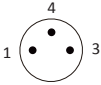


## G3 SERIES M5

## ARTICLE PROPERTIES

|                                 |                             |  |   |
|---------------------------------|-----------------------------|--|---|
| <b>SENSOR TYPE</b>              | Inductive sensor            | <b>CONNECTION TYPES</b> ( <i>see table</i> )   |   |
| <b>SIZE</b>                     | M5x0.5                      | <ul style="list-style-type: none"> <li>• cable PVC, 0.34 mm<sup>2</sup>, 2 m**</li> <li>• M8 connector, A-coded</li> </ul> |  |
| <b>RATED OPERATING DISTANCE</b> | <i>see table</i>            |  |   |
| <b>NUMBER OF CONDUCTORS</b>     | 3-wire ( <i>see table</i> ) |  |   |

\*\* other cable lengths are available on request

## MECHANICAL DATA

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

## STANDARDS AND DIRECTIVES

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

## APPROVALS



G3 SERIES M5

**DC 3-WIRE OUTPUT CABLE**

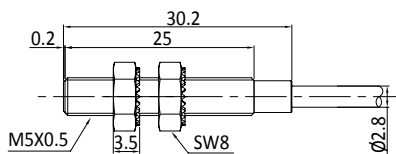
| Article number | Mounting | Rated operating distance Sn | Switching output (wiring diagram) | Switching frequency | Dimensions |
|----------------|----------|-----------------------------|-----------------------------------|---------------------|------------|
| Fi1.5-G05-OP6L | flush    | 1.5 mm                      | PNP NO (WD7)                      | 1000 Hz             | see Fig. 1 |
| Fi1.5-G05-CP6L | flush    | 1.5 mm                      | PNP NC (WD9)                      | 1000 Hz             | see Fig. 1 |
| Fi1.5-G05-ON6L | flush    | 1.5 mm                      | NPN NO (WD8)                      | 1000 Hz             | see Fig. 1 |
| Fi1.5-G05-CN6L | flush    | 1.5 mm                      | NPN NC (WD10)                     | 1000 Hz             | see Fig. 1 |

**DC 3-WIRE OUTPUT M8 CONNECTOR**

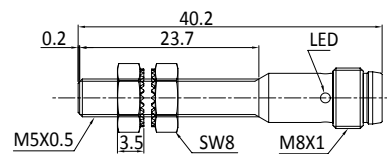
| Article number    | Mounting | Rated operating distance Sn | Switching output (wiring diagram) | Switching frequency | Dimensions |
|-------------------|----------|-----------------------------|-----------------------------------|---------------------|------------|
| Fi1.5-G05-OP6L-Q8 | flush    | 1.5 mm                      | PNP NO (WD7)                      | 1000 Hz             | see Fig. 2 |
| Fi1.5-G05-CP6L-Q8 | flush    | 1.5 mm                      | PNP NC (WD9)                      | 1000 Hz             | see Fig. 2 |
| Fi1.5-G05-ON6L-Q8 | flush    | 1.5 mm                      | NPN NO (WD8)                      | 1000 Hz             | see Fig. 2 |
| Fi1.5-G05-CN6L-Q8 | flush    | 1.5 mm                      | NPN NC (WD10)                     | 1000 Hz             | see Fig. 2 |

**DIMENSIONS**

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



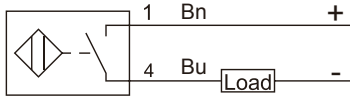
**Fig. 2** Inductive sensor with M8 connector (flush)



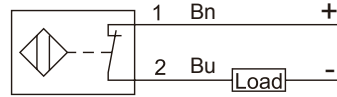
G3 SERIES M5

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

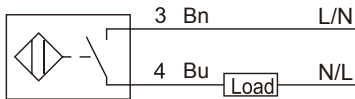
WD1 DC 2-wire NO



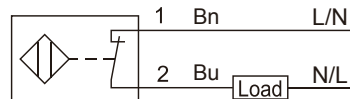
WD2 DC 2-wire NC



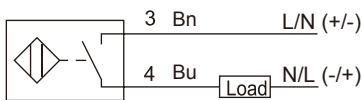
WD3 AC 2-wire NO



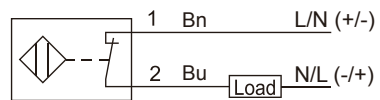
WD4 AC 2-wire NC



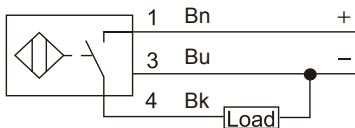
WD5 AC / DC 2-wire NO



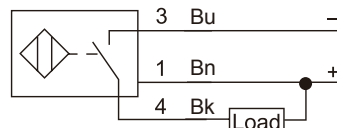
WD6 AC / DC 2-wire NC



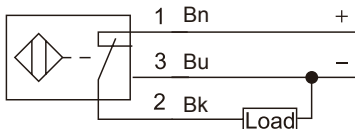
WD7 DC 3-wire PNP NO



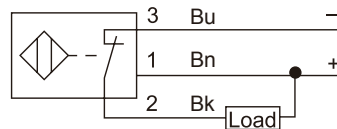
WD8 DC 3-wire NPN NO



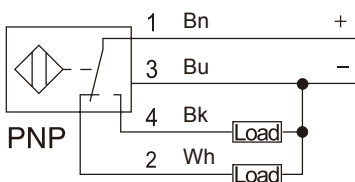
WD9 DC 3-wire PNP NC



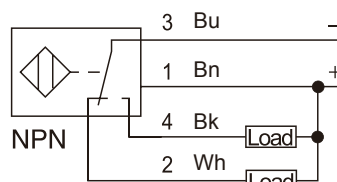
WD10 DC 3-wire NPN NC



WD11 DC 4-wire PNP NO + NC



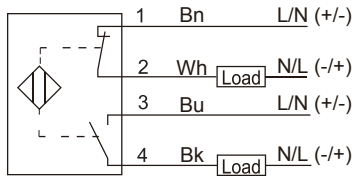
WD12 DC 4-wire NPN NO + NC



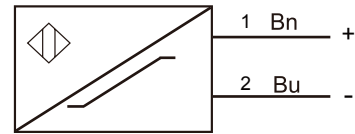
G3 SERIES M5

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**

