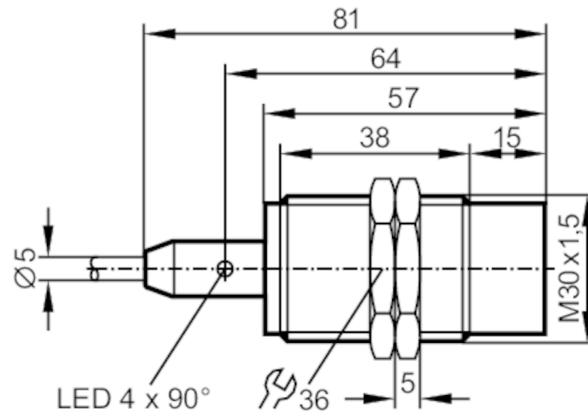




## Inductive sensor

IIK3022-BPKG/M/60V/6M/ZH



## Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	22
Housing	threaded type
Dimensions [mm]	M30 x 1.5 / L = 81

## Application

Special feature	Increased sensing range
Application	Use in mobile and harsh applications

## Electrical data

Operating voltage [V]	10...60 DC
Current consumption [mA]	< 10
Protection class	II
Reverse polarity protection	yes

## Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	200
Switching frequency DC [Hz]	100
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes



## Inductive sensor

IIK3022-BPKG/M/60V/6M/ZH

Detection zone		
Sensing range	[mm]	22
Real sensing range Sr	[mm]	22 ± 10 %
Operating distance	[mm]	0...17.82
Increased sensing range		yes
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.45 / copper: 0.35
Hysteresis	[% of Sr]	1...20
Switch point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	-40...85
Protection		IP 67; IP 69K
Tests / approvals		
EMC	automotive area	
	noise emission and noise interference according to the automotive directive 95/54/EC	E1 type approval
	noise immunity according to DIN ISO 11452-2	100 V/m
	conducted interference acc. to ISO 7637-2	
	pulse	1 2 3a 3b 4 5
	severity level	IV IV IV IV IV IV
	failure criterion	C C A A A C
	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-5 Surge	0,5 kV mains line to line
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / -20...50 °C
		50 sweep cycles per frequency; 1 octave per minute in 3 axes
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes / -40...85 °C
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes / -20...50 °C
Fast temperature change	EN 60068-2-14 Na	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)
MTTF	[years]	900
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	File number UL	E174191

# IIM211



## Inductive sensor

IIK3022-BPKG/M/60V/6M/ZH

Mechanical data	
Weight [g]	367.5
Housing	threaded type
Mounting	non-flush mountable
Dimensions [mm]	M30 x 1.5 / L = 81
Thread designation	M30 x 1.5
Materials	threaded sleeve: stainless steel; sensing face: LCP natural; LED window: PEI; lock nuts: brass

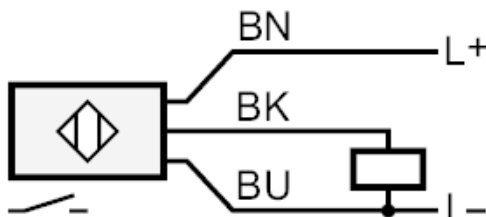
Displays / operating elements		
Display	switching status	4 x 90° LED, yellow

Accessories	
Accessories (supplied)	lock nuts: 2

Remarks	
Pack quantity	1 pcs.

Electrical connection	
Cable: 6 m, PUR; burning behaviour to ECE R118 rev. 2; 3 x 0.5 mm <sup>2</sup>	

### Connection



Core colours :

- BK = black
- BN = brown
- BU = blue