

General Specifications

Model PF1
Pneumatic to Electrical Converter

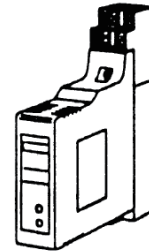


GS 77J10P01-01EN

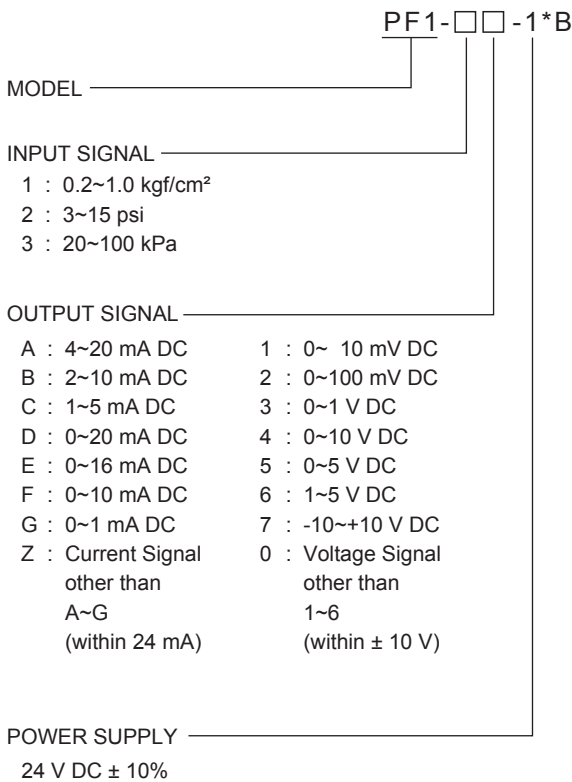
■ GENERAL

This plug-in type Pneumatic to Electrical Converter inputs 20~100 kPa, 0.2~1.0 kgf/cm² or 3~15 psi pneumatic pressure signal and converts it into various DC current or voltage signal.

- Compact type, high quality by using semiconductor pressure sensor.
- No positional error.



■ MODEL AND SUFFIX CODES



F01.ai

■ ORDERING INFORMATION

- Model Code: (Example) PF1-1A-1*B
- Custom order when install transducers in direct connecting DSC type nest of P-Rack (Model X017 or X018).
Designate output signal Code 6 (1~5 V DC) and put /Z at the end of Model Code.
(Example) PF1-□6-1*B/Z

■ INPUT AND OUTPUT

Input signal: 20~100 kPa, 0.2~1.0 kgf/cm² or 3~15 psi
Permissible input pressure:

Less than 200 kPa, 2.0 kgf/cm² or 28 psi

Output signal: DC current or voltage signal

Permissible load resistance:

Output Range	Permissible load resistance	Output Range	Permissible load resistance
4~20 mA DC	below 750 Ω	0~10 mV DC	over 250 kΩ
2~10 mA DC	below 1500 Ω	0~100 mV DC	over 250 kΩ
1~5 mA DC	below 3000 Ω	0~1 V DC	over 2 kΩ
0~20 mA DC	below 750 Ω	0~10 V DC	over 10 kΩ
0~16 mA DC	below 900 Ω	0~5 V DC	over 2 kΩ
0~10 mA DC	below 1500 Ω	1~5 V DC	over 2 kΩ
0~1 mA DC	below 15 kΩ	-10~+10 V DC	over 10 kΩ

Zero point adjust range: ± 5% of span

Span adjust range: ± 5% of span

■ STANDARD PERFORMANCE

Accuracy rating: ± 0.2% of span
± 0.5% of span when multi-close mounting.

Insulation resistance: Over 100 MΩ (at 500 V DC)
between output~power supply

Voltage withstand: 500 V AC/1 minute between
output~power supply

Temperature range: 0~50°C

Humidity range: 5~90% RH (no condensation)

Power voltage: 24 V DC ± 10%

Effect of power voltage fluctuation:

Less than ± 0.1% of span for 24 V DC
± 10% fluctuation

Effect of ambient temperature change:

Less than ± 0.4% of span for 10°C
change

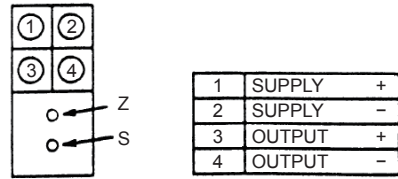
Current dissipation: 24 V DC 50 mA (1~5 V)

80 mA (4~20 mA)

■ MOUNTING AND DIMENSION

Materials: Case ABC plastic
 Mounting method: Wall mounting
 Signal connection:
 Electric Signal: Front terminal board (M4 screw) for both output signal and power supply
 Pneumatic signal: Pneumatic connection hole Rc1/4 (PT 1/4 femal screw) at lower face of terminal board
 External dimension: 124 × 24 × 125 mm (H × W × D) including terminal
 Weight: About 270 g

■ TERMINAL ARRANGEMENT



Z : Zero Adjust Trimmer
 S : Span Adjust Trimmer

F02.ai

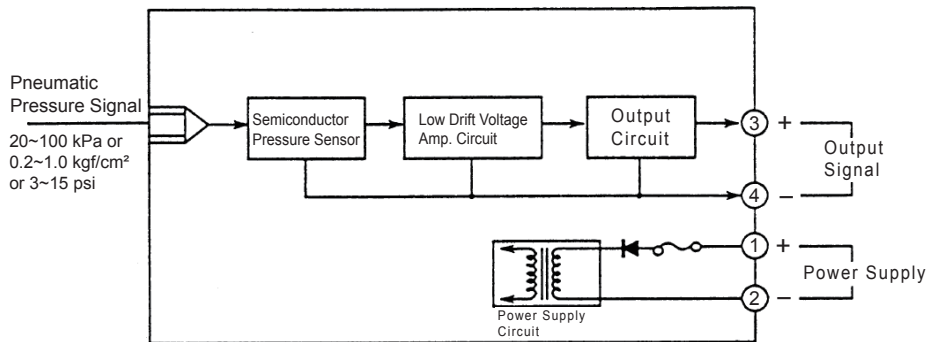
■ ACCESSORIES

Tag number label: 1

■ RELATED EQUIPMENT

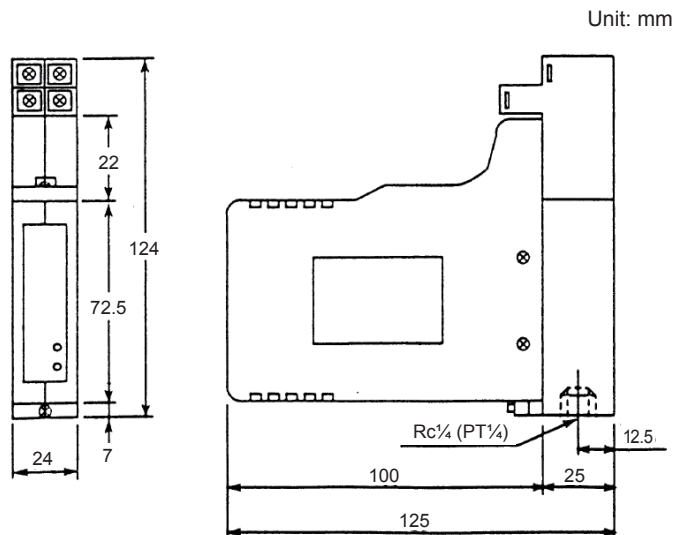
- Use X019 or X020 Mounting Board for multi-close mounting
- Use X017 or X018 P-RACK (connector connecting type nest) to connect to DCS.

■ BLOCK DIAGRAM



F03.ai

■ EXTERNAL DIMENSIONS



F04.ai

■ MOUNTING DIMENSIONS

Use for single unit

