

Differential pressure transmitter

Type 694

Technical
data

The Differential pressure transmitters of the Type 694 series incorporate a new and unique ceramic fulcrum lever technology. They deliver calibrated, temperature-compensated sensor signals, available as standard voltage or current outputs. They are ideal for registering low air flow in air conditioning systems and for the measurement of fine pressures in environmental, laboratory and clean-room applications (air and non-corrosive gases).

The transmitters are available with or without an integral display. for the 0 - 10 V / 4 - 20 mA output signals, user-adjustable versions are available (fs from 40 to 100 % p), with or without square root extraction.

The distinct advantages

- **Compact construction**
- **Fast, easy mounting.**
Housing incorporates integral bracket for wall or ceiling mounting.
Snap-on cover with a single screw.
- **Available with or without LCD display**
- **Available with or without root-extracted output**
- **Attractive price/performance ratio**
- **+/- 50 pascal ranges**

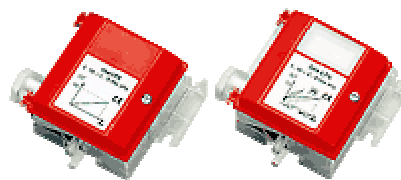
Differential pressure transmitter

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0 up to 50 mbar

+/- 50 pascal

Pressure range gradation and executions see order code selection table



Description

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Overload	See order code selection table	
Rupture pressure	200 mbar	
Accuracy	Linear output:	
	Zero point	< +/- 0.7 % FS
	(Type 0 - 1 mbar	< +/- 1.0 % FS)
	Linearity inclusive hysteresis	< +/- 1.0 % FS
	(Type 0 - 1 mbar	< +/- 2.0 %FS)
	Square-root extracted output: Absolut 误差	
	(from 2 ... 100% pressure)	
	< +/- 0.3	$\sqrt{\frac{P_{FS}}{p}} + 1.5$ [% of full scale]
	Type 0 - 1 mbar:	
	< +/- 0.6	$\sqrt{\frac{P_{FS}}{p}} + 1.5$ [% of full scale]
Case construction	Fire classification to UL94	
	Cover: HB	
	Pressure housing complete: V-2	
Diaphragm	Two-component silicone LSR	
Temperature influences	Medium and ambient temperature	0 °C up to +70 °C
	Storage temperature	-10 up to +70 °C
	TC zero point with linear output	< +/- 0.04 % fs/°C
	with root-extracted output	< +/- 0.06 $\sqrt{\frac{P_{FS}}{p}}$ in % fs/°C
	(from 2 ... 100 % pressure)	
	TC sensitivity	< +/- 0.02 % fs/°C
		(linear and root-extracted)
	For 1 mbar versions, muliply values by a factor of 2.5	
Dynamic response	Suitable for dynamic measurements. Response time < 10 ms	

	Load change	< 10 Hz	
	Resolution:		
	1 mbar fs version	< 0.2 % FS	
	3 to 50 mbar fs versions	< 0.1 % FS	
Outputs and power supply	See order code selection table		
Load impedance	3-wire cable:		
	0 - 10 V	> 10 kOhm	
	0 - 20 mA	< 400 Ohm	
	4 - 20 mA	< 400 Ohm	
	2-wire cable		
	4 - 20 mA	<div>supply voltage - 11 V</div> <div>0.02 A</div>	[Ohm]
Current consumption	3-wire cable:		
	0 - 10 V	< 10 mA	
	0 - 20 mA	< 30 mA	
	4 - 20 mA	< 30 mA	
	2-wire cable:	4 - 20 mA	
Display	Liquid-cristal, 3 ¹ / ₂ digit		