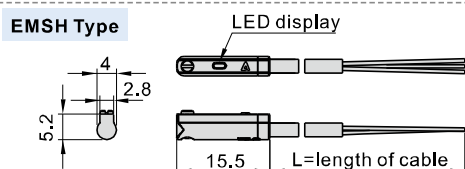
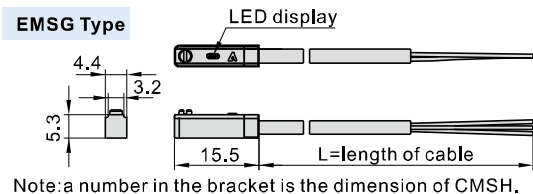
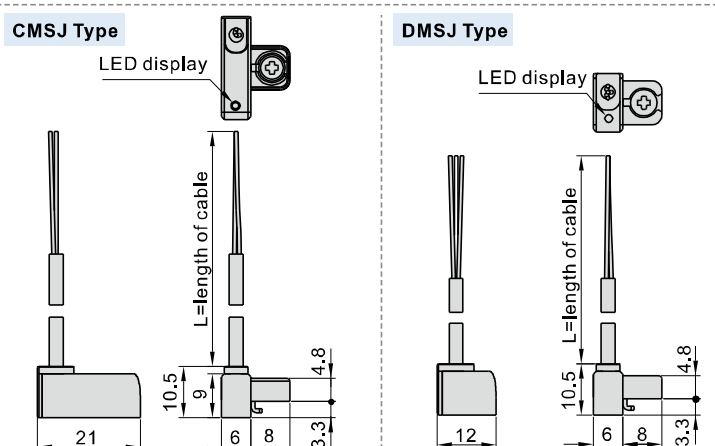
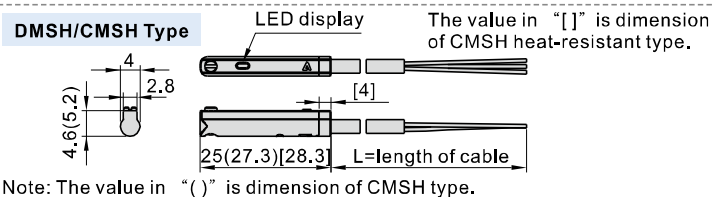
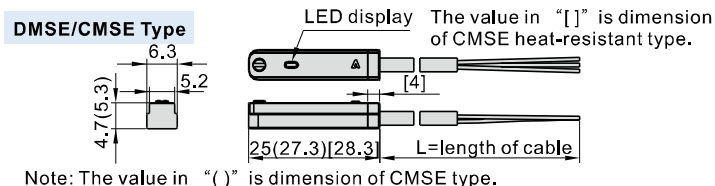
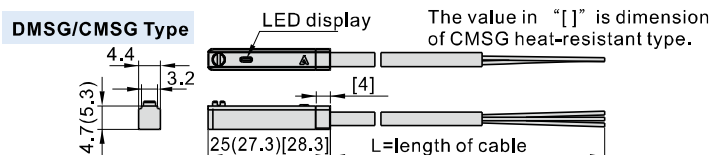


Ordering code for accessories

F - MQ □			Cylinder Accessory									
①	②	③										
			F : Accessory									
			MQ : Cylinder Accessory									
			Aluminum alloy			Aluminum alloy (Thick type)			Stainless steel			
			Code	For series	For bore size	Code	For series	For bore size	Code	For series	For bore size	
			A20: Φ20mm	MCK MBL	Φ20	A32T: Φ32mm	TWG	Φ32	S06: Φ6mm	PB/PBR MI MF MG MA/MAC	Φ6	
			A25: Φ25mm		Φ25	A40T: Φ40mm		Φ40	S08: Φ8mm		Φ8	
			A32: Φ32mm		Φ32	A50T: Φ50mm		Φ50	S10: Φ10mm		Φ10	
			A40: Φ40mm		Φ40				S12: Φ12mm		Φ12	
			A50: Φ50mm		Φ50				S16: Φ16mm		Φ16	
			A63: Φ63mm		Φ63			S20: Φ20mm	Φ20			
			A80: Φ80mm		Φ80			S25: Φ25mm	Φ25			
								S32: Φ32mm	Φ32			
								S40: Φ40mm	Φ40			
								S50: Φ50mm	Φ50			
								S63: Φ63mm	Φ63			

F - SC □ SH Tie Rod Cylinder Accessory				F : Accessory					
①	②	③	④	SC : Tie Rod Cylinder Accessory					
Category	Model	Cylinder	Attached	SC			SGC		
				Code	For series	For bore size	Code	For series	For bore size
				32	SC SGC	Φ32, Φ40			
				50		Φ50			
				63		Φ63			
				80		Φ80, Φ100			
				125		Φ125			
				160		Φ160, Φ200			
				250		Φ250			

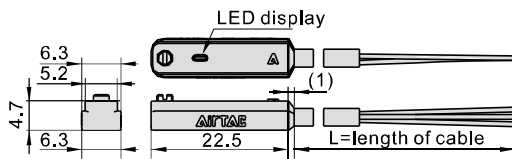
Dimensions



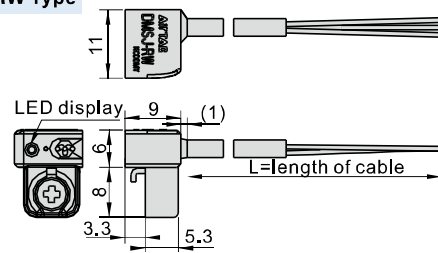
length of cable specification	length of cable(L)
020 Type	2000mm
030 Type	3000mm
050 Type	5000mm

DMS, EMS, CMS Series

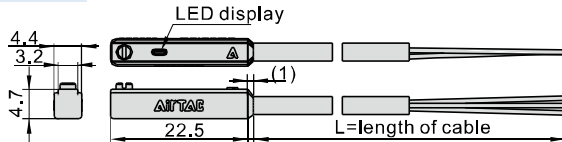
DMSE-RW Type



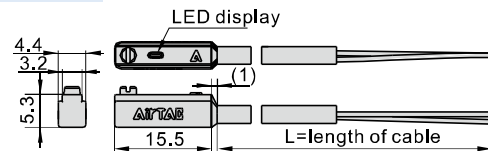
DMSJ-RW Type



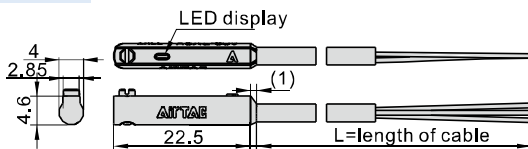
DMSG-RW Type



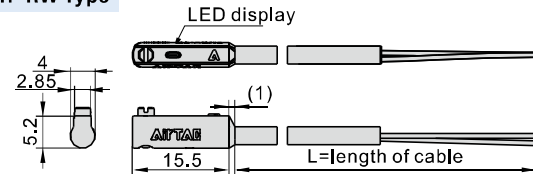
EMSG-RW Type



DMSH-RW Type



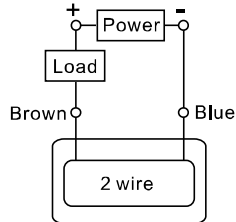
EMSH-RW Type



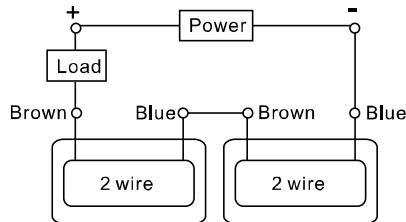
Connection method

2 wire, reed sensor connection

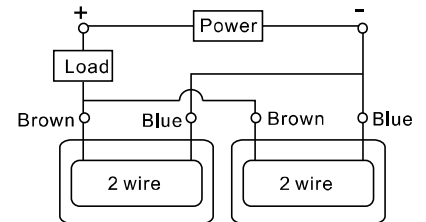
1.General connection



2.Series connection(And)

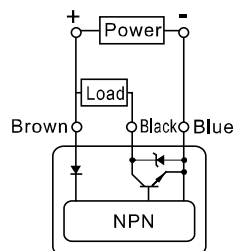


3.Parallel connection(OR)



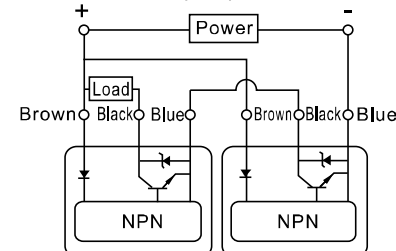
3 wire, solid state NPN connection

1.General connection

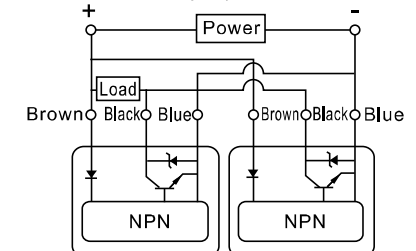


Note: The indicator lights will light up when both auto switches are turned NO.

2.Series connection(And)

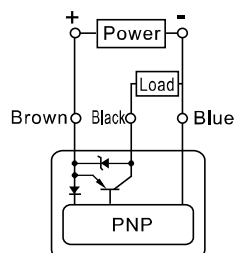


3.Parallel connection(OR)



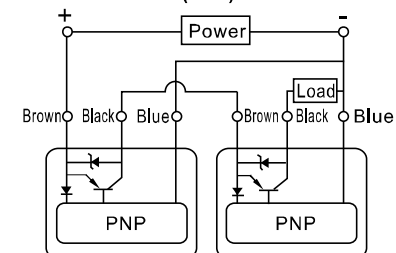
3 wire, solid state PNP connection

1.General connection

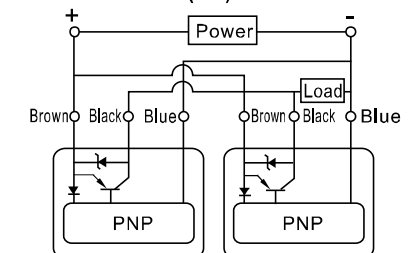


Note: The indicator lights will light up when both auto switches are turned NO.

2.Series connection(And)



3.Parallel connection(OR)



The selection of sensor

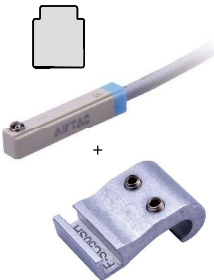
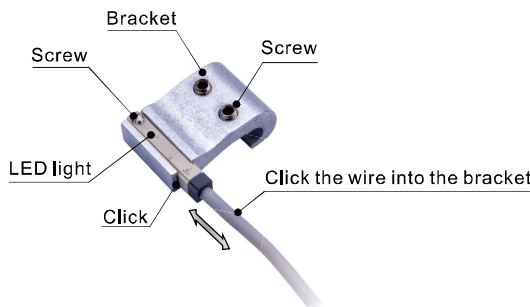
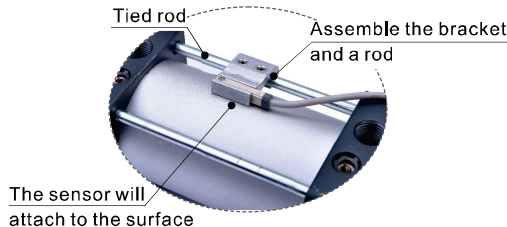
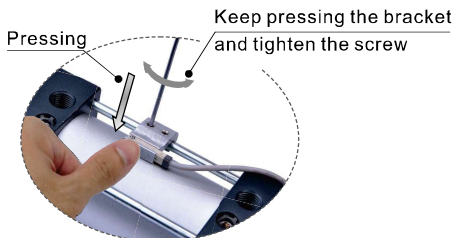
Installation

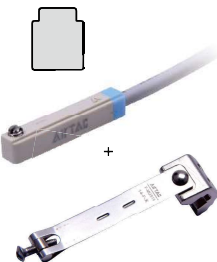
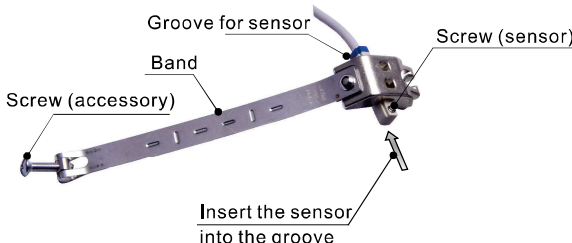
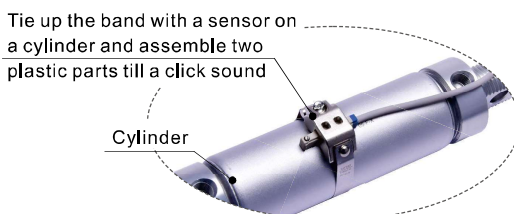
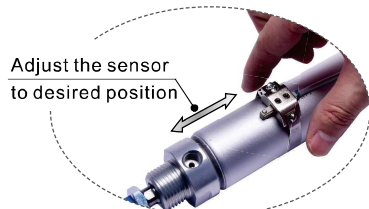
Sensor model	Procedure		
DMSG/CMMSG/EMSG	1 loose the screw Bottom of the sensor	2 Insert the sensor into the slot and adjust it to desired position	3 Tighten the screw
DMSE/CMSE	1 loose the screw Bottom of the sensor	2 Insert the sensor into the slot and adjust it to desired position	3 Tighten the screw
DMSH/CMSH/EMSH	1 loose the screw Bottom of the sensor	2 Insert the sensor into the slot and adjust it to desired position	3 Tighten the screw
DMSJ/CMSJ	1 loose the screw Bottom of the sensor	2 Insert the sensor into the slot and adjust it to desired position	3 Tighten the screw

Sensor

DMS、EMS、CMS Series

Sensor model	Procedure	
DMSG+(F-SC□SH) CMSG+(F-SC□SH)	1	2
	3	4
DMSG+(F-MQ□) CMSG+(F-MQ□)	1	2
	3	4

Sensor for "米" shape cylinder

SAI, SAU series will substitute for SI, SU series. And the corresponding sensors have some adjustments as the chart below.

New type(SAI)		Previous type(SI)	
Cylinder	Sensor	Cylinder	Sensor
	CMSE \ DMSE	CS1B1 / DS1B1 CS1B2 / DS1B2 CS1B3 / DS1B3 CS1B4 / DS1B4 CS1B5 / DS1B5 CS1B6 / DS1B6 CS1B7 / DS1B7 CS1F/DS1F/CS1U/DS1U + F-SI32H/F-SI40H F-SI50H/F-SI63H F-SI80H/F-SI100H F-SI125H/F-SI160H F-SI200H	CS1F/DS1F/CS1U/DS1U + F-SI32H/F-SI40H F-SI50H/F-SI63H F-SI80H/F-SI100H F-SI125H/F-SI160H F-SI200H
		Sensor (CS1F/DS1F/CS1U/DS1U) Mounting bracket (F-SI32H~F-SI200H) "米" shape cylinder (SI series) Sensor (CS1B1~B7/DS1B1~B7)	Sensor (CS1F/DS1F/CS1U/DS1U) Mounting bracket (F-SI32H~F-SI200H) "米" shape cylinder (SI series) Sensor (CS1B1~B7/DS1B1~B7)

New type(SAU)		Previous type(SU)	
Cylinder	Sensor	Cylinder	Sensor
	DMSG \ CMSG \ EMSG	CS1B1 / DS1B1 CS1B2 / DS1B2 CS1B3 / DS1B3 CS1B4 / DS1B4 CS1F/DS1F/CS1U/DS1U + F-SU32H/F-SU40H F-SU50H/F-SU63H F-SU80H/F-SU100H	CS1F/DS1F/CS1U/DS1U + F-SU32H/F-SU40H F-SU50H/F-SU63H F-SU80H/F-SU100H
		Sensor (CS1F/DS1F/CS1U/DS1U) Mounting bracket (F-SU32H~F-SU100H) "米" shape cylinder (SU series) Sensor (CS1B1~B4/DS1B1~B4)	Sensor (CS1F/DS1F/CS1U/DS1U) Mounting bracket (F-SU32H~F-SU100H) "米" shape cylinder (SU series) Sensor (CS1B1~B4/DS1B1~B4)

Socket

Ordering code

F - EC M08 B 020 - □

① ② ③ ④ ⑤ ⑥

① Category code

② Specification code

③ Socket type

④ Wire type

⑤ Wire length

⑥ Additional specification

F : Accessory

EC : Connecting Wire

M08:M8 socket

M12:M12 socket

B: 2-wire type

C:3-wire type

020: 2 meters

030:3meters

050:5meters

100:10meters

Blank: General type

Appearance

M8 socket

(Normal Close) 3

4Blue(-)

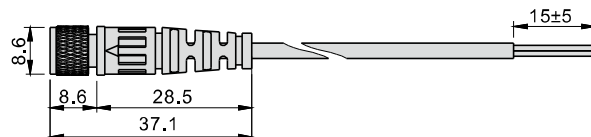
2-wire

Blue(-) 3

4Black(output)

1Brown(+)

3-wire



M12 socket

(Normal Close) 3

4Blue(-)

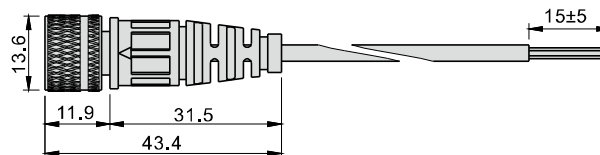
2-wire

Blue(-) 3

4Black(output)

1Brown(+)

3-wire



Instruction

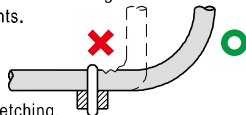
- Sensor shall not fall down or bear great impact when it is installed.
- The wire of the Sensor shall not move with the action of cylinder.
- Clamping torque shall be within the allowable scope when the Sensor is installed(0.15~0.2Nm).
- Sensor shall be installed in the middle position of the action scope.
- Sensor wiring:
 - The wire is unable to bear repetitive torsion and tension.
Please wire an external load before switch the power on.
 - No poor insulation in wire.
 - Do not wire with power line, high voltage line or use one wiring pipe.
 - Please wire the circuit correctly base on the circuit diagram.

- Execute scheduled maintenance by the following guidelines:
 - Make sure the sensor is firmly fixed.
 - Make sure the wire is intact.
 - Make sure that LED indicate the movement of cylinder correctly.
- Application of environment:
 - It is Not allow to use the sensor in the environment with explosive gas.
 - Magnetic sensor shall not be used in the environment with external magnetism.
 - Magnetic sensor shall not be used in the environment that is always eroded by water.
 - Magnetic sensor shall not be used in the environment with oil moisture or chemical substance.
 - Magnetic sensor shall not be used in the environment with periodically changing temperature.
 - Magnetic sensor shall not be used in the environment with excessively great impact.
 - Magnetic sensor shall not be used in the environment with sources of electrical pulse.
 - Avoid the environment with accumulated iron power and dense magnetic objects.

Precautions for wiring

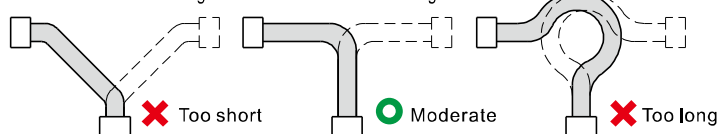
Do not install the wires in the following ways, as it may result in wire breakage accidents.

- Do not excessively bend or tighten the cables at the tie points.



- Cables should be routed to avoid repeated bending and stretching, as bending stress and tensile force can cause wire breakage.

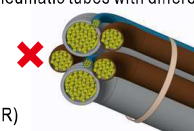
When installing in oscillating conditions, be sure to account for the cable's bending allowance to avoid excessive stretching that could lead to wire breakage.



- When fixing and laying cables (without considering oscillation), the bending radius (R) of the cables should be as large as possible.



- Do not bundle multiple cables together (especially cables or pneumatic tubes with different outer diameters) at the bending points.



- Precautions for Cable Carrier Use:

- Bending Radius of the Cable Carrier: The bending radius (R) should be 10 times or greater than the outer diameter of the cable.
- Prevent Twisting of Cables during Wiring: Cables inside the cable carrier should not be twisted. Place the cables horizontally or suspend them to eliminate any twisting.
- Avoid Over-fixing Inside the Cable Carrier: When wiring, ensure that no tension is applied to the cables, and do not fix the cables to movable parts. Secure the cables only at the two fixed ends of the cable carrier.

