

Rosemount TankRadar TGU 55

Still Pipe Antenna Gauge for Tanks

Description

Rosemount TankRadar TGU 55 is an intrinsically safe 10 GHz FMCW radar for level measurement in still pipes.

The gauge is intelligent and processes tank signals locally, giving better and faster tracking of the liquid surface.

The still pipe guides the radar waves down into the tank, allowing installation in narrow tanks and close to disturbing objects. Still pipe installations are common in slop tanks on tankers and within offshore applications.

The TGU 55 can be equipped with up to two independent measurement channels for optional redundant level measurement or high level or overfill alarm.

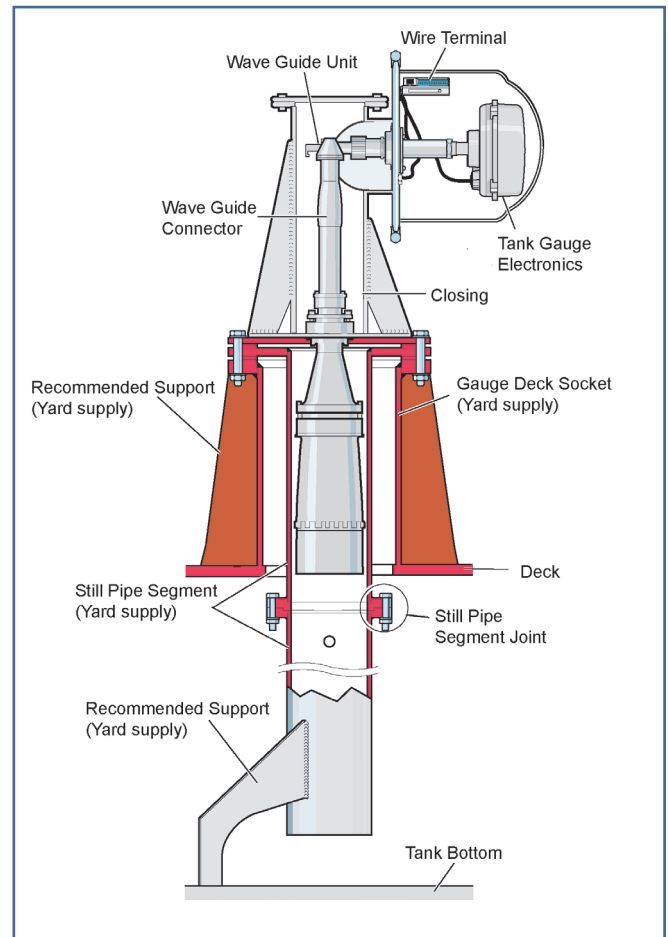
The TGU 55 can also receive signals from a vapour pressure sensor mounted in the device. Furthermore externally mounted tank temperature units can also be interfaced to the TGU 55.


Local display and tank cleaning monitoring sensors can also be connected.

Exchange of electronics can be done under closed tank conditions.

Benefits

- With a still pipe, it is easy to find installation space in the tank
- The still pipe and antenna solution is optimized to withstand build up and deposits inside the pipe
- Service can be done under closed tank conditions
- Robust design, withstands harsh conditions on deck
- Possibility to integrate vapour pressure sensor
- Independent 2-in-1 radar channels for use of level redundancy, high level or overfill alarm
- Radar gives high accuracy and stable measurement over long time without any need of recalibration



Technical Data - TGU 55		
Gauge		
Measuring Range	0 to 35 m	
FMCW Center Frequency	10 GHz	
Instrument Accuracy	±5 mm	
Ambient Temperature	-40 to +70 °C	
Cable to control room	Up to 2 cables with two or three twisted pairs with common shield. Max length 400 m	
Number of cable inlets	Up to 3 inlets (Ø 6 to 21 mm)	
Material facing tank atmosphere	Stainless steel 316L, PTFE	
Material facing deck	Stainless steel 316L	
Weight	52 kg	
Ingress protection	IP 66	
Explosion protection	Intrinsically safe	ATEX:  II 1G Ex ia IIC Ga T4 IECEX: Ex ia IIC Ga T4 Inmetro (optional)
Deck Socket and Still Pipe		
Deck socket and still pipe	Yard supply. Pipe vented to tank for level equalization.	
Still pipe dimension	Inner diameter must be between 154.0 and 158.0 mm Typical pipes: 165.2 x 4.85 mm (JIS) 168.3 x 6.3 mm (DIN)	
Still pipe material	Metallic, according to yard specification. Typically stainless or carbon steel.	
Optional		
Channels	Number of independent channels	Up to 2 for Level, Redundant Level, High Level and/or Overfill Alarm
Vapour Pressure	Operating range	-100 to 900 mBar
	Instrument accuracy	±3 mBar
	Material facing tank atmosphere	Alloy C276

©2014 Emerson Process Management. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Rosemount and the Rosemount logotype are registered trademarks of Rosemount Inc. TankRadar, LevelDatic and MAS 2600 are trademarks of Rosemount Tank Radar AB. Rosemount Tank Radar AB is a member of the Emerson Process Management family of companies. All other marks are the property of their respective owners.

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice that may appear in this publication.

Emerson Process Management

Rosemount Tank Radar AB
Box 13045
SE-40251 Sweden
T +46 31 337 00 00
F +46 31 25 30 22

www.EmersonProcess.com/mtm