

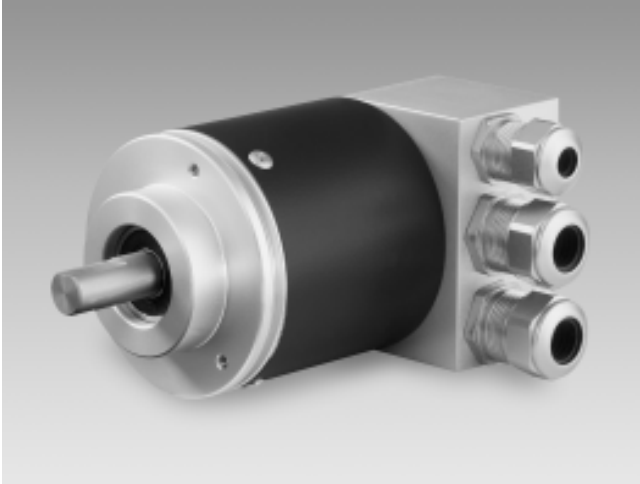
Optical Absolute Encoder Singleturn or Multiturn



Profibus-DP, CAN, CANopen, DeviceNet, SSI, LIGHTBUS

GXAMW, GXMMW

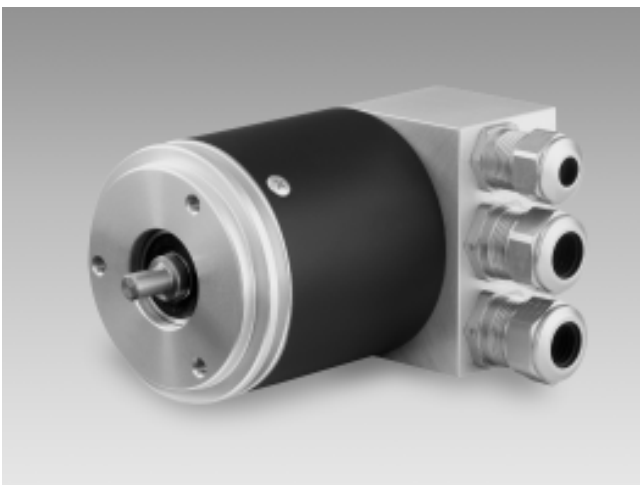
multivo[®]



GXAMW, GXMMW clamping flange

Features

- Interfaces: Profibus-DP, CAN, CANopen, DeviceNet SSI or optic fiber bus
- Resolution: 13 bit singleturn, 29 bit multiturn
- Parameterizable operating modes
- Parameterizable preset value
- Parameterizable scaling
- Option: With incremental tracks A, B

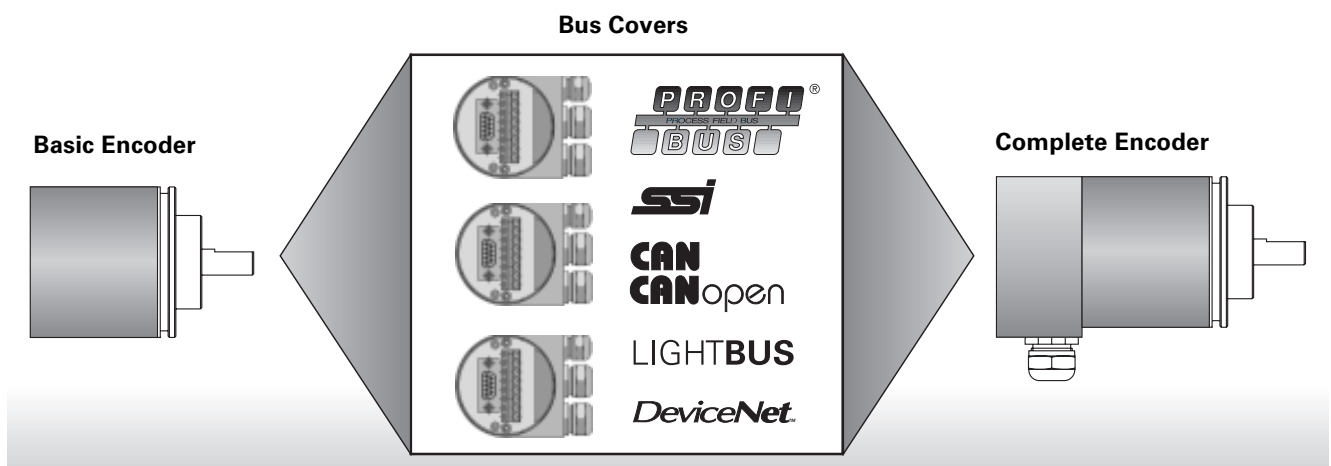


GXAMW, GXMMW servo flange

Electrical data

Operating voltage	10...30 VDC with reverse voltage protection
Current consumption	Max. 100 mA (w/o load) at 24 VDC
Signal coding	Binary
Max. resolution	Singleturn 13 bit, programmable 1 to 8192 steps/revolution Multiturn 29 bit, programmable 1 to 536870912 steps
Code switching speed	Max. 800 kHz
Accuracy	±0.025° at 400 kHz ±0.05° at 800 kHz
Preset value	Value parameterizable in set resolution range
User address	Settable with rotary switch
Rotating direction	Clockwise (cw) when shaft is viewed from the front ascending position values (parameterizable)

How to combine your encoders (interchangeable bus cover)



Order designation for GXAMW (Singleturn)

Order No.	Flange/Shaft
0	Clamping flange / 10 mm, IP 54
A	Clamping flange / 10 mm, IP 65
1	Servo flange / 6 mm, IP 54
B	Servo flange / 6 mm, IP 65
5	Front panel 63.5 x 63.5 mm / 9.52 mm, IP 54
F	Front panel 63.5 x 63.5 mm / 9.52 mm, IP 65

Description file

2	Without GSD/EDS file
3	With GSD/EDS file

GXAMW.□ 20 3P3 □	Profibus-DP
GXAMW.□ 20 4P3 2	CAN
GXAMW.□ 20 5P3 □	CANopen
GXAMW.□ 20 8P2 □	DeviceNet
GXAMW.□ 20 LM32	Optic fiber bus
GXAMW.□ 20 2PA2	SSI
GXAMW.□ 20 00 00	Basic encoder w/o bus cover

Order designation for GXMMW (Multiturn)

Order No.	Flange/Shaft
0	Clamping flange / 10 mm, IP 54
A	Clamping flange / 10 mm, IP 65
1	Servo flange / 6 mm, IP 54
B	Servo flange / 6 mm, IP 65
5	Front panel 63.5 x 63.5 mm / 9.52 mm, IP 54
F	Front panel 63.5 x 63.5 mm / 9.52 mm, IP 65

Description file

2	Without GSD/EDS file
3	With GSD/EDS file

GXMMW.□ 20 3P3 □	Profibus-DP
GXMMW.□ 20 4P3 2	CAN
GXMMW.□ 20 5P3 □	CANopen
GXMMW.□ 20 8P2 □	DeviceNet
GXMMW.□ 20 LM32	Optic fiber bus
GXMMW.□ 20 2PA2	SSI
GXMMW.□ 20 00 00	Basic encoder w/o bus cover

Bus cover description

The matching bus covers are listed from page 154.

Accessories

Order No.	
Z 119.006	Eccentric mounting
Z 119.013	Adapter plate for clamping flange
Z 119.015	Mounting bell for servo flange
Z 119.017	Angular mounting for clamping flange
Z 119.025	Adapter plate for clamping flange
Z 119.033	Adapter plate, ø65 mm for clamping flange
Z 119.034	Optic fiber bus connectors
Z 119.035	Bearing flange for servo flange
Z 150.022	CD with GSD/EDS files and manuals
Z 163.3P33	Bus cover for Profibus-DP
Z 163.4P32	Bus cover for CAN
Z 163.5P33	Bus cover for CANopen
Z 163.8P23	Bus cover for DeviceNet
Z 163.2PA2	Bus cover for SSI
Z 163.LM32	Bus cover for optic fiber bus
171.02.153	Installation instructions for optic fiber bus

Suitable optical-fiber cable:
LAPP-Kabel, Stuttgart, Art.: 2185030
HITRONIC[®] POF SIMPLEX PUR-PE

Additional accessories (couplings, measuring wheels, cable pulls or protective housings) from page 164.

Optical Absolute Encoder Singleturn or Multiturn Profibus-DP, CAN, CANopen, DeviceNet, SSI, LIGHTBUS

GXAMW, GXMMW

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Mechanical data

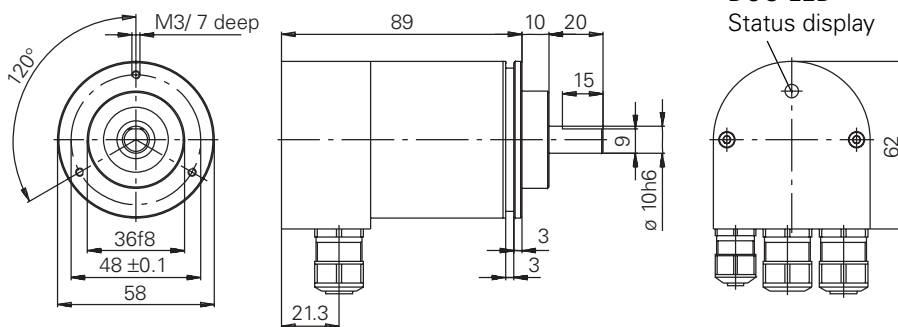
Speed	
mechanical	Max. 10000 rpm
electrical	Max. 6000 rpm
Start-up torque	
without sealing (IP54)	< 0.010 Nm
with sealing (IP65)	< 0.015 Nm
Shaft loading	
axial	< 20 N
radial	< 40 N
Moment of inertia	2×10^{-6} kgm ²
Material	
Housing	Steel
Flange	Aluminum
Bus cover	Aluminum
Cable gland	Metric thread, EMC certified
Weight	Approx. 600 g

Ambient conditions

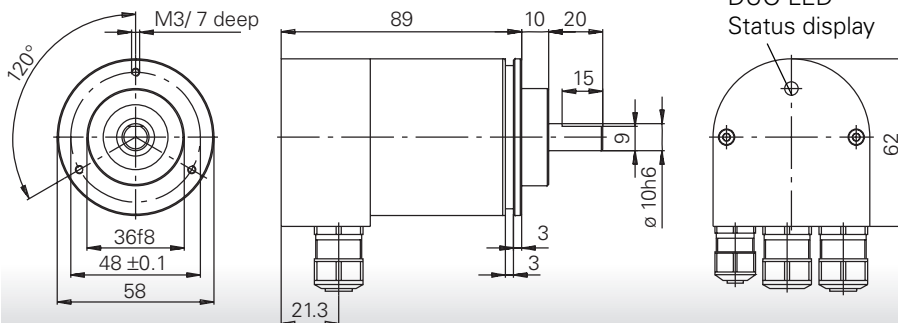
Operating temperature	-20...+85 °C
Protection type	
Shaft w/o sealing	IP 54
Shaft with sealing	IP 65
Humidity	Max. relative humidity 95 %, non-condensing
Resistance	
Vibration	DIN EN 60068-2-6 ≤200 m/s ² , 16-2000 Hz
Shock	DIN EN 60068-2-27 ≤2000 m/s ² , 6 ms
Interference resistance	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4

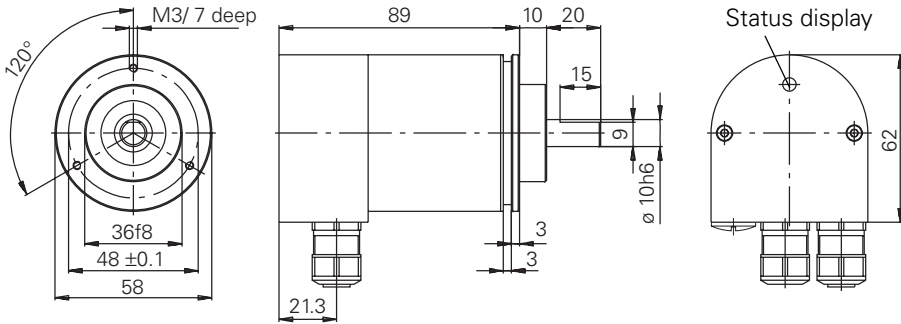
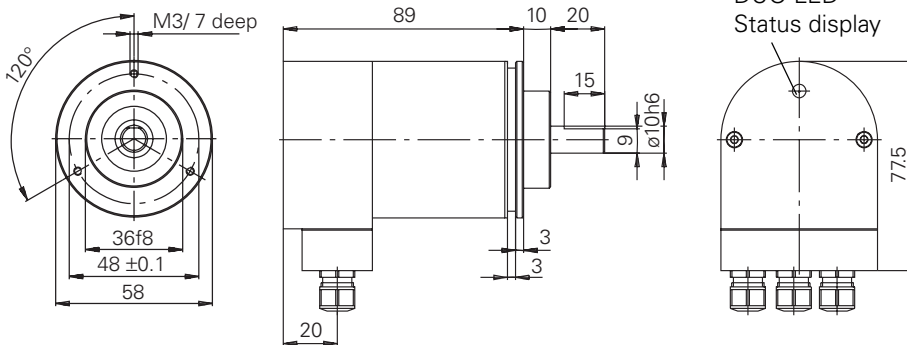
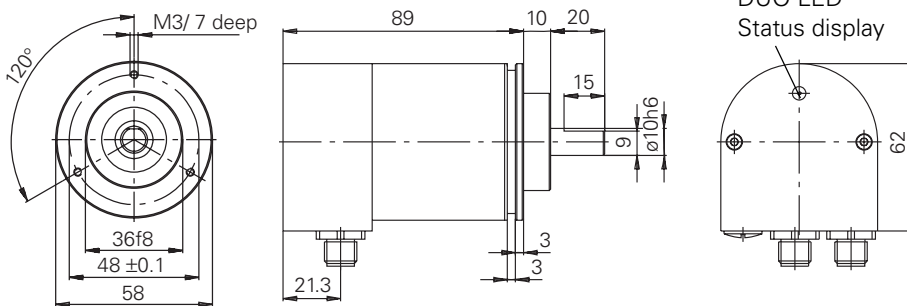
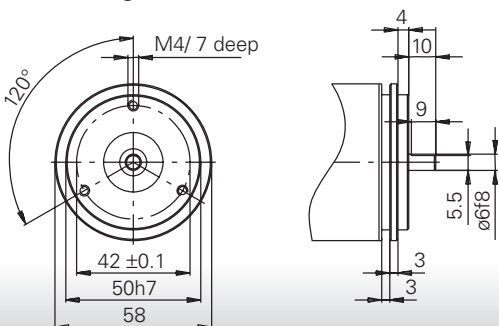
Dimensions

GXAMW, GXMMW clamping flange for Profibus-DP



GXAMW, GXMMW clamping flange for CAN, CANopen



Dimensions
GXAMW, GXMMW clamping flange for DeviceNet

GXAMW, GXMMW clamping flange for optic fiber bus

GXAMW, GXMMW clamping flange for SSI

Optional: Models as described above, however with: servo flange

square flange
