ADG–730 Technical Datasheet

Pressure Transmitter

Applications:

- Industrial automation
- Hydraulic and pneumatic systems
- Automotive industry
- The water and wastewater industry
- HVAC systems
- Laboratory and test processes

IP65

POOYAC

Pressure Transmitter

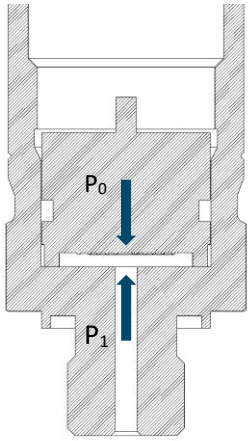
ADG-730

Introduction:

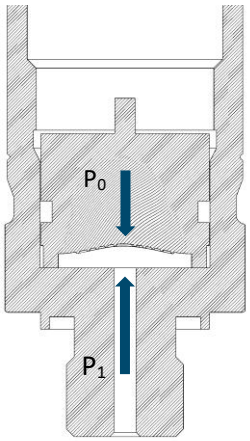
The ADG-730 Pressure Transmitter utilizes a cutting-edge sensor that leverages advanced diffused silicon technology to deliver precise and reliable pressure measurements. Designed for durability and performance, it features a robust SS316L diaphragm, a wide operating temperature range, exceptional stability, and resistance to harsh environments. This makes it an ideal solution for critical industrial processes where accuracy and dependability are paramount.

Working principle:

Applied pressure deforms the SS316L diaphragm, deflecting the sensor membrane and altering the resistance of the pressure sensing element. This change generates a voltage proportional to the applied pressure, which the transmitter's electronics process and amplify to produce a standardized 4-20 mA output signal, compatible with various controllers and measurement systems. The transmitter measures the differential pressure of the process relative to atmospheric pressure.



$P_0 = P_1$



$P_0 < P_1$

P_0 = Atmospheric Pressure
P_1 = Process Pressure

Features:

- Stable and reliable
- Rugged and durable
- IP65 Certified dust and water resistance
- Meets the requirements of industrial standards (IEC62828-1,2)

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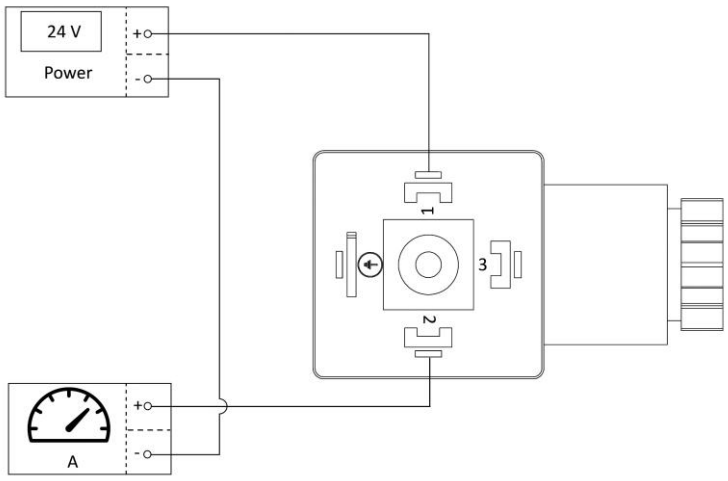
Technical Parameters			
Measuring Range	0 … 0.6 bar to 100 bar (Gauge)	Accuracy	0.5% F.S.
Overpressure Limit	2.0 x Range	Wetted Part Material	SS316L
Burst Pressure	4.0 x Range	Housing Material	SS304
Degree of Protection	IP65	O-ring Material	NBR
Sensor Technology	Diffused Silicon	Process Connection	G ¼ Male
Electrical Parameters			
Power Supply	10 … 30vDC	Load Resistance	$R[\Omega] = \frac{(U_{PS}[v] - 8v)}{0.02A}$
Output Signal	4-20 mA (two wire)	Response Time	< 1 ms
Performance			
Nonlinearity	Min: -0.3 %FS Nominal: ±0.2 %FS Max: +0.3 %FS	Operating Temp. Range	-25 … 80°C
Hysteresis, Repeatability	Min: -0.05 %FS Nominal: ±0.03 %FS Max: +0.05 %FS	Medium Temp. Range	-25 … 120°C Direct Measurement
Thermal Hysteresis	Min: -0.075 %FS Nominal: ±0.05 %FS Max: +0.075 %FS		-25 … 170°C By Impulse Line

Wiring diagram:



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

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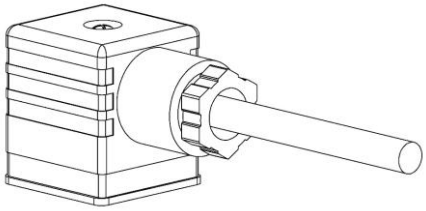
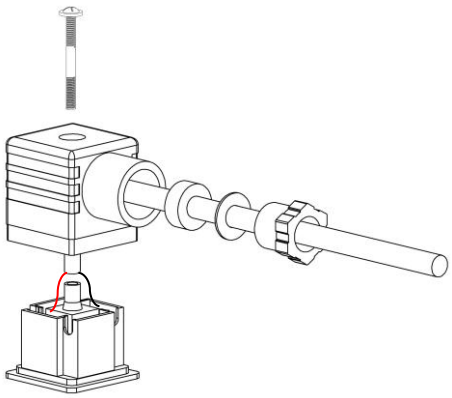
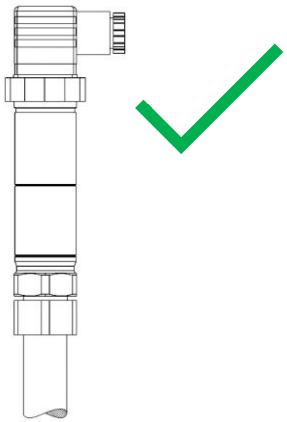
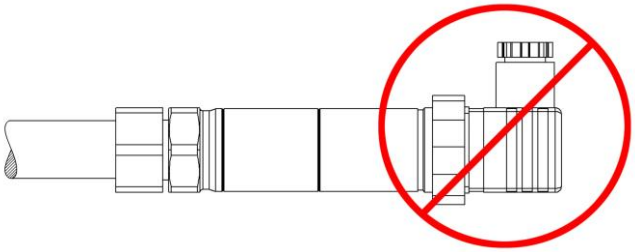
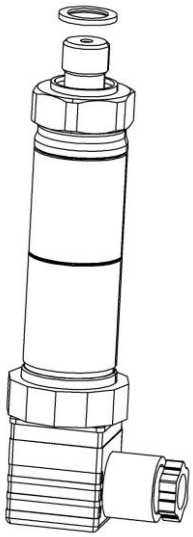
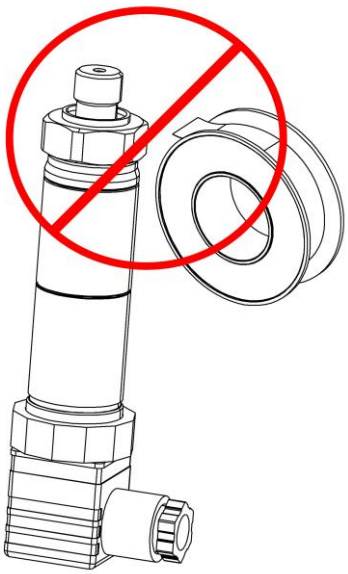
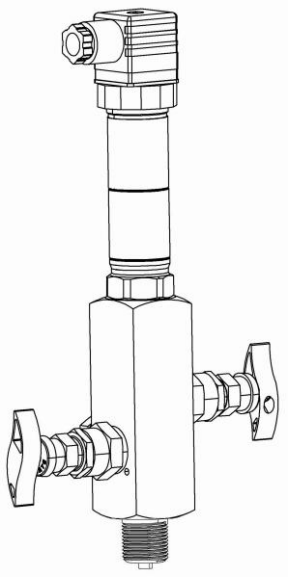
Recommendations regarding installation:

	
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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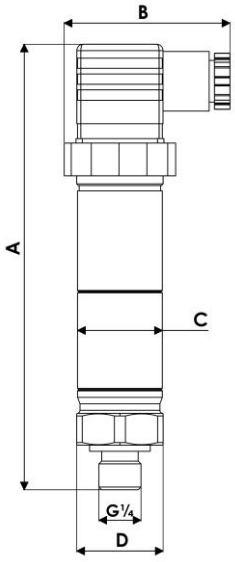
Dimensions:



Parameter	Value (mm)
A	139.80
B	51.81
C	26.50
D	27.00

Ordering Procedure:

Model	ADG-730								
Accuracy	0.5%FS								
	A5								
Pressure Type	Gauge								
	G								
Pressure Range	0.6 bar	1 bar	4 bar	6 bar	10 bar	16 bar	25 bar	40 bar	60 bar	100 bar
	0.6	1	4	6	10	16	25	40	60	100
Electrical Output	4-20 mA								
	I								
Electrical Connection	DIN EN 175301-803-A								
	A								
Process Connection	G ¼ (Male)								
	M1								
Housing Material	Stainless Steel,304								
	S4								
O-ring Material	NBR								
	N								

Additional Options:

Certification	3rd Party Lab. Certificate
	/C2

Example: ADG730-A5-G6-I-A-M1-S4-N /C2