

Absolute encoders - modular bus covers

Through hollow shaft, stainless steel housing

Optical multiturn encoders 13 bit ST / 16 bit MT

CANopen® / DeviceNet / EtherNet-IP / Profibus / PROFINET

GEMMH



GEMMH with modular bus cover

Features

- Encoder multiturn / bus cover
- Stainless steel design
- Optical sensing method
- Resolution: singleturn 13 bit, multiturn 16 bit
- Through hollow shaft up to $\varnothing 14$ mm
- CANopen®, DeviceNet, EtherNet/IP, Profibus-DP, PROFINET
- High reliability by self-diagnostics
- Encoder for parameterization
- Resistant against magnetic fields

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, EtherNet/IP, Profibus-DPV0, PROFINET
Function	Multiturn
Device address	Rotary switches in bus cover
Steps per revolution	≤ 8192 / 13 bit
Number of revolutions	≤ 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

Technical data - mechanical design

Size (flange)	$\varnothing 58$ mm
Shaft type	$\varnothing 12$ mm (through hollow shaft) $\varnothing 14$ mm (through hollow shaft)
Protection DIN EN 60529	IP 64
Operating speed	≤ 6000 rpm (mechanical) ≤ 6000 rpm (electric)
Starting acceleration	≤ 1000 U/s ²
Rotor moment of inertia	20 gcm ²
Materials	Housing: stainless steel 1.4305 Flange: stainless steel 1.4305 Bus cover: stainless steel 1.4305
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.	1500 g
Connection	Bus cover

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Part number

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		Interface
	3EA2	PROFINET / connector M12
	3P32	Profibus-DPV0 / cable gland
	5P32	CANopen® / cable gland
	8P22	DeviceNet / cable gland
	8EA2	EtherNet/IP / connector M12
		Through hollow shaft
P		∅12 mm, without pin
N		∅12 mm, pin 15 mm
R		∅14 mm, without pin
Q		∅14 mm, pin 15 mm
2		∅14 mm, pin 23.5 mm
3		∅12 mm, pin 23.5 mm

CD with file descriptions is not included in the delivery. You may order them on CD as accessory.

Accessories

Mounting accessories

10139345	Torque support by rubber buffer for encoders with 15 mm pin (Z 119.041)
10147837	Spring coupling for one-side attachment, length 35 mm (Z 119.050)
11034106	Spring coupling for motor's fan guard (Z 119.053)
10165157	Spring coupling for encoders with ∅58 mm housing, hole distance 73 mm (Z 119.072)
11034121	Spring coupling for encoders with ∅58 mm housing, hole distance 68 mm (Z 119.073)
11034123	Spring coupling for one-side attachment, length 115 mm (Z 119.076)
11003562	Spring coupling for encoders with ∅58 mm housing, hole distance 63 mm (Z 119.082)
11098229	Clamping ring set 16/30x6 - stainless steel (Z 119.092)

Programming accessories

10146710	CD with describing files & manuals (Z 150.022)
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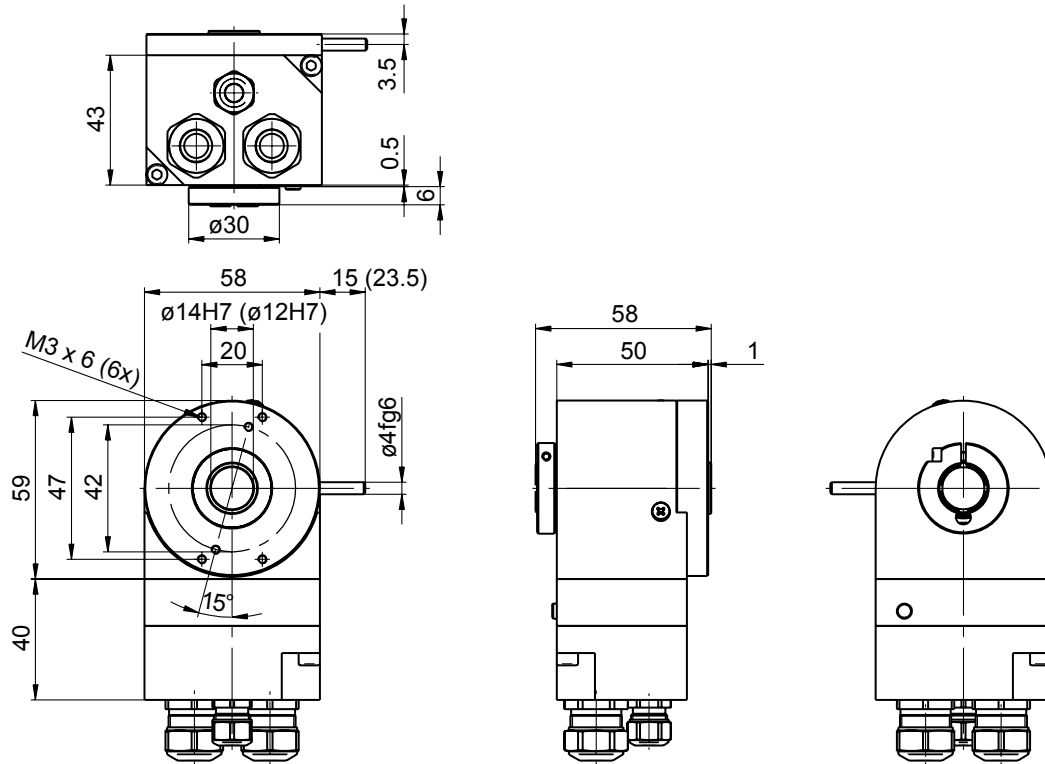
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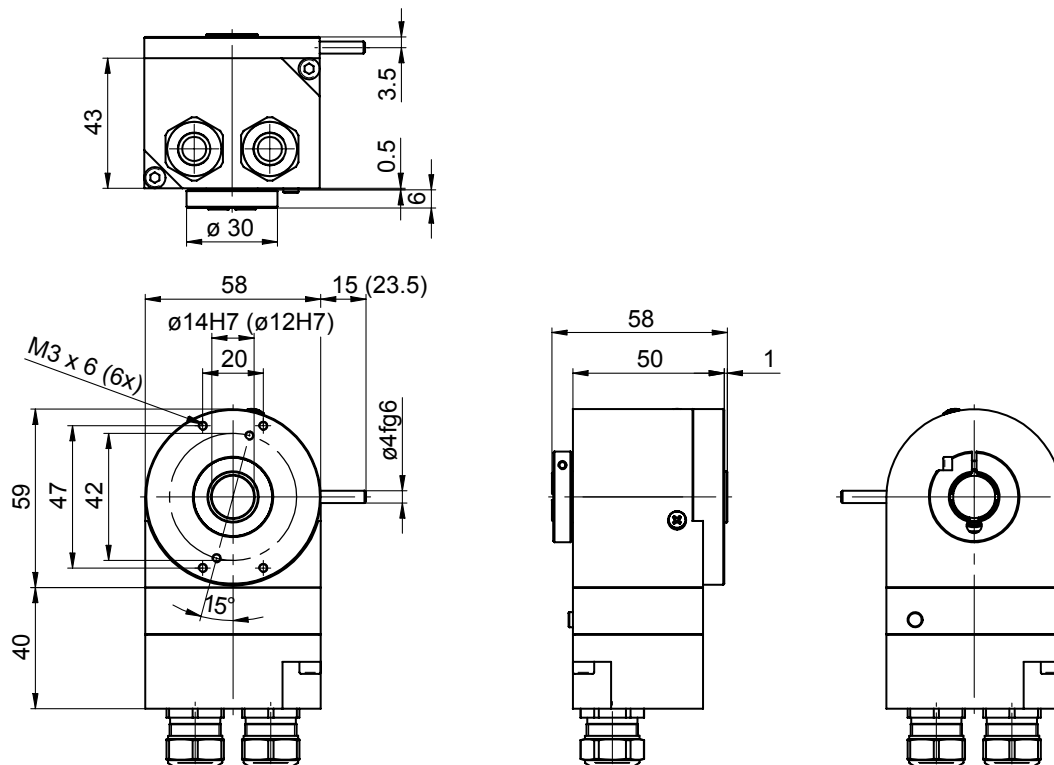
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Dimensions

GEMMH - CANopen®, Profibus-DP



GEMMH - DeviceNet



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Dimensions

GEMMH - EtherNet/IP, PROFINET

