

## GXMMW

Solid shaft with clamping or synchro flange  
Optical multiturn encoders 13 bit ST / 16 bit MT

### Overview

- Encoder multiturn / bus cover
- Optical sensing method
- Resolution: singleturn 13 bit, multiturn 16 bit
- Clamping or synchro flange
- Interface: Profibus-DP
- Code continuity check optional by bus
- Maximum resistant against magnetic fields



### Technical data

#### 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
Interface	Profibus
Function	Multiturn
Device adress	Rotary switch in bus cover (type-specific)
Steps per revolution	≤8192 / 13 bit
Number of revolutions	≤65536 / 16 bit
Absolute accuracy	±0,025 °
Sensing method	Optical
Code	Binary
Code sequence	CW/CCW programmable
Incremental output	2048 pulses A90°B (optional)
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-4
Programmable parameters	Steps per revolution Number of revolutions Preset Scaling Rotating direction
Diagnostic function	Position or parameter error Multiturn sensing
Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E63076

#### Technical data - mechanical design

Size (flange)	ø58 mm
Shaft type	ø10 mm solid shaft (clamping flange) ø6 mm solid shaft (synchro flange)
Flange	Clamping or synchro flange
Protection EN 60529	IP 54 (without shaft seal) IP 65 (with shaft seal)
Operating speed	≤10000 rpm (mechanical) ≤6000 rpm (electric)
Starting acceleration	≤1000 U/s <sup>2</sup>
Starting torque	≤0,015 Nm (+25 °C, IP 54) ≤0,03 Nm (+25 °C, IP 65)
Rotor moment of inertia	20 gcm <sup>2</sup>
Admitted shaft load	≤20 N axial ≤40 N radial
Material	Housing: steel Flange: aluminium Bus cover: zinc die-cast
Operating temperature	-25...+85 °C -40...+85 °C (optional)
Relative humidity	95 % non-condensing
Resistance	EN 60068-2-6 Vibration 10 g, 16-2000 Hz EN 60068-2-27 Shock 200 g, 6 ms
Weight approx.	650 g
Connection	Bus cover

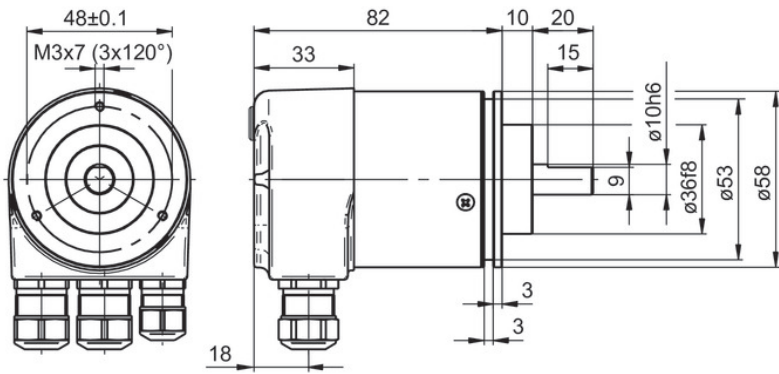
### Optional

- Incremental outputs and stainless steel design

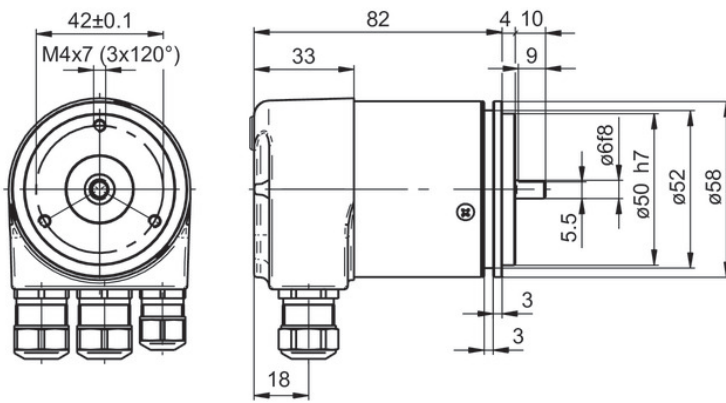
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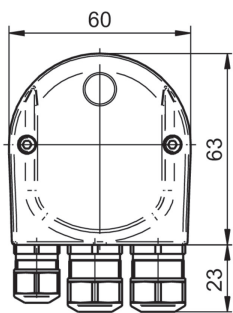
## Dimensions



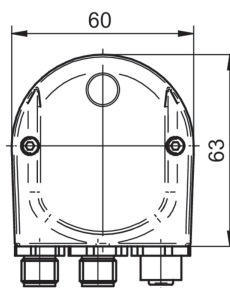
With clamping flange



With synchro flange



Profibus-DP



Profibus-DP - M12

**Ordering reference**

		GXMMW . #	20	####
<b>Product</b>		GXMMW		
<b>Flange / Solid shaft</b>				
Clamping flange / ø10 mm, IP 54			0	
Clamping flange / ø10 mm, IP 65			A	
Synchro flange / ø6 mm, IP 54			1	
Synchro flange / ø6 mm, IP 65			B	
<b>Voltage supply</b>				
10...30 VDC			20	
<b>Interface</b>				
Profibus-DPV0 / cable gland				3P32
Profibus-DPV0 / connector M12				3PA2
Profibus-DPV2 / cable gland				3V32
Profibus-DPV2 / connector M12				3VA2

**Accessories**
**Mounting accessories**

10117669	Eccentric fixing, single (Z 119.006)
10141255	Adaptor plate for clamping flange for modification into synchro flange (Z 119.013)
10117667	Mounting adaptor for encoders with synchro flange (Z 119.015)
10125051	Mounting adaptor for encoders with clamping flange (M3) (Z 119.017)
10158124	Bearing flange for encoders with synchro flange (Z 119.035)
10141132	Spring washer coupling D1=6 / D2=10 (Z 121.C01)

**Connectors and cables**

11034355	Cable connector M12, 4-pin, on both sides, D-coded, 5 m cable (Z 185.E05)
11034304	Female connector M12, 8-pin, straight, 2 m cable (Z 174.003)
11034305	Female connector M12, 8-pin, straight, 5 m cable (Z 174.005)

**Programming accessories**

10146710	CD with describing files & manuals (Z 150.022)
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