SDT

Differential pressure transmitter

Accuracy max ± 0.075%
Range 1 mbar ÷ 20 bar
Hart communication
LCD backlight display
Settings via display
Fast time responsive self-diagnostics
ATEX

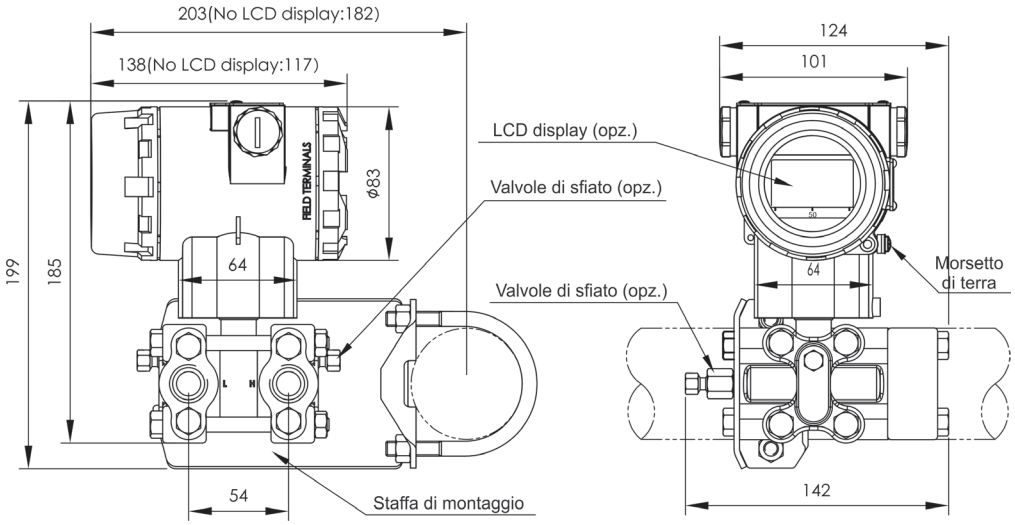
SDT is a differential pressure transmitter with performance at the top of the range and is designed for specific installations in processes where accuracy and stability over time are essential characteristics. Thanks to its technology it measures very low differential pressures from 1 mbar (10 mm H2O). The SDT is fully programmable by means of two external watertight buttons and a matrix backlight display. The programming or modification of the measurement parameters can be carried out in heavy duty ambient conditions without having access to the internal instrument parts thus maintaining the degree of protection IP67.

Technical Feature

Measure range
Differential pressure Max. 0÷20bar (0÷2Mpa); Min. 0÷0.001bar (0÷100Pa)
Accuracy
±0.075; ±0.1 for range A
Analog output resolution
15 bit

Power supply
12÷42Vdc (2-wires)
Communication protocol
HART
Zero and span calibration
onboard buttons
Data display
backlit alphanumeric display

IP rating
IP67
Stability
> ±0.1%FS
Working temperature
-40°÷+85°C
Certificazion
Atex



SDT Differential pressure transmitter

IP67 - Operation temperature: -40 ÷ +85°C
Power supply: 12÷42Vdc (2-wire)
4÷20mA HART

	Accuracy	
	H	± 0,075% (for range A ± 0,1%)
	Measure range	
	A	0 - 100Pa ÷ 1kPa (0 - 1 ÷ 10mbar) (0 - 10 ÷ 100 mmH²O) - accuracy ± 0,1%
	B	0 - 200Pa ÷ 6kPa (0 - 2 ÷ 60mbar) (0 - 20 ÷ 600 mmH²O)
	C	0 - 400Pa ÷ 40kPa (0 - 4 ÷ 400mbar) (0 - 40 ÷ 4000 mmH²O)
	D	0 - 2,5kPa ÷ 250kPa (0 - 25 ÷ 2500mbar) (0 - 0,25 ÷ 25 mH²O)
	E	0 - 20kPa ÷ 2MPa (0 - 0,2 ÷ 20bar) (0 - 2 ÷ 200 mH²O)
	Membrane / filling liquid	
	A	SS316L / silicone oil
	B	SS316L / fluorinated oil
	C	Hastelloy C / silicone oil
	D	Hastelloy C / fluorinated oil
	E	SS316L gold plated / silicone oil
	F	SS316L gold plated/ fluorinated oil
	G	SS316L EFP plated / silicone oil
	T	Tantalum / silicone oil
	Working pressure	
	1	16MPa (range A = 7MPa)
	2	25MPa (not for range A)
	3	40MPa (not for range A)
	Process connection	
	B	¼" - 18 NPT female SS316 thread with relief valves at the end of the flange
	D	¼" - 18 NPT female SS316 thread with relief valve on the lower part of the flange side
	N	¼" - 18 NPT female SS316 thread without relief valves
	U	¼" - 18 NPT female SS316 thread with relief valve on the upper part of the flange side
	Z	Special
	Sealed material	
	F	Viton (FKM)
	N	Perbunan (NBR)
	P	Teflon (PTFE)
	Special functions	
	N	None
	O	Degrease cleansing treatment (just with fluorinated oil and Viton seal, max 60°C)
	P	Line noise filter
	Fixing bracket for panel and pipe mounting (2")	
	1	SS304
	2	Galvanized carbon steel
	N	None
	Process connection accessories	
	1	SS316 oval-shaped flange with ½" NPT female thread
	2	SS316 D-shaped connector with M20x1.5 male thread (welded connection)
	N	None
	Display	
	2	Backlit LCD
	N	None
	Certification	
	A	Intrinsically Safe ATEX II 1/2G Ex ia IIC T4 Ga/Gb
	D	Explosion proof ATEX II 2 G D Ex db IIC T4/T5/T6 Gb Ex tb IIIC T80°C/T90°C/T130°C - Ta = -40°C ÷ +60°C
	N	None