

Combination

Encoder with integrated programmable, digital speed switch

Solid shaft with EURO flange B10

512...2500 pulses per revolution

POG 10 + DSL



POG 10 + DSL

Technical data - electrical ratings

Consumption w/o load	≤200 mA
Sensing method	Optical

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Voltage supply	9...30 VDC
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Voltage supply	15...30 VDC
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Technical data - electrical ratings (encoder)

Pulses per revolution	512...2500
Phase shift	90° ±20°
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Output frequency	≤120 kHz
Output signals	K1, K2, K0 + inverted
Output stages	HTL TTL/RS422

Technical data - electrical ratings (speed switches)

Interface	RS485
Switching accuracy	±2 % (or Digit)
Switching delay time	≤40 ms

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Switching outputs	2 outputs, speed control 1 control output
Output switching capacity	5...230 VAC/VDC; 5...250 mA

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Switching outputs	3 outputs, speed control
Output switching capacity	12 VDC; ≤40 mA

Features

- Freely programmable on and off switching speed
- Programming via included software (RS485 interface)
- Logic level TTL or HTL
- 512...2500 pulses per revolution
- EURO-flange B10 / solid shaft ø11 mm
- DSL.R: 3 outputs speed controlled (independent transistor outputs)
- DSL.E: 2 outputs speed controlled and 1 control output

Optional

- Relay module DS 93 R (DSL.R version only)

Technical data - mechanical design

Size (flange)	ø115 mm
Shaft type	ø11 mm solid shaft
Admitted shaft load	≤300 N axial ≤450 N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 66
Speed (n)	≤6000 rpm
Range of switching speed (ns)	Pulses = 512: ±16...6000 rpm Pulses = 1024: ±8...6000 rpm Pulses = 2048: ±4...3500 rpm Pulses = 2500: ±3...2900 rpm
Operating torque	≤2 Ncm
Rotor moment of inertia	290 gcm ²
Materials	Housing: aluminium Shaft: stainless steel
Operating temperature	-30...+85 °C
Resistance	IEC 60068-2-6 Vibration 20 g, 10-2000 Hz IEC 60068-2-27 Shock 200 g, 6 ms
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIC T135°C Dc (dust)
Connection	Terminal box
Weight approx.	3.3 kg
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approval	CE

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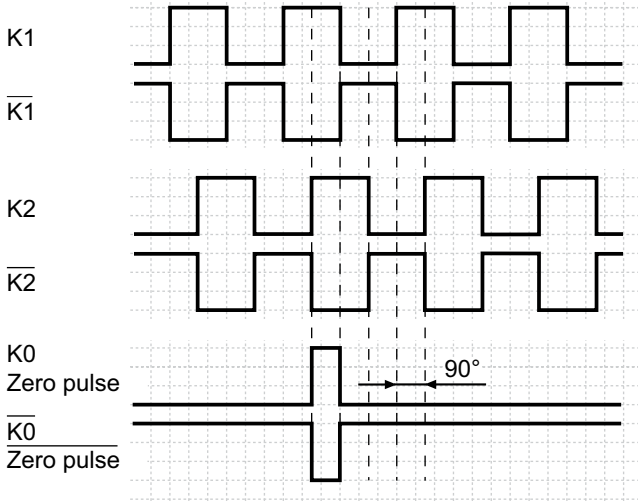
Solid shaft with EURO flange B10

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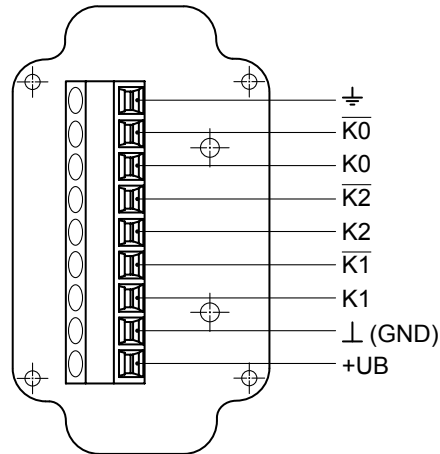
Output signals

At positive rotating direction



Terminal assignment

View A - Connecting terminal in terminal box



Terminal significance

Speed switch version DSL.R

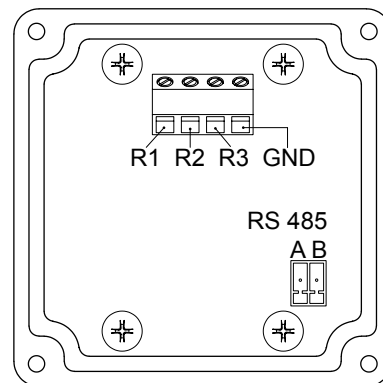
R1*	Transistor switching output 1, individually adjustable switching speed, High (12 V), Low (0 V), max. 20 mA
R2*	Transistor switching output 2, individually adjustable switching speed, High (12 V), Low (0 V), max. 20 mA
R3*	Transistor switching output 3, individually adjustable switching speed, High (12 V), Low (0 V), max. 20 mA
GND*	Ground connection
RS 485	Interface for PC or Laptop (adapter required). Programming of the DSL via the included software.

* Connection to relay module, for example DS 93 R (accessory)

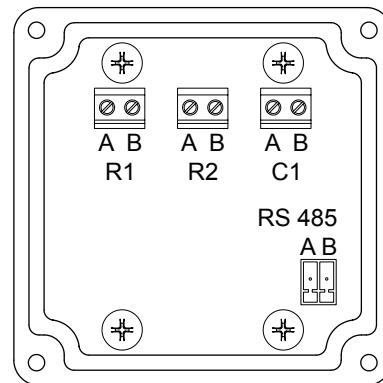
Speed switch version DSL.E

R1 (A+B)	Electronic relay output 1, individually adjustable switching speed, 5 ... 230 V AC/DC
R2 (A+B)	Electronic relay output 2, individually adjustable switching speed, 5 ... 230 V AC/DC
C1 (A+B)	Electronic relay output as a control output, 5 ... 250 mA
RS 485	Interface for PC or Laptop (adapter required). Programming of the DSL via the included software.

View B - Connecting terminal speed switch Version DSL.R



View B - Connecting terminal speed switch Version DSL.E



Combination

Encoder with integrated programmable, digital speed switch

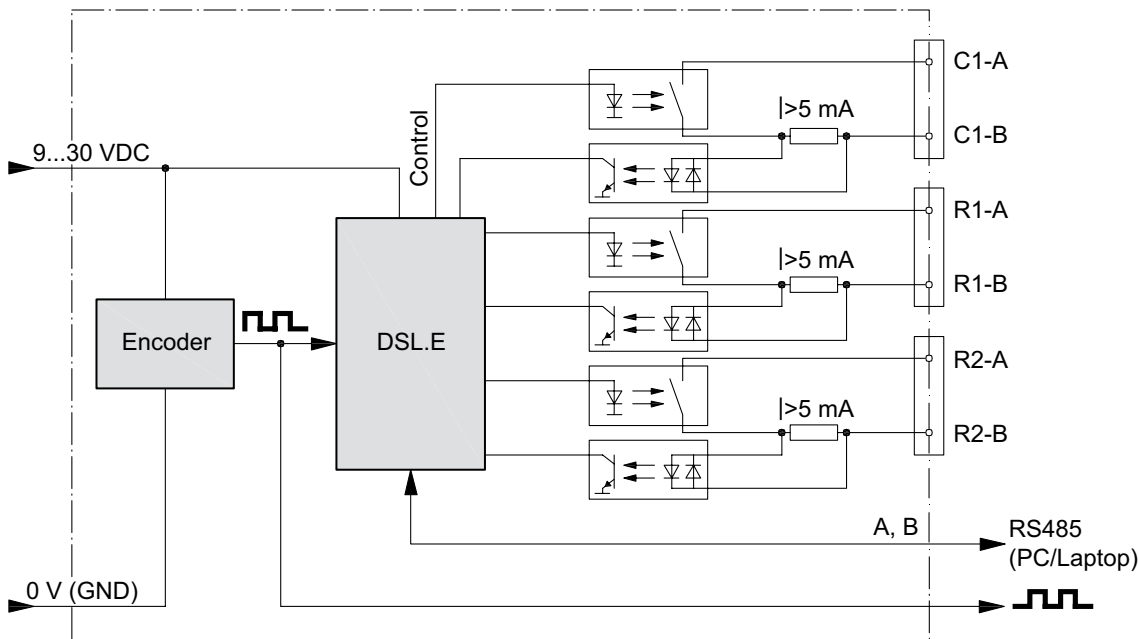
Solid shaft with EURO flange B10

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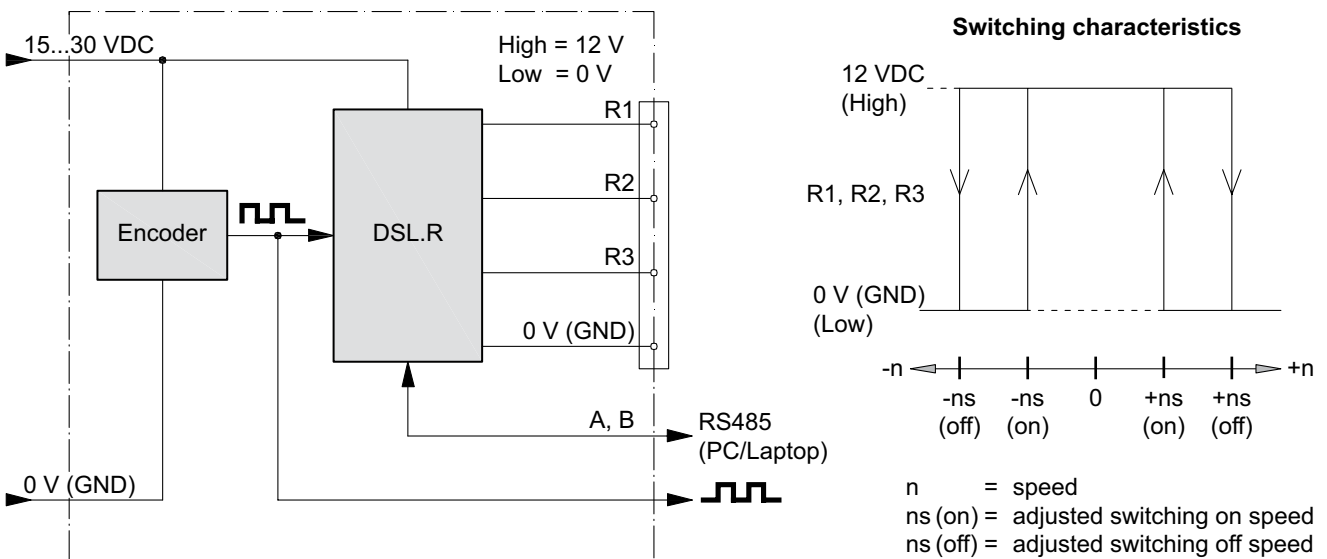
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Block circuit diagram

Version with DSL.E



Version with DSL.R



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Dimensions

