

# Heat Resistant 2-Color Indicator Solid State Auto Switch Direct Mounting Type



- Heat resistant (Max. 302°F [150°C]) type added to the D-M9□ compact auto switch.
- Choice of output types: PNP, NPN

## How to Order

D-M9 **N** **J** **L**

Output specifications

Symbol	Specification
N	NPN output
P	PNP output

Lead wire length

Symbol	Specification
L	Between the sensor and amplifier: 3 m, Amplifier section: 3 m
Z	Between the sensor and amplifier: 5 m, Amplifier section: 3 m



D-M9PJ



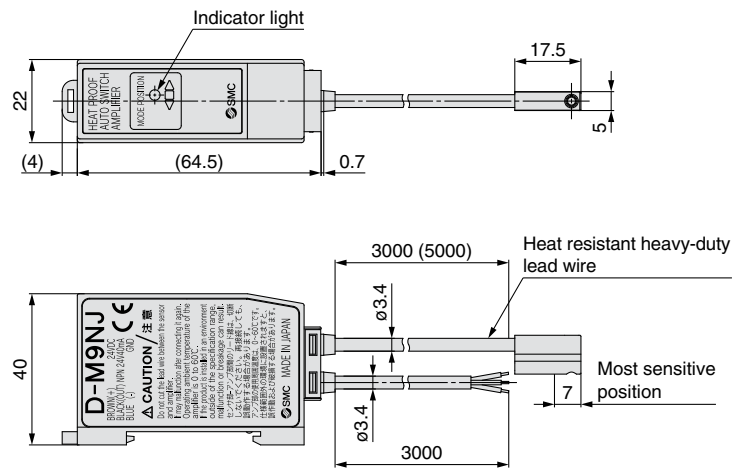
D-M9NJ

## Auto Switch Specifications

D-M9NJ, D-M9PJ (With indicator light)		
Auto switch model	D-M9NJ	D-M9PJ
Output type	NPN	PNP
Power supply voltage	5, 12, 24 VDC (4.5 to 28 V)	
Current consumption	25 mA or less	
Load voltage	28 VDC or less	—
Load current	40 mA or less	
Internal voltage drop	0.8 V or less	
Leakage current	100 μA or less at 24 VDC	
Indicator light	Operating range ..... Red LED lights up. Optimum operating range ..... Green LED lights up.	
Ambient temperature	Sensor section: 32 to 302°F [0 to 150°C] Amplifier section: 32 to 140°F [0 to 60°C]	
Impact resistance	Sensor section: 1000 m/s <sup>2</sup> Amplifier section: 300 m/s <sup>2</sup>	
Standards	CE marking, RoHS	

## Dimensions

[mm]



## Cylinder with Heat Resistant Auto Switch: -XB14 (Made to Order)

### Applicable Cylinder

Series	Description	Model	Action	Applicable bore size [mm]						Note	
				16	20	25	32	40	50		63
CDQ2	Compact cylinder	CDQ2-XB14	Double acting, Single rod	●	●	●	●	●	●	●	Except with rubber bumper

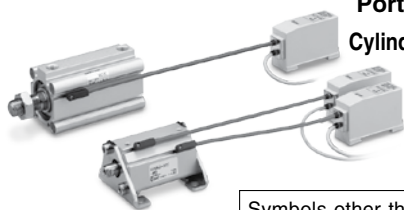
Series **D-M9□J**

## How to Order

With auto switch

**CDQ2** [ ] [ ] [ ] [ ] - [ ] **D** [ ] **Z** - [ ] [ ] - **M9NJL** [ ] - **XB14**

Mounting  
 Type  
 Bore size (See Table 1.)  
 Port thread type  
 Cylinder stroke (See Table 1.)  
 Body option  
 Mounting bolt  
 Rod end bracket



Symbols other than those for the auto switch are the same as the standard type. For details, refer to the **WEB catalog** or Best Pneumatics No. 2.

Number of auto switches  
 Cylinder with heat resistant auto switch

Auto switch

Symbol	Output
<b>M9NJ</b>	NPN
<b>M9PJ</b>	PNP

\* Lead wire length symbols  
 3 m ..... L (Example) M9NJL  
 5 m ..... Z (Example) M9NJZ

## Specifications

Ambient and fluid temperature range	32 to 302°F [0 to 150°C]
Seal material	Fluororubber
Grease	Heat resistant grease
Standard stroke	See Table 1.
Dimensions	See below.
Specifications other than above	Same as standard type

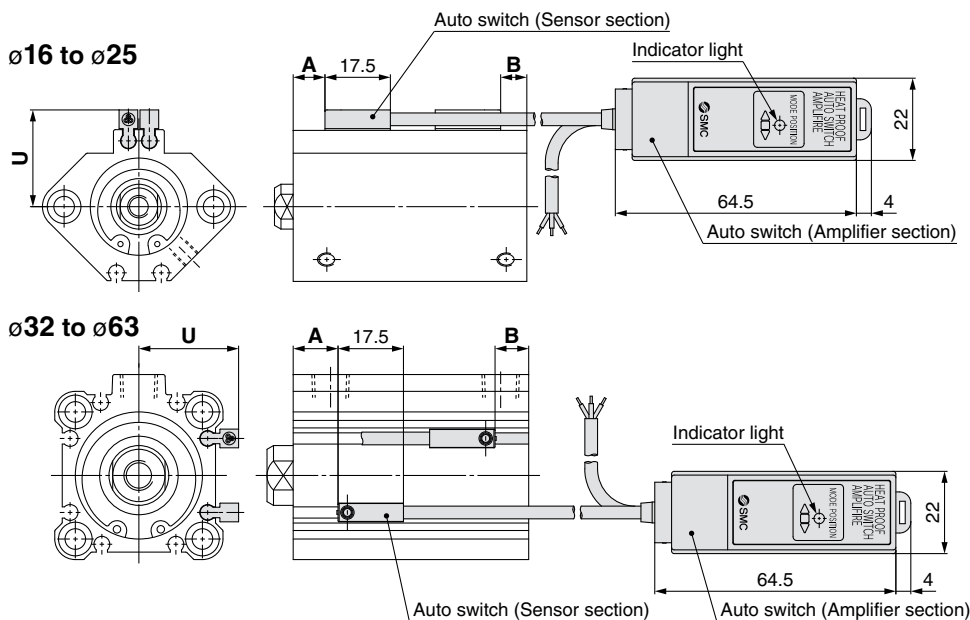
**Table 1 Cylinder Strokes** [mm]

Bore size	Stroke
<b>16</b>	15, 20, 25, 30
<b>20, 25</b>	15, 20, 25, 30, 35, 40, 45, 50
<b>32 to 63</b>	15, 20, 25, 30, 35, 40, 45, 50, 75, 100

● Manufacturing of intermediate strokes  
 Intermediate strokes in 1 mm increments are available by using spacers with standard stroke cylinders.

## Dimensions

(Dimensions other than those shown below are the same as the standard type. Refer to the **WEB catalog** or Best Pneumatics No. 2.)



**Auto Switch Proper Mounting Position (Detection at stroke end) and Its Mounting Height** [mm]

Bore size	Auto switch model		
	D-M9□ J	A	B
<b>16</b>	9.5	7	21
<b>20</b>	9.5	8.5	23.5
<b>25</b>	9.5	9	27
<b>32</b>	11	8	29
<b>40</b>	15	10.5	31
<b>50</b>	13	13.5	36
<b>63</b>	15.5	16.5	41.5

Note) Adjust the auto switch after confirming the operating condition in the actual setting.

**Operating Range** [mm]

Auto switch model	Bore size						
	16	20	25	32	40	50	63
<b>D-M9NJ□</b>	4.5	4.5	4.5	5	4.5	5	5
<b>D-M9PJ□</b>	4.5	4.5	4.5	5	4.5	5	5

\* Since the operating range is provided as a guideline at room temperature, it cannot be guaranteed. It may change substantially depending on the ambient environment.

**⚠ Safety Instructions** Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.

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