

14 SENSOR INDUCTIVE PROXIMITY CH 18DP



• DC 3-wire type

Model	PR08-1.5DN	PR08-2DN	PR12-2DN	PR12-4DN	PR18-5DN	PR18-8DN	PR30-10DN	PR30-15DN
	PR08-1.5DP	PR08-2DP	PR12-2DP	PR12-4DP	PR18-5DP	PR18-8DP	PR30-10DP	PR30-15DP
	PR08-1.5DN2	PR08-2DN2	PR12-2DN2	PR12-4DN2	PR18-5DN2	PR18-8DN2	PR30-10DN2	PR30-15DN2
	PR08-1.5DP2	PR08-2DP2	PR12-2DP2	PR12-4DP2	PR18-5DP2	PR18-8DP2	PR30-10DP2	PR30-15DP2
	PRL08-1.5DN	PRL08-2DN	PRS12-2DN	PRS12-4DN	PR18-5DN-V	PRL18-8DN	PRL30-10DN	PRL30-15DN
	PRL08-1.5DP	PRL08-2DP	PRS12-2DP	PRS12-4DP	PRL18-5DN	PRL18-8DP	PRL30-10DP	PRL30-15DP
	PRL08-1.5DN2	PRL08-2DN2	PRS12-2DN2	PRS12-4DN2	PRL18-5DP	PRL18-8DN2	PRL30-10DN2	PRL30-15DN2
PRL08-1.5DP2	PRL08-2DP2	PRS12-2DP2	PRS12-4DP2	PRL18-5DN2	PRL18-8DP2	PRL30-10DP2	PRL30-15DP2	
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)							
Current consumption	Max. 10mA							
Response frequency ^{※1}	1.5kHz	1kHz	1.5kHz	500Hz	350Hz	400Hz	200Hz	
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 structure	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	Ø3.5mm, 3-wire, 2m (AWG24, Core diameter: 0.08mm, Number of cores: 40, Insulator diameter: Ø1mm)		Ø4mm, 3-wire, 2m		Ø5mm, 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 includes packaging. The weight in parentheses is for unit only.

※Environment resistance is rated at no freezing or condensation.