

# Solid State Auto Switch with Timer Tie-rod Mounting Type D-F5NT



Refer to SMC website for the details of the products conforming to the international standards.

## Grommet

- With built-in OFF-delay timer (approx. 200 ms)
- Easy intermediate detection



## Auto Switch Specifications

PLC: Programmable Logic Controller

D-F5NT (With indicator light)	
Auto switch model	D-F5NT
Wiring type	3-wire
Output type	NPN
Output operation	Off-delay
Operating time	1 ms or less
Off-delay time	200 ± 50 ms
Applicable load	IC circuit, Relay, PLC
Power supply voltage	5, 12, 24 VDC (4.5 to 28 VDC)
Current consumption	10 mA or less
Load voltage	28 VDC or less
Load current	40 mA or less
Internal voltage drop	1.5 V or less (0.8 V or less at 10 mA)
Leakage current	100 μA or less at 24 VDC
Indicator light	Red LED illuminates when turned ON.
Standard	CE marking, RoHS

## Oilproof Heavy-duty Lead Wire Specifications

Auto switch model		D-F5NT
Sheath	Outside diameter [mm]	ø4
	Number of cores	3 cores (Brown/Blue/Black)
Insulator	Outside diameter [mm]	ø1.22
	Effective area [mm <sup>2</sup> ]	0.3
Conductor	Strand diameter [mm]	ø0.08
	Minimum bending radius [mm] (Reference values)	24

Note 1) Refer to page 1584 for solid state auto switch common specifications.

Note 2) Refer to page 1584 for lead wire lengths.

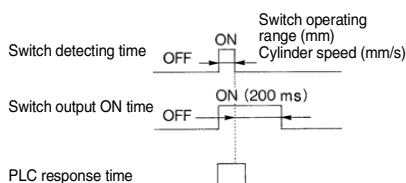
## Timer Operation

### Detection of intermediate positioning for high-speed cylinder

Detecting point dispersion occurs due to response time of PLC (sequencer); e.g. scanning.

Ex.) Cylinder speed — 1000 mm/sec.  
PLC response time — 0.1 sec.  
Detecting point dispersion — Within 100 mm (= 1000 mm/sec. x 0.1 sec.)

Take PLC response time into consideration when using.



## Weight

(g)

Auto switch model		D-F5NT
Lead wire length	3 m (L)	81
	5 m (Z)	127

## Dimensions

(mm)

