Cylindrical connector type proximity sensor

▣Features

- ●Shorten the time of maintenance
- ●Improved the noise resistance with dedicated IC (DC 3-wire)
- ●Reverse power polarity(DC 3-wire), surge(AC/DC), overcurrent protection(DC)
- ●Red LED status indication
- ●IP67 rated waterproof structure(IEC standard)
- ●Replacer for micro switches and limit switches

⚠ **Please read "Caution for your safety" in operation manual before using.**

CE

▣Specifications

●DC 2-wire type

Model	PRCMT12-2DO PRCMT12-2DC	PRCMT12-4DO PRCMT12-4DC	PRCMT18-5DO PRCMT18-5DC	PRCMT18-8DO PRCMT18-8DC	PRCMT30-10DO PRCMT30-10DC	PRCMT30-15DO PRCMT30-15DC
Sensing distance	2mm ±10%	4mm ±10%	5mm ±10%	8mm ±10%	10mm ±10%	15mm ±10%
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 ~ 1.4mm	0 ~ 2.8mm	0 ~ 3.5mm	0 ~ 5.6mm	0 ~ 7mm	0 ~ 10.5mm
Power supply (Operation voltage)	12-24VDC (10-30VDC)					
Leakage current	Max. 0.6mA					
Response frequency(*1)	1.5kHz	500Hz		350Hz	400Hz	200Hz
Residual voltage	Max. 7V					
Affection by Temp.	±10% Max. for sensing distance at +20℃ within temperature range of -25 ~ +70℃					
Control output	2 ~ 100mA					
Dielectric strength	Min. 50MΩ(at 500VDC mega)					
Insulation resistance	1500VAC 50/60Hz for 1 minute					
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours					
Shock	500m/s² (50G) in X, Y, Z directions for 3 times					
Indicator	Operation indicator(Red LED)					
Ambient temperature	-25 ~ +70℃(at non-freezing status)					
Storage temperature	-30 ~ +80℃(at non-freezing status)					
Ambient humidity	35 ~ 95%RH					
Protection circuit	Surge protection circuit, Overload & Short circuit protection					
Protection	IP67(IEC standard)					
Approval	CE					
Unit weight	Approx. 26g		Approx. 49g		Approx. 134g	

※**(*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.
※IEC standard item is available and add "-I" to the end of model. Ex)PRCM12-4DO-I
※See J-51 for IEC standard connector cables and specifications.

▣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
Sensing distance	2mm ±10%	4mm ±10%	5mm ±10%	8mm ±10%	10mm ±10%	15mm ±10%
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 ~ 1.4mm	0 ~ 2.8mm	0 ~ 3.5mm	0 ~ 5.6mm	0 ~ 7mm	0 ~ 10.5mm
Power supply (Operation voltage)	12-24VDC (10-30VDC)					
Current consumption	Max. 10mA					
Response frequency(*1)	1.5kHz	500Hz		350Hz	400Hz	200Hz
Residual voltage	Max. 1.5V					
Affection by Temp.	±10% Max. for sensing distance at +20℃ within temperature range of -25 ~ +70℃					
Control output	Max. 200mA					
Dielectric strength	Min. 50MΩ (at 500VDC mega)					
Insulation resistance	1500VAC 50/60Hz for 1 minute					
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours					
Shock	500m/s² (50G) in X, Y, Z directions for 3 times					
Indicator	Operation indicator(Red LED)					
Ambient temperature	-25 ~ +70℃ (at non-freezing status)					
Storage temperature	-30 ~ +80℃ (at non-freezing status)					
Ambient humidity	35 ~ 95%RH					
Protection circuit	Surge, Reverse power polarity, Overcurrent protection circuit					
Protection	IP67(IEC standard)					
Approval	CE					
Unit weight	Approx. 26g		PRCM18 : Approx. 49g PRCML18 : Approx. 73g		PRCM30 : Approx. 134g PRCML : 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.

●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
Sensing distance	2mm ±10%	4mm ±10%	5mm ±10%	8mm ±10%	10mm ±10%	15mm ±10%
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 ~ 1.4mm	0 ~ 2.8mm	0 ~ 3.5mm	0 ~ 5.6mm	0 ~ 7mm	0 ~ 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.	±10% Max. for sensing distance at +20℃ within temperature range of -25 ~ +70℃					
Control output	5 ~ 150mA		5 ~ 200mA			
Dielectric strength	Min. 50MΩ (at 500VDC mega)					
Insulation resistance	2500VAC 50/60Hz for 1 minute					
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours					
Shock	500m/s² (50G) in X, Y, Z directions for 3 times					
Indicator	Operation indicator(Red LED)					
Ambient temperature	-25 ~ +70℃ (at non-freezing status)					
Storage temperature	-30 ~ +80℃ (at non-freezing status)					
Ambient humidity	35 ~ 95%RH					
Protection circuit	Surge protection circuit					
Protection	IP67(IEC standard)					
Approval	CE					
Unit weight	Approx. 30g		PRCM18 : Approx. 53g PRCML18 : Approx. 74g		PRCM30 : Approx. 134g PRCML30 : 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.