Absolute encoders - modular bus covers

Through hollow shaft max. ø50.8 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**
– **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 - 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 adress	Rotary switch in bus cover
Steps per turn	≤8192 / 13 bit
Number of turns	≤65536 / 16 bit
Absolute accuracy	±0.025 °
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

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)	ø90 mm
Shaft type	ø16...25.4 mm (through hollow shaft)
Operating speed	≤3800 rpm (mechanical) ≤6000 rpm (electric)
Starting torque	≤0.35 Nm
Rotor moment of inertia	2000 gcm²
Weight approx.	890 g
G2MMH	
Size (flange)	ø116 mm
Shaft type	ø50.8 mm (through hollow shaft)
Operating speed	≤2000 rpm (mechanical) ≤6000 rpm (electric)
Starting torque	≤0.5 Nm
Rotor moment of inertia	11000 gcm²
Weight approx.	1200 g

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Part number

Hollow shaft max. ø25.4 mm

G1MMH. ☐ **20** ☐

Interface
3P32   Profibus-DPV0 / cable gland
5P32   CANopen® / cable gland
8P22   DeviceNet / cable gland

Through hollow shaft
2   ø25.4 mm, pin 15 mm
3   ø20 mm, pin 15 mm
4   ø16 mm, pin 15 mm
5   ø25 mm, 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.

Hollow shaft max. ø50.8 mm

G2MMH. ☐ **20** ☐

Interface
3P32   Profibus-DPV0 / cable gland
5P32   CANopen® / cable gland
8P22   DeviceNet / cable gland

Through hollow shaft
2   ø50.8 mm, pin 15 mm
3   ø50 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 element 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 element 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

Absolute encoders - modular bus covers
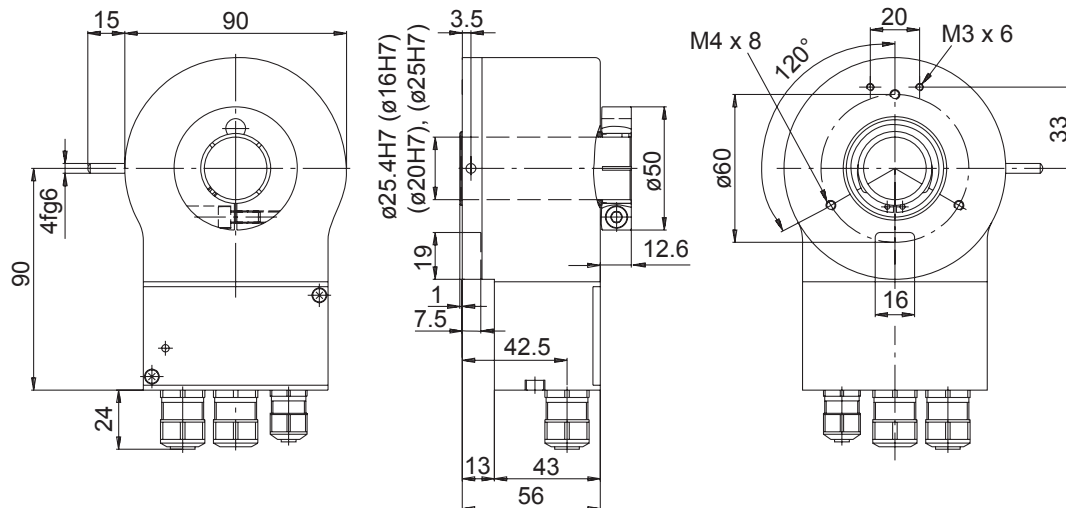
Through hollow shaft max. ø50.8 mm
Optical multiturn encoders 13 bit ST / 16 bit MT
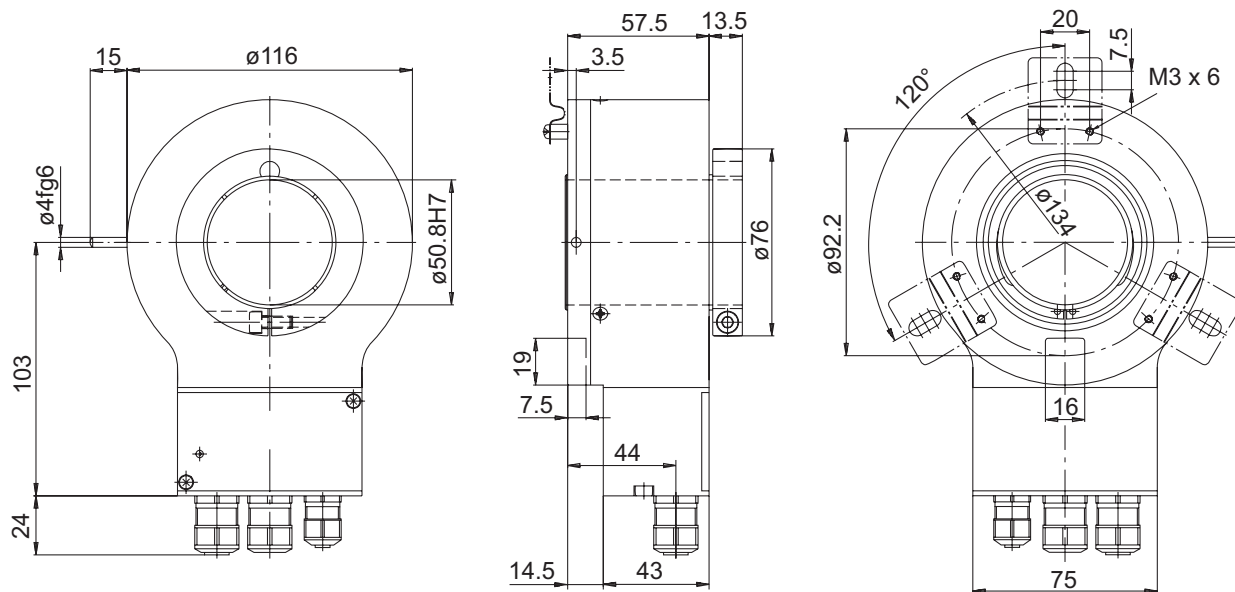**CANopen® / DeviceNet / Profibus**

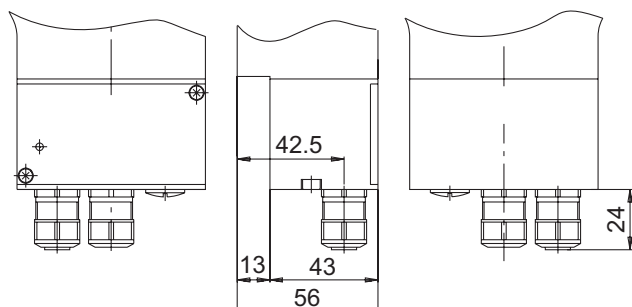### G1MMH, G2MMH - *multivo*

Dimensions

G1MMH - CANopen®, Profibus

G2MMH - CANopen®, Profibus

Bus cover DeviceNet

Absolute encoders - modular bus covers

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G1MMH, G2MMH - *multivo*