

PRODUCT SHEET

M12 Inductive Proximity Sensor

AKTEK-Q4UDGM12-PNP

Non-contact metal detection for industrial automation and position monitoring.



The AKTEK-Q4UDGM12-PNP detects metal targets without physical contact using the electromagnetic eddy-current principle. Its M12 stainless-steel cylindrical housing, fast switching response and industrial protection support position confirmation, workpiece detection and speed-counting applications.

4.0 mm RATED SENSING	PNP OUTPUT	1000 Hz FREQUENCY	IP68/IP69K PROTECTION
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Features

 4 mm rated sensing distance	 1000 Hz switching frequency	 IP68 / IP69K protection
 -40 to +85 C operation	 Stainless-steel M12 housing	 PNP open-collector output

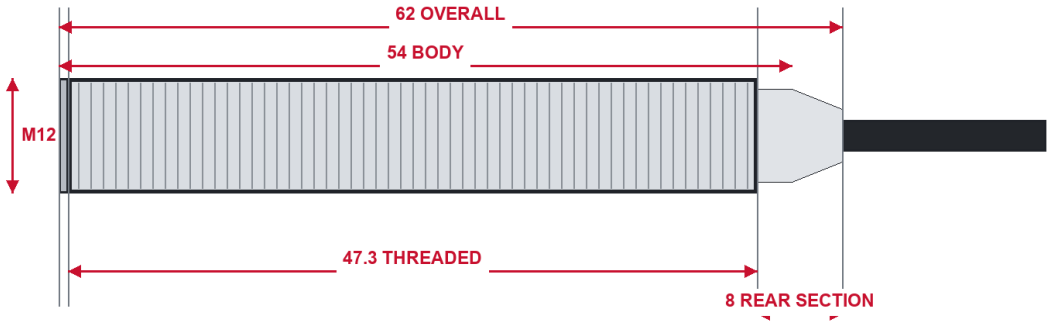
Specifications

Operating principle	Eddy-current induction	Housing	M12 threaded cylindrical
Mounting	Non-flush / exposed	Rated sensing distance	4.0 mm
Assured operating distance	3.20 mm	Sensing face	LCP
Standard target	Fe 37	Indicator	Orange LED
Switching mode	NO / NC selectable in series	Output	PNP open collector for specified model
Switching frequency	1000 Hz	Repeatability	<=3%
Hysteresis	<=15%	Supply voltage	10-30 V +/-10%
Current consumption	<=15 mA	Residual voltage	<=2.0 V
Load current	<=150 mA	Leakage current	<=0.01 mA
Insulation resistance	>=50 Mohm at 500 VDC	Dielectric strength	1000 VAC, 50/60 Hz, 1 min
Operating temperature	-40 to +85 C, no freezing/condensation	Operating humidity	35-95% RH, no freezing/condensation
Protection rating	IP68 / IP69K	Housing material	Stainless steel

Dimension Drawing

AKTEK-Q4UDGM12-PNP | DIMENSION DRAWING

Cable version shown. All dimensions in millimetres.



Connector version overall length: 65

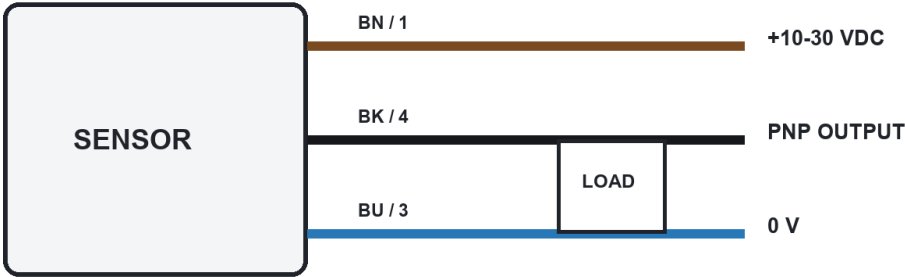
Key Dimensions

Cable version length	M12 x 62 mm	Connector version length	M12 x 65 mm
Threaded length	47.3 mm shown	Rear section	8 mm shown
Cable diameter	Dia. 4 mm shown	Thread	M12

Wiring Diagram

PNP THREE-WIRE CONNECTION

Load is connected between the black output and 0 V.



Connection Reference

BN / Pin 1	+10-30 VDC	BK / Pin 4	PNP switching output
BU / Pin 3	0 V	Load	Between BK output and 0 V

Typical Applications

Position confirmation | Workpiece detection | Cylinder position | Rotational speed counting

Document Reference

Product ID PRD-SEN-0005 | Model AKTEK-Q4UDGM12-PNP

Source note: The series description includes NPN and PNP variants; this sheet identifies the requested PNP model.