UNIJIN® ELECTRICAL CONTACT PRESSURE GAUGE

Model : P510 Series

P510 models is designed for non-hazardous environment and it contact switches are combine with local pressure indicating for switching or control capabilities into an economical, reliable and compact system. It has easy set point adjustment on window with key given. Unijin electric contact pressure gauges are ideally suitable for alarm or control function on hydraulic, pneumatic, and general industry machinery and equipment as well as on process industrial, petro-chemical, marine, oil refineries, paper mills, water and waste water treatment plants.

Standard Specification

Dial Size
100 mm

Scale Range (mbar, mmH₂O)
-76cmHg ~4 to 0 ~ 1000 kgf/cm²

Working Pressure
Steady : 75% Full Scale

Over Range Protection
130% of Full Scale

Blow Protection
Back, Rubber Disc

Accuracy
± 1.0% of Full Scale for Pressure Indication

Working Temperature
Ambient : -20 ~ 65°C
Process : -20 ~ 80°C

Material
Case & Cover : SS304
Window : Polycarbonate Clear
Movement : 304SS
Element : 316SS
Connection : 316SS

Pressure Gauge Ordering Information

Model
P511 (High Contact)
P512 (High / Low Contact)
P513 (Low Contact)
P514 (High/ Hi High Contact)
P515 (Low / Lo Low Contact)

Mounting Type
A: Direct bottom connection
B: Bottom connection with surface mounting plate
G: Lower back connection
N: Lower back connection with panel mounting plate

Dial Size
100mm

Scale Range

Connection Type
3/8" BSPT
1/2" BSPT

Example of Order

Model
P511

Mounting Type
(A)

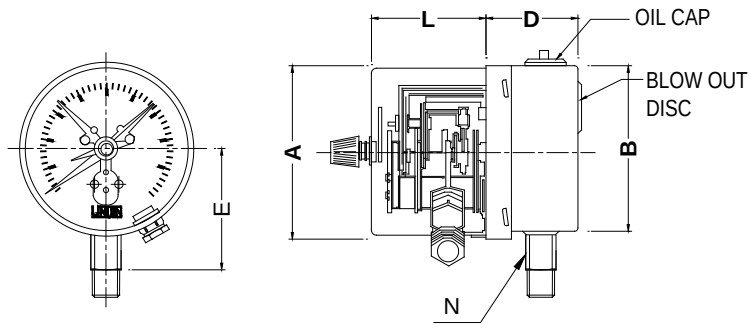
Dial Size
100mm

Scale Range
0 ~ 100 kgf/cm²

Connection
3/8" BSPT

Basic Dimensions

CODE A

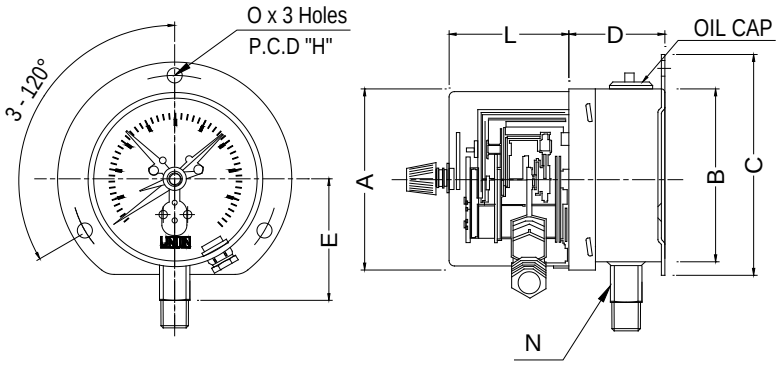


A: Direct bottom connection

Unit : mm

	ø 100
A	101.3
B	99.0
D	49.5
E	65.0
N	22.0

CODE B

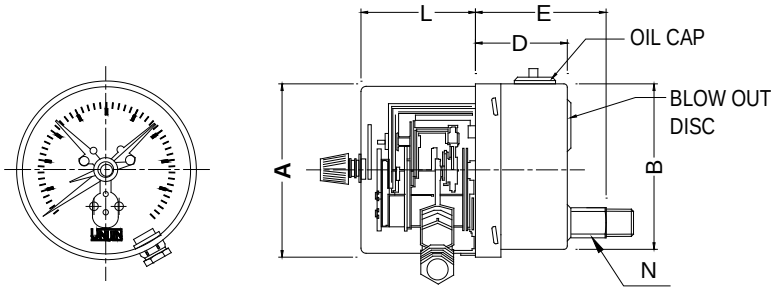


B: Bottom connection with Surface mounting plate

Unit : mm

	ø 100
A	101.3
B	99.0
C	122.0
D	53.3
E	65.0
H	117.5
L	46.3
N	22.0

CODE G

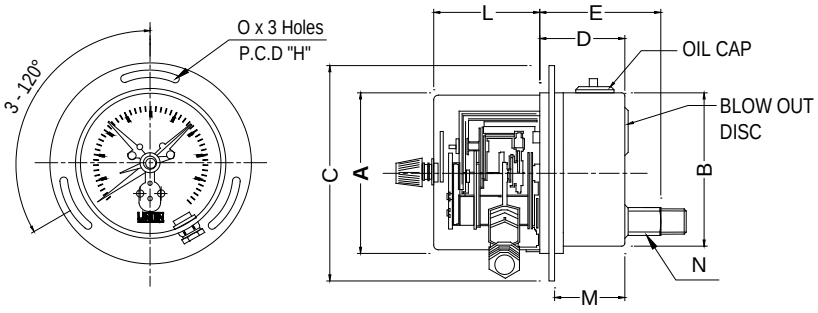


G: Lower back connection

Unit : mm

	ø 100
A	101.3
B	99.0
D	49.5
E	65.0
L	46.3
N	22.0

CODE N



N: Lower back connection with Panel mounting plate

Unit : mm

	ø 100
A	101.3
B	99.0
C	130.5
D	49.5
E	65.0
H	116.0
L	46.3
M	45.0
N	22.0
O	6.0

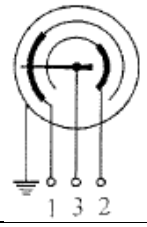
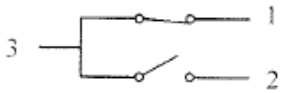
Magnetically Snap Action Contact

Electromechanical limit switches in pointer type measuring instruments are auxiliary current switches which open or close electrical circuits at set limit values by means of a contact arm which is moved by the actual value pointer.
The snap action contact is a mechanical contact for switching capacities up to 300W 50VA max. Contact making will be delayed and or advanced in relation to the movement of the actual value pointer. To close the circuit, the contact pin of the movable contact arm is attracted in a jump by the permanent magnet fastened to the supporting arm shortly before the set value has been reached.
Due to the retention force of the magnet, snap action contacts are more resistant against shock and vibration. The switching safety is increased by the increased contact pressure. When the circuit is opened, the magnet keeps the contact arm in its place until the restoring force of the measuring element exceeds the magnetic force, and the contact opens in a jump.

Specification

Nominal Operation Voltage	250 Vac max
Making and Breaking Voltage	1.0A max
Permanent Current	0.6A max
Switching Capacity	30W 50VA max
Contact Material	Ag80 Ni20
Switching Accuracy	3% of Full Scale
No. of Contact	2 max

Schematic and Recommended Wiring Connection

Wiring Schematic	Electric Schematic	Clockwise Movement of the Pointer Causes
1° MINIMUM 2° MAXIMUM 		Opening 1 Closing 2

3 = Wire Black = Common
1 = Wire Blue = Normally Close
2 = Wire Brown = Normally Open
Wire White = Earth

The contacts open or close the circuit depending on the position of the indicating pointer. The contact positions are adjustable over the whole range depend on the requirement of the application.

1. Minimum adjustment
Insert the adjustment key into the center knob, turn the key until it press against the handle of the minimum contact. Turn clockwise to increase or anticlockwise to reduce the triggering pressure.

2. Maximum adjustment
Insert the adjustment key into the center knob, turn the key until it press against the handle of the maximum contact. Turn clockwise to increase or anticlockwise to reduce the triggering pressure.