

DFP5100 intelligent pressure switch



Features

- Easy-to-read, rugged digital display
- Intuitive and fast setup
- Two switching outputs, the display can be rotated 330°
- Parameter correction function to correct the zero point error value
- Impact resistance, vibration resistance, corrosion resistance
- Switching point can be set freely between zero and full
- With short circuit protection and reverse polarity protection

Overview

The DFP5100 intelligent pressure switch is an intelligent pressure switch that integrates pressure measurement, display, output and control. Using a high-precision silicon piezoresistive pressure sensor, the output signal is amplified by a high-precision, low-temperature drift amplifier and sent to a high-precision A/D converter, which is converted into a digital signal that can be processed by a microprocessor. The signal processed by the operation controls two switches to measure and control the pressure of the control system. The pressure switch is flexible to use, simple to operate, easy to debug, safe and reliable. It is widely used in hydropower, tap water, petroleum, chemical, machinery, hydraulic and other industries to measure, display and control the pressure of fluid media.

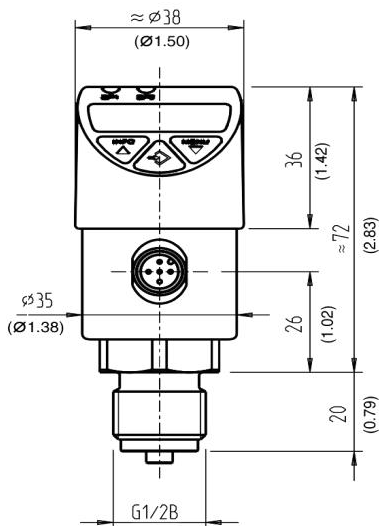
Technical Parameters

Pressure Parameters	
Measurement Range	-0.1 MPa...0MPa~0.1MPa...100 MPa
Overload	2x full scale pressure or 110MPa (min)
Pressure Type	Gauge pressure, absolute pressure, sealed gauge pressure
Electrical Specifications	
Power Supply	15~30V DC
Output Signal	4mA ~ 20mA DC (3-wire system)
Load Resistance	≤500 Ω
Insulation Resistance	100M Ω @100V DC
switch parameter	

Toggle Features	Normally open (default), normally closed, window mode, return mode,
Switching Current	$\leq 250\text{mA}$
Switch life	100 million times

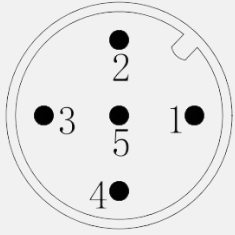
environmental parameter	
Media suitability	Various fluids without corrosion to 316L stainless steel and fluorubber
Compensation Temperature	$-10^{\circ}\text{C} \sim 80^{\circ}\text{C}$
Operating Temperature	$-30^{\circ}\text{C} \sim 80^{\circ}\text{C}$
Storage Temperature	$-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
Performance	
Accuracy	$\pm 0.25\% \text{ FS (typical); } \pm 0.5\% \text{ FS (maximum)}$
Repeatability	$\pm 0.1\% \text{ FS}$
LONG-TERM STABILITY STUDIES	$\pm 0.3\% \text{ FS/yr (max)}$

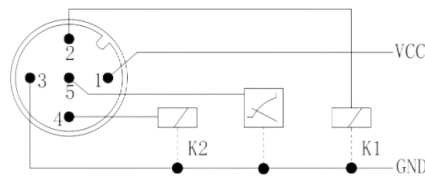
Form Factor



Straight-through elbow type

Electrical connection

Diagram	Line number	Wire Color	DEFINITIONS
	1	Merah	Power+
	2	Kuning.	switch 1
	3	Black	Power -
	4	Blue lights	switch 2
	5	Hijau.	4-20mA Output



Selection Guide

DFP5100	Type Smart Pressure Switch	
	Measurement Range	Measurement range: -0.1MPa... 0MPa ~ 0.01 MPa... 100MPa
	[0-X] kPa or MPa	X: Actual Measurement Range
	code	Putton type
	N	NPN + 4 ~ 20mA (3-wire system)
	P	PNP + 4 ~ 20mA (3-wire system)
	code	Electrical connection
	B21	M12 × 1 five-core aviation plug, straight-through type, fixed length 2m (customizable)
	B22	M12 × 1 five-core aviation plug, angular, fixed length 2m (customizable)
	code	Process connection
	C1	M20 × 1.5 male thread pressure interface, end face seal
	C3	G1/2 male thread pressure interface
	C4	G1/4 External Threaded Pressure Interface
	C5	M20 × 1.5 male thread pressure interface, water line sealing
	code	Pressure Type
	G	Gauge type
	A	Absolute pressure type
	S	Sealing gauge pressure
DFP5100 [0-1] Mpa N B21 C1 G Full Specification Model		