

OEM Relative and differential pressure transmitter type 403

Pressure range
0 ... 3 – 8 mbar



Type 403 pressure transmitters sense ultra-fine changes in gas pressure for use in air / gas ratio control systems. All materials used are compatible with flammable gas. When used in combination with our type 401 pressure transmitter, the optimum air / gas ratio can be achieved.

- Special development for optimize of combustion mixture in gas boilers
- With the special diaphragm geometry inherently stable due to homogeneous manufacture
- 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, neutral and burnable 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 measuring range

Materials in contact with the medium

Case		Polycarbonate (PC)
Diaphragm		NBR (NBR admission for burnable gas)
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 voltage without load	< 8 mA
Polarity reversal protection		Mechanically protected

Dynamic response

Response time		< 10 ms
Load cycle		< 10 Hz

Protection standard

IP 00		Protection class III
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Electrical connections

3 pole 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
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Packaging

Cardboard boxes with blister pack inserts (returnable).

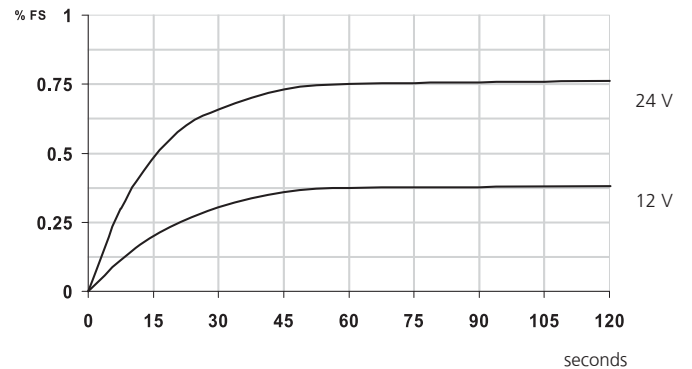
Ordering batches quantities / Transport volumes

Pieces	Variant	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

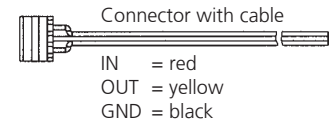
Pressure range	0 ... 3 mbar	4	0	3	.	9	3	0	0	0
	0 ... 5 mbar	4	0	3	.	9	5	0	0	0
	0 ... 8 mbar	4	0	3	.	9	8	0	0	0

▲ Full scale signal at these pressure

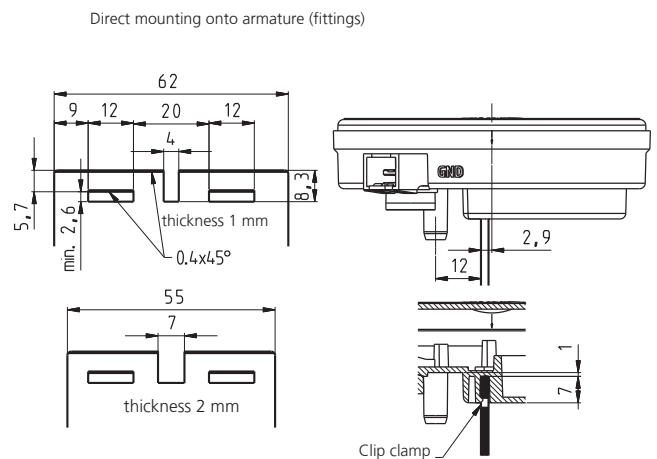
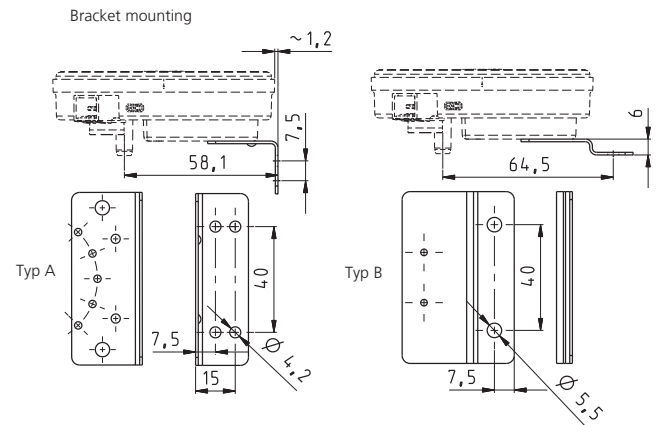
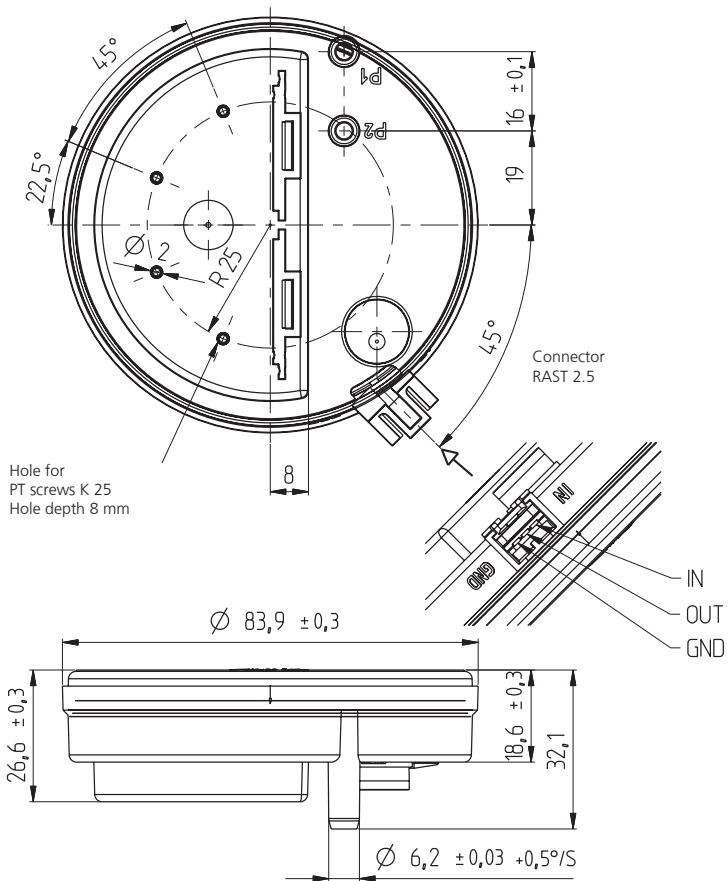
Accessories ¹⁾

Bracket type A		Order number	100295
Bracket type B		Order number	100098
Special screws for fastening transmitter to bracket (2 screws per transmitter required)		Order number	102976
Orifice for pulsed pressure		Order number	100251
Connector with cable RAST 2.5	30 cm	Order number	111668
Connector with cable RAST 2.5	110 cm	Order number	101817
Connector with cable RAST 2.5	150 cm	Order number	112282
Calibration certificate		Order number	104551

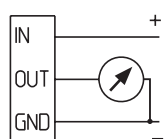
AMP connector ²⁾	Manufacture's Part No.	Colour	for flexible wire
	3-829868-3	grey	7 x 0.20 mm = 0.22 mm ² or
	1-966194-3	beige	12 x 0.20 mm = 0.35 mm ²
			7 x 0.25 mm = 0.35 mm ²



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

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