

Pressure Gauge for Vacuum

GZ46/GZ46E Series

RoHS



GZ46

GZ46-K2K

Specific Product Precautions

Be sure to read this before handling the products. Refer to back page 50 for safety instructions.

Selection

Caution

1. Make sure that no direct impact or vibrations are applied to the body.
2. If operating under pressure pulsations or in high frequency operations, please contact SMC.

Mounting

Caution

1. During transport and installation, do not apply shock to the product, such as by dropping doing so will affect its precision.
2. Regarding the installation posture, place it perpendicular to the ground, with the zero point on the reading of a pressure gauge facing down.
3. Do not install it in an area that is exposed to high temperature or humidity, because doing so will lead to improper operation.
4. To screw in the pressure gauge, make sure to turn the gauge by placing a wrench over the square wrench flats.

If the pressure gauge is screwed in by holding it on some other area, air leakage or damage may result.

Standard Specifications

| Model | | GZ46 | GZ46E |
|--------------------------------------|---|--|--|
| Type | Back side thread | | |
| Port size ⁽¹⁾ | R 1/8, R 1/4 (Option: M = M5 x with thread) | | |
| Fluid ^{(2) (5)} | Air | | |
| Indication precision ⁽⁶⁾ | ±3% | | |
| Fluid contact part cleaning | — | | Wetted parts degrease washing |
| Material ⁽⁴⁾ | Case (Surface treatment) | Rolled steel (Black melamine painted) | |
| | Clear cover (Surface treatment) | Polycarbonate Part no.: G46-00-00-3 | Polycarbonate (Hard coated) Part no.: G46-00-00-2 |
| | Stud (Surface treatment) | Brass | Brass (Electroless nickel plated) ⁽³⁾ |
| | Bourdon tube | Brass | |
| Weight [kg] | 0.078 | 0.08 | |
| Attachment: With cover ring assembly | C | Part no.: 1305104-1A | |
| | C2 | Part no.: 1305104-9A | |

Note 1) When mounting a pressure gauge, use caution not to tighten excessively. Excessive tightening will cause product failure. Use a pipe tape for sealing.

Note 2) When using other fluids, please consult with SMC for fluid compatibility information concerning corrosive potential.

Note 3) Movable parts (gear and etc.) in the pressure gauge are made of brass.

Note 4) Wetted parts stainless steel specifications are not available.

Note 5) Avoid freezing as this may cause a malfunction.

Note 6) The guaranteed temperature range is 23°C±5°C.

Model (Standard)

| Model | Pressure range ⁽¹⁾ | Indication unit | Connection thread | Note |
|----------------------|-------------------------------|-----------------|-------------------------------|--------------------------|
| | kPa | | | |
| GZ46-K-01 to 02 | -100 to 0 | kPa | R 1/8, 1/4 | — |
| GZ46-K-01 to 02-C/C2 | -100 to 0 | kPa | R 1/8, 1/4 | With cover ring assembly |
| GZ46-K-01 to 02M | -100 to 0 | kPa | R 1/8, 1/4 M5 (Female thread) | — |
| GZ46E-K-01 to 02M | -100 to 0 | kPa | R 1/8, 1/4 M5 (Female thread) | — |
| GZ46-K2K-01 to 02 | -100 to 200 | kPa | R 1/8, 1/4 | — |

Note 1) Do not apply more excessive pressure than max. pressure display. It will be a cause of malfunction.

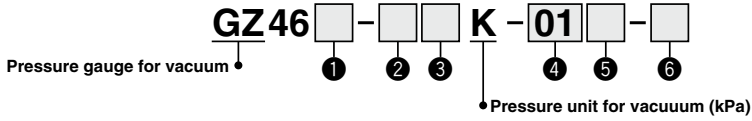
Model (Made to Order)

Please consult with SMC for models other than shown below, as delivery times may be extended.

| Model | Pressure range ⁽¹⁾ | Indication unit | Connection thread | Note |
|-------------------|-------------------------------|-----------------|-------------------|------|
| | kPa | | | |
| GZ46-K1K-01 to 02 | -100 to 100 | kPa | R 1/8, 1/4 | — |

Note 1) Do not apply more excessive pressure than max. pressure display. It will be a cause of malfunction.

How to Order

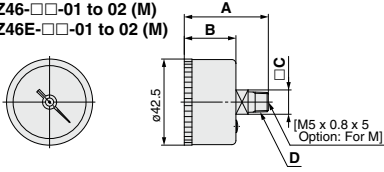


| | | Symbol | Description | ① | |
|---|-------------------------------------|------------------|--|----------------|--------------------------------------|
| | | | | Specifications | |
| | | | | GZ46 | GZ46E |
| | | | | — | Oil-free, external parts copper-free |
| ② | Pressure unit for positive pressure | Nil | — | ● | ● |
| | | K | kPa | ● | ● |
| | | + | | | |
| ③ | Display pressure range | Nil | -100 to 0 kPa | ● | ● |
| | | 1 | -100 to 100 kPa | ● | ● |
| | | 2 | -100 to 200 kPa | ● | ● |
| | | + | | | |
| ④ | Connection thread | 01 | R 1/8 | ● | ● |
| | | 02 | R 1/4 | ● | ● |
| | | + | | | |
| ⑤ | Option | Nil | — | ● | ● |
| | | M ⁽¹⁾ | With M5 (Female thread) | ● | ● |
| | | + | | | |
| ⑥ | Attachment | Nil | Without cover ring assembly | ● | ● |
| | | C | Clear cover has no protrusion. (Clear cover is inremovable.) | ● | ● |
| | | C2 | Clear cover has protrusion. (Clear cover is removable.) The wrench flats protrude. | ● | ● |

Note 1) To use the pressure gauge with M5 (female thread), attach the joint when piping the tube.

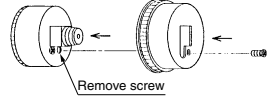
Dimensions

GZ46-□□-01 to 02 (M)
GZ46E-□□-01 to 02 (M)



| Model | A | B | C | D |
|-----------------|------|------|----|-------|
| GZ46-□□-01 (M) | 41.5 | 25.5 | 12 | R 1/8 |
| GZ46-□□-02 (M) | 45.5 | 25.5 | 14 | R 1/4 |
| GZ46E-□□-01 (M) | 40.5 | 24.5 | 12 | R 1/8 |
| GZ46E-□□-02 (M) | 44.5 | 24.5 | 14 | R 1/4 |

How to mount the cover ring assembly



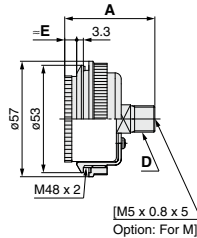
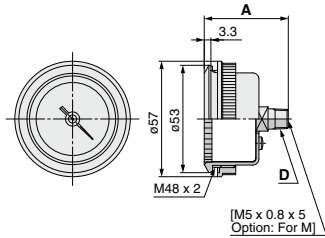
1. Remove the small screw (1 position) from the pressure gauge.
2. Place the cover ring on the pressure gauge.
3. Using the small screw that is provided with the cover ring, install the cover ring. The installation torque is 0.6 to 0.7 N·m. For reinstallation, the tightening torque is 0.5 to 0.6 N·m.

With cover ring assembly (For panel mounting)

GZ46-□□-01 to 02 (M)-C
GZ46E-□□-01 to 02 (M)-C

GZ46-□□-01 to 02 (M)-C2
GZ46E-□□-01 to 02 (M)-C2

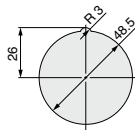
Type C2
(Clear cover is removable. The wrench flats protrude.)



| Model | A | D |
|-------------------|------|-------|
| GZ46-□□-01 (M)-C | 41.5 | R 1/8 |
| GZ46-□□-02 (M)-C | 45.5 | R 1/4 |
| GZ46E-□□-01 (M)-C | 41.5 | R 1/8 |
| GZ46E-□□-02 (M)-C | 45.5 | R 1/4 |

| Model | A | =E | D |
|--------------------|------|----|-------|
| GZ46-□□-01 (M)-C2 | 41.5 | 5 | R 1/8 |
| GZ46-□□-02 (M)-C2 | 45.5 | 5 | R 1/4 |
| GZ46E-□□-01 (M)-C2 | 40.5 | 4 | R 1/8 |
| GZ46E-□□-02 (M)-C2 | 44.5 | 4 | R 1/4 |

Panel fitting dimensions
Plate thickness Max. 3.5 t



G

GS

PPA