

LDZG

Displacer Level Transmitter



OVERVIEW

Operation

LZDG series displacer liquid level (interface) transmitter can be used to measure liquid level, interface or density, output 4 ~20mA current signal with HART communication protocol. Through a compatible HART communicator, the level controller can be queried, configured, calibrated or tested, and the information of a single measurement loop can also be accepted, and the information on site can be transmitted to the control system.

Features

- $\pm 0.5\%$ or $\pm 0.2\%$ accuracy
- 4...20mA+HART output
- Pressure rating up to 420 bar



TECHNICAL DATA

Power Supply

12~30V DC; Reverse polarity protection inside the controller (Controller voltage ≥ 17.75 V DC during HART protocol communication)

Output

4~20mA DC+HART (Positive action—increasing liquid level, interface, or density increases output; or reverse—increasing liquid level, interface, or density decreases output)

Measuring Range

300mm~2500mm (Can be customized out of range)

Pressure Rating

≤ 42.0 MPa(Class2500)

Nominal Diameter

DN40 or customized

Ambient Temperature

-40°C~+80°C(When $\leq -20^\circ\text{C}$, there is no display on the LCD, and the remote transmission can be used normally)

Medium Temperature

-196°C $\leq T \leq$ +450°C

Accuracy

$\pm 0.5\%$ or $\pm 0.2\%$

Power Supply Impact

When the power supply changes between the minimum and maximum values of the specified voltage, the output changes $< \pm 0.2\%$ of full scale

LCD Indicator

Output current signal, process variable, process temperature, percentage range, torque tube rotation angle

Liquid Density

$0.2 \leq \rho \leq 1.9$ g/cm³

Density Difference

≥ 0.04 g/cm³

Torque Tube Material

Standard Inconel 600, Optional Monel, Hastelloy C-276

Chamber Material

Carbon steel, SS304, SS316L or as customer requirements

Displacer Material

SS304, SS316L or as customer requirements

Flange Standard

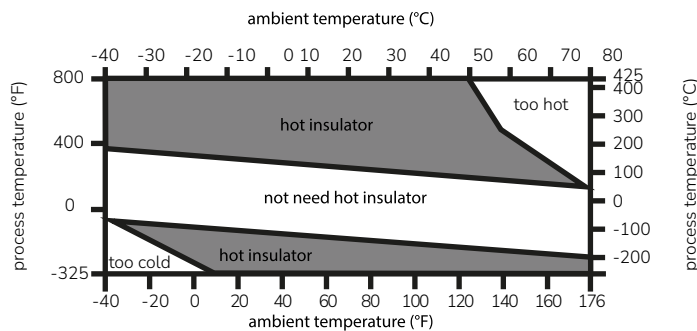
As customer requirement

Power Inlet

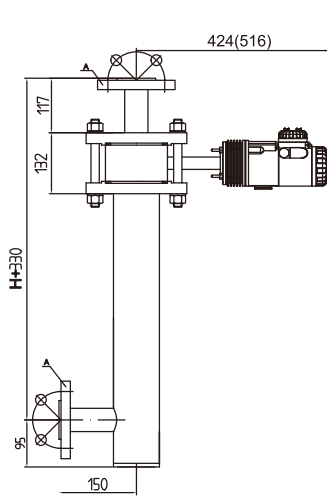
2 pcs M20×1.5 (internal thread) or as customer requirement

Explosion-proof Type

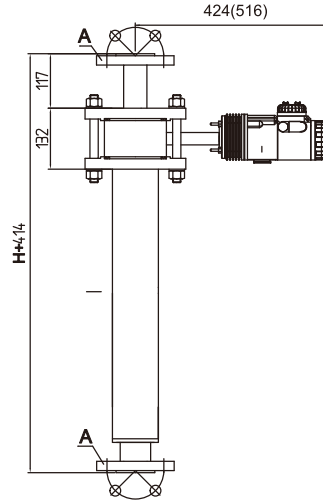
ATEX Ex ia IIC T5 Ga, Ex d IIC T5/T6 Gb



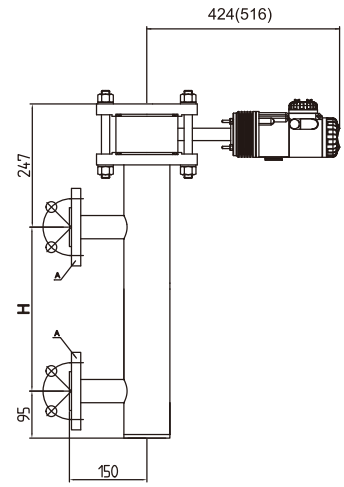
TECHNICAL DRAWINGS AND DIMENSIONS



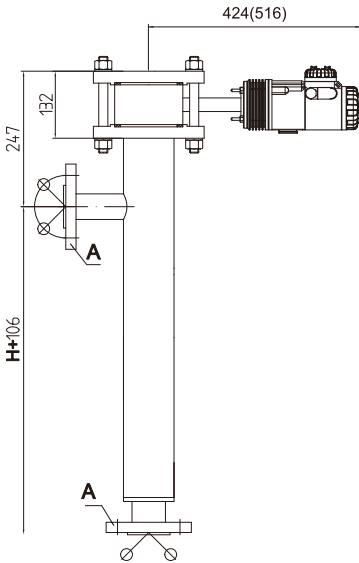
A. TOP-SIDE MOUNTED



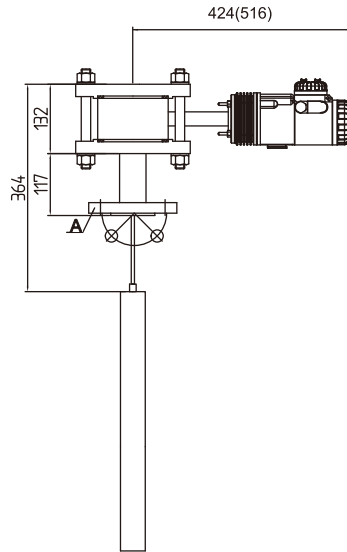
B. TOP-BOTTOMED MOUNTED



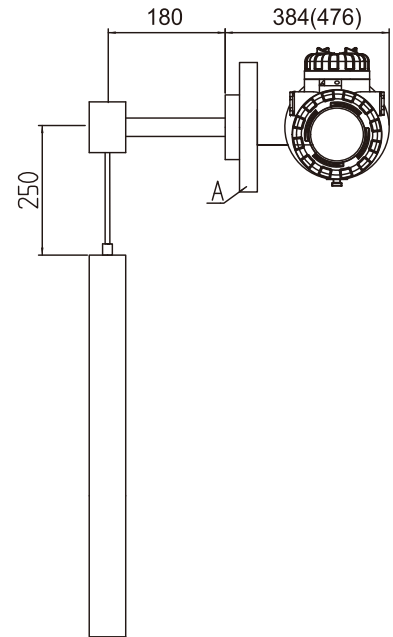
C. SIDE-SIDE MOUNTED



D. SIDE-BOTTOM MOUNTED



E. TOP MOUNTED



F. SIDE MOUNTED



ORDERING

Model	
LDZG	Displacer Level Transmitter

Measurement Type	
1	Intelligent Displacer Liquid Level Transmitter
2	Liquid Level Measurement
3	Interface Level Measurement

Mounting	
A	Density Measurement
B	Top-side Mounted Type
C	Top-bottom Mounted Type
D	Side-side Mounted Type
E	Bottom-side Mounted Type
F	Top Mounted Type
S	Side Mounted Type

Pressure	
1	Nominal Pressure: PN 2.5 MPa
2	Nominal Pressure: PN 4.0 MPa
3	Nominal Pressure: PN 6.3 MPa
4	Nominal Pressure: PN 10 MPa
5	Nominal Pressure: PN 16 MPa
6	Nominal Pressure: PN 20 MPa
7	Nominal Pressure: PN 25 MPa
8	Nominal Pressure: PN 32 Y: 166,58 mm

Hazardous Area	
i	Explosion-proof Type: Intrinsically Safe Type
d	Explosion-proof Type: Explosion Isolation Type

Wetted Material	
T	Wetted Material: Carbon Steel
H	Wetted Material: 1Cr18Ni9Ti

Temperature	
D	Medium Temperature $\leq 100^{\circ}\text{C}$
G	Medium Temperature $\leq 400^{\circ}\text{C}$
X	Field auxiliary (Please note if radiating fins or insulations are needed.)

Additional Code	
F	With flanges connection, steam tracing DN15, PN2.5
Z	With flanges connection, steam tracing ZG1/2"

