

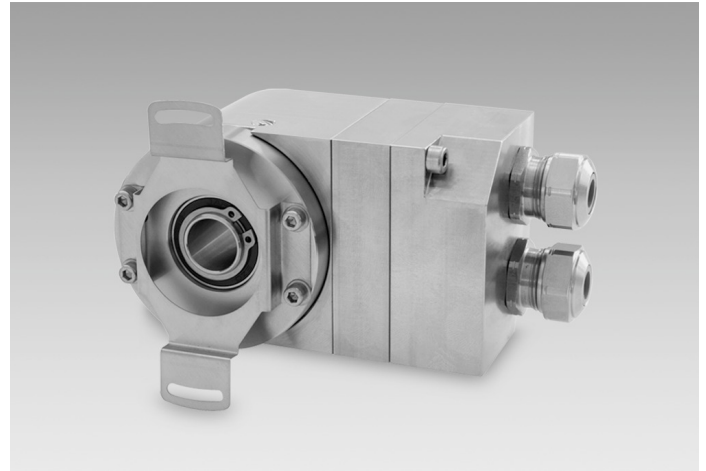
GEMMH

Through hollow shaft, stainless steel housing

Optical multiturn encoders 13 bit ST / 16 bit MT, CANopen®, EtherNet/IP, Profibus, PROFINET

Overview

- 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®, EtherNet/IP, Profibus-DP, PROFINET
- High reliability by self-diagnostics
- Encoder for parameterization
- Resistant against magnetic fields



Technical data

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
Interface	CANopen® EtherNet/IP Profibus-DPV0 PROFINET
Function	Multiturn
Device adress	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	EN 61000-6-2
Emitted interference	EN 61000-6-4
Programmable parameters	Steps per revolution Number of revolutions Preset Scaling Rotating direction
Diagnostic function	Position or parameter error Multiturn sensing

Technical data - electrical ratings

Status indicator	DUO-LED integrated in bus cover
Approval	UL approval / E63076

Technical data - mechanical design

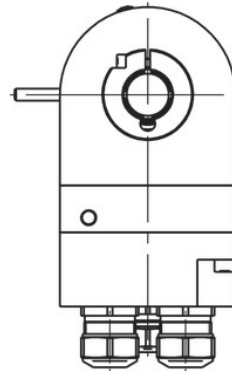
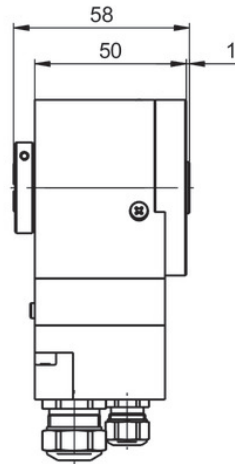
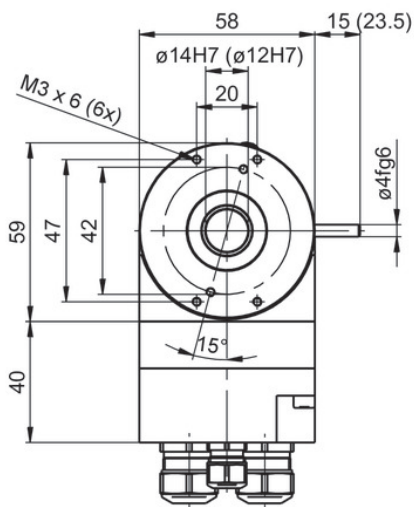
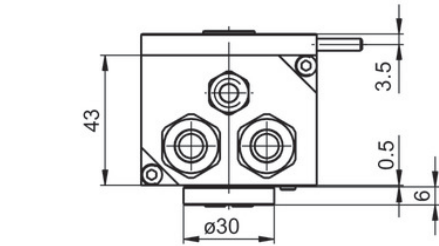
Size (flange)	$\varnothing 58$ mm
Shaft type	$\varnothing 12$ mm (through hollow shaft) $\varnothing 14$ mm (through hollow shaft)
Protection EN 60529	IP 64
Operating speed	≤ 6000 rpm (mechanical) ≤ 6000 rpm (electric)
Starting acceleration	≤ 1000 U/s ²
Rotor moment of inertia	20 gcm ²
Material	Housing: 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	EN 60068-2-6 Vibration 10 g, 16-2000 Hz EN 60068-2-27 Shock 200 g, 6 ms
Weight approx.	1500 g
Connection	Bus cover

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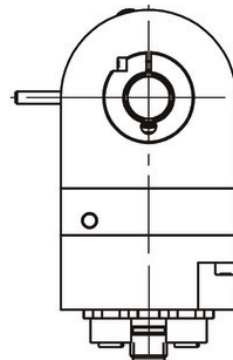
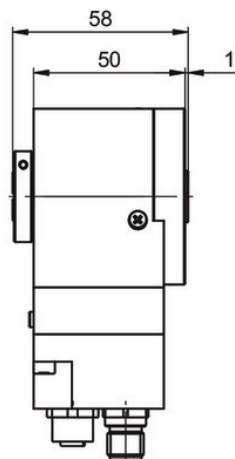
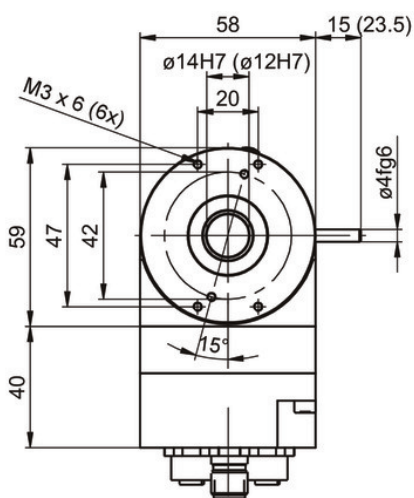
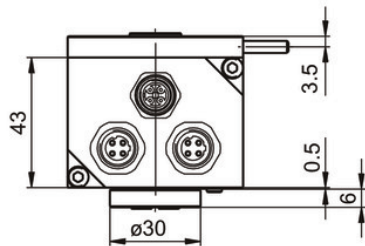
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Dimensions



GEMMH - CANopen®, Profibus-DP



GEMMH - EtherNet/IP, PROFINET

GEMMH

Through hollow shaft, stainless steel housing

Optical multiturn encoders 13 bit ST / 16 bit MT, CANopen®, EtherNet/IP, Profibus, PROFINET

Ordering reference

		GEMMH	.	#	20	####
Product						
		GEMMH				
Through hollow shaft						
ø12 mm, without pin					P	
ø12 mm, pin 15 mm					N	
ø14 mm, without pin					R	
ø14 mm, pin 15 mm					Q	
ø14 mm, pin 23.5 mm					2	
ø12 mm, pin 23.5 mm					3	
Voltage supply						
10...30 VDC						20
Interface						
PROFINET / connector M12						3EA2
Profibus-DPV0 / cable gland						3P32
CANopen® / cable gland						5P32
EtherNet/IP / connector M12						8EA2

Accessories

Mounting accessories

10139345	Torque support by rubber buffer for encoders with 15 mm pin (Z 119.041)
11066120	Mounting kit 056
11034106	Spring coupling for motor's fan guard (Z 119.053)
10165157	Spring coupling for encoders with ø58 mm housing, hole distance 73 mm (Z 119.072)
11034121	Spring coupling for encoders with ø58 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 ø58 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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