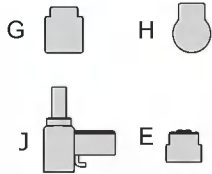




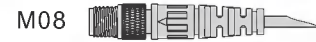
# DMS、CMS Series Sensor



## Ordering code for DMS



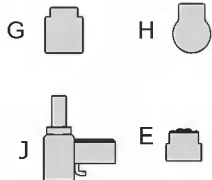
**DMS G - □ 020 - □**



① Model		DMS: Solid State Sensor			
② Specifications		G	H	E	J
③ Output type		Blank: 2 wire	N : NPN	P : PNP	
④ Lead wire length	Wire type	020: 2m	030: 3m	050: 5m	100: 10m
	Plug connector type	M08:0.5m with M8 plug connector		M12:0.5m with M12 plug connector	
		M08010:1m with M8 plug connector		M12010:1m with M12 plug connector	
		M08020:2m with M8 plug connector		M12020:2m with M12 plug connector	
		M08030:3m with M8 plug connector		M12030:3m with M12 plug connector	
⑤ Additional specification		Blank: General type		W:Waterproof type IP68 [note1]	

[Note1] There is no waterproof type for M08/M12 & J. The sockets of M08 and M12 need additional order.

## Ordering code for CMS



**CMS G-020-□**



① Model		CMS: Reed Sensor			
② Specifications		G	H	E	J
③ Lead wire length	Wire type	020: 2m	030: 3m	050: 5m	100: 10m
	Plug connector type	M08:0.5m with M8 plug connector		M12:0.5m with M12 plug connector	
		M08010:1m with M8 plug connector		M12010:1m with M12 plug connector	
		M08020:2m with M8 plug connector		M12020:2m with M12 plug connector	
		M08030:3m with M8 plug connector		M12030:3m with M12 plug connector	
④ Additional specification		Blank: General type		H:Heat resistant [note1]	

[Note 1] There is no heat resistant type for M08 & M12. The sockets of M08 and M12 need additional order.

## Ordering code for Socket



**F - EC M08 B 020 - □**



① Category code	F: Accessory			
② Specification code	EC: Connect wire line			
③ Socket type	M08:M8 socket	M12:M12 socket		
④ Wire type	B: 2-wire type		C: 3-wire type	
⑤ Wire length	020: 2 meters	030: 3meters	050: 5meters	100: 10meters
⑥ Add code	Blank: General type			



## DMS、CMS Series

### DMS Specifications

Item	DMS		
Model	2-wire	NPN	PNP
Power supply voltage	10V ~ 28V DC	5V ~ 30V DC	
Switching current	2.5mA ~ 100mA	30V/200mA Max.	
Contact capacity	2.8W Max.	6.0W Max.	
Current consumption	3mA Max.	5mA Max.	
Internal voltage drop	2.7V Max.	0.7V Max.	
Leakage current	0.05mA Max.	0.01mA Max.	
Switching frequency	1000Hz		
Impact resistance	50G		
Circuit protection	Reverse polarity protection Surge protection		
Operating Temp.	-10°C ~ 70°C		
Enclosure	IP64/IP68		
Standard	CE marking, RoHS		

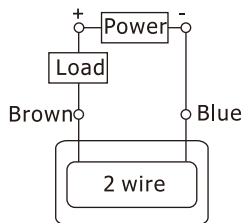
### CMS Specifications

Item	CMS	
Model	General	Heat resistant
Power supply voltage	5V ~ 240V AC/DC	
Switching current	100mA	
Contact capacity	10W Max.	
Current consumption	N/A	
Internal voltage drop	2.5V Max. @100mA DC	N/A
Leakage current	N/A	
Switching frequency	200Hz	
Impact resistance	50G	
Circuit protection	N/A	
Operating Temp.	-10°C ~ 70°C	-10°C ~ 125°C
Enclosure	IP64	
Standard	CE marking, RoHS	

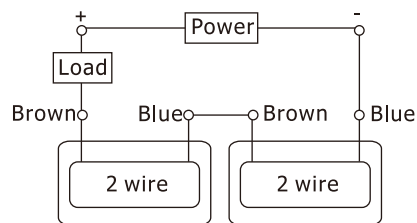
## Connection method

### 2 wire, reed sensor connection

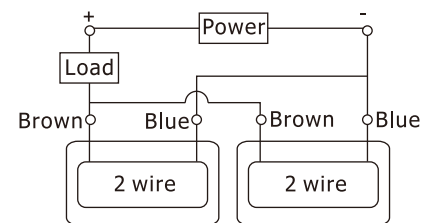
#### 1. General connection



#### 2. Series connection (And)



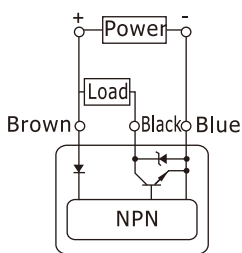
#### 3. Parallel connection (OR)



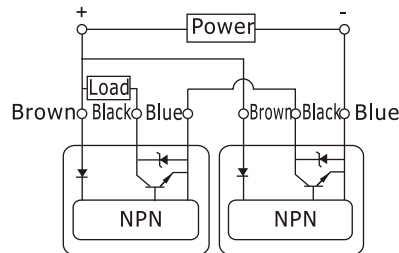
### 3 wire, solid state NPN connection

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

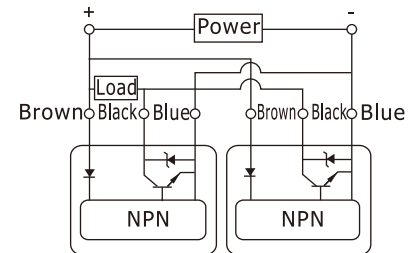
#### 1. General connection



#### 2. Series connection (And)



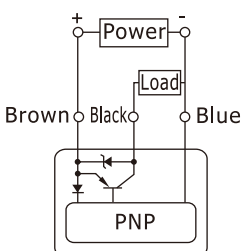
#### 3. Parallel connection (OR)



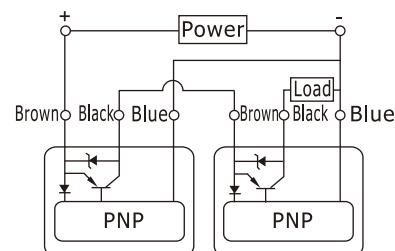
### 3 wire, solid state PNP connection

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

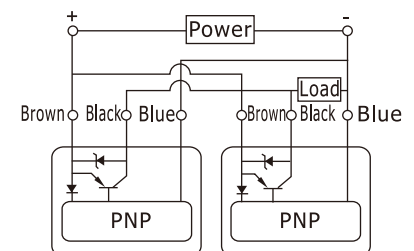
#### 1. General connection



#### 2. Series connection (And)

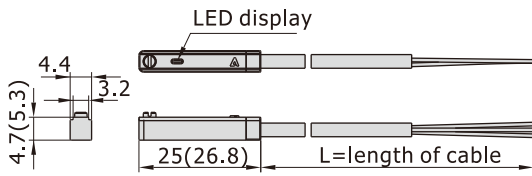


#### 3. Parallel connection (OR)



### Dimensions

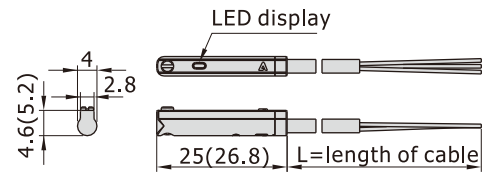
#### G Type



Note: a number in the bracket is the dimension of CMSG.

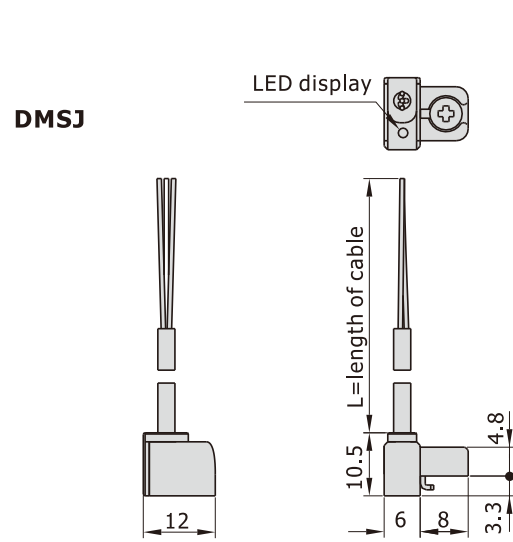
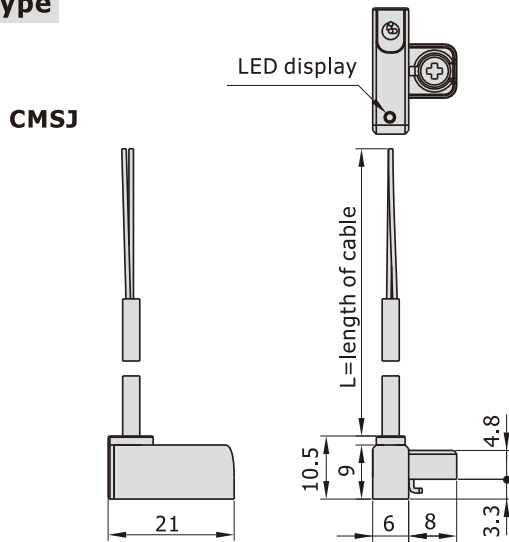
#### H Type

[Unit: mm]



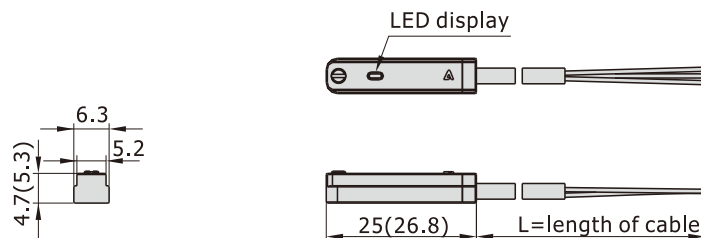
Note: a number in the bracket is the dimension of CMSH.

#### J Type



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

#### E Type

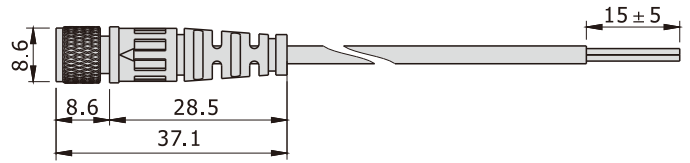
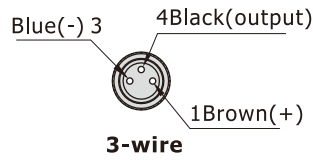
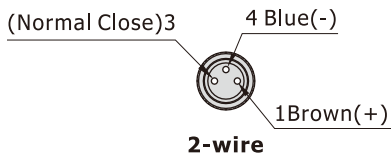


Note: a number in the bracket is the dimension of CMSE.

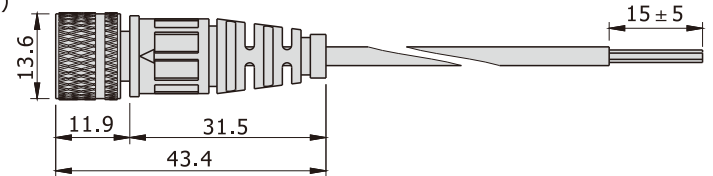
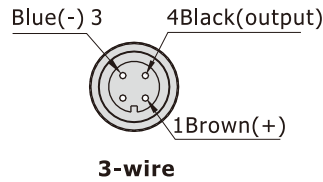
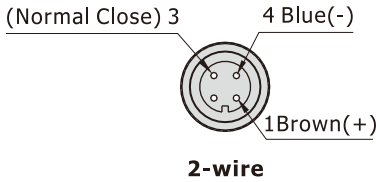
## DMS、CMS Series

### Socket

#### M8 socket



#### M12 socket



### How to selection

DMSG	CMSG	NSU					HFKP					HFKL			
		1-1/2	2	2-1/2	3-1/4	4	5	16	20	25	32	40	16	20	25
		●	●	●	●	●	●	●	●	●	●	●	●	●	●

DMSG	CMSG	NPB										
		5/16	7/16	9/16	3/4	7/8	1-1/16	1-1/4	1-1/2	1-3/4	2	2-1/2
		●	●	●	●	●	●	●	●	●	●	●
It needs an accessory to mount a sense on a cylinder												

DMSH	CMSH	NACF								NACQ									
		9/16	3/4	1-1/16	1-1/2	2	2-1/2	3	4	12	16	20	25	32	40	50	63	80	100
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		HFD				HFKP				HFCQ									
		8	12	16	20	25	10	16	20	25	32	40	16	20	25	32	40	50	63
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		HFKL				HGS													
		10	16	20	25	6	8	10	12										
		●	●	●	●	●	●	●	●										

## DMS, CMS Series

### How to selection

DMSG	CMSG	HFK						ACQ\TACQ												SDA																			
		10	16	20	25	32	40	12	16	20	25	32	40	50	63	80	100	125	140	160	12	16	20	25	32	40	50	63	80	100									
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
		TWQ						TCL\TCM						QCK						TWH\TWM																			
		20	25	32	40	50	6	10	12	16	20	25	32	40	50	63	80	100	12	16	20	25	32	40	50	63	20	25	32	40	50	63	80						
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
		SAU				HFZ				HFY				HFP				MD\MK																					
		32	40	50	63	80	100	6	10	16	20	25	32	40	6	10	16	20	25	32	10	16	20	25	32	6	10	16	20	25	32								
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
		TR			STW			RMT			RMTL																												
		6	10	16	20	25	32	10	16	20	25	32	16	20	25	32	40	10	16	20	25	32	40																
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●																
		Stainless steel																																					
		PB\PBR				MI				MF				MG				MA\MAC																					
		6	8	10	12	16	8	10	12	16	20	25	32	40	20	25	32	40	20	25	32	40	50	63	16	20	25	32	40	50	63								
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							
		Aluminum alloy														Aluminum alloy (Thick type)						It needs an accessory to mount a sense on a cylinder																	
		MBL				MCK				TWG																													
						20	25	32	40	50	63	25	32	40	50	63	80	32	40	50																			
						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●																
		SC						SGC						It needs an accessory to mount a sense on a cylinder																									
		32	40	50	63	80	100	125	160	200	250	125	160													200	250												
		●	●	●	●	●	●	●	●	●	●	●	●													●	●												

DMSJ	CMSJ	ACQ\TACQ						SDA										TWQ			QCK			QDK			TN						
		32	40	50	63	80	100	12	16	20	25	32	40	50	63	80	100	32	40	50	32	40	50	63	20	25	32	40	10	16	20	25	32
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		TWH\TWM																															
		20	25	32	40	50	63	80																									
		●	●	●	●	●	●																										

DMSH	CMSH	ACQ\TACQ			TC		HFZ				HFY		HFP		HFR				HFC				HFT										
		125	140	160	6	10	6	10	16	20	25	32	40	6	32	10	16	20	25	32	16	20	25	32	40	50	63	10	16	20	25	32	
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
		QDK			HLQ\HLQL				HLS\HLSL				MU				HLH				MPG												
		20	25	32	40	6	8	12	16	20	25	6	8	12	16	20	25	6	8	10	12	16	20	6	10	16	20	6	8	10	12	16	
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
		HRQ				HFK				RMH																							
		2	3	7	10	20	30	50	70	100	200	10	16	20	25	32	40	10	16	20	25												
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●												

DMSE	CMSE	SE/BSE						SAI						ACE														
		32	40	50	63	80	100	125	32	40	50	63	80	100	125	160	200	12	16	20	25	32	40	50	63	80	100	125
		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●