



Certificates



XI'AN YUNYI INSTRUMENT COMPANY LIMITED



1. Pressure Transmitter

4. Dead Weight Tester

7. Temperature Transmitter
2. Pressure Gauge

5. Level Transmitter

8. Density Meter
3. Pressure Calibrator

6. Flow Transmitter

YD34-1 & YD34-2 Series

Flush Pressure Transmitter / Sanitary Tri-Clamp Pressure Transmitter

Applications

- ☆ Irrigation Equipment
- ☆ General industrial applications
- ☆ Food and beverage industry
- ☆ Filling and packing machinery
- ☆ Dairy and beverage processing
- ☆ Pharmaceutical
- ☆ Dosing technology

Features

- ☆ For Sanitary or CIP (Clean-in-Place) applications
- ☆ 316L stainless steel diaphragm welded 316SS body construction shock and erosion
- ☆ Custom pressure ranges from 0-1m thru 0-500m
- ☆ Flush process connection eliminates plugging
- ☆ Advanced digital temperature compensation
- ☆ Available with an integral cooling extension for high temperature applications

Profiles

YD34-1 and YD34-2 are a pressure and level transmitter with sanitary flush diaphragm. They adopt U.S.A imported GE core. All process connections of the flush pressure transmitter are made of stainless steel, fully welded and isolate the process medium from the pressure measuring instrument via a positive seal. A reliable, dead-space free sealing between the process connection and the measuring medium is thus assured.

Through its optimized design, the flush process connection enables cleanability with the wetted diaphragm integrated into the process. Low-maintenance and trouble-free pressure measurement is thus guaranteed in critical applications with frequently changing media.

It has been specifically designed for the measurement of viscous, paste-like, adhesive, crystallizing, particulates containing and contaminated media, which would clog the pressure channel of conventional process connections. This model application in the field of water tank, Fuel tank, building & office water level measurement, city water supply, irrigation, food and sanitation, water factory, refinery, metallurgy, glass factory, sewage disposal center, water supply, reservoir.....

YunYi can provide a cost effective solution for level monitoring for a variety of applications. Welcome your inquiry.



YD34-1

YD34-2

Measuring range

bar	0 to 0.1 ... 0 to 600
inWC	0 to 40 ... 0 to 24000
psi	0 to 1.5... 0 to 9000
mH2O	0 to 1 ... 0 to 6000

The given measuring ranges are also available in mbar, kPa and MPa

Materials

Wetted Parts	Standard	Optional
Case	Stainless steel 304(HPT601) Stainless steel 316L(HPT602)	Ceramic Capacitor
Sensor	Stainless steel 316L	/
Cable	PVC	PUR/PE/PTFE

Mounting position

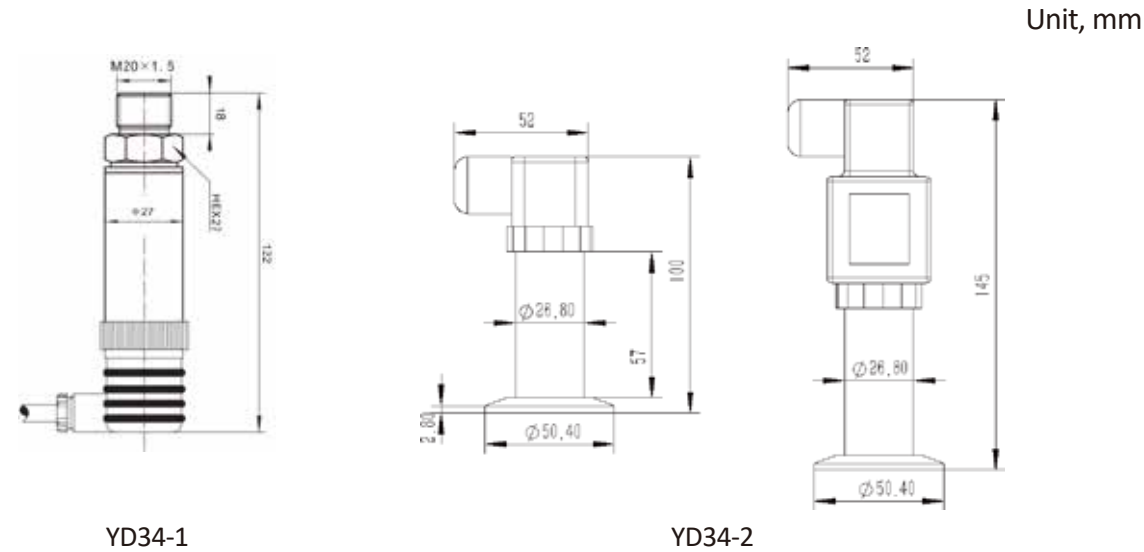
Calibrated in vertical mounting position with pressure connection facing downwards.

Specifications

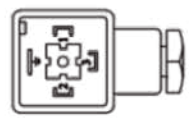
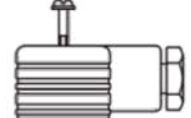
Parameter	YD34-1/YD34-2
Pressure Range	Clamp flush type -1 bar-0-0.1 bar...100 Bar Optional Thread flush type 0-20 bar...600bar option
Overload	150% F.S.
Burst Pressure	300% F.S.
Accuracy (Linearity Hysteresis Repeatability)	$\leq \pm 0.5\% \text{F.S.}@25^\circ \text{C}$ ($\leq \pm 0.25\% \text{F.S.}@25^\circ \text{C}$ by customized) Including non-lin., rep. and hys. Optional
Long-term Stability	Standard: $0.1\% \text{F.S.} \pm 0.05\%$
Working Temp.	$-40^\circ \text{C} \sim 80^\circ \text{C}$ (non-corrosive medium)
Storage Temp.	$-40^\circ \text{C} \sim 125^\circ \text{C}$ (Nitrile rubber sealing ring); $-30^\circ \text{C} \sim 150^\circ \text{C}$ (fluororubber rubber sealing ring)
Temperature Compensation	$0 \sim 80^\circ \text{C}$
Medium compatible	Compatible with 304/316L Stainless Steel
Electrical Wire	2 Wires 3 Wires
Output	4-20mA 1-5V;0-5V 0-10V 0.5-4.5V non-ratiometric RS485 Modbus RTU
Power Supply	7-30Vdc 8-30Vdc 13-30Vdc 5Vdc $\pm 5\%$ 3.5-36Vdc
Polarity protection	Yes No No No Yes
Insulate resistance	$> 100 \text{M} \Omega @ 50 \text{V}$
Zero Temp. Drift	$0.2\% \text{FS}/^\circ \text{C}$ ($\leq 100 \text{kPa}$); $0.1\% \text{FS}/^\circ \text{C}$ ($> 100 \text{kPa}$)
FS Temp. Drift	$0.02\% \text{FS}/^\circ \text{C}$ ($\leq 100 \text{kPa}$); $0.01\% \text{FS}/^\circ \text{C}$ ($> 100 \text{kPa}$)
Electronic connection	DIN43650 Hirschmann Terminal Box; Fixed cable and water proof IP67 optional
Response time	$\leq 10 \text{ms}$
Pressure Type	Gauge pressure; Sealed gauge and absolute optional
Certificate	Ex ia IICT6, TUV RoHS and CE Certificate
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1
Process Connect	G1/2", M20*1.5; G1", $\Phi 50$ clamp or by customized

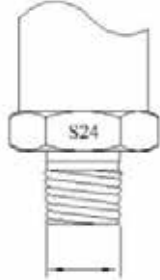
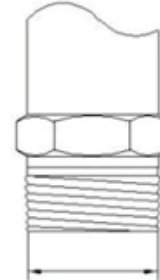
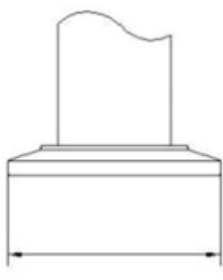
Ambient Temperature: 25°C (unless specified)

Dimensions and Drawing



Electrical Connection

DIN 43650 connector			
	Current	1	Vcc+
		2	Si+
		3	NC
		4	Shield
	Voltage	1	Vcc+
		2	GND
		3	Vout
		4	Shield
	RS485 RTU Modbus	1	Vcc+
		2	GND
		3	485A
		4	485B

Pressure Connections			
M20x1.5 male	G1/2" male	G1 male	Clamp Φ 50 mm
			
M20x1.5 male	G1/2"	G1"	Φ 50 flange

How to Order

01	0~0.1	02	0~0.15	03	0~0.2	04	0~0.25	05	0~0.3	06	0~0.4	07	0~0.5	08	0~1	09	0~2
10	0~2.5	11	0~3	12	0~5	13	0~10	14	0~16	15	0~25	16	0~40	17	0~60	18	0~100
19	0~160	20	0~250	21	0~300	22	0~400	23	0~500	24	0~600			X	By Customized		

1.Range Selection Table:

Kindly according to your application select suitable range code , Example: code 13 = 10 .

Unit of measure select on the Part Number Selection Table . Example: Code B=Bar , that's 10 bar

2.Part Number Selection Table:

YD34-1/2 Selection Type	13	B	G	E5	S11	N	8	2	001
☆ Range	Range reference to range selection table code								
☆ Pressure & Level Units	H=mH2O (Min: 1 mH2O; Max:50 mH2O) B=bar (Min:0.1bar Max:600bar) P=Psi (Min:1Psi; Max:8700Psi) K= kPa (Min:10KPa; Max:60000 KPa) I= inWC (Min: 20 inWC; Max: 20000 inWC) MB= mbar (Min:100 mbar Max: 5000 mbar)								
☆ Pressure type	G=Gauge/Relative pressure type (universal) A=Absolute pressure (customized)								
☆ Signal Output	E5=4-20mA(2 wires) E6=0-5V(3 wires) E7=0-10V(3 wires) E8=0.5-4.5V(3 wires) E11=RS485(MODBUS) E0=1-5V (3 wires) X= By Customized								
☆ Power Supply	S6=5Vdc S11=7-30Vdc S12=8-30Vdc S42=3.5-36Vdc S43=13-30Vdc X= By Customized								
☆ Measuring Medium	N= Standard Type 2= Max 150 ℃ (With Cooling Device)								
☆ Others function (Optional)	8= M20*1.5 male 9= G1/2" male 18= Clamp Φ 50 mm 29= G1" male(by customized) X= By Customized								
☆ Accuracy	1=0.5%F.S (Typical) 2=0.25%F.S (By Customized)								
☆ Cable length	001= Cable 1M 002= Cable 2M 003= Cable 3M X= By Customized								

Accessories

(Notes: Please purchase separately. For the price of accessories, please contact our sales.)

Description		Order number
	Liquid level display control device With all kinds of liquid level sensor, measurement according to liquid level, and according to the setting of the container structure and size and the density of liquid, calculation, display liquid volume or quality.	0008
	Flange 4 holes 316 SS flange, size can be customized	0001
	Locking flange For locking cables, made of aluminum alloy	0029
	Conduit adapter 316 SS 1/2" NPT male cable conduit adapter.Must be factory installed.	0011
	Terminal box The terminal box, with IP 67 ingress protection and watertight ventilation element, provides a moisture-free electrical termination for the submersible pressure transmitter. It should be mounted in dry environment or directly in the switch cabinet.	0003
	Additional weight The additional weight increases the dead weight of the submersible pressure transmitter.It simplifies the lowering into monitoring wells, narrow shafts and deep wells. It effectively reduces negative environmental influences on the measuring result from the measured medium (e.g. turbulent flow).Stainless steel 316L, approx. 1.46kg, height (H) 70 mm	0009
	Adapter Converter It is able to convert RS-232 signal to RS-485 balanced differential signal and extend the communication distance to 1.2km.It uses a particular pump to gain power from RS-232 signal (RTS, DTR, TXD) without initializing the RS-232 series interface.This interface converter does this without requiring any AC or DC power.	0005
	Surge electrostatic protector Anti-surge ±2000V/±4000V, anti-static 18KV, suitable for protecting 4-20ma and RS485 circuits.	0014

Order information

Model / Measuring range / Output signal / Temperature measurement / Cable material / Cable length / Case/
Lightning protection / Accessories