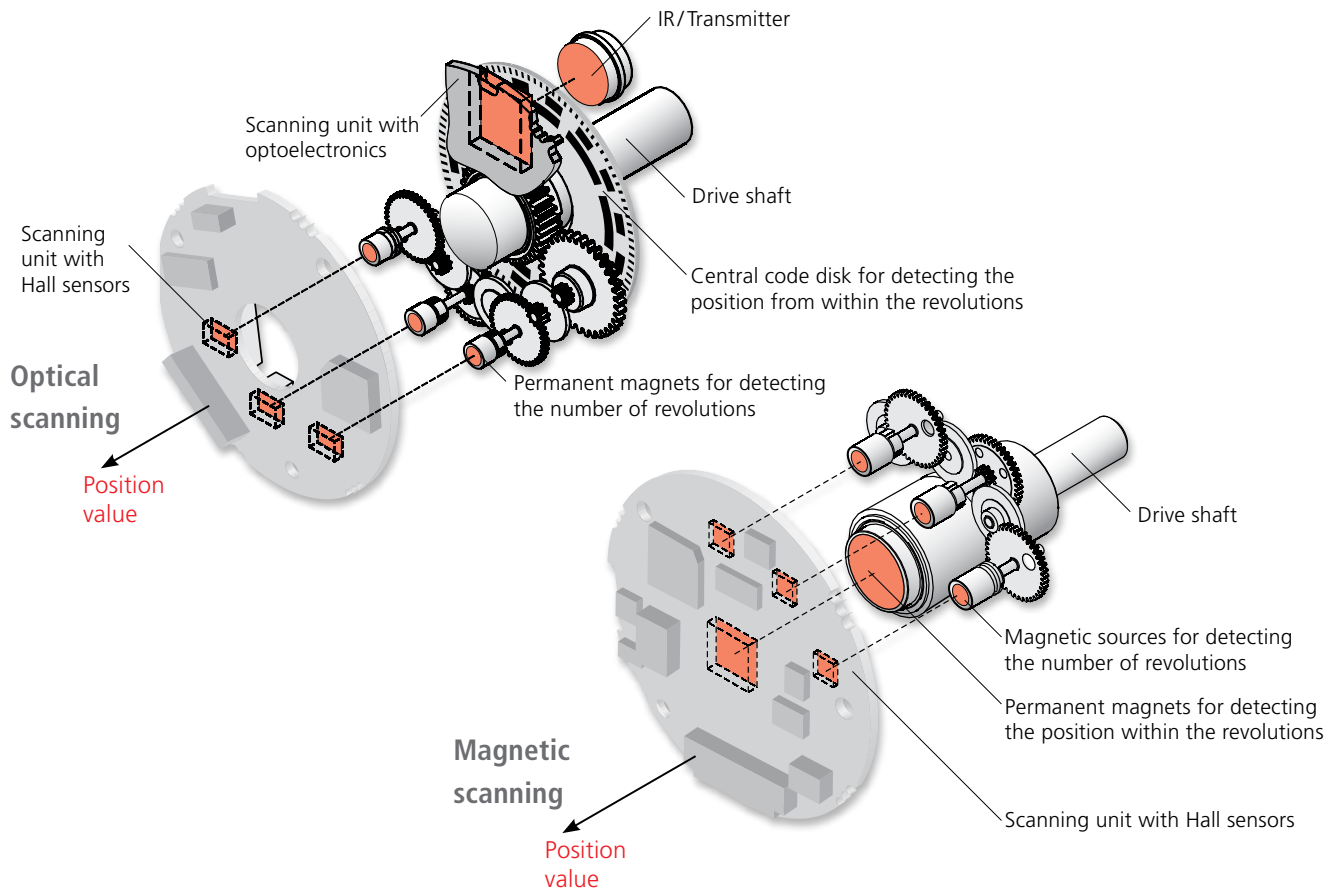


C__582 – the next generation

Standard size with outstanding features



Scanning – Optical and magnetic



Three detections for perfect cost-benefit ratio

O High-resolution optical scanning

Thanks to modern Opto-Asic technology, up to 18 bits (262,144 steps) can be generated within a single revolution. This is supplemented with up to 4,096 absolute scanned revolutions. Signal processing occurs at FPGA speed. This type of scanning is always used whenever position values need to be captured very quickly and with high resolution. This type of scanning is denoted by the letter “O” in the type designation.

E Optical scanning for standard applications

The majority of industrial applications use rotary encoders with a resolution of up to 15 bits per revolution and up to 4,096/256,000 scanned revolutions. Signal processing within the processor enables multiple evaluation functions and

optimal adjustment to new requirements. Signals such as limit switches and speed monitoring can also be generated. This type of scanning is denoted by the letter “E” in the type designation.

M Magnetic scanning for price-sensitive applications

Price-conscious, magnetic rotary encoders are the first choice for applications with lesser requirements in terms of accuracy, resolution and timing. The resolution of a revolution is 11 bits and this is supplemented with 4,096 absolute scanned revolutions. There is no extended signal processing, though the resolution of this device is programmable. This type of scanning is denoted by the letter “M” in the type designation.

Shaft types

Solid shaft



Blind shaft



Hollow shaft



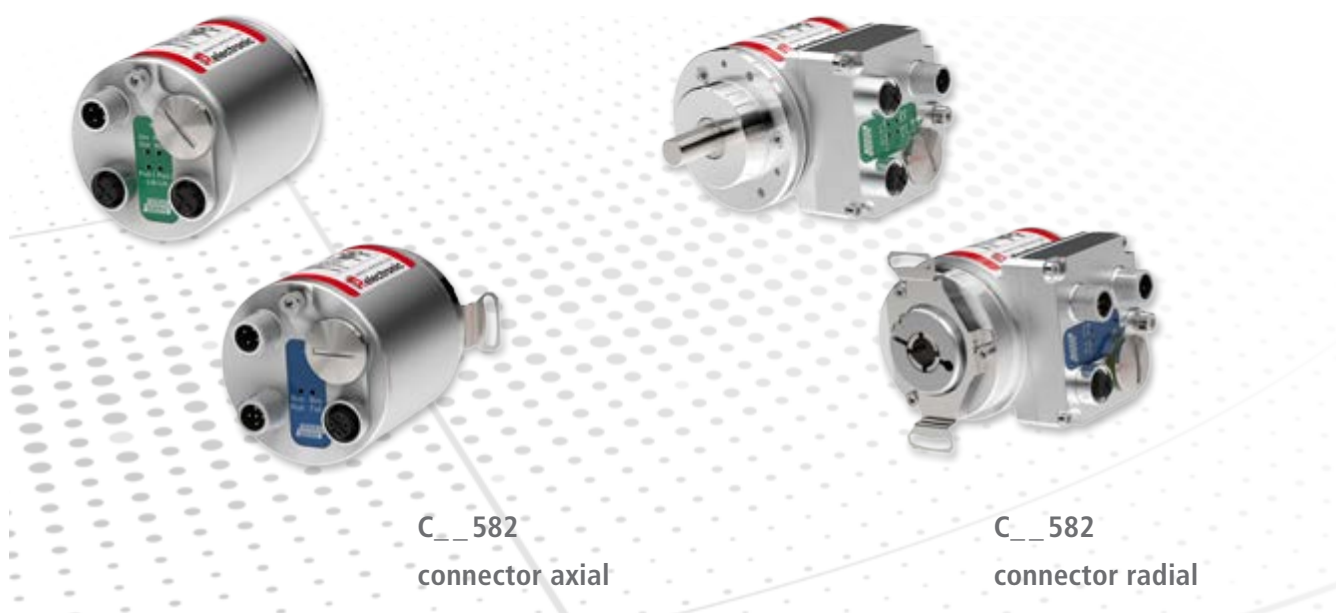
Persistent machine concept

The 58 mm series of the compact rotary encoder was developed for diverse mounting variations. Therefore, there will always be a fitting device for any installation situation that should arise. Functions that you need with a solid shaft, are also available with a hollow shaft. Our rotary encoders with solid shaft are available with many coupling options for easy integration.

The variety of mechanical solutions enhances your room for innovative constructions. You will find a sample of the numerous mounting possibilities in the following overview.

Important: not all possible combinations will be shown.

C__582 – the next generation: Standard size with outstanding features



_ Efficient design

Everything the application needs – reduce to the max.

_ Robust magnetic multiturn rotary encoder CM_582

13 bit resolution within one revolution (singleturn)
12 bit revolutions (multiturn), optionally 16 bit.
Output up to 256,000 revolutions.

_ Servo flange, clamping flange Slip-on hollow shaft up to 15 mm

Plenty of shaft diameters, flanges and torque supports
make the magnetic encoders CM_582 fit into the mechanic
surroundings of many applications.

_ Precise optical multiturn encoder CE_582, CO_582

15 or 18 bit resolution in one revolution (singleturn)
12 bit revolutions (multiturn), optionally 16 bit.
Output of up to 256,000 revolutions.”

_ Servo flange, clamping flange Slip-on hollow shaft up to 15 mm Hollow-through-shaft up to 15 mm

CE_582 and CO_582 add hollow-through shafts with
diameters up to 15 mm to the standard range of solid
and slip-on blind shafts and flanges.

_ Connectors axial or radial

Mounting space is valuable. Do not let cabling interfere with
other parts and components.
For solid and slip-on shafts (blind shaft), you can choose
between connectors axial (at the side opposite to the shaft)
or radial (at the side of the encoder housing).



_ Parameterizable gearbox

Fractional gearbox parameters (numerator/denominator) for almost any reproduction of gearbox factors.
Also for exact detection of closed rotary axes.

_ Latest communication standards for Industry 4.0

The new C__582 generation of industrial standard rotary encoders is rigorously equipped with state-of-the-art chip families.

_ Easy installation with open configuration options

TR absolute rotary encoders fulfill the standards of the respective user organizations for parameterization. Users can thus navigate the standard parameters without difficulty. The free configuration also offers easy access to all functions which are available in addition to the standard functions.

_ Alarms and diagnostics

How's about my machine? To know that at any time is one of the core aspects of industry 4.0.
Be it capacity utilisation or upcoming services: C__582 provides all necessary alarms and diagnostic messages for long term machine and plant surveillance.

_ "On the fly" preset for adjustment during the process

Preset values are transmitted via the real-time capable process image area. This means that absolute adjustments (also called "preset" or "offset adjustment") can be performed synchronously with the control cycle even while the system is in operation. No more axis stops necessary.

_ Update time <1 ms

Suitable for quick position control with less than 1 ms encoder actual value updating for the bus output.

_ Speed output with adjustable averaging

The time base for the speed evaluation can be freely set within a range of one millisecond to one second and can also be scaled in any units.



_ Free mapping of process data in Ethernet Telegram

For EtherCAT, the transmitted telegram can be freely designed to meet the programmers needs. Choose free from current reading position, speed, warnings, alarms, software-cams ... what is needed for your process / your control architecture.

_ Software-Cams

Since industrial revolution, cams were a propriate way to control automated processes. At first with mechanical camshafts and then with electromechanic cam switches. Now, cam signals are calculated in the central control - or, even more comfortable – directly in C__582 ETC. Cam signals are mapped arbitrarily into the process data channel and are available to other bus nodes.

_ Distributed Clocks down to 100 µs cycle time

For precise position and path control of moving axes, all sensors and actors involved must be synchronized. With EtherCAT, this is achieved by distributed clocks. The smallest possible cycle time in C__582 is 100 µs.



_ Firmware Update via TCP/IP

Computer and smartphones are the role model: New functionality by new firmware. New firmware for C__582 EIP can be loaded via the asynchronous TCP/IP-cannel. Existing hardware is future-proof and can be equipped even for new applications.

_ Device Level Ring DLR

A ring makes the network safe. Similar to MRP with PROFINET, DLR provides higher availability to machines and plants with Ethernet/IP. With one additional connection from the last encoder in a branch back to the switch, connection is closed to a ring with much higher reliability. Break in signal transmission is detected at once and bypassed. A single cable break this does not lead to failure of all nodes behind the break in a branch.



_ Encoderprofile

C__582 EPN consequently supports the EPN-Encoder profile of Profibus International standardisation organisation.

_ Profinet with IRT

The PROFINET variant therefore uses cutting-edge technology with long-term availability and is absolutely compliant with the latest standards of the PI User Organization. Real-time synchronization (IRT) enables precisely synchronized positioning of several axes.

_ Neighborhood detection

With neighborhood detection, you exchange devices without the use of an engineering tool. An encoder that is connected newly to the network can determine his position and function in the network by help of his physical neighbours and then requests the parameter data for this function from the master control.

_ Fast Startup for quick system availability

C__582 PROFINET starts faster than any other bus rotary encoder. Once configured a stable, valid absolute position value is available in the PROFINET control just a few instants after restoration of supply. System startup is greatly accelerated and modular machine concepts in particular (with periodically decoupled modules) benefit directly from this technology.*

_ Media-Redundancy Protocol for highest reliability

One ring for reliability. The PROFINET interface of the C__582 supports the innovative Media Redundancy Protocol MRP. Normally PROFINET only supports a linear/tree structure. A redundant connection is not primarily provided as standard. MRP significantly increases availability with one simple device! Branches are connected to a ring with an additional line from the last node to the next switch. The appropriately configured nodes detect this. One of the nodes now disconnects this ring, by "ignoring" the second connection. If a connection fails (due to cable breakage or failure of a node), the nodes detect this and attempt to find another way to the rest of the system. The previously opened connection is now closed and all nodes are reconnected to the network.*

*An encoder can either be configured for Fast Startup or for MRP.



- _ Low connection costs:
M12, 4-pin, A-coded, without shield,
supply and data in one cable.**

- _ Cyclical transfer:
Position, speed, 2 independent
position limit switches, speed monitor.**

- _ Transferred parameters can be configured.**

- _ Cycle time for cyclical transfer ≥ 1 ms.**
- _ Acyclical transfer:
Error messages, operating hours.**
- _ Hardware switching output programmable:
Either speed monitor, limit switches ...**

An IO-Link master is often already present in a machine, usually to read in and parameterize initiators. TR-Electronic rotary encoders with IO-Link use exactly this infrastructure to communicate with the control.

If a machine or system already has IO-Link integrated as a bus system, the obvious approach is to also control absolute rotary encoders with this bus system. The actual value communication uses a star distribution system between rotary encoder and the next distribution node and is compatible with normal, digital initiator communication.

The zero position of the rotary encoder is conveniently adjusted via IO-Link and the usual bus parameterization tools – without turning the encoder itself. This makes installation child's play. The transferred parameters can also be selected at the same time.

Machine condition monitoring made easy: Important status information is transferred via the acyclical services.

C_ _582 with IO-Link enables internal states to be converted into programmable switching states of the digital output. This enables simple implementation of e.g. speed monitoring, position limit value monitoring, limit switches and much more. The rotary encoder reacts to exceeding of a speed range, for example, through a digital signal like a normal initiator and can also send status messages to a very simple electronic analysis module.



_ The direct route for mounted encoders to SINAMICS® drives.

DRIVE-CLiQ is the open system interface for position sensors for the SINAMICS® drive family from Siemens AG for motion control. This fast absolute encoder interface connects the converter centrally installed in the switch cabinet to the rotary encoders and position sensors directly on the respective axes.

_ Direct position measurement without gear backlash

For increased reliability and precision, it may be desirable not only to use the encoder in the motor for position control. Encoders mounted directly on the axis to be measured eliminate the uncertainties caused by gear backlash.

_ Reliability through redundancy

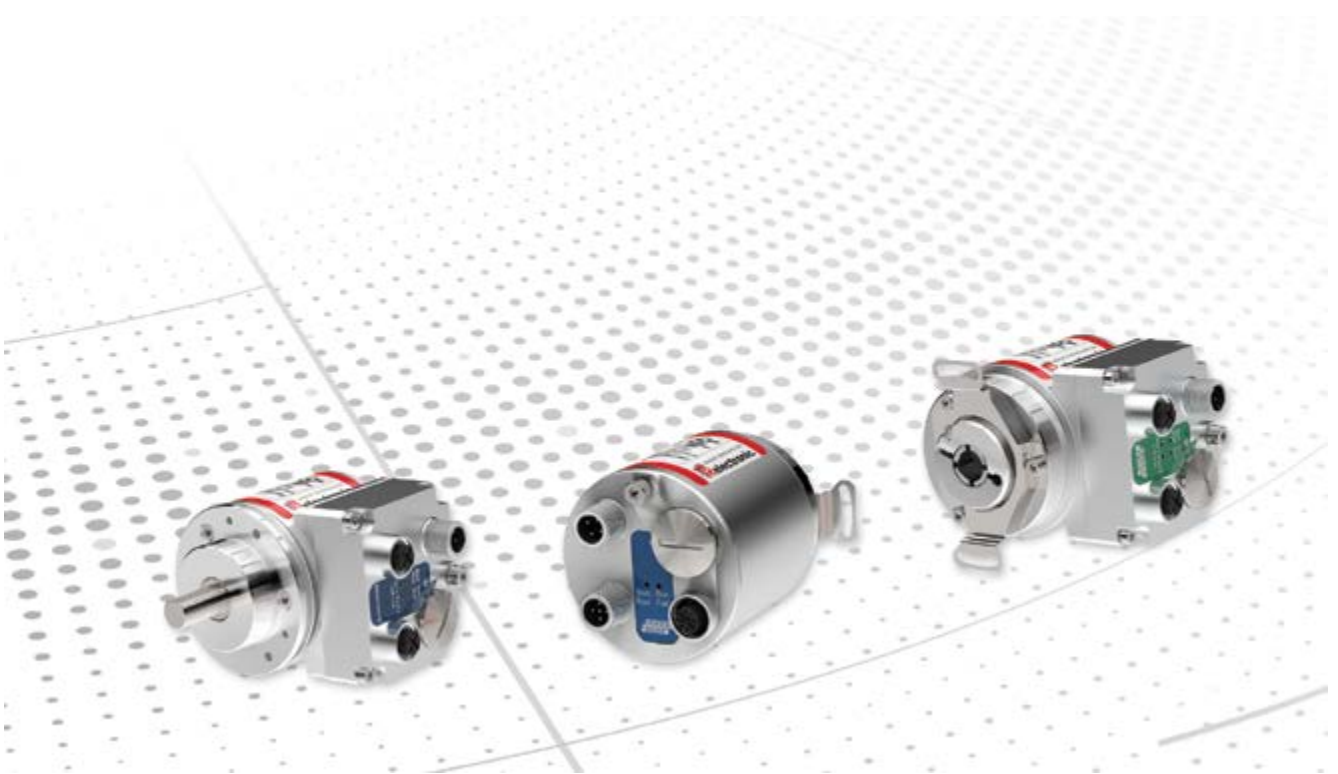
Mounted encoders used in conjunction with motor-integrated systems can reliably detect slipping of connections or even shaft/gear breakage.

_ All mechanical variants of Generation 2

The C__582s from TR-Electronic are available with the DRIVE-CLiQ interface.

The design engineers thus have access to the entire mechanical diversity of the modular system with full integration into the SINAMICS® drive technology family.

Absolute Rotary Encoders - Family C__58 - Housing 58 mm



58 mm housing for standard industrial applications

Encoders with size 58 mm have been established as the industrial standard for absolute and incremental encoders. With TR-Electronic, you get as a standard what is special with other manufacturers. Absolute encoders of Series 58 are modular. Your demands can be realized precisely and in most cases without any special development.














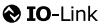











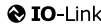
















- _ Industrial standard size 58 mm
- _ Cost optimized by different resolution ranges
- _ Compatible with a vast number of control systems
- _ Shaft-, flange - and assembly versions
- _ Same mechanics - plenty of interfaces
- _ Compact Connector System - perfect for machines produced in series
- _ Can be adapted to singular applications via parametrization done by user
- _ Available with customer-specific connector systems
- _ UL approval for most types

Contents

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Dimensional Drawings.....	22		

Magnet detection (M)











































Magnet detection (P)

Product	CMV582	CMS582	CPV582
			
Detection	Magnet detection (M)	Magnet detection (M)	Magnet detection (P)
Single / multi	(M) Multi (S) single	(M) Multi (S) single	(M) Multi (S) single
Supply	11...27 VDC*	11...27 VDC*	11...27 VDC*
Full resolution	<= 25 bit *	<= 25 bit *	<= 28 bit *
Steps per turn	<= 8192 *	<= 8192 *	<= 65536 *
Number of turns	<= 4096 *	<= 4096 *	<= 4096 *
Precision	± 0,5 °	± 0,5 °	± 0,5 °
Shaft diameters available	6, 8, 10, 12, 14, 1/4", 3/8", 1/2"	6, 8, 10, 12, 14, 15, 1/4", 3/8", 1/2"	6, 8, 10, 12, 14, 1/4", 3/8", 1/2"
Connectors	Connector axial or radial *	Connector axial or radial *	Connector axial or radial *
Ambient temperature	-20...+75 °C	-20...+75 °C	-20...+75 °C
Protection class	IP65	IP65	IP65
ATEX-zone	Option 2/22	Option 2/22	Option 2/22
Interface	           	           	           
Option, additional interfaces (on request)			
Weblink	www.tr-electronic.com/s/S013306	www.tr-electronic.com/s/S013307	www.tr-electronic.com/s/S022328
QR-Code			

* depending on the interface

Can't find the right variant? Please contact us (info@tr-electronic.de)






































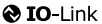











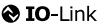




Magnet detection (P) Optical 15 bit (E)

Product	CPS582	CEV582	CEH582
			
Detection	Magnet detection (P)	Optical 15 bit (E)	Optical 15 bit (E)
Single / multi	(M) Multi (S) single	(M) Multi (S) single	(M) Multi (S) single
Supply	11...27 VDC*	11...27 VDC*	11...27 VDC*
Full resolution	<= 28 bit *	<= 33 bit *	<= 33 bit *
Steps per turn	<= 65536 *	<= 32768 *	<= 32768 *
Number of turns	<= 4096 *	<= 256000 *	<= 256000 *
Precision	± 0,5 °	± 1 digit	± 1 digit
Shaft diameters available	6, 8, 10, 12, 14, 15, 1/4", 3/8", 1/2"	6, 8, 10, 12, 14, 1/4", 3/8", 1/2"	6, 8, 10, 12, 14, 15, 1/4", 3/8", 1/2"
Connectors	Connector axial or radial *	Connector axial or radial *	Connector radial
Ambient temperature	-20...+75 °C	-20...+75 °C	-20...+75 °C
Protection class	IP65	IP65	IP54, option 65
ATEX-zone	Option 2/22	Option 2/22	Option 2/22
Interface	           	           	           
Option, additional interfaces (on request)			
Weblink	www.tr-electronic.com/s/S022330	www.tr-electronic.com/s/S013308	www.tr-electronic.com/s/S013312
QR-Code			

* depending on the interface

Optical 15 bit (E)

Optical 18 bit (O)

			
Optical 15 bit (E)	Optical 18 bit (O)	Optical 18 bit (O)	Optical 18 bit (O)
(M) Multi (S) single	(M) Multi (S) single	(M) Multi (S) single	(M) Multi (S) single
11...27 VDC *	11...27 VDC *	11...27 VDC *	11...27 VDC *
<= 33 bit *	<= 36 bit *	<= 36 bit *	<= 36 bit *
<= 32768 *	<= 262144 *	<= 262144 *	<= 262144 *
<= 256000 *	<= 262144 *	<= 262144 *	<= 262144 *
± 1 digit	± 1 digit	± 1 digit	± 1 digit
6, 8, 10, 12, 14, 15, 1/4", 3/8", 1/2"	6, 8, 10, 12, 14, 1/4", 3/8", 1/2"	6, 8, 10, 12, 14, 15, 1/4", 3/8", 1/2"	6, 8, 10, 12, 14, 15, 1/4", 3/8", 1/2"
Connector axial or radial *	Connector axial or radial *	Connector radial	Connector axial or radial *
-20...+75 °C	-20...+75 °C	-20...+75 °C	-20...+75 °C
IP65	IP65	IP54, option 65	IP65
Option 2/22	Option 2/22	Option 2/22	Option 2/22
           	           	           	           
www.tr-electronic.com/s/S013313	www.tr-electronic.com/s/S013314	www.tr-electronic.com/s/S013315	www.tr-electronic.com/s/S013316
			

* depending on the interface

Can't find the right variant? Please contact us (info@tr-electronic.de)

Suggested Products

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
CEH582 -EIP(E) Optical 15 Bit, hollow shaft, Ethernet/IP						
CEH582M-00002	8192	4096	3/8" hollow through shaft	Radial	3x 4 pin M12	Clamping ring flange side
CEH582M-00005	32768	4096	12H7 hollow through shaft	Radial	3x 4 pin M12	Clamping ring flange side
CEH582-EPN (E) Optical 15 Bit, hollow shaft, PROFINET						
CEH582M-00003	8192	4096	10H7 hollow through shaft	Radial	3x 4 pin M12	Clamping ring flange side
CEH582M-00004	8192	4096	12H7 hollow through shaft	Radial	3x 4 pin M12	Clamping ring flange side
CEH582-ETC (E) Optical 15 Bit, hollow shaft, EtherCAT						
CEH582M-00007	8192	4096	10H7 hollow through shaft	Radial	3x 4 pin M12	Clamping ring flange side
CEH582 -SSI (E) Optical 15 Bit, hollow shaft, SSI						
CEH582M-10271	4096	4096	10H7 hollow through shaft	Radial	12 pin M23	Clamping ring flange side
CEH582M-00019	4096	4096	10H7 hollow through shaft	Radial	12 pin M23	Clamping ring flange side
CEH582M-00022	4096	4096	12H7 hollow through shaft	Radial	12 pin M23	Clamping ring flange side
CEH582S-00001	4096	1	12H7 hollow through shaft	Radial	12 pin M23	Clamping ring flange side
CESS582-EIP (E) Optical 15 Bit, blind shaft, Ethernet/IP						
CESS582M-00009	8192	4096	14H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side
CESS582-EPN (E) Optical 15 Bit, blind shaft, PROFINET						
CESS582M-00001	8192	4096	15H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side
CESS582M-00004	8192	4096	12H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side
CESS582M-00007	8192	4096	12H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side
CESS582S-00001	8192	1	15H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side
CEV582-EIP (E) Optical 15 Bit, solid shaft, Ethernet/IP						
CEV582M-00027	4096	4096	6GL/10 ZB50	Radial	3x 4 pin M12	
CEV582M-00003	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Axial	3x 4 pin M12	
CEV582M-00004	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	

For further product information simply enter the order number in the search field at www.tr-electronic.com.

* depending on the interface

We will help you to select the most suitable products from the complete TR range. Please contact us (info@tr-electronic.de).

Suggested Products

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
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CEV582-EPN (E) Optical 15 Bit, solid shaft, PROFINET

CEV582M-00024	4096	4096	6GL/10 ZB50	Radial	3x 4 pin M12	Absorber flange
CEV582M-00002	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	
CEV582M-00011	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	Reset Switch
CEV582M-00014	8192	4096	10FL/19,5 ZB50 D65	Radial	3x 4 pin M12	
CEV582M-00015	8192	4096	10GL/19,5 ZB36 D65	Axial	3x 4 pin M12	
CEV582M-00022	8192	4096	6GL/10 ZB50	Radial	3x 4 pin M12	Reset Switch
CEV582M-00025	8192	4096	10FL/19,5 ZB50	Axial	3x 4 pin M12	
CEV582M-00032	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	Reset Switch
CEV582S-00005	8192	1	6GL/10 ZB50	Radial	3x 4 pin M12	Absorber flange
CEV582S-00004	32768	1	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	Seal Pack

CEV582-ETC (E) Optical 15 Bit, solid shaft, EtherCAT

CEV582M-00005	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Axial	3x 4 pin M12	
CEV582M-00006	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	
CEV582M-00008	8192	4096	6GL/10 ZB50	Radial	3x 4 pin M12	
CEV582M-00013	8192	4096	10GL/19,5 ZB36 3xM3+3xM4	Axial	3x 4 pin M12	
CEV582M-00030	8192	4096	10FL/19,5 ZB36 D65	Radial	3x 4 pin M12	

CEV582 -SSI (E) Optical 15 Bit, solid shaft, SSI

CEV582M-00036	4096	4096	10GL/19,5 ZB36 3xM3+3xM4	Radial	12 pin M23	
CEV582M-00038	4096	4096	6GL/10 ZB50 D65	Radial	12 pin M23	
CEV582M-00045	4096	4096	6GL/10 ZB50	Radial	12 pin M23	
CEV582M-00072	4096	4096	12FL/25 ZB36 D65	Radial	12 pin M23	
CEV582M-10025	4096	4096	10FL/19,5 ZB36	Radial	12 pin M23	
CEV582M-10069	4096	4096	6GL/10 ZB50	Radial	12 pin M23	
CEV582M-00055	8192	4096	12FL/25 ZB36 3xM3+3xM4	Radial	1 m cable, open end	

CEV582 -IBS (E) Optical 15 Bit, solid shaft, Interbus

CEV582M-00039	4096	4096	10FL/19,5 ZB50 D65	Radial	2 x 9pin M23	
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For further product information simply enter the order number in the search field at www.tr-electronic.com.

Suggested Products

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
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CMS582-EIP (M) Magnet detection, blind shaft, Ethernet/IP

CMS582M-00012	8192	4096	12H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side
CMS582M-00016	8192	4096	15H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side

CMS582-EPN (M) Magnet detection, blind shaft, profinet

CMS582M-00001	8192	4096	10H7 blind shaft	Axial	3x 4 pin M12	
CMS582M-00004	8192	4096	15H7 blind shaft	Radial	3x 4 pin M12	
CMS582M-00010	8192	4096	15H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side
CMS582M-00011	8192	4096	12H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side
CMS582M-00014	8192	4096	12H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side
CMS582M-00015	8192	4096	10H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side
CMS582M-00017	8192	4096	14H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side, Reset
CMS582M-00019	8192	4096	08H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side, Reset
CMS582M-00021	8192	4096	12H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side

CMS582-ETC (M) Magnet detection, blind shaft, EtherCAT

CMS582M-00009	8192	4096	12H7 blind shaft	Radial	3x 4 pin M12	Clamping ring flange side
CMS582M-00013	8192	4096	10H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side

CMS582-IOL (M) Magnet detection, blind shaft, IO-Link

CMS582M-00018	4096	4096	10H7 blind shaft	Radial	4 pin M12	Clamping ring flange side
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CMS582-SSI (M) Magnet detection, blind shaft, SSI

CMS582M-00025	8192	4096	12H7 blind shaft	Radial	12 pin M23	Clamping ring flange side
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CMV582-EIP (M) Magnet detection, solid shaft, Ethernet/IP

CMV582M-00003	8192	4096	10FL/19,5 ZB36	Axial	3x 4 pin M12	
CMV582M-00004	8192	4096	10FL/19,5 ZB36	Radial	3x 4 pin M12	
CMV582M-00015	8192	4096	6GL/10 ZB50	Radial	3x 4 pin M12	
CMV582M-00018	8192	4096	3/8"FL/22,3 ZB36	Axial	3x 4 pin M12	

For further product information simply enter the order number in the search field at www.tr-electronic.com.

We will help you to select the most suitable products from the complete TR range. Please contact us (info@tr-electronic.de).

Suggested Products

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
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CMV582-EPN (M) Magnet detection, solid shaft, Profinet

CMV582M-00001	8192	4096	10FL/19,5 ZB36	Axial	3x 4 pin M12	
CMV582M-00002	8192	4096	10FL/19,5 ZB36	Radial	3x 4 pin M12	
CMV582M-00007	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Axial	3x 4 pin M12	
CMV582M-00008	8192	4096	10FL/19,5 ZB36	Axial	3x 4 pin M12	With reset button
CMV582M-00009	8192	4096	10FL/19,5 ZB50	Radial	3x 4 pin M12	
CMV582M-00016	8192	4096	6GL/10 ZB50	Axial	3x 4 pin M12	
CMV582M-00022	8192	4096	10FL/19,5 ZB36/D65	Radial	3x 4 pin M12	
CMV582M-00025	8192	4096	6GL/10 ZB50	Radial	3x 4 pin M12	Reset Switch

CMV582-ETC (M) Magnet detection, solid shaft, EtherCAT

CMV582M-00002	8192	4096	10FL/19,5 ZB36	Axial	3x 4 pin M12	
CMV582M-00006	8192	4096	10FL/19,5 ZB36	Radial	3x 4 pin M12	
CMV582M-00013	8192	4096	12FL/25 ZB36	Axial	3x 4 pin M12	

CMV582-IOL (M) Magnet detection, solid shaft, IO-Link

CMV582M-00028	4096	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	4 pin M12	
CMV582M-00034	4096	4096	10FL/19,5 ZB36/D65	Radial	4 pin M12	

CMV582-SSI (M) Magnet detection, blind shaft, SSI

CMV582M-00039	4096	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	4 pin M12	
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COS582-EPN (O) Optical 18 Bit, blind shaft, PROFINET

COS582M-00001	262144	1	10H7 blind shaft	Axial	3x 4 pin M12	Clamping ring flange side
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COV582-EPN (O) Optical 18 Bit, solid shaft, PROFINET

COV582M-00002	262144	4096	10FL/19,5 ZB36 D65	Radial	3x 4 pin M12	
COV582M-00003	262144	4096	10FL/19,5 ZB36 3xM3+3xM4	Axial	3x 4 pin M12	

For further product information simply enter the order number in the search field at www.tr-electronic.com.

Suggested Products

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
COV582-ETC (O) Optical 18 Bit, solid shaft, EtherCAT						
COV582M-00001	262.144	4096	10GL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	
COH582-SSI (O) Optical 18 Bit, solid shaft, SSI						
COH582M-00001	262.144	64	12H7 hollow shaft with keyway	Radial	12 pin M23	

For further product information simply enter the order number in the search field at www.tr-electronic.com.

Further product information

1. Enter order code into ...



Bestellnummer	Umdrehung	Wollen
CMV58-A		
CMV58S-00011	1,000	Ø10h7

2. Searchfield (top right) on www.tr-electronic.com



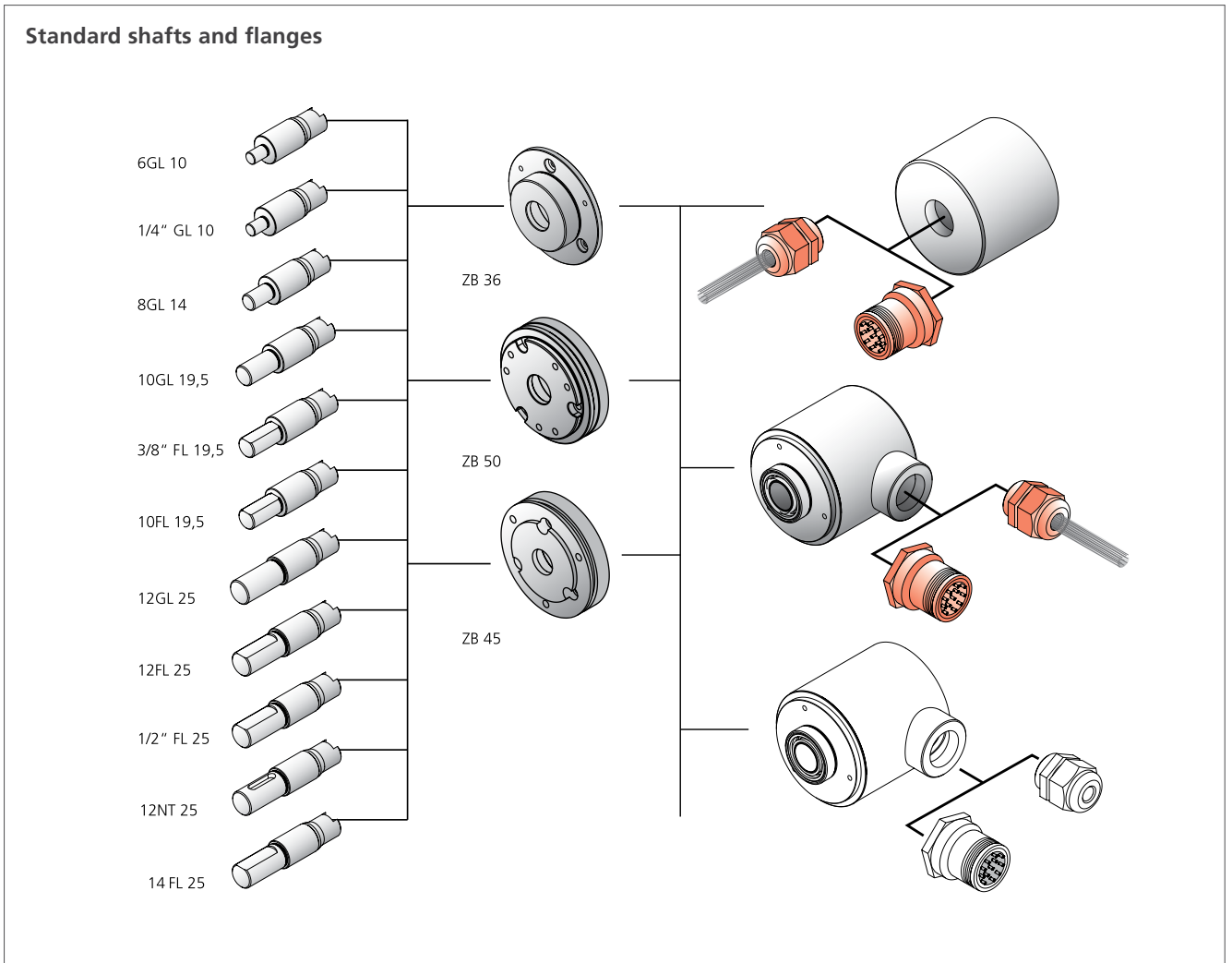
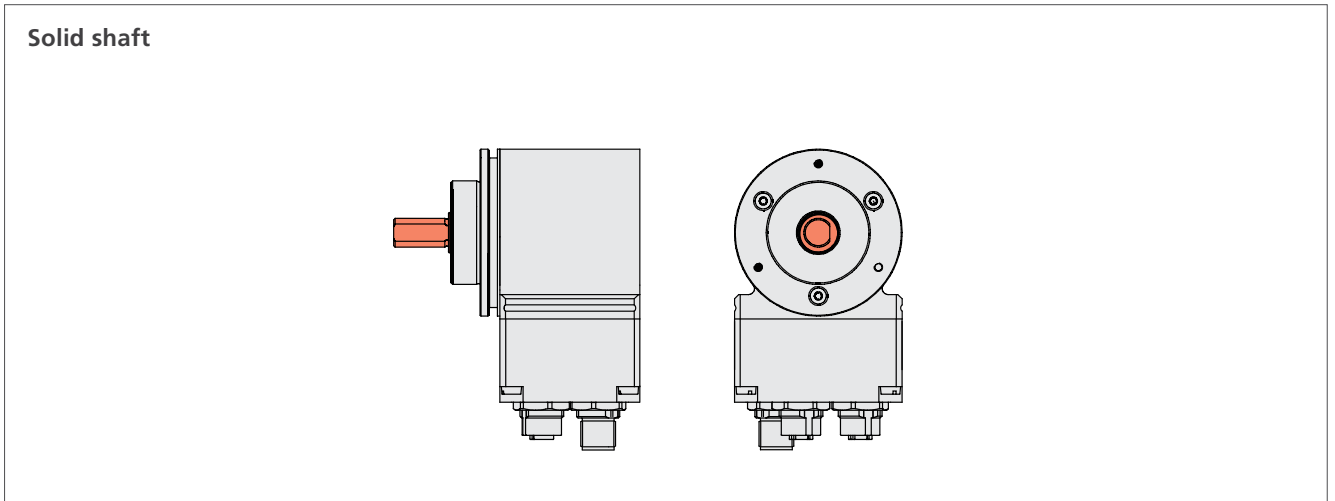
3. Choose desired information



We will help you to select the most suitable products from the complete TR range. Please contact us (info@tr-electronic.de).



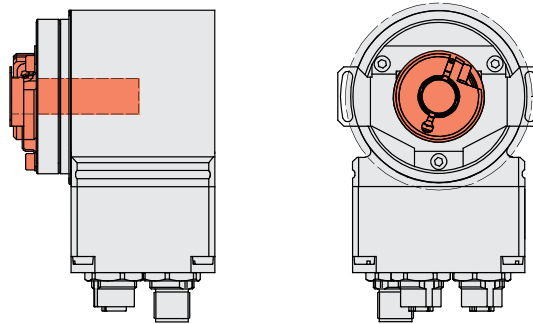
Shaft Types



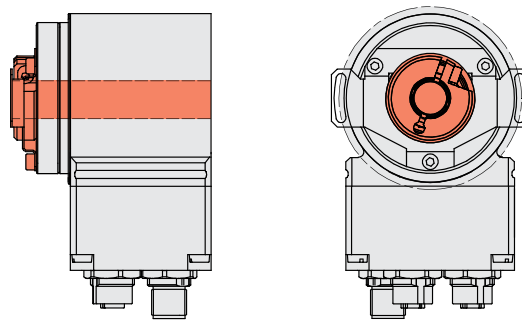
Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at www.tr-electronic.com or on request.

Shaft Types

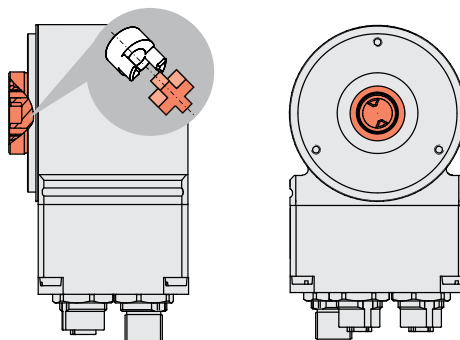
Blind shaft



Hollow shaft



Integrated coupling



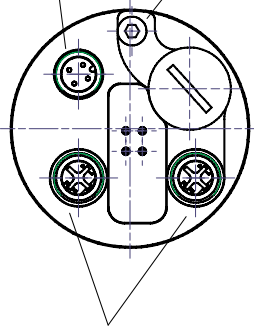
Dimensional Drawings

C_582 axial

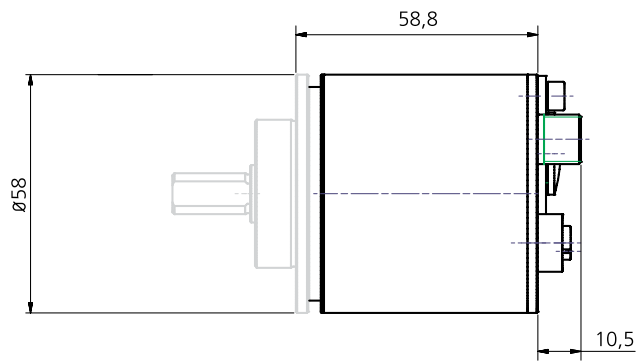
PROFINET, EtherCAT, Ethernet/IP, PROFIBUS axial

4pin. M12-male-connector (Supply voltage)

thread M4 for
potential equalisation



2x4pin. M12-connector, d-coded (female)



Dimensional Drawings

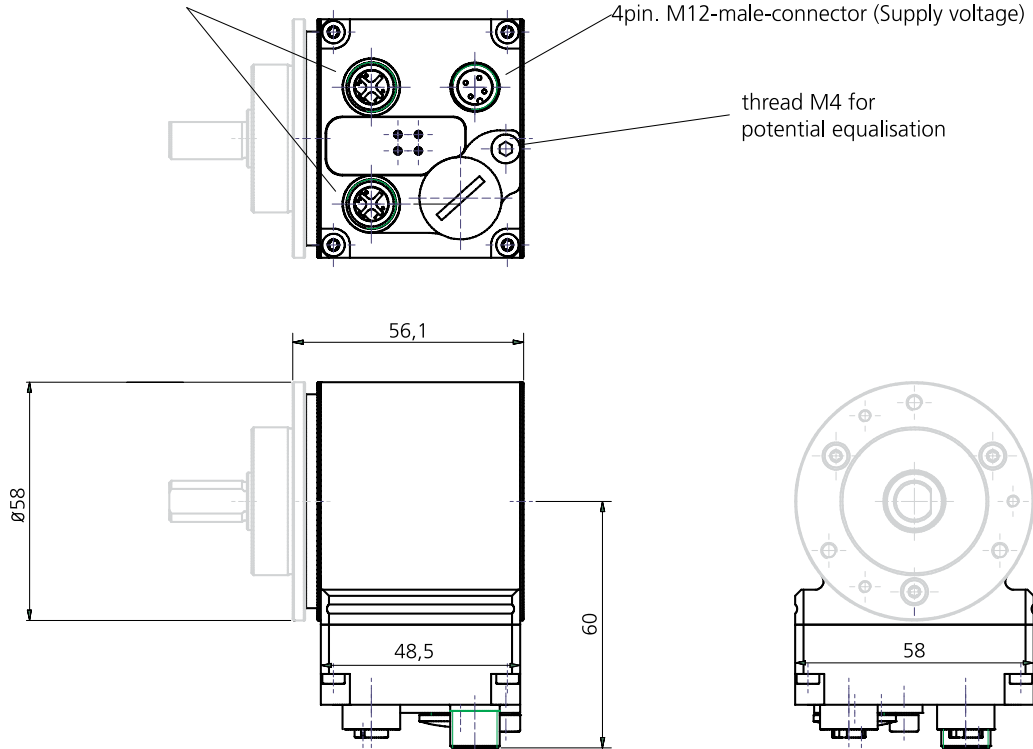
C_582 radial

PROFINET, EtherCAT, Ethernet/IP, PROFIBUS radial

2x4pin. M12-connector, d-coded (female)

4pin. M12-male-connector (Supply voltage)

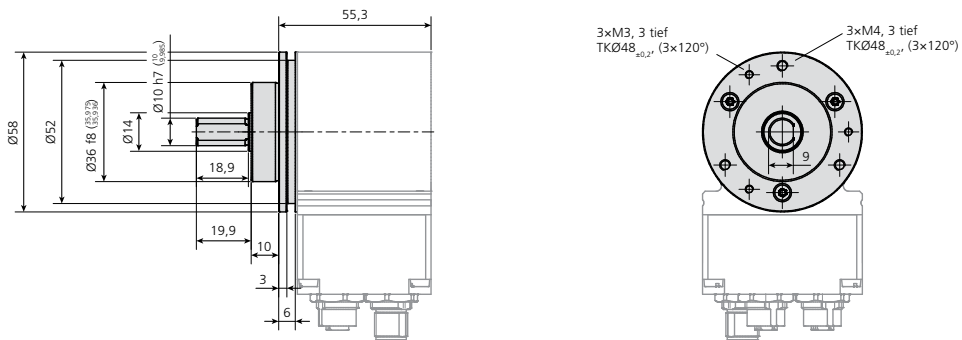
thread M4 for potential equalisation



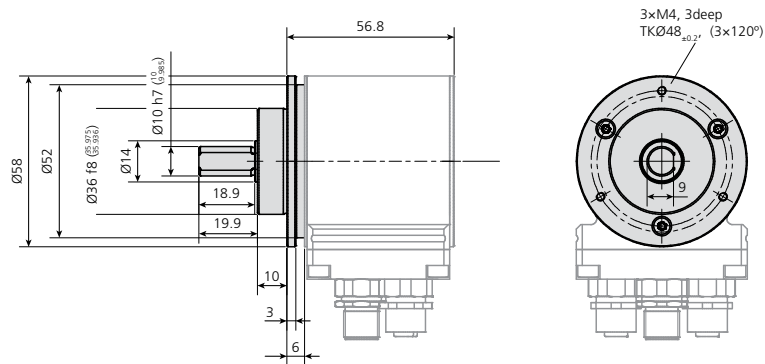
Flanges

Standard flange ZB 36 M3/M4

Other drill patterns available

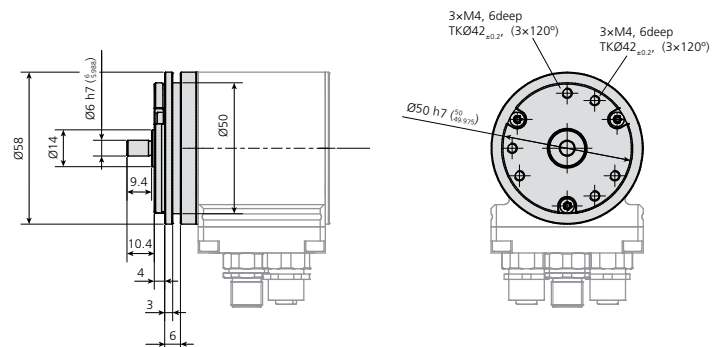


Standard flange ZB 36 M4



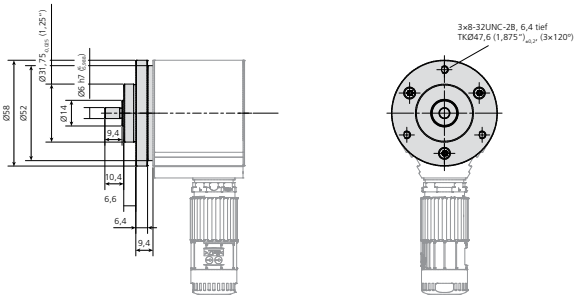
Standard flange ZB 50

Other drill patterns available

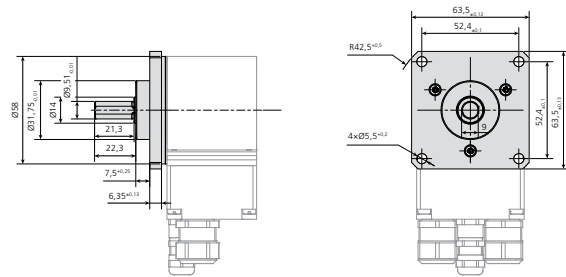


Flanges

Flange ZB 31,75 (1,25")

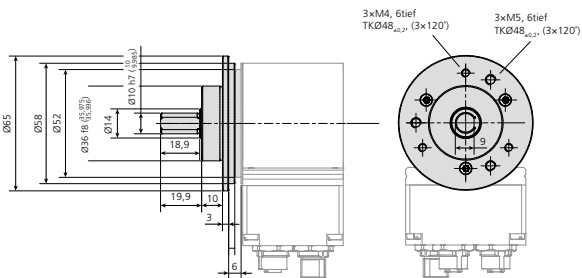


Square flange ZB 31,75 (1,25")



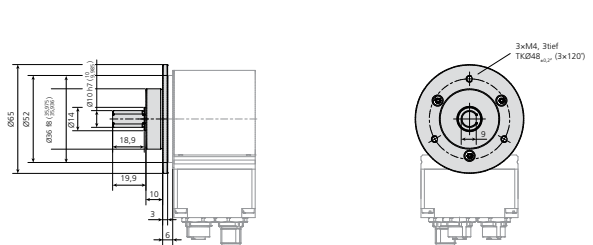
Flange option D65 ZB36 M3/M4

Fits encoder mounting places 65mm, ZB 36mm, 3x M4 and 3x M5 threads



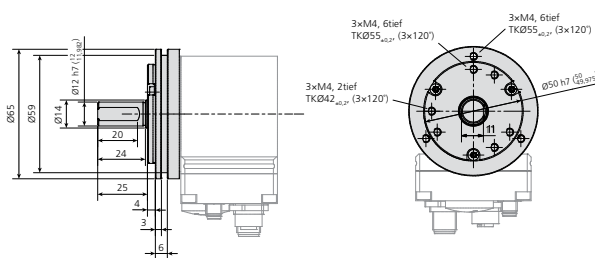
Flange option D65 ZB36 M4

Fits encoder mounting places 65mm, ZB 36mm, 3x M4 threads



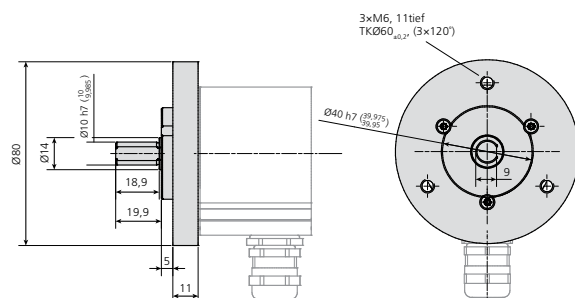
Flange option D65 ZB50

Fits encoder mounting places 65mm, ZB 50mm

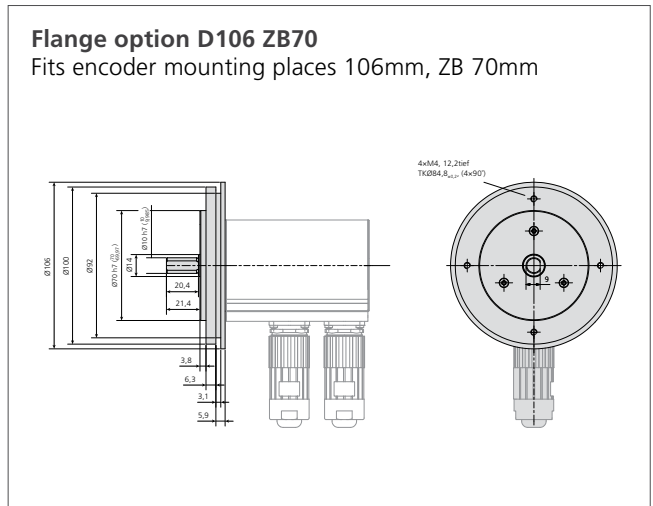
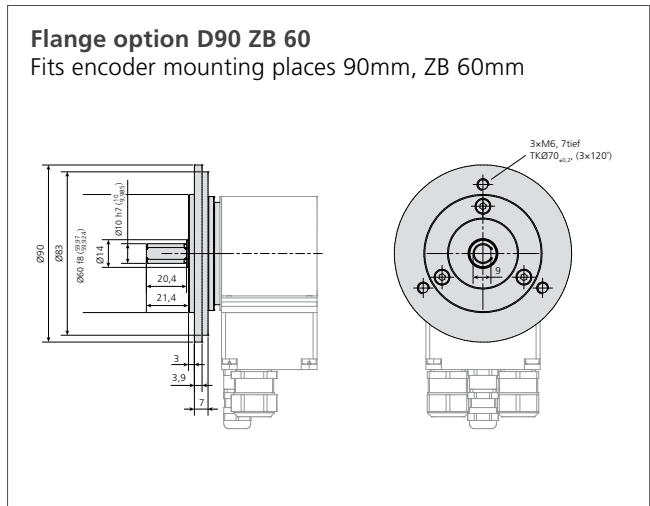
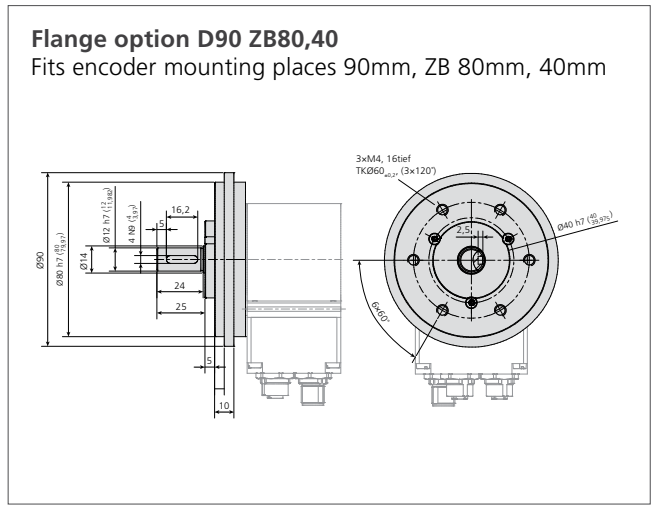
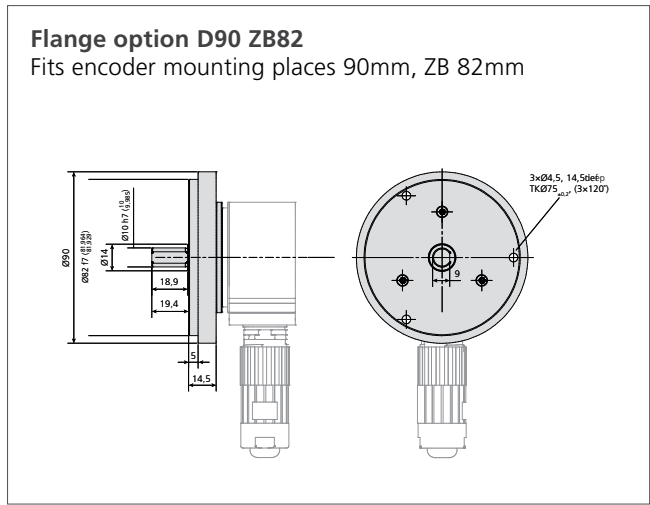
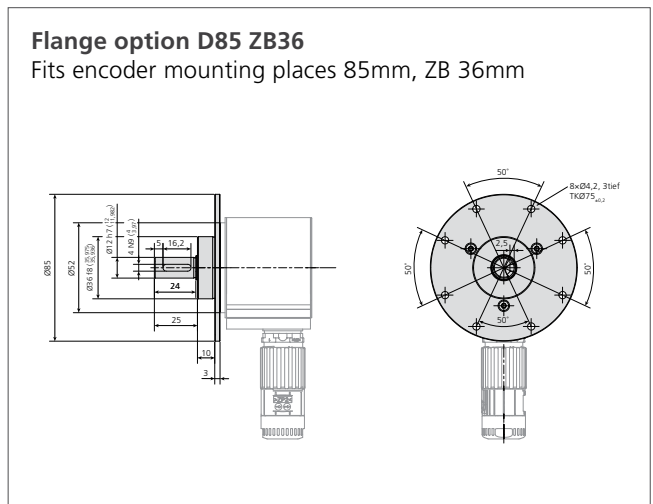
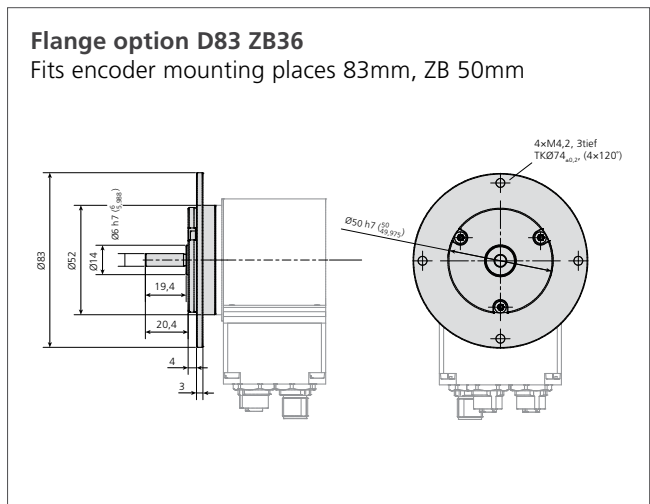


Flange option D80 ZB40

Fits encoder mounting places 80 mm, ZB 40mm



Flanges

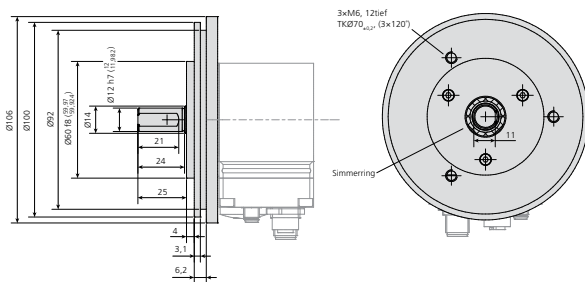


Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at www.tr-electronic.com or on request.

Flanges

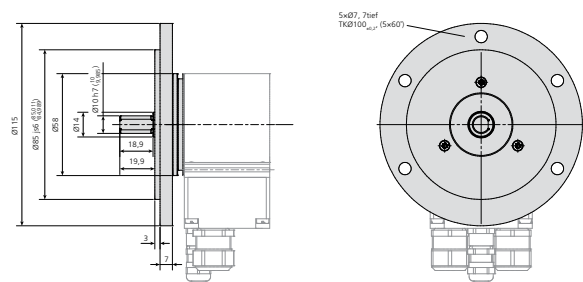
Flange option D106 ZB60

Fits encoder mounting places 106mm, ZB 60mm



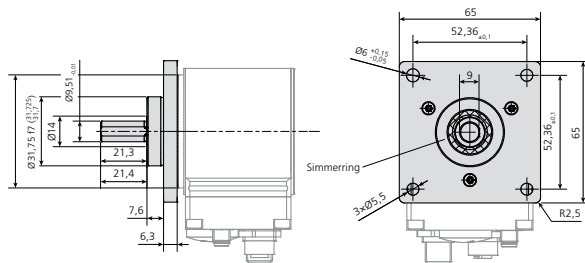
Flange option D115 ZB85

Fits encoder mounting places 115mm, ZB 85mm



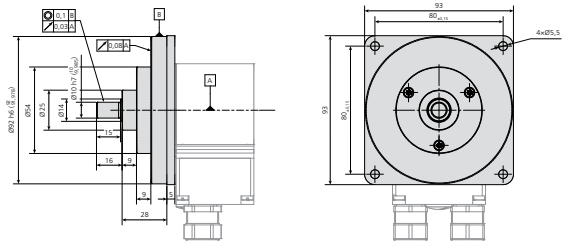
Flange option Q65

Square flange 65mm



Flange option Q93

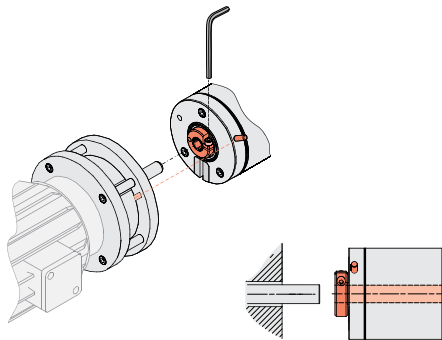
Square flange 93mm



Assembly Examples

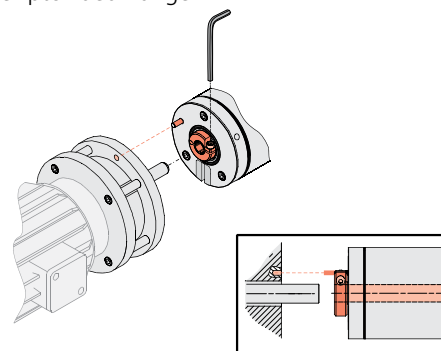
Blind- and hollow-shaft - encoder fixation

Pin, radial, fits into a groove of customer-provided flange



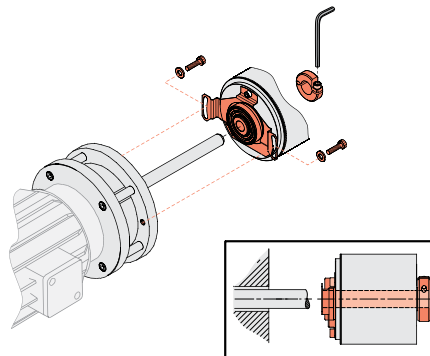
Blind- and hollow-shaft - encoder fixation

Pin, axial in encoder flange fits into bore/groove of customer-provided flange



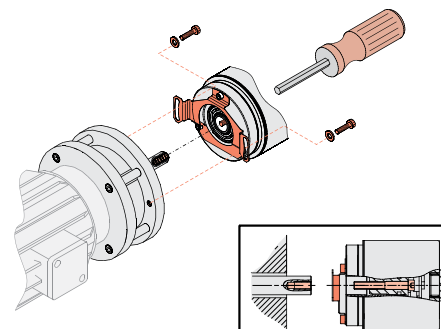
Blind- and hollow-shaft - encoder fixation

Sheet-metal torque support, here with clamping ring.



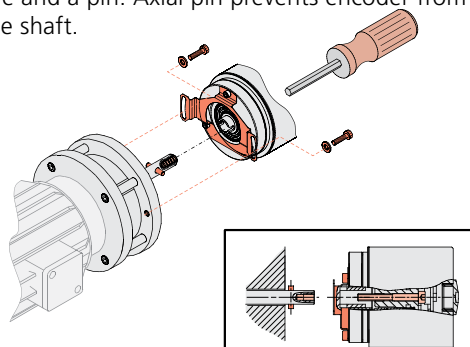
Blind- and hollow-shaft - encoder fixation

Axial screw attaches the shaft to the encoder. Here with a sheet-metal torque support.



Blind- and hollow-shaft - shaft fixation

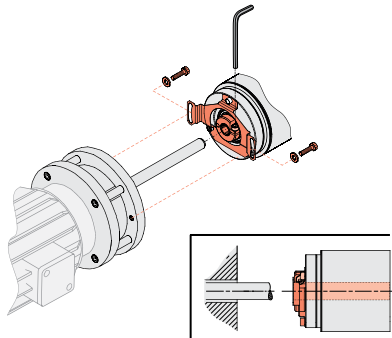
Transmission of torque is done by form closure by a V-groove and a pin. Axial pin prevents encoder from falling off the shaft.



Assembly Examples

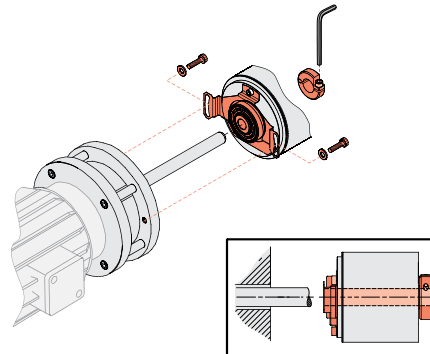
Blind- and hollowShaft - shaft fixation

Blind shaft and hollow shaft devices usually have clamping ring on flange side.



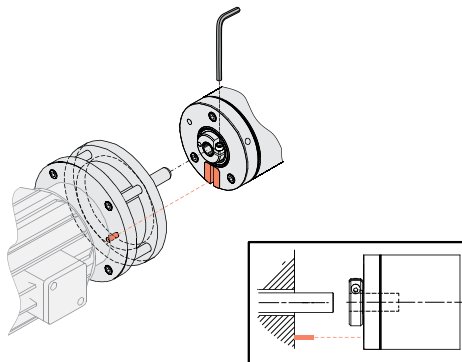
Blind- and hollow-shaft - shaft fixation

Hollow shaft devices can be ordered with clamping ring hood side.



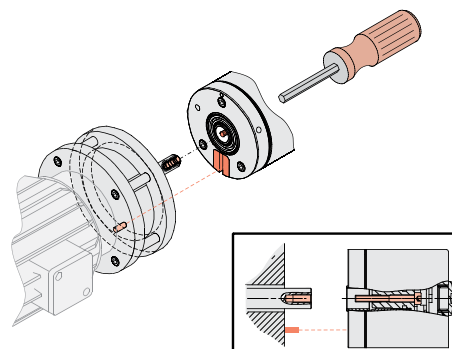
Blind shaft

Pin/groove axial, clamping ring

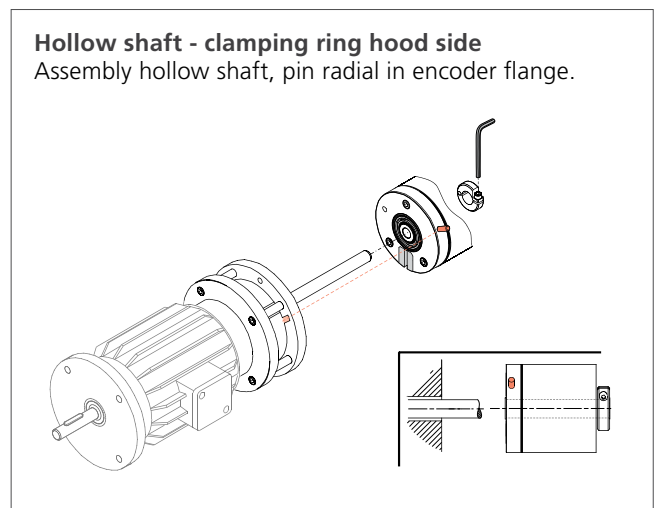
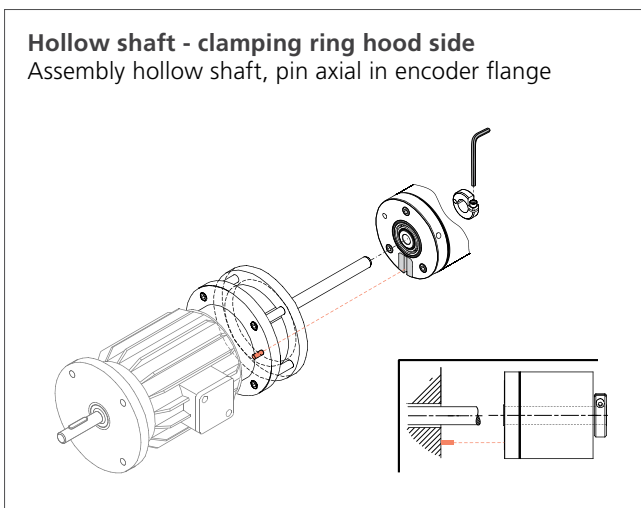
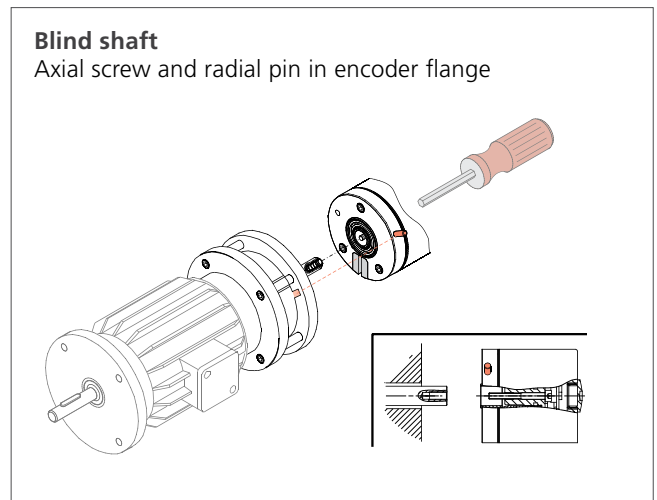
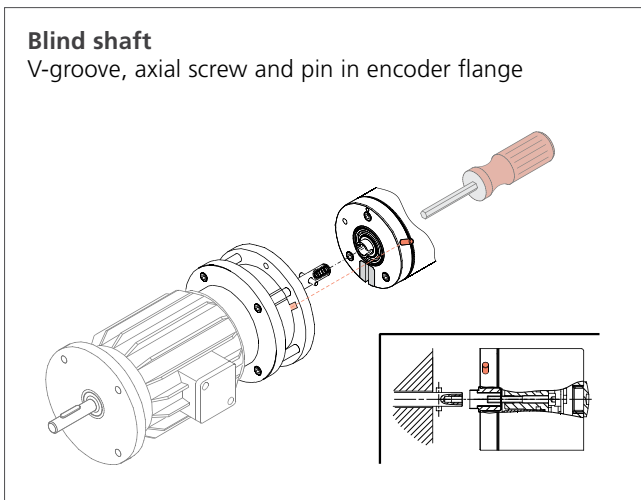
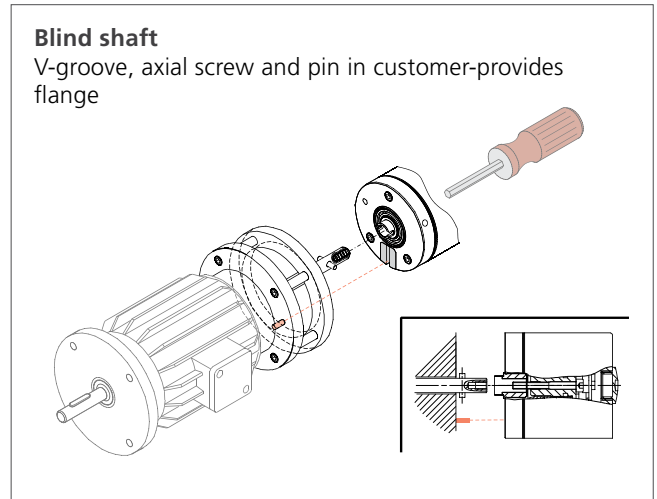
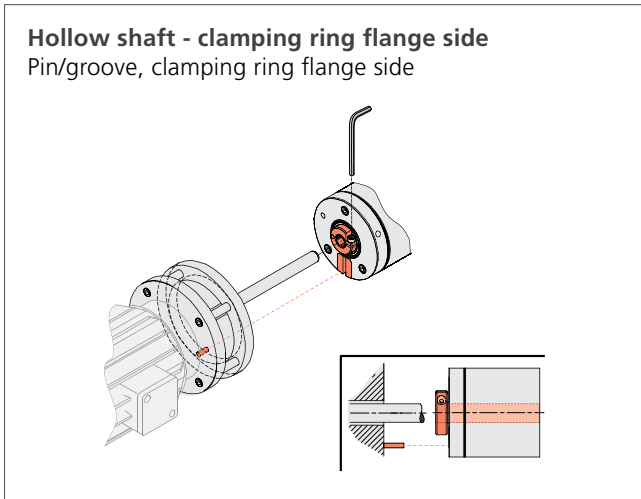


Blind shaft

Axial screw



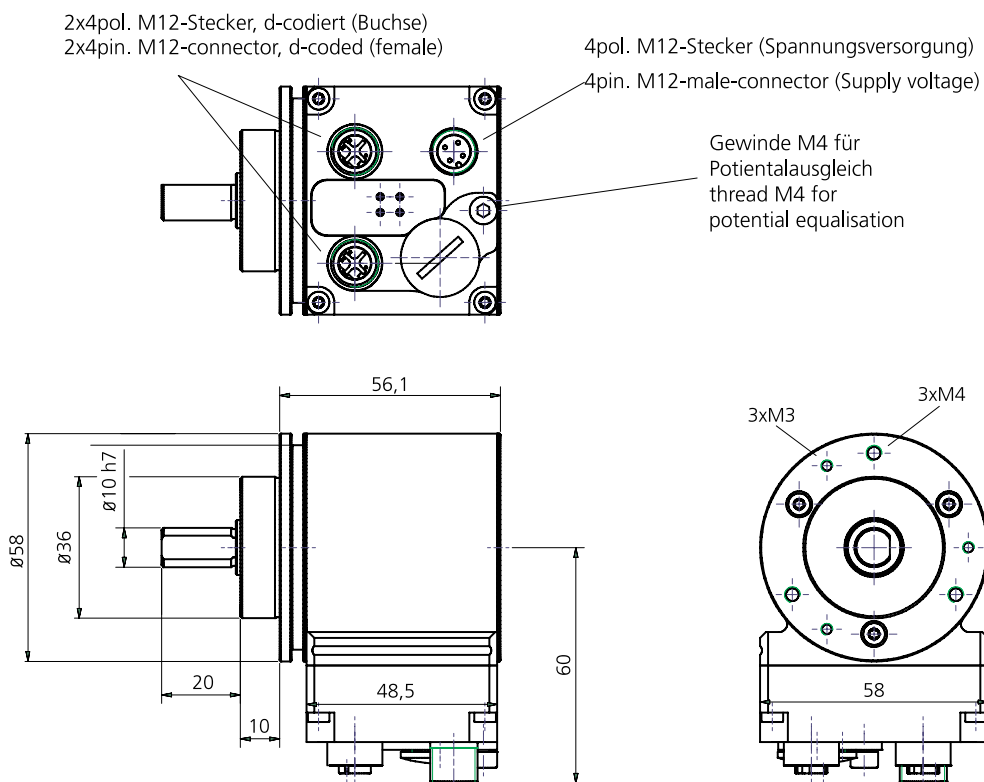
Assembly Examples



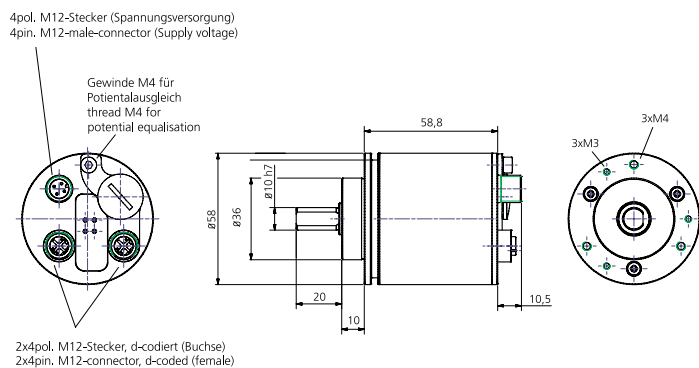
Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at www.tr-electronic.com or on request.

Dimensional Drawings

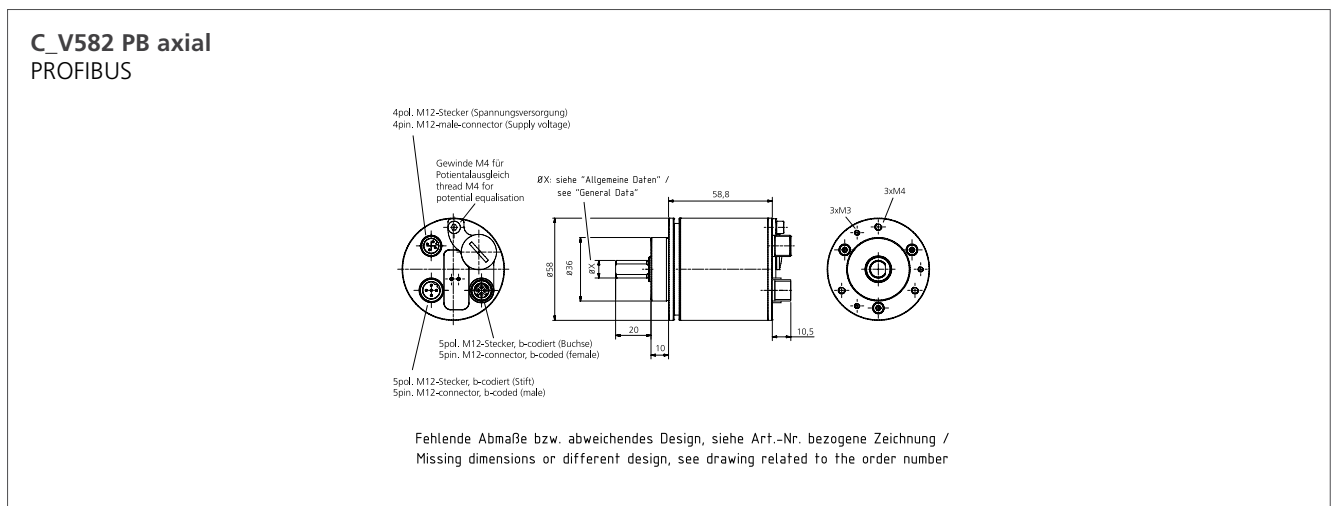
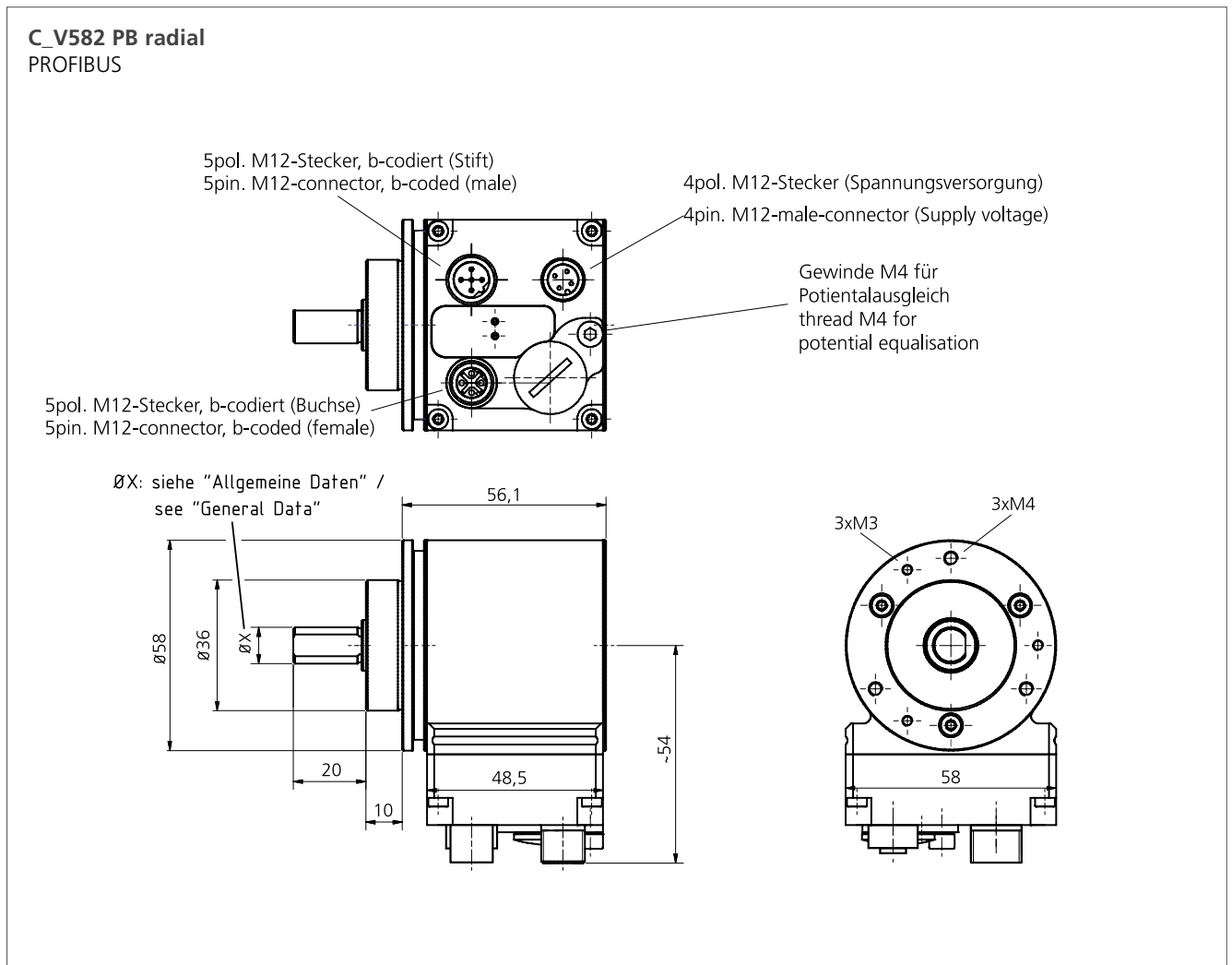
C_V582 Industrial Ethernet radial PROFINET, EtherCAT, Powerlink, Ethernet / IP



C_V582 Industrial Ethernet axial PROFINET, EtherCAT, Powerlink, Ethernet / IP



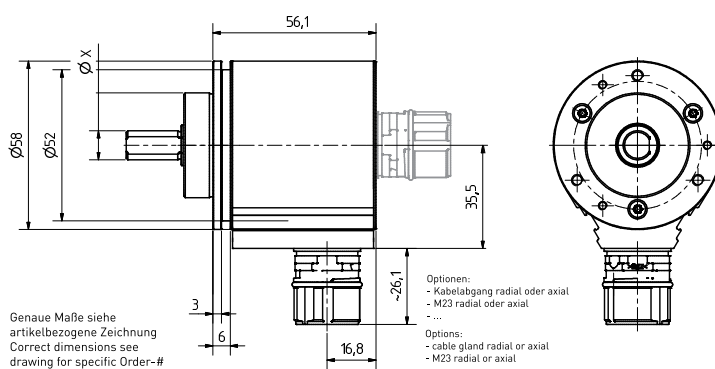
Dimensional Drawings



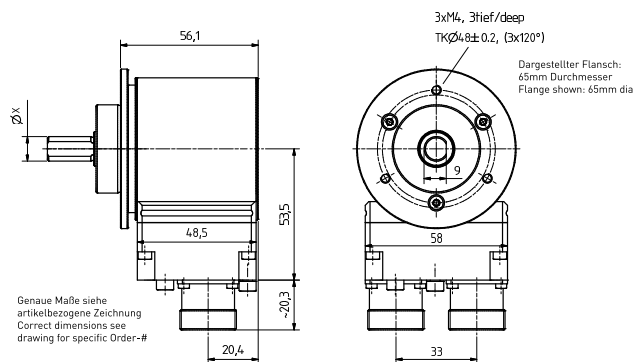
Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at www.tr-electronic.com or on request.

Dimensional Drawings

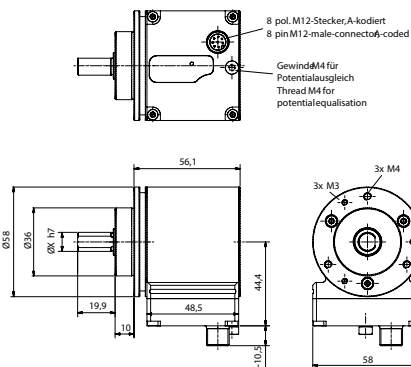
C_V582 SSI SSI



C_V582 IBS Interbus



C_V582 IO-Link, DRIVE-CLiQ



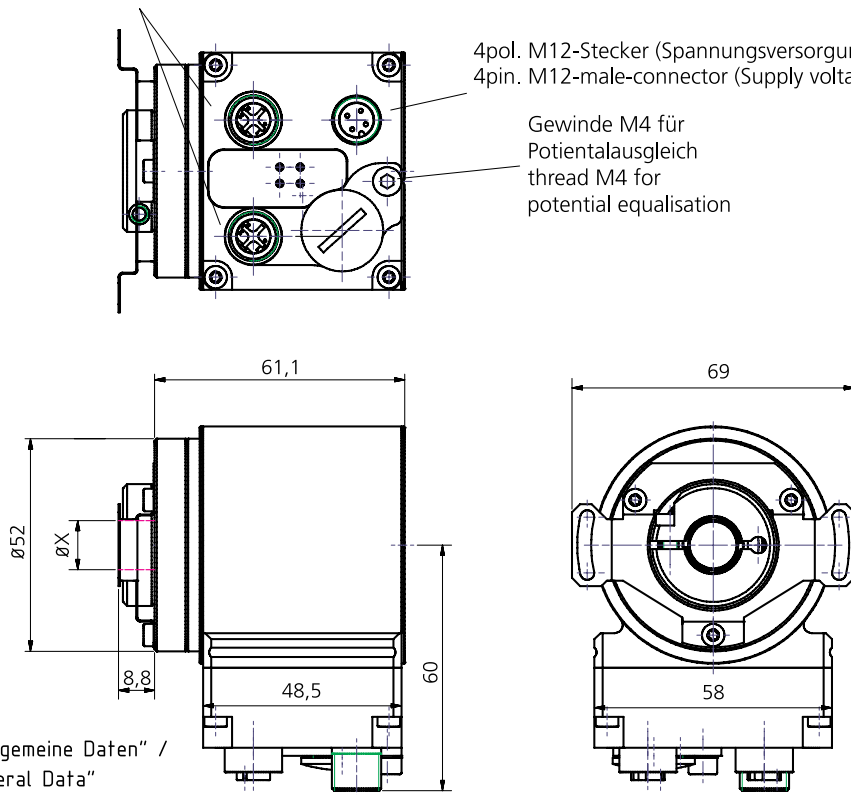
Dimensional Drawings

C_S582 Industrial Ethernet radial PROFINET, EtherCAT, Powerlink, Ethernet / IP

2x4pol. M12-Stecker, d-codiert (Buchse)
2x4pin. M12-connector, d-coded (female)

4pol. M12-Stecker (Spannungsversorgung)
4pin. M12-male-connector (Supply voltage)

Gewinde M4 für
Potentialausgleich
thread M4 for
potential equalisation

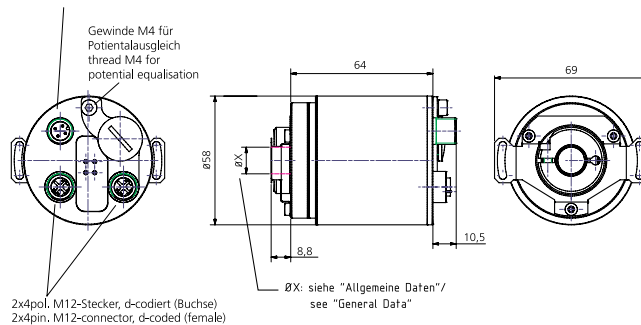


ØX: siehe "Allgemeine Daten" /
see "General Data"

C_S582 Industrial Ethernet axial PROFINET, EtherCAT, Powerlink, Ethernet / IP

4pol. M12-Stecker (Spannungsversorgung)
4pin. M12-male-connector (Supply voltage)

Gewinde M4 für
Potentialausgleich
thread M4 for
potential equalisation

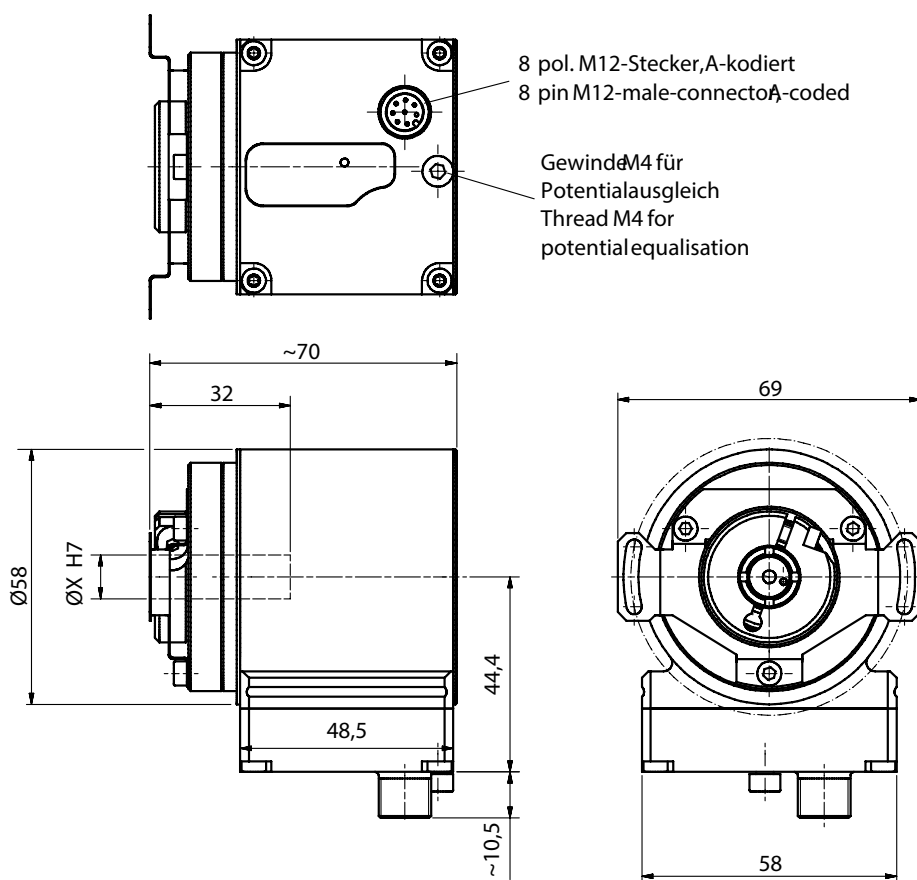


2x4pol. M12-Stecker, d-codiert (Buchse)
2x4pin. M12-connector, d-coded (female)

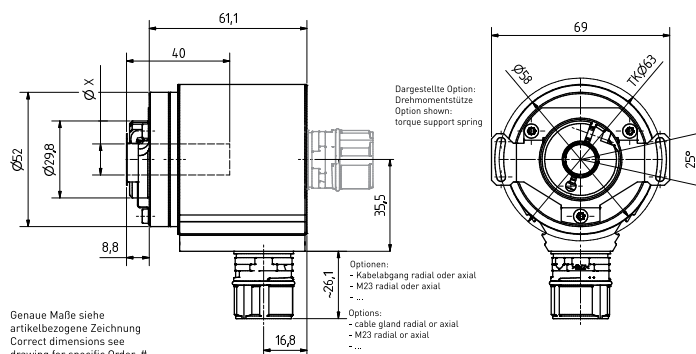
ØX: siehe "Allgemeine Daten" /
see "General Data"

Dimensional Drawings

C_S582
IO-Link, DRIVE-CLiQ



C_S582 SSI
SSI



Dimensional Drawings

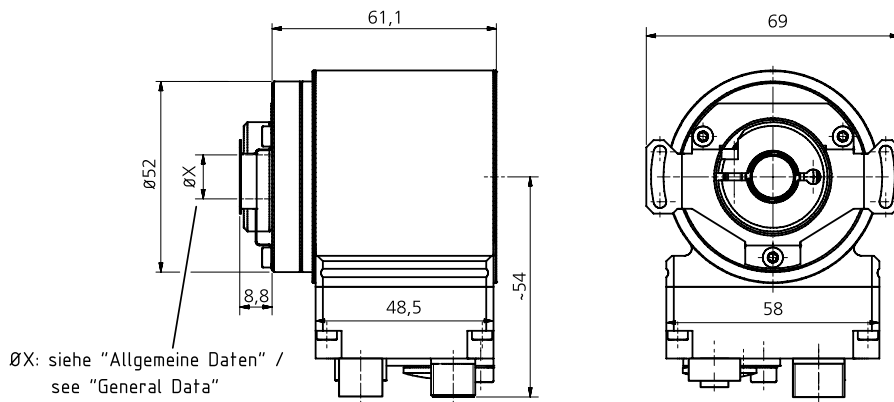
C_S582 PB radial PROFIBUS

5pol. M12-Stecker, b-codiert (Stift)
5pin. M12-connector, b-coded (male)

4pol. M12-Stecker (Spannungsversorgung)
4pin. M12-male-connector (Supply voltage)

Gewinde M4 für
Potentialausgleich
thread M4 for
potential equalisation

5pol. M12-Stecker, b-codiert (Buchse)
5pin. M12-connector, b-coded (female)



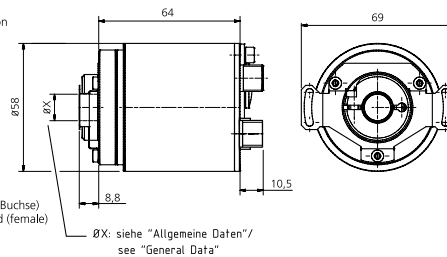
C_S582 PB axial PROFIBUS

4pol. M12-Stecker (Spannungsversorgung)
4pin. M12-male-connector (Supply voltage)

Gewinde M4 für
Potentialausgleich
thread M4 for
potential equalisation

5pol. M12-Stecker, b-codiert (Buchse)
5pin. M12-connector, b-coded (female)

5pol. M12-Stecker, b-codiert (Stift)
5pin. M12-connector, b-coded (male)



Dimensional Drawings

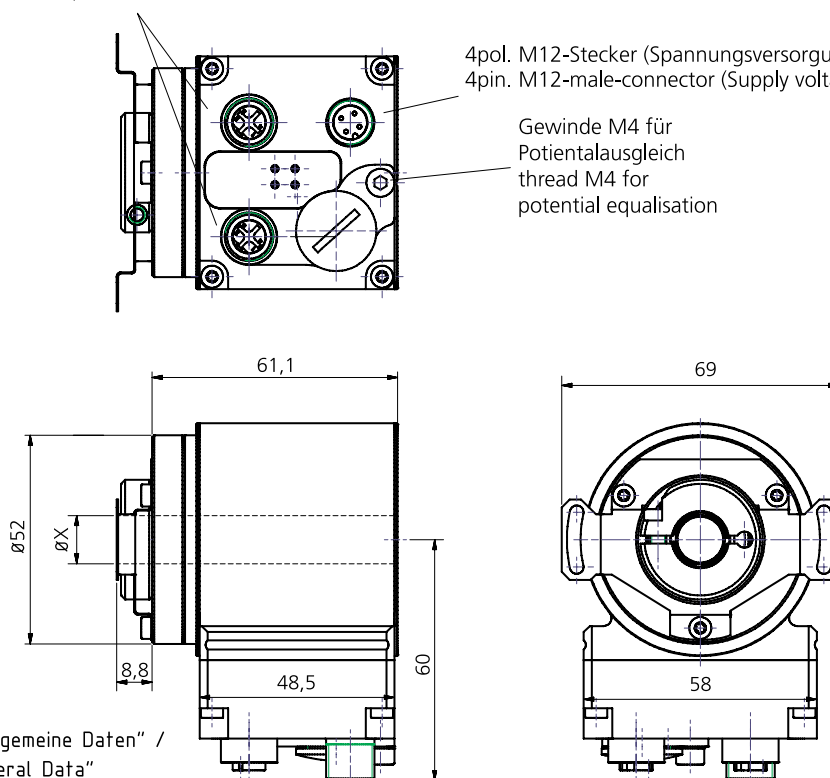
C_H582 Industrial Ethernet

PROFINET, EtherCAT, Powerlink, Ethernet / IP

2x4pol. M12-Stecker, d-codiert (Buchse)
2x4pin. M12-connector, d-coded (female)

4pol. M12-Stecker (Spannungsversorgung)
4pin. M12-male-connector (Supply voltage)

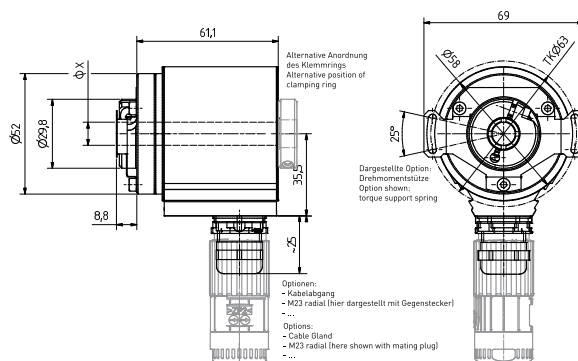
Gewinde M4 für
Potentialausgleich
thread M4 for
potential equalisation



ØX: siehe "Allgemeine Daten" /
see "General Data"

C_H582 SSI

SSI

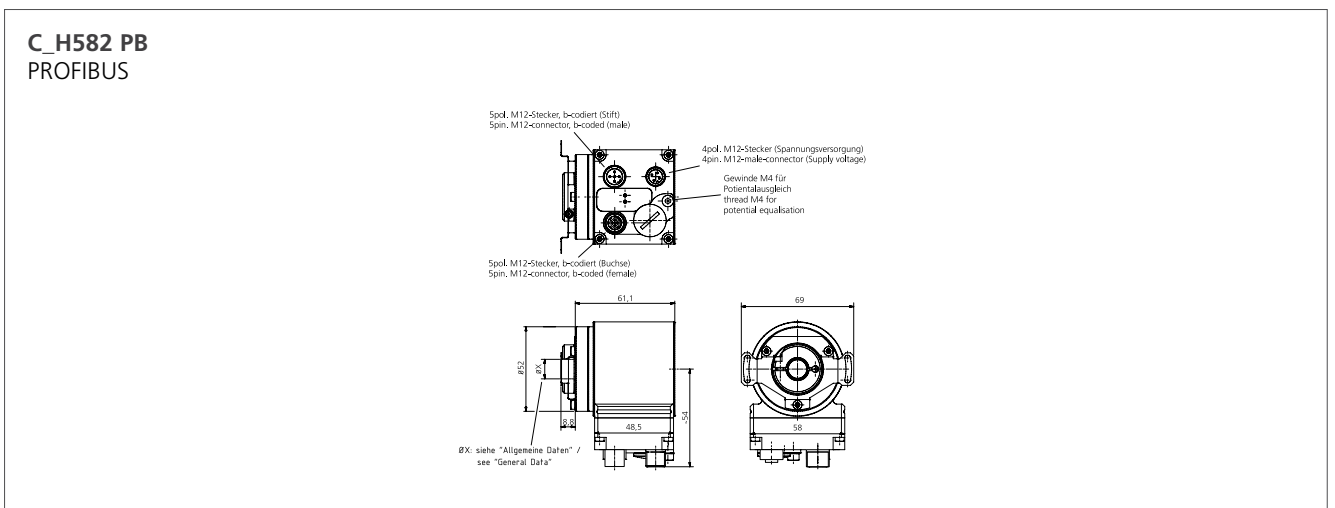
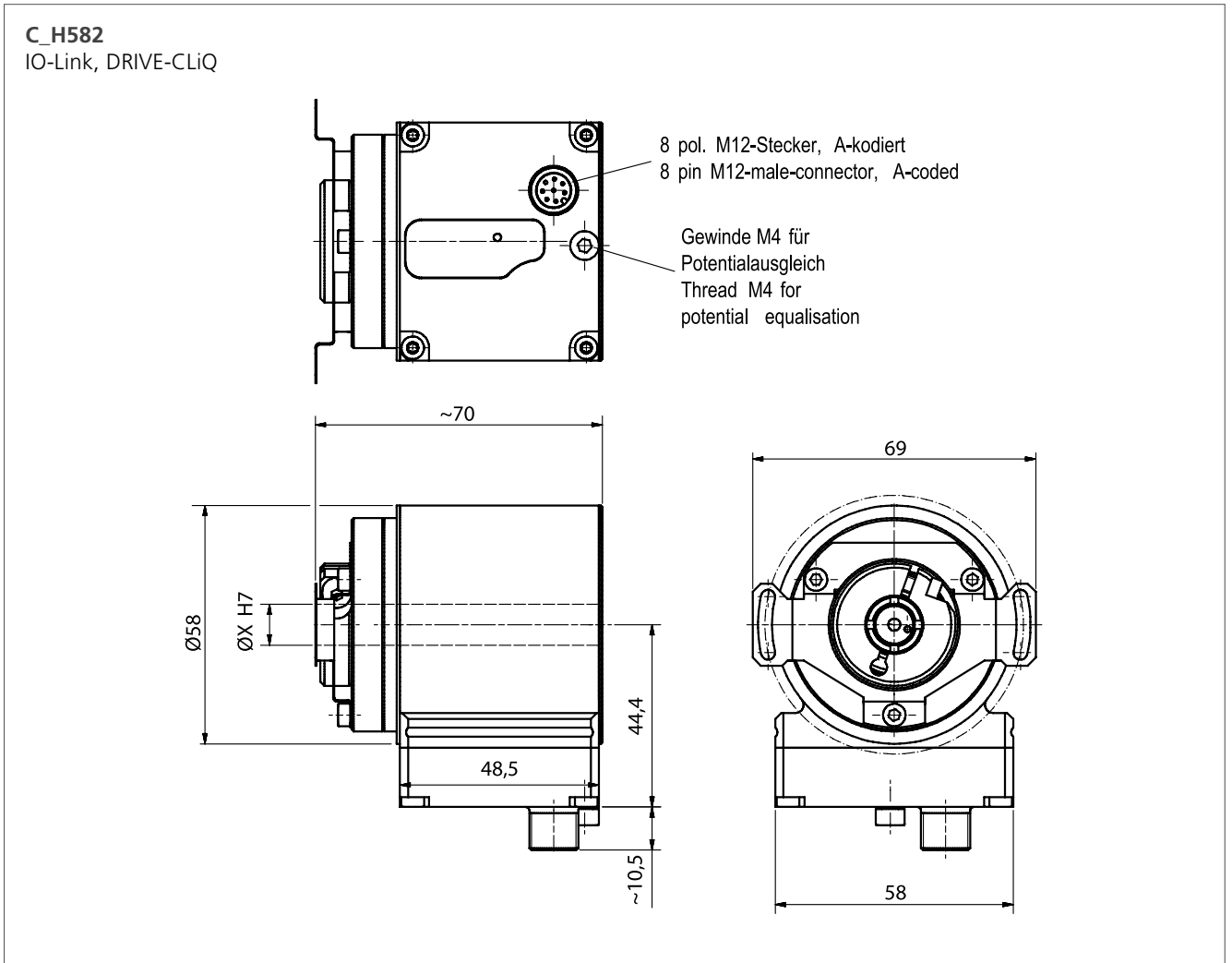


Alternative Anordnung
des Klemmrings
Alternative position of
clamping ring

Dargestellte Option:
Drehmomentsülze
Option shown:
torque support spring

Optionen:
- Kabelabgang
- M23 radial (hier dargestellt mit Gegenstecker)
- ...
Optionen:
- Cable Gland
- M23 radial (here shown with mating plug)
- ...

Dimensional Drawings



Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at www.tr-electronic.com or on request.

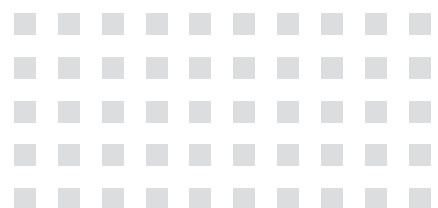


TR-Electronic GmbH

Eglishalde 6
D - 78647 Trossingen

Tel. +49 7425 228-0
Fax +49 7425 228-33

info@tr-electronic.de
www.tr-electronic.de



Last update: 10/2019

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Subject to technology and design modifications.

Cover photo background: ©kras99-fotolia.com