

## VD589824

### Encoder • parameterizable

Encoder, programmable, Ø58mm 45long, hollow shaft 8mm, 65536 pulses, 5-30V DC, M12 connector 8-pin, IP65, aluminum

- / USB interface
- / M12 connection 8-pin radial
- / High shock and vibration resistance



### Incremental encoder programmable

An encoder or rotary encoder is a device that converts a rotary movement into a digital output signal that can be processed via downstream evaluation electronics. Our encoders all work on the principle of optical scanning. Inside the device there is an impulse disc on which, depending on the encoder, there is a clear (absolute) or repeating (incremental) line graduation that is scanned by an optical system. Turning the encoder shaft causes the impulse disc to rotate, which results in a corresponding scanning signal from the optical system. This is then converted into encoder-specific output signals by integrated electronics (e.g. multiturn, RS422, etc.). Shaft couplings, resilient base (for mounting brackets or flanges) are used for professional mounting in numerous applications. In addition, the encoder shaft can be fitted with measuring wheels or pinions in various versions and sizes. Typical application examples include angular measurement on bending machines, length measurement on conveyor systems or speed measurement on winding systems.

#### Electrical features

Type of electrical connection	Connector M12
Type of switching output	Push-pull
Rated switching current	20 mA
Setting procedure	Application software
Increments per revolution	65536
No-load current	45 mA
Number of pins	8
Switching frequency	900000 Hz
Signal outputs	A+B+0(+inverted)
Measurement principle	Optical
Supported communication interface	USB
Operating voltage (DC)	5 - 30 V
ardSOCA_ElektrischerAnschluss	M12 8-pin plug connector
ardSOCA_Betriebsspannung	5-30VDC
ardTEEL_Schutzfunktionen	Short circuit protection

**Mechanical features**

Type of encoder shaft	Hollow shaft
Axial load capacity of shaft	40 N
Encoder size	58
Torque	0.02 Nm
Diameter	58 mm
Shaft diameter	8 mm
Cable infeed	radial
Length	45.1 mm
Max. rotation speed	6000 upm
Radial load capacity of the shaft	80 N
Shock resistance, acceleration	100 g
Shock resistance, pulse time	6 ms
Degree of protection (IP)	IP65
Moment of inertia	60 gcm <sup>2</sup>
Vibration resistance, acceleration	10 g
Housing material	Aluminum
Shaft bearing	Ball bearing
Bearing life	10000000000 Turns
Vibration resistance Frequency	16 - 2000 Hz
Ambient temperature	-20 - 80 °C
ardSOCA_Abmessungen	Ø58mm, 45.1mm long

**Other features**

Range of functions	Inkremete einstellbar
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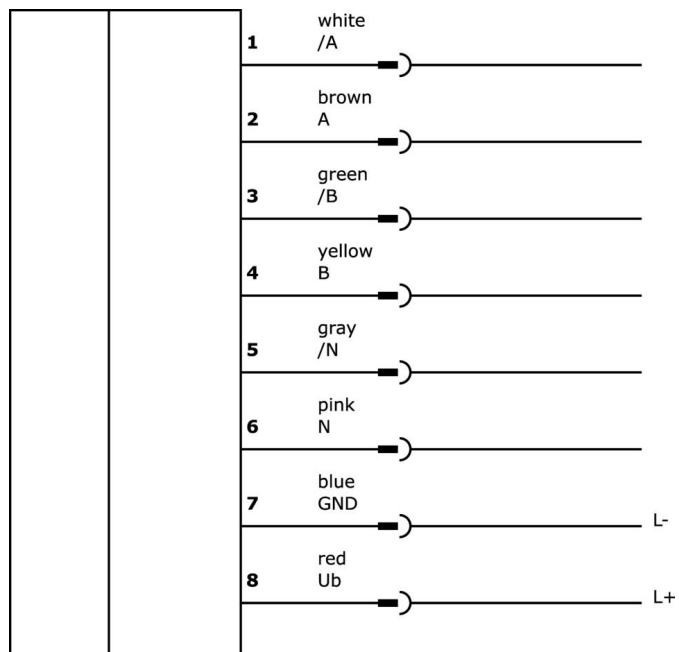
**Classification**

ETIM 8	
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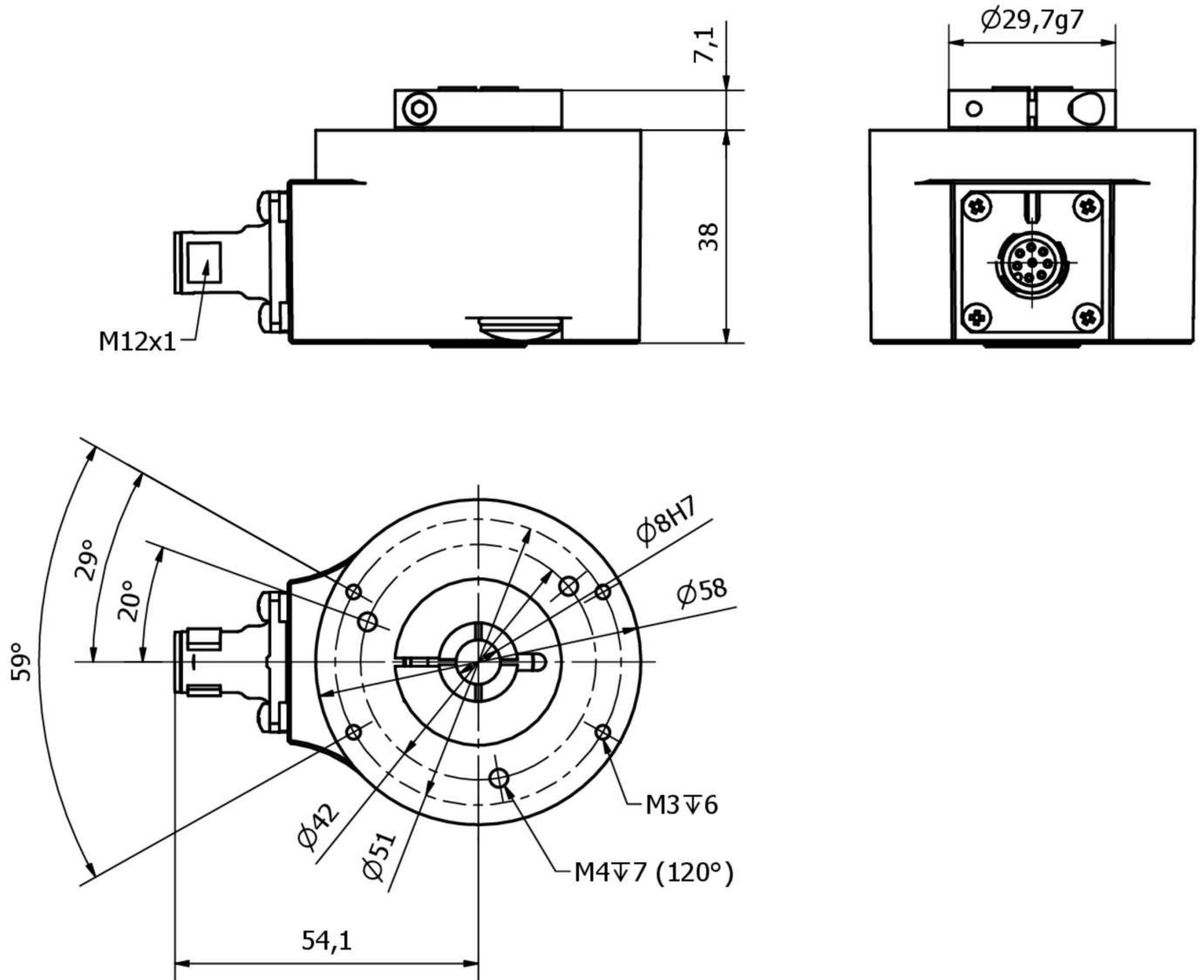
**More**

IPF Product Group	520 encoders
packaging dimensions	140 x 130 x 110 mm
gross weight	
Customs tariff number	90318020
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



**Dimensional drawing**



**Extract accessories program**

**VK205A21**



Connection cable, 2m, M12 socket 8-pin angular, free cable end, 8x0.25mm<sup>2</sup>, PUR (polyurethane), Ø6.6mm, 30V, -25-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding range, silicone-free

**VK205A25**



Connection cable, 2m, M12 socket 8-pin straight, free cable end, 8x0.25mm<sup>2</sup>, PUR (polyurethane), Ø6.6mm, 30V, -25-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK200A25**



Connection cable, 2m, M12 Female (socket) 8pin Straight, Free conductor end, 8wire, PUR (Polyurethane), Ø5.9mm, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

**VK500A25**



Connection cable, 5m, M12 socket 8-pin straight, free cable end, 8-core, PUR (polyurethane), Ø5.9mm, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**AV000137**



accessories, Torque support, 7, 7x65x51mm, Aluminum

**VK100U44**



Programming cable, 1m, USB-2.0-Micro-B connector 4-pin straight, USB-A connector 4-pin straight, PVC

**VK03E275**



Connection cable, 0.3m, M12 socket 8-pin straight, M23 connector 12-pin straight, 8x0.25mm<sup>2</sup>, PUR (polyurethane) black, Ø6.3mm, 30V, -30-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding range, silicone-free

You can find further accessories on our homepage



**Installation**

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



**Disposal**

WEEE number according to § 6 para. 3 ElektroG: 40951076

**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.

/ Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: [www.ipf-electronic.com](http://www.ipf-electronic.com)