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SDT3051S Smart Differential Pressure Transmitter

Features

- Using reliable silicon sensor or capacitance sensor
- Stable, reliable, anti-vibration and has good interchangeability
- Powerful interface operation function
- Optional signal output
- Offset and full scale adjustable
- LCD display
- Multiple installation methods are available



Introduction

The SDT3051S smart differential pressure transmitter produced by our company is a multi-functional digital instrument, which is carefully designed based on advanced, mature and reliable silicon sensor or capacitance sensor technology, combined with advanced single chip microcomputer technology and sensor digital conversion technology.

The core component single chip microcomputer, its powerful function and high-speed operation ability ensure the excellent quality of the transmitter. The whole design framework focuses on reliability, stability, high precision and intelligence.

It has powerful interface operation function. The digital meter can display pressure, percentage and current, and 0 ~ 100% analog indication. The key operation can conveniently complete the setting of basic parameters such as zero point migration, measuring range setting and damping setting without standard pressure source, which greatly facilitates on-site debugging.

The integrated application specific integrated circuit (ASICS) is used in signal conversion, signal acquisition and processing and current output control, which makes the transmitter stable, reliable, anti-vibration and has good interchangeability.

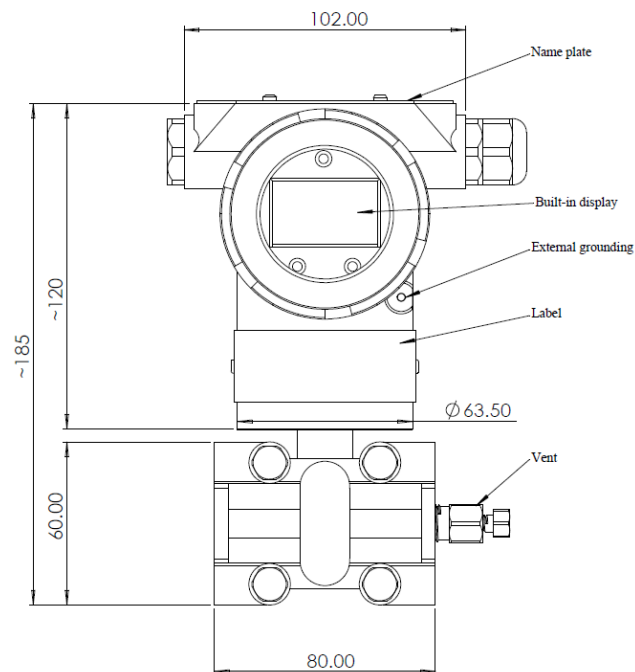
Specification

Range	-400~0...0~400bar
Output signal	4~20mADC, HART, RS485
Process connection	1/2 NPT male (with 1/4 NPT inside) or as per customer's requirement
Accuracy	±0.075%FS, ±0.1%FS, ±0.25%FS optional
Display range	-19999~99999
Compensated temp.	-20~70℃
Environment temp.	-30~80℃ (-55℃可定制)
Power supply	12~32VDC (24VDC is recommended)
Housing protection	IP65

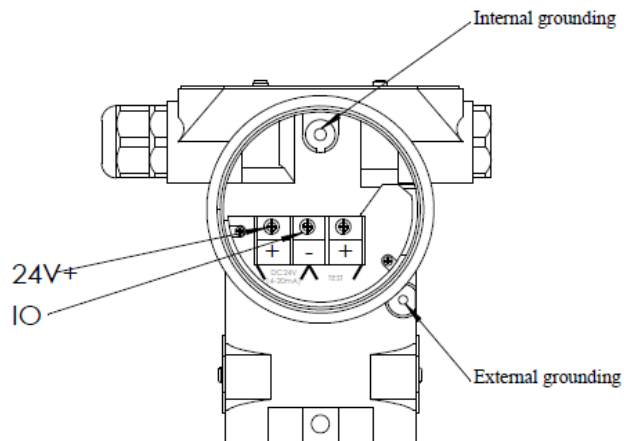
Construction Material

Diaphragm	Stainless Steel 316L, Hast-alloy C
Process Connection	Stainless steel 316L
Filling liquid	Silicone oil
Sealing ring	NBR, FKM, PTFE
Transmitter housing	Aluminum alloy material, epoxy resin glue spraying on the surface
Housing sealing ring	NBR
Nameplate	Stainless steel 304

Outline Dimension (Unit:mm)



Electrical Connection



SDT3051S- Smart Differential Pressure Transmitter Datasheet

Order Information

SDT3051S	Smart Differential Pressure Transmitter												
		Code	Output										
		H	4mA~20mADC with HART										
		N	4mA~20mADC analog output										
				Code	Pressure range								
				Differential Pressure									
				B	-600mm~0...60mm~600 mm H ₂ O/-60mbar~0mbar...6mbar~60mbar								
				C	-4000mm~0mm...200mm~4000mmH ₂ O/-400mbar~0mbar...20mbar~400mbar								
				D	-25m~0m...0.25m~25m H ₂ O/-2500mbar~0mbar...25mbar~2500mbar								
				F	-300m~0m...3m~300 m H ₂ O/-30bar~0bar...0.3bar~30bar								
				G	-100bar~0bar...1bar~100bar								
				H	-210bar~0bar...2.1bar~210bar								
				I	-400bar~0bar...4bar~400bar								
						Code	Diaphragm material		Filling				
						A	Stainless steel316L		silicone oil				
						C	Hastelloy C		silicone oil				
						X	Special material to be mentioned in order						
							Code	Process connection					
							C1	M20x1.5 male					
							C3	G1/2 male					
							C5	1/4 NPT male					
							C6	1/2 NPT male					
							C16	Vacuum connector DIN 28403 KF16 / ISO 2861 ^[2]					
		C22	1/2 NPT female										
		CX	Other thread										
					Code	Process connection parts							
					N	None							
					O	No oil processing (For oxygen measurement: fluorocarbon oil filling, viton sealing ring)							
					Code	Mounting bracket							
					N	None							
					1	Stainless steel							
					2	Galvanized Carbon Steel							
					Code	Display							
					N	No display							
					1	LCD							
					2	LCD with back-light							
						Code	Flange						
						N	None						
						1	Single flange						
						2	Single flange remote						

SDT3051S- Smart Differential Pressure Transmitter Datasheet

									3	Double flange remote	
										Code	Others
										N	None
										A	Intrinsic safe
										D	Exd
										E	Exd version with Explosion-proof cable joint
SDT3051S	H	F	A	C1	N	2	1	1		N	The whole spec

Note:

Please note the size of flange, and the length of remote capillary of flange if it is necessary.