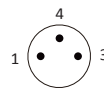


KM05 SERIES

ARTICLE PROPERTIES

SENSOR TYPE	Inductive sensor	CONNECTION TYPES (<i>see table</i>)	
SIZE	M5x0.5	• cable	PVC, 0.15 mm ² , 2 m**
RATED OPERATING DISTANCE	<i>see table</i>	• M8 connector, A-coded	
NUMBER OF CONDUCTORS	3-wire (<i>see table</i>)		

** other cable lengths are available on request

MECHANICAL DATA

MOUNTING (mounting nuts included in delivery)	flush (<i>see table</i>)
HOUSING	threaded cylindrical
MATERIAL HOUSING	stainless steel
MATERIAL SENSING SURFACE	PBT
TIGHTENING TORQUE LOCKING	1 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	3-wire: ≤ 100 mA
SWITCHING FREQUENCY	<i>see table</i>
SWITCHING OUTPUT	<i>see table</i>
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	VIBRATION RESISTANCE (EN 60068-2-27)	55 Hz, 1 mm
AMBIENT TEMPERATURE	-25 ... 70 °C	SHOCK RESISTANCE (EN 60068-2-6)	30g/11 ms

STANDARDS AND DIRECTIVES

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



KM05 SERIES

DC 3-WIRE OUTPUT CABLE

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi1-KM05-OP6L	flush	1 mm	PNP NO (WD7)	1000 Hz	see Fig. 1
Fi1-KM05-CP6L	flush	1 mm	PNP NC (WD9)	1000 Hz	see Fig. 1
Fi1-KM05-ON6L	flush	1 mm	NPN NO (WD8)	1000 Hz	see Fig. 1
Fi1-KM05-CN6L	flush	1 mm	NPN NC (WD10)	1000 Hz	see Fig. 1

DC 3-WIRE OUTPUT M8 CONNECTOR

Article number	Mounting	Rated operating distance Sn	Switching output (wiring diagram)	Switching frequency	Dimensions
Fi1-KM05-OP6L-Q8	flush	1 mm	PNP NO (WD7)	1000 Hz	see Fig. 2
Fi1-KM05-CP6L-Q8	flush	1 mm	PNP NC (WD9)	1000 Hz	see Fig. 2
Fi1-KM05-ON6L-Q8	flush	1 mm	NPN NO (WD8)	1000 Hz	see Fig. 2
Fi1-KM05-CN6L-Q8	flush	1 mm	NPN NC (WD10)	1000 Hz	see Fig. 2

DIMENSIONS

Fig. 1 Inductive sensor with cable (flush)

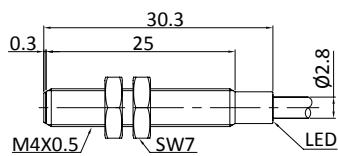
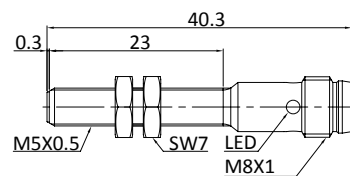


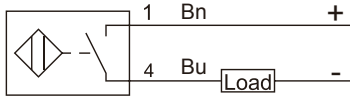
Fig. 2 Inductive sensor with M8 connector (flush)



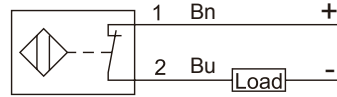
KM05 SERIES

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

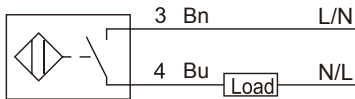
WD1 DC 2-wire NO



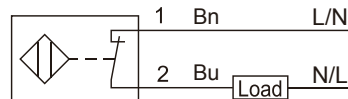
WD2 DC 2-wire NC



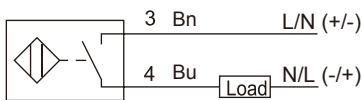
WD3 AC 2-wire NO



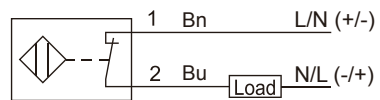
WD4 AC 2-wire NC



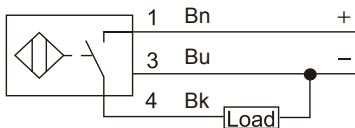
WD5 AC / DC 2-wire NO



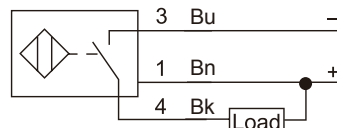
WD6 AC / DC 2-wire NC



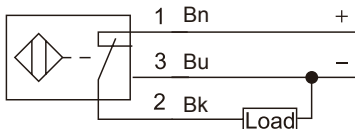
WD7 DC 3-wire PNP NO



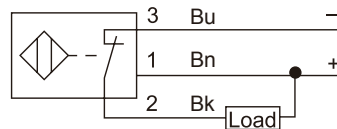
WD8 DC 3-wire NPN NO



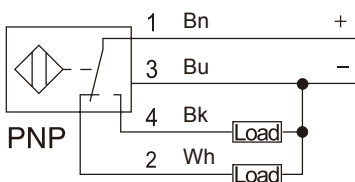
WD9 DC 3-wire PNP NC



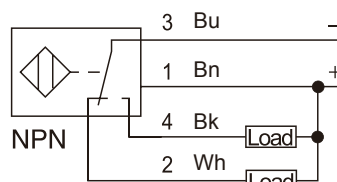
WD10 DC 3-wire NPN NC



WD11 DC 4-wire PNP NO + NC



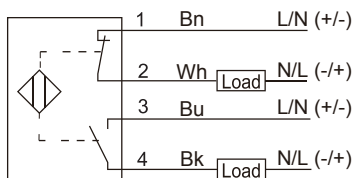
WD12 DC 4-wire NPN NO + NC



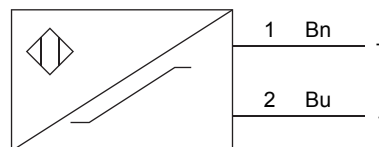
KM05 SERIES

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

