

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-DPV0/V2
Function	Multiturn
Device address	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)
Angular acceleration	≤2500 rad/s² (UB = 0 VDC) ≤500000 rad/s² (UB = 10...30 VDC)
Starting torque	≤0.015 Nm (+25 °C, IP 54) ≤0.03 Nm (+25 °C, IP 65)
Rotor moment of inertia	20 gcm²
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	Cable gland Connector 3xM12

Optional

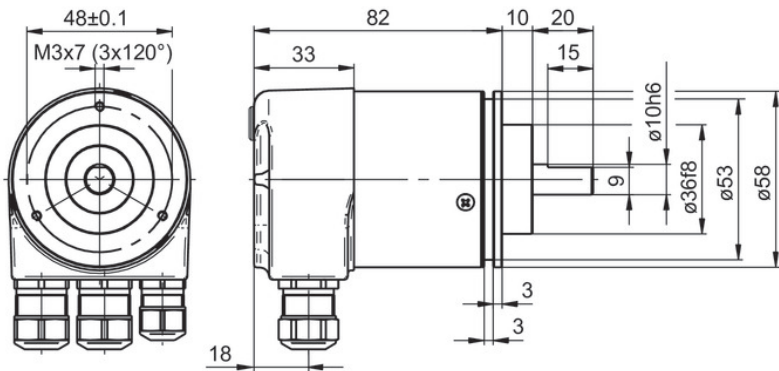
- Incremental outputs and stainless steel design

GXMMW

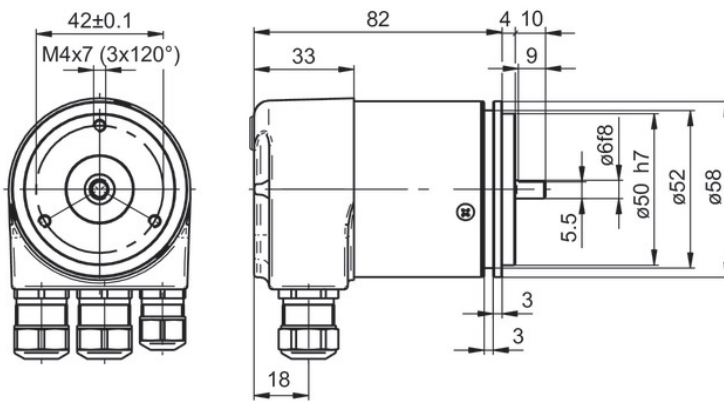
Solid shaft with clamping or synchro flange

Optical multiturn encoders 13 bit ST / 16 bit MT

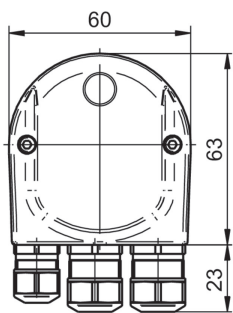
Dimensions



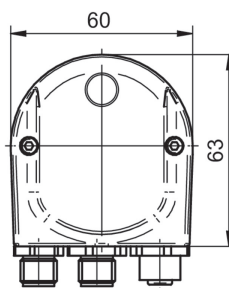
With clamping flange



With synchro flange



Profibus-DP



Profibus-DP - M12

Ordering reference

		GXMMW	.	#	20	####
Product						
		GXMMW				
Flange / Solid shaft						
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				
Voltage supply						
10...30 VDC		20				
Interface						
Profibus-DPV0 / cable gland		3P32				
Profibus-DPV0 / connector M12		3PA2				
Profibus-DPV2 / cable gland		3V32				
Profibus-DPV2 / connector M12		3VA2				

Accessories
Mounting accessories

11065545	Set of eccentric fixings type A
10141255	Adaptor plate for clamping flange to convert into synchro flange
10117667	Mounting adaptor
10117668	Set of eccentric fixings for mounting clamp (10117667)
10125051	Mounting adaptor
10158124	Bearing flange for encoders with synchro flange (Z 119.035)
10141132	Spring washer coupling (D1=6 / D2=10)