

## Kalinsky Sensor Elektronik

### Drucksensortechnik

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## Electronic Pressure Gauges of the series DMG 3

### description:

The electronic pressure gauges of the series DMG 3 measures relative-, difference- and absolut pressure and velocity of flow in air and non aggressive gases. These measured values are directed to a 0-10 V analog output. They are shown on a 3,5-digit LED-display with a figureheight of 14.2 mm. Because of used piezoresistive cells the pressure gauge reaches high reliability and precision. The aluminium enclosure has a high mechanical stability and good EMC- properties. It is suitable for installation into a control switchboard. The user is warned against overload pressure by a red LED on the front. An individual calibration certificate belongs to every delivered pressure gauge.

### options:

two switch outputs with LED for each on the front  
4-20 mA - transmitter  
RS 232 - interface  
square rout output for measuring velocity of flow

### applications:

control of airblowers  
supervsion of airfilters  
mechanical- and system engineering  
environmental technology  
liquid level control  
pressure control in cleanrooms or spray chambers  
medical engineering

### technical data DMG 3 (difference pressure):

pressure range [mbar]	pressure range [kPa]	max. over-pressure [mbar]	linear error max. [± % F.S.]	tempera- ture error max. [± % F.S.] 0-50 °C	long-term- stability [± % F.S.]	repeat- precision [± % F.S.]	time of response 0-10 V output [ms]
0 - 2.5	0 - 0.25	250	0.8	2	2	0.3	2
0 - 5	0 - 0.5	250	0.8	1	1	0.3	2
0 - 10	0 - 1	250	0.8	1	0.5	0.2	2
0 - 25	0 - 2.5	375	0.7	1	0.1	0.1	2
0 - 50	0 - 5	500	0.7	1	0.1	0.1	2
0 - 100	0 - 10	750	0.5	1	0.1	0.1	2
0 - 250	0 - 25	triple	0.5	1	0.1	0.1	2
0 - 500	0 - 50	triple	0.5	1	0.1	0.1	2
0 - 1000	0 - 100	triple	0.5	1	0.1	0.1	2

### technical data DMG 3 (absolut pressure):

700-1100	10 - 110	triple	± 0.9 mbar	2.3 mbar	0.1	0.1	2
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### technical data DMG 3 with electronic correction of linear error (difference pressure):

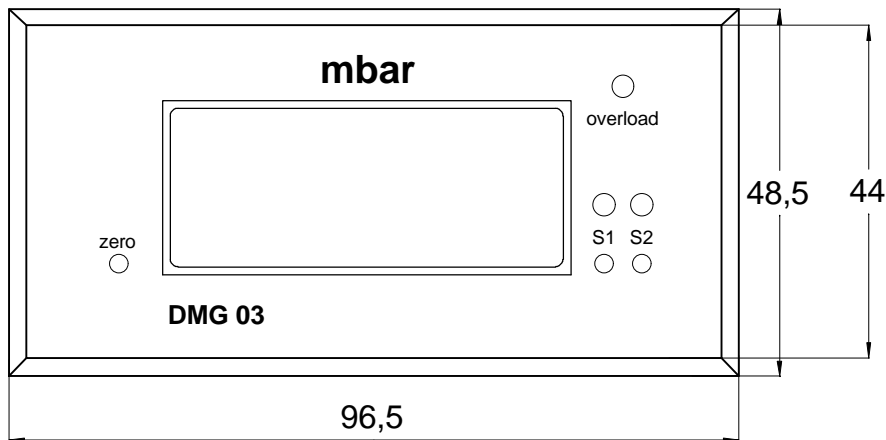
0 - 100	0 - 10	750	0.2	1	0.1	0.1	2
0 - 250	0 - 25	triple	0.2	1	0.1	0.1	2
0 - 500	0 - 50	triple	0.2	1	0.1	0.1	2
0 - 1000	0 - 100	triple	0.2	1	0.1	0.1	2

For special ranges please enquire.

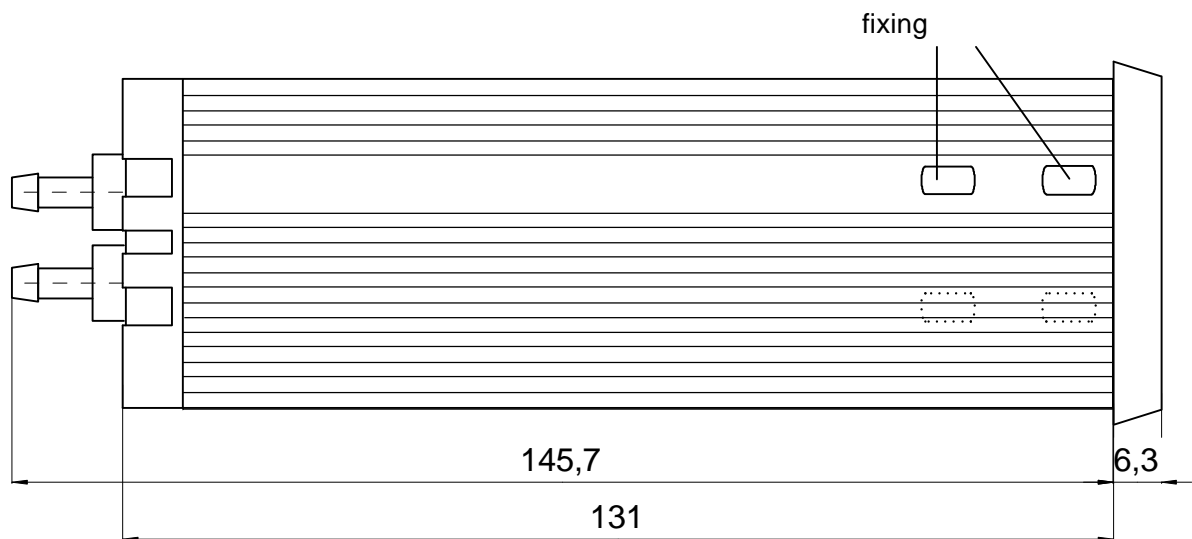
<b>operation temperature range:</b>	-20 to +50 °C	
<b>hysteresis:</b>	maximum 0,1%	
<b>medium:</b>	air and all non aggressive gases	
<b>power supply and output-signals:</b>	U <sub>s</sub> optionally:	15-30 VDC or 230 VAC +- 10 %
	analog output:	0-10 V
	load:	R <sub>L</sub> >= 2 kΩ
<b>connections:</b>	electrical:	plug with 7-pole depth clamp for 0,14-1,5 mm <sup>2</sup>
	pneumatic:	2 connections for tubes with 4 mm diameter inside
<b>optionally two switching outputs:</b>	loadability:	max. 230 VAC 1A
	switch hysteresis:	ca. 2 % F.S.
<b>optionally RS-232 interface:</b>	data format:	8 bit without parity-bit, 1 stop-bit
	baudrate:	9600
	handshake:	xon / xoff
<b>optionally 4-20 mA transmitter:</b>	analog output:	4-20 mA or 0-20 mA
		R <sub>B</sub> >= 20 ... 100 Ω
<b>optionally square root output:</b>	DMG 3 can measure and display the velocity of flow if it is completed with a square root output. Therefore a measuring blend or a Prandtl-tube or accumulation-tube must be used.	
<b>analog output:</b>	0-10 V	
<b>weight:</b>	approximately 380 g	
<b>protection class:</b>	IP 54 (front)	
<b>technical drawings:</b>	see page no. 3	

technical drawings: (unit of measure is mm)

### front plate



### side view



necessary switchboard-cutting: 48 x 96 mm

### back

