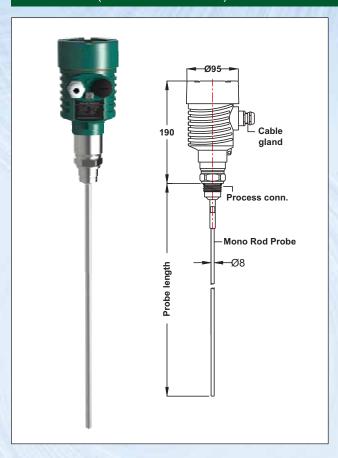
Probe MOC : SS316

Process Conn. : SS304 Screwed or Flanged

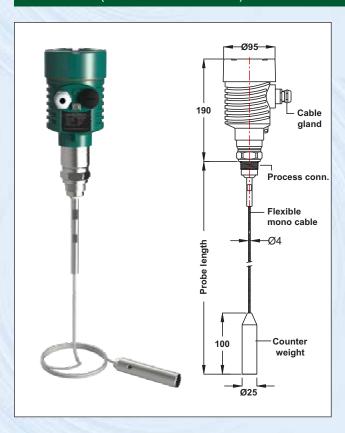
Optg. Pressure : -0.1 - 2 MpaOptg. Temp. : Std - 40 to  $120^{\circ}\text{C}$ 

: High Temp upto 250°C

#### G-TROL (Mono Rod Probe)



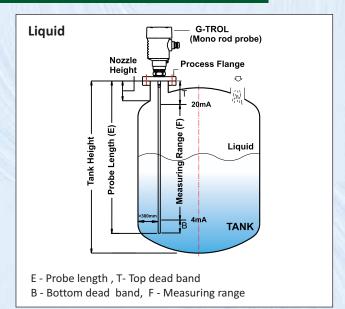
#### G-TROL (Mono Cable Probe)

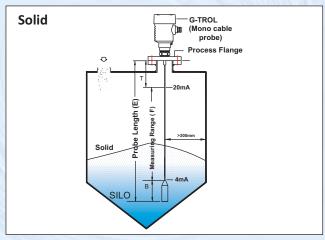


# Cost effective replacement for :

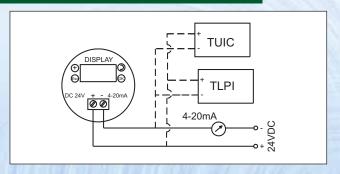
- 1. Float & Tape Gauge with Transmitter
- 2. Displacer Transmitter
- 3. Capacitance Transmitter

## Typical Installations:





## Terminations & Wiring:





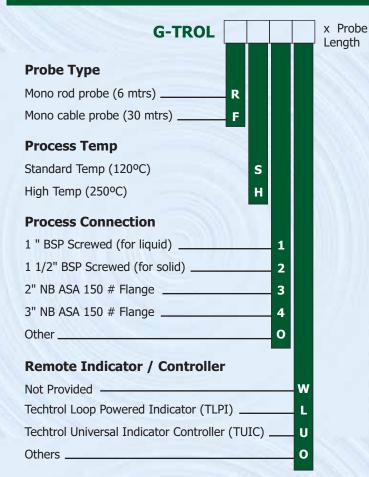
#### Industries:

Food, Chemical, Water & Waste, Power generation, Steel, Cement, Quarry and Powder.

#### Applications:

- 1. Level measurement
- 2. Volume measurement in conjunction with TUIC

#### Model Identification:



# Ordering Information:

Model no x Probe length x Product and its dielectric constant, Optg. Temp & Pressure.

\*Dimensions are in mm

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