

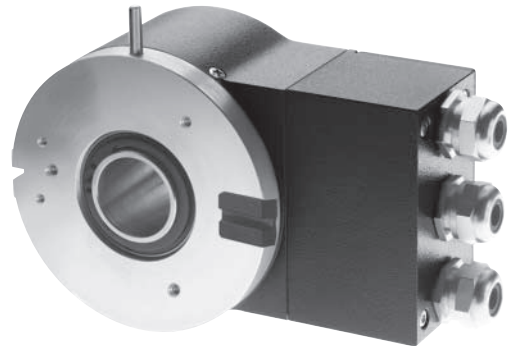
# Absolute multi-turn hollow shaft encoder

## BPMD flexible

### Profibus-DP, CANopen, DeviceNet

#### features

- multi-turn encoder up to
  - 13 bit single-turn
  - 16 bit multi-turn
- modular bus cover
- programmable operating modes
- programmable bus parameters
- programmable resolution and preset values
- hollow shaft  $\varnothing$  25,4...50,8 mm



#### general data

voltage supply	10 - 30 VDC with reverse polarity protection
max. supply current no load	100 mA (at 24 VDC)
signal coding	binary code
max. resolution single-turn	13 bit (1 step = 2' 38")
multi-turn	16 bit (65'536 rev.)
max. switching frequency	800 kHz
max. error limit	$\pm 0,025^\circ$ at 400 kHz $\pm 0,05^\circ$ at 800 kHz
preset	in state data-exchange encoder can be set to a predefined position
address	adjustable via jog-dial
baud rate	selectable via dip switches
direction of rotation	looking at the flange, position counts up as the shaft rotates clockwise (CW), programmable

#### ambient conditions

temperature range	-20...+85 °C
relative humidity	max. 95% non condensing
vibration	DIN EN 60068-2-6 ( $\leq 100 \text{ m/s}^2 / 16 - 2'000 \text{ Hz}$ )
shock	DIN EN 60068-2-27 ( $\leq 2'000 \text{ m/s}^2 / 6 \text{ ms}$ )
noise immunity	DIN EN 61000-6-2
emitted interference	DIN EN 61000-6-4

#### mechanical data

##### BPMD 25

max. revolutions	mech. 3'800 rpm electr. 6'000 rpm
moment of inertia	$200 \times 10^{-6} \text{ kgm}^2$
max. protection class	IP 54
material	housing: aluminum
weight	approx. 830 g

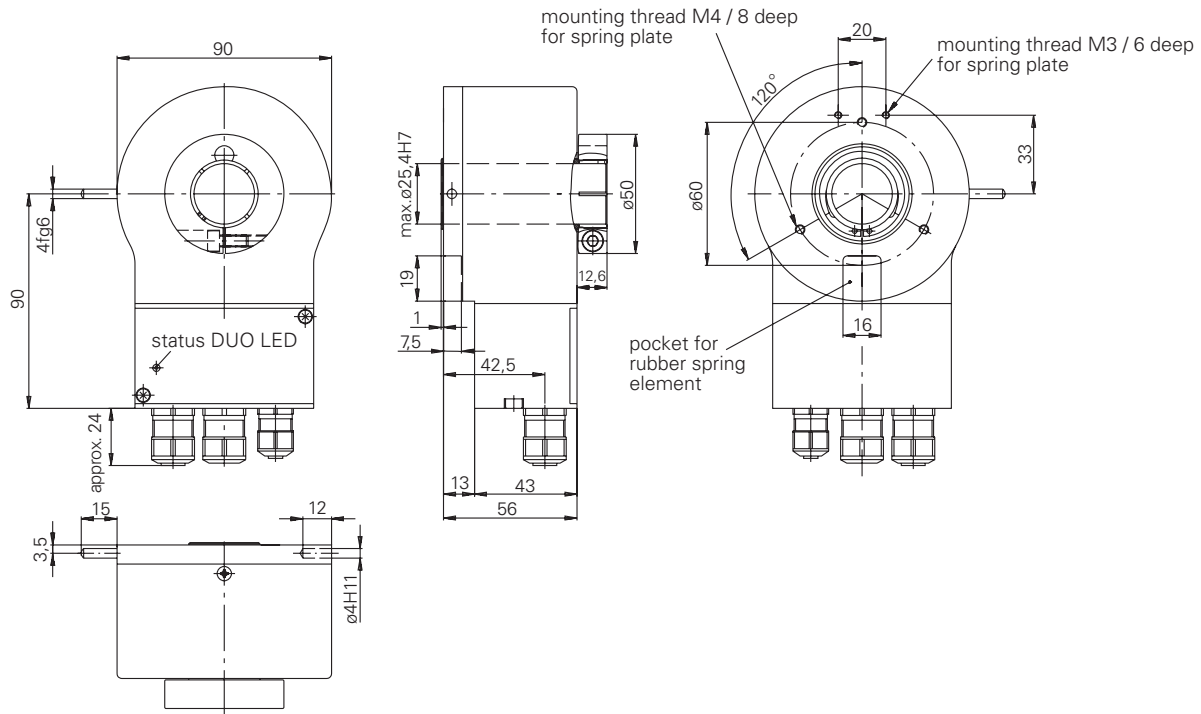
##### BPMD 50

max. revolutions	mech. 2'000 rpm higher on request electr. 6'000 rpm
moment of inertia	$1'100 \times 10^{-6} \text{ kgm}^2$
max. protection class	IP 54
material	housing: aluminum
weight	approx. 1'200 g



dimensions

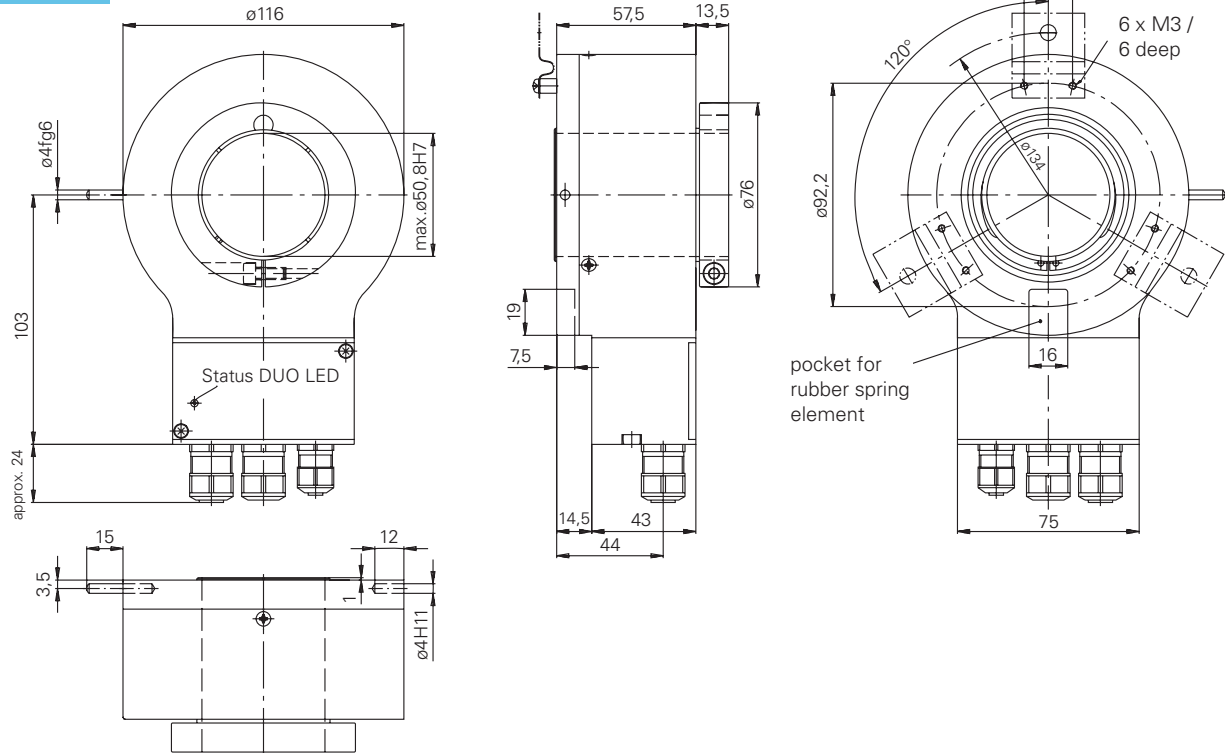
**BPMD 25** with Profibus-DP



# Absolute multi-turn hollow shaft encoder BPMD flexible Profibus-DP, CANopen, DeviceNet

## dimensions

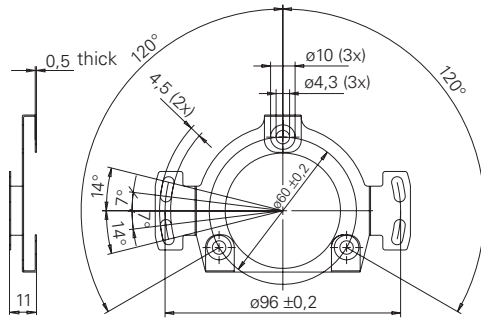
### BPMD 50 with Profibus-DP



Profibus-DP, CANopen, DeviceNet

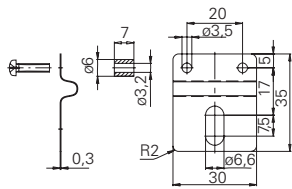


spring plate BPMD 25



part nr. 143969

spring plate BPMD 50



part nr. 147837

order designation

BPMD   G1P24C13/16   G base encoder  
without bus cover  
BPMD   G1P24  13/16   D complete encoder

shaft

**KF** through hollow shaft 25,4 mm  
IP 54 with clamping ring  
**KQ** through hollow shaft 50,8 mm  
IP 54 with clamping ring

interface

**P** Profibus-DP  
**B** CANopen  
**D** DeviceNet

housing diameter

**25** ø 90 mm (for shaft type KF)  
**50** ø 116 mm (for shaft type KQ)

accessories

CD-ROM with GSD-/EDS-/XML-files and manuals	part nr. 147362
bus cover for Profibus-DP	see chapter accessories
for CANopen	part nr. 145145
for DeviceNet	part nr. 145144
spring plate BPMD 25	part nr. 143969
BPMD 50	part nr. 147837

included in delivery

- rubber spring element and adjustment piece
- 2 washers
- 2 cap screws M5 x 12 DIN912