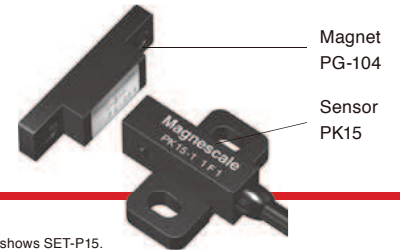


SET SET-P15/-P16

High-precision, non-contact Magneswitch

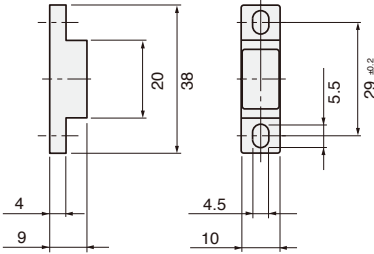


* Photo shows SET-P15.

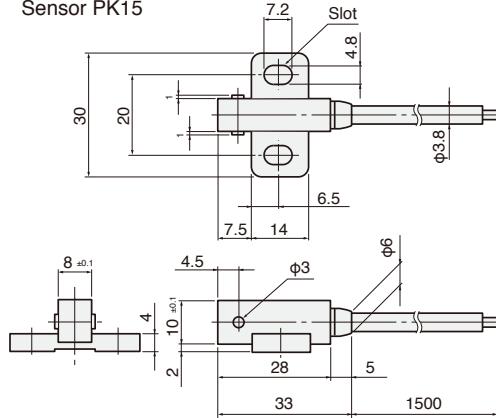
Outer dimensions

SET-P15

Magnet PG-104(PG-10)

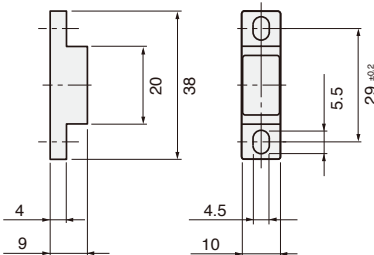


Sensor PK15

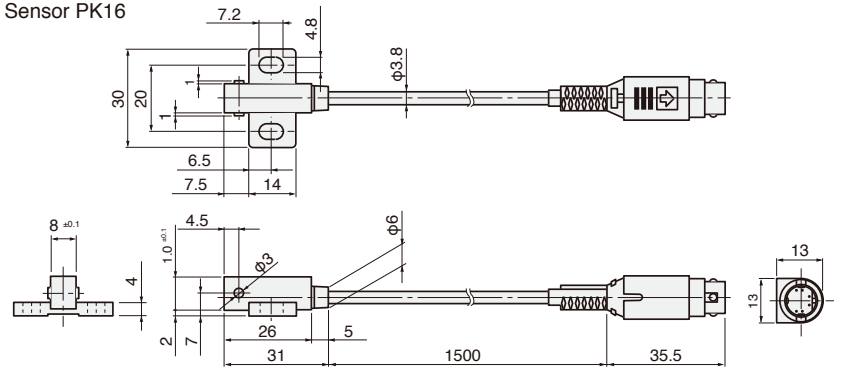


SET-P16

Magnet PG-104



Sensor PK16



Unit: mm

- SET-P15 can be used as a reference point for DIGIRULER or as a limit switch.
- SET-P16 can be used as a reference point for DIGIRULER (interpolator MJ100/110 used in combination).
- Resistant to oil, dust, vibration, and impact and withstands extreme work conditions
- Repeatability: $\pm 3 \mu\text{m}$
- Max. response frequency: 10 kHz
- Built-in circuit for direct connection to a control unit (SET-P15)
- Indication lamp (LED) for visual confirmation that the switching action is being made

Specifications

Model	PK15			PK16
	-1	-2	-3	-1
Repeatability	$\pm 3 \mu\text{m}$ (under same conditions)*1			
Operating range	7.5 \pm 2 mm (at 1 mm clearance)			
Clearance	Max. 3 mm			
Max. response frequency	10 kHz			
Output	Circuit: NPN transistor, open collector			
	Operation: Turns ON in proximity			
	Contact capacity: Max. current 30 mA, max. voltage 30 V			
	Residual voltage: Residual voltage $V_{OL} = 0.4$ V or less at Isink of 30 mA			
	Protection circuit: Surge killer, protection against reverse polarity			
Indication lamp	Red LED turns ON when activated			
Power supply	5V DC $\pm 10\%$	12V DC $\pm 10\%$	24V DC $\pm 10\%$	5V DC $\pm 10\%$
Current consumption	Max. 10 mA			
Protective design grade	IP67 or equivalent			
Insulation resistance	10 M Ω DC250 V ^{*2}			
Vibration resistance	49 m/s ² , 0 to 500 Hz			
Shock resistance	980 m/s ²			
Operating temperature	-10 °C to 60 °C			
Storage temperature	-20 °C to 80 °C			
Cable length	1.5 m/4.9' (expandable up to 30 m/98.4')			

*1 Repeatability

This is unidirectional repeatability accuracy and indicates the accuracy of the position at which the reference point (stop) pulse output goes ON.
Conditions for accuracy $\pm 3 \mu\text{m}$: temperature change within $\pm 1.2^\circ\text{C}$, voltage change within $\pm 1\%$ 5 min. after the power supply is turned ON, clearance variation 1 mm

*2 Provided between molded plastic housing and circuit, and shielded wire and circuit

