

Pressure transmitters, Performance series

Technical details

Type:	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

Type:		0601 / 0602						
Standard pressure ranges p _{nom} :		0 - 2 bar (0 – 29 psi)	0 - 4 bar (0 – 58 psi)	0 - 10 bar (0 – 145 psi)	0 - 16 bar (0 – 230 psi)	0 - 40 bar (0 – 580 psi)	0 - 100 bar (0 – 1,450 psi)	0 - 250 bar (0 – 3,625 psi)
Overpressure protection p ¹⁾ _u :		4 bar (58 psi)	10 bar (145 psi)	20 bar (290 psi)	40 bar (580 psi)	100 bar (1,450 psi)	150 bar (2,175 psi)	375 bar (5,439 psi)
Burst pressure: ¹⁾		8 bar (115 psi)	20 bar (290 psi)	35 bar (500 psi)	60 bar (870 psi)	140 bar (2,000 psi)	300 bar (4,350 psi)	500 bar (7,250 psi)
Mechanical life expectancy:		5,000,000 pulsations at rise rates to 14,500 psi/s (1,000 bar/s) at p _{nom}						
Permitted pressure change rate:		≤ 14,500 psi/s (≤ 1,000 bar/s)						
Accuracy:		≤ ±1 % full scale (FS) at room temperature, ±0.5 % BFSL						
Long term stability:		±0.3 % of full scale (FS) per year						
Repeatability: ²⁾		±0.1 % FS						
Temperature error ³⁾ :		≤ ±0.04 % of full scale (FS) / °C						
Compensated temperature range:		32 °F ... +158 °F (0 °C ... +70 °C)						
Temperature range ambient:		-22 °F ... +212 °F (-30 °C ... +100 °C)						
Temperature range media:		with NBR (BunaN) seal: -22 °F ... +212 °F (-30 °C ... +100 °C)						
		with EPDM seal: -22 °F ... +257 °F (-30 °C ... +125 °C)						
		with FKM (Viton®) seal: -4 °F ... +257 °F (-20 °C ... +125 °C)						
		with TPE seal: -22 °F ... +230 °F (-30 °C ... +110 °C)						
Wetted parts material	Housing:	Stainless steel AISI 303 (1.4305)						
	Measuring cell:	Ceramic						
	Seal material:	NBR (BunaN), EPDM, FKM (Viton®) ³⁾ or TPE						
Insulation resistance:		> 100 MΩ (35 VDC)						
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. 2.82 oz / 80 g (DIN EN 175301 approx. 3.88 oz /110 g)						

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

²⁾ Within the compensated temperature range

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

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hex 24
Performance

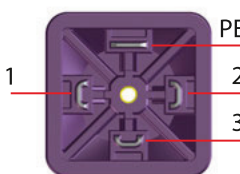
0601 / 0602

Electrical connectors and threads



hex 24

DIN EN 17530-803-A



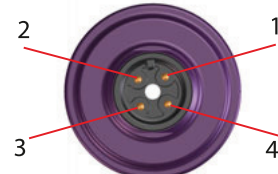
Pin	0601	0602
1	U_{V+}	U_{V+}
2	Gnd	I_{out}
3	U_{out}	nc
PE		

IP65

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

Connection code: 013

M12-DINEN61076-2-101 A



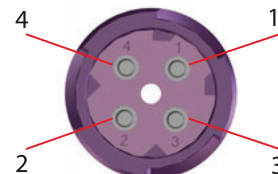
Pin	0601	0602
1	U_{V+}	U_{V+}
2	U_{out}	nc
3	Gnd	I_{out}
4	nc	nc

IP67

x ~ 54 mm

Connection code: 002

ISO 15170 - A1 - 4.1



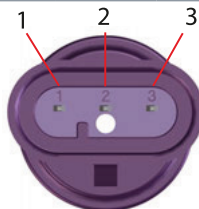
Pin	0601	0602
1	U_{V+}	U_{V+}
2	Gnd	I_{out}
3	U_{out}	nc
4	nc	nc

IP67, IP6K9K

x ~ 56 mm

Connection code: 015

AMP Superseal 1.5 ®



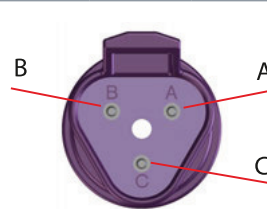
Pin	0601	0602
1	U_{out}	nc
2	Gnd	I_{out}
3	U_{V+}	U_{V+}

IP67

x ~ 61 mm

Connection code: 007

Deutsch DT04 - 3P

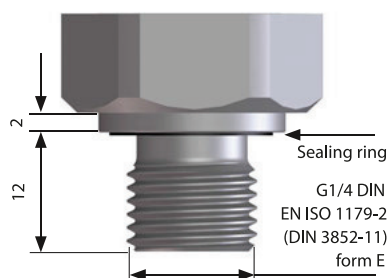


Pin	0601	0602
A	U_{V+}	U_{V+}
B	Gnd	I_{out}
C	U_{out}	nc

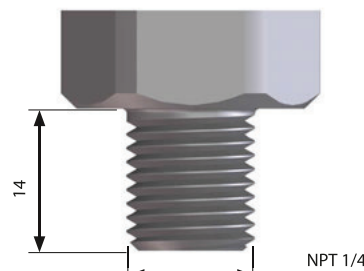
IP67, IP6K9K

x ~ 61 mm

Connection code: 014



Thread code: 41



Thread code: 09

0601 / 0602

Order matrix for pressure transducers

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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 (58 psi)	8 bar (115 psi)	0 – 2 bar (approx. 29 psi)	200
10 bar (145 psi)	20 bar (290 psi)	0 – 4 bar (approx. 58 psi)	400
20 bar (290 psi)	35 bar (500 psi)	0 – 10 bar (approx. 145 psi)	101
40 bar (580 psi)	60 bar (870 psi)	0 – 16 bar (approx. 230 psi)	161
100 bar (1,450 psi)	140 bar (2,000 psi)	0 – 40 bar (approx. 580 psi)	401
150 bar (2,175 psi)	300 bar (4,350 psi)	0 – 100 bar (approx. 1,450 psi)	102
375 bar (5,439 psi)	500 bar (7,250 psi)	0 – 250 bar (approx. 3,625 psi)	252



Pressure connection

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



Seal material – Application areas

NBR (BunaN)	Hydraulic/machine oil, heating oil, air, nitrogen, water, etc	1
EPDM	Brake fluid, water, acetylene, hydrogen, oxygen etc.	2
FKM (Viton®) ²⁾	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
M 12x1 - 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



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 transducer.

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



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Mating plugs

For requirements at short notice and for realising custom solutions

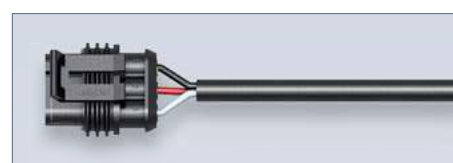
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Accessories



Deutsch DT06-3S (for DT04-3P) 3 x 0,5 mm ² PUR cable (2 m), IP67	Suitable for connection code 010 Deutsch DT04-3P	Article number: 1-1-36-653-160
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TE AMP Superseal 1.5°, 3-pin 3 x 0,5 mm ² Radox cable (2 m), IP65	Suitable for connection code 007 AMP Superseal 1.5°	Article number: 1-1-32-653-158
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M12 DIN EN 61076-2-LF, 4-pin 4 x 0,34 mm ² PUR cable (2 m), IP65	Suitable for connection code 002 M12 DIN EN 61076-2-101 A	Article number: 1-1-00-653-162
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Socket device M 12x1 DIN EN 61076-2-101 A straight, 4-pin Terminals for wire diameter 0.75 mm ² (AWG 18)	Suitable for connection code 002 M 12x1 DIN EN 61076-2-101-LF	Article number: 1-6-00-652-016
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Coupler socket device M 12x1 DIN EN 61076-2-101 A angled, 4-pin Terminals for wire diameter 0.75 mm ² (AWG 18)	Suitable for connection code 002 M 12x1 DIN EN 61076-2-101-LF	Article number: 1-6-00-652-017
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Pressure transmitters, Performance series

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- Housing made of stainless steel (1.4305), others on request
- 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
- Very attractively priced electronic pressure transmitters
- Available as 'plasma cleaned for oxygen applications'¹⁾