

Absolute encoders - modular bus covers

Solid shaft with clamping or synchro flange

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

BMSV 58, BMMV 58 flexible - MAGRES



BMMV 58K flexible with clamping flange

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, PoE, Profibus-DPV0/V2, PROFINET, POWERLINK, SAEJ1939
Device 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 Number of revolutions Preset Scaling Rotating direction
Diagnostic functions	Position or parameter error Multiturn sensing
Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E217823
BMSV 58K, BMSV 58S	
Function	Singleturn
BMMV 58K, BMMV 58S	
Function	Multiturn
Number of turns	≤262144 / 18 bit

Features

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

Technical data - mechanical design

Size (flange)	ø58 mm
Protection DIN EN 60529	IP 65
Operating speed	≤12000 rpm (mechanical) ≤6000 rpm (electric)
Operating torque typ.	0.023 Nm
Materials	Housing: aluminium 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
BMSV 58K, BMMV 58K	
Shaft type	ø10 mm solid shaft (clamping flange)
Flange	Clamping flange
Shaft loading	≤40 N axial ≤60 N radial
BMSV 58S, BMMV 58S	
Shaft type	ø6 mm solid shaft (synchro flange)
Flange	Synchro flange
Shaft loading	≤10 N axial ≤20 N radial

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Part number

Singleturn clamping flange

BMSV 58K1N 12/00 C0

				Connection
			G	Basic encoder without bus cover
			D	Complete encoder with bus cover / cable gland (CANopen, DeviceNet, Profibus)
			E	Complete encoder with bus cover, M12
				<u>Solid shaft</u>
			C0	ø10 mm, IP 65
				<u>Resolution</u>
			12/00	12 bit singleturn
				<u>Voltage supply / signals</u>
			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

Multiturn clamping flange

BMMV 58K1N C0

				Connection
			G	Basic encoder without bus cover
			D	Complete encoder with bus cover / cable gland (CANopen, DeviceNet, Profibus)
			E	Complete encoder with bus cover, M12
				<u>Solid shaft</u>
			C0	ø10 mm, IP 65
				<u>Resolution</u>
			12/18	12/18 bit single-/multiturn (only CANopen)
			12/16	12/16 bit single-/multiturn
				<u>Voltage supply / signals</u>
			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 free-of-charge under part number 10147362.

* Power over EtherCAT on request

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Part number

Singleturn synchro flange

BMSV 58S1N 12/00 C6

- Connection
- G Basic encoder without bus cover
 - D Complete encoder with bus cover / cable gland (CANopen, DeviceNet, Profibus)
 - E Complete encoder with bus cover, M12

Solid shaft
C6 ø6 mm, IP 65

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

Multiturn synchro flange

BMMV 58S1N C6

- Connection
- G Basic encoder without bus cover
 - D Complete encoder with bus cover / cable gland (CANopen, DeviceNet, Profibus)
 - E Complete encoder with bus cover, M12

Solid shaft
C6 ø6 mm, IP 65

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

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Accessories

Connectors and cables

10160565	Cable connector/connector M12, EtherCAT, straight, 5 m
11046264	Female connector M12, 5-pin, straight, shielded, 2 m
10153968	Female connector M12, 5-pin, 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

Mounting accessories for BMSV 58K, BMMV 58K

10252773	Clamp set $\varnothing 15$ mm
11053277	Bellows coupling aluminium/stainless steel 10 mm

Mounting accessories for BMSV 58S, BMMV 58S

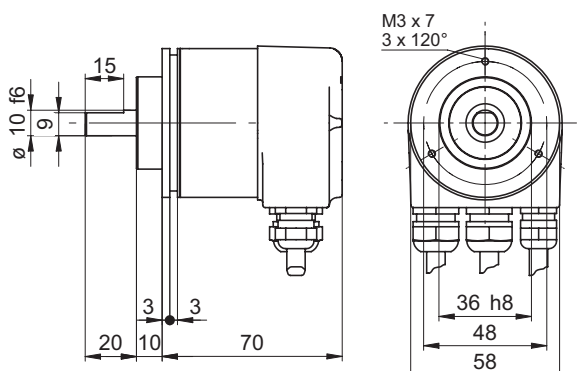
10252773	Clamp set $\varnothing 15$ mm
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Programming accessories

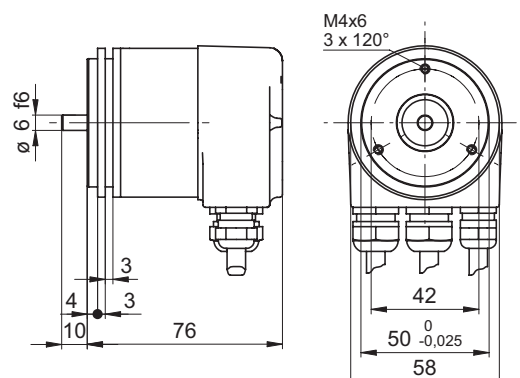
10147362	CD-ROM with GSD-/EDS-/XML files and user manuals
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Dimensions

BMSV/BMMV 58 flexible clamping flange, bus cover



BMSV/BMMV 58 flexible synchro flange, bus cover



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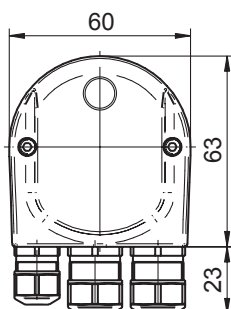
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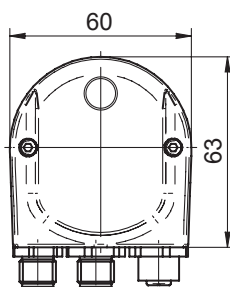
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Dimensions

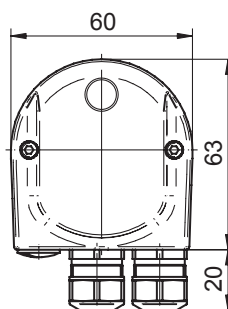
Profibus-DP/CANopen®



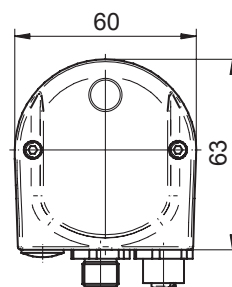
Profibus-DP - M12



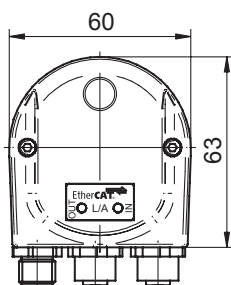
DeviceNet



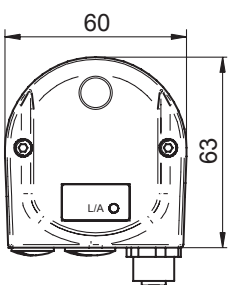
CANopen®/DeviceNet M12



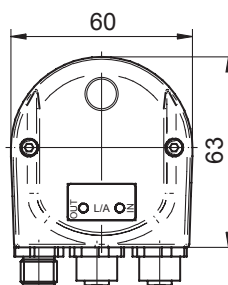
EtherCAT/EtherNet-IP



Power over EtherCAT



PROFINET/POWERLINK



SAEJ1939 - M12

