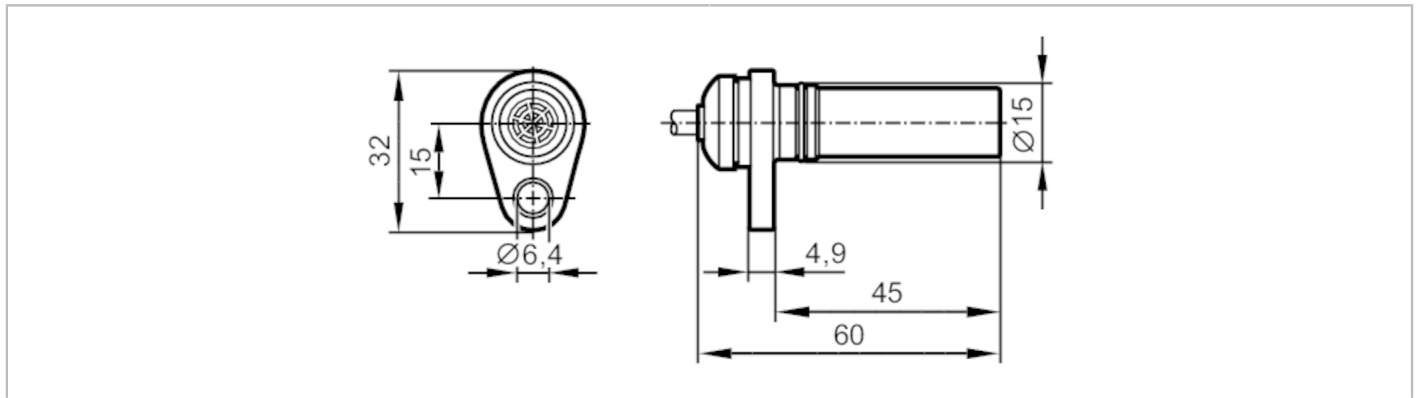


MX5050



Rotational speed sensor

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



Product characteristics		
Electrical design		PNP
Output function		normally open
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 = 60
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
Monitoring range		
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 Sr	[mm]	1.7 ± 10 %
Operating distance	[mm]	1.38
Operating conditions		
Ambient temperature	[°C]	-32...85
Protection		IP 65; IP 68; IP 69K

MX5050



Rotational 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]		49.8
Dimensions [mm]		Ø 15 / L = 60
Material		brass; 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 - plug

Cable: 0.5 m, PUR

Connector: 1 x M12; coding: A



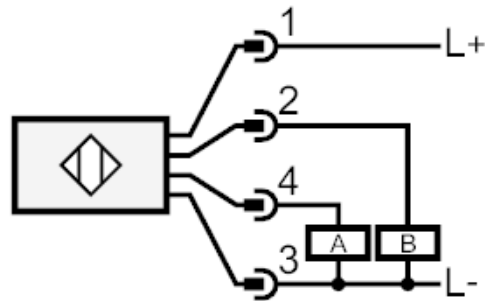
MX5050



Rotational speed sensor

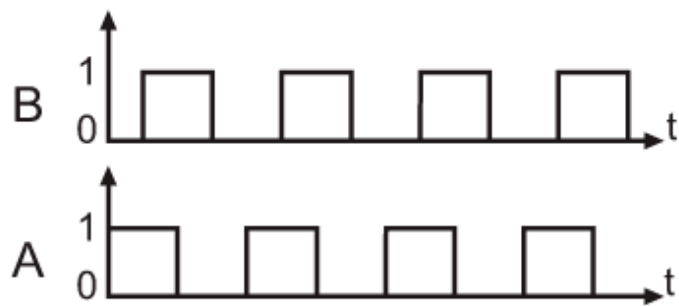
MXD41,7/BPKG/H/0,5/ZH/US

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.