

# SAFECODER



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## GENERAL

The safety Sin/Cos incremental encoder SAFECODER, together with Mosaic, comprise a SIL 3 certified safety function for speed monitoring. SAFECODER encoders are characterized by robust and reliable interface and the ability to handle high mechanical loads and electronic equipment.

## MAIN CHARACTERISTICS

Incremental encoder for use in safety-related applications up to SIL3.

Shaft or Hollow Shaft versions.

Protection rate: housing and flange side IP67, shaft IP65 (optional IP67)

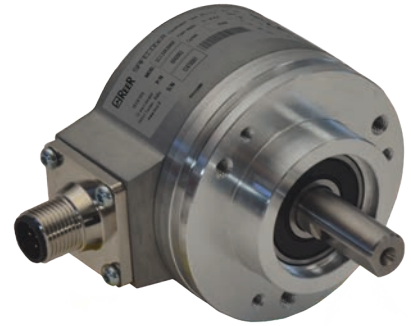
Safety-Lock™.

Allow high rotational speed and high shaft load capacity

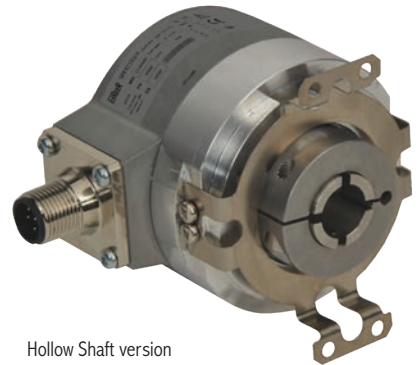
Shock and vibration resistant.

Insensitive to strong magnetic fields.

2048 pulse rate.



Shaft version



Hollow Shaft version

## TECHNICAL DATA AND ORDERING CODES

Model	SC3 24D2048R	SC3 05D2048R	SC3 24B2048R	SC3 05B2048R
Ordering code	1100102	1100103	1100104	1100105
Power supply	24 VDC	5 VDC	24 VDC	5 VDC
Shaft type	Hollow Shaft version Ø 12 mm		Shaft version Ø 10 mm with flat	
Resolution	2048 pulse rate		2048 pulse rate	
Connector	Radial M12		Radial M12	

## Cables

Model	Code	Description
C8D5 SH	1330930	M12 straight connector, 8 poles, pre-wired shielded cable 5 m
C8D10 SH	1330931	M12 straight connector, 8 poles, pre-wired shielded cable 10 m
C8D15 SH	1330932	M12 straight connector, 8 poles, pre-wired shielded cable 15 m
C8D95 SH	1330933	M12 90° angled connector, 8 poles, pre-wired shielded cable 5 m
C8D910 SH	1330934	M12 90° angled connector, 8 poles, pre-wired shielded cable 10 m
C8D915 SH	1330935	M12 90° angled connector, 8 poles, pre-wired shielded cable 15 m

Cable supplied with M12 8-pole connector at one end only. The other side must be cut off at correct length and crimped with RJ45 connector (not included).

## Safety level: SIL 3 – SILCL 3 – PL e – Cat. 4 – Type 4

- 2006/42/EC “Machinery Directive”
- 2004/108/EC “Electromagnetic Compatibility (EMC)”
- EN ISO 13849-1 “Safety of machinery: Safety-related parts of control systems. Part 1: General principles for design”.
- EN ISO 13849-2 “Safety of machinery: Safety-related parts of control systems. Part 2: Validation”
- IEC 61508 “Functional safety of electrical, electronic and programmable electronic safety-related systems.
- EN ISO 61800-5-2 “Adjustable speed electrical power drive systems”. Part 5-2 Safety requirements - Functional
- UL (C+US) mark for USA and Canada
- BGIA - Institute for Occupational Safety and Health - Germany.



Safety level:

**SIL 3**

SIL 3 – SILCL 3  
PL e – Cat. 4