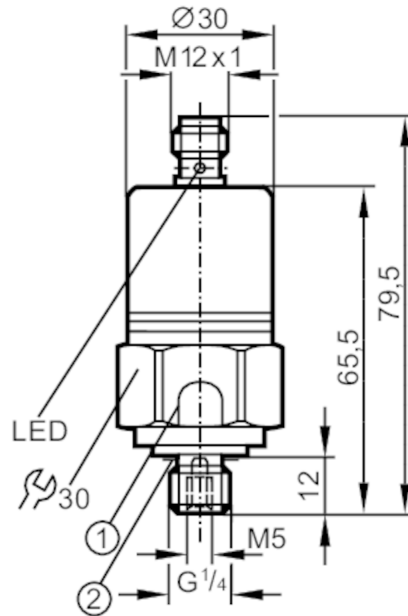


# PP7550



## Pressure switch with ceramic measuring cell

PP-400-SBG14-QFPKG/US/ IV



- 1 Pressure relief mechanism
- No mechanical force must be exerted on the pressure relief mechanism.
- 2 sealing



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...400 bar	0...5800 psi	0...40 MPa
Process connection	threaded connection G 1/4 external thread Internal thread:M5		

### Application

Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...90		
Min. bursting pressure	1000 bar	14500 psi	100 MPa
Pressure rating	600 bar	8700 psi	60 MPa
Type of pressure	relative pressure		

### Electrical data

Operating voltage [V]	9.6...36 DC; (communication mode: 18...32)		
Current consumption [mA]	< 45		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Power-on delay time [s]	0.3		

### Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2		
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### Outputs

Total number of outputs	2		
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# PP7550



## Pressure switch with ceramic measuring cell

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Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP		
Number of digital outputs	2		
Output function	normally open / closed; (configurable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	250		
Switching frequency DC [Hz]	170		
Short-circuit protection	yes		
Type of short-circuit protection	yes (non-latching)		
Overload protection	yes		

### Measuring/setting range

Measuring range	0...400 bar	0...5800 psi	0...40 MPa
Set point SP	4...400 bar	60...5790 psi	0.4...40 MPa
Reset point rP	2...398 bar	30...5760 psi	0.2...39.8 MPa
In steps of	2 bar	30 psi	0.2 MPa
Factory setting		SP1 = 100 bar	rP1 = 92 bar
		SP2 = 300 bar	rP2 = 292 bar
		OUT1 = Hno	OUT2 = Hno

### Accuracy / deviations

Switch point accuracy [% of the span]	< ± 0,5
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)
Hysteresis deviation [% of the span]	< ± 0,1
Long-term stability [% of the span]	< ± 0,1; (per year)
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...80 °C)
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...80 °C)

### Reaction times

Response time [ms]	< 3
Damping process value dAP in steps [s]	0,003 - 0,006 - 0,010 - 0,017 - 0,060 - 0,125 - 0,250 - 0,500

### Interfaces

Communication interface	IO-Link
Transmission type	COM2 (38,4 kBaud)
IO-Link revision	1.0
Profiles	no profile
SIO mode	yes
Required master port class	A

# PP7550



## Pressure switch with ceramic measuring cell

PP-400-SBG14-QFPKG/US/ IV

Process data analog		1
Process data binary		2
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	default	2

Operating conditions		
Ambient temperature	[°C]	-25...85
Storage temperature	[°C]	-40...100
Protection		IP 68; (7 days / 1 m water depth / 0.1 bar)

Tests / approvals		
EMC	noise immunity	EN 61000-6-2
	EN 61000-4-2 ESD	4 kV contact discharge / 15 kV air discharge
	EN 61000-4-3 HF radiated	20 V/m
	EN 61000-4-4 Burst	4 kV coupling clamp
	EN 61000-4-5 Surge	0,5 kV supply / 1 kV signal for DC units
	EN 61000-4-6 HF conducted	10 V
	noise immunity	according to the automotive directive 1995/54/EC / 04/104EG / 05/83/EG
	Absorber chamber test to ISO 11452-2:	80 V/m
	EN 50155	Klasse T3, C1, S1
Shock resistance	DIN IEC 60068-2-27 / DIN IEC 60068-2-29	1000 g
	DIN EN 61373	Category 3
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
	DIN EN 60068-2-64	14 g
	DIN EN 61373	Category 2
MTTF	[years]	310
Pressure equipment directive		sound engineering practice; can be used for group 2 fluids; group 1 fluids on request

Mechanical data		
Weight	[g]	218
Housing		tubular
Dimensions	[mm]	Ø 30 / L = 79.5
Material		stainless steel (1.4301 / 304); FKM; EPDM/X; PA
Materials (wetted parts)		stainless steel (1.4305 / 303); ceramics; FKM
Min. pressure cycles		100 million
Process connection		threaded connection G 1/4 external thread Internal thread:M5
Restrictor element integrated		yes

Displays / operating elements		
Display	Power	2 x LED, green
	Switching status	2 x LED, yellow
Teach function		yes

Remarks		
Pack quantity		1 pcs.

# PP7550



## Pressure switch with ceramic measuring cell

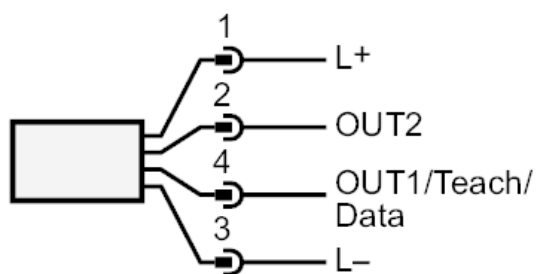
PP-400-SBG14-QFPKG/US/ IV

### Electrical connection

Connector: 1 x M12; coding: A



### Connection



OUT1	Switching output
OUT2	Switching output
	Diagnostic output