

Magnetic absolute single-turn shaft encoder

BMSV – MAGRES

DeviceNet

features

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

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	12 bit (1 step = 5'16'')
max. error limit	±1°
repeatability	0,3°
max. baud rate	500 kbit/s
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	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: aluminium flange: aluminium
weight	approx. 300 g

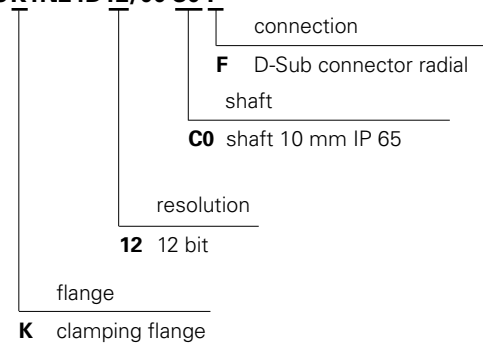


58K

58S

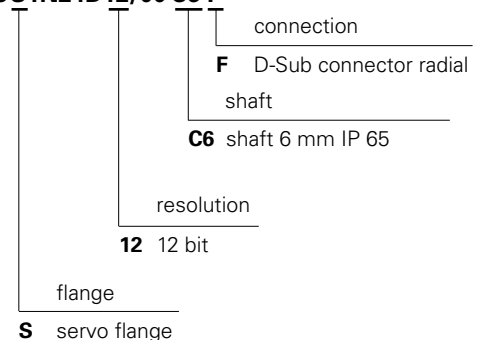
order designation BMSV 58K

BMSV 58K1N24D12/00 C0 F



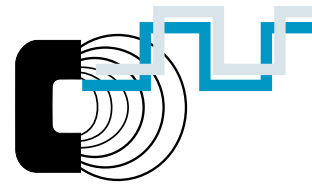
order designation BMSV 58S

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ambient conditions

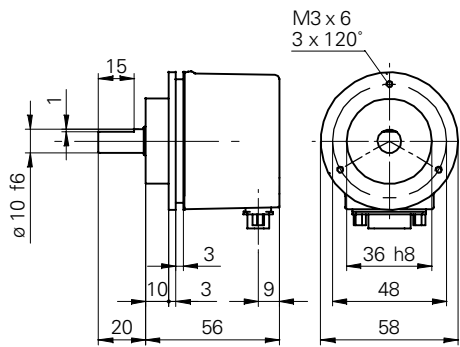
temperature range	20...+85 °C
relative humidity	max. relative humidity 95%
vibration	IEC 60068-2-6 (≤ 300 m/s ² / 10 - 2'000 Hz)
shock	IEC 60068-2-27 (≤ 1'000 m/s ² / 6 ms)
noise immunity	EN 61000-6-2
emitted interference	EN 61000-6-3



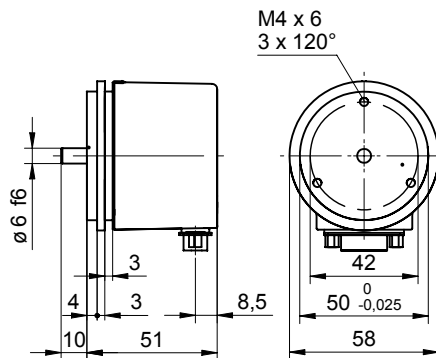
DeviceNet

dimensions

-K



-S



Note

Mounting drawings see end of chapter.

assignment connector D-Sub male 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
clamp set	part nr. 252773
D-Sub connector angled CAN-Bus couplings	part nr. 145023 see chapter accessories