

Proximity sensor

Ordering information(Cylindrical type)

P	R					18	-	8	D	N	-																																																											
Item	Shape	Feature	Connection	Body size	Wire	Dimension	Sensing distance	Voltage	Output type	Standard/ Cable material																																																												
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※1: IEC standard item is available and add "-I" to the end of model.

※2: Normally Open, Normally Closed output are only for DC 2-wire and AC 2-wire type.

※3: Short type is only for DC 3-wire of PR12 type.

Ordering information(Rectangular type)

P	S		17	-	5	D	N	-																																																	
Item	Shape	Output	Dimension	Sensing distance	Voltage	Output type	Sensing position	Frequency																																																	
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※1: Differential frequency type is only for PSN17 type.

※2: Upside sensing type is only for PS12, PSN17 type.

※3: Normally Open, Normally Closed output are only for DC 2-wire and AC 2-wire type.

※4: N3, P3 output is only for AS80 type.

※5: DC 2-wire type is only for PSN17 type.

Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/ Power controller

Counter

Timer

Panel meter

Tacho/ Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply

Stepper motor& Driver&Controller



Graphic/ Logic panel

Field network device

Long distance proximity sensor

■ Specifications

● DC 2-wire type

Model	PRDT12-4□O PRDT12-4□C PRDT12-4□O-V PRDT12-4□C-V PRDLT12-4□O PRDLT12-4□C PRDLT12-4□O-V PRDLT12-4□C-V PRDWT12-4□O PRDWT12-4□C PRDWT12-4□O-I PRDWT12-4□C-I PRDWT12-4□O-IV PRDWT12-4□C-IV	PRDT12-8□O PRDT12-8□C PRDT12-8□O-V PRDT12-8□C-V PRDLT12-8□O PRDLT12-8□C PRDLT12-8□O-V PRDLT12-8□C-V PRDWT12-8□O PRDWT12-8□C PRDWT12-8□O-I PRDWT12-8□C-I PRDWT12-8□O-IV PRDWT12-8□C-IV	PRDT18-7□O PRDT18-7□C PRDT18-7□O-V PRDT18-7□C-V PRDLT18-7□O PRDLT18-7□C PRDLT18-7□O-V PRDLT18-7□C-V PRDWT18-7□O PRDWT18-7□C PRDWT18-7□O-I PRDWT18-7□C-I PRDWT18-7□O-IV PRDWT18-7□C-IV PRDWLT18-7□O-IV PRDWLT18-7□C-IV	PRDT18-14□O PRDT18-14□C PRDT18-14□O-V PRDT18-14□C-V PRDLT18-14□O PRDLT18-14□C PRDLT18-14□O-V PRDLT18-14□C-V PRDWT18-14□O PRDWT18-14□C PRDWT18-14□O-I PRDWT18-14□C-I PRDWT18-14□O-IV PRDWT18-14□C-IV PRDWLT18-14□O-IV PRDWLT18-14□C-IV	PRDT30-15□O PRDT30-15□C PRDT30-15□O-V PRDT30-15□C-V PRDLT30-15□O PRDLT30-15□C PRDLT30-15□O-V PRDLT30-15□C-V PRDWT30-15□O PRDWT30-15□C PRDWT30-15□O-I PRDWT30-15□C-I PRDWT30-15□O-IV PRDWT30-15□C-IV	PRDT30-25□O PRDT30-25□C PRDT30-25□O-V PRDT30-25□C-V PRDLT30-25□O PRDLT30-25□C PRDLT30-25□O-V PRDLT30-25□C-V PRDWT30-25□O PRDWT30-25□C PRDWT30-25□O-I PRDWT30-25□C-I PRDWT30-25□O-IV PRDWT30-25□C-IV
Appearances						
Sensing distance	4mm	8mm	7mm	14mm	15mm	25mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)	25×25×1mm (Iron)	20×20×1mm (Iron)	40×40×1mm (Iron)	45×45×1mm (Iron)	75×75×1mm (Iron)
Sensing distance	0 to 2.8mm	0 to 5.6mm	0 to 4.9mm	0 to 9.8mm	0 to 10.5mm	0 to 17.5mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)					
Leakage current	Max. 0.6mA					
Response frequency※1	450Hz	400Hz	250Hz	200Hz	100Hz	
Residual voltage※2	Max. 3.5V(for non-polarity type, max. 5V)					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	2 to 100mA					
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	1500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) X, Y, Z directions for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, Storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, Storage: 35 to 95%RH				
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: Heat-resistant ABS, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)					
Cable	ø4, 2-wire, 2m		ø5, 2-wire, 2m (for cable type, 300mm, M12 connector), (AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)			
Approval						
Protection	IP67(IEC Standard)					
Unit weight	PRDT: Approx. 74g PRDLT: Approx. 94g PRDWT: Approx. 44g	PRDT: Approx. 72g PRDLT: Approx. 92g PRDWT: Approx. 42g	PRDT: Approx. 115g PRDLT: Approx. 145g PRDWT: Approx. 80g PRDWLT: Approx. 42g	PRDT: Approx. 110g PRDLT: Approx. 140g PRDWT: Approx. 75g PRDWLT: Approx. 105g	PRDT: Approx. 175g PRDLT: Approx. 215g PRDWT: Approx. 140g	PRDT: Approx. 180g PRDLT: Approx. 220g PRDWT: Approx. 145g

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.


※2: Before using non-polarity type, check the condition of connected device because residual voltage is 5V.

※The '□' of model name is for power type. 'D' is 12-24VDC, 'X' is non-polarity 12-24VDC.

※The last 'V' of model name is for the model with oil-resistance reinforced cable.

※Environment resistance is rated at no freezing or condensation.

● DC 3-wire type

Model	PRD12-4DN PRD12-4DP PRD12-4DN2 PRD12-4DP2 PRDL12-4DN PRDL12-4DP PRDL12-4DN2 PRDL12-4DP2 PRDW12-4DN PRDW12-4DP PRDW12-4DN2 PRDW12-4DP2 PRDW12-4DN-V PRDW12-4DP-V PRDWL12-4DN PRDWL12-4DP PRDWL12-4DN2 PRDWL12-4DP2	PRD12-8DN PRD12-8DP PRD12-8DN2 PRD12-8DP2 PRDL12-8DN PRDL12-8DP PRDL12-8DN2 PRDL12-8DP2 PRDW12-8DN PRDW12-8DP PRDW12-8DN2 PRDW12-8DP2 PRDW12-8DN-V PRDW12-8DP-V PRDWL12-8DN PRDWL12-8DP PRDWL12-8DN2 PRDWL12-8DP2	PRD18-7DN PRD18-7DP PRD18-7DN2 PRD18-7DP2 PRDL18-7DN PRDL18-7DP PRDL18-7DN2 PRDL18-7DP2 PRDW18-7DN PRDW18-7DP PRDW18-7DN2 PRDW18-7DP2 PRDW18-7DN-V PRDW18-7DP-V PRDWL18-7DN PRDWL18-7DP PRDWL18-7DN2 PRDWL18-7DP2	PRD18-14DN PRD18-14DP PRD18-14DN2 PRD18-14DP2 PRDL18-14DN PRDL18-14DP PRDL18-14DN2 PRDL18-14DP2 PRDW18-14DN PRDW18-14DP PRDW18-14DN2 PRDW18-14DP2 PRDW18-14DN-V PRDW18-14DP-V PRDWL18-14DN PRDWL18-14DP PRDWL18-14DN2 PRDWL18-14DP2	PRD30-15DN PRD30-15DP PRD30-15DN2 PRD30-15DP2 PRDL30-15DN PRDL30-15DP PRDL30-15DN2 PRDL30-15DP2 PRDW30-15DN PRDW30-15DP PRDW30-15DN2 PRDW30-15DP2 PRDW30-15DN-V PRDW30-15DP-V PRDWL30-15DN PRDWL30-15DP PRDWL30-15DN2 PRDWL30-15DP2	PRD30-25DN PRD30-25DP PRD30-25DN2 PRD30-25DP2 PRDL30-25DN PRDL30-25DP PRDL30-25DN2 PRDL30-25DP2 PRDW30-25DN PRDW30-25DP PRDW30-25DN2 PRDW30-25DP2 PRDW30-25DN-V PRDW30-25DP-V PRDWL30-25DN PRDWL30-25DP PRDWL30-25DN2 PRDWL30-25DP2
Appearances	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">Line-up</div>  </div>					
Sensing distance	4mm	8mm	7mm	14mm	15mm	25mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)	25×25×1mm(Iron)	20×20×1mm (Iron)	40×40×1mm (Iron)	45×45×1mm (Iron)	75×75×1mm (Iron)
Sensing distance	0 to 2.8mm	0 to 5.6mm	0 to 4.9mm	0 to 9.8mm	0 to 10.5mm	0 to 17.5mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)					
Current consumption	Max. 10mA					
Response frequency ^{※1}	500Hz	400Hz	300Hz	200Hz	100Hz	100Hz
Residual voltage	Max. 1.5V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	200mA					
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	1500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) X, Y, Z directions for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, Storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, Storage: 35 to 95%RH				
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit					
Protection	IP67(IEC Standard)					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: Heat-resistant ABS, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)					
Cable	ø4, 3-wire, 2m			ø5, 3-wire, 2m		
	(for cable type, 300mm, M12 connector), (AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)					
Approval	CE					
Unit weight	PRD: Approx. 74g PRDL: Approx. 94g PRDW: Approx. 44g PRDWL: Approx. 64g	PRD: Approx. 72g PRDL: Approx. 92g PRDW: Approx. 42g PRDWL: Approx. 62g	PRD: Approx. 115g PRDL: Approx. 145g PRDW: Approx. 80g PRDWL: Approx. 110g	PRD: Approx. 110g PRDL: Approx. 140g PRDW: Approx. 75g PRDWL: Approx. 105g	PRD: Approx. 175g PRDL: Approx. 215g PRDW: Approx. 140g PRDWL: Approx. 180g	PRD: Approx. 180g PRDL: Approx. 220g PRDW: Approx. 145g PRDWL: Approx. 185g

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※The last 'V' of model name is for the model with oil-resistance reinforced cable.

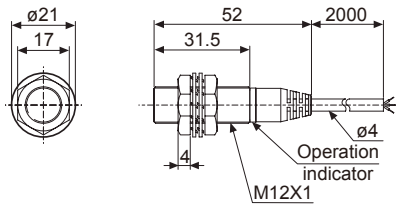
※Environment resistance is rated at no freezing or condensation.

- Photo electric sensor
- Fiber optic sensor
- Door/Area sensor
- Proximity sensor
- Pressure sensor
- Rotary encoder
- Connector/Socket
- Temp. controller
- SSR/Power controller
- Counter
- Timer
- Panel meter
- Tacho/Speed/Pulse meter
- Display unit
- Sensor controller
- Switching mode power supply
- Stepper motor & Driver&Controller
- Graphic/Logic panel
- Field network device

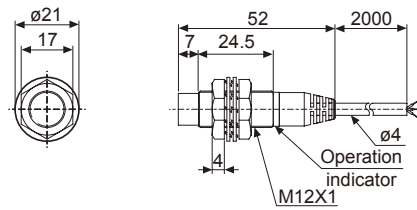
■ Dimensions

(unit: mm)

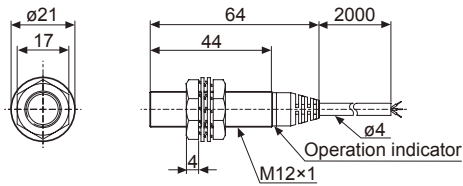
● PRD(T)12-4D□



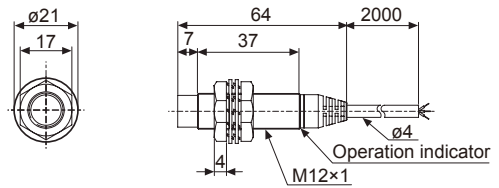
● PRD(T)12-8D□



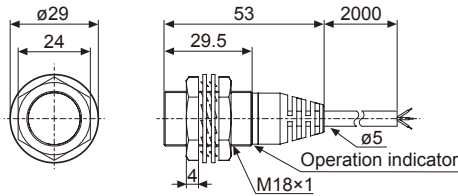
● PRDL(T)12-4D□



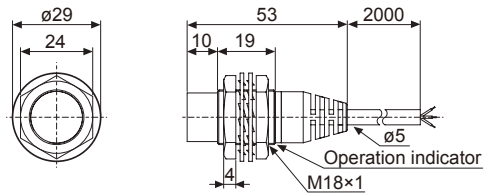
● PRDL(T)12-8D□



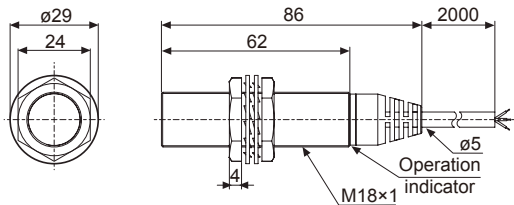
● PRD(T)18-7D□



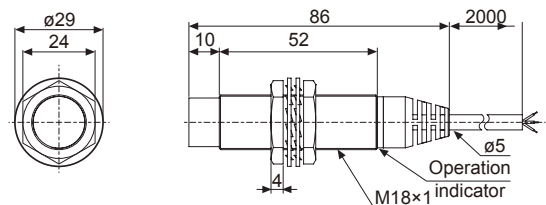
● PRD(T)18-14D□



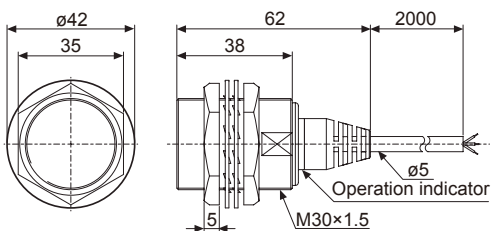
● PRDL(T)18-7D□



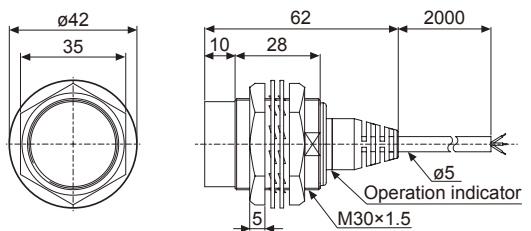
● PRDL(T)18-14D□



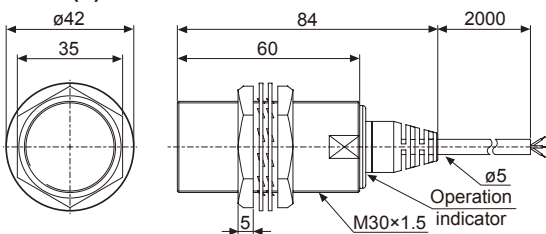
● PRD(T)30-15D□



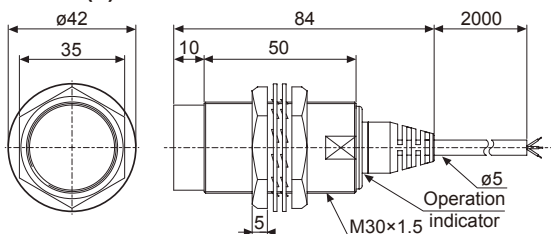
● PRD(T)30-25D□



● PRDL(T)30-15D□



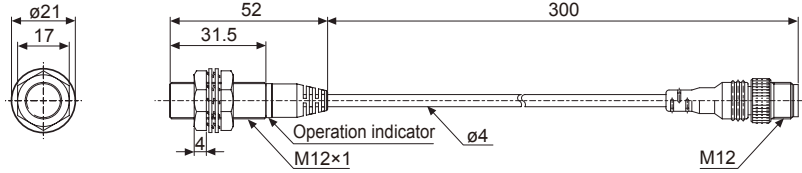
● PRDL(T)30-25D□



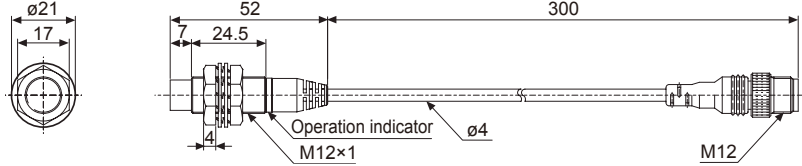
■ Dimensions

(unit: mm)

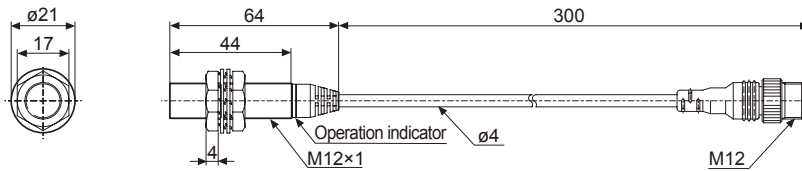
● PRDW(T)12-4D□



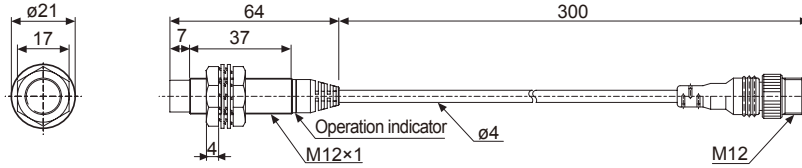
● PRDW(T)12-8D□



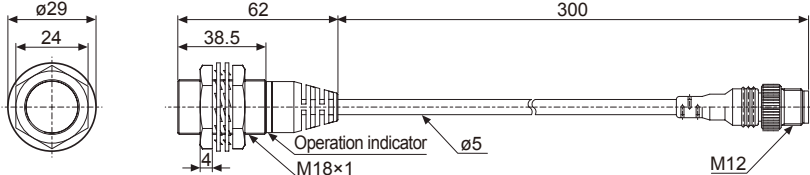
● PRDWL12-4D□



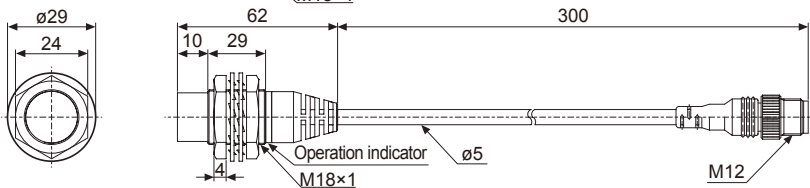
● PRDWL12-8D□



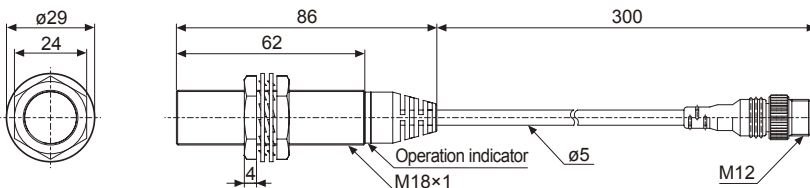
● PRDW(T)18-7D□



● PRDW(T)18-14D□



● PRDWL(T)18-7D□



● PRDWL(T)18-14D□

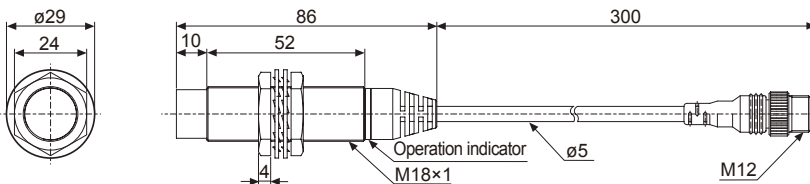


Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/Power controller

Counter

Timer

Panel meter

Tacho/Speed/Pulse meter

Display unit

Sensor controller

Switching mode power supply

Stepper motor & Driver&Controller

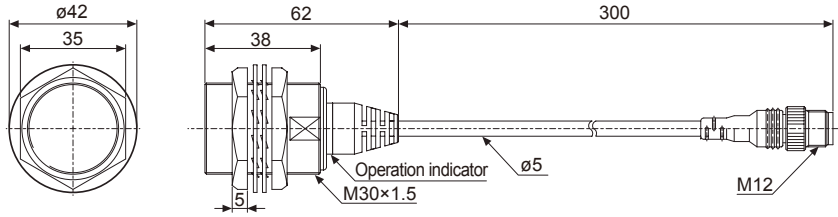
Graphic/Logic panel

Field network device

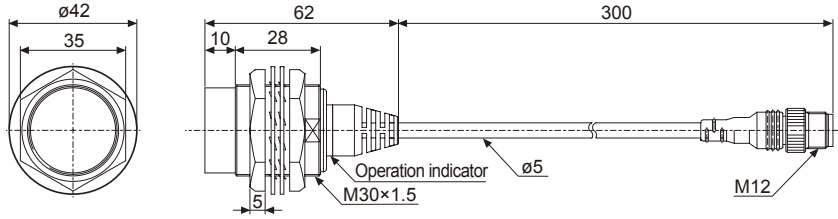
■ Dimensions

(unit: mm)

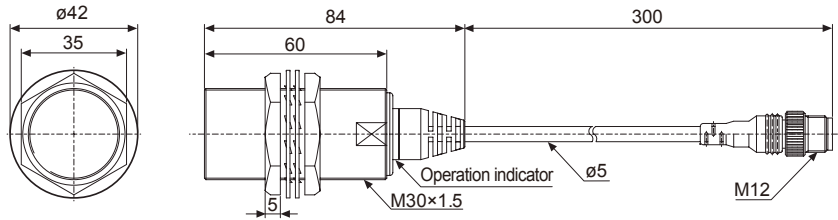
● PRDW(T)30-15D□



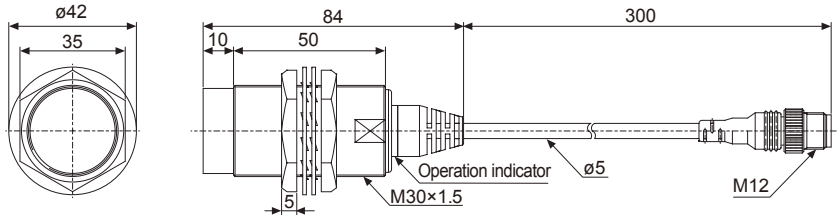
● PRDW(T)30-25D□



● PRDWL(T)30-15D□



● PRDWL(T)30-25D□



Long distance connector type proximity sensor

Specifications

DC 2-wire type

Model ^{※1}	PRDCMT08-2DO PRDCMT08-2DC PRDCMT08-2DO-I PRDCMT08-2DC-I	PRDCMT08-4DO PRDCMT08-4DC PRDCMT08-4DO-I PRDCMT08-4DC-I	PRDCMT12-4DO PRDCMT12-4DC PRDCMT12-4DO-I PRDCMT12-4DC-I PRDCMLT12-4DO PRDCMLT12-4DC PRDCMLT12-4DO-I PRDCMLT12-4DC-I	PRDCMT12-8DO PRDCMT12-8DC PRDCMT12-8DO-I PRDCMT12-8DC-I PRDCMLT12-8DO PRDCMLT12-8DC PRDCMLT12-8DO-I PRDCMLT12-8DC-I	PRDCMT18-7DO PRDCMT18-7DC PRDCMT18-7DO-I PRDCMT18-7DC-I PRDCMLT18-7DO PRDCMLT18-7DC PRDCMLT18-7DO-I PRDCMLT18-7DC-I	PRDCMT18-14DO PRDCMT18-14DC PRDCMT18-14DO-I PRDCMT18-14DC-I PRDCMLT18-14DO PRDCMLT18-14DC PRDCMLT18-14DO-I PRDCMLT18-14DC-I	PRDCMT30-15DO PRDCMT30-15DC PRDCMT30-15DO-I PRDCMT30-15DC-I PRDCMLT30-15DO PRDCMLT30-15DC PRDCMLT30-15DO-I PRDCMLT30-15DC-I	PRDCMT30-25DO PRDCMT30-25DC PRDCMT30-25DO-I PRDCMT30-25DC-I PRDCMLT30-25DO PRDCMLT30-25DC PRDCMLT30-25DO-I PRDCMLT30-25DC-I	
Appearances									
Sensing distance	2mm	4mm	8mm	7mm	14mm	15mm	25mm		
Hysteresis	Max. 10% of sensing distance								
Standard sensing target	8×8×1mm (Iron)	12×12×1mm (Iron)	25×25×1mm (Iron)	20×20×1mm (Iron)	40×40×1mm (Iron)	45×45×1mm (Iron)	75×75×1mm (Iron)		
Setting distance	0 to 1.4mm	0 to 2.8mm	0 to 5.6mm	0 to 5.6mm	0 to 9.8mm	0 to 10.5mm	0 to 17.5mm		
Power supply (Operating voltage)	12-24VDC (10-30VDC)								
Leakage current	Max. 0.6mA								
Response frequency ^{※2}	600Hz	500Hz	450Hz	400Hz	250Hz	200Hz	200Hz	100Hz	
Residual voltage	Max. 3.5V								
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C								
Control output	2 to 100mA								
Insulation resistance	Min. 50MΩ(at 500VDC megger)								
Dielectric strength	1500VAC 50/60Hz for 1minute								
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours								
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times								
Indicator	Operation indicator(red LED)								
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C							
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH							
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit								
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: Heat-resistant ABS (PRDCMT08 type - Case: SUS303)								
Approval	CE								
Protection	IP67(IEC Standard)								
Unit weight ^{※3}	Existing	—		PRDCMT: Approx. 26g PRDCMLT: Approx. 36g		PRDCMT: Approx. 48g PRDCMLT: Approx. 66g		PRDCMT: Approx. 142g PRDCMLT: Approx. 182g	
	Upgrade	Approx. 15.5g	Approx. 15g	Approx. 23.5g	Approx. 22g	Approx. 46.5g	Approx. 42.5g	Approx. 118.5g	Approx. 110.5g

※1: PRDCMT series is going to upgrade performance(4-side LED) and structure(comprehensive existing case and rear cap type).

※2: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.


※3: Upgrade unit weight is only for PRDCMT(Upgrade). Refer to the existing unit weight for the other models or existing products.

※Environment resistance is rated at no freezing or condensation.

- Photo electric sensor
- Fiber optic sensor
- Door/Area sensor
- Proximity sensor
- Pressure sensor
- Rotary encoder
- Connector/Socket
- Temp. controller
- SSR/ Power controller
- Counter
- Timer
- Panel meter
- Tacho/ Speed/ Pulse meter
- Display unit
- Sensor controller
- Switching mode power supply
- Stepper motor& Driver&Controller
- Graphic/ Logic panel
- Field network device

■ Specifications

● DC 3-wire type

Model	PRDCM12-4DN PRDCM12-4DP PRDCM12-4DN2 PRDCM12-4DP2 PRDCML12-4DN PRDCML12-4DP PRDCML12-4DN2 PRDCML12-4DP2	PRDCM12-8DN PRDCM12-8DP PRDCM12-8DN2 PRDCM12-8DP2 PRDCML12-8DN PRDCML12-8DP PRDCML12-8DN2 PRDCML12-8DP2	PRDCM18-7DN PRDCM18-7DP PRDCM18-7DN2 PRDCM18-7DP2 PRDCML18-7DN PRDCML18-7DP PRDCML18-7DN2 PRDCML18-7DP2	PRDCM18-14DN PRDCM18-14DP PRDCM18-14DN2 PRDCM18-14DP2 PRDCML18-14DN PRDCML18-14DP PRDCML18-14DN2 PRDCML18-14DP2	PRDCM30-15DN PRDCM30-15DP PRDCM30-15DN2 PRDCM30-15DP2 PRDCML30-15DN PRDCML30-15DP PRDCML30-15DN2 PRDCML30-15DP2	PRDCM30-25DN PRDCM30-25DP PRDCM30-25DN2 PRDCM30-25DP2 PRDCML30-25DN PRDCML30-25DP PRDCML30-25DN2 PRDCML30-25DP2
Appearances						
Sensing distance	4mm	8mm	7mm	14mm	15mm	25mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)	25×25×1mm(Iron)	20×20×1mm(Iron)	40×40×1mm(Iron)	45×45×1mm(Iron)	75×75×1mm(Iron)
Setting distance	0 to 2.8mm	0 to 5.6mm	0 to 4.9mm	0 to 9.8mm	0 to 10.5mm	0 to 17.5mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)					
Current consumption	Max. 10mA					
Response frequency ^{※1}	500Hz	400Hz	300Hz	200Hz	100Hz	100Hz
Residual voltage	Max. 1.5V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	Max. 200mA					
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	1500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times					
Indicator	Operation indicator(Red LED)					
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH				
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit					
Protection	IP67(IEC specification)					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: Heat-resistant ABS					
Approval	CE					
Unit Weight	PRDCM: Approx. 26g PRDCML: Approx. 34g		PRDCM: Approx. 48g PRDCML: Approx. 66g		PRDCM: Approx. 142g PRDCML: Approx. 182g	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

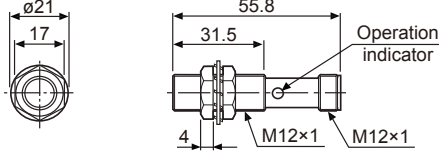
※Environment resistance is rated at no freezing or condensation.

■ Dimensions

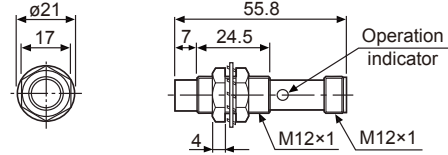
◎ PRDCM(T) Series

(unit: mm)

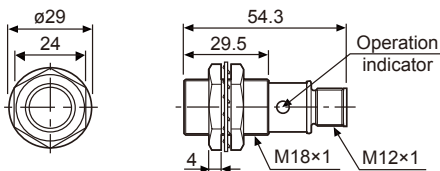
● PRDCM(T)12-4D



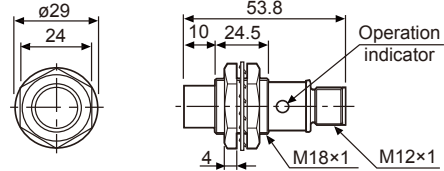
● PRDCM12-8D



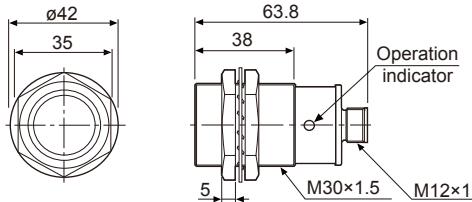
● PRDCM(T)18-7D



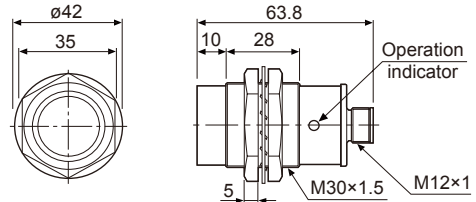
● PRDCM(T)18-14D



● PRDCM(T)30-15D

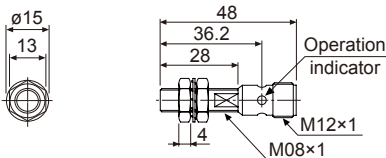


● PRDCM(T)30-25D

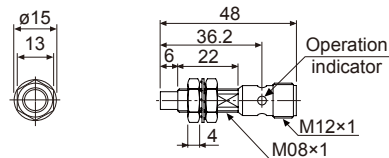


◎ PRDCMT Series Upgrade

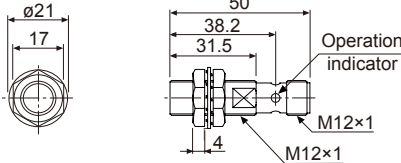
● PRDCMT08-2D



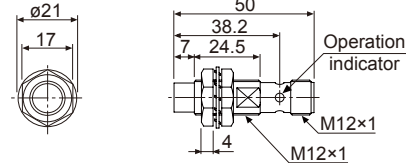
● PRDCMT08-4D



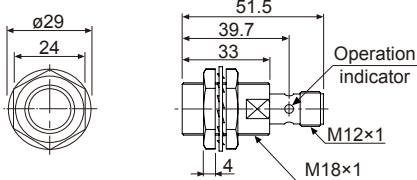
● PRDCMT12-4D



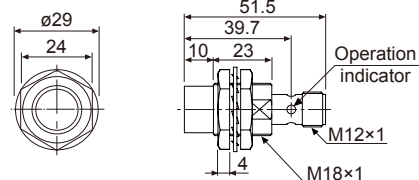
● PRDCMT12-8D



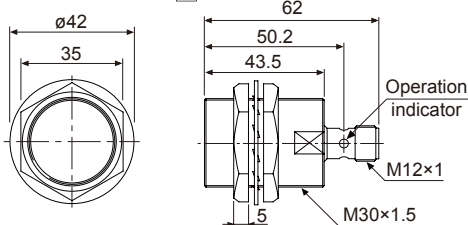
● PRDCMT18-7D



● PRDCMT12-8D



● PRDCMT30-15D



● PRDCMT30-25D

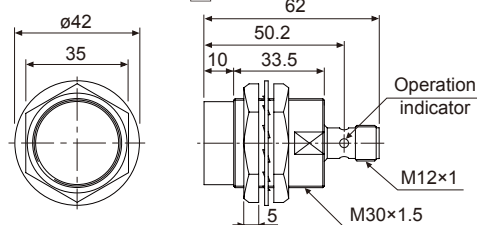


Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/ Power controller
Counter
Timer
Panel meter
Tacho/ Speed/ Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor & Driver&Controller
Graphic/ Logic panel
Field network device

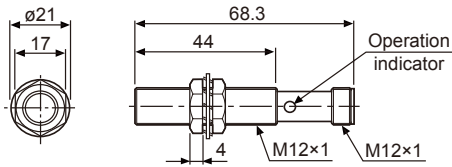
Selection Guide

■ Dimensions

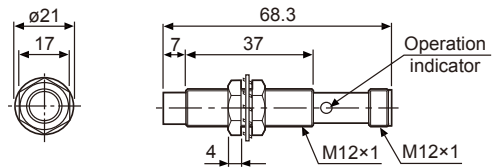
◎ PRDCML(T) Series

(unit: mm)

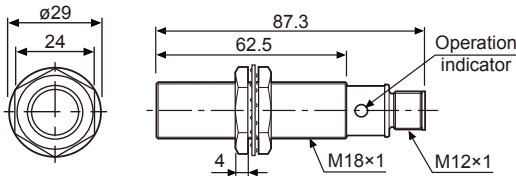
● PRDCML(T)12-4D□



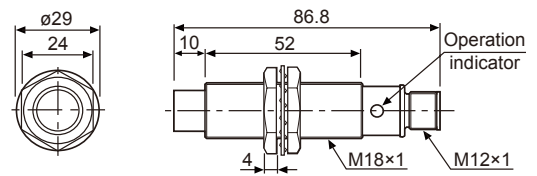
● PRDCML(T)12-8D□



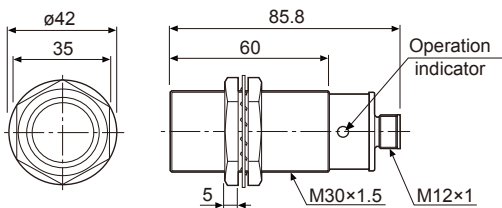
● PRDCML(T)18-7D□



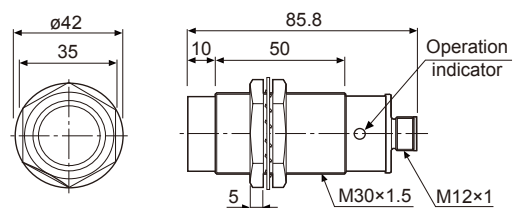
● PRDCML(T)18-14D□



● PRDCML(T)30-15D□



● PRDCML(T)30-25D□



Long distance inductive proximity sensor (spatter resistance type)

■ Specifications

● DC 2-wire type

Model	PRDAT18-7DO PRDAT18-7DC PRDAT18-7DO-V PRDAT18-7DC-V	PRDAWT18-7DO PRDAWT18-7DC PRDAWT18-7DO-I PRDAWT18-7DC-I PRDAWT18-7DO-IV PRDAWT18-7DC-IV	PRDAT30-15DO PRDAT30-15DC PRDAT30-15DO-V PRDAT30-15DC-V	PRDAWT30-15DO PRDAWT30-15DC PRDAWT30-15DO-I PRDAWT30-15DC-I PRDAWT30-15DO-IV PRDAWT30-15DC-IV
Appearances	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>NEW</p> <p>CE</p> </div> </div>			
Sensing distance	7mm		15mm	
Hysteresis	Max. 10% of sensing distance			
Standard sensing target	20×20×1mm(iron)		45×45×1mm(iron)	
Sensing distance	0 to 4.9mm		0 to 10.5mm	
Power supply (operating voltage)	12-24VDC (10-30VDC)			

Model	PRDAT18-7DO PRDAT18-7DC PRDAT18-7DO-V PRDAT18-7DC-V	PRDAWT18-7DO PRDAWT18-7DC PRDAWT18-7DO-I PRDAWT18-7DC-I PRDAWT18-7DO-IV PRDAWT18-7DC-IV	PRDAT30-15DO PRDAT30-15DC PRDAT30-15DO-V PRDAT30-15DC-V	PRDAWT30-15DO PRDAWT30-15DC PRDAWT30-15DO-I PRDAWT30-15DC-I PRDAWT30-15DO-IV PRDAWT30-15DC-IV	Photo electric sensor Fiber optic sensor Door/Area sensor Proximity sensor Pressure sensor Rotary encoder Connector/Socket Temp. controller SSR/Power controller Counter Timer Panel meter Tacho/Speed/Pulse meter Display unit Sensor controller Switching mode power supply Stepper motor & Driver&Controller Graphic/Logic panel Field network device
Leakage current	Max. 0.6mA				
Response frequency*1	250Hz		100Hz		
Residual voltage	Max. 3.5V				
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C				
Control output	2 to 100mA				
Insulation resistance	Min. 50MΩ (at 500VDC megger)				
Dielectric strength	1,500VAC 50/60Hz for 1 min.				
Vibration	1mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 2 hours				
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times				
Indicator	Operation indicator (red LED)				
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C			
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH			
Protection circuit	Surge protection circuit, overcurrent protection				
Protection	IP67(IEC standard)				
Material	Case/Nut: Teflon coated brass, Washer: Teflon coated Iron, Sensing surface: Teflon, Standard cable(black): Polyvinyl chloride(PVC), Oil resistant cable(gray): Polyvinyl chloride(oil resistant PVC)				
Cable	ø5, 2-wire, 2m (AWG22, Core diameter : 0.08mm, Number of cores: 60, Insulator out diameter:ø1.25)	ø5, 2-wire, 300mm, M12 connector	ø5, 2-wire, 2m (AWG22, Core diameter : 0.08mm, Number of cores: 60, Insulator out diameter:ø1.25)	ø5, 2-wire, 300mm, M12 connector	
Approval	CE				
Weight*2	Approx. 134g(approx. 122g)	Approx. 77g(approx. 65g)	Approx. 221g(approx. 184g)	Approx. 155g(approx. 143g)	

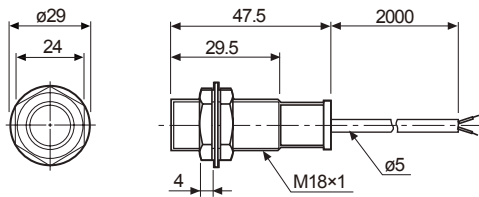
※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※2: The weight with packaging and the weight in parentheses is only unit weight. ※ Environment resistance is rated at no freezing or condensation.

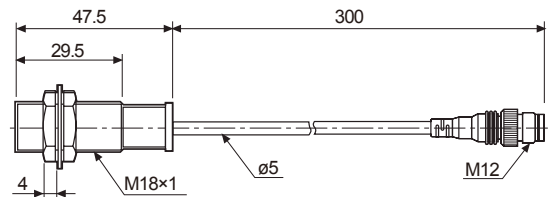
■ Dimensions

(unit: mm)

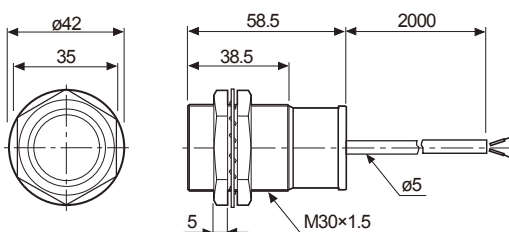
● PRDAT18-7D □



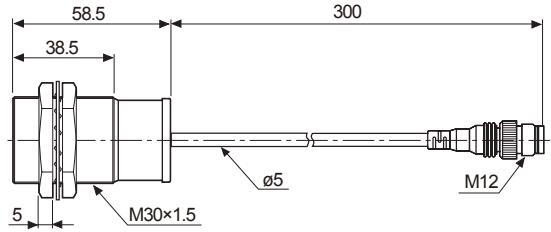
● PRDAWT18-7D □



● PRDAT30-15D □



● PRDAWT30-15D □




Cylindrical type proximity sensor

■ Specifications

● DC 2-wire type

※When the □ model name is X, it is non-polarity model.

Model	PRT08-1.5DO PRT08-1.5DC	PRT08-2DO PRT08-2DC	PRT12-2□DO PRT12-2□DC	PRT12-4□DO PRT12-4□DC	PRT18-5□DO PRT18-5□DC	PRT18-8□DO PRT18-8□DC	PRT30-10□DO PRT30-10□DC PRT30-10□DO-V	PRT30-15□DO PRT30-15□DC
Appearances	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Line-up</p> <p>2-wire non-polarity</p> <p>CE</p> </div>  </div>							
Sensing distance	1.5mm	2mm	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis	Max. 10% of sensing distance							
Standard sensing target	8×8×1mm (Iron)		12×12×1mm (Iron)		18×18×1mm (Iron)	25×25×1mm (Iron)	30×30×1mm (Iron)	45×45×1mm (Iron)
Sensing distance	0 to 1.05mm	0 to 1.4mm	0 to 1.4mm	0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)							
Current consumption	Max. 0.6mA							
Response frequency※1	1.5kHz	1kHz	1.5kHz	500Hz		350Hz	400Hz	200Hz
Residual voltage※2	Max. 3.5V(Non-polarity type is Max. 5V)							
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C(for PRT08 Series : ±20% Max.)							
Control output	2 to 100mA							
Insulation resistance	Min. 50MΩ(at 500VDC megger)							
Dielectric strength	1500VAC 50/60Hz for 1minute							
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours							
Shock	500m/s ² (approx. 50G) in X, Y, Z direction for 3 times							
Indicator	Operation indicator(red LED)							
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C						
	Ambient humidity	35 to 95% RH, storage: 35 to 95% RH						
Protection circuit	Surge protection circuit		Surge protection circuit, Overcurrent protection circuit					
Protection	IP67(IEC standard)							
Cable	ø3.5, 3-wire, 2m (AWG24, Core diameter: 0.08mm, Number of cores: 40, Insulator diameter: ø1)		ø4, 2-wire, 2m		ø5, 2-wire, 2m			(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)							
Approval	CE							
Weight※3	Approx. 64g(approx. 52g)		Approx.84g(approx. 72g)		Approx.122g(approx. 110g)		Approx.207g(approx. 170g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.


※2: Before using non-polarity type, check the condition of connected device because residual voltage is 5V.

※3: The weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

■ Specifications

● DC 2-wire type

Model	PR08-1.5DN PR08-1.5DP PR08-1.5DN2 PR08-1.5DP2 PRL08-1.5DN PRL08-1.5DP PRL08-1.5DN2 PRL08-1.5DP2	PR08-2DN PR08-2DP PR08-2DN2 PR08-2DP2 PRL08-2DN PRL08-2DP PRL08-2DN2 PRL08-2DP2	PR12-2DN PR12-2DP PR12-2DN2 PR12-2DP2 PRS12-2DN PRS12-2DP PRS12-2DN2 PRS12-2DP2	PR12-4DN PR12-4DP PR12-4DN2 PR12-4DP2 PRS12-4DN PRS12-4DP PRS12-4DN2 PRS12-4DP2 PRL12-4DN PRL12-4DP	PR18-5DN PR18-5DP PR18-5DN2 PR18-5DP2 PR18-5DN-V PRL18-5DN PRL18-5DP PRL18-5DN2 PRL18-5DP2	PR18-8DN PR18-8DP PR18-8DN2 PR18-8DP2 PRL18-8DN PRL18-8DP PRL18-8DN2 PRL18-8DP2	PR30-10DN PR30-10DP PR30-10DN2 PR30-10DP2 PRL30-10DN PRL30-10DP PRL30-10DN2 PRL30-10DP2	PR30-15DN PR30-15DP PR30-15DN2 PR30-15DP2 PRL30-15DN PRL30-15DP PRL30-15DN2 PRL30-15DP2
Appearances	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Line-up 2-wire non-polarity</p> <p>CE</p> </div>  </div>							
Sensing distance	1.5mm	2mm	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis	Max. 10% of sensing distance							
Standard sensing target	8×8×1mm(Iron)		12×12×1mm(Iron)		18×18×1mm (Iron)	25×25×1mm (Iron)	30×30×1mm (Iron)	45×45×1mm (Iron)
Setting distance	0 to 1.05mm	0 to 1.4mm	0 to 1.4mm	0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operation voltage)	12-24VDC (10-30VDC)							
Leakage current	Max. 10mA							
Response frequency ^{※1}	1.5kHz	1kHz	1.5kHz	500Hz		350Hz	400Hz	200kHz
Residual voltage	Max. 2.0V		Max. 1.5V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C, PR08 Series : Max. ±20%							
Control output	Max. 200mA							
Insulation resistance	Min. 50MΩ(at 500VDC megger)							
Dielectric strength	1500VAC 50/60Hz for 1minute							
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours							
Shock	500m/s ² (approx. 50G) in X, Y, Z direction for 3 times							
Indicator	Operation indicator(red LED)							
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C						
	Ambient humidity	30 to 95%RH, storage: 35 to 95%RH						
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit							
Protection	IP67(IEC standard)							
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)							
Cable	ø3.5, 3-wire, 2m (AWG24, Core diameter: 0.08mm, Number of cores: 40, Insulator diameter: ø1)		ø4, 3-wire, 2m		ø5, 3-wire, 2m			
			AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)					
Approval	CE							
Weight ^{※2}	PR: Approx. 64g(approx. 52g) PRL: Approx. 66g(approx. 54g)		PR: Approx. 84g(approx. 72g) PRS: Approx. 82g(approx. 70g) PRL: Approx. 88g(approx. 76g)		PR: Approx. 122g(approx. 110g) PRL: Approx. 142g(approx. 130g)		PR: Approx. 207g(approx. 170g) PRL: Approx. 247g(approx. 210g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※2: The weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/Power controller

Counter

Timer

Panel meter

Tacho/Speed/Pulse meter

Display unit

Sensor controller

Switching mode power supply


Stepper motor & Driver&Controller

Graphic/Logic panel

Field network device

■ Specifications

● AC 2-wire type

Model	PR12-2AO PR12-2AC	PR12-4AO PR12-4AC	PR18-5AO PR18-5AC PRL18-5AO PRL18-5AC	PR18-8AO PR18-8AC PRL18-8AO PRL18-8AC	PR30-10AO PR30-10AC PRL30-10AO PRL30-10AC	PR30-15AO PR30-15AC PRL30-15AO PRL30-15AC
Appearances	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Line-up 2-wire non-polarity</p> <p>CE</p> </div>  </div>					
Sensing distance	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)		18×18×1mm(Iron)	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)
Setting distance	0 to 1.4mm	0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operation voltage)	100-240VAC (85-264VAC)					
Leakage current	Max. 2.5mA					
Response frequency ^{※1}	20Hz					
Residual voltage	Max. 10V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	5 to 150mA			5 to 200mA		
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	2,500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) in X, Y, Z direction for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C				
	Ambient humidity	30 to 95%RH, storage: 35 to 95%RH				
Protection circuit	Surge protection circuit					
Protection	IP67(IEC standard)					
Material	ø4, 2-wire, 2m			ø5, 2-wire, 2m		
	(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)					
Insulation type	Double insulation or reinforced insulation (Mark: □, dielectric strength between the measuring input part and the power part: 1kV)					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Black): Polyvinyl chloride(PVC)					
Approval	CE					
Weight ^{※2}	Approx. 84g(approx. 66g)			PR: Approx. 130g(approx. 118g) PRL: Approx. 142g(approx. 130g)		PR: Approx. 207g(approx. 170g) PRL: Approx. 245g(approx. 208g)

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

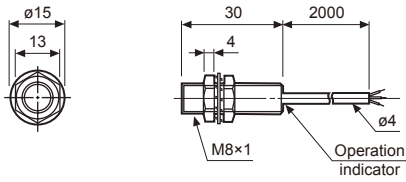
※2: The weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

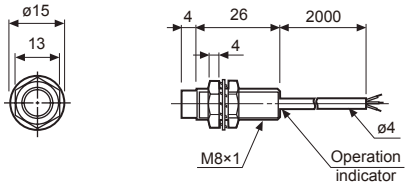
■ Dimensions

(unit: mm)

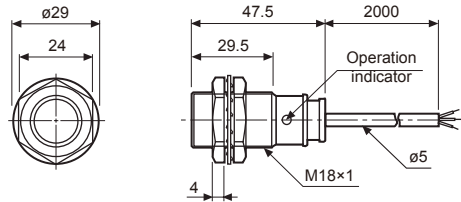
● PR(T)08-1.5D □



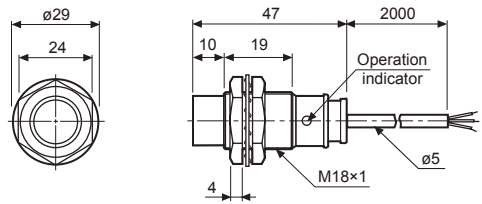
● PR(T)08-2D □



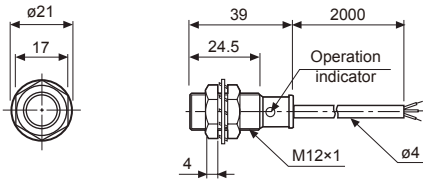
● PR(T)18-5D □



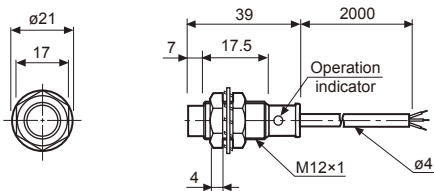
● PR(T)18-8D □



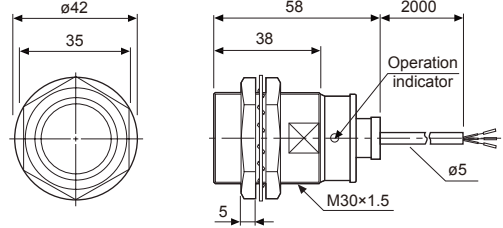
● PRS12-2D □



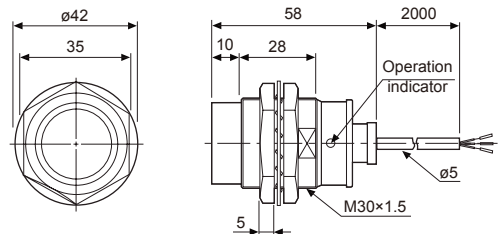
● PRS12-4D □



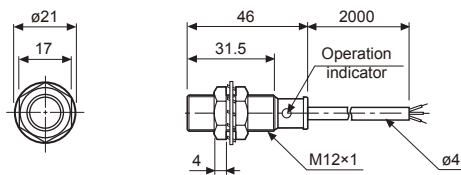
● PR(T)30-10D □



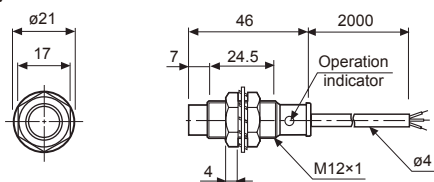
● PR(T)30-15D □



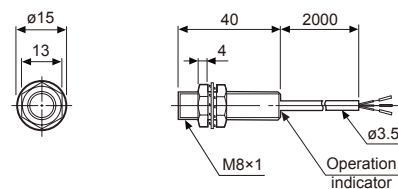
● PR(T)12-2D □



● PR(T)12-4D □



● PRL08-1.5D □



● PRL08-2D □

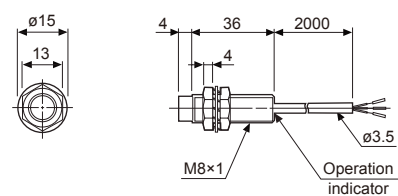
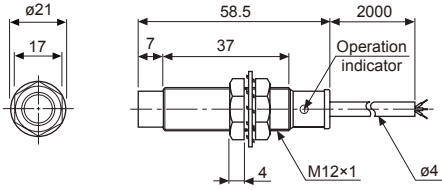


Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/ Power controller
Counter
Timer
Panel meter
Tacho/ Speed/ Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor & Driver&Controller
Graphic/ Logic panel
Field network device

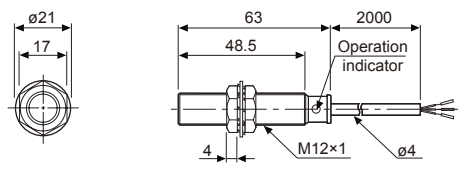
■ Dimensions

(unit: mm)

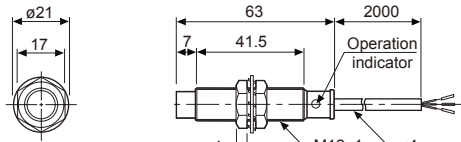
● PRL12-4D



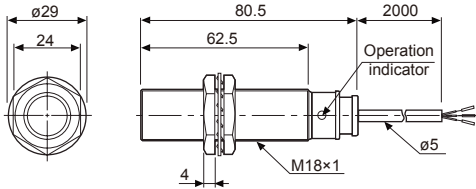
● PR12-2A



● PR12-4A

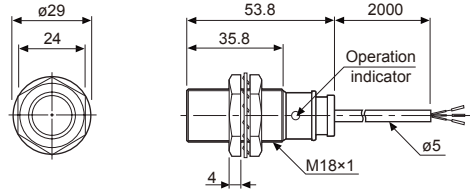


● PRL18-5D

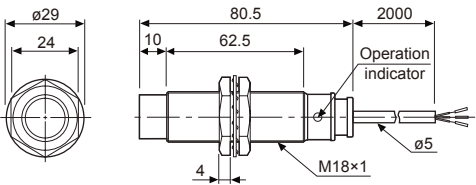


● PRL18-5A

● PR18-5A

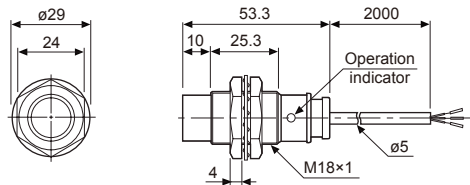


● PRL18-8D

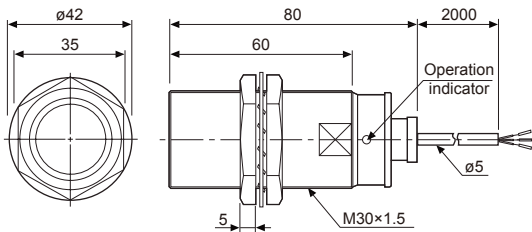


● PRL18-8A

● PR18-8A

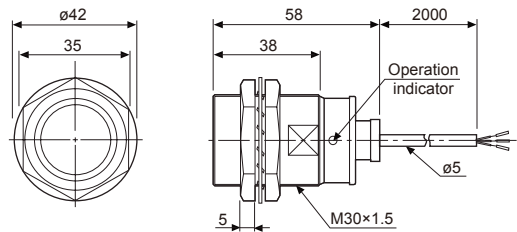


● PRL30-10D

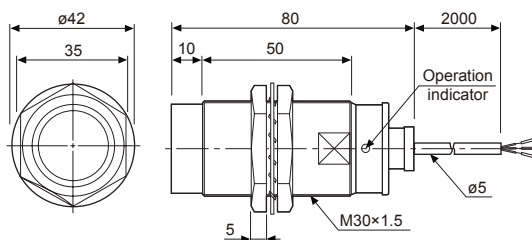


● PRL30-10A

● PR30-10A

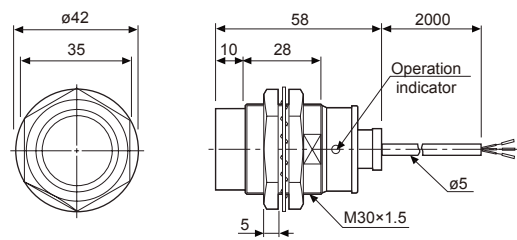


● PRL30-15D




● PRL30-15A

● PR30-15A



Cylindrical cable connector type proximity sensor

Model	PRWT08-1.5DO PRWT08-1.5DC PRWT08-1.5DO-I PRWT08-1.5DC-I PRWT08-1.5DO-V PRWT08-1.5DC-V PRWT08-1.5DO-I-V PRWT08-1.5DC-I-V	PRWT08-2DO PRWT08-2DC PRWT08-2DO-I PRWT08-2DC-I PRWT08-2DO-I-V PRWT08-2DC-I-V	PRWT12-2DO PRWT12-2DC PRWT12-2DO-I PRWT12-2DC-I	PRWT12-4DO PRWT12-4DC PRWT12-4DO-I PRWT12-4DC-I	PRWT18-5DO PRWT18-5DC PRWT18-5DO-I PRWT18-5DC-I	PRWT18-8DO PRWT18-8DC PRWT18-8DO-I PRWT18-8DC-I	PRWT30-10DO PRWT30-10DC PRWT30-10DO-I PRWT30-10DC-I PRWT30-10DO-V PRWT30-10DC-V	PRWT30-15DO PRWT30-15DC PRWT30-15DO-I PRWT30-15DC-I PRWT30-15DO-I-V PRWT30-15DC-I-V
Appearances	<p>Line-up 2-wire non-polarity</p>  <p>CE</p>							
Sensing distance	1.5mm	2mm	4mm	5mm	8mm	10mm	15mm	
Hysteresis	Max. 10% of sensing distance							
Standard sensing target	8×8×1mm(Iron)		12×12×1mm(Iron)		18×18×1mm (Iron)	25×25×1mm (Iron)	30×30×1mm (Iron)	45×45×1mm (Iron)
Setting distance	0 to 1.05mm	0 to 1.4mm		0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operation voltage)	12-24VDC (10-30VDC)							
Leakage current	Max. 0.6mA							
Response frequency ^{※1}	1.5kHz	1kHz	1.5kHz	500Hz	350Hz	400Hz	200Hz	
Residual voltage ^{※2}	Max. 3.5V(Non-polarity type is Max. 5V)							
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C(for PRWT08 Series : ±20% Max.)							
Control output	2 to 100mA							
Insulation resistance	Min. 50MΩ(at 500VDC meggera)							
Dielectric strength	1500VAC 50/60Hz for 1 minute							
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours							
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times							
Indicator	Operation indicator(red LED)							
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C						
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH						
Protection circuit	Surge protection circuit		Surge protection circuit, Overcurrent protection circuit					
Protection	IP67(IEC standard)							
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)							
Cable	ø4, 2-wire, 300mm, M12 connector				ø5, 2-wire, 300mm, M12 connector			
Approval	CE							
Unit weight ^{※3}	Approx. 44g(approx. 32g)		Approx. 54g(approx. 42g)		Approx.70g(approx. 58g)		Approx. 134g(approx. 122g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※2: Before using non-polarity type, check the condition of connected device because residual voltage is 5V.

※3: The weight with packaging and the weight in parentheses is only unit weight.

※Please fasten the vibration part with Teflon tape.


※The '□' of model name is for power type. 'D' is 12-24VDC, 'X' is non-polarity 12-24VDC.

※The last 'V' of model name is for the model with oil-resistance reinforced cable.


※Environment resistance is rated at no freezing or condensation.

- Photo electric sensor
- Fiber optic sensor
- Door/Area sensor
- Proximity sensor
- Pressure sensor
- Rotary encoder
- Connector/ Socket
- Temp. controller
- SSR/ Power controller
- Counter
- Timer
- Panel meter
- Tacho/ Speed/ Pulse meter
- Display unit
- Sensor controller
- Switching mode power supply
- Stepper motor& Driver&Controller
- Graphic/ Logic panel
- Field network device

Specifications

Model	PRW08-1.5DN PRW08-1.5DP PRW08-1.5DN2 PRW08-1.5DP2 PRW08-1.5DN-V PRW08-1.5DP-V PRWL08-1.5DN PRWL08-1.5DP PRWL08-1.5DN2 PRWL08-1.5DP2	PRW08-2DN PRW08-2DP PRW08-2DN2 PRW08-2DP2 PRW08-2DN-V PRW08-2DP-V PRWL08-2DN PRWL08-2DP PRWL08-2DN2 PRWL08-2DP2	PRW12-2DN PRW12-2DP PRW12-2DN2 PRW12-2DP2	PRW12-4DN PRW12-4DP PRW12-4DN2 PRW12-4DP2	PRW18-5DN PRW18-5DP PRW18-5DN2 PRW18-5DP2 PRW18-8DN PRW18-8DP PRW18-8DN2 PRW18-8DP2 PRWL18-5DN PRWL18-5DP PRWL18-5DN2 PRWL18-5DP2	PRW18-8DN PRW18-8DP PRW18-8DN2 PRW18-8DP2 PRWL18-8DN PRWL18-8DP PRWL18-8DN2 PRWL18-8DP2	PRW30-10DN PRW30-10DP PRW30-10DN2 PRW30-10DP2 PRW30-10DN-V PRW30-10DP-V PRWL30-10DN PRWL30-10DP PRWL30-10DN2 PRWL30-10DP2	PRW30-15DN PRW30-15DP PRW30-15DN2 PRW30-15DP2 PRW30-15DN-V PRW30-15DP-V PRWL30-15DN PRWL30-15DP PRWL30-15DN2 PRWL30-15DP2
Appearances	<p>Line-up 2-wire non-polarity</p> <p>CE</p> 							
Sensing distance	1.5mm	2mm	4mm	5mm	8mm	10mm	15mm	
Hysteresis	Max. 10% of sensing distance							
Standard sensing target	8×8×1mm(Iron)		12×12×1mm(Iron)		18×18×1mm(Iron)	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)
Setting distance	0 to 1.05mm		0 to 1.4mm		0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm
Power supply (Operation voltage)	12-24VDC (10-30VDC)							
Current consumption	Max. 10mA							
Response frequency ^{*1}	1.5kHz	1kHz	1.5kHz	500Hz	350Hz	400Hz	200Hz	
Residual voltage	Max. 2V		Max. 1.5V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C(for PRW(L)08 series : ±20% Max.)							
Control output	200mA							
Insulation resistance	Min. 50MΩ(at 500VDC megger)							
Dielectric strength	1500VAC 50/60Hz for 1 minute							
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours							
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times							
Indicator	Operation indicator(red LED)							
Environment	Ambient temperature: -25 to 70°C, storage: -30 to 80°C Ambient humidity: 35 to 95%RH, storage: 35 to 95%RH							
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit							
Protection	IP67(IEC standard)							
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)							
Cable	ø4, 3-wire, 300mm, M12 connector				ø5, 3-wire, 300mm, M12 connector			
Approval	CE							
Unit weight ^{*2}	PRW: Approx. 44g(approx. 32g) PRWL: Approx. 46g(approx. 34g)		Approx. 54g(approx. 42g)		PRW: Approx. 70g(approx. 58g) PRWL: Approx. 90g(approx. 78g)		PRW: Approx. 134g(approx. 122g) PRWL: Approx. 195g(approx. 158g)	

AC 2-wire type

Model	PRW12-2AO PRW12-2AC	PRW12-4AO PRW12-4AC	PRW18-5AO PRW18-5AC PRWL18-5AO PRWL18-5AC	PRW18-8AO PRW18-8AC PRWL18-8AO PRWL18-8AC	PRW30-10AO PRW30-10AC PRWL30-10AO PRWL30-10AC	PRW30-15AO PRW30-15AC PRWL30-15AO PRWL30-15AC
Appearances	<p>Line-up 2-wire non-polarity</p> <p>CE</p> 					
Sensing distance	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)		18×18×1mm(Iron)	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)
Setting distance	0 to 1.4mm	0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operation voltage)	100-240VAC (85-264VAC)					
Leakage current	Max. 2.5mA					
Response frequency ^{*1}	20Hz					
Residual voltage	Max. 10V					

Model	PRW12-2AO PRW12-2AC	PRW12-4AO PRW12-4AC	PRW18-5AO PRW18-5AC PRWL18-5AO PRWL18-5AC	PRW18-8AO PRW18-8AC PRWL18-8AO PRWL18-8AC	PRW30-10AO PRW30-10AC PRWL30-10AO PRWL30-10AC	PRW30-15AO PRW30-15AC PRWL30-15AO PRWL30-15AC
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	5 to 150mA		5 to 200mA			
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	2,500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH				
Protection circuit	Surge protection circuit					
Protection	IP67(IEC standard)					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Black): Polyvinyl chloride(PVC)					
Cable	ø4, 2-wire, 300mm, M12 connector		ø5, 2-wire, 300mm, M12 connector			
Approval	CE					
Unit weight ^{※2}	Approx. 54g(approx. 42g)		PRW: Approx. 78g (approx. 66g) PRWL: Approx. 90g (approx. 78g)		PRW: Approx. 134g(approx. 122g) PRWL: Approx. 195g(approx. 158g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

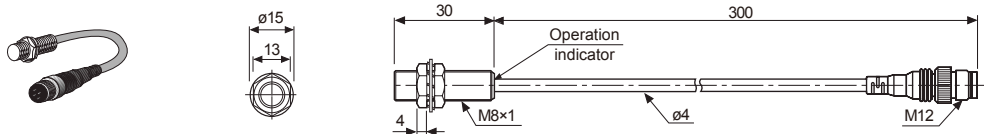
※2: The weight with packaging and the weight in parentheses is only unit weight.

※The last 'V' of model name is for the model with oil-resistance reinforced cable. ※Environment resistance is rated at no freezing or condensation.

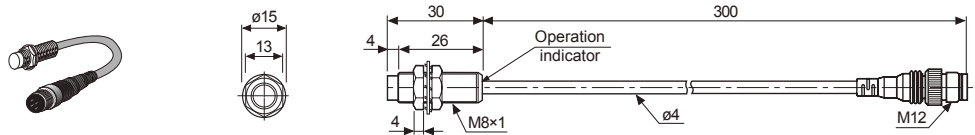
■ Dimensions

(unit: mm)

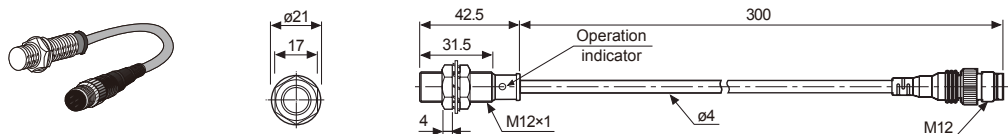
● PRWT08-1.5D□(-I) ● PRW08-1.5D□



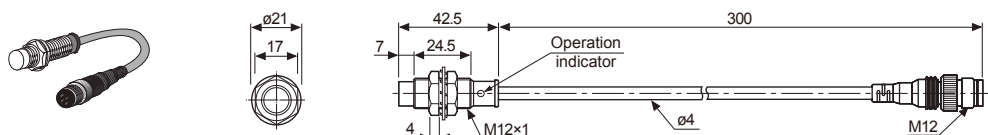
● PRWT08-2D□(-I) ● PRW08-2D□



● PRWT12-2D□(-I) ● PRW12-2D□



● PRWT12-4D□(-I) ● PRW12-4D□

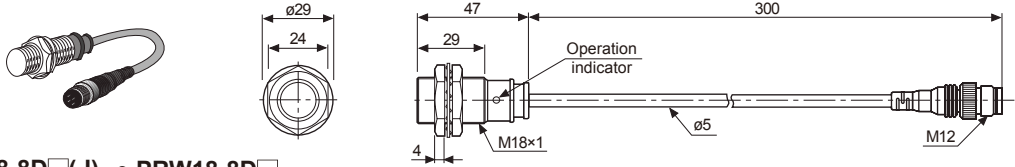


Selection Guide

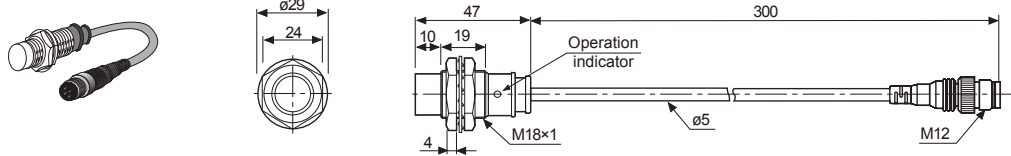
■ Dimensions

(unit: mm)

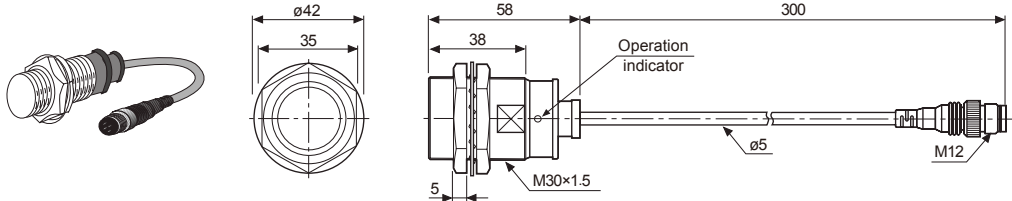
● PRWT18-5D□(-I) ● PRW18-5D□



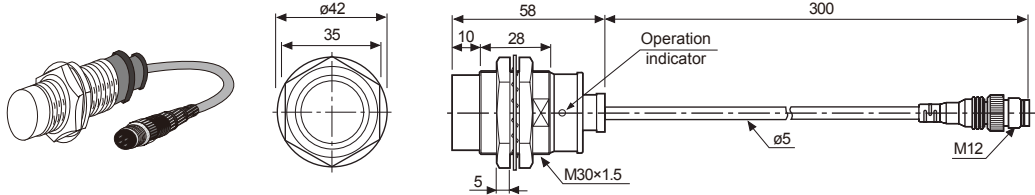
● PRWT18-8D□(-I) ● PRW18-8D□



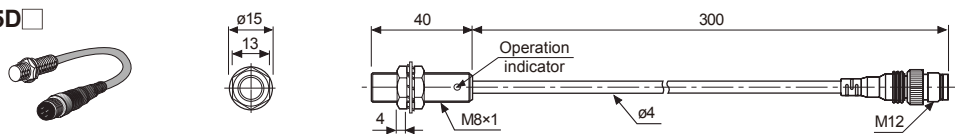
● PRWT30-10D□(-I) ● PRW30-10D□



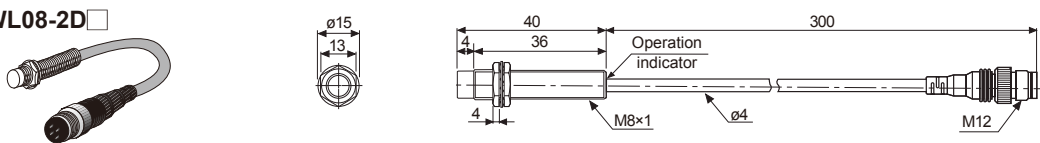
● PRWT30-15D□(-I) ● PRW30-15D□



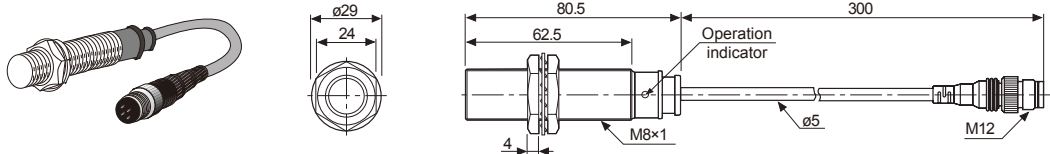
● PRWL08-1.5D□



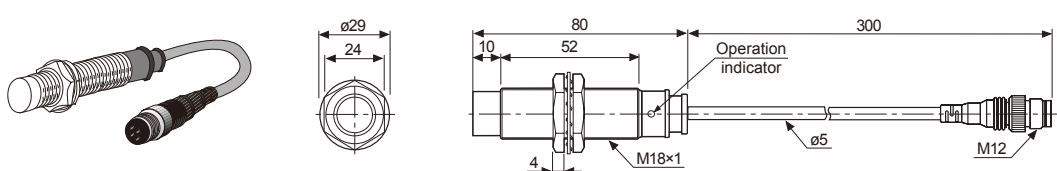
● PRWL08-2D□



● PRWL18-5D□ ● PRWL18-5A□



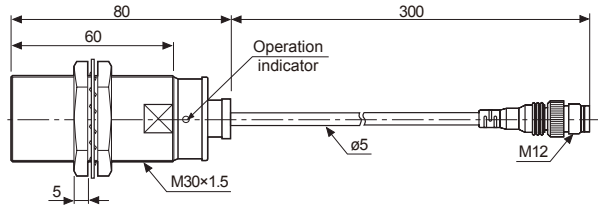
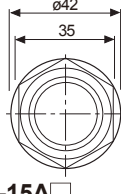
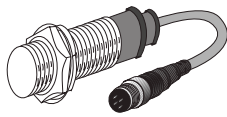
● PRWL18-8D□ ● PRWL18-8A□



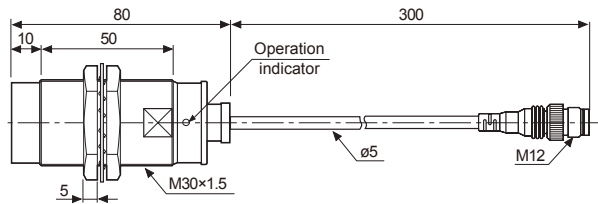
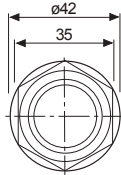
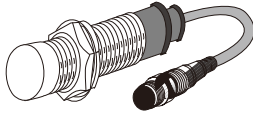
■ Dimensions

(unit: mm)

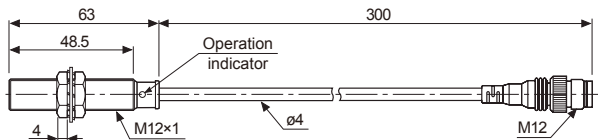
- PRWL30-10D
- PRWL30-10A



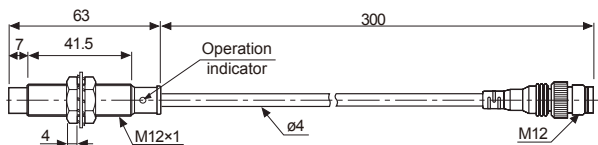
- PRWL30-15D
- PRWL30-15A



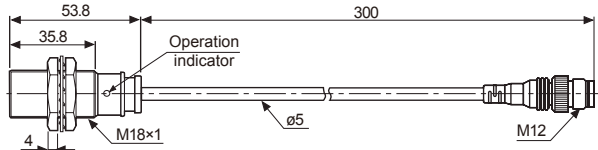
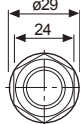
- PRW12-2A



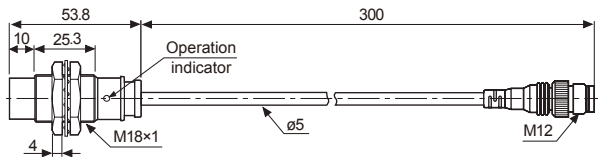
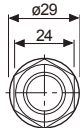
- PRW12-4A



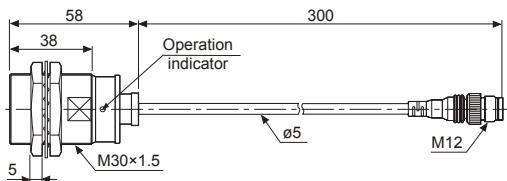
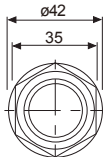
- PRW18-5A



- PRW18-8A



- PRW30-10A



- PRW30-15A

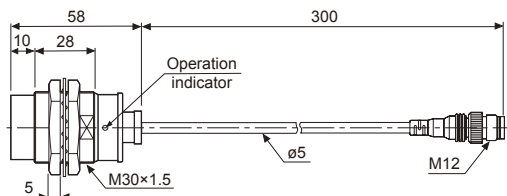
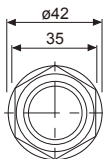



Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/Power controller
Counter
Timer
Panel meter
Tacho/Speed/Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor & Driver&Controller
Graphic/Logic panel
Field network device

Cylindrical connector type proximity sensor

■ Specifications

● DC 2-wire type

Model	PRCMT12-2DO PRCMT12-2DC PRCMT12-2DO-I PRCMT12-2DC-I	PRCMT12-4DO PRCMT12-4DC PRCMT12-4DO-I PRCMT12-4DC-I	PRCMT18-5DO PRCMT18-5DC PRCMT18-5DO-I PRCMT18-5DC-I	PRCMT18-8DO PRCMT18-8DC PRCMT18-8DO-I PRCMT18-8DC-I	PRCMT30-10DO PRCMT30-10DC PRCMT30-10DO-I PRCMT30-10DC-I	PRCMT30-15DO PRCMT30-15DC PRCMT30-15DO-I PRCMT30-15DC-I
Appearances						
Sensing distance	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)		18×18×1mm(Iron)	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)
Setting distance	0 to 1.4mm	0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)					
Leakage current	Max. 0.6mA					
Response frequency ^{※1}	1.5kHz	500Hz	350Hz	400Hz	200Hz	
Residual voltage	Max. 3.5V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	2 to 100mA					
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	1500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH				
Protection circuit	Surge protection circuit, Overcurrent protection					
Protection	IP67(IEC Standard)					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT Standard Cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)					
Approval	CE					
Weight ^{※2}	Approx. 38g(approx. 26g)		Approx. 60g(approx. 48g)		Approx. 154g(approx. 142g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.


※2: The weight with packaging and the weight in parentheses is only unit weight.

※ There is IEC standard connector cable. Refer to the 148 page about IEC standard connector wires and specifications.

※ Environment resistance is rated at no freezing or condensation.

■ Specifications

● DC 3-wire type

Model	PRCM12-2DN PRCM12-2DP PRCM12-2DN2 PRCM12-2DP2	PRCM12-4DN PRCM12-4DP PRCM12-4DN2 PRCM12-4DP2	PRCM18-5DN PRCM18-5DP PRCM18-5DN2 PRCM18-5DP2 PRCML18-5DN PRCML18-5DP PRCML18-5DN2 PRCML18-5DP2	PRCM18-8DN PRCM18-8DP PRCM18-8DN2 PRCM18-8DP2 PRCML18-8DN PRCML18-8DP PRCML18-8DN2 PRCML18-8DP2	PRCM30-10DN PRCM30-10DP PRCM30-10DN2 PRCM30-10DP2 PRCML30-10DN PRCML30-10DP PRCML30-10DN2 PRCML30-10DP2	PRCM30-15DN PRCM30-15DP PRCM30-15DN2 PRCM30-15DP2 PRCML30-15DN PRCML30-15DP PRCML30-15DN2 PRCML30-15DP2
Appearances						
Sensing distance	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)		18×18×1mm(Iron)	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)
Sensing distance	0 to 1.4mm	0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)					
Current consumption	Max. 10mA					
Response frequency ^{※1}	1.5kHz	500kHz	500kHz	350kHz	400kHz	200kHz
Residual voltage	Max. 1.5V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	Max. 200mA					
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	1500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH				
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection					
Protection	IP67(IEC Standard)					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT					
Approval	CE					
Weight ^{※2}	Approx. 38g(approx. 26g)		PRCM: Approx. 61g(approx. 49g) PRCML: Approx. 85g(approx. 73g)		PRCM: Approx. 146g(approx. 134g) PRCML: Approx. 181g(approx. 169g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.


※2: The weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

- Photo electric sensor
- Fiber optic sensor
- Door/Area sensor
- Proximity sensor
- Pressure sensor
- Rotary encoder
- Connector/Socket
- Temp. controller
- SSR/Power controller
- Counter
- Timer
- Panel meter
- Tacho/Speed/Pulse meter
- Display unit
- Sensor controller
- Switching mode power supply
- Stepper motor& Driver&Controller
- Graphic/Logic panel
- Field network device

■ Specifications

● AC 2-wire type

Model	PRCM12-2AO PRCM12-2AC	PRCM12-4AO PRCM12-4AC	PRCM18-5AO PRCM18-5AC PRCML18-5AO PRCML18-5AC	PRCM18-8AO PRCM18-8AC PRCML18-8AO PRCML18-8AC	PRCM30-10AO PRCM30-10AC PRCML30-10AO PRCML30-10AC	PRCM30-15AO PRCM30-15AC PRCML30-15AO PRCML30-15AC
Appearances						
Sensing distance	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)		18×18×1mm(Iron)	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)
Sensing distance	0 to 1.4mm	0 to 2.8mm	0 to 3.5mm	0 to 5.6mm	0 to 7mm	0 to 10.5mm
Power supply (Operating voltage)	100-240VAC (85-264VAC)					
Current consumption	Max. 2.5mA					
Response frequency ^{※1}	20Hz					
Residual voltage	Max. 10V					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	5 to 150mA		5 to 200mA			
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	2,500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH				
Protection circuit	Surge protection circuit					
Protection	IP67(IEC Standard)					
Insulation type	Double insulation or reinforced insulation (Mark: <input type="checkbox"/> , dielectric strength between the measuring input part and the power part: 1kV)					
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT					
Approval	CE					
Weight ^{※2}	Approx. 42g(approx. 30g)		PRCM: Approx. 66g(approx. 54g) PRCML: Approx. 78g(approx. 66g)		PRCM: Approx. 154g(approx. 142g) PRCML: Approx. 194g(approx. 182g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※2: The weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

■ Dimensions

(unit: mm)

Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/Power controller
Counter
Timer
Panel meter
Tacho/Speed/Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor & Driver&Controller
Graphic/Logic panel
Field network device


<p>● PRCM12-2D□ / PRCMT12-2D□(-I)</p> <p>Front view: Ø21, 17 Side view: 55.8, 31.5, 4, M12×1, M12, Operation indicator</p>	<p>● PRCM12-4D□ / PRCMT12-4D□(-I)</p> <p>Front view: Ø21, 17 Side view: 55.8, 24.5, 7, 4, M12×1, M12, Operation indicator</p>
<p>● PRCM18-5D□ / PRCMT18-5D□(-I)</p> <p>Front view: Ø29, 24 Side view: 54.3, 29.5, 4, M18×1, M12, Operation indicator</p>	<p>● PRCM18-8D□ / PRCMT18-8D□(-I)</p> <p>Front view: Ø29, 24 Side view: 53.8, 19, 10, 4, M18×1, M12, Operation indicator</p>
<p>● PRCM30-10D□ / PRCMT30-10D□(-I)</p> <p>Front view: Ø42, 35 Side view: 63.8, 38, 5, M30×1.5, M12, Operation indicator</p>	<p>● PRCM30-15D□ / PRCMT30-15D□(-I)</p> <p>Front view: Ø42, 35 Side view: 63.8, 28, 10, 5, M30×1.5, M12, Operation indicator</p>
<p>● PRCM12-2A□</p> <p>Front view: Ø21, 17 Side view: 72.8, 48.5, 4, M12×1, M12, Operation indicator</p>	<p>● PRCM12-4A□</p> <p>Front view: Ø21, 17 Side view: 72.8, 41.5, 7, 4, M12×1, M12, Operation indicator</p>
<p>● PRCM18-5A□</p> <p>Front view: Ø29, 24 Side view: 60.6, 35.8, 4, M12×1, M12, Operation indicator</p>	<p>● PRCM18-8A□</p> <p>Front view: Ø29, 24 Side view: 60.1, 25.3, 10, 4, M12×1, M12, Operation indicator</p>
<p>● PRCM30-10A□</p> <p>Front view: Ø42, 35 Side view: 63.8, 38, 5, M30×1.5, M12, Operation indicator</p>	<p>● PRCM30-15A□</p> <p>Front view: Ø42, 35 Side view: 63.8, 28, 10, 5, M30×1.5, M12, Operation indicator</p>
<p>● PRCML18-5D□ / PRCML18-5A□</p> <p>Front view: Ø29, 24 Side view: 87.3, 62.5, 4, M18×1, M12, Operation indicator</p>	<p>● PRCML18-8D□ / PRCML18-8A□</p> <p>Front view: Ø29, 24 Side view: 85.8, 52, 10, 4, M30×1.5, M12, Operation indicator</p>
<p>● PRCML18-5D□ / PRCML18-5A□</p> <p>Front view: Ø42, 35 Side view: 87.3, 62.5, 5, M30×1.5, M12, Operation indicator</p>	<p>● PRCML30-15D□ / PRCML30-15A□</p> <p>Front view: Ø42, 24 Side view: 85.8, 50, 10, 5, M30×1.5, M12, Operation indicator</p>

Spatter-resistance type proximity sensor

■ Specifications

● DC 2-wire type

※When the □ model name is X, it is non-polarity model.

Model	PRAT12-2□□ PRAT12-2□C	PRAWT12-2□□ PRAWT12-2□C PRAWT12-2□□-I PRAWT12-2□C-I	PRAT18-5□□ PRAT18-5□C	PRAWT18-5□□ PRAWT18-5□C PRAWT18-5□□-I PRAWT18-5□C-I	PRAT30-10□□ PRAT30-10□C	PRAWT30-10□□ PRAWT30-10□C PRAWT30-10□□-I PRAWT30-10□C-I
Appearances	Line-up 2-wire non-polarity 					
Sensing distance	2mm		5mm		10mm	
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	12×12×1mm(Iron)		18×18×1mm(Iron)		30×30×1mm(Iron)	
Setting distance	0 to 1.4mm		0 to 3.5mm		0 to 7mm	
Power supply (Operating voltage)	12-24VDC (10 -30VDC)					
Leakage current	Max. 0.6mA					
Response frequency ^{※1}	1.5kHz		500Hz		400Hz	
Residual voltage ^{※2}	Max. 3.5V(Non-polarity type is Max. 5V)					
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C					
Control output	2 to 100mA					
Insulation resistance	Min. 50MΩ(at 500VDC megger)					
Dielectric strength	1500VAC 50/60Hz for 1 minute(between all terminals and case)					
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times					
Indicator	Operation indicator(red LED)					
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C				
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH				
Protection circuit	Surge protection circuit, Overcurrent protection circuit					
Protection	IP67(IEC standard)					
Cable	ø4, 2-wire, 2m		ø5, 2-wire, 2m			
	(for cable type, 300mm, M12 connector), (AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)					
Material	Case/Nut: Teflon coated Brass, Washer: Teflon coated Iron, Sensing surface: Teflon, Standard cable(Black): Polyvinyl chloride(PVC)					
Approval	CE					
Weight ^{※3}	Approx. 84g (approx. 72g)	Approx. 54g (approx. 42g)	Approx. 122g (approx. 110g)	Approx. 70g (approx. 58g)	Approx. 207g (approx. 170g)	Approx. 134g (approx. 122g)

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※2: Before using non-polarity type, check the condition of connected device because residual voltage is 5V.

※3: The weight with packaging and the weight in parentheses is only unit weight.


※Environment resistance is rated at no freezing or condensation.

※Refer to the 148 page for IEC standard connector cables and specifications.


※The '□' of model name is for power type. 'D' is 12-24VDC, 'X' is non-polarity 12-24VDC.

■ Specifications

● DC 3-wire type

Model	PRA12-2DN PRA12-2DP PRA12-2DN2 PRA12-2DP2	PRA18-5DN PRA18-5DP PRA18-5DN2 PRA18-5DP2	PRA30-10DN PRA30-10DP PRA30-10DN2 PRA30-10DP2
Appearances	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Line-up 2-wire non-polarity</p> <p>CE</p> </div>  </div>		
Sensing distance	2mm	5mm	10mm
Hysteresis	Max. 10% of sensing distance		
Standard sensing target	12×12×1mm(Iron)	18×18×1mm(Iron)	30×30×1mm(Iron)
Setting distance	0 to 1.4mm	0 to 3.5mm	0 to 7mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)		
Current consumption	Max. 10mA		
Response frequency ^{※1}	1.5kHz	500Hz	400Hz
Residual voltage	Max. 1.5V		
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C		
Control output	Max. 200mA		
Insulation resistance	Min. 50MΩ(at 500VDC megger)		
Dielectric strength	1500VAC 50/60Hz for 1 minute		
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours		
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times		
Indicator	Operation indicator(red LED)		
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C	
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH	
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit		
Protection	IP67(IEC standard)		
Cable	ø4, 3-wire, 2m		ø5, 2-wire, 2m
	(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)		
Material	Case/Nut: Teflon coated Brass, Washer: Teflon coated Iron, Sensing surface: Teflon, Standard cable(Black): Polyvinyl chloride(PVC)		
Approval	CE		
Weight ^{※2}	Approx. 84g(approx. 72g)	Approx. 122g(approx. 110g)	Approx. 207g(approx. 170g)

● AC 2-wire type

Model	PRA12-2AO PRA12-2AC	PRA18-5AO PRA18-5AC	PRA30-10AO PRA30-10AC
Appearances	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Line-up 2-wire non-polarity</p> <p>CE</p> </div>  </div>		
Sensing distance	2mm	5mm	10mm
Hysteresis	Max. 10% of sensing distance		
Standard sensing target	12×12×1mm(Iron)	18×18×1mm(Iron)	30×30×1mm(Iron)
Setting distance	0 to 1.4mm	0 to 3.5mm	0 to 7mm
Power supply (Operating voltage)	100-240VAC (85-264VAC)		
Leakage current	Max. 2.5mA		
Response frequency ^{※1}	20Hz		
Residual voltage	Max. 10V		
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C		

- Photo electric sensor
- Fiber optic sensor
- Door/Area sensor
- Proximity sensor
- Pressure sensor
- Rotary encoder
- Connector/Socket
- Temp. controller
- SSR/Power controller
- Counter
- Timer
- Panel meter
- Tacho/Speed/ Pulse meter
- Display unit
- Sensor controller
- Switching mode power supply
- Stepper motor& Driver&Controller
- Graphic/ Logic panel
- Field network device

■ Specifications

● AC 2-wire type

Model	PRA12-2AO PRA12-2AC	PRA18-5AO PRA18-5AC	PRA30-10AO PRA30-10AC
Control output	5 to 150mA	5 to 200mA	
Insulation resistance	Min. 50MΩ(at 500VDC megger)		
Dielectric strength	2500VAC 50/60Hz for 1 minute		
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours		
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times		
Indicator	Operation indicator(red LED)		
Environment	Ambient temperature -25 to 70°C, storage: -30 to 80°C		
	Ambient humidity 35 to 95%RH, storage: 35 to 95%RH		
Protection circuit	Surge protection circuit		
Protection	IP67(IEC standard)		
Cable	ø4, 2-wire, 2m	ø5, 2-wire, 2m	
	(for cable type, 300mm, M12 connector), (AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)		
Material	Case/Nut: Teflon coated Brass, Washer: Teflon coated Iron, Sensing surface: Teflon, Standard cable(Black): Polyvinyl chloride(PVC)		
Insulation type	Double insulation or reinforced insulation(Mark: □, Dielectric strength between the measuring input part and the power part: 1.5kVAC)		
Approval	CE		
Weight ^{※2}	Approx. 78g(approx. 66g)	Approx. 118g(approx. 106g)	Approx. 207g(approx. 170g)

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

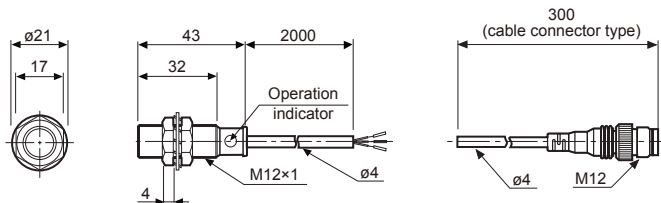
※2: The weight with packaging and the weight in parentheses is only unit weight.

※ Environment resistance is rated at no freezing or condensation.

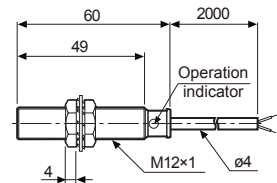
■ Dimensions

(unit: mm)

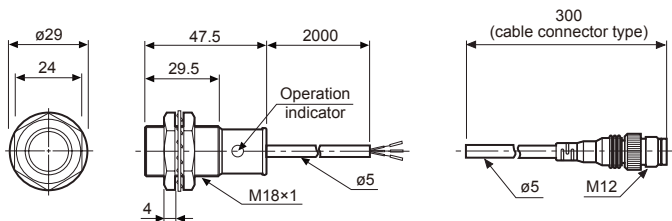
● PRA12-2D □ / PRAT12-2D □ / PRAWT12 -2D □



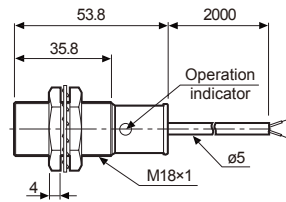
● PRA12-2A □



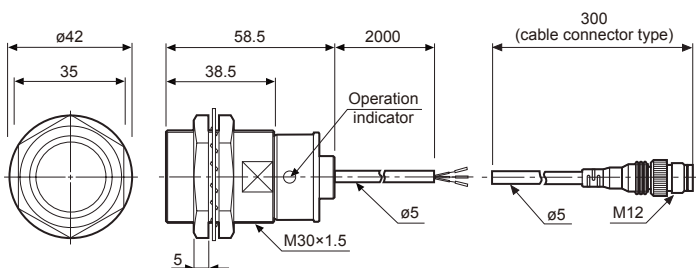
● PRA18-5D □ / PRAT18-5D □ / PRAWT18 -5D □



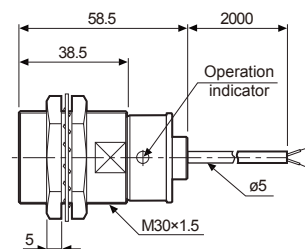
● PRA18-5A □



● PRA30-10D □ / PRAT30 -10D □ / PRAWT30 -10D □



● PRA 30-10A □




Rectangular type proximity sensor

■ Specifications

● DC 2-wire type

※The existing PST17 is upgraded its function and design and changed as PSN17.
 ※The case color of Normal Close type is changed from orange to gray.

Model	PSNT17-5DO PSNT17-5DC	PSNT17-5DOU PSNT17-5DCU
Appearances		
Sensing distance	5mm	
Hysteresis	Max. 10% of sensing distance	
Standard sensing target	18×18×1mm(Iron)	
Setting distance	0 to 3.5mm	
Power supply (Operating voltage)	12-24VDC (10-30VDC)	
Leakage current	Max. 0.6mA	
Response frequency ^{※1}	700Hz	
Residual voltage	Max. 3.5V	
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C	
Control output	2 to 100mA	
Insulation resistance	Min. 50MΩ(at 500VDC megger)	
Dielectric strength	1500VAC 50/60Hz for 1 minute	
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours	
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times	
Indicator	Operation indicator(red LED)	
Environ- ment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH
Protection circuit	Surge protection circuit, Overcurrent protection circuit	
Protection	IP67(IEC standard)	
Cable	ø4, 3-wire, 2m (AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator out diameter: ø1.25)	
Approval	CE	
Unit weight	Approx. 71g	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※Environment resistance is rated at no freezing or condensation.

Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/ Power controller
Counter
Timer
Panel meter
Tacho/ Speed/ Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor& Driver&Controller
Graphic/ Logic panel
Field network device

■ Specifications

● DC 3-wire type

※The case color of PNP output type is changed from orange to gray.

Model	PS12-4DN PS12-4DP PS12-4DN2 PS12-4DNU PS12-4DPU PS12-4DN2U	PSN17-5DN PSN17-5DP PSN17-5DN2 PSN17-5DP2 PSN17-5DN2U PSN17-5DPU PSN17-5DP2U PSN17-5DN-F	PSN17-8DN PSN17-8DP PSN17-8DN2 PSN17-8DP2 PSN17-8DNU PSN17-8DPU PSN17-8DN2U PSN17-8DP2U	PSN17-8DN-F PSN17-8DP-F PSN17-8DN2-F PSN17-8DP2-F PSN17-8DNU-F PSN17-8DPU-F PSN17-8DN2U-F PSN17-8DP2U-F	PSN25-5DN PSN25-5DP PSN25-5DN2 PSN25-5DP2	PSN30-10DN PSN30-10DP PSN30-10DN2 PSN30-10DP2	PSN30-15DN PSN30-15DP PSN30-15DN2 PSN30-15DP2	PSN40-20DN PSN40-20DP PSN40-20DN2 PSN40-20DP2	PS50-30DN PS50-30DP PS50-30DN2 PS50-30DP2
Appearances									
Sensing distance	4mm	5mm	8mm	5mm	10mm	15mm	20mm	30mm	
Hysteresis	Max. 10% of sensing distance								
Standard sensing target	12×12×1mm (Iron)	18×18×1mm (Iron)	25×25×1mm (Iron)			30×30×1mm (Iron)	45×45×1mm (Iron)	60×60×1mm (Iron)	90×90×1mm (Iron)
Setting distance	0 to 2.8mm	0 to 3.5mm	0 to 5mm		0 to 3.5mm	0 to 7mm	0 to 10.5mm	0 to 14mm	0 to 21mm
Power supply (Operation voltage)	12-24VDC (10-30VDC)								
Current consumption	Max. 10mA								
Response frequency ^{※1}	500Hz	700Hz	200Hz	300Hz	250Hz	200Hz	100Hz	50Hz	
Residual voltage	Max. 1.5V								
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C								
Control output	Max. 200mA								
Insulation resistance	Min. 50MΩ(at 500VDC megger)								
Dielectric strength	1500VAC 50/60Hz for 1minute								
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours								
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times								
Indicator	Operation indicator(red LED)								
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C							
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH							
Protection circuit	Surge protection circuit, Overcurrent protection circuit, Reverse polarity protection circuit								
Protection	IP67(IEC standard)								
Cable	ø4, 3-wire, 2m								ø5, 3-wire, 2m
	(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator out diameter: ø1.25)								
Material	Case: Heat-resistant ABS, Standard cable(Black): Polyvinyl chloride(PVC).								
Approval	CE								
Unit weight	Approx. 62g	Approx. 71g	Approx. 70g		Approx. 111g		Approx. 185g	Approx. 220g	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※Environment resistance is rated at no freezing or condensation.

■ Specifications

● AC 2-wire type

※The case color of Normally Closed type is changed from orange to gray.

Model	PSN25-5AO PSN25-5AC	PSN30-10AO PSN30-10AC	PSN30-15AO PSN30-15AC	PSN40-20AO PSN40-20AC
Appearances				
Sensing distance	5mm	10mm	15mm	20mm
Hysteresis	Max. 10% of sensing distance			
Standard sensing target	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)	60×60×1mm(Iron)
Setting distance	0 to 3.5mm	0 to 7mm	0 to 10.5mm	0 to 14mm
Power supply(Operating voltage)	100-240VAC(85-264VAC)			
Leakage current	Max. 2.5mA			
Response frequency ^{※1}	20Hz			
Residual voltage	Max. 10V			
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C			
Control output	5 to 200mA			
Insulation resistance	Min. 50MΩ(at 500VDC megger)			
Dielectric strength	1500VAC 50/60Hz for 1 minute			
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours			
Shock	500m/s ² (approx. 50G) in X, Y, Z direction for 3 times			
Indicator	Operation indicator(red LED)			
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C		
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH		
Protection circuit	Surge protection circuit			
Protection	IP67(IEC standard)			
Cable	φ4, 2-wire, 2m(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator out diameter: φ1.25)			
Approval	CE			
Unit weight	Approx. 65g	Approx. 106g		Approx. 152g

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

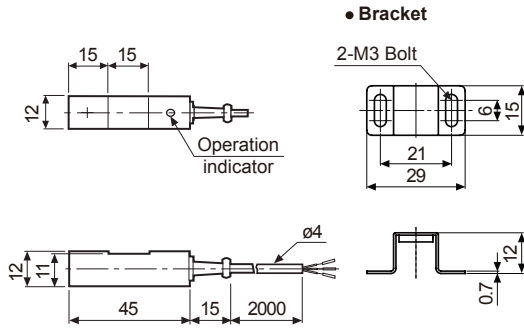
※Environment resistance is rated at no freezing or condensation.

Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/ Power controller
Counter
Timer
Panel meter
Tacho/ Speed/ Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor& Driver&Controller
Graphic/ Logic panel
Field network device

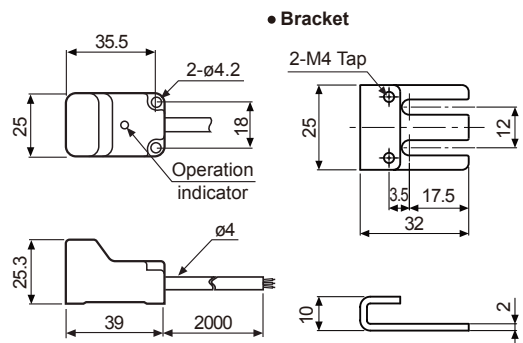
■ Dimensions

(unit: mm)

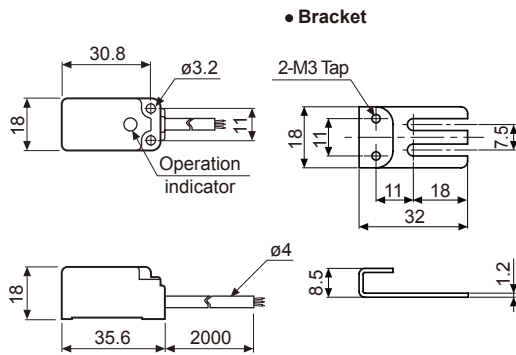
● PS12



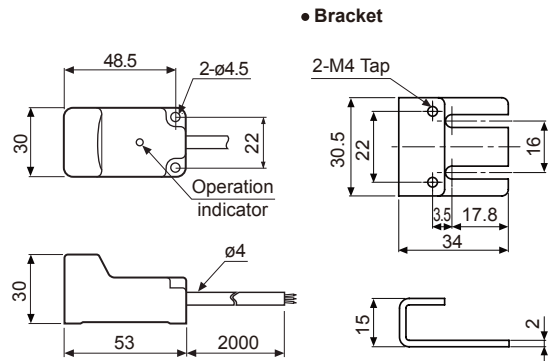
● PSN25



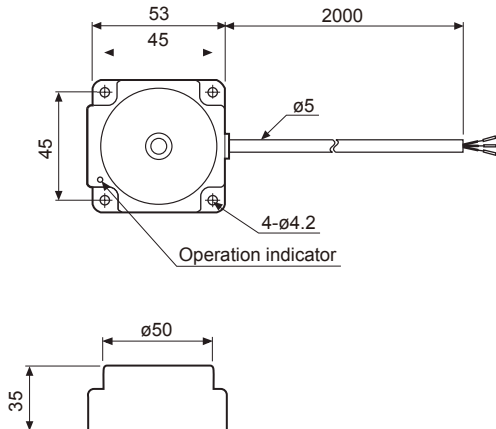
● PSN17 / PSNT17(former : PS17/ PST17)



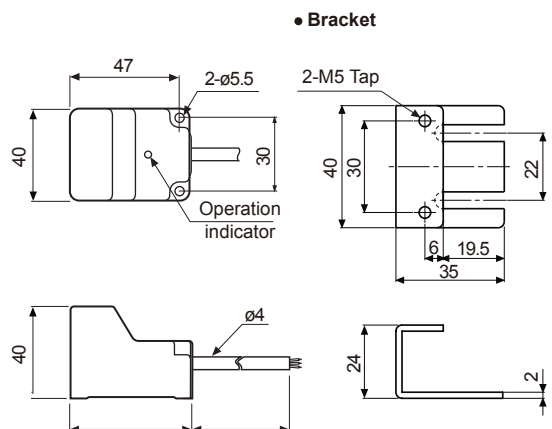
● PSN30



● PS50




● PSN40



Flat type proximity sensor

■ Specification

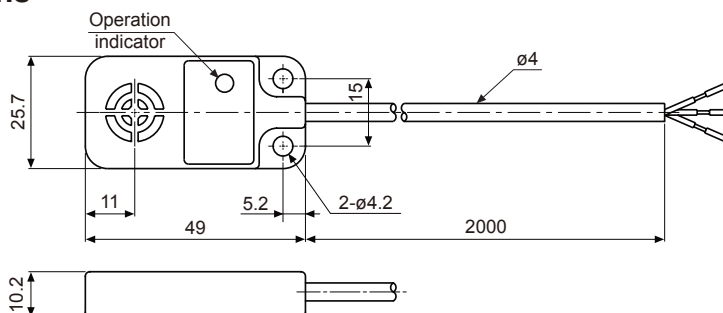
Model	PFI25-8DN PFI25-8DN2	PFI25-8DP PFI25-8DP2	PFI25-8AO PFI25-8AC
Appearances			
Sensing distance	8mm		
Hysteresis	Max. 10% of sensing distance		
Standard sensing target	25×25×1 mm(Iron)		
Setting distance	0 to 5.6mm		
Power supply (Operating voltage)	12-24VDC (10-30VDC)		100-240VAC (85-264VAC)
Current/Leakage consumption	Max. 10mA		Max. 2.5mA
Response frequency ^{※1}	200Hz		20Hz
Residual voltage	Max. 1.5V		Max. 10V
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C		
Control output	Max. 200mA		5 to 150mA
Insulation resistance	Min. 50MΩ(at 500VDC megger)		
Dielectric strength	1,500VAC 50/60Hz for 1 minute		2,500VAC 50/60Hz for 1 minute
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours		
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times		
Indicator	Operation indicator(red LED)		
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C	
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH	
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit		Surge protection circuit
Cable	ø4, 3-wire, 2m		ø4, 2-wire, 2m
	(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator out diameter: ø1.25)		
Material	Case: PPS, General cable(Black): Polyvinyl chloride(PVC)		
Protection	IP67(IEC standard)		
Approval	CE		
Unit weight	Approx. 70g		

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※Environment resistance is rated at no freezing or condensation.

■ Dimensions


(unit: mm)



- Photo electric sensor
- Fiber optic sensor
- Door/Area sensor
- Proximity sensor**
- Pressure sensor
- Rotary encoder
- Connector/Socket
- Temp. controller
- SSR/Power controller
- Counter
- Timer
- Panel meter
- Tacho/Speed/ Pulse meter
- Display unit
- Sensor controller
- Switching mode power supply
- Stepper motor & Driver&Controller
- Graphic/Logic panel
- Field network device

Long sensing distance type proximity sensor

■ Specification

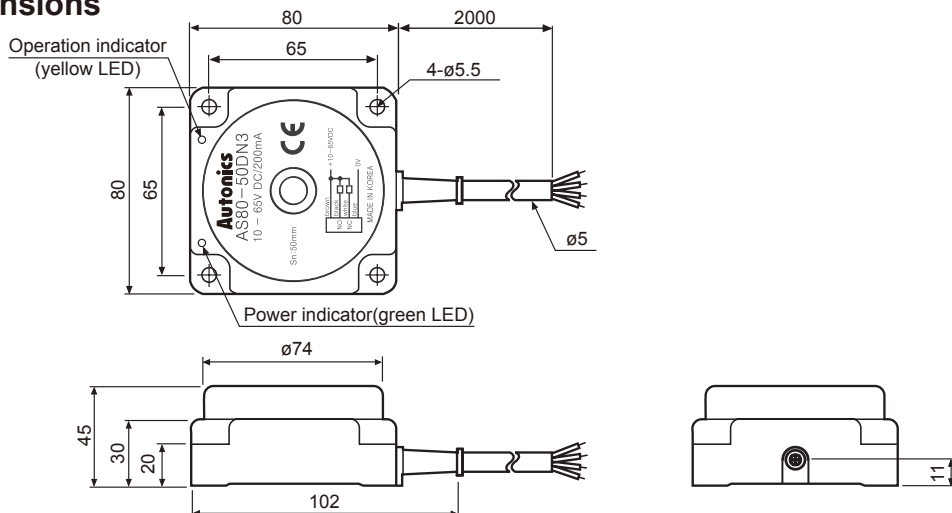
Model	AS80-50DN3	AS80-50DP3
Appearances		
Sensing type	NPN Normally Open + Normally Closed	PNP Normally Open + Normally Closed
Sensing distance	50mm	
Hysteresis	Max. 15% of sensing distance	
Standard sensing target	150×150×1mm(Iron)	
Setting distance	0 to 35mm	
Power supply (Operating voltage)	12-48VDC (10-65VDC)	
Current consumption	Max. 20mA	
Response frequency※1	30Hz	
Residual voltage	Max. 2V	
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C	
Control output	Max. 200mA	
Insulation resistance	Min. 50MΩ(at 500VDC megger)	
Dielectric strength	1500VAC 50/60Hz for 1 minute	
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours	
Shock	500m/s ² (approx. 50G) in X, Y, Z direction for 3 times	
Indicator	Power indicator: green LED, Operation indicator: yellow LED	
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C
	Ambient humidity	35 to 95%RH, storage: 35 to 95%RH
Protection circuit	Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit	
Cable	ø5, 4-wire, 2m(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator diameter: ø1.25)	
Approval	CE	
Protection	IP67(IEC standard)	
Unit weight	Approx. 470g	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

※Environment resistance is rated at no freezing or condensation.


■ Dimensions

(unit: mm)



Electric capacitive type proximity sensor

Specifications

Model	CR18-8DN CR18-3DP CR18-8DN2	CR30-15DN CR30-15DP CR30-15DN2	CR18-8AO CR18-8AC	CR30-15AO CR30-15AC
Appearances				
Sensing distance	8mm	15mm	8mm	15mm
Hysteresis	Max. 20% of sensing distance			
Standard sensing target	50×50×1mm(Iron)			
Sensing distance	0 to 5.6mm	0 to 10.5mm	0 to 5.6mm	0 to 10.5mm
Power supply (Operating voltage)	12-24VDC(10-30VDC)		100-240VAC 50/60Hz(85-264VAC)	
Current consumption	Max. 15mA		—	
Leakage current	—		Max. 2.2mA	
Response frequency ^{※1}	50Hz		20Hz	
Residual voltage	Max. 1.5V		Max. 20V	
Affection by Temp.	Max. ±10% for sensing distance at ambient temperature 20°C			
Control output	Max. 200mA			
Insulation resistance	Min. 50MΩ(at 500VDC megger)			
Dielectric strength	1500VAC 50/60Hz for 1minute			
Vibration	1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours			
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times			
Indicator	Operation indicator(red LED)			
Environment	Ambient temperature: -25 to 70°C, storage: -30 to 80°C Ambient humidity: 35 to 95%RH, storage: 35 to 95%RH			
Protection circuit	Reverse polarity protection, Surge protection		Serge protection circuit	
Protection	IP66(IEC standard)	IP65(IEC standard)	IP66(IEC standard)	IP65(IEC standard)
Cable	ø4, 3-wire, 2m	ø5, 3-wire, 2m	ø4, 2-wire, 2m	ø5, 2-wire, 2m
	(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator out diameter: ø1.25)			
Material	Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)			
Weight ^{※2}	Approx. 64g(approx. 52g)		Approx.84g(approx. 72g)	

※1: The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

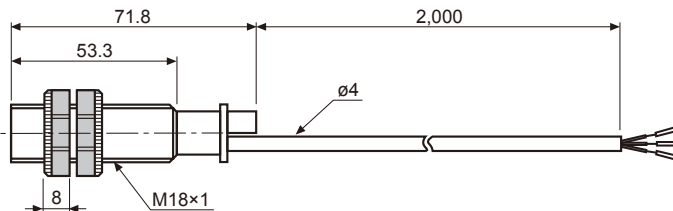
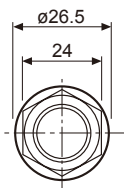
※2: The weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

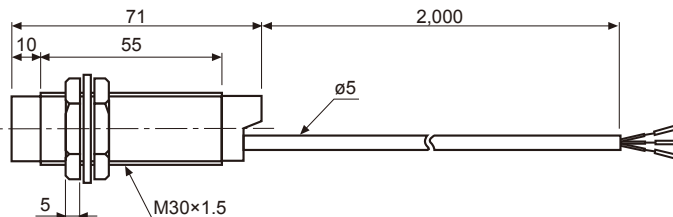
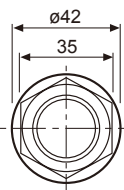
Dimensions

(unit: mm)

CR18-8




CR30-15



- Photo electric sensor
- Fiber optic sensor
- Door/Area sensor
- Proximity sensor**
- Pressure sensor
- Rotary encoder
- Connector/Socket
- Temp. controller
- SSR/Power controller
- Counter
- Timer
- Panel meter
- Tacho/Speed/Pulse meter
- Display unit
- Sensor controller
- Switching mode power supply
- Stepper motor& Driver&Controller
- Graphic/Logic panel
- Field network device

Transmission coupler

■ Specifications

Model	PET18-5			
Appearances				
Transmitting distance	5mm			
Set transmitting distance	1 to 4.5mm			
Response time	Max. 1ms			
Insulation resistance	Min. 50MQ(at 500VDC megger)			
Dielectric strength	1,500VAC 50/60Hz for 1minute			
Vibration	1mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 2 hours			
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times			
Environment	Ambient temperature	-25 to 70°C, storage: -30 to 80°C		
	Ambient humidity	35 to 95% RH, storage: 35 to 95% RH		
Protection	IP67(IEC standards)			
Cable	Ø5, 2-wire, 2m(AWG22, Core diameter: 0.08mm, Number of cores: 60, Insulator out diameter: Ø1.25)			
Material	Case and nut: Nickel-plated brass, Washer: Nickel-plated steel, Sensing part: PBT, General cable(Black): Polyvinyl chloride(PVC)			
Weight ^{※1}	Approx. 133g(approx. 121g)			
Application of proximity sensor	PR18-5DN PR18-5DP PR18-5DN2 PR18-5DP2 PRW18-5DN PRW18-5DP PRW18-5DN2 PRW18-5DP2	PRCM18-5DN PRCM18-5DP PRCM18-5DN2 PRCM18-5DP2 PRWL18-5DN PRWL18-5DP PRWL18-5DN2 PRWL18-5DP2	PRL18-5DN PRL18-5DP PRL18-5DN2 PRL18-5DP2 PRCML18-5DN PRCML18-5DP PRCML18-5DN2 PRCML18-5DP2	PRT18-5DO PRT18-5DC PRCMT18-5DO PRCMT18-5DC

※1: The Weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

■ Dimensions

