



Main features

- 0 ... 25 bar up to 0 ... 1000 bar
- Robust stainless steel housing
- Compact design
- Media temperature up to 150°C

Applications

- Mobile hydraulic applications
- Heavy vehicles

Main characteristics

Measuring range	0 ... 25 bar up to 0 ... 1000 bar
Long term stability	$\leq \pm 0.2\%$ FS / Year
Accuracy (20 °C) <small>(Includes linearity, hysteresis, repeatability, error of span and zero point according limit point adjustment)</small>	$\leq \pm 0.5\%$ FS

Technical specifications

Measuring principle	Resistive thin film
Measuring ranges	0 ... 25 bar up to 0 ... 1000 bar
Type of pressure	Relative
Accuracy (20 °C) <small>(Includes linearity, hysteresis, repeatability, error of span and zero point according limit point adjustment)</small>	$\leq \pm 0.5\%$ FS
Total error	
0 ... + 80°C	$\leq \pm 1.0\%$ FS
-25 ... +100°C	$\leq \pm 1.5\%$ FS
-40 ... +125°C	$\leq \pm 2.5\%$ FS
Long term stability	$\leq \pm 0.2\%$ FS / Year
Response time (10 ... 90%)	≤ 1 ms

Environment

Temperature	
Storage	-40 ... + 125°C
Compensated range	0 ... + 80°C
Medium	-40 ... + 150°C
Ambient	-40 ... + 125°C
Protection rating	IP67 (EN 60529)
Vibration IEC60068-2-6	20 g
Shock IEC60068-2-27	500 g

Electrical specification

Output signal /	4 ... 20 mA / 9 ... 36 VDC
Power supply	1 ... 6 V / 9 ... 36 VDC
	0 ... 5 V / 9 ... 36 VDC
	0 ... 10 V / 14 ... 36 VDC
	0.5 ... 4.5 V (10 ... 90% VDC) / 5 VDC ratiometric

Material

Process connection	SS 1.4548 AISI 630
Housing	SS 1.4301 AISI 304
Diaphragm	SS 1.4548 AISI 630
Sealing	FKM

Approvals

CE conformity	EMC directive 2004/108/CE in accordance with EN 61000-6-2, EN 61000-6-3
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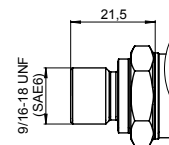
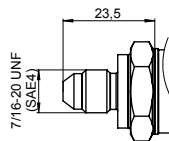
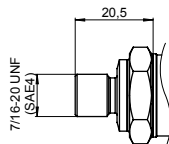
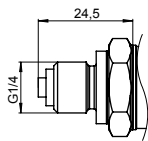
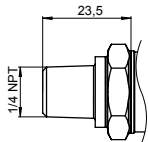
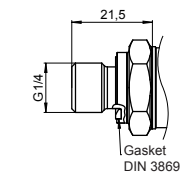
E1 accreditation

Measuring ranges and overpressure safety

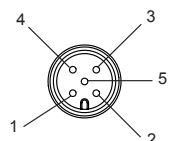
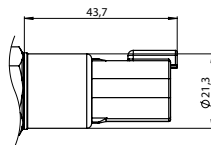
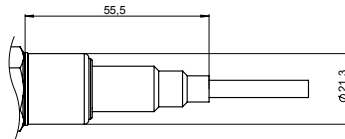
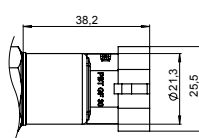
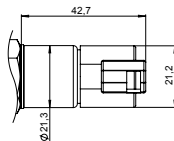
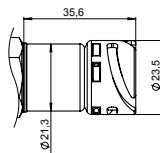
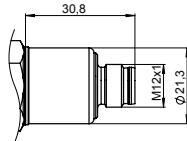
	Pressure in bar					
Pressure range	0 ... 25	0 ... 60	0 ... 100	0 ... 160 0 ... 250	0 ... 400 0 ... 600	0 ... 1000
Over pressure	40	100	200	500	800	1200
Burst pressure	60	500	1000	2500	4000	>4000

Dimensions and electrical connections

Process connections



Electrical connections



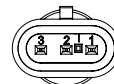
Connector M12, 5 pin, IP67



Bayonet connector DIN 72585, IP67



DT04-3P, IP67



AMP superseal 1,5, IP67

Cable output



DT04-4P

Pin assignment :
VDC = 1, Signal = 3 (2 wire-technique)
VDC = 1, GND = 3, Signal = 4
(3 wire-technique)
Do not connect other PIN's

Pin assignment :
VDC = 1, Signal = 2 (2 wire-technique)
VDC = 1, GND = 2, Signal = 3
(3 wire-technique)
Do not connect other PIN's

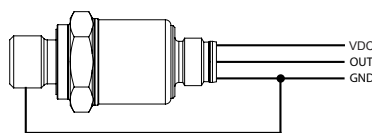
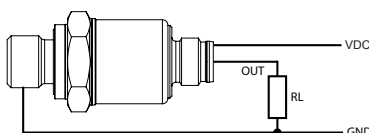
Pin assignment :
VDC = A, Signal = C (2 wire-technique)
VDC = A, Signal = B, GND = C
(3 wire-technique)

Pin assignment :
VDC = 3, Signal = 1 (2 wire-technique)
VDC = 3, GND = 1, Signal = 2
(3 wire-technique)

Pin assignment :
VDC = BN, Signal = BU (2 wire-technique)
VDC = BN, GND = BU, Signal = BK
(3 wire-technique)

Pin assignment :
VDC = 1, Signal = 2 (2 wire-technique)
VDC = 1, Signal = 2, GND = 3
(3 wire-technique)
Do not connect other PIN's

Recommended terminal layout



Ordering details PBM4

	P	B	M	4	-	1	.	3	.	x	.	xx	.	R	.	xx	.	xx	.	xx	.	6	3
Model	Compact industrial pressure transmitter for hydraulic application																						
	PBM4																						
Housing material	Stainless steel 1.4301 AISI 304																						
	1																						
Accuracy	0.5% FS																						
	3																						
Pressure unit	Bar																						
	B																						
	Psi																						
	H																						
Pressure range and unit	0 ... 25 bar																						
	26																						
	0 ... 60 bar																						
	29																						
	0 ... 100 bar																						
	31																						
	0 ... 160 bar																						
	33																						
	0 ... 250 bar																						
	35																						
	0 ... 400 bar																						
	38																						
	0 ... 600 bar																						
	39																						
	0 ... 1000 bar																						
	41																						
	0 ... 400 psi																						
	26																						
	0 ... 1000 psi																						
	30																						
	0 ... 1500 psi																						
	31																						
	0 ... 3000 psi																						
	34																						
	0 ... 6000 psi																						
	38																						
	0 ... 9000 psi																						
	39																						
	0 ... 15000 psi																						
	41																						
Kind of pressure	Relative																						
	R																						
Output signal	4...20 mA																						
	A1																						
	0...10 V																						
	A2																						
	1...6 V																						
	A8																						
	0...5 V																						
	A4																						
	0.5...4.5 V ratiometric																						
	A5																						
Output connection	M12, 5 pins																						
	15																						
	Cable (1 m)																						
	52																						
	Bayonet DIN 72585																						
	85																						
	AMP Superseal 1.5																						
	86																						
	DT04, 4 pins																						
	87																						
	DT04, 3 pins																						
	88																						
Process connection	G1/4 EN 837																						
	02																						
	1/4 NPT																						
	04																						
	G1/4 DIN 3852																						
	06																						
	G1/4 DIN 3852 with Ø 0.6 mm pressure channel																						
	26																						
	9/16-18 UNF with o-ring (SAE 6)																						
	36																						
	7/16-20 UNF with cone (SAE 4)																						
	38																						
	7/16-20 UNF with o-ring (SAE 4)																						
	39																						
Process connection material	Stainless steel 1.4548 / AISI 630																						
	6																						
Sealing	Without																						
	0																						
	FKM (Viton®)																						
	3																						