



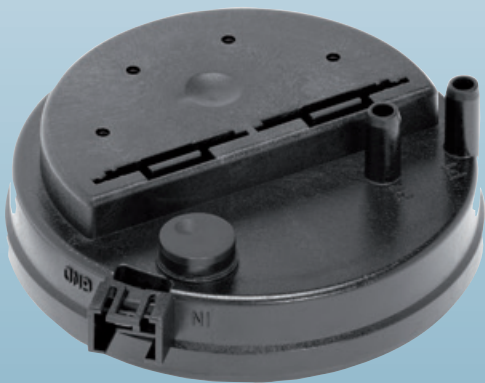
Differential pressure transmitter

Huba Control

OEM differential pressure transmitter

Type 401

Type 401 pressure transmitters sense ultra fine changes in air pressure and are designed to provide optimum control. The dual component diaphragm with its unique geometry, gives highly sensitive operation and excellent repeatability, even in the range below 20 Pascal.



Pressure range
0 ... 3 – 8 mbar

- + Special development for optimize of combustion mixture in gas boilers
- + With the special diaphragm geometry inherently stable
- + Ideal dimensioning for high sensitivity and with long term stability
- + Excellent repeatability even in the lower pressure range (< 20 Pascal)

Technical overview

Pressure range

Relative and differential	0 ... 3 – 8 mbar
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Operating conditions

Medium	Air and neutral gases	
Temperature	Medium / ambient	0 ... +70 °C
	Storage	-40 ... +70 °C
Tolerable overload on one side	25 mbar	
Rupture pressure	100 mbar short period at room temperature	
Leak rate	200 mbar	
	< 5 cm ³ /h (Air), at nominal pressure	

Materials in contact with the medium

Case	Polycarbonate (PC)
Diaphragm	LSR (Liquid Silicon Rubber)
Sensor	Ceramic Al ₂ O ₃

Electrical overview

Output	0.5 ... 4.5 V	
Power supply	10.4 ... 18 VDC ¹⁾	
Load	> 15 kOhm (to GND)	
Current consumption	At nominal pressure without load	< 8 mA
Polarity reversal protection	Mechanically protected	
Electrical compatibility	The product is designed exclusively for installation in equipment. The customer is responsible for CE conformity.	

Dynamic response

Response time	< 10 ms
Load cycle	< 10 Hz

Electrical connections

3 pole plug connector RAST 2.5	Protection standard	IP 00	Protection class	III
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Pressure connection

Pipe Ø 6.2 mm

Mounting instruction

Installation arrangement	Diaphragm horizontal (recommend)	Pressure connections facing downward
	Diaphragm vertical (on request)	Pressure connections lateral, signal approx. 13 Pa below actual pressure
Mounting	Snap mounting in sheet steel (thickness 1 and 2 mm)	
	Mounting bracket type A / type B	

Tests / Admissions

DVGW	CE-0085BP0459 (DVGW) acc. DIN EN 1854
Gas appliance directive	2016/426/EG

Weight

Without accessories	~ 60 g
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Packaging

Cardboard boxes with blister pack inserts (returnable).

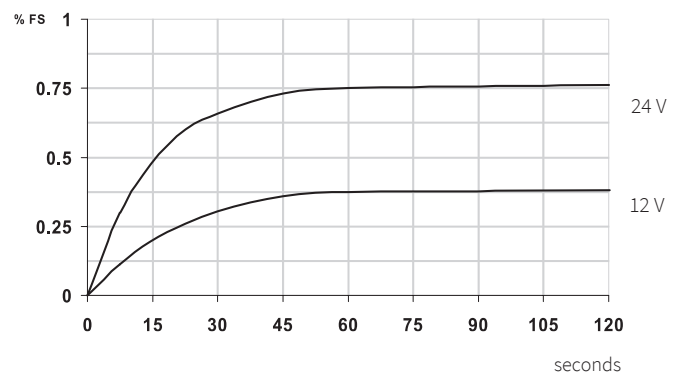
Ordering batches quantities / Transport volumes

Pieces	Varaint	Length (cm)	Width (cm)	Height (cm)	Weight (kg)	Blister (20 pcs)
1440	12 Box on euro-palette	120	80	93	~ 148	72
120	1 Box	59	39	26	~ 10.5	6

Accuracy

Signal drift

Parameter		Unit	
Tolerance zero point ²⁾	max.	% fs	± 0.5
Tolerance full scale ²⁾	max.	% fs	- 1.5 /+ 0.5
Resolution		% fs	0.1
Total of linearity, hysteresis and repeatability	max.	% fs	± 0.3
long term stability acc. to DIN EN 60770		% fs	± 1.0
TC zero point ³⁾	typ.	% fs/10K	± 0.2
TC zero point ³⁾	max.	% fs/10K	± 0.3
TC sensitivity ³⁾	typ.	% fs/10K	± 0.1



¹⁾ Power supply possible up to 28 VDC (with higher Power up drift see diagram)

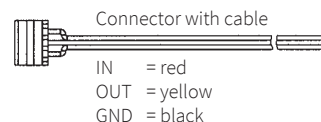
²⁾ For changing diaphragm position from horizontal to vertical, approx. -0.13 mbar.

³⁾ TC = Temperature coefficient

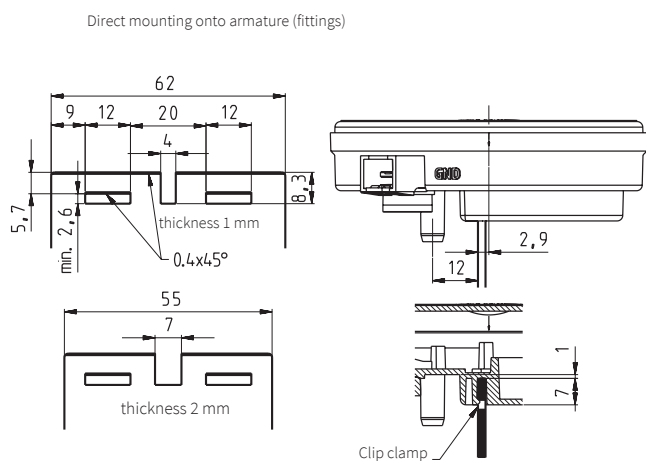
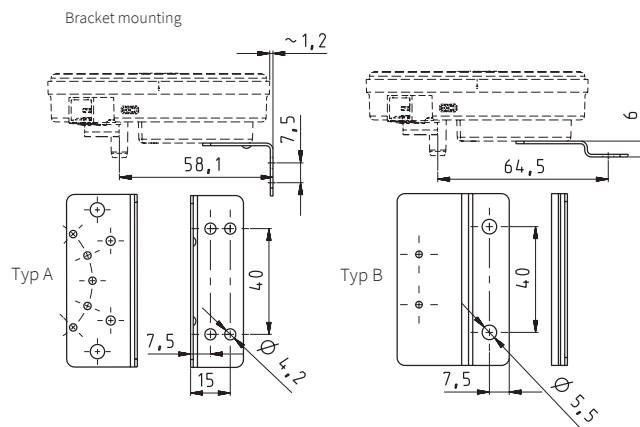
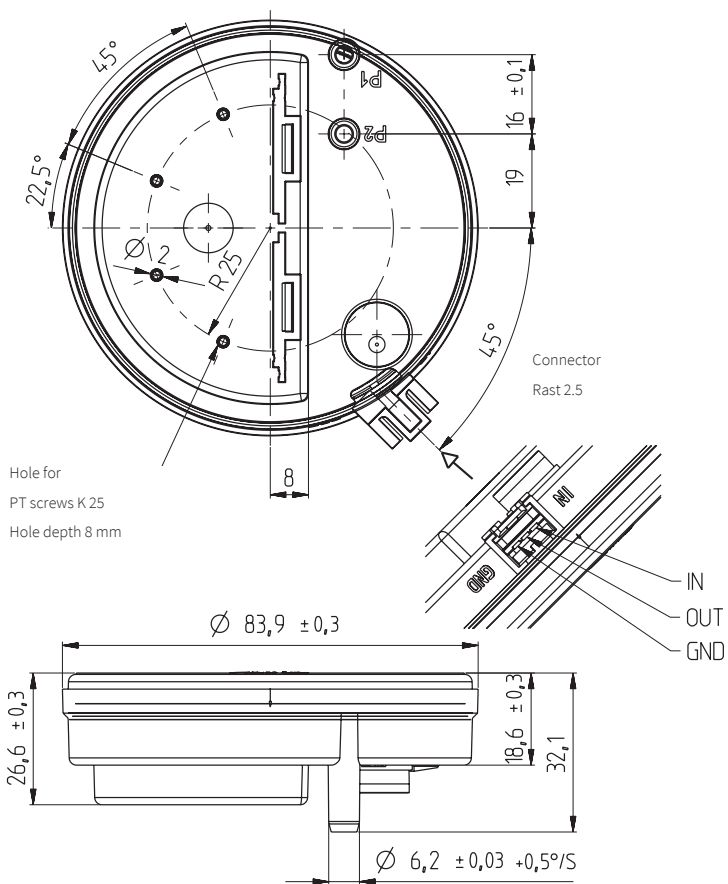
Order code selection table		Order number								
Pressure range	0 ... 3 mbar	4	0	1	.	9	3	0	0	0
	0 ... 5 mbar	4	0	1	.	9	5	0	0	0
	0 ... 8 mbar	4	0	1	.	9	8	0	0	0
▲ Full scale signal at these pressure										

Accessories (supplied loose)		Order number							
Bracket type A		100295							
Bracket type B		100098							
Fixing screw for wall thickness 1 – 2 mm	Length of screw 6 mm (min. required 2 pcs)	102976							
Orifice for pulsed pressure		100251							
Connector Rast 2.5 with cable 30 cm		111668							
Connector Rast 2.5 with cable 110 cm		101817							
Connector Rast 2.5 with cable 150 cm		112282							
Calibration certificate		104551							

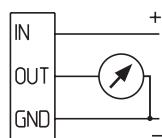
AMP connector ¹⁾	Manufacture's Part No.	Colour	for flexible wire
	3-829868-3	grey	7 x 0.20 mm = 0.22 mm ² or 12 x 0.20 mm = 0.35 mm ²
	1-966194-3	beige	7 x 0.25 mm = 0.35 mm ²



Dimensions in mm / Electrical connections



Other dimensions as per «Thickness 1 mm»



¹⁾ To be ordered separately from original manufacturer. Further information can be found in the manufacturer specification No. 114-18049.49.

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