

Magnetic absolute multi-turn shaft encoder

BMMV – MAGRES hermetic

CANopen

features

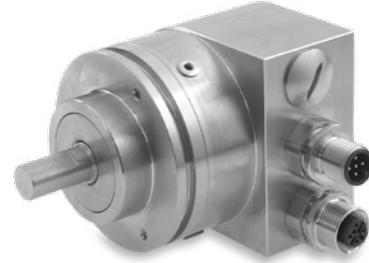
- multi-turn encoder / CANopen
- magnetic principle, hermetically sealed
- resolution: single-turn 12 bit and multi-turn 18 bit
- high shock- und vibration-resistance
- integrated fieldbus
- resolution and zero-point programmable
- protection class IP 69K

general data

voltage supply	10 - 30 VDC
max. supply current no load	typ. 100 mA (at 24 VDC)
output circuit	CAN-Bus Standard ISO / DIS 11898
protocol	CANopen
profile	CANopen CIA, DS-301 V4.01 DSP-305 V1.0, DS-406 V3.0
specification	CAN 2.0B
operating modes	Event-triggered / Time-triggered Remotely-requested Sync (cyclic) / Sync (acyclic)
signal code	natural binary-code
max. resolution single-turn	12 bit (1 step = 5'16'')
multi-turn	18 bit (262'144 revolutions)
max error limit	±1°
repeatability	0,3°
max. baud rate	1 Mbit/s
counter buffering	with Lithium cell typ. 19 years
direction of rotation	looking at the flange, position counts up as the shaft rotates clockwise (CW), programmable

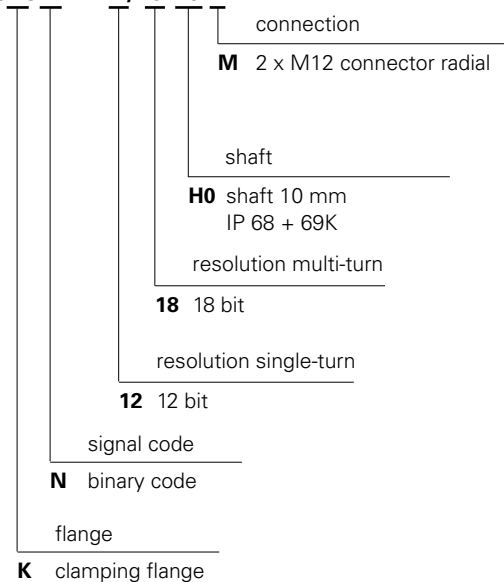
ambient conditions

temperature range	-40...+85 °C
vibration	IEC 60068-2-6 (≤ 300 m/s ² / 10 - 2'000 Hz)
shock	IEC 60068-2-27 (≤ 3'000 m/s ² / 6 ms)
noise immunity	EN 61000-6-2
emitted interference	EN 61000-6-3



order designation BMMV 58K

BMMV 58K5N24B12/18 H0 M



mechanical data

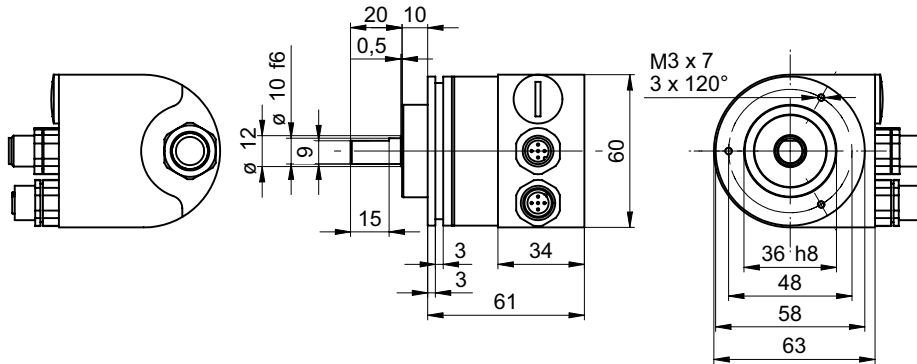
max. revolutions	6'000 rpm
moment of inertia	typ. 20 x 10 ⁻⁷ kgm ²
torque	typ. 3,1 cNm (3'000 rpm / 20 °C)
max. shaft load	axial: 120 N radial: 280 N (combined) axial: 270 N (single load)
product life	depending on ambient conditions (typ. 10 ⁹ revolutions)
protection class	IP 68 + IP 69K (IP 68: water 20 °C, 1 m, 24 h)
material	high grade steel 1,4305 ¹
weight	approx. 900 g
explosion protection	Ex II3D Txx °C (Zone 22) ¹

¹ additional versions and materials on request

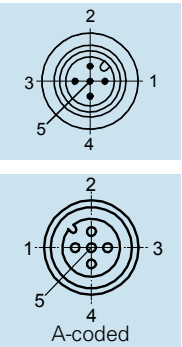


dimensions

-M



assignment connector 2 x M12 (M)



pin	signal	description
1	n.c.	-
2	+Vs	voltage supply 10...30 VDC
3	GND	CAN ground / ov
4	CAN_H	bus line (dominant HIGH)
5	CAN_L	bus line (dominant LOW)

accessories

CD-ROM with GSD-/EDS-/XML-files and manuals	part nr. 147362
connector M12 female straight	part nr. 153968
connector M12 male straight	part nr. 153969
connector M12 female angled	part nr. 145021
connector M12 male angled	part nr. 156584
spring clamp set	part nr. 252773
couplings	see chapter accessories

Note

Mounting drawings see end of chapter.