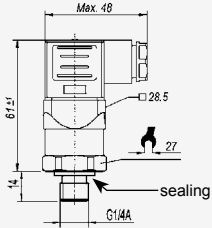


Pressure transmitter



A-10

Pressure transmitter (relative pressure, zero output at atmospheric pressure)

Option: Absolute Pressure

(0 ... 1 bar abs. to 0 ... 25 bar abs.)

Option: Under Pressure

(-1.0 ... +1.5 bar, -1.0 ... +3.0 bar, -1.0 ... +9.0 bar)

Application:

Suitable for all applications in machine and systems engineering, automotive technology as well as cooling and air conditioning technology.

Specification:

Measuring range (MR), Overload limit (OL), Burst pressure (BD):

MR:	1, 40,	1.6, 60,	2.5, 100,	4, 160,	6, 250,	10, 400,	16, 600,	25,
OL:	2, 80,	3.2, 120,	5, 200,	8, 320,	12, 500,	20, 800,	32, 1200,	50,
BD:	5, 400,	10, 550,	10, 800,	17, 1000,	34, 1200,	34, 1700,	100, 2400,	100,

Output signal: 4-20 mA, 2-wire, $R_A [Ω] < (U_V [V] - 8V) / 0.02 A$
0-10 V, 3-wire, $R_L > 10 kΩ$
(other output signals upon request)

Auxiliary energy U_V : 8 ... 30 VDC (for output 4-20 mA)
14 ... 30 VDC (for output 0-10 V)

Accuracy: * $\leq 1.0 \% FS$ (optional: $\leq 0.5 \% FS$)
* = including non-linearity, hysteresis, zero point and scale error. Corresponds to error of measurement per IEC 61298-2. Sensor adjusted in vertical mounting position with lower pressure connection

Non-Linearity: $\leq 0.5 \% FS$ (optional: $\leq 0.25 \% FS$)

Zero Offset: $\leq 0.5 \% FS$ (typ.), $\leq 0.8 \% FS$ (max.),
(Optional: $\leq 0.15 \% FS$ (typ.), $\leq 0.4 \% FS$ (max.))

Hysteresis: $\leq 0.16 \% FS$

Repeatability: $\leq 0.1 \% FS$

Long-term drift: $\leq 0.1 \% FS$ (according to IEC 61298-3)

Response time: T_{90} $\leq 4 ms$

Permitted temperature of measurement media: 0 ... +80 °C (optional: -30 ... +85 °C)

Ambient temperature: 0 ... +80 °C (optional: -20 ... +80 °C)

Storage temperature: -20 ... +80 °C

Temperature compensated area: 0 ... +80 °C

Temperature error in compensated area: $\leq 1.0 \% FS$ (typ.), $\leq 2.5 \% FS$ (max.)

Material: Parts coming into contact with pres. media

- Pressure connection: 316 L

- Pressure sensor: 316 L (as of 10 bar rel. 13-8 PH)

- Housing: 316 L

Pressure connection: G 1/4 A, DIN 3852-E with NBR sealing

Protection rating: IP65 or IP67 with cable

Electric connection: elbow-type plug acc. to EN 175301-803/A or connection cable, cable length 2 m

Electric protections: reverse voltage and short-circuit protection

Weight: approx. 80 g

Accessories and spare parts:

Higher sensor accuracy (class 0.5)

Extended temperature range: -30 ... +100 °C

Output signal 0-10 V

Fixed connecting cable

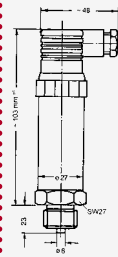
2 m with bend protection (instead of elbow-type plug, IP67)

GWA1214

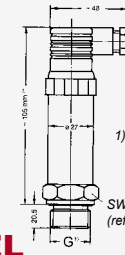
V4A thread adapter G 1/2" with internal thread G 3/4" and external thread G 1/2"

Pressure measuring transducer for over/under and absolute pressure

Types:
S-10 REL, S-10 ABS



Types:
S-11 REL, S-11 ABS



1) G 1/2 B = SW27
G 1 B = SW41
SW27 or SW41 (refer to)



S-10 REL

Pressure measuring transducer (Standard, zero output at ambient pressure)

S-11 REL

Pressure measuring transducer (Flush, zero output at ambient pressure)

S-10 ABS

Pressure measuring transducer (Standard, absolute, zero output at vacuum)

S-11 ABS

Pressure measuring transducer (Flush, absolute, zero output at vacuum)

Description:

piezoresistive pressure sensor with temperature compensation. Completely welded and stainless steel design, filled food safe (up to 16 bar), thin film strain (above 25 bar).

Specification:

Measuring ranges: in bar (other values upon request)

S-10 REL and S-11REL: 0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600, 1000

S-10 ABS and S-11ABS: 0.25, 0.4, 0.6, 1, 1.6, 2.5, 4, 6, 10, 16

Measuring range (MB), Overload limit (ÜL):

MB (bar):	0.1, 1.6, 25 ...	0.16, 2.5, 600,	0.25, 4, 1000	0.4, 6,	0.6, 10,	1, 16,
ÜL (bar):	1, 10, 2 x MB	1.5, 10	2, 17, 1500	2, 35	4, 35	5, 80

Output signal: 4-20 mA (0-10 V - refer to options; others upon request)

Permissible impedance: $R_A [Ω] \leq (U_V [V] - 10 V) / 0.02 A$ (for output 4-20 mA)

Permissible load: $R_L > 10 kΩ$ (for output 0-10 V)

Auxiliary energy: 10 ... 30 V DC (14 ... 30 V DC for output 0-10 V)

Accuracy:

deviation from parameter (% of Span): ≤ 0.5 (setting of cut-off point)
 ≤ 0.25 (setting of tolerance band, BFSL)

Repeatability (% of Span): ≤ 0.05

Stability/year (% of Span): ≤ 0.2 (bei Referenzbedingungen)

Hysteresis (% of Span): ≤ 0.1

Permissible temperature of media: -30 ... +100 °C (refer to options)

Operating temperature ambient: -20 ... +80 °C

Compensated temperature range: 0 ... +80 °C

Temperature coefficient: $\leq 0.02 \% FS / K$ (or $\leq 0.04 \% FS$ for MB ≤ 0.25 bar)

Filling: KN77, food safe

Housing: stainless steel 1.4435 (IP65)

Pressure connection: (other upon request)

Type S-10... : G 1/2 B

Type S-11... : G 1 B (up to 1.6 bar), G 1/2 B (from 2.5 ... 600 bar)

Mounting position: any

Electric connection: standard via elbow-type plug EN 175301-803/A

Electric protections: reverse voltage protection, over voltage and short-circuit protection.

Accessories and spare parts:

Special measuring range

Media temperature: -40 ... +125 °C (S-10 only)

Media temperature: -30 ... +125 °C (S-11 only)

Media temperature: -20 ... +150 °C
(S-11 only with cooling section)

Output signal 0-10 V

(other upon request)

Ex-protection

upon request