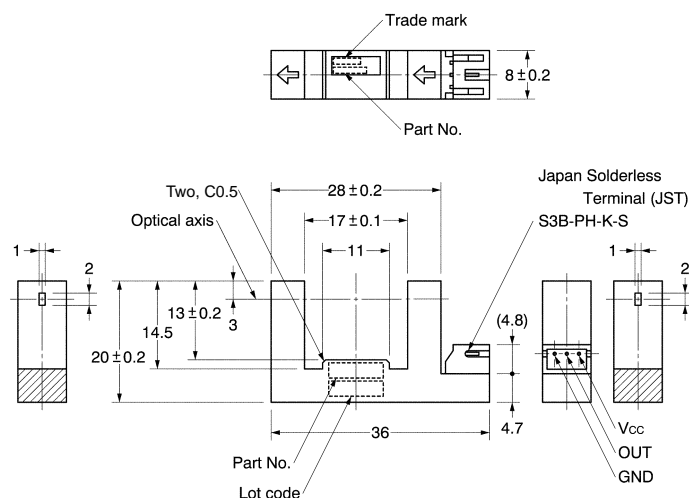


EE-SPX414-P1 Light Modulation Photomicrosensor (Transmissive) with Built-in Amplifier

■ Dimensions

Note: All units are in millimeters unless otherwise indicated.



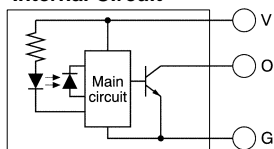
■ Features

- Wide-width transmissive sensor with 17-mm slot.
- Uses light modulation via built-in amplifier IC.
- Applicable to the PH connector series from JST (Japan Solderless Terminal).

■ Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rated value
Supply voltage	Vcc	16 VDC
Output voltage	Vout	16 V
Output current	Iout	50 mA
Operating temperature	Topr	−10°C to 60°C
Storage temperature	Tstg	−40°C to 80°C

Internal Circuit



Unless otherwise specified, the tolerances are as shown below.

Dimensions	Tolerance
4 mm max.	±0.2
4 < mm ≤ 16	±0.3
16 < mm ≤ 63	±0.5

Terminal No.	Name
V	Power supply (Vcc)
O	Output (OUT)
G	Ground (GND)

Recommended Mating Connectors

JST (Japan Solderless Terminal)

PHR-3

03CR-6H

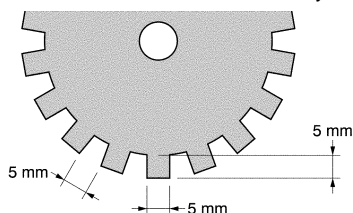
03KR-8M

03KR-6S

■ Electrical Characteristics (Ta = 25°C, Vcc = 12 V)

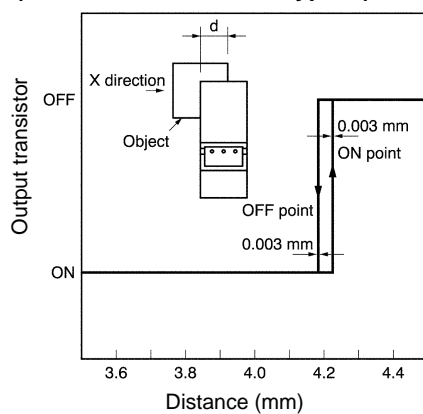
Item	Symbol	Limits			Unit	Testing conditions
		MIN.	TYP.	MAX.		
Current consumption	Icc	---	---	20	mA	With/without object
Low level output voltage	V _{OL}	0.01	0.2	0.4	V	Iout = 20 mA without object
High level output current	I _{OH}	0	---	40	mA	Vout = 12 V with object
Response frequency	f	500	---	---	Hz	Vout = Vcc = 12 VDC RL = 1.2 kΩ (See note.)

Note: The value indicated is that measured by rotating the disk as shown below.



■ Engineering Data

**Repetitive Sensing Position Characteristics
(in horizontal direction, typical)**



**Repetitive Sensing Position Characteristics
(in vertical direction, typical)**

