

Incremental hollow shaft encoder

- Miniature shaft encoder with extended pulse range
- Through shaft mounting up to $\varnothing 6$ mm
or end shaft mounting up to $\varnothing 12$ mm
- Radial cable or plug connection



mechanical data			
	max. revolutions	12'000 min	
	rotor inertia	typ. $3,0 \times 10^{-7}$ kgm ²	
	torque	typ. 0,21 cNm (3000 rev/min 20 °C)	
	max. protection class	shaft: IP 64 housing side: IP 42 through shaft, IP 65 with end cap	
	material	housing: polyamid flange: aluminum	
	weight	approx. 100 g	
electrical data		circuit options and output sequence see page 11, electrical connections see page 12	
	max. measuring step	8192 steps at 2048 pulses	
	pulse tolerance	± 15%	
	switching frequency f _{max}	50 kHz (512...2048 pulses 100 kHz)	
	voltage supply	5 V ± 10%, 10 - 30 VDC	
options		complementary and pulse ranges see page 11, electrical connection see page 12	
	pulse range	5 up to 2048 PPR (range 3 extended) (output sequence 6)	
	output sequence	CH _A , CH _B , CH _N , (output sequence 6)	
	temperature range	reference 0 : 0...+65 °C, reference 1 : -20...+85 °C (by complementary 05A)	
	circuit options	complementary, reference 05A , push-pull, short circuit protection, reference 24K	
	shaft ø 6 mm	with clamping ring and spring plate reference -I6 , with clamping reference -B6	
	shaft ø 12 mm	with clamping ring and spring plate reference -I2 , with clamping ring reference -B2	
	electrical connection	cable with PG-gland radial reference -5 , connector radial reference -9	
preferential types	with 12 mm hollow shaft	complementary 05A (5 V ± 10%)	push-pull, short circuit prot. 24K (10 - 30 VDC)
	cable radial -5	BHK 06.05A...-I2-5	BHK 06.24K...-I2-5
	connector radial -9	BHK 06.05A...-I2-9	BHK 06.24K...-I2-9

**pulse range
range 3**

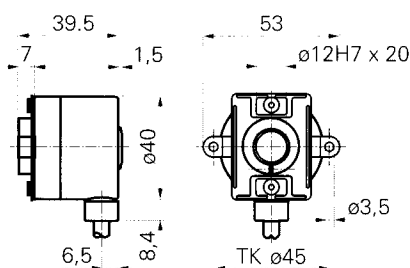
5, 8, 10, 12,
15, 20, 25, 30,
32, 40, 50, 60,
64, 90, 100,
110, 120, 125,
180, 200, 250,
256, 360, 400,
500, 512, 720,
1000, 1024

**range 3
extended**

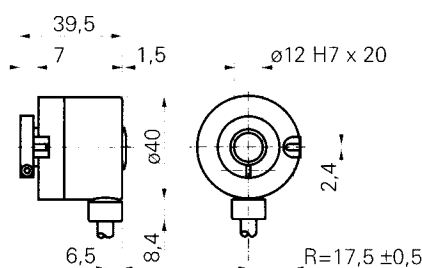
1250, 1440,
1500, 1800,
2000, 2048

dimensions

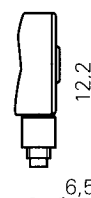
shaft reference **-I2**
with clamping ring and spring plate

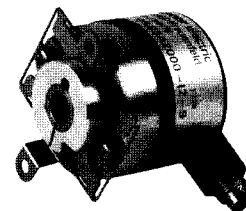


shaft reference **-B2**
with clamping ring without
spring plate



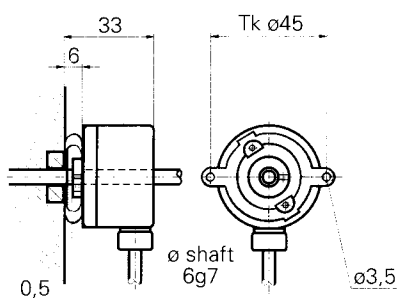
connection
option **-9**
connector
radial





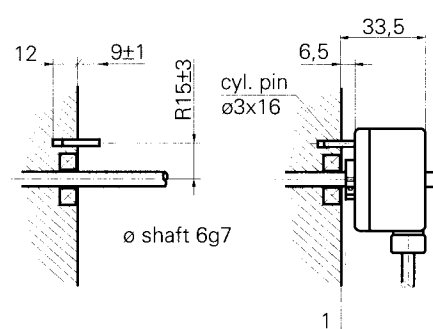
-I6

Through shaft mounting 6 mm
with clamping ring and spring plate



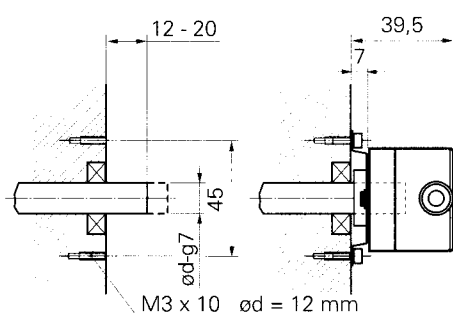
-B6

Through shaft mounting 6 mm
with clamping ring, without spring plate



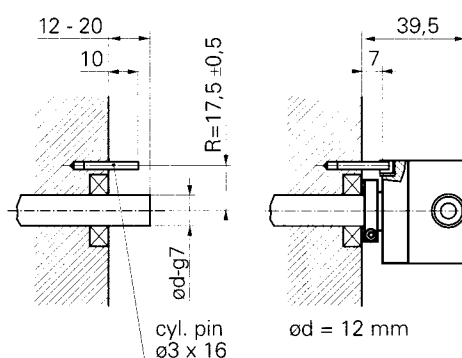
-I2

End shaft mounting 12 mm
with clamping ring and spring plate



-B2

End shaft mounting 12 mm
with clamping ring without spring plate



Part number key

BHK 06.05A...-I2-5

temperature range

output sequence

circuit option

pulse rate

shaft diameter

electrical connection

Accessories

05A output	part number
connector cable	2 m ES62FB2
connector cable	5 m ES62FB5

24K output	part number
connector cable	2 m ES62CB2
connector cable	5 m ES62CB5