

Solid State Switch/Direct Mounting Type D-F9N(V)/D-F9P(V)/D-F9B(V)

Grommet



Applicable rotary actuator series

Series	Size	Auto switch adjustment
MSQ	10, 20, 30, 50, 70, 100, 200	Refer to p.1.6-6

Applicable air gripper series

Series	Size	Auto switch setting example
MHZ2	10, 16, 20, 25	Refer to p.2.10-1
MHZJ2	10, 16, 20, 25	Refer to p.2.10-1
MDHR	10, 15, 20, 30	Refer to p.2.10-5
MHK2	12, 16, 20, 25	Refer to p.2.10-1
MHS	16, 20, 25	Refer to p.2.10-9
MHT2	32, 40, 50, 63	Refer to p.2.10-1
MHY2	10, 16, 20, 25	Refer to p.2.10-11
MRHQ	10, 16	Refer to p.2.10-13

Auto switch specifications

PLC: Programmable Logic Controller

D-F9□/D-F9□V (With indicator light)

Auto switch model no.	D-F9N	D-F9NV	D-F9P	D-F9PV	D-F9B	D-F9BV
Electrical entry	In-line	Perpendicular	In-line	Perpendicular	In-line	Perpendicular
Wiring	3 wire				2 wire	
Output	NPN type		PNP type		—	
Application	IC circuit, Relay, PLC					
Power voltage	5, 12, 24V DC (4.5 to 28V)				—	
Current consumption	8mA or less		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 load current 10mA)		0.8V or less		4V or less	
Leakage current	100μA or less at 24V DC				1mA or less at 24V DC	
Indicator light	ON: Red light emitting diode					



● Lead wire — Oil proof vinyl heavy insulation cable ø2.7, 3 wire (brown, black, blue) 0.15mm², 2 wire (brown, blue) 0.18mm², 0.5m

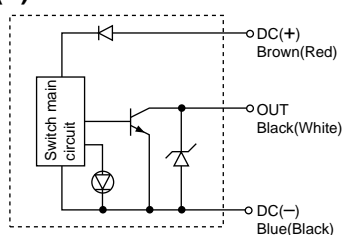
Note 1) Refer to p.2.11-5 for common specifications of solid state switch.

Note 2) Refer to p.2.11-5 for lead wire length.

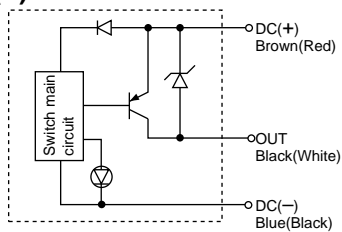
Auto switch internal circuit

(): Before IEC standard

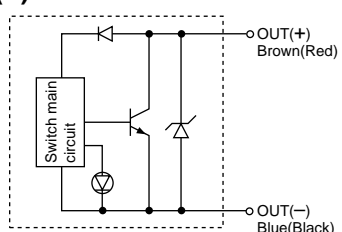
D-F9N(V)



D-F9P(V)

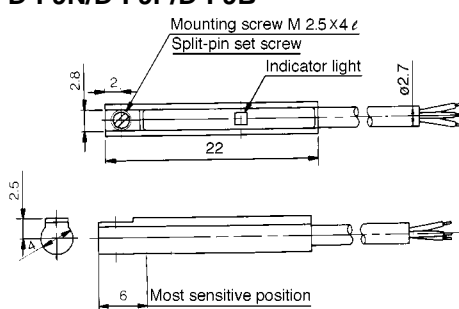


D-F9B(V)

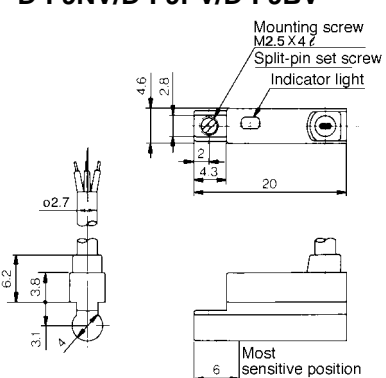


Dimensions

D-F9N/D-F9P/D-F9B



D-F9NV/D-F9PV/D-F9BV



⚠ Specific Product Precautions

Be sure to read before handling.
Refer to p.0-20 and 0-21 for Safety Instructions and common precautions on the products mentioned in this catalog, and refer to p.2.11-2 to 2.11-4 for detailed precautions on every series.

⚠ Caution

Do not use set screw which is not attached to auto switch body. If it is used, the switch may damage.

MHZ2

MHZJ2

MHQ

MHL2

MHR

MHK

MHS

MHC2

MHT2

MHY2

MHW2

MRHQ

Auto switch