

# Magnetic absolute multi-turn shaft encoder

## BMMV flexible – *MAGRES*

### Profibus-DP, CANopen, DeviceNet, EtherCAT

#### features

- multi-turn encoder / bus cover
- magnetic sensing principle
- resolution: single-turn 12 bit and multi-turn to 18 bit
- modular fieldbus system
- high resistance against shock and vibration
- resolution and zero point programmable
- clamping flange or servo flange



58K

58S

#### general data

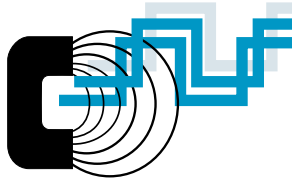
voltage supply	10 - 30 VDC
supply current no load	typ. 100 mA (at 24 VDC)
output circuit	CANopen, DeviceNet, Profibus-DP, EtherCAT
max. resolution single-turn multi-turn	DeviceNet, Profibus-DP, EtherCAT 12 bit (1 step = 5' 16") 16 bit (65'536 revolutions)
single-turn multi-turn	CANopen 12 bit (1 step = 5' 16") 18 bit (262'144 revolutions)
max. error limit	±1°
repeatability	0,3°
preset	value programmable within resolution range
address	selectable via dip switches (B,D) or bus (E)
baud rate	selectable via dip switches (B,D) or bus (E)
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 C0	typ. 11,8 x 10 <sup>-7</sup> kgm <sup>2</sup> typ. 17,8 x 10 <sup>-7</sup> kgm <sup>2</sup>
torque	typ. 2,3 cNm (3'000 rpm / 20 °C)
max. shaft load C6 C0	axial: 10 N    radial: 20 N axial: 40 N    radial: 60 N
product life	depending of ambient conditions (typ. 10 <sup>9</sup> revolutions)
max. protection class	IP 65
material	housing: steel bus cover/flange: aluminium
weight	approx. 480 g

#### ambient conditions

temperature range	-20...+85 °C
relative humidity	max. relative humidity 95%
vibration	IEC 60068-2-6 (≤ 100 m/s <sup>2</sup> / 10 - 2'000 Hz)
shock	IEC 60068-2-27 (≤ 500 m/s <sup>2</sup> / 11 ms)
noise immunity	EN 61000-6-2
emitted interference	EN 61000-6-3

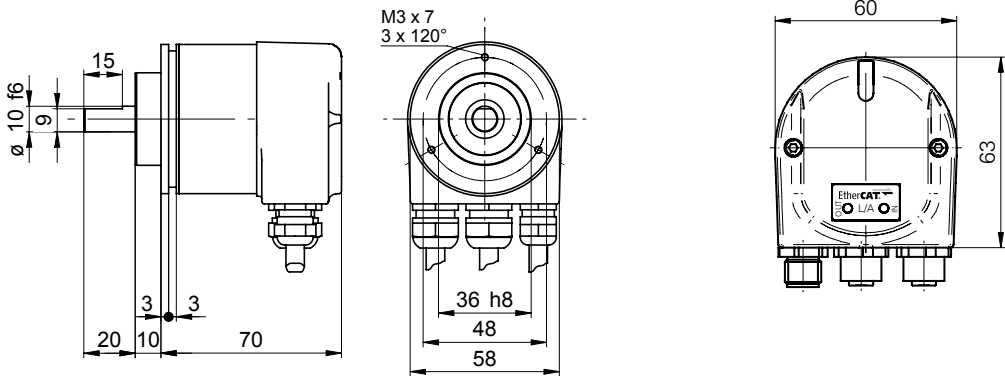


Profibus-DP, CANopen, DeviceNet, EtherCAT

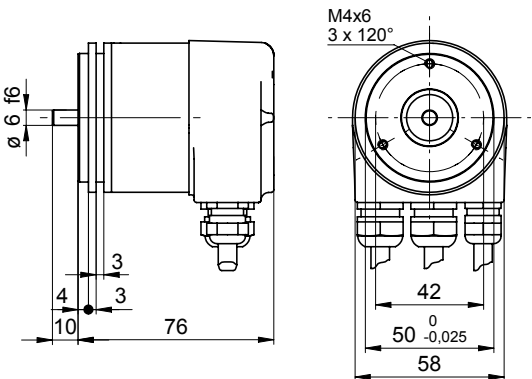
dimensions

dimensions bus cover

-K



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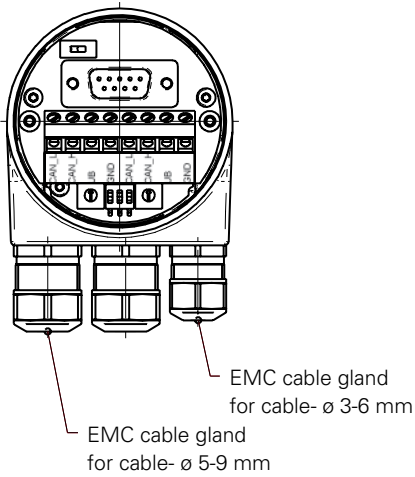
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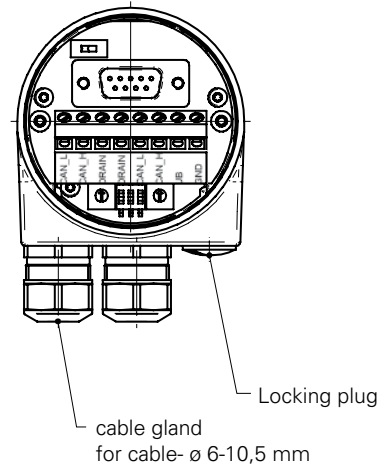
## Profibus-DP, CANopen, DeviceNet, EtherCAT

### bus cover

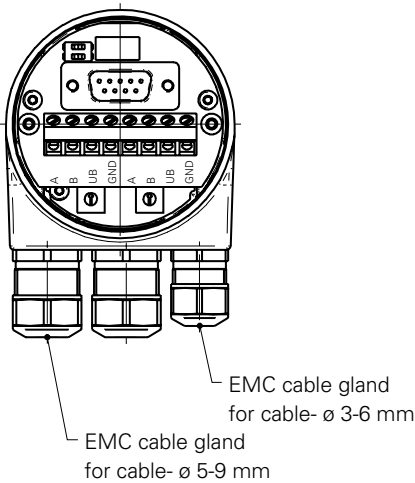
**-B** CANopen



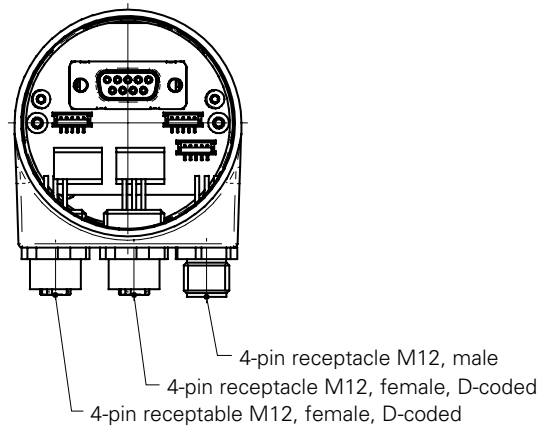
**-D** DeviceNet

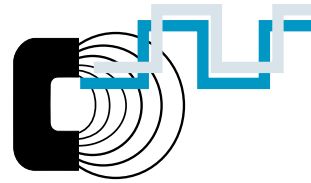


**-P** Profibus-DP



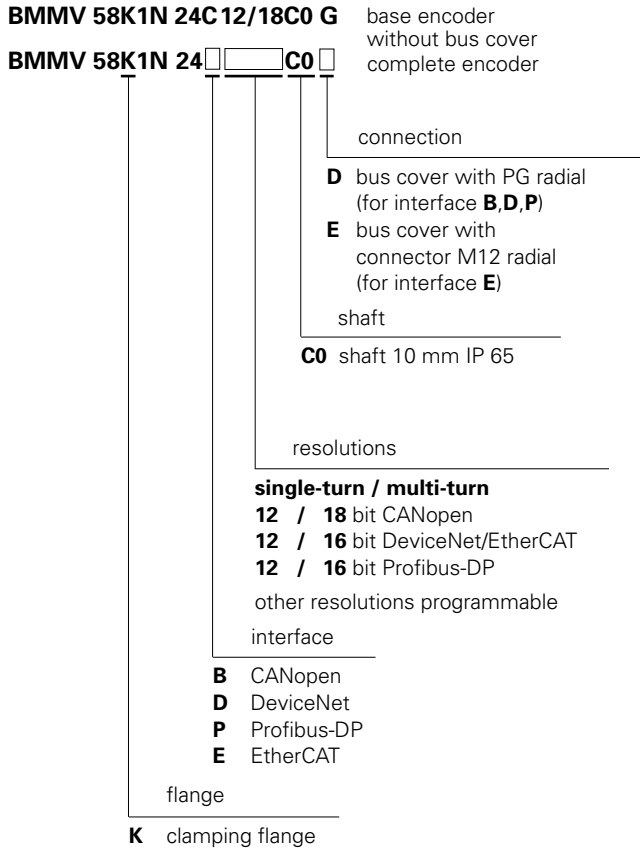
**-E** EtherCAT



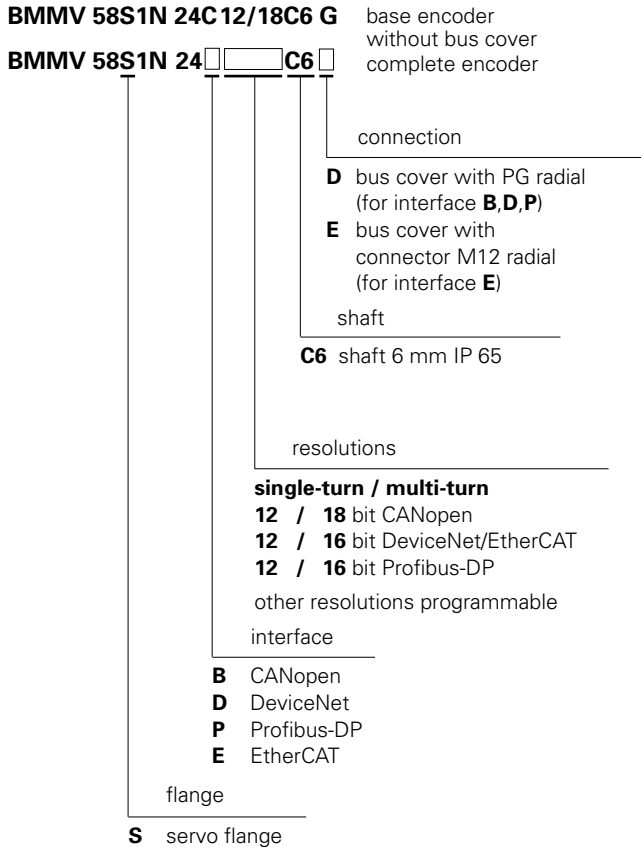


**Profibus-DP, CANopen, DeviceNet, EtherCAT**

**order designation BMMV 58K**



**order designation BMMV 58S**



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**accessories**

bus cover for Profibus-DP	part nr. 140831
for CANopen	part nr. 140832
for DeviceNet	part nr. 140833
for EtherCAT	part nr. 159110
spring clamp set	part nr. 252773
coupling and shaft adapter	see chapter accessories
cable EtherCAT M12 male-male, d-coded M12 straight, 5 m	part nr. 160565
CD-ROM with GSD-/EDS-/XML-files and manuals	part nr. 147362