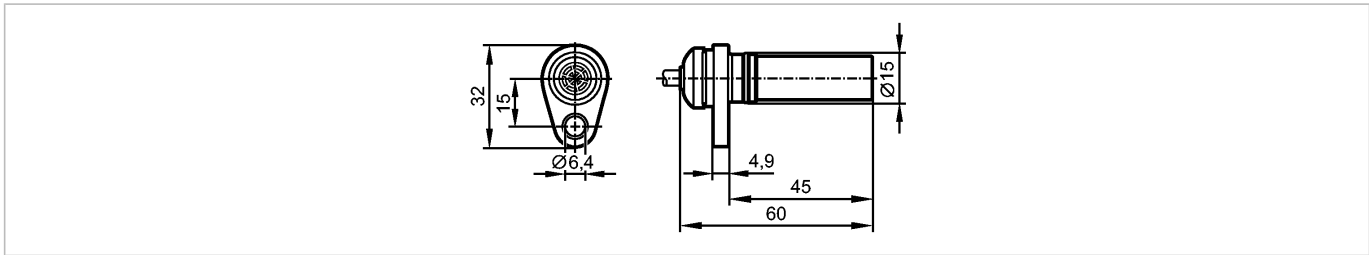


**MX5050**

MXD41.7/BPKG/H/0.5/ZH/US

Rotational speed sensors



**Product characteristics**

|                                 |
|---------------------------------|
| Rotational speed sensor         |
| Plastic housing                 |
| Cable with connector            |
| 2-channel                       |
| Sensing range 1.7 mm; *)        |
| Toothed wheel module [mm]: 1.25 |

**Electrical data**

|                             |            |
|-----------------------------|------------|
| Electrical design           | DC PNP     |
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 40       |
| Protection class            | III        |
| Reverse polarity protection | yes        |

**Outputs**

|                      |               |
|----------------------|---------------|
| Output function      | normally open |
| Voltage drop [V]     | < 1           |
| Leakage current [mA] | < 0.1         |

|                                    |           |
|------------------------------------|-----------|
| <b>Current rating</b>              |           |
| - Current rating (continuous) [mA] | 50        |
| - Current rating (peak) [mA]       | 50        |
| Short-circuit protection           | yes       |
| Overload protection                | yes       |
| Switching frequency [Hz]           | 1...15000 |

**Range**

|                              |            |
|------------------------------|------------|
| Sensing range [mm]           | 1.7, *)    |
| Real sensing range (Sr) [mm] | 1.7 ± 10 % |
| Operating distance [mm]      | 1.38       |

**Environment**

|                          |                        |
|--------------------------|------------------------|
| Ambient temperature [°C] | -32...85               |
| Protection               | IP 65 / IP 68 / IP 69K |

**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/m            |
|     | EN 61000-4-8: | 30 A/m            |
|     | EN 55011:     | 0 class B         |

**MX5050**

MXD41.7/BPKG/H/0.5/ZH/US

**Rotational speed sensors**

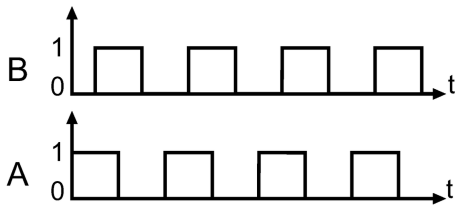
|                          |                   |  |
|--------------------------|-------------------|--|
| Shock resistance         |                   | 30 g (11 ms half sine; 3 shocks in each direction along the three coordinate axes) |
|                          | DIN EN 60068-2-27 |  |
| Fast temperature changes |                   | TA = -10°C; TB = 70°C; t1 = 60 min; t2 = < 10 s; 20 Zyklen                         |
|                          | EN 60068-2-14 Na  |  |
| Salt spray test          |                   | severity level 5 (4 test cycles)   |
|                          | EN 60068-2-52 Kb  |  |
| MTTF                     | [Years]           | 3659   |

**Mechanical data**

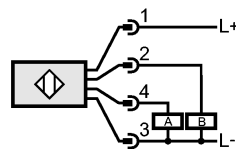
|                      |      |   |
|----------------------|------|---|
| Housing materials    |      | Brass; PA; O-ring: FPM  |
| Tightening torque    | [Nm] | 7   |
| Toothed wheel module | [mm] | 1.25  |
|                      |      | phase shift 90° +/- 20° *)<br>mark-to-space ratio 50 % +/- 10 % |
| Weight               | [kg] | 0.047   |

**Electrical connection**

|            |  |                                       |
|------------|--|---------------------------------------|
| Connection |  | PUR cable / 0.5 m; with M12 connector |
|------------|--|---------------------------------------|

|                   |  |   |
|-------------------|--|---|
| Switching signals |  |  |
|-------------------|--|---|

**Wiring**



**Remarks**

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

|               |         |   |
|---------------|---------|---|
| Pack quantity | [piece] | 1 |
|---------------|---------|---|