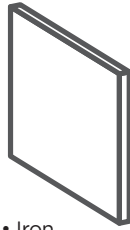
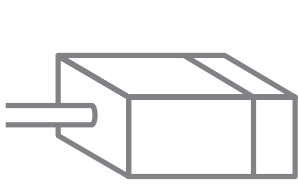


Inductive Proximity Sensor

Square-Standard Type

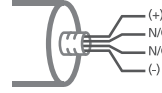
KPS Series



- Iron
- Aluminum
- Copper
- Stainless
- Brass



Variety connector types help to easy install.



A body has two output for variety applications. (N/O+N/C)



Wide power supply and combination AC/DC power.



Enhanced waterproof design



Provides Long-distance Detection. (Maximum 35mm)

Part Number Description

SERIES



SERIES	KPS : Inductive Proximity Square			
① Distance	H : 5mm P : 15mm	J : 7mm Q : 20mm	K : 8mm S : 25mm	L : 10mm V : 35mm
② Size	A : 18 Square	B : 25 Square	C : 30 Square	D : 40 Square
③ Output	1 : NPN N/O (3 wire) 5 : N/O (2 wire)	2 : NPN N/C (3 wire) 6 : N/C (2 wire)	3 : PNP N/O (3 wire) 7 : NPN N/O+N/C (4 wire)	4 : PNP N/C (3 wire) 8 : PNP N/O+N/C (4 wire)
④ Power	1 : 10 - 30VDC	5 : 20 - 240VAC	6 : 20 - 240VAC/DC	
⑤ Cable Outlet	Standard* : 2m Cable	3 : M12 connector		

* Standard specification is not appeared in part number description

Guide to Selection

Size	●3	●5	■7	●8	●12	●■18	■25	●■30	●32	■34	■40	■80
Available						□	□	□			□	
Sensing Distance	0.8mm	1mm	1.5mm	2mm	3mm	4mm	5mm	7mm	8mm	10mm	12mm	15mm
Available							○	○	○	○		○
Sensing Distance	20mm	22mm	25mm	35mm	40mm	50mm	70mm					
Available	○		○	○								
Output	NPN N/C	NPN N/O	PNP N/C	NPN N/O	N/C	N/O	NPN N/O+N/C		PNP N/O+N/C		Analogue	NAMUR
Available	○	○	○	○	○	○	○		○			
Connector	2m Cable			M8 Connector			M12 Connector			Screw Terminal		
Available	○						○					
Power	7.7-9VDC		10-30VDC		15-30VDC		10-60VDC		20-240VAC		20-240VAC/DC	
Available			○						○		○	

General Specification

Detectable Object	Ferrous metal (The sensing distance decreases with non-ferrous metal.)
Differential Travel	Max. 15% of sensing distance
Indicators	LED
Cable Outlet	Standard : 2m Cable 3 : M12 connector (KPS Q, KPS V only)
Protection Circuits	Load short-circuit protection, Surge suppressor, Reverse polarity protection
Ambient Temperature	Operating/Storage : -25 to 70°C (with no icing)
Ambient Humidity	Operating/Storage : 35% to 95% (with no icing)
Temperature Influence	Max. ±10% of sensing distance at 23°C in the temperature range of -25 to 70°C
Voltage Influence	Max. ±1% of sensing distance at rated voltage in the rated voltage ±15% range
Insulation Resistance	Min. 50 MΩ (at 500 VDC) between current-carrying parts and case
Vibration Resistance	Destruction : 10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions
Shock Resistance	Destruction : 1,000 m/s ² 10 times each in X, Y, and Z directions

Characteristics

	DC 3/4 wire	DC 2 wire	AC/DC 2 wire	AC 2 wire		
Supply Voltage	1 : 10 - 30VDC 3 : 15 - 30VDC	4 : 10 - 60VDC	6 : 20 - 250VAC/DC	5 : 20 - 240VAC		
Current Consumption	Max. 10mA	Max. 0.8mA		-		
Leakage Current	-	-		Max. 1mA		
Voltage Drop	Residual voltage : Max. 1V Load current : Max. 100 mA	Residual voltage : Max. 4V Load current : 3 to 100 mA	Residual voltage : Max. 5V for DC power Load current : 3 to 200 mA	Load current : 5 to 200 mA		
Operation Mode	3wire : 1 : NPN N/O, 2 : NPN N/C, 3 : PNP N/O, 4 : PNP N/C 4wire : 7 : NPN N/O+N/C, 8 : PNP N/O+N/C	5 : N/O, 6 : N/C				
Dielectric Strength	1,000 VAC, 50/60 Hz for 1 minute between current carry parts and case		4,000 VAC, 50/60 Hz for 1 minute between current carry parts and case			
Maximum Switching Frequency	18sq	Flush Non flush	1000Hz	800Hz	20Hz	20Hz
	25sq	Flush Non flush	700Hz	600Hz	20Hz	20Hz
	30sq	Flush Non flush	500Hz	500Hz	20Hz	20Hz
	40sq	Flush Non flush	150Hz	150Hz	20Hz	20Hz

Inductive Proximity Sensor

Square-Standard Type

KPS Series

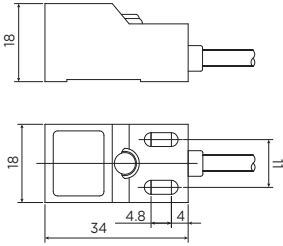
Product Selection

Model	Sensing Distance	Shape	Output	Power	Cable Outlet	Part Number	Response Frequency
18 Square 3-Wire(DC) 	H : 5mm	A : 18sq Flush	1 : NPN N/O	1 : 10-30VDC	Standard : 2m Cable	KPS HA11	1,000Hz
			2 : NPN N/C			KPS HA21	
			3 : PNP N/O			KPS HA31	
			4 : PNP N/C			KPS HA41	
	K : 8mm	A : 18sq Non flush	1 : NPN N/O	1 : 10-30VDC	Standard : 2m Cable	KPS KA11	1,000Hz
			2 : NPN N/C			KPS KA21	
			3 : PNP N/O			KPS KA31	
			4 : PNP N/C			KPS KA41	
25 Square 3-Wire(DC) 	J : 7mm	B : 25sq Flush	1 : NPN N/O	1 : 10-30VDC	Standard : 2m Cable	KPS JB11	700Hz
			2 : NPN N/C			KPS JB21	
			3 : PNP N/O			KPS JB31	
			4 : PNP N/C			KPS JB41	
	L : 10mm	B : 25sq Non flush	1 : NPN N/O	1 : 10-30VDC	Standard : 2m Cable	KPS LB11	700Hz
			2 : NPN N/C			KPS LB21	
			3 : PNP N/O			KPS LB31	
			4 : PNP N/C			KPS LB41	
30 Square 3-Wire(DC) 	L : 10mm	C : 30sq Flush	1 : NPN N/O	1 : 10-30VDC	Standard : 2m Cable	KPS LC11	500Hz
			2 : NPN N/C			KPS LC21	
			3 : PNP N/O			KPS LC31	
			4 : PNP N/C			KPS LC41	
	P : 15mm	C : 30sq Non flush	1 : NPN N/O	1 : 10-30VDC	Standard : 2m Cable	KPS PC11	500Hz
			2 : NPN N/C			KPS PC21	
			3 : PNP N/O			KPS PC31	
			4 : PNP N/C			KPS PC41	
40 Square 3-Wire(DC) 	Q : 20mm	D : 40sq Flush	1 : NPN N/O	1 : 10-30VDC	3 : M12 connector	KPS QD11 3	150Hz
			2 : NPN N/C			KPS QD21 3	
			3 : PNP N/O			KPS QD31 3	
			4 : PNP N/C			KPS QD41 3	
	V : 35mm	D : 40sq Non flush	1 : NPN N/O	1 : 10-30VDC	3 : M12 connector	KPS VD11 3	150Hz
			2 : NPN N/C			KPS VD21 3	
			3 : PNP N/O			KPS VD31 3	
			4 : PNP N/C			KPS VD41 3	

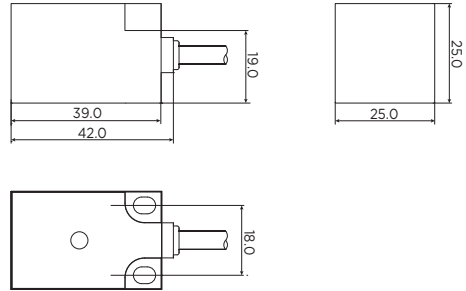
Dimension

(mm)

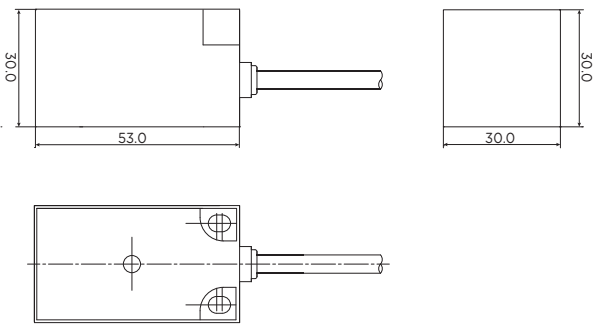
KPS 18sq



KPS 25sq



KPS 30sq



KPS 40sq

