

- Suitable for optical incremental encoders with single ended TTL output A, B, Z (Index)
- Possible signal level conversion of the signals thanks to open collector outputs for signal cable lengths up to 150 m
- Incl. MOLEX 5-Pin plug and coupling, pitch 2.54 mm
- With signal cable total length incl. connectors 220 mm
- Supply voltage 9.5..32 V/DC
- PCK3 supplies connected rotary encoder with 5 V/DC

The application of the PCK3 is the conversion of output signals A, B, Z (index) from an optical incremental rotary encoder, from TTL level to open collector circuit outputs. The open collector circuit allows a level conversion and a maximum pull-up voltage up to 35 V. Thus, signal cable lengths between rotary encoder and evaluation unit until 150m can be realized. On demand external pull-up resistors can be connected between the signal outputs of the PCK3 and VSUP to adapt the PCK3 to the evaluation unit optimally. Thanks to the variable supply voltage range, the PCK3 can be used flexible and supplies the connected encoder with a stabilized supply voltage of 5 V/DC.

### Electrical Data

Input electronics	Suitable for asymmetrical signals (single ended), TTL
Output electronics	Open Collector
Electrical inputs	A, B, Z (Index), VSUP PCK3 9.5..32 V/DC, GND
Electrical outputs	A, B, Z (Index) from rotary encoder, VSUP 5 V/DC for rotary encoder, GND
Supply voltage for PCK3	9..32 V/DC
Supply voltage for rotary encoder	5 V/DC stabilized
Power consumption PCK3 (no load)	typ. 4 mA
Power consumption of rotary encoder	max. 75 mA
Output voltage (open collector, low)	max. 0.4V@100 mA
Output load (open collector)	max. 550 mA
Max. pull up voltage (open collector)	35 V

### Mechanical and Environmental Data, Miscellaneous

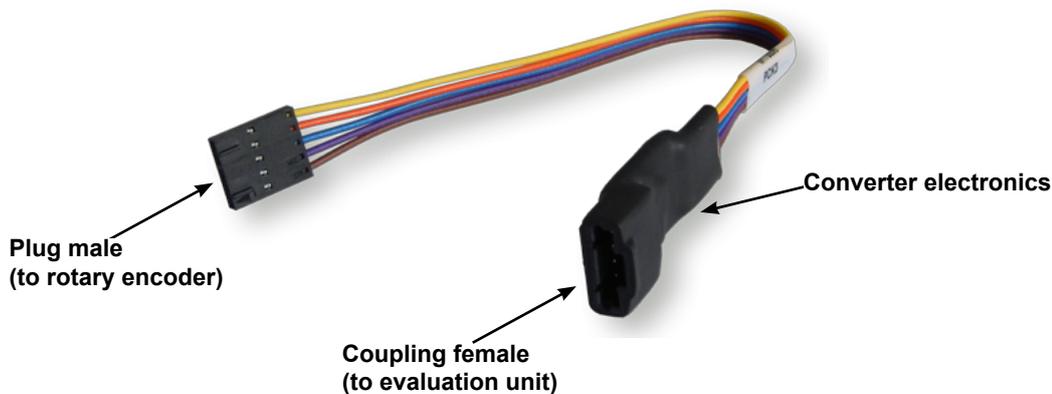
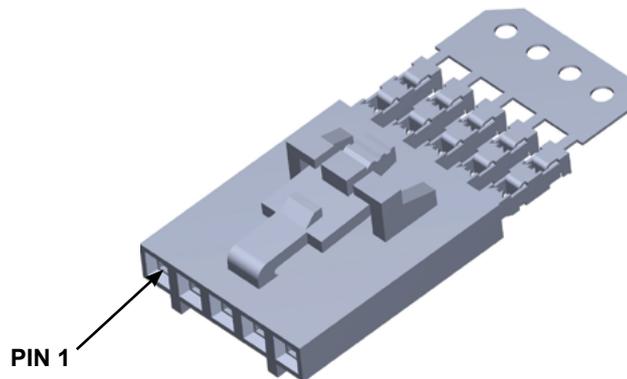
Operating temperature range	-40 °C up to +85 °C
Cable length incl. plug and coupling	220 mm (tolerance +25 -10mm)
Pitch	2.54 mm
Plug integrated (to rotary encoder)	5 pol. MOLEX, with latch, male
Coupling integrated (to evaluation unit and power supply)	5 pol. MOLEX, with latch, female

### Order Information

<b>MEGATRON order number:</b>	<b>Order description:</b>
125538	PCK3 (TTL to Open Collector converter)

**Recommendation for Plug from PCK3 to evaluation unit (gold plated contacts):**

- MOLEX 14-56-7052 (AWG22)
- MOLEX 14-60-0052 (AWG24)
- MOLEX 14-60-0054 (AWG26)
- MOLEX 14-60-0056 (AWG28)



### Cable and pin assignment

PIN:	Plug male (to rotary encoder)	Coupling female (to evaluation unit)
1	GND	GND
2	Z (Index)	Z (Index)
3	A Channel	A Channel
4	VSUP Sensor	VSUP PCK3
5	B Channel	B Channel