

VD589820

ROTARY ENCODERS • ENCODERS

A rotary encoder is a device that converts a rotary motion into a digital output signal, which can be processed on a subsequent evaluation electronics. All of our encoders operate according to the principle of optical scanning. Inside the device there is a pulse disc on which is – depending on the encoder - a unique (absolute) or repetitive (incremental) line graduation, which is scanned by an optical system. The turning of the encoder shaft causes rotation of the pulse disc, which results in a corresponding sampling signal of the optical system. This is finally implemented by an integrated electronics in encoder-specific output signals (e.g. multi-turn, RS422 etc.). For professional installation in many applications, shaft couplings or resilient bases for mounting brackets or flanges are used. In addition, the encoder shaft can be equipped with measuring wheels or pinions in various designs and sizes. Typical applications include the angle measurement on bending machines, length measuring of belt systems or speed measurement on winding systems.



MECHANICAL FEATURES

Ambient temperature	-20 °C ... 80 °C
Axial load capacity of shaft	40 N
Degree of protection (IP)	IP65
Encoder size	58
For damp environments	-
Housing material	Aluminum
Max. rotation speed	6000 UpM
Moment of inertia	30 gcm ²
Radial load capacity of the shaft	40 N
Sensor diameter	58 mm
Sensor length	58.5 mm
Shaft diameter	6 mm ... 6 mm
Shock resistance, acceleration	100 g
Shock resistance, pulse time	6 ms
Torque	0.01 Nm
Type of encoder shaft	Full shaft
Version	Incremental encoder
Vibration resistance, acceleration	10 g
Vibration resistance, frequency	2000 Hz
With hollow shaft	-
With shaft sealing ring	-

ELECTRICAL FEATURES

	+
Encoder signal outputs	A+B+0
Impulse rate per revolution	0 ... 65536
Max. no. of pulses	65536
Max. output current	0.02 A
Max. output frequency	900000 Hz
No-load current	45 mA
Number of pins	8
Physical measurement principle	Optic
Positioning of cable feed	IV001908

ELECTRICAL FEATURES

Programmable	+
Reverse polarity protection	-
Shaft length	10
Short-circuit protection	+
Suitable for absolute value detection	-
Supply voltage	5 V ... 30 V
Track A inverted	+
Track B inverted	+
Track N inverted	+
Type of electrical connection	Connector M12
Voltage type	DC

OTHER FEATURES

Single-turn encoder	-
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Other

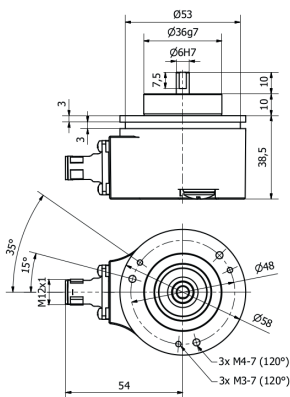
Packaging dimensions	0.0mm x 0.0mm x 0.0mm
Shipping weight	
Tariff code	90318020

Classification

ipf product group	520
eClass 8.0	27270590
eClass 9.0	27270590
eClass 9.1	27270590
ETIM-5.0	EC001486
ETIM-6.0	EC001486
ETIM-7.0	EC001486

Connection

Dimensional drawing



Installation



Mounting / installation may only be carried out by a qualified electrician!

Disposal



Software

Please download the software or driver required for operating your new device on our homepage: www.ipf.de

Safety warnings

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

Never use these devices in applications where the safety of a person depends on their functionality.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.