

Pressure transmitters, Performance series

hex 24



- Very attractively priced electronic pressure transmitters
- High overpressure protection (up to 2 x)
- Small, compact transmitters
- High level of adaptability to your requirements (custom solutions)
- Ceramic sensor in thick film technology
- Housing made of stainless steel (1.4305), others on request
- Available as 'plasma cleaned for oxygen applications'⁽¹⁾

¹⁾ For oxygen applications, the EPDM diaphragm can only be used up to 250 bar and a media temperature of max. +60°C.

Pressure transmitters, Performance series

Technical details

	0601	0602
Output signal:	0 - 10 V (3-wire)	4 - 20 mA (2-wire)
Supply voltage U_{V+} :	11 - 32 VDC with reverse voltage protection	9.6 - 32 VDC with reverse voltage protection
Permissible load / apparent ohmic resistance:	$\geq 4.7 \text{ k}\Omega$	$\leq (U_{V+} - 10 \text{ V}) / 20 \text{ mA}$
Idle power consumption:	approx. 5 mA	< 4 mA

		0601 / 0602						
Standard pressure ranges p_{nom} :		0 – 2 bar	0 – 4 bar	0 – 10 bar	0 – 16 bar	0 – 40 bar	0 – 100 bar	0 – 250 bar
Overpressure protection $p_u^{1)}$:		4 bar	10 bar	20 bar	40 bar	100 bar	150 bar	375 bar
Burst pressure ¹⁾ :		8 bar	20 bar	35 bar	60 bar	140 bar	300 bar	500 bar
Mechanical life expectancy:		5,000,000 pulsations at rise rates to 1,000 bar/s at p_{nom}						
Permitted pressure change rate:		$\leq 1,000 \text{ bar/s}$						
Accuracy:		$\leq \pm 1 \%$ full scale (FS) at room temperature, $\pm 0.5 \%$ BFSL						
Long term stability:		$\pm 0.3 \%$ of full scale (FS) per year						
Repeatability ²⁾ :		$\pm 0.1 \%$ FS						
Temperature error ²⁾ :		$\leq \pm 0.04 \%$ of full scale (FS) / °C						
Compensated temperature range:		0 °C ... +70 °C (32 °F ... 158 °F)						
Temperature range ambient:		-30 °C ... +100 °C (-22 °F ... 212 °F)						
Temperature range media:		with TPE seal: -30 °C ... +110 °C (-22 °F ... +230 °F)						
		with NBR seal: -30 °C ... +100 °C (-22 °F ... +212 °F)						
		with EPDM seal: -30 °C ... +125 °C (-22 °F ... +257 °F)						
		with FKM seal: -20 °C ... +125 °C (-4 °F ... +257 °F)						
Wetted parts material	Housing:	Stainless steel 1.4305 (AISI 303)						
	Measuring cell:	Ceramic						
	Seal material:	TPE, NBR, EPDM or FKM ³⁾						
Insulation resistance:		> 100 M Ω (35 VDC)						
Response time 10 – 90 %:		$\leq 2 \text{ ms}$						
Vibration resistance:		20 g at 4 – 2000 Hz sine wave; DIN EN 60068-2-6						
Shock resistance:		half sine wave 500 m/s ² ; 11ms; DIN EN 60068-2-27						
Protection class		IP65: DIN EN 175301-803-A, IP67: M12x1, AMP Superseal 1.5°, cable connector IP67 and IP6K9K: Bayonet ISO 15170-A1-4.1, Deutsch DT04-3P						
Electromagnetic compatibility:		EMC 2014/30/EU, EN 61000-6-2:2005, EN 61000-6-3:2007						
Max. length of connection cable:		30 m						
Protection against reverse polarity, short-circuit and overvoltage:		Built-in						
Cable output thread size:		For DIN EN 175301: PG9 (outside diameter of cable 6 to 9 mm)						
Weight:		approx. 80 g (DIN EN 175301 approx. 110 g)						

¹⁾ Static pressure, dynamic pressure 30 to 50% lower. Values refer to the hydraulic or pneumatic part of the pressure transmitter.

²⁾ Within the compensated temperature range

³⁾ FKM sealings are only suitable for pressure ranges up to 0-16 bar.

T.1

hex 24
Performance

0601 / 0602

Electrical connectors and threads



hex 24

DIN EN 17530-803-A

Pin	0601	0602
1	U_{V+}	U_{V+}
2	Gnd	I_{out}
3	U_{out}	nc
PE		

IP65

x ~ 60 mm without socket device
x ~ 77 mm with socket device

Connection code: 013

M12-DINEN61076-2-101 A

Pin	0601	0602
1	U_{V+}	U_{V+}
2	U_{out}	nc
3	Gnd	I_{out}
4	nc	nc

IP67

x ~ 54 mm

Connection code: 002

ISO 15170 - A1 - 4.1

Pin	0601	0602
1	U_{V+}	U_{V+}
2	Gnd	I_{out}
3	U_{out}	nc
4	nc	nc

IP67, IP6K9K

x ~ 56 mm

Connection code: 015

AMP Superseal 1.5[®]

Pin	0601	0602
1	U_{out}	nc
2	Gnd	I_{out}
3	U_{V+}	U_{V+}

IP67

x ~ 61 mm

Connection code: 007

Deutsch DT04 - 3P

Pin	0601	0602
A	U_{V+}	U_{V+}
B	Gnd	I_{out}
C	U_{out}	nc

IP67, IP6K9K

x ~ 61 mm

Connection code: 014

Sealing ring

G1/4 DIN
EN ISO 1179-2
(DIN 3852-11)
form E

Thread code: 41

NPT 1/4

Thread code: 09



0601 / 0602

Article matrix for pressure transmitters

T.1

hex 24
Performance



	Type	Pressure range	Pressure connection	Seal material	Electrical connection
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0 - 10 V, 3-wire	0601
4 - 20 mA, 2-wire	0602

Max. Overpressure¹⁾ Burst Pressure Pressure range

4 bar	8 bar	0 - 2 bar (approx. 29 PSI)	200
10 bar	20 bar	0 - 4 bar (approx. 58 PSI)	400
20 bar	35 bar	0 - 10 bar (approx. 145 PSI)	101
40 bar	60 bar	0 - 16 bar (approx. 230 PSI)	161
100 bar	140 bar	0 - 40 bar (approx. 580 PSI)	401
150 bar	300 bar	0 - 100 bar (approx. 1.450 PSI)	102
375 bar	500 bar	0 - 250 bar (approx. 3.625 PSI)	252

Pressure connection

G1/4 – DIN EN ISO 1179-2 (DIN 3852-11), form E	41
NPT 1/4	09

Seal material – Application areas

NBR	Hydraulic/machine oil, air, nitrogen, water, etc.	1
EPDM	Brake fluid, water, acetylene, hydrogen, oxygen etc.	2
FKM²⁾	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
TPE	Hydraulic/machine oil, water, air, nitrogen, acetylene, etc.	7

Electrical connection

DIN EN 175301-803-A (DIN 43650-A); socket device included	013
M12x1 - DIN EN 61076-2-101-A	002
Bayonet ISO 15170-A1-4.1 (DIN 72585-A1-4.1)	015
AMP Superseal 1.5°	007
Deutsch DT04-3P	014



Article number	060X	XXX	XX	X	XXX
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¹⁾ Static pressure, dynamic pressure 30 to 50% lower. Values refer to the hydraulic or pneumatic part of the pressure transmitter.

²⁾ FKM sealings are only suitable for pressure ranges up to 0-16 bar.

