

VD580828

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 DATA

Ambient temperature (MAX)	85 °C
Ambient temperature (MIN)	-20 °C
Axial load capacity of shaft	20 N
Degree of protection (IP)	IP54
Encoder size	58
Housing material	Aluminium
Max. rotation speed	10000 UpM
Moment of inertia	14.5 gcm ²
Radial load capacity of the shaft	40 N
Sensor diameter	58 mm
Sensor length	65 mm
Shaft diameter (MAX)	6 mm
Shaft diameter (MIN)	6 mm
Shock resistance, acceleration	200 g
Shock resistance, pulse time	6 ms
Torque	0.02 Nm
Type of encoder shaft	Full shaft
Version	Incremental encoder
Vibration resistance, acceleration	10 g
Vibration resistance, frequency	2000 Hz
Weight	0.25 kg

ELECTRICAL DATA

Encoder signal outputs	A+B+0
Impulse rate per revolution (MAX)	2000
Impulse rate per revolution (MIN)	2000
Max. no. of pulses	2000

