

# Heat Resistant Reed Auto Switch D-B30(J)/31(J)/35(J)



Can be used outdoors or under high temperature (Max. 120°C). Wide operating range (double that of other SMC products) enables stable position detection.



High temperature environment such as places around ignited gas outlet or furnace

Outdoor plants and environment with high temperature and humidity

Environment for steam cleaning or high temperature sterilization

Applications requiring wide operating range such as clamping of elastic work pieces

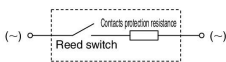
Use of metal case and heat resistant materials.

The construction prevents influence of external environment by sealing the auto switch internal parts to improve heat resistance.

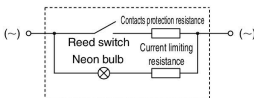
The wide operating range allows easy position setting and reduces influence of the work piece position changes.

## Auto Switch Internal Circuit

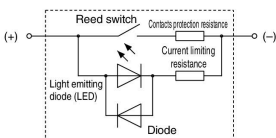
### D-B30



### D-B31



### D-B35



## Auto Switch Specifications

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

PLC: Programmable Logic Controller						
Auto switch model	D-B30	D-B30J	D-B31	D-B31J	D-B35	D-B35J
Electrical entry	Terminal conduit	Grommet	Terminal conduit	Grommet	Terminal conduit	Grommet
Operating voltage	24 VDC / 100 VAC		100 VAC		24 VDC	
Operating current range	5 to 30 mAADC / 5 to 20 mAAC		5 to 20 mAAC		5 to 30 mAADC	
Internal voltage drop	2.5 V or less		2.5 V or less		2.0 V or less	
Indicator light	Without indicator light		Neon bulb lights up when OFF		Red LED lights up when OFF	
Applicable load	PLC (Programmable Logic Controller)					
Shock resistance	300 m/s <sup>2</sup>					
Leakage current	0.1 mA or less		1 mA or less		1 mA or less	
Lead wire	—	0.5 m	—	0.5 m	—	0.5 m
Enclosure	Terminal conduit : IEC60529 IP64 Grommet : IEC60529 IP67					
Withstand voltage	1500 VAC for 1 minute (between case and terminals or lead wires)					
Insulation resistance	50 MΩ or larger between case (ground) and lead wires (terminals)					
Operating temperature range	-10°C to 120°C					
Standard	CE marking					

## Oilproof Heavy-duty Lead Wire Specifications

Auto switch model	D-B30J	D-B31J	D-B35J
Sheath	Outside diameter [mm]	ø6	
Insulator	Number of cores	2 cores (Brown/Blue)	
	Outside diameter [mm]	ø2.3	
Conductor	Effective area [mm <sup>2</sup> ]	0.5	
	Strand diameter [mm]	ø0.08	
Lead wire minimum bending radius [mm] (Reference values)	48 (Room temperature)		

## Weight

(g)

Auto switch model	D-B30	D-B30J	D-B31	D-B31J	D-B35	D-B35J
Lead wire length	None	190	—	190	—	190
	0.5 m (Nil)	—	250	—	250	—
	3 m (L)	—	268	—	268	—
	5 m (Z)	—	462	—	462	—

## Lead wire length

In case of the grommet type (J type), the lead wire length is 0.5 m.

(No lead wire is attached to the terminal conduit type.)

Manufacture of 3 m and 5 m types is also possible. Please consult SMC for these types.