

Absolute encoders - modular bus covers

Hollow shaft max. $\varnothing 50.8$ mm

Optical multiturn encoders 13 bit ST / 16 bit MT

CANopen / DeviceNet / Profibus

G1MMH, G2MMH - *multivo*



G1MMH with modular bus cover

Features

- Encoder multiturn / bus cover
- Optical sensing
- Resolution: singleturn 13 bit, multiturn 16 bit
- 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 - 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
User 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 Rotational direction
Diagnostic functions	Position or parameter error Multiturn sensing
Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E63076

Technical data - mechanical design

Protection DIN EN 60529	IP 54
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

Housing	$\varnothing 90$ mm
Shaft	$\varnothing 16$ mm hollow shaft $\varnothing 20$ mm hollow shaft $\varnothing 25$ mm hollow shaft $\varnothing 25.4$ mm hollow shaft
Operating speed	≤ 3800 rpm (mechanical) ≤ 6000 rpm (electric)
Starting torque	≤ 0.35 Nm
Rotor moment of inertia	2000 gcm ²
Weight approx.	890 g

G2MMH

Housing	$\varnothing 116$ mm
Shaft	$\varnothing 50.8$ mm hollow shaft
Operating speed	≤ 2000 rpm (mechanical) ≤ 6000 rpm (electric)
Starting torque	≤ 0.5 Nm
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>Hollow shaft</u>
2		Hollow shaft $\varnothing 25.4$ mm with pin 15 mm
3		Hollow shaft $\varnothing 20$ mm with pin 15 mm
4		Hollow shaft $\varnothing 16$ mm with pin 15 mm
5		Hollow shaft $\varnothing 25$ mm with pin 15 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 "Accessories".

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>Hollow shaft</u>
2		Hollow shaft $\varnothing 50.8$ mm with pin 15 mm
3		Hollow shaft $\varnothing 50$ mm with 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 element for encoders with 15 mm pin
Z 119.043	Spring coupling for GX and G1
Z 119.050	Spring coupling

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 element for encoders with 15 mm pin
Z 119.050	Spring coupling

Programming accessories

Z 150.022	CD with describing files & manuals
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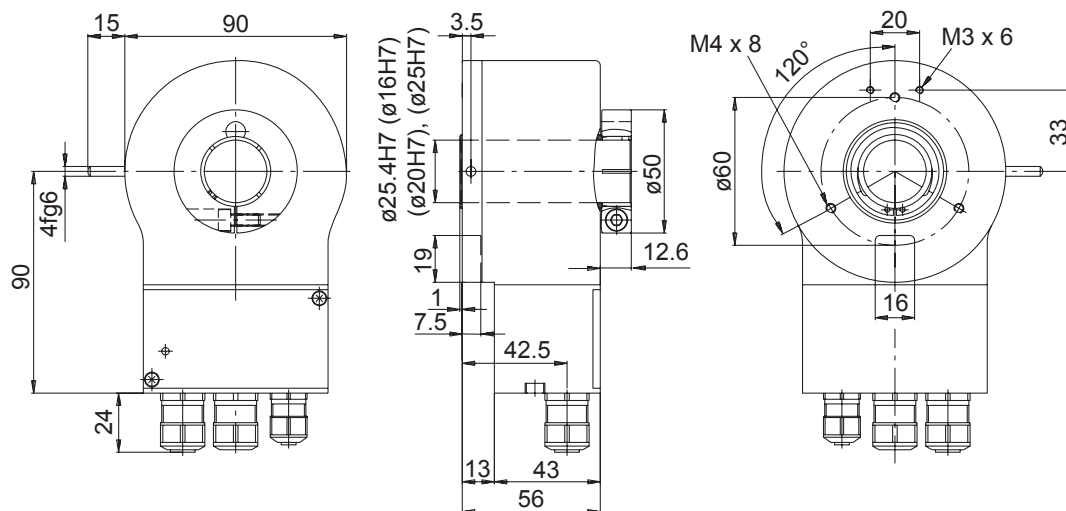
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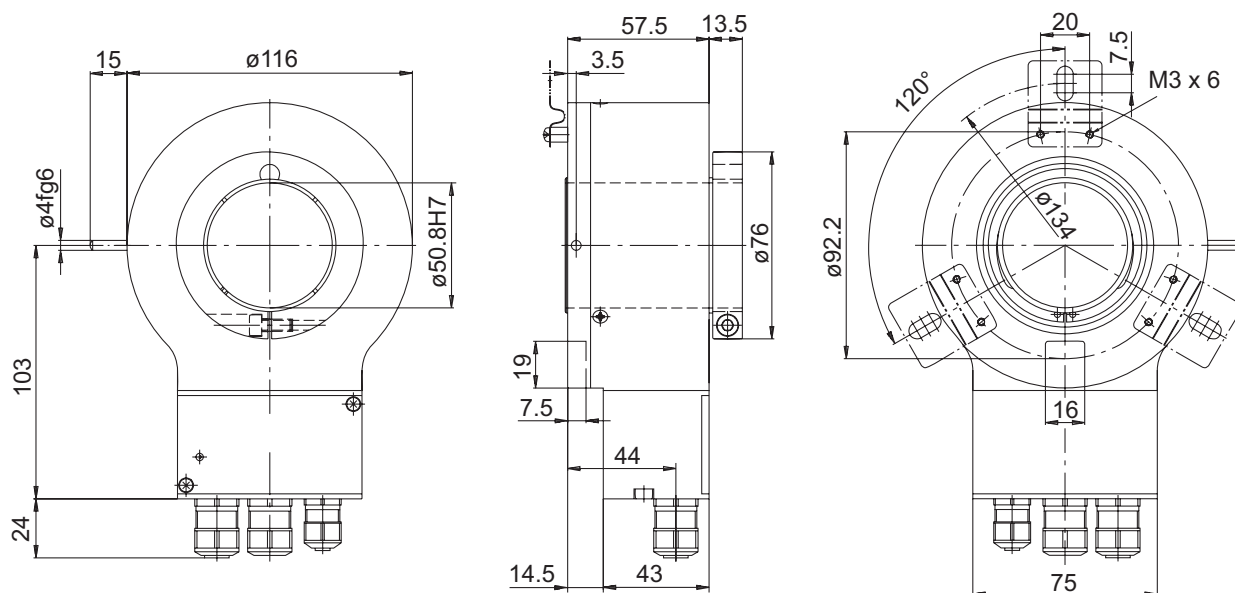
G1MMH, G2MMH - *multivo*

Dimensions

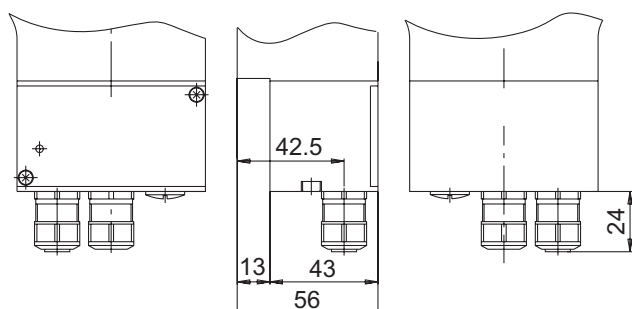
G1MMH with CANopen, Profibus



G2MMH with CANopen, Profibus



Bus cover DeviceNet



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