



# Technical Specifications

## Pressure measuring range (mH2O)

	1 ... 5, (1)	> 5 ... 20	> 20 ... 250
<b>Overpressure</b>	3 bar	3 x FS ( $\geq 3$ bar)	3 x FS
<b>Burst pressure</b>	> 200 bar	> 200 bar	> 200 bar
<b>Accuracy, (2), (<math>\pm</math> % FS)</b>	$\leq 0.5 / \leq 0.25$	$\leq 0.5 / \leq 0.25$	$\leq 0.5 / \leq 0.25$
<b>Thermal shift, (<math>\pm</math> % FS/<math>^{\circ}</math>C)</b>			
Zero point 0...70 $^{\circ}$ C	$\leq 0.06$	$\leq 0.03$	$\leq 0.015$
Zero point -25...85 $^{\circ}$ C	$\leq 0.08$	$\leq 0.04$	$\leq 0.02$
Span 0...70 $^{\circ}$ C	$\leq 0.015$	$\leq 0.015$	$\leq 0.015$
Span -25...85 $^{\circ}$ C	$\leq 0.02$	$\leq 0.02$	$\leq 0.02$
<b>Response time, (typ.)</b>	< 1ms / 10...90% FS	< 1ms / 10...90% FS	< 1ms / 10...90% FS
<b>Long term stability, (3)</b>	< 0.5% FS / < 4 mbar	< 0.2% FS / < 4 mbar	< 0.1% FS / < 0.2% FS

(1) 0.5 mH2O on request

(2) Zero based accuracy according to DIN16086, incl. hysteresis and repeatability at ambient temperature

(3) 1 year (typ. / max.), the long term stability can be improved by ageing (burn-in) the sensor

## Typical output signal (mH2O)

	1 ... 2	> 2 ... 4	> 4 ... 10
<b>Output signal, (1), (mV)</b>	15	25	35

	> 10 ... 20	> 20 ... 250
<b>Output signal, (1), (mV)</b>	50	100

(1) At nominal pressure, 10 V DC

## Electrical specifications

<b>Circuit diagram</b>	
<b>Input impedance</b>	> 10 kOhm
<b>Bridge resistance, (typ.)</b>	3 kOhm
<b>Supply voltage, (typ. / max.)</b>	10 / 15 V DC

## ATEX Approval

<b>Certificate, (1)</b>	SEV 04 ATEX 0149		
<b>Gas</b>	II 1G Ex ia IIC T3 / T4 / T6	EN 60079-0 / -11 / -26	
<b>Dust</b>	II 1D Ex iaD 20 IP6x Tx $^{\circ}$ C	EN 61241-0 / -11	
<b>Temperature class, (2)</b>	T6	T4	T3
Ambient temperature	-5...55 $^{\circ}$ C	-5...80 $^{\circ}$ C	-5...80 $^{\circ}$ C
Process temperature	-5...55 $^{\circ}$ C	-5...80 $^{\circ}$ C	-5...80 $^{\circ}$ C
<b>Maximum values of the connection circuit</b>	20 V / 300 mA / 1.2 W		

(1) For detailed Ex specifications see certificate and operating an safety instructions

(2) Without any information about temperature class the transmitter will be delivered for T4

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## Physical specifications

<b>Materials</b>	
Transducer	Stainless steel (316L / 1.4435), titanium (Gr. 2), (1)
Housing	Stainless steel (316L / 1.4404), titanium (Gr. 2)
Seals	Viton (Standard), EPDM, Kalrez
Cable	PUR, PTFE

(1) Hastelloy (C-276) on request

## Equipment

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### Overview

<b>10.00.0091</b>	Accessories overview

## Additional documents

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### Operating and safety instructions

	Article number
<b>10.88.0369</b>	DMM030

## Ordering information

		X. XXXX.	XXXX.	XX.	XXX
<b>Type</b>					
	TM/N/Ex	19			
<b>Pressure type</b>					
	Gauge	1			
	Absolute (vacuum)	2			
<b>Pressure measuring range</b>					
	Any pressure measuring ranges between 0...1 mH <sub>2</sub> O and 0...250 mH <sub>2</sub> O available, (1), (2)	XX			
<b>Process connection</b>					
	Closed, (Fig. 1)	55			
	Open, (Fig. 2)	56			
	G 1/4 M, (Fig. 3)	11			
	G 1/2 M, (Fig. 3)	13			
	Customized connections available	XX			
<b>Electrical connection</b>					
	Connectable version, IP 68, (Fig. 4), (3)		XX		
	PE cable, IP 68, (4), (5)		13		
	PUR cable, IP 68, (4), (6)		15		
	PTFE cable, IP 68, (4)		21		
<b>Output signal</b>					
	0...mV (specified by the customer)		99		
<b>Accuracy</b>					
	≤ ± 0.5 % FS			0	
	≤ ± 0.25 % FS (on request)			1	
<b>Temperature range</b>					
	T6 (Ta: -5...55 °C) -5...50 °C compensated (allowed process temperature: -5...50°C)			3	
	T4 (Ta: -5...80 °C) -5...80 °C compensated (allowed process temperature: -5...80°C)			5	
<b>Option 1</b>					
	Special oil filling: ASEOL Food (for food applications)				G
	Special oil filling: Halocarbon (for oxygen applications)				H
<b>Option 2</b>					
<b>Option 3</b>					
	Ballast weight				B
	Version titanium				K
	Seals: Viton (standard)				U
	Seals: EPDM				S
	Seals: Kalrez				T
	Aging				Z

(1) 0.5 mH<sub>2</sub>O on request

(2) mH<sub>2</sub>O, mWS, mWC etc. available

(3) Connector with required cable has to be ordered separately (KART100)

(4) Please specify the required cable length and medium

(5) Suitable for drinking water (food approved)

(6) For operating temperature > 50°C, PE or PTFE cable must be used

# Technical drawings

## Dimensions

Fig. 1: Closed version

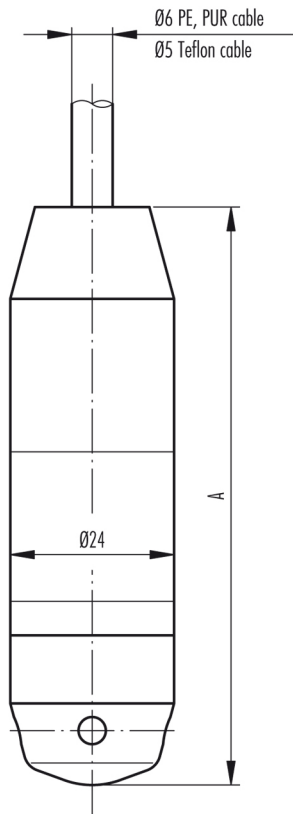


Fig. 2: Open version

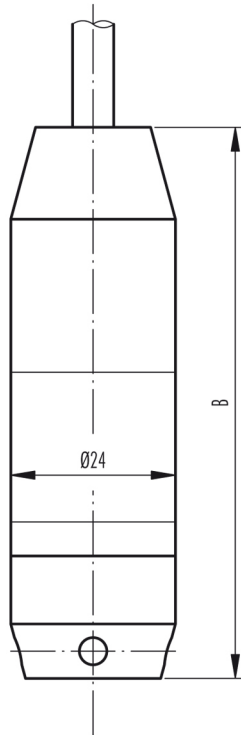


Fig. 3: with process connection

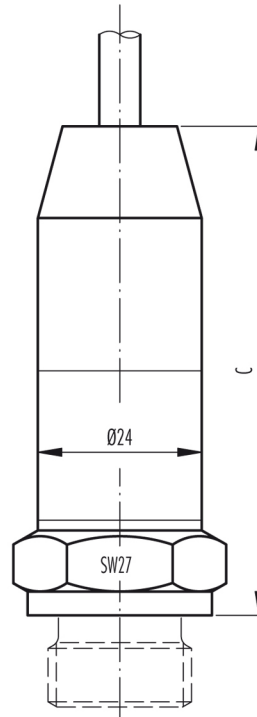
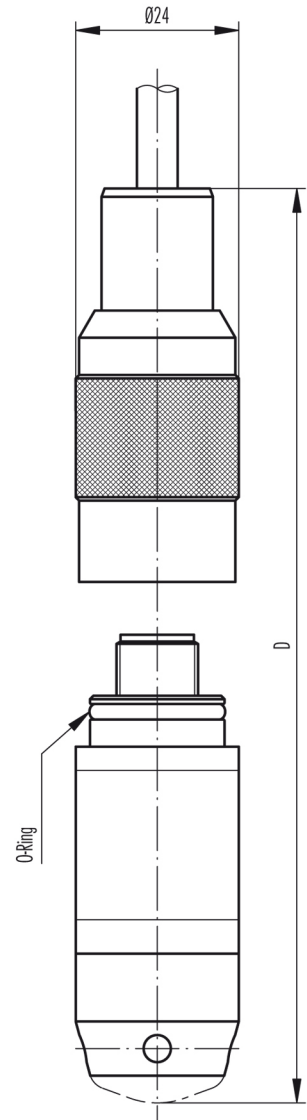


Fig. 4: Electrical connection, connectable



	A [mm]	B [mm]	C [mm]	D [mm]	Weight [g]
without ballast weight	85	81	on request	on request	approx. 200
with ballast weight	172	168	on request	on request	approx. 450

Colour	
white	+Vin
yellow	GND
brown	+Out
green	-Out

Specifications may change without notice.

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