



Application

- Hydropower and water supply
- Chemical processing
- Scientific research
- Precise fluid-pressure measurement and control

Special Features

- High switching accuracy
- Adjustable response time
- NPN and PNP compatible; freely selectable
- Keypad adjustment, one-key zero reset and quick unit switching
- Four-digit OLED display for current pressure
- Switching-status indicator for easy observation

Description

The 3209 electronic digital pressure switch is an intelligent pressure measurement and control product that integrates pressure measurement, display, output and control. A silicon piezoresistive pressure sensor, precision low-drift amplifier, A/D converter and microprocessor provide local display and two switching outputs for pressure monitoring and control. The switch is easy to configure, safe and reliable, and is widely used for water supply, petroleum, chemical processing, machinery and hydraulic systems.

Specifications

Parameter	Specification
Pressure range	0-10 kPa to 100 MPa
Overload capacity	150-300 %FS
Accuracy	Class 0.1 or 0.5
Power supply	12-30 VDC; 24 VDC recommended
Display	Four-digit OLED
Output signal	Two switching outputs; NPN / PNP compatible
Load capacity	≤ 24 V, 1.2 A
Power consumption	≤ 15 mA
Operating temperature	-25 to 80 C
Storage temperature	-40 to 100 C
Response time	≤ 20 ms
Insulation	100 Mohm / 250 VDC
Protection class	IP65

Mechanical Construction

Parameter	Specification
Housing material	304 stainless steel
Medium compatibility	316L wetted diaphragm; 304 stainless steel pressure connection

Output Signal

Pin	Definition
1	VCC (supply +)
2	GND (supply -)
3	SP1 (switch output 1)
4	SP2 (switch output 2)
5	NC

Pressure Range Selection

Range code	Pressure type	Range	Overload %FS	Burst %FS
10k	G	0-10 kPa	300	600
35k	G	0-35 kPa	300	600
70k	G	0-70 kPa	300	600
100k	G / A	0-100 kPa	200	500
250k	G / A	0-250 kPa	200	500
400k	G / A	0-400 kPa	200	500
600k	G / A	0-600 kPa	200	500
1.0M	G / A	0-1.0 MPa	200	500
2.5M	G / S	0-2.5 MPa	200	500
6M	S	0-6 MPa	200	400
10M	S	0-10 MPa	200	400
16M	S	0-16 MPa	200	400
25M	S	0-25 MPa	150	300
40M	S	0-40 MPa	150	300
60M	S	0-60 MPa	150	300
100M	S	0-100 MPa	150	200

G = gauge pressure; A = absolute pressure; S = sealed pressure.

Accessories

Name	Specification
M12 five-core female cable connector	M12 five-core female connector with 2 m cable

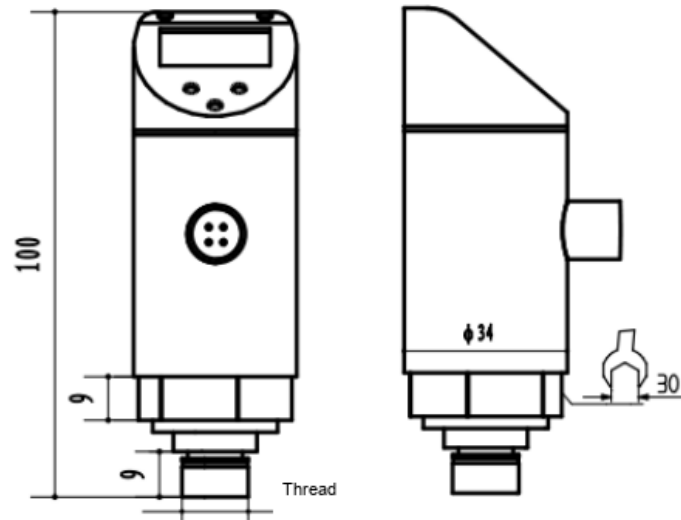
Options

- Confirm compatibility of the process medium with all wetted product materials.
- Custom configurations are available for special mechanical or performance requirements.

Safety Notes

- Do not touch the diaphragm with hard objects.
- Read the operating instructions and verify the product information before installation.
- Follow the wiring diagram exactly; incorrect wiring can damage the product.
- This datasheet is for product selection. Refer to the operating manual for complete installation, operation and maintenance instructions.

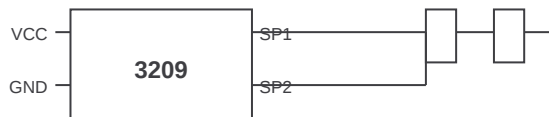
Dimensions



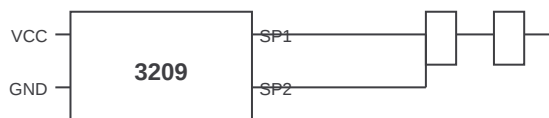
All dimensions are in mm.

Wiring Diagram

PNP output wiring



NPN output wiring



How To Order

Ordering code: 3209 - [Range] - [Pressure type] - [Accuracy] - [Connection]

Field	Available options
Range	Select from the Pressure Range Selection table
Pressure type	G: gauge A: absolute S: sealed
Accuracy	P1: +/-0.5 %FS P3: +/-0.1 %FS
Connection	C1: M20 x 1.5 C2: G1/2 C3: G1/4 C5: NPT1/4 C11: 7/16-20 UNF

Example: 3209-1M-G-P3-C1 = 1 MPa gauge range, +/-0.1 %FS accuracy, M20 x 1.5 connection.