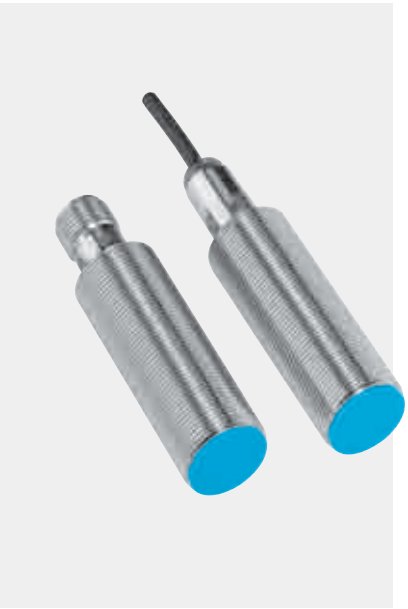
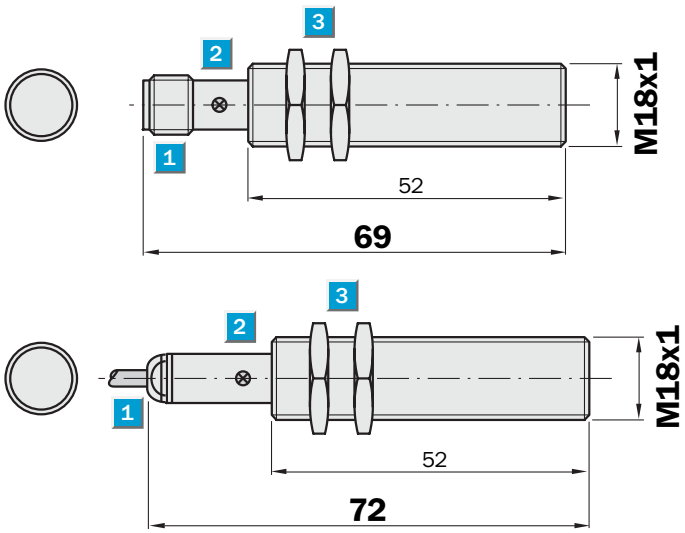
Sensing range 5 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation flush

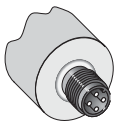
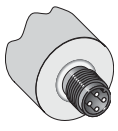
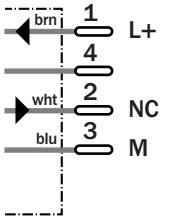
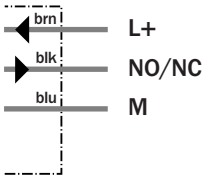
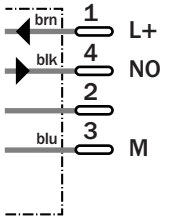


Dimensional drawing



1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-05BN0ZC0S IME18-05BPSZC0S	IME18-05BN0ZW2S IME18-05BNSZW2S IME18-05BP0ZW2S IME18-05BPSZW2S	IME18-05BNSZC0S IME18-05BPSZ0S
		
M12, 4-pin	3 x 0.25 mm²	M12, 4-pin
		

Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	05BNO ZC0S	05BNO ZW2S	05BNS ZC0S	05BNS ZW2S	05BPS ZC0S	05BPO ZW2S	05BPS Z0S	05BPS ZW2S
Sensing range S_n	5 mm	■	■	■	■	■	■	■	■
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■
Supply voltage V_s	DC 10 ... 30 V	■	■	■	■	■	■	■	■
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■
Switching output	NPN	■	■	■	■				
	PNP					■	■	■	■
Output function	Normally closed	■	■			■	■		
	Normally open			■	■			■	■
Installation	Flush	■	■	■	■	■	■	■	■
Connection type	Connector, M12, 4-pin	■		■		■		■	
	Cable, PVC, 2 m		■		■		■		■
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■
Reverse polarity protection	✓	■	■	■	■	■	■	■	■
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■
Tightening torque	40 Nm	■	■	■	■	■	■	■	■

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

Ordering information

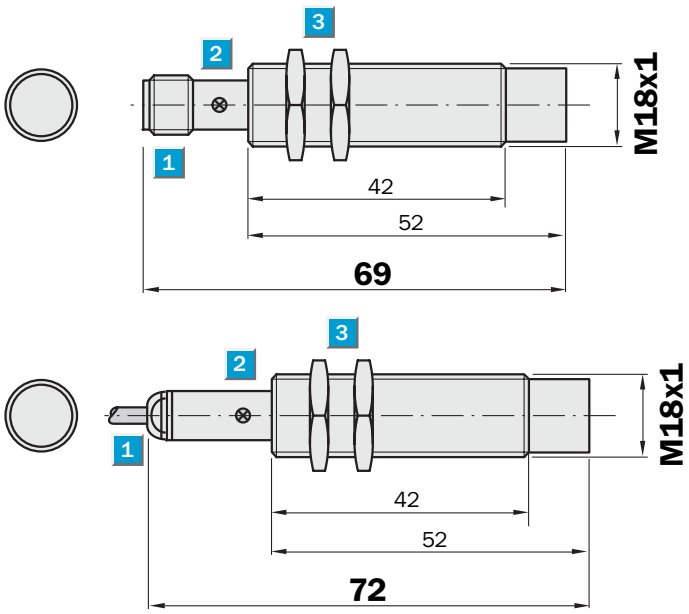
Type	Part Number
IME18-05BN0ZC0S	1 040 946
IME18-05BN0ZW2S	1 040 948
IME18-05BNSZC0S	1 040 942
IME18-05BNSZW2S	1 040 944
IME18-05BPSZC0S	1 040 938
IME18-05BP0ZW2S	1 040 940
IME18-05BPSZ0S	1 040 934
IME18-05BPSZW2S	1 040 936

Sensing range 8 mm

Inductive sensor

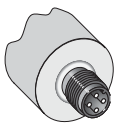
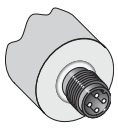
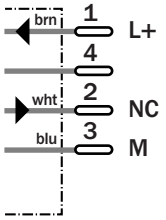
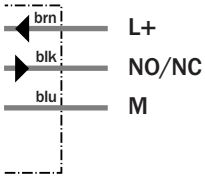
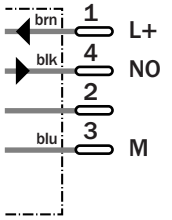
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation non-flush

Dimensional drawing



1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-08NN0ZC0S IME18-08NP0ZC0S	IME18-08NN0ZW2S IME18-08NNSZW2S IME18-08NP0ZW2S IME18-08NPSZW2S	IME18-08NNSZC0S IME18-08NPSZC0S
		
M12, 4-pin	3 x 0.25 mm²	M12, 4-pin
		
brn 1 L+ 4 wht 2 NC blu 3 M	brn L+ blk NO/NC blu M	brn 1 L+ blk 4 NO 2 blu 3 M

Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	08NN 0ZC0S	08NNO ZW2S	08NNS ZC0S	08NNS ZW2S	08NPO ZC0S	08NPO ZW2S	08NPS ZC0S	08NPS ZW2S
Sensing range S_n	8 mm	■	■	■	■	■	■	■	■
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■
Supply voltage V_s	DC 10 ... 30 V	■	■	■	■	■	■	■	■
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■
Switching output	NPN	■	■	■	■				
	PNP					■	■	■	■
Output function	Normally closed	■	■			■	■		
	Normally open			■	■			■	■
Installation	Non-flush	■	■	■	■	■	■	■	■
Connection type	Connector, M12, 4-pin	■		■		■		■	
	Cable, PVC, 2 m		■		■		■		■
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■
Reverse polarity protection	✓	■	■	■	■	■	■	■	■
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■
Tightening torque	40 Nm	■	■	■	■	■	■	■	■

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

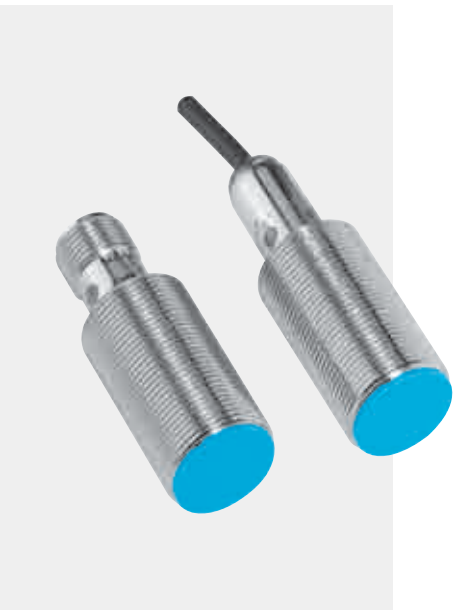
The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

Ordering information	
Type	**Part Number**
IME18-08NNOZC0S	1 040 962
IME18-08NNOZW2S	1 040 964
IME18-08NNSZC0S	1 040 958
IME18-08NNSZW2S	1 040 960
IME18-08NPOZC0S	1 040 954
IME18-08NPOZW2S	1 040 956
IME18-08NPSZC0S	1 040 950
IME18-08NPSZW2S	1 040 952

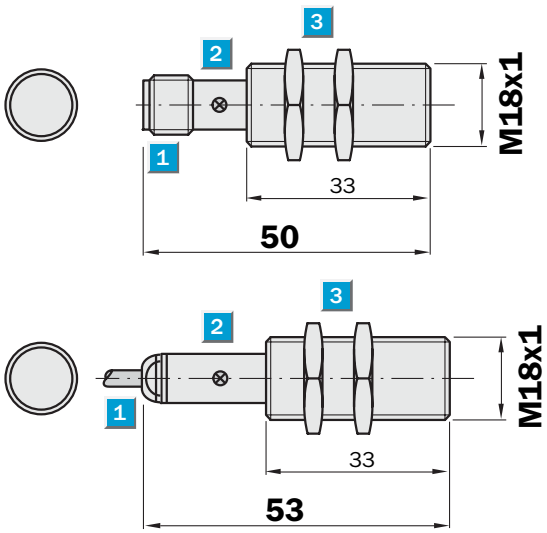
Sensing range
5 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation flush

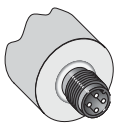
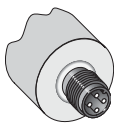
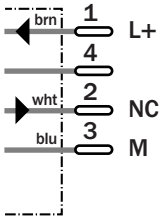
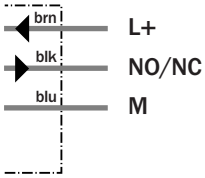
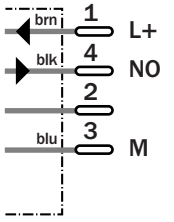


Dimensional drawing



1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-05BNOZC0K IME18-05BPOZC0K	IME18-05BNOZW2K IME18-05BNSZW2K IME18-05BPOZW2K IME18-05BPSZW2K	IME18-05BNSZC0K IME18-05BPSZC0K
		
M12, 4-pin	3 x 0.25 mm²	M12, 4-pin
		
brn 1 L+ 4 wht 2 NC blu 3 M	brn L+ blk NO/NC blu M	brn 1 L+ blk 4 NO 2 blu 3 M

Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	05BNO ZC0K	05BNO ZW2K	05BNS ZC0K	05BNS ZW2K	05BPO ZC0K	05BPO ZW2K	05BPS ZC0K	05BPS ZW2K
Sensing range S_n	5 mm	■	■	■	■	■	■	■	■
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■
Supply voltage V_s	DC 10 ... 30 V	■	■	■	■	■	■	■	■
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■
Switching output	NPN	■	■	■	■				
	PNP					■	■	■	■
Output function	Normally closed	■	■			■	■		
	Normally open			■	■			■	■
Installation	Flush	■	■	■	■	■	■	■	■
Connection type	Connector, M12, 4-pin	■		■		■		■	
	Cable, PVC, 2 m		■		■		■		■
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■
Reverse polarity protection	✓	■	■	■	■	■	■	■	■
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■
Tightening torque	40 Nm	■	■	■	■	■	■	■	■

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

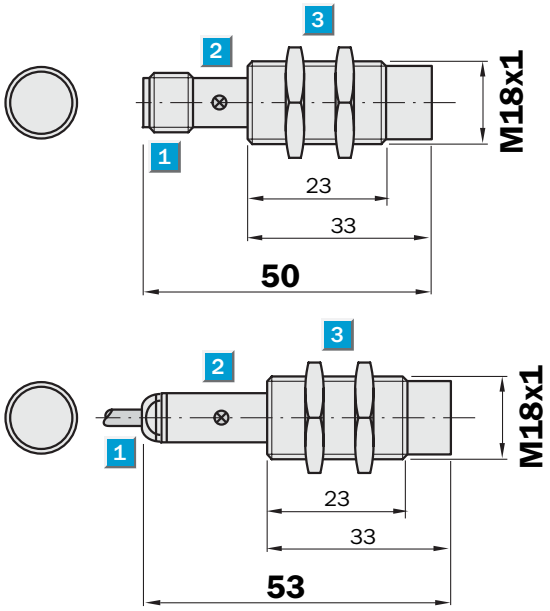
Ordering information	
Type	**Part Number**
IME18-05BNOZC0K	1 040 945
IME18-05BNOZW2K	1 040 947
IME18-05BNSZC0K	1 040 941
IME18-05BNSZW2K	1 040 943
IME18-05BPOZC0K	1 040 937
IME18-05BPOZW2K	1 040 939
IME18-05BPSZC0K	1 040 933
IME18-05BPSZW2K	1 040 935

Sensing range 8 mm

Inductive sensor

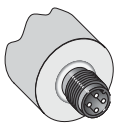
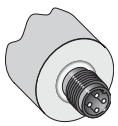
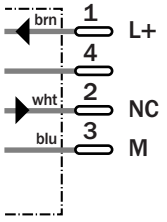
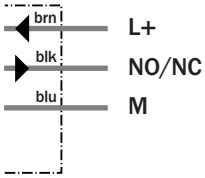
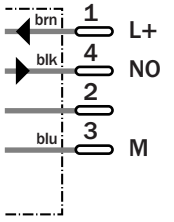
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation non-flush

Dimensional drawing



1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-08NNOZC0K IME18-08NPOZC0K	IME18-08NNOZW2K IME18-08NNSZW2K IME18-08NPOSZW2K IME18-08NPSZW2K	IME18-08NNSZC0K IME18-08NPSZC0K
		
M12, 4-pin	3 x 0.25 mm²	M12, 4-pin
		
brn 1 L+ 4 wht 2 NC blu 3 M	brn L+ blk NO/NC blu M	brn 1 L+ blk 4 NO 2 blu 3 M

Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	08NN 0ZC0K	08NNO ZW2K	08NNS ZC0K	08NNS ZW2K	08NPO ZC0K	08NPO SZW2K	08NPS ZC0K	08NPS ZW2K
Sensing range S_n	8 mm	■	■	■	■	■	■	■	■
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■
Supply voltage V_s	DC 10 ... 30 V	■	■	■	■	■	■	■	■
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■
Switching output	NPN	■	■	■	■				
	PNP					■	■	■	■
Output function	Normally closed	■	■			■	■		
	Normally open			■	■			■	■
Installation	Non-flush	■	■	■	■	■	■	■	■
Connection type	Connector, M12, 4-pin	■		■		■		■	
	Cable, PVC, 2 m		■		■		■		■
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■
Reverse polarity protection	✓	■	■	■	■	■	■	■	■
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■
Tightening torque	40 Nm	■	■	■	■	■	■	■	■

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

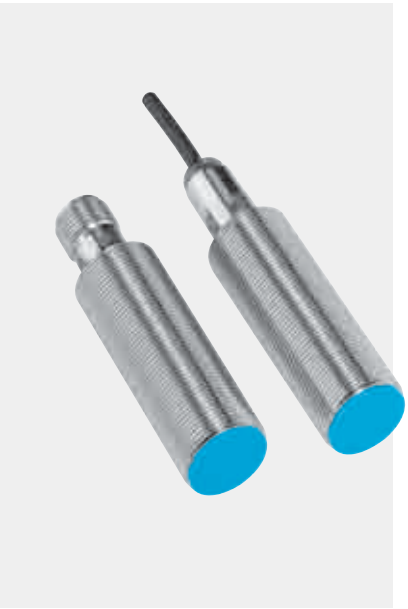
The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

Ordering information	
Type	**Part Number**
IME18-08NN0ZC0K	1 040 961
IME18-08NN0ZW2K	1 040 963
IME18-08NNSZC0K	1 040 957
IME18-08NNSZW2K	1 040 959
IME18-08NP0ZC0K	1 040 953
IME18-08NP0SZW2K	1 040 955
IME18-08NPSZC0K	1 040 949
IME18-08NPSZW2K	1 040 951

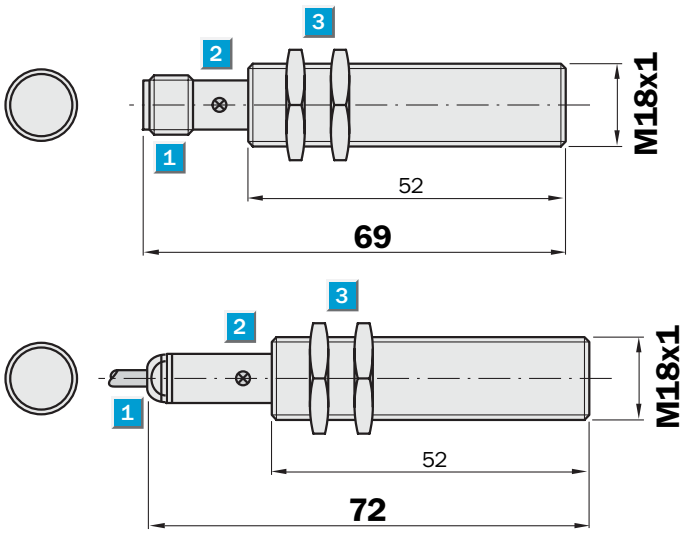
Sensing range 8 mm

Inductive sensor

- Enhanced sensing range
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation quasi flush

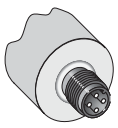
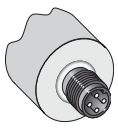
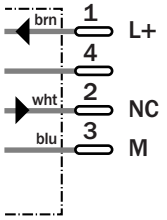
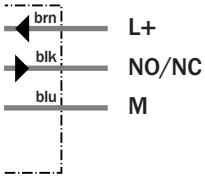
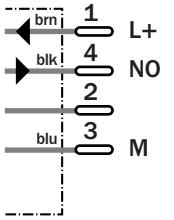


Dimensional drawing



1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-BN0ZC0S IME18-08BP0ZC0S	IME18-08BN0ZW2S IME18-08BNSZW2S IME18-08BP0ZW2S IME18-08BPSZW2S	IME18-08BNSZC0S IME18-08BPSZC0S
		
M12, 4-pin	3 x 0.25 mm²	M12, 4-pin
		

Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	BN0ZC 0S	08BNO ZW2S	08BNS ZC0S	08BNS ZW2S	08BPO ZC0S	08BPO ZW2S	08BPS ZC0S	08BPS ZW2S		
Sensing range S_n	8 mm	■	■	■	■	■	■	■	■		
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■		
Supply voltage V_S	DC 10 ... 30 V	■	■	■	■	■	■	■	■		
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■		
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■		
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■		
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■		
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■		
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■		
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■		
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■		
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■		
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■		
Switching output	NPN	■	■	■	■						
	PNP					■	■	■	■		
Output function	Normally closed	■	■			■	■				
	Normally open			■	■			■	■		
Installation	Quasi-flush	■	■	■	■	■	■	■	■		
Connection type	Connector, M12, 4-pin	■		■		■		■			
	Cable, PVC, 2 m		■		■		■		■		
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■		
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■		
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■		
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■		
Reverse polarity protection	✓	■	■	■	■	■	■	■	■		
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■		
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■		
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■		
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■		
Tightening torque	40 Nm	■	■	■	■	■	■	■	■		

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

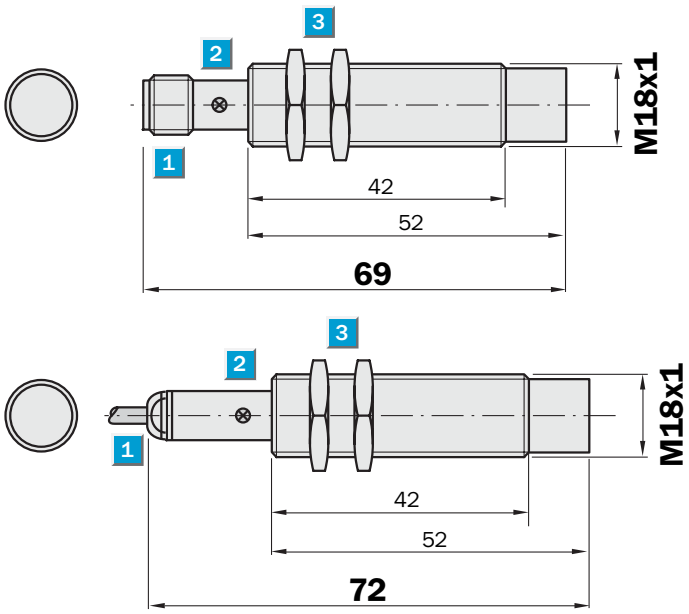
Ordering information	
Type	**Part Number**
IME18-BN0ZC0S	1 040 978
IME18-08BN0ZW2S	1 040 980
IME18-08BNSZC0S	1 040 974
IME18-08BNSZW2S	1 040 976
IME18-08BP0ZC0S	1 040 970
IME18-08BP0ZW2S	1 040 972
IME18-08BPSZC0S	1 040 966
IME18-08BPSZW2S	1 040 968

Sensing range 12 mm

Inductive sensor

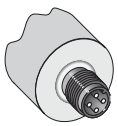
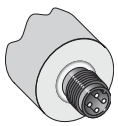
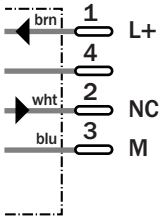
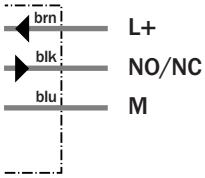
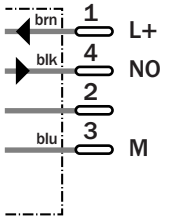
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation non-flush

Dimensional drawing



1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-12NNOZC0S IME18-12NPOZC0S	IME18-12NNOZW2S IME18-12NNSZW2S IME18-12NPOZW2S IME18-12NPSZW2S	IME18-12NNSZC0S IME18-12NPSZC0S
		
M12, 4-pin	3 x 0.25 mm²	M12, 4-pin
		

Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	12NN 0ZC0S	12NNO ZW2S	12NNS ZC0S	12NNS ZW2S	12NPO ZC0S	12NPO ZW2S	12NPS ZC0S	12NPS ZW2S		
Sensing range S_n	12 mm	■	■	■	■	■	■	■	■		
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■		
Supply voltage V_S	DC 10 ... 30 V	■	■	■	■	■	■	■	■		
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■		
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■		
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■		
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■		
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■		
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■		
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■		
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■		
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■		
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■		
Switching output	NPN	■	■	■	■						
	PNP					■	■	■	■		
Output function	Normally closed	■	■			■	■				
	Normally open			■	■			■	■		
Installation	Non-flush	■	■	■	■	■	■	■	■		
Connection type	Connector, M12, 4-pin	■		■		■		■			
	Cable, PVC, 2 m		■		■		■		■		
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■		
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■		
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■		
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■		
Reverse polarity protection	✓	■	■	■	■	■	■	■	■		
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■		
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■		
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■		
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■		
Tightening torque	40 Nm	■	■	■	■	■	■	■	■		

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

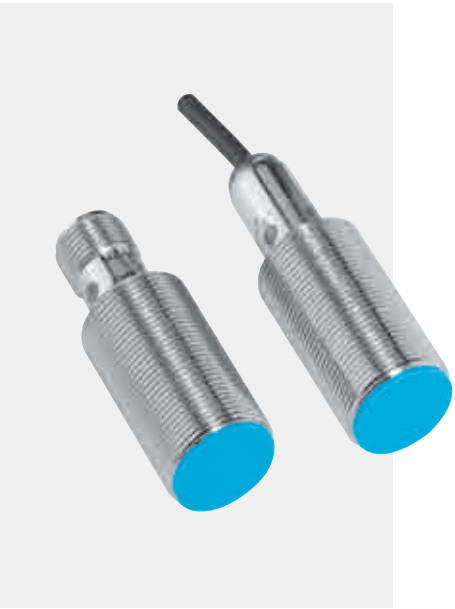
The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

Ordering information	
Type	**Part Number**
IME18-12NN0ZC0S	1 040 994
IME18-12NN0ZW2S	1 040 996
IME18-12NNSZC0S	1 040 990
IME18-12NNSZW2S	1 040 992
IME18-12NP0ZC0S	1 040 986
IME18-12NP0ZW2S	1 040 988
IME18-12NPSZC0S	1 040 982
IME18-12NPSZW2S	1 040 984

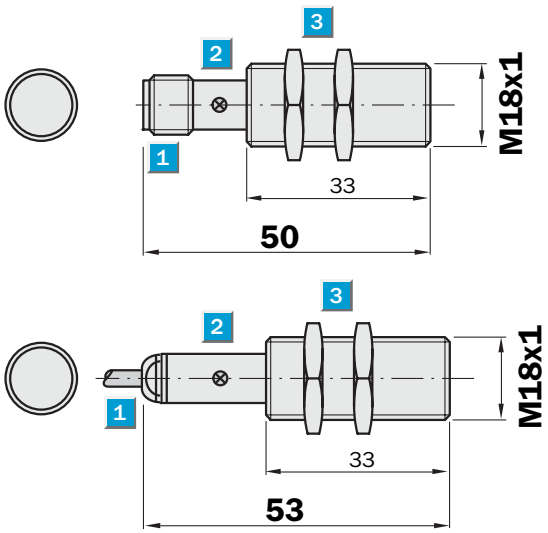
Sensing range 8 mm

Inductive sensor

- Enhanced sensing range
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation quasi flush

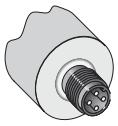
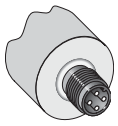
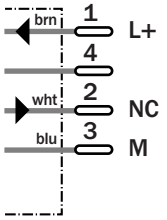
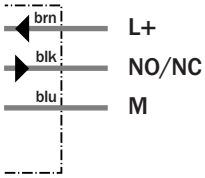
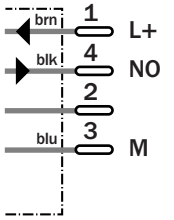


Dimensional drawing



1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-08BN0ZC0K IME18-08BP0ZC0K	IME18-08BN0ZW2K IME18-08BNSZW2K IME18-08BP0ZW2K IME18-08BPSZW2K	IME18-08BNSZC0K IME18-08BPSZC0K
		
M12, 4-pin	3 x 0.25 mm²	M12, 4-pin
		

Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	08BNO ZC0K	08BNO ZW2K	08BNS ZC0K	08BNS ZW2K	08BPO ZC0K	08BPO ZW2K	08BPS ZC0K	08BPS ZW2K
Sensing range S_n	8 mm	■	■	■	■	■	■	■	■
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■
Supply voltage V_s	DC 10 ... 30 V	■	■	■	■	■	■	■	■
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■
Switching output	NPN	■	■	■	■				
	PNP					■	■	■	■
Output function	Normally closed	■	■			■	■		
	Normally open			■	■			■	■
Installation	Quasi-flush	■	■	■	■	■	■	■	■
Connection type	Connector, M12, 4-pin	■		■		■		■	
	Cable, PVC, 2 m		■		■		■		■
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■
Reverse polarity protection	✓	■	■	■	■	■	■	■	■
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■
Tightening torque	40 Nm	■	■	■	■	■	■	■	■

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

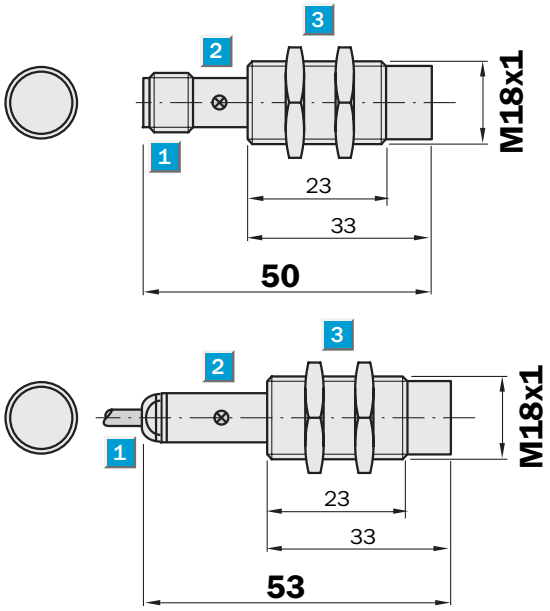
Ordering information	
Type	**Part Number**
IME18-08BNOZC0K	1 040 977
IME18-08BNOZW2K	1 040 979
IME18-08BNSZC0K	1 040 973
IME18-08BNSZW2K	1 040 975
IME18-08BPOZC0K	1 040 969
IME18-08BPOZW2K	1 040 971
IME18-08BPSZC0K	1 040 965
IME18-08BPSZW2K	1 040 967

Sensing range 12 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67
- Installation non-flush

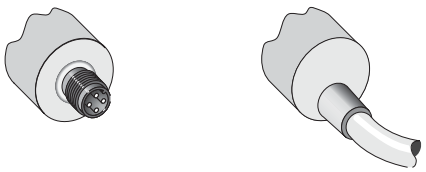
Dimensional drawing



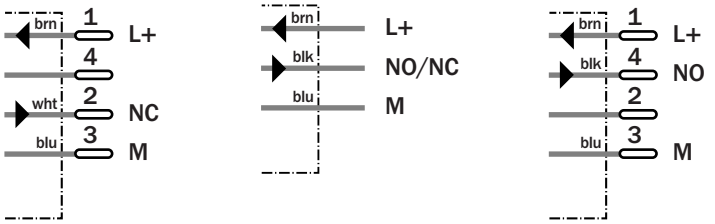
1 Connection
2 Display LED
3 Fastening nuts (2 x); width across 24, metal

Connection type

IME18-12NNOZC0K	IME18-12NNOZW2K	IME18-NNSZC0K
IME18-12NPOZC0K	IME18-12NNSZW2K	IME18-12NPSZC0K
	IME18-12NPOZW2K	
	IME18-12NPSZW2K	



M12, 4-pin	3 x 0.25 mm²	M12, 4-pin



Accessories

Connector, M12, 4-pin
Mounting systems

Technical specifications	IME18-	12NN 0ZC0K	12NNO ZW2K	NNSZ C0K	12NNS ZW2K	12NPO ZC0K	12NPO ZW2K	12NPS ZC0K	12NPS ZW2K		
Sensing range S_n	12 mm	■	■	■	■	■	■	■	■		
Electrical configuration	DC 3-wire	■	■	■	■	■	■	■	■		
Supply voltage V_s	DC 10 ... 30 V	■	■	■	■	■	■	■	■		
Nominal voltage V_n	DC	■	■	■	■	■	■	■	■		
Ripple U_{pp}	≤ 10 %	■	■	■	■	■	■	■	■		
Voltage drop U_d	≤ 2 V[1]	■	■	■	■	■	■	■	■		
Power consumption	≤ 10 mA[2]	■	■	■	■	■	■	■	■		
Continuous current I_a	≤ 200 mA	■	■	■	■	■	■	■	■		
Time delay before availability t_v	≤ 100 ms	■	■	■	■	■	■	■	■		
Hysteresis H, of s_r	5 ... 15 %	■	■	■	■	■	■	■	■		
Repeatability R	≤ 2 % (U_b and T_a constant)[3]	■	■	■	■	■	■	■	■		
Temperature drift, of s_r	± 10 %	■	■	■	■	■	■	■	■		
EMC	According to EN 60947-5-2	■	■	■	■	■	■	■	■		
Switching output	NPN	■	■	■	■						
	PNP					■	■	■	■		
Output function	Normally closed	■	■			■	■				
	Normally open			■	■			■	■		
Installation	Non-flush	■	■	■	■	■	■	■	■		
Connection type	Connector, M12, 4-pin	■		■		■		■			
	Cable, PVC, 2 m		■		■		■		■		
Enclosure rating	IP 67[4]	■	■	■	■	■	■	■	■		
Max. switching frequency	300 Hz	■	■	■	■	■	■	■	■		
Dimensions	M18 x 1[5]	■	■	■	■	■	■	■	■		
Short-circuit protection	✓[6]	■	■	■	■	■	■	■	■		
Reverse polarity protection	✓	■	■	■	■	■	■	■	■		
Power-up pulse suppression	✓	■	■	■	■	■	■	■	■		
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm	■	■	■	■	■	■	■	■		
Ambient temperature T_a	-20 °C ... +65 °C	■	■	■	■	■	■	■	■		
Housing material	Brass nickel-plated, plastic	■	■	■	■	■	■	■	■		
Tightening torque	40 Nm	■	■	■	■	■	■	■	■		

[1] at I_a max
[2] without load
[3] of s_r
[4] according to EN 60529
[5] Thread diameter x pitch (mm)
[6] (pulsed)

Reduction factor R_M

The following are reference values, which may vary from type to type:	
St37 (Fe)	1
Stainless steal (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

Ordering information	
Type	**Part Number**
IME18-12NNOZC0K	1 040 993
IME18-12NNOZW2K	1 040 995
IME18-NNSZC0K	1 040 989
IME18-12NNSZW2K	1 040 991
IME18-12NPOZC0K	1 040 985
IME18-12NPOZW2K	1 040 987
IME18-12NPSZC0K	1 040 981
IME18-12NPSZW2K	1 040 983