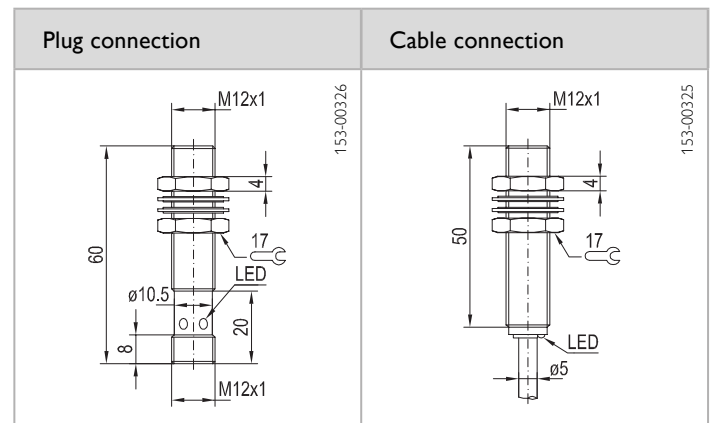
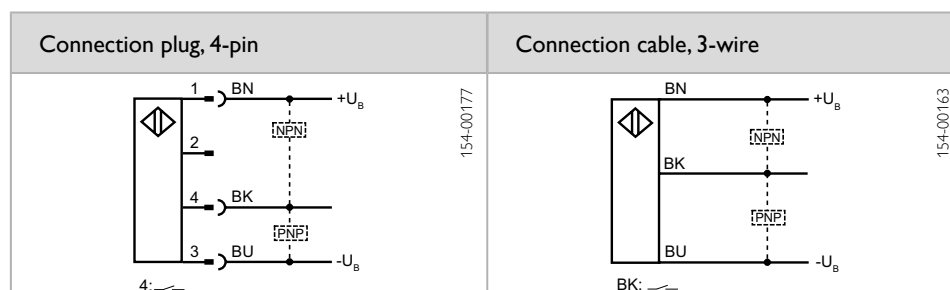


Inductive sensor with expanded switching distance



Sensor data		Functions	
Switching distance	6 mm	Indicator LED, yellow	Switching output indicator
Repeatability	0.3 mm ¹		
Hysteresis	≤ 10 % ²		
Reduction factor, Al	0.30		
Reduction factor, Cu	0.25		
Reduction factor, V2A	0.70		
Reduction factor, steel FE 360	1.00		
Reduction factor, brass	0.40		
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30 V DC ³	Dimensions	See Selection Table
No-load current, I ₀	≤ 10 mA	Enclosure rating	IP 67 ⁴
Output current, I _e	≤ 200 mA	Mounting	Quasi-flush
Voltage drop, U _D	≤ 2 V at 200 mA	Material, housing	Brass, chrome-plated
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q) / induction protection	Material, front surface	PBTP (PPS)
Switching output, Q	PNP / NPN (see Selection Table)	Type of connection	See Selection Table
Output function	N.O.	Ambient temperature: operation	-25 ... +70 °C
Switching frequency, f (ti/tp 1:1)	≤ 800 Hz	Vibration and impact resistance	IEC 60947-5-2 / 7.4

¹ U_B = 20 ... 30 V DC, T_A = 23 °C ± 5 °C ² Refers to switching distance ³ Max. 20 % ripple, within U_B ⁴ With connected IP 67 plug



Sold & Serviced By:

**ELECTROMATE**

Toll Free Phone (877) SERV098
www.electromate.com
sales@electromate.com

Switching distance	Switching output	Dimensions	Type of connection	Part number	Article number
6 mm	PNP	M12 × 60 mm	Plug, M12x1, 4-pin	IS 512-42	996-09969
6 mm	NPN	M12 × 60 mm	Plug, M12x1, 4-pin	IS 512-41	996-09968
6 mm	PNP	M12 × 50 mm	Cable, 2 m, 3-wire	IS 512-02	996-09421
6 mm	NPN	M12 × 50 mm	Cable, 2 m, 3-wire	IS 512-01	996-09420

IS 512

Inductive sensor with expanded switching distance



Plug connection	Cable connection
<p>153-00327</p>	<p>153-00328</p>

Sensor data		Functions	
Switching distance	10 mm	Indicator LED, yellow	Switching output indicator
Repeatability	$\leq 0.3 \text{ mm}^1$		
Hysteresis	$\leq 10 \%^2$		
Reduction factor; Al	0.49		
Reduction factor; Cu	0.45		
Reduction factor; V2A	0.77		
Reduction factor; steel FE 360	1.00		
Reduction factor; brass	0.56		
Electrical data		Mechanical data	
Operating voltage, $+U_B$	10 ... 30V DC ³	Dimensions	See Selection Table
No-load current, I_0	$\leq 10 \text{ mA}$	Enclosure rating	IP 67 ⁴
Output current, I_e	$\leq 200 \text{ mA}$	Mounting	Non-flush
Voltage drop, U_D	$\leq 2 \text{ V}$ at 200 mA	Material, housing	Brass, chrome-plated
Protective circuits	Reverse-polarity protection, U_B / short-circuit protection (Q) / induction protection	Material, front surface	PBTP (PPS)
Switching output, Q	PNP / NPN (see Selection Table)	Type of connection	See Selection Table
Output function	N.O.	Ambient temperature: operation	-25 ... +70 °C
Switching frequency, f (ti/tp 1:1)	$\leq 400 \text{ Hz}$	Vibration and impact resistance	IEC 60947-5-2 / 7.4

¹ $U_B = 20 \dots 30 \text{ V DC}$, $T_A = 23 \text{ °C} \pm 5 \text{ °C}$ ² Refers to switching distance ³ Max. 20 % ripple, within U_B ⁴ With connected IP 67 plug

Connection plug, 4-pin	Connection cable, 3-wire
<p>154-00177</p>	<p>154-00163</p>

Sold & Serviced By:

ELECTROMATE

Toll Free Phone (877) SERV098

www.electromate.com
sales@electromate.com

Switching distance	Switching output	Dimensions	Type of connection	Part number	Article number
10 mm	PNP	M12 x 60 mm	Plug, M12x1, 4-pin	IS 512-44-S	996-51449
10 mm	NPN	M12 x 60 mm	Plug, M12x1, 4-pin	IS 512-43	996-09970
10 mm	PNP	M12 x 50 mm	Cable, 2 m, 3-wire	IS 512-04-S	996-51458
10 mm	NPN	M12 x 50 mm	Cable, 2 m, 3-wire	IS 512-03-S	996-51472