

Magnetic absolute multi-turn shaft encoder

BMMV – MAGRES

DeviceNet

features

- multi-turn encoder / DeviceNet
- magnetic sensing principle
- resolution: single-turn 12 bit and multi-turn 18 bit
- high resistance against shock and vibration
- integrated fieldbus
- resolution and zero point programmable
- clamping flange or servo-flansch

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	DeviceNet
profile	Device Profile for Encoder V 1.0
operating modes	I/O-Polling, Cyclic, Change of State
signal code	natural binary-code
max. resolution single-turn	12 bit (1 step = 5'16'')
multi-turn	18 bit (65'536 revolutions)
max error limit	±1°
repeatability	0,3°
max. baud rate	500 kbit/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

mechanical data

max. revolutions	12'000 rpm (mech.) 6'000 rpm (electr.)
moment of inertia C6	typ. $11,8 \times 10^{-7}$ kgm ²
C0	typ. $17,8 \times 10^{-7}$ kgm ²
torque	typ. 2,3 cNm (3'000 rpm / 20 °C)
max. shaft load C6	axial: 10 N radial: 20 N
C0	axial: 40 N radial: 60 N
product life	depending on ambient conditions (typ. 10 ⁹ revolutions)
max. protection class	IP 65
material	housing: steel flange: aluminum
weight	approx. 300 g

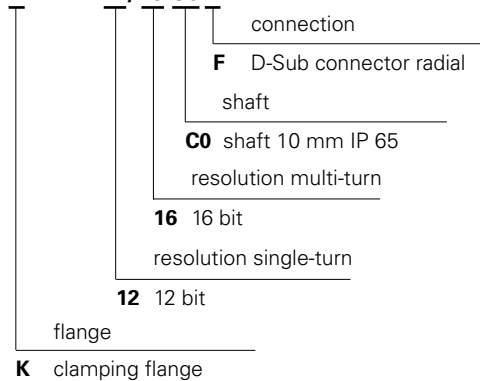


58K

58S

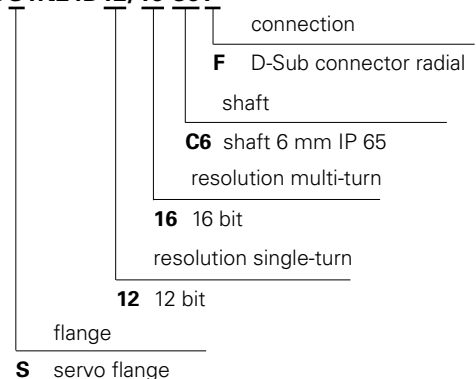
order designation BMMV 58K

BMMV 58K1N24D12/16 C0 F



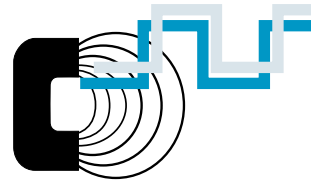
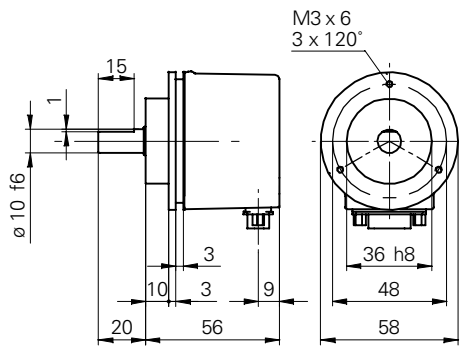
order designation BMMV 58S

BMMV 58S1N24D12/16 C6 F



ambient conditions

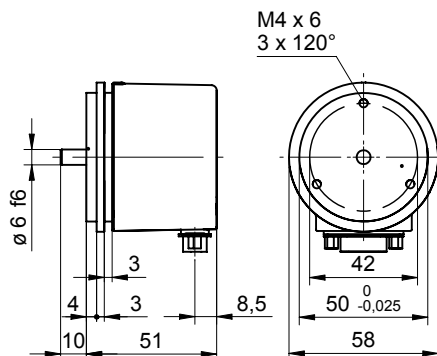
temperature range	-20...+85 °C
relative humidity	max. relative humidity 95%
vibration	IEC 60068-2-6 (≤ 300 m/s ² / 10 - 2'000 Hz)
shock	IEC 60068-2-27 (≤ 1'000 m/s ² / 6 ms)
noise immunity	EN 61000-6-2
emitted interference	EN 61000-6-3


dimensions
-K

assignment D-Sub connector DeviceNet

pin	signal	description
1	d.u.	do not use
2	CAN_L	bus line (dominant LOW)
3	CAN_GND	CAN ground
4	d.u.	do not use
5	CAN_SHLD	CAN shield
6	0 V	voltage supply
7	CAN_H	bus line (dominant HIGH)
8	n.c.	-
9	+Vs	voltage supply

accessories

CD-ROM with GSD-/EDS-/XML-files and manuals	part nr. 147362
spring clamp set	part nr. 252773
D-Sub connector angled CAN-Bus couplings	part nr. 145023
	see chapter accessories

-S

Note

Mounting drawings see end of chapter.