Encoders without bearings - absolute

Magnetic sensor bore max. ø12 mm

Magnetic single- or multiturn encoders / kit 12 bit ST / 18 bit MT

BMSK 58, BMMK 58 flexibel - *MAGRES*

BMMK 58 flexible kit

Features

- **Encoder kit single- or multiturn / bus cover**
- **Magnetic sensing method**
- **Resolution: singleturn 12 bit, multiturn 18 bit**
- **Modular fieldbus interfaces**
- **High resistance to shock and vibrations**
- **CANopen®/DeviceNet/EtherCAT/EtherNet-IP SAEJ1939/PROFINET/PoE/POWERLINK/Profibus**
- **Resolution and zero point programmable**

Technical data - electrical ratings

Voltage supply	10...30 VDC
Consumption typ.	100 mA (24 VDC, w/o load)
Initializing time typ.	170 ms after power on
Interfaces	CANopen®, DeviceNet, EtherCAT, EtherNet/IP, PoE, Profibus-DPV0/V2, PROFINET, POWERLINK, SAE J1939
Steps per revolution	≤4096 / 12 bit
Absolute accuracy	±1 °
Device adress	Rotary switches in bus cover
Sensing method	Magnetic
Code	Binary
Code sequence	CW default, programmable
Diagnostic functions	Position or parameter error Multiturn sensing
Status indicator	DUO-LED integrated in bus cover
Programmable parameters	Steps per revolution Number of revolutions Preset Scaling Rotating direction
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-3
Approval	UL approval / E217823
BMSK 58	
Function	Singleturn
BMMK 58	
Function	Multiturn
Number of revolutions	≤262144 / 18 bit

Technical data - mechanical design

Size (flange)	ø58 mm
Shaft type	ø12 mm (magnet bore)
Protection DIN EN 60529	IP 67
Operating speed	≤12000 rpm (mechanical) ≤6000 rpm (electric)
Gap tolerance	≤0.3 mm axial ≤0.1 mm radial
Materials	Housing: steel Flange: aluminium Bus cover: zinc die-cast
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 200 g, 6 ms
Weight approx.	480 g
Connection	Bus cover

Encoders without bearings - absolute

Magnetic sensor bore max. ø12 mm

Magnetic single- or multiturn encoders / kit 12 bit ST / 18 bit MT

BMSK 58, BMMK 58 flexibel - *MAGRES*

Part number

Singleturn

BMSK 58S1N | | **12/00** | **12** | |

Connection
- D Complete encoder with bus cover / cable gland (w/o 246)
- G Basic encoder without bus cover
- E Complete encoder with bus cover, M12

Solid shaft
- 12 ø12 mm magnet bore

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
- 242 10...30 VDC / Power over EtherCAT*
- 24L 10...30 VDC / POWERLINK
- 24H 10...30 VDC / PROFINET
- 24J 10...30 VDC / SAEJ1939
- 24C 10...30 VDC / basic encoder

CD with file descriptions is not included in the delivery.
You may order them on CD as accessory under part number 10147362.

* Power over EtherCAT on request

Multiturn

BMMK 58S1N | | | **12** | |

Connection
- D Complete encoder with bus cover / cable gland (w/o 246)
- G Basic encoder without bus cover
- E Complete encoder with bus cover, M12

Solid shaft
- 12 ø12 mm magnet bore

Resolution
- 12/18 12/18 bit single-/multiturn (only CANopen)
- 12/16 12/16 bit single-/multiturn

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
- 242 10...30 VDC / Power over EtherCAT*
- 24L 10...30 VDC / POWERLINK
- 24H 10...30 VDC / PROFINET
- 24J 10...30 VDC / SAEJ1939
- 24C 10...30 VDC / basic encoder

Encoders without bearings - absolute

Magnetic sensor bore max. ø12 mm

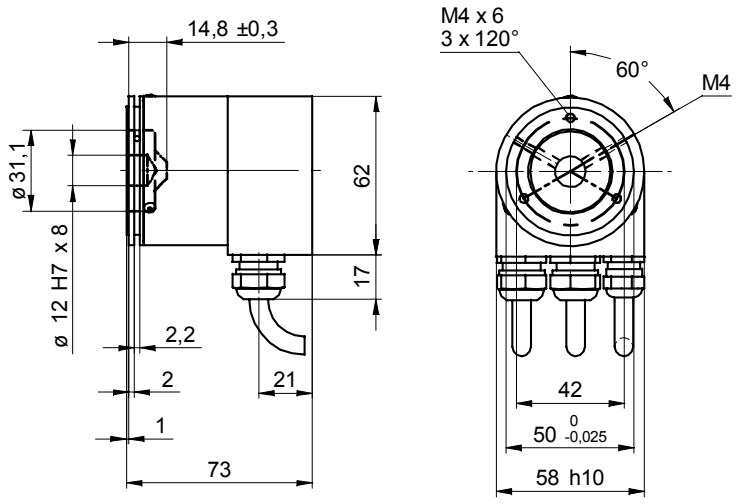
Magnetic single- or multiturn encoders / kit 12 bit ST / 18 bit MT

BMSK 58, BMMK 58 flexibel - *MAGRES*

Accessories	
Connectors and cables	
10160565	Cable connector/connector M12, EtherCAT, straight, 5 m
11046266	Female connector M12, 5-pin, straight, shielded, 5 m cable
11046264	Female connector M12, 5-pin, straight, shielded, 2 m cable
10153968	Female connector M12, 5-pin, straight, without cable
10157910	Cable with male/female M12, Profibus, straight, B-coded, 5 m
10159389	Cable with male/female M12, Profibus, straight, B-coded, 0.3 m (stub line)
10157911	Cable with male/female M12, Profibus, angled, B-coded, 2 m
10157912	Cable with male/female M12, Profibus, angled, B-coded, 5 m
Mounting accessories	
10110616	Clamp set ø15 mm
10112432	Hexagon wrench 2.5 mm
Programming accessories	
10147362	CD-ROM with GSD-/EDS-/XML files and user manuals

Dimensions

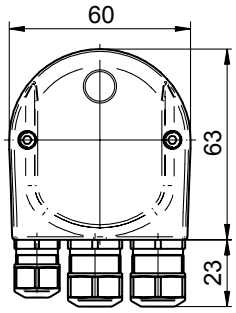
BMSK/BMMK 58 flexible encoder with bus cover



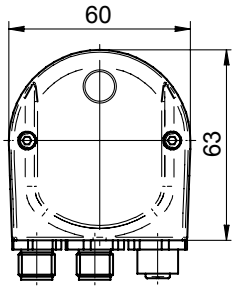
BMSK 58, BMMK 58 flexibel - *MAGRES*

Dimensions

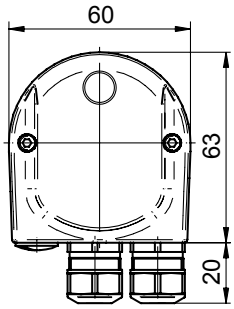
Profibus-DP/CANopen®



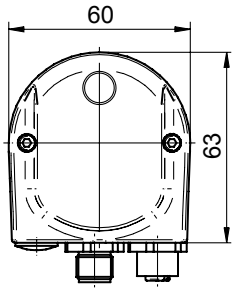
Profibus-DP - M12



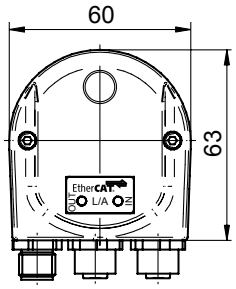
DeviceNet



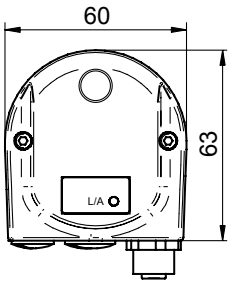
CANopen®/DeviceNet M12



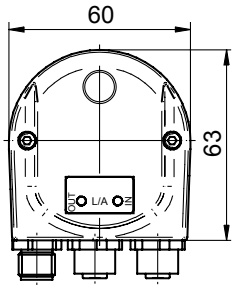
EtherCAT/EtherNet-IP



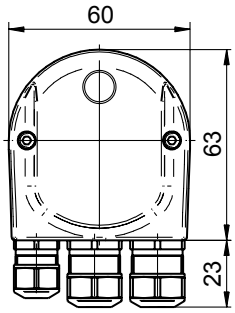
Power over EtherCAT



PROFINET/POWERLINK



SAEJ1939



SAEJ1939 - M12