

Pressure Gauge with Switch

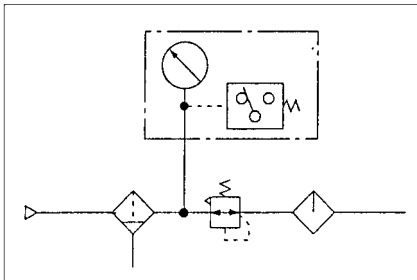
GP46

O.D.: ø42



- A pressure switch function has been added to the gauge.
- The pressure switch is equipped with a light for verifying operation.
- The pressure gauge is equipped with a limit indicator.
- To be used for verifying the supply pressure.

Circuit Example



- Be sure to read the precautions in page 14-11-15 for selection and installation.

Standard Specifications

Model		GP46
Gauge	Type	Back side thread
	Ambient and fluid temperature	-5 to 60°C (No freezing)
	Indicated pressure range	0 to 1.0 MPa
	Port size <sup>(1)</sup>	R 1/8, 1/4 (Option M: with M5 female thread)
	Fluid <sup>(2)</sup>	Air
Pressure switch	Indication precision	±0.03 MPa
	Setting range <sup>(3)(4)</sup>	1 to 0.8 MPa
	Hysteresis	0.07 MPa
	Pointer error <sup>(5)</sup>	±0.05 MPa (5 to 40°C) ±0.08 MPa (-5 to 60°C) No freezing
	Contact	With light: 1a (Normally open) Without light: 1ab (Normally open/ Normally closed)
	Wiring	Lead wire (Length: 300 mm)
	Indicator light	AC DC Neon light Light emitting diode (LED)
Attachment: With cover ring assembly		C Part no.: 1305104-4A
Weight (kg)		0.12

- Note 1) Indicates the condition at the lower pressure limit. Use a pipe tape for sealing. Recommended tightening torque: R 1/8: Set between 7 and 9 N·m, R 1/4: 12 and 14 N·m respectively.
- Note 2) Water is not an acceptable fluid. When using the other fluids, please consult with SMC for compatibility information concerning corrosion.
- Note 3) Set value of pressure switch is indicated by pointer (green). It is the point where the circuit between N.O. (white) and COM (black) is turned off during pressure decrease. To set the value, turn needle in clockwise position to the correct value. When setting; if desired set position has been passed, turn needle in a counterclockwise direction back again beyond the desired value and then once again return needle in a clockwise direction stopping at the desired value. Value must be set while needle is traveling in a clockwise direction.
- Note 4) Make sure to provide a minimum difference of 0.1 MPa between the set pressure and the operating pressure (including the pressure drop). If the difference is smaller, it could lead to improper operation. Refer to page 14-11-15 for details on how to set the setting needle. Use caution: Operating pressure should be the sum of the pressure of the setting needle error (±0.05 MPa), the hysteresis (0.07 MPa), and the display accuracy (±0.05 MPa) on the set pressure value, or the circuit between N.O. (white) and COM (black) may not turn ON while pressure is increasing.
- Note 5) Maximum error value: Add the pressure gauge indicator error of 0.03 MPa to the setting needle error.

Model (Standard)

Other versions of this unit can be made on a made-to-order basis. Please consult with SMC for details, as delivery times may be extended.

Model	Pressure range <sup>(1)</sup> MPa	Indication unit	Connection thread	Note
GP46-10-01 to 02	0 to 1.0	MPa	R 1/8 R 1/4	—
GP46-10-01 to 02L2				
GP46-10-01 to 02L5				

- Note 1) Do not apply pressure more than the maximum display pressure. This will cause a malfunction.

Micro-switch Rated Voltage

Load	Load resistant		
	Rated voltage	125 VAC	250 VAC
Operating current range	30 VDC	0.01 to 0.3 A	0.01 to 0.2 A

How to Order

GP46 — 10 — 01 M L2 C X201

Pressure gauge with switch

Size

Symbol	Outside diameter
46	ø42.5

Max. display pressure

Symbol	Unit: MPa
10	1.0

Option

Symbol	Specifications
Nil	—
M	With M5 (Female thread)

Indicator light

Symbol	Specifications
Nil	Without indicator light
L2	Neon light (100 VAC/220 VAC)
L5	LED/24 VDC

Attachment (Cover ring assembly)

Symbol	Specifications
Nil	Without cover ring assembly
C	Clear cover has no protrusion. (Clear cover is irremovable.)

Option

Symbol	Specifications
Nil	—
X201	Lead wire length 3 m

Note 1) X3 (Wetted parts stainless steel) specification is not available.

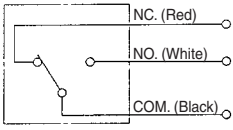
Note 2) Part number for pressure gauge with MPa·psi units is G46-P\*\*-\*-X30. This will no longer be sold for use in Japan after the new Weight and Measure Act has been implemented (October, 1999).

Note) Option C1 (Clear cover has protrusion. / Clear cover is removable.) is not compliant.

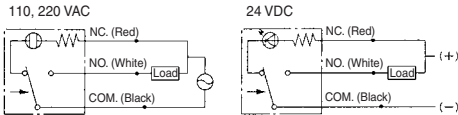
- F.R.L.
- AV
- AU
- AF
- AR
- IR
- VEX
- AMR
- ITV
- IC
- VBA
- VE□
- VY1
- G
- PPA
- AL

## Circuit Diagram

### Without indicator light



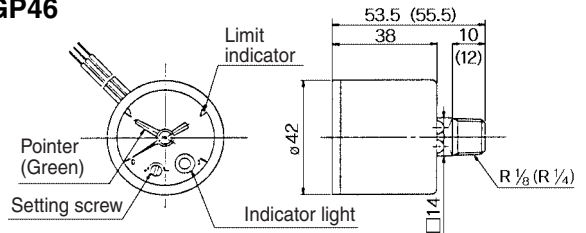
### With indicator light



The arrow in the diagram indicates the direction of the pressure increase. The light turns OFF when the pressure becomes higher than the set pressure and turns ON when the pressure becomes lower than the set pressure.

## Dimensions

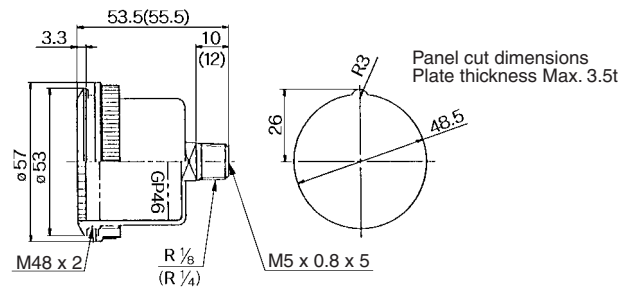
### GP46



( ): R 1/4

### GP46: With cover ring assembly (For panel mounting)

Clear cover is not removable.



Refer to page 14-11-15 for mounting method.