

# Level Measurement Radar 26GHz

RD-2200

# Level measurement under certain pressure temperature limit and easy process condition

## **GENERAL**

The extremely narrow microwave pulse emitted by the antenna on radar level instrument can travel at the speed of light andpart of its energy, which is reflected offthe surface of target medium, is received by the very same antenna. The time lapse between pulse emission and reception by the antenna is proportional to the distance between the surface of target medium and the reference point on antenna. However, due to the fact that the electromagnetic wave is transmitted at extremely high speed, which leads to the tiny time lapse (nanosecond level) and makes it difficult to be identified, RD series of radar level instrument have adopted a special demodulation technology, enabling itself to detect the time lapse between pulse emission and reception correctly, and eventually generate accurate measurement result.



Measurement Range: 0-30m Measurement Accuracy: 3 mm

Process Temperature : -40~150 C°/-40~200 C°/-60~250 C°/-60~400 C°

Frequency Range : 26GHz (K Band) Process Pressure : -1.0~40 bar

Signal Output: 4-20mA(DC24V)/HART (2-Wire)

4-20mA(22.8~26.4VDC)/HART(4-Wire) 4-20mA(90~260VAC)/HART(4-Wire)

Effective Beam Angle: Horn Ø 48mm-18°, Horn Ø 78mm-10°

Horn,Ø 98mm-8°,HornØ 123mm-6°

Display: LCD Adjustment Module

Antenna Material: Stainless Steel 316L/PTFE

Stainless Steel 316L-(Extension)/PTFE

Stainless Steel 316L-(Extension)/PTFE-(Dustproof)

Polypropylene/PTFE-(Dustproof)

Polypropylene-(Extension)/PTFE-(Dustproof)

Housing/Protection: Plastic(PBT)/IP66

Aluminium/IP67

Aluminium(two Chamber)/IP67 Stainless steel 316L/IP67

Process Connection: Threaded Version G1-1/2A,1-1/2NPT,

Flange DN50, DN80, DN100, DN125 and Special Specification

Approval : Standard(without Approval)

Intrinsically Safe(Exia IIC T6)

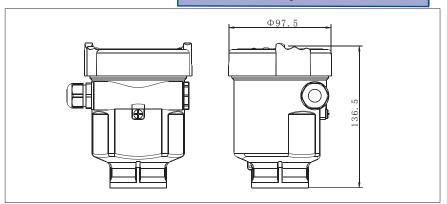
Intrinsically Safe+Ship Approval(Exia IIC T6)

Intrinsically Safe+Flameproof Approval(Exia IIC T6)



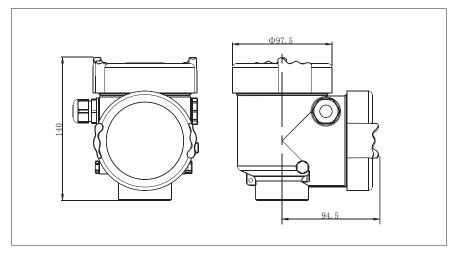
## Level Measurement Radar 26GHz

# Dimensional Specifications

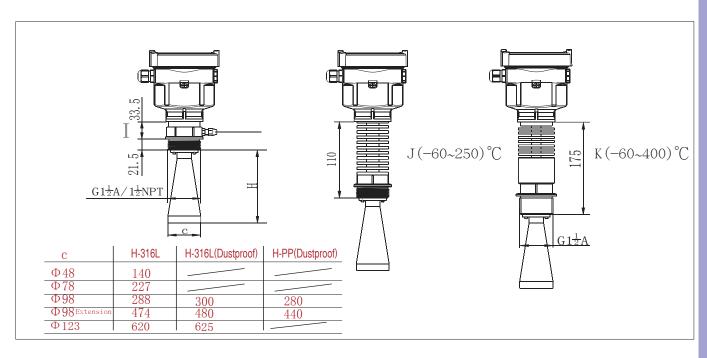


A/B/D Type:Housing

Material :PBT/Aluminium/316L



C Type:Aluminium(two chamber)





## **ACTSONIC** Level Measurement Radar 26GHz RD-2200

#### MODEL SELECTION GUIDE

#### RD-2200-X-X-XX-XX-X-X-X-X

#### **Explosion Proof Approval**

- P Standard(without Approval)
- I Intrinsically Safe(Exia IIC T6)
- C Intrinsically Safe+Ship Approval(Exia IIC T6)
- G Intrinsically Safe+Flameproof Approval(Exd ia IIC T6)

#### Shape of Antenna/Material

- B (T Type) Horn Ø 48mm/Stainless Steel 316L
- C (T Type) Horn Ø 78mm/Stainless Steel 316L
- H (T Type) Horn Ø 98mm/Stainless Steel 316L
- I (T Type) Horn Ø 98mm(Extension)/Stainless Steel 316L
- J (T Type) Horn Ø 123mm/Stainless Steel 316L
- K (S Type) Horn Ø 98mm/Polypropylene/PTFE-(Dustproof)
- L (S Type) Horn Ø 98mm(Extension)/Polypropylene/PTFE-(Dustproof)
- M (V Type) Horn Ø 98mm/Stainless Steel 316L/PTFE-(Dustproof)
- N (V Type) Horn Ø 98mm(Extension)/Stainless Steel 316L/PTFE-(Dustproof)
- P (V Type) Horn Ø 123mm/Stainless Steel 316L/PTFE-(Dustproof)
- X Special Specification

#### **Process Connection**

- GP (H)Thread G1-1/2 A / Stainless Steel 316
- GA (H)Thread 1-1/2 NPT/ Stainless Steel 316
- GB (G)Thread G1-1/2 A / PP
- GC (J)Thread G1-1/2 A / Stainless Steel 316/(-60~250C°)
- GD (K)Thread G1-1/2 A / Stainless Steel 316(-60~250C°) Process 40MPa
- GE (I) Thread G1-1/2 A / Stainless Steel 316(Air Purging Connection)
- **GX Special Specification**

#### Flange Optional/Materials

| Materials specifications cod | PP(L) | PTFE(L) | Stainless Steel 316(M) |
|------------------------------|-------|---------|------------------------|
| DN50                         | FA    | FB      | FC                     |
| DN80                         | GA    | GB      | GC                     |
| DN100                        | HA    | НВ      | HC                     |
| DN125                        | IA    | ΙB      | IC                     |

#### FO NO

**FX Special Specification** 

#### **Seal/Process Temperature**

- 2 Viton/(-60~200C°)
- 3 Kalrez(-60~250C°)
- 4 Graphite(-60~250C°)

#### **Electronic**

- B 4-20mA/HART 2-Wire
- C 4-20mA/(22.8~26.4)V DC/HART 4-Wire
- D 4-20mA/(198~242)V DC/HART 4-Wire

## Housing/General Safety Level/Antenna Safety Level

- Aluminium/IP67 Α
- В Plastic(PBT)/IP66
- Aluminium(two chamber)/IP67
- D Stainless steel 316L/IP67

### **Cable Entry**

- M M20x1.5
- N 1/2NPT

#### **Display/Programming**

- A YES
- X NO