

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

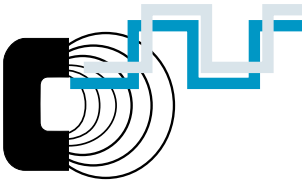
voltage supply	10 - 30 VDC
max. supply current no load	typ. 100 mA (at 24 VDC)
output circuit	CANopen, DeviceNet, Profibus-DP, EtherCAT
max. resolution	12 bit (1 step = 5' 16'')
max. error limit	±1°
repeatability	0,3°
preset	value programmable within resolution range
address	selectable via rotary switches (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	dependening 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

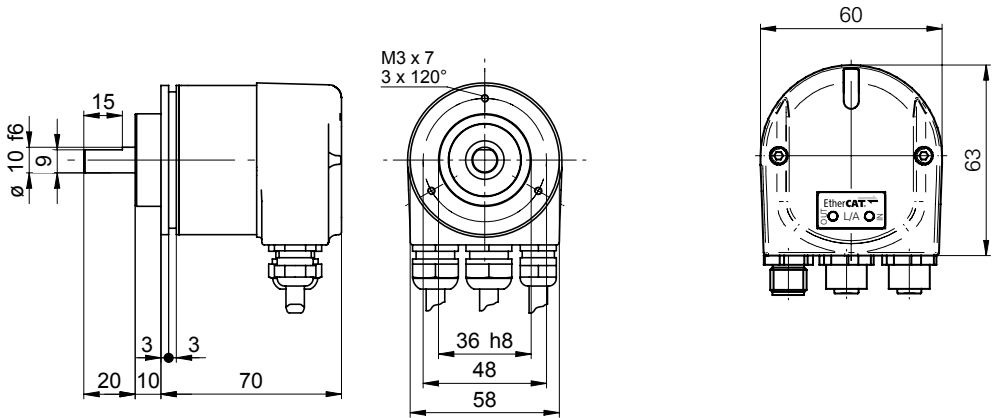


CANopen, DeviceNet, Profibus-DP, EtherCAT

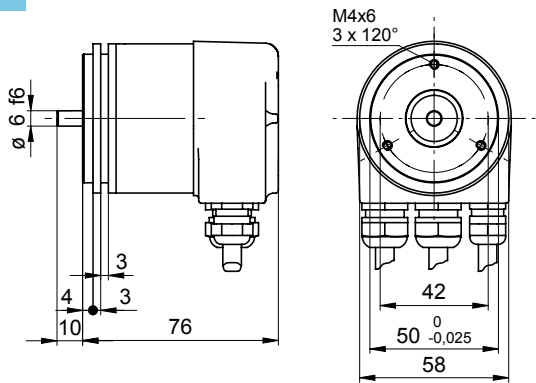
dimensions

dimensions bus cover

-K



-S



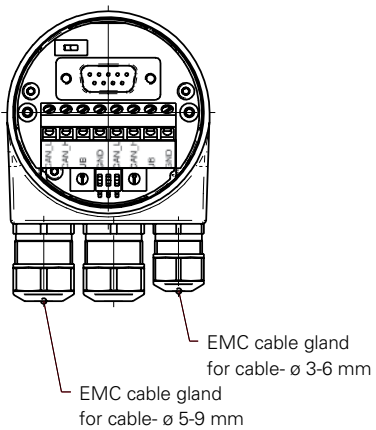
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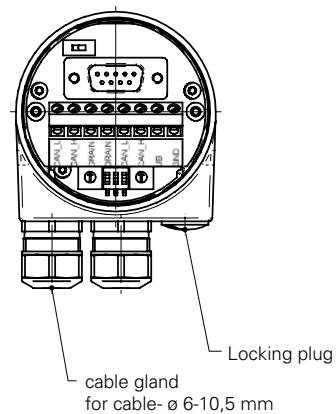
CANopen, DeviceNet, Profibus-DP, EtherCAT

bus cover

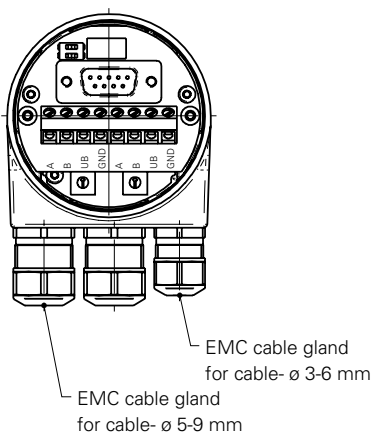
-B CANopen



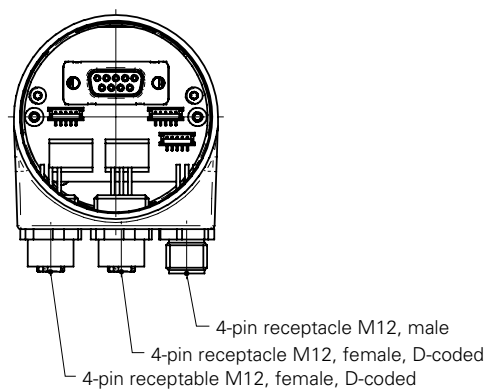
-D DeviceNet

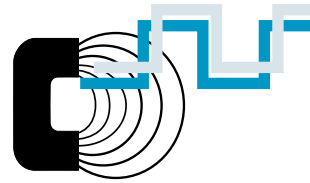


-P Profibus-DP



-E EtherCAT





CANopen, DeviceNet, Profibus-DP, EtherCAT

order designation BMSV 58K

BMSV 58K1N 24 ☐ **12/00** **C0** ☐ **G** base encoder (no bus cover)
BMSV 58K1N 24 ☐ **12/00** **C0** ☐ complete encoder

connection

D bus cover with PG radial (for Interface **B, D, P**)
E bus cover with connector M12 radial (for Interface **E**)

shaft

C0 shaft 10 mm IP 65

interface

B CANopen
D DeviceNet
P Profibus-DP
E EtherCAT

flange

K clamping flange

order designation BMSV 58S

BMSV 58S1N 24 ☐ **12/00** **C6** ☐ **G** base encoder (no bus cover)
BMSV 58S1N 24 ☐ **12/00** **C6** ☐ complete encoder

Anschluss

D bus cover with PG radial (for Interface **B, D, P**)
E bus cover with connector M12 radial (for Interface **E**)

shaft

C6 shaft 6 mm IP 65

interface

B CANopen
D DeviceNet
P Profibus-DP
E EtherCAT

flange

S servo flange

2

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