

# ***RADAR LEVEL TRANSMITTER***

***FlowRLT Series***



**FLOWTECH**

CE



*FlowRLT-900 Model*

*FlowRLT-630 Model*

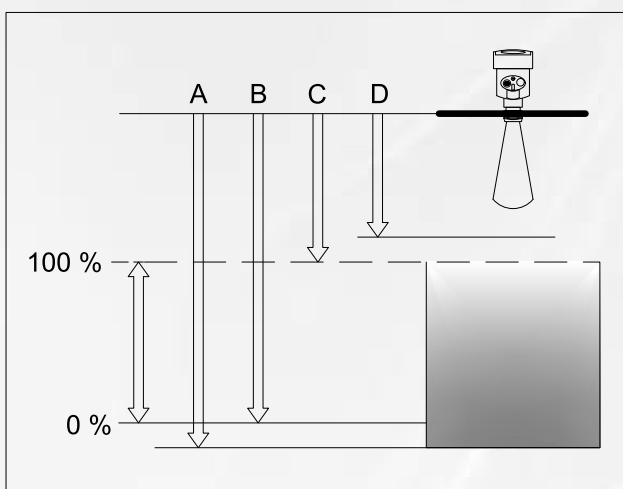
*FlowRLT-720 Model*

## Product Description

Radar water 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.

## Radar Level Transmitter 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 water sensor, make sure that the highest material level cannot reach the measurement blind spot (the territory that indicate as D)

## Features :

- 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.

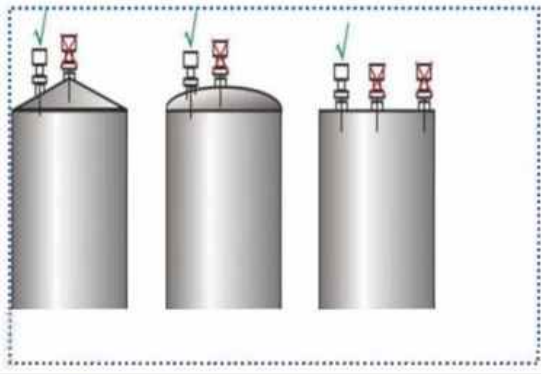
## Technical Details :

Model	FlowRLT - 630
Frequency	78GHz-80GHz
Max Range	10m, 15m, 20m, 30m, 50m
Accuracy	± 2mm
Signal Output	4~20mA / HART
Communication	RS485/Modbus
Power Supply	DC 24V (22V~30V)
Process Temperature	-20°C ~ +70°C
Process Pressure	Normal atmospheric pressure
Ambient Humidity	(0%~95%) RH
Beam Angle	3°
Protection Classic	IP65/IP67
Display	Bluetooth App, WeChat Mini Program
Process Connection	Threaded connection G1,G3/2 M76X2
Weight-Man Unit	0.5 kg
Main Unit Size	Diameter 76 mm x Height 107 mm
Housing	PP/ABS

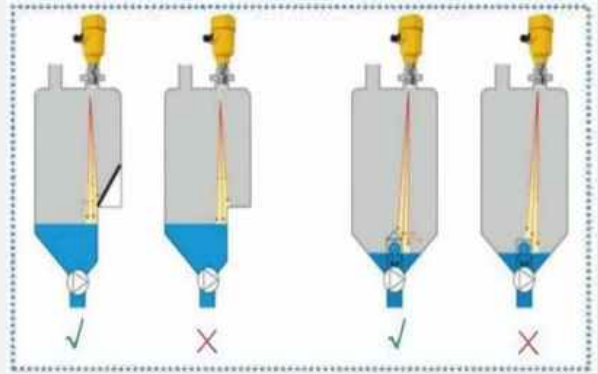
## Technical Details :

Model	FlowRLT - 720
Frequency	78GHz-80GHz
Max Range	10m, 15m, 20m, 30m, 50m
Accuracy	± 2mm
Signal Output	4~20mA / HART
Communication	RS485/Modbus
Power Supply	DC 24V (22V~30V)
Process Temperature	-20°C ~ +70°C
Process Pressure	Normal atmospheric pressure
Ambient Humidity	(0%~95%) RH
Beam Angle	3°
Protection Classic	IP65/IP67
Display	128*64Lattice LCD, Bluetooth App, WeChat Mini Program
Process Connection	Threaded connection G1,G3/2
Weight-Man Unit	0.5 kg
Main Unit Size	Diameter 76 mm x Height 107 mm
Housing	PP/ABS

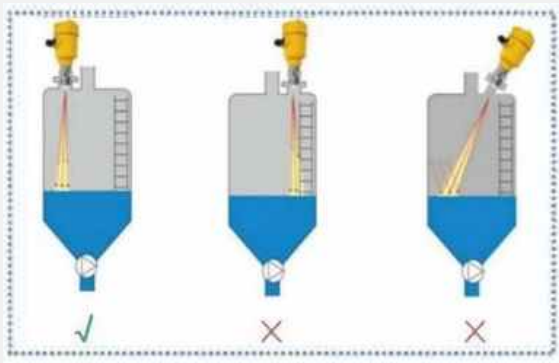
Model	FlowRLT - 900
Frequency	78GHz-80GHz
Max Range	10m, 15m, 20m, 30m, 50m
Accuracy	± 2mm
Signal Output	4~20mA / HART
Communication	RS-485/Modbus
Application	Liquid Solid level measurement (suitable for strong corrosive media)
Process Temperature	-40°C ~ +200°C
Process Pressure	-1 ~ 16 bar
Ambient Humidity	(0%~95%) RH
Beam Angle	3°
Protection Classic	IP65/IP67
Antenna Material	PTFE/PFA
Explosion-proof grade	Exdia II CT6Gb
Power	<0.5W (two-wire)
Power Supply	DC24V



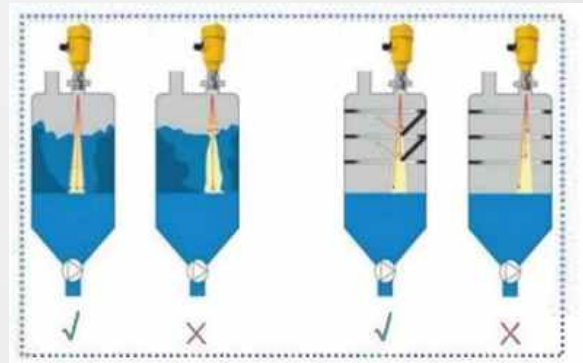
Diagram



Avoid false echos

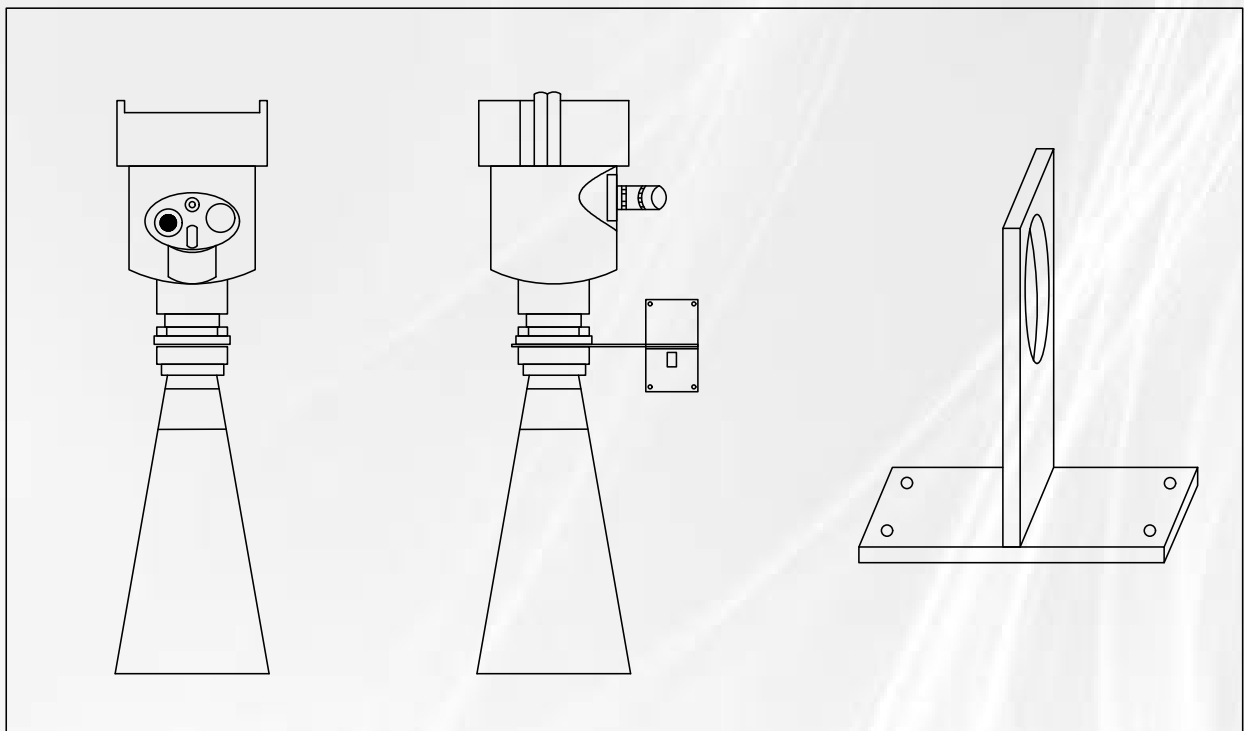


Ladder position and tank with grilles processing



Tank with material hanging & tank with grilles

## Technical Drawings :



## Product Ordering Information

### Order Code for FlowRLT Series Model

Model	Description	Code
	FlowRLT-900	C 1
	FlowRLT-720	C 2
	FlowRLT-630	C 3

Measuring Type	Description	Code
	Liquid	L
Solid	S	

Measuring Range	Description	Code
	10	M 1
	15	M 2
	20	M 3
	30	M 4
50	M 5	

Process Connection Type	Description	Code
	Threaded	T
	Flange-End	F
Custom	Cust	

Process Connection Standard	Description	Code
	1/2" BSP	PC 1
	1/2" NPT	PC 2
ASA 150#	Pc 3	

Process Connection MOC	Description	Code
	PP	0 1
	PTFE	0 2
	MS	0 3
	SS 304	0 4
SS 316	0 5	

Temperature Range	Description	Code
	-40°C to 60°C	T 1
	-40°C to 120°C	T 2
-40°C to 200°C	T 3	

Cable Entry	Description	Code
	M20 x 1.5 (F)	E 1
1/2 NPT (F)	E 2	

Power Supply	Description	Code
	230 VAC	P 1
	24 VDC	P 2
Custom	P 3	

Output	Description	Code
	4-20mA	O 1
4-20mA+HART	O 2	

Communication Output	Description	Code
	RS 485	CO 1
Customised	Cust	

\*De-codification from Right to Left and Top to Bottom



**FLOWTECH**

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