ADG–710

Technical Datasheet

Pressure Transmitter

Applications

- Industrial automation
- Hydraulic and pneumatic systems
- Water and wastewater systems
- HVAC systems
- Laboratory and test processes
- General industrial machinery

IP65

POOYAC

Pressure Transmitter

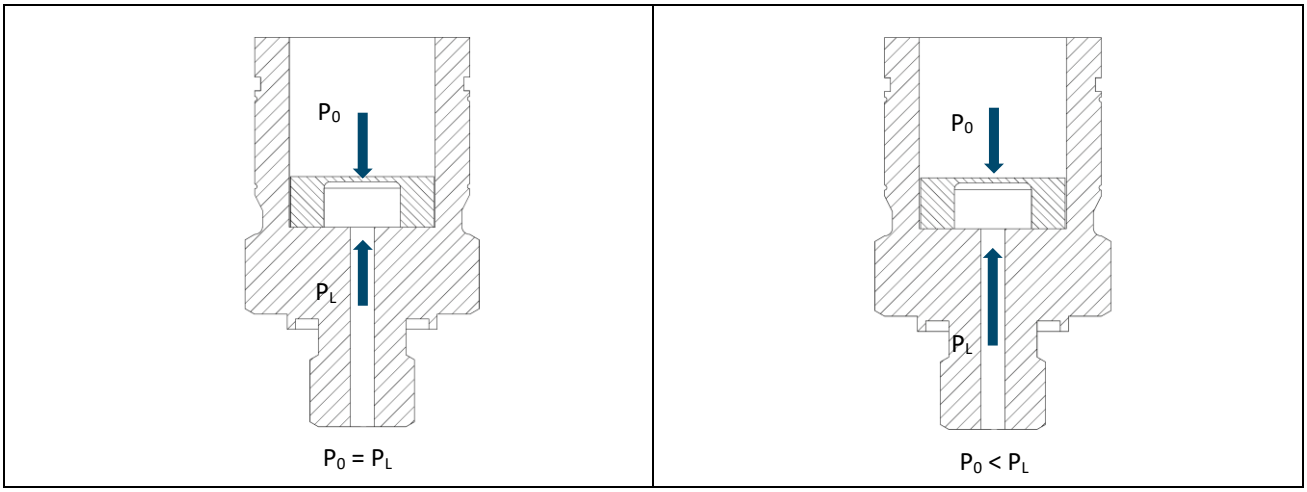
ADG-710

Introduction:

The ADG-710 Series pressure transmitter utilizes advanced ceramic thick-film technology to deliver accurate and reliable pressure measurement. With excellent long-term stability, high durability, and resistance to wear and mechanical shock, it provides dependable performance in demanding industrial environments while remaining a cost-effective solution for general-purpose applications.

Working principle:

The sensor utilizes a ceramic resistive diaphragm that deflects under process pressure. This displacement causes a change in resistance, which is converted by the integrated electronics into a proportional 4-20 mA output signal. This standardized signal ensures seamless compatibility with industrial control and monitoring systems.



P_0 = Atmospheric Pressure
P_L = Process Pressure

Features:

- Long-term stability and reliability
- High resistance to corrosion and abrasion
- High thermal stability and wide operating temperature range
- IP65 Certified dust and water resistance
- Meets the requirements of industrial standards (IEC62828-1,2)

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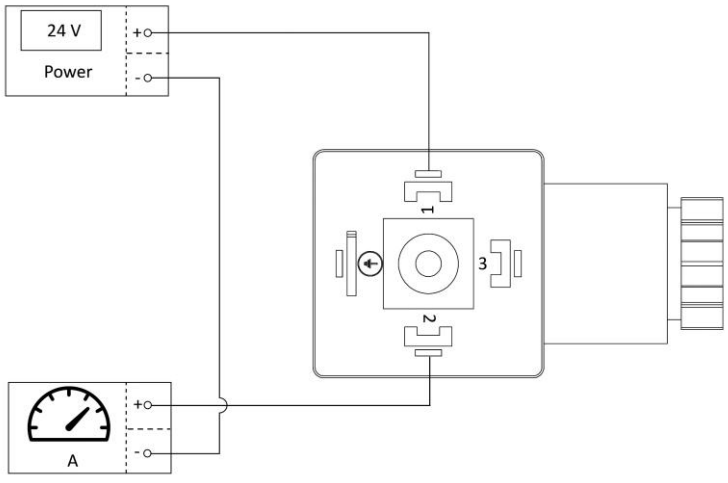
Technical Parameters			
Measuring Range	0 … 2 bar to 100 bar (Gauge)	Accuracy	0.5% F.S.
Overpressure Limit	1.5 x Range	Sensor Material	Alumina Al203-96%
Burst Pressure	200 … 300% F.S.	Housing Material	SS304, SS316L
Degree of Protection	IP65	O-ring Material	NBR
Sensor Technology	Ceramic Piezoresistive	Process Connection	G ¼ Male
Electrical Parameters			
Power Supply	8 … 30vDC	Load Resistance	$R[\Omega] = \frac{(U_{PS}[v] - 8v)}{0.02A}$
Output Signal	4-20 mA (two wire)	Response Time	< 1 ms
Performance			
Long-term Stability	± 0.2%FS	Medium Temp. Range	-25 … 80°C
Temperature Drift	≤ ±0.03%FS/°C		

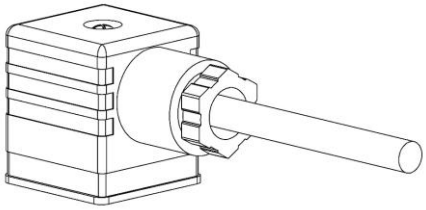
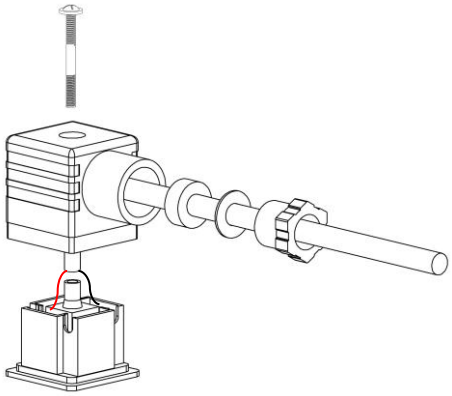
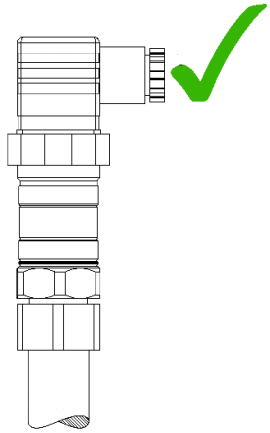
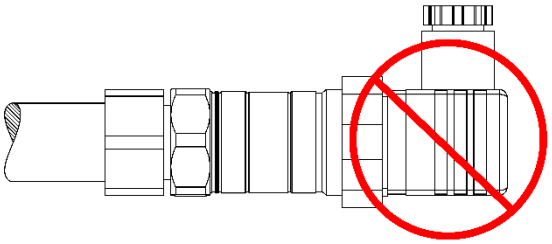
Range	Overpressure Limit (Bar)	Burst Pressure (Bar)
2 Bar (200 KPa)	3	6
4 Bar (400 KPa)	7.5	15
10 Bar (1 MPa)	15	30
16 Bar (1.6 MPa)	30	60
25 Bar (2.5 MPa)	45	90
40 Bar (4 MPa)	60	100
60 Bar (6 MPa)	105	175
100 Bar (10 MPa)	150	200

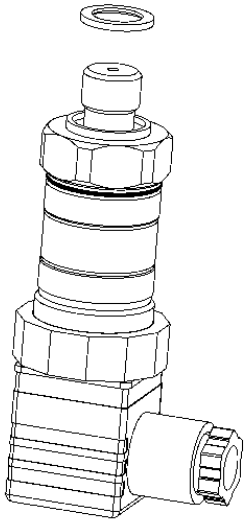
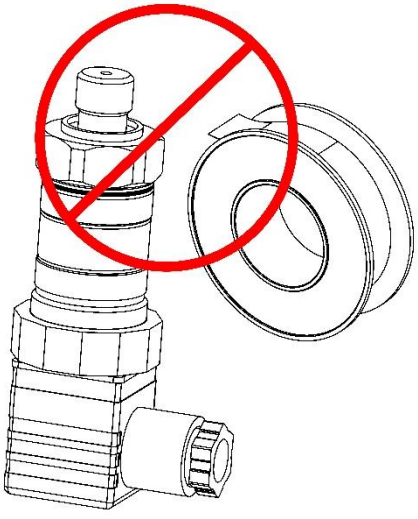
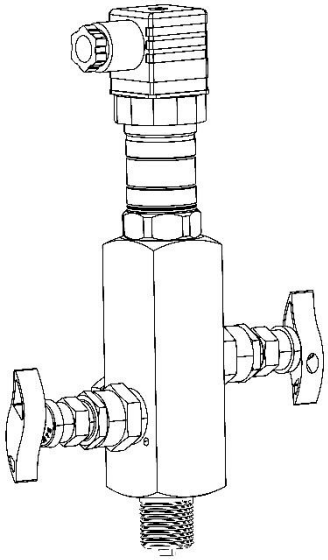
Wiring diagram:



DIN EN 175301-803-A	
PIN1	U_{PS}
PIN2	$+I_{OUT}$
PIN3	No Connection
⏚	Earth

Recommendations regarding installation:

	
In case of high electromagnetic interference, use a twisted pair shield cable	Use a cable with a suitable diameter to fit the connector gasket for proper sealing
	
Mount the transmitter vertically, ensuring it is aligned with the measurement point for accurate results	Avoid mounting the transmitter with the gland pointing upward

		
Use the product gasket to seal the connection	No Teflon tape is required	Using a valve manifold is recommended

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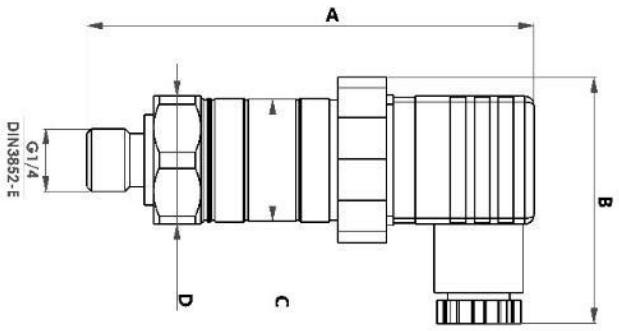
Dimensions:



Parameter	Value (mm)
A	94
B	51.80
C	26.00
D	27.00

Ordering Procedure:

Parameters	Code	Description
Model	ADG-710	Ceramic piezoresistive gauge pressure transmitter
Accuracy	A5	0.5%FS
Pressure Range	G2	2 Bar or 200 KPa
	G4	4 Bar or 400 KPa
	G10	10 Bar or 1 MPa
	G16	16 Bar or 1.6 MPa
	G25	25 Bar or 2.5 MPa
	G40	40 Bar or 4 MPa
	G60	60 Bar or 6 MPa
	G100	100 Bar or 10 MPa
Electrical Output	I	4-20 mA
Electrical Connection	A	DIN EN 175301-803-A
Process Connection	M1	G ¼ (Male)
Housing Material	S4	Stainless Steel,304
	S16L	Stainless Steel,316L
O-ring Material	N	NBR

Additional Options:

Certification	**/C2**	3rd Party Lab. Certificate

Example: ADG710-A5-G6-I-A-M1-S4-N /C2

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