## Pressure sensor with LED bar display

PZ-250MSBM12-HFPKG/US/ /V



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Product characteristics			
Number of inputs and outputs		Number of digital outputs: 1	
Measuring range	[MPa]	025	
Process connection		threaded connection M12 x 1,5 Internal thread ISO 6149	
Application			
System		gold-plated contacts	
Application		for industrial applications	
Media	liquids and gases		
Conditionally suitable for		For gaseous media the application is limited to max. 25 bar.	
Medium temperature	[°C]	-2580	
Min. bursting pressure	[MPa]	85	
Pressure rating	[MPa]	40	
Type of pressure		relative pressure	
Electrical data			
Operating voltage	[V]	1830 DC	
Current consumption	[mA]	< 50	
Min. insulation resistance	[ΜΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Power-on delay time	[s]	0.2	

# PZ5121

## Pressure sensor with LED bar display



Integrated watchdog



Imputs / outputs   Number of digital outputs: 1	integrated watchdog			yes	
Outputs         Total number of outputs         1           Output signal         switching signal           Electrical design         PNP           Number of digital outputs         1           Output function         normally open / closed; (configurable)           Max. voltage drop switching output DC         [mail output DC           Permanent current rading of switching output DC         [mail output DC           Switching frequency DC         [Hz]         10           Short-circuit protection         yes           Type of short-circuit protection         yes (non-latching)           Vevorload protection         yes           Measuring/setting range         [MPa]         025           Set point SP         [MPa]         1.2525           Reset point SP         [MPa]         0.7524.5           In steps of [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy         [% of the final value]         < ± 2,0	Inputs / outputs				
Total number of outputs   Switching signal   Switching signal signal   Switching signal signal   Switching signal signal   Switching signal signal signal signal   Switching signal signal signal   Switching signal sig	Number of inputs and outpu	ıts	Number of digital outputs: 1		
Switching signal   Switching signal   Switching signal   Switching signal   PNP	Outputs				
Electrical design	Total number of outputs			1	
Number of digital outputs	Output signal				
Output function         normally open / closed; (configurable)           Max. voltage drop switching output DC         (Max. voltage drop switching output DC           Permanent current rating of switching output DC         (mA)           Switching frequency DC	Electrical design			PNP	
Max. voltage drop switching of output DC         [Max]         2           Permanent current rating of switching output DC         [max]         250           Switching frequency DC         [Hz]         10           Short-circuit protection         yes           Type of short-circuit protection         yes           Overload protection         yes           Measuring/setting range         [MPa]           Get point SP         [MPa]         0.25           Reset point rP         [MPa]         0.7524.5           In steps of [MPa]         0.25           Note on hysteresis         adjustable           Accuracy I deviations         Switch point accuracy [% of the final value]         < ± 2,0	Number of digital outputs			1	
output DC         250           Permanent current rating of switching drequency DC         [Hz]         10           Short-circuit protection         yes           Type of short-circuit protection         yes (non-latching)           Type of short-circuit protection         yes (non-latching)           Overload protection         yes           Measuring range           Measuring range         [MPa]         025           Set point SP         [MPa]         1.2525           In steps of         [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy [% of the final value]         \$ ± 2,0           Repeatability [% of the final value]         \$ ± 0,25; (with temperature fluctuations < 10 K)	Output function		normally op	oen / closed; (configurable)	
switching output DC         250           Switching frequency DC         [Hz]         10           Short-circuit protection         yes           Type of short-circuit protection         yes (non-latching)           Overload protection         yes           Weasuring/setting range         MPa           Measuring/setting range         MPa           Measuring range         MPa           Set point SP         MPal           In steps of         MPal           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy / g% of the final value]         \$\frac{\pmax*20,25}{2,0}\$ (with temperature fluctuations < 10 K)		[V]		2	
Short-circuit protection         yes           Type of short-circuit protection         yes (non-latching)           Overload protection         yes           Measuring/setting range         [MPa]           Measuring range         [MPa]           Set point SP         [MPa]           Reset point rP         [MPa]           In steps of         [MPa]           Note on hystresis         adjustable           Accuracy / deviations         Switch point accuracy           [% of the final value]         < ± 2,0		f [mA]		250	
Type of short-circuit protection         yes (non-latching)           Overload protection         yes           Measuring/setting range         Measuring range           Measuring range         [MPa]         025           Set point SP         [MPa]         0.7524.5           In steps of         [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy         [% of the final value]         < ± 2,0	Switching frequency DC	[Hz]		10	
protection         yes           Overload protection         yes           Measuring/setting range         [MPa]         025           Set point SP         [MPa]         1.2525           Reset point rP         [MPa]         0.7524.5           In steps of         [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations         Switch point accuracy         \$\frac{\pmathrm{2}}{2}\$ (% of the final value)           Repeatability         [% of the final value]         \$\frac{\pmathrm{2}}{2}\$ (with temperature fluctuations < 10 K)           Temperature drift per 10 K         \$\frac{\pmathrm{2}}{2}\$ (with temperature fluctuations < 10 K)           Software / programming           Adjustment of the switch point         Programming button           Departing conditions           Ambient temperature         [°C]         -2580           Storage temperature         [°C]         -2580           Storage temperature         [°C]         -40100           Protection         [P 67]           Tests / approvals           EMC         EN 61000-4-2 ESD         4 kV CD / 8 kV AD           EN 61000-4-3 HF radiated         10 V/m           EN 61000-4-4 Burst	Short-circuit protection			yes	
Measuring/setting range         [MPa]         025           Set point SP         [MPa]         1.2525           Reset point rP         [MPa]         0.7524.5           In steps of         [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy           [% of the final value]         < ± 2,0	= =		у	ves (non-latching)	
Measuring range         [MPa]         025           Set point SP         [MPa]         1.2525           Reset point rP         [MPa]         0.7524.5           In steps of         [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy           [% of the final value]         < ± 2,0	<td>Overload protection</td> <td></td> <td></td> <td>yes</td>	Overload protection			yes
Set point SP         [MPa]         1.2525           Reset point rP         [MPa]         0.7524.5           In steps of         [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy [% of the final value]         < ± 2,0	Measuring/setting range				
Reset point rP         [MPa]         0.7524.5           In steps of         [MPa]         0.25           Note on hysteresis         adjustable           Accuracy / deviations           Switch point accuracy [% of the final value]         < ± 2,0	Measuring range	[MPa]		025	
In steps of   MPa   0.25     Note on hysteresis   adjustable	Set point SP	[MPa]		1.2525	
Note on hysteresis  Accuracy / deviations  Switch point accuracy [% of the final value]  Repeatability [% of the final value]  Temperature drift per 10 K  Software / programming  Adjustment of the switch point  Operating conditions  Ambient temperature [°C] Storage temperature [°C] Protection  Fests / approvals  EMC  EN 61000-4-2 ESD EN 61000-4-3 HF radiated EN 61000-4-4 Burst EN 61000-4-4 Burst EN 61000-4-6 HF conducted DIN IEC 68-2-27  Switch point	Reset point rP	[MPa]		0.7524.5	
Accuracy / deviations           Switch point accuracy [% of the final value]         < ± 2,0	In steps of	[MPa]		0.25	
Switch point accuracy	Note on hysteresis			adjustable	
Software / programming   Separation	Accuracy / deviations				
Repeatability				< ± 2.0	
Software / programming			\ <u> </u>		
Temperature drift per 10 K			$< \pm 0.25$ ; (with temperature fluctuations $< 10 \text{ K}$ )		
Software / programming					
Adjustment of the switch point         Programming button           Operating conditions         Ambient temperature         [°C]         -2580           Storage temperature         [°C]         -40100           Protection         IP 67           Tests / approvals           EMC         EN 61000-4-2 ESD         4 kV CD / 8 kV AD           EN 61000-4-3 HF radiated         10 V/m           EN 61000-4-4 Burst         2 kV           EN 61000-4-6 HF conducted         10 V           Shock resistance         DIN IEC 68-2-27         50 g (11 ms)			< ± 0.3		
Programming Button					
Ambient temperature [°C] -2580  Storage temperature [°C] -40100  Protection IP 67  Tests / approvals  EMC EN 61000-4-2 ESD 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated 10 V/m EN 61000-4-4 Burst 2 kV EN 61000-4-6 HF conducted 10 V  Shock resistance DIN IEC 68-2-27 50 g (11 ms)	-		Programming button		
Storage temperature         [°C]         -40100           Protection         IP 67           EMC         EN 61000-4-2 ESD         4 kV CD / 8 kV AD           EN 61000-4-3 HF radiated         10 V/m           EN 61000-4-4 Burst         2 kV           EN 61000-4-6 HF conducted         10 V           Shock resistance         DIN IEC 68-2-27         50 g (11 ms)	Operating conditions				
Protection         IP 67           Tests / approvals           EMC         EN 61000-4-2 ESD         4 kV CD / 8 kV AD           EN 61000-4-3 HF radiated         10 V/m           EN 61000-4-4 Burst         2 kV           EN 61000-4-6 HF conducted         10 V           Shock resistance         DIN IEC 68-2-27         50 g (11 ms)	Ambient temperature	[°C]		-2580	
Tests / approvals         EMC       EN 61000-4-2 ESD       4 kV CD / 8 kV AD         EN 61000-4-3 HF radiated       10 V/m         EN 61000-4-4 Burst       2 kV         EN 61000-4-6 HF conducted       10 V         Shock resistance       DIN IEC 68-2-27       50 g (11 ms)	Storage temperature [°C]		-40100		
EMC	Protection		IP 67		
EN 61000-4-3 HF radiated 10 V/m EN 61000-4-4 Burst 2 kV EN 61000-4-6 HF conducted 10 V Shock resistance DIN IEC 68-2-27 50 g (11 ms)	Tests / approvals				
EN 61000-4-4 Burst 2 kV EN 61000-4-6 HF conducted 10 V Shock resistance DIN IEC 68-2-27 50 g (11 ms)	EMC				
EN 61000-4-6 HF conducted         10 V           Shock resistance         DIN IEC 68-2-27         50 g (11 ms)					
Shock resistance DIN IEC 68-2-27 50 g (11 ms)					
	Shock resistance				
20 g (102000 112)				1	
	VISTALIOTI TOSISLATIOC		2		

yes

# PZ5121

## Pressure sensor with LED bar display

PZ-250MSBM12-HFPKG/US/ /V



Mechanical data				
Dimensions	[mm]	Ø 34 / L = 91.5		
Material		stainless steel (1.4305 / 303); PBT; PC; PA; NBR; EPDM/X; FKM		
Materials (wetted parts)		stainless steel (1.4305 / 303); ceramics; FKM		
Min. pressure cycles		100 million		
Process connection		threaded connection M12 x 1,5 Internal thread ISO 6149		

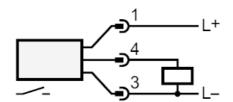
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Displays / operating e	lements	
Display	Switching status	LED, yellow
	Measured values	10 x LED, green Resolution 10 % of the final value
Remarks		

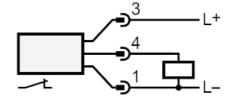
## Electrical connection

Pack quantity

Connector: 1 x M12; coding: A; Contacts: gold-plated







1 pcs.