

Amplifier-Relayed Compact Proximity Sensors

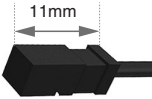
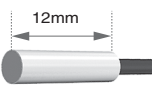
APT Series

Very compact amplifier is almost the same size as the cable.



- Ultra-compact sensor head
Cylindrical type: 3mm dia. x 12mm
Square type: 3.5mm square x 11mm
- Amplifier is almost the same size as the cable,
4mm dia x 31mm
- Cable between sensor head and amplifier
is made to bend, optimum for use in high-speed
equipment




ORDER GUIDE

Sensor head shape	Sensing distance	Catalog listing	Output type	Operation mode
(3.5mm square) 	0.8mm	APT-A01J	DC2-wire	NO
		APT-A01K		NC
(3mm dia.) 	0.5mm	APT-N01J		NO
		APT-N01K		NC

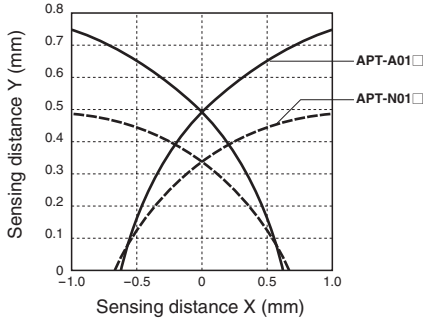
SPECIFICATIONS

Sensing head shape	3.5mm square		3mm dia	
Catalog listing	APT-A01J	APT-A01K	APT-N01J	APT-N01K
Actuation method	High-frequency oscillation			
Rated supply voltage	12/24Vdc			
Operating voltage range	10 to 30Vdc			
Leakage current	0.8mA max. (24Vdc)			
Rated sensing distance	0.8±15%mm		0.5±15%mm	
Standard target object	5x5x1mm(SPCC)			
Differential travel	15% max. of sensing distance			
Operation mode	N.O.	N.C.	N.O.	N.C.
Output mode	DC 2-wire type, transistor output			
Control output	Switching current 3 to 50mA, voltage drop 3.0V max. (at switching current 50mA, cable 1m), output dielectric strength 30Vdc			
Operating frequency	1000Hz min.			
Temperature characteristics	±20% max. of the sensing distance for the -25 to +70° range when 25° is taken as standard temperature.			
Indicator lamps	Lights (orange) during output			
Operating temperature range	-25 to +70°C			
Insulation resistance	50MΩ min. (at 500Vdc)			
Dielectric strength	1000Vac 50/60Hz for 1 minute between case and electrically live metal			
Vibration resistance	10 to 55Hz, 1.5mm peak-to-peak amplitude, 2 hrs each in X, Y and Z directions			
Shock resistance	500m/s ² 3 times each in X, Y and Z directions			
Protection	IP66 (IEC standard)			
Allowable bend-radius(shielded wire and cable)	R30			
Weight	Approx. 11g (with 1m cable)			
Circuit protection	Reverse connection protection, surge absorption, load short-circuit protection			

MOUNTING BRACKET (sold separately)

Name	Appearance	Catalog listing
Relay amplifier mounting bracket (resin type)		APT-PA07
Relay amplifier mounting bracket (metal type)		APT-PA06
Square sensing head mounting bracket		APT-PA05

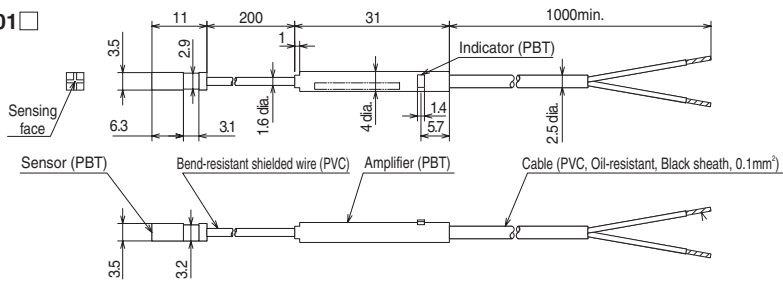
SENSING AREA DIAGRAMS (typical examples)



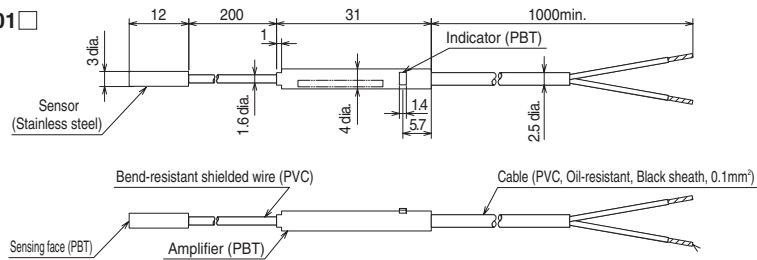
EXTERNAL DIMENSIONS

(unit: mm)

APT-A01



APT-N01



WIRING DIAGRAM

