



RELIANT™

R120-120GHz Radar Level Meter

BEST MEASUREMENT PERFORMANCE

- Best measurement performance on solid
- Optimum level measurement
- Reliable level measurement for the most complicate applications
- Excellent design to reduce installation cost and eliminate daily maintenance

BEST FIT- FOR- APPLICATION

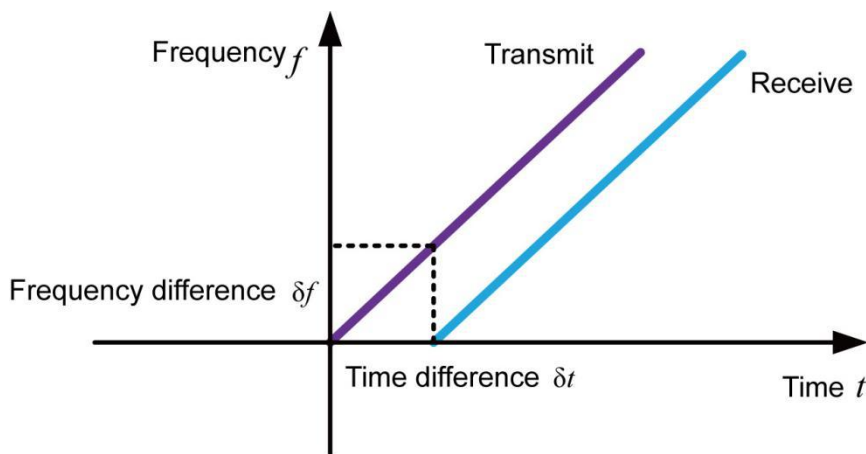
- Wide range up to 150 meters
- Wide application of Solid material, Strong dust, easy to crystallize, condensation condition
- Wide variety of I/O and expansive communication protocols

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PRINCIPLE

The general principle of frequency-modulated continuous wave radar level gauge: the radar emits electromagnetic waves on the top of the tank. The electromagnetic waves are received by the radar after being reflected by the medium. The frequency difference δf between the received signal and the transmitted signal is proportional to the distance R of the medium surface: $R = C$ (speed) * δf (frequency difference) / 2 / K (frequency modulation slope). Since the speed of light C and the frequency-modulated slope K are known, the frequency difference δf is estimated, and the distance R of the surface of the radar installation position can be obtained. Then, the known space height of the tank is subtracted from the radar to the material surface. Empty height), the height of the material level is obtained.



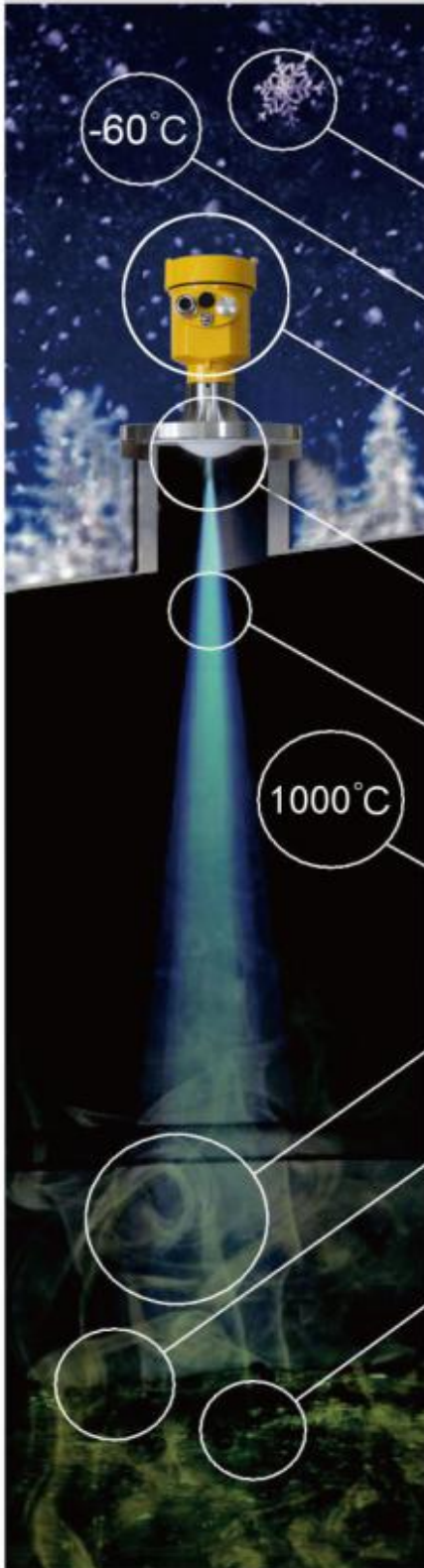
$$\left. \begin{array}{l} \text{Time difference } \delta t = 2R/C \\ \text{Frequency difference } \delta f = K \cdot \delta t \end{array} \right\} \Rightarrow \text{Distance } R = C \cdot \delta f / 2K$$

Note: K is the frequency modulation slope

CHARACTERISTIC

1. Millimeter-wave radar, with a measurement accuracy of up to $\pm 2\text{mm}$ and a minimum blind area of 0.05m .
2. Smaller antenna size to meet the measurement of more working conditions.
3. A variety of lens antennas, smaller emission angles, more concentrated energy, and stronger echo signals, so it has higher reliability than other radar products under the same industrial and mining conditions.
4. It has stronger penetrability and can be used normally under the condition of adhesion and condensation.
5. R120 series products have larger dynamic signal range and more stable measurement for low dielectric constant media.
6. Multiple measurement modes, the radar response time is less than 1S in the fast measurement mode.

MAIN ADVANTAGE



Unaffected by atmospheric precipitation

Ambient temperature - 60 degrees Celsius

Installed from outside the storage tank

The antenna inside the level gauge is heated and protected by fluoroplastic lens.

Measuring ray is narrow, easy to install, stable measurement

Level measurement accuracy is not limited by the temperature inside the container

Evaporation and dust do not affect measurement

Level measurement of boiling liquid

Level measurement of corrosive liquids, No contact, no corrosion - stable measurement

R120G Radar level Meter

Measurable product :

I Solid measurement

- Powder
- Granule
- Block

※ Low dielectric constant plastic particles

II Liquid measurement

- Reactor level
- Large steam level
- Foam product level
- Crystal product level
- Ultra high temperature product level
- Ultra high pressure product level
- Hygienic product level

● R121



Measuring medium: Liquid
Measuring Range: 0.05m~30m
Process Connection: Thread G1½"A / 1½"NPT
Flange≥DN50
Process Temperature: -40~80°C
Process Pressure: -0.1~0.3MPa
Antenna Size: 32mm lens antenna
Antenna material: PTFE
Accuracy: ±2mm
Protection Level: IP67
Frequency: 123GHz
Launch angle: 7 °
Power Supply: Two-wire / DC 24V
Four-wire / DC 12~24V
Four-wire / AC 220V
Outer casing: Aluminum/ Plastic/ Stainless steel
Signal output: Two-wire / 4...20mA / Hart protocol
Four-wire / 4...20mA / Modbus-RS485

● R122



Measuring medium: Liquid
Measuring Range: 0.05m~35m
Process Connection: Thread G2"A / Flange≥DN65
Process Temperature: -40~110°C
Process Pressure: -0.1~1.6MPa
Antenna Size: 42mm lens antenna
Antenna material: PTFE
Accuracy: ±2mm
Protection Level: IP67
Frequency: 123GHz
Launch angle: 5 °
Power Supply: Two-wire / DC 24V
Four-wire / DC 12~24V
Four-wire / AC 220V
Outer casing: Aluminum/ Plastic/ Stainless steel
Signal output: Two-wire / 4...20mA / Hart protocol
Four-wire / 4...20mA / Modbus-RS485

● R123



Measuring medium: Liquid
Measuring Range: 0.1m~100m
Process Connection: Flange≥DN80
Process Temperature: -40~110°C
Process Pressure: -0.1~0.3MPa
Antenna Size: 78mm lens antenna
Antenna material: PTFE
Accuracy: ±2mm (Range below 35m)
±5mm ((Range between 35m-100m))
Protection Level: IP67
Frequency: 123GHz
Launch angle: 3 °
Power Supply: Two-wire / DC 24V
Four-wire / DC 12~24V
Four-wire / AC 220V
Outer casing: Aluminum/ Plastic/ Stainless steel
Signal output: Two-wire / 4...20mA / Hart protocol
Four-wire/ 4...20mA / Modbus-RS485

● R124



Measuring medium: Liquid
Measuring Range: 0.1m~150m
Process Connection: Flange≥DN125
Process Temperature: -40~110°C
Process Pressure: -0.1~0.3MPa
Antenna Size: 110mm lens antenna
Antenna material: PTFE
Accuracy: ±2mm (Range below 35m)
±5mm ((Range between 35m-100m))
Protection Level: IP67
Frequency: 123GHz
Launch angle: 1.5 °
Power Supply: Two-wire / DC 24V
Four-wire / DC 12~24V
Four-wire / AC 220V
Outer casing: Aluminum/ Plastic/ Stainless steel
Signal output: Two-wire / 4...20mA / Hart protocol
Four-wire/ 4...20mA / Modbus-RS485

● R125



Measuring medium: Liquid
Measuring Range: 0.1m~35m
Process Connection: Flange \geq DN80
Process Temperature: -40~200°C
Process Pressure: -0.1~2.5MPa
Antenna Size: 78mm lens antenna
Antenna material: PTFE / integral filling
Accuracy: \pm 2mm
Protection Level: IP67
Frequency: 123GHz
Launch angle: 3 °
Power Supply: Two-wire / DC 24V
Four-wire / DC 12~24V
Four-wire / AC 220V
Outer casing: Aluminum/ Plastic/ Stainless steel
Signal output: Two-wire / 4...20mA / Hart protocol
Four-wire/ 4...20mA / Modbus-RS485

● R126



Measuring medium: Solid
Measuring Range: 0.3m~150m
Process Connection: Flange \geq DN80
Process Temperature: -40~110°C
Process Pressure: -0.1~0.3MPa
Antenna Size: 78mm lens antenna
78mm lens antenna + purge
Antenna material: PTFE
Accuracy: \pm 5mm
Protection Level: IP67
Frequency: 123GHz
Launch angle: 3 °
Power Supply: Two-wire / DC 24V
Four-wire / DC 12~24V
Four-wire / AC 220V
Outer Covering: Aluminum/ Plastic/ Stainless steel
Signal output: Two-wire / 4...20mA / Hart protocol
Four-wire/ 4...20mA / Modbus-RS485

DESIGN & BENEFIT

- ◆ Small antenna size, easy to install; Non-contact radar, no wear, no pollution.
- ◆ Almost no corrosion, bubble effect; almost not affected by water vapor in the atmosphere, the temperature and pressure changes.
- ◆ Serious dust environment on the high level meter work has little effect.
- ◆ A shorter wavelength, the reflection of solid surface inclination is better.
- ◆ Beam angle is small, the energy is concentrated, can enhance the ability of echo and to avoid interference.
- ◆ The measuring range is smaller, for a measurement will yield good results.
- ◆ High signal-to-noise ratio, the level fluctuation state can obtain better performance.
- ◆ High frequency, measurement of solid and low dielectric constant of the best choice.

APPLICATION

Industries

- | | |
|---------------------|-------------------|
| ◆ Chemicals | ◆ Pharmaceuticals |
| ◆ Food & Beverages | ◆ Power Plant |
| ◆ Machinery | ◆ Pulp & Paper |
| ◆ Minerals & Mining | ◆ Water |
| ◆ Oil & Gas | ◆ Waste Water |

ELECTRICAL CONNECTIONS

Process Connection/Material	Thread, Flange / Stainless steel304, 316L, PP, PTFE
Antenna Material	PTFE
The outer shell	Cast aluminum / stainless steel / plastic ABS
Seal material of shell and shell	Silicone rubber
Casing window	Polycarbonate
Casing window	Polycarbonate
The ground terminal	Stainless steel
Power Supply	
<i>4-wire system</i>	(12~24) V DC Power dissipation max 80mA, DC24V/ 2W Allowable ripple <100Hz U _{ss} < IV (100~100K) Hz U _{ss} < 10mV
Double chamber housing	(198~242)V AC 4-wire system 110V AC 4-wire system

Cable parameters	
Cable entrance / plug	1-M20x1.5 cable entrance, 1- blind plug
Terminal	Conductor cross section 2.5mm ²

Output and Communication	
Output signal	(4 to 20) mA/Modbus-RS485
Resolution	1mm
Fault signal	Current output unchanged, 20.5mA, 22mA; 3.9mA
Integral time	(0 to 20) s, adjustable
Blind area	0.1m / 0.2m / 0.3m
Max. distance measurement	150 meters
Accuracy	± 2 mm
Display	LCD, Programmable
Enclosure	IP67
Ex-Grade	Exia II C T6 Ga/ Exd II C T6 Gb
Frequency	120GHz
Communication interface	HART communication protocol
Measurement interval	about 1 second (depend on parameter settings)
Adjust the time	about 1 second (depend on parameter settings)
Display resolution	1 mm
Storage temperature	(-40 to 80) °C
Relative humidity	< 95%
Process Temperature	(-40 to 130)°C / (-40 to 250)°C
Pressure	Max. 2.5MPa
Seismic	Mechanical vibration 10m/s ² , (10 to 150) Hz

LINEARITY

- Beam angle

The beam angle is the beam angle when the radar wave energy density reaches half of its maximum value (3dB width). Microwaves emit signals outside the beam range and can be reflected by interference objects.

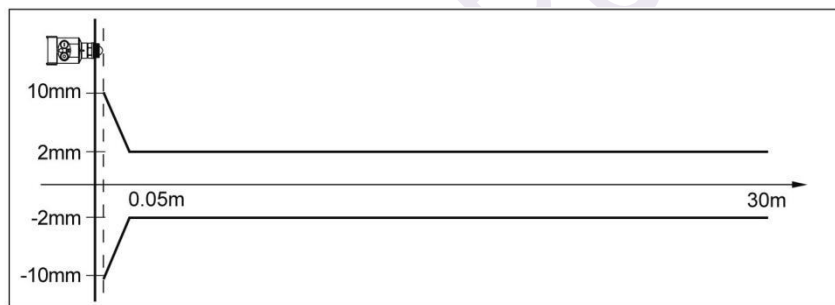
Model	R121	R122	R123	R1244	R125	R126
Lens antenna diameter	Φ32mm Lens antenna	Φ42mm Lens antenna	Φ78mm Lens antenna	Φ110mm Lens antenna	Φ78mm filled Lens antenna	Φ78mm Lens antenna with purge
Beam angle	7°	5°	3°	1.5°	3°	3°

The larger the antenna size and the smaller the beam angle α , the less interference echoes will be generated.

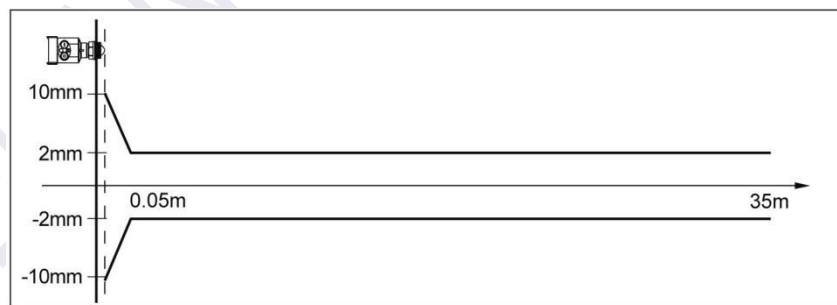
For more accurate measurements, avoid installing any internal devices (limit switches, temperature sensors, bases, vacuum rings, heating coils, baffles, etc.) within the signal beam range.

● Linearity

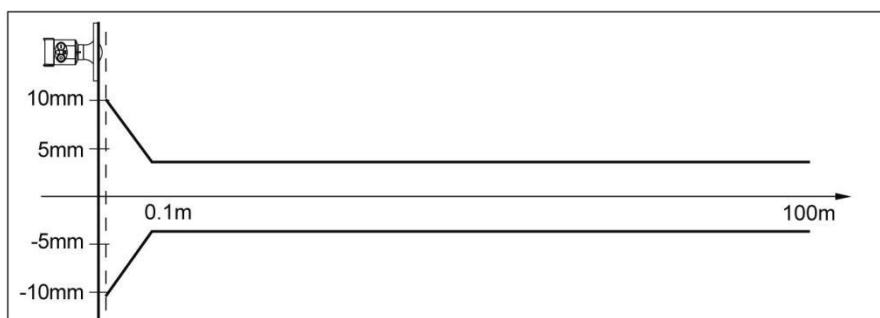
➤ R121



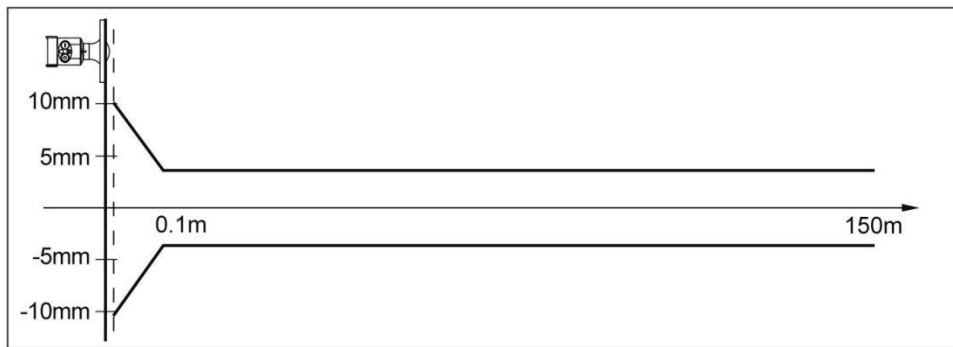
➤ R122



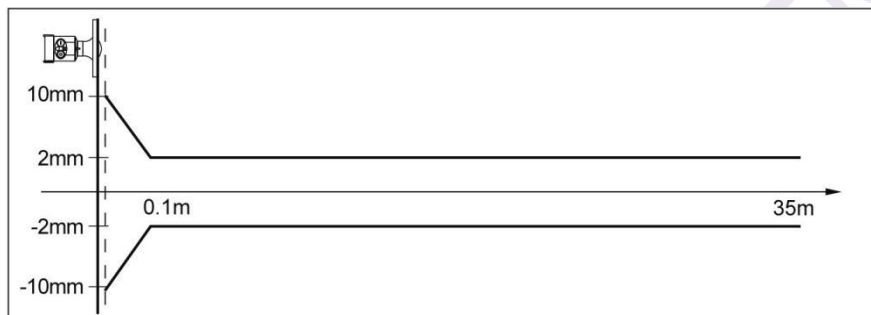
➤ R123



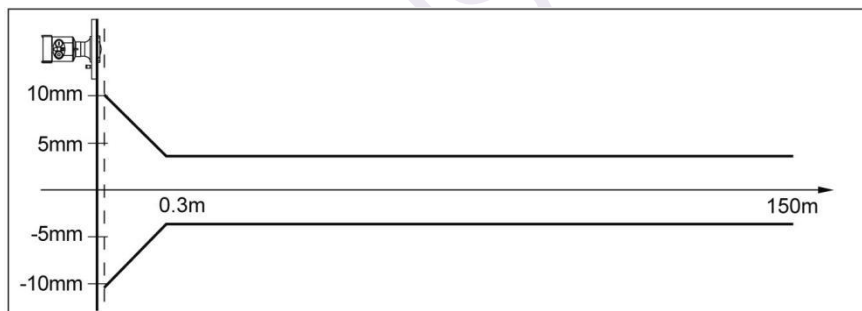
➤ R124



➤ R125

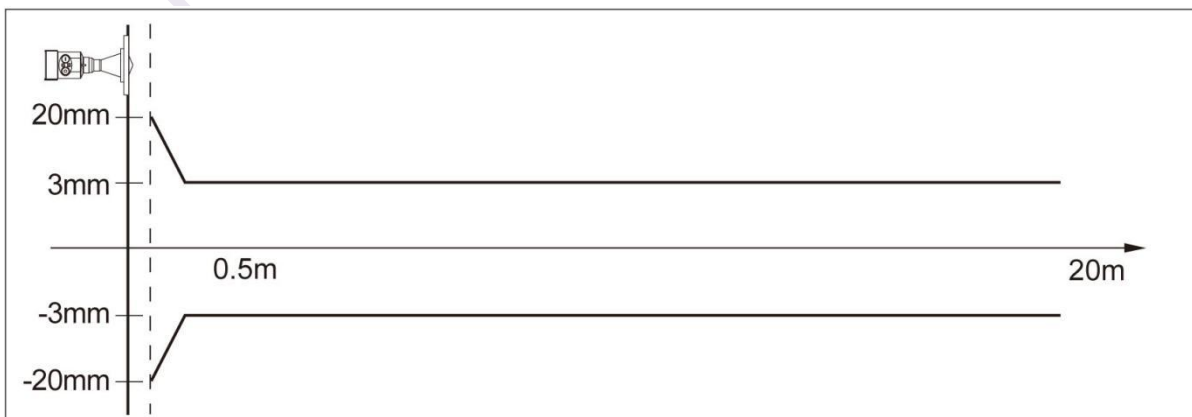


➤ R126



Emission angle
 - \varnothing 76mm
 Precision

Depending on the size of the antenna
 12°
 See chart



MODEL SELECTION

R121-				
P	Standard (Non-explosion-proof)	I	Intrinsically safe (Exia II C T6 Ga)	
G	Flameproof (Exd II C T6 Gb)			
Process Connection / Material				
GA	G1½" A Thread /PTFE	GB	1½" NPT Thread /PTFE	
GC	G1½" A Thread / SS316L	GD	1½" NPT Thread / SSL316L	
XX	Special customization			
Flange option / Material				
Specification / Material	PP	PTFE	SS304	SS316L
DN50	P1	F1	G1	S1
DN65	P2	F2	G2	S2
DN80	P3	F3	G3	S3
DN100	P4	F4	G4	S4
DN125	P5	F5	G5	S5
DN150	P6	F6	G6	S6
DN200	P7	F7	G7	S7
Antenna Type / Material				
A	32mm Lens antenna / PTFE			
B	32mm Lens antenna / PFA			
Sealing / Process temperature				
A	FKM/ (-40-80℃)			
B	EPDM/ (-40-80℃)			
Y	Special customization			
The Electronic Unit				
1	(4~20) mA / HART protocol	24VDC	2-wire	
2	(4~20) mA / RS485 interface	/Modbus	12-24VDC	4-wire/ 6-wire
3	(4~20) mA / RS485 interface	/ Modbus	220VAC	4-wire/ 6-wire
Outer casing Material / Protection Grade				
A	Cast aluminum / Single chamber / IP67			
B	Cast aluminum / Double chamber / IP67			
C	Plastic ABS / Single chamber / IP65			
D	Stainless steel 304 / Single chamber / IP67			
Cable Line				
M	M20×l. 5			
N	½" NPT			
Display programming				
A	Programming with display			
B	With display programming & Bluetooth communication			
C	Without			

R122-

- P** Standard (Non-explosion-proof) **I** Intrinsically safe (Exia II C T6 Ga)
G Flameproof (Exd II C T6 Gb)

Process Connection / Material

- GA** G2" A Thread /PTFE **GB** 2" NPT Thread /PTFE
GC G2" A Thread / SS316L **GD** 2" NPT Thread / SS316L
XX Special customization

Flange option / Material

Specification /Material	PP	PTFE	SS304	SS 316L
DN65	P1	F1	G1	S1
DN80	P2	F2	G2	S2
DN100	P3	F3	G3	S3
DN125	P4	F4	G4	S4
DN150	P5	F5	G5	S5
DN200	P6	F6	G6	S6

Antenna Type / Material

- A** 42mm Lens antenna / PTFE
B 42mm Lens antenna / PFA

Sealing / Process temperature

- A** FKM/ (-40-110°C)
B EPDM/ (-40-110°C)
Y Special customization

The Electronic Unit

- 1** (4~20) mA / HART protocol 24VDC 2-wire
2 (4~20mA / RS485 interface /Modbus 12-24VDC 4-wire/ 6-wire
3 (4~20mA / RS485 interface / Modbus 220VAC 4-wire/ 6-wire

Outer casing Material / Protection Grade

- A** Cast aluminum / Single chamber / IP67
B Cast aluminum / Double chamber / IP67
C Plastic ABS / Single chamber / IP65
D Stainless steel 304 / Single chamber / IP67

Cable Line

- M** M20×1.5
N ½" NPT

Display programming

- A** Programming with display
B With display programming / Bluetooth communication
C Without

R123-

P Standard (Non-explosion-proof) **I** Intrinsically safe (Exia II C T6 Ga)
G Flameproof (Exd II C T6 Gb)

Process Connection / Material

1 Gantry frame **2** Flange≥DN80
X Special customization

Flange option / Material

Specification/ Material	PP	PTFE	SS304+PTFE	SS316+PTFE
DN80	P2	F2	G2	S2
DN100	P3	F3	G3	S3
DN125	P4	F4	G4	S4
DN150	P5	F5	G5	S5
DN200	P6	F6	G6	S6

Antenna Type / Material

A 78mm Lens antenna / PTFE
B 78mm Lens antenna / PFA

Sealing / process temperature

A FKM/ (-40-110℃)
B EPDM/ (-40-110℃)
Y Special customization

The Electronic Unit

1 (4~20) mA / HART protocol 24VDC 2-wire
2 (4~20mA / RS485 interface / Modbus 12-24VDC 4-wire/ 6-wire
3 (4~20) mA / RS485 interface / Modbus 220VAC 4-wire/ 6-wire

Outer casing Material / Protection Grade

A Cast aluminum / Single chamber / IP67
B Cast aluminum / Double chamber / IP67
C Plastic ABS / Single chamber / IP65
D Stainless steel 304 / Single chamber / IP67

Cable Line

M M20×l. 5
N ½" NPT

Display programming

A Programming with display
B With display programming
 / Bluetooth communication
C Without

R124-

- P Standard (Non-explosion-proof)
- I Intrinsically safe (Exia II C T6 Ga)
- G Flameproof (Exd II C T6 Gb)

Process Connection / Material

- 1 Gantry frame
- 2 Flange≥DN100
- X Special customization

Flange option / Material

Specification / Material	PP	PTFE	SS304+PTFE	SS316+PTFE
DN100	P4	F4	G4	S4
DN150	P5	F5	G5	S5
DN200	P6	F6	G6	S6

Antenna Type / Material

- A 110mm Lens antenna / PTFE
- B 110mm Lens antenna / PFA

Sealing / process temperature

- A FKM/ (-40-110℃)
- B EPDM/ (-40-110℃)
- Y Special customization

The Electronic Unit

- 1 (4~20) mA / HART protocol 24VDC 2-wire
- 2 (4~20mA / RS485 interface / Modbus 12-24VDC 4-wire/ 6-wire
- 3 (4~20) mA / RS485 interface / Modbus 220VAC 4-wire/ 6-wire

Outer casing Material / Protection Grade

- A Cast aluminum / Single chamber / IP67
- B Cast aluminum / Double chamber / IP67
- C Plastic ABS / Single chamber / IP65
- D Stainless steel 304 / Single chamber / IP67

Cable Line

- M M20×l. 5
- N ½" NPT

Display programming

- A Programming with display
- B With display programming / Bluetooth communication
- C Without

R125-

- P Standard (Non-explosion-proof)
- I Intrinsically safe (Exia II C T6 Ga)
- G Flameproof (Exd II C T6 Gb)

Process Connection / Material

- 1 Flange≥DN80
- X Special customization

Flange option / Material

Specification /Material	SS304+PTFE	SS316 +PTFE
DN80	G2	S2
DN100	G3	S3
DN125	G4	S4
DN150	G5	S5
DN200	G6	S6

Antenna Type / Material

- A 78mm filled lens antenna / PTFE

Sealing / process temperature

- A FKM/ (-40-200℃)
- B EPDM/ (-40-200℃)
- Y Special customization

The Electronic Unit

- 1 (4~20) mA / HART protocol 24VDC 2-wire
- 2 (4~20mA / RS485 interface /Modbus 12-24VDC 4-wire/ 6-wire
- 3 (4~20) mA / RS485 interface / Modbus 220VAC 4-wire/ 6-wire

Outer casing Material / Protection Grade

- A Cast aluminum / Single chamber / IP67
- B Cast aluminum / Double chamber / IP67
- C Plastic ABS / Single chamber / IP65
- D Stainless steel 304 / Single chamber / IP67

Cable Line

- M M20×I. 5
- N ½" NPT

Display programming

- A Programming with display
- B With display programming / Bluetooth communication
- C Without

R126

- P Standard (Non-explosion-proof)
- I Intrinsically safe (Exia II C T6 Ga)
- G Flameproof (Exd II C T6 Gb)

Process Connection / Material

- 1 Gantry frame
- 2 Flange≥DN80
- X Special customization

Flange option / Material

Specification / Material	PP	SS 304	SS 316L	SS304 universal flange
DN80	P2	G2	S2	-
DN100	P3	G3	S3	W3
DN125	P4	G4	S4	W4
DN150	P5	G5	S5	W5
DN200	P6	G6	S6	W6

Antenna Type / Material

- A 78mm Lens antenna / PTFE
- B 78mm Lens antenna / With purge port / PTFE

Sealing / process temperature

- A FKM/ (-40-110°C)
- B EPDM/ (-40-110°C)
- Y Special customization

The Electronic Unit

- 1 (4~20) mA / HART protocol 24VDC 2-wire
- 2 (4~20mA / RS485 interface / Modbus 12-24VDC 4-wire/ 6-wire
- 3 (4~20) mA / RS485 interface / Modbus 220VAC 4-wire/ 6-wire

Outer casing Material / Protection Grade

- A Cast aluminum / Single chamber / IP67
- B Cast aluminum / Double chamber / IP67
- C Plastic ABS / Single chamber / IP65
- D Stainless steel 304 / Single chamber / IP67

Cable Line

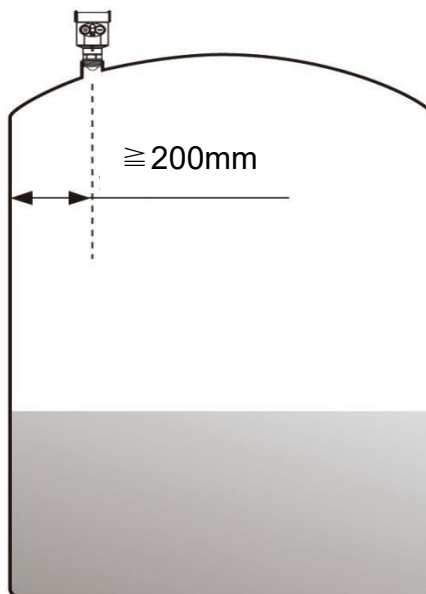
- M M20×l. 5
- N 1/2" NPT

Display programming

- A Programming with display
- B With display programming / Bluetooth communication
- C Without

INSTALLATION

➤ 1. Threaded Installation (applicable to R121, R122)

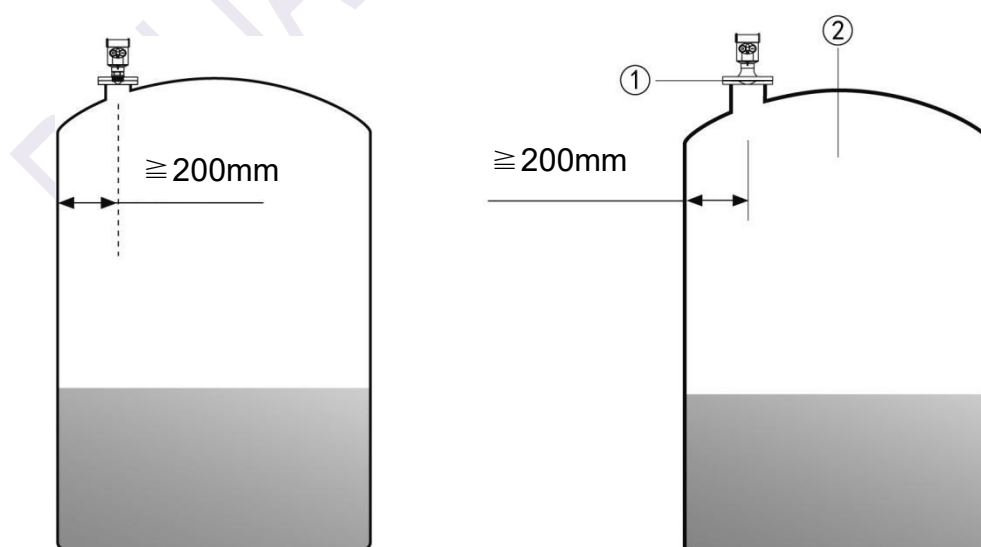


➤ 2. Flange Installation

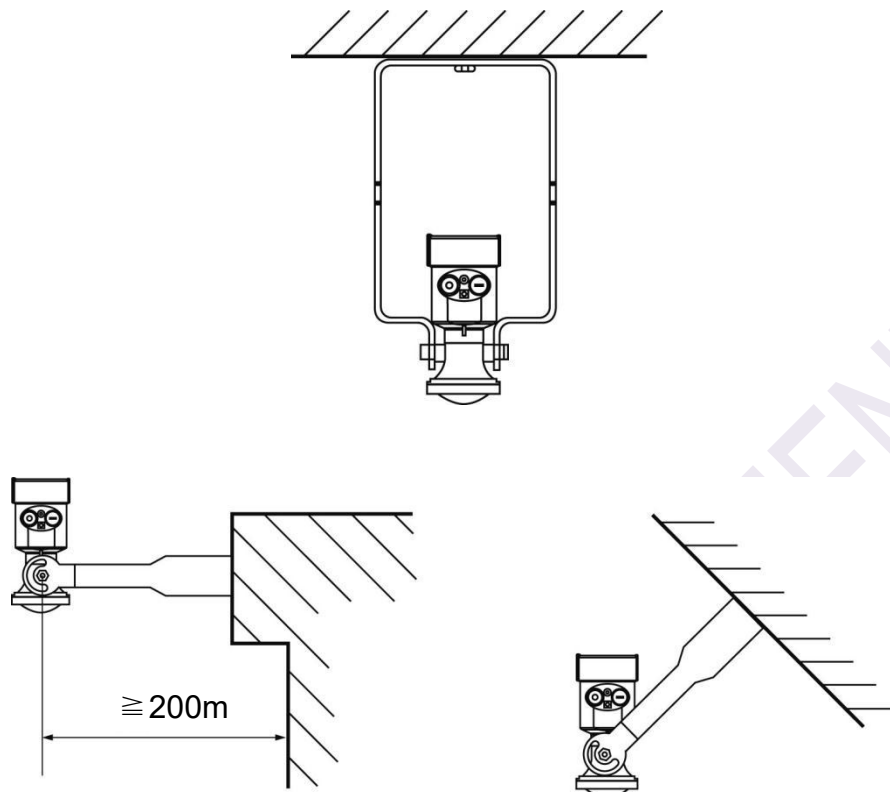
When using flange mounting, the minimum distance between the meter and the tank wall should be 200mm.

Note: ① Datum

② Container center or axis of symmetry

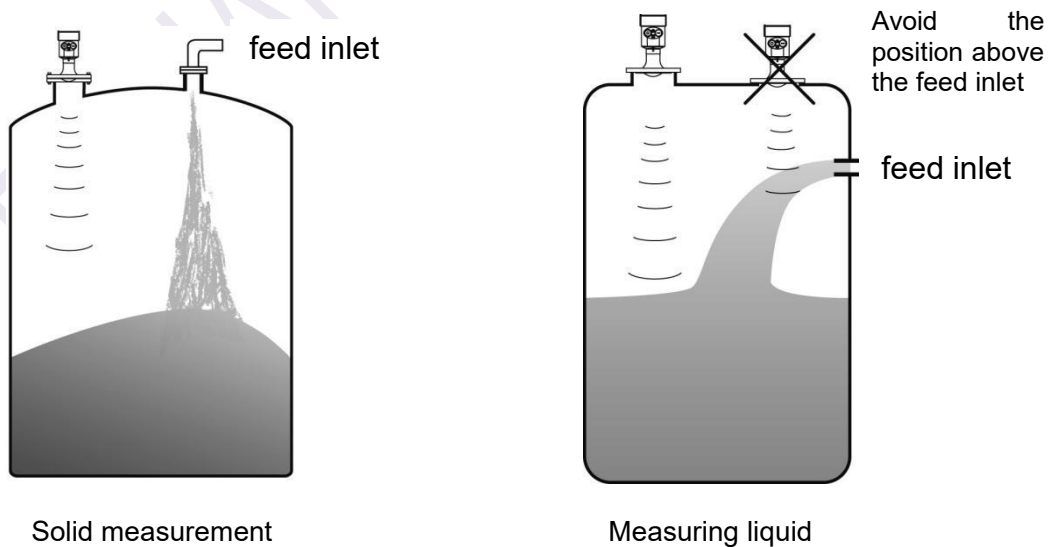


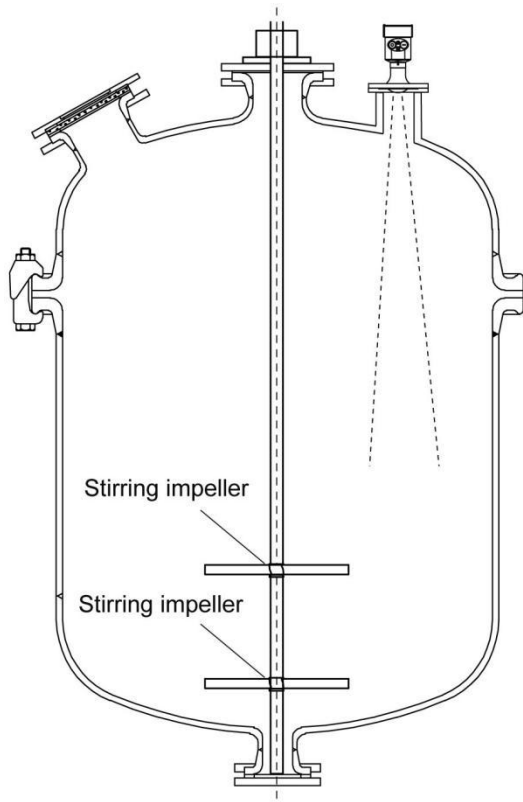
➤ 3. Lifting (selected according to specific installation conditions)



● **Installation requirements:**

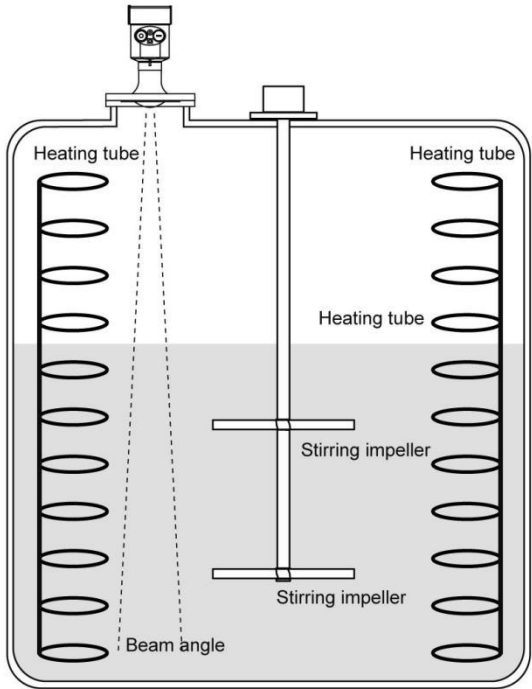
When installing the instrument, avoid installing it above the material inlet, and try to avoid various objects that affect the signal, such as stirring paddles, etc.





Remarks: Cannot be installed above the inlet, there can be no obstacles under the meter

Under extremely complex working conditions, the instrument can work normally with the radar installation point as the center and no obstacles in the area with a radius of 20 cm.

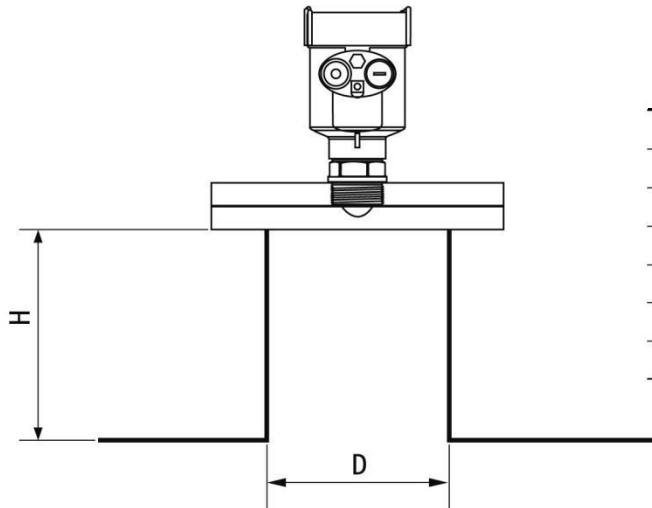


Extremely low emission angles ensure accurate measurements under extreme conditions

● Installation takeover diagram:

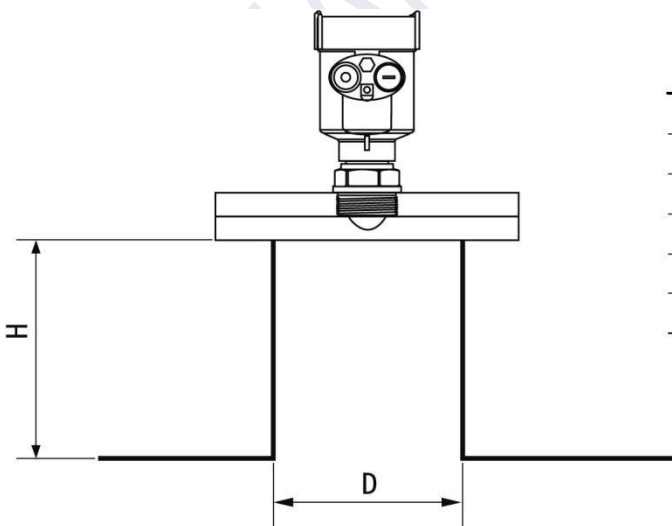
The maximum installed short tube height depends on the diameter D of the installed short tube and the size of the product launch angle. Overly long installation and takeover will affect radar performance.

➤ R121



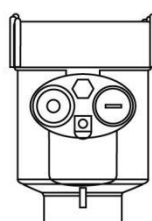
Flange	D	H max
DN50	50mm (2")	300mm
DN65	65mm (2.5")	450mm
DN80	80mm (3")	550mm
DN100	100mm (4")	700mm
DN125	125mm (5")	900mm
DN150	150mm (6")	1100mm

➤ R122



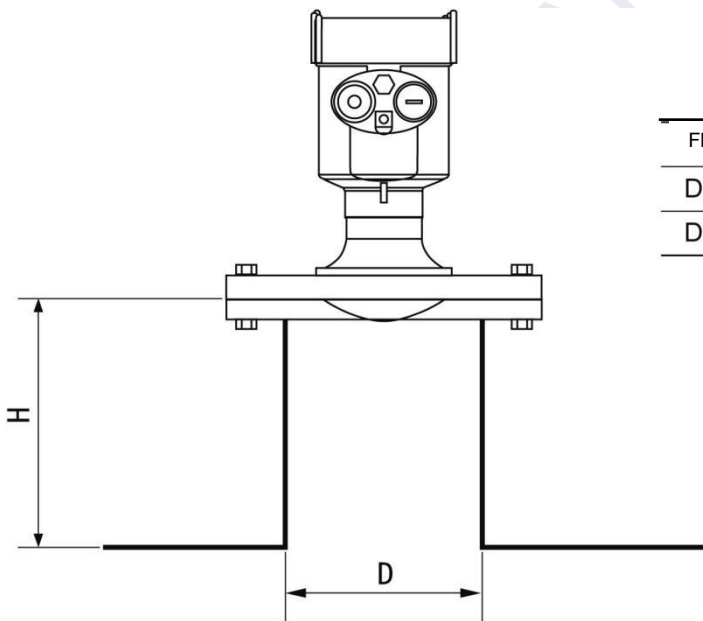
Flange	D	H max
DN65	65mm (2.5")	600mm
DN80	80mm (3")	800mm
DN100	100mm (4")	1000mm
DN125	125mm (5")	1200mm
DN150	150mm (6")	1400mm

➤ R123/ R125



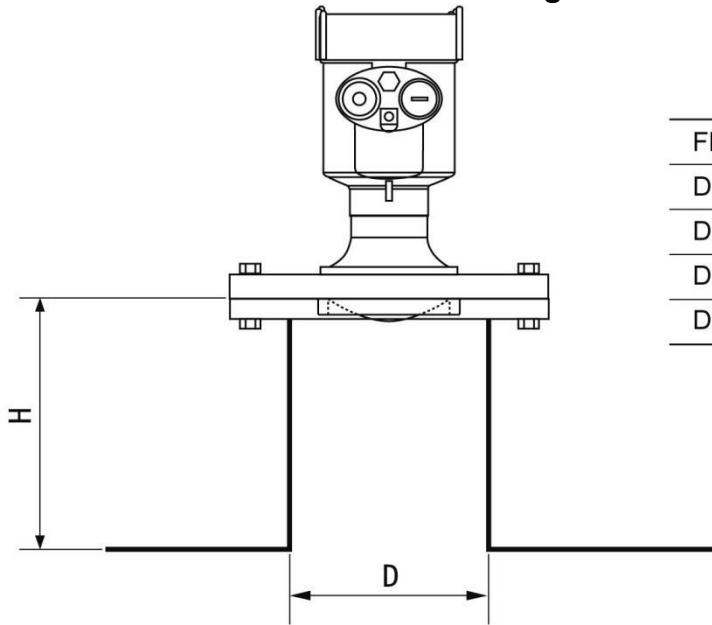
Flange	D	H max
DN80	80mm (3")	1200mm

➤ R124



Flange	D	H max
DN125	125mm (5")	4000mm
DN150	150mm (6")	5000mm

➤ R126



Flange	D	H max
DN80	80mm (3")	1200mm
DN100	100mm (4")	1500mm
DN125	125mm (5")	2000mm
DN150	150mm (6")	2500mm

ELECTRICAL CONNECTIONS

● Supply Voltage

(4~20) mA (2-wire)

The power supply and the output current signal share a two-core shielded cable. See the technical data for the specific supply voltage range.

(4~20) mA (4-wire / 6-wire)

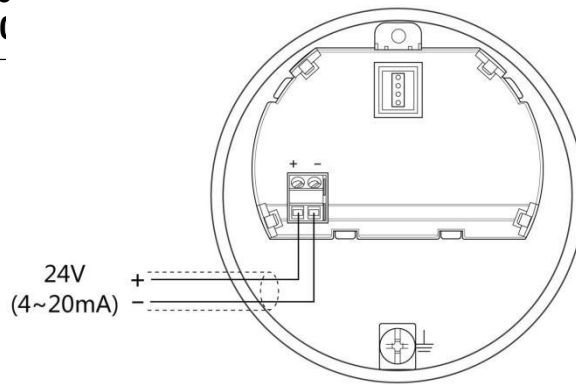
The power supply needs to be powered separately. The power supply and current signals use a four-core shielded cable (current signal and RS485 interface can be output simultaneously, and a six-core shielded cable is required for output).

Modbus-RS485

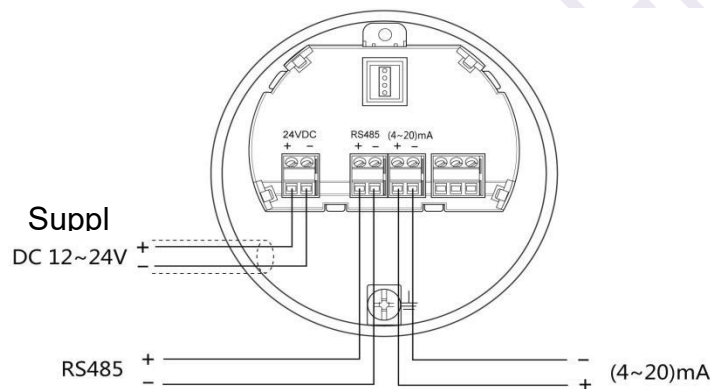
The power supply needs to be powered separately. The power supply and digital use a four-core shielded cable (current signal and RS485 interface can be output simultaneously, and a six-core shielded cable is required for output).

● Connection Method

➤ 24V two-wire system wiring diagram is as follows:



➤ 12~24V four-wire system wiring diagram is as follows:



● Safety Guidance

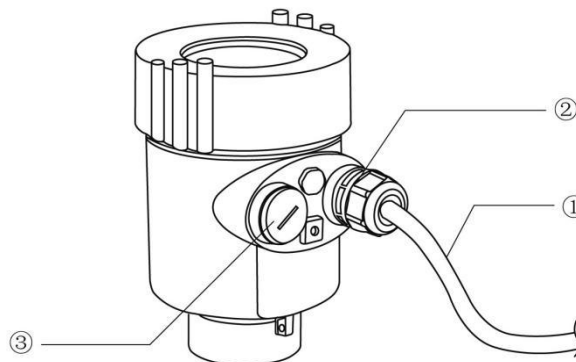
Please observe the requirements of the local electrical installation regulations!

Please observe local regulations regarding the health and safety of personnel. All operations on the electrical components of the instrument must be performed by trained professionals.

Please check the nameplate of the instrument to ensure that the product specifications meet your requirements. Make sure that the supply voltage is the same as that on the instrument nameplate.

● Protection Level

This instrument fully meets the requirements of protection grade IP66/67. Please ensure the waterproof performance of the cable gland. As shown below:



How to ensure that the installation meets the requirements of IP67:

Make sure the seal head is not damaged.

Make sure the cable is not damaged.

Make sure that the cable you are using meets the electrical connection specifications.

Before entering the electrical interface, bend the cable down to ensure that water does not flow into the housing, see ①

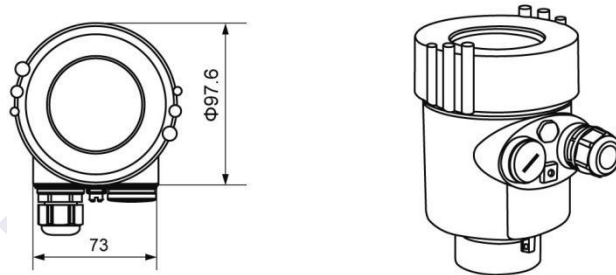
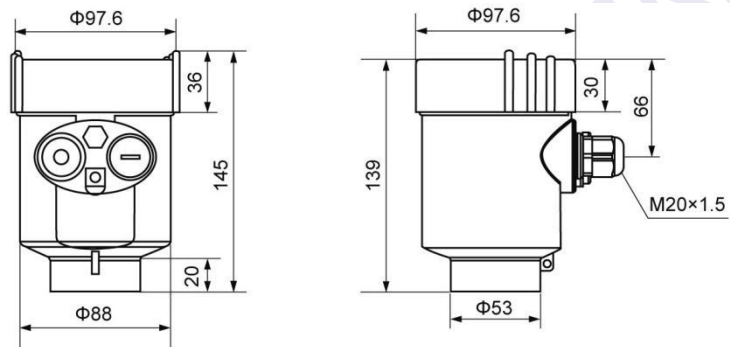
Please tighten the cable gland, see ②

Please block the unused electrical interface with a blind plug, see ③

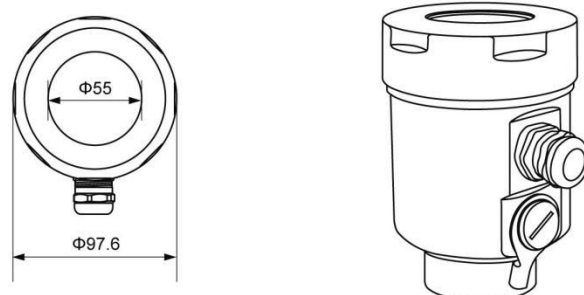
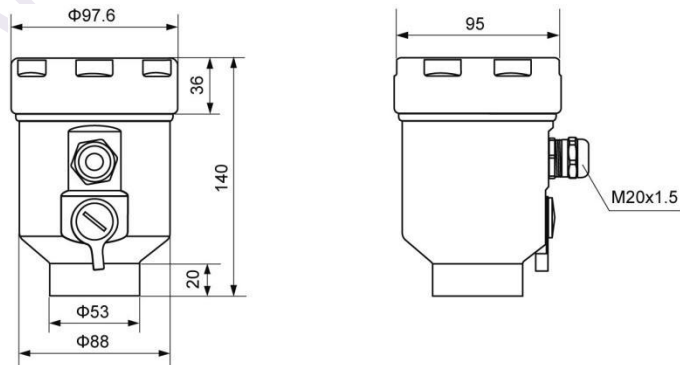
Structure Size:

● **The outer casing size (unit: mm)**

➤ **Aluminum case:**

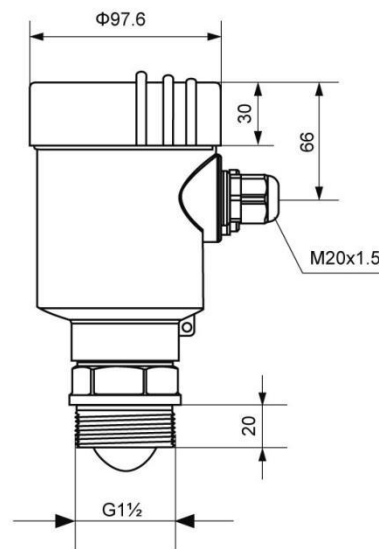
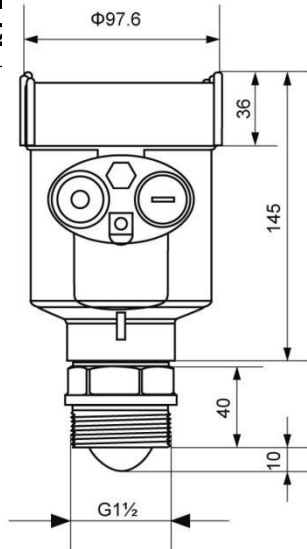


➤ **Stainless steel case:**

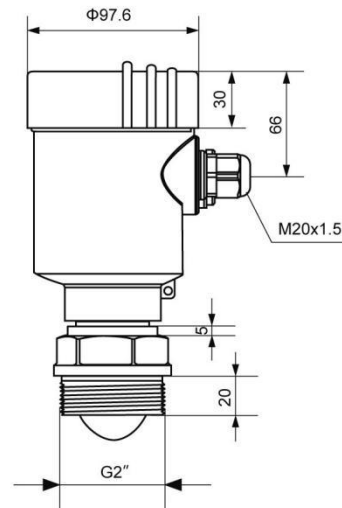
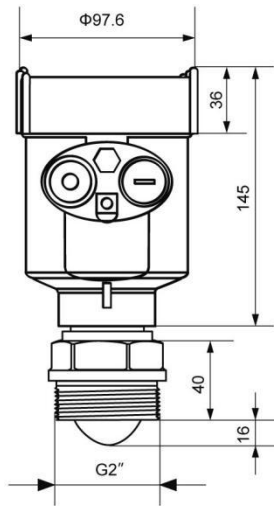


● **Product Size (unit: mm)**

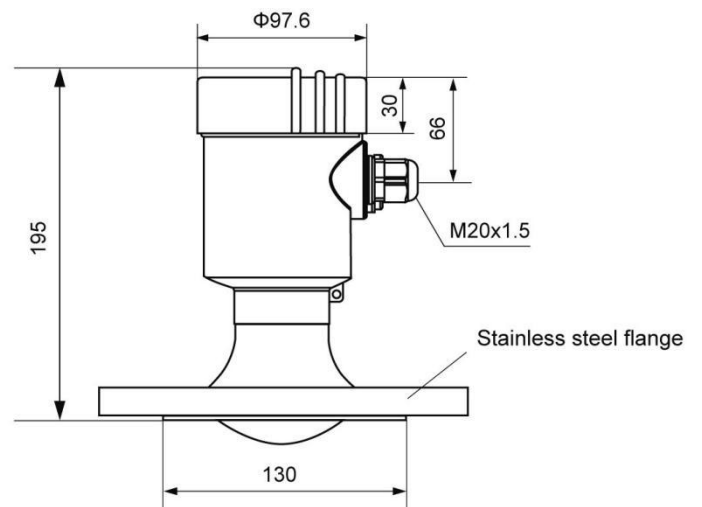
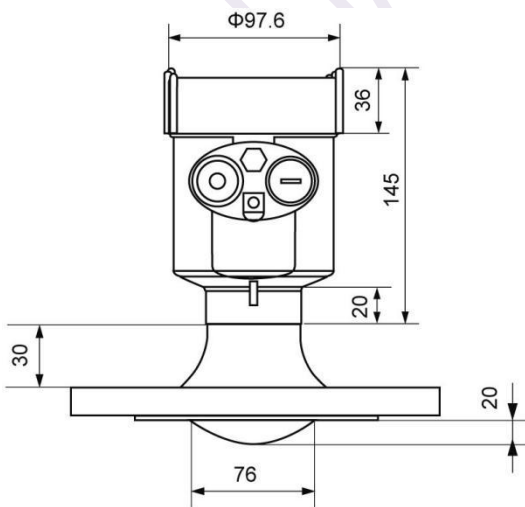
➤ R121



➤ R122

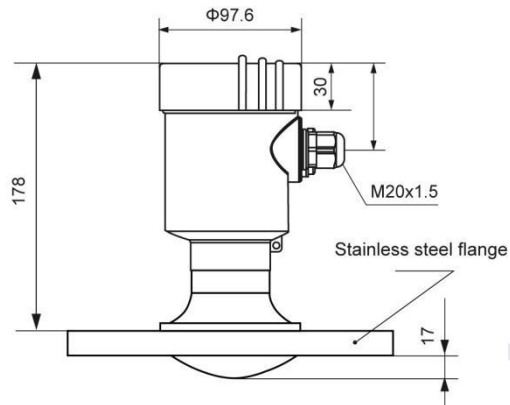
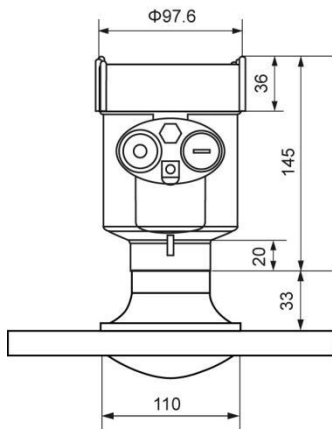


➤ R123



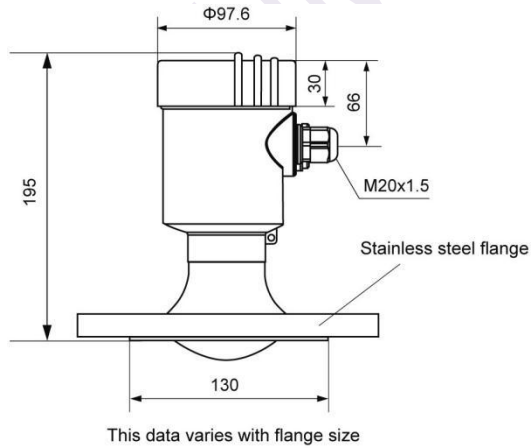
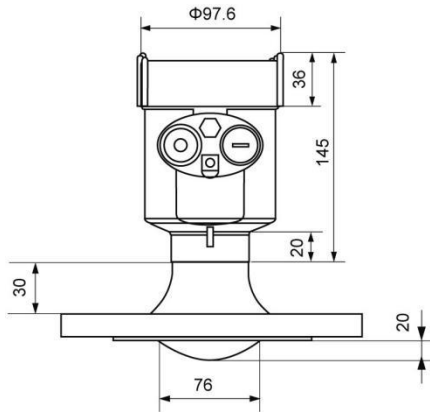
This data varies with flange size

➤ R124

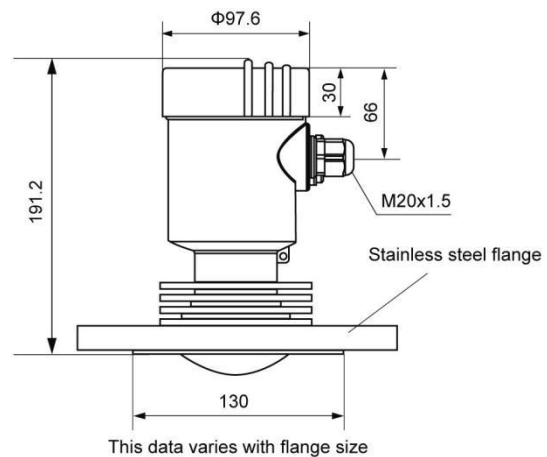
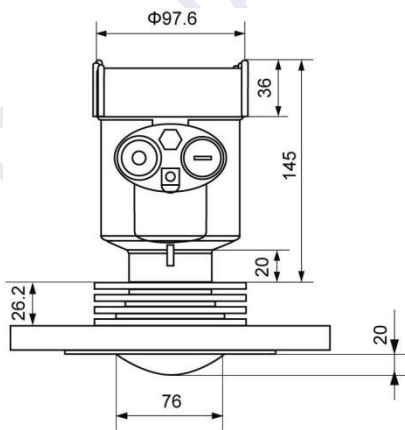


➤ R125

✧ Standard type

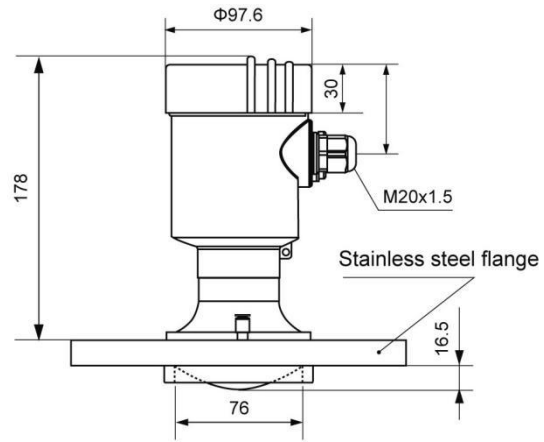
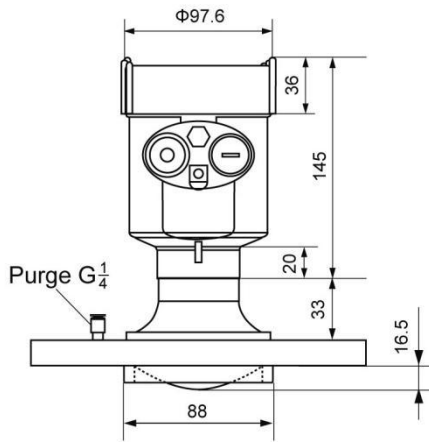


✧ High temperature type

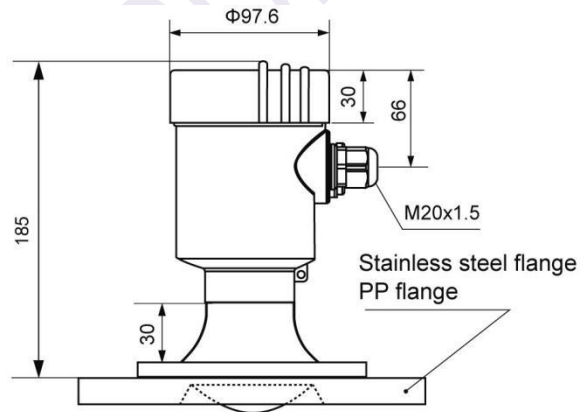
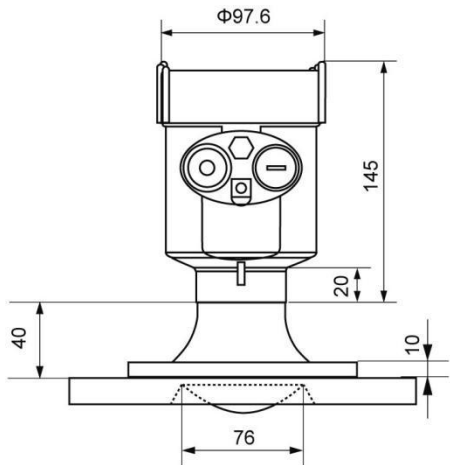


➤ R126

✧ With purge type:



➤ Without purge type:



1. The Installation Requirements

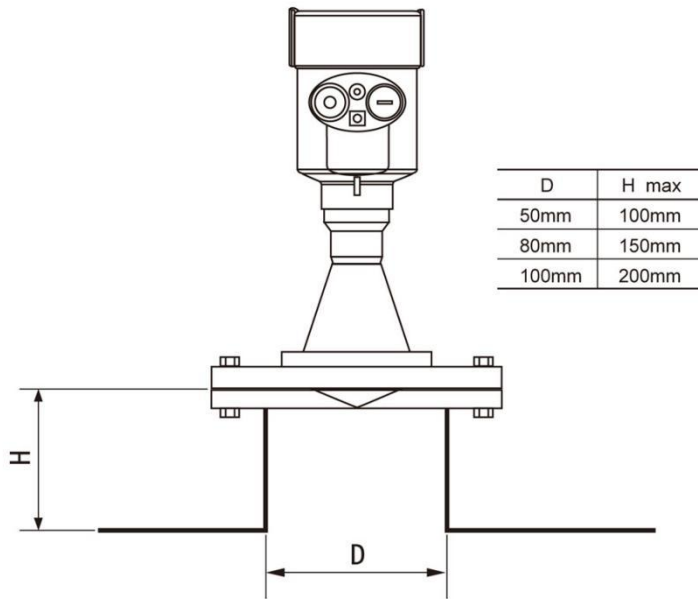
● Installation guide:

Be installed in the diameter of the 1/4 or 1/6.
 Avoid installing in the center of the tank.

Note: ① datum

②The container center or axis of symmetry

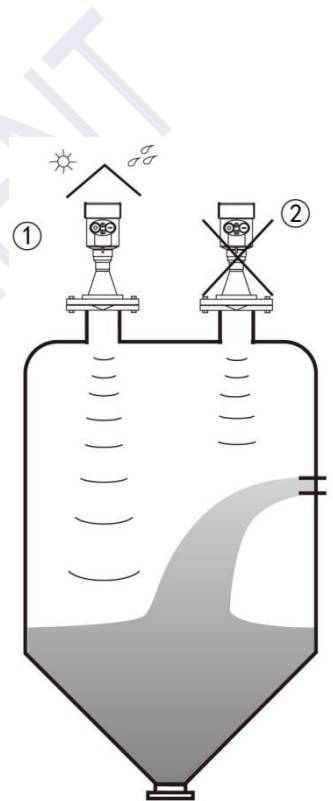
● Take over the installation diagram:



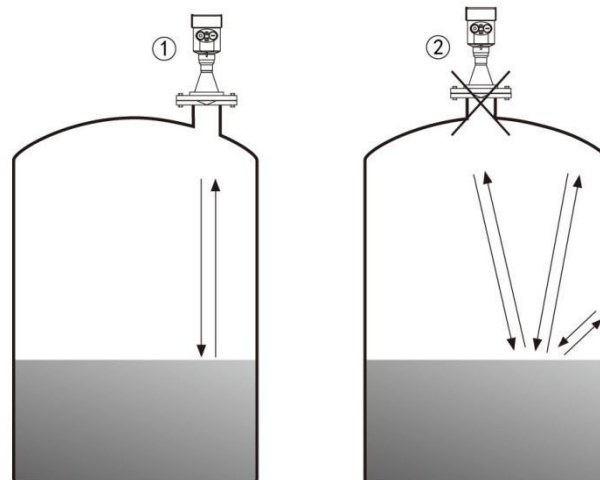
● Typical installation errors:

- Conical tank cannot be installed above the feed port.
Note: outdoor installation should adopt sunshade.

- ① Correct rainproof measures
- ② Error



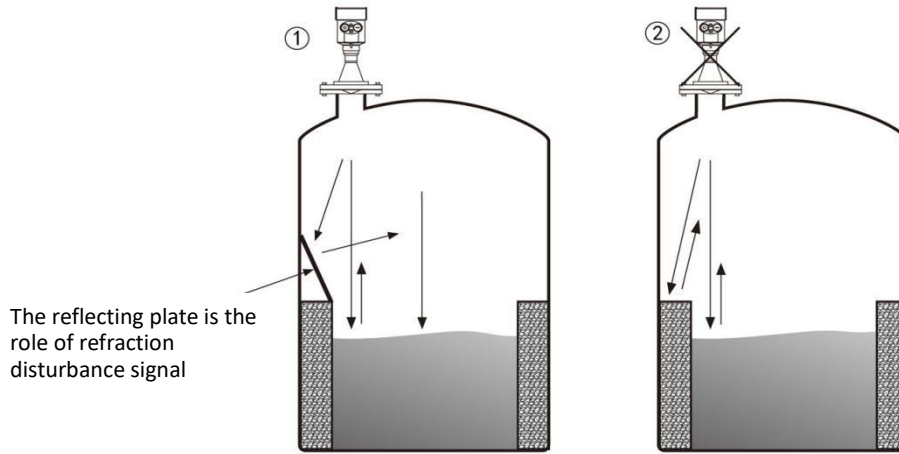
- The instrument cannot be installed in the arched or domed roof intermediate. In addition to produce indirect echo is also affected by the echoes. Multiple echo can be larger than the real value of signal echo, because through the top can concentrate multiple echo. So cannot be installed in a central location.



- ① Correct
- ② Error

➤ There are obstacles affecting measurement needed reflection plate.

- ① Correct
- ② Error





Level Meter Selection Parameter Table

Customer information

Company: _____ Contact: _____
 Address: _____ Zip code: _____
 Tel: _____ Fax: _____ Mobile phone: _____
 E-mail: _____ Date: _____

License

- The standard type (Non-explosion-proof) Intrinsically safe (Exia IIB T5)
 Intrinsically safe (Exia IIC T6 Ga) Intrinsically safe+marine license (Exia IIC T6 Ga)
 Flame proof (Exd IIC T6 Gb)

Tank / Container Information

The Types of Tank:

- Tank Reaction Tank Separation Tank Marine Tank

The Tank Structure:

Material of Tank: _____ Pressure: _____

Tank size:

Tank Height: _____ m Diameter: _____

The top of the tank:

- Vault Flat Open Cone type

The bottom of the tank:

- Cone bottom Flat Slope bottom Arc bottom

Installation:

- Top installation Side installation
 The bypass pipe mount Guided wave pipe installation

Installation takes over the top of the tank (information):

Height of take over : _____ mm Diameter of take over : _____ mm

Measurement of Medium

Media name: Liquid Solid Mixed Media

Medium temperature: _____ °C

Dielectric Constant: _____

Linked material: Yes No

Mixing: Yes No

Process Connection

Thread: G1½" A 1½" NPT

Flange Flange (DN= _____) Flange (ANSI= _____)

Power supply:

- 24V DC Two wire system 24V DC Four wire system 220V AC Four wire system

Output: 4-20mA HART

Display: Take the meter display program Without meter display program



Warning

- Ensure the explosion-proof class marked on the nameplate to meet or exceed the required rating of the relevant installation environment.
- Ensure that the enclosure rating indicated on the nameplate to meet the requirements of the installation environment.
- Ensure that the ambient and process temperature ranges marked on the nameplates to meet the application requirements.

CONTACT INFORMATION

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