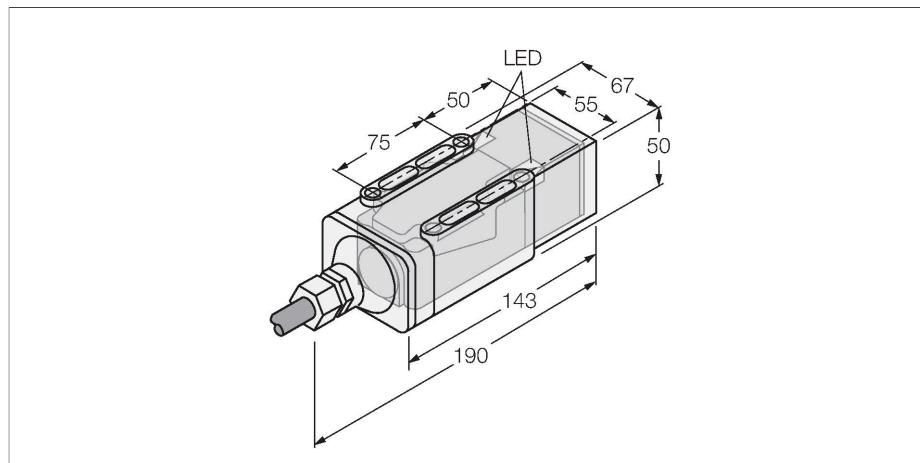


# NI35-CP40-VP4X2/S369-F 30M

## Inductive Sensor – For Underwater Applications



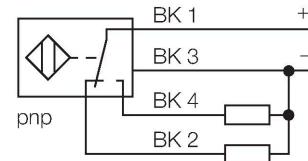
### Technical data

Type	NI35-CP40-VP4X2/S369-F 30M
ID	1569425
Special version	S369 Corresponds to: Ni / Bi...-CP40-..../ S369-F o. T: with XX m ÖLFLEX rugged 215C 4x0,5 sw1-sw4 in SG40/2 potted (F=Front; T=Top)
<b>General data</b>	
Rated switching distance	35 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times Sn)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage $U_B$	10...65 VDC
Ripple $U_{ss}$	$\leq 10\% U_{Bmax}$
DC rated operating current $I_o$	$\leq 200$ mA
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, PNP
Insulation class	□
Switching frequency	0.15 kHz

### Features

- Rectangular, height 67 mm
- UV and ozone resistance
- Plastic, Ultem
- Sensor potted in the housing
- Protection class IP68, 50 m water column
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Cable connection

### Wiring diagram



### Functional principle

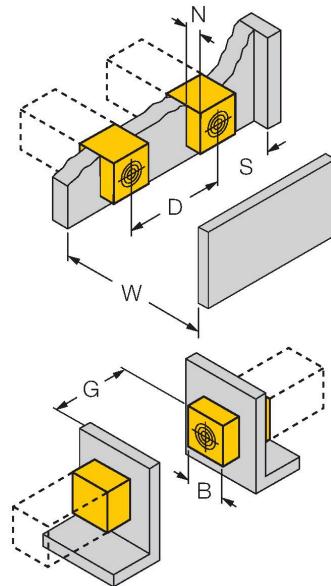
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

Mechanical data	
Design	Rectangular, CP40
Dimensions	190 x 67 x 50 mm
Housing material	Plastic, Ultem
Active area material	Plastic, Ultem
Electrical connection	Cable
Cable quality	Ø 6.6 mm, Ölflex rugged 215C, TPE, 30 m
Core cross-section	4 x 0.5 mm <sup>2</sup>
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
Power-on indication	2 x LEDs, Green
Switching state	2 x LEDs, Yellow

## Mounting instructions

### Mounting instructions/Description



Distance D	4.5 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	1 x B
Width active area	40 mm
B	