

Introduction

The product uses high performance pressure sensor as sensing element, which could measure liquid static pressure that is positive proportional to level depth precisely, and transform pressure signal into standard current/voltage signal output by amplifier circuit to measure accurate level depth. The product has high accuracy, compact size, easy installation, can be submersible into the liquid directly to measure level from transmitter bottom to the liquid surface. It can be widely used for water and level measure and control of petroleum, chemical industry, power station, city water supply and drainage and hydrology, etc.



Features

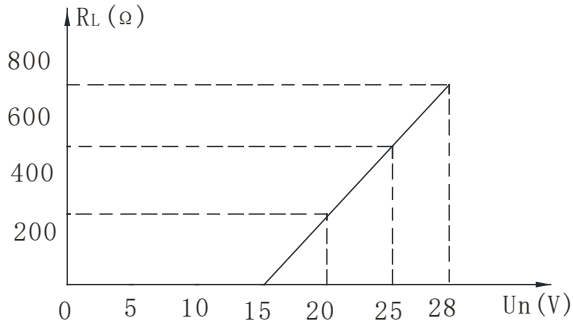
- Full sealed stainless steel construction for submersible part; sensor and amplifier circuit are all in the sealed housing; protection class IP68;
- Waterproof Junction Box is optional to ease wiring; protection class IP65;
- Removable top stainless steep cap; Prevent diaphragm damage and ease cleaning;
- Product is issued CE Certificate;
- Product is National Patent Product, patent No.ZL00226955.4 and ZL2013 3 0060430.9;
- Explosion-proof product conforms to Exia II CT6 Ga of Standard GB3836.4; Ex-proof Certificate is issued;
- Ship-use product conforms to CCS Rules of Classification of Sea-going Steel Ships (2018); Ship-use Certificate is issued.

Specifications

Range	1, 2, 5, 10, 20, 50, 100, 200 mH ₂ O			
Overpressure	1.5 times FS			
Accuracy	±0.25%FS (typ.) ±0.5%FS (max.)			
Stability error	±0.1%FS (typ.) ±0.2%FS (max.) range>10mH ₂ O			
	±10mmH ₂ O (typ.) ±20mmH ₂ O (max.) range≤10mH ₂ O			
Temp. drift		Zero drift, %FS/°C		Sensitivity drift, %FS/°C
	Rang>10mH ₂ O	0.005(typ.)	0.01(max.)	0.02(max.)
	Range≤10mH ₂ O	0.01(typ.)	0.02(max.)	0.02(max.)
	Range≤5mH ₂ O	0.015(typ.)	0.03(max.)	0.02(max.)
	Range≤2mH ₂ O	0.025(typ.)	0.05(max.)	0.02(max.)
Transmitting	2-wire	3-wire		3-wire
Power supply	15V~28V DC(Intrinsic safe version is supplied through safe barrier)			
Output signal	4mA~20 mA DC	0mA~10/20mA DC		0/1V~5/10V DC
Load (Ω)	<(U-15) /0.02A	<(U-15) /0.02A		>5k
Material contacting with media	Housing: SS 304	Seal parts: Viton		
	Rubber casing: NBR	Cable: Φ7.5mm PVC/Polyurethane cable with vented tube		
	Diaphragm: SS 316L			
Operation temp.	-10°C ~70°C ; -10°C ~60°C (Exia)			
Storage temp.	-20°C ~85°C			
Protection	IP68 (sensor part); IP65 (connection box)			
Ex-proof class	Exia II CT6 Ga			

Note:For 2-wire output transmitter with LCD/LED display, the power supply shall be ≥20V DC.

Load Characteristic

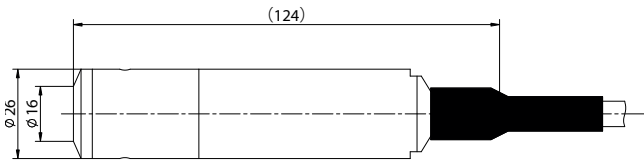


2-wire

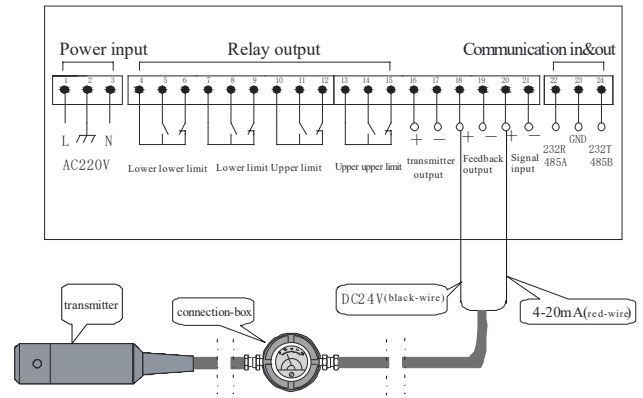
4mA~20mA DC output

$$R_L \leq \frac{U_n - 15V}{20mA} \times 10^3 (\Omega)$$

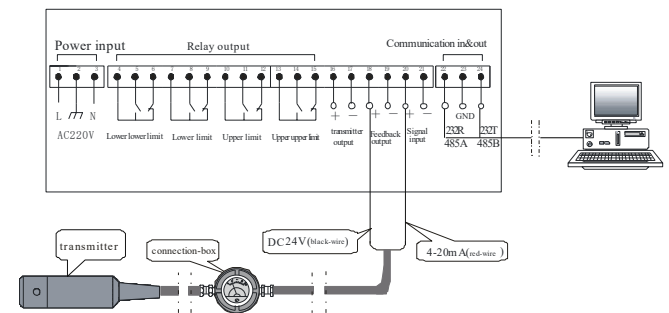
Outline Construction (Unit: mm)



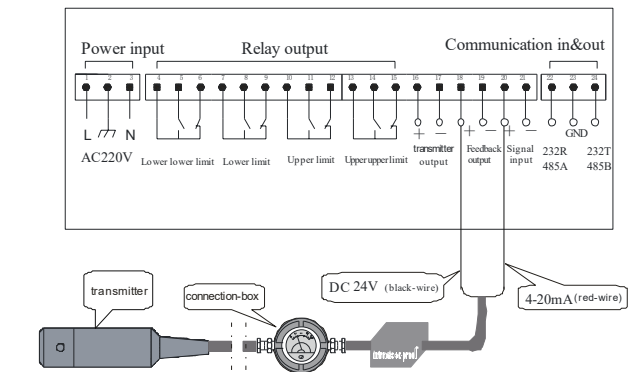
Application Example



Connecting level transmitter with measure display to build up a control system

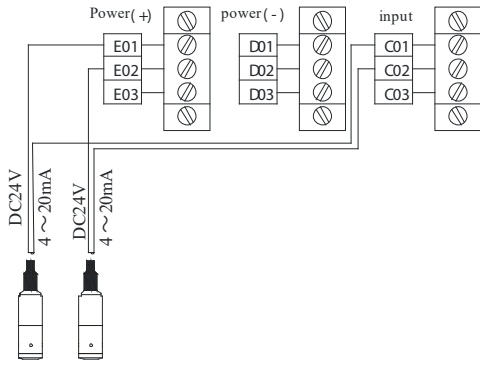


Connecting level transmitter with MSB9418 measure display to build up one level measure system with upper and lower limits control and alarming. Output signal is RS232 or analog 1V~5V DC, 0V~5V DC, 4mA~20mA DC.

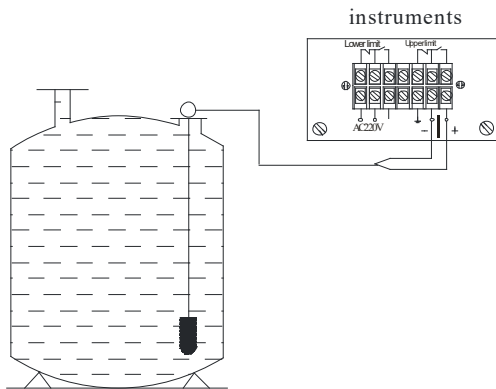


Connect Ex-proof version transmitter with safe barrier and measure display to build up one control system.

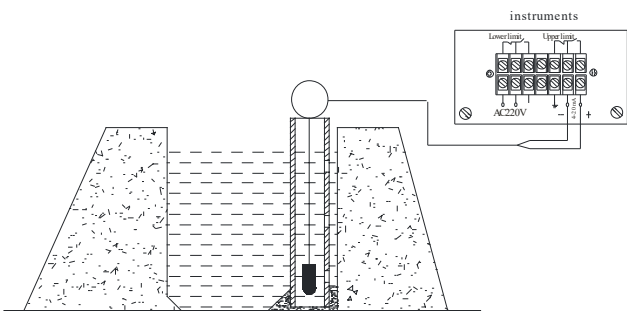
Outline Construction (Unit: mm)



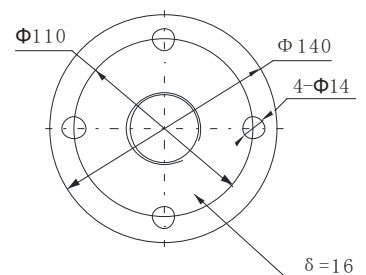
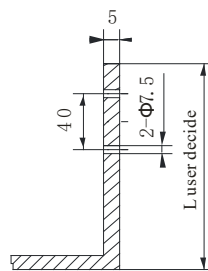
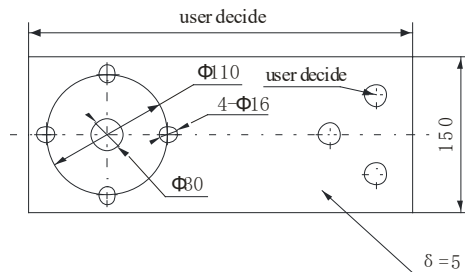
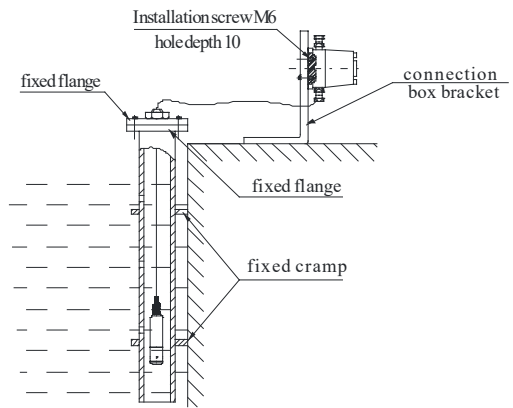
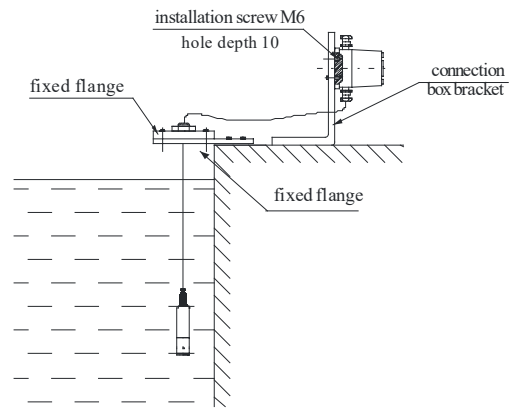
Connecting the most two level transmitter with MSB9438 measure displayer to build up one level difference system with multi-channel display. Output signal can be 4mA~20mA analog, it can also provide upper and lower limit control and alarm.



When measure static pressure in open tank, please put transmitter into tank bottom, and fix transmitter cable and connection box at the entrance of the tank.



When measuring level in flow water, please insert one steel tube $\Phi 45$, and make some little holes $\Phi 5$ at the different height of the tube. Make holes opposite to water flowing direction, and let water go into tube unobstructed. Fix cable and connection box at the entrance of the tube.



Order Guide

MPM426W		Level Transmitter			
Range		[0~XmH ₂ O]L L: cable length; suggested L-X=(1~2)m			
Code		Output signal			
E		4mA~20mA DC			
F		1V~5V DC			
J		0V~5V DC			
Q		0mA~10mA DC			
U		0mA~20mA DC			
V		0V~10V DC			
Code		Construction material			
		Diaphragm	Pressure port	Housing	
22		SS 316L	SS	SS	
24		SS 316L	SS 316L	SS 316L	
25		Tantalum	SS	SS	
Code		Others			
M ₁		0%~100% hand pointer indicator			
M ₆		4 digits LED digital indicator(only for 4mA~20mA)			
M ₇		4 digits LCD digital indicator(only for 4mA~20mA)			
Y _b		Aluminum connection box without display			
Y _c		MS200 water-proof connection box(default)			
Y _d		PD140 lightning-proof protection device			
Y _e		connection box(with display or without display)			
i		Intrinsic safe version Exia II CT6 Ga			
C ₁		M20×1.5 male, face type seal			
C ₃		G1/2 male			
C ₅		M20×1.5 male, waterline seal			
T		Ship-use			
F ₁		Fixed flange			
MPM426W	[0m~3mH ₂ O]5	E	22	Y _b iC ₁	the whole spec.

Notes

- 1.Please be sure the measured media is compatible with contacting material; please pay attention to media density in the measurement (except water);
- 2.We provide two kinds of cable, PVC or polyurethane cable. Polyurethane cable is more flexible and wearable. If the use has no special requirement, we provide PVC cable as default;
- 3.If the product is installed in "lightning and thunder" area, please note "lightning-proof" in the order. We suggest to increase Lightning-proof Protection Device to protect transmitter. Please be sure good grounding as well;
- 4.If the user has special requirement, please feel free to contact our company.