

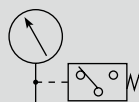
F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac-
remove Filt
Film
Resist FR
Oil-ProhR
Med
Press FR
No Cu/
PTFE FRL
Outdrs FRL
Adapter
Joiner
Press
Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneUR
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRtSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending



Pressure gauge with switch

G52D Series

JIS symbol



Features

- Pressure switch function added to the analog pressure gauge
- Nonpolar connector as an option
- Activation confirmation lamp as an option

Specifications

1 MPa = 10 bar

Item		Pressure gauge
Working fluid		Compressed air
Fluid temperature °C		5 (41°F) to 60 (140°F)
Ambient temperature °C		-5 (23°F) to 60 (140°F) (no freezing)
Accuracy *1		Full scale ±3%
Shape		DT type (rear side screw, stock section hexagon)
Material	Stock	Copper alloy
	Bourdon tube	Phosphor bronze
	Housing	Steel plate + chrome plating
	Lens	Polycarbonate resin
	Setting needle	ABS resin (green)
Pressure range *2		0 (≈0 psi) to 1.0 MPa (≈150 psi)
Port size		R 1/4
Weight		g 150

*1: The guaranteed indicator accuracy temperature is 20±15°C.

*2: Do not apply pressure exceeding the maximum indicated pressure. Otherwise, malfunctions may result.

1 MPa = 10 bar

Item		Pressure switch
Pressure switch setting range		0.1 (≈15 psi) to 0.8 MPa (≈120 psi)
Hysteresis		0.07 MPa (≈10 psi, 0.7 bar)
Contact array		Without lamp: 1ab (normally open, normally closed) With lamp: 1a (normally open)
Setting needle error		±0.05 MPa (≈7.3 psi, 0.5 bar)
Lead wire length		300 mm
Electrical connections		Without lamp: 3 lead wires With lamp: M12 connector (4-pin)
Indicator lamp		LED (load current: 8 to 30 mA)

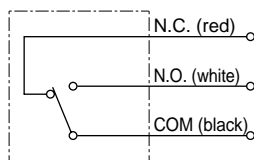
Micro switch rating

Load	Resistance load	
Rated voltage	30 VDC	125 VAC
Operating current range *1	0.1 to 2 A	0.1 to 5 A

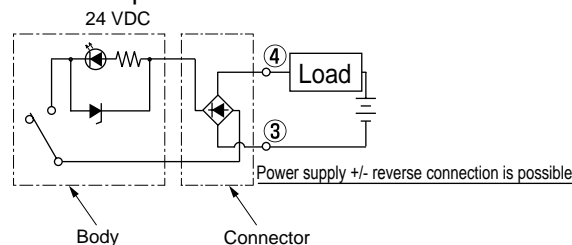
*1: Use 12 VDC or more for 0.10 to 0.16 A.

Electrical wiring diagram

○ Without indicator lamp



○ With indicator lamp/LED



How to order

G52D - 8 - P10 - 3N

Model No.

A Port size

B Pressure display

C Option

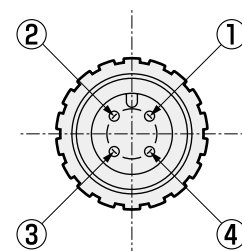
Code	Description
A Port size *1	
8	R1/4
B Pressure display MPa *2	
P10	0 to 1.0
C Option	
Blank	Without indicator lamp
3N	LED (24 VDC) no polarity

⚠ Precautions for model No. selection

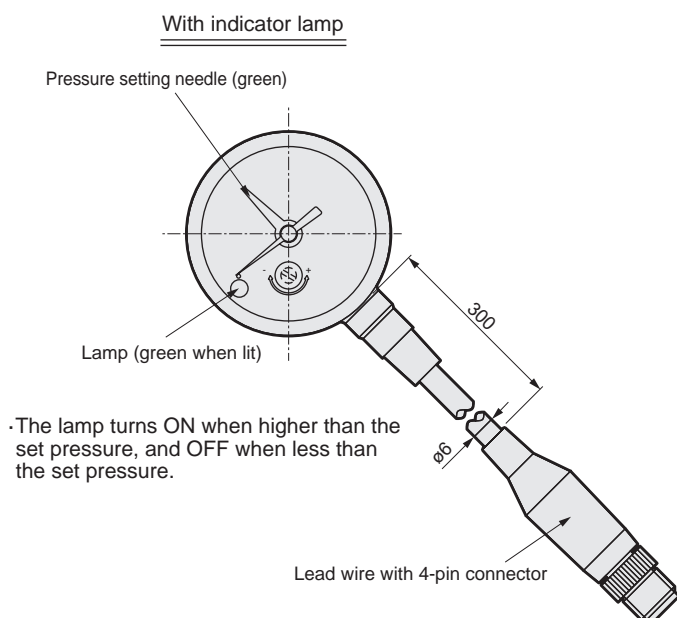
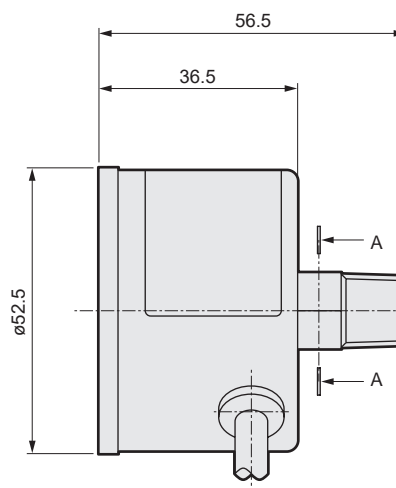
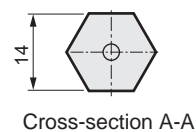
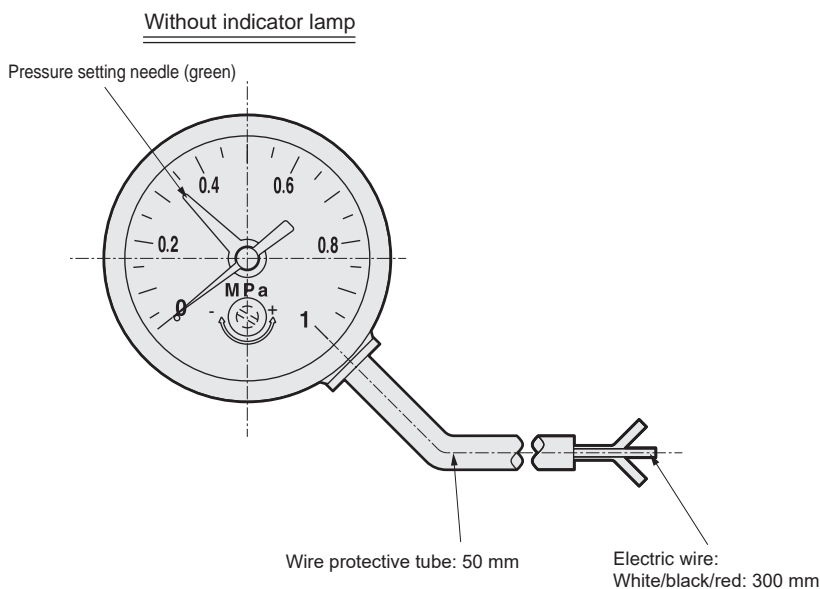
*1: Contact CKD when ordering NPT thread.

*2: Contact CKD for indications other than MPa.

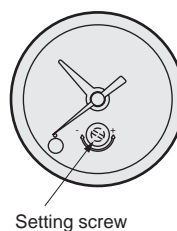
Terminal layout of male connectors



Dimensions



Setting the setting needle



- Pass a flathead screwdriver (tip width 2.9 mm) through the rubber cap on the lens, and turn the setting screw to set the setting needle to the required pressure.

- * Turn the setting screw
 - Minus (-) side (clockwise) → set pressure decrease
 - Plus (+) side (counterclockwise) → set pressure increase

⚠ Safety precautions

- Make sure that impact and vibration are not applied directly onto the body.
- Repeated and sudden increases or decreases in pressure and pressure pulsations must be avoided as they could adversely affect the life of the pressure gauge. Ease the pressure fluctuation in the circuit.
- The pressure switch setting value is indicated with the green setting needle. Set the pressure switch value so that the setting needle turns clockwise. If the setting needle passes the setting position, turn the setting needle counterclockwise once, then reset.
- Set a difference of 0.1 MPa and over from the working pressure (including pressure drops). Malfunctions could result if the difference is small. Refer to the drawings above for details on setting the setting needle. When using the pressure switch in the normally open state, the switch may not turn ON when the pressure drops unless pressure, to which set indication error (± 0.05 MPa), hysteresis (0.07 MPa), and indicated accuracy ($\pm 3\%$ F/S) have been added, has been applied.
- Add the pressure gauge's indication accuracy to the maximum value of the setting indicator and indicator error (set indicator error).
- When a DC lamp is used, the internal voltage drop is to be 4 V or less and load current 8 to 30 mA at 24 VDC. Please be careful.
- Wire such that repeated bending or tension are not applied to the lead wires. Failure to do so could lead to disconnection or malfunction.
- Avoid using in an atmosphere containing silicone (siloxane). Contact failure could result.
- Setting needle error may increase depending on the operating environment and operating frequency. Check the operation periodically.

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Res press exh valve
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Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PresCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRISens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending