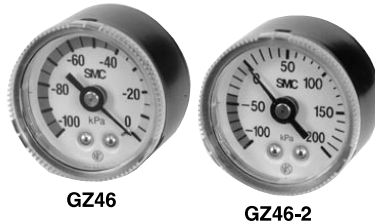


Pressure Gauge for Vacuum Series GZ46/GZ46E

RoHS



⚠ Specific Product Precautions

Be sure to read this before handling. Refer to front matter 56 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	
	C1	Part no.: 1305104-3A	

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. Recommended tightening torque: R 1/8: Set between 7 to 9 N·m, R 1/4: 12 to 14 N·m respectively.

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) X3 (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, C1	−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

GZ46 - **K** - 01 -

Pressure gauge for vacuum • 1 2 3 • Pressure unit for vacuum (kPa) 4 5 6

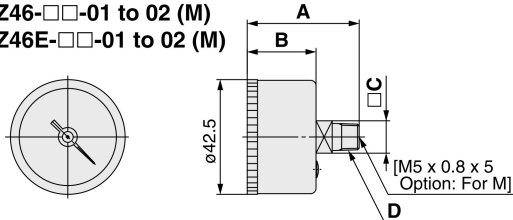
	Symbol	Description	① Specifications	
			GZ46	GZ46E
			—	Oil-free, external parts copper-free
+				
② Pressure unit for positive pressure	Nil	—	•	•
	K	kPa	•	•
+				
③ Display pressure range	Nil	-100 to 0 kPa	•	•
	1	-100 to 100 kPa	•	•
	2	-100 to 200 kPa	•	•
+				
④ Connection thread	01	R 1/8	•	•
	02	R 1/4	•	•
+				
⑤ Option	Nil	—	•	•
	M ⁽¹⁾	With M5 (Female thread)	•	•
+				
⑥ Attachment ^{Note 2)}	Nil	Without cover ring assembly	•	•
	C	Clear cover has no protrusion. (Clear cover is irremovable.)	•	•
	C1	Clear cover has protrusion. (Clear cover is removable.)	•	•

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

Note 2) For pressure gauges with the cover ring assembly, it is recommended to select the option M so as to perform the piping.

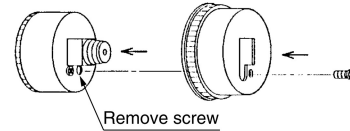
Dimensions

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



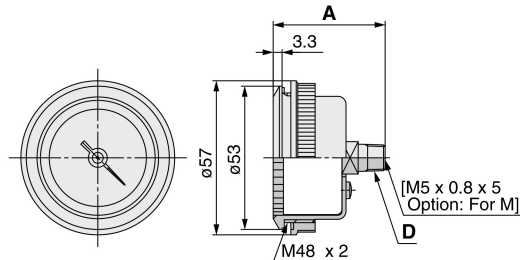
Model	A	B	□C	D
GZ46-□□-01 (M)	41.5	25.5	12	R 1/8
GZ46-□□-02 (M)	45.5	25.5	14	R 1/4
GZ46E-□□-01 (M)	40.5	24.5	12	R 1/8
GZ46E-□□-02 (M)	44.5	24.5	14	R 1/4

How to mount the cover ring assembly



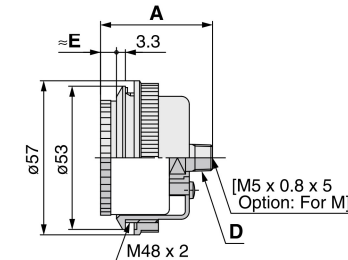
1. Remove the small screw (1 position) from the pressure gauge.
2. Place the cover ring on the pressure gauge.
3. Using the small screw that is provided with the cover ring, install the cover ring. The installation torque is 0.6 to 0.7 N·m. For reinstallation, the tightening torque is 0.5 to 0.6 N·m.

With cover ring assembly (For panel mounting)
GZ46-□□-01 to 02 (M)-C
GZ46E-□□-01 to 02 (M)-C



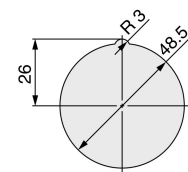
Model	A	D
GZ46-□□-01 (M)-C	41.5	R 1/8
GZ46-□□-02 (M)-C	45.5	R 1/4
GZ46E-□□-01 (M)-C	41.5	R 1/8
GZ46E-□□-02 (M)-C	45.5	R 1/4

GZ46-□□-01 to 02 (M)-C1
GZ46E-□□-01 to 02 (M)-C1



Model	A	≈E	D
GZ46-□□-01 (M)-C1	41.5	6	R 1/8
GZ46-□□-02 (M)-C1	45.5	6	R 1/4
GZ46E-□□-01 (M)-C1	40.5	5	R 1/8
GZ46E-□□-02 (M)-C1	44.5	5	R 1/4

Panel fitting dimensions
Plate thickness Max. 3.5 t



G
GS
PPA