

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SISTEMS**

UKŁADY HYDRAULICZNE

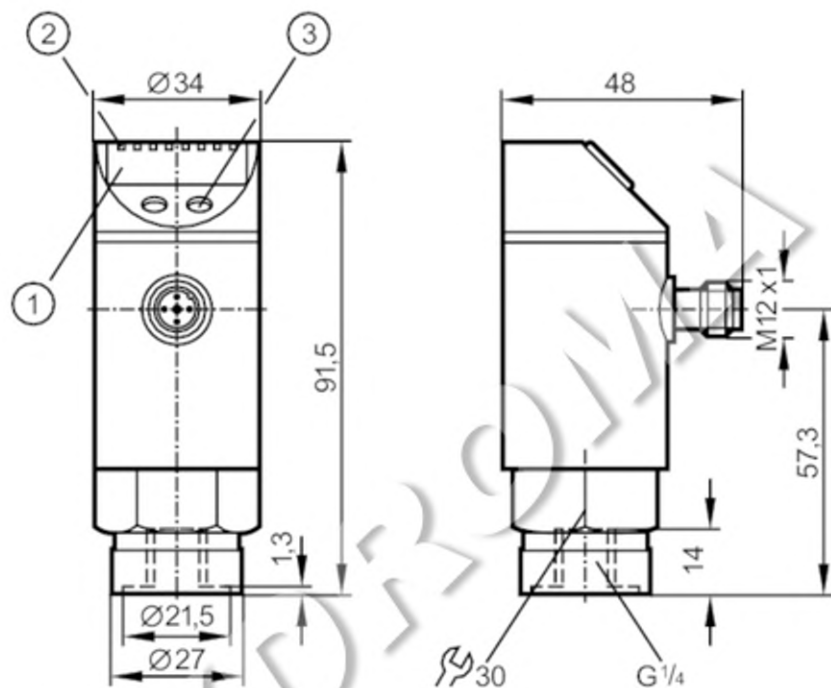
HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

PY9961

Pressure sensor with display

PN-250-SBR14-QFPKA/US/ IV



- 1 alphanumeric display 4-digit
 2 LEDs Display unit / switching status
 3 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...250 bar	0...3620 psi	0...25 MPa
Process connection	threaded connection G 1/4 internal thread		

Application

Special feature	Gold-plated contacts		
Media	liquids and gases		
Conditionally suitable for	For gaseous media the application is limited to max. 25 bar.		
Medium temperature [°C]	-25...80		
Min. bursting pressure	850 bar	12300 psi	85 MPa
Pressure rating	400 bar	5800 psi	40 MPa
Type of pressure	relative pressure		

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Electrical data			
Operating voltage tolerance	[%]	20	
Operating voltage	[V]	24 AC / 18...55 DC	
Current consumption	[mA]	< 50	
Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Overvoltage protection		yes; (< 60 V DC / < 40 V AC)	
Power-on delay time	[s]	0.5	
Integrated watchdog		yes	
Inputs / outputs			
Number of inputs and outputs		Number of digital outputs: 2	
Outputs			
Total number of outputs		2	
Output signal		switching signal	
Electrical design		PNP	
Number of digital outputs		2	
Output function		normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC	[V]	3	
Max. voltage drop switching output AC	[V]	3	
Permanent current rating of switching output AC	[mA]	100	
Permanent current rating of switching output DC	[mA]	100	
Switching frequency AC	[Hz]	< 170	
Switching frequency DC	[Hz]	< 170	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Measuring/setting range			
Measuring range		0...250 bar	0...3620 psi
Set point SP		2...250 bar	40...3620 psi
Reset point rP		1...249 bar	20...3600 psi
In steps of		1 bar	20 psi
			0...25 MPa
			0.2...25 MPa
			0.1...24.9 MPa
			0.1 MPa
Accuracy / deviations			
Switch point accuracy		< ± 0,5	
	[% of the span]		
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K)	
	[% of the span]		
Characteristics deviation		< ± 0,25 (BFSL) / < ± 0,5 (LS)	
	[% of the span]		
Hysteresis deviation		< ± 0,25	
	[% of the span]		
Long-term stability		< ± 0,05; (per 6 months)	

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	[% of the span]	
Temperature coefficient zero point	[% of the span / 10 K]	0,2; (-20...80 °C)
Temperature coefficient span	[% of the span / 10 K]	0,2; (-20...80 °C)

Response times

Delay time programmable dS, dr	[s]	0; 0,2...50
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Operating conditions

Ambient temperature	[°C]	-20...80
Storage temperature	[°C]	-40...100
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 61000-4-5 Surge	0,5/1 kV
	EN 61000-4-6 HF conducted	10 V
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]	199
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request

Mechanical data

Weight	[g]	261
Materials		stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; EPDM/X
Materials (wetted parts)		stainless steel (1.4305 / 303); ceramics; FKM
Min. pressure cycles		100 million
Process connection		threaded connection G 1/4 internal thread
Restrictor element integrated		no (can be retrofitted)

Displays / operating elements

Display	Display unit	3 x LED, green
	switching status	2 x LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit

Remarks

Remarks	BFSL = Best Fit Straight Line LS = limit value setting
Pack quantity	1 pcs.

Electrical connection

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

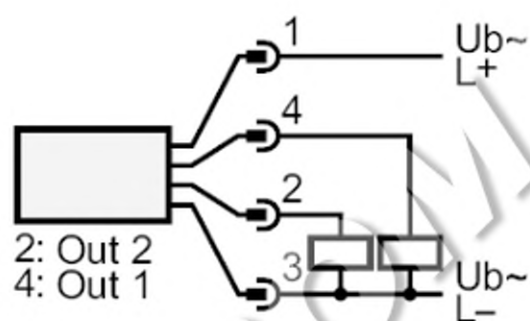
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Connection



OUT1	switching output
OUT2	switching output
	Diagnostic output