

Absolute pressure transmitters

ABSOLUTE PRESSURE TRANSMITTERS

Absolute pressure measurements are essential for determining atmospheric pressure. Here, the current pressure is compared with a vacuum. While atmospheric pressure measurements are only able to record (weather-dependent) ambient pressure, i.e. approx. 1013.25 hPa $\pm$ 50 hPa, "traditional" measurements of absolute pressure are also able to compare other pressure values, e.g. 0.75 hPa, to the vacuum depending on the selected pressure range.

	AD 1000	BA 1000	BA 90
Details on	p. 34	p. 34	p. 35
			
Features	Absolute pressure transmitter	Atmospheric pressure transmitter	Digital precision barometer
Measurement range	0 .. 50 kPa 0 .. 100 kPa 80 .. 120 kPa 90 .. 110 kPa 100 .. 0 kPa	80 .. 120 kPa 85 .. 115 kPa 90 .. 110 kPa 95 .. 115 kPa	913.3 - 1113.3 hPa
Margin of error	$\pm$ 1 % of measurement range reference $\pm$ 0.5 hPa with respect to sea level		$\pm$ 0.4 hPa $\pm$ 1 digit Reference $\pm$ 0.5 hPa with respect to sea level
Display	3 1/2 digit (optional), see foto 4 1/2 digit (optional)		4 1/2 digit (LED)

ACCESSORIES

DAkkS calibration certificate, German
DAkkS calibration certificate, English
ISO factory calibration certificate
Connecting components (tubing etc.)

Order no.

9601.0003
9601.0004
9601.0002
see p. 17

APPLICATION

Weather forecasting is one area where it is vital to be able to measure atmospheric pressure accurately. Air-conditioning systems, too, often measure the current level of atmospheric pressure in order to avoid excessive differences in pressure, e.g. in entrance areas/air curtains.

Precise measurements of absolute pressure are also vital in many scientific and production processes where it is essential to have a (weather-dependent) process pressure value, e.g. frequently required for pressure compensation of volume flow measurements.



Margin of error	± 1 % of measurement range Reference ± 0.5 hPa with respect to sea level
Temperature effect	0.04 % / K (10 .. 50 °C)
Calibration temperature	22 °C
Operating temperature	10 .. 60 °C
Storage temperature	-10 .. 70 °C
Long-term drift	0,3 hPa/year
Reduction	0 .. 850 m above sea level (please indicate when placing your order)
Power consumption	approx. 3 VA
Cable glands	2 x PG 7 (for a 80 x 120 housing) 2 x PG11 (for a 120 x 122 housing)
Protection class	IP54
Weight	approx. 0.6 kg
Pressure ports ¹⁾	for tubing NW 6 mm
Certificates	CE

¹⁾ AD 1000: 2 pressure ports, BA 1000: 1 pressure port

Product	Measurement range	A
AD 1000	0 .. 50 kPa	50A
	0 .. 100 kPa	100A
	80 .. 120 kPa	80A
	90 .. 110 kPa	90A
	100 .. 0 kPa	0A
BA 1000	80 .. 120 kPa	80B
	85 .. 115 kPa	85B
	90 .. 110 kPa	90B
	95 .. 115 kPa	95B

Output	B
0 .. 10 V ($R_L \geq 2 \text{ k}\Omega$)	1
0 .. 20 mA ($R_L \leq 500 \Omega$)	0
4 .. 20 mA ($R_L \leq 500 \Omega$)	4

Power supply	C
24 VDC	24D
24 VAC	24A
115 VAC	115
230 VAC	230

LCD	D
none	0
3 1/2 digit, see foto	3
4 1/2 digit	4

Reduction	E
none	0
please indicate in meters (e.g. 2 m)	

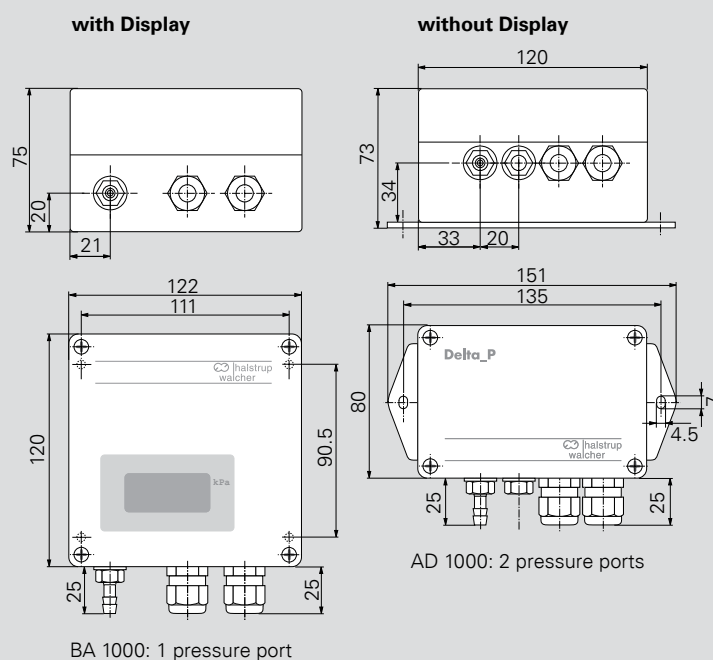
Order code	A	B	C	D	E
AD-BA 1000					

AD/BA 1000



Features

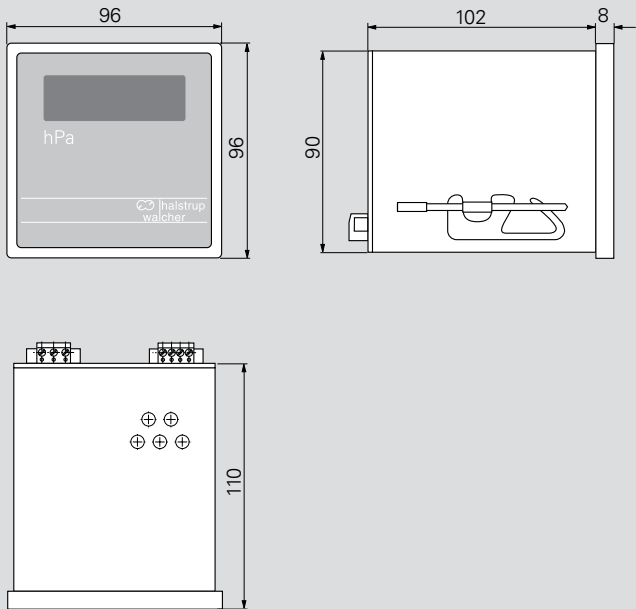
- Precise absolute pressure transmitter
- AD: for absolute pressure
- BA: for atmospheric pressure
- High level of accuracy and long-term stability
- Little zero-point drift or hysteresis; largely independent of temperature
- The size of the optional display can be adjusted (reduced) in the factory to correspond to the height of the installation site, see DIN ISO 2533 (only BA 1000)





Features

- Precise digital barometer for installation in control cabinets
- A potentiometer can be used to adjust (reduce) the display to correspond to the height of installation site (see DIN ISO 2533)
- High level of accuracy and long-term stability
- Little zero-point drift or hysteresis; largely independent of temperature



Measurement range	913.3 - 1113.3 hPa
Margin of error	$\pm 0.4 \text{ hPa} \pm 1 \text{ digit}$ Reference $\pm 0.5 \text{ hPa}$ with respect to sea level
Resolution	0.1 hPa
Temperature effect	$\pm 0.2 \text{ hPa/K}$ in the temperature range 20..50 °C
Calibration temperature	22 °C
Operating temperature	0..50 °C (Temperature compensation in the range 20..50 °C)
Storage temperature	-10..70 °C
Long-term drift	0.3 hPa/year
Supply voltage	230 VAC +6/-15 % or 115 VAC +6/-15 % or 12..28 VDC (universal voltage adapter)
Display	4 1/2 digit (LED)
Reduction	0..850 m above sea level using potentiometer
Power consumption	approx. 5 VA
Weight	approx. 0.8 kg
Certificates	CE

Output	A
0..20 mA ($R_L \leq 250 \Omega$)	0
-2..2 V ($R_L \geq 5 \text{ k}\Omega$)	1
4..20 mA ($R_L \leq 250 \Omega$)	4

Order code	A
BA 90	-

halstrup-walcher GmbH
Stegener Str. 10
79199 Kirchzarten
Germany

Tel. + 49 (0) 76 61 39 63-0
Fax + 49 (0) 76 61 39 63-99
www.halstrup-walcher.com
info@halstrup-walcher.de

Australia / New Zealand

Bestech Australia Pty. Ltd.
Unit 14, 44 Garden Blvd,
Dingley, VIC 3172
Tel. +61 (0) 3 9540 5100
Fax +61 (0) 3 9551 5541
Enquiry@bestech.com.au
www.bestech.com.au

Belgium / Luxembourg / Netherlands

DIMED nv
Joe Englishstraat 47
2140 Antwerpen
Tel. +32 3 236 64 65
Fax +32 3 236 64 62
info@dimed.be
www.dimed.eu

China

Shanghai Yu Ting
Scientific Co., LTD
BeiGuan Village, MaLu Town,
JiaDing District,
Shanghai City. PRC
Tel. +86 21 6915 3366
Tel. +86 21 6915 5916
Fax +86 21 6915 3939
ch-sys@ch-sys.net
www.ch-sys.com

Denmark

Hans Buch A/S
Roskildevej 8-10
2620 Albertslund
Tel. +45 43 68 50 00
Fax: +45 43 68 50 50
info@hansbuch.dk
www.hansbuch.dk

Italy

FISME srl
Via Volta 21
20082 Binasco (MI)
Tel. +39 02 905 53 58
Fax +39 02 905 22 67
fisme@tin.it
www.fisme.it

Japan

Krone Corporation
2-22-1 Higashi-Shinkoiwa
Katsushika-ku
J-Tokyo 1240023
Tel. +81 (0) 3 3695 5431
Fax: +81 (0) 3 3695 5698
sales-tokyo@krone.co.jp
www.krone.co.jp

Austria / Croatia / Serbia / Hungary / Slovenia

Industrie Automation Graz
Ing. W. Häusler GmbH
Autaler Str. 55
8074 Raaba
Tel. +43 (0) 316 405 105
Fax +43 (0) 316 405 105-22
office@iag.co.at
www.iag.co.at

Sweden

DJ Stork Automation AB
Karlsbodavägen 39
16867 Bromma
Tel. +46 (0) 8 635 60 30
Fax +46 (0) 8 635 60 31
stork@storkautomation.se
www.storkautomation.se

Switzerland

Trelco AG
Gewerbestrasse 10
5037 Muhen
Tel. +41 (0) 62 737 62 62
Fax +41 (0) 62 737 62 70
trelco@trelco.ch
www.trelco.ch

Turkey

CAGDAS Automation
& Engineering Co. Ltd.
Kizilay cad. 28006 sok No: 5
01010 Seyhan/Adana
Tel. +90 322 359 81 85
Fax +90 322 359 36 39
cagdas@cagdasltd.com.tr
www.cagdasltd.com.tr

Taiwan

Chih Horng Scientific Co.
3F No.162 WEN LIN N. RD.
112 PEITOU TAIPEI R.O.C.
Tel. +886 2 2822 1466
Fax +886 2 2823 8003
chih.mail@msa.hinet.net
www.ch-sys.com

USA

Intelligent Measurement
Solutions LLC
7801 Clinton-Macon Road
49236 Clinton, MI
Tel. +1 (616) 608 7919
Tel. +1 (734) 637-1596
Fax +1 (616) 608 7954
darrell@i-m-solutions.net
www.h-wusa.com