

Magnetic Position Sensors of KIPPRIBOR LM40 series



The KIPPRIBOR LM40 Series magnetic position sensors are designed for monitoring gripper, rotary, and linear modules, as well as robotic accessories. These sensors provide non-contact detection of approaching components and deliver a continuous output signal.

The KIPPRIBOR LM Series sensors are used for automation in machine tools across manufacturing, food processing, and woodworking industries, as well as in equipment for PVC window production.

The advantages of S-slotted sensor:

- Complete filling of the housing with a compound, oil-resistant cable, and high maximum operating temperature ensure reliable performance even in harsh industrial environments;
- LED indication makes visual monitoring during both operation and initial setup easier;
- The durable housing with a screw clamp provides a vibration-proof installation, even on equipment subject to high vibration;
- Connection Options:
 - Pre-wired cable, 2 m
 - M8 connector on a 0.5 m cable
 - 4M12 connector on a 0.15 m cable

Technical data of LM40 series magnetic sensors

Parameter	Parameter value		
	LM40-xx.P1.U1.Kxx	LM40-xx.N1.U1.Kxx	LM40-xx.D1.U1.Kxx
Switching element type	Semiconductor element		
Switching function	NO		
Connection diagram	PNP	NPN	2-wire
Supply voltage	10...30 VDC		
Maximum load current	100 mA		50 mA
Current consumption	max 3 mA at 24 VDC		-
Leakage current	0.1 mA		90 mA при 28 VDC
Voltage drop across the sensor	max 0.8 V, at 100 mA DC		2.65 V, at 50 mA DC
Maximum load that can be switched off	3 W		1.5 W
Maximum operating frequency	900 Hz		
Sensitivity	40~800 Gs		
Ingress protection (IP)	IP67		
Surge protection	Yes		
Reverse polarity current protection	Yes		No
Impact resistance	50 g		
Resistance to vibration load	9 g		
Availability of indication	LED		
Electrical connection type	Pre-wired cable/connectors with M8 (female) and M12 (female) plugs		
Operating temperature	-10...+70°C		

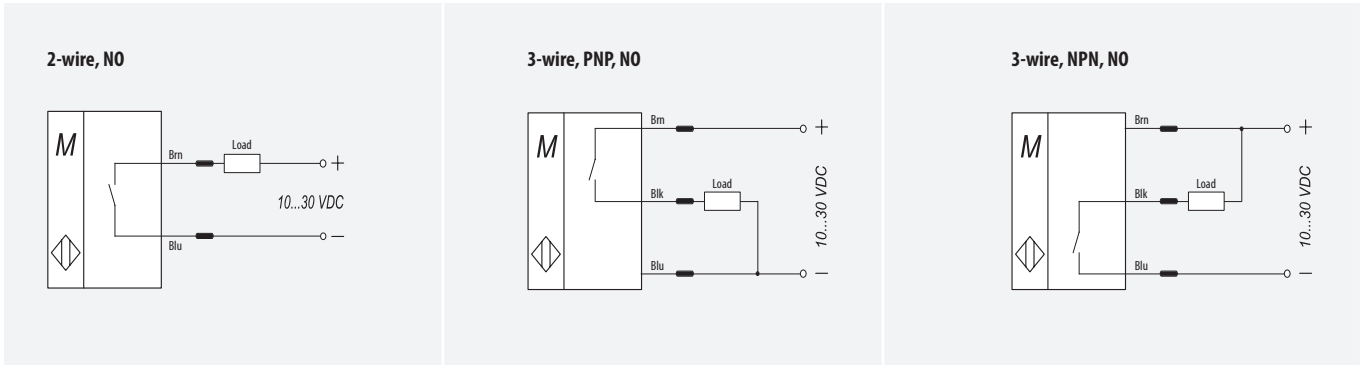
Selection Table for LM40 series magnetic sensors with 14 mm housing length

Model	Dimensional drawing	Output	Output type
LM40-14.D1.U1.K		Pre-wired cable	2-wire
LM40-14.P1.U1.K			PNP
LM40-14.N1.U1.K			NPN
LM40-14.D1.U1.K08		Connectors with M8 (male), 3 pin	2-wire
LM40-14.P1.U1.K08			PNP
LM40-14.N1.U1.K08			NPN
LM40-14.D1.U1.K12		Connectors with M12 (male), 4 pin	2-wire
LM40-14.P1.U1.K12			PNP
LM40-14.N1.U1.K12			NPN

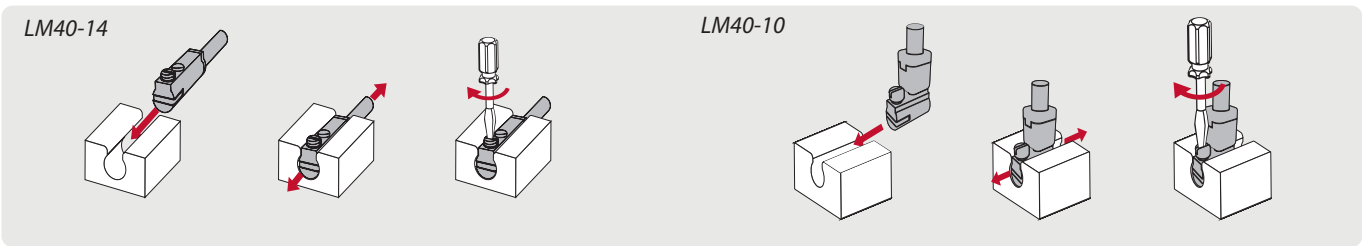
Selection Table for LM40 series magnetic sensors with 10 mm housing length

Model	Dimensional drawing	Output	Output type
LM40-10.D1.U1.K		Prewired cable	2-wire
LM40-10.P1.U1.K			PNP
LM40-10.N1.U1.K			NPN
LM40-10.D1.U1.K08		Connectors with M8 (male), 3 pin	2-wire
LM40-10.P1.U1.K08			PNP
LM40-10.N1.U1.K08			NPN
LM40-10.D1.U1.K12		Connectors with M12 (male), 4 pin	2-wire
LM40-10.P1.U1.K12			PNP
LM40-10.N1.U1.K12			NPN

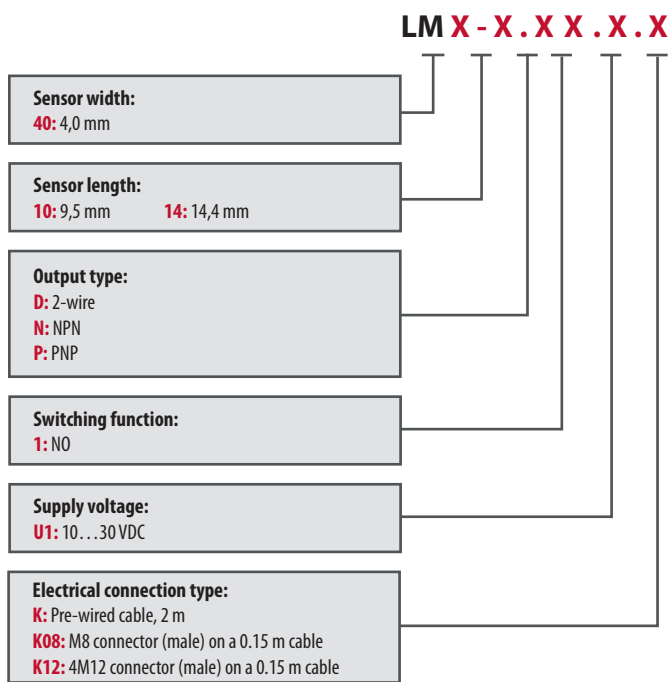
Output Wiring Diagrams for LM40 Series Sensors



Mounting LM40 Series Magnetic Sensors in a C-Shaped Slot



Designation System



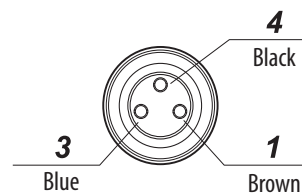
Example of designation:

LM40-10.P1.U1.K08 — L-slotted magnetic sensor with an 9.5 mm housing length, 3-wire PNP output type, NO switching function, 10...30 VDC supply voltage, 2 m pre-wired cable, and M8 connector on a 150mm cable.

Accessories

For connecting the LM40 sensors, we offer KIPPRIBOR extension cables and connectors with M8 (female) and M12 (female) plugs.

Pinout of KIPPRIBOR CM Series Connectors (M8)



Pinout of KIPPRIBOR CM Series Connectors (M12)

