

OEM Relative and differential pressure transmitter type 401

Pressure range
0 ... 3 – 8 mbar



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.

- 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)

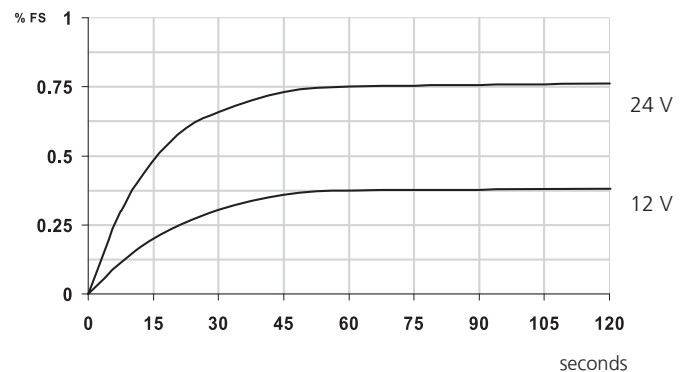
Technical overview

Pressure range						
Relative and differential		0 ... 3 – 8 mbar				
Operating conditions						
Medium		Air and neutral gases				
Temperature	Medium / ambient	0 ... +70 °C				
	Storage	-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		Protection class				
IP 00		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

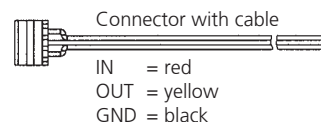
Order code selection table		Order number								
Pressure range	0 ... 3 mbar	4	0	1	.	9	3	0	0	0
	0 ... 5 mbar	4	0	1	.	9	5	0	0	0
	0 ... 8 mbar	4	0	1	.	9	8	0	0	0

▲ Full scale signal at these pressure

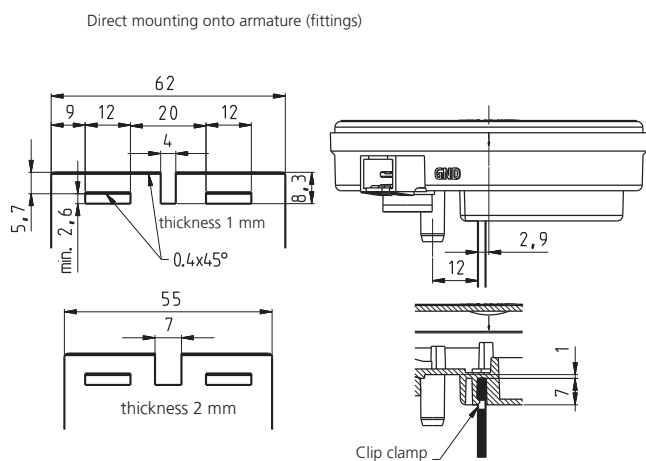
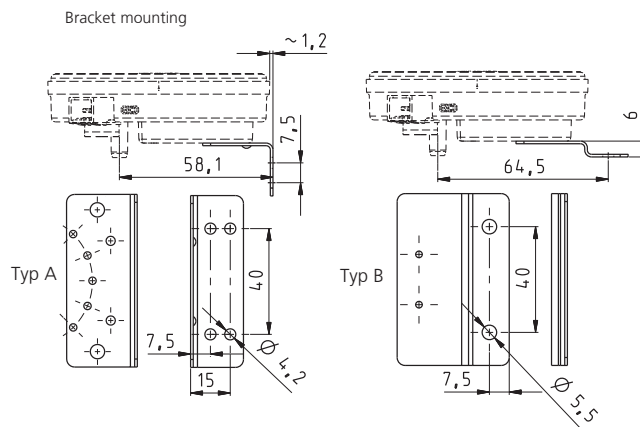
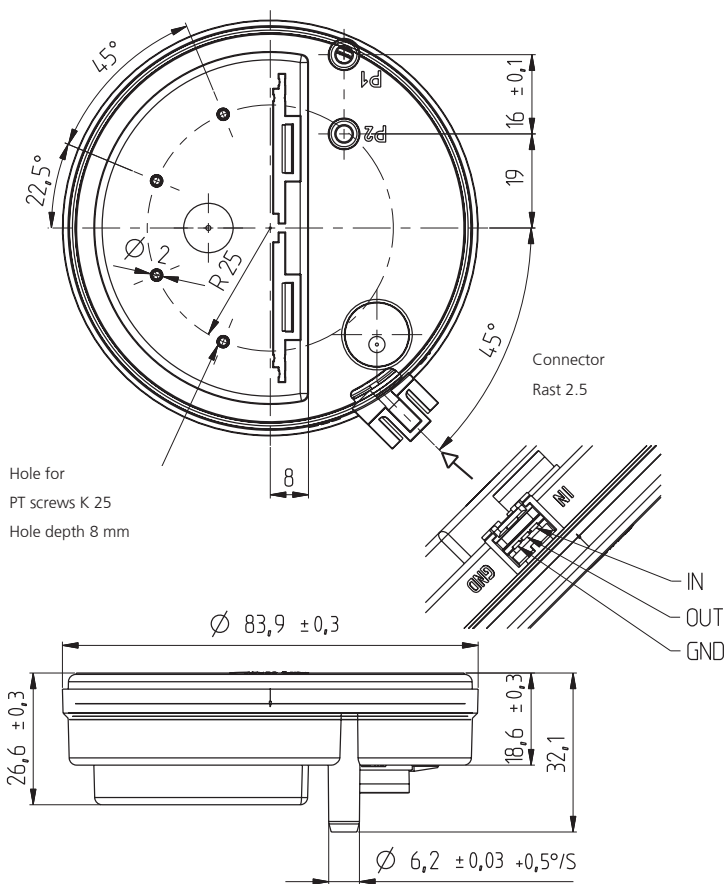
Accessories ¹⁾

		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

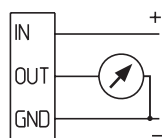
AMP connector ²⁾	Manufacture's Part No.	Colour	for flexible wire
	3-829868-3	grey	7 x 0.20 mm = 0.22 mm ² or 12 x 0.20 mm = 0.35 mm ²
	1-966194-3	beige	7 x 0.25 mm = 0.35 mm ²



Dimensions in mm / Electrical connections



Other dimensions as per «Thickness 1 mm»



¹⁾ 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.

Huba Control AG
Headquarters
Industriestrasse 17
5436 Würenlos
Telefon +41 (0) 56 436 82 00
Telefax +41 (0) 56 436 82 82
info.ch@hubacontrol.com

Huba Control AG
Niederlassung Deutschland
Schlattgrabenstrasse 24
72141 Walddorfhäslach
Telefon +49 (0) 7127 23 93 00
Telefax +49 (0) 7127 23 93 20
info.de@hubacontrol.com

Huba Control SA
Succursale France
Rue Lavoisier
Technopôle Forbach-Sud
57602 Forbach Cedex
Téléphone +33 (0) 387 847 300
Télécopieur +33 (0) 387 847 301
info.fr@hubacontrol.com

Huba Control AG
Vestiging Nederland
Hamseweg 20A
3828 AD Hoogland
Telefoon +31 (0) 33 433 03 66
Telefax +31 (0) 33 433 03 77
info.nl@hubacontrol.com

Huba Control AG
Branch Office United Kingdom
Unit 3 Network Point, Range Road
Witney Oxfordshire OX29 0YD
Phone +44 (0) 1993 776667
Fax +44 (0) 1993 776671
info.uk@hubacontrol.com

Huba Control AG
Rep. Office Singapore
No. 16 Ayer Rajah Crescent Witney
#06-06B Tempco Technominium
139965 Singapore
Phone +65 (0) 61 004 822
Fax +65 (0) 63 994 822
info.sg@hubacontrol.com

Huba Control AG
Rep. Office China
CBC Building, 49A Wuyi Road
Shanghai 200050
Phone +86 (0) 21 511 808 21
Fax +86 (0) 21 515 520 99
info.cn@hubacontrol.com