

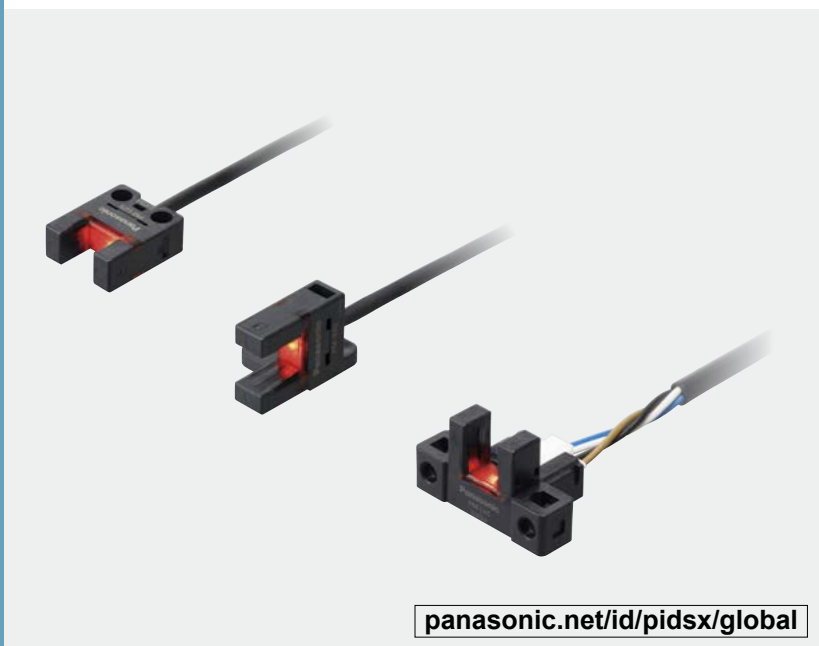
## Related Information

■ General terms and conditions ..... F-3

■ Selection guide ..... P.393~

■ Glossary of terms / General precautions ..... P.1549~ / P.1552~

■ Korea's S-mark ..... P.1602

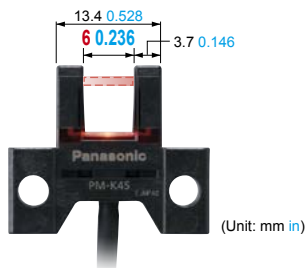

[panasonic.net/id/pidsx/global](http://panasonic.net/id/pidsx/global)
Certified  
(Some models only)PNP output  
type available**One step ahead in performance and mounting ease****Three protection circuits standard on all models  
PM-25/45/65 SERIES**

All models are standardly equipped with the following protection circuits in their compact bodies. These protection circuits minimize the possibility of sensor malfunctions caused by erroneous wiring.

- ① Reverse supply polarity protection circuit
- ② Reverse output polarity protection circuit
- ③ Output short-circuit protection circuit

**Ample beam emitting / receiving distance of  
6 mm 0.236 in PM-25/45/65 SERIES**

The beam emitting and receiving sections are 0.5 mm **0.02 in** thinner than those on our conventional models while their external dimensions are the same. As a result, the distance between the beam emitting point and receiving point increased by 1 mm **0.039 in**. The wider distance means less possibility of collision between the sensing section and sensing object.



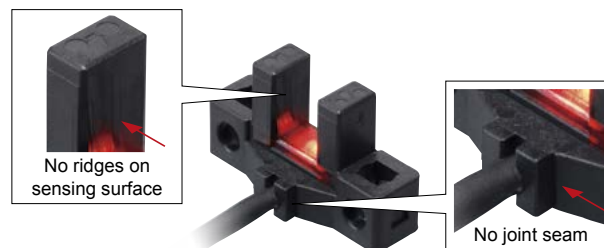
(Unit: mm in)

**Industry's first\*! IP64 rating**

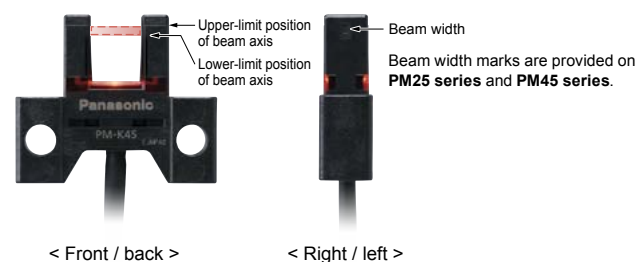
\*As of April 2017, in-company survey.

**PM-25/45 SERIES**

Our original integrated molding method has eliminated grooves and gaps on the sensing surface and main body, thus reducing the possibility of malfunctions caused by splashing water or dust.

**Beam marks for easy adjustment****PM-25/45/65 SERIES**

The upper-limit and lower-limit positions of beam can be visually confirmed from the front, back, right and left sides of the sensor unit. This allows easy adjustment of the position of sensing object.



&lt; Front / back &gt;

&lt; Right / left &gt;

FIBER  
SENSORSLASER  
SENSORSPHOTOELECTRIC  
SENSORSMICRO  
PHOTOELECTRIC  
SENSORSAREA  
SENSORSSAFETY LIGHT  
CURTAINS /  
SAFETY COMPONENTSPRESSURE /  
FLOW  
SENSORSINDUCTIVE  
PROXIMITY  
SENSORSPARTICULAR  
USE SENSORSSENSOR  
OPTIONSSIMPLE  
WIRE-SAVING  
UNITSWIRE-SAVING  
SYSTEMSMEASUREMENT  
SENSORSSTATIC  
CONTROL  
DEVICESLASER  
MARKERS

PLC

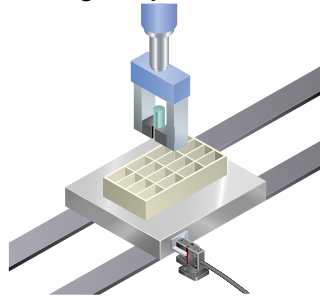
HUMAN MACHINE  
INTERFACESENERGY  
MANAGEMENT  
SOLUTIONS

FA COMPONENTS

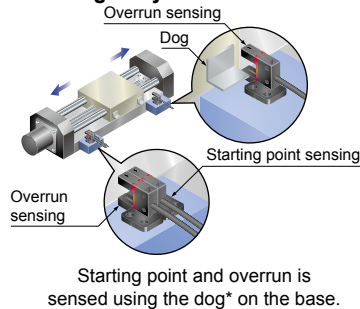
MACHINE VISION  
SYSTEMSUV CURING  
SYSTEMSSelection  
Guide

U-shaped

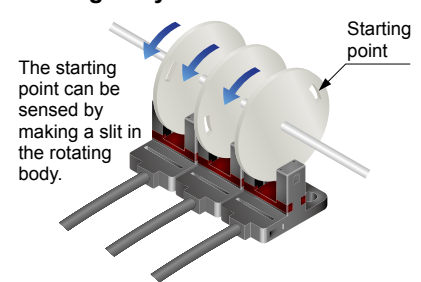
Convergent  
ReflectivePM-25/PM-45/  
PM-65

**APPLICATIONS****Positioning of a pallet**

Pallet is stopped by sensing the dog\*.

**Sensing the starting point and overrun of a moving body**

Starting point and overrun is sensed using the dog\* on the base.

**Sensing the starting point on a rotating body**

The starting point can be sensed by making a slit in the rotating body.

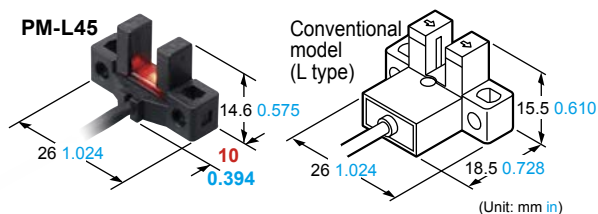
\*"Dog" refers to the sensing object for activating the sensor's detecting operation.

**Large and easy to see****Multi-angle operation indicator PM-25/45/65 SERIES**

The large operation indicator (orange) lights up when the beam enters. The indicator is easy to see from above and from the sides.

**Compact size****PM-45 SERIES**

All new models require significantly less mounting space than our conventional models when mounted with the same pitch. What's more, the new models can directly replace our conventional models currently in use.

**All models easy to mount with M3 screws****PM-25/45/65 SERIES**

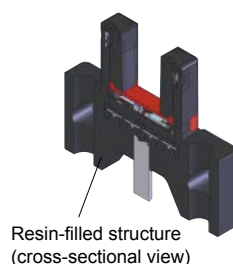
The sensor unit can be installed with one or two M3 screws.

\* M3 screws and washers are not included.

- Models requiring one M3 screw for installation  
**PM-F25, PM-R25, PM-F65, PM-R65**
- Models requiring two M3 screws for installation  
Models other than above

**Resistant to vibrations and impacts****PM-25/45/65 SERIES**

The sections where stress concentrates, such as the connecting section of the cable and internal circuit, are covered with a resin. This helps prevent malfunctions caused by vibrations and impacts.

**VARIATION**

Sensors come in various shapes to suit a wide range of mounting conditions

**Ultra-small / Cable type****PM-25 SERIES**

Easy mounting with M2/M3 screws!

|            |                    |                    |                                      |
|------------|--------------------|--------------------|--------------------------------------|
| NPN output | 1 m 3.281 ft cable | 3 m 9.843 ft cable | 1 m 3.281 ft bending-resistant cable |
| PNP output | 1 m 3.281 ft cable | 3 m 9.843 ft cable | 1 m 3.281 ft bending-resistant cable |

**Compact / Cable type****PM-45 SERIES**

Compact size!

|            |                    |                    |                                      |
|------------|--------------------|--------------------|--------------------------------------|
| NPN output | 1 m 3.281 ft cable | 3 m 9.843 ft cable | 1 m 3.281 ft bending-resistant cable |
| PNP output | 1 m 3.281 ft cable | 3 m 9.843 ft cable | 1 m 3.281 ft bending-resistant cable |

**Compact / Connector built-in type PM-65 SERIES**

Easy connection with a single touch using commercially-available connectors

|            |                                                                      |                                                                                        |
|------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| NPN output | Connector attached cable<br>1 m 3.281 ft cable<br>3 m 9.843 ft cable | Connector attached bending-resistant cable<br>1 m 3.281 ft cable<br>3 m 9.843 ft cable |
| PNP output | Connector attached cable<br>1 m 3.281 ft cable<br>3 m 9.843 ft cable | Connector attached bending-resistant cable<br>1 m 3.281 ft cable<br>3 m 9.843 ft cable |

FIBER SENSORS

LASER SENSORS

PHOTO-ELECTRIC SENSORS

MICRO PHOTO-ELECTRIC SENSORS

AREA SENSORS

SAFETY LIGHT CURTAINS / SAFETY COMPONENTS

PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASURE-MENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS

PLC

HUMAN MACHINE INTERFACES

ENERGY MANAGEMENT SOLUTIONS

FA COMPONENTS

MACHINE VISION SYSTEMS

UV CURING SYSTEMS

Selection Guide

U-shaped

Convergent Reflective

PM-25/PM-45/PM-65