Sensor switch

DS1-F Series

Dimensions

| 13.0 |
| 12.0 |
| 11.0 | 1.5 | 26.0 | 1.5 |
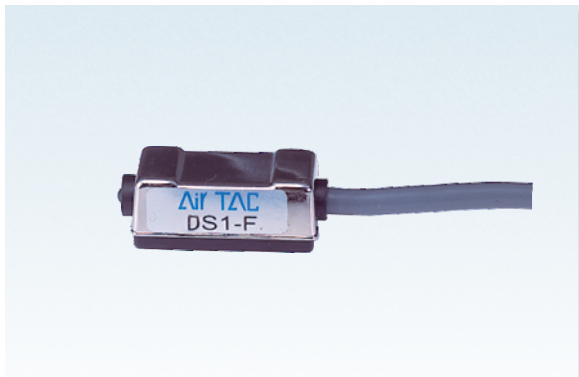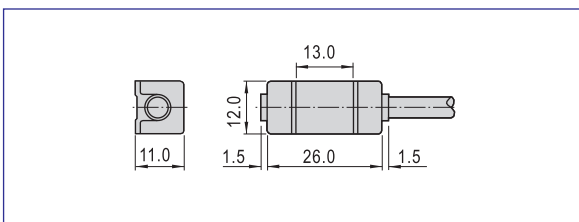
The ordering code of mounting accessories

Bore size\Series	SC,SCL	SU,SUL	SI,SIL	JSI
32	F-SC32H	F-SU32H	F-SI32H	F-SI32H
40	F-SC32H	F-SU40H	F-SI40H	F-SI40H
50	F-SC32H	F-SU50H	F-SI50H	F-SI50H
63	F-SC63H	F-SU63H	F-SI63H	F-SI63H
80	F-SC80H	F-SU80H	F-SI80H	F-SI80H
100	F-SC80H	F-SU100H	F-SI100H	F-SI100H
125	-	-	F-SI125H	F-SI125H
160	-	-	F-SI160H	-
200	-	-	F-SI200H	-

Specification

Item\Type	DS1-F	DS1-FN	DS1-FP
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	17mA Max. @24V
Voltage drop	2.65V Max. @50mA DC	1.0V Max. @200mA DC	
Cable	Φ4.0,2C Black oil resistant PVC	Φ4.0,3C Black oil resistant PVC	
Indicator	Red LED		
Leakage current	20(90)uA Max. @28V	0.01mA Max.	
Sensitivity(Gauss)	25~700	60~75	
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 F N 020

Number of sensor switch
DS1: Sensor switch

Specification of sensor switch

Specification	Product Series
F: F type	SI, SU, SC, JSI, MI, MA50(63)

Connecting way ①

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

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 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 P442 for the specific data.

Mounting

Installation example	Installation method
 Outline 1: Used with SU, SI, JSI series Outline 2: Used with SC series Outline 3: Used with MI, MA series	When the DS1–F, DS1–FN, DS1–FP series sensor switch used with different cylinders, different mounting accessories must be ordered. the details are below. 1. When it used with MI, MA50, 63 series cylinders, you must order the band unit(the ordering code is GXPAB–01), then depend on the below outline 3, fixed the sensor switch on the proper position of the cylinder's body with the band unit. 2. When it used with SC series cylinders，you must order the Mounting bracket（the ordering code is below table），then depend on the below outline 2, fixed the sensor switch on the proper position of the cylinder's body with the mounting bracket. 3. When it used with SU, SI, JSI cylinders, you must order the mounting bracket(the ordering code is below table), then depend on the below outline 1, fixed the sensor switch on the proper position of the cylinder's body with the mounting bracket.

Sensor switch