



合肥皖科智能技
HEFEI WNK SMART TECH

PRODUCT MANUAL WNK125SPT

Hefei WNK Smart Technology Co., Ltd.

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WhatsApp



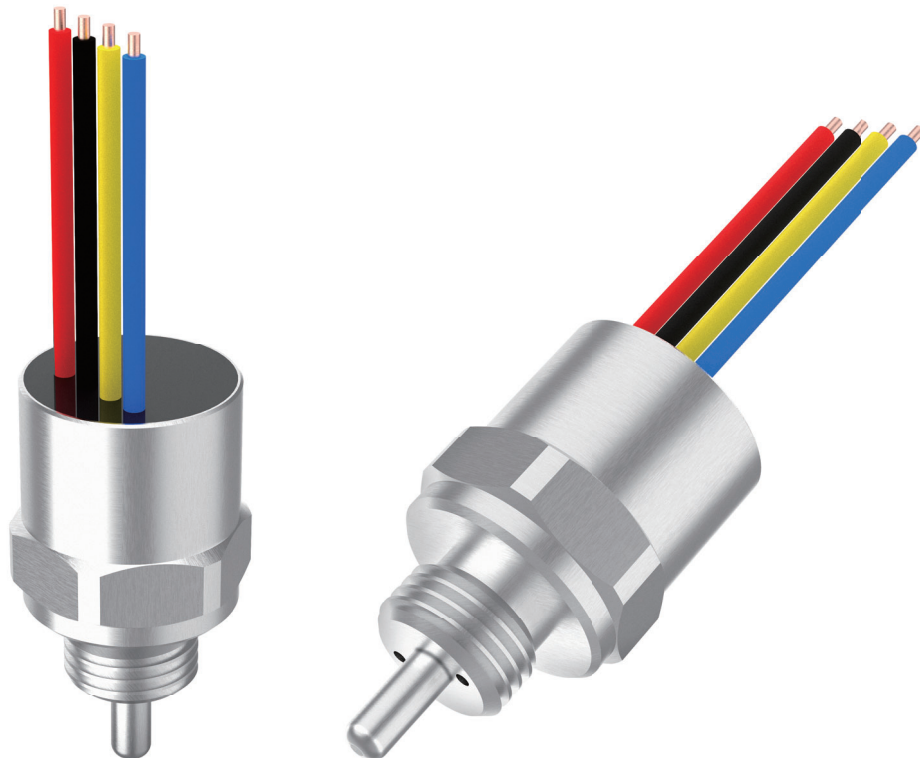
ADDRESS:

CN, Anhui, Hefei, Area A And B, 5th
Floor, Plant 2, Mingzhu Industrial
Park, No. 106 Chuangxin Avenue,
High-Tech Zone.



PRODUCT INTRODUCTION

WNK125SPT is a compact diffused silicon integrated temperature and pressure sensor that can measure pressure and temperature simultaneously. Since the sensor size is very small, it is more convenient for engineers to save more available space when developing products. The pressure sensor has high temperature stability and measurement accuracy, and is mainly used in coffee machines, water dispensers, air conditioners, smart water meters, water pumps and other fields.





APPLICATION



Coffee machine



HVAC



Smart water meter



Water dispenser

FEATURES

- Easy installation.
- 1% typical accuracy provides superior accuracy for critical applications.
- Factory calibrated, no on-site calibration required. Plug and play reliability.
- Sturdy and compact design, saving installation space.
- OEM/ODM available and can be adapted to special needs.
- Designed with a fully welded construction, it is compatible with a wide range of media.



SPECIFICATION PARAMETERS

Model	WNK125SPT
Supply voltage	5V DC, 3.3~5V DC
Range	0~5...50bar, (customized)
Temperature sensor	NTC
Output	0.5V~4.5V, I2C, (10%-90%Vcc proportional output)
Process connection	M10x1, M12x1, (other customized)
Electrical connection	Direct cable
Operating temperature	-20℃~80℃
Storage temperature	-30℃~90℃
Safety pressure	2 times of sensor range
Explosion pressure	6Mpa
Accuracy	±1%F.S (linearity, hysteresis, repeatability, calibration) static error band @25℃, 3.5VDC
Total error band	±3% (-30℃~90℃)
Applicable medium	Engine oil, POE oil, refrigerant, gas, water or liquid
Material	Shell 304 stainless steel
Mounting torque	8~15N·m
Antifreeze function	When the working medium of this sensor is water, this sensor has no anti-freeze function
Protection level	IP68 top glue filling



PRODUCT SIZE

Unit:mm

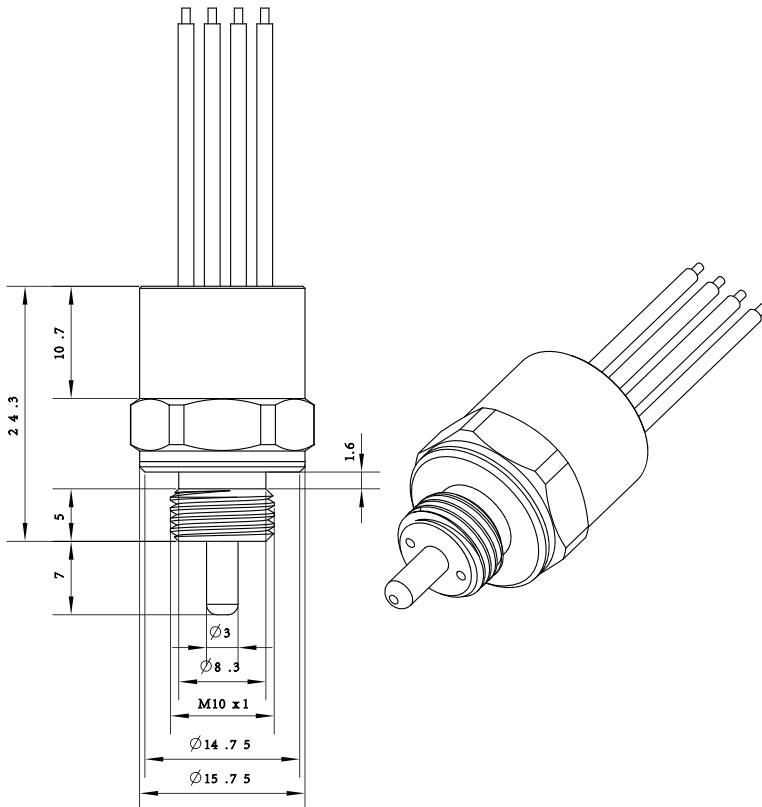
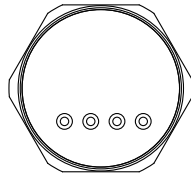
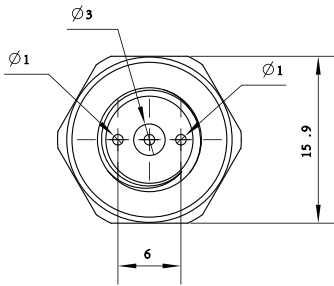
Wiring method

Voltage output

Red: VCC
Black: GND
White: VOUT
Yellow: Temperature

I2C output

Red: VCC
Black: GND
Yellow: SCL
White: SDA
Blue: Temperature

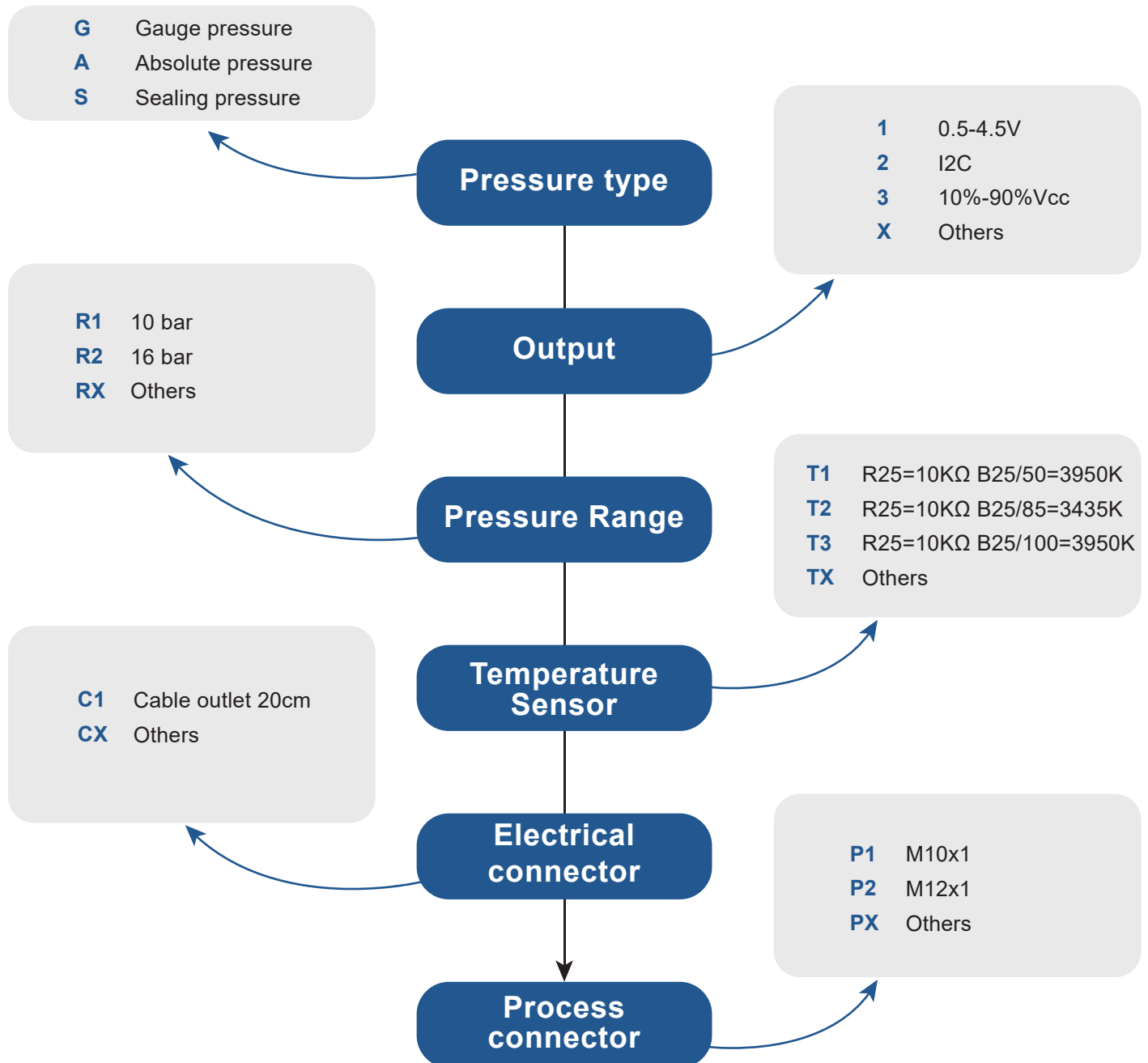


R/T parameters

T (°C)	R25=10.00K Ω ±1%		B25/85=3435K±1%	
	Rmin (K Ω)	Rnom (K Ω)	Rmax (K Ω)	
-40	202.497	210.874	219.576	
-30	115.973	120.093	124.347	
-20	69.410	71.504	73.654	
-10	42.855	43.933	45.034	
0	27.190	27.746	28.311	
10	17.737	18.022	18.310	
20	11.926	12.069	12.213	
25	9.900	10.000	10.100	
30	8.186	8.284	8.383	
40	5.710	5.799	5.889	
50	4.070	4.147	4.226	
60	2.952	3.018	3.085	
70	2.174	2.229	2.286	
80	1.623	1.669	1.716	
90	1.227	1.266	1.305	
100	0.940	0.972	1.004	
110	0.728	0.755	0.782	
120	0.571	0.593	0.617	
130	0.453	0.472	0.492	
140	0.364	0.380	0.396	
150	0.296	0.309	0.323	



SELECTION GUIDE



Please select your selection code : **WNK125SPT-A-2-R1-T2-C1-P1**