

GXAMW

Solid shaft with clamping or synchro flange

Optical singleturn encoders 13 bit

Overview

- Encoder singleturn / bus cover
- Optical sensing method
- Resolution: 13 bit
- Clamping or synchro flange
- CANopen®, EtherCAT, EtherNet/IP, SAEJ1939, PROFINET, Profibus, SSI
- 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	CANopen® EtherCAT EtherNet/IP Profibus PROFINET SAE J1939 SSI
Function	Singleturn
Device adress	Rotary switch in bus cover (type-specific)
Steps per revolution	≤8192 / 13 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 Preset Scaling Rotating direction
Diagnostic function	Position or parameter error
Status indicator	DUO-LED integrated in bus cover

Technical data - electrical ratings

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/s²
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	Bus cover

Optional

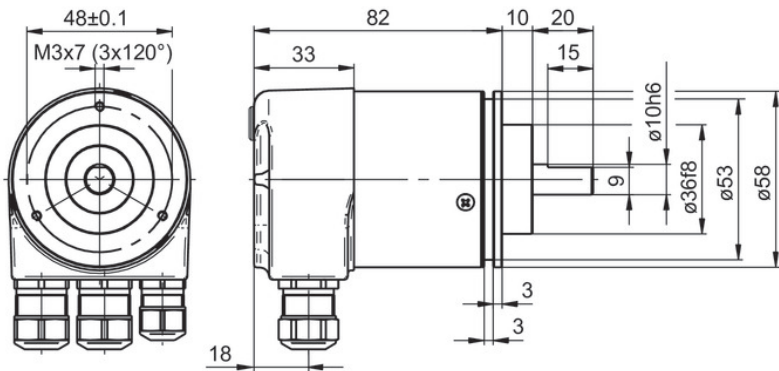
- Incremental outputs and stainless steel design

GXAMW

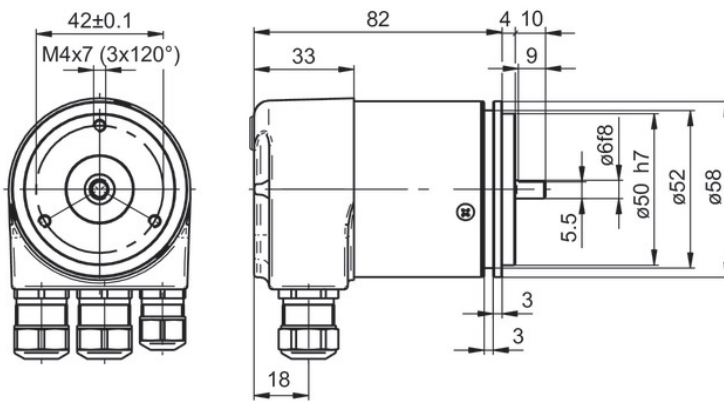
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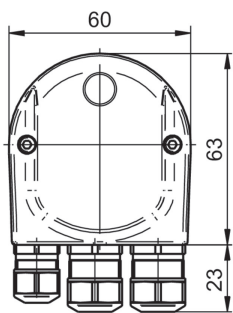
Dimensions



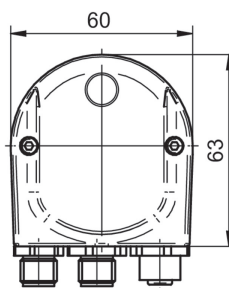
With clamping flange



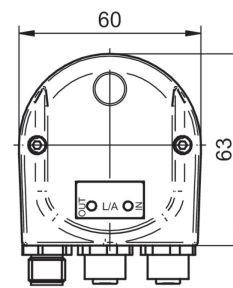
With synchro flange



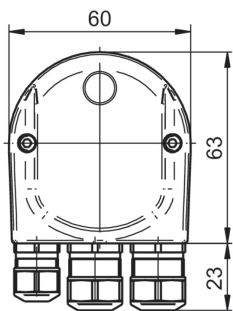
Profibus-DP



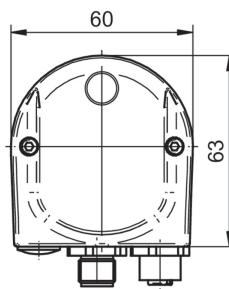
Profibus-DP - M12



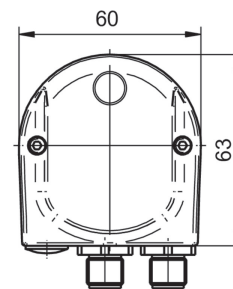
EtherCAT/EtherNet-IP



SAEJ1939



SAEJ1939 - M12



SSI

Ordering reference

		GXAMW	.	#	20	####
Product						
		GXAMW				
Flange / Solid shaft						
Clamping flange / ø10 mm, IP 54						
Clamping flange / ø10 mm, IP 65						
Synchro flange / ø6 mm, IP 54						
Synchro flange / ø6 mm, IP 65						
Voltage supply						
10...30 VDC						
Interface						
Profibus-DPV0 / cable gland						
Profibus-DPV0 / connector M12						
Profibus-DPV2 / cable gland						
Profibus-DPV2 / connector M12						
PROFINET / connector M12						
EtherCAT / connector M12						
EtherNet/IP / connector M12						
CANopen® / cable gland						
CANopen® / connector M12						
SSI / connector M12						
SAEJ1939 / cable gland						
SAEJ1939 / connector M12						

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)

Programming accessories

10146710	CD with describing files & manuals (Z 150.022)
11034193	Programming cable for encoders with SSI bus cover, CD with software and manual (Z 139.008)