



AV700

WET-WET

Differential Pressure Transmitter

OVERVIEW

AV700 series is media isolated differential pressure transmitters consists of both isolation membrane differential pressure sensor and integrated circuits. It has characteristics of high precision, good stability, high reliability and good sensibility. It has built-in high-performance microprocessor (MCU) which can correct nonlinearity and compensate temperature drift to measure and control for liquid and gas.

BENEFITS

- * Low Static and Thermal Errors
- * Wide Operating Temperature Range
- * Compact Size
- * CE Approved

APPLICATIONS

- * Pressure Instrumentation
- * Water Level
- * Boiler Controls
- * Pneumatics
- * HVAC/R Systems
- * Filtration

Performance@25°C (77°F)

| | |
|----------------------|------------------|
| Accuracy* | <±0.4% typ. |
| Stability (1 year) | <±0.25% typ. |
| Pressure Range | Up to 300 PSI |
| Common Line Pressure | 500PSI |
| Burst Pressure | 3X Full Scale |
| Pressure Cycle | 4 million cycles |

| Output | Excitation | Zero Offset | Span Tolerance |
|----------------------|------------|--------------|----------------|
| 0-5V | 10-30VDC | <±0.5% of FS | <±1% of FS |
| 1-5V | | | |
| 4-20mV | | | |
| 0.5-4.5V Ratiometric | 5VDC typ. | | |

Reverse Polarity Protection Yes

* Accuracy includes non-linearity, hysteresis & non-repeatability

Physical Description

| | |
|------------------------|---------|
| Wetted Materials | 316L-SS |
| Weight | 150g |
| Electrical Connections | Packard |

Environmental Data

| | |
|--------------------|----------------------------|
| Temperature | |
| Operating | -40 to 105°C |
| Storage | -40 to 125°C |
| Thermal Limits | |
| Compensated Range | -0°C to 70°C (32 to 158°F) |
| TC Zero | <±1.5% FS |
| TC Span | <±1.5% FS |
| Other | |
| Shock | 100 (11mS) |
| Vibration | 20g (20-5000HZ) |
| EMI/RFI Protection | YES |
| Rating | IP65 |



Ordering Method

For Example:-

AV700 A 000 D F L 0 C 000

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

| ① | Series | Code | Description | ⑥ | Wetted Material | L | 316L-SS |
|---|--------|------|-------------|---|-----------------|---|---------|
| | | 700 | | | | | |

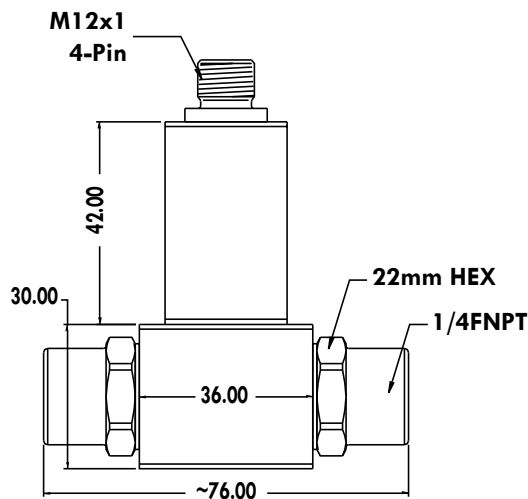
| ② | Pressure Unit | Code | Description | ⑦ | Output | 0 | 0-5V |
|---|---------------|------|-------------|---|--------|---|----------------------|
| | | A | kPa | | | 1 | 1-5V |
| | | P | PSI | | | 4 | 4-20mA |
| | | | | | | 8 | 0.5-4.5V Ratiometric |

| ③ | Pressure Range | Code | Description | ⑧ | Electrical Connection | C | Din43650C Connector |
|---|----------------|------|--------------|---|-----------------------|----------------------------------|-----------------------|
| | | 000 | differential | | | D <td>Deutsch DT04-3P</td> | Deutsch DT04-3P |
| | | 005 | 5psid | | | E <td>Deutsch DT04-4P</td> | Deutsch DT04-4P |
| | | 010 | 10psid | | | P <td>Packard Metripack 150</td> | Packard Metripack 150 |
| | | 030 | 30psid | | | Q <td>1m Cable</td> | 1m Cable |
| | | 100 | 100psid | | | R <td>2m Cable</td> | 2m Cable |
| | | | | | | S <td>3m Cable</td> | 3m Cable |
| | | | | | | Y <td>M12x1 - 4P</td> | M12x1 - 4P |
| | | | | | | Z <td>M12x1 - 5P</td> | M12x1 - 5P |

| ④ | Pressure Type | Code | Description | ⑨ | Options Code | Code | Description |
|---|---------------|------|--------------|---|--------------|------|---------------------------------------------------------------|
| | | D | Differential | | | 000 | No Special Options (3-Digit Code) |
| | | | | | | 003 | 450 PSI Transient Pressure on Single side, Fomblin Oil Filled |

| ⑤ | Header Thread | Code | Description |
|---|---------------|------|--------------------|
| | | 4 | 1/4 MNPT |
| | | E | 1/4 NPT Female |
| | | F | 1/8 MNPT Female |
| | | Q | 7/16-20 UNF Female |

DIMENSIONAL DATA



CONNECTOR - FRONT VIEW

