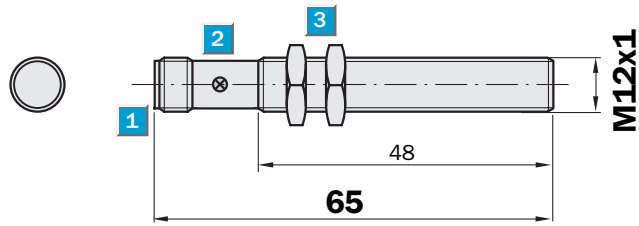


**Sensing range**  
2 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M12 x 1 mm
- Enclosure rating IP 67
- Installation flush

Dimensional drawing

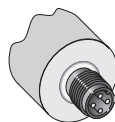


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 17, metal

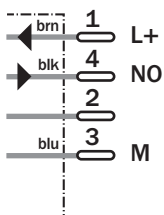


Connection type

- IME12-02BNSZC0SF38
- IME12-02BPSZC0SF38



M12, 4-pin



**Accessories**

Connector, M12, 4-pin

Mounting systems

Technical specifications		IME12-	02BNS ZC0S F38	02BPS ZC0S F38										
<b>Sensing range <math>S_n</math></b>	2 mm													
<b>Electrical configuration</b>	DC3-wire													
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V													
Ripple $U_{pp}$	$\leq 10\%$													
Voltage drop $U_d$	$\leq 2\text{ V}^{1)}$													
Power consumption	$\leq 10\text{ mA}^{2)}$													
<b>Continuous current <math>I_a</math></b>	$\leq 200\text{ mA}$													
Time delay before availability $t_v$	$\leq 100\text{ ms}$													
Hysteresis H, of $s_r$	5 ... 15 %													
Repeatability R	$\leq 2\%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>													
Temperature drift, of $s_r$	$\pm 10\%$													
EMC	According to EN 60947-5-2													
<b>Switching output</b>	NPN													
	PNP													
<b>Output function</b>	Normally open													
<b>Installation</b>	Flush													
<b>Connection type</b>	Connector, M12, 4-pin													
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>													
Max. switching frequency	2000 Hz													
Dimensions	M12 x 1 <sup>5)</sup>													
<b>Short-circuit protection</b>	✓ <sup>6)</sup>													
<b>Reverse polarity protection</b>	✓													
<b>Power-up pulse suppression</b>	✓													
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm													
Ambient temperature $T_a$	-25 °C ... +75 °C													
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)													
Tightening torque	Typ. 12 Nm													
<b>Approvals</b>														
Protection class	<input type="checkbox"/>													
UL approval	cULus Listed													

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

**Reduction factor  $R_M$**

The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

**Ordering information**

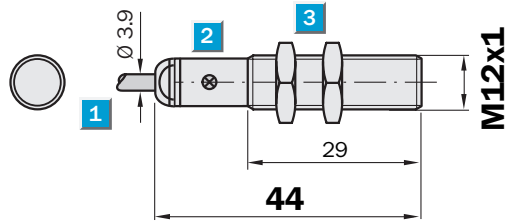
Type	Part Number
IME12-02BNSZC0SF38	7018238
IME12-02BPSZC0SF38	7018231

**Sensing range**  
2 mm

Inductive sensor

- Short circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M12 x 1 mm
- Enclosure rating IP 67
- Installation flush

**Dimensional drawing**

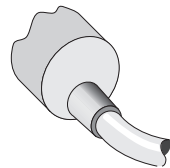


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 17, metal

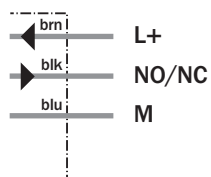


**Connection type**

- IME12-02BNSZW2KF38
- IME12-02BPSZW2KF38



3 x 0.25 mm<sup>2</sup>



**Accessories**

Mounting systems

Technical specifications		IME12-	02BNS ZW2K F38	02BPS ZW2K F38									
<b>Sensing range <math>S_n</math></b>	2 mm												
<b>Electrical configuration</b>	DC3-wire												
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V												
Ripple $U_{pp}$	$\leq 10 \%$												
Voltage drop $U_d$	$\leq 2 V^{1)}$												
Power consumption	$\leq 10 mA^{2)}$												
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$												
Time delay before availability $t_v$	$\leq 100 ms$												
Hysteresis H, of $s_r$	5 ... 15 %												
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>												
Temperature drift, of $s_r$	$\pm 10 \%$												
EMC	According to EN 60947-5-2												
<b>Switching output</b>	NPN												
	PNP												
<b>Output function</b>	Normally open												
<b>Installation</b>	Flush												
<b>Connection type</b>	Cable, PVC, 2 m												
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>												
Max. switching frequency	2000 Hz												
Dimensions	M12 x 1 <sup>5)</sup>												
<b>Short-circuit protection</b>	✓ <sup>6)</sup>												
<b>Reverse polarity protection</b>	✓												
<b>Power-up pulse suppression</b>	✓												
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm												
Ambient temperature $T_a$	-25 °C ... +75 °C												
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)												
Tightening torque	Typ. 12 Nm												
<b>Approvals</b>													
Protection class	<input type="checkbox"/>												
UL approval	cULus Listed												

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load  
<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529  
<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

#### Reduction factor $R_M$

The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

#### Ordering information

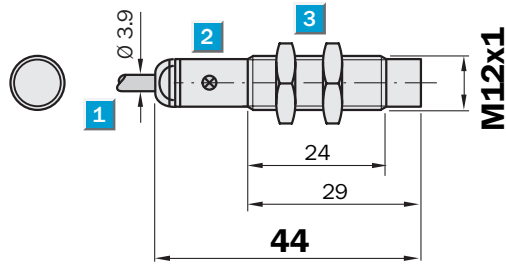
Type	Part Number
IME12-02BNSZW2KF38	7018229
IME12-02BPSZW2KF38	7018225

**Sensing range**  
4 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M12 x 1 mm
- Enclosure rating IP 67
- Installation non-flush

Dimensional drawing

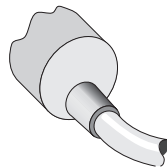


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 17, metal

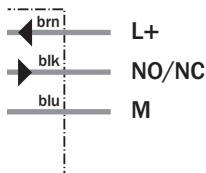


Connection type

- IME12-04NNSZW2KF38
- IME12-04NPSZW2KF38



3 x 0.25 mm<sup>2</sup>



Accessories

Mounting systems

Technical specifications		IME12-	04NNS ZW2K F38	04NPS ZW2K F38										
<b>Sensing range <math>S_n</math></b>	4 mm													
<b>Electrical configuration</b>	DC3-wire													
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V													
Ripple $U_{pp}$	$\leq 10 \%$													
Voltage drop $U_d$	$\leq 2 V^{1)}$													
Power consumption	$\leq 10 mA^{2)}$													
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$													
Time delay before availability $t_v$	$\leq 100 ms$													
Hysteresis H, of $s_r$	5 ... 15 %													
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>													
Temperature drift, of $s_r$	$\pm 10 \%$													
EMC	According to EN 60947-5-2													
<b>Switching output</b>	NPN													
	PNP													
<b>Output function</b>	Normally open													
<b>Installation</b>	Non-flush													
<b>Connection type</b>	Cable, PVC, 2 m													
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>													
Max. switching frequency	2000 Hz													
Dimensions	M12 x 1 <sup>5)</sup>													
<b>Short-circuit protection</b>	✓ <sup>6)</sup>													
<b>Reverse polarity protection</b>	✓													
<b>Power-up pulse suppression</b>	✓													
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm													
Ambient temperature $T_a$	-25 °C ... +75 °C													
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)													
Tightening torque	Typ. 12 Nm													
<b>Approvals</b>														
Protection class	<input type="checkbox"/>													
UL approval	cULus Listed													

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

#### Reduction factor $R_M$

The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

#### Ordering information

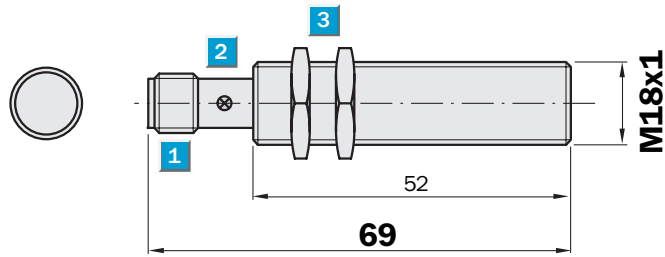
Type	Part Number
IME12-04NNSZW2KF38	7018250
IME12-04NPSZW2KF38	7018253

**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

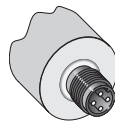


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 24, metal

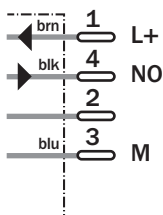


Connection type

- IME18-05BNSZC0SF38
- IME18-05BPSZC0SF38



M12, 4-pin



Accessories

- Connector, M12, 4-pin
- Mounting systems

Technical specifications		IME18-	05BNS ZCOS F38	05BPS ZCOS F38						
<b>Sensing range <math>S_n</math></b>	5 mm									
<b>Electrical configuration</b>	DC3-wire									
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V									
Nominal voltage $V_n$	DC									
Ripple $U_{pp}$	$\leq 10 \%$									
Voltage drop $U_d$	$\leq 2 V^{1)}$									
Power consumption	$\leq 10 mA^{2)}$									
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$									
Time delay before availability $t_v$	$\leq 100 ms$									
Hysteresis H, of $s_r$	5 ... 15 %									
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>									
Temperature drift, of $s_r$	$\pm 10 \%$									
EMC	According to EN 60947-5-2									
<b>Switching output</b>	NPN									
	PNP									
<b>Output function</b>	Normally open									
<b>Installation</b>	Flush									
<b>Connection type</b>	Connector, M12, 4-pin									
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>									
Max. switching frequency	1000 Hz									
Dimensions	M18 x 1 <sup>5)</sup>									
<b>Short-circuit protection</b>	$\checkmark^{6)}$									
<b>Reverse polarity protection</b>	$\checkmark$									
<b>Power-up pulse suppression</b>	$\checkmark$									
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm									
Ambient temperature $T_a$	-25 °C ... +75 °C									
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)									
Tightening torque	40 Nm									
<b>Approvals</b>										
Protection class	<input type="checkbox"/>									
UL approval	cULus Listed									

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

**Reduction factor  $R_M$**


The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

**Ordering information**

Type	Part Number
IME18-05BNSZC0SF38	7018235
IME18-05BPSZC0SF38	7018244

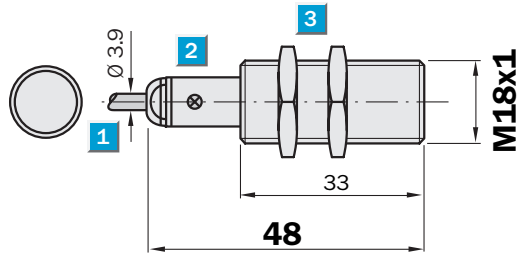


 **Sensing range**  
5 mm

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

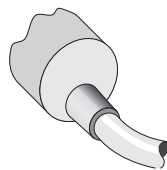


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 24, metal

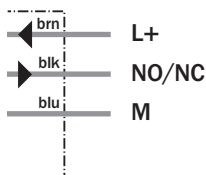


Connection type

- IME18-05BNSZW2KF38
- IME18-05BPSZW2KF38



3 x 0.25 mm<sup>2</sup>



Accessories  
Mounting systems

Technical specifications		IME18-	05BNS ZW2K F38	05BPS ZW2K F38								
<b>Sensing range <math>S_n</math></b>	5 mm											
<b>Electrical configuration</b>	DC3-wire											
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V											
Nominal voltage $V_n$	DC											
Ripple $U_{pp}$	$\leq 10 \%$											
Voltage drop $U_d$	$\leq 2 V^1)$											
Power consumption	$\leq 10 mA^2)$											
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$											
Time delay before availability $t_v$	$\leq 100 ms$											
Hysteresis H, of $s_r$	5 ... 15 %											
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>											
Temperature drift, of $s_r$	$\pm 10 \%$											
EMC	According to EN 60947-5-2											
<b>Switching output</b>	NPN											
	PNP											
<b>Output function</b>	Normally open											
<b>Installation</b>	Flush											
<b>Connection type</b>	Cable, PVC, 2 m											
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>											
Max. switching frequency	1000 Hz											
Dimensions	M18 x 1 <sup>5)</sup>											
<b>Short-circuit protection</b>	✓ <sup>6)</sup>											
<b>Reverse polarity protection</b>	✓											
<b>Power-up pulse suppression</b>	✓											
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm											
Ambient temperature $T_a$	-25 °C ... +75 °C											
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)											
Tightening torque	40 Nm											
<b>Approvals</b>												
Protection class	<input type="checkbox"/>											
UL approval	cULus Listed											

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)


#### Reduction factor $R_M$

The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

#### Ordering information

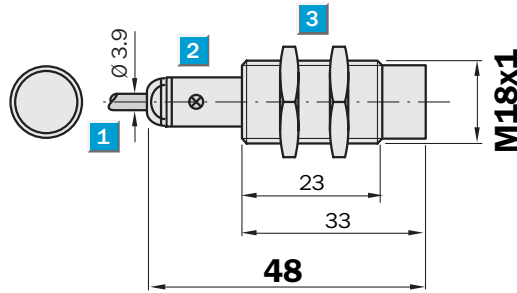
Type	Part Number
IME18-05BNSZW2KF38	7018222
IME18-05BPSZW2KF38	7018213

 **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



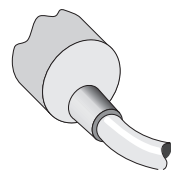
- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 24, metal



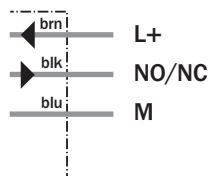
Connection type

IME18-08NNSZW2KF38

IME18-08NPSZW2KF38



3 x 0.25 mm<sup>2</sup>



Accessories

Mounting systems

Technical specifications		IME18-	08NNS ZW2K F38	08NPS ZW2K F38										
<b>Sensing range <math>S_n</math></b>	8 mm													
<b>Electrical configuration</b>	DC3-wire													
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V													
Nominal voltage $V_n$	DC													
Ripple $U_{pp}$	$\leq 10 \%$													
Voltage drop $U_d$	$\leq 2 V^{1)}$													
Power consumption	$\leq 10 mA^{2)}$													
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$													
Time delay before availability $t_v$	$\leq 100 ms$													
Hysteresis H, of $s_r$	5 ... 15 %													
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>													
Temperature drift, of $s_r$	$\pm 10 \%$													
EMC	According to EN 60947-5-2													
<b>Switching output</b>	NPN													
	PNP													
<b>Output function</b>	Normally open													
<b>Installation</b>	Non-flush													
<b>Connection type</b>	Cable, PVC, 2 m													
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>													
Max. switching frequency	1000 Hz													
Dimensions	M18 x 1 <sup>5)</sup>													
<b>Short-circuit protection</b>	✓ <sup>6)</sup>													
<b>Reverse polarity protection</b>	✓													
<b>Power-up pulse suppression</b>	✓													
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm													
Ambient temperature $T_a$	-25 °C ... +75 °C													
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)													
Tightening torque	40 Nm													
<b>Approvals</b>														
Protection class	<input type="checkbox"/>													
UL approval	cULus Listed													

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

#### Reduction factor $R_M$

The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

#### Ordering information

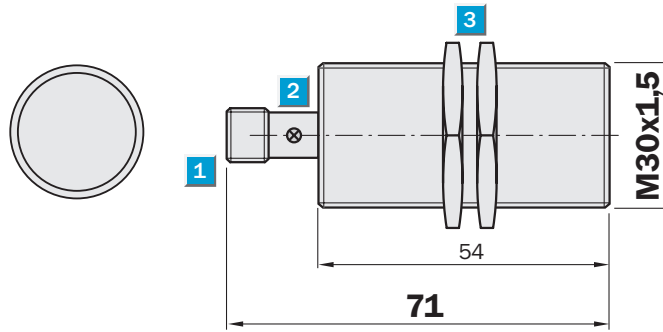
Type	Part Number
IME18-08NNSZW2KF38	7018257
IME18-08NPSZW2KF38	7018266

**Sensing range**  
10 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M30 x 1.5 mm
- Enclosure rating IP 67
- Installation flush

Dimensional drawing

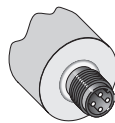


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, metal

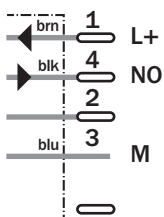


Connection type

- IME30-10BNSZC0SF38
- IME30-10BPSZC0SF38



M12, 4-pin



<b>Accessories</b>
Connector, M12, 4-pin
Mounting systems

Technical specifications		IME30-	10BNS ZCOS F38	10BPS ZCOS F38										
<b>Sensing range <math>S_n</math></b>	10 mm													
<b>Electrical configuration</b>	DC3-wire													
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V													
Nominal voltage $V_n$	DC													
Ripple $U_{pp}$	$\leq 10 \%$													
Voltage drop $U_d$	$\leq 2 V^{1)}$													
Power consumption	$\leq 10 mA^{2)}$													
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$													
Time delay before availability $t_v$	$\leq 125 ms$													
Hysteresis H, of $s_r$	5 ... 15 %													
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>													
Temperature drift, of $s_r$	$\pm 10 \%$													
EMC	According to EN 60947-5-2													
<b>Switching output</b>	NPN													
	PNP													
<b>Output function</b>	Normally open													
<b>Installation</b>	Flush													
<b>Connection type</b>	Connector, M12, 4-pin													
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>													
Max. switching frequency	500 Hz													
Dimensions	M30 x 1.5 <sup>5)</sup>													
<b>Short-circuit protection</b>	✓ <sup>6)</sup>													
<b>Reverse polarity protection</b>	✓													
<b>Power-up pulse suppression</b>	✓													
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm													
Ambient temperature $T_a$	-25 °C ... +75 °C													
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)													
Tightening torque	100 Nm													
<b>Approvals</b>														
Protection class	<input type="checkbox"/>													
UL approval	cULus Listed													

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

### Reduction factor $R_M$

The following are reference values, which may vary from type to type:


St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

### Installation note

Mounting based on non-ferromagnetic materials

### Ordering information

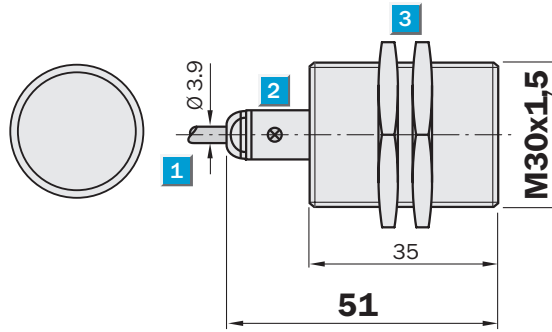
Type	Part Number
IME30-10BNSZCOSF38	7018247
IME30-10BPSZCOSF38	7018241

 **Sensing range**  
**10 mm**

**Inductive sensor**

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M30 x 1.5 mm
- Enclosure rating IP 67
- Installation flush

**Dimensional drawing**

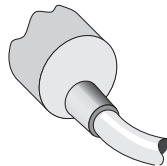


- 1** Connection
- 2** Display LED
- 3** Fastening nuts (2 x); width across 36, metal

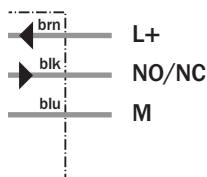


**Connection type**

- IME30-10BNSZW2KF38
- IME30-10BPSZW2KF38



3 x 0.5 mm<sup>2</sup>



**Accessories**  
Mounting systems

Technical specifications		IME30-	10BNS ZW2K F38	10BPS ZW2K F38										
<b>Sensing range <math>S_n</math></b>	10 mm													
<b>Electrical configuration</b>	DC3-wire													
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V													
Nominal voltage $V_n$	DC													
Ripple $U_{pp}$	$\leq 10 \%$													
Voltage drop $U_d$	$\leq 2 V^{1)}$													
Power consumption	$\leq 10 mA^{2)}$													
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$													
Time delay before availability $t_v$	$\leq 125 ms$													
Hysteresis H, of $s_r$	5 ... 15 %													
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>													
Temperature drift, of $s_r$	$\pm 10 \%$													
EMC	According to EN 60947-5-2													
<b>Switching output</b>	NPN													
	PNP													
<b>Output function</b>	Normally open													
<b>Installation</b>	Flush													
<b>Connection type</b>	Cable, PVC, 2 m													
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>													
Max. switching frequency	500 Hz													
Dimensions	M30 x 1.5 <sup>5)</sup>													
<b>Short-circuit protection</b>	✓ <sup>6)</sup>													
<b>Reverse polarity protection</b>	✓													
<b>Power-up pulse suppression</b>	✓													
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm													
Ambient temperature $T_a$	-25 °C ... +75 °C													
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)													
Tightening torque	100 Nm													
<b>Approvals</b>														
Protection class	<input type="checkbox"/>													
UL approval	cULus Listed													

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

### Reduction factor $R_M$

The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

### Installation note

Mounting based on non-ferromagnetic materials

### Ordering information

Type	Part Number
IME30-10BNSZW2KF38	7018219
IME30-10BPSZW2KF38	7018216

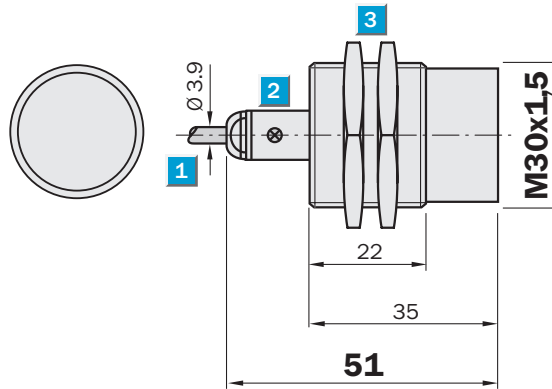


**Sensing range**  
15 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M30 x 1.5 mm
- Enclosure rating IP 67
- Installation non-flush

Dimensional drawing

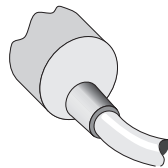


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, metal

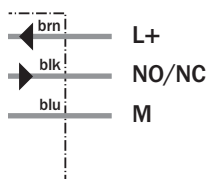


Connection type

- IME30-15NNSZW2KF38
- IME30-15NPSZW2KF38



3 x 0.5 mm<sup>2</sup>



Accessories

Mounting systems

Technical specifications		IME30-	15NNS ZW2K F38	15NPS ZW2K F38										
<b>Sensing range <math>S_n</math></b>	15 mm													
<b>Electrical configuration</b>	DC3-wire													
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V													
Nominal voltage $V_n$	DC													
Ripple $U_{pp}$	$\leq 10 \%$													
Voltage drop $U_d$	$\leq 2 V^{1)}$													
Power consumption	$\leq 10 mA^{2)}$													
<b>Continuous current <math>I_a</math></b>	$\leq 200 mA$													
Time delay before availability $t_v$	$\leq 125 ms$													
Hysteresis H, of $s_r$	5 ... 15 %													
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>3)</sup>													
Temperature drift, of $s_r$	$\pm 10 \%$													
EMC	According to EN 60947-5-2													
<b>Switching output</b>	NPN													
	PNP													
<b>Output function</b>	Normally open													
<b>Installation</b>	Non-flush													
<b>Connection type</b>	Cable, PVC, 2 m													
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>													
Max. switching frequency	500 Hz													
Dimensions	M30 x 1.5 <sup>5)</sup>													
<b>Short-circuit protection</b>	✓ <sup>6)</sup>													
<b>Reverse polarity protection</b>	✓													
<b>Power-up pulse suppression</b>	✓													
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm													
Ambient temperature $T_a$	-25 °C ... +75 °C													
<b>Housing material</b>	Brass nickel-plated, plastic (PA6)													
Tightening torque	100 Nm													
<b>Approvals</b>														
Protection class	<input type="checkbox"/>													
UL approval	cULus Listed													

<sup>1)</sup> At  $I_a$  max  
<sup>2)</sup> Without load

<sup>3)</sup> Of  $s_r$   
<sup>4)</sup> According to EN 60529

<sup>5)</sup> Thread diameter x pitch (mm)  
<sup>6)</sup> (Pulsed)

### Reduction factor $R_M$

The following are reference values, which may vary from type to type:

St37 (Fe)	1
Stainless steel (V2A)	Approx. 0.8
Aluminum (solid)	Approx. 0.45
Copper (Cu)	Approx. 0.4

### Installation note

Mounting based on non-ferromagnetic materials

### Ordering information

Type	Part Number
IME30-15NNSZW2KF38	7018269
IME30-15NPSZW2KF38	7018263