



KYAB05B-5 Air-rail Pressure & Temperature Sensors

Description

KYAB05B-5 use German back pressure sensing element, can measure both pressure and temperature of the medium, with excellent media compatibility (can withstand corrosive H₂S in natural gas), with wide working temperature, good stability and reliability to ensure reliable operation of the sensor in harsh automotive environments.

Applications

Engine intake manifold pressure and temperature detection
Turbo pressure - temperature detection
Gas Pressure - Temperature detection
Auxiliary intake air quantity calculation
Auxiliary overheating, booster protection
Auxiliary highland compensation
Dual-fuel engine



Features:

- ◆ Imported back pressure chip improve the anti-corrosion for weak acid (especially H₂S);
- ◆ Operating temperature -40°C and 125°C
- ◆ Anti-shock, anti-vibration, Good interchangeability at site
- ◆ Working pressure and temperature output, leak-proof;
- ◆ Customized Range Available

Specifications:

Parameter	Value	Units
Supply Voltage	5	VDC
Media	Clean non-corrosive air or liquid	—
Pressure Range	20~1000(absolute)	kPa
Performance guarantee pressure	1500(absolute)	kPa
Burst Pressure	2000(absolute)	kPa
Output Voltage	0.5~4.5 (@V _{cc} =5.0VDC) ⁽¹⁾	VDC
Error in working temperature range	3.0	%FS
Error in normal temperature	1.0	%FS
Operating Temperature	-40~125	°C
Storage Temperature	-40~130	°C
Resistance of temperature sensor at room temperature (20 °C)	2.5±5 %	kΩ
B Value of temperature sensor(B20/100)	3575	—
Error in working temperature range for	±5	%

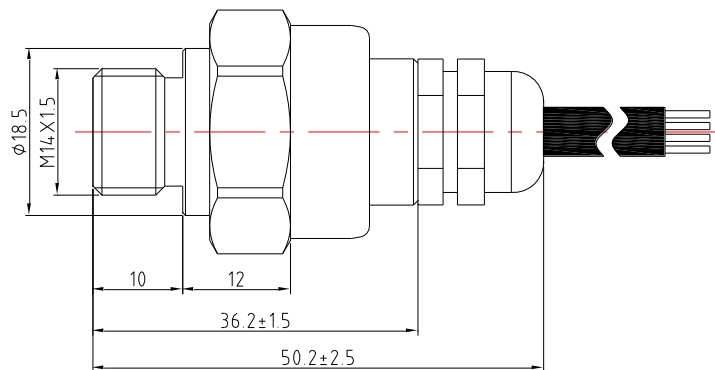


temperature sensor		
Operating Current	<10	mA
Long-term Stability	±0.5	%FS/year
Pressure response time	2.0	ms
Temperature response time (T63)	<15	s
Notes	(1)Output of pressure sensor: Proportional voltage output	

Application Description:

Air-rail pressure and temperature sensors measured the changes of air-rail pressure (vacuum) based on the load state of the engine, and converted it into a voltage signal, together with the speed signal delivered to the engine electronic control unit (ECU), as the basic of fuel injection volume.

Product Diagram:



Gross Weight: 53g

Net Weight: 50g

Xinhui KangYu Control Systems Engineering, Inc.

Guifeng Hightech Village, Ximen Rd., Xinhui District, Jiangmen City, Guangdong 529100, P.R. China

Tel: 86-750-6318857 Fax: 86-750-6318900 E-mail: sale@chinakangyu.com Website: www.chinakangyu.com