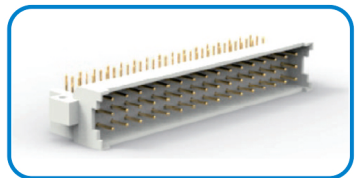


中航华亿 JOHUAYI



Connectors & Sensors for rail transit



JOHUAYI(shenyang) Electronic Technology Co., Ltd

www.johuayi.com

Profile

JOHUAYI is affiliated with Aviation Industries Corporation of China, and is a subsidiary corporation of JONHON. Established in 2008, JOHUAYI has been specializing in supply of electrical/optical/fluid connectors, sensors, and system integration & interconnection products.

As the key supplier for CRRC Group, Johuayi has been mastering the core technologies and production processes of connectors, sensors, and integrated products in the rail transit and high-end manufacturing areas.

Certificate



ISO 9001:2015



ISO 14001:2015



ISO 45001:2018



ISO/TS22163:2017

Main customer

 中车长春轨道客车股份有限公司
CRRC CHANGCHUN RAILWAY VEHICLES CO., LTD.

 中车株洲电力机车有限公司
CRRC ZHUZHOU LOCOMOTIVE CO., LTD.

 中车青岛四方机车车辆股份有限公司
CRRC QINGDAO SIFANG CO., LTD.

 中车唐山机车车辆有限公司
CRRC TANGSHAN CO., LTD.

 中车南京浦镇车辆有限公司
CRRC NANJING PUZHEN CO., LTD.






中国通号

 北京交通大学
BEIJING JIAOTONG UNIVERSITY


中国铁道科学研究院
CHINA ACADEMY OF RAILWAY


西安沙尔特宝
XI'AN SCHALTBAU


北京交大思诺科技股份有限公司
BEIJING JIAOTONG SIGNAL TECHNOLOGY CO., LTD.


新誉集团
New United Group

 交控科技
Traffic Control Technology


WAYCOM
华高科技


UnitTEC
众合科技


和利时
HollySys


CASCO
卡斯柯

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Direct connected temperature sensor

Introduction



Technical performance

No.	Project	Parameter
1	Specification	PT100, PT1000, ect.
2	Accuracy	$\leq \pm(0.3+0.005 t ^\circ\text{C})$
3	Working temperature	-40 °C~+125 °C -55 °C~+125 °C
4	Working current	$\leq 5\text{mA}$, 1mA is recommended
5	Insulation resistance	$\geq 100\text{ M}\Omega$ / 500V DC
6	Withstanding voltage	AC 2500 V/50Hz, leakage current $\leq 5\text{mA}$
7	Degree of protection	IP68
8	Vibration and shock	IEC 61373-2010-I-B
9	EMC	GB/T 24338.4-2018
10	Electrical interface	Customized
11	Mechanical interface	Customized

Probe type temperature sensor

Introduction



Application

Axle box&gear box, etc

Technical performance

No.	Project	Parameter
1	Specification	PT100, PT1000, ect.
2	Accuracy	$\leq \pm(0.3+0.005 t ^\circ\text{C})$
3	Working temperature	-40 °C ~ +200 °C -55 °C ~ +200 °C
4	Working current	$\leq 5\text{mA}$, 1mA is recommended
5	Insulation resistance	$\geq 200\text{ M}\Omega$ / 500V DC
6	Withstanding voltage	AC 2500 V/50Hz, leakage current $\leq 5\text{mA}$
7	Degree of protection	IP68
8	Corresponding time	$T_{0.9} \leq 17\text{s}$
9	Vibration and shock	IEC 61373-2010-III
10	EMC	GB/T 24338.4-2018
11	Electrical interface	Customized
12	Mechanical interface	Customized

Surface mounted temperature sensor

Introduction



Technical performance

No.	Project	Parameter
1	Specification	PT100, PT1000, ect.
2	Accuracy	$\leq \pm(0.3+0.005 t)^\circ\text{C}$
3	Working temperature	-40 °C ~ +125 °C -55 °C ~ +200 °C
4	Working current	$\leq 5\text{mA}$, 1mA is recommended
5	Insulation resistance	$\geq 100\text{ M}\Omega$ / 500V DC
6	Withstanding voltage	AC 2500 V/50Hz, leakage current $\leq 5\text{mA}$
7	Degree of protection	IP68
8	Vibration and shock	IEC 61373-2010- II
9	EMC	GB/T 24338.4-2018
10	Electrical interface	Customized
11	Mechanical interface	Customized

High temperature sensor

Introduction

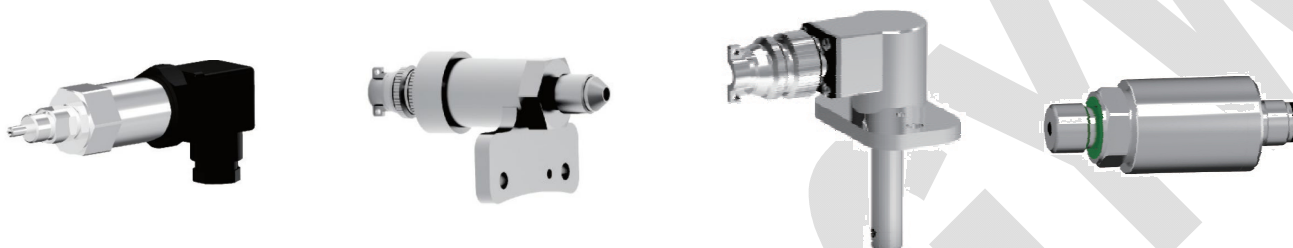


Technical performance

No.	Project	Parameter
1	Specification	PT100, B, S, K, N, E, J, T, ect.
2	Accuracy	I , II
3	Working temperature	-40 ℃~+850 ℃
		-40 ℃~+1300 ℃
		-55 ℃~+1300 ℃ 0℃~+1700 ℃
4	Working current	≤5mA, 1mA is recommended
5	Insulation resistance	≥100 MΩ / 500V DC
6	Withstanding voltage	AC 1000 V/50Hz, leakage current≤5mA
7	Degree of protection	IP65
8	Vibration and shock	IEC 61373-2010-I-B
9	EMC	GB/T 24338.4-2018
10	Electrical interface	Customized
11	Mechanical interface	Customized

Pressure sensor

Introduction



Technical performance

No.	Project	Parameter
1	Specification	Sputtering thin film / Diffusion silicon
2	Range	1 M Pa~70 M Pa
3	Accuracy	±0.5%, ±1%, ±5%,
4	Working temperature	-40 °C~+120 °C
5	Working voltage	24V DC(9V~32V)
6	Out put	4~20 mA, 5V~12V, 0~5V,etc
7	Insulation resistance	≥200 MΩ / 100V DC
8	Degree of protection	IP65
9	Vibration and shock	IEC 61373-2010-I-B
10	EMC	GB/T 24338.4-2018
11	Electrical interface	Customized
12	Mechanical interface	Customized

Speed sensor

Introduction



Technical performance

No.	Project	Parameter
1	Specification	Hall Effect
2	Working distance	0.4mm~1.4mm
3	Duty ratio	50%±25%
4	Phase difference	90°±20°(can be customized)
5	Working temperature	-40 °C~+120 °C -55 °C~+120 °C
6	Working voltage	15V DC
7	Out put	Current / Voltage(can be customized)
8	Insulation resistance	≥100 MΩ / 500V DC
9	Degree of protection	IP68
10	Vibration and shock	IEC 61373-2010-III
11	EMC	GB/T 24338.4-2018
12	Electrical interface	Customized
13	Mechanical interface	Customized

Acceleration sensor

Introduction



Technical performance

No.	Project	Parameter
1	Working altitude	≤4500m
2	Working temperature	-40 °C~+125 °C -55 °C~+125 °C
3	Working voltage	12V DC(can be customized)
4	Out put	4mA~20mA(can be customized)
5	Load resistance	≤250 Ω
6	Rage	2g / 10g / 50g / 100g / 200g / 500g (can be customized)
7	Accuracy	≤5% FS
8	Response frequency	100Hz / 250Hz / 1000Hz / 2500Hz, ±3dB(can be customized)
9	Withstanding voltage	AC 4000 V/50Hz, leakage current≤5mA
10	Insulation resistance	≥200 MΩ / 500V DC
11	Degree of protection	IP67
12	Vibration and shock	IEC 61373-2010- I / II /III
13	EMC	GB/T 24338.4-2018
14	Electrical interface	Customized
15	Mechanical interface	Customized

IEPE temperature&acceleration sensor

Introduction



Technical performance

No.	Project	Parameter
1	Working altitude	$\leq 4500\text{m}$
2	Working temperature	$-40\text{ }^{\circ}\text{C} \sim +125\text{ }^{\circ}\text{C}$ $-55\text{ }^{\circ}\text{C} \sim +125\text{ }^{\circ}\text{C}$
3	Working voltage	12V DC(can be customized)
4	Out put	4mA~20mA(can be customized)
5	Load resistance	$\leq 250\text{ }\Omega$
6	Rage	0g / 20g / 50g / 100g / 200g / 500g (can be customized)
7	Accuracy	$\leq 5\% \text{ FS}$
8	Response frequency	20Hz~10K Hz, ($\pm 3\text{dB}$ / $\pm 1.2\text{dB}$, can be customized)
9	Withstanding voltage	AC 4000 V/50Hz, leakage current $\leq 5\text{mA}$
10	Insulation resistance	$\geq 200\text{ M}\Omega/500\text{V DC}$
11	Degree of protection	IP67
12	Vibration and shock	IEC 61373-2010- I / II / III
13	EMC	GB/T 24338.4-2018
14	Electrical interface	Customized
15	Mechanical interface	Customized

MEMS temperature&acceleration sensor

Introduction



Technical performance

No.	Project	Parameter
1	Working altitude	≤4500m
2	Working temperature	-40 °C~+125 °C -55 °C~+125 °C
3	Working voltage	12V DC(can be customized)
4	Out put	4mA~20mA(can be customized)
5	Load resistance	≤250 Ω
6	Rage	0g / 20g / 50g / 100g / 200g / 500g (can be customized)
7	Accuracy	≤5% FS
8	Response frequency	6000 Hz, ±3dB (can be customized)
9	Withstanding voltage	AC 2500 V/50Hz, leakage current≤5mA
10	Insulation resistance	≥200 MΩ/500V DC
11	Degree of protection	IP67
12	Vibration and shock	IEC 61373-2010- I / II /III
13	EMC	GB/T 24338.4-2018
14	Electrical interface	Customized
15	Mechanical interface	Customized



**WORLD STARTS WITH
CONNECTION**

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