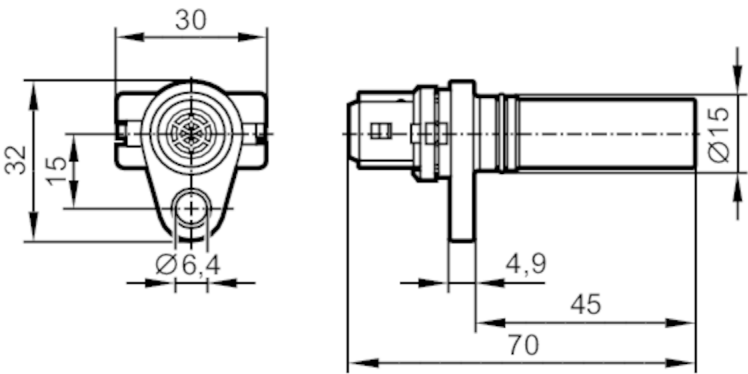


# MX5000



## Speed sensor

MXD31,8 ANOG/AMP/H



### Product characteristics

|                   |      |                                                                                                                    |
|-------------------|------|--------------------------------------------------------------------------------------------------------------------|
| Electrical design |      | NPN                                                                                                                |
| Sensing range     | [mm] | 1.7; (Using toothed wheels with a different modulus has an influence on the sensing range and the phase position.) |
| Dimensions        | [mm] | Ø 15 / L = 70                                                                                                      |

### Electrical data

|                             |      |           |
|-----------------------------|------|-----------|
| Operating voltage           | [V]  | 7...30 DC |
| Current consumption         | [mA] | < 30      |
| Protection class            |      | III       |
| Reverse polarity protection |      | no        |

### Outputs

|                                                 |      |           |
|-------------------------------------------------|------|-----------|
| Electrical design                               |      | NPN       |
| Permanent current rating of switching output DC | [mA] | 50        |
| Switching frequency DC                          | [Hz] | 2...15000 |
| Short-circuit protection                        |      | no        |

### Detection zone

|                    |      |                                                                                                                    |
|--------------------|------|--------------------------------------------------------------------------------------------------------------------|
| Sensing range      | [mm] | 1.7; (Using toothed wheels with a different modulus has an influence on the sensing range and the phase position.) |
| Operating distance | [mm] | 1                                                                                                                  |

### Operating conditions

|                             |      |                              |
|-----------------------------|------|------------------------------|
| Ambient temperature         | [°C] | -32...140                    |
| Ambient temperature         | [°C] | 125                          |
| Note on ambient temperature |      | for the plug area            |
| Protection                  |      | IP 67; IP 69K; (plug: IP 54) |

### Tests / approvals

|                  |                   |                                                                                 |
|------------------|-------------------|---------------------------------------------------------------------------------|
| EMC              | EN 61000-4-2      | 4 kV CD / 8 kV AD                                                               |
|                  | EN 61000-4-3      | 10 V/m                                                                          |
|                  | EN 61000-4-4      | 2 kV                                                                            |
|                  | EN 61000-4-6      | 10 V                                                                            |
|                  | EN 61000-4-8      | 30 A/m                                                                          |
| Shock resistance | DIN EN 60068-2-27 | 30 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes |

# MX5000



## Speed sensor

MXD31,8 ANOG/AMP/H

|                 |               |                         |
|-----------------|---------------|-------------------------|
| Salt spray test | EN 60068/2-11 | 96 h 5 % NaCl bei 25 °C |
| MTTF [years]    |               | 2247                    |

### Mechanical data

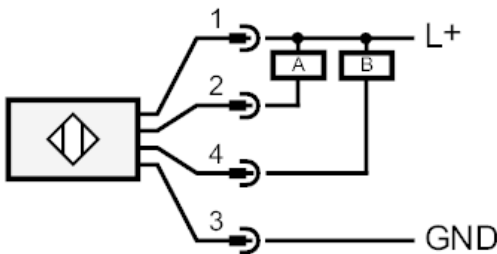
|                           |                                         |
|---------------------------|-----------------------------------------|
| Weight [g]                | 23.5                                    |
| Dimensions [mm]           | Ø 15 / L = 70                           |
| Materials                 | socket: brass; housing: PA; O-ring: FKM |
| Tightening torque [Nm]    | 7                                       |
| Toothed wheel module [mm] | 1.25                                    |
| Installation length [mm]  | 45                                      |

### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

#### Connection

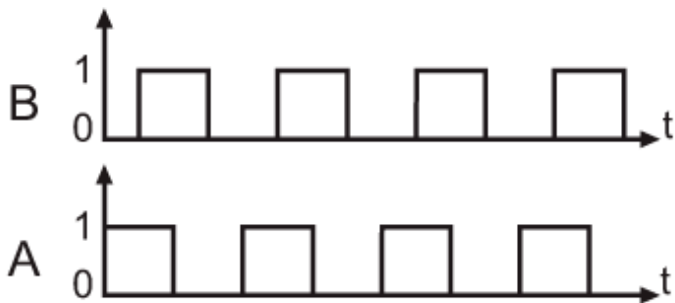


A: Pulse output  
B: Pulse output

Connector: 1 x AMP-Junior Timer (282 192-1)

### Diagrams and graphs

#### switching signals



phase shift 90° +/- 20°

pulse/pause ratio 50 % +/- 10 %

Using toothed wheels with a different modulus has an influence on the sensing range and the phase position.