Inductive sensor with expanded switching distance



CE

Plug connection	Cable connection
M18x1 016.4 0 0 LED M12x1	M18x1 95 ED

Sensor data		Functions		
Switching distance Repeatability Hysteresis Reduction factor, Al Reduction factor, Cu Reduction factor, V2A Reduction factor, steel FE 360 Reduction factor, brass	12 mm 0.6 mm¹ ≤ 10 %² 0.26 0.20 0.63 1.00 0.33	Indicator LED, yellow	Switching output indicator	
Electrical data		Mechanical data		
Operating voltage, +U _B No-load current, I ₀	10 30 V DC ³ ≤ 10 mA	Dimensions Mounting	See Selection Table Quasi-flush	
Output current, le Voltage drop, U _D	≤ 200 mA ≤ 2 V at 200 mA	Enclosure rating Material, housing	IP 67 ⁴ Brass, chrome-plated	
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q) / induction protection	Material, front surface Type of connection	PBTP 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)	≤ 500 Hz			

 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

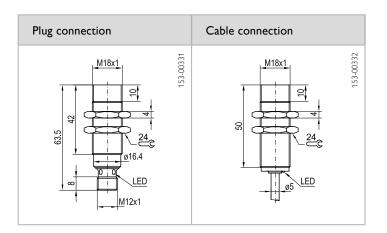
Connection plug, 4-pin	Connection cable, 3-wire
1 DBN +U _n 2 NBN +U _n 4 DBK -U _n 4 DBK -U _n	BN +U _a +U _b +U _b +U _b +V

Switching distance	Switching output	Dimensions	Type of connection	Part number	Article number
12 mm	PNP	M18 × 63.5 mm	Plug, M12×1, 4-pin	IS 518-42	996-09973
12 mm	NPN	M18 × 63.5 mm	Plug, M12x1, 4-pin	IS 518-41	996-09972
12 mm	PNP	M18 × 50 mm	Cable, 2 m, 3-wire	IS 518-02	996-09429
12 mm	NPN	M18 x 50 mm	Cable, 2 m, 3-wire	IS 518-01	996-09428





CE



Sensor data		Functions		
Switching distance Reduction factor, Al Reduction factor, Cu Reduction factor, V2A	20 mm 0.40 0.35 0.66	Indicator LED, yellow	Switching output indicator	
Electrical data		Mechanical data		
Operating voltage, +U _B	10 30 V DC ¹	Dimensions	See Selection Table	
No-load current, I ₀	≤ 10 mA	Mounting	Non-flush	
Output current, le	≤ 200 mA	Enclosure rating	IP 67 ²	
Voltage drop, U _D	≤ 2 V at 200 mA	Material, housing	Brass, nickel-plated	
Protective circuits	Short-circuit protection (Q) /	Type of connection	See Selection Table	
	overload protection	Ambient temperature: operation	-25 +70 °C	
Power On Delay	100 ms			
Switching output, Q	PNP / NPN (see Selection Table)			
Output function	N.O.			
Switching frequency, f (ti/tp 1:1)	≤ 200 Hz			

 $^{^{1}}$ Max. 20 % ripple, within $\rm U_{B}$ 2 With connected IP 67 plug

Connection plug, 4-pin	Connection cable, 3-wire
1 BN +U _n 2 BN +U _n 4 3 BK -U _n 4:	BN +U _a 20,000+51

Switching distance	Switching output	Dimensions	Type of connection	Part number	Article number
20 mm	PNP	M18 × 63.5 mm	Plug, M12x1, 4-pin Plug, M12x1, 4-pin Cable, 3-wire	IS 518-44-S	996-51453
20 mm	NPN	M18 × 63.5 mm		IS 518-43-S	996-50327
20 mm	PNP	M18 × 50 mm		IS 518-04-S	996-51450