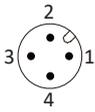


G30 SERIES

ARTICLE PROPERTIES

<b>SENSOR TYPE</b>	Inductive sensor	<b>CONNECTION TYPES</b> (see table)	
<b>SIZE</b>	M30x1.5	• Cable	PVC, 0.34 mm <sup>2</sup> , 2 m**
<b>RATED OPERATING DISTANCE</b>	See table		
<b>NUMBER OF CONDUCTORS</b>	2-wire / 3-wire / 4-wire (see table)	• M12 connector, A-coded	

\*\* Other cable lengths are available on request

MECHANICAL DATA

<b>MOUNTING</b> (mounting nuts included in delivery)	Flush / non-flush (see table)
<b>HOUSING</b>	Threaded cylindrical
<b>MATERIAL HOUSING</b>	2-wire: Brass nickel-plated 3-wire: Stainless steel
<b>MATERIAL SENSING SURFACE</b>	PBT
<b>TIGHTENING TORQUE LOCKING</b>	40 N·m, 100 N·m
<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 AC: 20 ... 250 V AC AC/DC: 20 ... 250 V AC/DC
<b>RATED OPERATING CURRENT</b>	2-wire DC: ≤ 100 mA 2-wire AC: ≤ 200 mA 3-wire: ≤ 200 mA 4-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>	IP68	<b>VIBRATION RESISTANCE</b> (EN 60068-2-6)	10 ... 55 Hz, 1 mm
<b>AMBIENT TEMPERATURE</b>	-30 ... +85 °C	<b>SHOCK RESISTANCE</b> (EN 60068-2-27)	30 g, 11 ms

STANDARDS AND DIRECTIVES

<b>EMC DIRECTIVE 2014/30/EU</b>	EN IEC 60947-5-2
<b>ROHS DIRECTIVE 2011/65/EU</b>	EN IEC 63000

## G30 SERIES

## APPROVALS



## DC 2-WIRE OUTPUT CABLE

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-OD6L	flush	15 mm	DC NO (WD1)	350 Hz	see Fig. 1
Fi15-G30-CD6L	flush	15 mm	DC NC (WD2)	350 Hz	see Fig. 1
Ni22-G30-OD6L	non-flush	22 mm	DC NO (WD1)	200 Hz	see Fig. 3
Ni22-G30-CD6L	non-flush	22 mm	DC NC (WD2)	200 Hz	see Fig. 3
Ni30-G30-OD6L	non-flush	30 mm	DC NO (WD1)	75 Hz	see Fig. 3
Ni30-G30-CD6L	non-flush	30 mm	DC NC (WD2)	75 Hz	see Fig. 3

## DC 2-WIRE OUTPUT M12 CONNECTOR

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-OD6L-Q12	flush	15 mm	DC NO (WD1)	350 Hz	see Fig. 5
Fi15-G30-CD6L-Q12	flush	15 mm	DC NC (WD2)	350 Hz	see Fig. 5
Ni22-G30-OD6L-Q12	non-flush	22 mm	DC NO (WD1)	200 Hz	see Fig. 7
Ni22-G30-CD6L-Q12	non-flush	22 mm	DC NC (WD2)	200 Hz	see Fig. 7
Ni30-G30-OD6L-Q12	non-flush	30 mm	DC NO (WD1)	75 Hz	see Fig. 7
Ni30-G30-CD6L-Q12	non-flush	30 mm	DC NC (WD2)	75 Hz	see Fig. 7

## AC/DC 2-WIRE OUTPUT CABLE

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-OA41L	flush	15 mm	AC/DC NO (WD5)	20/350 Hz	see Fig. 2
Fi15-G30-CA41L	flush	15 mm	AC/DC NC (WD6)	20/350 Hz	see Fig. 2
Ni22-G30-OA41L	non-flush	22 mm	AC/DC NO (WD5)	20/200 Hz	see Fig. 4
Ni22-G30-CA41L	non-flush	22 mm	AC/DC NC (WD6)	20/200 Hz	see Fig. 4
Ni30-G30-OA41L	non-flush	30 mm	AC/DC NO (WD5)	20/75 Hz	see Fig. 4
Ni30-G30-CA41L	non-flush	30 mm	AC/DC NC (WD6)	20/75 Hz	see Fig. 4

G30 SERIES

**AC/DC 2-WIRE OUTPUT M12 CONNECTOR**

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-OA41L-Q12	flush	15 mm	AC/DC NO (WD5)	20/350 Hz	see Fig. 6
Fi15-G30-CA41L-Q12	flush	15 mm	AC/DC NC (WD6)	20/350 Hz	see Fig. 6
Ni22-G30-OA41L-Q12	non-flush	22 mm	AC/DC NO (WD5)	20/200 Hz	see Fig. 8
Ni22-G30-CA41L-Q12	non-flush	22 mm	AC/DC NC (WD6)	20/200 Hz	see Fig. 8
Ni30-G30-OA41L-Q12	non-flush	30 mm	AC/DC NO (WD5)	20/75 Hz	see Fig. 8
Ni30-G30-CA41L-Q12	non-flush	30 mm	AC/DC NC (WD6)	20/75 Hz	see Fig. 8

**DC 3-WIRE OUTPUT CABLE**

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-OP6L	flush	15 mm	PNP NO (WD7)	300 Hz	see Fig. 1
Fi15-G30-ON6L	flush	15 mm	NPN NO (WD8)	300 Hz	see Fig. 1
Fi15-G30-CP6L	flush	15 mm	PNP NC (WD9)	300 Hz	see Fig. 1
Fi15-G30-CN6L	flush	15 mm	NPN NC (WD10)	300 Hz	see Fig. 1
Ni22-G30-OP6L	non-flush	22 mm	PNP NO (WD7)	200 Hz	see Fig. 3
Ni22-G30-ON6L	non-flush	22 mm	NPN NO (WD8)	200 Hz	see Fig. 3
Ni22-G30-CP6L	non-flush	22 mm	PNP NC (WD9)	200 Hz	see Fig. 3
Ni22-G30-CN6L	non-flush	22 mm	NPN NC (WD10)	200 Hz	see Fig. 3
Ni30-G30-OP6L	non-flush	30 mm	PNP NO (WD7)	75 Hz	see Fig. 3
Ni30-G30-ON6L	non-flush	30 mm	NPN NO (WD8)	75 Hz	see Fig. 3
Ni30-G30-CP6L	non-flush	30 mm	PNP NC (WD9)	75 Hz	see Fig. 3
Ni30-G30-CN6L	non-flush	30 mm	NPN NC (WD10)	75 Hz	see Fig. 3

**DC 3-WIRE OUTPUT M12 CONNECTOR**

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-OP6L-Q12	flush	15 mm	PNP NO (WD7)	300 Hz	see Fig. 5
Fi15-G30-ON6L-Q12	flush	15 mm	NPN NO (WD8)	300 Hz	see Fig. 5
Fi15-G30-CP6L-Q12	flush	15 mm	PNP NC (WD9)	300 Hz	see Fig. 5
Fi15-G30-CN6L-Q12	flush	15 mm	NPN NC (WD10)	300 Hz	see Fig. 5
Ni22-G30-OP6L-Q12	non-flush	22 mm	PNP NO (WD7)	200 Hz	see Fig. 7
Ni22-G30-ON6L-Q12	non-flush	22 mm	NPN NO (WD8)	200 Hz	see Fig. 7
Ni22-G30-CP6L-Q12	non-flush	22 mm	PNP NC (WD9)	200 Hz	see Fig. 7
Ni22-G30-CN6L-Q12	non-flush	22 mm	NPN NC (WD10)	200 Hz	see Fig. 7
Ni30-G30-OP6L-Q12	non-flush	30 mm	PNP NO (WD7)	75 Hz	see Fig. 7
Ni30-G30-ON6L-Q12	non-flush	30 mm	NPN NO (WD8)	75 Hz	see Fig. 7
Ni30-G30-CP6L-Q12	non-flush	30 mm	PNP NC (WD9)	75 Hz	see Fig. 7
Ni30-G30-CN6L-Q12	non-flush	30 mm	NPN NC (WD10)	75 Hz	see Fig. 7

G30 SERIES

**DC 4-WIRE OUTPUT CABLE**

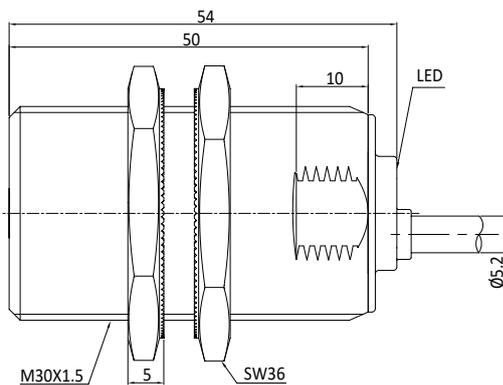
Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-BP6L	flush	15 mm	PNP NO+NC (WD11)	350 Hz	see Fig. 2
Fi15-G30-BN6L	flush	15 mm	NPN NO+NC (WD12)	350 Hz	see Fig. 2
Ni30-G30-BP6L	non-flush	30 mm	PNP NO+NC (WD11)	70 Hz	see Fig. 4
Ni30-G30-BN6L	non-flush	30 mm	NPN NO+NC (WD12)	70 Hz	see Fig. 4

**DC 4-WIRE OUTPUT M12 CONNECTOR**

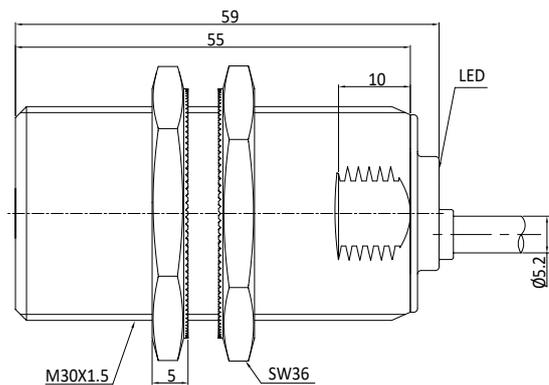
Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi15-G30-BP6L-Q12	flush	15 mm	PNP NO+NC (WD11)	350 Hz	see Fig. 6
Fi15-G30-BN6L-Q12	flush	15 mm	NPN NO+NC (WD12)	350 Hz	see Fig. 6
Ni30-G30-BP6L-Q12	non-flush	30 mm	PNP NO+NC (WD11)	70 Hz	see Fig. 8
Ni30-G30-BN6L-Q12	non-flush	30 mm	NPN NO+NC (WD12)	70 Hz	see Fig. 8

**DIMENSIONS**

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



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



G30 SERIES

DIMENSIONS

Fig. 3 Inductive sensor with cable (non-flush)

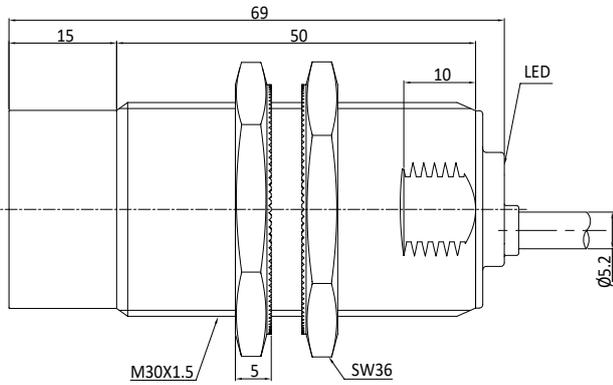


Fig. 4 Inductive sensor with cable (non-flush)

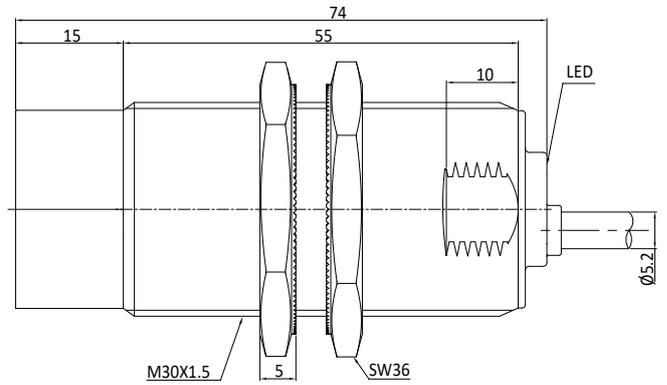


Fig. 5 Inductive sensor with M12 connector (flush)

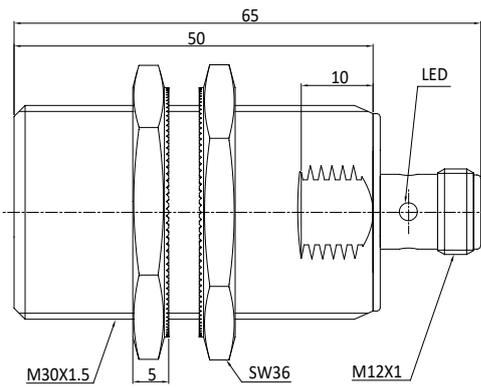


Fig. 6 Inductive sensor with M12 connector (flush)

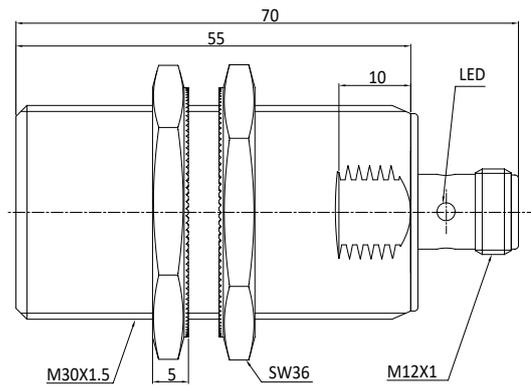


Fig. 7 Inductive sensor with M12 connector (non-flush)

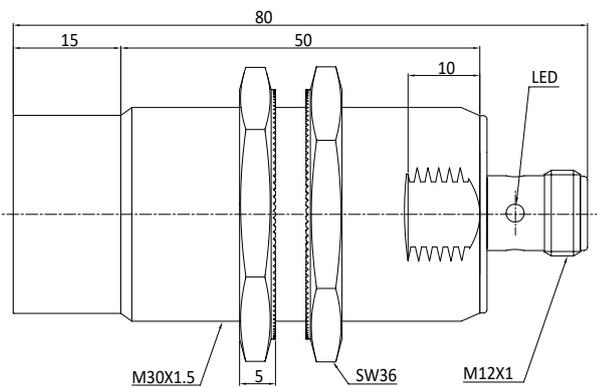
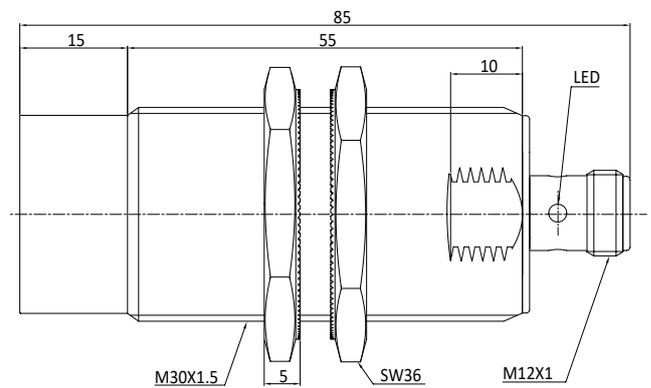


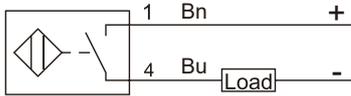
Fig. 8 Inductive sensor with M12 connector (non-flush)



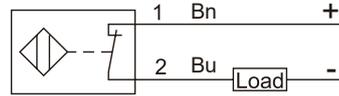
G30 SERIES

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

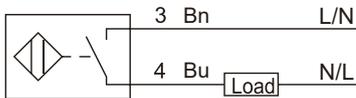
WD1 DC 2-wire NO



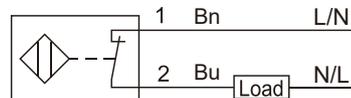
WD2 DC 2-wire NC



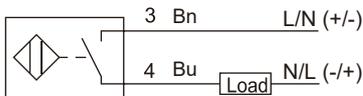
WD3 AC 2-wire NO



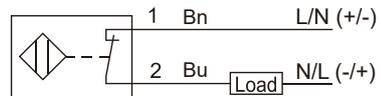
WD4 AC 2-wire NC



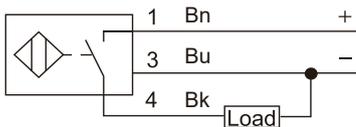
WD5 AC / DC 2-wire NO



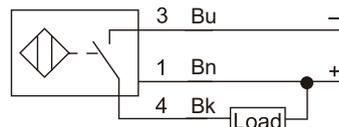
WD6 AC / DC 2-wire NC



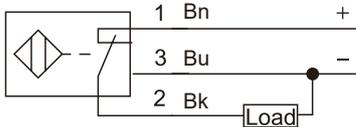
WD7 DC 3-wire PNP NO



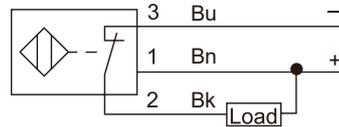
WD8 DC 3-wire NPN NO



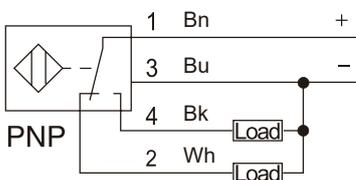
WD9 DC 3-wire PNP NC



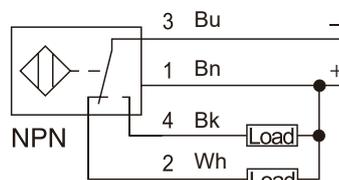
WD10 DC 3-wire NPN NC



WD11 DC 4-wire PNP NO + NC



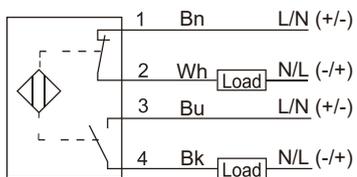
WD12 DC 4-wire NPN NO + NC



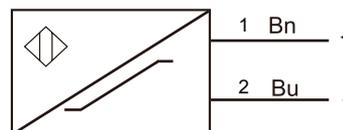
G30 SERIES

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

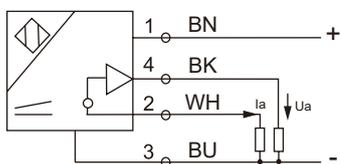
**WD13 AC/DC 4-wire NO+NC**



**WD14 NAMUR 2-wire NC**



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



## G30 SERIES

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