

# Hall-effect sensor

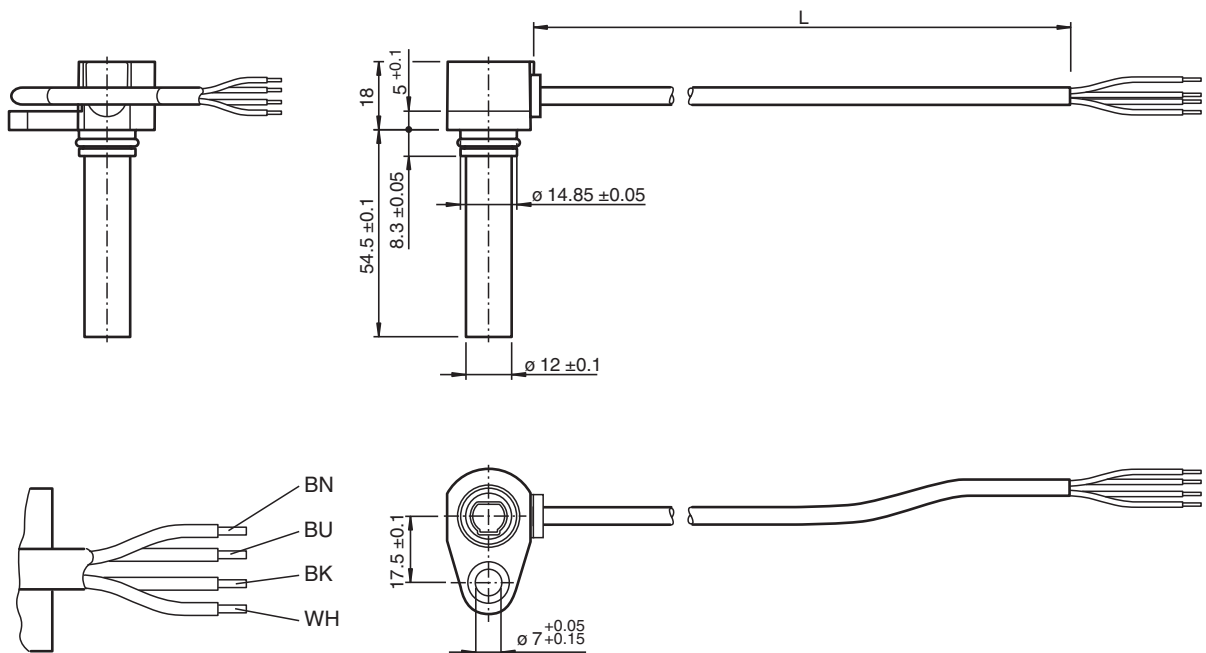
## MHS2-12M55-2EU-0,3M



- Rotational speed-detecting hall effect sensor
- Responds to customer-specific gear
- Switching frequency up to 10 kHz



### Dimensions



### Technical Data

#### General specifications

Output type	Digital voltage output	
Assured operating distance	$s_a$	0.3 ... 2 mm

#### Nominal ratings

Operating voltage	$U_B$	4.75 ... 5.25 V
Switching frequency	$f$	10 kHz
Operating current	$I_L$	0 ... 25 mA

#### Functional safety related parameters

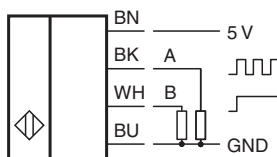
MTTF <sub>d</sub>	882.2 a	
Mission Time (T <sub>M</sub> )	20 a	

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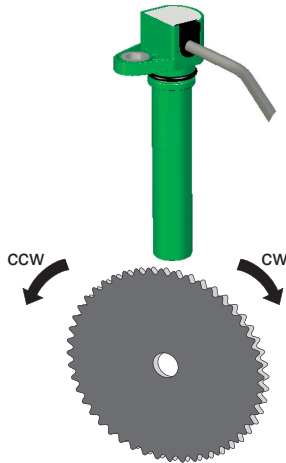
## Technical Data

Diagnostic Coverage (DC)		0 %
<b>Output 1</b>		
Designation		A
Output type		Digital voltage output output of the velocity
Output value		The following output values are only achieved with a load resistance of $\geq 500 \Omega$ high level 3.8 ... 4.75 V low level 0.4 ... 2.6 V
<b>Output 2</b>		
Designation		B
Output type		Digital voltage output output of the direction of rotation
Output value		The following output values are only achieved with a load resistance of $\geq 500 \Omega$ direction of rotation cw 3.8 ... 4.75 V direction of rotation ccw 0.4 ... 2.6 V
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cURus Recognized Load Type: General Purpose Circuitry: Class 2 Power Source Supply/Switching Voltage: 5 V DC
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 125 °C (-40 ... 257 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		PBT + GF
Sensing face		PBT + GF
Degree of protection		IP67
<b>Cable</b>		
Cable diameter		4.8 mm $\pm$ 0.15 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		4
Core cross section		0.5 mm <sup>2</sup>
Length	L	300 mm
Tightening torque, fastening screws		$\leq 10$ Nm
Tightening torque, housing screws		10 Nm
<b>General information</b>		
Supplementary information		Specifications relating to disk 61_01-105_04_72-03 ST12 ferromagnetic steel

## Connection Assignment

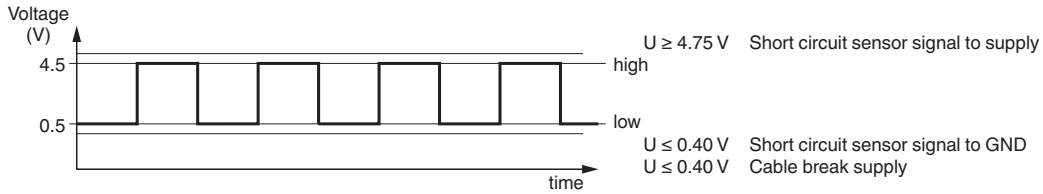


**Installation Conditions**

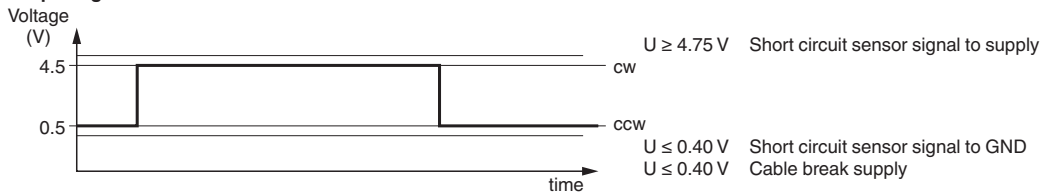


**Operation**

**Output signal A**



**Output signal B**



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