



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

Operating conditions

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

Protection standard

IP 00 Protection class III

Electrical connections

3 pole plug connector RAST 2.5

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 ~ 45 g

Packaging

Cardboard boxes with blister pack inserts (returnable).

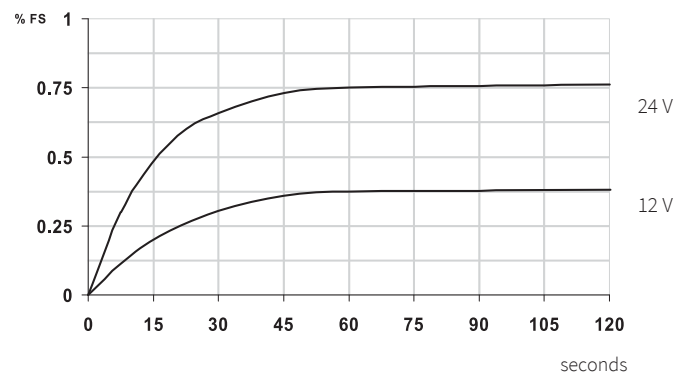
Ordering batches quantities / Transport volumes

Pieces	Varaint	Length (cm)	Width (cm)	Height (cm)	Weight (kg)	Blister (20 pcs)
1440	12 Box on euro-palette	120	80	93	134	72
120	1 Box	59	39	26	9.5	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

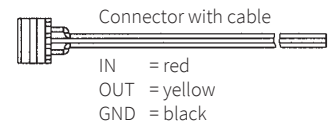
▲ Full scale signal at these pressure

Accessories ¹⁾

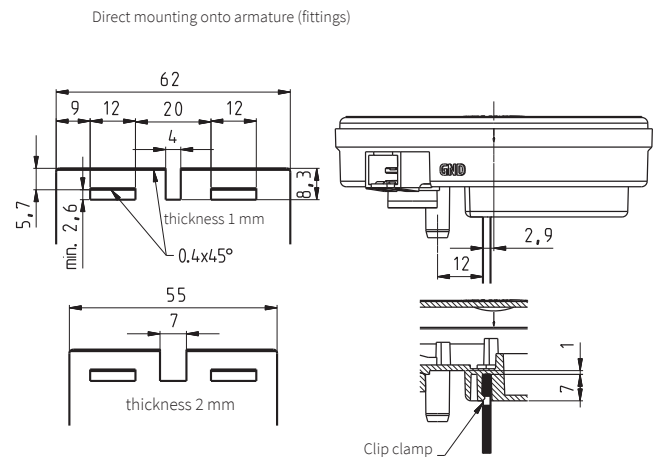
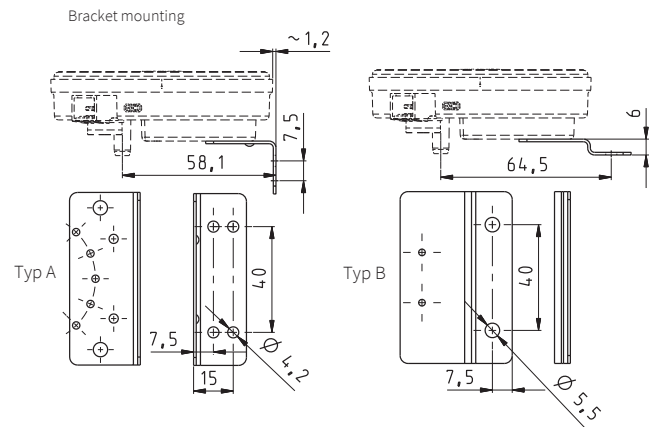
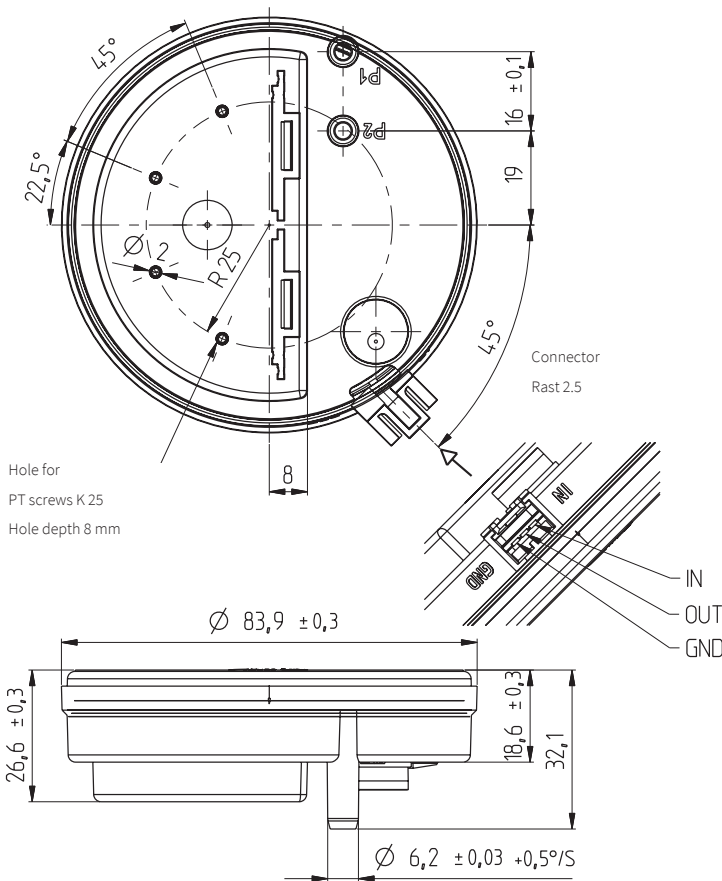
Order number

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

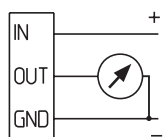
AMP connector ²⁾	Manufacturer's Part No.	Colour	for flexible wire
	3-829868-3	grey	7 x 0.20 mm = 0.22 mm ² or 12 x 0.20 mm = 0.35 mm ²
	1-966194-3	beige	7 x 0.25 mm = 0.35 mm ²



Dimensions in mm / Electrical connections



Other dimensions as per «Thickness 1 mm»



¹⁾ Accessories supplied loose

²⁾ To be ordered separately from original manufacturer. Further information can be found in the manufacturer specification No. 114-18049.49 zu finden.



株式会社 **クローネ**

■カタログに掲載してある製品の色は印刷インキの関係上、実際とは異なる場合があります。
■製品のデザイン、仕様等などは、予告なく変更する場合があります。

本 社：〒124-0023 東京都葛飾区東新小岩3丁目9番6号 TEL: (03) 3695-5431 / FAX: (03) 3695-5698
大阪支店：〒530-0054 大阪市北区南森町2-2-9(南森町八千代ビル7F) TEL: (06) 6361-4831 / FAX: (06) 6361-9360
e-mail: sales-tokyo@krone.co.jp URL: <https://www.krone.co.jp>

www.hubacontrol.com

