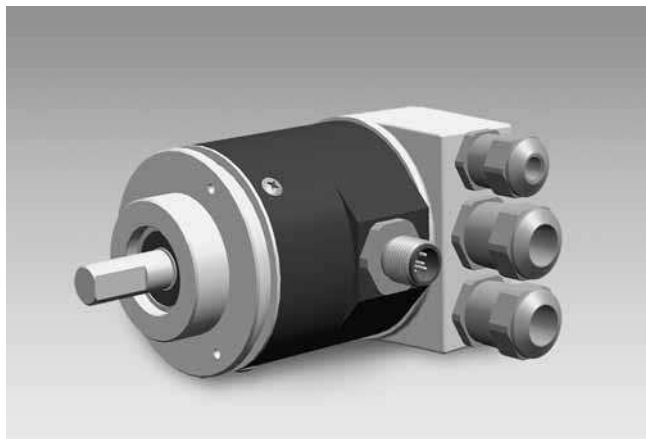


Absolute encoders - modular bus covers

Shaft with clamping or synchro flange

Optical multiturn encoders 13 bit ST / 16 bit MT, incremental tracks

GXMMW + incremental - *multivo*



GXMMW with modular bus cover

Features

- Encoder multiturn / bus cover
- Optical sensing
- Resolution: singleturn 13 bit, multiturn 16 bit
- Clamping or synchro flange
- High resistance to shock and vibrations
- CANopen/DeviceNet/EtherCAT/EtherNet-IP/SAEJ1939 fiber-optic/PROFINET/Power over EtherCAT POWERLINK/Profibus/SSI
- Code continuity check optional by bus
- Two incremental tracks A and B

Technical data - electrical ratings

Voltage supply	10...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤100 mA (24 VDC)
Initializing time (typ.)	250 ms after power on
Interfaces	CANopen, DeviceNet, Fiber-optic, EtherCAT, EtherNet/IP, PoE, Profibus, PROFINET, POWERLINK, SAEJ1939, SSI
Function	Multiturn
User address	Rotary switch in bus cover (type-specific)
Steps per turn	≤8192 / 13 bit
Number of turns	≤65536 / 16 bit
Incremental output	2048 pulses A90°B + inverted
Absolute accuracy	±0.025 °
Sensing method	Optical
Code	Binary
Code sequence	CW/CCW programmable
Output circuit	Push-pull short-circuit proof RS422
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Programmable parameters	Steps per revolution Number of revolutions Preset Scaling Rotational direction
Diagnostic functions	Position or parameter error Multiturn sensing
Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E63076

Technical data - mechanical design

Dimensions (flange)	ø58 mm
Shaft	ø10 mm (clamping flange) ø6 mm (synchro flange)
Flange	Clamping or synchro flange
Protection DIN EN 60529	IP 54 (without shaft seal), IP 65 (with shaft seal)
Operating speed	≤10000 rpm (mechanical) ≤6000 rpm (electric)
Starting torque	≤0.01 Nm (IP 54) ≤0.015 Nm (IP 65)
Rotor moment of inertia	20 gcm ²
Shaft loading	≤20 N axial ≤40 N radial
Materials	Housing: steel Flange: aluminium Bus cover: aluminium
Operating temperature	-25...+85 °C -40...+85 °C (optional)
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 16-2000 Hz DIN EN 60068-2-27 Shock 200 g, 6 ms
Weight approx.	670 g
Connection	Bus cover

Absolute encoders - modular bus covers

Shaft with clamping or synchro flange

Optical multiturn encoders 13 bit ST / 16 bit MT, incremental tracks

GXMMW + incremental - *multivo*

Part number

GXMMW.

		<u>Interface</u>
	3P32	Profibus-DPV0 / cable gland
	3PA2	Profibus-DPV0 / connector M12
	3V32	Profibus-DPV2 / cable gland
	3VA2	Profibus-DPV2 / connector M12
	3EA2	PROFINET / connector M12
	EPA6	EtherCAT / connector M12
	8EA2	EtherNet/IP / connector M12
	EEA2	Power over EtherCAT / connector M12
	5EA2	POWERLINK / connector M12
	5P32	CANopen / cable gland
	5PA2	CANopen / connector M12
	8P22	DeviceNet / cable gland
	8PA2	DeviceNet / connector M12
	LM32	Fiber-optic / cable gland
	2PA2	SSI / connector M12
	5B32	SAEJ1939 / cable gland
	5BA2	SAEJ1939 / connector M12
		<u>Pulses / Incremental output</u>
	50	2048 pulses / push-pull +inverted
	F0	2048 pulses / RS422
		<u>Flange / Shaft</u>
	0	Clamping flange / ø10 mm IP 54
	A	Clamping flange / ø10 mm IP 65
	1	Synchro flange / ø6 mm IP 54
	B	Synchro flange / ø6 mm IP 65

Absolute encoders - modular bus covers

Shaft with clamping or synchro flange

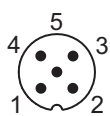
Optical multiturn encoders 13 bit ST / 16 bit MT, incremental tracks

GXMMW + incremental - *multivo*

Terminal assignment

Incremental connector

Connector	Assignment
Pin 1	A
Pin 2	B
Pin 3	A inv.
Pin 4	B inv.
Pin 5	GND



Accessories

Connectors and cables

Z 119.034	Connector for data cable fibre-optic
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Mounting accessories

Z 119.006	Eccentric fixing, single
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Z 119.013	Adaptor plate for clamping flange for modification into synchro flange
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Z 119.015	Mounting adaptor for synchro flange
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Z 119.017	Mounting angle for clamping flange (M3)
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Z 119.035	Bearing flange for encoders with synchro flange
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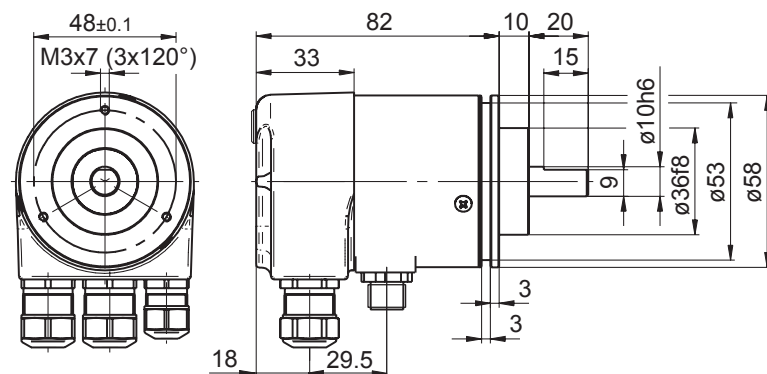
Programming accessories

Z 150.022	CD with describing files & manuals
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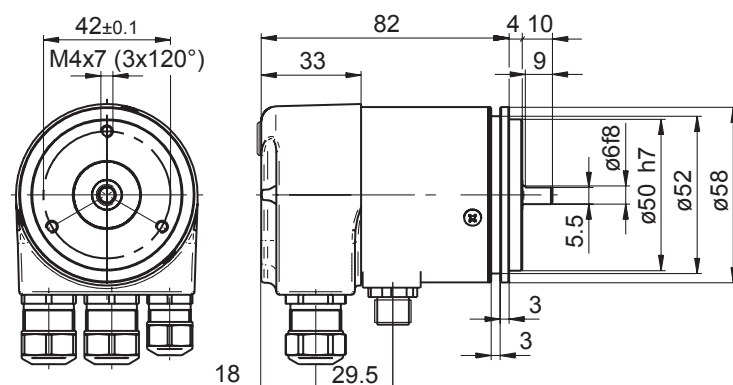
Z 139.008	Programming cable for encoders with SSI bus cover, CD with software and manual
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Dimensions

GXMMW - clamping flange



GXMMW - synchro flange



Absolute encoders - modular bus covers

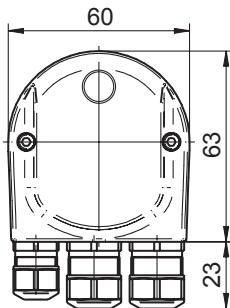
Shaft with clamping or synchro flange

Optical multiturn encoders 13 bit ST / 16 bit MT, incremental tracks

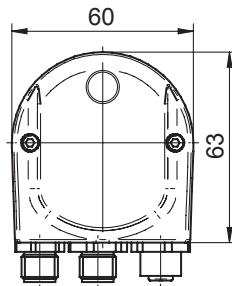
GXMMW + incremental - *multivo*

Dimensions

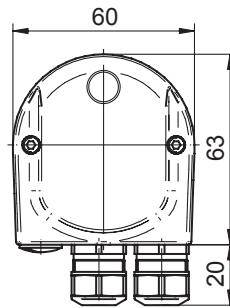
Profibus-DP/CANopen



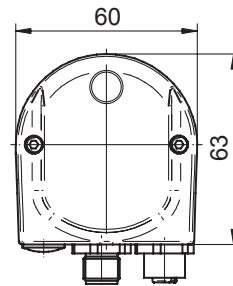
Profibus-DP - M12



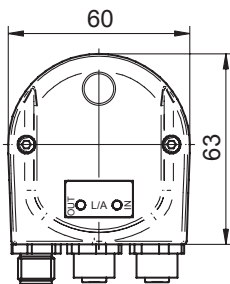
DeviceNet



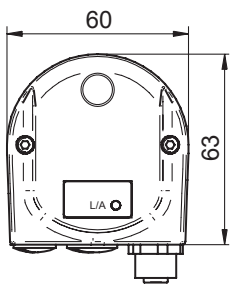
CANopen/DeviceNet M12



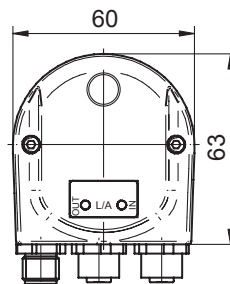
EtherCAT/EtherNet-IP



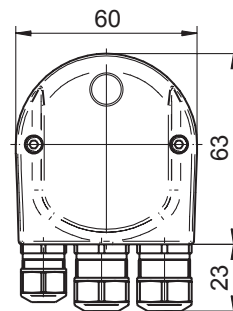
Power over EtherCAT



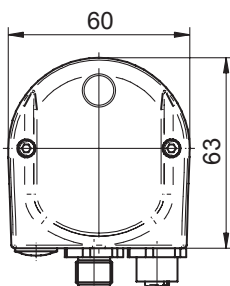
PROFINET/POWERLINK



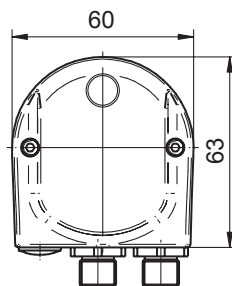
SAEJ1939



SAEJ1939 - M12



SSI



Fibre-optic

