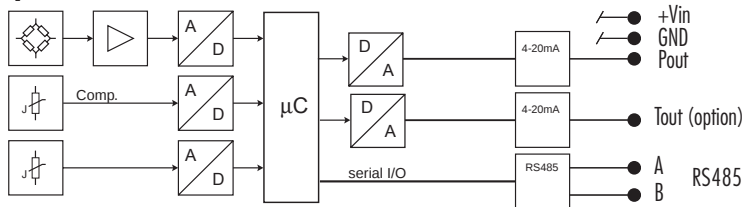


Specifications



Pressure range [bar]		0.1 ... 0.5	> 0.5 ... 2	> 2 ... 25
Overpressure		3 bar	3 x FS (min. 3 bar)	3 x FS
Burst pressure		> 200 bar	> 200 bar	> 200 bar
Thermal shift	[± % FS/°C]			
	Zero			
	0...70°C	0.06	0.03	0.015
	-25...85°C	0.08	0.04	0.02
Span	0...70°C	0.015	0.015	0.015
	-25...85°C	0.02	0.02	0.02
Active compensated (Z+S)	-10...50°C (typ./max.)	0.01/0.015	0.01/0.015	0.01/0.015
	-25...85°C (typ./max.)	0.015/0.02	0.015/0.02	0.015/0.02
Accuracy¹⁾		≤ ± 0.25 % FS ≤ ± 0.1 % FS, ≥ 500 mbar ≤ ± 0.1 % FS, active compensated (option)		

¹⁾ Zero based non-conformity according to DIN 16086, including hysteresis and repeatability

Electrical specifications

Supply voltage	Range:	9...30 V DC
	Supply voltage influence:	< 0.1 % FS
Output	Standard:	RS485 (pressure) and 4...20mA (pressure)
	Active compensated:	RS485 (pressure and temperature) and 4...20mA (pressure and temperature)
	Resolution:	≤ ± 0.025 % (analog output), ± 0.01 % (digital output)
	Output at 4 mA:	adjustable between -5% FS... 105% FS
	Output at 20 mA:	adjustable between -5% FS... 105% FS
	Span:	adjustable between 25% FS... 110% FS, min. 50 mbar
	Adjustable time delay:	100 ms, 1 s, 10 s, (standard ca. 30 ms)
Load resistance	Temperature output (precision):	± 1°C
		$R_L = U_B [V] \cdot 6V / 0.02A$, 1 kOhm max.
Load resistance influence		< 0.1 % FS
Protocol		MODBUS
Interface³⁾		VART199 incl. PC-Program (VART244)

Materials

Process connection, Diaphragm, Housing Stainless steel 1.4435 (316L) other materials (e.g. titanium) on request
Seals (standard) Viton (other materials see ordering code)

Electromagnetic compatibility

Standard		Level	Typical interferences
Emission:			
EN 61000-6-3 EN 55022	Generic emission standard		
	Emission, class B		
Immunity:			
EN 61000-6-2 EN 61000-4-2 EN 61000-4-3 EN 61000-4-3 EN 61000-4-4 EN 61000-4-6 EN 61000-4-5	Generic immunity		
	Electrostatic discharge	4kV contact, 8kV air	
	Radiated electro-magnetic field	10V/m, 80-1000 MHz, 80% AM 1kHz	Cellular phones, radio sets
	Radiated electro-magnetic field (GSM)	10V/m, 950 MHz, 200Hz on/off	Digital portable phones
	Fast transients (burst)	2 kV	Motors, valves
	Conducted radio-frequency	10V, 0.15-80 MHz, 80% AM 1kHz	Cellular phones, radio sets
	Surge	10 kA (8/20 ms) ²⁾	Lightning strikes

²⁾ Only with optional surge (lightning) protection

³⁾ Interface not included



The pressure transmitter PTM fulfils the emission and immunity requirements described in the EMC directive IEC 61000.

Dimensions

Fig. 1: Closed version

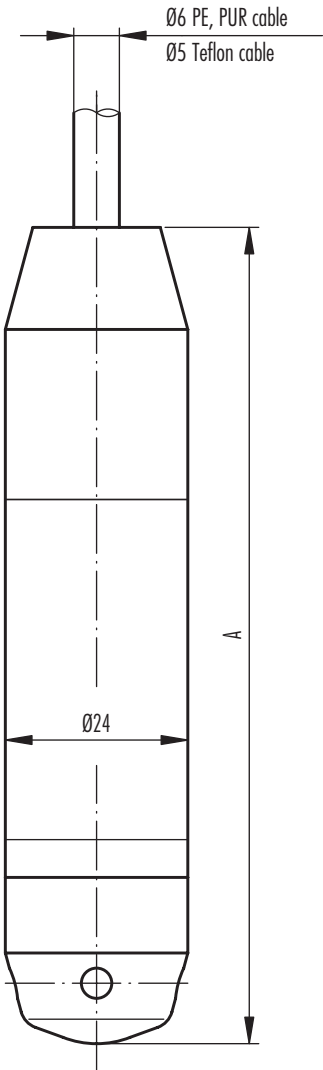


Fig. 2: Open version

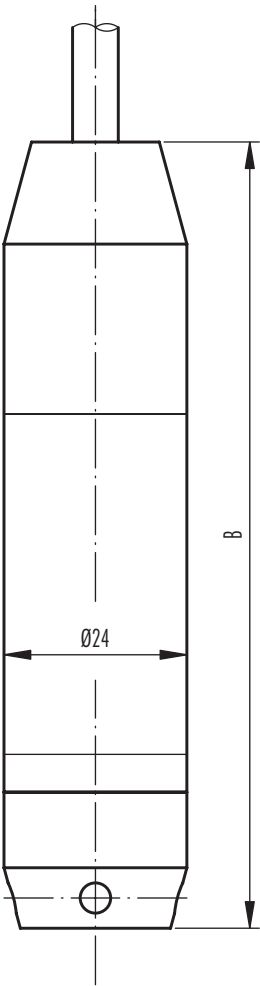
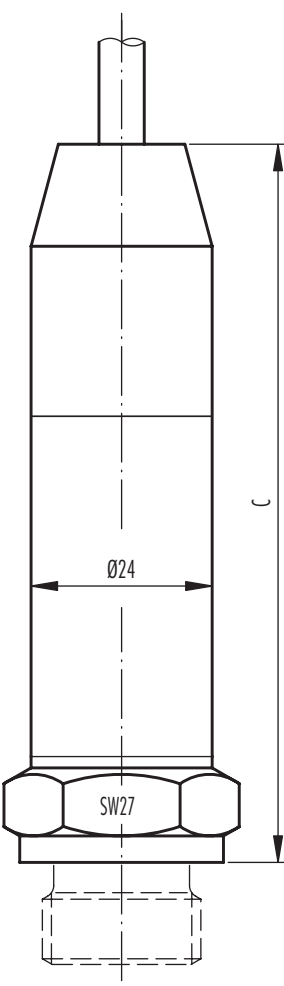


Fig. 3: with process connection



Standard

	A [mm]	B [mm]	C [mm]	D [mm]	Weight [g]
without ballast weight	118	114	on request*	on request*	ca. 200
with ballast weight	205	201	on request*	on request*	ca. 460

*C: Depending on process connection

*D: Depending on process connection or version

Variant with overvoltage protection

	A [mm]	B [mm]	C [mm]	D [mm]	Weight [g]
without ballast weight	248	244	on request*	on request*	ca. 280
with ballast weight	335	331	on request*	on request*	ca. 540

*C: Depending on process connection

*D: Depending on process connection or version

Colour	RS485
white	+Vin
yellow	GND
brown	Pout
rosa	Tout
green	A
grau	B

Specifications may change without notice.

DED035A