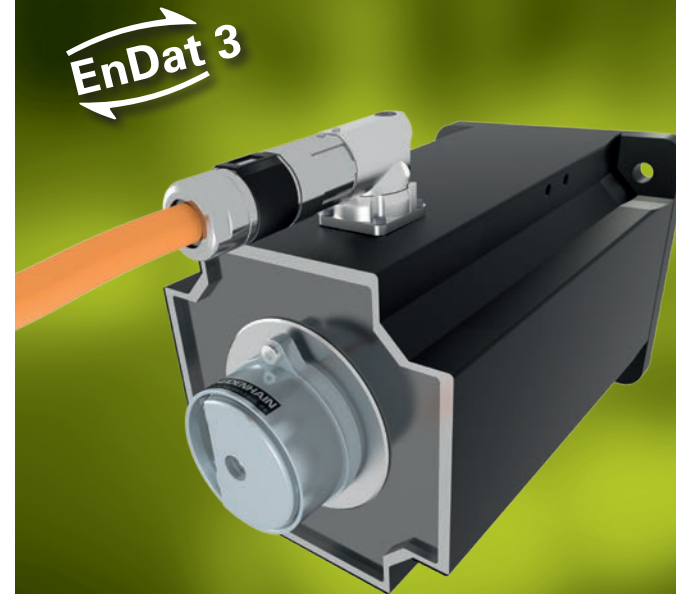
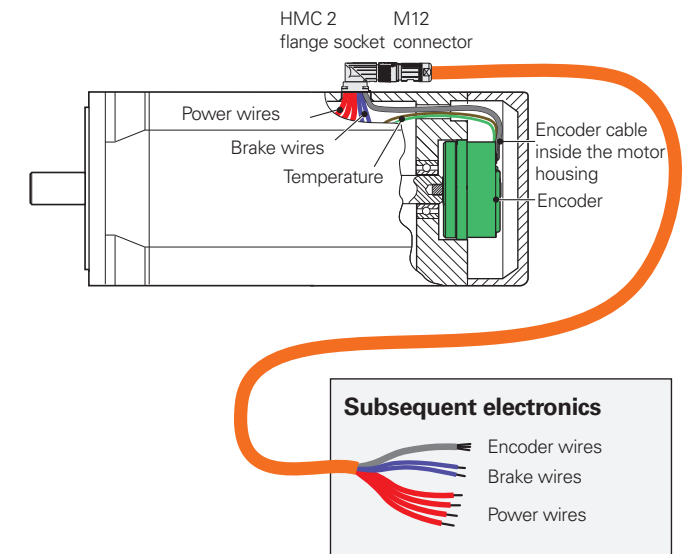


The new HMC 2 hybrid motor cable unites the encoder wires and power wires, necessitating only a single cable between the motor and the electrical cabinet.

The HMC 2 single-cable solution is specially designed for HEIDENHAIN encoders featuring the EnDat 3 interface and purely serial data transmission at cable lengths of up to 100 m. With this proven combination of carefully matched connector, cable, and encoder technology, you can count on a harmonious complete system for your motor technology.



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DR. JOHANNES HEIDENHAIN GmbH develops and manufactures linear encoders, angle encoders, rotary encoders, digital readouts, touch probes, and numerical controls. With its products, HEIDENHAIN supplies machine tool manufacturers and producers of automated equipment and machines, particularly for the semiconductor and electronics manufacturing industries.

HEIDENHAIN is represented in all industrialized countries—primarily through wholly owned subsidiaries. Sales engineers and service technicians support the user on-site with advisory services and servicing.

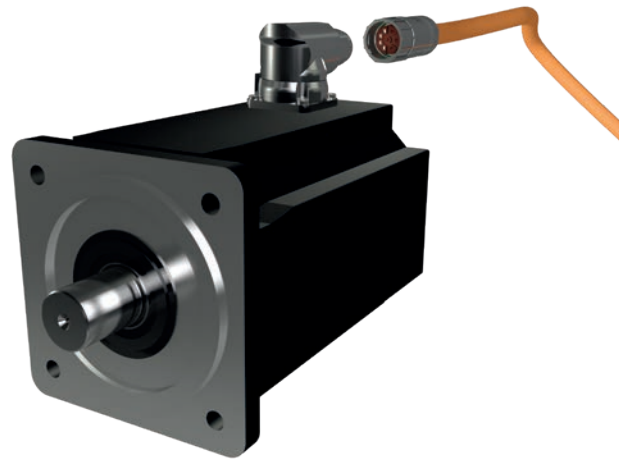


Hybrid cable solutions offer optimization potential

- Reduced cabling
- Smaller drag chains and improved drag-chain suitability
- Ability to incorporate additional sensors
- Easier integration into the machine housing

HMC 2 is the perfect addition to HMC 6

- Reduced logistics for cables and connectors
- Quick and easy installation
- Fewer serviceable components needed
- Tested cable-connector combination



Cost and quality benefits

HEIDENHAIN

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HMC 2
 One Cable, One Connector,
 All of the Data

Innovative connection technology

A proven connection

The HMC 2 is based on prevalent and robust standard connection technology:

- M12 or M23 SpeedTec flange socket (rotatable)
- Hybrid cable with one M12 or M23 SpeedTec coupling

As a result, the HMC 2 offers these key benefits:

- Complete connector-cable-encoder system
- Cost-optimized hybrid cable solutions
- EMC testing in a realistic environment
- Available service pack with cable and connector

SpeedTec is a registered trademark of TE Connectivity Industrial GmbH



Standard components for a dependable connection

Hybrid cable

- Purely serial two-wire transmission
- Standard cable and connectors

Functional safety

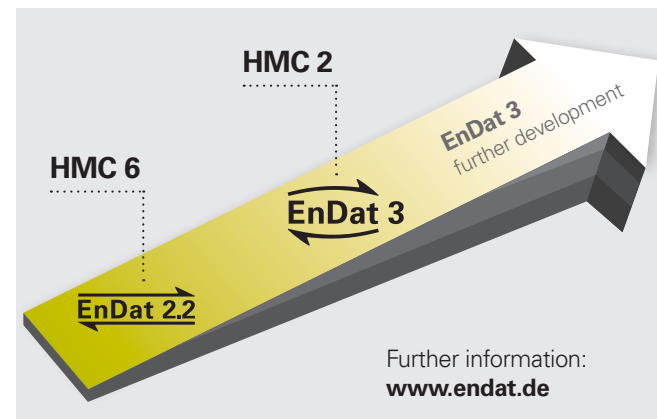
- Up to SIL 3
- Black-channel communication

Sensor integration

- Easy integration of an external motor temperature sensor (e.g., KTY 84, PT 1000)

System monitoring

- Simple commissioning
- Electronic ID label (for motor, encoder, and machine)
- Diagnostics



EnDat 3: forward-thinking further development

Extensive system monitoring

HEIDENHAIN encoders provide all of the information needed for configuration, monitoring, and diagnostics:

- Inspection of encoder mounting quality
- Alignment of encoder position to the motor commutation
- Selection of the temperature sensor's characteristic curve (KTY 84 / PT 1000)
- Configuration of the temperature warning threshold



Simple installation and configuration

Rotary encoder for HMC 2

ECI 1119/EQI 1131 and ECI 1319/EQI 1331

Areas of application

- Robotics
- Automation

Characteristics

- High vibration tolerance up to 60 g
- For safety-related applications up to SIL 3
- Bearingless design
- Convenient mounting

Specifications

- Measuring steps per revolution: 19 bits
- Revolutions: 12 bits
- System accuracy: $\pm 65''$ (Exl 1300), $\pm 120''$ (Exl 1100)
- Temperature evaluation for the PT 1000, KTY 84-130, etc.

Interface

EnDat 3 with HMC 2



Robust measurement technology for motors