



HEIDENHAIN

Robotics

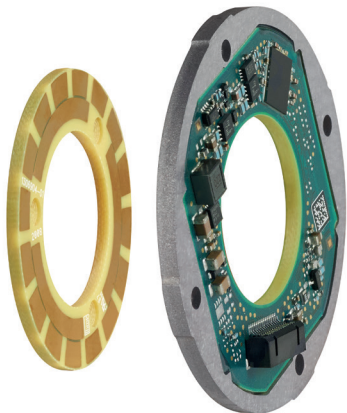
KCI 1319

KBI 1335



Absolute inductive rotary encoder with hollow shaft

For motor feedback



Areas of application

- Robotics industry
- Compact servomotors

Characteristics

- 25 mm hollow shaft
- Connectivity for external temperature sensor
- Small dimensions
- Wide mounting tolerances
- Also available with functional safety

Specifications

- Measuring steps/rev. 524288 (19 bits)
- Revolutions (KBI 1335) 65536 (16 bits)
- System accuracy $\pm 90''$
- Safety category SIL 2 as per EN 61508; Category 3
PL d as per EN ISO 13849-1:2008
(up to SIL 3 with additional measures)
- Supply voltage DC 3.6 V to 14 V

Interface

- EnDat 2.2; 16 MHz clock frequency

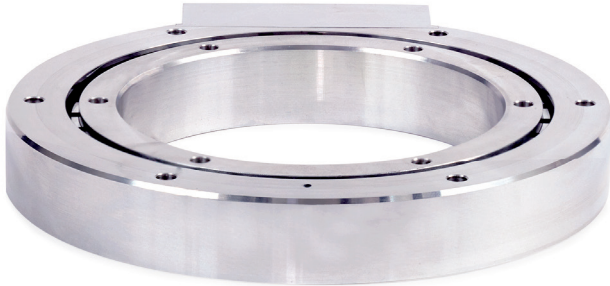
ECI 4000

EBI 4000



Absolute inductive rotary encoder without integral bearing

Particularly rugged design



Areas of application

- Medical technology systems and applications
- Torque motors for production machines
- General motor technology

Characteristics

- Wide mounting tolerances
- Simple mounting
- Multiturn functionality via battery-buffered revolution counter (EBI 4000)
- Also available with functional safety

Specifications

- System accuracy $\pm 25''/\pm 40''$
- Hollow shaft diameter 90 mm/180 mm
- Shaft speed ≤ 6000 rpm

Interfaces

- EnDat 2.2
- DRIVE-CLiQ

DRIVE-CLiQ is a registered trademark of Siemens AG.

Absolute inductive angle encoder

Insensitive to contamination



Areas of application

- Rotary axes for large work envelopes
- Swivel heads
- Robots

Characteristics

- Large hollow-shaft diameters
- Low mass moment of inertia
- Also available with functional safety

Specifications

- | | |
|-----------------------|--|
| • Graduation accuracy | Down to $\pm 3 \mu\text{m/m}$ (arc length) |
| • Grating period | 1000 μm |
| • Diameter | 81 mm to 10000 mm |
| • Protection rating | IP67 |

Interfaces

- | | |
|--------------|--------------|
| • EnDat 2.2 | • Mitsubishi |
| • Fanuc | • BiSS/C |
| • DRIVE-CLiQ | • SSI |

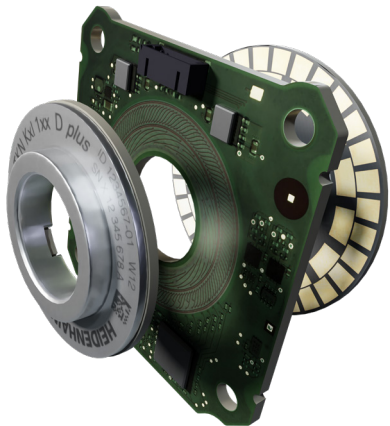
DRIVE-CLiQ is a registered trademark of Siemens AG.

KCI 120 Dplus



Absolute inductive dual encoder

Two encoders in one: motor feedback and position measurement



Areas of application

- Robotics industry
- In compact robot arms

Characteristics

- Compensation of gearing inaccuracies
- Small footprint
- Low weight
- Only one cable
- Also available with functional safety

Specifications

- Measuring step/rev. 1 048 576 (20 bits) for pos. measurement
524 288 (19 bits) for motor feedback
- System accuracy $\pm 40''$
- Safety category SIL 2 as per EN 61508; Category 3
PL d as per EN ISO 13849-1:2008
(up to SIL 3 with additional measures)
- Supply voltage DC 3.6 V to 14 V

Interface


- EnDat 2.2; 16 MHz clock frequency

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