

# Absolute encoders - modular bus covers

Shaft with synchro flange

Magnetic singleturn encoders 12 bit

## BMSV 70 flexible - MAGRES



BMSV 70 flexible with synchro flange

### Features

- Encoder singleturn / bus cover
- Magnetic sensing, permanent shock proof
- Resolution: singleturn 12 bit
- Modular fieldbus interfaces
- High resistance to shock and vibrations
- Resolution and zero point programmable
- CANopen/DeviceNet/EtherCAT/EtherNet-IP/SAEJ1939  
PROFINET/POWERLINK/Profibus
- Safety screw connection

### Technical data - electrical ratings

Voltage supply	10...30 VDC
Consumption w/o load (typ.)	100 mA (24 VDC)
Initializing time (typ.)	170 ms after power on
Interfaces	CANopen, DeviceNet, EtherCAT, EtherNet/IP, Profibus-DPV0/V2, PROFINET, POWERLINK, SAEJ1939
Function	Singleturn
User address	Rotary switch in bus cover
Steps per turn	≤4096 / 12 bit
Absolute accuracy	±1 °
Sensing method	Magnetic
Code	Binary
Code sequence	CW default, programmable
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-3
Programmable parameters	Steps per revolution Preset Scaling Rotational direction
Diagnostic function	Position or parameter error
Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E217823

### Technical data - mechanical design

Dimensions (flange)	ø70 mm
Shaft	ø12 mm
Flange	Synchro flange
Protection DIN EN 60529	IP 64
Operating speed	≤6000 rpm
Operating torque typ.	0.023 Nm
Shaft loading	≤40 N axial ≤60 N radial
Materials	Housing: steel ETG100, bronzed Bus cover, lid: aluminium
Operating temperature	-20...+85 °C
Relative humidity	95 %
Resistance	DIN EN 60068-2-6 Vibration 30 g, 10-2000 Hz DIN EN 60068-2-27 Shock 20 g, 6 ms
Weight approx.	770 g
Connection	Bus cover

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### Part number

#### Singleturn synchro flange

<b>BMSV 70S1N</b>	<b>12/00</b>	<b>L2</b>	<b>E</b>
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Connection  
 E Complete encoder with bus cover, M12

Shaft  
 L2 ø12 mm, IP 64

Resolution  
 12/00 12 bit singleturn

Voltage supply / signals  
 24B 10...30 VDC / CANopen  
 24D 10...30 VDC / DeviceNet  
 24P 10...30 VDC / Profibus-DPV0  
 24Q 10...30 VDC / Profibus-DPV2  
 246 10...30 VDC / EtherCAT  
 24I 10...30 VDC / EtherNet/IP  
 24L 10...30 VDC / POWERLINK  
 24H 10...30 VDC / PROFINET  
 24J 10...30 VDC / SAEJ1939

### Accessories

#### Connectors and cables

10160565	Cable connector/connector M12, EtherCAT, straight, 5 m
10144720	Female connector M12, 5-pin, A-coded, straight, shielded, 2 m
10153968	Female connector M12, 5-pin, A-coded, straight
10157909	Cable with male/female M12, Profibus, shielded, straight, B-coded, 2 m
10159389	Cable with male/female M12, Profibus, shielded, straight, B-coded, 0.3 m (stub line)
10157911	Cable with male/female M12, Profibus, shielded, angled, B-coded, 2 m

#### Programming accessories

10147362	CD-ROM with GSD-/EDS-/XML files and user manuals
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CD with file descriptions is not included in the delivery. You may order them on CD as accessory free-of-charge under part number 10147362.

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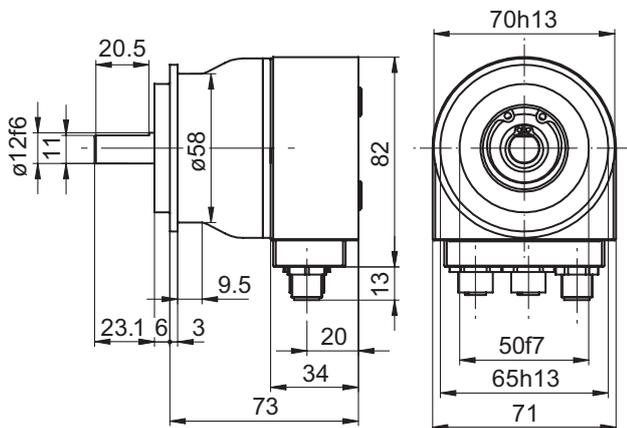
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### Dimensions

BMSV 70 flexible, bus cover



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