

CEV58M*8192/4096 PB 36ZB10FL

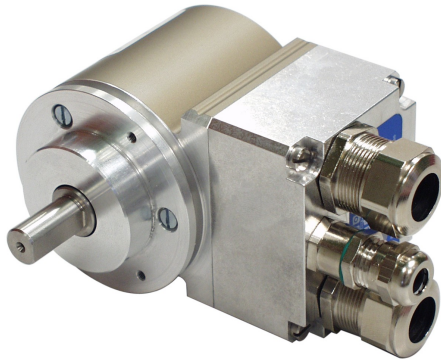
fieldbus hood

Order-#: CEV58M-00167

2.6.2020 / 010102005802020201

Advantages

— New series available



Stock photo



Technical data for CEV58M-00167

NO.OF STEPS/REV	8.192,000
NO. OF REVOLUTIONS	4.096,000
INTERFACE	PROFIBUS DP
CODE	PROGRAMABLE
OUTPUT LEVEL	RS485
SUPPLY VOLTAGE	11-27V
CONNECTOR TYPE	2XM16X1,5/1XM12X1,5
CONNECTOR-POSITION	RADIAL
MATING PLUG	NO
FLANGE TYPE	ZB36
SHAFT TYPE	10FL/19,5
TEMPERATURE RANGE	-20+80°C
PROTECTION Class	IP65
OPTIONS ENC	12MBAUD
	PNO-PROFILE CLASS.2
PINOUT NO.	TR-ECE-TI-D-0065
DRAWING NO.	04-CEV58M-M0014
VERSIONNO	000
FIRMWARE NO	437A73
DOCUMENTATION NO	DOKUMENTE

Subject to change.

TR-Electronic GmbH
 Eglisshalde 6
 78647 Trossingen
 Tel. +49 (0) 7425 228-0
 info@tr-electronic.de
www.tr-electronic.de

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General data for K-CEV58-PB-2

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	11/27 VDC
Nominal current, typically	
- Specific value	120 mA
- Condition	unloaded
Supply	
- In case of UL / CSA approval	according to NEC Class 2
Device design	
- Type	Single-/Multi-Turn
Total resolution	<= 33 Bit
Number of steps per revolution	<= 32768
Number of revolutions	<= 256000
Output capacity	<= 25 Bit
PROFIBUS - Interface	
- PROFIBUS-DP V0	IEC 61158, IEC 61784
- PNO Encoder-Profile	Class 1 and 2
Transmission rate	
- Specific value	9.6...12000 kbit/s
Cycle time	250 µs
Parameter/Function, changeable	Resolution
	Output code
	Adjustment - Parameter
	Counting direction
	Gear function
	Velocity parameter
Type of parametrization	programmable
Programming - Tool	Fieldbus-Device
Maximum Speed, mechanically	<= 12000 1/min
Shaft load, axial/radial	<= 50 N, <= 100 N
Bearing life time	>= 3.9E+10 revolutions
Bearing life time - Parameter	
- Speed	6000 1/min
- Operating temperature	60 °C
- Shaft load, axial/radial	= 60 %
Point of origin, shaft load	Mounting flange + 10 mm
Shaft type	
- Shaft diameter [mm]	6
- Shaft diameter [mm]	8
- Shaft diameter [mm]	10

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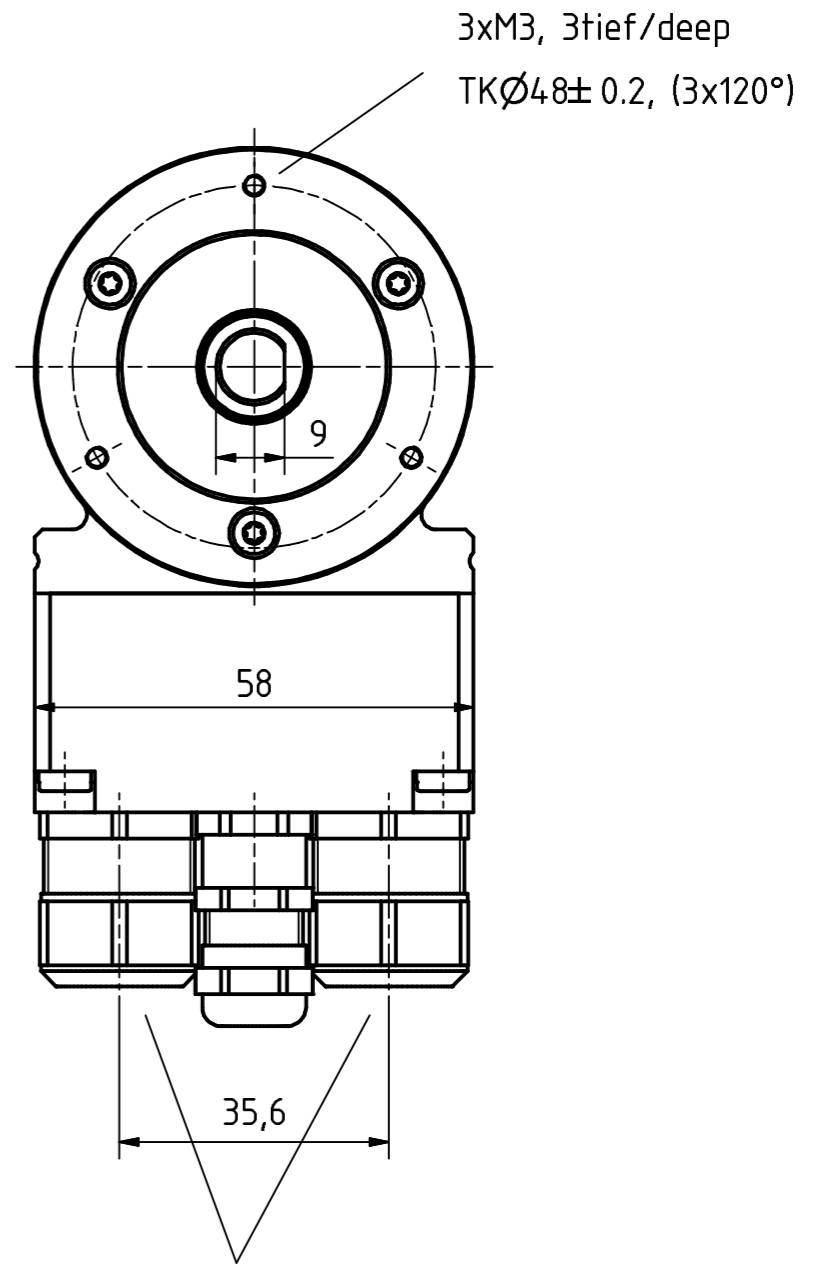
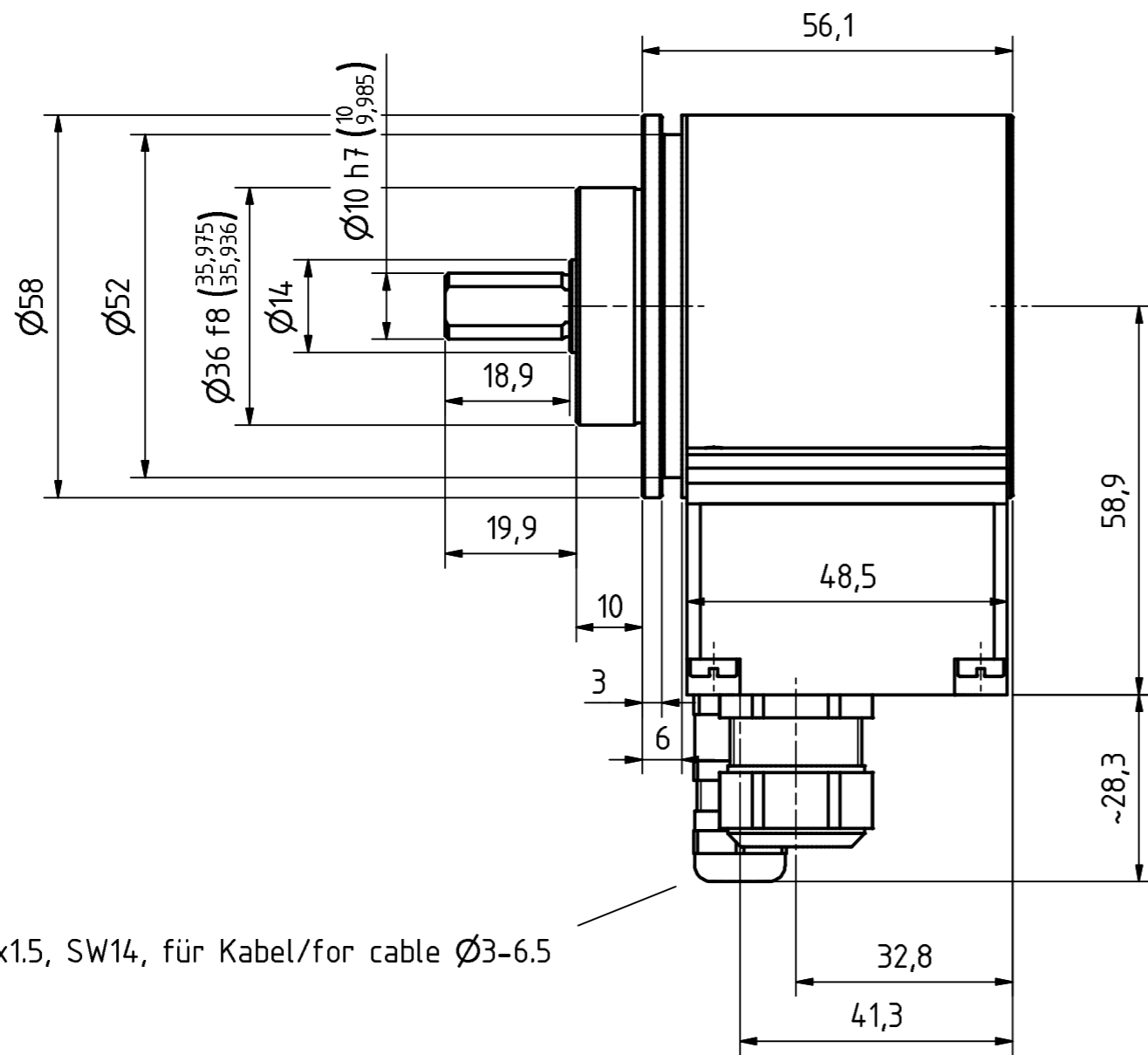
General data for K-CEV58-PB-2 continuation

- Shaft diameter [mm]	12
- Shaft diameter ["]	3/8
Angular acceleration	$\leq 10E+4 \text{ rad/s}^2$
Moment of inertia, typically	$2.5E-6 \text{ kg m}^2$
Start-up torque, 20 °C	2 Ncm
Mass, typically	0.3...0.5 kg

Environmental data

Vibration	
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	
- Specific value	$\leq 1000 \text{ m/s}^2$
- 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
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65

Subject to change.

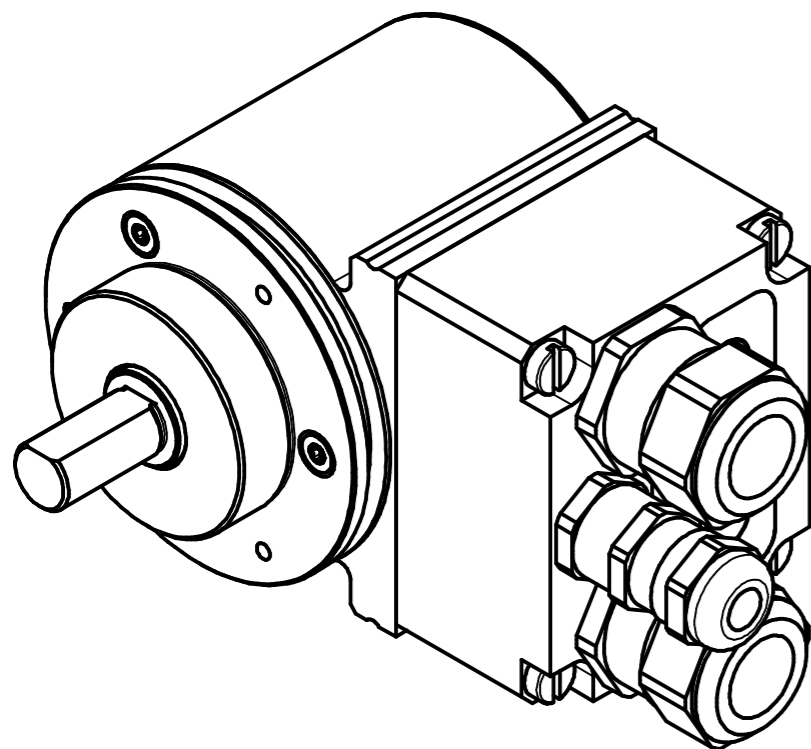



M12x1.5, SW14, für Kabel/for cable Ø3-6.5

2xM16x1.5, SW21, für Kabel/for cable Ø8.5-12

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

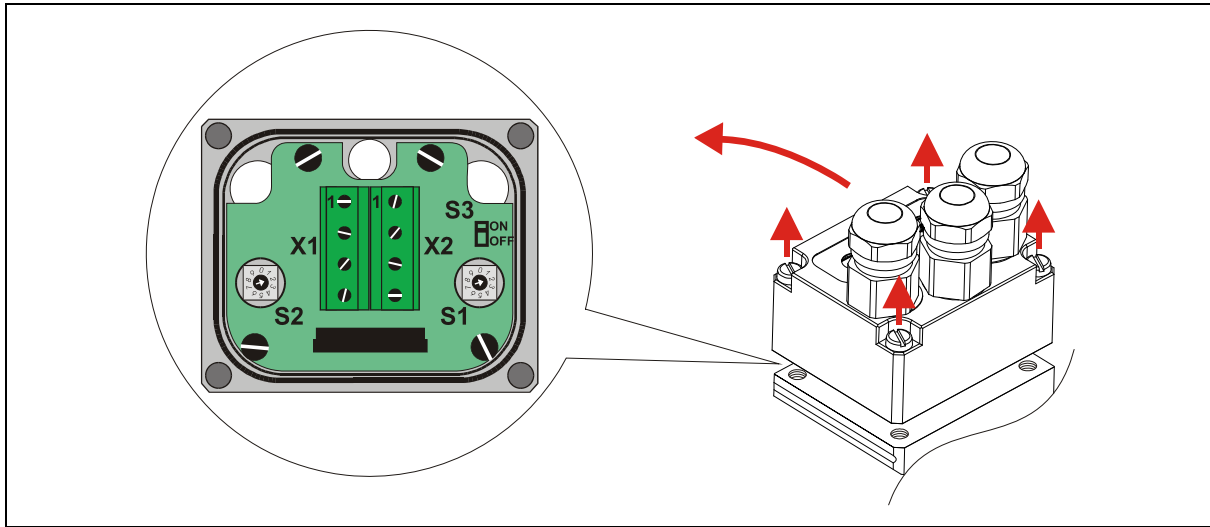
Artikel-Nr. und Steckerbelegung: siehe Datenblatt
 Article-No. and pin connections: see data sheet



 TR-Electronic GmbH Eglisshalde 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	23.07.2015	FLAIG	
Bearb.	23.07.2015	FLAIG	
Gepr.	27.07.2015	NEMECZ	
	Norm		
1	komplette Neuzeichnung		
	CAD + Norm	23.07.15	Flaig
Zust.	Änderungen	Datum	Name
		www.tr-electronic.de DXF+Info: info@tr-electronic.de	
Zeichnungs-NR./Drawing-No.:			Blatt
04-CEV58M-M0014			1
			1 Bl.

Pin assignment

58 / 80 Profibus-DP PNO Class 2



X1	Screw clamp 4 pin	
Pin 1	Profibus, Data A	Profibus_IN
Pin 2	Profibus, Data B	
Pin 3	US, 11-27 V DC	
Pin 4	GND, 0V	

X2	Screw clamp 4 pin	
Pin 1	Profibus, Data A	Profibus_OUT
Pin 2	Profibus, Data B	
Pin 3	US, 11-27 V DC	
Pin 4	GND, 0V	

Print clamp, MKDSN 1,5/ 4-5,08: (not connected clamps must be tightened securely!)

- Nominal current: 13.5 A
- nominal voltage: 250 V
- grid spacing: 5.08 mm
- number of poles: 4
- connection angle: 0°
- nominal cross-section (flexible) max. 1.5 mm²
- nominal cross-section AWG/kcmil max. 16



Betriebsanleitung beachten! - Observe User Manual!



Pin assignment

● = ON ○ = OFF ⊙ = 1 Hz ⊚ = 10 Hz

BUS FAIL (red)	BUS RUN (green)	Cause
○	○	No supply voltage, hardware error
●	⊙	Parameter- or configuration error (Preset value 1/2 or limit switch out of range, wrong GSD file) Memory error, position error
○	⊙	Blink mode is supported only in case of older measuring system generations. Unrecoverable measuring system defect (memory error, position error)
⊙	●	No allocation to a master, no data exchange
○	⊙	Parameter- or configuration error in PNO compatible target configuration (number of revolutions is not a power of two)
○	●	operational, no error, bus in cycle

General note:

If the measuring system is the last station in the Profibus segment, the DIP switch S_3 for the Profibus terminator (switching-on of the terminal resistance) must be switched on. Otherwise the terminator must be switched off. With the add-on connection of the terminal resistance the Profibus signals DataA_OUT and DataB_OUT will be switched off and following slaves are separated from the bus.

The Profibus also operates, if the device is separated from the connection cap, however with one exception: **If the measuring system is the last station in the Profibus segment, the termination isn't fully active because the reference potential of the terminator resistance 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 S_1 (10^0) and S_2 (10^1) the station address for the Profibus is set from 3 to 99.



Betriebsanleitung beachten! - Observe User Manual!

