

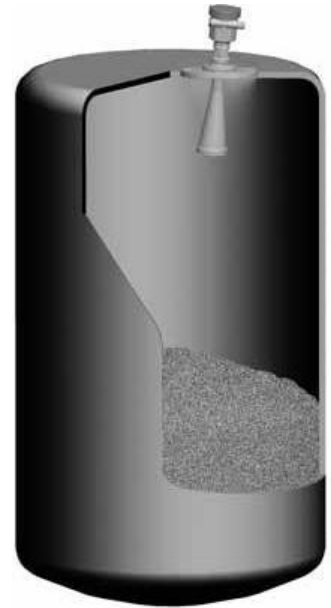
26G Pulse Radar Level Meter

Catalog



Principle

The extremely narrow microwave pulse emitted by the antenna on radar level instrument can travel at the speed of light and part of its energy, which is reflected off the 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, JERD810 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.



Features

The guided wave radar level instrument, adopted 26GHz as transmitting frequency, which make this series have specialties as below:

1. Small beam angle, which centralize energy, make JERD800 high ability of anti-jamming, hence high accuracy and reliable.
2. Small antenna size, easy to mount and easy to equip extra dust protection
3. Small blind zone, good accuracy even for small.
4. Shorter wave-length, suitable for the measurement of powder, grain and etc.
5. The guided wave radar level instrument, with pulses as its working tool and extremely low emission power, can be mounted on various metal or nonmetal vessels, harmless towards the environment and human beings.

Equipped with advanced microprocessor and unique Echo Discovery echo processing technology, the radar level instrument can be used under various hazardous process conditions

Product Introduction

RD805



| | |
|----------------------------|---|
| Application | Liquid, especially for highly corrosive liquids |
| Measuring Range | 10 m |
| Repeatability | ±5mm |
| Process temperature | (-40~130) °C |
| Process pressure | (-0.1~0.3) MPa |
| Frequency range | 26G |
| Signal output | (4~20) mA/HART/Modbus |
| Power | two wire (DC24V) four wire (DC24V/AC220V) |
| On-site display | LCD (Optional) |
| Housing | selective |
| Process connection | screw/flange (selective) |
| Antenna | Rod (PTFE) |

RD806



| | |
|----------------------------|--|
| Application | Liquid, temperature pressure slightly corrosive liquid |
| Measuring Range | 30 m |
| Accuracy | ±3mm |
| Process temperature | (-40~130) °C (-60~250) °C |
| Process pressure | (-0.1~4) MPa |
| Frequency range | 26G |
| Signal output | (4~20) mA/HART/Modbus |
| Power | two wire (DC24V) four wire (DC24V/AC220V) |
| On-site display | LCD (Optional) |
| Housing | selective |
| Process connection | screw/flange (selective) |
| Antenna | Rod (PTFE) |

RD807



| | |
|----------------------------|--|
| Application | liquids, use for highly erosive liquids |
| Measuring Range | 20 m |
| Accuracy | ±3mm |
| Process temperature | (-40~150) °C |
| Process pressure | (-0.1~0.5) MPa |
| Frequency range | 26G |
| Signal output | (4~20) mA/HART/Modbus |
| Power | two wire (DC24V) four wire (DC24V/AC220V) |
| On-site display | LCD (Optional) |
| Housing | selection |
| Process connection | thread/flange (selection) |
| Antenna | cone-shape plating (PTFE/Stainless steel316L) |

RD808



| | |
|----------------------------|--|
| Application | solid, strong dew, dust, crystal |
| Measuring Range | 80 m |
| Accuracy | ±15mm |
| Process temperature | (-40~130) °C (-60~250) °C |
| Process pressure | (-0.1~4) MPa |
| Frequency range | 26G |
| Signal output | (4~20) mA/HART/Modbus |
| Power | two wire (DC24V) four wire (DC24V/AC220V) |
| On-site display | LCD (Optional) |
| Housing | selective |
| Process connection | thread/flange (optional) |
| Antenna | Horn (Stainless steel316L) |

RD809



| | |
|----------------------------|--|
| Application | solid, suitable for dew, dust, crystal |
| Measuring Range | 30 m |
| Accuracy | ±15mm |
| Process temperature | (-40~130) °C (-60~250) °C |
| Process pressure | (-0.1~4) MPa |
| Frequency range | 26G |
| Signal output | (4~20) mA/HART/Modbus |
| Power | two wire (DC24V) four wire (DC24V/AC220V) |
| On-site display | LCD (Optional) |
| Housing | selective |
| Process connection | thread/flange (selection) |
| Antenna | Horn (Stainless steel316L PTFE Shield) |

Product Model Selection

● RD805

| Explosion proof approval | | | |
|---|--|-----------|----------------------|
| P | Standard (without approval) | | |
| I | Intrinsic safe (Exia IIC T6) | | |
| C | Intrinsic safe+Ship approval (Exia IIC T6) | | |
| G | Intrinsic safe+Flame proof approval (Exd (ia) ia IIC T6) | | |
| Shape of Antenna/Material/Process temperature | | | |
| RP | (R) Airproof horn/PP/(-40~80)°C | | |
| RF | (R) Airproof horn/PTFE/(-40~130)°C | | |
| Process connection | | | |
| GP | Thread G1½A | | |
| NP | Thread ½NPT | | |
| FA | Flange DN50 (PTFE) | | |
| FX | Special design | | |
| Flange selection/Material | | | |
| DN50 | PA (PP) | FA (PTFE) | QA (Stainless steel) |
| DN80 | PB (PP) | FB (PTFE) | QB (Stainless steel) |
| DN100 | PC (PP) | FC (PTFE) | QC (Stainless steel) |
| Length of vessel socket | | | |
| A | 100mm | | |
| B | 200mm | | |
| Electronic | | | |
| B | (4~20) mA/(22.8~26.4)VDC HART two-wire | | |
| C | (4~20) mA/(22.8~26.4)VDC/Modbus/ four-wire | | |
| D | (198~242) V AC/ Modbus/ four-wire | | |
| Housing/Protection | | | |
| L | Aluminium/IP67 | | |
| P | Plastic/IP66 | | |
| Q | Stainless steel 316L/IP67 | | |
| Cable entry | | | |
| M | M20x1.5 | | |
| N | ½NPT | | |
| Display/Programming | | | |
| B | Yes | | |
| X | No | | |

● RD806

| Explosion proof approval | | | |
|--|---|-----------|--|
| P | Standard (without approval) | | |
| I | Intrinsic safe (Exia IICT6) | | |
| C | Intrinsic safe+Ship approval (Exia IICT6) | | |
| G | Intrinsic safe+Flame proof approval (Exd (ia) ia IICT6) | | |
| Process connection/Material | | | |
| QG | (H)Thread G1½A/Stainless steel (304/316L) | | |
| QN | (H)Thread 1½NPT/Stainless steel (304/316L) | | |
| SG | (I) Thread G1½A/Stainless steel (304/316L) (Huff) | | |
| XX | Special design | | |
| Flange selection/Material | | | |
| DN50 | PA (PP) | FA (PTFE) | QA (Stainless steel) |
| DN80 | PB (PP) | FB (PTFE) | QB (Stainless steel) |
| DN100 | PC (PP) | FC (PTFE) | QC (Stainless steel) |
| DN125 | PD (PP) | FD (PTFE) | QD (Stainless steel) |
| DN150 | PE (PP) | FE (PTFE) | QE (Stainless steel) |
| F0 | No choice | FX | Special design |
| Shape of Antenna/Material | | | |
| Horn | Φ48mm | TA | (Stainless steel316L) |
| Horn | Φ78mm | TB | (Stainless steel316L) |
| Horn | Φ98mm | TC | (Stainless steel316L) SC (PP)PTFE Shield |
| Horn | Φ123mm | TA | (Stainless steel316L) SD (PP)PTFE Shield |
| | | XX | Special design |
| Seal/Process temperature | | | |
| 1.Viton(-60~150)°C 2.Kalrez(-60~250)°C 3.Graphite(-60~400)°C | | | |
| Electronic | | | |
| B | (4~20) mA/(22.8~26.4)VDC HART two-wire | | |
| C | (4~20) mA/(22.8~26.4)VDC/Modbus/ four-wire | | |
| D | (198~242) V AC/ Modbus/ four-wire | | |
| Housing/Protection | | | |
| L | Aluminium/IP67 | | |
| P | Plastic/IP66 | | |
| Q | Stainless steel316L/IP67 | | |
| Cable entry | | | |
| M | M20x1.5 | N | ½NPT |
| Display/Programming | | | |
| B | Yes | X | No |

● RD807

| Explosion proof approval | |
|--|---|
| P | Standard (without approval) |
| I | Intrinsical safe (Exia IICT6) |
| C | Intrinsical safe+Ship approval (Exia IICT6) |
| G | Intrinsical safe+Flame proof approval (Exd (ia) ia IICT6) |
| Antenna Material/Process connection | |
| A | (U)Stainless steel&PTFE Flange DN50 |
| B | (U)Stainless steel&PTFE Flange DN80 |
| C | (U)Stainless steel&PTFE Flange DN100 |
| XX | Special design |
| Electronic | |
| B | (4~20) mA/(22.8~26.4)VDC HART two-wire |
| C | (4~20) mA/(22.8~26.4)VDC/Modbus/ four-wire |
| D | (198~242) V AC/ Modbus/ four-wire |
| Housing/Protection | |
| L | Aluminium/IP67 |
| P | Plastic/IP66 |
| Q | Stainless steel316L/IP67 |
| Cable entry | |
| M | M20x1.5 |
| N | ½NPT |
| Display/Programming | |
| B | Yes |
| X | No |

● RD808

| Explosion proof approval | | | | |
|--|--|-----------|----------------------|----------------------------|
| P | Standard (without approval) | | | |
| I | Intrinsic safe (Exia IIC T6) | | | |
| C | Intrinsic safe+Ship approval (Exia IIC T6) | | | |
| G | Intrinsic safe+Flame proof approval (Exd (ia) ia IIC T6) | | | |
| Process connection/Material | | | | |
| QG | (H)Thread G1½A/Stainless steel (304/316L) | | | |
| QN | (H)Thread 1½NPT/Stainless steel (304/316L) | | | |
| SG | (I) Thread G1½A/Stainless steel (304/316L) (Huff) | | | |
| XX | Special design | | | |
| Flange selection/Material | | | | |
| DN80 | PB (PP) | FB (PTFE) | QB (Stainless steel) | EB(Gimbal) |
| DN100 | PC (PP) | FC (PTFE) | QC (Stainless steel) | EC(Gimbal) |
| DN125 | PD (PP) | FD (PTFE) | QD (Stainless steel) | ED(万向节) |
| F0 | No choice | FX | Special design | |
| Shape of Antenna/Material | | | | |
| TB | Horn Φ78mm /Stainless steel316L | | | |
| TC | Horn Φ98mm /Stainless steel316L | | | |
| TD | Horn Φ123mm /Stainless steel316L | | | |
| VC | Horn Φ98mm /Stainless steel316L(PTFE Shield) | | | |
| VD | Horn Φ123mm /Stainless steel316L(PTFE Shield) | | | |
| WF | Parabolic Φ198mm/Stainless steel316L | | | |
| WG | Parabolic Φ248mm /Stainless steel316L | | | |
| XX | Special design | | | |
| Seal/Process temperature | | | | |
| 1.Viton(-60~150)°C 2.Kalrez(-60~250)°C 3.Graphite(-60~400)°C | | | | |
| Electronic | | | | |
| B | (4~20) mA/(22.8~26.4)VDC HART two-wire | | | |
| C | (4~20) mA/(22.8~26.4)VDC/Modbus/ four-wire | | | |
| D | (198~242) V AC/ Modbus/ four-wire | | | |
| Housing/Protection | | | | |
| L | Aluminium/IP67 | P | Plastic/IP66 | Q Stainless steel316L/IP67 |
| Cable entry | | | | |
| M | M20x1.5 | N | ½NPT | |
| Display/Programming | | | | |
| B | Yes | X | No | |

● RD809

| Explosion proof approval | | | | |
|---|---|--|----------------------|----------------------------|
| P | Standard (without approval) | | | |
| I | Intrinsic safe (Exia IICT6) | | | |
| C | Intrinsic safe+Ship approval (Exia IICT6) | | | |
| G | Intrinsic safe+Flame proof approval (Exd (ia) ia IICT6) | | | |
| Process connection/Material | | | | |
| QG | (H)Thread G1½A/Stainless steel (304/316L) | | | |
| QN | (H)Thread 1½NPT/Stainless steel (304/316L) | | | |
| SG | (I) Thread G1½A/Stainless steel (304/316L) (Huff) | | | |
| XX | Special design | | | |
| Flange selection/Material | | | | |
| DN80 | PB (PP) | FB (PTFE) | QB (Stainless steel) | EB(Gimbal) |
| DN100 | PC (PP) | FC (PTFE) | QC (Stainless steel) | EC(Gimbal) |
| DN125 | PD (PP) | FD (PTFE) | QD (Stainless steel) | ED(Gimbal) |
| F0 | No choice | FX | Special design | |
| Shape of Antenna/Material | | | | |
| TB | Horn | Φ78mm /Stainless steel316L | | |
| TC | Horn | Φ98mm /Stainless steel316L | | |
| TD | Horn | Φ123mm /Stainless steel316L | | |
| VC | Horn | Φ98mm /Stainless steel316L(PTFE Shield) | | |
| VD | Horn | Φ123mm /Stainless steel316L(PTFE Shield) | | |
| WF | Parabolic | Φ198mm /Stainless steel316L | | |
| WG | Parabolic | Φ248mm /Stainless steel316L | | |
| XX | Special design | | | |
| Seal/Process temperature | | | | |
| 1.Viton(-60~150)℃ 2.Kalrez(-60~250)℃ 3.Graphite(-60~400)℃ | | | | |
| Electronic | | | | |
| B | (4~20) mA/(22.8~26.4)VDC HART two-wire | | | |
| C | (4~20) mA/(22.8~26.4)VDC/Modbus/ four-wire | | | |
| D | (198~242) V AC/ Modbus/ four-wire | | | |
| Housing/Protection | | | | |
| L | Aluminium/IP67 | P | Plastic/IP66 | Q Stainless steel316L/IP67 |
| Cable entry | | | | |
| M | M20x1.5 | N | ½NPT | |
| Display/Programming | | | | |
| B | Yes | X | No | |