# IQLT-D Diesel Level Transmitter

## Features

- Integrated construction, without outer adjustment
- Reversed polarity protection
- Protection grade of sensor housing is IP68,protection grade of PD140 protection device is IP65.
- High reliable, stable in long term use

## Introduction

IQLT-D Diesel Level Transmitter is a submersible piezoresistive level measuring instrument with all seal construction. High stable and reliable piezoresistive pressure sensor and high-precision circuit chosen. Whole temperature range of digital temperature compensation is done. Specialized cable is sealed with the housing. The air vented tube is inside of the cable. IQLT-D Diesel can be used for a long time in the liquid that is compatible with transmitter housing material.

IQLT-D Diesel Level Transmitter is small in size, light in weight, good stability in long term use. Customers do not need to adjust themselves. It can be used for level measurement and control in oil, chemical industry, medicine, metallurgy, power plant, mine, city water drainage and hydrology.

## Specification

| | |
|---|---|
| Measuring range | 0~2m Diesel Oil(proportion: 0.84~0.86) |
| Overpressure | 2 times of FS(variation <0.3%) |
| Power supply | 8~28V DC |
| Output | 4~20mA DC(2-wire) |
| Accuracy ① | 0.5%FS |
| Total error ② | 1%(-10~80℃ ) |
| Stability error | 0.5%FS/Year |
| Working Temperature range | -10~80℃ |
| Storage Temperature range | -20~80℃ |
| Load resistance | ≤(U-8)/0.02Ω |
| Response time | ≤3s |
| Insulation | ≥100MΩ/100V |
| Protection | IP68 |
| Relative Humidity | 10%~95%RH |
| Vibration effect | 3g(0~150Hz) |
| Life | $10\times10^6$times full scale |
| Intrinsic Explosion proof | Exia II BT6 Ga |

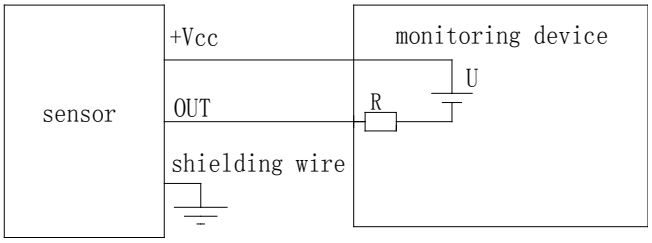
Note:
① Testing is under normal temperature (refer to 20℃ ± 5℃ ); non-linearity. Accuracy is rms root-mean-square of non-linearity, repeatability, hysteresis.
② Within the temperature range, it includes total index of non-linearity, repeatability, hysteresis, zero drift, sensitivity drift, zero short-term stability etc.

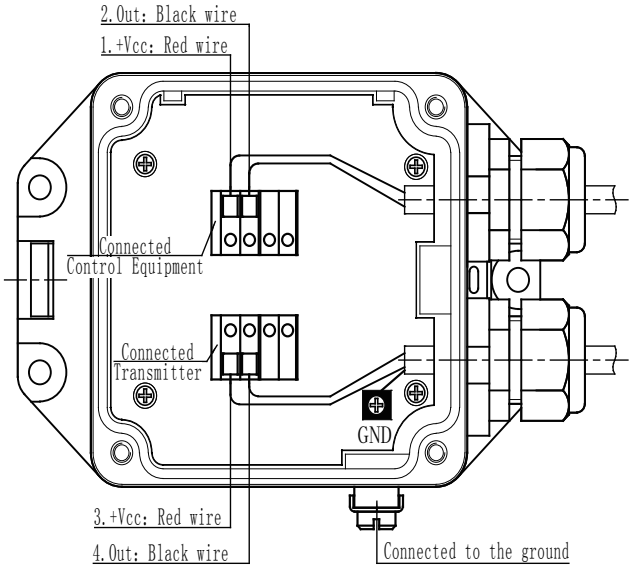
## Construction material

- Housing: Stainless Steel 316L
- Cable: Polyurethane cable with air vented tube
- Diaphragm: Stainless Steel 316L
- Connection Device: PBT Engineering Plastics PBT

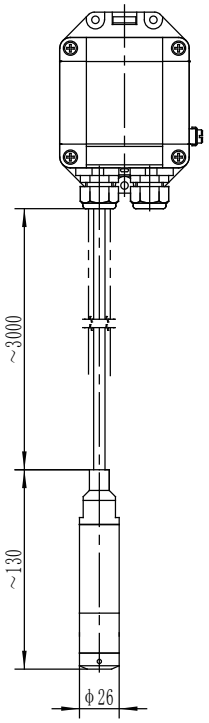
## Electrical Connection

| Wire Color | Electrical definition |
|---|---|
| Red | +VCC |
| Black | OUT |

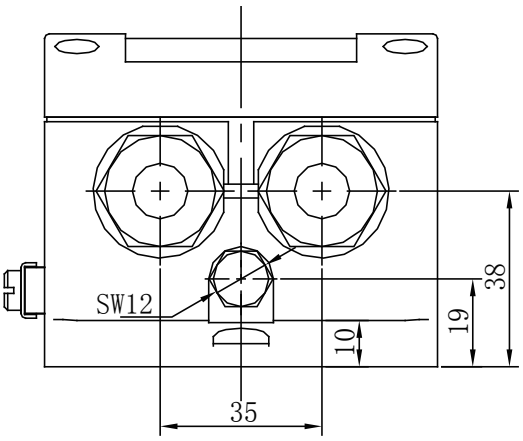


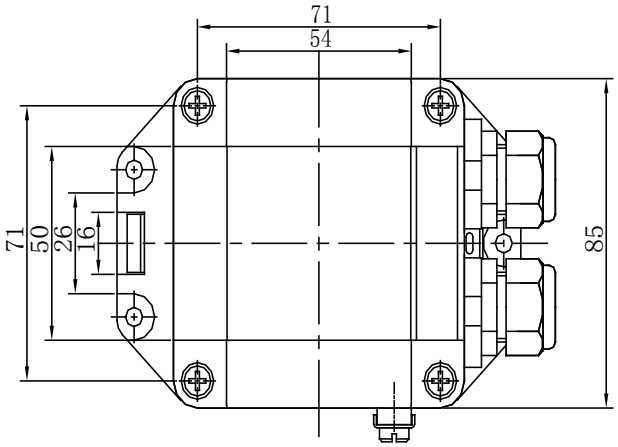




## Outline Construction (Unit: mm)




IQLT-D Diesel Lever Transmitter




PD140 Lightning Protection Device

## Order Guide

| IQLT-D Diesel | Lever transmitter | | | | |
|---|---|---|---|---|---|
| | range | [0~2 m Diesel] L L: cable length, when choosing, suggest L - X = (1 ~ 2) m | | | |
| | Code | Output signal | | | |
| | E | 4~20mADC | | | |
| | | Code | Structure material | | |
| | | | Diaphragm | Connection | Housing |
| | | 24 | 316L SS | 316L SS | 316LSS |
| | | | Code | Others | |
| | | | Yd | PD140 Lightning Protection device | |
| | | | F | *Flange installation assembly | |
| | | | FB | *Flange plate installation | |
| | | | ZH | *Rack installation assembly | |
| | | | W | *Bent pipe installation components | |
| IQLT-D Diesel | [0~2m diesel] 3 | E | 24 | YdFB | whole spec. |

### Notes

1.Measured media should be compatible with transmitter material, and the density of the measured media should be clearly indicated (except water).

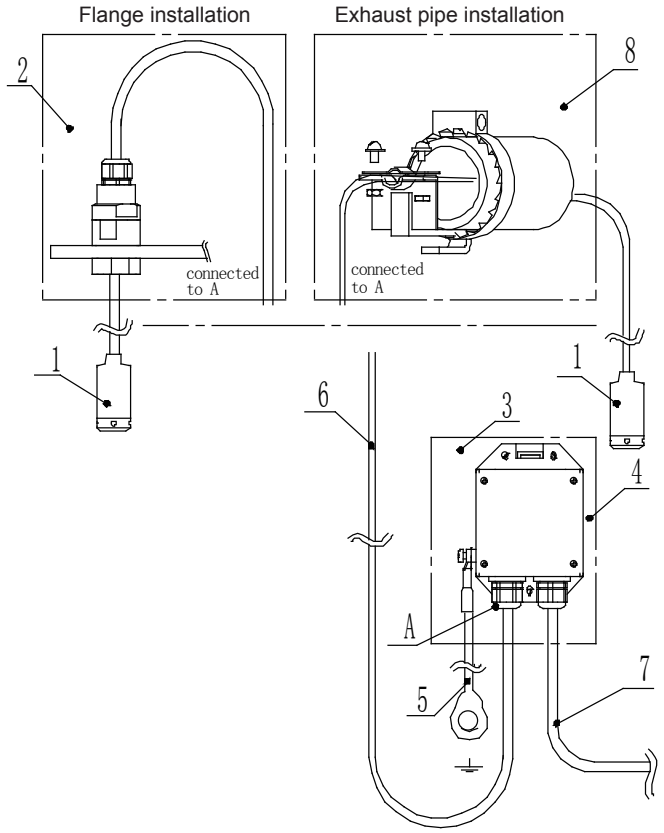
2. It uses Polyurethane cable.

3. Cable length is as per the requirement of clients.

4. If clients has special requirement, please contact us.

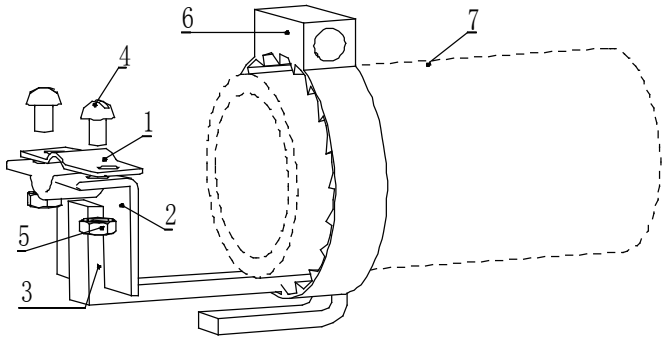
## Appendix

Flange installation assembly diagram:



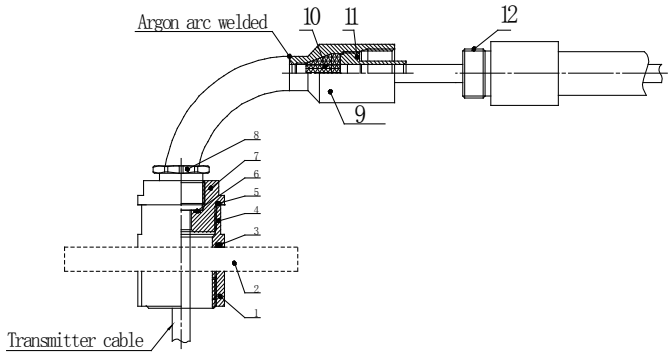

| | |
|---|---|
| 1 | IQLT-D Diesel Level Transmitter |
| 2 | Flange mounting kit |
| 3 | PD140 Lightning Protection Device |
| 4 | Permanent magnet absorbing installation |
| 5 | Grounding cable assembly |
| 6 | Transmitter specialized cable |
| 7 | 15m signal cable |
| 8 | Bracket mounting kit |

Rack installation assembly diagram:



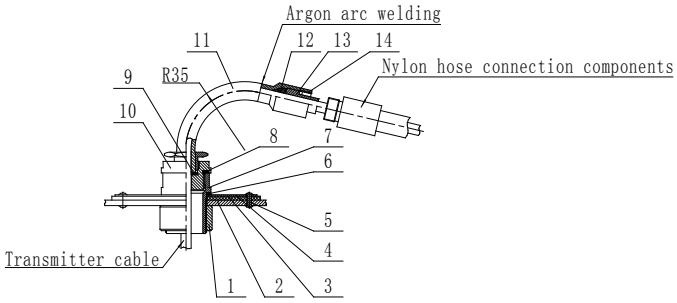
| | |
|---|---|
| 1 | Stainless steel clip |
| 2 | Bracket cable saddle |
| 3 | Rack support arm |
| 4 | M3 bolt |
| 5 | M3 nut |
| 6 | Steel cable |
| 7 | Air-vented tube |

Bent pipe installation components:




| | |
|---|---|
| 1 | M30×1nut |
| 2 | Tank flange |
| 3 | Type O ring ( 28×2.65) |
| 4 | Flange set |
| 5 | Type O ring ( 28×1. 8) |
| 6 | Gasket (cylindrical 16.5mm, inner circle 13mm, thickness 1.4mm) |
| 7 | Flange bushing |
| 8 | Welding bend component |
| 9 | Lock line seat |
| 10 | Rubber ring |
| 11 | Locking ring |
| 12 | Nylon hose connection components |

installation:




| | |
|---|---|
| 1 | M30x1 nut |
| 2 | fuel tank |
| 3 | Sealed gasket |
| 4 | flange plate |
| 5 | Enclosed tonsil loose core rivet |
| 6 | O ring(⌀28x2.65) |
| 7 | Flange cover |
| 8 | O ring (⌀28x1.8) |
| 9 | Sealed gasket (External circle ⌀16.5, internal circle ⌀13, thickness 1.4 |
| 10 | Flange center tube |
| 11 | Welded bent pipe components |
| 12 | Cable locker base |
| 13 | Rubber ring |
| 14 | Lines seat |