

# GP40

RoHS  
  
**SERIES**

# Pressure switch

## Features

- 2 Colors Display.
- Unit Setting Available.
- When setting the pressure unit, it will display on the sub-display section.
- The status of setting mode can display on the sub-display section.
- RoHs Directive Compliant.
- Saving Space.



## ■ SPECIFICATION

TYPE		GP40C (Compound)	GP40V (Vacuum)	GP40P (Positive)
Rated pressure range		-100.0 ~ 100.0 kPa	0.0 ~ -101.3 kPa	0 ~ 1000 kPa
Setting pressure range		-101.0 ~ 101.0 kPa	10.0 ~ -101.3 kPa	-100 ~ 1000 kPa
Withstand pressure		300 kPa		1.5 MPa
Fluid		Air, Non-corrosive gases ,incombustible gases		
Set pressure resolution	kPa	0.1		1
	kgf/cm <sup>2</sup>	0.001		0.01
	bar	0.001		0.01
	psi	0.01		0.1
	InHg	0.1		-
	mmHg	1		-
Power supply voltage		12 to 24VDC ±10%, Ripple (P-P) 10% or less		
Current consumption		≤ 45mA (With no load)		
Switch output		NPN open collector Max. load current : 125mA Max. supply voltage: 30VDC Residual voltage : ≤1.5V (load current 125mA)	PNP open collector Max. load current : 125mA Max. supply voltage: 24VDC Residual voltage : ≤1.5V (load current 125mA)	
Repeatability(Switch output)		≤ ±0.2% F.S. ±1digit		
Hysteresis	Hysteresis mode	Adjustable		
	Window comparator mode			
Response time		≤ 2.5ms (chattering-proof function: 24ms, 250ms,500ms,1000ms and 1500ms selections)		
Output short circuit protection		Yes		
7 segment LCD display		Two color(Red/Green) display (Sampling rate: 5 times/1sec.)		
Indicator accuracy		≤ ±2% F.S. ±1 digit (ambient temperature: 25 ±3 °C)		
Switch ON Indicator		Green OUT Indicator		
Analog output (Voltage Output)		Output Voltage: 1 to 5V ≤ ±2.5%F.S. (within rated pressure range) Linearity: ≤ ±1% F.S. Output impedance:about 1kΩ		
Analog output (Current Output)		Output Current: 4 to 20mA ≤ ±2.5%F.S. (within rated pressure range) Linearity: ≤ ±1% F.S. Max.Load Impedance:300Ω at power supply of 12V, 600Ω at power supply of 24V Min.Load impedance:50Ω		
Environment	Enclosure	IP 40		
	Ambient temp. range	Operation: 0 ~ 50 °C,storage: -10 ~ 60 °C ( No condensation or freezing)		
	Ambient humidity range	Operation/Storage: 35 ~ 85% RH ( No condensation)		
	Withstand voltage	1000VAC in 1-min (between case and lead wire)		
	Insulation resistance	50Mohm min. (at 500VDC , between case and lead wire)		
	Vibration	Total amplitude 1.5mm,10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X,Y and Z		
Shock		100m/s <sup>2</sup> (10G),3 times each in direction of X,Y and Z		
Temperature characteristic		≤ ±2% F.S. of detected pressure (25 °C) at temp. Range of 0-50 °C		
Port size		F1:1/8"PT,M5; F2:1/8"NPT,10-32UNF; F3: G1/8" , M5		
Lead wire		Oil-resistance cable(0.15mm <sup>2</sup> )		
Weight		Approx.*75 g(with 2-meter lead wire),Approx.*45 g(with male connector )		

GENTLE AUTOMATIC SOLUTION SDN BHD

No.36, Jalan Industri USJ 1/13, Taman Perindustrian USJ 1, 47600 Subang Jaya, Selangor.

TEL: 603-8023 7743 / 8743 FAX: 603-8023 9743 email:sales@gentle.com.my / gpauto@tm.net.my

# GP40



# Pressure switch

## ORDERING INFORMATION

GP 40 C - 02 - F1 - [ ] - J

### Pressure Range

C : Compound (-101 ~ 101 kPa)  
V : Vacuum (0 ~ -101.3 kPa)  
P : Positive (-100 ~ 1000 kPa)

### Pressure Port

F1 : 1/8" PT,M5  
F2 : 1/8" NPT,10-32UNF  
F3 : G1/8" ,M5

### Pressure Unit

Blank: Unit changeable  
J: Unit unchangeable  
(Fixed unit is kPa)

### Output Specifications

010 : 1 NPN output & 1 Analog output (1-5V)  
011 : 1 NPN output & 1 Analog output (4-20mA)  
02 : 1 NPN output  
030 : 1 PNP output & 1 Analog output (1-5V)  
031 : 1 PNP output & 1 Analog output (4-20mA)  
04 : 1 PNP output

### Cable Length / Connector

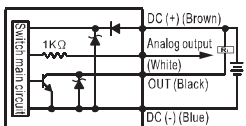
Blank: With 2 meter cable  
QD : With M8, 4 Pin male connector

### Option part

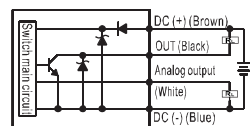
M84R-W0085-2M : With M8,4 Pin female connector  
GP20-A : Mounting bracket (BT-1+BT-2)  
GP40-B : Panel adapter (PA-3+PA-4)  
GP40-C : Panel adapter + Front protective lid (PA-3+PA-4+FPC-2)

## OUTPUT CIRCUIT WIRING GRAPH

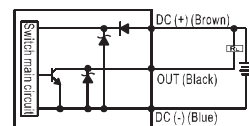
GP40□ - 010 -□ -□  
NPN + Analog (Voltage) output



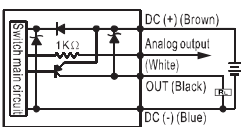
GP40□ - 011 -□ -□  
NPN + Analog (Current) output



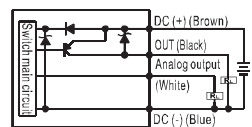
GP40□ - 02 -□ -□  
NPN output



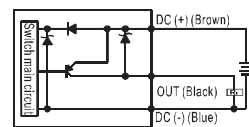
GP40□ - 030 -□ -□  
PNP + Analog (Voltage) output



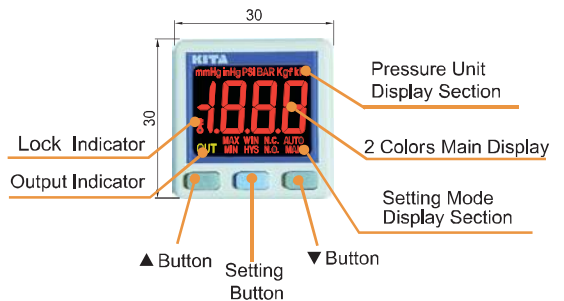
GP40□ - 031 -□ -□  
PNP + Analog (Current) output



GP40□ - 04 -□ -□  
PNP output



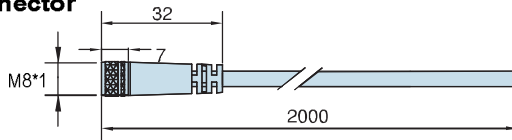
## PANEL INSTRUCTIONS



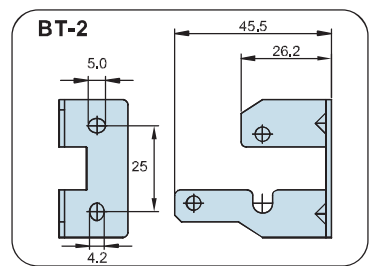
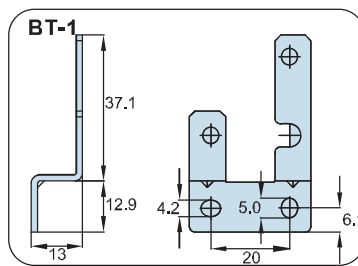
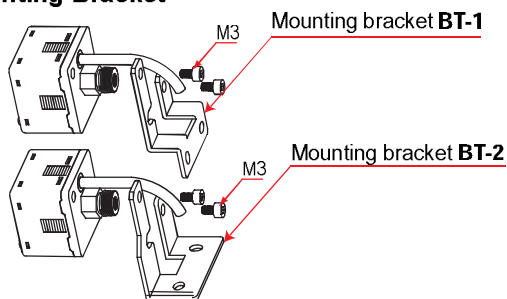
## TYPE OF SPARE PARTS / DIMENSION GRAPH

### 1 M8 Female Connector

M84R-W0085-2M

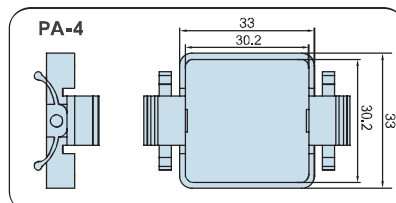
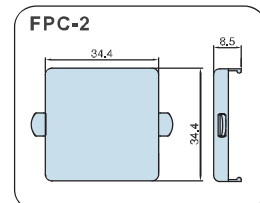
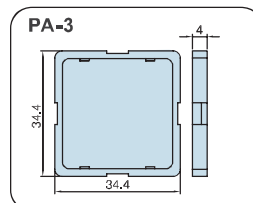
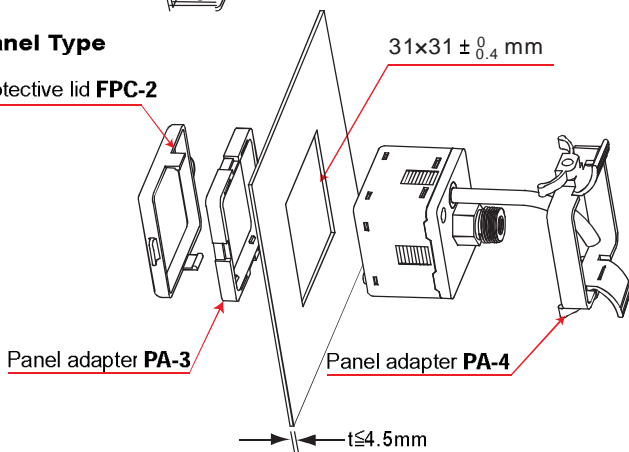


### 2 Mounting Bracket



### 3 Panel Type

Front protective lid FPC-2



Unit:mm

GENTLE AUTOMATIC SOLUTION SDN BHD

No.36, Jalan Industri USJ 1/13, Taman Perindustrian USJ 1, 47600 Subang Jaya, Selangor.

TEL: 603-8023 7743 / 8743 FAX: 603-8023 9743 email:sales@gentle.com.my / gpauto@tm.net.my