

Pressure transmitters, Performance series

hex 24



- Very attractively priced electronic pressure transmitters
- High overpressure protection (up to 2 x)
- Small, compact transmitters
- Broad diversity of electronic and mechanical connection options
- 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

Technical details

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

Type:		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 bar/ms at p _{nom}						
Pressure rise:		≤ 1 bar/ms						
Accuracy:		≤ ±1 % full scale (FS) at room temperature, ±0.5 % BFSL						
Long term stability:		±0.3 % FS p. a.						
Repeatability ²⁾ :		±0.1 % FS						
Temperature error ²⁾ :		≤ ±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						
Insulation resistance:		> 100 MΩ (500 VDC, Ri > 42 Ω)						
Response time 10 – 90 %:		≤ 2 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 ; 11 ms; 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



DIN EN 175301-803-A



Pin	0601	0602
1	Uv+	Uv+
2	Gnd	I _{out}
3	U _{out}	nc*

IP65

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

Order number: 013

M 12 – DIN EN 61076-2-101 A



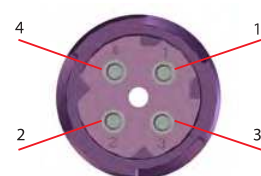
Pin	0601	0602
1	Uv+	Uv+
2	U _{out}	nc*
3	Gnd	I _{out}
4	nc*	nc*

IP67

x ~ 54 mm

Order number: 002

ISO 15170-A1-4.1



Pin	0601	0602
1	Uv+	Uv+
2	Gnd	nc*
3	U _{out}	I _{out}
4	nc*	nc*

IP67, IP6K9K

x ~ 56 mm

Order number: 004

AMP Superseal 1.5®



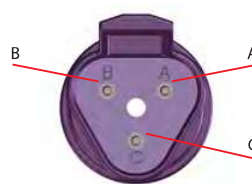
Pin	0601	0602
1	U _{out}	nc*
2	Gnd	I _{out}
3	Uv+	Uv+

IP67

x ~ 61 mm

Order number: 007

Deutsch DT04-3P



Pin	0601	0602
A	Uv+	Uv+
B	Gnd	nc*
C	U _{out}	I _{out}

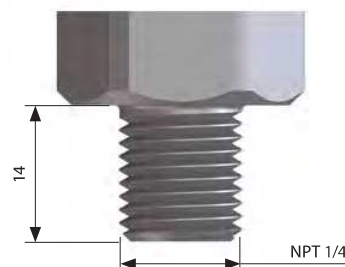
IP67, IP6K9K

x ~ 61 mm

Order number: 010



Thread code: 41



Thread code: 09



0601 / 0602

Order 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. overpressure ¹⁾	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



Pressure connection

G 1/4 – (DIN 3852), form E, male thread	41
NPT 1/4	09



Seal material – Application areas

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



Electrical connection

DIN EN 175301-803-A (DIN 43650-A) ; socket device included	013
M 12x1 – DIN EN 61076-2-101-A	002
Bayonet ISO 15170-A1-4.1 (DIN 72585-A1-4.1)	004
AMP Superseal 1.5®	007
Deutsch DT04-3P	010



Order number:	06XX	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.

