

Applicable Cylinder Series 1

[illegible]

Solid State Auto Switch with Timer Tie-rod Mounting Style D-F5NTL



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

Auto Switch Specifications

PLC: Programmable Logic Controller

D-F5NTL (With indicator light)	
Auto switch model	D-F5NTL
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

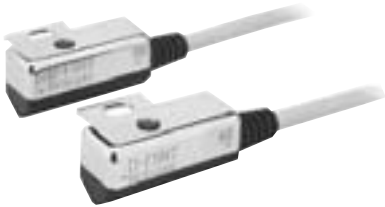
• Lead wires — Oilproof heavy-duty vinyl cord, $\phi 4$, 0.3 mm², 3 cores (Brown, Black, Blue), 3 m (Standard)

Note 1) Refer to page 1272 for solid state auto switch common specifications.

Note 2) Refer to page 1272 for lead wire lengths.

Grommet

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

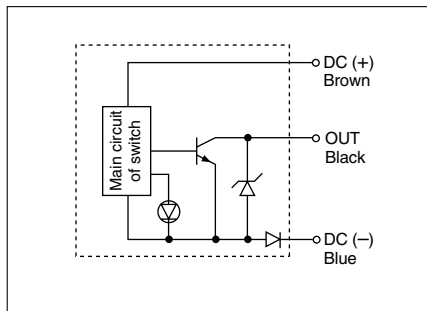


Mass

(g)

Auto switch model	D-F5NT	
Lead wire length (m)	0.5	—
	3	81
	5	127

Auto Switch Internal Circuit



Timer Operation

Detection of intermediate positioning for high-speed cylinder

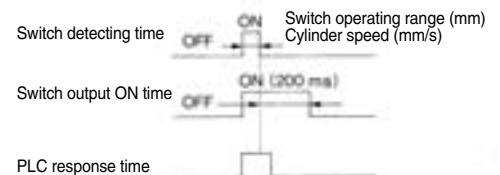
Detecting point dispersion occurs due to response time of PLC (sequencer); e.g. scanning.

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.



Dimensions

(mm)

