

# Absolute encoders - modular bus covers

Hollow shaft max.  $\varnothing 14$  mm

Optical single and multiturn encoders 13 bit ST / 16 bit MT

CANopen / DeviceNet / EtherNet-IP / Profibus / PROFINET

**G0AMH, G0MMH - *multivo***



G0MMH with modular bus cover

## Features

- Encoder single- or multiturn / bus cover
- Optical sensing
- Resolution: singleturn 13 bit, multiturn 16 bit
- Hollow shaft max.  $\varnothing 14$  mm
- Compact design
- CANopen/DeviceNet/EtherNet-IP/Profibus/PROFINET
- High reliability by self-diagnostics
- Encoder for optional parameterization

## Technical data - electrical ratings

Voltage supply	10...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	$\leq 100$ mA (24 VDC)
Initializing time (typ.)	250 ms after power on
Interfaces	CANopen, DeviceNet, EtherNet/IP, Profibus-DPV0, PROFINET
User address	Rotary switch in bus cover or via interface
Steps per turn	$\leq 8192$ / 13 bit
Absolute accuracy	$\pm 0.025^\circ$
Sensing method	Optical
Code	Binary
Code sequence	CW/CCW programmable
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Programmable parameters	Steps per revolution Number of revolutions Preset Scaling Rotational direction
Diagnostic functions	Position or parameter error Multiturn sensing
Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E63076

### G0AMH

Function	Singleturn
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### G0MMH

Function	Multiturn
Number of turns	$\leq 65536$ / 16 bit

## Technical data - mechanical design

Dimensions (flange)	$\varnothing 58$ mm
Shaft	$\varnothing 12$ mm hollow shaft $\varnothing 14$ mm hollow shaft
Protection DIN EN 60529	IP 54
Operating speed	$\leq 6000$ rpm (mechanical) $\leq 6000$ rpm (electric)
Starting torque	$\leq 0.04$ Nm (IP 54)
Rotor moment of inertia	20 gcm <sup>2</sup>
Materials	Housing: aluminium Flange: aluminium Bus cover: aluminium
Operating temperature	-25...+85 °C -40...+85 °C (optional)
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 16-2000 Hz DIN EN 60068-2-27 Shock 200 g, 6 ms
Weight approx.	600 g
Connection	Bus cover

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## Part number

### Singleturn

G0AMH.  20

	Interface
3EA2	PROFINET / connector M12
3P32	Profibus-DPV0 / cable gland
5P32	CANopen / cable gland
8EA2	EtherNet/IP / connector M12
8P22	DeviceNet / cable gland

#### Hollow shaft / clamping ring

0	Hollow shaft $\varnothing$ 12 mm without pin / on flange
1	Hollow shaft $\varnothing$ 12 mm with pin 15 mm / on flange
4	Hollow shaft $\varnothing$ 14 mm without pin / on flange
5	Hollow shaft $\varnothing$ 14 mm with pin 15 mm / on flange
L	Hollow shaft $\varnothing$ 12 mm without pin / on housing
A	Hollow shaft $\varnothing$ 12 mm with pin 23.5 mm / on housing
M	Hollow shaft $\varnothing$ 14 mm without pin / on housing
E	Hollow shaft $\varnothing$ 14 mm with pin 23.5 mm / on housing

### Multiturn

G0MMH.  20

	Interface
3EA2	PROFINET / connector M12
3P32	Profibus-DPV0 / cable gland
5P32	CANopen / cable gland
8EA2	EtherNet/IP / connector M12
8P22	DeviceNet / cable gland

#### Hollow shaft / clamping ring

0	Hollow shaft $\varnothing$ 12 mm without pin / on flange
1	Hollow shaft $\varnothing$ 12 mm with pin 15 mm / on flange
4	Hollow shaft $\varnothing$ 14 mm without pin / on flange
5	Hollow shaft $\varnothing$ 14 mm with pin 15 mm / on flange
L	Hollow shaft $\varnothing$ 12 mm without pin / on housing
A	Hollow shaft $\varnothing$ 12 mm with pin 23.5 mm / on housing
M	Hollow shaft $\varnothing$ 14 mm without pin / on housing
E	Hollow shaft $\varnothing$ 14 mm with pin 23.5 mm / on housing

CD with file descriptions is not included in the delivery.  
You may order them on CD as accessory free-of-charge  
under part number Z 150.022.

## Accessories

### Mounting accessories

Z 119.041	Torque support by rubber buffer element for encoders with 15 mm pin
Z 119.050	Spring coupling
Z 119.053	Spring coupling height 19.1 mm
Z 119.072	Spring coupling for encoders with $\varnothing$ 58 mm housing, hole distance 73 mm
Z 119.073	Spring coupling for encoders with $\varnothing$ 58 mm housing, hole distance 68 mm
Z 119.076	Spring coupling for encoders with $\varnothing$ 58 mm housing
Z 119.082	Spring coupling for encoders with $\varnothing$ 58 mm housing, hole distance 63 mm

### Programming accessories

Z 150.022	CD with describing files & manuals
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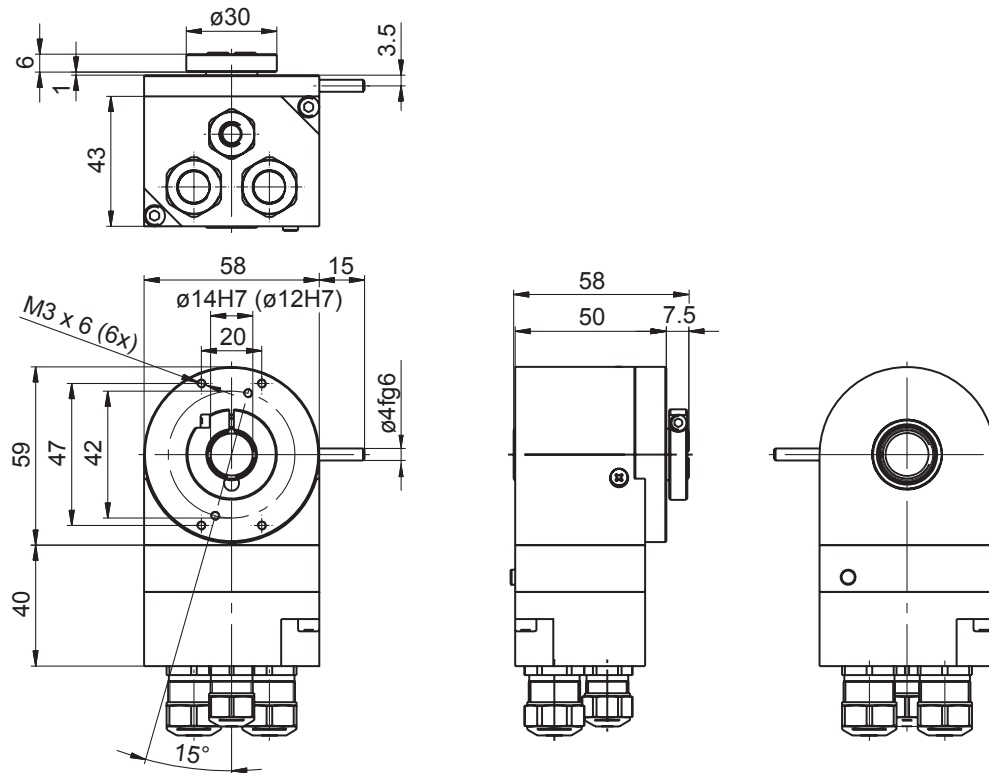
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## Dimensions

G0AMH, G0MMH - clamping ring on flange / CANopen, Profibus



G0AMH, G0MMH - clamping ring on flange / DeviceNet

