DATA SHEET INDUCTIVE SENSOR V1.1

M08 HIGH TEMPERATURE SERIES

ARTICLE PROPERTIES

SENSOR TYPE	Inductive sensor
SIZE	M8x1
RATED OPERATING DISTANCE	*see table*
NUMBER OF CONDUCTORS	2-wire / 3-wire (*see table*)

CONNECTION TYPES (*see table*)

- cable — PTFE, 0.14 mm², 2 m**

** other cable lengths are available on request

MECHANICAL DATA

MOUNTING (mounting nuts included in delivery)	flush/non-flush (*see table*)
HOUSING	threaded cylindrical
MATERIAL HOUSING	brass nickel-plated
MATERIAL SENSING SURFACE	PBT
TIGHTENING TORQUE LOCKING	2 Nm
STANDARD TEST	FE360
ATTENUATION COEFFICIENT	St37 = 1, V2A = 0.7, Al = 0.3

ELECTRICAL DATA

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

ENVIRONMENTAL CONDITIONS

PROTECTION CLASS	IP67
AMBIENT TEMPERATURE	-25 ... 120 °C
VIBRATION RESISTANCE (EN 60068-2-27)	55 Hz, 1 mm
SHOCK RESISTANCE (EN 60068-2-6)	30*g*/11 ms

STANDARDS AND DIRECTIVES

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR	DIN EN IEC 60947-5-2:2021-04

APPROVALS

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M08 HIGH TEMPERATURE SERIES

DC 2-WIRE OUTPUT CABLE

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi2-M08-OD6L/T120	flush	2 mm	DC NO (WD1)	1000 Hz	*see Fig. 1*
Fi2-M08-CD6L/T120	flush	2 mm	DC NC (WD2)	1000 Hz	*see Fig. 1*
Ni4-M08-OD6L/T120	non-flush	4 mm	DC NO (WD1)	800 Hz	*see Fig. 2*
Ni4-M08-CD6L/T120	non-flush	4 mm	DC NC (WD2)	800 Hz	*see Fig. 2*

DC 3-WIRE OUTPUT CABLE

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi2-M08-OP6L/T120	flush	2 mm	PNP NO (WD7)	1000 Hz	*see Fig. 1*
Fi2-M08-ON6L/T120	flush	2 mm	NPN NO (WD8)	1000 Hz	*see Fig. 1*
Fi2-M08-CP6L/T120	flush	2 mm	PNP NC (WD9)	1000 Hz	*see Fig. 1*
Fi2-M08-CN6L/T120	flush	2 mm	NPN NC (WD10)	1000 Hz	*see Fig. 1*
Ni4-M08-OP6L/T120	non-flush	4 mm	PNP NO (WD7)	800 Hz	*see Fig. 2*
Ni4-M08-ON6L/T120	non-flush	4 mm	NPN NO (WD8)	800 Hz	*see Fig. 2*
Ni4-M08-CP6L/T120	non-flush	4 mm	PNP NC (WD9)	800 Hz	*see Fig. 2*
Ni4-M08-CN6L/T120	non-flush	4 mm	NPN NC (WD10)	800 Hz	*see Fig. 2*

DIMENSIONS

Fig. 1 Inductive sensor with cable (flush)

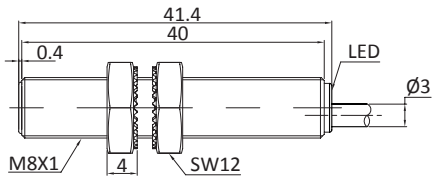
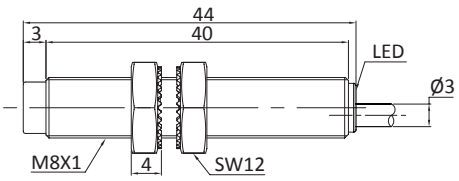


Fig. 2 Inductive sensor with cable (non-flush)



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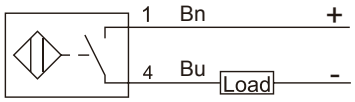
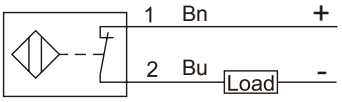
WIRING DIAGRAMS (Note: 1 / 2 / 3 / 4 connector and terminals pin number Bn / Bu / Wh / Bk cable color)

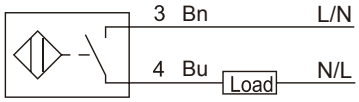
WD1 DC 2-wire NO



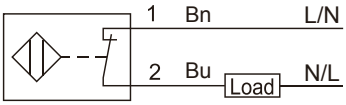
WD2 DC 2-wire NC



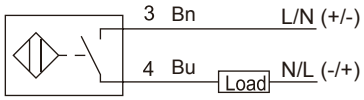
WD3 AC 2-wire NO



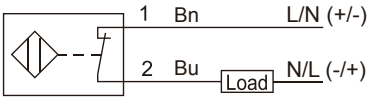
WD4 AC 2-wire NC



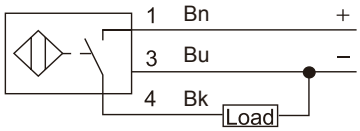
WD5 AC / DC 2-wire NO



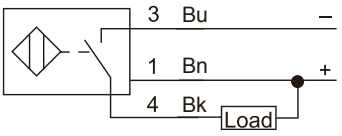
WD6 AC / DC 2-wire NC



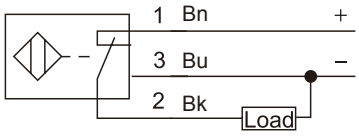
WD7 DC 3-wire PNP NO



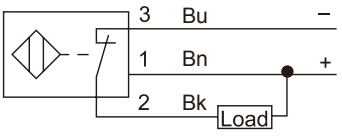
WD8 DC 3-wire NPN NO



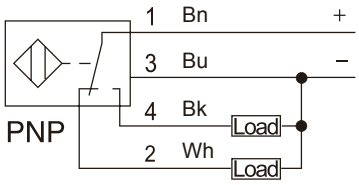
WD9 DC 3-wire PNP NC



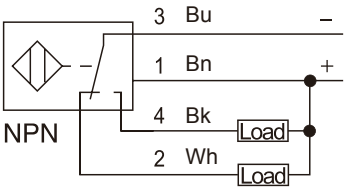
WD10 DC 3-wire NPN NC



WD11 DC 4-wire PNP NO + NC



WD12 DC 4-wire NPN NO + NC



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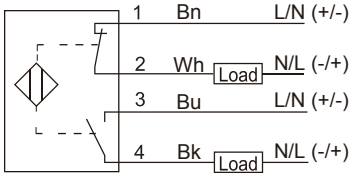
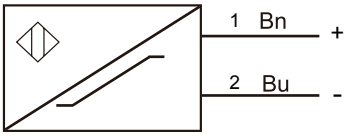
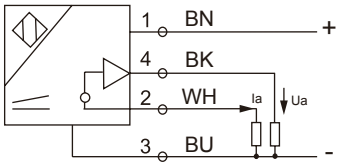
WD13 AC/DC 4-wire NO+NC



WD14 NAMUR 2-wire NC



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



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