



ASY Electronics (Jiaxing) Co., Ltd

Business inquiries: +86 181 5734 3325

E-mail: sales@king-sen.com Website: www.asyix.com

Address: Room 302, Building 11, No. 79 Jinsui Road, Economic and
Technological Development Zone, Jiaxing , Zhejiang P.R. China

AI-TH pressure transmitter

Hessmann Manual





Product Overview

The AI-TH Hirschmann pressure transmitter uses a piezoresistive OEM pressure sensor with a stainless steel diaphragm as the signal measuring element. It undergoes automated computer testing and utilizes laser trimming technology for zero-point and temperature performance compensation over a wide temperature range. The signal processing circuit, located within a stainless steel housing, converts the sensor signal into a standard output signal. The entire product has undergone rigorous testing and aging screening of components, semi-finished products, and finished products, ensuring stable and reliable performance.

With its excellent reliability, flexibility and versatility, this product is widely used for pressure measurement and control in industrial processes such as petroleum, chemical, metallurgy, power, and water level.

Features

- ✓ Wide measuring range, -0.1MPa to 100MPa.
- ✓ All stainless steel construction, various pressure interface types.
- ✓ Reliable performance, safe and easy to use.
- ✓ Various output signal types.
- ✓ Reverse polarity protection and instantaneous overcurrent and overvoltage protection meet EMI protection requirements..
- ✓ Intrinsically safe explosion-proof products meet the design requirements of GB3836.4 standard.
- ✓ Explosion-proof products meet the design requirements of the national standard GB3836.2.

Address: Room 302, Building 11, No. 79 Jinsui Road, Economic and Technological Development Zone, Jiaxing , Zhejiang P.R. China

Technical drawing of a high-pressure cell assembly (HTP) showing dimensions and components. The drawing includes a side view and a cross-sectional view.

Dimensions (mm):

- Overall height: 107
- Top section height: 48
- HTP section height: 28.2
- Flange section height: 10.5
- Press edge seal section height: 12
- Weld section height: 30
- SW24.5 section height: 6
- Bottom section height: 20
- Bottom section inner diameter: 17.5
- Bottom section outer diameter: 17.5
- Bottom section thread: G1/2

Components:

- HTP (High-Pressure Transducer)
- Press edge seal
- Weld
- SW24.5 (Screw)



Technical parameters:

Range	-0.1Mpa ~ 0MPa ~ 0.01MPa ~ 100MPa	
Overload	2 times full-scale pressure or 110MPa (whichever is lower)	
Type of stress	Gauge pressure, absolute pressure, or sealed gauge pressure type	
Accuracy	±0.5%FS	
Long-term stability	Maximum ±0.3%FS/year	
Zero-point temperature coefficient	0.03%FS/°C(≤100kPa); 0.02%FS/°C(>100kPa)	
Full-scale temperature coefficient	0.03%FS/°C(≤100kPa); 0.02%FS/°C(>100kPa)	
Compensation temperature	-10°C~80°C	
Operating temperature	-30°C ~ 80°C, intrinsically safe type -10°C~60°C	
Storage temperature	-40°C ~ 125°C	
Output type	Current-type (two-wire system)	Voltage type (three-wire system)
Power supply	10~30VDC	10~30VDC
Output signal	4mA~20mADC	0/1~5/10VDC
Insulation resistance	100MΩ, 100VDC	
Enclosure protection	IP65 (plug-in type)	
Electrical connection	Hessmann	
Pressure connection	G1/2 external thread (customizable upon request)	

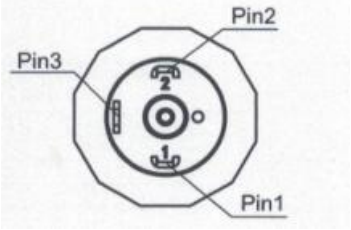


Business inquiries: +86 181 5734 3325

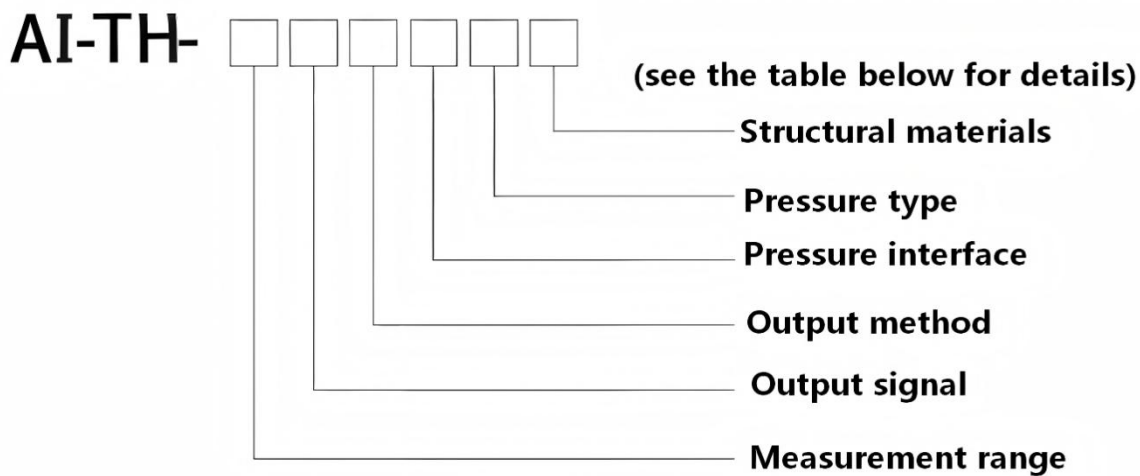
E-mail: sales@king-sen.com Website: www.asyjsx.com

Address: Room 302, Building 11, No. 79 Jinsui Road, Economic and Technological Development Zone, Jiaxing , Zhejiang P.R. China

Electrical connection

	Pin	Two-line system	Three-line system
	1	Positive power supply: +V	Positive power supply: +V
	2	Signal: +OUT	Public side: GND
	3	Null	Output: +OUT
	⏏	Null	null

Selection Guide



Item number	Range ability	Output signal	Output mode	Pressure interface	Pressure datum	Structural material
AI-TH	[0~100]kPa	E	B1	C5	G	22

Illustrate:

Item number: AI-TH-[0 ~ 100]kPa-E-B1C5G-22

Product model: AI-TH Piezoresistive pressure transmitter; **Range ability:** [0~100]kPa;

Output signal: 4-20mA; **Output mode:** Hersman connection output;



Business inquiries: +86 181 5734 3325

E-mail: sales@king-sen.com Website: www.asyjx.com

Address: Room 302, Building 11, No. 79 Jinsui Road, Economic and Technological Development Zone, Jiaxing, Zhejiang P.R. China

Pressure interface: M20×1.5 external thread pressure interface; Pressure datum: Gauge pressure type; Structural material : Isolation diaphragm : Stainless steel 316L , interface : Stainless steel, shell: Stainless steel;		
Range ability	Measurement range : -0.1MPa ~ 0MPa~0.01 MPa ~ 100MPa [0~X] kPa or MPa X: Actual measurement range	
Output signal	E	4mA ~ 20mA DC
	F	1V ~ 5V DC
	J	0V ~ 5V DC
	V	0V ~ 10V DC
Output mode	B1	Hersman connection output
Pressure interface	PC3	G1/2 The external thread pressure interface is of flush membrane type
	PC5	M20×1.5 The external thread pressure interface is of flush membrane type
	C3	G1/2 External thread pressure interface
	C5	M20×1.5 External thread pressure interface
Pressure datum	G	Chief property and specification
	A	Absolute pressure type
	S	Seal gauge pressure
Structural material	22	Isolation diaphragm: Stainless steel 316L Interface: Stainless steel Shell: Stainless steel
	24	Isolation diaphragm: Stainless steel 316L Interface: Stainless steel 316L Shell: Stainless steel 316L



Selection Tips:

1. Please try to fully understand the medium conditions, pressure range, and other operating status of the pressure detection point. Avoid unnecessary losses caused by improper use of the product.

2: Although the product is designed with various protective measures, for extreme applications, such as applications with strong lightning strikes, it is necessary to ensure that the power supply is reliably grounded and to install lightning protection devices to minimize the probability of product failure.

3. For products with special applications, our company can provide special design and manufacturing services. Customers are welcome to inquire and discuss.

Note : Installation with a torque exceeding 25 N•m is strictly prohibited.

After-sales service



Business Phone: 18157343325 Lila Xu

Technical Phone: 18057302496 Wailly Yang

E-mail: sales@king-sen.com

Office website: www.asyjsx.com

Address: Room 302, Building 11, No. 79 Jinsui Road,
Economic and Technological Development Zone,
Jiaxing , Zhejiang P.R. China

*This information product images and technical data is for reference only, if subject to update without prior notice, the specific content of the right to interpret ASY Electronics (Jiaxing) Co., Ltd.