

# 8-Pin Plug Digital Counters



## FS Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Features

- Counting speeds: 1 cps / 30 cps / 2 kcps / 5 kcps
- Switch between voltage input (PNP) and no-voltage input (PNP) using DIP switch
- Operation modes: count-up, count-down
- Decimal point display function (fixed decimal point)
- 10 year memory protection (using non-volatile semiconductor)
- Output model types: single preset, indicator only
- Power supply
  - 100 - 240 VAC~ 50 / 60 Hz (AC type)
  - 24 VAC~ 50 / 60 Hz, 24 - 48 VDC= (AC / DC universal type)

### Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

FS ① - ② ③

#### ① Display digits

4: 4-digit  
5: 5-digit

#### ③ Power supply

2: 24 VAC~ ± 10 % 50 / 60 Hz,  
24 - 48 VDC= ± 10 %  
4: 100 - 240 VAC~ ± 10 % 50 / 60 Hz

#### ② Output

1P: 1-stage setting (4-digit)  
I: Indicator (5-digit)

### Product Components

- Product (+ bracket)
- Instruction manual

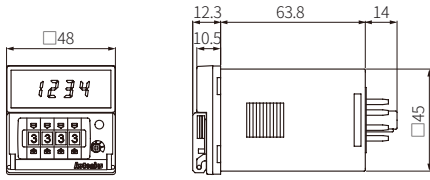
### Specifications

Model	FS4-1P□	FS5-I4
Display digits	4-digit	5-digit
Character size	W 3.8 × H 7.6 mm	W 4 × H 8 mm
Max. counting speed	1 / 30 / 2 k / 5 k cps	
Return time	≤ 500 ms	
Min. signal width	RESET: ≈ 20 ms	
Input logic	Voltage input (PNP) - input impedance: ≤ 10.8 kΩ, [H]: 5 - 30 VDC=, [L]: 0 - 2 VDC= No-voltage input (NPN) - short-circuit impedance: ≤ 470 Ω, short-circuit residual voltage: ≤ 1 VDC= open-circuit impedance: ≥ 100 kΩ	
One-shot output time	0.05 to 5 sec	
Contact control output	Relay	-
Type	Instantaneous SPST (1a) × 1	-
Capacity	250 VAC~ 3 A, 30 VDC= 3 A resistive load	-
Unit weight (packaged)	≈ 90 g (≈ 130 g)	≈ 80 g (≈ 120 g)
Approval	CE, RoHS, ENEC	

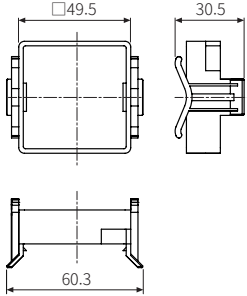
Voltage type	AC voltage	AC / DC voltage
Power supply	100 - 240 VAC~ ± 10 % 50 / 60 Hz	24 VAC~ ± 10 % 50 / 60 Hz, 24 - 48 VDC= ± 10 %
Power consumption (FS4-1P□)	≤ 4.6 VA	AC: ≤ 3.5 VA DC: ≤ 2.3 W
Power consumption (FS5-I4)	≤ 3.8 VA	-
External supply power	≤ 12 VDC= ± 10 % 50 mA	
Memory retention	≈ 10 years (non-volatile semiconductor memory type)	
Insulation resistance	≥ 100 MΩ (500 VDC= megger)	
Dielectric strength	Between all terminals and case: 2,000 VAC~ 50 / 60 Hz for 1 minute	
Noise immunity	± 2 kV square wave noise (pulse width: 1 μs) by the noise simulator	± 500 V square wave noise (pulse width: 1 μs) by the noise simulator
Vibration	0.75 mm double amplitude at frequency of 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 1 hour	
Vibration (malfunction)	0.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 10 min	
Shock	300 m/s <sup>2</sup> (≈ 30 G) in each X, Y, Z direction for 3 times	
Shock (malfunction)	100 m/s <sup>2</sup> (≈ 10 G) in each X, Y, Z direction for 3 times	
Relay life cycle	Mechanical: ≥ 5,000,000 operations Electrical: ≥ 100,000 operations (250 VAC~ 3 A resistive load)	
Ambient temperature	-10 to 55 °C, storage: -25 to 65 °C (no freezing or condensation)	
Ambient humidity	35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)	
Protection rating	IP20 (front part, IEC standard)	

## Dimensions

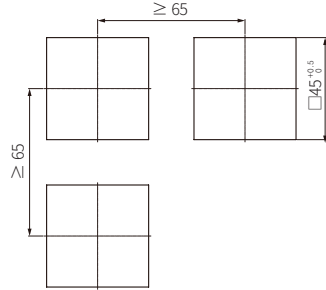
- Unit: mm, For the detailed drawings, follow the Autonics website.



### Bracket



### Panel cut-out



## Sold Separately

- 8-pin socket: PG-08, PS-08(N)