

Incremental hollow shaft encoder BHW

features

- large hollow shaft encoder up to \varnothing 27 mm
- high resolution up to 36'000 ppr
- small mounting depth



general data

voltage supply	5 VDC \pm 10% (05A) 10 - 30 VDC (24K)
max. supply current no load	typ. 80 mA (05A) typ. 60 mA (24K)
pulse range	see order designation
max. measuring steps	144'000 steps
max. switching frequency	750 kHz (05A) 200 kHz (05A >30'000 ppr) 200 kHz (24K)

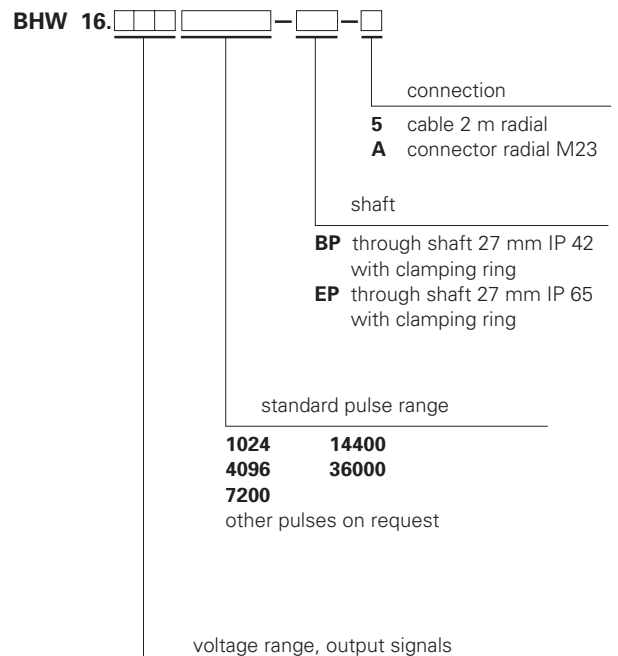
mechanical data

max. revolutions	12'000 rpm (IP 42) 6'000 rpm (IP 65)
moment of inertia	typ. 4×10^{-5} kgm ²
torque	typ. 0,75 cNm IP 42 typ. 3,0 cNm IP 65 (3'000 rpm / 20 °C)
product life	depending on ambient conditions (typ. 10 ⁹ revolutions)
max. protection class	IP 65
material	housing: aluminum flange: aluminum
weight	approx. 500 g

ambient conditions

temperature range	-20...+85 °C
relative humidity	max. 95% non condensing
vibration	IEC 60068-2-6 (≤ 100 m/s ² / 10 - 200 Hz)
shock	IEC 60068-2-27 (≤ 500 m/s ² / 11 ms)
noise immunity	EN 61000-6-2
emitted interference	EN 61000-6-3

order designation



05A 5 VDC complementary
24K 10 - 30 VDC push-pull, short-circuit protection

Other versions on request.

accessories

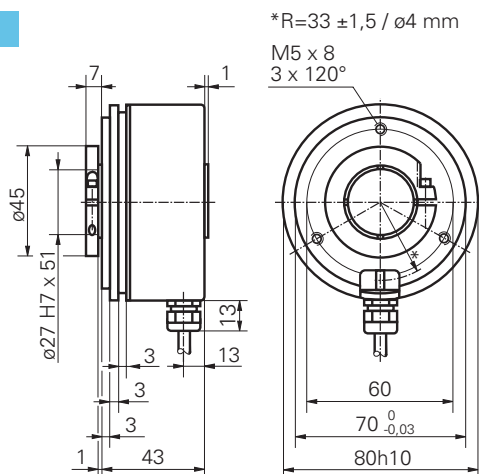
cable with connector M23 female (pre-assembled) ref. -A	
2 m	part nr. 130367
5 m	part nr. 118532
clamp set	part nr. 252773
torque spring ¹⁾	part nr. 109520
torque pin	part nr. 107540
spring plate set	part nr. 130313
connector M23 female for ref. -A	part nr. 107687

¹⁾ encoder is delivered with fixed rubber torque spring

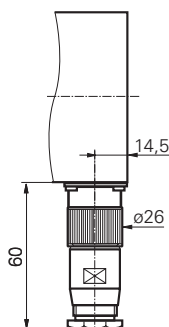
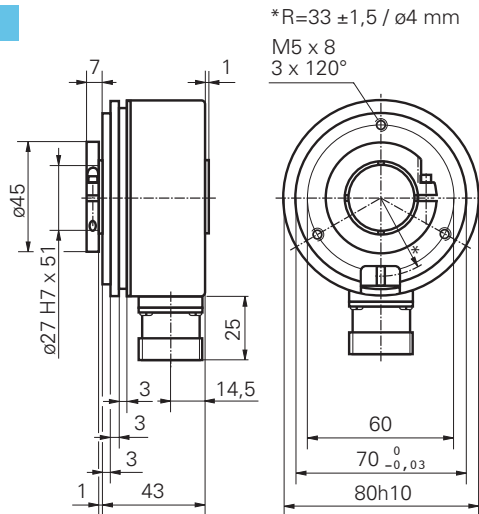


dimensions and connection dimensions

-5



-A



assignment cable

for connection reference **-5**
05A (5 VDC complementary)

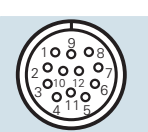
cable color	signals
brown	+Vs
green	CHA
red	CHA compl.
yellow	CHB
blue	CHB compl.
pink	CHN
grey	CHN compl.
white	0V
screen	connected to connector housing
cable data	8 x 0,14 mm ² , max. ext. ϕ 5,7 mm

24K (10 - 30 VDC push-pull, short-circuit protection)

cable color	signals
brown	+Vs
green	CHA
yellow	CHB
pink	CHN
white	0 V
screen	connected to flange
cable data	5 x 0,14 mm ² , max. ext ϕ 5,4 mm

assignment connector M23 male

for connection reference **-A**



05A (5 VDC complementary)
24K (10 - 30 VDC push-pull, short-circuit pro.)

pin number	signals
1	CHA compl.
2	+Vs
3	CHN
4	CHN compl.
5	CHB
6	CHB compl.
7	n.c.
8	CHA
9	housing
10	0 V
11	0 V
12	+Vs

push-pull version **24K** without CHx complementary signals.