

Prior to Use Auto Switch Specifications

Precautions

Auto Switch Common Specifications

Auto switch style	Reed switch	Solid state switch
Current leakage	None	3 wire: 100 μ A or less, 2 wire: 1mA or less
Operating time	1.2ms	1ms or less ⁽³⁾
Shock resistance	300m/s ²	1000m/s ²
Insulation resistance	50 M Ω or more at 500MV DC (between lead wire and the case)	
Withstand voltage	1500V AC/min. (between lead wire and the case) ⁽¹⁾	1000V AC/min. (between lead wire and the case)
Ambient temperature	-10 to 60°C	
Protective construction	IEC529 Standard IP67, Waterproof construction (JISC0920) ⁽²⁾	

Note 1) Connector style (D-A73C/A80C/C73C/C80C) and D-9/9□A/A9/A9□V style: 1000V AC/min. (between lead wire and the case)

Note 2) IEC529 Standard IP63, Rainproof construction (JISC0920) for Terminal conduit style (D-A3/A3□A/A3□C/G39/G39A/G39C/K39/K39A/K39C) and DIN terminal style (D-A44/A44A/A44C).

Note 3) Except solid state switch with timer (D-M5□TL, G5NTL, F7NTL, F5NTL) and **Auto switch for strong magnetic field resistance (D-P5DWL)**.
D-J51: 5ms or less

Lead Wire Length

How to Order

Ex.)

D-A73□L

•Lead wire length

—	0.5m
L	3m
Z	5m
N*	None

* Applicable for the connector style (D- ** C) only

Note 1) Applicable auto switch with 5 meter lead wire ("Z")

Reed switch: D-B53/B54, D-C73 (C)/C80C,D-A73(C)(H)/A80C

D-A53/A54, D-Z73, D-90/97/90A/93A

Solid state switch: Manufactured upon receipt of order as standard
(Except D-M9/M9□V)

Note 2) The standard lead wire length of solid state switch with timer or with water resistant 2 colour indication is 3 meters. (Not available 0.5m)

Note 3) The standard lead wire length of strong magnetic field resistant solid state switch is 3 or 5 meters. (Not available 0.5m.)

Part No. of lead wire with connector

(Available for connector style only.)

Part No.	Lead wire length
D-LC05	0.5m
D-LC30	3m
D-LC50	5m

Change of Lead Wire Colour

Lead wire colours of SMC auto switches have been changed in order to meet Nippon Electric Control Equipment Industries Association Standard No. 402.

2 wire auto switch

	Old	New
Output (+)	Red	Brown
Output (-)	Black	Blue

Solid state auto switch with diagnostic output

	Old	New
Power supply	Red	Brown
GND	Black	Blue
Output	White	Black
Diagnostic output	Yellow	Orange

3 wire auto switch

	Old	New
Power supply	Red	Brown
GND	Black	Blue
Output	White	Black

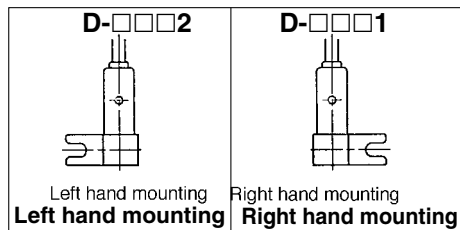
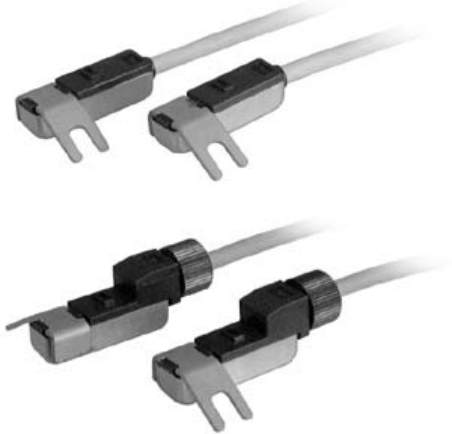
Solid state auto switch with latching style diagnostic output

	Old	New
Power supply	Red	Brown
GND	Black	Blue
Output	White	Black
Latching style diagnostic output	Yellow	Orange

Solid State Switch/Direct Mounting Type

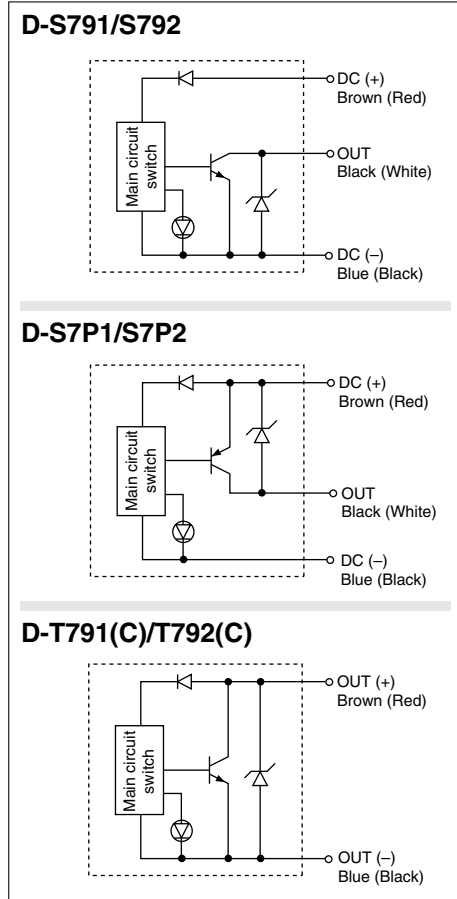
D-S79/D-S7P/D-T79(C)

Grommet, Connector Electrical Entry: In-line



Auto switch internal circuit

() : Before IEC standard



Applicable rotary actuator series

Series	Size
CDRB1	20, 30, 50, 80, 100
CDRBU	20, 30
MDSUB	7, 20

Auto switch specifications

PLC: Programmable Logic Controller

D-S79/D-T79 (With indicator light)			
Auto switch model no.	D-S791/D-S792	D-S7P1/D-S7P2	D-T791/D-T792/D-T791C/D-T792C
Wiring type	3 wire		2 wire
Output	NPN type	PNP type	—
Applicable load	IC circuit, Relay, PLC		24V DC Relay, PLC
Power voltage	5, 12, 24V DC (4.5 to 28V DC)		—
Current consumption	10mA or less		—
Load voltage	28V DC or less	—	24V DC (10 to 28V DC)
Load current	40mA or less	80mA or less	5 to 40mA
Internal voltage drop	1.5V or less (0.8V or less at 10mA)	0.8V or less	4V or less
Leakage current	100 μ A or less at 24V DC		0.8mA or less at 24V DC
Indicator light	ON: Red light emitting diode		



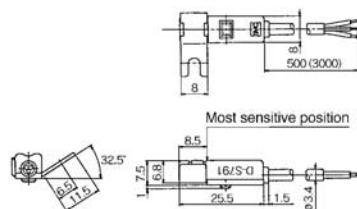
- Lead wire — Oil proof vinyl heavy insulation cable ϕ 3.4, 0.2mm², 3 wire (brown, black, blue) 2 wire (brown, blue) 0.5m

Note 1) Refer to p.6-18 for common specifications of solid state switch.

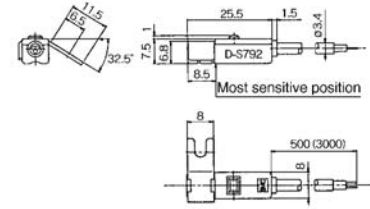
Note 2) Refer to p.6-18 for lead wire length.

Dimensions

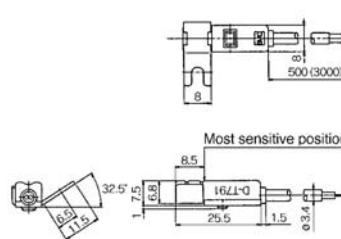
D-S791: Right hand mounting D-S7P1



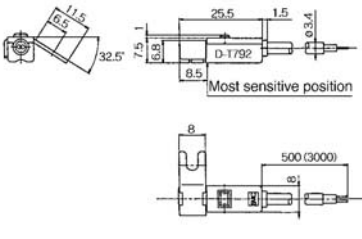
D-S792: Left hand mounting D-S7P2



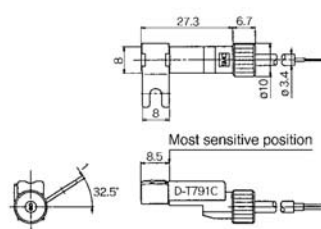
D-T791: Right hand mounting



D-T792: Left hand mounting



D-T791C: Right hand mounting



D-T792C: Left hand mounting

