

Flange pressure transmitters

ATM/F



Version: 07.01.2016

Technical Specifications

Pressure measuring range (bar)

	0.1 ... 0.5	> 0.5 ... 2	> 2 ... 25
Overpressure	3 bar	3 x FS (≥ 3 bar)	3 x FS
Berstdruck	> 200 bar	> 200 bar	> 200 bar
Accuracy, (1), (\pm % FS)	$\leq 0.5 / \leq 0.25$	$\leq 0.5 / \leq 0.25 / \leq 0.1$	$\leq 0.5 / \leq 0.25 / \leq 0.1$
Thermal shift, (\pm % FS/$^{\circ}$C)			
Zero point 0 ... 70 $^{\circ}$ C	≤ 0.06	≤ 0.03	≤ 0.015
Zero point -25 ... 85 $^{\circ}$ C	≤ 0.08	≤ 0.04	≤ 0.02
Span 0 ... 70 $^{\circ}$ C	≤ 0.015	≤ 0.015	≤ 0.015
Span -25 ... 85 $^{\circ}$ C	≤ 0.02	≤ 0.02	≤ 0.02
Long term stability, (2)	< 0.5% FS / < 4 mbar	< 0.2% FS / < 4 mbar	< 0.1% FS / < 0.2% FS

(1) Zero based accuracy according to DIN-16086, incl. hysteresis and repeatability at ambient temperature

(2) 1 year (typ. / max.)

Temperature range

Operating temperature	-25 ... 85 $^{\circ}$ C
Process temperatur	-25 ... 100 $^{\circ}$ C
Storage temperatur	-25 ... 85 $^{\circ}$ C

Electrical specifications

	4 ... 20 mA	0 ... 20 mA	0 ... 5 V / 0 ... 10 V
Power supply	9 ... 33 VDC	9 ... 33 VDC	15 ... 30 VDC
Supply influence	< 0.1% FS	< 0.1% FS	< 0.1% FS
Current consumption			3 mA
Circuit diagram			
Load resistance			$R_L > 10k\Omega$
Load influence	< 0.1% FS	< 0.1% FS	< 0.1% FS

Qualifications

	Description	Level	Typical interferences
EN 61000-4-2	Electrostatic discharge	4 kV contact 8 kV air	
EN 61000-4-3	Irradiated RF	10V/m (0.08 ... 1 GHz)	Radio sets, wireless phones
EN 61000-4-4	Transients (burst)	2 kV	Motors, valves
EN 61000-4-5	Surge	10 kA (8 / 20 μ s), (1)	Overvoltage
EN 61000-4-6	Conducted RF	10 V (0.15...80 MHz)	Frequency converters

(1) Only with optional overvoltage protection

Physical specifications

Materials	
Transducer	Stainless steel (316L / 1.4435)
Housing	Stainless steel (316L / 1.4404)
Cable	PUR, FEP, PE

Accessories

Overview

10.00.0091	Accessories overview
HART001	Cable Socket Connector

Additional documents

Operating and safety instructions

	Article number
10.88.0092	DMM029

Ordering information

		X. XXXX.	XXXX.	XX.	XXX
Type					
	ATM/F	25			
Pressure type					
	Gauge	1			
	Absolute pressure (vacuum)	2			
	Sealed gauge	3			
Pressure measuring range					
	100 mbar ... 25 bar	XX			
Process connection					
	Milk flange DN 25 - DIN-11851 (Fig. 1), (1)	30			
	Milk flange DN 40 - DIN-11851 (Fig. 2), (1)	31			
	Milk flange DN 50 - DIN-11851 (1)	32			
	Clamp 1", DN 25 (Fig. 3)	40			
	Clamp 1 1/2", DN 25 (Fig. 3)	41			
	DIN flange DN 25	45			
	DIN flange DN 40	46			
	DIN-flange DN 50	47			
	Customized	99			
Electrical connection					
	DIN-43650, with metal threaded part, demountable, IP 65 (Fig. 10), (2)		01		
	Binder 723, 5 pins		03		
	Binder 723, 5 pins, demountable, IP 67 (Fig. 12), (2)		43		
	MIL C26482, 10-6, IP 40 (Fig. 13), (2)		06		
	Lumberg RSF4, 4 pins (Fig. 15), (2)		07		
	Customized		99		
Output signal					
	4 ... 20 mA		05		
	0 ... 20 mA		00		
	0 ... 5 VDC		46		
	0 ... 10 VDC		47		
	4 ... 20 mA with overvoltage protection		08		
	0 ... 10 VDC with overvoltage protection		49		
	Customized		99		
Accuracy					
	≤ ± 0.5 % FS			0	
	≤ ± 0.25 % FS			1	
	≤ ± 0.1 % FS			2	
Temperature range					
	0 ... 70°C compensated (allowed process temperature: -25 ... 100°C)			0	
	-25 ... 85°C compensated (allowed process temperature: -25 ... 100°C)			1	
	-25 ... 85°C compensated (allowed process temperature: -25 ... 100°C) with cooling fins			2	
	Customized			9	
Option 1					
	Special oil filling: Anderol Food (for food applications)				G
	Special oil filling: AS100 (suitable in media temp. -55 ... 150°C)				J
	Special oil filling: PAO4 (silicone free)				Q

Option 2					
	Electronics packed in gel: Gauge pressure				C
	Electronics packed in gel: Absolute pressure				D
Option 3					
	Seals: Viton (standard)				U

- (1) Nut included
- (2) Cable socket connector not included
- (3) Please specify the required cable length and medium
- (4) Suitable for drinking water (food approved)
- (5) For operating temperature > 50°C, PE or FEP cable must be used
- (6) min. Medium temperature -25 ° C
- (7) Standard, no special cleaning. Special cleaning must be requested.

Technical drawings

Pressure connection

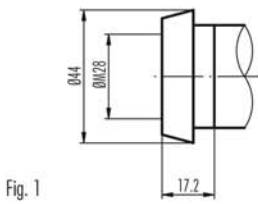
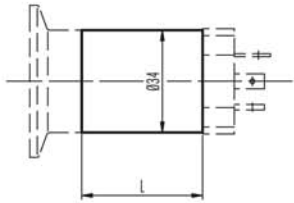


Fig. 1

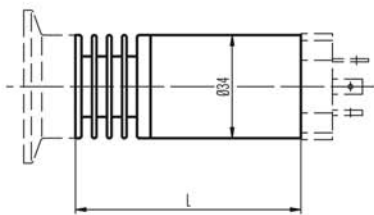
Dimensions

Version for media temperature up to 100°C



L = 90 mm for version with surge (lightning) protection
L = 40 mm for all other versions

Version for media temperature >100°C up to 150°C



L = 125 mm for version with surge (lightning) protection
L = 75 mm for all other versions

Electrical connections

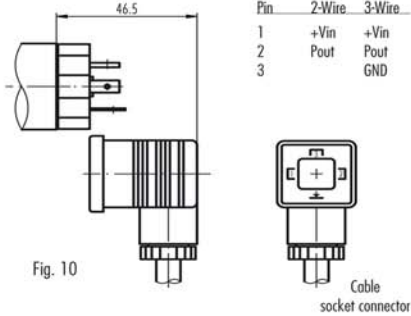


Fig. 10

Pin	2-Wire	3-Wire
1	+Vin	+Vin
2	Pout	Pout
3		GND

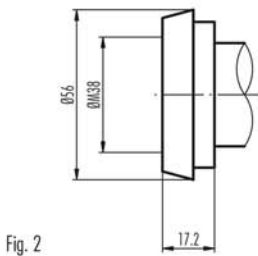


Fig. 2

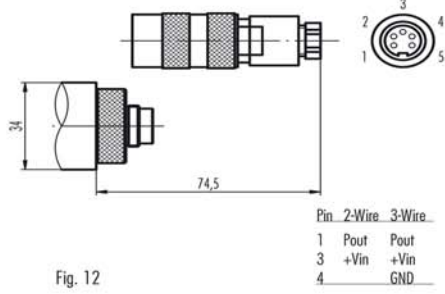


Fig. 12

Pin	2-Wire	3-Wire
1	Pout	Pout
3	+Vin	+Vin
4		GND

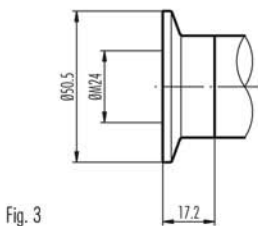


Fig. 3

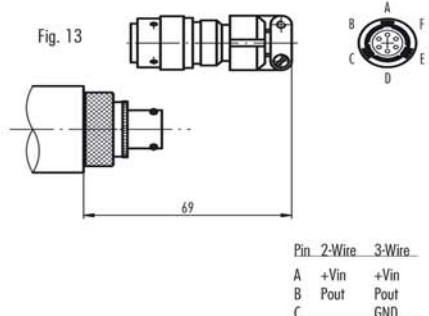


Fig. 13

Pin	2-Wire	3-Wire
A	+Vin	+Vin
B	Pout	Pout
C		GND

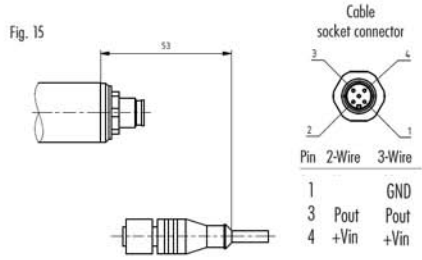
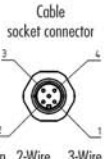


Fig. 15

Pin	2-Wire	3-Wire
1		GND
3	Pout	Pout
4	+Vin	+Vin



Specifications may change without notice.

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