

# 26GHz Radar Level Transmitter



09/12/2020

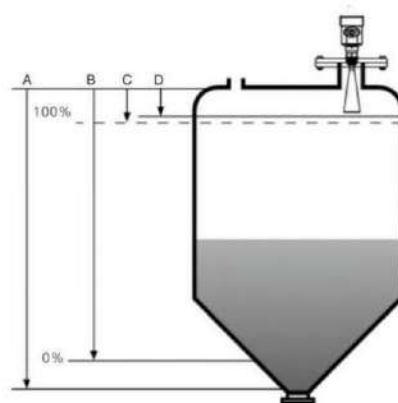
## 26GHz Intelligent Radar Level Transmitter

### Product Description

**SEAL** Series Radar Level Transmitter is high-frequency level measuring instruments with the maximum measuring distance up to 70 meters. The antenna is further optimized, and the new-type microprocessor can perform higher rate of signal analysis and processing, making the instrument available for complex measurement conditions, such as reactors, solid silos.

### Working Principle

Radar level antenna emits narrow microwave pulses that transmitted down by the antenna. The microwave comes into contact with the measured medium surface then reflected back and receiving by the antenna system. The signal is transmitted to electronic circuit and partly convert to level signals (as the microwave featured with high propagation speed, it's almost instantaneous for the electromagnetic waves to reach the target and return to the receiver)



A. Measuring range setting

B. Low position adjustment

C. High position adjustment

D. Blind spot range

Measurement datum: thread bottom and flange sealing surface

Note: When applying the radar level transmitter, make sure that the highest material level cannot reach the measurement blind spot (the territory that indicate as D)

### Features of 26GHz Radar Level Transmitter

- Small antenna size, easy to install; non-contact radar, no wear, no pollution.
- Almost free from corrosion, foam impact; hardly affected by the change of the temperature, pressure and water vapor in the atmosphere.
- Severe dust environment is not likely to affect the work of the high-frequency level meter.
- Shorter wavelength can achieve better reflection for the inclined solid surface.
- The small field angle and energy concentration, enhanced echo capabilities, and beneficial to avoid interference.
- Minimized measuring blind spot can gain better result of small tank measurement.
- High SNR, even in the case of fluctuations can result in better performance.
- High frequency, the best choice to measure solids and low dielectric media.

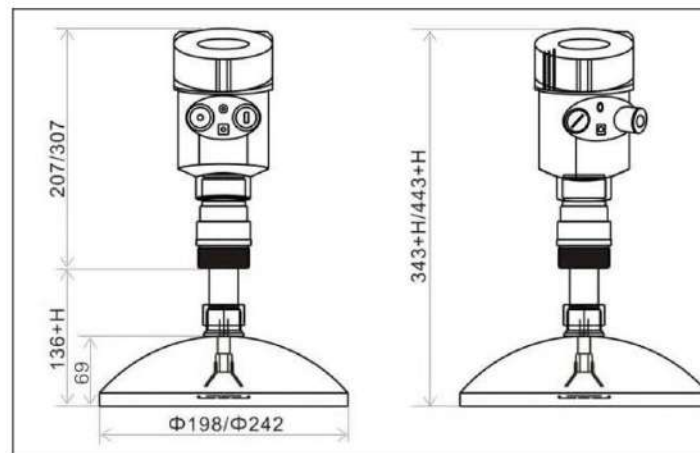
## SEAL04 Radar Level Transmitter

### 1. SEAL04 Technical Parameter :

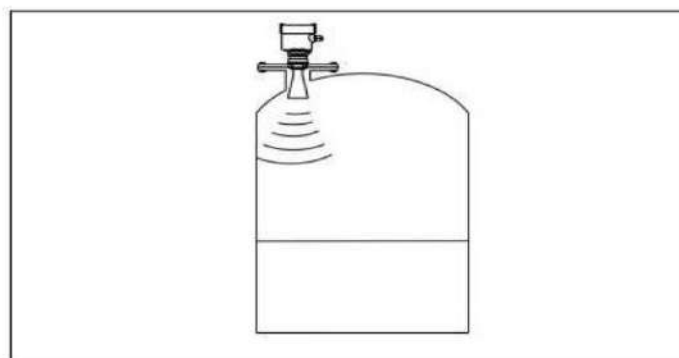


<b>Application</b>	Long range storage container, process container, or hanging bulk material and crystallization, condensation occasion
<b>Measuring range</b>	70 meter
<b>Process connection</b>	Screw thread, Flange
<b>Medium Temperature</b>	-40~250°C
<b>Process pressure</b>	Atmospheric
<b>Accuracy</b>	±15mm
<b>Frequency range</b>	26GHz
<b>Anti-explosion/safety grade</b>	Exia II CT6 Ga, Exd ia II CT6 Gb / IP67
<b>Signal output</b>	4~20mA/HART(Two-wire/Four-wire) RS485/Modbus

### 2. SEAL04 Outer Dimension :



### 3. SEAL04 Installation :



## SEAL04 Model Selection

Element	Code	Parameter	Note
Anti-explosion	P	Standard (non-Ex)	
	I	Intrinsic safety (ExiaIICT6 Ga)	
	D	Exd (Exd ia II CT6 Gb)	
Process connection/ Material	G	Screw thread G1½A / stainless steel 304	
	N	Screw thread 1½NPT / stainless steel 304	
	F	Flange DN200 / stainless steel 304	
	H	Flange DN250 / stainless steel 304	
	W	Flange DN200 / universal joint (stainless steel) 304	
	V	Flange DN250 / universal joint (stainless steel) 304	
	Y	Special custom	
Antenna Type/ Material	B	Parabolic antennaΦ198mm / stainless steel 304	
	C	Parabolic antennaΦ242mm / stainless steel 304	
	D	Parabolic antennaΦ198mm / stainless steel 304(extension tube 100mm)	
	E	Parabolic antennaΦ242mm / stainless steel 304(extension tube 100mm)	
	F	Parabolic antennaΦ198mm / stainless steel 304(extension tube 200mm)	
	H	Parabolic antennaΦ242mm / stainless steel 304(extension tube 200mm)	
	M	Parabolic antennaΦ198mm / stainless steel 304(extension tube 300mm)	
	K	Parabolic antennaΦ242mm / stainless steel 304(extension tube 300mm)	
Seal/Process temperature	V	Viton / (- 40 ~ 150) °C	
	K	Kalrez / (- 40 ~ 250) °C	
Electronic unit	2	(4 ~ 20) mA / 24V DC / HART two-wire system	
	3	(4 ~ 20) mA / 24V DC / HART four-wire system	
	4	(4 ~ 20) mA / (85~ 265) V AC / HART four-wire system	
	5	RS485/Modbus/( 6~26)V DC	
Housing/Protection grade	L	Aluminum / IP67	
	G	Aluminum / IP67 Double chamber	
Cable entry	M	M20*1. 5	
	N	½ NPT	
Live display/ Programming	A	With	
	X	Without	
Special custom	Y	Special custom	