

# PRESSURE MEASUREMENT

## FX3051S DP Intelligent Monocrystalline Silicon Differential Pressure Transmitter

### Product Overview

FX3051S DP series smart Monocrystalline Silicon differential pressure transmitter is a high-precision, high-stability, multi-parameter pressure measurement product, with HART protocol. The digital technology combined with the international advanced Mono core design and manufacturing technology. The reliable explosion-proof structure design and standardized signal output, high accuracy and wide range, suitable for precision measurement of fluid pressure.



### Main Feature

◆ Wide measurement range. Measure level, density, pressure/differential pressure and flow in fluids
◆ The sensor adopts digital compensation and nonlinear correction
◆ Laser marking, exquisite appearance
◆ Digital circuit design, on-site adjustment button to zero
◆ Adjustable turndown ratio up to 100:1
◆ High accuracy 0.075% F.S
◆ Meeting GB3836 standard, Obtained Explosion-proof certificate

### Performance Index

Item	Technical Parameters
Pressure Range	0-50Pa ~ 3MPa ( Specific refer to selection table )
Pressure Type	Differential Pressure
Overload Pressure	Overload 150% measurement range
Working Pressure	Static pressure 16MPa, 25MPa, 40MPa Optional
Accuracy	0.075%F.S / 0.1%F.S / 0.25%F.S Optional
Long-term Stability	0.1%F.S/Year
Working temperature	-20℃ ~ 80℃
Power Supply	12V ~ 32VDC ( Recommend 24VDC )
Output signal	4mA ~ 20mADC / 1V-5VDC / RS485 etc.
Protocol	MODBUS RTU/ HART
Electronic connection	M20*1.5(F)Standard/ can be customized
Protection Grade	IP65
Explosion-proof Grade	Exia II CT6 Ga, Exd II CT6 Gb, ExtD A21 IP66 T80℃
Products Warranty	12 Months

Dimensions	Electrical interface and wiring

FX3051S DP Intelligent Monocrystalline Differential Pressure Transmitter Model Selection Table

Item	Code	Description
FX3051S DP		Differential Pressure Transmitter
Accuracy	B	± 0.075%F.S
	C	± 0.1%F.S
	D	± 0.2%F.S
	E	± 0.25%F.S
Pressure Range	B	0-0.05kPa ~ 6kPa
	C	0-0.4kPa ~ 40kPa
	D	0-2.5kPa ~ 250kPa
	E	0-30kPa ~ 3MPa
Static pressure sensor	0	No
	1	40MPa
	2	10MPa
Diaphragm Fill Fluid	A	SS316L Silicon oil
	B	SS316L Fluorine oil
	C	Hastelloy C Silicon oil
	D	Hastelloy C Fluorine oil
	E	Gold plated on 316L Silicon oil
	F	Gold plated on 316L Fluorine oil
	G	PTFE coated on SS316 Silicon oil
	T	Tantalum Silicon oil
Rated working pressure	1	16MPa
	2	25MPa
	3	40MPa (Not applied for Range B or Gas)
Relief Valve	N	No Relief Valve
	B	Relief valves at end of flanges
Contacting liquid sealing material	N	Perbunan ( NBR )
	F	Viton (FKM)
	P	Teflon (PTFE)
Special Fuction	N	No
	O	Degrease cleansing treatment
	P	Anti-lightning function
	T()	Special
Mounting brackets	N	No brackets
	1	Stainless Steel
	2	Carbon steel galvanized
Process connection	C0	1/4 NPT female thread
	C1	Oval-shaped flange with 1/2 NPT female thread
	C2	M20x1.5 male thread, with φ 14 welding tube
	C3	NPT 1/4-M20 x 1.5 adapter, with φ 14 welding tube
	C4	NPT 1/2-M20 x 1.5 adapter, with φ 14 welding tube
Electronic Connection	M	M20*1.5 Cable entry
	A	ANSI NPT 1/2(F) female thread
Display	L	LCD display (-20℃)
	S	Low temperature LCD Display (-30℃)
Explosion-proof Grade	N	Standard
	i	Ex ia II C T4 Ga (Intrinsically Safe)
	d	Exd II C T6 Gb ( Flameproof )
	t	Ex tD A21 IP66 T80℃ ( Dust type )
Tag Number	N	No
	1	Tag number on Nameplate
Manual	2	Hanging stainless steel nameplate
	C	Chinese
Accessories ( Optional )	E	English
	Y	Special requirement