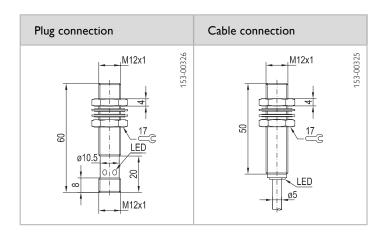
Inductive sensor with expanded switching distance

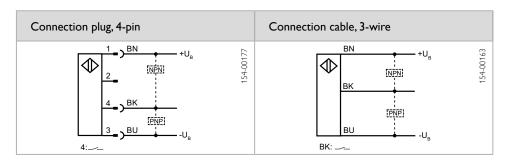


CE



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, le	≤ 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)	
		Type of connection	See Selection Table	
Switching output, Q	PNP / NPN (see Selection Table)	Ambient temperature: operation	-25 +70 °C	
Output function	N.O.	Vibration and impact resistance	IEC 60947-5-2 / 7.4	
Switching frequency, f (ti/tp 1:1)	≤ 800 Hz	·		

 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



Switching distance	Switching output	Dimensions	Type of connection	Part number	Article number
6 mm	PNP	M12 × 60 mm	Plug, M12×1, 4-pin	IS 512-42	996-09969
6 mm	NPN	M12 x 60 mm	Plug, M12x1, 4-pin	IS 512-41	996-09968
6 mm	PNP	M12 x 50 mm	Cable, 2 m, 3-wire	IS 512-02	996-09421
6 mm	NPN	M12 x 50 mm	Cable, 2 m, 3-wire	IS 512-01	996-09420

Inductive sensor with expanded switching distance

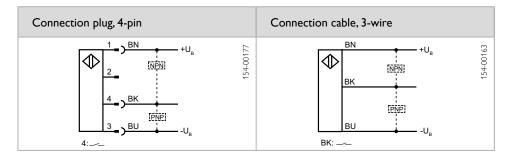


CE

Plug connection	Cable connection	
M12x1 M12x1 M12x1 M12x1	M12x1	

Sensor data		Functions		
Switching distance Repeatability Hysteresis Reduction factor, Al Reduction factor, Cu Reduction factor, V2A Reduction factor, steel FE 360 Reduction factor, brass	10 mm ≤ 0.3 mm ¹ ≤ 10 % ² 0.49 0.45 0.77 1.00 0.56	Indicator LED, yellow	Switching output indicator	
Electrical data		Mechanical data		
Operating voltage, +U _B No-load current, I _O Output current, Ie Voltage drop, U _D Protective circuits Switching output, Q Output function Switching frequency, f (ti/tp 1:1)	10 30 V DC³ ≤ 10 mA ≤ 200 mA ≤ 2 V at 200 mA Reverse-polarity protection, U _B / short-circuit protection (Q) / induction protection PNP / NPN (see Selection Table) N.O. ≤ 400 Hz	Dimensions Enclosure rating Mounting Material, housing Material, front surface Type of connection Ambient temperature: operation Vibration and impact resistance	See Selection Table IP 67 ⁴ Non-flush Brass, chrome-plated PBTP (PPS) See Selection Table -25 +70 °C IEC 60947-5-2 / 7.4	

 1 U $_{B}$ = 20 ... 30 V DC, T_{A} = 23 °C \pm 5 °C $^{-2}$ Refers to switching distance $^{-3}$ Max. 20 % ripple, within U $_{B}$ $^{-4}$ With connected IP 67 plug



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