

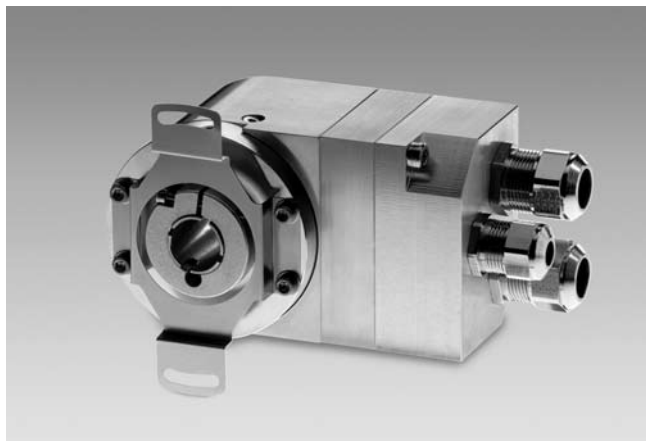
# Absolute encoders - modular bus covers

Optical sensing, hollow shaft up to  $\varnothing 14$  mm

Single and multiturn encoder 13 bit ST / 16 bit MT

CANopen / DeviceNet / Profibus

**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 / Profibus
- 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	Profibus-DPV0, CANopen, DeviceNet
User address	Rotary switch in bus cover
Steps per turn	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
<b>G0AMH</b>	
Function	Singleturn
<b>G0MMH</b>	
Function	Multiturn
Number of turns	65536 / 16 bit

## Technical data - mechanical design

Housing	$\varnothing 58$ 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)
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
E-connection	Bus cover

# Absolute encoders - modular bus covers

Optical sensing, hollow shaft up to  $\varnothing 14$  mm

Single and multiturn encoder 13 bit ST / 16 bit MT

CANopen / DeviceNet / Profibus

**G0AMH, G0MMH - *multivo***

## Part number

### Singleturn

G0AMH.  20

		<u>Interface</u>
	3P32	Profibus-DPV0 / cable gland
	5P32	CANopen / cable gland
	8P22	DeviceNet / cable gland
		<u>Hollow shaft</u>
0	Hollow shaft $\varnothing 12$ mm without pin	
1	Hollow shaft $\varnothing 12$ mm with pin 15 mm	
B	Hollow shaft $\varnothing 12$ mm with pin 9.5 mm	
4	Hollow shaft $\varnothing 14$ mm without pin	
5	Hollow shaft $\varnothing 14$ mm with pin 15 mm	
F	Hollow shaft $\varnothing 14$ mm with pin 9.5 mm	

### Multiturn

G0MMH.  20

		<u>Interface</u>
	3P32	Profibus-DPV0 / cable gland
	5P32	CANopen / cable gland
	8P22	DeviceNet / cable gland
		<u>Hollow shaft</u>
0	Hollow shaft $\varnothing 12$ mm without pin	
1	Hollow shaft $\varnothing 12$ mm with pin 15 mm	
B	Hollow shaft $\varnothing 12$ mm with pin 9.5 mm	
4	Hollow shaft $\varnothing 14$ mm without pin	
5	Hollow shaft $\varnothing 14$ mm with pin 15 mm	
F	Hollow shaft $\varnothing 14$ mm with pin 9.5 mm	

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.

Matching bus covers are listed in the chapter "Accessories".

## Accessories

### Mounting accessories (page %S)

Z 119.024	Torque support and spring washer for encoders with 9.5 mm pin
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 119.070	Spring coupling height 29.1 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 (page %S)

Z 150.022	CD with describing files & manuals
-----------	------------------------------------

# Absolute encoders - modular bus covers

Optical sensing, hollow shaft up to  $\varnothing 14$  mm

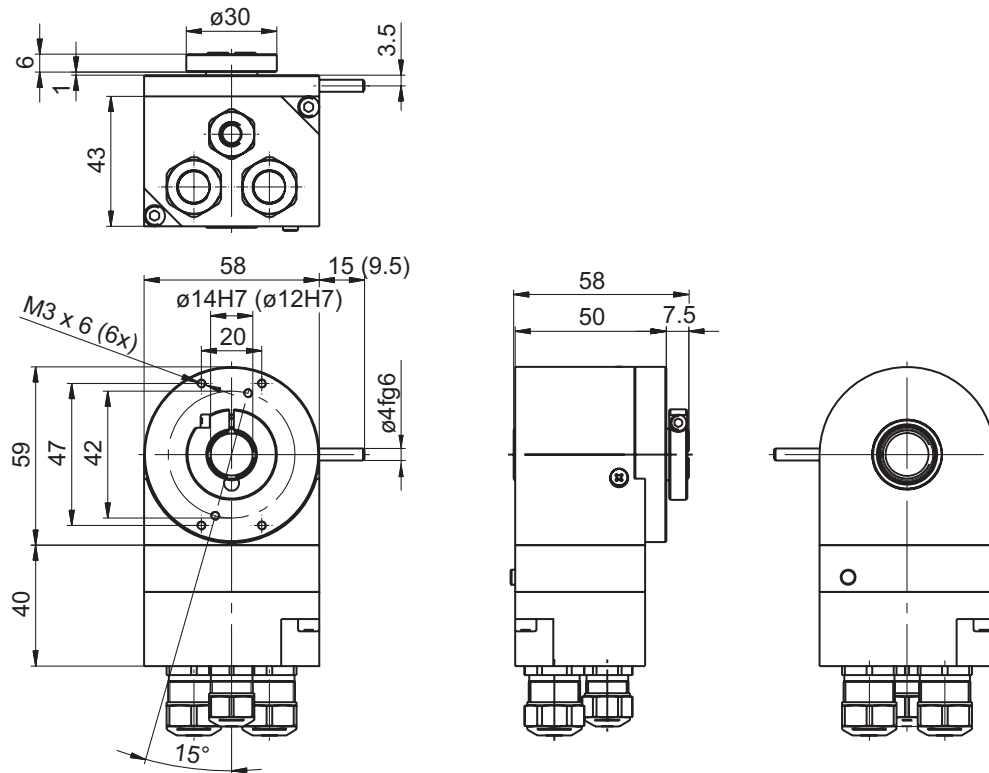
Single and multiturn encoder 13 bit ST / 16 bit MT

CANopen / DeviceNet / Profibus

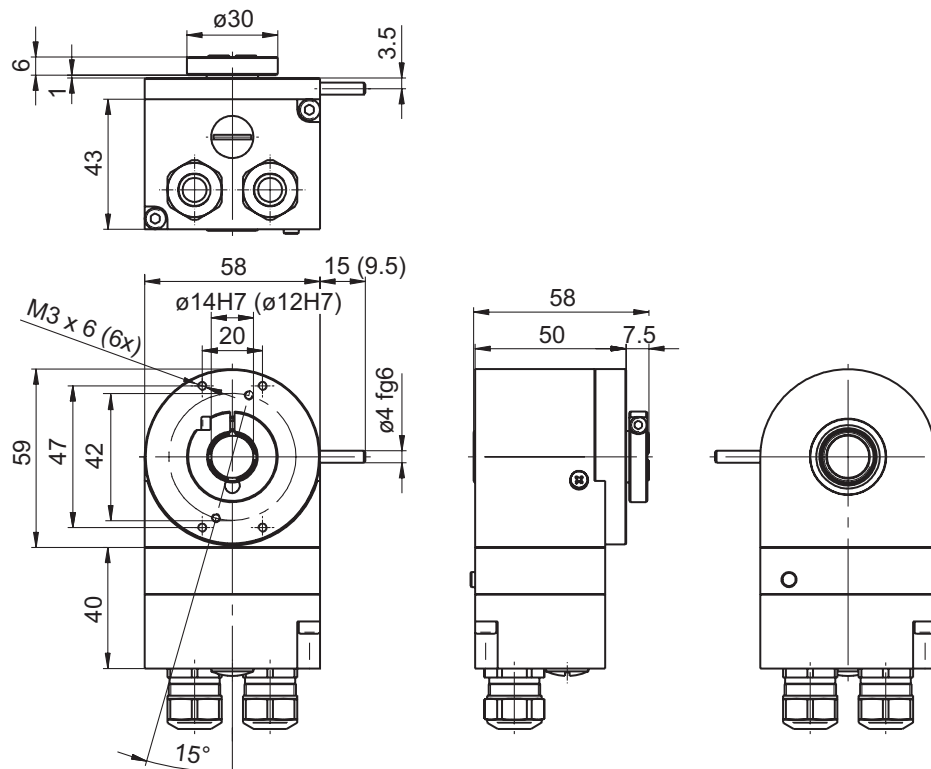
## G0AMH, G0MMH - *multivo*

### Dimensions

#### G0AMH, G0MMH CANopen, Profibus



#### G0AMH, G0MMH DeviceNet



# Absolute encoders - modular bus covers

Optical sensing, hollow shaft up to  $\varnothing 14$  mm

Single and multiturn encoder 13 bit ST / 16 bit MT

CANopen / DeviceNet / Profibus

G0AMH, G0MMH - *multivo*

---