

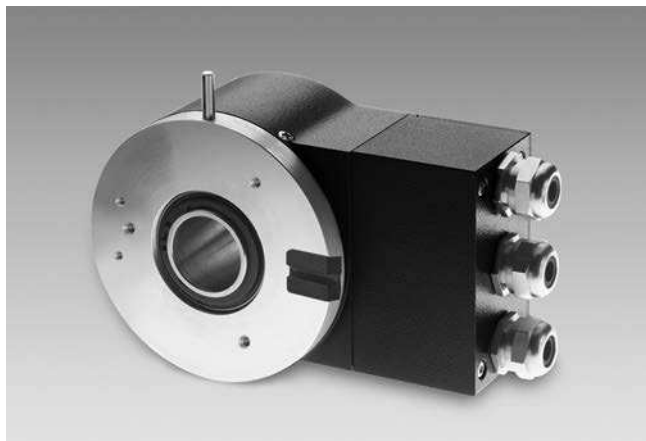
Absolute encoders - modular bus covers

Through hollow shaft up to $\varnothing 50.8$ mm

Optical multiturn encoders 13 bit ST / 16 bit MT

CANopen® / DeviceNet / Profibus

G1MMH, G2MMH



G1MMH with modular bus cover

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
Interfaces	CANopen®, DeviceNet, Profibus-DPV0
Function	Multiturn
Device address	Rotary switch in bus cover
Steps per turn	≤ 8192 / 13 bit
Number of turns	≤ 65536 / 16 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 Rotating direction
Diagnostic functions	Position or parameter error Multiturn sensing
Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E63076

Features

- Encoder multiturn / bus cover
- Optical sensing method
- Resolution: singleturn 13 bit, multiturn 16 bit
- Through hollow shaft of 1" and 2" diameter
- High flexibility in mounting and maintenance
- Resolution, baud rate, node ID optionally selectable
- Code continuity check optional by bus

Optional

- Modular bus covers for SSI interface

Technical data - mechanical design

Protection DIN EN 60529	IP 54, IP 65 (optional)
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
Connection	Bus cover
G1MMH	
Size (flange)	$\varnothing 90$ mm
Shaft type	$\varnothing 16...25.4$ mm (through hollow shaft)
Operating speed	≤ 3800 rpm (mechanical) ≤ 6000 rpm (electric)
Starting torque	≤ 0.35 Nm (+25 °C)
Rotor moment of inertia	2000 gcm ²
Weight approx.	890 g
G2MMH	
Size (flange)	$\varnothing 116$ mm
Shaft type	$\varnothing 50.8$ mm (through hollow shaft)
Operating speed	≤ 2000 rpm (mechanical) ≤ 6000 rpm (electric)
Starting torque	≤ 0.5 Nm (+25 °C)
Rotor moment of inertia	11000 gcm ²
Weight approx.	1200 g

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Part number

Hollow shaft max. $\varnothing 25.4$ mm

G1MMH. 20

		<u>Interface</u>
	3P32	Profibus-DPV0 / cable gland
	5P32	CANopen® / cable gland
	8P22	DeviceNet / cable gland
		<u>Through hollow shaft</u>
2	$\varnothing 25.4$ mm, pin 15 mm	
3	$\varnothing 20$ mm, pin 15 mm	
4	$\varnothing 16$ mm, pin 15 mm	
5	$\varnothing 25$ mm, pin 15 mm	

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

Hollow shaft max. $\varnothing 50.8$ mm

G2MMH. 20

		<u>Interface</u>
	3P32	Profibus-DPV0 / cable gland
	5P32	CANopen® / cable gland
	8P22	DeviceNet / cable gland
		<u>Through hollow shaft</u>
2	$\varnothing 50.8$ mm, pin 15 mm	
3	$\varnothing 50$ mm, pin 15 mm	

Accessories

Mounting accessories for G1MMH

Z 119.037	Rubber buffer element 18.5 mm long, as torque support
Z 119.039	Set of adjusting angles as torque support
Z 119.040	Shoulder screw M5 as torque support
Z 119.041	Torque support by rubber buffer for encoders with 15 mm pin
Z 119.043	Spring coupling for GX and G1
Z 119.050	Spring coupling for one-side attachment, length 35 mm

Mounting accessories for G2MMH

Z 119.037	Rubber buffer element 18.5 mm long, as torque support
Z 119.039	Set of adjusting angles as torque support
Z 119.040	Shoulder screw M5 as torque support
Z 119.041	Torque support by rubber buffer for encoders with 15 mm pin
Z 119.050	Spring coupling for one-side attachment, length 35 mm

Programming accessories

Z 150.022	CD with describing files & manuals
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Through hollow shaft up to $\varnothing 50.8$ mm

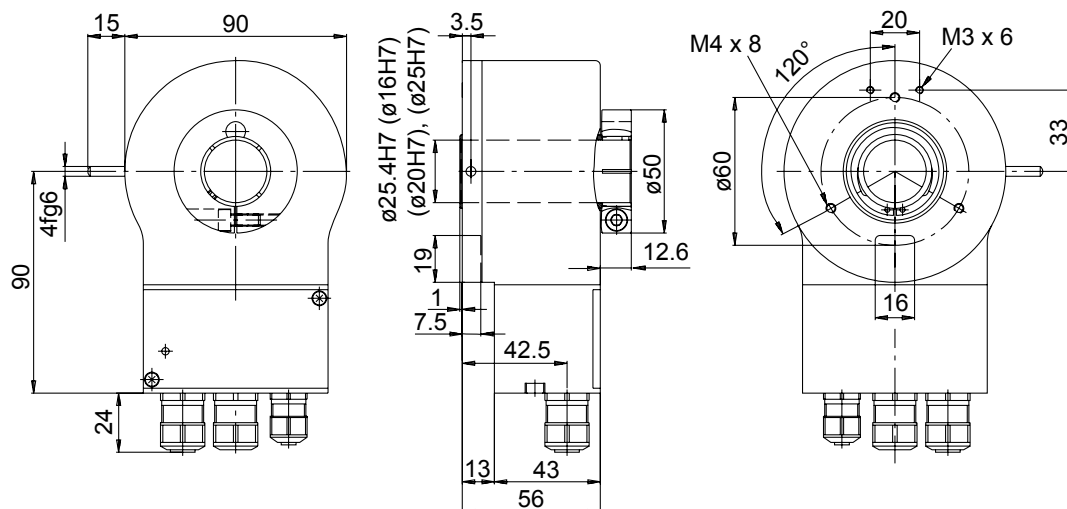
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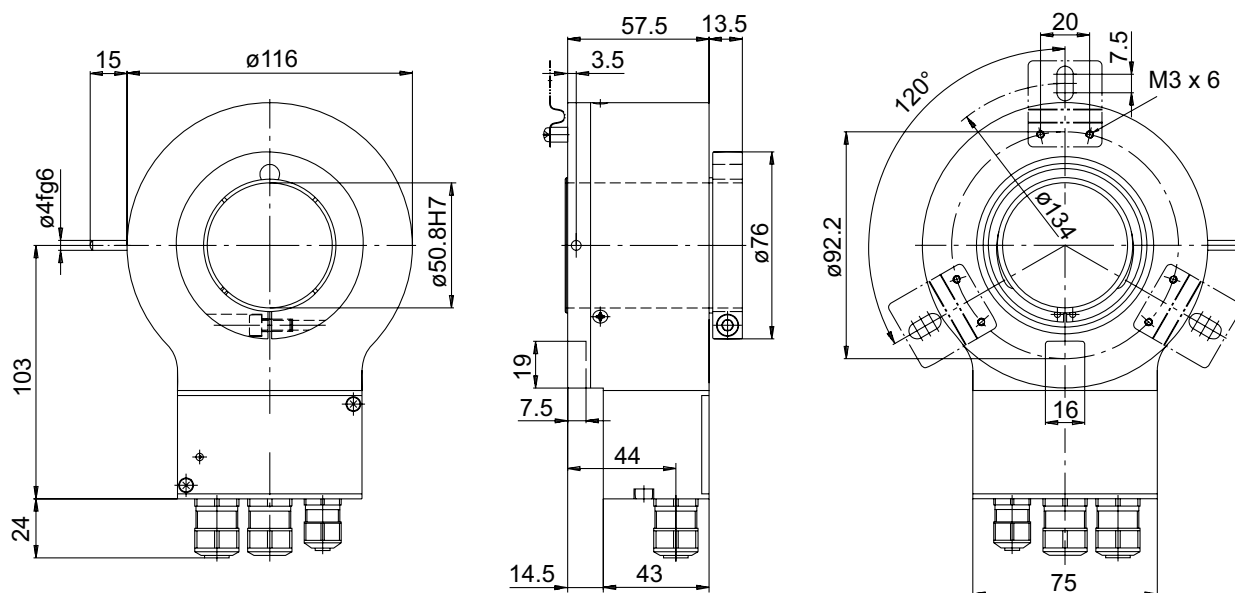
G1MMH, G2MMH

Dimensions

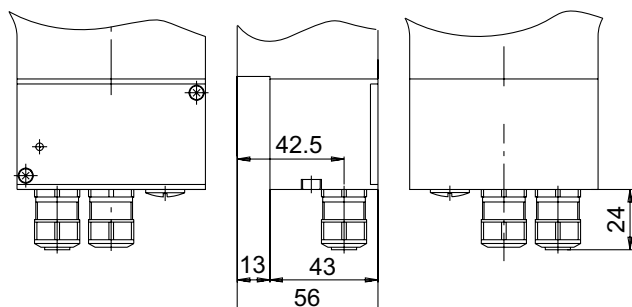
G1MMH - CANopen®, Profibus



G2MMH - CANopen®, Profibus



Bus cover DeviceNet



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G1MMH, G2MMH
