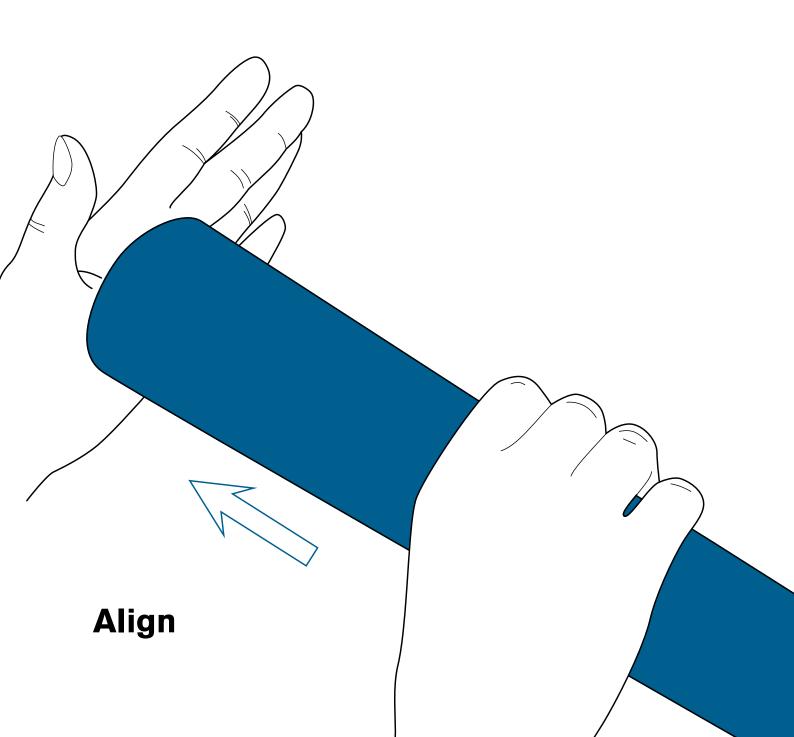
LPC

WEB GUIDE SYSTEM

02

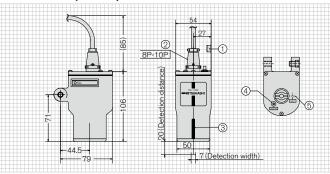
Sensor



Туре	Detection Method	Detection Target	Light Source	Photodetector	Application · Features
PS-1100	Reflection		Light Emitting Diode	CCD	Line · Edge · Pattern
PS-261	Reflection	Line · Edge	Light Emitting Diode	Photodiode	Line · Edge · Pattern
PS-270	Reflection	Line · Edge	Light Emitting Diode	Photodiode	Line · Edge · Pattern
PS-800	Transmission	Edge · Line	Lamp	Photodiode	Transparent and opaque edge, as well as line
PS-711	Transmission	Edge · Centering	Light Emitting Diode	Photodiode	Transparent and opaque edge
PS-300	Transmission	Centering	Light Emitting Diode	Photodiode	The sensor is always fixed even with changes in web width.
PS-350	Transmission	Centering	Light Emitting Diode	Photodiode	The sensor is always fixed even with changes in web width.
PS-400	Transmission(Ultrasonic)	Edge			The sensor is not affected by edge of transparent and any patterns.
PS-45	Transmission(Ultrasonic)	Edge			The sensor is not affected by edge of transparent and any patterns.
MF-6C	Contact	EdgeON/OFF/ON			Clothes edge

PS-1100 type reflective type Sensor (CCD)





Specifications

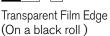
Detecting Distance	20mm
Light Source	White LED
Detection Width	7mm
Photodetector	CCD Linear Image Sensor (2048 bits, 14 µ m pitch)
Case	Aluminum Die Cast
Ambient Temperature	0 ~ 40℃
Humidity	Below 80%RH (No condensation)
Mass	Approx.0.5kg (Approx1.2kg with PZ-121 Holder)

Feature

- 1. Since the SET switch is built into the main part of a sensor, initial setting can be carried out easily, looking at a film.
- 2. A detection position is quite obvious. Film alignment is simple.
- 3. A line mark can be detected without being influenced by a character and the pattern.

Detection Pattern







Line Mark

with Pattern

Pattern





Plural Line

Marks

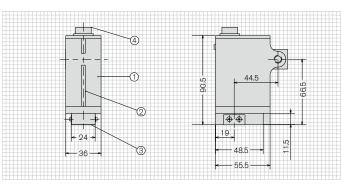


Mixed Colors Printing Edge

O Sensor Position

PS-261 Reflection Sensor





- ① PS-261 Sensor
- 2 Center mark
- 3 Senor Filter
- Sensor Cord Connector

1 Angle adjustment key ② Sensor cable (option)

③ Center mark **4** CATCH lamp 5 SET switch

Feature

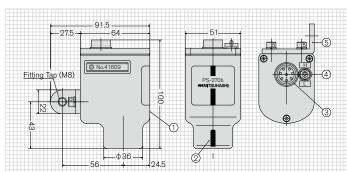
- 1. The non-contact sensor of the photoelectric reflection method
- **2.** The filter, supplied with the sensor, makes the sensor free from any disturbance.
- **3.** This sensor will detect the line marks of any color accurately and correctly. (The line mark should be 0.5mm~3mm wide.)
- **4.** The photodetector incorporate a pair of opt electric transducers of special construction, thus ensuring stable sensing operations.

Specifications

Detecting System	Photo electric reflection, Deviation Proportional Type
Light Source	White LED
Photodetector	Silicon Photodiode
Line-mark width	0.5 ~ 3mm
Ambient Temperature	0°C~ 50°C
Mass	Approx.700g

PS-270 Reflection Sensor





- ① Case
- ② Center mark
- 3 Sensor Cord Connector
- Sensitivity Selection Switch
- ⑤ Mounting Bracket

Feature

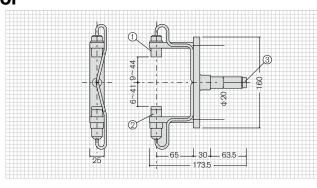
- **1.** The large-sized lens of 30 mm of detection distance and the diameter phi 7.5 of a spot is adopted. A detecting point is legible and position adjustment is easy.
- **2.** It is equipped with a newly-designed circuit. It is not affected by the influence of the lighting of sunlight and the circumference, etc.
- **3.** The web of gold and a silver background is also detectable. This become s strong in gold, the mark line of the Web of "the light" including the silver by a new optical system, too

Specifications

Detecting System	Photo electric reflection, Deviation Proportional Type
Light Source	White LED
Photodetector	Silicon Photodiode
Detecting Distance	30mm
Detecting Range	5mm
Ambient Temperature	$0 \sim 40^{\circ}\text{C}$ Humidity Below 80%RH (No condensation)
Mass	380g

PS-800 Transmission Sensor





- ① Photodetector device
- ② Light emitting device
- ③ Connector
- Holder PZ-110 Type
 (option)

Feature

- **1.** This sensor can detect the boundary between a semitransparent and an opaque sheet material.
- **2.** The sensor can be applied to detect any webs, both transparent and opaque.
- The sensor can detect the edge of a web without touching it, so it can be applied to the sheet with unstable edge movement.
- **4.** The sensor adopts a silicone photodiode that can get photoelectric current by a slight change in the amount of light.

Specifications

Detecting System	Photo electric reflection, Deviation Proportional Type
Light Source	5.5V0.4A Tungsten lamp
Photodetector	Silicon Photodiode
Position Setting	± 30mm
Ambient Temperature	0°C~ 50°C
Mass	2.0kg

Detection Pattern (PS-261、PS-270、PS-800)

















Transparent

Letters, Patterns

Opaque

Edge

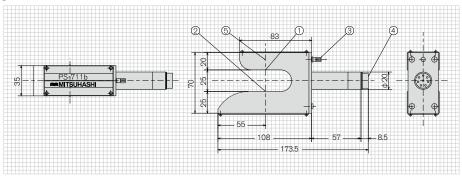
Boundary Line

Line Mark

Mark Colored

PS-711 Transmission Sensor





① Photodetector ② Light Emitting Device ③ Ground Terminal ④ Connector ⑤ Center mark

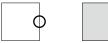
Feature

- 1. This sensor can be applied to both transparent and opaque webs.
- 2. This sensor provides a broad sensing scope of \pm 5mm, thus can also be applied to the centering guide system.
- **3.** Use of light—emitting diode as light source gives the sensor a virtually permanent service life.
- The sensor employs the pulse-lighting system for control purposes, making it free from any disturbances.
- **5.** Steel Shaft Type PS-720

Specifications

Detecting System	Photo electric reflection, Deviation Proportional Type
Light Source	Light Emitting Diode
Photodetector	Photodiode
Detection Width	± 5mm(Proportional region)
Ambient Temperature	0°C~ 50°C
Mass	Approx.200g

Detection Pattern



Edge





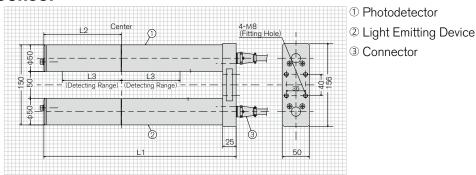
Boundary Line Transparent
Opaque

___ Opaqu

O Sensing Light Beam

PS-300/350 Transmission Sensor





PS-300 L1=360 L2=145 L3=110 **PS-350** L1=663 L2=318 L3=220

Feature

- 1. This sensor can be applied to detect opaque webs.
- **2.** This sensor provides a broad sensing scope thus can be used for centering guide system.
- **3.** Use of light-emitting diode as light source gives the sensor a virtually permanent service life.
- The sensor is fixed on both edges of the web to form a centering system.

Specifications

Detecting System	Photo electric reflection, Deviation Proportional Type
Light Source	Light Emitting Diode
Photodetector	Photodiode
Detection Width	PS-300 : ± 100mm PS-350 : ± 220mm
Ambient Temperature	0°C~ 50°C
Mass	PS-300 : 2.2kg (One side) PS-350 : 4kg (One side)

Detection Pattern

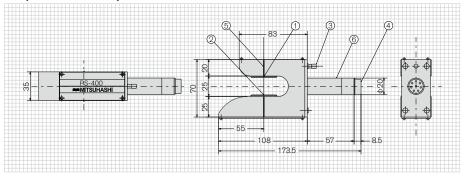


Opaque

O Sensing Light Beam

PS-400 Transmission Sensor (Ultrasonic)





① Receiver ② Transmitter ③ Ground Terminal ④ Connector ⑤ Center mark ⑥ Mounting Shaft

Feature

Since change of the amount of penetrations of an ultrasonic wave is detected, it can detect without being affected by the influence of the transparency of a web.

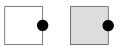
An edge of a web is detected certainly without also influencing printed matter and the pattern, etc. as well as a clear film.

· Steel Shaft Type···PS-420

Specifications

Detecting Position	Web Edge
Detecting Distance	25mm
Detecting Range	Proportional region \pm 2mm
Detection Object	Transparent Web, Opaque Web
Center Frequency	200KHZ
Ambient Temperature	0°C~ 50°C (No condensation)
Mass	約 200g

Detection Pattern







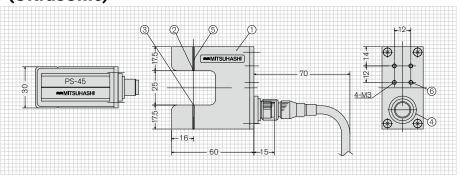


Opaque

Sensor Position

PS-45 Transmission Sensor (Ultrasonic)





① Case ② Receiver ③ Transmitter ④ Sensor Code Connector ⑤ Center Mark ⑥ Mounting Tap

Feature

- **1.** Supersonic system Sensor PS-45 miniaturized the volume in about 1/2 compared with our items (PS-400). It's lack of space up to now and it can also be installed in the place which couldn't be installed
- **2.** Since change of the amount of penetrations of an ultrasonic wave is detected, it can detect without being affected by the influence of the transparency of a web.

An edge of a web is detected certainly without also influencing printed matter and the pattern, etc. as well as a clear film.

Specifications

Detecting Position	Web Edge
Detecting Distance	25mm
Detecting Range	Proportional region \pm 2mm
Detection Object	Transparent Web, Opaque Web
Center Frequency	200KHZ
Ambient Temperature	0°C~ 40°C (No condensation)
Mass	Approx.130g

Detection Pattern











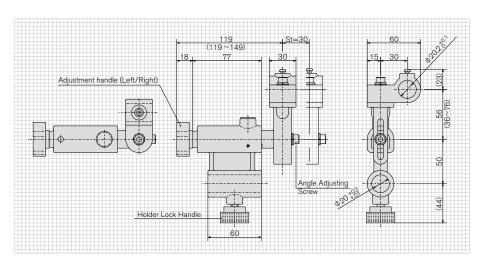
Sensor Position

PZ-110 Sensor Holder



Specifications

Stroke	30mm
Feeding Amount	1mm/revolution
Mass	Approx.300g

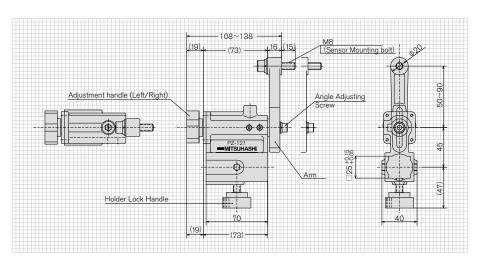


PZ-121 Sensor Holder



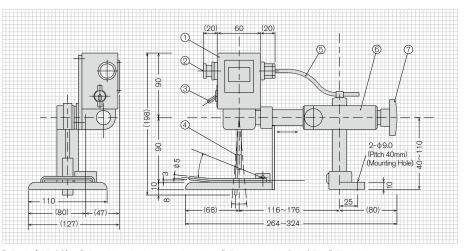
Specifications

Stroke	30mm
Feeding Amount	1mm/revolution
Mass	Approx.500g



MF-6C Feeler Sensor





- ① Body (MF-6C) ② Dead band adjustment handle ③ Power switch ON/OF ④ Feeler lever
- © Connection cord © Holder © Adjustment handle (Left/Right)

Feature

- 1. Operate in high sensitivity by very light contact pressure.
- **2.** Since it operates by light contact pressure, it is the best for the edge detection of a thin web.
- 3. It is small size, and it can install also in a narrow place and check is easy.

Detection Pattern

The MF-6C type makes a filler lever have contact with EDGE of a web, and it's detected.

Specifications

Detecting System	ON-OFF-ON 3 Position
Detecting Device	Contact Switch
Dead Band Adjustment	1~5mm
Operating Pressure	More than 3g
Position Setting	110 ~ 170mm
Ambient Temperature	0°C ~ 50°C
Mass	Approx.800g (2.2kg with holder)



Lending "hands" to replace human hands.

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