

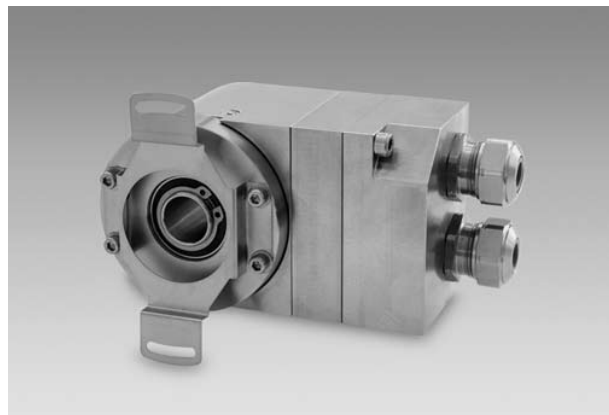
Absolute encoders - modular bus covers

multivo: stainless steel housing with hollow shaft

Multiturn encoder 13 bit ST / 16 bit MT

CANopen / DeviceNet / Profibus

GEMMH - *multivo*



GEMMH with modular bus cover

Features

- Encoder multiturn / bus cover
- Stainless steel design
- Optical sensing
- Resolution: singleturn 13 bit, multiturn 16 bit
- Hollow shaft max. \varnothing 14 mm
- Modular bus interfaces
- CANopen, DeviceNet, Profibus-DP
- High reliability by self-diagnostics
- Encoder for optional parameterization

Technical data - electrical ratings

| | |
|-----------------------------|--|
| Voltage supply | 10...30 VDC |
| Reverse polarity protection | Yes |
| Consumption w/o load | \leq 100 mA (24 VDC) |
| Initializing time (typ.) | 250 ms after power on |
| Interfaces | Profibus-DPV0, CANopen, DeviceNet |
| User address | Rotary switch in bus cover |
| Steps per turn | 8192 / 13 bit |
| Number of turns | 65536 / 16 bit |
| Absolute accuracy | \pm 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 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

| | |
|-------------------------|--|
| Housing | \varnothing 58 mm |
| Shaft | \varnothing 12 mm hollow shaft \varnothing 14 mm hollow shaft |
| Protection DIN EN 60529 | IP 64 |
| Operating speed | \leq 6000 rpm (mechanical) \leq 6000 rpm (electric) |
| 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 |
| E-connection | Bus cover |

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Part number

GEMMH.

| | | |
|--|----|--|
| | 20 | |
|--|----|--|

| | | |
|---|--------------------------------------|-----------------------------|
| | | <u>Interface</u> |
| | 3P32 | Profibus-DPV0 / cable gland |
| | 5P32 | CANopen / cable gland |
| | 8P22 | DeviceNet / cable gland |
| | | <u>Hollow shaft</u> |
| P | Hollow shaft ø12 mm without pin | |
| N | Hollow shaft ø12 mm with pin 15 mm | |
| R | Hollow shaft ø14 mm without pin | |
| Q | Hollow shaft ø14 mm with pin 15 mm | |
| 2 | Hollow shaft ø14 mm with pin 23.5 mm | |
| 3 | Hollow shaft ø12 mm with pin 23.5 mm | |

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

Accessories

Mounting accessories (page %S)

| | |
|-----------|---|
| Z 119.041 | Torque support by rubber buffer element for encoders with 15 mm pin |
| Z 119.050 | Spring coupling |
| Z 119.053 | Spring coupling height 19.1 mm |
| Z 119.070 | Spring coupling height 29.1 mm |
| Z 119.072 | Spring coupling for encoders with ø58 mm housing, hole distance 73 mm |
| Z 119.073 | Spring coupling for encoders with ø58 mm housing, hole distance 68 mm |
| Z 119.076 | Spring coupling for encoders with ø58 mm housing |
| Z 119.082 | Spring coupling for encoders with ø58 mm housing, hole distance 63 mm |

Programming accessories (page %S)

| | |
|-----------|------------------------------------|
| Z 150.022 | CD with describing files & manuals |
|-----------|------------------------------------|

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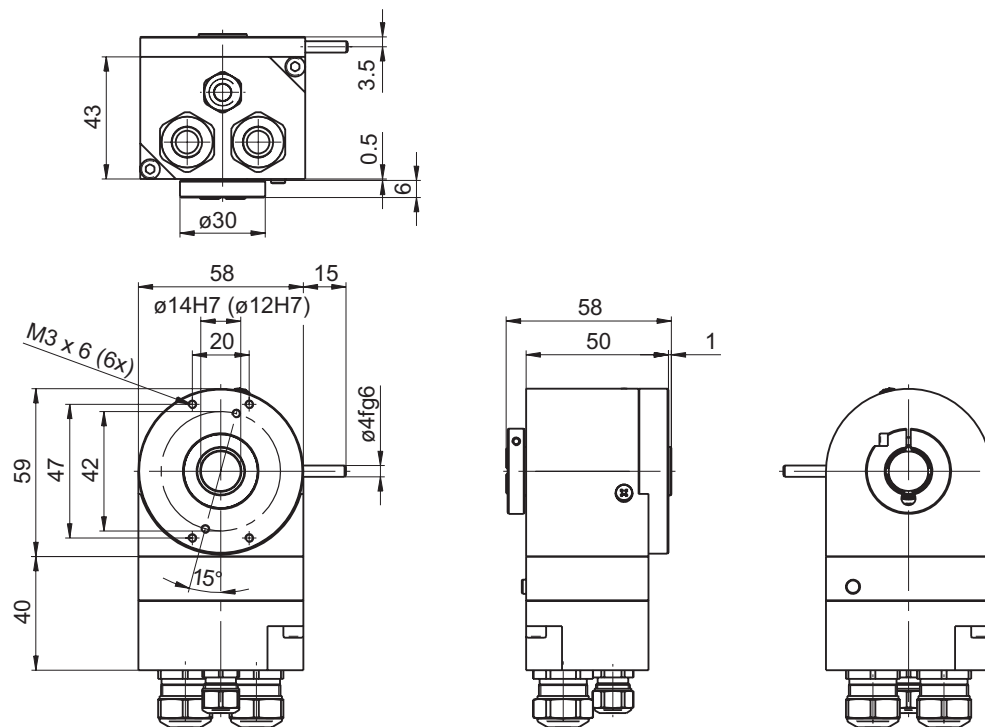
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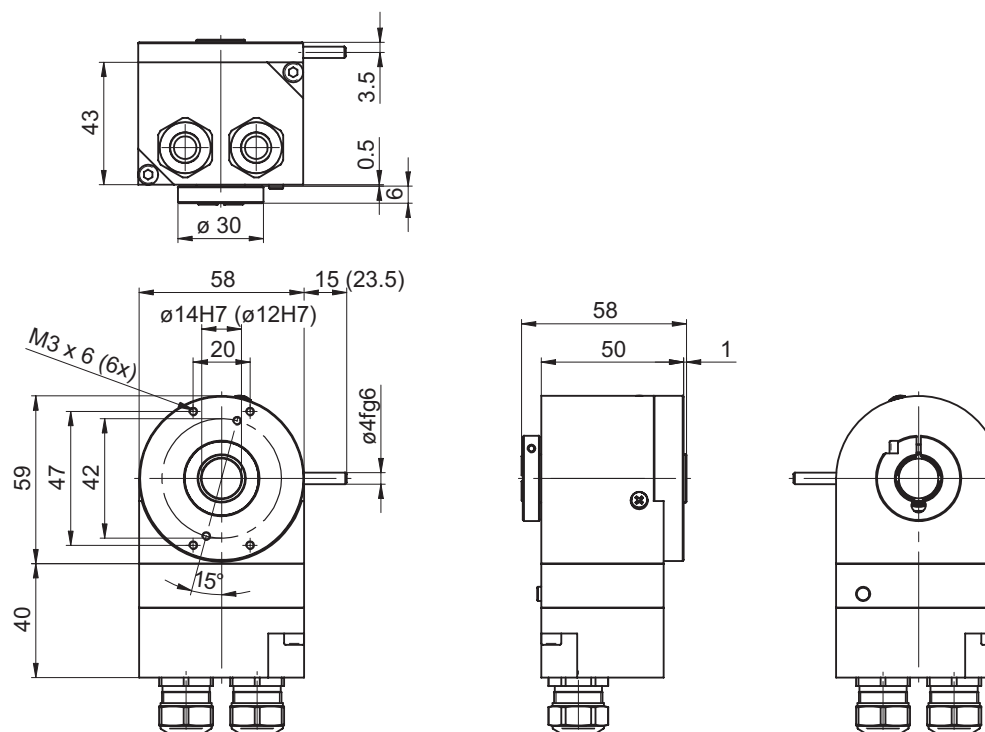
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Dimensions

GEMMH CANopen, Profibus-DP



GEMMH DeviceNet



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29/10/2008 Subject to modification in technic and design. Errors and omissions excepted.