Differential pressure transmitter

Type 696

Technical

The Differential pressure transmitters of the type 696 series with new, unique ceramic fulcrum lever technology habe calibrated, temperature-compensated sensor signals that are available as voltage outputs.

<u>data</u>

They are ideally suitable for registering of fine air flow in air conditioning technology and for measuring fine pressures in the environmental/medical technology sectors.

The distinct advantages

- Attractive price/performance ratio
- Excellent synergy of diaphragm technology and ceramic elements
- Special adapter for top-hat rail mounting
- Direct pcb mounting with simple snap-on system

Differential pressure transmitter

Type 696

0 - 10 / 30 / 50 mbar

Pressure range gradation and executions see order code selection table



<u>Description</u>

Technical data

		0 – 10 mbar		0 – 30 mbar			0 – 50 mbar			
Parameter	Unit	min.	typ.	max.	min.	typ.	max.	min.	typ.	max.
Outputs:										
Zero point horizontal	V	0.475	0.500	0.525	0.475	0.500	0.525	0.475	0.500	0.525
Zero point vertical ¹⁾	V	0.475	0.500	0.525	0.475	0.500	0.525	0.475	0.500	0.525
Final value horizontal	V	4.465	4.500	4.535	4.475	4.500	4.525	4.475	4.500	4.525

Final value vertical ¹⁾	V	4.450	4.500	4.550	4.475	4.500	4.525	4.475	4.500	4.525
Linearity	% FS	-0.3	+/-0.2	+0.3	-0.3	+/-0.2	+0.3	-0.3	+/-0.2	+0.3
Hysteresis	% FS		0.2	+0.3		0.1	+0.2		0.1	+0.2
Long-term stability ²⁾	% FS	0.5			0.5			0.5		
(zero point)										
TC zero point ³⁾	% fs/°C	-0.04	+/-0.02	+0.04	-0.04	+/-0.02	+0.04	-0.04	+/-0.02	+0.04
TC sensitivity ³⁾	% fs/°C	-0.04	+/-0.02	+0.04	-0.04	+/-0.02	+0.04	-0.04	+/-0.02	+0.04

¹⁾ On change of position pressure horizontal on vertical, ca. -11 Pascal.

Test conditions: 25°C, 45% rF

TC zero point / TC sensitivity 0 – 70°C

Medium	Neutral gases, air				
Overload allowed	up to 200 mbar				
Rupture pressure	500 mbar				
Case construction	Polycarbonat (PC)				
Diaphragm	Silicone-polymer				
Temperature influences	Medium temperature	0 - 70 °C			
	Ambient temperature	0 - 50 °C			
	Storage temperature	-10 °C up to +70 °C			
Dynamic response	Response time	< 10 ms			
	Load cycle	< 10 Hz			

²⁾ Long-term stability in % fs over 1 year

³⁾ TC = temperature coefficient

Outputs and power supplies	Output:	0.5 - 4.5 VDC			
	Power supply:	10.5 - 35 VDC			
Load	> 30 kOhm				
Electrical connections	Female connector for on-board pin connector				
	3-pin connector				
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