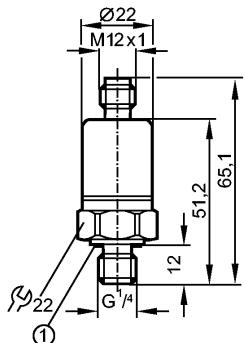


**PT9553**

PT-025-SBG14-B-DVG/US/ /W

Pressure sensors



1: FKM seal / DIN 3869-14
tightening torque 25 Nm

**Product characteristics**

Electronic pressure sensor

for mobile applications

e1 compliant

Process connection: G 1/4 A

Analog output

Measuring range: 0...25 bar

Application

Application	Type of pressure: relative pressure Liquids and gases
Pressure rating [bar]	60
Bursting pressure min. [bar]	600
Medium temperature [°C]	-25...90 ****)

Electrical data

Electrical design	DC
Operating voltage [V]	16...36 DC
Current consumption [mA]	< 6
Insulation resistance [MΩ]	> 100 (80 V DC)
Protection class	III
Reverse polarity protection	yes

Outputs

Output	Analog output
Output function	0...10 V analog
Analog output	0...10 V
Max. load [Ω]	min. 2000

Measuring / setting range

Measuring range [bar]	0...25
-----------------------	--------

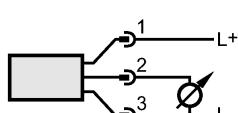
Accuracy / deviations

Accuracy / deviations (in % of the span)	
Characteristics deviation *)	< ± 1.8
Linearity	< ± 0.25 (BFSL) / < ± 0.5 (LS)
Hysteresis	< ± 0.2

PT9553

PT-025-SBG14-B-DVG/US/ W

Pressure sensors

Repeatability **)	< ± 0.1	
Long-term stability ***)	< ± 0.1	
Temperature coefficients (TEMPCO) in the temperature range -25...90° C (in % of the span per 10 K)		
Greatest TEMPCO of the zero point	< ± 0.1	
Greatest TEMPCO of the span	< ± 0.1	
Reaction times		
Step response time analogue output	[ms]	8
Environment		
Ambient temperature	[°C]	-25...90 ****)
Storage temperature	[°C]	-40...100
Protection		IP 67 / IP 69K
Tests / approvals		
EMC	EN 61000-4-2 ESD: noise immunity ISO 11452-2 ISO 11452-4 ISO 7637-2 radiation of interference EN 61000-6-1 EN 61000-6-4	4 kV CD / 8 kV AD according to the automotive directive 95/54/EC 04/104EC / 05/83EC 100 V/m 100 mA / severity level 4 severity level 4 according to CISPR 25
Shock resistance	DIN IEC 68-2-27:	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6:	20 g (10...2000 Hz)
MTTF [Years]		1069
Mechanical data		
Process connection		G ¼ A
Materials (wetted parts)		stainless steel 316L / 1.4404; FPM (Viton)
Housing materials		stainless steel 316L / 1.4404; TROGAMID
Min. pressure cycles		50 million
Weight [kg]		0.08
Electrical connection		
Connection		M12 connector
Wiring		
2 1 3 4		
Remarks		
Remarks	*) incl. drift due to tightening torque, zero and span error **) with temperature fluctuations < 10 K ***) in% of the span / 6 months ****) -40...100°C upon request BFSL = Best Fit Straight Line / LS = Limit Value Setting	
Pack quantity	[piece]	1



PT9553

PT-025-SBG14-B-DVG/US/ /W

Pressure sensors

ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 — We reserve the right to make technical alterations without prior notice. — US — PT9553 — 29.11.2012