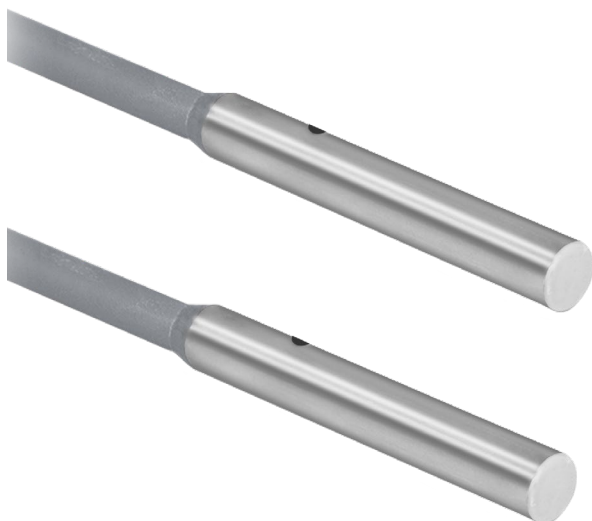


Inductive proximity sensors KIPPRIBOR, LDS series



The inductive proximity switch KIPPRIBOR, LDS series, is a cylindrical electronic sensor that responds to the approach of a metal object to its front sensing surface without physical contact. This operating principle reduces wear on mechanisms and improves equipment reliability.

LDS sensors are designed to detect the presence and position of metal objects. They are used in industrial automation, pneumatics, CNC machines, robotics (for workpiece presence and gripper position monitoring), conveyor and sorting lines, woodworking, food and pharmaceutical industries, as well as in construction and public utilities.

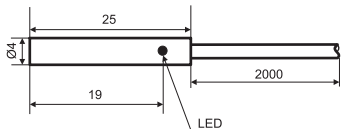
The sensing range of the sensor is located at the front of the housing and is 1.5 mm; the switching distance depends on the type of metal (steel, stainless steel, cast iron, copper, aluminum, brass).

Key advantages of KIPPRIBOR LDS: high reliability and long service life due to the absence of moving parts, non-contact detection, high switching frequency, low power consumption, and LED status indication for easy setup.

Parameter	Value
Supply voltage	10...30 VDC
Rated load current	100 mA
Minimum load current	<10 mA
Leakage current	<0.01 mA
Voltage drop	<1.5 V
Overload protection	Yes
Protection activation threshold	120 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes
Switching hysteresis	$\leq 15 \% S_f^{(1)}$
Repeat accuracy	$\leq 1 \% S_f^{(1)}$
Switching status indication	LED
Housing material	Stainless steel
Active face material	Impact-resistant engineering plastic
Operating temperature	-25...+70 °C
Temperature drift	$\leq 10 \% S_f^{(1)}$
Protection rating	IP67
Electrical connection	Cable, 2 m

⁽¹⁾ - Actual operating distance of the proximity switch, measured at rated supply voltage and under specified temperature and mounting conditions.

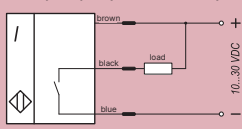
Selection table for cylindrical inductive proximity sensors KIPPRIBOR, LDS series
Housing diameter: 4 mm

Outline drawing	Supply voltage	Wiring diagram	Switching function	Nominal sensing distance	Max. switching frequency	Modification	Stock
	10...30 VDC	NPN	NO	1.5 mm	2 kHz	LDS04-25.1,5N1.U1.K	In stock
			NC			LDS04-25.1,5N2.U1.K	Made to order
		PNP	NO			LDS04-25.1,5P1.U1.K	In stock
			NC			LDS04-25.1,5P2.U1.K	Made to order

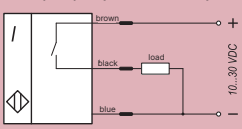
Wiring diagrams

DC Current sensors

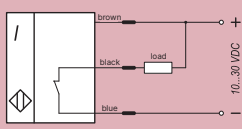
3-wire, NPN, NO (LDS---.N1.U1.K)



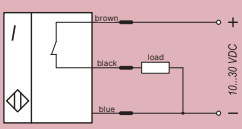
3-wire, PNP, NO (LDS---.P1.U1.K)



3-wire, NPN, NC (LDS---.N2.U1.K)



3-wire, PNP, NC (LDS---.P2.U1.K)



Part number code structure

LDS 04 - X . X X X . X . X

Housing diameter:
04: 4 mm

Housing length:
25: 25 mm

Sensing distance (Sn):
1,5: 1,5 mm

Output type:
N: NPN 3-wire
P: PNP 3-wire

Switching function:
1: NO
2: NC

Supply voltage:
U1: 10...30 VDC

Electrical connection:
K: cable, 2 m

Part number example:

LDS04-25.1,5N1.U1.K — inductive sensor with a housing diameter of 4 mm, nominal sensing distance of 1.5 mm, 3-wire NPN wiring, NO switching function, 10...30 VDC supply voltage, 2 m cable.