

GEMMW

Solid shaft with clamping or synchro flange, stainless steel housing

Optical multiturn encoders 13 bit ST / 16 bit MT, CANopen®, Profibus

Overview

- Encoder multiturn / bus cover
- Stainless steel design
- Optical sensing method
- Resolution: singleturn 13 bit, multiturn 16 bit
- Clamping or synchro flange
- CANopen®, Profibus-DP
- Material: stainless steel 1.4305
- 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	CANopen® Profibus-DPV0
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
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
Approval	UL approval / E63076

Technical data - mechanical design

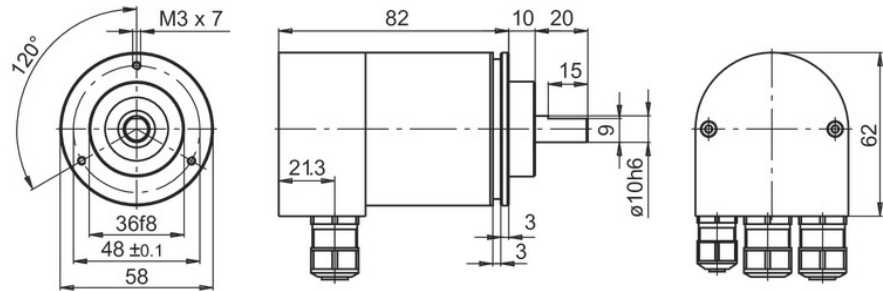
Size (flange)	ø58 mm
Shaft type	ø10 mm solid shaft (clamping flange) ø6 mm solid shaft (synchro flange)
Flange	Clamping or synchro flange
Protection EN 60529	IP 67
Operating speed	≤10000 rpm (mechanical) ≤6000 rpm (electric)
Starting acceleration	≤1000 U/s²
Starting torque	≤0.03 Nm (+25 °C, IP 67)
Rotor moment of inertia	20 gcm²
Admitted shaft load	≤20 N axial ≤40 N radial
Material	Housing: stainless steel 1.4305 Flange: stainless steel 1.4305 Bus cover: stainless steel 1.4305
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.	900 g
Connection	Bus cover

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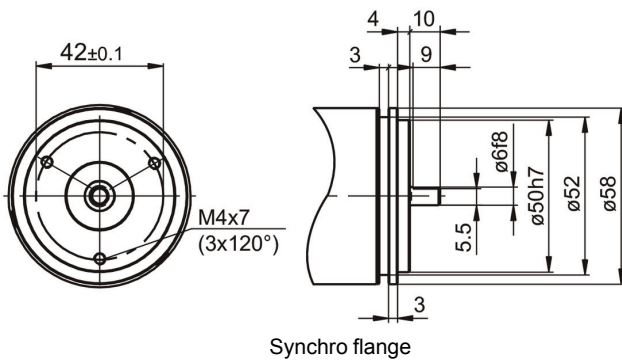
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Dimensions



GEMMW - CANopen®, Profibus-DP, clamping flange



Synchro flange

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Ordering reference

		GEMMW	.	#	20	####
Product		GEMMW				
Flange / Solid shaft						
Clamping flange / ø10 mm, IP 67						
Synchro flange / ø6 mm, IP 67						
Voltage supply						
10...30 VDC						
Interface						
Profibus-DPV0 / cable gland						
CANopen® / cable gland						

Accessories

Mounting accessories

11191971 Spring washer coupling - stainless steel D1=10 /
 D2=10 (Z 121.G03)

Programming accessories

10146710 CD with describing files & manuals (Z 150.022)