

Absolute-Encoder CEV582 - SSI

[Click Here](#) for Quick Delivery Stock Options



Ref.: K-CEV58_2-SSI-1

28.04.2020

010102058202010201

Advantages

- _ Customer-specific solutions
- _ Flexible programming
- _ Further interfaces available
- _ Modular mechanical design
- _ Modular product line
- _ Salt-resistant
- _ Short lead times

General Data

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	10/30 VDC
Nominal current, typically	
- Specific value	45 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	<= 30 Bit
SSI - Interface	
- SSI-Clock input	Optocoupler
- SSI-Data output	RS-422, 2-wire
- SSI-Clock frequency	80...1000 kHz
- SSI-Mono time, typically	9...41 µs
- SSI-Mono time, typically	20 µs
Incremental - Interface	
- Equipment	Optional interface

Subject to change.

TR-Electronic GmbH
 Eglisshalde 6
 78647 Trossingen
 Tel. +49 (0) 7425 228-0
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Absolute-Encoder CEV582 - SSI

Ref.: K-CEV58_2-SSI-1

28.04.2020

010102058202010201

General Data continuation

- Incremental signals, square	K1± K2± K0±
- Impulses, square wave	2...65536
- Output driver, TTL	RS-422, 5 VDC
- Output driver, HTL	Push-Pull, Supply Voltage
- Type of parametrization	programmable
- Output frequency	<= 150 KHz, HTL
- Output frequency	<= 300 KHz, TTL
Cycle time	125 µs
Parameter/Function, changeable	Resolution
	Output code
	Output format
	Number of data bits
	Movement status signal
	Limit switch
	Error signal
	Mono time
	Offset
	Preset parameter
	Parity
	Direction signal
	Special bits
	Overspeed
	Sign
	Counting direction
	Gear function
Type of parametrization	programmable
Programming - Tool	TR-Soft: TRWinProg
External inputs	
- F/R	Count direction
- Preset	electronic adjustment
- Logic level	"0" < +2V, "1" = Supply
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 %

Subject to change.

Absolute-Encoder CEV582 - SSI

Ref.: K-CEV58_2-SSI-1

28.04.2020

010102058202010201

General Data continuation

Point of origin, shaft load	Mounting flange + 10 mm
Shaft type	
- Shaft diameter [mm]	6
- Shaft diameter [mm]	8
- Shaft diameter [mm]	10
- Shaft diameter [mm]	12
- Shaft diameter ["]	1/4
- Shaft diameter ["]	3/8
- Shaft diameter ["]	1/2
Angular acceleration	$\leq 10E+4 \text{ rad/s}^2$
Moment of inertia, typically	$1.3E-6 \text{ kg m}^2$
Start-up torque, 20 °C	2 Ncm
Mass, typically	0.3...0.5 kg

Environmental conditions

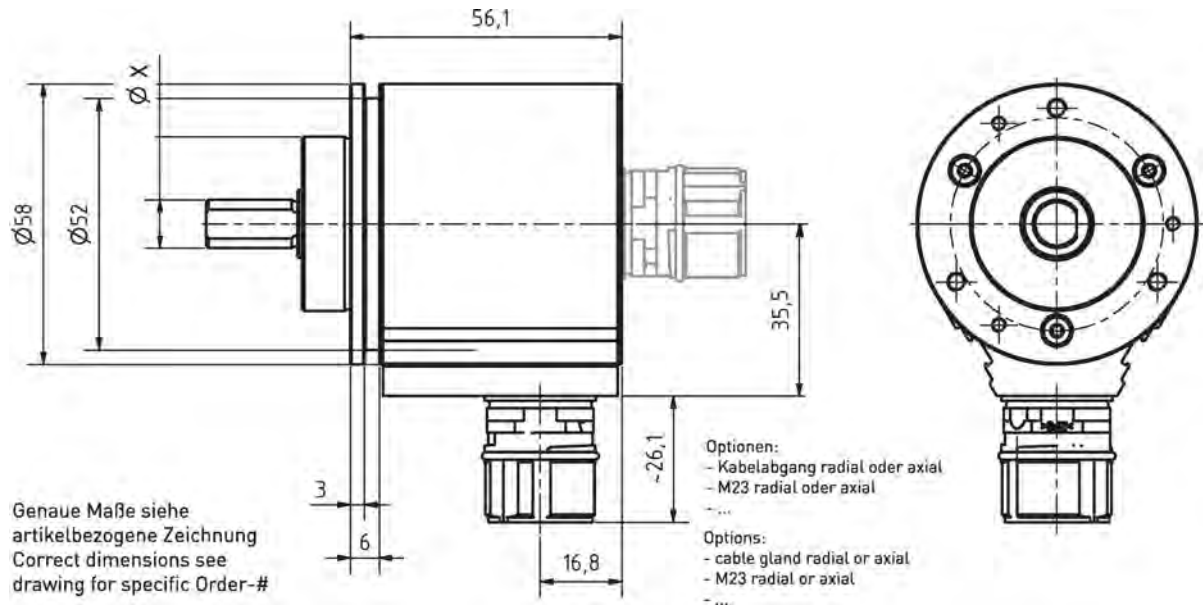
Vibration	DIN EN 60068-2-6
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	DIN EN 60068-2-27
- Specific value	$\leq 1000 \text{ m/s}^2$
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+75 °C
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Resistance	
- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
- excluded are	Attachment parts

Subject to change.

Absolute-Encoder CEV582 - SSI

Ref.: K-CEV58_2-SSI-1
 28.04.2020
 010102058202010201

Dimensional drawing



Subject to change.

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Absolute-Encoder CEV582 - SSI

Ref.: K-CEV58_2-SSI-1
28.04.2020
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Quick Delivery Stock Options (Click Article Number for Data Sheet)

Article Number	Mounting Flange	Shaft	Connector Orientation
<u>CEV582M-10051</u>	36mm Pilot	10x19.5mmw/Flat	Radial
<u>CEV582M-10069</u>	50mm Pilot	6x10mm Round	Radial

Subject to change.

CEV582M*8192/4096
SSI(ALT:CEV58M-00051)
[Click Here](#) to go back to Stock Options

Order No.:CEV582M-10051

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Stock photo



Advantages

- Customer-specific solutions
- Flexible programming
- Further interfaces available
- Modular mechanical design
- Modular product line
- Salt-resistant
- Short lead times

Technical data for CEV582M-10051

NO.OF STEPS/REV	8.192,000
NO. OF REVOLUTIONS	4.096,000
PROGRAMMABLE	PROG.
INTERFACE	SSI
CODE	GRAY
OUTPUT LEVEL	RS422
SUPPLY VOLTAGE	10-30V
CONNECTOR TYPE	CONTACT 12P
CONNECTOR-POSITION	CONNECTOR RADIAL ON HOUSING
MATING PLUG	YES
FLANGE TYPE	ZB 36, 15 THICK
SHAFT TYPE	10FL/19,5
TEMPERATURE RANGE	-20+75°C
PROTECTION Class	IP65
OPTIONS ENC	F/R
	PRESET 1+2
	PROGRAMMABLE
PINOUT NO.	185E
DRAWING NO.	04-CEV582M-M0110
FIRMWARE NO	437582

Subject to change.

CEV582M*8192/4096
SSI(ALT:CEV58M-00051)

Order-#: CEV582M-10051
28.4.2020 / 010102058202010201

Technical data for CEV582M-10051 continuation

DOCUMENTATION NO	DOKUMENTE
EL:	AL:N
ECCN:	ECCN:N
MTTFd [y] (T=45°C, DC=0) >=	200
UL-APPROVALS	USA+CANADA

General data for K-CEV58_2-SSI-1

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	10/30 VDC
Nominal current, typically	
- Specific value	45 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	<= 30 Bit
SSI - Interface	
- SSI-Clock input	Optocoupler
- SSI-Data output	RS-422, 2-wire
- SSI-Clock frequency	80...1000 kHz
- SSI-Mono time, typically	9...41 µs
- SSI-Mono time, typically	20 µs
Incremental - Interface	
- Equipment	Optional interface
- Incremental signals, square	K1± K2± K0±
- Impulses, square wave	2...65536
- Output driver, TTL	RS-422, 5 VDC
- Output driver, HTL	Push-Pull, Supply Voltage
- Type of parametrization	programmable
- Output frequency	<= 150 KHz, HTL
- Output frequency	<= 300 KHz, TTL
Cycle time	125 µs

Subject to change.

CEV582M*8192/4096
SSI(ALT:CEV58M-00051)

Order-#: CEV582M-10051
28.4.2020 / 010102058202010201

General data for K-CEV58_2-SSI-1 continuation

Parameter/Function, changeable	Resolution
	Output code
	Output format
	Number of data bits
	Movement status signal
	Limit switch
	Error signal
	Mono time
	Offset
	Preset parameter
	Parity
	Direction signal
	Special bits
	Overspeed
	Sign
	Counting direction
	Gear function
Type of parametrization	programmable
Programming - Tool	TR-Soft: TRWinProg
External inputs	
- F/R	Count direction
- Preset	electronic adjustment
- Logic level	"0" < +2V, "1" = Supply
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
- Shaft diameter [mm]	12
- Shaft diameter ["]	1/4
- Shaft diameter ["]	3/8

Subject to change.

CEV582M*8192/4096
SSI(ALT:CEV58M-00051)

Order-#: CEV582M-10051
28.4.2020 / 010102058202010201

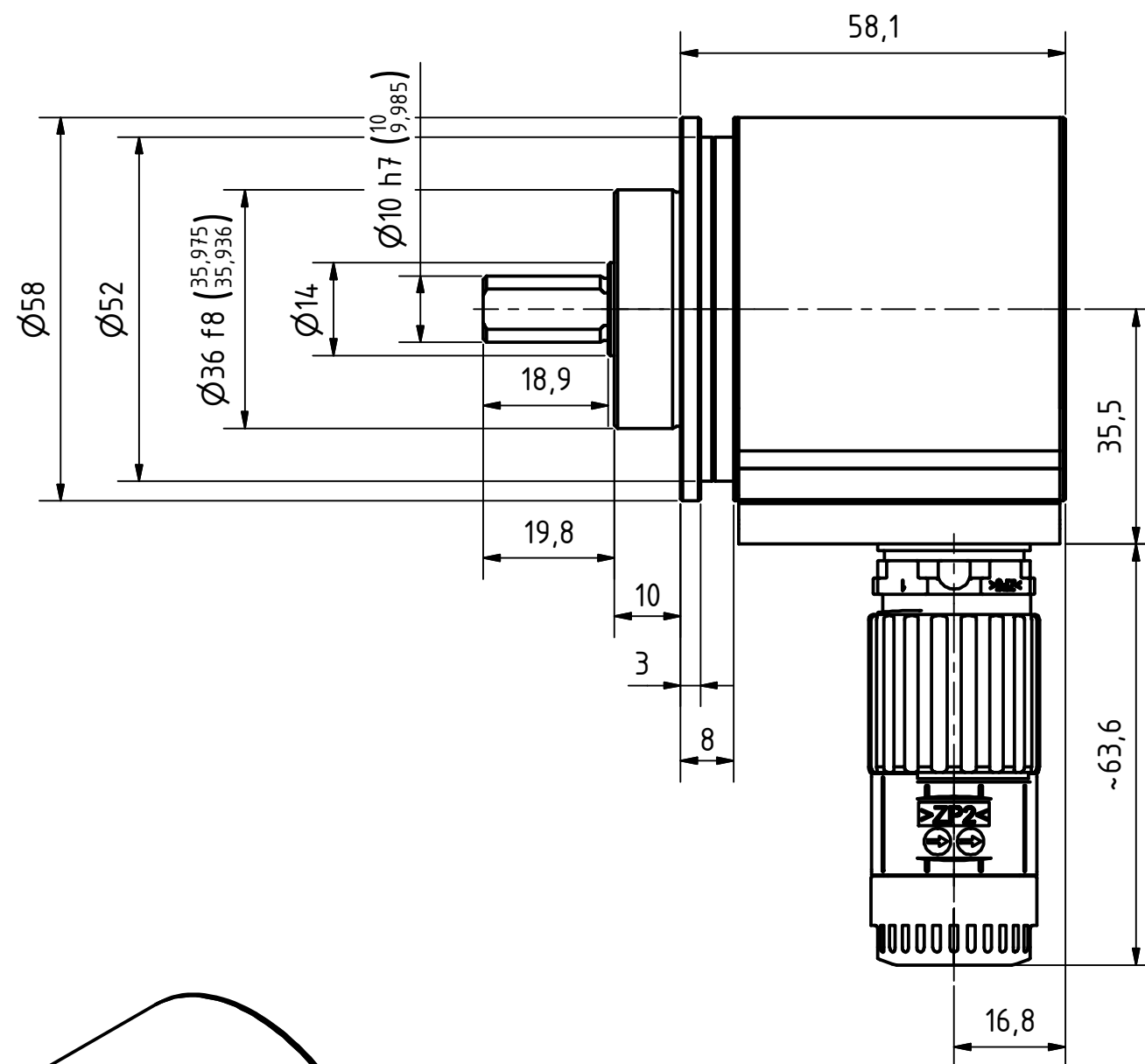
General data for K-CEV58_2-SSI-1 continuation

- Shaft diameter ["]	1/2
Angular acceleration	$\leq 10E+4 \text{ rad/s}^2$
Moment of inertia, typically	1.3E-6 kg m ²
Start-up torque, 20 °C	2 Ncm
Mass, typically	0.3...0.5 kg

Environmental data

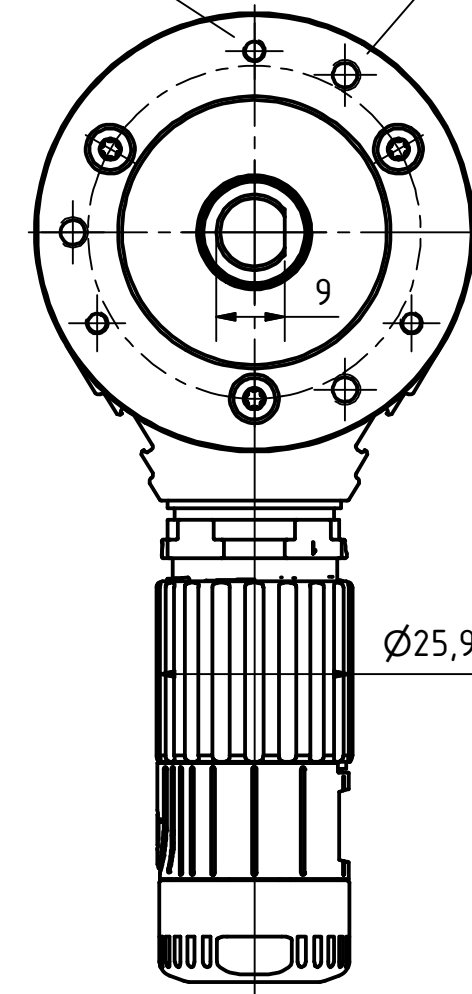
Vibration	DIN EN 60068-2-6
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	DIN EN 60068-2-27
- Specific value	$\leq 1000 \text{ m/s}^2$
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+75 °C
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Resistance	
- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
- excluded are	Attachment parts

Subject to change.

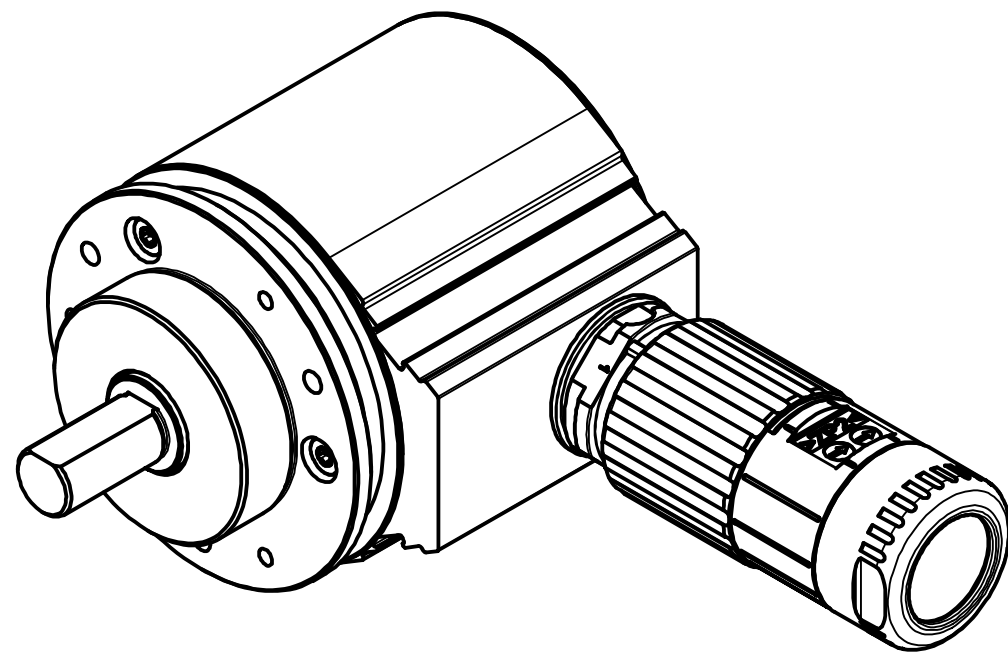


3xM3, 5tief/deep
TK \varnothing 48 \pm 0.2, (3x120°)


3xM4, 5tief/deep
TK \varnothing 48 \pm 0.2, (3x120°)



12pol. Stecker
12pin. connector



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

 TR-electronic Eglshalde 6 D-78647 Trossingen phone +49 7425 228.0 www.tr-electronic.de	Maßstab DIN A3		Projekt-Nr.:	
	Zeichnungs-Nr. nur für diese Ausführung gültig Drawing-No. only for this type valid			
	Datum	Name		
	Erstellt 10.12.2018	FLAIG		
	Bearb. 10.12.2018	FLAIG		
	Gepr. 11.12.2018	NEMECZ		
	Norm			
www.tr-electronic.de DXF+Info: info@tr-electronic.de		Zeichnungs-NR./Drawing-No.:		Blatt
		04-CEV582M-M0110		1
Zustf.	Änderungen	Datum	Name	1 Bl.

Pin assignment

Pin assignment number: 185

Index: E

27.01.2014

Connector name: 12-pol CONTACT

Pin-count: 12

Page: 1/1

Pin	Designation	Description	Level	Driver NC	Colour
1	SSI_Clock-_IN	Clock input -	RS 422	RS 422	white
2	SSI_Clock+_IN	Clock input +	RS 422	RS 422	brown
3	SSI_DATA+_OUT	Data output +	RS 422	RS 422	green
4	SSI_DATA-_OUT	Data output -	RS 422	RS 422	yellow
5	Ser.Program+_IN/OUT	Ser. programming interface RS485	RS 485	RS 485	gray
6	Ser.Program-_IN/OUT	Ser. programming interface RS485	RS 485	RS 485	pink
7	not connected				
8	Direction IN	Change of counting direction	Supply Voltage		0 red
9	Preset1_IN	Preset value 1	Supply Voltage		0 black
10	Preset2_IN	Preset value 2	Supply Voltage		0 violet
11	Supply Voltage IN	Supply voltage	11-27V		gray/pink
12	Ground IN	Ground	0V		red/blue

WARNING

'De-energize the system before carrying out wiring work or opening and closing electrical connections !

Short-circuits, voltage peaks, etc. can cause operating failures and uncontrolled operating states, as well as serious personal injuries and damage to property.

Verdrahtungsarbeiten, Öffnen und Schließen von elektrischen Verbindungen nur im spannungslosen Zustand durchführen ! Kurzschlüsse, Spannungsspitzen etc. können zur Fehlfunktion und unkontrollierten Zuständen der Anlage bzw. zu erheblichen Personen- und Sachschäden führen.

CEV582M*4096/4096 SSI (ALT:CEV58M-00069)

[Click Here](#) to go back to Stock Options

Order No.:CEV582M-10069

[Click Here](#) for a Quote - customer@tr-electronic.com



Stock photo



Advantages

- _ Customer-specific solutions
- _ Flexible programming
- _ Further interfaces available
- _ Modular mechanical design
- _ Modular product line
- _ Salt-resistant
- _ Short lead times

Technical data for CEV582M-10069

NO.OF STEPS/REV	4.096,000
NO. OF REVOLUTIONS	4.096,000
PROGRAMMABLE	PROG.
INTERFACE	SSI
CODE	PROGRAMMABLE
OUTPUT LEVEL	RS422
SUPPLY VOLTAGE	10-30V
CONNECTOR TYPE	CONTACT 12P
CONNECTOR-POSITION	CONNECTOR RADIAL ON HOUSING
MATING PLUG	YES
FLANGE TYPE	ZB50
SHAFT TYPE	6RD/10
TEMPERATURE RANGE	-20+75°C
PROTECTION Class	IP65
OPTIONS ENC	F/R
	PRESET 1+2
	PROGRAMMABLE
PINOUT NO.	185E
DRAWING NO.	04-CEV582M-M0037
FIRMWARE NO	437582

Subject to change.

CEV582M*4096/4096 SSI (ALT:CEV58M-00069)

Order-#: CEV582M-10069
28.4.2020 / 010102058202010201

Technical data for CEV582M-10069 continuation

DOCUMENTATION NO	DOKUMENTE
EL:	AL:N
ECCN:	ECCN:N
MTTFd [y] (T=45°C, DC=0) >=	200
UL-APPROVALS	USA+CANADA

General data for K-CEV58_2-SSI-1

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	10/30 VDC
Nominal current, typically	
- Specific value	45 mA
- Condition	unloaded
Supply	
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Device design	
- Type	Single-/Multi-Turn
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- SSI-Clock frequency	80...1000 kHz
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- Equipment	Optional interface
- Incremental signals, square	K1± K2± K0±
- Impulses, square wave	2...65536
- Output driver, TTL	RS-422, 5 VDC
- Output driver, HTL	Push-Pull, Supply Voltage
- Type of parametrization	programmable
- Output frequency	<= 150 KHz, HTL
- Output frequency	<= 300 KHz, TTL
Cycle time	125 µs

Subject to change.

CEV582M*4096/4096 SSI (ALT:CEV58M-00069)

Order-#: CEV582M-10069
28.4.2020 / 010102058202010201

General data for K-CEV58_2-SSI-1 continuation

Parameter/Function, changeable	Resolution
	Output code
	Output format
	Number of data bits
	Movement status signal
	Limit switch
	Error signal
	Mono time
	Offset
	Preset parameter
	Parity
	Direction signal
	Special bits
	Overspeed
	Sign
	Counting direction
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Type of parametrization	programmable
Programming - Tool	TR-Soft: TRWinProg
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Maximum Speed, mechanically	<= 12000 1/min
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Bearing life time - Parameter	
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Shaft type	
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Subject to change.

CEV582M*4096/4096 SSI (ALT:CEV58M-00069)

Order-#: CEV582M-10069
28.4.2020 / 010102058202010201

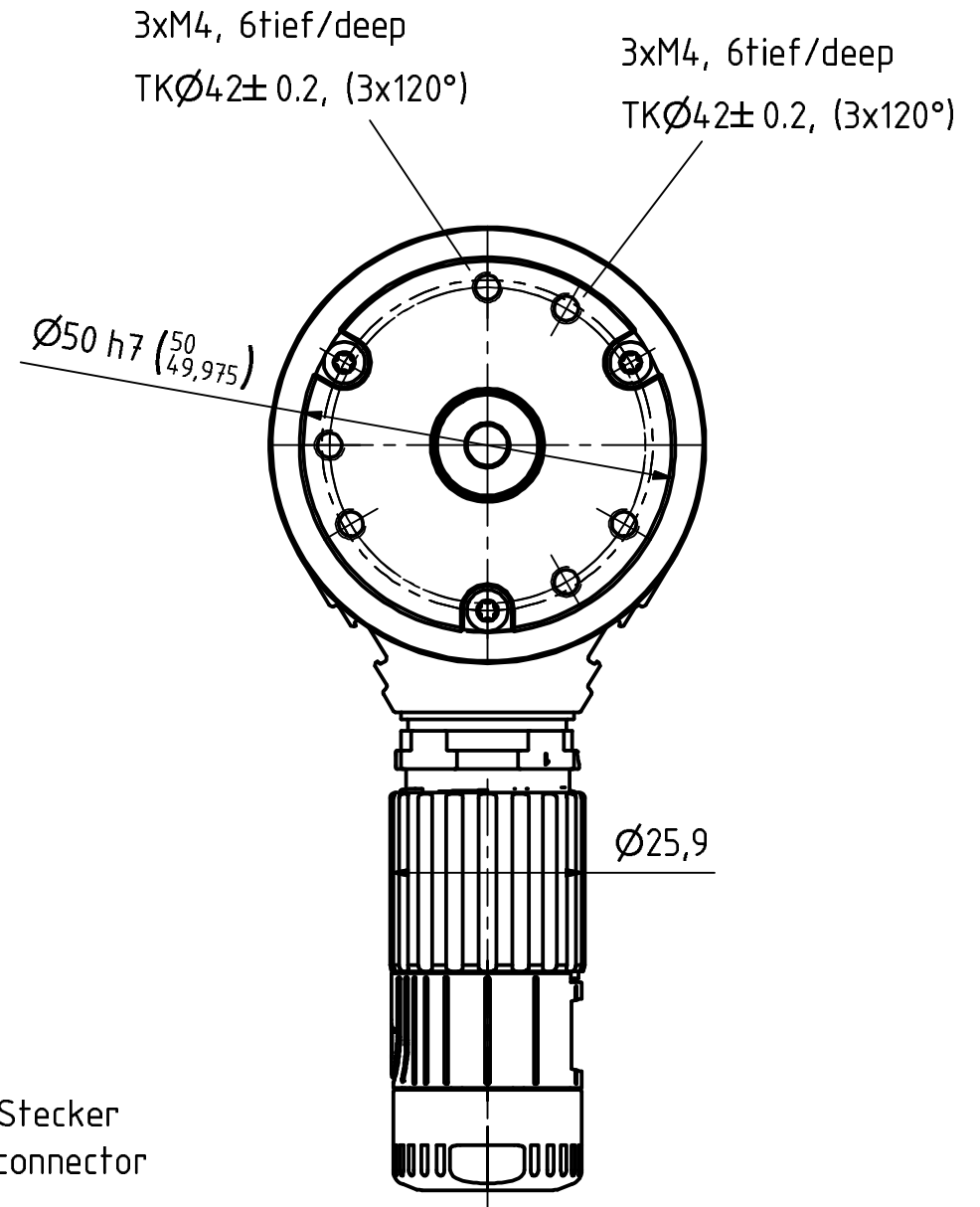
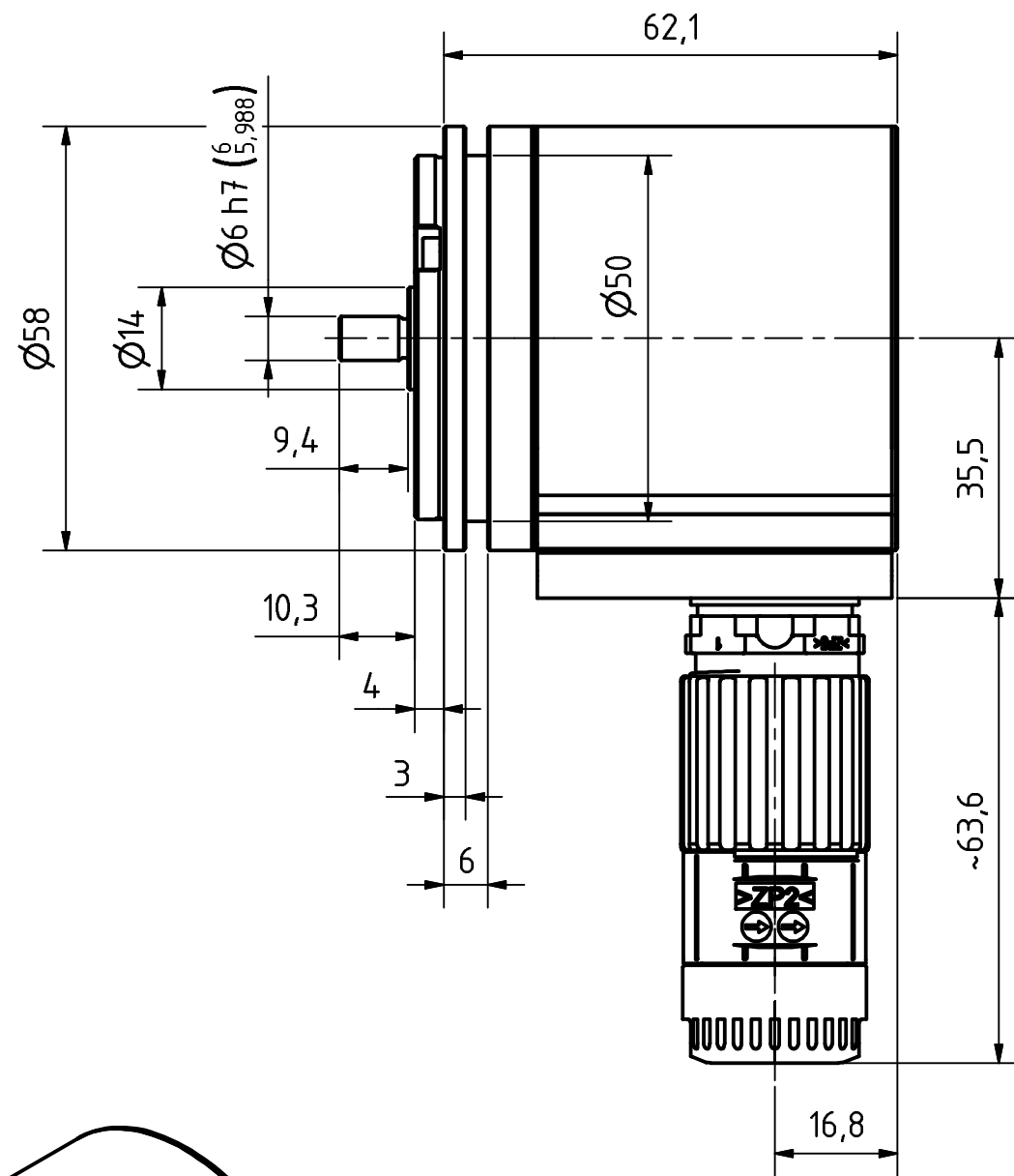
General data for K-CEV58_2-SSI-1 continuation

- Shaft diameter ["]	1/2
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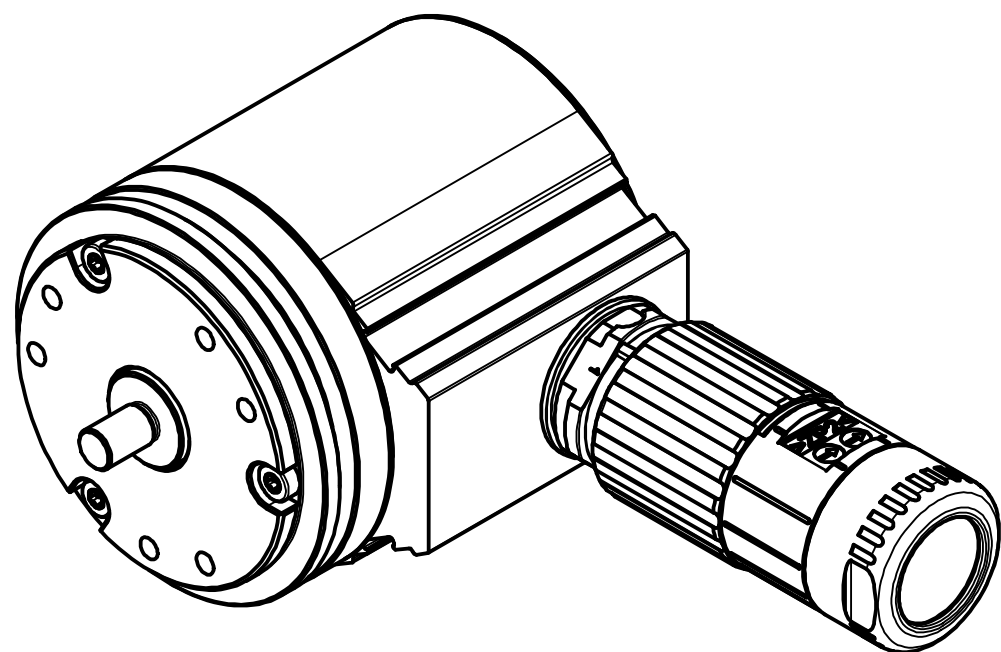
Environmental data

Vibration	DIN EN 60068-2-6
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- Sine	50...2000 Hz
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- Standard	IP65
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- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
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12pol. Stecker
12pin. connector



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 DIN A3		Projekt-Nr.:
		Zeichnungs-Nr. nur für diese Ausführung gültig Drawing-No. only for this type valid		
		Datum	Name	
		Erstellt	20.03.2018	FLAIG
		Bearb.	20.03.2018	FLAIG
		Gepr.	21.03.2018	NEMECZ
		Norm		
			www.tr-electronic.de DXF+Info: info@tr-electronic.de	
		Zeichnungs-NR./Drawing-No.: 04-CEV582M-M0037		
Zustf.	Änderungen	Datum	Name	Blatt 1 1 BL

Pin assignment

Pin assignment number: 185

Index: E

27.01.2014

Connector name: 12-pol CONTACT

Pin-count: 12

Page: 1/1

Pin	Designation	Description	Level	Driver NC	Colour
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7	not connected				
8	Direction IN	Change of counting direction	Supply Voltage	0	red
9	Preset1_IN	Preset value 1	Supply Voltage	0	black
10	Preset2_IN	Preset value 2	Supply Voltage	0	violet
11	Supply Voltage IN	Supply voltage	11-27V		gray/pink
12	Ground IN	Ground	0V		red/blue

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