

PN3229

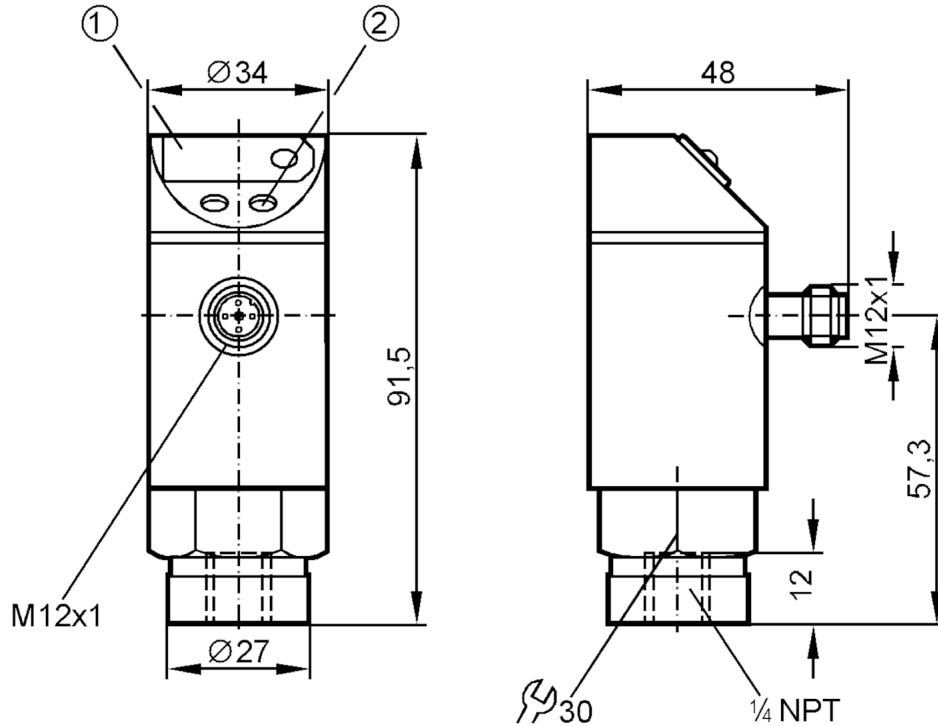


Pressure sensor with display

PN-002HRBN14-KFPKG/US/ IV

Article no longer available - archive entry

replaced by: PN2209



- 1 7-segment LED display
- 2 programming button



Product characteristics

Output signal	switching signal; analogue signal; (configurable)
Measuring range [inHg]	-30...20
Process connection	threaded connection 1/4 NPT external thread

Application

Application	for industrial applications
Media	liquids and gases
Medium temperature [°C]	-25...80
Pressure rating [inHg]	600
Min. bursting pressure [inHg]	1500
Type of pressure	relative pressure

Electrical data

Operating voltage [V]	20...30 DC
Current consumption [mA]	< 60
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	0.2
Integrated watchdog	yes



Pressure sensor with display

PN-002HRBN14-KFPKG/US/ IV

Inputs / outputs										
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1									
Outputs										
Total number of outputs	2									
Output signal	switching signal; analogue signal; (configurable)									
Electrical design	PNP									
Number of digital outputs	1									
Max. voltage drop switching output DC [V]	2									
Permanent current rating of switching output DC [mA]	250									
Number of analogue outputs	1									
Analogue current output [mA]	4...20									
Max. load [Ω]	500									
Short-circuit protection	yes									
Type of short-circuit protection	pulsed									
Overload protection	yes									
Measuring/setting range										
Measuring range [inHg]	-30...20									
Set point SP [inHg]	-29...20									
Reset point rP [inHg]	-29.5...19.5									
In steps of [inHg]	0.5									
Accuracy / deviations										
Switch point accuracy [% of the final value]	< ± 1,5									
Repeatability [% of the final value]	< ± 0,25; (with temperature fluctuations < 10 K)									
Characteristics deviation [% of the final value]	< ± 1,0									
Temperature drift per 10 K	< ± 0.3									
Response times										
Switching frequency for a given set response time of one output	Response time [ms] (dAP)	3	6	10	17	30	60	125	250	500
	Switching frequency [Hz]	170	80	50	30	16	8	4	2	1
Response time [ms]	at rectangular pressure characteristic; switch point (SPx) = 70 %; reset point (rPx) = 30 %									
Delay time programmable dS, dr [s]	0, 0,2,...10, 11,...50									
Max. response time analogue output [ms]	3									
Software / programming										
Adjustment of the switch point	programming button									

PN3229



Pressure sensor with display

PN-002HRBN14-KFPKG/US/ IV

Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 65

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)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)

Mechanical data	
Materials	EPDM/X; FKM; NBR; PBT; PC; PTFE; stainless steel (1.4301 / 304)
Materials (wetted parts)	FKM; ceramics; stainless steel (1.4305 / 303)
Min. pressure cycles	100 million
Process connection	threaded connection 1/4 NPT external thread

Displays / operating elements		
Display	switching status	LED, red
	function display	7-segment LED display
	measured values	7-segment LED display

Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12



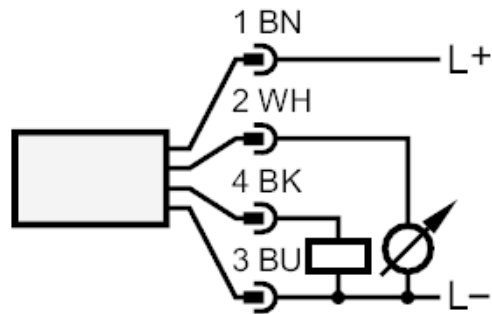
PN3229



Pressure sensor with display

PN-002HRBN14-KFPKG/US/ IV

Connection



Article no longer available - archive entry

replaced by: PN2209