

Magnetic absolute single-turn shaft encoder

BMSV flexible – *MAGRES*

CANopen, DeviceNet, Profibus-DP, EtherCAT

features

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



general data

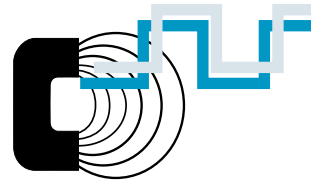
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|--------------------------------|---------------------------------------------------------------------------------------------------|
| voltage supply | 10 - 30 VDC |
| max. supply current no load | typ. 100 mA (at 24 VDC) |
| output circuit | CANopen, DeviceNet, Profibus-DP, EtherCAT |
| max. resolution | 12 bit (1 step = 5' 16") |
| max. error limit | ±1° |
| repeatability | 0,3° |
| preset | value programmable within resolution range |
| address | selectable via rotary switches (B, D, P) 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 (mechanical) 6'000 rpm (electrical) |
| moment of inertia C6 C0 | typ. 11,8 x 10 ⁻⁷ kgm ² typ. 17,8 x 10 ⁻⁷ kgm ² |
| 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 | dependending on ambient conditions (typ. 10 ⁹ 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 ² / 10 - 2'000 Hz) |
| shock | IEC 60068-2-27 (≤ 500 m/s ² / 11 ms) |
| noise immunity | EN 61000-6-2 |
| emitted interference | EN 61000-6-3 |

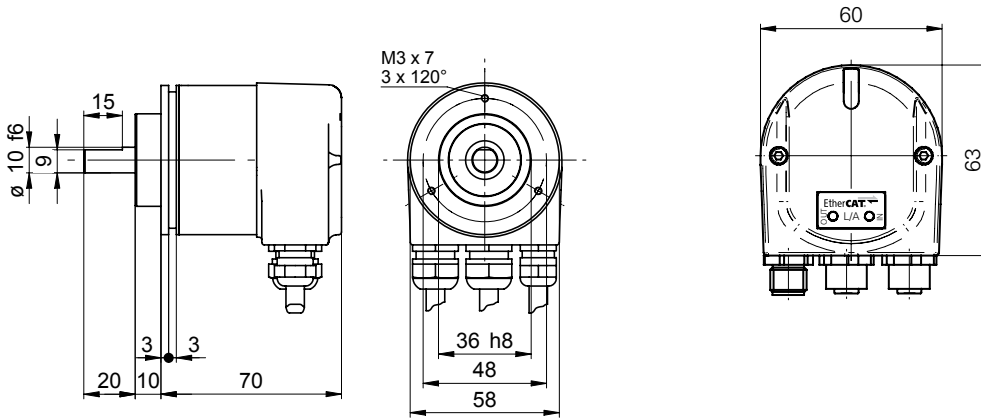


CANopen, DeviceNet, Profibus-DP, EtherCAT

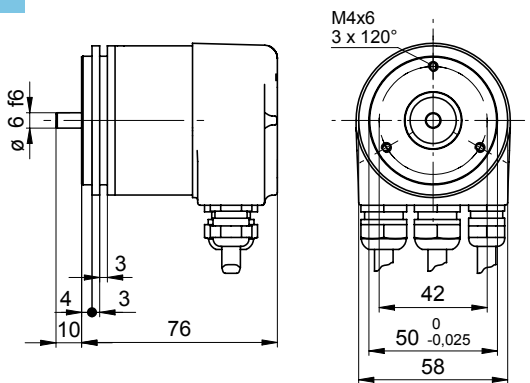
dimensions

dimensions bus cover

-K



-S



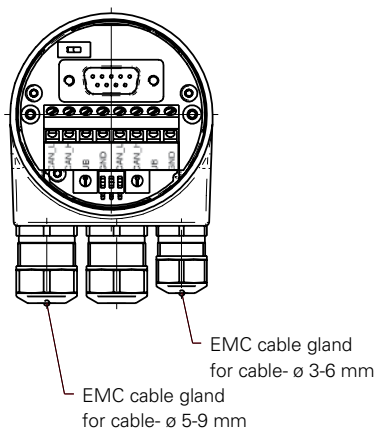
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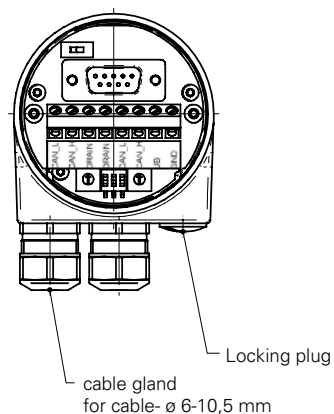
CANopen, DeviceNet, Profibus-DP, EtherCAT

bus cover

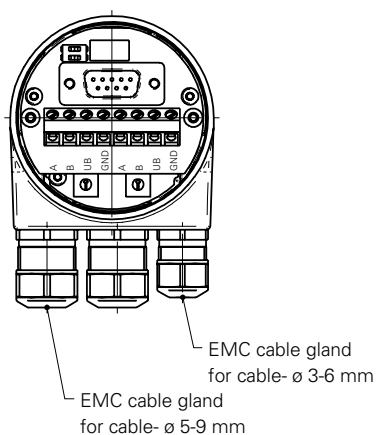
-B CANopen



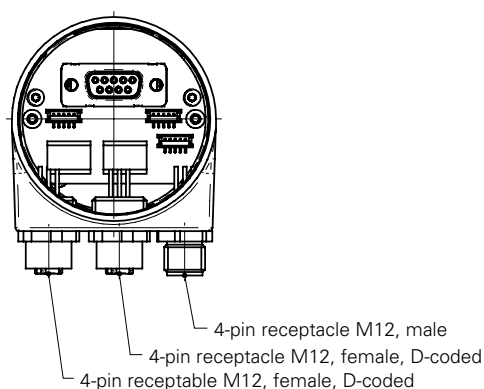
-D DeviceNet

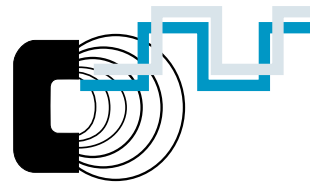
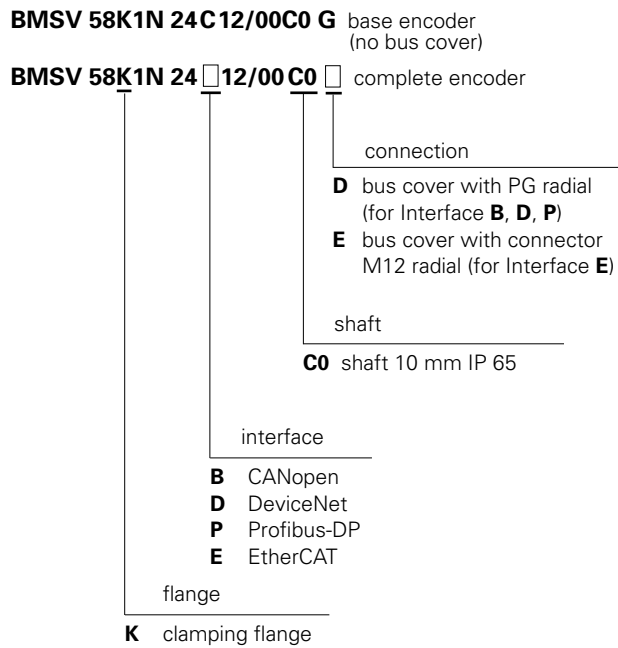
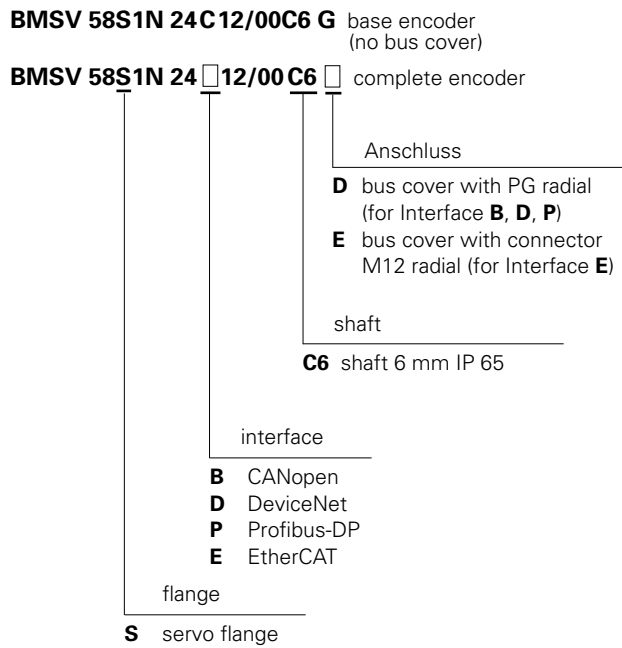


-P Profibus-DP



-E EtherCAT




CANopen, DeviceNet, Profibus-DP, EtherCAT
order designation BMSV 58K

order designation BMSV 58S

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accessories

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