

ABSOLUTE ENCODER - CEV65M PB - SP2000300125

ABSOLUTE ENCODER

TYPE: CEV 65 M - PB PROFIBUS DP

ORDER No.: CEV65M-01460

MAKE: TR Electronics, GmbH

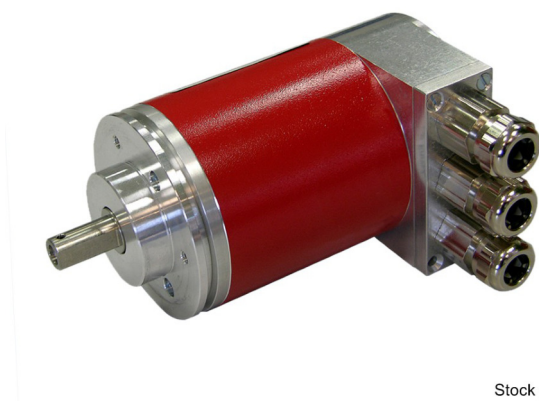
Note to Supplier:

- 1) These items are required as one to one spare for existing Absolute encoders in Seamless Steel Tube Plant process automation.
- 2) Existing Absolute encoders are of M/s TR Electronic make. No other equivalent model is accepted.

CEV65M*4096/4096 PB (ALT.:110-01460)

fieldbus hood

Order-#: CEV65M-01460
19.6.2017 / 010102006502020201



Stock photo



Advantages

- _ Customer-specific solutions
- _ Flexible programming
- _ Further interfaces available
- _ Modular mechanical design
- _ Modular product line

Technical data for CEV65M-01460

NO.OF STEPS/REV	4.096,000
NO. OF REVOLUTIONS	4.096,000
PROGRAMMABLE	PROG.
INTERFACE	PROFIBUS DP
CODE	PROGRAMMABLE
OUTPUT LEVEL	RS485
SUPPLY VOLTAGE	11-27V
CONNECTOR TYPE	3XPG9
CONNECTOR-POSITION	PG RADIAL
MATING PLUG	NO
FLANGE TYPE	ZB36
SHAFT TYPE	10FL/19,5
TEMPERATURE RANGE	-20+70°C
PROTECTION Class	IP65
OPTIONS ENC	12MBAUD
	PNO-PROFILE CLASS.2
PINOUT NO.	TR-ECE-TI-D-0017
DRAWING NO.	04-CEV65M-M0003
VERSIONNO	000
FIRMWARE NO	437826

Subject to change.

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General data for K-CEV65-PB-1

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	11/27 VDC
Nominal current, typically	
- Specific value	120 mA
- Condition	unloaded
Device design	
- Type	Single-/Multi-Turn
Total resolution	<= 31 Bit
Number of steps per revolution	<= 8192
Number of revolutions	<= 256000
Output capacity	<= 25 Bit
PROFIBUS - Interface	
- PROFIBUS-DP V0	IEC 61158, IEC 61784
- PNO Encoder-Profile	Class 1 and 2
SSI - Interface	
- Equipment	Optional interface
- SSI-Clock input	Optocoupler
- SSI-Data output	RS-422, 2-wire
- SSI-Clock frequency	80...1000 kHz
- SSI-Mono time, typically	18 µs
Incremental - Interface	
- Equipment	Optional interface
- Incremental signals, square	K1± K2±
- Impulses, square wave	1024 or 2048
- Output driver, TTL	RS-422, 5 VDC
Transmission rate	
- Specific value	9.6...12000 kbit/s
Cycle time	250 µs
Parameter/Function, changeable	Resolution
	Output code
	Limit switch
	External Preset inputs
	Adjustment - Parameter
	SSI-Parameter
	Counting direction
	Gear function
	Velocity parameter
Type of parametrization	programmable

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General data for K-CEV65-PB-1 continuation

Programming - Tool	Fieldbus-Device
External inputs	
- Preset	electronic adjustment
- Logic level	"0" < +2V, "1" = Supply
Maximum Speed, mechanically	<= 6000 1/min
Shaft load, axial/radial	<= 40 N, <= 60 N
Bearing life time	>= 3.9E+10 revolutions
Bearing life time - Parameter	
- Speed	3000 1/min
- Operating temperature	60 °C
- Shaft load, axial/radial	<= 20 N, <= 30 N
Point of origin, shaft load	at the shaft end
Shaft type	
- Shaft diameter [mm]	6
- Shaft diameter [mm]	8
- Shaft diameter [mm]	10
- Shaft diameter [mm]	12
- Shaft diameter [mm]	14
- Shaft diameter ["]	3/8
Angular acceleration	<= 10E+4 rad/s ²
Moment of inertia, typically	2.5E-6 kg m ²
Start-up torque, 20 °C	2 Ncm
Mass, typically	0.7 kg

Environmental data

Vibration	
- Specific value	<= 100 m/s ²
- Sine	50...2000 Hz
Shock	
- Specific value	<= 1000 m/s ²
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	0...+60 °C
- Optional	-20...+70 °C;
Storage temperature, dry	-30...+80 °C

Subject to change.

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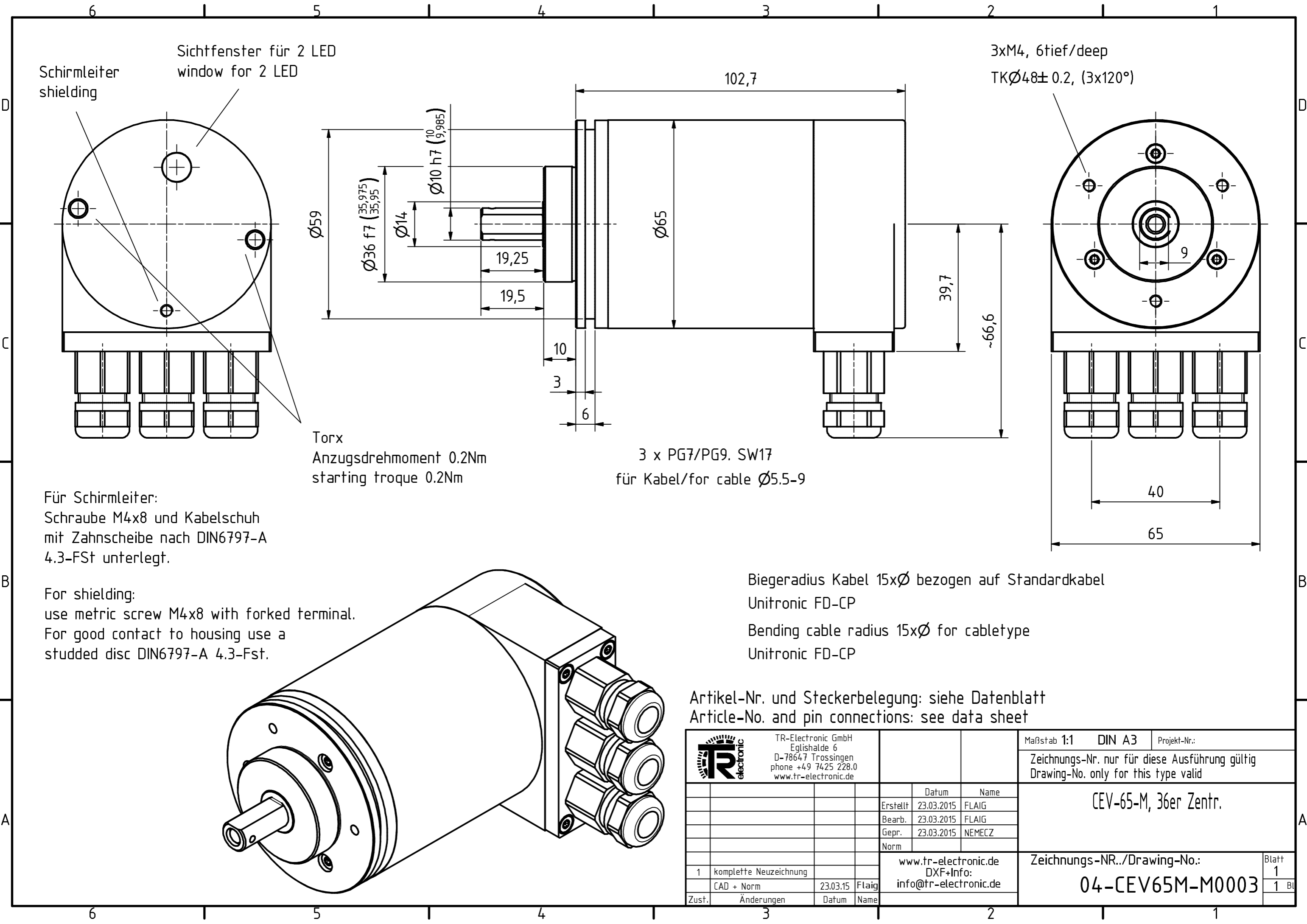
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Environmental data continuation

Relative humidity	98 %, non condensing
Protection class - Standard	IP65

Subject to change.



Für Schirmleiter:
Schraube M4x8 und Kabelschuh
mit Zahnscheibe nach DIN6797-A
4.3-FSt unterlegt.


For shielding:
use metric screw M4x8 with forked terminal.
For good contact to housing use a
studded disc DIN6797-A 4.3-Fst.

Torx
Anzugsdrehmoment 0.2Nm
starting troque 0.2Nm

3 x PG7/PG9. SW17
für Kabel/for cable Ø5.5-9

Biegeradius Kabel 15xØ bezogen auf Standardkabel
Unitronic FD-CP
Bending cable radius 15xØ for cabletype
Unitronic FD-CP

Artikel-Nr. und Steckerbelegung: siehe Datenblatt
Article-No. and pin connections: see data sheet

 TR-electronic GmbH Eglshalde 6 D-78647 Trossingen phone +49 7425 228.0 www.tr-electronic.de	Maßstab 1:1 DIN A3		Projekt-Nr.:
	Zeichnungs-Nr. nur für diese Ausführung gültig Drawing-No. only for this type valid		
	Datum	Name	
	Erstellt	23.03.2015	FLAIG
	Bearb.	23.03.2015	FLAIG
	Gepr.	23.03.2015	NEMECZ
	Norm		
www.tr-electronic.de DXF+Info: info@tr-electronic.de		Zeichnungs-NR./Drawing-No.:	
1 komplette Neuzeichnung		04-CEV65M-M0003	
CAD + Norm	23.03.15	Flaig	Blatt 1
Zust.	Änderungen	Datum	Name

**Connector pin assignment for Profibus-DP Encoder with PNO-Profile Class 2
Design with two-pole screw terminals and Preset**

General note:

If the encoder is the last station in the profibus line, the DIP switches *S3* and *S4* for the profibus terminator (switching-on of the terminal resistance) must be switched on. Otherwise they must be switched off.

The profibus also works when the encoder is removed. Is the encoder the last station in the profibus line, the reference potential of the terminator resistances is missing!

In order to enable a separate wiring of incoming and outgoing signals the profibus terminals and the terminals for the supply voltage have two connection possibilities.

TR-Electronic recommends for the operation to use only bus cables certified by the Profibus User Organization (PNO).

With the BCD address switches *S1* (10^1) and *S2* (10^0) the station address for the profibus is set from 3 to 99.

Explanation of terms:

US: Supply voltage, 11-27 V DC
 US-input: 1-level > +8V, 0-level < +2V, up to ±35V, 5 kOhm

X1 - screw clamp 2-pin

Pin 1 Profibus DataA
 Pin 2 Profibus DataB

X2 - screw clamp 2-pin

Pin 1 Profibus DataB
 Pin 2 Profibus DataA

X3 - screw clamp 2-pin

Pin 1 US-input for Preset 1
 Pin 2 US-input for Preset 2

X4 - screw clamp 2-pin

Pin 1 US, supply voltage
 Pin 2 GND, supply voltage 0 V

X5 - screw clamp 2-pin

Pin 1 GND, supply voltage 0 V
 Pin 2 US, supply voltage

