

TRANTECH ELECTRONIC DIGITAL PRESSURE SENSOR - TTEDPS50



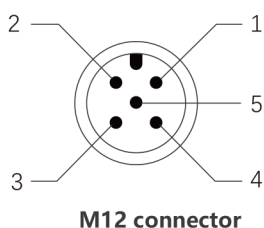
Principle structure

The diffused silicon sensor is used for pressure measurement, and the signal is processed by a post-processing circuit converted into a standard industrial electrical signal for output and display. The all-metal casing design, with a highlight digital display, enables the product line to be used in a variety of industrial applications. The three-button design and menu make the product more convenient to use, and a variety of connection methods can fully meet various specific installation needs. The device, which can rotate at 330°, guarantees the best viewing Angle in different mounting modes.

Technical parameter

◇ Supply voltage: 12... 30Vdc	◇ Accuracy: $\leq \pm 0.5\%$ range
◇ No-load current consumption: maximum 40mA, 24Vdc power supply	◇ Stability (annual drift) : $\leq \pm 0.3\%$ range
◇ Switch output:	◇ Temperature:
Output type: PNP/NPN can be switched, normally open/normally closed can be set	Medium temperature: -20... 85 ° c.
SP1, SP2 load: <1A /24VDC	Ambient temperature: -20... 80 ° c.
Response time: <10ms	Storage temperature: -30... 80 ° c.
Switching accuracy: $\leq \pm 0.5\%$ range	◇ Materials:
Current model analog output: $\leq \pm 0.5\%$ range	Case: engineering plastic
Output type: 4... 20mA can be set	Flame retardant grade: UL-94 V-0
Load RA: $\leq 0.5\text{K}\Omega$	Housing: stainless steel 304
Linearity: $\leq 0.5\%$ range	Medium contact part: stainless steel 304
Communication output: IO-Link/RS485	◇ Protection level: IP67
Connection protection: reverse phase, overload, short circuit protection	◇ Outlet mode: M12x1 connector
◇ Display:	
Design: Red 4-bit 12mm high brightness LED	
Display range: -1999... 9999	

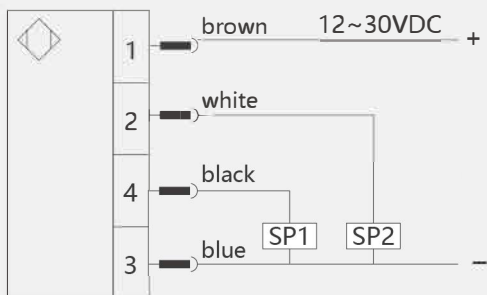
Wiring diagram



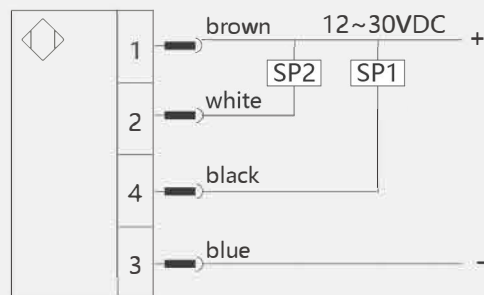
1	brown	Power supply +
2	white	Switch output SP2 (analog) (RS485 A)
3	blue	Power supply -
4	black	Switch output SP1 (IO-Link) (RS485 B)
5	grey	Analog output (voltage or current)

Two way switch

PNP

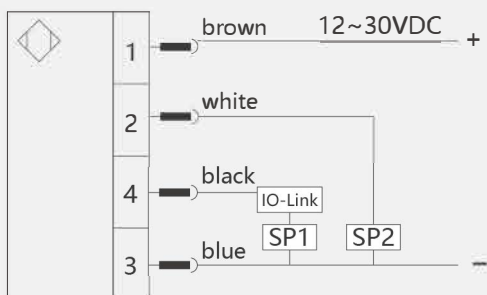


NPN

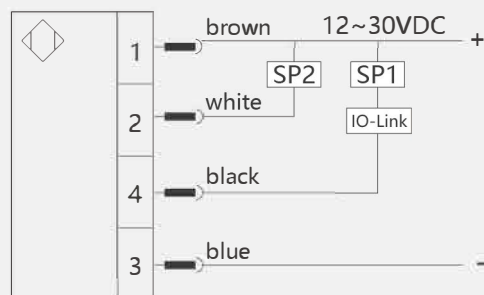


Two way switch+ (IO-Link)

PNP

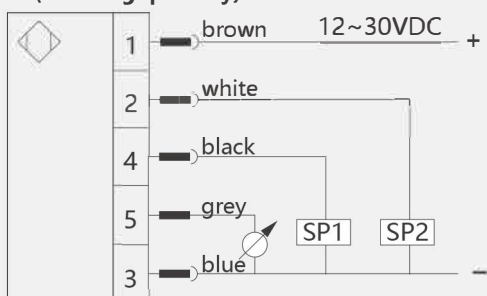


NPN

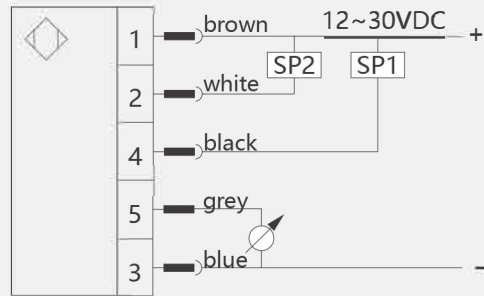


Two way switch+An Analog quantity

PNP(+Analog quantity)

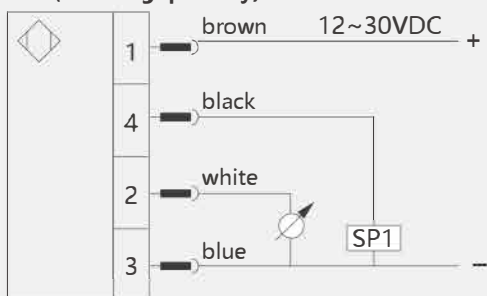


NPN(+Analog quantity)

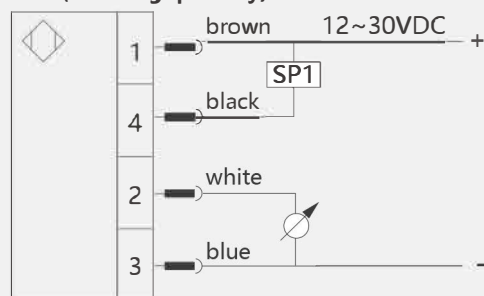


One switch + An Analog quantity

PNP(+Analog quantity)

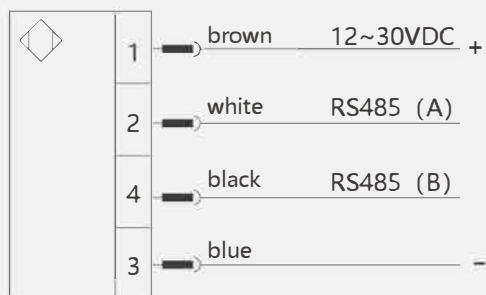


NPN(+Analog quantity)

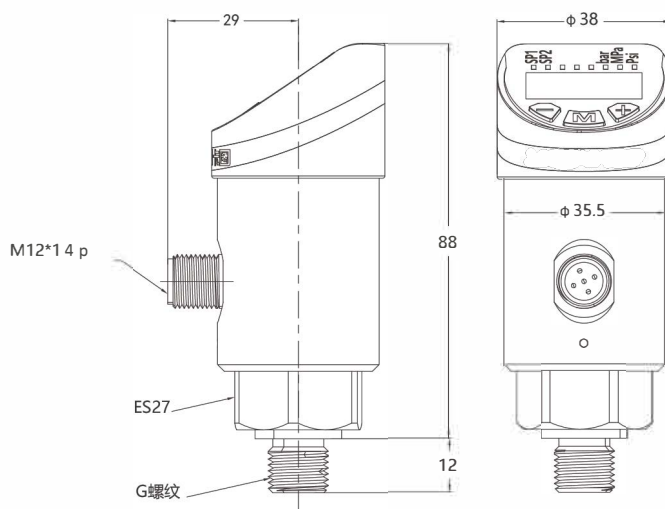




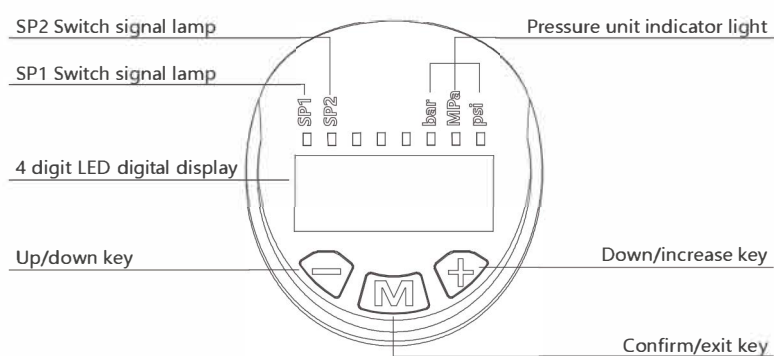
RS485 communication



Dimensional drawing (mm)



Panel diagram



Parameter list

Pressure range	bar	1	2	5	10	16	25	60	100	160	250	400	600
	psi	15	30	75	145	230	370	900	1500	2300	3600	6000	9000
Maximum overload pressure		×5			×3			×2			×1.5		×1.3
Minimum damage pressure		×6			×4			×3			×2		×1.6

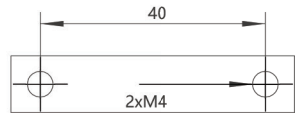
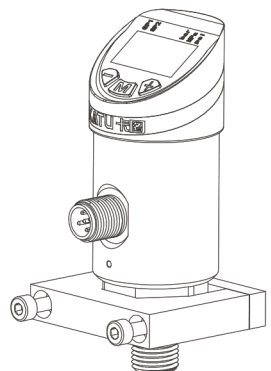


TTEDPS50	B	100	G14M	S2	detail	
TTEDPS50					TTEDPS50 series electronic digital display pressure sensor	
	B				Gauge pressure	
	F				Negative pressure	
		0001			Measuring range:-10...10KPa or 0...10KPa	
		0006			Measuring range:-60...60KPa or 0...60KPa	
		001			Measuring range:-1...1bar or 0...1bar	
		002			Measuring range:-1...5bar or 0...2bar	
		005			Measuring range:-1...5bar or 0...5bar	
		010			Measuring range:0...10bar	
		025			Measuring range:0...25bar	
		060			Measuring range:0...60bar	
		100			Measuring range:0...100bar	
		160			Measuring range:0...160bar	
		250			Measuring range:0...250bar	
		400			Measuring range:0...400bar	
		600			Measuring range:0...600bar	
		1000			Measuring range:0...1000bar	
			G14M		G14 external thread	
			G12M		G12 external thread	
			G14K		G1/4 internal thread	
			N14M		NPT1/4 external thread	
			R14M		R1/4 external thread	
			M20M		M20*1.5 external thread	
			M27P		M27*2 metal flat film type	
			M22P		Oil-filled metal flat film type: M22*1.5 external thread	
			M22T		Ceramic flat film type: M22*1.5 external thread	
			KT50		Ceramic Chuck Connection (OD 50.5mm)	
			KP50		1.5 "(OD 50.5mm) chuck metal flat film type	
			KH50		1.5 "(OD 50.5mm) sanitary chuck metal flat film type	
			KF16		KF16 Vacuum chuck type	
				S2	Two switch output	
				SL	Two switch output+(IO-Link)	
				A2	A switch output + analog output (0/4... 20mA)	Current pattern
				A3	Two switch outputs + analog output (0/4... 20mA)	
				V2	A switch output + analog output (0/1... 5V)	5V Voltage pattern
				V3	Two switch outputs + analog output (0/1... 5V)	
				V4	A switch output + analog output (0/1... 10V)	10V Voltage pattern
				V5	Two switch outputs + analog output (0/1... 10V)	
				RS	RS485 communication	

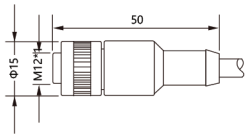
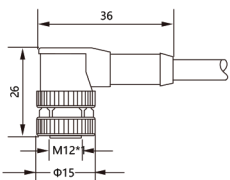




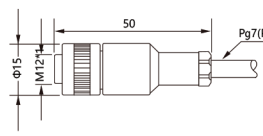
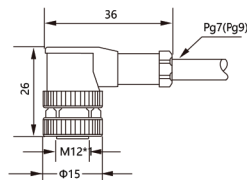
Optional accessories

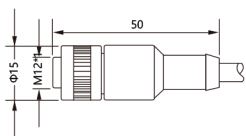
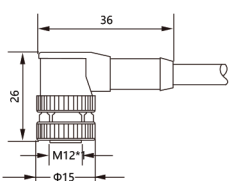
Mounting accessories	Hole size (mm)	Installation effect drawing
		

Optional accessories - electrical accessories

name	Outline drawing/dimension drawing (mm)	material	model
M12*1-5Pin (2m cable)	 	PUR	ZL05-PU02G
M12*1-5Pin (5m cable)			ZL05-PU05G
M12*1-5Pin (10m cable)			ZL05-PU010G
M12*1-5Pin (2m cable)	 	PVC	ZL05-PC02G
M12*1-5Pin (5m cable)			ZL05-PC05G
M12*1-5Pin (10m cable)			ZL05-PC010G
M12*1-5Pin (2m cable)		PUR	ZL05-PU02W
M12*1-5Pin (5m cable)			ZL05-PU05W
M12*1-5Pin (10m cable)			ZL05-PU010W
M12*1-5Pin (2m cable)		PVC	ZL05-PC02W
M12*1-5Pin (5m cable)			ZL05-PC05W
M12*1-5Pin (10m cable)			ZL05-PC010W

Factory standard: ZL05-PC02G

M12* 1-4pin /5Pin self-connector/size drawing (mm)	model
 	GL04 (4Pin joint)
	GL05 (5Pin joint)
 	WL04 (4Pin joint)
	WL05 (5Pin joint)

name	Outline drawing/dimension drawing (mm)	material	model
M12*1-4Pin (2m cable)	 	PUR	ZL04-PU02G
M12*1-4Pin (5m cable)			ZL04-PU05G
M12*1-4Pin (10m cable)			ZL04-PU010G
M12*1-4Pin (2m cable)	 	PVC	ZL04-PC02G
M12*1-4Pin (5m cable)			ZL04-PC05G
M12*1-4Pin (10m cable)			ZL04-PC010G
M12*1-4Pin (2m cable)		PUR	ZL04-PU02W
M12*1-4Pin (5m cable)			ZL04-PU05W
M12*1-4Pin (10m cable)			ZL04-PU010W
M12*1-4Pin (2m cable)		PVC	ZL04-PC02W
M12*1-4Pin (5m cable)			ZL04-PC05W
M12*1-4Pin (10m cable)			ZL04-PC010W

Factory standard: ZL04-PC02G