



Monocrystalline Silicon

Differential Pressure Transmitter

AV720

OVERVIEW

AV720 Monocrystalline Silicon Differential Pressure Transmitter uses high stability differential pressure chip. The monocrystalline silicon design achieves internationally leading high-precision, ultra-high overload performance and superior stability. The embedded signal processing module achieves a perfect combination of static pressure and temperature compensation, achieving high accuracy and long-term stability over a wide range of static pressure and temperature changes.

The AV720 Monocrystalline Silicon Differential Pressure Transmitter uses voltage power supply, and convert the measured differential pressure value into 0.5-4.5V Ratiometric, 0-5VDC, 4~20mA or 4~20mA+RS485-MODBUS protocol current signal.

BENEFITS

- * Imported ultra-high stability differential pressure die
- * High accuracy and excellent stability
- * Static pressure error within $\pm 0.1\%$ FS/10MPa
- * Patented double overpressure protection diaphragm design
- * Unilateral overpressure limit of up to 40MPa
- * High accuracy temperature sensor inside
- * Intelligent temperature compensation
- * Positive and negative pressure completely symmetrical, no O-ring inside
- * All welded integrated structure

APPLICATIONS

- * Tank Level Monitoring
- * Flow Measurements
- * Filter Clogging Monitoring



Performance@21°C (70°F)

Accuracy*	0.5% FS, MAX
Stability (1 year)	< $\pm 0.1\%$ FS
Pressure Range Lowest	0-8 inches H2O
Pressure Range Highest	0-450 PSID
Response time	≤ 1 ms (up to 90%FS)
Reverse Polarity Protection	Yes
Overpressure	2500PSI
Maximum Static Pressure	5800PSI

Output	Excitation	Zero Offset	Span Tolerance
0-5V	10-28VDC	< $\pm 0.5\%$ of FS	< $\pm 1\%$ of FS
4-20mA			
RS485 MODBUS			
0.5-4.5V Ratiometric	5VDC		

* Accuracy includes non-linearity, hysteresis & non-repeatability, <0.5% FS available.

Physical Description

Wetted Materials	316L Stainless Steel, Hastelloy C276 diaphragm optional
Weight	1000g
Electrical Connections	Cable, M12x1, Din43650A

Environmental Data

Temperature

Operating	-40 to 85°C
Storage	-40 to 125°C

Thermal Limits

Compensated Range	-20°C to 80°C
TC Zero	< $\pm 1.5\%$ FS
TC Span	< $\pm 1.5\%$ FS

Other

Shock	100g (11ms)
Vibration	20g (20-5000HZ)
EMI/RFI Protection	YES
Rating	IP65



Ordering Method



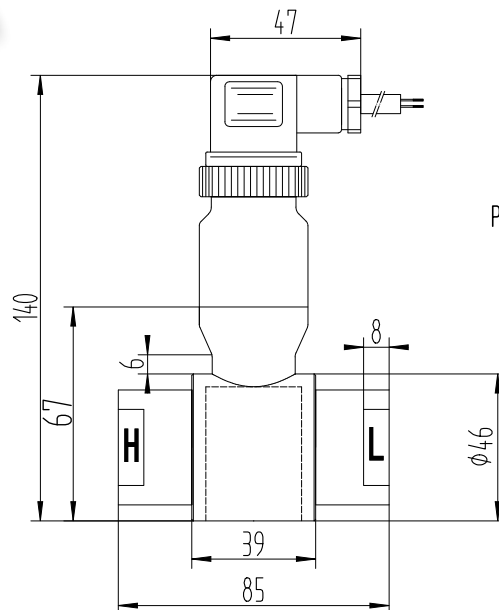
For Example:-

AV720 H 001 D E L 4 A 000

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1	Series	Code	Description		6	Wetted Material	L	316L-SS	
		720					H	Hastelloy C276	
2	Pressure Unit	Code	Description		7	Output	0	0-5V	
		H	Inches H ₂ O				4	4-20mA	
		P	PSI				8	0.5-4.5V Ratiometric	
M			RS485 MODBUS						
3	Pressure Range	001	1psid	008	8Inches H ₂ O	8	Electrical Connection	A	Din43650A Connector
		005	5psid	028	28Inches H ₂ O			Q	1m cable
		015	15psid	055	55Inches H ₂ O			R	2m cable
		040	40psid	083	83Inches H ₂ O			S	3m cable
		150	150psid	110	110Inches H ₂ O			Y	M12x1 - 4P
		450	450psid	208	208Inches H ₂ O				
4	Pressure Type	Code	Description		9	Options Code	Code	Description	
		D	Differential				000	No Special Options (3-Digit Code)	
5	Header Thread	D	1/2 NPT Female						
		E	1/4 NPT Female						

DIMENSIONAL DATA



Profile dimensions(unlabeled tolerance ± 0.1 mm)