

AV310 Pressure Transmitter

Features

- Compact structure
- Digital circuit processing
- Strong anti-interference and excellent long-term stability
- Small diameter, small size, easy to install and use
- Available for measurement of absolute pressure, gauge pressure and sealed gauge pressure
- Multiple electrical connection options
- SS316L Diaphragm
- Suitable for mass production

Applications

- Air compressor
- Hydraulic and pneumatic equipment
- Refrigeration
- Pipeline system
- High Volume

Notes:

- 1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.
- 2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
- 3 Strictly follow the wiring method for wiring, otherwise it may cause product damage or other potential faults.
- 4 Misuse of the product may cause danger or personal injury.



Overview

AV310 pressure transmitter is specially designed for small and medium-sized equipment applications such as booster pump, air compressor and pipeline hydraulic system. It is also applicable to a wide range of industrial applications in a variety of structures, outputs and pressure connections, which meets most application requirements. It has the compact structure which is especially suitable for the installation in the small spaces.

Notes:

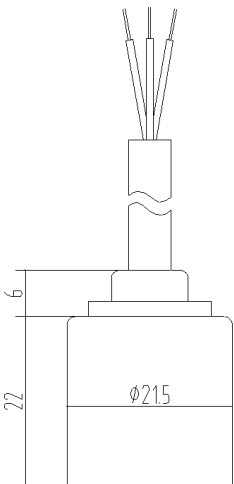
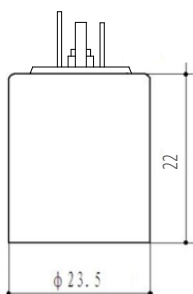
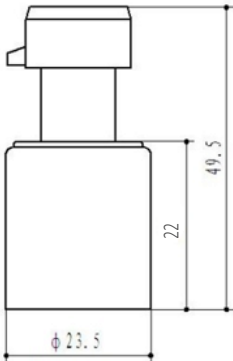
- 1 Do not misuse documentation.
- 2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- 3 Complete installation, operation, and maintenance information is provided in the instructions of the product.
- 4 Misuse of the product may cause danger or personal injury.

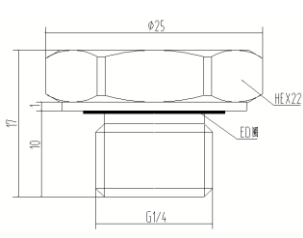
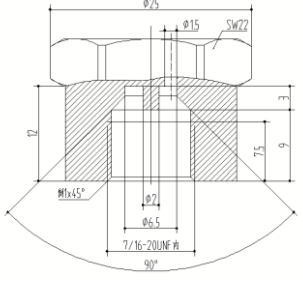
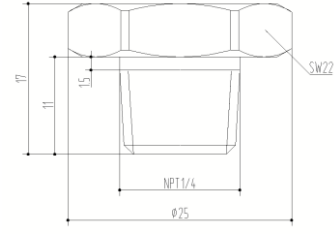
Performance parameters

Pressure range	0~35kPa...50Bar
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Supply & output	4~20mA (12-30VDC) 0.5~4.5V Ratiometric (5VDC) 0~5V (12-30VDC)
Accuracy	±0.5%FS(typ.); ±1%FS(max.)

Hysteresis & repeatability	$\leq \pm 0.1\%FS$
Temperature drift	$\leq \pm 1.5\%FS(-20^{\circ}C \sim 85^{\circ}C)$
Response time	$< 90ms$
Service life	$\geq 10 \times 10^6$ pressure cycles
Ambient temp.	$-20^{\circ}C \sim 80^{\circ}C$
Medium temp.	$-30^{\circ}C \sim 105^{\circ}C$
Storage temp.	$-40^{\circ}C \sim 120^{\circ}C$
EMC-interference	IEC 61000-6-3
EMC-immunity	IEC 61000-6-2
Withstand voltage	1800VAC 1min
Insulation resistance	$\geq 100M \Omega / 500VDC(200M \Omega / 250VDC)$
Vibration resistance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Shock resistance	Shock: 200g/1ms; IEC 60068-2-27 Free fall: 1m; IEC 60068-2-32
Protection	IP65
Material	Wetted part: ASTM S31603 (AISI316L) Housing: ASTM S30400 (AISI304) Electrical connection: PA66
Weight	120±5g (Cable outlet)
Hexahedral size	HEX22

Outline Dimensional

	Q: Cable	C: Din43650C	P: Packard
Dimension In mm			

Thread code	Z: G1/4 Male	Q: 7/16-20UNF Female	4: 1/4MNPT
Dimension In mm			
Recommended torque	15~25N•m	15~25 N•m	15~25 N•m

Note:

1. Commonly used threads: G1/4 Male, 7/16-20UNF Male, 1/4MNPT, 1/8MNPT, 7/16-20UNF Female.
For the requests on the other threads, please get in contact with technical department in advance.
2. Recommended torque depends on a number of factors such as gasket material, supporting material, thread lubrication and pressure.

Pressure range selection					
Code	Pressure reference	Pressure range	Overpressure	Burst pressure	Remark
35k	G	0~35kPa	300%FS	600%FS	
70k	G	0~70kPa	300%FS	600%FS	
100k	G、A	0~100kPa	200%FS	500%FS	
160k	G、A	0~160kPa	200%FS	500%FS	
250k	G、A	0~250kPa	200%FS	500%FS	
400k	G、A	0~400kPa	200%FS	500%FS	
600k	G、A	0~600kPa	200%FS	500%FS	
010B	G、A	0~10Bar	200%FS	500%FS	
016B	S	0~16Bar	200%FS	500%FS	
025B	S	0~25Bar	200%FS	500%FS	
040B	S	0~40Bar	200%FS	400%FS	
050B	S	0~50Bar	200%FS	400%FS	

Note: G-Gauge pressure, A-Absolute pressure, S-Sealed gauge pressure

Ordering Method

For Example:-

AV310 A 000 A R L 4 C 007

1 2 3 4 5 6 7 8 9

1	Series	Code 310	Description	
2	Pressure Unit	Code A B	Description kPa bar	
3	Pressure Range	000	Standard Pressure Range (3-Code)	
		Example	0d1	0.1
			2d5	2.5
			018	18
			725	725
			01K	1000
4	Pressure Type	A G S	Absolute Gauge Sealed Gauge	
5	Header Thread	4	1/4 MNPT	
		8	1/8 MNPT	
		7	7/16-20 UNF Male	
		R	7/16-20 UNF Female w/ Schraeder Pin	
6	Wetted Material	L	316L-SS	
7	Output	0	0-5V	
		1	1-5V	
		8	0.5-4.5V Ratiometric	
		4	4-20mA	
8	Electrical Connection	Q	1m Cable	
		R	2m Cable	
		S	3m Cable	
		C	Din43650C Connector	
		P	Packard Metripack 150	
		X	Other Cable Length / Special Connection (See Option Code)	
9	Options Code	Code	Description	
		007	No Snubber	

Contact us

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