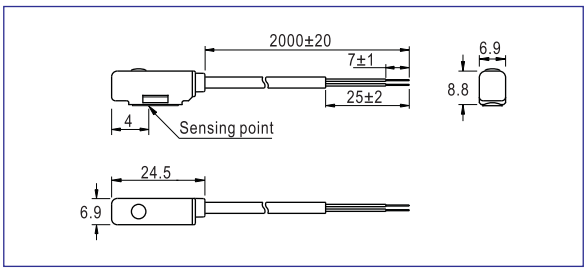
Dimensions



Specification

Item\Type		DS1-M	DS1-MN	DS1-MP
Switch logic		Transistor without contact, Normally opened type		
Switch type		Two lines type	NPN type	PNP type
Operating voltage(V)		10~28V DC	5~30V DC	
Max. Switching current(mA)		50	200	
Switching rating(W)		Max. 1.4	Max. 6	
Current consumption		12(40)uA Max. @24V	15mA Max. @24V	
Voltage drop		2.65V Max. @50mA DC	0.5V Max. @200mA DC	
Cable		Φ3.3,2C Black oil resistant PVC	Φ3.3,3C Black oil resistant PVC	
Indicator		Red LED		
Leakage current		20(90)uA Max. @28V	0.01mA Max.	
Sensitivity (Gauss)	S06~S10	25~700	45~55	
	S12~S16	25~700	55~65	
	S20~S63	25~700	65~75	
	A20~A40	25~700	65~75	
Max. Frequency(Hz)		1000		
Shock(m/s^2)		500		
Vibration(m/s^2)		90		
Temperature range(℃)		-10~70		
Enclosure classification		IP67(NEMA6)		
Protection circuit		Power reverse polarity, surge suppression		

Ordering code

DS1 M N 020 S 06

Number of sensor switch
DS1: Sensor switch

Specification of sensor switch

Specification	Product Series
M: M type	PB, MA, MAL, MI, MF

Model of sensor switch
- Blank: two-line /normally opened
- N: three-line NPN with no contact (current flows in)/ normally opened
- P: three-line PNP with no contact (current flows out)/ normally opened

① Connecting way
- C08: M8 quick joint, length of wire is 150mm
- C12: M12 quick joint, length of wire is 150mm
- 020: length of wire is 2m
- 030: length of wire is 3m
- 050: length of wire is 5m
- 100: length of wire is10m

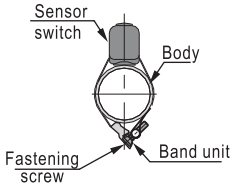
Bore size

Cylinder barrel material	Bore size
Aluminum alloy	20: Φ20mm
	25: Φ25mm
	32: Φ32mm
	40: Φ40mm
Stainless steel	06: Φ6mm
	08: Φ8mm
	10: Φ10mm
	12: Φ12mm
	16: Φ16mm
	20: Φ20mm
	25: Φ25mm
	32: Φ32mm
	40: Φ40mm
	50: Φ50mm
	63: Φ63mm

Cylinder Barrel material
- S: Stainless steel
- A: Aluminum alloy

① Note: The quick joint that is attached at the end of wire is three-needle-male joint-linear-rotary screw thread type. The female joint plug has to be ordered additionally. Please refer to P420for the specific data.

Mounting

Installation example	Installation method
	No additional accessories are necessary for the sensor switch of DS1-M, DS1-MN, DS1-MP series. It can be directly fixed onto the cylinder, which is convenient and fast. 1. Strap band round the cylinder barrel. Snap the clamping screw into button orifice and adjust it to the proper position. Properly tighten the clamping screw to fix.