P063 Piezoresistive Differential Pressure Transmitter

Introduction

EYC P063's output signal from Weston Bridge on the sensing die has a good linear relationship with differential pressure, so the measured differential pressure could be measured precisely.
The whole product is used for differential pressure measurement of various gases and liquids in pipeline in many fields including petroleum, chemi-industry, power station and hydrology, etc.

Feature

- Using piezoresistive differential pressure sensor, 316L isolated diaphragm
- Welding and full-sealed construction, full stainless housing, compact size, easy installation
- Well overload capacity and shock effect, nicer long-term stability with reasonable price

Applications

- Measuring differential pressure for liquid and gas
- For research and development, laboratory, and processing engineering
- Mechanical equipment, water plant, air equipment, chiller unit
- Differential pressure measurement of gases and liquids in pipelines such as petroleum, chemi-industry, power station and hydrology, etc.

Specification

Input

Sensor Type	Piezoresistive diaphragm
Measuring Range	0 ... 20 bar
+ Overpressure	≦ 10 bar : 2 x F.S. ;
	>10 bar : 2 x F.S.
- Overpressure	≦ 10 bar : 1 x F.S. ;
	>10 bar : 0.5 x F.S.

Output

Output	4 ... 20mA
Signal Connection	2-wire
Load Resistance (current output)	≦ (power supply - 10 V) / 0.02 A Ω
Output Calibration (ZERO & SPAN)	± 10 % of zero-point and full-scale
Response Time (10 ... 90 %)	≦ 5 ms

Temperature Influence (at + 35 °C)

Zero-Point Error	≦ 2 bar : ± 0.75 % of F.S. ;
	Max. : ± 1.25 % of F.S.
	> 2 bar : ± 0.5 % of F.S. ;
	Max. : ± 0.75 % of F.S.
Measuring Range Error	≦ 2 bar : ± 0.75 % of F.S. ;
	Max. : ± 1.25 % of F.S.
	> 2 bar : ± 0.5 % of F.S. ;
	Max. : ± 0.75 % of F.S.

Accuracy

Accuracy	± 0.5 % of F.S.

Environment

Media Measured	Liquid / Gas (provide coating)
Temp. of Media Measured	0 ... + 70 °C
Ambient Temperature	0 ... + 70 °C
Ambient Humidity	0 ... 100 %RH (non-cond.)
Storage Temperature	- 40 ... + 70 °C

Electric

Power Supply	10 ... 30 VDC
Current Consumption	≦ 27.5 mA
Overvoltage Protection	< 33 VDC
Electric Connection	DIN 43650 ABS plug ;
	M12 - 4 PIN metal connector

Installation

Installation	Duct

Protection

Protection Rating	DIN 43650 : IP65 ;
	M12 - 4 PIN metal connector : IP67
Electric Protection	◎Polarity protection ◎Over-voltage
	◎Short-circuit
Shock Effect	≦ ± 1 % at 3 gRMS · 30Hz ... 2000Hz

Certification

Certification	CE

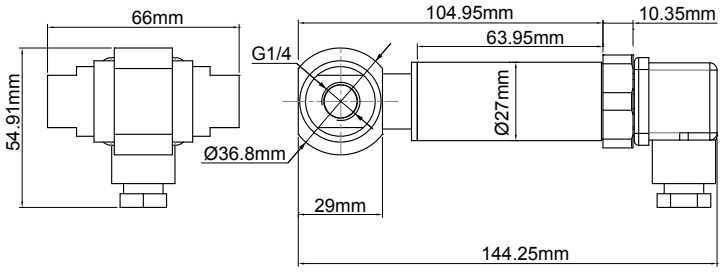
Material

Housing	SUS 316L
Wetted Parts	SUS 316L
Sensor	SUS 316L
Connector	SUS 304
Sealing Material	VITON
Weight	410 g (without connector)

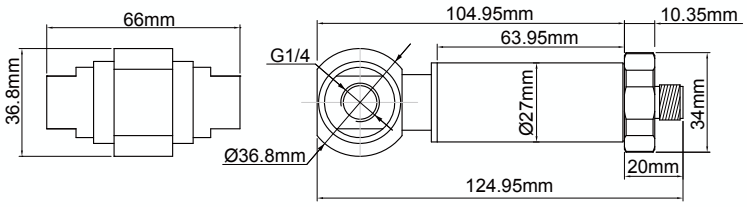
Ordering Guide

Item	P063	–	21	1	0	1	1
Pressure Range	0.1 bar 0.2 bar 0.4 bar 0.6 bar 1.0 bar 2.5 bar 4.0 bar 6.0 bar 10 bar 16 bar		01 02 04 06 11 13 14 16 21 22				
Output	4 ... 20 mA			1			
Power Supply	10 ... 30 VDC				0		
Connect Thread	Housing G 1/4" Inside thread					0	
Connector	DIN 43650 ABS plug M12 x 1 Metal Connector						1 2

Dimension

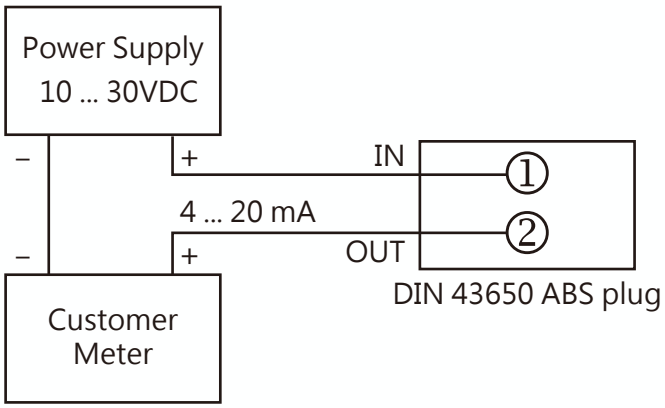


DIN 43650 ABS plug

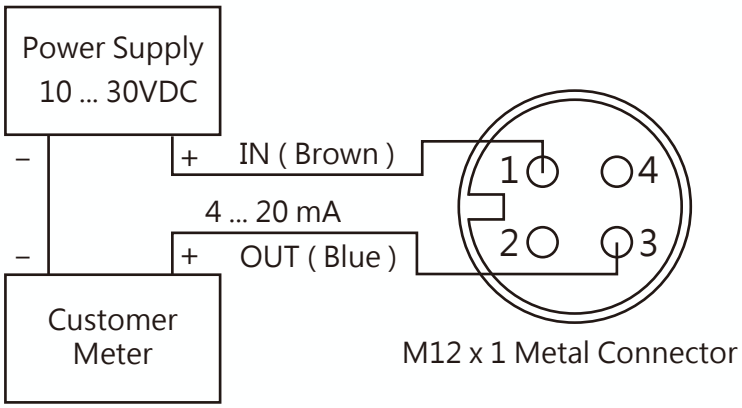


M12 x 1 Metal Connector

Diagram



DIN 43650 ABS plug



M12 x 1 Metal Connector