

Model VMEPT1130 series

OEM Pressure transmitter Ceramic

pressure sensor

For aggressive media application



Features

- Measuring ranges from 200mbar to 50bar
- Gauge pressure, Absolute pressure
- Accuracy: $\pm 0.5\% \text{FSO}(\text{Typ.})$, $\pm 1.0\% \text{FSO}(\text{Max.})$
- Calibrated and temperature compensated
- Ceramic pressure sensor
- Output 4...20mA, 1...5 VDC, 0.5...4.5 VDC etc.

Application

- Energy industry
- Medical technology
- Environmental industry

Technical data

Performance	
Accuracy*	$\pm 0.5\% \text{FS@}25^\circ\text{C}(\text{Typ.})$ $\pm 1.0\% \text{FS@}25^\circ\text{C}(\text{Max.})$ ¹⁾
Operating Temperature Range	0 to 50°C
Compensated Temperature Range	0 to 50°C
Overpressure	150%FS
Vibration	10 g RMS(20 to 2000Hz)
Shock	100 g(11ms)
Cycles	10x10 ⁵
Long Term Stability	$\pm 0.3\% \text{FS}$

Electrical @25°C	
Output signal / Supply	2-wire 4...20 mA / $V_s = 10... 30 \text{ VDC}$
	3-wire 1...5 VDC / $V_s = 10... 30 \text{ VDC}$
	3-wire 0...5 VDC / $V_s = 10... 30 \text{ VDC}$
	3-wire 0...10 VDC / $V_s = 12... 30 \text{ VDC}$
	3-wire 0.5...4.5 VDC / $V_s = 8... 30 \text{ VDC}$
	3-wire 0.5...4.5 VDC ratiometric / $V_s = 5 \text{ V} \pm 0.1 \text{ VDC}$
	4-wire RS485 Modbus RTU / $V_s = 12... 30 \text{ VDC}$
Insulation Resistance	100 M Ω @100VDC
EMC Test	IEC61000-4-2/IEC61000-4-3
Reverse polarity protection	No damage – no function

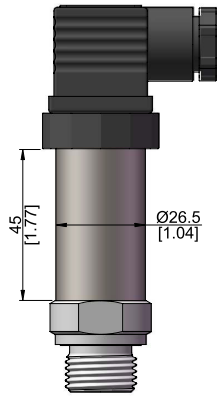
Physical Specifications	
Housing	SUS304 stainless steel
Diaphragm	Ceramic (96% Al ₂ O ₃)
Pressure port material	PVDF,PP,PTFE
Protection	IP65
Sensor sealing	FKM/FFKM
Weight	~150g

¹⁾ Linearity (best straight line) + Hysteresis + Repeatability

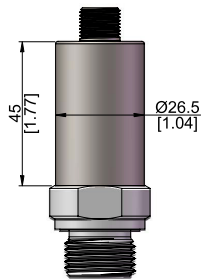


Dimensions in mm [in]

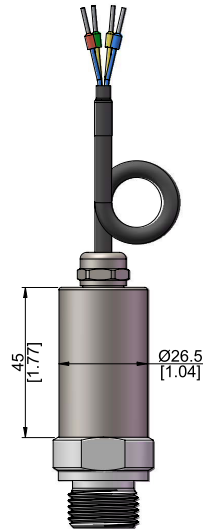
Code E1
DIN175301-803A/DIN43650/IP65



Code E2
Circular connector M12x1(4-pin)/IP66



Code E4
Cable outlet,1.5m/IP67



For D1~D2 output: Length of housing increases by 20 mm

Electrical connections

DIN175301-803A /DIN43650		4...20 mA	0...10 VDC 0...5VDC 0.5...4.5VDC	RS485
		2-wire	3-wire	4-wire
	+Vcc	1	1	1
	OUT	2	3	-
	GND	-	2	2
	RS485A	-	-	3
	RS485B	-	-	⊥

Circular connector M12x1(4-pin)		4...20 mA	0...10 VDC 0...5VDC 0.5...4.5VDC	RS485
		2-wire	3-wire	4-wire
	+Vcc	1	1	1
	OUT	3	4	-
	GND	-	3	3
	RS485A	-	-	2
	RS485B	-	-	4

Cable outlet		4...20 mA	0...10 VDC 0...5VDC 0.5...4.5VDC	RS485
		2-wire	3-wire	4-wire
	+Vcc	Red	Red	Red
	OUT	Green/Black	Yellow	-
	GND	-	Green	Green
	RS485A	-	-	Yellow
	RS485B	-	-	Blue

Range code

Code	Nominal pressure [bar]	Gauge	Sealed gauge	Absolute
00	0...0.2	✓		
01	0...0.35	✓		
02	0...0.6	✓		✓
03	0...1	✓		✓
04	0...1.6	✓		✓
05	0...2.5	✓		✓
06	0...4	✓		✓
07	0...10	✓		✓
08	0...16	✓		✓
09	0...20	✓		✓

Code	Nominal pressure [bar]	Gauge	Sealed gauge	Absolute
19	0...25	✓		✓
20	0...35	✓		✓
21	0...50	✓		✓
23	-0.2...+0.2	✓		
24	-1...0	✓		
25	-1...9	✓		
26	-1...16	✓		
27	-1...30	✓		
28	Custom	✓		

Ordering code

Model	Range	Type	Output/Power supply	Electrical Connection
VMEPT1130	Code²⁾	G Gauge	S1 4...20mA / V _S =10...30VDC	E1 DIN175301-803A/DIN43650/IP65
		A Absolute	S2 DC 1...5V / V _S =10...30VDC	E2 Circular connector M12x1(4-pin)/IP66
			S3 DC 0...5V / V _S =10...30VDC	E4 Cable outlet,1.5m/IP67
			S4 DC 0.5...4.5V / V _S =8...30VDC	
			S5 DC 0.5...4.5V ratiometric / V _S =5 V±0.1 VDC	
			S8 DC 0...10V / V _S =12...30VDC	
			D1 4...20mA+HART / V _S =12... 30VDC	
			D2 RS485 Modbus RTU / V _S =12... 30VDC	

Pressure Port			Accuracy		Pressure port material		Sensor sealing
01	G¼ A male	16	R½ male	A2 0.25%FS	M1	PVDF(Standard)	F FKM(Standard)
02	G½ A male	19	M20x1.5 male	A3 0.5%FS (Standard)	M2	PP	K FFKM
03	G¾ A male	20	G¼ female	A4 1.0%FS	M3	PTFE	
05	G¼ B male	21	¼NPT female				
06	G½ B male	99	Custom				
07	G¾ B male						
11	¼NPT male						
12	½NPT male						
13	PT¼ male						
14	PT½ male						
15	R¼ male						

²⁾ The pressure unit can be selected from mH₂O, inH₂O, psi, bar, mbar, kPa, MPa.

Accessory [Optional]

Description	Version	Order number
Circular connector M12x1, 4-pin, straight 	With 2 m PVC cable	M124S2PV
	With 5 m PVC cable	M124S5PV
	With 2 m PUR cable	M124S2PU
	With 5 m PUR cable	M124S5PU
Circular connector M12 x 1, 4-pin, angled 	With 2 m PVC cable	M124A2PV
	With 5 m PVC cable	M124A5PV
	With 2 m PUR cable	M124A2PU
	With 5 m PUR cable	M124A5PU