# Solid State Auto Switch with Timer
# Rail Mounting Type
# D-F7NT

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-F7NT (With indicator light) | |
|---|---|
| Auto switch model | **D-F7NT** |
| **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-F7NT** |
|---|---|---|
| Sheath | Outside diameter [mm] | ø3.4 |
| Insulator | Number of cores | 3 cores (Brown/Blue/Black) |
| | Outside diameter [mm] | ø1.1 |
| Conductor | Effective area [mm²] | 0.2 |
| | Strand diameter [mm] | ø0.08 |
| Minimum bending radius [mm] (Reference values) | | 21 |

Note 1) Refer to page 1584 for solid state auto switch common specifications.
Note 2) Refer to page 1584 for lead wire lengths.

## Weight

(g)

| Auto switch model | | **D-F7NT** |
|---|---|---|
| Lead wire length | 3 m (**L**) | 57 |
| | 5 m (**Z**) | 92 |

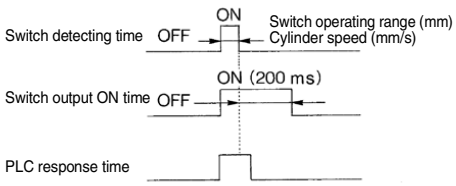
## Timer Operation

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

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

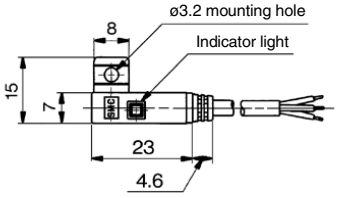
Ex.) Cylinder speed — 1000 mm/sec.
PLC response time — 0.1 sec.
Detecting point dispersion — Within 100 mm (= 1000 mm/sec. x 0.1 sec.)

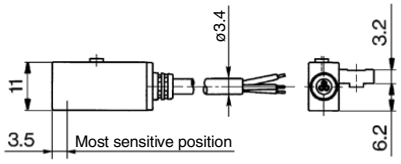
Take PLC response time into consideration when using.




## Dimensions

(mm)

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