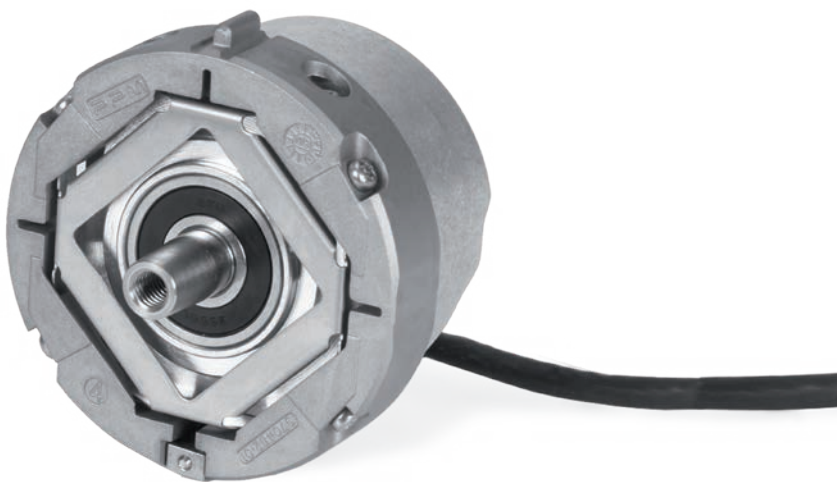




HEIDENHAIN



**Functional
Safety**

Product Information

ECN 425
EQN 437

Absolute Rotary Encoders
with Tapered Shaft and
Expanding Ring Coupling
for Safety-Related
Applications

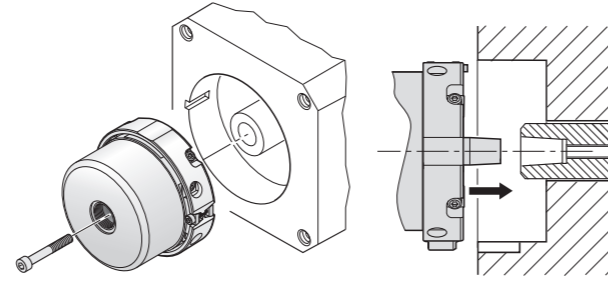
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ID 1178029-02

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Mounting

The tapered shaft of the rotary encoder is pressed onto the measured shaft and fastened with a central screw. It is particularly important to ensure that the positive-locking element of the stator coupling securely engages the corresponding slot in the measured shaft. Use a central screw with material-bonding anti-rotation lock (see *Mounting accessories*). The stator coupling is clamped by means of an axially tightenable screw in a locating hole.



More information:

For the customer-side mounting design, the material specifications for steel apply to the customer-side shaft. For the customer-side stator, the material specifications for aluminum apply.

Also comply with the other material properties in the *Encoders for Servo Drives* brochure (ID 208922-xx).

Mounting accessories

Screws

Screws (central screw, mounting screws) are not included in delivery and can be ordered separately.

ECN 425, EQN 437 screws ¹⁾			Quantity
Central screw for fastening the shaft	DIN 6912 – M5×50 – 08.8 – MKL	ID 202264-54	10 or 100

¹⁾ With coating for material bonding anti-rotation lock

For more mounting information and mounting aids, see the mounting instructions and the *Encoders for Servo Drives* brochure. The mounting quality can be inspected with the PWM 21 and ATS software.

Electrical connection

Pin layout

8-pin M12 coupling							
Power supply				Serial data transmission			
	8	2	5	1	3	4	6
	U _P	Sensor U _P	0V	Sensor 0V	DATA	DATA	CLOCK
	Brown/Green	Blue	White/Green	White	Gray	Pink	Violet

Cable shield connected to housing; U_P = Power supply voltage

Sensor: The sense line is connected in the encoder with the corresponding power supply line.

Vacant pins or wires must not be used!

Note for safety-related applications: Only completely assembled HEIDENHAIN cables are qualified. Do not modify cables or exchange their connectors without first consulting with HEIDENHAIN Traunreut!

HEIDENHAIN

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This Product Information document supersedes all previous editions, which thereby become invalid. The basis for ordering from HEIDENHAIN is always the Product Information document edition valid when the order is placed.

More information:

Comply with the requirements described in the following documents to ensure correct and intended operation:

- Operating Instructions

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