

VD58E226

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)	100 °C
Ambient temperature (MIN)	-40 °C
Axial load capacity of shaft	40 N
Degree of protection (IP)	IP67
Encoder size	58
Housing material	Aluminium
Max. rotation speed	6000 UpM
Radial load capacity of the shaft	80 N
Sensor diameter	58 mm
Sensor length	68 mm
Shaft diameter (MAX)	10 mm
Shaft diameter (MIN)	10 mm
Shock resistance, acceleration	300 g
Shock resistance, pulse time	6 ms
Torque	0.02 Nm
Type of encoder shaft	Full shaft
Version	Incremental encoder
Vibration resistance, acceleration	30 g
Vibration resistance, frequency	2000 Hz
Weight	0.25 kg
With shaft sealing ring	Yes

ELECTRICAL DATA

Encoder signal outputs	A+B+0
Impulse rate per revolution (MAX)	100
Impulse rate per revolution (MIN)	100
Max. no. of pulses	100

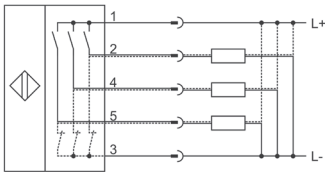
ELECTRICAL DATA

Max. output current	20 A
Max. output frequency	160000 Hz
No-load current	70 mA
Number of pins	5
Physical measurement principle	Optic
Programmable	No
Reverse polarity protection	Yes
Shaft length	20
Short-circuit-proof	Yes
Suitable for absolute value detection	No
Supply voltage (MAX)	30 V
Supply voltage (MIN)	4.75 V
Track A inverted	No
Type of electrical connection	Connector M12
Voltage type	DC

OTHER DATA

Relative air humidity	90 %
Single-turn encoder	Yes

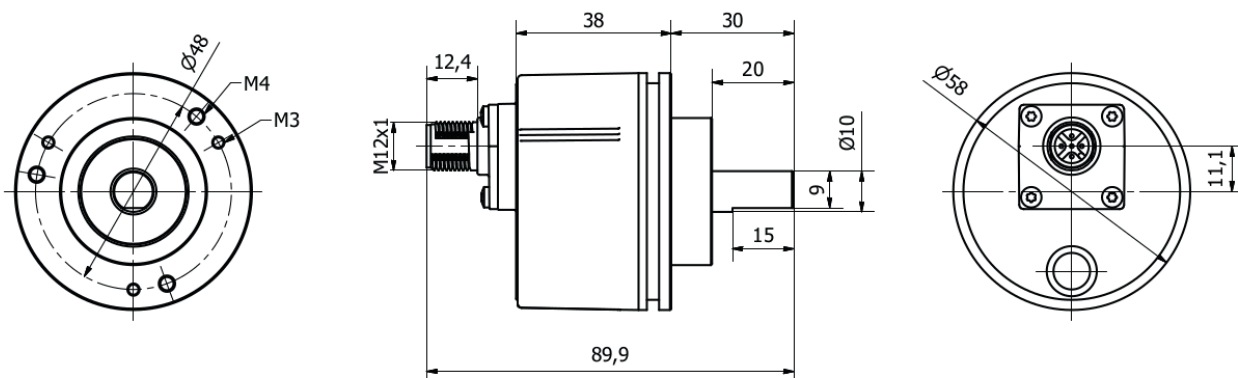
CONNECTION



Colors: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black), 5 = GY (gray)

Functions: 1 = L+, 2 = A, 3 = L-, 4 = B, 5 = R

DIMENSIONAL DRAWING



INSTALLATION

DISPOSAL



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



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.