



## LEVEL

# Explosion-Proof Guided Wave Radar Level Transmitter

## Tek-Flex 4100A



Technology Solutions



### 1 FEATURES

- Continuous level measurement in process or storage tanks, reactors, and pressure vessels.
- Precisely measures liquids, slurries, and solids level.
- Robust design.
- Highly accurate and reliable.
- High-end guided radar.
- Measuring distance up to 60m.
- 2-wire guided radar level transmitter based on the Time Domain Reflectometry (TDR) technology.
- Cost-effective and maintenance-free.
- Rotatable and removable transmitter.
- Stainless Steel housing for corrosive environment.
- Suitable for liquid storage and process applications.
- Pre-calibrated from factory for easy installation.
- Programmable fail safe mode.

### 3 APPLICATIONS

- Oil and Gas Industries.
- Chemical Industries.
- Petrochemical Industries.
- Metal Industries.
- Minerals and Mining Industries.

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### 2 SPECIFICATION

<b>Accuracy</b>	Standard: • $\pm 0.08"$ ( $\pm 2\text{mm}$ ) (distance $\leq 10\text{m}$ / 33ft) • $\pm 0.02\%$ of measured distance (distance $> 10\text{m}$ / 33ft) Interface: • $\pm 0.2"$ ( $\pm 5\text{mm}$ ) (distance $\leq 10\text{m}$ / 33ft) • $\pm 0.05\%$ of measured distance (distance $> 10\text{m}$ / 33ft)
<b>Probe Options</b>	Single Rod ( $\text{Ø}1/4"$ ( $\text{Ø}8\text{mm}$ )): Single-Piece or Segmented Type; Single Rod ( $\text{Ø}3/8"$ ( $\text{Ø}10\text{mm}$ )): Single-piece fully PTFE coated; Single Cable ( $\text{Ø}1/8"$ ( $\text{Ø}4\text{mm}$ ))
<b>Measuring Range</b>	Single-Piece or Single-piece fully PTFE coated: 3.28 to 13.12ft (0.6 to 4m); Segmented: 3.28 to 19.69ft (0.6 to 6m); Single Cable: 3.28 to 196.85ft (1 to 60m)
<b>Resolution</b>	0.004" (0.1mm)
<b>Repeatability</b>	$\pm 0.04"$ ( $\pm 1\text{mm}$ )
<b>Temperature Limits</b>	+59 to +77°F (+15 to +25°C)
<b>Operating Temperature</b>	-58 to +482°F (-50 to +250°C); -58 to +302°F (-50 to 150°C)
<b>Ambient Temperature</b>	-40 to +176°F (-40 to +80°C)
<b>Storage Temperature</b>	-58 to +185°F (-50 to +85°C)
<b>Pressure Limits</b>	Single fully PTFE-coated: -14.5 to 580psig (-1 to 40barg); Single ceramic process seal system: -14.5 to 1450psig (-1 to 100barg);
<b>Humidity</b>	60% $\pm$ 15%
<b>Viscosity</b>	10000mPa·s / 10000cP
<b>Dielectric Constant</b>	$\geq 1.6$ in direct mode (interface: $\epsilon_r(\text{interface}) \gg \epsilon_r(\text{level})2$ )
<b>Material</b>	316L SS; Hastelloy C; PTFE
<b>Process Connection</b>	Thread, Flange
<b>Output Signal</b>	4 to 20mA or HART output
<b>Power Supply</b>	11.5 to 30VDC; 13.5 to 34VDC
<b>Display</b>	LCD display (128 x 64 pixels in 8-step greyscale with 4-button keypad)
<b>Protection Class</b>	IP68; IP66
<b>Enclosure</b>	NEMA 4x
<b>Approvals</b>	cQPSus XP-IS/DIP-IS CL I DIV 1 GP A-G + CL I Z1 AEx db ia/Ex db ia IIC T6...T' Gb + Z21 AEx ia tb/Ex ia tb IIIC T85°C...T°C Db