

MEMS Tilt Angle Sensor

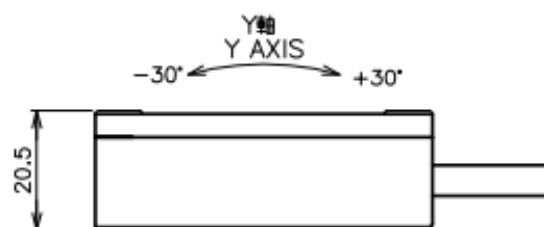
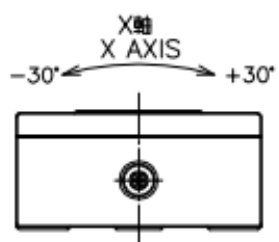
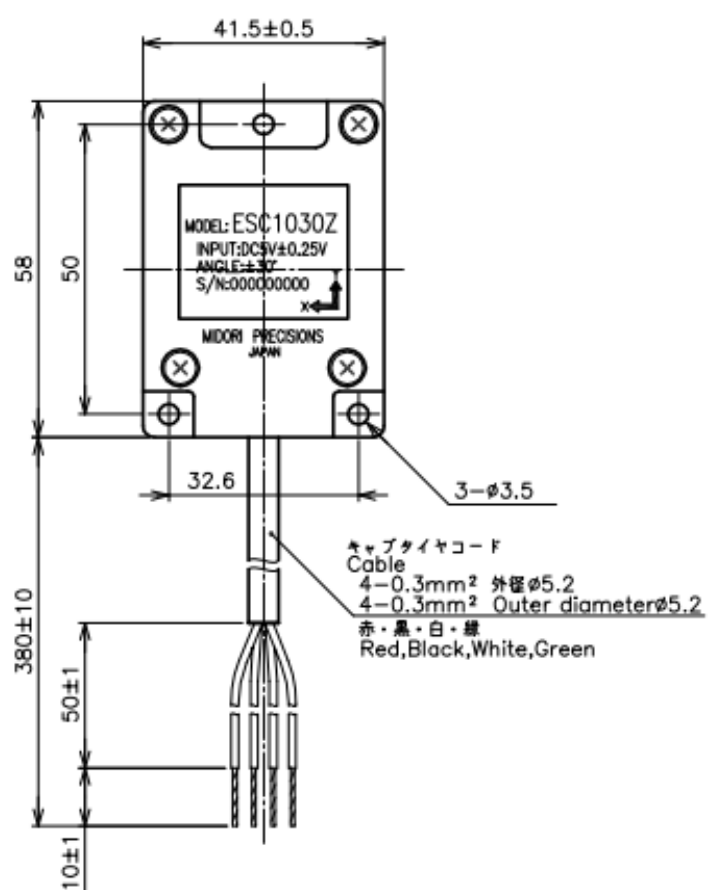
ESC1030Z Series

- 2 Axis Tilt Angle Sensor
- Effective Electrical Tilt Angle: $\pm 30^\circ$
- Zero-based Linearity: $\pm 1.5\%FS$

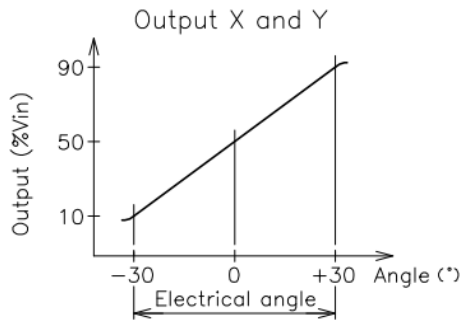
【Material】

● Housing : PBT

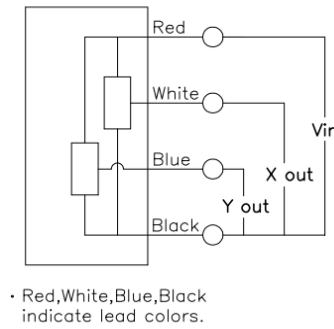
■ Dimension [mm]



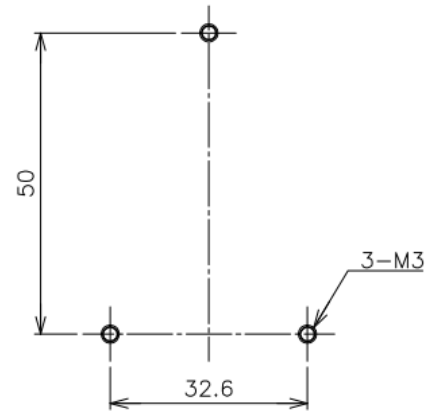
Output Characteristics



Schematic



Mounting



【Model No.】

ESC1030Z

【Electrical Specifications】

Effective Electrical Tilt Angle	±30	°
Output Range	10~90	%Vin
Index Point	50±3	%Vin
Zero Based Linearity	±1.5 (FS=60°)	%FS
Input Voltage	DC 5±0.25	V
Load Resistance	MIN. 10	kΩ
Supply Current	MAX. 10	mA
Insulation Resistance	DC50 /MIN. 100MΩ	V
Temp. Characteristics -20°C~80°C (Reference Temp. 25°C)	At 0°±1.0° At ±30°±1.2°	

【Mechanical Specifications】

Response time	(Step Response) 0.5	Sec.
Mass	Approx. 65	g

【Environmental Specifications】

Category Temperature Range	-20~+80	°C
Storage Temperature Range	-40~+80	°C
Vibration	200m/s ² 5~500Hz(10min.) Horizontal (2axis) 2hours、Upside down 4hours	
Shock	1000m/s ² 6ms 3axis 3times	
EMS	10V/m 10MHz ~1GHz	
ESD(Case-Each Terminal)	±12kV(IEC61000-4-2)	
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IP Level	IP50	

■ Handling Instruction

- This product is impossible to measure resistance value as a variable resistor.
- As this unit is used CMOS IC, handle the leadwires at place where is protected from ESD.