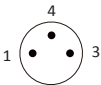


KH6.5 SERIES

ARTICLE PROPERTIES

<b>SENSOR TYPE</b>	Inductive sensor	<b>CONNECTION TYPES</b> (see table)	
<b>SIZE</b>	Ø 6.5 mm	• cable	PVC, 0.15 mm <sup>2</sup> , 2 m**
<b>RATED OPERATING DISTANCE</b>	see table	• M8 connector, A-coded	
<b>NUMBER OF CONDUCTORS</b>	2-wire / 3-wire (see table)		

\*\* other cable lengths are available on request

MECHANICAL DATA

<b>MOUNTING</b>	flush/non-flush (see table)
<b>HOUSING</b>	cylindrical
<b>MATERIAL HOUSING</b>	stainless steel
<b>MATERIAL SENSING SURFACE</b>	PBT
<b>TIGHTENING TORQUE LOCKING</b>	—
<b>STANDARD TEST</b>	FE360
<b>ATTENUATION COEFFICIENT</b>	St37 = 1, V2A = 0.7, Al = 0.3

ELECTRICAL DATA

<b>OPERATING VOLTAGE</b>	DC: 10 ... 30 V DC
<b>RATED OPERATING CURRENT</b>	2-wire: ≤ 100 mA 3-wire: ≤ 200 mA
<b>SWITCHING FREQUENCY</b>	see table
<b>SWITCHING OUTPUT</b>	see table
<b>FUNCTION INDICATOR</b>	yellow LED
<b>HYSTERESIS</b>	3 ... 15 %
<b>TEMPERATURE DRIFT</b>	±10 %
<b>SHORT-CIRCUIT PROTECTION</b>	yes
<b>OVERLOAD RESISTANCE</b>	yes
<b>REVERSE POLARITY PROTECTION</b>	yes

ENVIRONMENTAL CONDITIONS

<b>PROTECTION CLASS</b>	IP67	<b>VIBRATION RESISTANCE (EN 60068-2-27)</b>	55 Hz, 1 mm
<b>AMBIENT TEMPERATURE</b>	-25 ... 70 °C	<b>SHOCK RESISTANCE (EN 60068-2-6)</b>	30g/11 ms

STANDARDS AND DIRECTIVES

<b>LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR</b>	DIN EN IEC 60947-5-2:2021-04
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APPROVALS



## KH6.5 SERIES

## DC 2-WIRE OUTPUT CABLE

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi1.5-KH6.5-OD6L	flush	1.5 mm	DC NO (WD1)	1000 Hz	see Fig. 1
Fi1.5-KH6.5-CD6L	flush	1.5 mm	DC NC (WD2)	1000 Hz	see Fig. 1
Ni2-KH6.5-OD6L	non-flush	2 mm	DC NO (WD1)	1000 Hz	see Fig. 2
Ni2-KH6.5-CD6L	non-flush	2 mm	DC NC (WD2)	1000 Hz	see Fig. 2

## DC 2-WIRE OUTPUT M8 CONNECTOR

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi1.5-KH6.5-OD6L-Q8	flush	1.5 mm	DC NO (WD1)	1000 Hz	see Fig. 3
Fi1.5-KH6.5-CD6L-Q8	flush	1.5 mm	DC NC (WD2)	1000 Hz	see Fig. 3
Ni2-KH6.5-OD6L-Q8	non-flush	2 mm	DC NO (WD1)	1000 Hz	see Fig. 4
Ni2-KH6.5-CD6L-Q8	non-flush	2 mm	DC NC (WD2)	1000 Hz	see Fig. 4

## DC 3-WIRE OUTPUT CABLE

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi1.5-KH6.5-OP6L	flush	1.5 mm	PNP NO (WD7)	1000 Hz	see Fig. 1
Fi1.5-KH6.5-ON6L	flush	1.5 mm	NPN NO (WD8)	1000 Hz	see Fig. 1
Fi1.5-KH6.5-CP6L	flush	1.5 mm	PNP NC (WD9)	1000 Hz	see Fig. 1
Fi1.5-KH6.5-CN6L	flush	1.5 mm	NPN NC (WD10)	1000 Hz	see Fig. 1
Ni2-KH6.5-OP6L	non-flush	2 mm	PNP NO (WD7)	1000 Hz	see Fig. 2
Ni2-KH6.5-ON6L	non-flush	2 mm	NPN NO (WD8)	1000 Hz	see Fig. 2
Ni2-KH6.5-CP6L	non-flush	2 mm	PNP NC (WD9)	1000 Hz	see Fig. 2
Ni2-KH6.5-CN6L	non-flush	2 mm	NPN NC (WD10)	1000 Hz	see Fig. 2

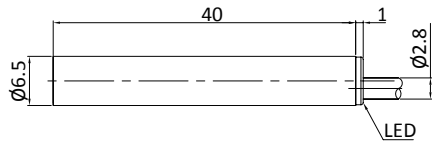
## DC 3-WIRE OUTPUT M8 CONNECTOR

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi1.5-KH6.5-OP6L-Q8	flush	1.5 mm	PNP NO (WD7)	1000 Hz	see Fig. 3
Fi1.5-KH6.5-ON6L-Q8	flush	1.5 mm	NPN NO (WD8)	1000 Hz	see Fig. 3
Fi1.5-KH6.5-CP6L-Q8	flush	1.5 mm	PNP NC (WD9)	1000 Hz	see Fig. 3
Fi1.5-KH6.5-CN6L-Q8	flush	1.5 mm	NPN NC (WD10)	1000 Hz	see Fig. 3
Ni2-KH6.5-OP6L-Q8	non-flush	2 mm	PNP NO (WD7)	1000 Hz	see Fig. 4
Ni2-KH6.5-ON6L-Q8	non-flush	2 mm	NPN NO (WD8)	1000 Hz	see Fig. 4
Ni2-KH6.5-CP6L-Q8	non-flush	2 mm	PNP NC (WD9)	1000 Hz	see Fig. 4
Ni2-KH6.5-CN6L-Q8	non-flush	2 mm	NPN NC (WD10)	1000 Hz	see Fig. 4

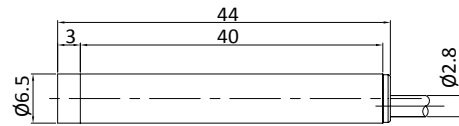
KH6.5 SERIES

DIMENSIONS

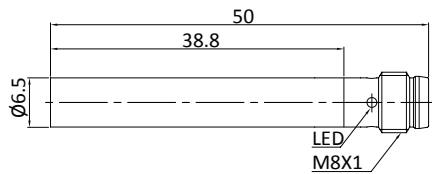
**Fig. 1** Inductive sensor with cable (flush)



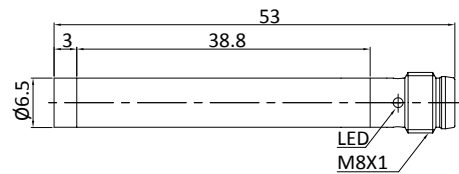
**Fig. 2** Inductive sensor with cable (non-flush)



**Fig. 3** Inductive sensor with M8 connector (flush)



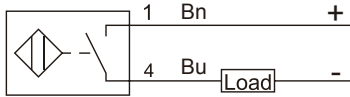
**Fig. 4** Inductive sensor with M8 connector (non-flush)



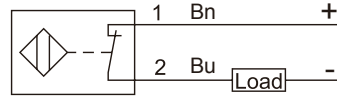
KH6.5 SERIES

WIRING DIAGRAMS (Note: 1 / 2 / 3 / 4 connector and terminals pin number Bn / Bu / Wh / Bk cable color)

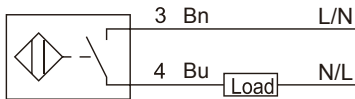
**WD1 DC 2-wire NO**



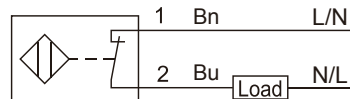
**WD2 DC 2-wire NC**



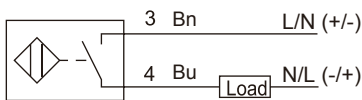
**WD3 AC 2-wire NO**



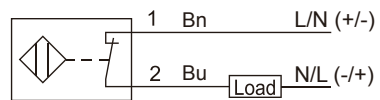
**WD4 AC 2-wire NC**



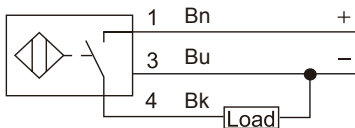
**WD5 AC / DC 2-wire NO**



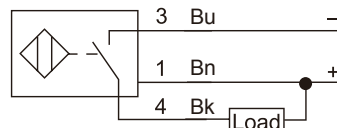
**WD6 AC / DC 2-wire NC**



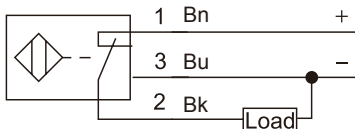
**WD7 DC 3-wire PNP NO**



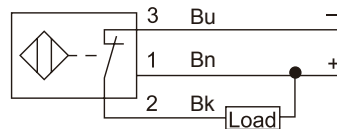
**WD8 DC 3-wire NPN NO**



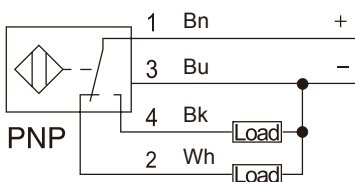
**WD9 DC 3-wire PNP NC**



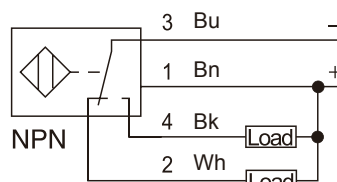
**WD10 DC 3-wire NPN NC**



**WD11 DC 4-wire PNP NO + NC**



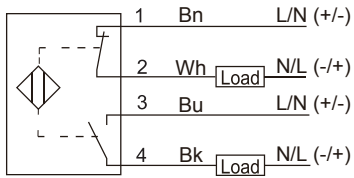
**WD12 DC 4-wire NPN NO + NC**



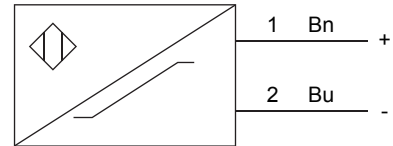
KH6.5 SERIES

WIRING DIAGRAMS (Note: 1 / 2 / 3 / 4 connector and terminals pin number Bn / Bu / Wh / Bk cable color)

**WD13 AC/DC 4-wire NO+NC**



**WD14 NAMUR 2-wire NC**



**WD15 DC 4-wire 0-10V+0-20mA**

