

Reed Auto Switch Direct Mounting Type

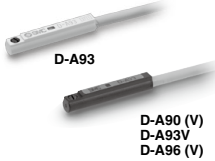
D-A90(V)/D-A93(V)/D-A96(V) (C) (E)

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

Auto Switch Specifications

PLC: Programmable Logic Controller

Grommet



Caution

Precautions

1. Do not drop or bump the auto switch while handling it as it may result in the auto switch breaking.
2. Do not remove the protective cover attached to the product body until the product is ready to be mounted on the actuator.
3. Fix the auto switch with the existing screw installed on the auto switch body. The auto switch may be damaged if a screw other than the one supplied is used.

D-A90, D-A90V (Without indicator light)			
Auto switch model	D-A90, D-A90V		
Applicable load	IC circuit, Relay, PLC		
Load voltage	24 V $\frac{DC}{\text{AC}}$ or less	48 V $\frac{DC}{\text{AC}}$ or less	100 V $\frac{DC}{\text{AC}}$ or less
Maximum load current	50 mA	40 mA	20 mA
Internal circuit*	④		
Contact protection circuit	None		
Internal resistance	1 Ω or less (Including lead wire length of 3 m)		
Standard	CE marking		
D-A93, D-A93V, D-A96, D-A96V (With indicator light)			
Auto switch model	D-A93, D-A93V	D-A96, D-A96V	
Applicable load	Relay, PLC	IC circuit	
Load voltage	24 VDC ⁽⁴⁾	100 VAC	4 to 8 VDC
Load current range and Maximum load current ⁽³⁾	5 to 40 mA	5 to 20 mA	20 mA
Internal circuit*	③		⑤
Contact protection circuit	None		
Internal voltage drop	D-A93: 2.4 V or less (up to 20 mA)/3 V or less (up to 40 mA) D-A93V: 2.7 V or less		0.8 V or less
Indicator light	Red LED illuminates when turned ON.		
Standard	CE marking		

Oilproof Heavy-duty Lead Wire Specifications

Auto switch model	D-A90(V)	D-A93(V)	D-A96(V)
Sheath	Outside diameter [mm]	$\phi 2.7$	
Insulator	Number of cores	2 cores (Brown/Blue)	3 cores (Brown/Blue/Black)
	Outside diameter [mm]	$\phi 0.96$	$\phi 0.91$
Conductor	Effective area [mm ²]	0.18	0.15
	Strand diameter [mm]	$\phi 0.08$	
Lead wire minimum bending radius [mm] (Reference values)			17

* Refer to the applicable internal circuit diagram (numbers ① to ⑦) on page 1587.

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

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

Note 3) Under 5 mA, the strength of the indicator light is poor. In some cases, visibility of the indicator light will not be possible where the output signal is less than 2.5 mA. However, there is no problem in terms of contact output, when an output signal exceeds 1 mA or more.

Note 4) The auto switches can operate at 12 VDC, but consider the internal voltage drop of the auto switch described in Reed Auto Switch Precautions on page 12.

Weight

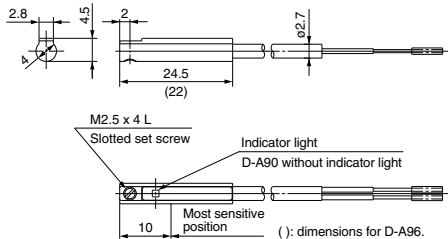
(g)

Model	D-A90	D-A90V	D-A93	D-A93V	D-A96	D-A96V	
Lead wire length	0.5 m (NII)	6	6	6	8	8	
	1 m (M)	—	—	11	—	—	
	3 m (L)	30	30	30	30	41	41
	5 m (Z)	—	—	47	47	—	—

Dimensions

(mm)

D-A90/D-A93/D-A96



D-A90V/D-A93V/D-A96V

