



## Compendium of EMS Series

**General type(EMS)**

General type(Aqua Blue)      Waterproof type(Yellow)

**Manipulator industry(A05-EMS)**

Product characteristics:  
1. Flexure resistant curve material can be used in manipulator industry, such as multi joint manipulator and tank chain.  
2. In case of high temperature, much dust, or water droplets and oil dust, the sensor shall take corresponding dust-proof measures.

**Oil resistance and deflection resistance (A06-EMS)**

Product characteristics:  
1. Flexure resistant curve material can be used in manipulator industry, such as multi joint manipulator and tank chain.  
2. In case of welding slag, corresponding protective measures shall be taken for the sensor.

**High deflection wire**

The deflection is increased by about 20% compared with the general type

**Waterproof design(IP68)**

**High cylinder installation flexibility**

EMSG is the mini type corresponding to DMSG, which can be used for long and short strokes.  
EMSH is the mini type corresponding to DMSH, which can be used for long and short strokes.

**Three types of sensors**

**Bending resistance**

**SR: bending resistance**

**Impact resistant materials**

Note: The recommended minimum bending radius of A05-EMS, A06-EMS cables is 19mm.

### Two types of cross section

<b>G Type</b>	General type(Aqua Blue)	Waterproof type(Yellow)
<b>H Type</b>	General type(Aqua Blue)	Waterproof type(Yellow)

### EMS Specifications

Item	EMS
Model	2-wire
Power supply voltage	10V ~ 28V DC
Switching current	2.5mA ~ 100mA
Contact capacity	2.8W Max.
Current consumption	3mA Max.
Internal voltage drop	3.5V Max.
Leakage current	0.06mA Max.
Switching frequency	1000Hz
Impact resistance	50G
Circuit protection	Reverse polarity protection Surge protection
Operating Temp.	-10°C ~ 70°C
Enclosure	EMS, A05-EMS: IP64 / A06-EMS: IP68
Standard	CE marking, RoHS
Note	Temperature overheat protection

### Ordering code for EMS

EMS G - □ 020 - □	
A05-EMS G - □ 020	
A06-EMS G - □ 020	

G

H

M08

M12

① Industry code	Blank: General type A05: Manipulator industry      A06: Oil resistance and deflection resistance
② Model	EMS : Solid State Sensor
③ Specifications	G      H
④ Output type	Blank: 2 wire
⑤ Lead wire	Direct lead wire      020: 2m    030: 3m    050: 5m    100: 10m
	Plug connector [Noet1]
⑥ Additional specification	Blank: General type      W: Waterproof type IP68 [note2]

[Note1] A05 and A06 have no plug connector option. [Note2] A05 and A06 don't have a-w Waterproof option. Standard A06 model has a waterproof function. Add: The sockets of M08 and M12 need additional order. Please check on page 371.

