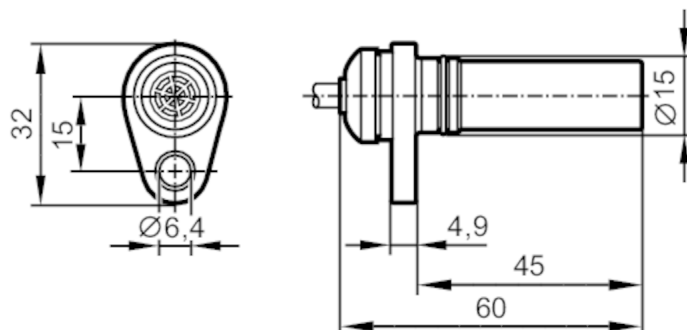


MX5050



Speed sensor

MXD41,7/BPKG/H/0,5/ZH/US



Electrical data

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

Outputs

Electrical design		PNP
Output function		normally open
Max. voltage drop switching output DC	[V]	1
Max. leakage current	[mA]	0.1
Permanent current rating of switching output DC	[mA]	50
Short-time current rating of switching output	[mA]	50
Switching frequency DC	[Hz]	1...15000
Short-circuit protection		yes
Overload protection		yes

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.)
Real sensing range S_r	[mm]	$1.7 \pm 10 \%$
Operating distance	[mm]	1.38

Operating conditions

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

MX5050



Speed sensor

MXD41,7/BPKG/H/0,5/ZH/US

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

Mechanical data

Weight [g]	49.5
Dimensions [mm]	Ø 15 / L = 60
Materials	brass; PA; O-ring: FKM
Tightening torque [Nm]	7
Toothed wheel module [mm]	1.25

Electrical connection

Connection	plug
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Remarks

Pack quantity	1 pcs.
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Electrical connection - plug

Cable: 0.5 m, PUR

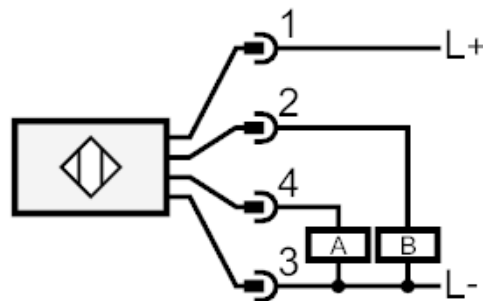
Connector: 1 x M12



Speed sensor

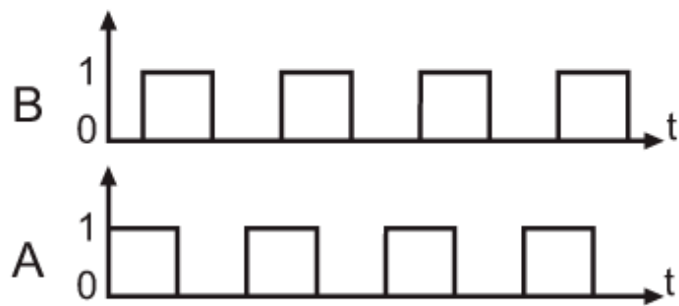
MXD41,7/BPKG/H/0,5/ZH/US

Connection



Diagrams and graphs

switching signals



phase shift $90^\circ \pm 20^\circ$

pulse/pause ratio 50 % $\pm$ 10 %

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