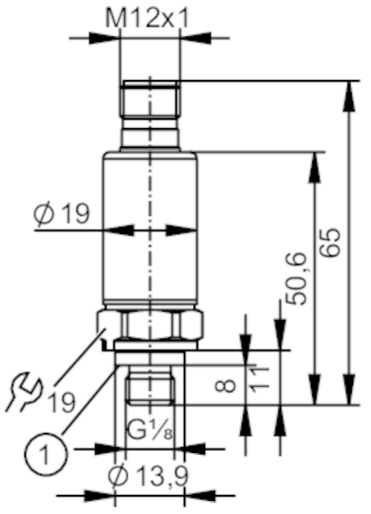
PV2801

Pressure switch with IO-Link

PV-250-SEG18-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs		Number of digital outputs: 2	
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Process connection	threaded connection G 1/8 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element		metallic thin film cell	
Application		for industrial applications	
Media		liquids and gases	
Medium temperature	[°C]	-40...90	
Min. burst pressure	1200 bar	17400 psi	120 MPa
Pressure rating	625 bar	9060 psi	62.5 MPa
Note on pressure rating		static	
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure		relative pressure	
Electrical data			
Operating voltage	[V]	18...30 DC	
Current consumption	[mA]	< 15	
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	
Outputs			
Total number of outputs		2	
Output signal		switching signal; IO-Link; (configurable)	
Electrical design		PNP/NPN	
Number of digital outputs		2	

PV2801

Pressure switch with IO-Link

PV-250-SEG18-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Set point SP	2.5...250 bar	37...3626 psi	0.25...25 MPa
Reset point rP	1.3...248.8 bar	18...3608 psi	0.13...24.88 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting	SP1 = 195 bar	rP1 = 190 bar	ou1 = Hno;
	SP2 = 4 bar	rP2 = 2 bar	ou2 = Hnc;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV2801

Pressure switch with IO-Link

PV-250-SEG18-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1566
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667	
UL approval		UL approval no.	J016
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	55.5	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 65	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	20...25; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/8 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

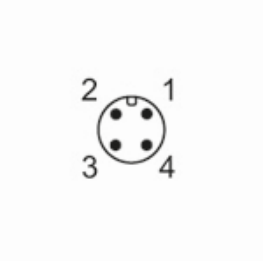
PV2801

Pressure switch with IO-Link

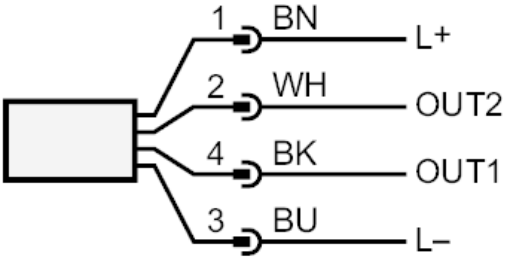
PV-250-SEG18-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

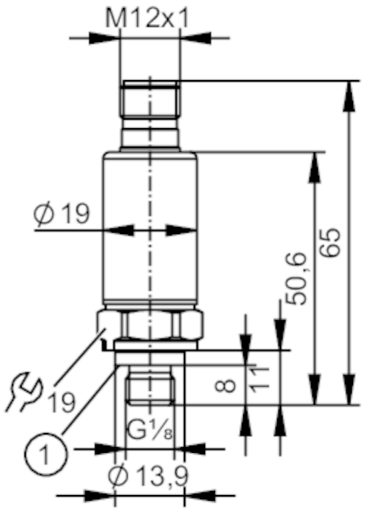


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV2802

Pressure switch with IO-Link

PV-100-SEG18-UFRVG/US/ /



1 Sealing

Product characteristics				
Number of inputs and outputs		Number of digital outputs: 2		
Measuring range		0...100 bar	0...1450 psi	0...10 MPa
Process connection		threaded connection G 1/8 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application				
Measuring element		metallic thin film cell		
Application		for industrial applications		
Media		liquids and gases		
Medium temperature	[°C]	-40...90		
Min. burst pressure		1000 bar	14500 psi	100 MPa
Pressure rating		250 bar	3625 psi	25 MPa
Note on pressure rating		static		
Vacuum resistance		-1000 mbar	-0.1 MPa	
Type of pressure		relative pressure		
Electrical data				
Operating voltage	[V]	18...30 DC		
Current consumption	[mA]	< 15		
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		
Outputs				
Total number of outputs		2		
Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		

PV2802

Pressure switch with IO-Link

PV-100-SEG18-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Set point SP	1...100 bar	15...1450 psi	0.1...10 MPa
Reset point rP	0.5...99.5 bar	7...1433 psi	0.05...9.95 MPa
In steps of	0.05 bar	1 psi	0.005 MPa
Factory setting	SP1 = 65 bar	rP1 = 60 bar	ou1 = Hno;
	SP2 = 4 bar	rP2 = 2 bar	ou2 = Hnc;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV2802

Pressure switch with IO-Link

PV-100-SEG18-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1565
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667	
UL approval		UL approval no.	J016
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	55.5	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 65	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	20...25; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/8 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

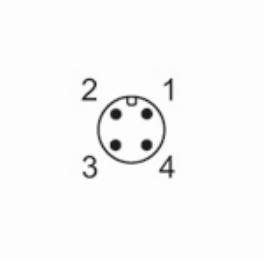
PV2802

Pressure switch with IO-Link

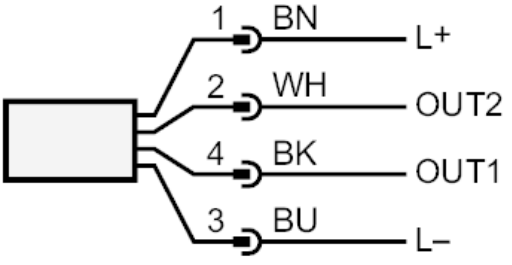
PV-100-SEG18-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

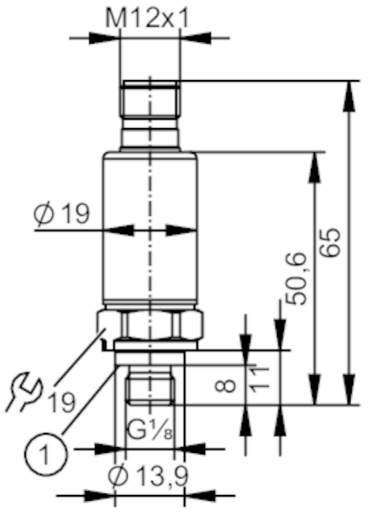


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV2804

Pressure switch with IO-Link

PV-010-REG18-UFRVG/US/ /



1 Sealing

Product characteristics				
Number of inputs and outputs	Number of digital outputs: 2			
Measuring range	-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Process connection	threaded connection G 1/8 external thread (DIN EN ISO 1179-2); internal thread:M5			
Application				
Measuring element	metallic thin film cell			
Application	for industrial applications			
Media	liquids and gases			
Medium temperature [°C]	-40...90			
Min. burst pressure	300 bar	4350 psi	30 MPa	
Pressure rating	25 bar	360 psi	2.5 MPa	
Note on pressure rating	static			
Vacuum resistance	-1000 mbar	-0.1 MPa		
Type of pressure	relative pressure; vacuum			
Electrical data				
Operating voltage [V]	18...30 DC			
Current consumption [mA]	< 15			
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			
Outputs				
Total number of outputs	2			
Output signal	switching signal; IO-Link; (configurable)			
Electrical design	PNP/NPN			
Number of digital outputs	2			

PV2804

Pressure switch with IO-Link

PV-010-REG18-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC	[V]	2		
Permanent current rating of switching output DC	[mA]	100		
Switching frequency DC	[Hz]	< 170		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Overload protection		yes		
Measuring/setting range				
Measuring range		-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Set point SP		-0.9...10 bar	-13.1...145 psi	-0.09...1 MPa
Reset point rP		-0.95...9.95 bar	-13.8...144.3 psi	-0.095...0.995 MPa
In steps of		0.005 bar	0.1 psi	0.0005 MPa
Factory setting		SP1 = 4.5 bar	rP1 = 3.5 bar	ou1 = Hno;
		SP2 = 1.9 bar	rP2 = 1 bar	ou2 = Hnc;
		dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
		coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations				
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation	[% of the span]	< ± 0,2		
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times				
Response time	[ms]	< 3		
Software / programming				
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces				
Communication interface		IO-Link		
Transmission type		COM2 (38,4 kBaud)		
IO-Link revision		1.1		
SDCI standard		IEC 61131-9		

PV2804

Pressure switch with IO-Link

PV-010-REG18-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1564
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667	
UL approval		UL approval no.	J015
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	53.9	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 65	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	20...25; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/8 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		no	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

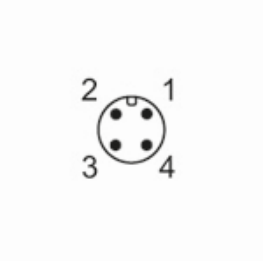
PV2804

Pressure switch with IO-Link

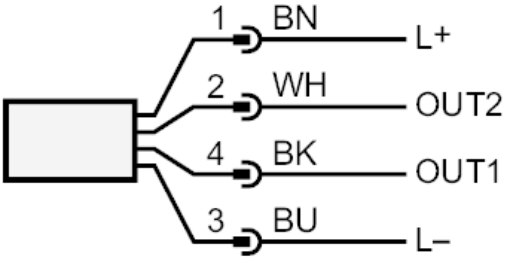
PV-010-REG18-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

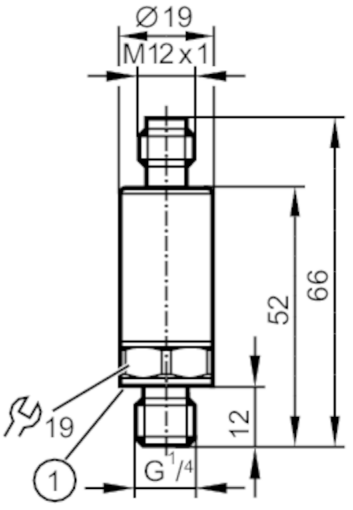


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7000

Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /



1 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 (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1700 bar	24655 psi	170 MPa
Pressure rating	1000 bar	14500 psi	100 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV7000

Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...400 bar	0...5800 psi	0...40 MPa
Set point SP	4...400 bar	58...5802 psi	0.4...40 MPa
Reset point rP	2...398 bar	30...5773 psi	0.2...39.8 MPa
In steps of	0.2 bar	1 psi	0.02 MPa
Factory setting	SP1 = 100 bar	rP1 = 92 bar	ou1 = Hno;
	SP2 = 300 bar	rP2 = 292 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV7000

Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	708
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667.77	
UL approval		UL approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	63.5	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

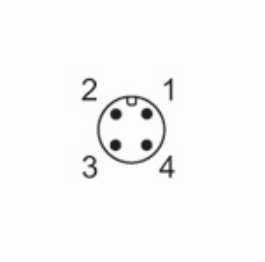
PV7000

Pressure switch with IO-Link

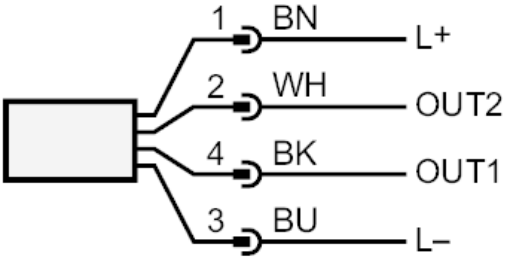
PV-400-SEG14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

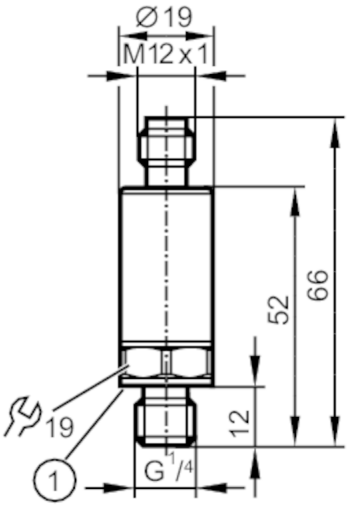


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7001

Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1200 bar	17400 psi	120 MPa
Pressure rating	625 bar	9060 psi	62.5 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV7001

Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Set point SP	2.5...250 bar	37...3626 psi	0.25...25 MPa
Reset point rP	1.3...248.8 bar	18...3608 psi	0.13...24.88 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting	SP1 = 62.5 bar	rP1 = 57.5 bar	ou1 = Hno;
	SP2 = 187.5 bar	rP2 = 182.5 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV7001

Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	709
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667.77	
UL approval		UL approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	64.5	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

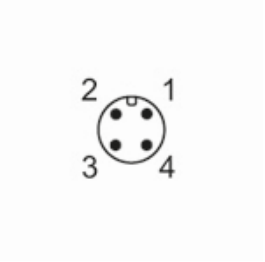
PV7001

Pressure switch with IO-Link

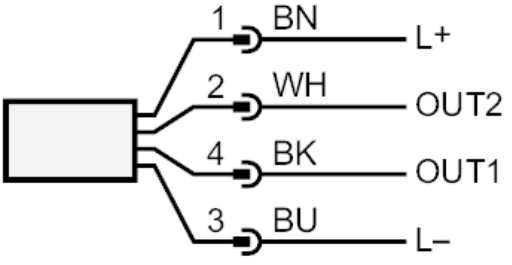
PV-250-SEG14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

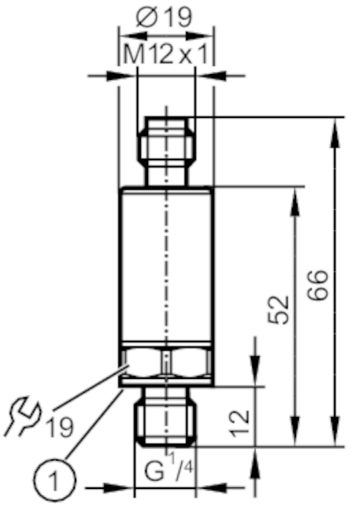


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7002

Pressure switch with IO-Link

PV-100-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics				
Number of inputs and outputs		Number of digital outputs: 2		
Measuring range		0...100 bar	0...1450 psi	0...10 MPa
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application				
Measuring element		metallic thin film cell		
Application		for industrial applications		
Media		liquids and gases		
Medium temperature	[°C]	-40...90		
Min. burst pressure		1000 bar	14500 psi	100 MPa
Pressure rating		250 bar	3625 psi	25 MPa
Note on pressure rating		static		
Vacuum resistance		-1000 mbar	-0.1 MPa	
Type of pressure		relative pressure		
Electrical data				
Operating voltage	[V]	18...30 DC		
Current consumption	[mA]	< 15		
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		
Outputs				
Total number of outputs		2		
Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		

PV7002

Pressure switch with IO-Link

PV-100-SEG14-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Set point SP	1...100 bar	15...1450 psi	0.1...10 MPa
Reset point rP	0.5...99.5 bar	7...1443 psi	0.05...9.95 MPa
In steps of	0.05 bar	1 psi	0.005 MPa
Factory setting	SP1 = 25 bar	rP1 = 23 bar	ou1 = Hno;
	SP2 = 75 bar	rP2 = 73 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV7002

Pressure switch with IO-Link

PV-100-SEG14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	710
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667.77	
UL approval		UL approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	63	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

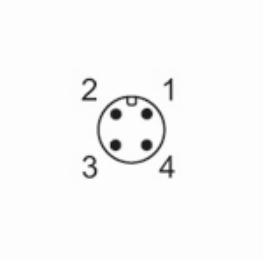
PV7002

Pressure switch with IO-Link

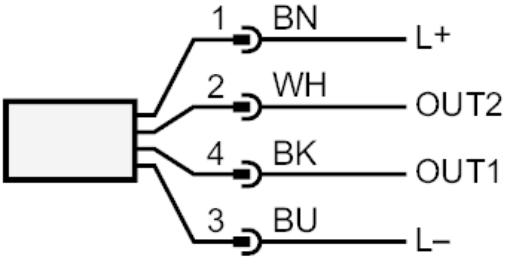
PV-100-SEG14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

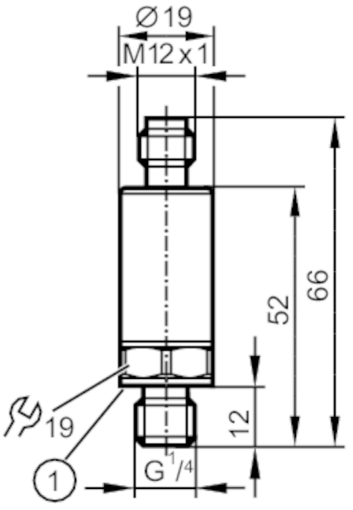


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7003

Pressure switch with IO-Link

PV-025-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	-1...25 bar	-14.6...362.6 psi	-0.1...2.5 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	600 bar	8700 psi	60 MPa
Pressure rating	65 bar	940 psi	6.5 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure; vacuum		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV7003

Pressure switch with IO-Link

PV-025-SEG14-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	-1...25 bar	-14.6...362.6 psi	-0.1...2.5 MPa
Set point SP	-0.75...25 bar	-10.8...362.6 psi	-0.075...2.5 MPa
Reset point rP	-0.87...24.88 bar	-12.7...360.8 psi	-0.087...2488 MPa
In steps of	0.01 bar	0.1 psi	0.001 MPa
Factory setting	SP1 = 6.25 bar	rP1 = 5.75 bar	ou1 = Hno;
	SP2 = 18.75 bar	rP2 = 18.25 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV7003

Pressure switch with IO-Link

PV-025-SEG14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	712
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667.77	
UL approval		UL approval no.	J015
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	63	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

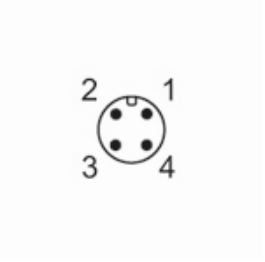
PV7003

Pressure switch with IO-Link

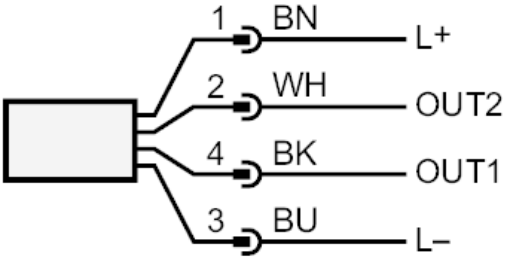
PV-025-SEG14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

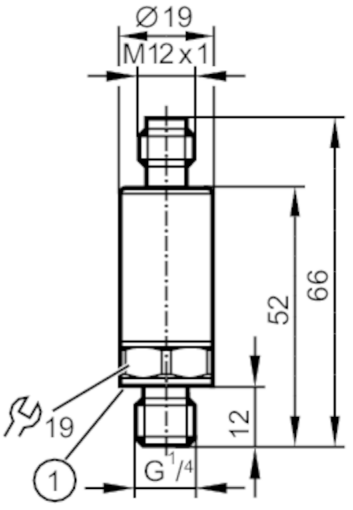


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7004

Pressure switch with IO-Link

PV-010-REG14-UFRVG/US/ /



1 Sealing

Product characteristics				
Number of inputs and outputs	Number of digital outputs: 2			
Measuring range	-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5			
Application				
Measuring element	metallic thin film cell			
Application	for industrial applications			
Media	liquids and gases			
Medium temperature [°C]	-40...90			
Min. burst pressure	300 bar	4350 psi	30 MPa	
Pressure rating	25 bar	360 psi	2.5 MPa	
Note on pressure rating	static			
Vacuum resistance	-1000 mbar	-0.1 MPa		
Type of pressure	relative pressure; vacuum			
Electrical data				
Operating voltage [V]	18...30 DC			
Current consumption [mA]	< 15			
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			
Outputs				
Total number of outputs	2			
Output signal	switching signal; IO-Link; (configurable)			
Electrical design	PNP/NPN			
Number of digital outputs	2			

PV7004

Pressure switch with IO-Link

PV-010-REG14-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC	[V]	2		
Permanent current rating of switching output DC	[mA]	100		
Switching frequency DC	[Hz]	< 170		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Overload protection		yes		
Measuring/setting range				
Measuring range		-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Set point SP		-0.9...10 bar	-13.1...145 psi	-0.09...1 MPa
Reset point rP		-0.95...9.95 bar	-13.8...144.3 psi	-0.095...0.995 MPa
In steps of		0.005 bar	0.1 psi	0.0005 MPa
Factory setting		SP1 = 2.5 bar	rP1 = 2.3 bar	ou1 = Hno;
		SP2 = 7.5 bar	rP2 = 7.3 bar	ou2 = Hno;
		dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
		coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations				
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation	[% of the span]	< ± 0,2		
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times				
Response time	[ms]	< 3		
Software / programming				
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces				
Communication interface		IO-Link		
Transmission type		COM2 (38,4 kBaud)		
IO-Link revision		1.1		
SDCI standard		IEC 61131-9		

PV7004

Pressure switch with IO-Link

PV-010-REG14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	713
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667.77	
UL approval		UL approval no.	J015
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	63.5	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

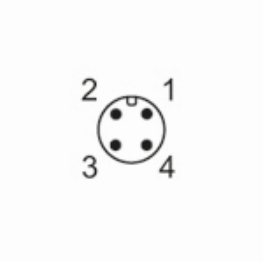
PV7004

Pressure switch with IO-Link

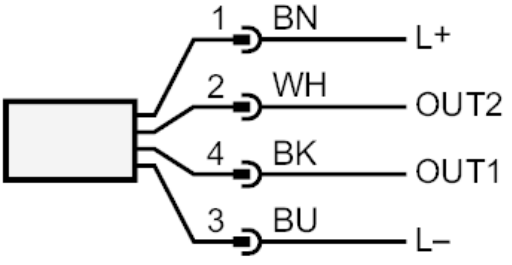
PV-010-REG14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

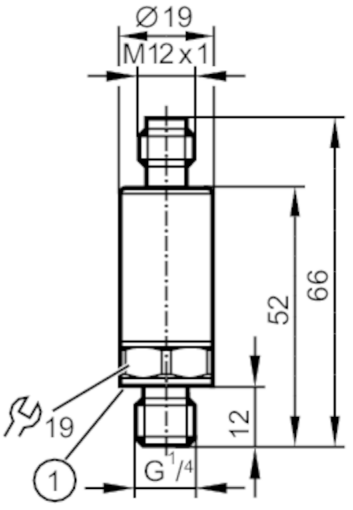


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7023

Pressure switch with IO-Link

PV-060-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...60 bar	0...870 psi	0...6 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	900 bar	13050 psi	90 MPa
Pressure rating	150 bar	2175 psi	15 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV7023

Pressure switch with IO-Link

PV-060-SEG14-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...60 bar	0...870 psi	0...6 MPa
Set point SP	0.6...60 bar	9...870 psi	0.06...6 MPa
Reset point rP	0.3...59.7 bar	4...866 psi	0.03...5.97 MPa
In steps of	0.02 bar	1 psi	0.002 MPa
Factory setting	SP1 = 15 bar	rP1 = 13.8 bar	ou1 = Hno;
	SP2 = 45 bar	rP2 = 43.8 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV7023

Pressure switch with IO-Link

PV-060-SEG14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	711
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667.77	
UL approval		UL approval no.	J015
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	63	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

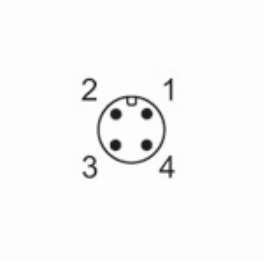
PV7023

Pressure switch with IO-Link

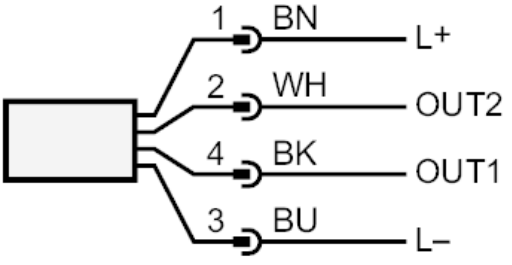
PV-060-SEG14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

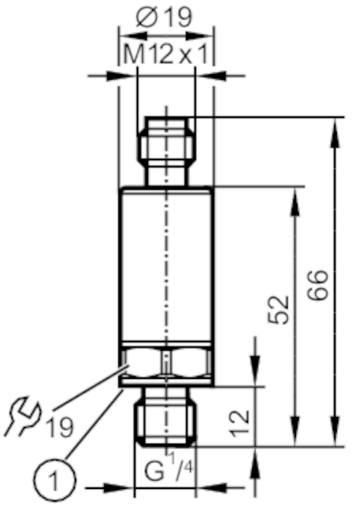


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7060

Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...600 bar	0...8700 psi	0...60 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	2500 bar	36255 psi	250 MPa
Pressure rating	1500 bar	21755 psi	150 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV7060

Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...600 bar	0...8700 psi	0...60 MPa
Set point SP	6...600 bar	85...8700 psi	0.6...60 MPa
Reset point rP	3...597 bar	45...8660 psi	0.3...59.7 MPa
In steps of	0.2 bar	5 psi	0.02 MPa
Factory setting	SP1 = 150 bar	rP1 = 138 bar	ou1 = Hno;
	SP2 = 450 bar	rP2 = 438 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		

PV7060

Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	723
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J016
		File number UL	E174189
Pressure Equipment Directive		Modul A; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	63	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	30...50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

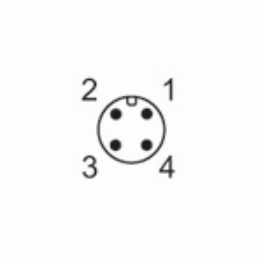
PV7060

Pressure switch with IO-Link

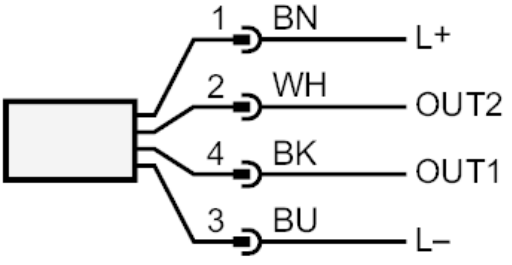
PV-600-SEG14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

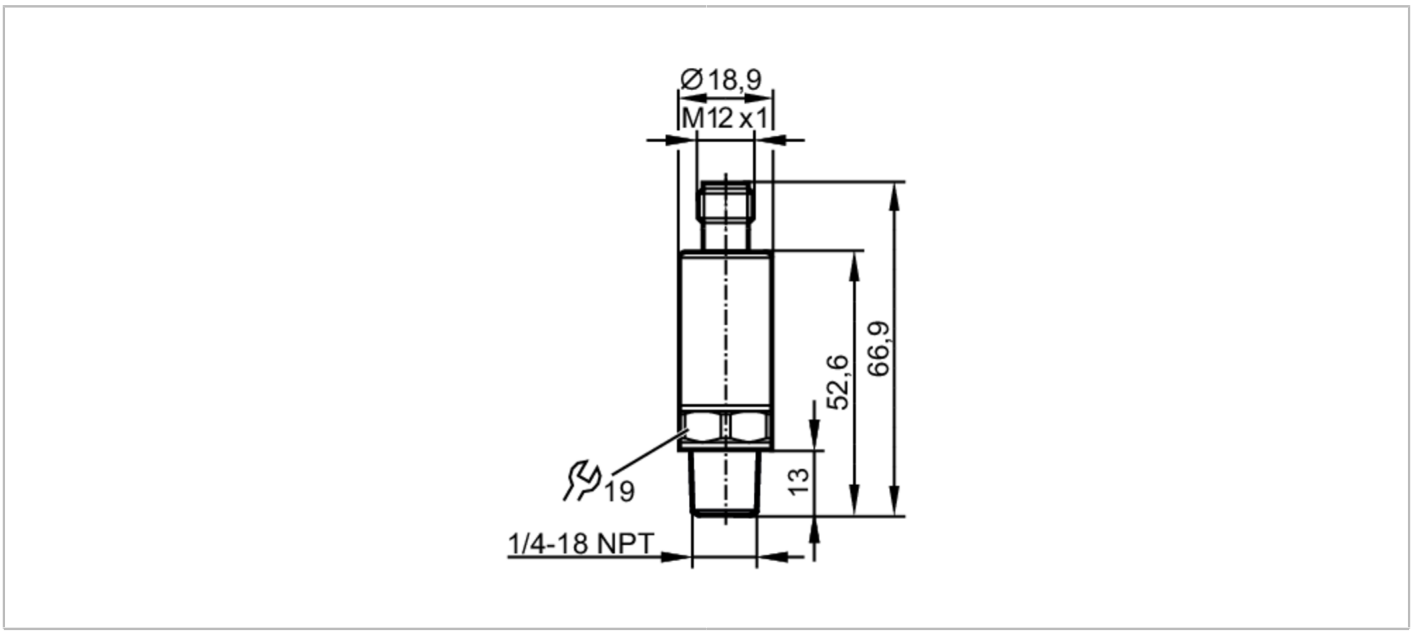


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7600

Pressure switch with IO-Link

PV-400-SEN14-UFRVG/US/ /



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 1/4" NPT external thread internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1700 bar	24655 psi	170 MPa
Pressure rating	1000 bar	14500 psi	100 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
MAWP for applications according to CRN [bar]	840		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		

PV7600

Pressure switch with IO-Link

PV-400-SEN14-UFRVG/US/ /

Output signal			switching signal; IO-Link; (configurable)	
Electrical design			PNP/NPN	
Number of digital outputs			2	
Output function			normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC	[V]		2	
Permanent current rating of switching output DC	[mA]		100	
Switching frequency DC	[Hz]		< 170	
Short-circuit protection			yes	
Type of short-circuit protection			pulsed	
Overload protection			yes	
Measuring/setting range				
Measuring range		0...400 bar	0...5800 psi	0...40 MPa
Set point SP		4...400 bar	58...5802 psi	0.4...40 MPa
Reset point rP		2...398 bar	30...5773 psi	0.2...39.8 MPa
In steps of		0.2 bar	1 psi	0.02 MPa
Factory setting		SP1 = 100 bar	rP1 = 92 bar	ou1 = Hno;
		SP2 = 300 bar	rP2 = 292 bar	ou2 = Hno;
		dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
		coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations				
Switch point accuracy	[% of the span]		< ± 0,5 (nach DIN EN 61298-2)	
Repeatability	[% of the span]		< ± 0,05; (with temperature fluctuations < 10 K)	
Characteristics deviation	[% of the span]		< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)	
Linearity deviation	[% of the span]		< ± 0,1 (BFSL) / < ± 0,2 (LS)	
Hysteresis deviation	[% of the span]		< ± 0,2	
Long-term stability	[% of the span]		< ± 0,1; (per 6 months)	
Temperature coefficient zero point	[% of the span / 10 K]		< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)	
Temperature coefficient span	[% of the span / 10 K]		< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)	
Response times				
Response time	[ms]		< 3	
Software / programming				
Parameter setting options			hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces				
Communication interface			IO-Link	
Transmission type			COM2 (38,4 kBaud)	

PV7600

Pressure switch with IO-Link

PV-400-SEN14-UFRVG/US/ /

IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	851

Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	

Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data		
Weight	[g]	65
Housing		cylindrical
Dimensions	[mm]	Ø 18.9 / L = 66.9
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection 1/4" NPT external thread internal thread:M5
Restrictor element integrated		yes

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

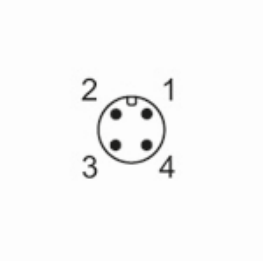
PV7600

Pressure switch with IO-Link

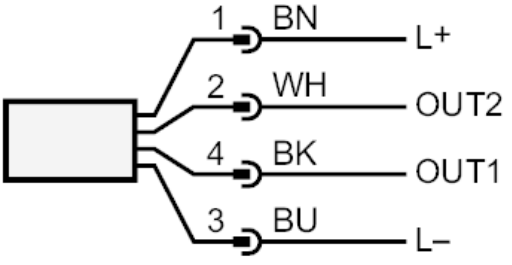
PV-400-SEN14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

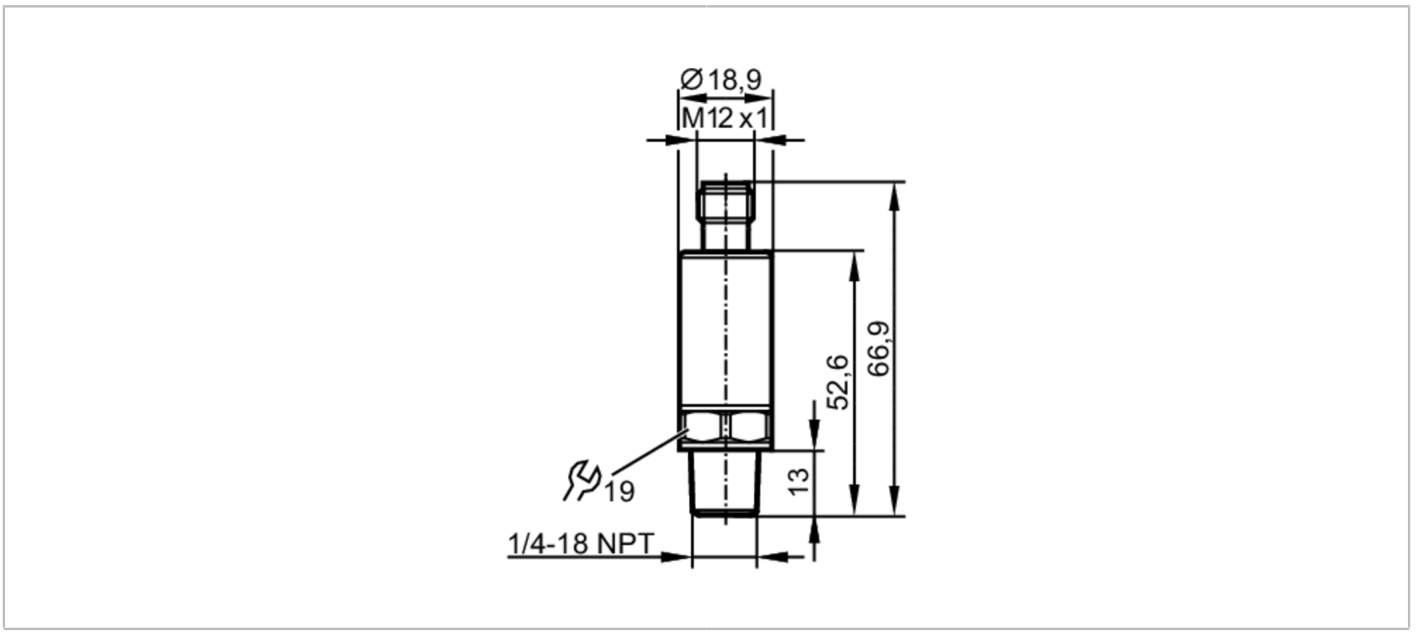


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7601

Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ /



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Process connection	threaded connection 1/4" NPT external thread internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1200 bar	17400 psi	120 MPa
Pressure rating	625 bar	9060 psi	62.5 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
MAWP for applications according to CRN [bar]	625		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		

PV7601

Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ /

Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		
Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Set point SP	2.5...250 bar	37...3626 psi	0.25...25 MPa
Reset point rP	1.3...248.8 bar	18...3608 psi	0.13...24.88 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting	SP1 = 62.5 bar	rP1 = 57.5 bar	ou1 = Hno;
	SP2 = 187.5 bar	rP2 = 182.5 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		

PV7601

Pressure switch with IO-Link

PV-250-SEN14-UFRVG/US/ /

IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	852

Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	

Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data		
Weight	[g]	66
Housing		cylindrical
Dimensions	[mm]	Ø 18.9 / L = 66.9
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection 1/4" NPT external thread internal thread:M5
Restrictor element integrated		yes

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

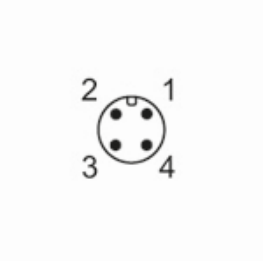
PV7601

Pressure switch with IO-Link

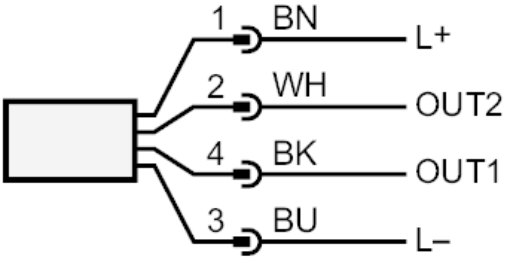
PV-250-SEN14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

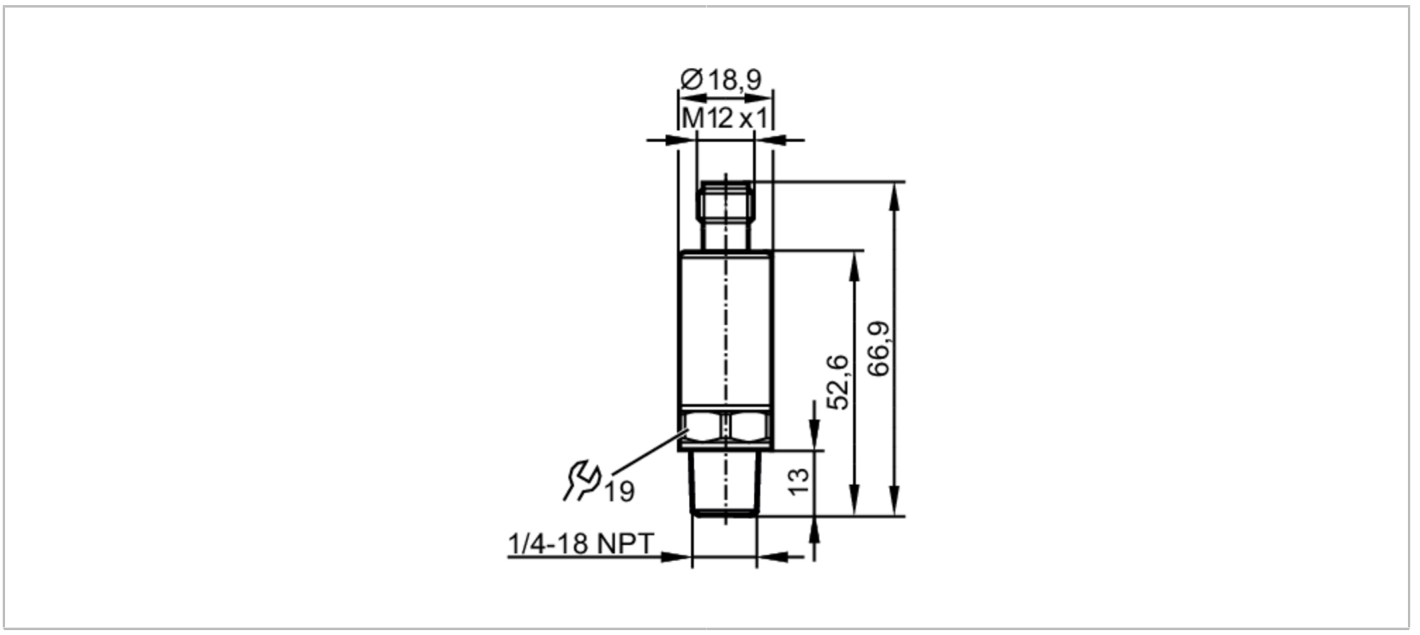


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7602

Pressure switch with IO-Link

PV-100-SEN14-UFRVG/US/ /



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Process connection	threaded connection 1/4" NPT external thread internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1000 bar	14500 psi	100 MPa
Pressure rating	250 bar	3625 psi	25 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
MAWP for applications according to CRN [bar]	250		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		

PV7602

Pressure switch with IO-Link

PV-100-SEN14-UFRVG/US/ /

Output signal		switching signal; IO-Link; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	< 170
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Measuring/setting range

Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Set point SP	1...100 bar	15...1450 psi	0.1...10 MPa
Reset point rP	0.5...99.5 bar	7...1443 psi	0.05...9.95 MPa
In steps of	0.05 bar	1 psi	0.005 MPa
Factory setting	SP1 = 25 bar	rP1 = 23 bar	ou1 = Hno;
	SP2 = 75 bar	rP2 = 73 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms

Accuracy / deviations

Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)

Response times

Response time	[ms]	< 3

Software / programming

Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping

Interfaces

Communication interface	IO-Link
Transmission type	COM2 (38,4 kBaud)

PV7602

Pressure switch with IO-Link

PV-100-SEN14-UFRVG/US/ /

IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	853

Operating conditions

Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	

Tests / approvals

EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data

Weight	[g]	65
Housing		cylindrical
Dimensions	[mm]	Ø 18.9 / L = 66.9
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection 1/4" NPT external thread internal thread:M5
Restrictor element integrated		yes

Remarks

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

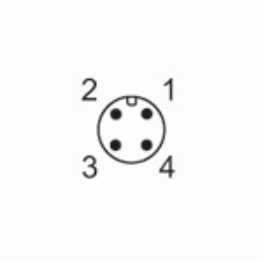
PV7602

Pressure switch with IO-Link

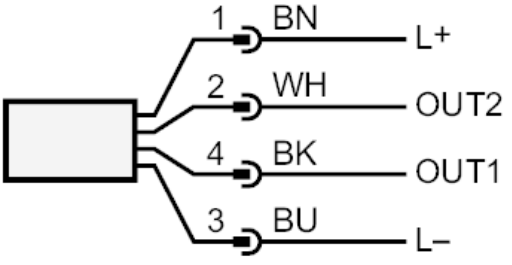
PV-100-SEN14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

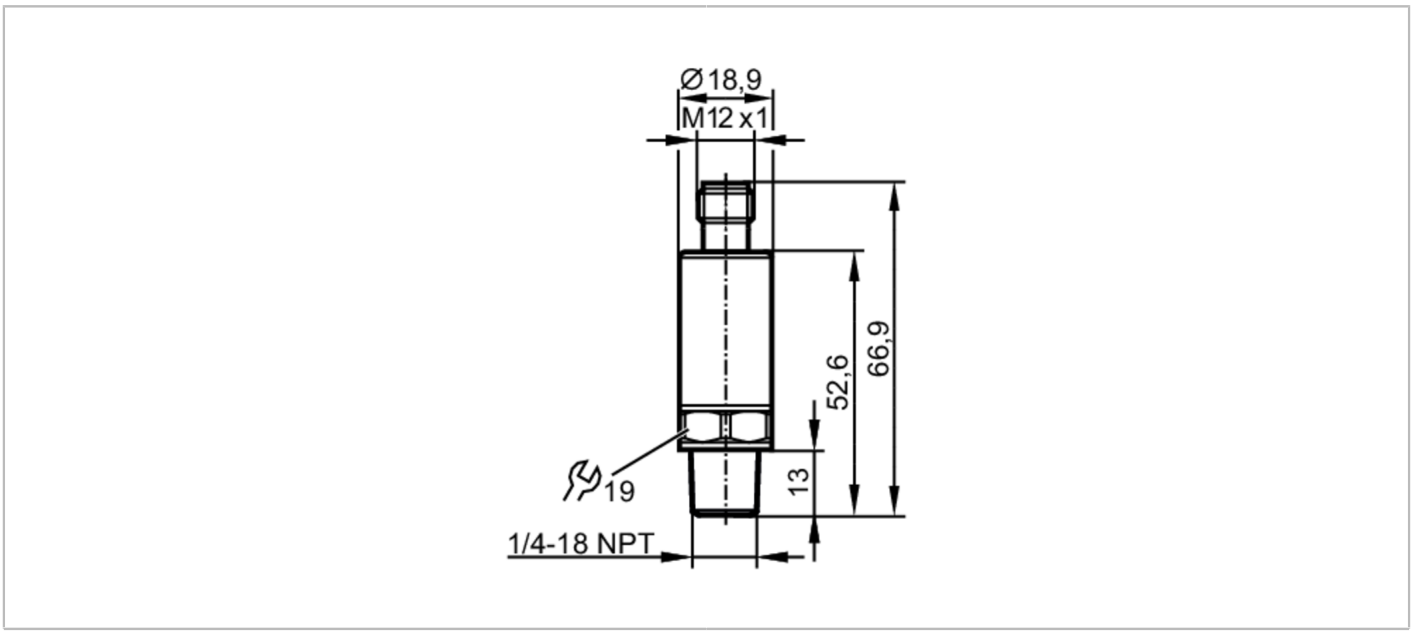


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7603

Pressure switch with IO-Link

PV-025-SEN14-UFRVG/US/ /



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	-1...25 bar	-14.6...362.6 psi	-0.1...2.5 MPa
Process connection	threaded connection 1/4" NPT external thread internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	600 bar	8700 psi	60 MPa
Pressure rating	65 bar	940 psi	6.5 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure; vacuum		
MAWP for applications according to CRN [bar]	65		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		

PV7603

Pressure switch with IO-Link

PV-025-SEN14-UFRVG/US/ /

Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		
Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	100		
Switching frequency DC [Hz]	< 170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	-1...25 bar	-14.6...362.6 psi	-0.1...2.5 MPa
Set point SP	-0.75...25 bar	-10.8...362.6 psi	-0.075...2.5 MPa
Reset point rP	-0.87...24.88 bar	-12.7...360.8 psi	-0.087...2488 MPa
In steps of	0.01 bar	0.1 psi	0.001 MPa
Factory setting	SP1 = 6.25 bar	rP1 = 5.75 bar	ou1 = Hno;
	SP2 = 18.75 bar	rP2 = 18.25 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation [% of the span]	< ± 0,2		
Long-term stability [% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times			
Response time [ms]	< 3		
Software / programming			
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		

PV7603

Pressure switch with IO-Link

PV-025-SEN14-UFRVG/US/ /

IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	854
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J015
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	64	
Housing		cylindrical	
Dimensions	[mm]	Ø 18.9 / L = 66.9	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection 1/4" NPT external thread internal thread:M5	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

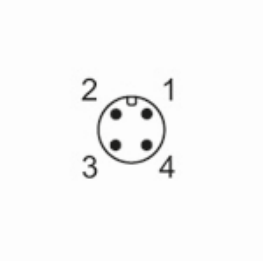
PV7603

Pressure switch with IO-Link

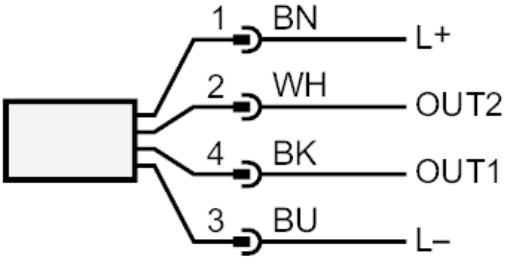
PV-025-SEN14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

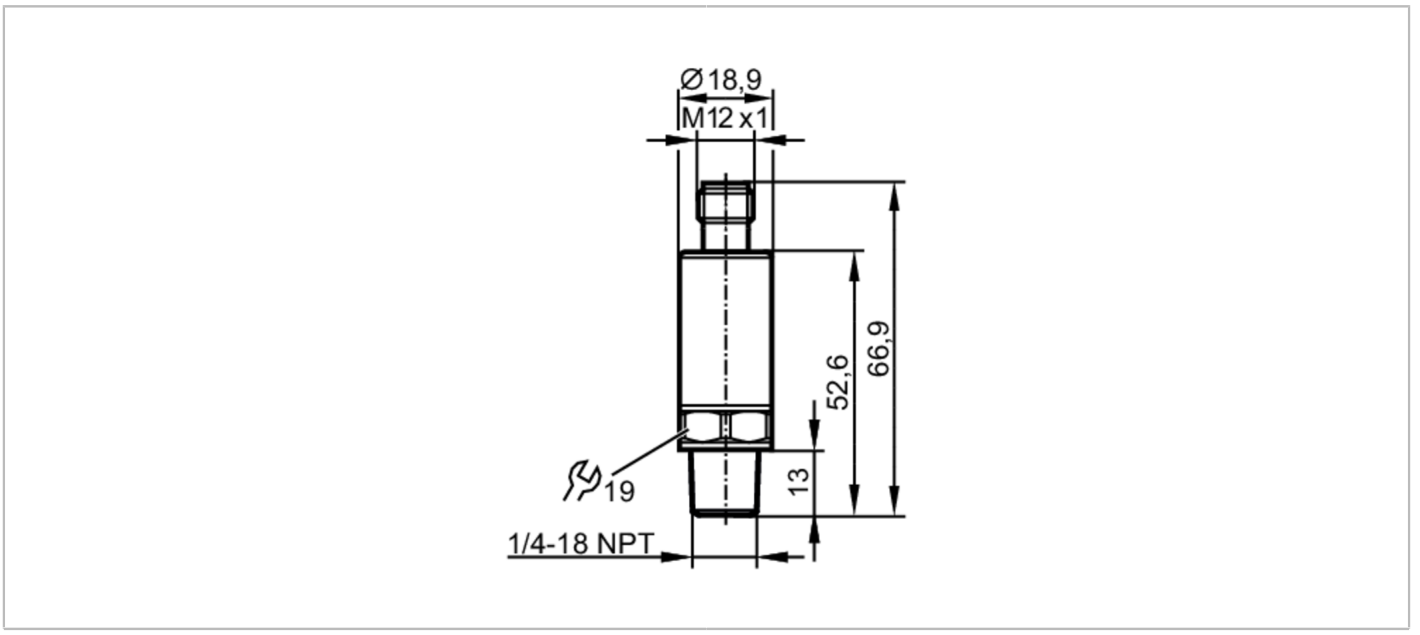


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7623

Pressure switch with IO-Link

PV-060-SEN14-UFRVG/US/ /



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...60 bar	0...870 psi	0...6 MPa
Process connection	threaded connection 1/4" NPT external thread internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	900 bar	13050 psi	90 MPa
Pressure rating	150 bar	2175 psi	15 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
MAWP for applications according to CRN [bar]	150		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		

PV7623

Pressure switch with IO-Link

PV-060-SEN14-UFRVG/US/ /

Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		
Output function		normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC	[V]	2		
Permanent current rating of switching output DC	[mA]	100		
Switching frequency DC	[Hz]	< 170		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Overload protection		yes		
Measuring/setting range				
Measuring range		0...60 bar	0...870 psi	0...6 MPa
Set point SP		0.6...60 bar	9...870 psi	0.06...6 MPa
Reset point rP		0.3...59.7 bar	4...866 psi	0.03...5.97 MPa
In steps of		0.02 bar	1 psi	0.002 MPa
Factory setting		SP1 = 15 bar	rP1 = 13.8 bar	ou1 = Hno;
		SP2 = 45 bar	rP2 = 43.8 bar	ou2 = Hno;
		dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
		coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations				
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation	[% of the span]	< ± 0,2		
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times				
Response time	[ms]	< 3		
Software / programming				
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces				
Communication interface		IO-Link		
Transmission type		COM2 (38,4 kBaud)		

PV7623

Pressure switch with IO-Link

PV-060-SEN14-UFRVG/US/ /

IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	899

Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	

Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J015
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data		
Weight	[g]	64.5
Housing		cylindrical
Dimensions	[mm]	Ø 18.9 / L = 66.9
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection 1/4" NPT external thread internal thread:M5
Restrictor element integrated		yes

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

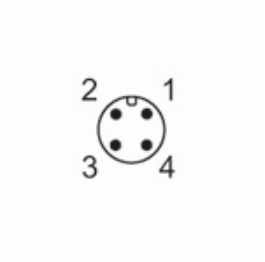
PV7623

Pressure switch with IO-Link

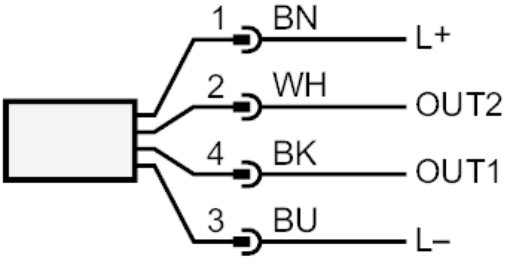
PV-060-SEN14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

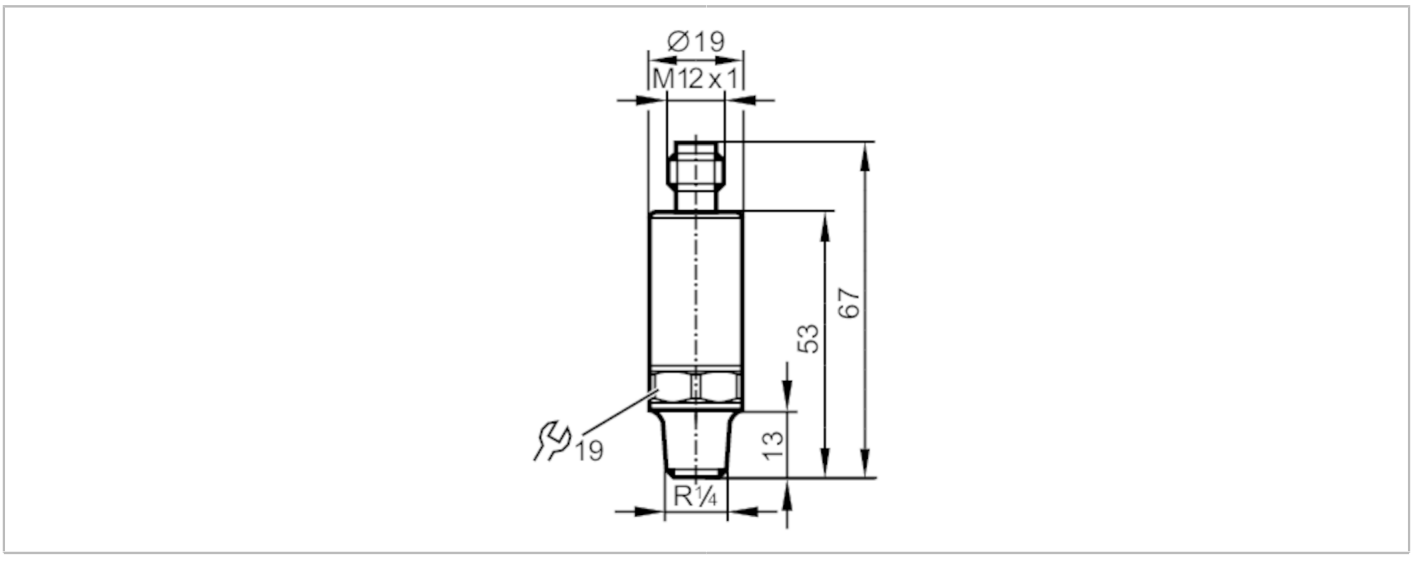


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7702

Pressure switch with IO-Link

PV-100MSER14-UFRVG/US/ /



Product characteristics		
Number of inputs and outputs		Number of digital outputs: 2
Measuring range	[MPa]	0...10
Process connection		threaded connection R 1/4 external thread internal thread:M5
Application		
Measuring element		metallic thin film cell
Application		for industrial applications
Media		liquids and gases
Medium temperature	[°C]	-40...90
Min. burst pressure	[MPa]	100
Pressure rating	[MPa]	25
Note on pressure rating		static
Vacuum resistance		-1000 mbar -0.1 MPa
Type of pressure		relative pressure
Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 15
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
Outputs		
Total number of outputs		2
Output signal		switching signal; IO-Link; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		2

PV7702

Pressure switch with IO-Link

PV-100MSER14-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC	[V]	2		
Permanent current rating of switching output DC	[mA]	100		
Switching frequency DC	[Hz]	< 170		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Overload protection		yes		
Measuring/setting range				
Measuring range	[MPa]	0...10		
Set point SP	[MPa]	0.1...10		
Reset point rP	[MPa]	0.05...9.95		
In steps of	[MPa]	0.005		
Factory setting		SP1 = 2.5 MPa	rP1 = 2.3 MPa	ou1 = Hno;
		SP2 = 7.5 MPa	rP2 = 7.3 MPa	ou2 = Hno;
		dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
		coF = 0 %	P-n = PnP	dAP= 60 ms
Accuracy / deviations				
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)		
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)		
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)		
Hysteresis deviation	[% of the span]	< ± 0,2		
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)		
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)		
Response times				
Response time	[ms]	< 3		
Software / programming				
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping		
Interfaces				
Communication interface		IO-Link		
Transmission type		COM2 (38,4 kBaud)		
IO-Link revision		1.1		
SDCI standard		IEC 61131-9		

PV7702

Pressure switch with IO-Link

PV-100MSER14-UFRVG/US/ /

Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	782
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667.77	
UL approval		UL approval no.	J016
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	65	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 67	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	50; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection R 1/4 external thread internal thread:M5	
Restrictor element integrated		yes	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

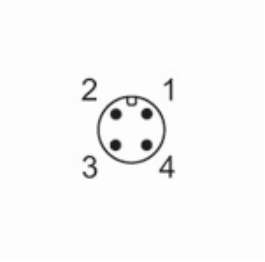
PV7702

Pressure switch with IO-Link

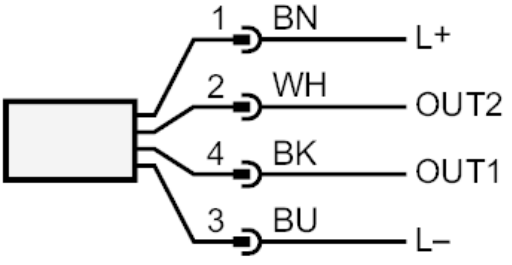
PV-100MSER14-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

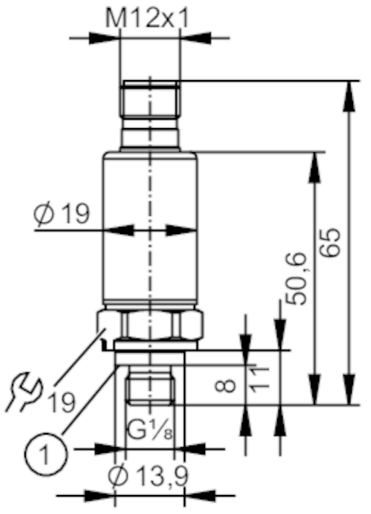


OUT1	switching output IO-Link
OUT2	switching output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV7804

Pressure switch with IO-Link

PV-010-REG18-UFRVG/US/ /



1 Sealing

Product characteristics				
Number of inputs and outputs		Number of digital outputs: 2		
Measuring range		-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Process connection		threaded connection G 1/8 external thread DIN EN ISO 1179-2 internal thread:M5		
Application				
Measuring element		metallic thin film cell		
Application		for industrial applications		
Media		liquids and gases		
Medium temperature	[°C]	-40...90		
Min. burst pressure		300 bar	4350 psi	30 MPa
Pressure rating		25 bar	360 psi	2.5 MPa
Note on pressure rating		static		
Vacuum resistance		-1000 mbar	-0.1 MPa	
Type of pressure		relative pressure; vacuum		
Electrical data				
Operating voltage	[V]	18...30 DC		
Current consumption	[mA]	< 15		
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		
Outputs				
Total number of outputs		2		
Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		

PV7804

Pressure switch with IO-Link

PV-010-REG18-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)			
Max. voltage drop switching output DC [V]	2			
Permanent current rating of switching output DC [mA]	100			
Switching frequency DC [Hz]	< 170			
Short-circuit protection	yes			
Type of short-circuit protection	pulsed			
Overload protection	yes			
Measuring/setting range				
Measuring range	-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Set point SP	-0.9...10 bar	-13.1...145 psi	-90...1000 kPa	-0.09...1 MPa
Reset point rP	-0.95...9.95 bar	-13.8...144.3 psi	-95...995 kPa	-0.095...0.995 MPa
In steps of	0.005 bar	0.1 psi	0.5 kPa	0.0005 MPa
Factory setting	SP1 = 2.5 bar	rP1 = 2.3 bar	ou1 = Hno;	
	SP2 = 7.5 bar	rP2 = 7.3 bar	ou2 = Hno;	
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms		
	coF = 0 %	P-n = PnP	dAP= 60 ms	
Accuracy / deviations				
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)			
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)			
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)			
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)			
Zero-point stabilisation [% of the span]	IO-Link,	0,25; (see operating instructions zero-point behaviour)		
	switching output	0,5		
Hysteresis deviation [% of the span]	< ± 0,2			
Long-term stability [% of the span]	< ± 0,1; (per 6 months)			
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)			
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)			
Response times				
Response time [ms]	< 3			
Software / programming				
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping			
Interfaces				
Communication interface	IO-Link			
Transmission type	COM2 (38,4 kBaud)			

PV7804

Pressure switch with IO-Link

PV-010-REG18-UFRVG/US/ /

IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	727
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667	
UL approval		UL approval no.	J015
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	55	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		Process connection , measuring cell: stainless steel (630/1.4542/17-4 PH); M12-plug: stainless steel (316L/1.4404); M12-plug: acrylate, PEI; ventilation diaphragm: PTFE	
Materials (wetted parts)		Process connection , measuring cell: stainless steel (630/1.4542/17-4 PH); Sealing: FKM	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	20...25; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/8 external thread DIN EN ISO 1179-2 internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		no	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

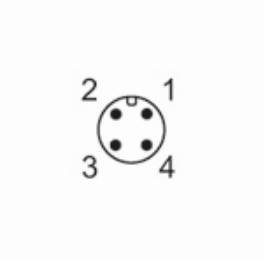
PV7804

Pressure switch with IO-Link

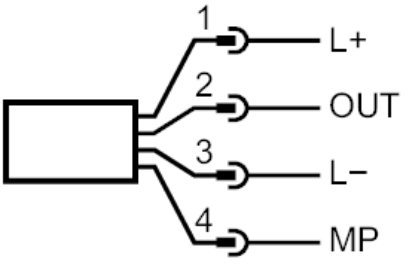
PV-010-REG18-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

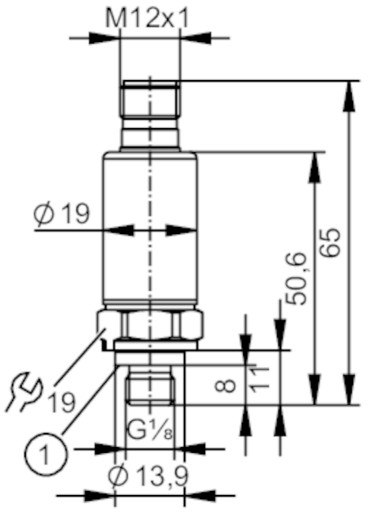


1	L+	
2	OUT	DO2 (NO/NC)
3	L-	
4	MP	DO1 (NO/NC), IO-Link

PV7829

Pressure switch with IO-Link

PV-1-0-REG18-UFRVG/US/ /



1 Sealing

Product characteristics					
Number of inputs and outputs		Number of digital outputs: 2			
Measuring range		-1...0 bar	-1000...0 mbar	-14.5...0 psi	-100...0 kPa	-0.1...0 MPa
Process connection		threaded connection G 1/8 external thread DIN EN ISO 1179-2 internal thread:M5			
Application					
Measuring element		metallic thin film cell			
Application		for industrial applications			
Media		liquids and gases			
Medium temperature	[°C]	-40...90			
Min. burst pressure		200 bar	2900 psi	20 MPa	
Pressure rating		15 bar	217 psi	1.5 MPa	
Note on pressure rating		static			
Vacuum resistance		-1000 mbar	-0.1 MPa		
Type of pressure		relative pressure; vacuum			
Electrical data					
Operating voltage	[V]	18...30 DC			
Current consumption	[mA]	< 15			
Min. insulation resistance	[MΩ]	100; (500 V DC)			
Protection class		III			
Reverse polarity protection		yes			
Power-on delay time	[s]	< 60			
Inputs / outputs					
Number of inputs and outputs		Number of digital outputs: 2			
Outputs					
Total number of outputs		2			
Output signal		switching signal; IO-Link; (configurable)			
Electrical design		PNP/NPN			
Number of digital outputs		2			

PV7829

Pressure switch with IO-Link

PV-1-0-REG18-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)				
Max. voltage drop switching output DC [V]	2				
Permanent current rating of switching output DC [mA]	100				
Switching frequency DC [Hz]	< 170				
Short-circuit protection	yes				
Type of short-circuit protection	pulsed				
Overload protection	yes				
Measuring/setting range					
Measuring range	-1...0 bar	-1000...0 mbar	-14.5...0 psi	-100...0 kPa	-0.1...0 MPa
Set point SP	-0.98...0 bar	-980...0 mbar	-14.2...0 psi	-98...0 kPa	-0.098...0 MPa
Reset point rP	-0.99...-0.01 bar	-990...-10 mbar	-14.4...-0.1 psi	-99...-1 kPa	-0.099...-0.001 MPa
In steps of	0.001 bar	1 mbar	0.1 psi	0.1 kPa	0.0001 MPa
Factory setting	SP1 = -230 mbar		rP1 = -250 mbar		ou1 = Hnc;
	SP2 = -730 mbar		rP2 = -750 mbar		ou2 = Hnc;
	dS1/dS2 = 0 ms		dr1/dr2 = 0 ms		
	coF = 0 %		P-n = PnP		dAP= 60 ms
Accuracy / deviations					
Switch point accuracy [% of the span]	< ± 2,5 (nach DIN EN 61298-2)				
Repeatability [% of the span]	< ± 0,25; (with temperature fluctuations < 10 K)				
Characteristics deviation [% of the span]	< ± 2,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)				
Linearity deviation [% of the span]	< ± 0,2 (BFSL) / < ± 0,4 (LS)				
Zero-point stabilisation [% of the span]	IO-Link,	1,25; (see operating instructions zero-point behaviour)			
	switching output	2,5			
Hysteresis deviation [% of the span]	< ± 0,6				
Long-term stability [% of the span]	< ± 0,3; (per 6 months)				
Temperature coefficient zero point [% of the span / 10 K]	< 0,4 (-25...90 °C)				
Temperature coefficient span [% of the span / 10 K]	< 0,3 (-25...90 °C)				
Response times					
Response time [ms]	< 3				
Software / programming					
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping				
Interfaces					
Communication interface	IO-Link				
Transmission type	COM2 (38,4 kBaud)				

PV7829

Pressure switch with IO-Link

PV-1-0-REG18-UFRVG/US/ /

IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 0	Generic Profiled Sensor
		Function	Device identification
		Function	Process data variable
		Function	Device diagnosis
SIO mode		yes	
Required master port type		A	
Process data analogue		2	
Process data binary		2	
Min. process cycle time	[ms]	5	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1829
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	667	
UL approval		UL approval no.	J015
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	54.2	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		Process connection , measuring cell: stainless steel (630/1.4542/17-4 PH); M12-plug: stainless steel (316L/1.4404); M12-plug: acrylate, PEI; ventilation diaphragm: PTFE	
Materials (wetted parts)		Process connection , measuring cell: stainless steel (630/1.4542/17-4 PH); Sealing: FKM	
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)	
Tightening torque	[Nm]	20...25; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)	
Process connection		threaded connection G 1/8 external thread DIN EN ISO 1179-2 internal thread:M5	
Process connection sealing		FKM (DIN EN ISO 1179-2)	
Restrictor element integrated		no	
Remarks			
Remarks		BFSL = Best Fit Straight Line	
		LS = limit value setting	
Pack quantity		1 pcs.	

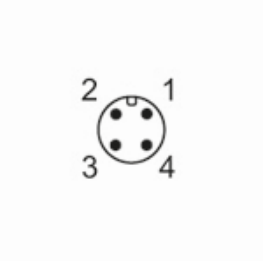
PV7829

Pressure switch with IO-Link

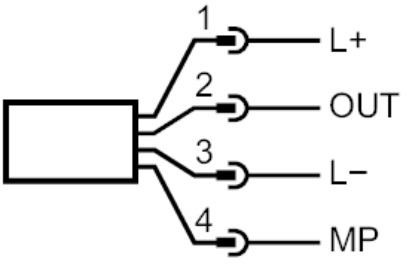
PV-1-0-REG18-UFRVG/US/ /

Electrical connection

Connector: 1 x M12; coding: A



Connection

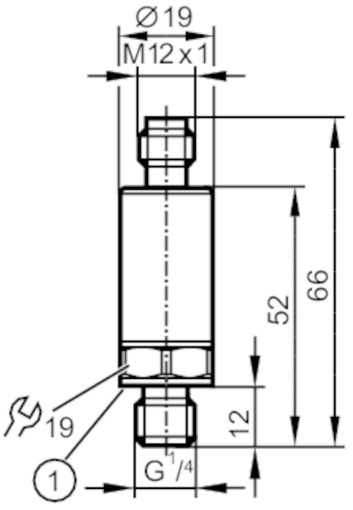


1	L+	
2	OUT	DO2 (NO/NC)
3	L-	
4	MP	DO1 (NO/NC), IO-Link

PV8000

Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /



1 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 (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1700 bar	24655 psi	170 MPa
Pressure rating	1000 bar	14500 psi	100 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV8000

Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	< 130
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Measuring/setting range			
Measuring range	0...400 bar	0...5800 psi	0...40 MPa
Set point SP	4...400 bar	58...5802 psi	0.4...40 MPa
Reset point rP	2...398 bar	30...5773 psi	0.2...39.8 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting	SP1 = 100 bar	rP1 = 92 bar	ou1 = Hno;
	SP2 = 300 bar	rP2 = 292 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms

Temperature monitoring		
Measuring range	-40...90 °C	-40...194 °F
Set point SP	-38...90 °C	-36.4...194 °F
Reset point rP	-40...88 °C	-40...190.4 °F
In steps of	0.1 °C	0.1 °F

Accuracy / deviations		
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)

Temperature monitoring		
Accuracy	[K]	± 2 K + (0.1 x (ambient temperature - medium temperature))
Notes on the accuracy / deviation		temperature range -10 to 80 °C

Response times		
Response time	[ms]	< 3

PV8000

Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /

Temperature monitoring			
Dynamic response T05 / T09	[s]	< 80 / < 210 (under ifm reference conditions)	
Software / programming			
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
SIO mode		yes	
Required master port type		A	
Process data analogue		5	
Process data binary		2	
Min. process cycle time	[ms]	4.5	
IO-Link resolution pressure	[bar]	0.2	
IO-Link resolution temperature	[K]	0.2	
IO-Link process data (cyclical)		**function**	**bit length**
		pressure	16
		temperature	16
		device status	4
		binary switching information	2
IO-Link functions (acyclical)		application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1214
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J038
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	56.9	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	

PV8000

Pressure switch with IO-Link

PV-400-SEG14-UFRVG/US/ /

Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5
Process connection sealing		FKM (DIN EN ISO 1179-2)
Restrictor element integrated		yes

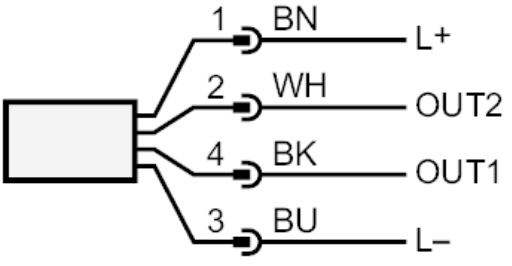
Remarks

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

Electrical connection

Connector: 1 x M12; coding: A

Connection

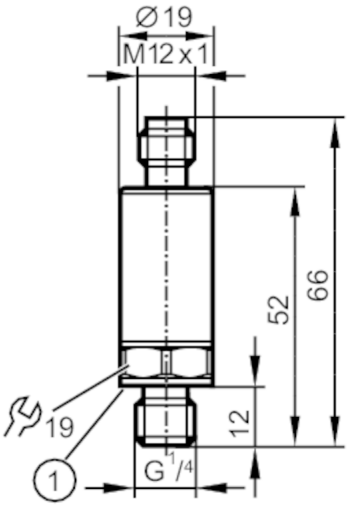


OUT1	switching output pressure
	IO-Link
OUT2	switching output pressure / temperature
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV8001

Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	1200 bar	17400 psi	120 MPa
Pressure rating	625 bar	9060 psi	62.5 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV8001

Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	< 130
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Measuring/setting range			
Measuring range	0...250 bar	0...3626 psi	0...25 MPa
Set point SP	2.5...250 bar	37...3626 psi	0.25...25 MPa
Reset point rP	1.3...248.8 bar	18...3608 psi	0.13...24.88 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting	SP1 = 62.5 bar	rP1 = 57.5 bar	ou1 = Hno;
	SP2 = 187.5 bar	rP2 = 182.5 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms

Temperature monitoring		
Measuring range	-40...90 °C	-40...194 °F
Set point SP	-38...90 °C	-36.4...194 °F
Reset point rP	-40...88 °C	-40...190.4 °F
In steps of	0.1 °C	0.1 °F

Accuracy / deviations		
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)

Temperature monitoring		
Accuracy	[K]	± 2 K + (0.1 x (ambient temperature - medium temperature))
Notes on the accuracy / deviation		temperature range -10 to 80 °C

Response times		
Response time	[ms]	< 3

PV8001

Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /

Temperature monitoring			
Dynamic response T05 / T09	[s]	< 80 / < 210 (under ifm reference conditions)	
Software / programming			
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
SIO mode		yes	
Required master port type		A	
Process data analogue		5	
Process data binary		2	
Min. process cycle time	[ms]	4.5	
IO-Link resolution pressure	[bar]	0.1	
IO-Link resolution temperature	[K]	0.2	
IO-Link process data (cyclical)		**function**	**bit length**
		pressure	16
		temperature	16
		device status	4
		binary switching information	2
IO-Link functions (acyclical)		application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1213
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J038
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	56.9	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	

PV8001

Pressure switch with IO-Link

PV-250-SEG14-UFRVG/US/ /

Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5
Process connection sealing		FKM (DIN EN ISO 1179-2)
Restrictor element integrated		yes

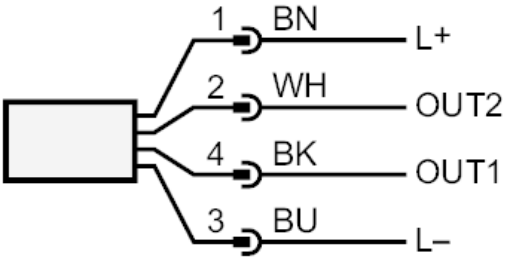
Remarks

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

Electrical connection

Connector: 1 x M12; coding: A

Connection

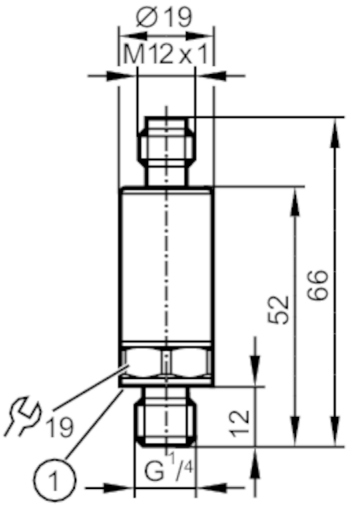


OUT1	switching output pressure
	IO-Link
OUT2	switching output pressure / temperature
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV8002

Pressure switch with IO-Link

PV-100-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics				
Number of inputs and outputs		Number of digital outputs: 2		
Measuring range		0...100 bar	0...1450 psi	0...10 MPa
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application				
Measuring element		metallic thin film cell		
Application		for industrial applications		
Media		liquids and gases		
Medium temperature	[°C]	-40...90		
Min. burst pressure		1000 bar	14500 psi	100 MPa
Pressure rating		250 bar	3625 psi	25 MPa
Note on pressure rating		static		
Vacuum resistance		-1000 mbar	-0.1 MPa	
Type of pressure		relative pressure		
Electrical data				
Operating voltage	[V]	18...30 DC		
Current consumption	[mA]	< 15		
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		
Outputs				
Total number of outputs		2		
Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		

PV8002

Pressure switch with IO-Link

PV-100-SEG14-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	< 130
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Measuring/setting range			
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Set point SP	1...100 bar	15...1450 psi	0.1...10 MPa
Reset point rP	0.51...99.51 bar	7...1443 psi	0.051...9.951 MPa
In steps of	0.01 bar	1 psi	0.001 MPa
Factory setting	SP1 = 25 bar	rP1 = 23 bar	ou1 = Hno;
	SP2 = 75 bar	rP2 = 73 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms

Temperature monitoring		
Measuring range	-40...90 °C	-40...194 °F
Set point SP	-38...90 °C	-36.4...194 °F
Reset point rP	-40...88 °C	-40...190.4 °F
In steps of	0.1 °C	0.1 °F

Accuracy / deviations		
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)

Temperature monitoring		
Accuracy	[K]	± 2 K + (0.1 x (ambient temperature - medium temperature))
Notes on the accuracy / deviation		temperature range -10 to 80 °C

Response times		
Response time	[ms]	< 3

PV8002

Pressure switch with IO-Link

PV-100-SEG14-UFRVG/US/ /

Temperature monitoring			
Dynamic response T05 / T09	[s]	< 80 / < 210 (under ifm reference conditions)	
Software / programming			
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
SIO mode		yes	
Required master port type		A	
Process data analogue		5	
Process data binary		2	
Min. process cycle time	[ms]	4.5	
IO-Link resolution pressure	[bar]	0.05	
IO-Link resolution temperature	[K]	0.2	
IO-Link process data (cyclical)		**function**	**bit length**
		pressure	16
		temperature	16
		device status	4
		binary switching information	2
IO-Link functions (acyclical)		application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1212
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J038
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	56.8	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	

PV8002

Pressure switch with IO-Link

PV-100-SEG14-UFRVG/US/ /

Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5
Process connection sealing		FKM (DIN EN ISO 1179-2)
Restrictor element integrated		yes

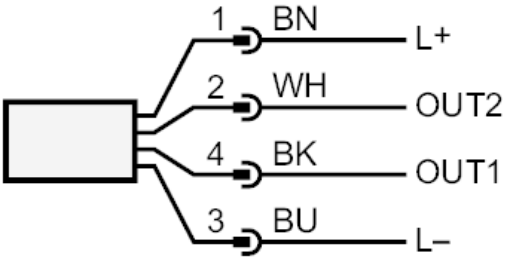
Remarks

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

Electrical connection

Connector: 1 x M12; coding: A

Connection

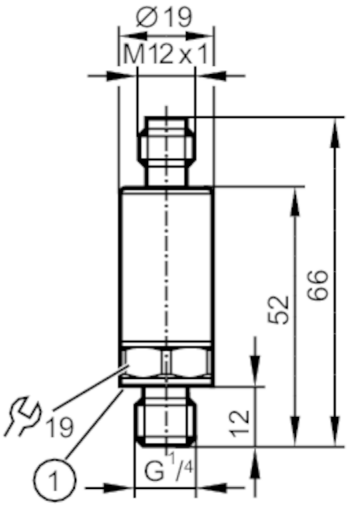


OUT1	switching output pressure
	IO-Link
OUT2	switching output pressure / temperature
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV8003

Pressure switch with IO-Link

PV-025-SEG14-UFRVG/US/ /



1 Sealing

Product characteristics				
Number of inputs and outputs		Number of digital outputs: 2		
Measuring range		-1...25 bar	-14.6...362.6 psi	-0.1...2.5 MPa
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application				
Measuring element		metallic thin film cell		
Application		for industrial applications		
Media		liquids and gases		
Medium temperature	[°C]	-40...90		
Min. burst pressure		600 bar	8700 psi	60 MPa
Pressure rating		65 bar	940 psi	6.5 MPa
Note on pressure rating		static		
Vacuum resistance		-1000 mbar	-0.1 MPa	
Type of pressure		relative pressure		
Electrical data				
Operating voltage	[V]	18...30 DC		
Current consumption	[mA]	< 15		
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		
Outputs				
Total number of outputs		2		
Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		

PV8003

Pressure switch with IO-Link

PV-025-SEG14-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	< 130
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Measuring/setting range			
Measuring range	-1...25 bar	-14.6...362.6 psi	-0.1...2.5 MPa
Set point SP	-0.75...25 bar	-10.8...362.6 psi	-0.075...2.5 MPa
Reset point rP	-0.87...24.88 bar	-12.7...360.8 psi	-0.087...2.488 MPa
In steps of	0.01 bar	0.1 psi	0.001 MPa
Factory setting	SP1 = 6.25 bar	rP1 = 5.75 bar	ou1 = Hno;
	SP2 = 18.75 bar	rP2 = 18.25 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms

Temperature monitoring		
Measuring range	-40...90 °C	-40...194 °F
Set point SP	-38...90 °C	-36.4...194 °F
Reset point rP	-40...88 °C	-40...190.4 °F
In steps of	0.1 °C	0.1 °F

Accuracy / deviations		
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)

Temperature monitoring		
Accuracy	[K]	± 2 K + (0.1 x (ambient temperature - medium temperature))
Notes on the accuracy / deviation		temperature range -10 to 80 °C

Response times		
Response time	[ms]	< 3

PV8003

Pressure switch with IO-Link

PV-025-SEG14-UFRVG/US/ /

Temperature monitoring			
Dynamic response T05 / T09	[s]	< 80 / < 210 (under ifm reference conditions)	
Software / programming			
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
SIO mode		yes	
Required master port type		A	
Process data analogue		5	
Process data binary		2	
Min. process cycle time	[ms]	4.5	
IO-Link resolution pressure	[bar]	0.01	
IO-Link resolution temperature	[K]	0.2	
IO-Link process data (cyclical)		**function**	**bit length**
		pressure	16
		temperature	16
		device status	4
		binary switching information	2
IO-Link functions (acyclical)		application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1211
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J037
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	56.3	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	

PV8003

Pressure switch with IO-Link

PV-025-SEG14-UFRVG/US/ /

Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5
Process connection sealing		FKM (DIN EN ISO 1179-2)
Restrictor element integrated		yes

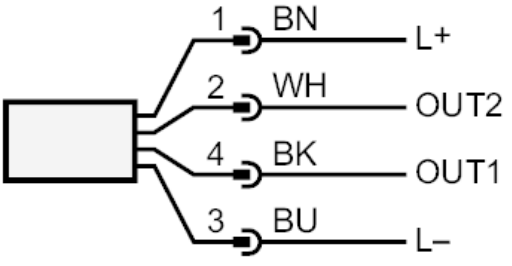
Remarks

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

Electrical connection

Connector: 1 x M12; coding: A

Connection

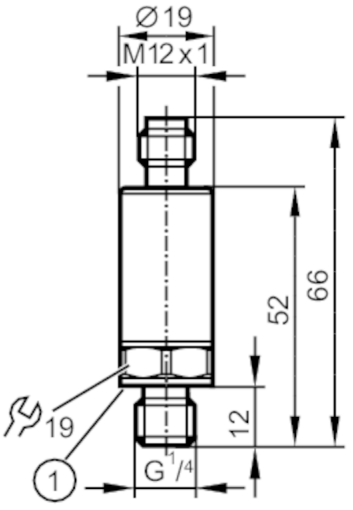


OUT1	switching output pressure
	IO-Link
OUT2	switching output pressure / temperature
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV8004

Pressure switch with IO-Link

PV-010-REG14-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	-1...10 bar	-14.5...145 psi	-0.1...1 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	300 bar	4350 psi	30 MPa
Pressure rating	25 bar	360 psi	2.5 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV8004

Pressure switch with IO-Link

PV-010-REG14-UFRVG/US/ /

Output function	normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC [V]	2	
Permanent current rating of switching output DC [mA]	100	
Switching frequency DC [Hz]	< 130	
Short-circuit protection	yes	
Type of short-circuit protection	pulsed	
Overload protection	yes	
Measuring/setting range		
Measuring range	-1...10 bar	-14.5...145 psi / -0.1...1 MPa
Set point SP	-0.9...10 bar	-13.1...145 psi / -0.09...1 MPa
Reset point rP	-0.949...9.951 bar	-13.8...144.3 psi / -0.0949...0.9951 MPa
In steps of	0.001 bar	0.1 psi / 0.0001 MPa
Factory setting	SP1 = 2.5 bar	rP1 = 2.3 bar / ou1 = Hno;
	SP2 = 7.5 bar	rP2 = 7.3 bar / ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms
	coF = 0 %	P-n = PnP / dAP= 60 ms
Temperature monitoring		
Measuring range	-40...90 °C	-40...194 °F
Set point SP	-38...90 °C	-36.4...194 °F
Reset point rP	-40...88 °C	-40...19.4 °F
In steps of	0.1 °C	0.1 °F
Accuracy / deviations		
Switch point accuracy [% of the span]	< ± 0,5 (nach DIN EN 61298-2)	
Repeatability [% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)	
Characteristics deviation [% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)	
Linearity deviation [% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)	
Hysteresis deviation [% of the span]	< ± 0,2	
Long-term stability [% of the span]	< ± 0,1; (per 6 months)	
Temperature coefficient zero point [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)	
Temperature coefficient span [% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)	
Temperature monitoring		
Accuracy [K]	± 2 K + (0.1 x (ambient temperature - medium temperature))	
Notes on the accuracy / deviation	temperature range -10 to 80 °C	
Response times		
Response time [ms]	< 3	

PV8004

Pressure switch with IO-Link

PV-010-REG14-UFRVG/US/ /

Temperature monitoring			
Dynamic response T05 / T09	[s]	< 80 / < 210 (under ifm reference conditions)	
Software / programming			
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
SIO mode		yes	
Required master port type		A	
Process data analogue		5	
Process data binary		2	
Min. process cycle time	[ms]	4.5	
IO-Link resolution pressure	[bar]	0.005	
IO-Link resolution temperature	[K]	0.2	
IO-Link process data (cyclical)		**function**	**bit length**
		pressure	16
		temperature	16
		device status	4
		binary switching information	2
IO-Link functions (acyclical)		application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1210
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J037
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	53.5	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	

PV8004

Pressure switch with IO-Link

PV-010-REG14-UFRVG/US/ /

Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5
Process connection sealing		FKM (DIN EN ISO 1179-2)
Restrictor element integrated		yes

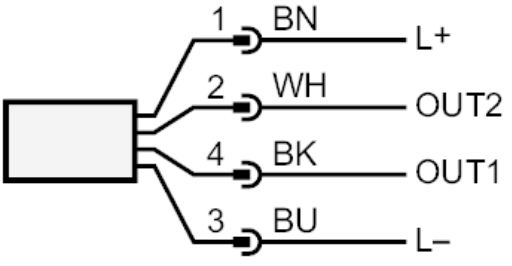
Remarks

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

Electrical connection

Connector: 1 x M12; coding: A

Connection

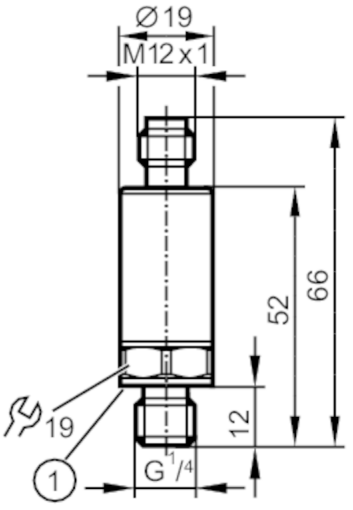


OUT1	switching output pressure
	IO-Link
OUT2	switching output pressure / temperature
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV8023

Pressure switch with IO-Link

PV-060-REG14-UFRVG/US/ /



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...60 bar	0...870 psi	0...6 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	900 bar	13050 psi	90 MPa
Pressure rating	150 bar	2175 psi	15 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV8023

Pressure switch with IO-Link

PV-060-REG14-UFRVG/US/ /

Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	< 130
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Measuring/setting range			
Measuring range	0...60 bar	0...870 psi	0...6 MPa
Set point SP	0.6...60 bar	9...870 psi	0...6 MPa
Reset point rP	0.31...59.71 bar	4...866 psi	0.031...5.971 MPa
In steps of	0.01 bar	1 psi	0.001 MPa
Factory setting	SP1 = 15 bar	rP1 = 13.8 bar	ou1 = Hno;
	SP2 = 45 bar	rP2 = 43.8 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms

Temperature monitoring		
Measuring range	-40...90 °C	-40...194 °F
Set point SP	-38...90 °C	-36.4...194 °F
Reset point rP	-40...88 °C	-40...190.4 °F
In steps of	0.1 °C	0.1 °F

Accuracy / deviations		
Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)

Temperature monitoring		
Accuracy	[K]	± 2 K + (0.1 x (ambient temperature - medium temperature))
Notes on the accuracy / deviation		temperature range -10 to 80 °C

Response times		
Response time	[ms]	< 3

PV8023

Pressure switch with IO-Link

PV-060-REG14-UFRVG/US/ /

Temperature monitoring			
Dynamic response T05 / T09	[s]	< 80 / < 210 (under ifm reference conditions)	
Software / programming			
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
SIO mode		yes	
Required master port type		A	
Process data analogue		5	
Process data binary		2	
Min. process cycle time	[ms]	4.5	
IO-Link resolution pressure	[bar]	0.02	
IO-Link resolution temperature	[K]	0.2	
IO-Link process data (cyclical)		**function**	**bit length**
		pressure	16
		temperature	16
		device status	4
		binary switching information	2
IO-Link functions (acyclical)		application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1215
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	668	
UL approval		UL approval no.	J037
		File number UL	E174189
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	56.1	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	

PV8023

Pressure switch with IO-Link

PV-060-REG14-UFRVG/US/ /

Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)
Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5
Process connection sealing		FKM (DIN EN ISO 1179-2)
Restrictor element integrated		yes

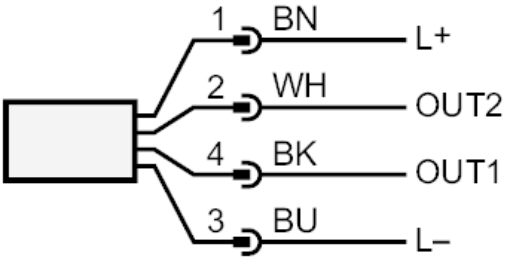
Remarks

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

Electrical connection

Connector: 1 x M12; coding: A

Connection

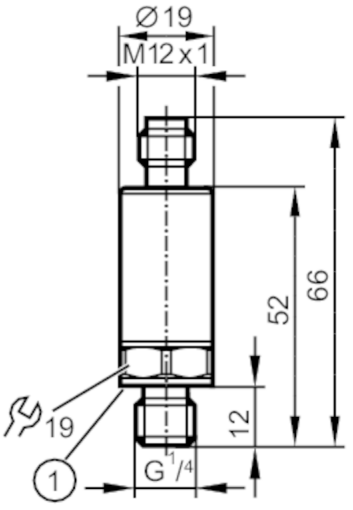


OUT1	switching output pressure
	IO-Link
OUT2	switching output pressure / temperature
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white

PV8060

Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US



1 Sealing

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...600 bar	0...8700 psi	0...60 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5		
Application			
Measuring element	metallic thin film cell		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...90		
Min. burst pressure	2500 bar	36255 psi	250 MPa
Pressure rating	1500 bar	21755 psi	150 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...30 DC		
Current consumption [mA]	< 15		
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		
Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		

PV8060

Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US

Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	< 130
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Measuring/setting range

Measuring range	0...600 bar	0...8700 psi	0...60 MPa
Set point SP	6...600 bar	87...8702 psi	0.6...60 MPa
Reset point rP	3.1...597.1 bar	44...8660 psi	0.31...59.71 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting	SP1 = 150 bar	rP1 = 138 bar	ou1 = Hno;
	SP2 = 450 bar	rP2 = 438 bar	ou2 = Hno;
	dS1/dS2 = 0 ms	dr1/dr2 = 0 ms	
	coF = 0 %	P-n = PnP	dAP= 60 ms

Temperature monitoring

Measuring range	-40...90 °C	-40...194 °F
Set point SP	-38...90 °C	-36.4...194 °F
Reset point rP	-40...88 °C	-40...190.4 °F
In steps of	0.1 °C	0.1 °F

Accuracy / deviations

Switch point accuracy	[% of the span]	< ± 0,5 (nach DIN EN 61298-2)
Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)
Temperature coefficient span	[% of the span / 10 K]	< 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)

Temperature monitoring

Accuracy	[K]	± 2 K + (0.1 x (ambient temperature - medium temperature))
Notes on the accuracy / deviation		temperature range -10 to 80 °C

Response times

Response time	[ms]	< 3

PV8060

Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US

Temperature monitoring			
Dynamic response T05 / T09	[s]	< 80 / < 210 (under ifm reference conditions)	
Software / programming			
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; switch-on/switch-off delay; Damping	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Common - I&D	Identification and Diagnosis
		Function	Measurement data, standard resolution
SIO mode		yes	
Required master port type		A	
Process data analogue		5	
Process data binary		2	
Min. process cycle time	[ms]	4.5	
IO-Link resolution pressure	[bar]	0.2	
IO-Link resolution temperature	[K]	0.2	
IO-Link process data (cyclical)		**function**	**bit length**
		pressure	16
		temperature	16
		device status	4
		binary switching information	2
IO-Link functions (acyclical)		application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1216
Operating conditions			
Ambient temperature	[°C]	-40...90	
Storage temperature	[°C]	-40...100	
Protection		IP 67; IP 69K	
Tests / approvals			
EMC		DIN EN 61326-1	
Shock resistance		DIN EN 60068-2-27	500 g (1 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
UL approval		UL approval no.	J038
		File number UL	E174189
Pressure Equipment Directive		Modul A; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	57	
Housing		cylindrical	
Dimensions	[mm]	Ø 19 / L = 66	
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PEI	
Materials (wetted parts)		stainless steel (303/1.4305); stainless steel (630/1.4542/17-4 PH)	

PV8060

Pressure switch with IO-Link

PV-600-SEG14-UFRVG/US

Min. pressure cycles		60 million; (at 1.2 times nominal pressure)
Tightening torque	[Nm]	25...35; (recommended tightening torque; depends on the lubrication, the seal and the pressure load)
Process connection		threaded connection G 1/4 external thread (DIN EN ISO 1179-2); internal thread:M5
Process connection sealing		FKM (DIN EN ISO 1179-2)
Restrictor element integrated		yes

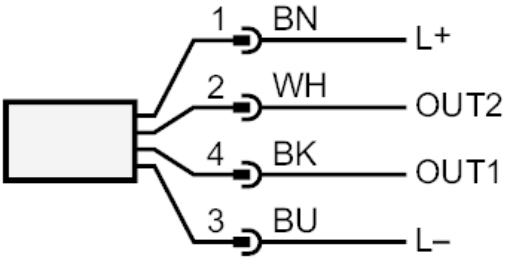
Remarks

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

Electrical connection

Connector: 1 x M12; coding: A

Connection



OUT1	switching output pressure IO-Link
OUT2	switching output pressure / temperature
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white