



Flush pressure sensor with display PI2795

URL:<https://www.sxplc.com/flush-pressure-sensor-with-display-pi2795>

Product data sheet

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2, Number of analog outputs: 1		
Measuring range	-1...4 bar	-14.5...58 psi	-100...400 kPa
Process connection	Threaded connection G 1 external thread Asseptroler Vario		
Application			
System	gold-plated contacts		
Application	flush mountable for the food and beverage industry		
Media	viscous media and liquids with suspended particles, liquids and gases		
Medium temperature [°C]	-25...125 (145 max. 1h)		
Min. bursting pressure	100 bar	1450 psi	10000 kPa
Pressure rating	30 bar	435 psi	3000 kPa
Vacuum resistance (mbar)	-1000		
Type of pressure	relative pressure, vacuum		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	30		
Electrical data			
Min. insulation resistance [MΩ]	100, (500 V DC)		
Protection class	II		
Reverse polarity protection	yes		
Integrated watchdog	yes		
3-wire			
Operating voltage [V]	20...32 DC		
Current consumption [mA]	3.6...21		
Power-on delay time [s]	1		
3-wire			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 45		
Power-on delay time [s]	0.5		
Inputs / outputs			
Number of inputs and outputs	Number of digital outputs: 2, Number of analog outputs: 1		
Outputs			
Total number of outputs	2		
Output signal	switching signal, analog signal, IO-Link, (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		
Output function	normally open / closed, (configurable)		
Number of analog outputs	1		
Analog current output [mA]	4...20, invertible, (scalable)		
Short-circuit protection	yes		
Type of short-circuit protection	yes (non-latching)		
Overload protection	yes		
3-wire			
Max. load [Ω]	300		
3-wire			
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	250		
Switching frequency DC [Hz]	125		
Max. load [Ω]	(0.8...10 V) / 20 mA		
Measuring/setting range			
Measuring range	-1...4 bar	-14.5...58 psi	-100...400 kPa
Set point SP	0.09...4 bar	-14.36...58 psi	-99...400 kPa
Reset point RP	-1...3.99 bar	-14.5...57.85 psi	-100...399 kPa
Analog start point	-1...3 bar	-14.5...43.5 psi	-100...300 kPa
Analog end point	0...4 bar	0...58 psi	0...400 kPa
In steps of	0.005 bar	0.05 psi	0.5 kPa
Factory setting			SP1 = 1.000 bar SP2 = 3.000 bar ASP = 0.000 bar RP1 = 0.820 bar RP2 = 2.820 bar AEP = 4.000 bar
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0.2, (Turn down 1:1)		
Repeatability [% of the span]	< ± 0.2, (with temperature fluctuations < 10 °K, Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0.2, (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62028-1)		
Linearity deviation [% of the span]	< ± 0.15, (Turn down 1:1)		
Hysteresis deviation [% of the span]	< ± 0.15, (Turn down 1:1)		
Long-term stability [% of the span]	< ± 0.1, (Turn down 1:1, per year)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0.05, (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0.15, (0...70 °C)		
Reaction times			
Damping process value dAP [s]	0...30		
Damping for the analog output dAA [s]	0.01...99.99		
3-wire			
Step response time analog output [ms]	45		
3-wire			
Min. response time of switching output (dAP) [ms]	3		
Step response time analog output [ms]	7		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38.4 kbaud)		
IO-Link revision	1.0		
Profiles	no profile		
SIO mode	yes		
Required master port class	A		
Process data analog	1		
Process data binary	2		
Min. process cycle time [ms]	2.3		
Supported DeviceIDs	Type of operation default	DeviceID 108	
Operating conditions			
Ambient temperature [°C]	-25...80		
Storage temperature [°C]	-40...100		
Protection	IP 67, IP 68, IP 69K		
Tests / approvals			
EMC	EN 61000-4-2 ESD EN 61000-4-3 RF radiated EN 61000-4-4 burst EN 61000-4-5 Surge EN 61000-4-6 RF conducted	4 kV CD / 8 kV AD 10 V/m 2 kV 0.5/1 kV 10 V	
Shock resistance	DIN IEC 68-2-27 50 g (11 ms)		
Vibration resistance	DIN IEC 68-2-6 20 g (10...2000 Hz)		
MTTF [years]	160		
Note on approval	Factory certificate available as download at www.factory-certificate.fm		
Mechanical data			
Weight [g]	358.5		
Material	stainless steel (1.4404 / 316L), POM, PTFE, PBT, PEI, PFA		
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃), stainless steel (1.4435 / 316L), surface characteristics: Ra < 0.4 / Rz 4, PTFE		
Min. pressure cycles	100 million		
Process connection	threaded connection G 1 external thread Asseptroler Vario		
Displays / operating elements			
Display	Display unit Switching status Function display Measured values	LED, green LED, yellow alphanumeric display, 4-digit alphanumeric display, 4-digit	
Display unit	bar, psi, kPa, % of the span		
Remarks			
Pack quantity	1 pcs		

