

# 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:	<b>0601</b>	<b>0602</b>
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:	<b>0601 / 0602</b>					
Standard pressure ranges $p_{nom}$ :	0 – 2 bar	0 – 4 bar	0 – 10 bar	0 – 16 bar	0 – 40 bar	0 – 100 bar
Overpressure protection $p_u^{1)}$ :	4 bar	10 bar	20 bar	40 bar	100 bar	200 bar
Burst pressure <sup>1)</sup> :	8 bar	20 bar	35 bar	60 bar	140 bar	300 bar
Mechanical life expectancy:	5,000,000 pulsations at rise rates to 1 bar/ms at $p_{nom}$					
Pressure rise:	$\leq 1 \text{ bar/ms}$					
Accuracy:	$\leq \pm 1 \%$ full scale (FS) at room temperature, $\pm 0.5 \%$ BFSL					
Long term stability:	$\pm 0.3 \%$ FS p. a.					
Repeatability <sup>2)</sup> :	$\pm 0.1 \%$ FS					
Temperature error <sup>2)</sup> :	$\leq \pm 0.04 \%$ 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 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:	NBR, EPDM or FKM				
Insulation resistance:	$> 100 \text{ M}\Omega$ (500 VDC, $R_i > 42 \Omega$ )					
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 <sup>2</sup> ; 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)					

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

<sup>2)</sup> Within the compensated temperature range

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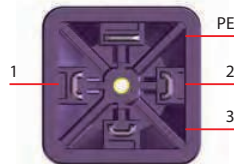
# 0601 / 0602

Electrical connectors and threads



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### DIN EN 175301-803-A



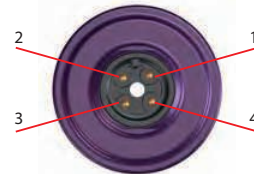
Pin	0601	0602
1	U <sub>v+</sub>	U <sub>v+</sub>
2	Gnd	I <sub>out</sub>
3	U <sub>out</sub>	nc*

IP65

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

**Order number: 013**

### M 12 – DIN EN 61076-2-101 A



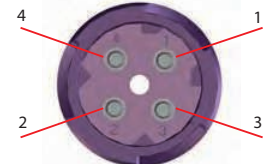
Pin	0601	0602
1	U <sub>v+</sub>	U <sub>v+</sub>
2	U <sub>out</sub>	nc*
3	Gnd	I <sub>out</sub>
4	nc*	nc*

IP67

x ~ 54 mm

**Order number: 002**

### ISO 15170-A1-4.1



Pin	0601	0602
1	U <sub>v+</sub>	U <sub>v+</sub>
2	Gnd	nc*
3	U <sub>out</sub>	I <sub>out</sub>
4	nc*	nc*

IP67, IP6K9K

x ~ 56 mm

**Order number: 004**

### AMP Superseal 1.5°



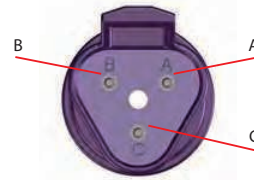
Pin	0601	0602
1	U <sub>out</sub>	nc*
2	Gnd	I <sub>out</sub>
3	U <sub>v+</sub>	U <sub>v+</sub>

IP67

x ~ 61 mm

**Order number: 007**

### Deutsch DT04-3P

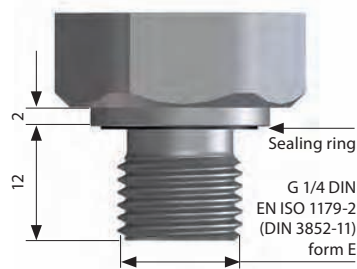


Pin	0601	0602
A	U <sub>v+</sub>	U <sub>v+</sub>
B	Gnd	nc*
C	U <sub>out</sub>	I <sub>out</sub>

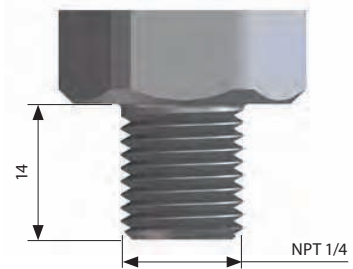
IP67, IP6K9K

x ~ 61 mm

**Order number: 010**



**Thread code: 41**



**Thread code: 09**



# 0601 / 0602

## Order matrix for pressure transmitters

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

Max. overpressure <sup>1)</sup>	Burst pressure	Pressure range	
4 bar	8 bar	0 – 2 bar (approx. 29 PSI)	<b>200</b>
10 bar	20 bar	0 – 4 bar (approx. 58 PSI)	<b>400</b>
20 bar	35 bar	0 – 10 bar (approx. 145 PSI)	<b>101</b>
40 bar	60 bar	0 – 16 bar (approx. 230 PSI)	<b>161</b>
100 bar	140 bar	0 – 40 bar (approx. 580 PSI)	<b>401</b>
200 bar	300 bar	0 – 100 bar (approx. 1,450 PSI)	<b>102</b>

### Pressure connection

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

### Seal material – Application areas

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

### Electrical connection

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

<b>Order number:</b>	<b>06XX</b>	<b>XXX</b>	<b>XX</b>	<b>X</b>	<b>XXX</b>
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<sup>1)</sup> Static pressure, dynamic pressure 30 to 50% lower. Values refer to the hydraulic or pneumatic part of the pressure transmitter.



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