

General Specifications

Model FF1A, FF1V
Pneumatic to Electrical Converter

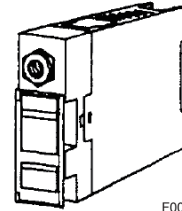


GS 77J08F01-01E

■ GENERAL

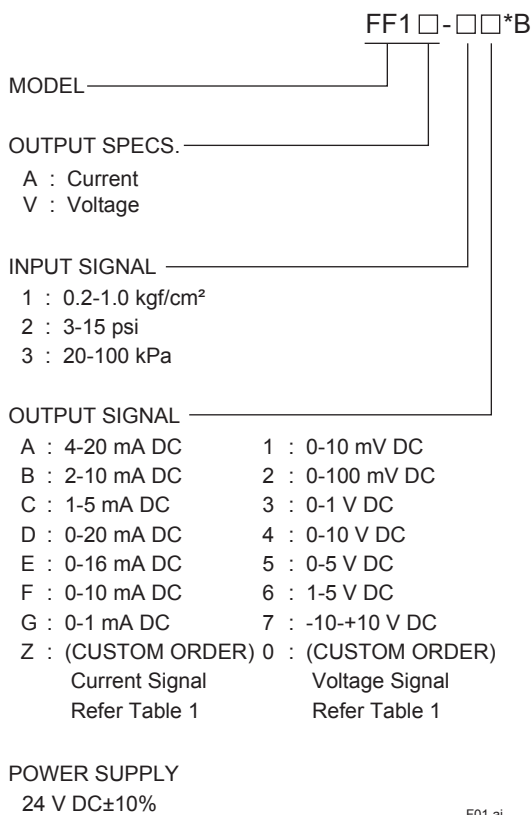
This Pneumatic to Electrical Converter converts pneumatic signals of 20-100 kPa, 0.2-1.0 kgf/cm² or 3-15 psi into current or voltage signals.

- Compact type, by using semi-conductor pressure sensor.



F00.ai

■ MODEL AND SUFFIX CODES



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
However, accuracy of output less than 0.5% is out of warranty in case of output range is 0-x mA
- Insulation resistance: More than 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%
(ripple content: 5% p-p or less)
- 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 75 mA (FF1A)
45 mA (FF1V)

■ ORDERING INFORMATION

- Model Code: (Example) FF1A-1A*B

■ INPUT AND OUTPUT

- Input signal: 20-100 kPa, 0.2-1.0 kgf/cm² or 3-15 psi
dry, non-corrosive air
- Permissible input pressure:
Less than 200 kPa, 2.0 kgf/cm² or 28 psi
- Input signal connecting hole: RC 1/8 (PT 1/8)
- Output signal: DC current or voltage signals

■ MOUNTING AND DIMENSION

- Materials: Case ABS plastic
- Mounting method: Rack, wall and DIN rail
- Connecting method: M4 screw terminal connection
- External dimension: 72 × 24 × 127 mm (H × W × D)
- Weight: About 150 g

■ ACCESSORIES

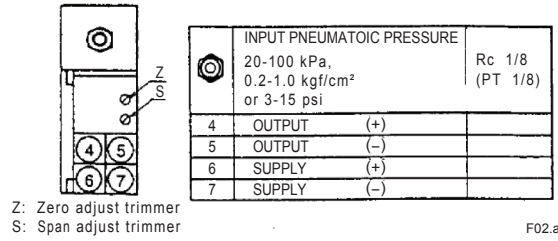
Tag number label: 1
 Mounting Block: 2
 M4 Screw: 2

■ CUSTOM ORDER SPECS

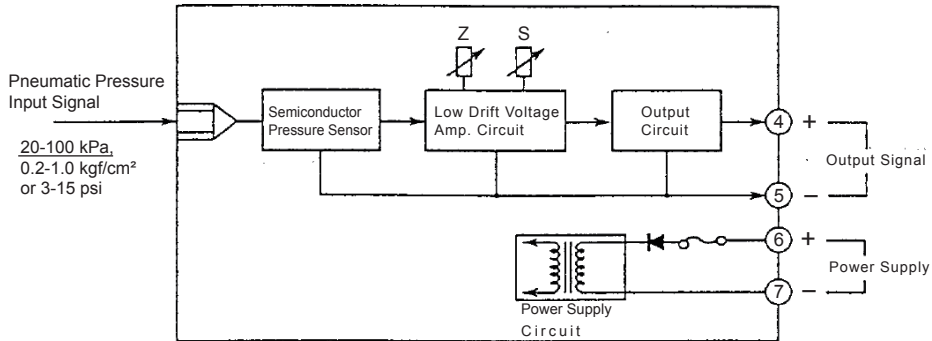
Table 1 Manufacturable Range

	Current Signal	Voltage Signal
Output Range	0-24 mA DC	-10-+10 V DC
Span	1-24 mA DC	10 mV-20 V DC
Zero Elevation	0-200%	-100-+200%

■ TERMINAL ARRANGEMENT



■ BLOCK DIAGRAM



■ EXTERNAL DIMENSIONS

Unit: mm

