

# Cable transducer

Cable-pull with absolute or incremental encoder

Up to 50 m measuring length



Cable transducer GCA15

## Features

- Ready-to-use mounted combination of cable mechanism and encoder
- Measuring length 2.4...50 m
- Broad selection of absolute and incremental standard encoders
- High linearity up to  $\pm 0.01$  % of the measuring range
- Cable made of highly flexible stainless steel cores
- High service life up to 5 million strokes

## Technical data - cable-pull

Materials	Housing: Aluminium, plastic PBT GF 20 (GCI2 / GCA2) Cable: Stainless steel, polyamide-coated
Operating temperature	-20...+80 °C
Protection per IEC60529	IP 50 (cable-pull)
Cable mounting	2.4 m: with snap hook 3...5 m: with thread or eyelet 5...50 m: with eyelet
Service life	2.4 m: approx. 1 million strokes 3 m: approx. 5 million strokes 5...50 m: approx. 1 million strokes
Linearity	0...2.4 m: $\pm 0.05$ % ( $\pm 0.01$ % on request) 3...7.5 m: $\pm 0.02$ % 10...50 m: $\pm 0.01$ %
Product family	GCI: Cable transducer with incremental encoder GCA: Cable transducer with absolute encoder

Product family	Cable length	Weight	Distance/rev.	Cable acceleration	Pull-out force	Pull-in force	Cable- $\phi$
GCI2 / GCA2	2.4 m	0.2 kg	150.75 mm	Max. 5 m/s <sup>2</sup>	Max. 7 N	Min. 1 N	0.45 mm
GCI4 / GCA4	3 m	1.1 kg	260.09 mm	Max. 70 m/s <sup>2</sup>	Max. 11 N	Min. 3 N	0.8 mm
GCI15 / GCA15	5 m	1.4 kg	315.07 mm	Max. 50 m/s <sup>2</sup>	Max. 16 N	Min. 4 N	1.0 mm
GCI15 / GCA15	7.5 m	1.7 kg	315.07 mm	Max. 60 m/s <sup>2</sup>	Max. 24 N	Min. 8 N	1.0 mm
GCI15 / GCA15	10 m	2.5 kg	315.07 mm	Max. 30 m/s <sup>2</sup>	Max. 21 N	Min. 8 N	1.0 mm
GCI15 / GCA15	15 m	2.7 kg	315.07 mm	Max. 30 m/s <sup>2</sup>	Max. 25 N	Min. 8 N	1.0 mm
GCI50 / GCA50	30 m	9.5 kg	500.00 mm	Max. 20 m/s <sup>2</sup>	Max. 22 N	Min. 12 N	0.8 mm
GCI50 / GCA50	40 m	10.5 kg	500.00 mm	Max. 20 m/s <sup>2</sup>	Max. 22 N	Min. 11 N	0.8 mm
GCI50 / GCA50	50 m	11 kg	500.00 mm	Max. 20 m/s <sup>2</sup>	Max. 24 N	Min. 11 N	0.8 mm

Technical encoder data: See encoder product sheet.

# Cable transducer

## Cable-pull with absolute or incremental encoder

### Up to 50 m measuring length

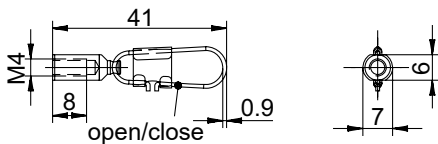
#### Ordering part number

The respective ordering part number is defined after receipt of order (combination of encoder and cable-pull).

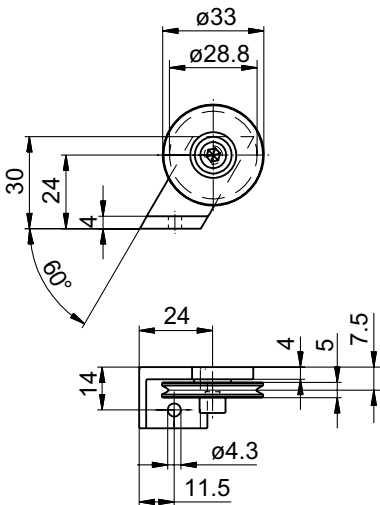
Example: GCA15-GM401.E26 = cable-pull with 15 m cable length combined with absolute encoder GM401.120A102 (SSI, gray code, 12x12 bit, 10...30 VDC).

#### Accessories

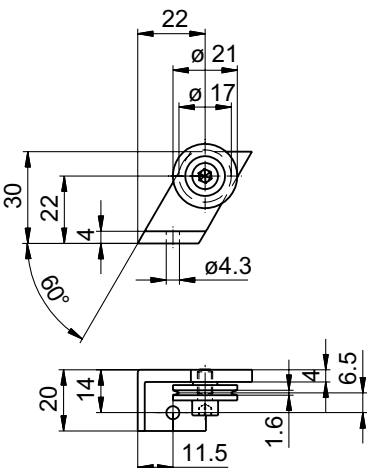
Z 119.060 Snap hook for cable-pulls of 3 m length



Z 119.065 Idler for cable thickness 0.8...1 mm



Z 119.067 Idler for cable thickness max. 0.5 mm



#### The appropriate encoder for system solutions

All current encoder designs with 58 mm housing offered in our wide range on absolute and incremental encoders are compatible to the cable-pull of your choice.

#### Incremental encoders (GCI)

- Impulse numbers up to 65.536 pulses/turn
- Interfaces: HTL/TTL

#### Absolute encoders (GCA)

- Resolution max. 31 bit
- Programmable (e.g.: rotation direction)

These absolute encoders can be varied with all current fieldbus interfaces:



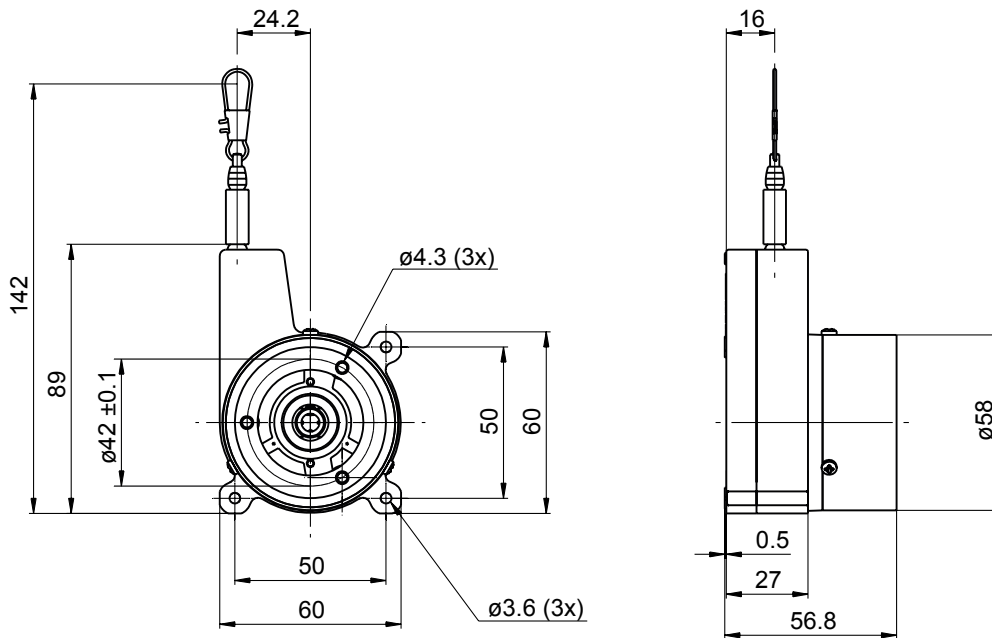
# Cable transducer

Cable-pull with absolute or incremental encoder

Up to 50 m measuring length

## Dimensions

GCI2/GCA2 – without encoder, measuring length 2.4 m – with snap hook



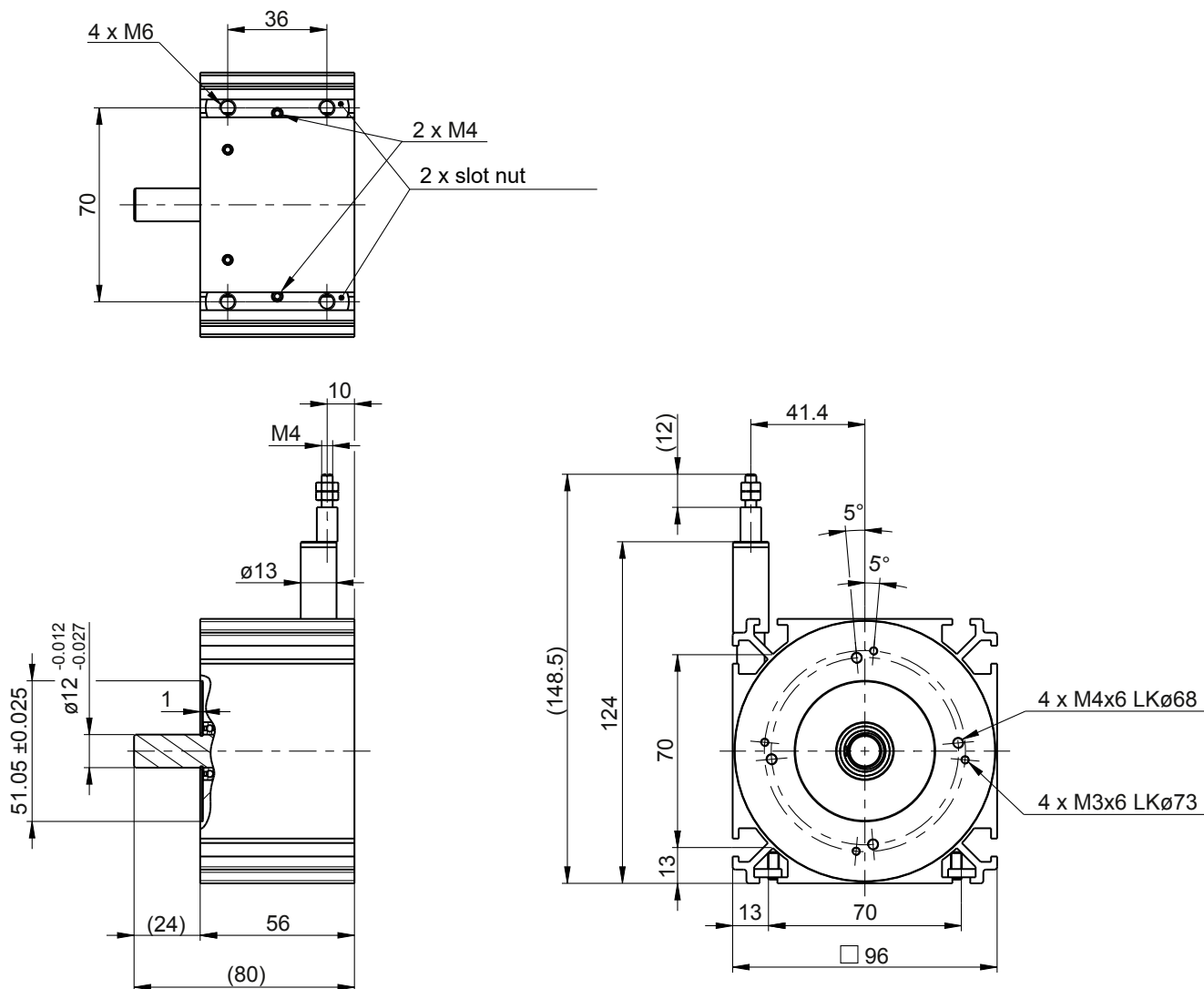
# Cable transducer

Cable-pull with absolute or incremental encoder

Up to 50 m measuring length

## Dimensions

GCI4/GCA4 – without encoder, measuring length 3 m – with thread



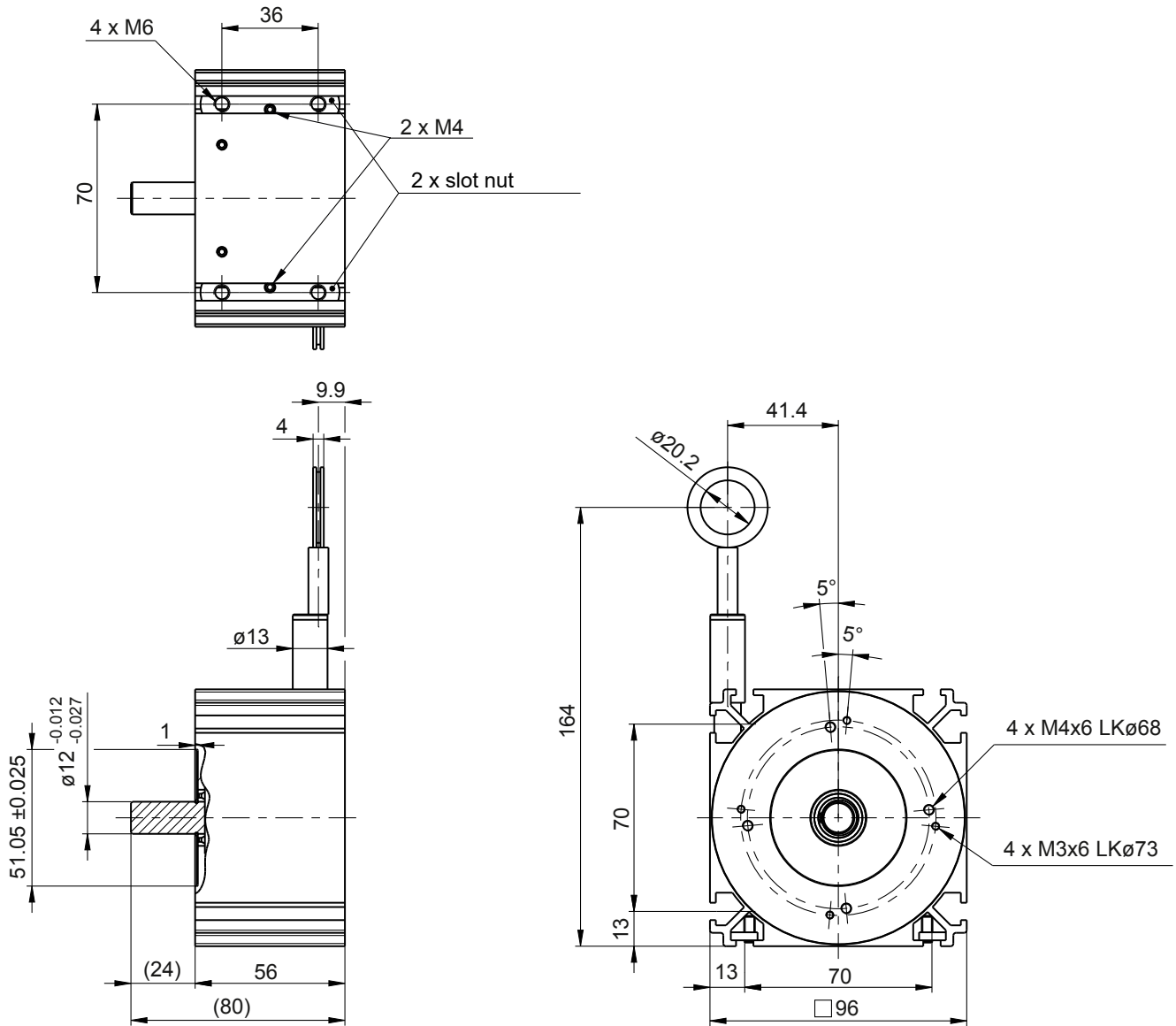
# Cable transducer

Cable-pull with absolute or incremental encoder

Up to 50 m measuring length

## Dimensions

GCI4/GCA4 – without encoder, measuring length 3 m – with eyelet



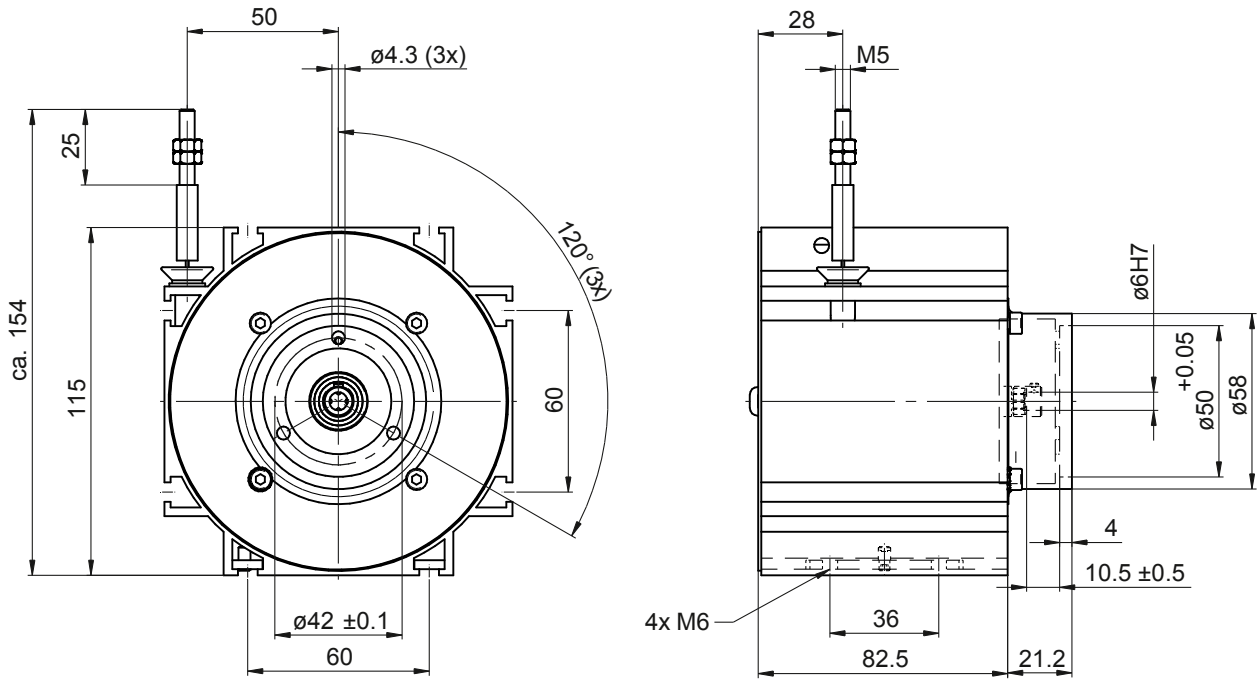
# Cable transducer

Cable-pull with absolute or incremental encoder

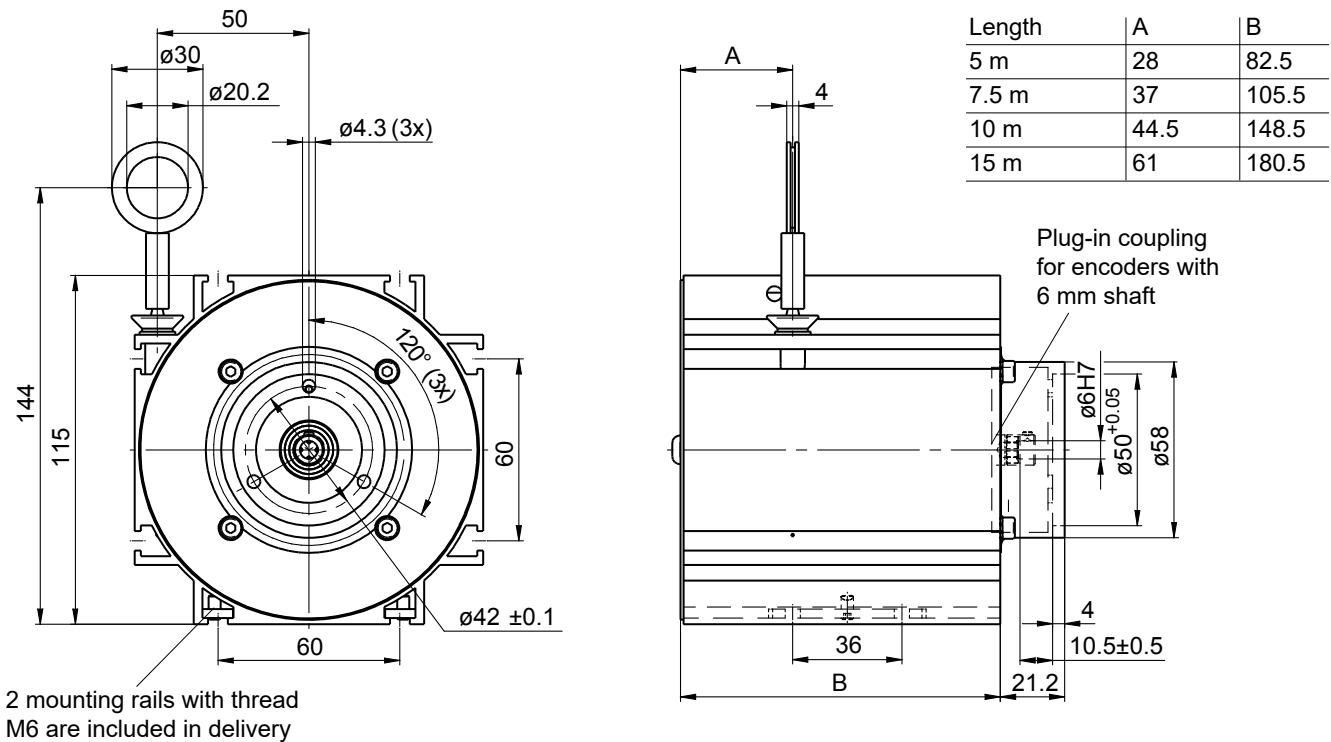
Up to 50 m measuring length

## Dimensions

GCI15/GCA15 – without encoder, measuring length 5 m – with thread



GCI15/GCA15 – without encoder, measuring length 5, 7.5, 10 or 15 m – with eyelet



# Cable transducer

Cable-pull with absolute or incremental encoder

Up to 50 m measuring length

## Dimensions

GCI50/GCA50 – without encoder, measuring length 30, 40 or 50 m – with eyelet

