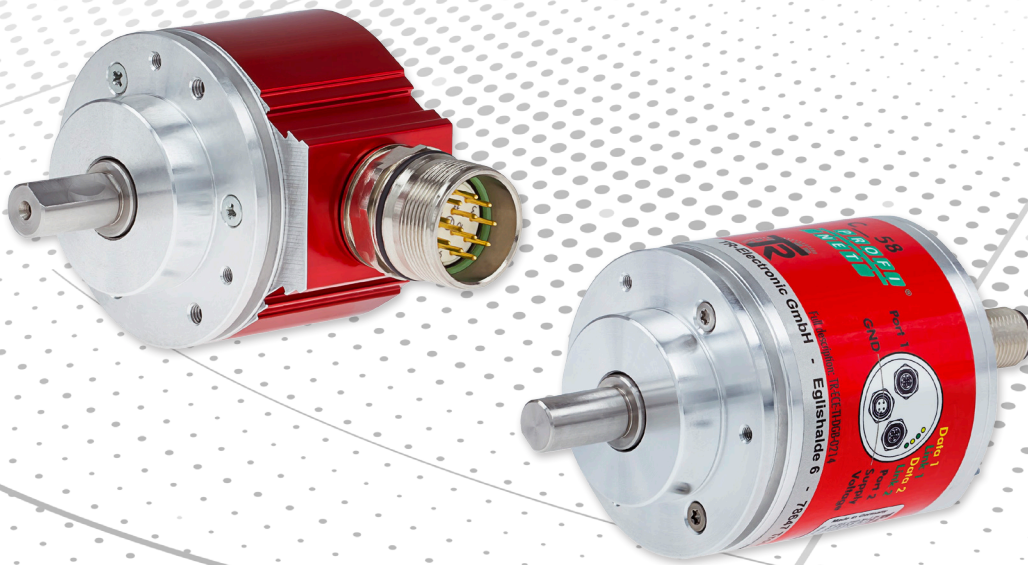
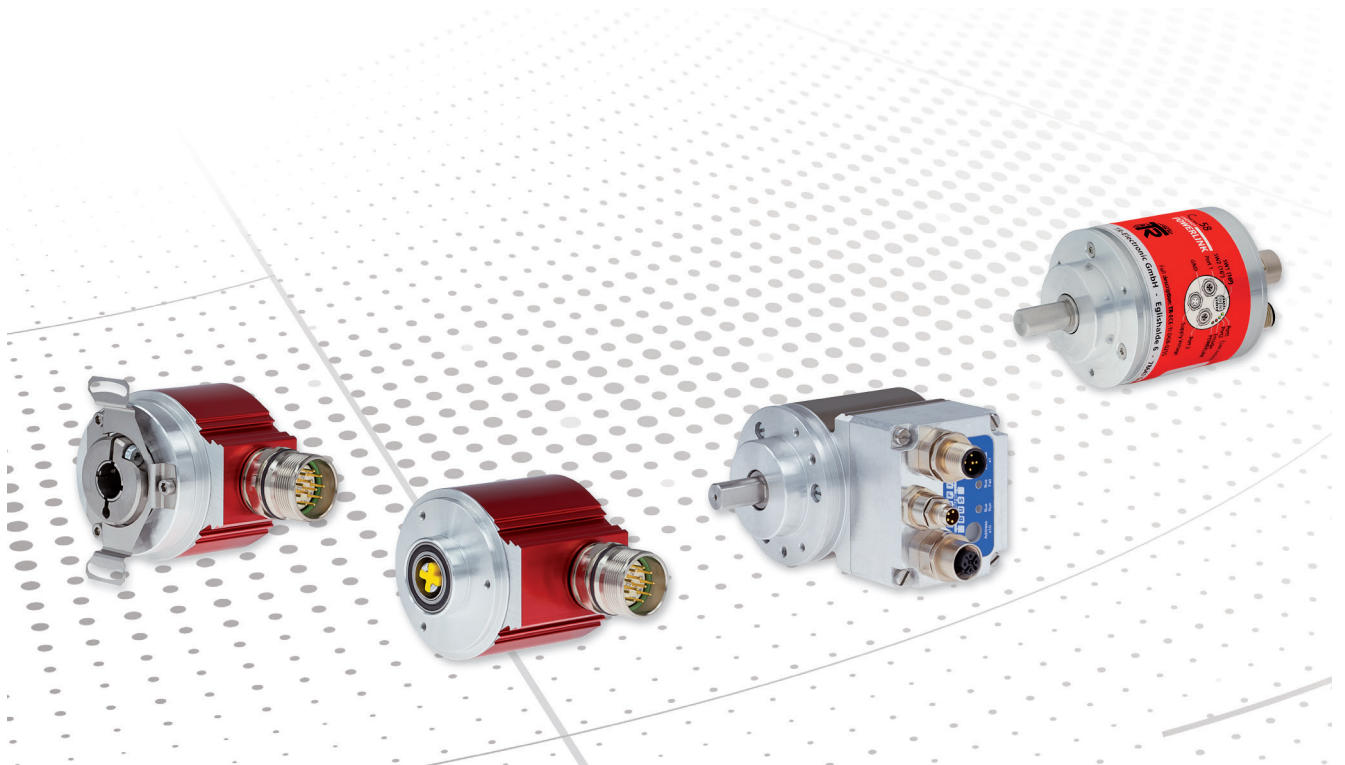


# Absolute Rotary Encoders

## Family C\_\_58



# 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.

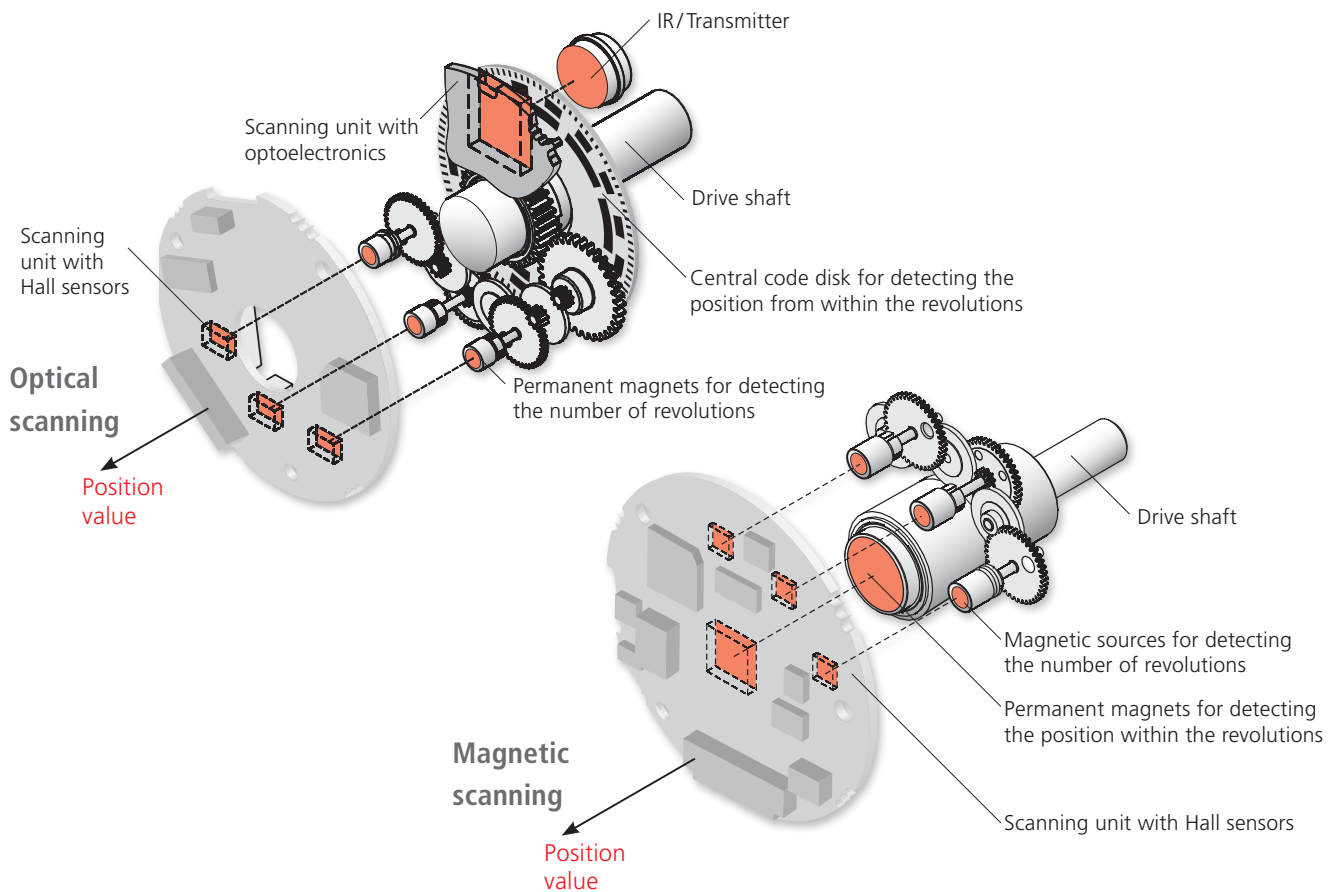
- \_ Industrial standard size 58 mm
- \_ Cost optimized by different resolution ranges
- \_ Compatible with a vast number of control systems
- \_ Shaft-, flange - and assembly versions
- \_ Same mechanics - plenty of interfaces
- \_ Compact Connector System - perfect for machines produced in series
-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

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## 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.

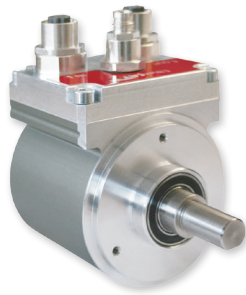
#### **M** Magnetic scanning for price-sensitive applications

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.

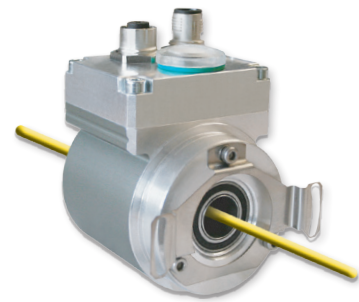
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## Shaft types

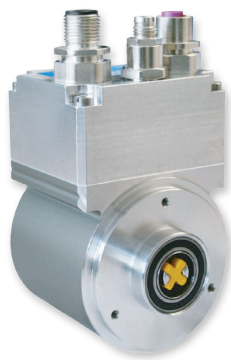
Solid shaft



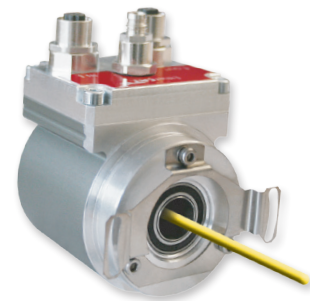
Hollow shaft



Integrated coupling



Blind 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 an sample of the numerous mounting possibilities in the following overview.

Important: not all possible combinations will be shown.
























## Magnet detection (M)

Products	CMV58	CMH58	CMS58
			
<b>Detection</b>	Magnet detection (M)	Magnet detection (M)	Magnet detection (M)
<b>Single / Multi</b>	(M) Multi (S) single	(M) Multi (S) single	(M) Multi (S) single
<b>Supply</b>	11...27 VDC (12...30 VDC)*	11...27 VDC (12...30 VDC)*	11...27 VDC (12...30 VDC)*
<b>Full resolution</b>	$\leq 24$ bit *	$\leq 24$ bit *	$\leq 24$ bit *
<b>Steps per turn</b>	$\leq 4096$ *	$\leq 4096$ *	$\leq 4096$ *
<b>Number of turns</b>	$\leq 4096$ *	$\leq 4096$ *	$\leq 4096$ *
<b>Precision</b>	$\pm 1,0^\circ / \pm 0,5^\circ$ *	$\pm 1,0^\circ / \pm 0,5^\circ$ *	$\pm 1,0^\circ / \pm 0,5^\circ$ *
<b>Shaft diameters available</b>	6...12mm	8, 10, 12mm	8, 10, 12mm
<b>Connectors</b>	Connector axial or radial *	Connector radial	Connector axial or radial *
<b>Ambient temperature</b>	-20...+70 °C	-20...+70 °C	-20...+70 °C
<b>Protection class</b>	IP65	IP54	IP65
<b>ATEX-zone</b>			
<b>Interface</b>	<b>SSI</b>  <b>Analog</b> 	<b>SSI</b>	<b>SSI</b>  <b>Analog</b> 
<b>Option, additional interfaces (on request)</b>			
<b>Weblink</b>	<a href="http://www.tr-electronic.com/s/S006736">www.tr-electronic.com/s/S006736</a>	<a href="http://www.tr-electronic.com/s/S006741">www.tr-electronic.com/s/S006741</a>	<a href="http://www.tr-electronic.com/s/S006742">www.tr-electronic.com/s/S006742</a>
<b>QR-Code</b>			

\* depending on the interface

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

# Magnet detection (M) Optical 15 bit (E)

Products	CMK58	CEV58	CEH58	
				
<b>Detection</b>	Magnet detection (M)	Optical 15 bit (E)	Optical 15 bit (E)	
<b>Single / Multi</b>	(M) Multi (S) single	(M) Multi (S) single	(M) Multi (S) single	
<b>Supply</b>	11...27 VDC (12...30 VDC)*	11...27 VDC	11...27 VDC	
<b>Full resolution</b>	<= 24 bit *	<= 33 bit *	<= 33 bit *	
<b>Steps per turn</b>	<= 4096 *	<= 32768 *	<= 8192 *	
<b>Number of turns</b>	<= 4096 *	<= 256000 *	<= 32768 *	
<b>Precision</b>	± 1,0 ° / ± 0,5 °*	± 1 digit	± 1 digit	
<b>Shaft diameters available</b>		6...12mm	8, 10, 12mm	
<b>Connectors</b>	Connector radial	Cable gland or connector, radial or axial, Fieldbus hood radial *	Cable gland or connector, radial or axial, Fieldbus hood radial *	
<b>Ambient temperature</b>	-20...+70 °C	-20...+70 °C	-20...+70 °C; option: -40...+85 °C	
<b>Protection class</b>	IP65	IP65	IP54	
<b>ATEX-zone</b>				
<b>Interface</b>	<b>SSI</b> <b>Analog</b>	<b>SSI</b>  <b>ASi</b>  <b>Parallel</b> EtherCAT   EtherNet/IP   ETHERNET POWERLINK  <b>CANopen</b> <b>SERCOS</b>   	<b>SSI</b>  <b>Parallel</b>    <b>CANopen</b> EtherCAT 	
<b>Option, additional interfaces (on request)</b>		<b>INC</b>	<b>INC</b>	
<b>Weblink</b>	<a href="http://www.tr-electronic.com/s/S006747">www.tr-electronic.com/s/S006747</a>	<a href="http://www.tr-electronic.com/s/S006773">www.tr-electronic.com/s/S006773</a>	<a href="http://www.tr-electronic.com/s/S006740">www.tr-electronic.com/s/S006740</a>	
<b>QR-Code</b>				

\* depending on the interface

# Optical 15 bit (E)

# Optical 18 bit (O)

CE58	CEK58	COV58	COH58
Optical 15 bit (E)	Optical 15 bit (E)	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 *	<= 33 bit *	<= 36 bit *	<= 36 bit *
<= 32768 *	<= 32768 *	<= 262144 *	<= 262144 *
<= 256000 *	<= 256000 *	<= 262144 *	<= 262144 *
± 1 digit	± 1 digit	± 1 digit	± 1 digit
8, 10, 12mm		6...12mm	8, 10, 12mm
Cable gland or connector, radial or axial, Fieldbus hood radial *	Cable gland or connector, radial or axial, Fieldbus hood radial *	Connector radial	Connector radial
-20...+70 °C; option: -40...+85 °C	-20...+70 °C; option: -40...+85 °C	-20...+70 °C	-20...+70 °C
IP65	IP65	IP65	IP54
<b>INC</b>	<b>INC</b>	<b>INC</b>	<b>INC</b>
<a href="http://www.tr-electronic.com/s/S006743">www.tr-electronic.com/s/S006743</a>	<a href="http://www.tr-electronic.com/s/S006746">www.tr-electronic.com/s/S006746</a>	<a href="http://www.tr-electronic.com/s/S006738">www.tr-electronic.com/s/S006738</a>	<a href="http://www.tr-electronic.com/s/S006739">www.tr-electronic.com/s/S006739</a>

\* depending on the interface












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

# Optical 18 bit (O) Double detection (D)

Products	COS58	COK58	CDV58	
				
<b>Detection</b>	Optical 18 bit (O)	Optical 18 bit (O)	Double detection (D)	
<b>Single / Multi</b>	(M) Multi (S) single	(M) Multi (S) single	(M) Multi	
<b>Supply</b>	11...27 VDC	11...27 VDC	11...27 VDC double	
<b>Full resolution</b>	<= 36 bit *	<= 36 bit *		
<b>Steps per turn</b>	<= 262144 *	<= 262144 *	<= 262144 *	
<b>Number of turns</b>	<= 262144 *	<= 262144 *	<= 256000 *	
<b>Precision</b>	± 1 digit	± 1 digit	± 1 digit	
<b>Shaft diameters available</b>	8, 10, 12mm		6...12mm	
<b>Connectors</b>	Connector radial	Connector radial	Connector radial	
<b>Ambient temperature</b>	-20...+70 °C	-20...+70 °C	-20...+70 °C	
<b>Protection class</b>	IP65	IP65	IP65	
<b>ATEX-zone</b>				
<b>Interface</b>	      	     	        	
<b>Option, additional interfaces (on request)</b>	<b>INC</b>	<b>INC</b>	<b>INC</b>	
<b>Weblink</b>	<a href="http://www.tr-electronic.com/s/S006744">www.tr-electronic.com/s/S006744</a>	<a href="http://www.tr-electronic.com/s/S006745">www.tr-electronic.com/s/S006745</a>	<a href="http://www.tr-electronic.com/s/S006894">www.tr-electronic.com/s/S006894</a>	
<b>QR-Code</b>				

\* depending on the interface

# Double detection (D) ATEX zone 2/22

CDS58	AMV58	AEV58	AE58
			
Double detection (D)	Magnet detection (M)	Optical 15 bit (E)	Optical 15 bit (E)
(M) Multi	(M) Multi (S) single	(M) Multi (S) single	(M) Multi (S) single
11...27 VDC double	11...27 VDC (12...30 VDC)*	11...27 VDC	11...27 VDC
	<= 24 bit *	<= 33 bit *	<= 33 bit *
<= 262144 *	<= 4096 *	<= 32768 *	<= 32768 *
<= 256000 *	<= 4096 *	<= 256000 *	<= 256000 *
± 1 digit	± 1,0 ° / ± 0,5 °*	± 1 digit	± 1 digit
8, 10, 12mm	6...12mm	6...12mm	8, 10, 12mm
Connector radial	Connector axial or radial *	Cable gland or connector, radial or axial, Fieldbus hood radial *	Connector axial or radial *
-20...+70 °C	-20...+70 °C	-20...+70 °C	-20...+70 °C
IP65	IP65	IP65	IP65
	2/22	2/22	2/22
<b>SSI</b>  <b>Parallel</b>    <b>CANopen</b>  	<b>Analog</b>	<b>SSI</b> <b>Analog</b>	<b>SSI</b> <b>Analog</b>
<b>INC</b>			
<a href="http://www.tr-electronic.com/s/S006895">www.tr-electronic.com/s/S006895</a>	<a href="http://www.tr-electronic.com/s/S008452">www.tr-electronic.com/s/S008452</a>	<a href="http://www.tr-electronic.com/s/S007163">www.tr-electronic.com/s/S007163</a>	<a href="http://www.tr-electronic.com/s/S007164">www.tr-electronic.com/s/S007164</a>
			

\* 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
<b>CMV58-SSI (M) Magnet detection, solid shaft, SSI</b>						
CMV58M-00002	4096	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	M23, 12 pin	Preset V/R
<b>CMV58-A (M) Magnet detection, solid shaft, analogue</b>						
CMV58M-00044	4096	256	6GL/10 ZB50	Radial	M23, 12 pin	4...20 mA
CMV58M-00055	4096	256	10FL/19,5 ZB36 3xM3+3xM4	Radial	M23, 12 pin	0...10V
CMV58S-00011	4096	1	10FL/19,5 ZB36 3xM3+3xM4	Radial	M23, 12 pin	0...10 V
CMV58S-00013	4096	1	10FL/19,5 ZB36 3xM3+3xM4	Radial	M23, 12 pin	4...20 mA
<b>CMV58-PB (M) Magnet detection, solid shaft, profibus</b>						
CMV58M-00003	4096	4096	10FL/19,5 ZB36 3xM3+3xM4	Axial	2x 5 pin M12	
CMV58M-00005	4096	4096	10FL/19,5 ZB36 3xM3+3xM4	Axial	2x 5 pin M12	
CMV58S-00001	4096	1	10FL/19,5 ZB36	Axial	2x 5 pin M12 1x 4 pin M8	
<b>CMV58-CO (M) Magnet detection, solid shaft, CANopen</b>						
CMV58M-00017	2048	4096	10FL/19,5 ZB36	Axial	2x 5pin M12	Us via bus
CMV58S-00005	1024	1	6GL/10 ZB50	Axial	2x 5 pin M12	
<b>CMH58-SSI (M) Magnet detection, hollow shaft, SSI</b>						
CMH58M-00005	4096	4096	12H7 hollow through shaft	Radial	M23, 12 pin	Preset V/R
CMH58S-00002	4096	1	12H7 hollow through shaft	Radial	M23, 12 pin	Preset V/R
<b>CMS58-SSI (M) Magnet detection, blind shaft, SSI</b>						
CMS58M-00004	4096	4096	12H7 blind shaft	Radial	M23, 12 pin	Preset V/R
CMS58S-00005	3600	1	12H7 blind shaft	Radial	M23, 12 pin	Preset V/R
<b>CMS58-A (M) Magnet detection, blind shaft, analogue</b>						
CMS58M-00024	4096	16	12H7 blind shaft	Radial	M23, 12 pin	4...20 mA
CMS58S-00009	4096	1	12H7 blind shaft	Radial	M23, 12 pin	0...10V
<b>CMS58-PB (M) Magnet detection, blind shaft, profibus</b>						
CMS58M-00005	4096	4096	12H7 blind shaft	Axial	2x 5 pin M12 1x 4 pin M8	
CMS58S-00004	4096	1	12H7 blind shaft	Axial	2x 5 pin M12 1x 4 pin M8	

For further product information simply enter the order number in the search field at [www.tr-electronic.de](http://www.tr-electronic.de).

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

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
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**CM558-CO (M) Magnet detection, blind shaft, CANopen**

CM558M-00015	2048	4096	12H7 blind shaft	Axial	2x 5 pin M12	
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**CEV58-SSI (E) Optical 15 bit, solid shaft, SSI**

CEV58M-00051	8192	4096	10FL/19,5 ZB36, 15 mm thick	Radial	M23, 12 pin	
CEV58M-00180	4096	4096	12NUT/25 ZB50	Cable Gland radial	SUBD 25P	
CEV58S-00002	8192	1	10FL/19,5 ZB36	Radial	M23, 12 pin	

**CEV58-PB (E) Optical 15 bit, solid shaft, profibus**

CEV58M-00167	8192	4096	10FL/19,5 ZB36	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
CEV58M-00299	8192	4096	10FL/19,5 ZB36	Radial	2x 5 pin M12 1x 4 pin M8	
CEV58S-00022	8192	1	10FL/19,5 ZB36	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood

**CEV58-CO (E) Optical 15 bit, solid shaft, CANopen**

CEV58M-00433	8192	4096	10FL/19,5 ZB36	Radial	2x 5 pin M12 1x 4 pin M8	
CEV58S-00053	8192	1	10FL/19,5 ZB36	Radial	2XM16X1,5	Fieldbus hood
CEV58S-00123	8192	1	10FL/19,5 ZB36 3xM3+3xM4	Radial	2x 5 pin M12	

**CEV58-DN (E) Optical 15 bit, solid shaft, DeviceNet**

CEV58M-00206	8192	4096	10FL/19,5 ZB36	Radial	2XM16X1,5	Fieldbus hood
CEV58S-00121	4096	1	6GL/10 ZB36 3xM3+3xM4	Radial	2XM16X1,5	Fieldbus hood

**CEV58-PN (E) Optical 15 bit, solid shaft, Profinet**

CEV58M-00379	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	
CEV58M-00441	8192	4096	10FL/19,5 ZB36	Axial	3x 4 pin M12	
CEV58M-00442	8192	4096	10FL/19,5 ZB36/D65	Axial	3x 4 pin M12	
CEV58M-00478	8192	4096	12FL/25 ZB50/D65	Axial	3x 4 pin M12	Flange 65mm
CEV58M-00557	8192	4096	10FL/19,5 ZB36	Axial	1X4P.M12-connector	With reset button
CEV58S-00118	8192	1	10FL/19,5 ZB36	Radial	3x 4 pin M12	

For further product information simply enter the order number in the search field at [www.tr-electronic.de](http://www.tr-electronic.de).

## Suggested Products

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
<b>CEV58-ETC (E) Optical 15 bit, solid shaft, EtherCAT</b>						
CEV58M-00245	8192	4096	10FL/19,5 ZB36 3xM3+3xM4	Radial	3x 4 pin M12	
CEV58M-00466	8192	4096	10FL/19,5 ZB36	Axial	3x 4 pin M12	
CEV58S-00109	8192	1	10FL/19,5 ZB36 3xM3+3xM4	Radial	2x 4 pin M12 1x 4 pin M8	
<b>CEV58-EIP (E) Optical 15 bit, solid shaft, Ethernet/IP</b>						
CEV58M-00456	8192	4096	10FL/19,5 ZB36	Axial	3x 4 pin M12	
<b>CEV58-DQ (E) Optical 15 bit, solid shaft, DRIVECLiQ</b>						
CEV58M-00534	4096	4096	12NUT/25 ZB50	Axial	1X8P.M12-connector	Shaft with groove
<b>CEH58-SSI (E) Optical 15 bit, hollow shaft, SSI</b>						
CEH58M-00107	8192	4096	12H7 hollow through shaft	Radial	M23, 12 pin	
CEH58S-00034	8192	1	12H7 hollow through shaft	Radial	M23, 12 pin	
<b>CEH58-PB (E) Optical 15 bit, hollow shaft, Profibus</b>						
CEH58S-00052	8192	1	12H7 hollow through shaft	Radial	2x 4 pin M12 1x 4 pin M8	
<b>CEH58-DN (E) Optical 15 bit, hollow shaft, DeviceNet</b>						
CEH58S-00016	8192	1	12H7 hollow through shaft	Radial	2XM16X1,5	Fieldbus hood
<b>CEH58-PN (E) Optical 15 bit, hollow shaft, Profinet</b>						
CEH58M-00173	8192	4096	12H7 hollow through shaft	Radial	3x 4 pin M12	
CEH58S-00043	8192	1	12H7 hollow through shaft	Radial	3x 4 pin M12	
<b>CE58-SSI (E) Optical 15 bit, blind shaft, SSI</b>						
CE58M-00015	8192	4096	12H7 blind shaft	Radial	M23, 12 pin	
CE58S-00032	8192	1	10H7 blind shaft	Radial	M23, 12 pin	

For further product information simply enter the order number in the search field at [www.tr-electronic.de](http://www.tr-electronic.de).

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
<b>CES58-PB (E) Optical 15 bit, blind shaft, Profibus</b>						
CE58S-00013	8192	1	12H7 blind shaft	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
<b>CES58-CO (E) Optical 15 bit, blind shaft, CANopen</b>						
CE58M-00001	4096	4096	12H7 blind shaft	Radial	1X8P.M12-connector	
<b>CES58-DN (E) Optical 15 bit, blind shaft, DeviceNet</b>						
CE58M-00039	8192	4096	12H7 blind shaft	Radial	2XM16X1,5	Fieldbus hood
<b>CES58-PN (E) Optical 15 bit, blind shaft, Profinet</b>						
CE58M-00157	8192	4096	12H7 blind shaft	Axial	1X4P.M12-connector	
<b>CES58-ETC (E) Optical 15 bit, blind shaft, EtherCAT</b>						
CE58S-00025	8192	1	10H7 blind shaft	Radial	2x 4 pin M12 1x 4 pin M8	
CE58S-00031	8192	1	12H7 blind shaft	Radial	2x 4 pin M12 1x 4 pin M8	
<b>COV58-SSI (O) Optical 18 bit, solid shaft, SSI</b>						
COV58M-00011	262144	256000	10FL/19,5 ZB36	Radial	M23, 12 pin	
COV58S-00014	524288	1	10FL/19,5 ZB36	Radial	M23, 12 pin	
<b>COV58-PB (O) Optical 18 bit, solid shaft, Profibus</b>						
COV58M-00014	65536	4096	10FL/19,5 ZB36	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
COV58S-00027	262144	1	10FL/19,5 ZB36	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
<b>COV58-CO (O) Optical 18 bit, solid shaft, CANopen</b>						
COV58M-00024	262144	4096	10FL/19,5 ZB36	Radial	2x 5 pin M12 1x 4 pin M8	
COV58S-00031	262144	1	10FL/19,5 ZB36	Radial	2x 5 pin M12 1x 4 pin M8	
<b>COV58-PN (O) Optical 18 bit, solid shaft, Profinet</b>						
COV58M-00017	131072	4096	10FL/19,5 ZB36	Radial	3x 4 pin M12	

For further product information simply enter the order number in the search field at [www.tr-electronic.de](http://www.tr-electronic.de).

# Suggested Products

Order code	Steps per turn	Turns	Shaft / Flange	Connector position	Connector type	Remark
<b>COV58-ETC (O) Optical 18 bit, solid shaft, EtherCAT</b>						
COV58M-00018	262144	4096	10FL/19,5 ZB36	Radial	3x 4 pin M12	
COV58S-00024	262144	1	10FL/19,5 ZB36	Radial	3x 4 pin M12	
<b>COH58-SSI (O) Optical 18 bit, hollow shaft, SSI</b>						
COH58M-00008	131072	4096	12H7 hollow through shaft	Radial	M23, 17 pin	+ SIN/COS
COH58S-00005	131072	1	12H7 hollow through shaft	Radial	M23, 12 pin	
<b>COH58-PB (O) Optical 18 bit, hollow shaft, Profibus</b>						
COH58M-00012	131072	4096	12H7 hollow through shaft	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
COH58S-00010	262144	1	10H7 hollow through shaft	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
<b>COS58-PB (O) Optical 18 bit, blind shaft, Profibus</b>						
COS58M-00004	131072	4096	10H7 blind shaft	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
COS58S-00004	65536	1	12H7 blind shaft	Radial	2XM16X1,5/1XM12X1,5	Fieldbus hood
<b>ATEX AEV58-SSI (E) Optical 15 bit, solid shaft, SSI</b>						
AEV58M-00001	8192	4096	10FL/19,5 ZB36	Radial	M23, 12 pin	ATEX zone 2 / 22
<b>ATEX AES58-SSI (E) Optical 15 bit, blind shaft, SSI</b>						
AES58M-00001	8192	4096	10H7 blind shaft	Radial	M23, 12 pin	ATEX zone 2 / 22

## Further product information

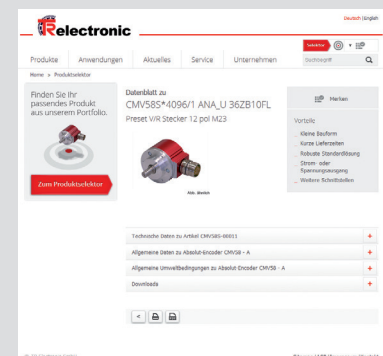
1. Enter order code into ...

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

2. Searchfield (top right) on [www.tr-electronic.com](http://www.tr-electronic.com)



3. Choose desired information

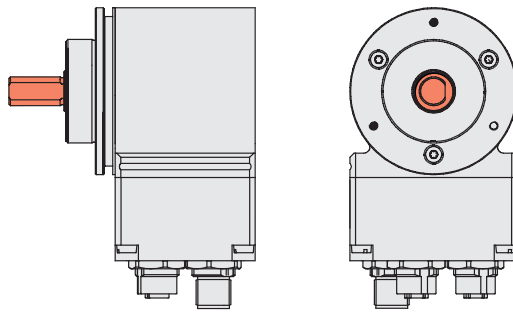


We will help you to select the most suitable products from the complete TR range. Please contact us ([info@tr-electronic.de](mailto:info@tr-electronic.de)).

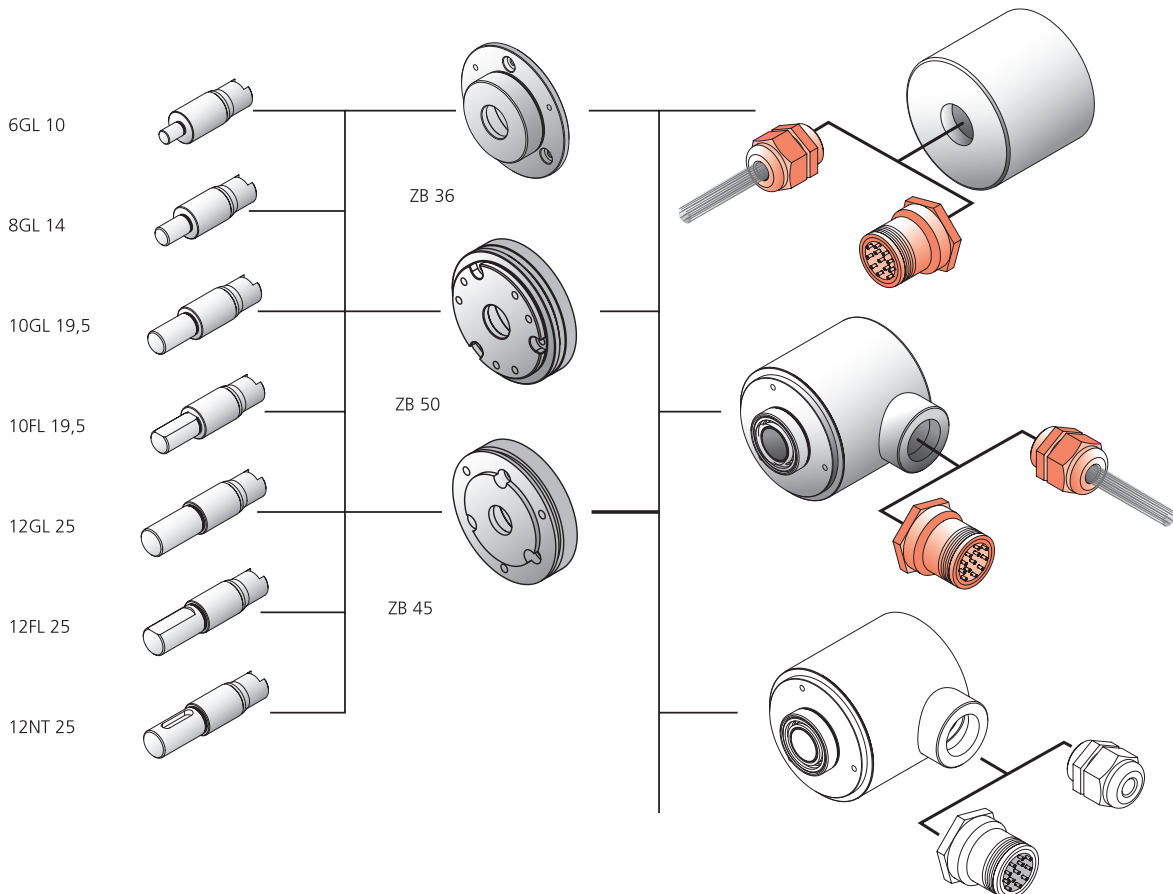


# Shaft Types

## Solid shaft



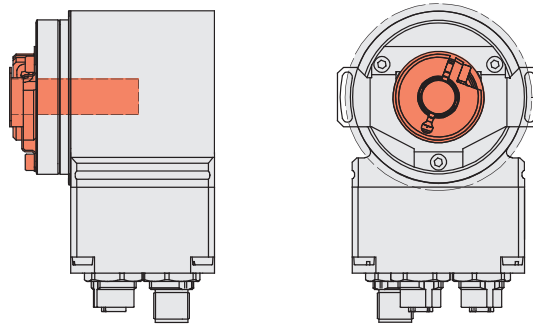
## Standard shafts and flanges



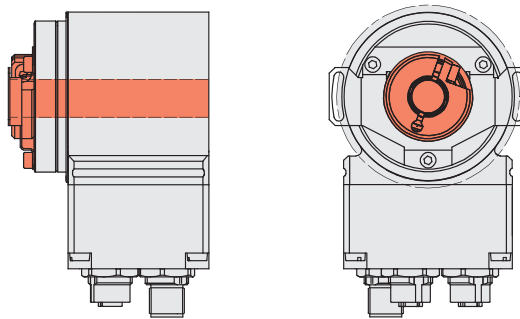
Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

## Shaft Types

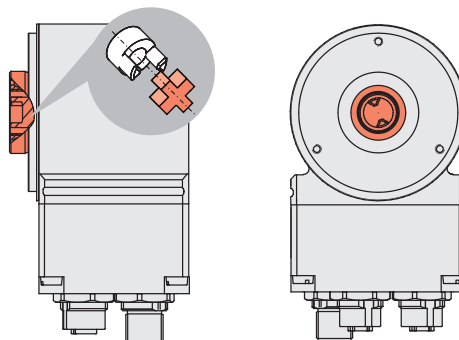
Blind shaft



Hollow shaft

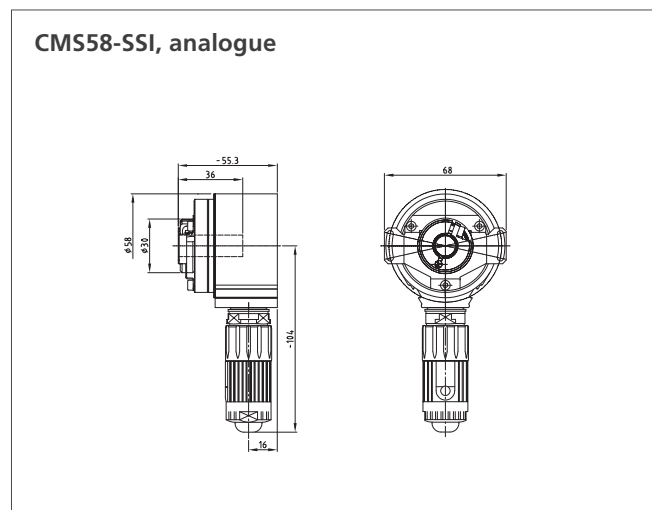
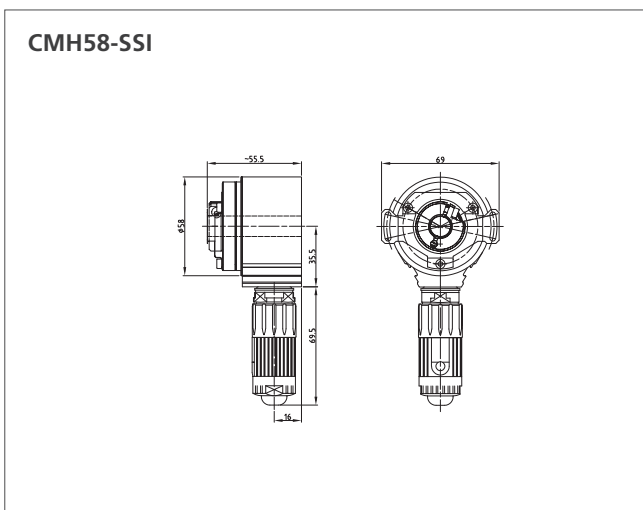
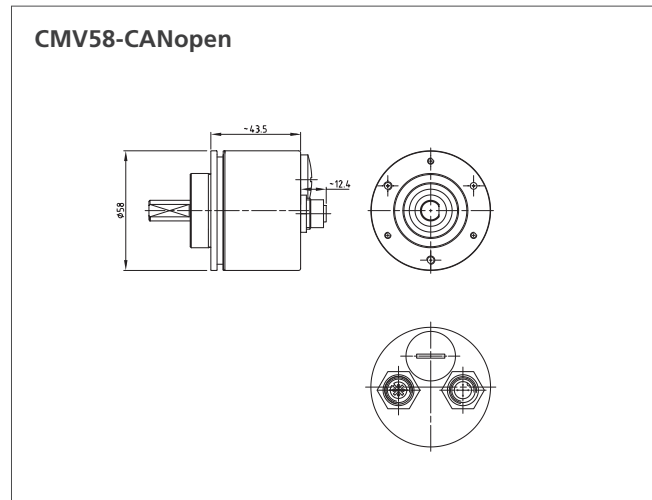
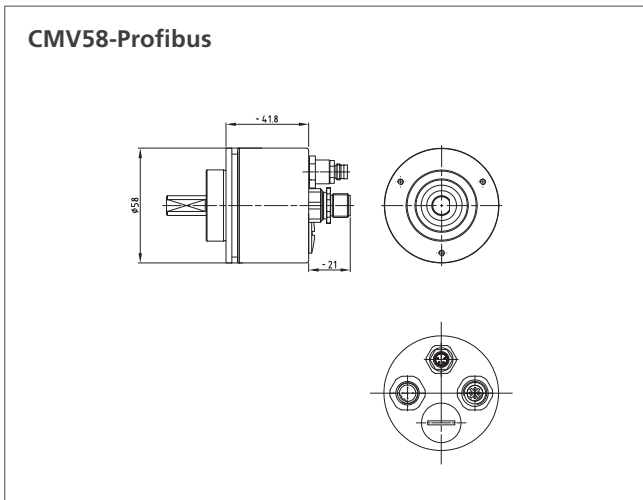
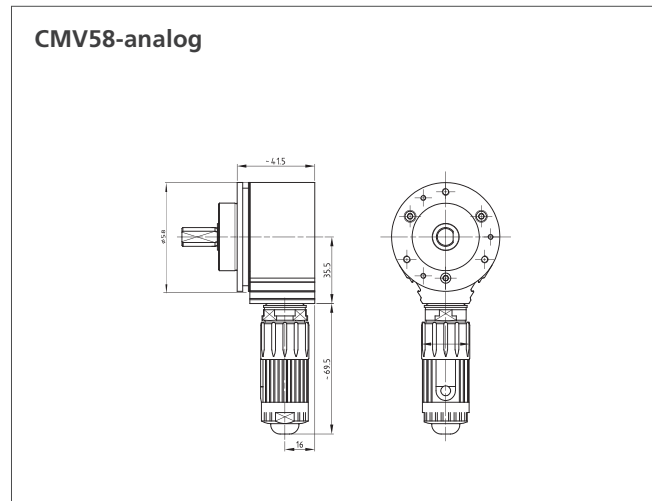
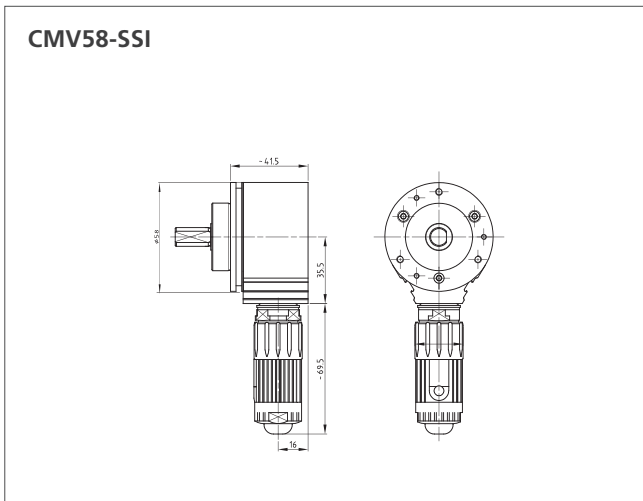


Integrated coupling



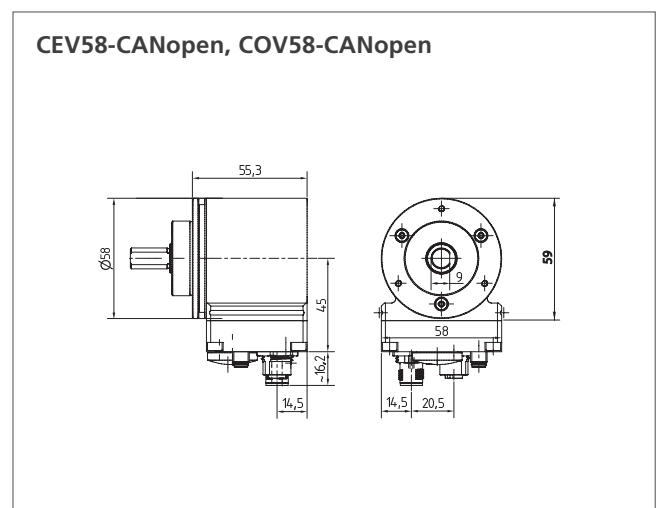
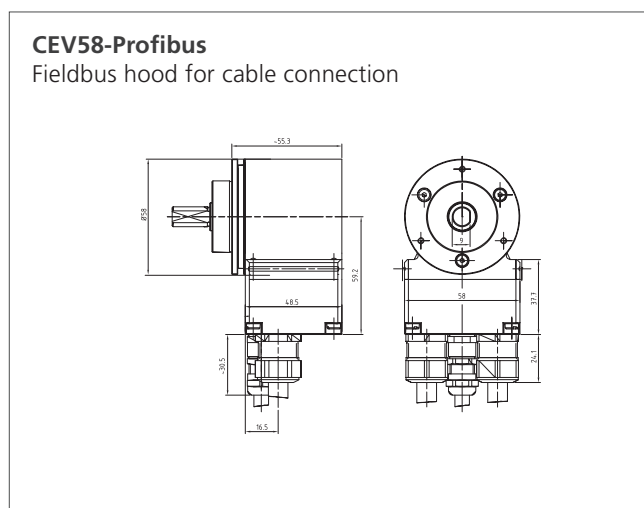
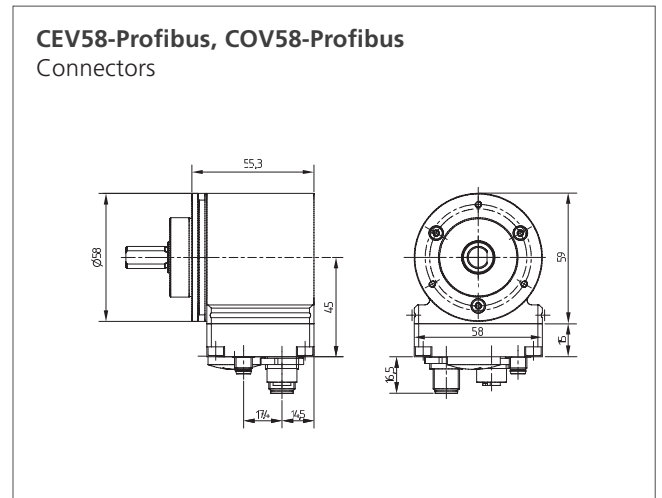
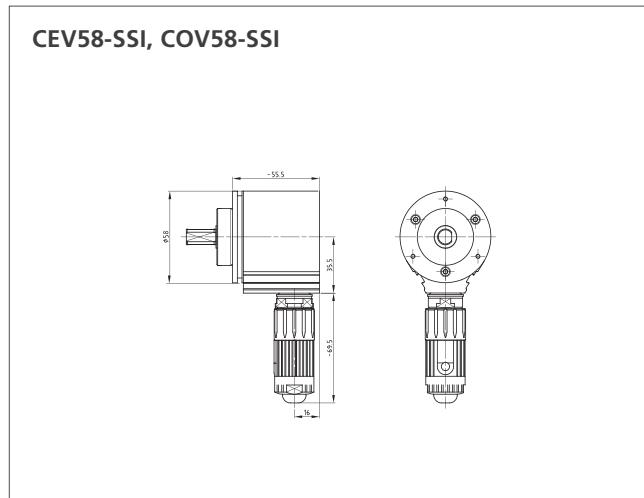
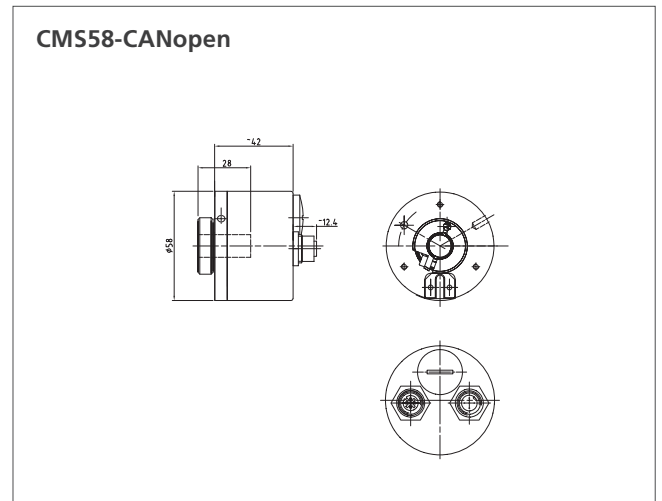
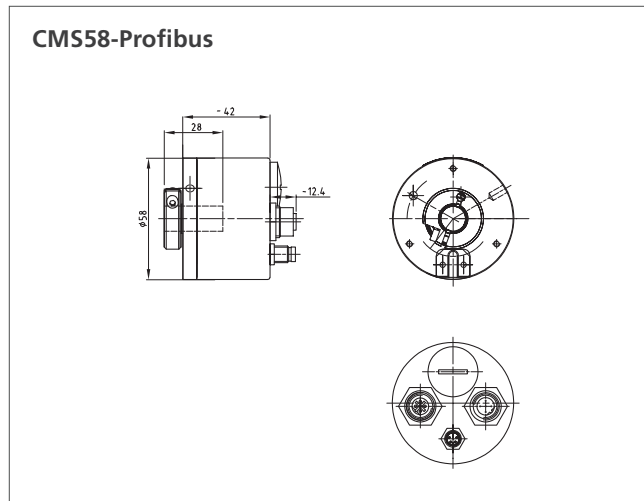
Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

# Dimensional Drawings



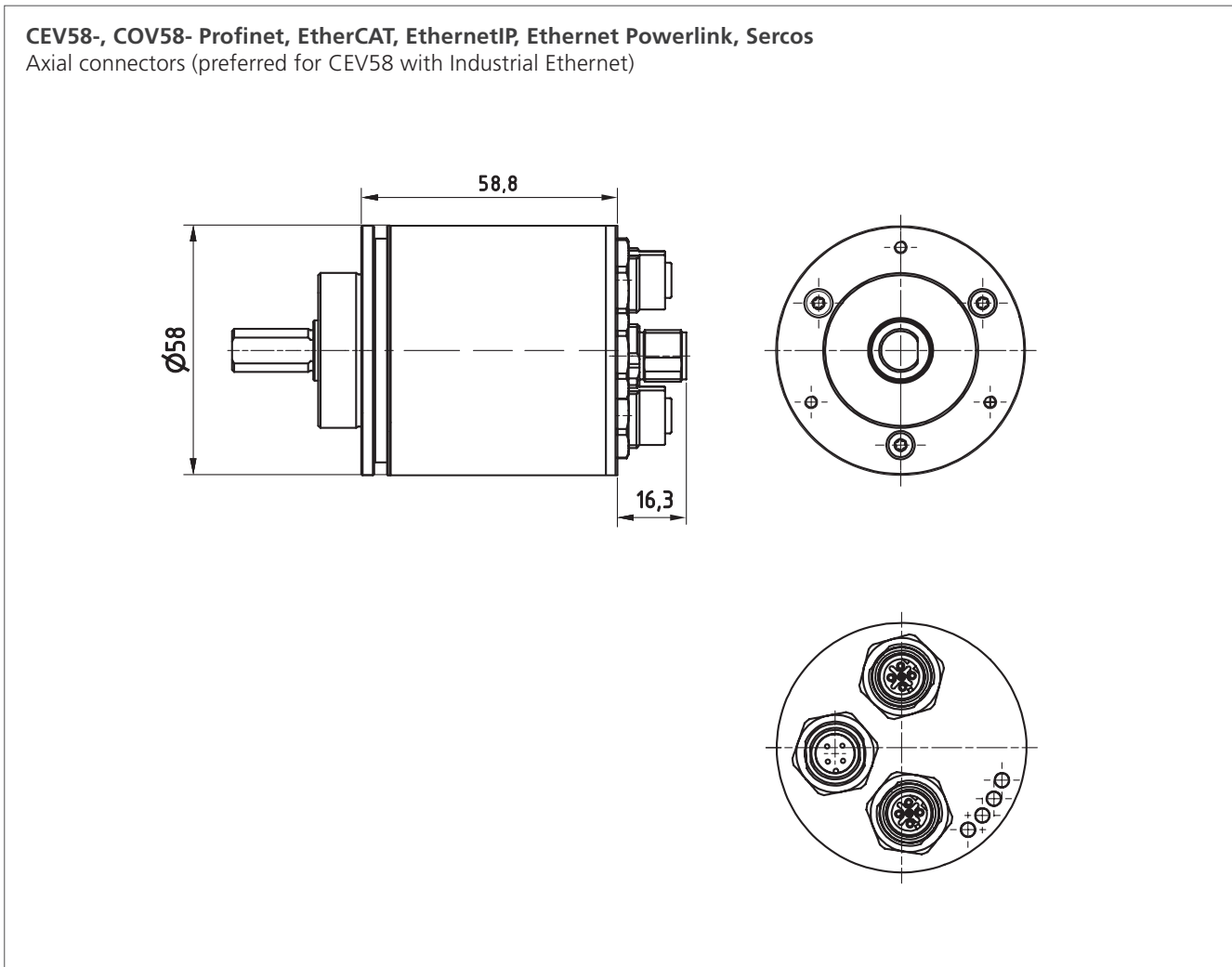
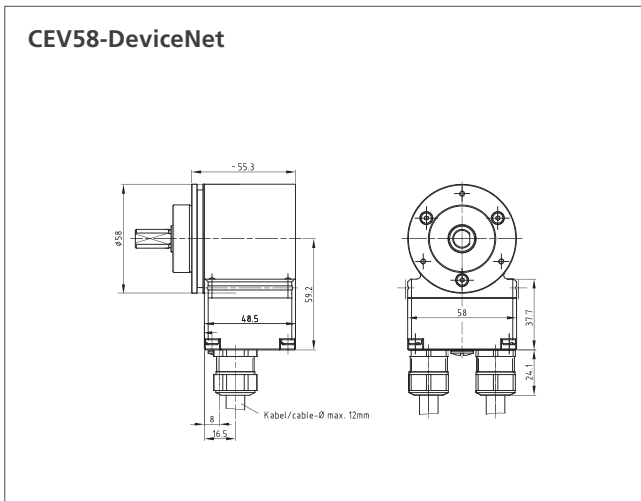
Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

# Dimensional Drawings



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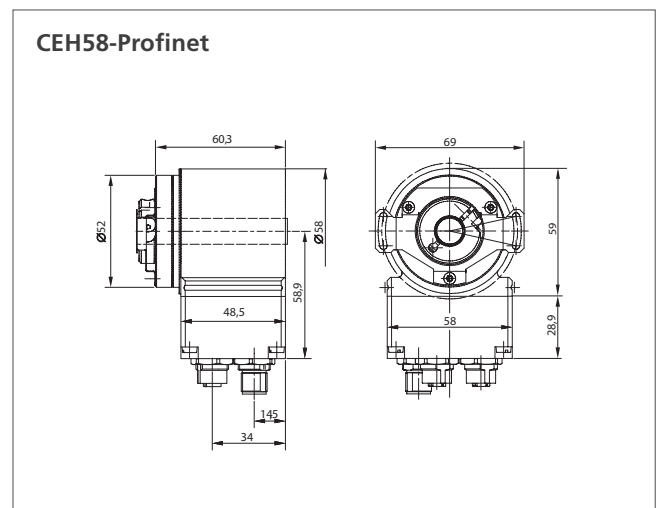
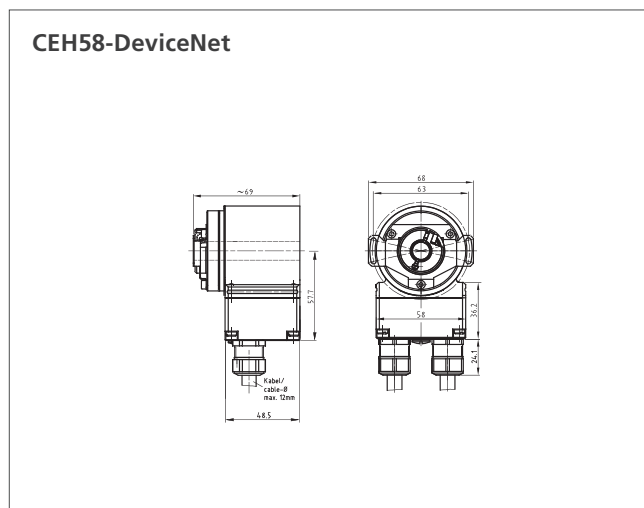
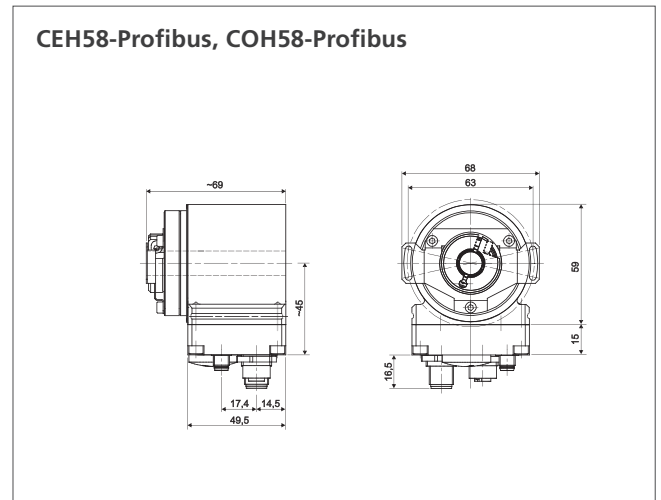
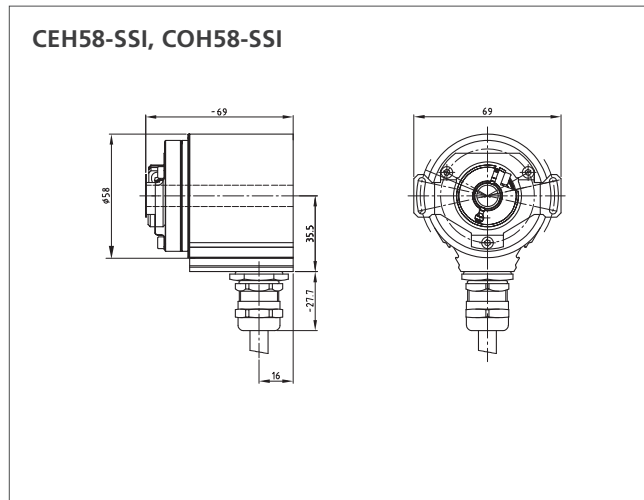
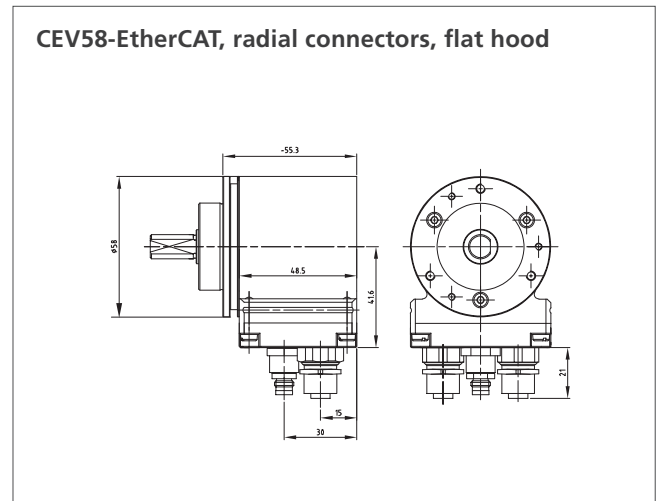
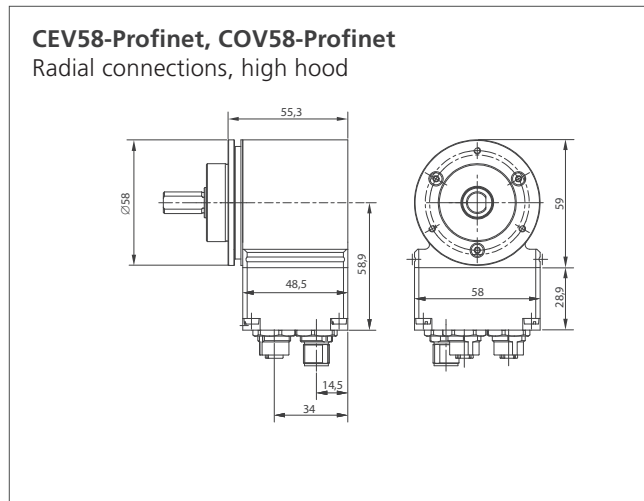
# Dimensional Drawings



Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

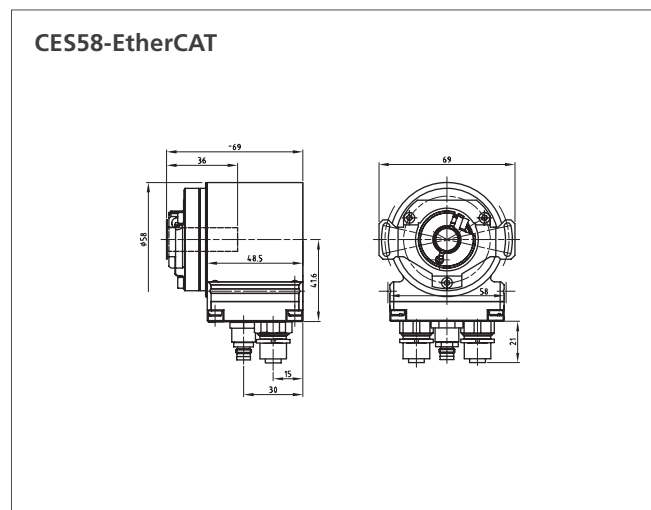
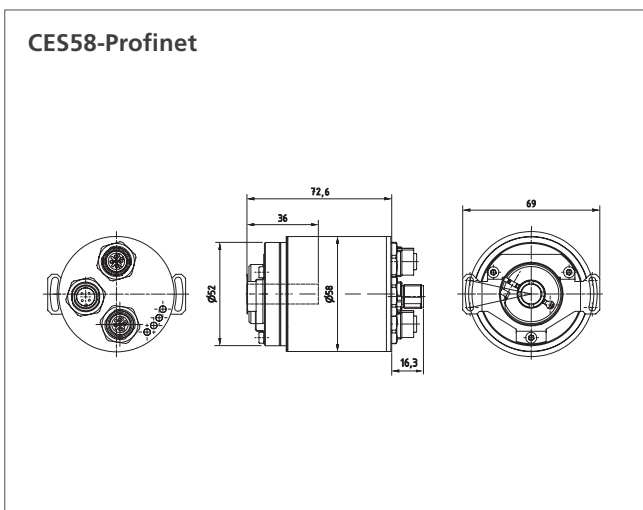
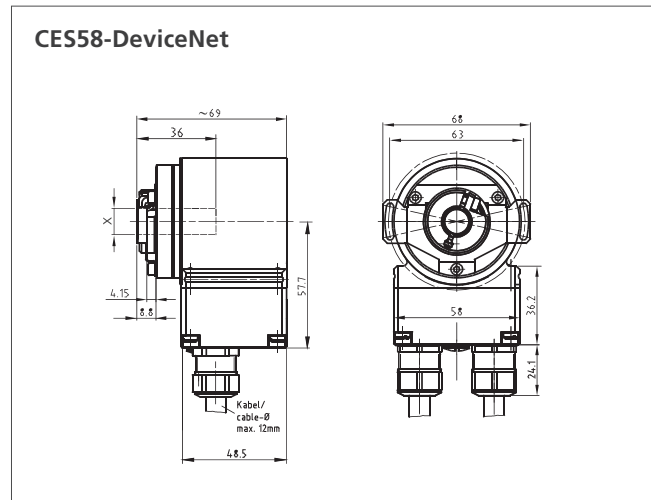
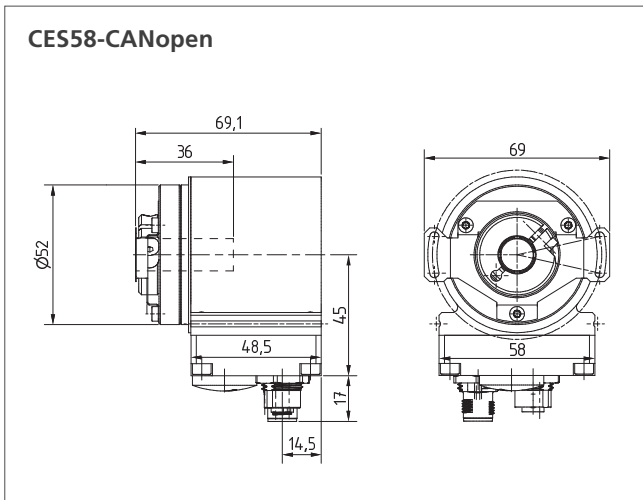
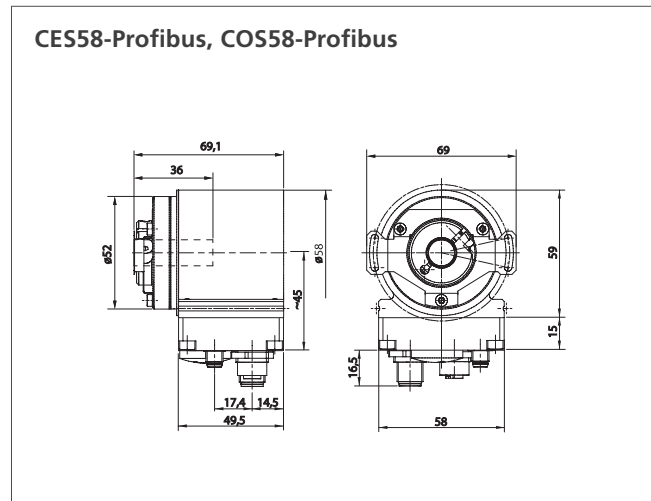
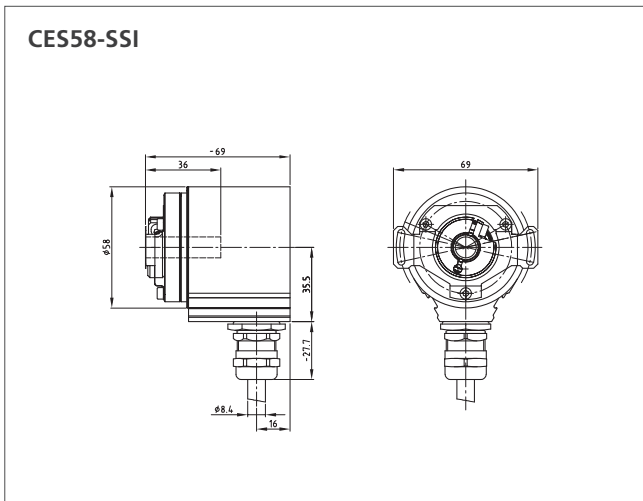


## Dimensional Drawings



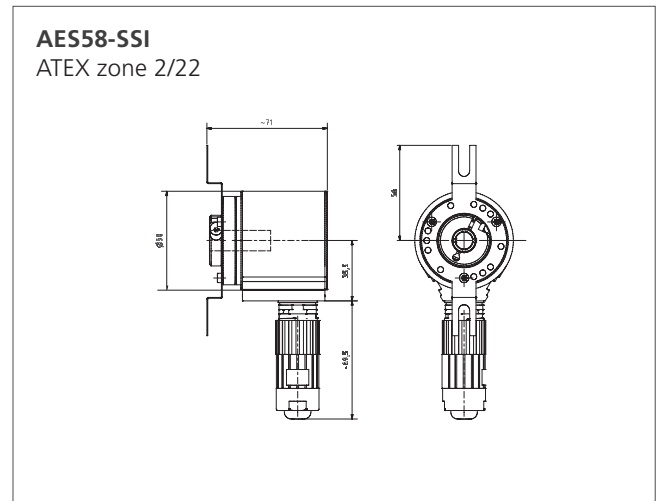
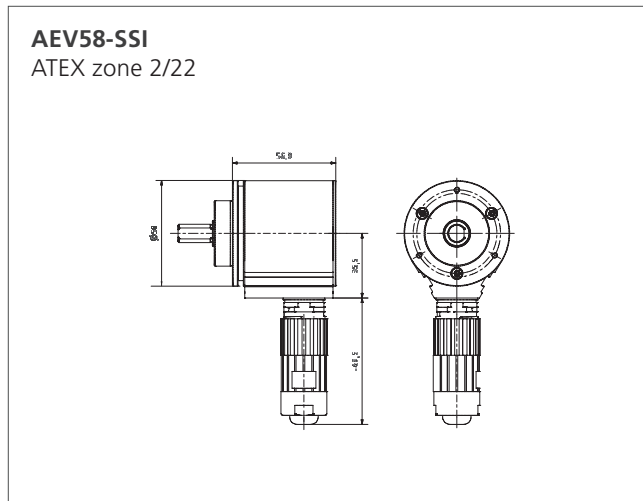
Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

# Dimensional Drawings



Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

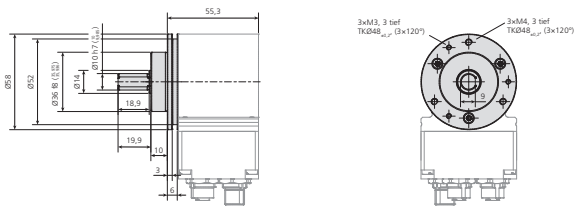
## Dimensional Drawings



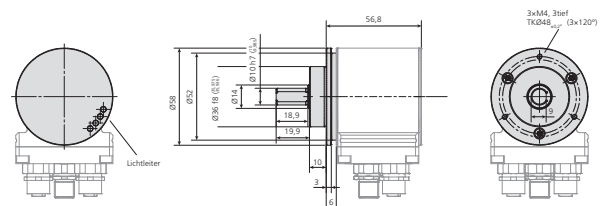
# Flanges

## Standard flange ZB 36 M3/M4

Other drill patterns available

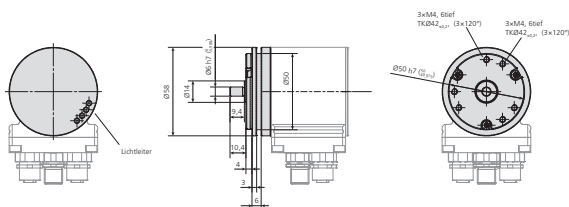


## Standard flange ZB 36 M4

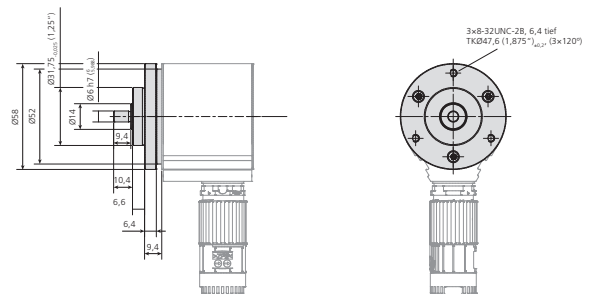


## Standard flange ZB 50

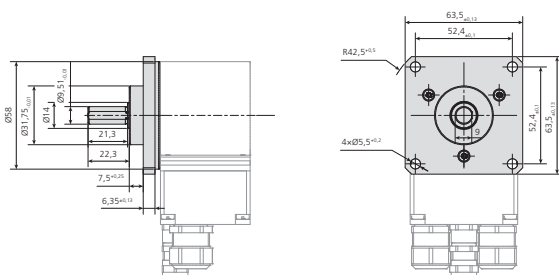
Other drill patterns available



## Flange ZB 31,75 (1,25")

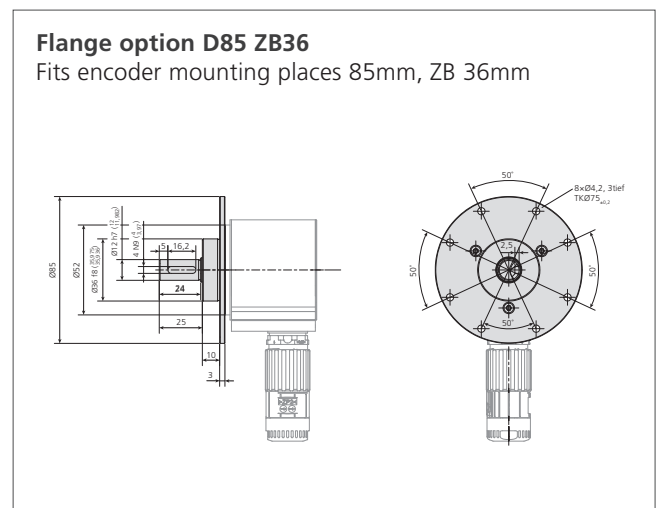
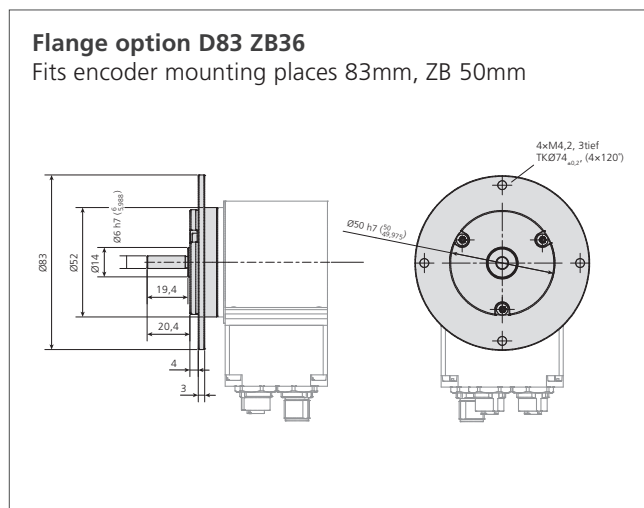
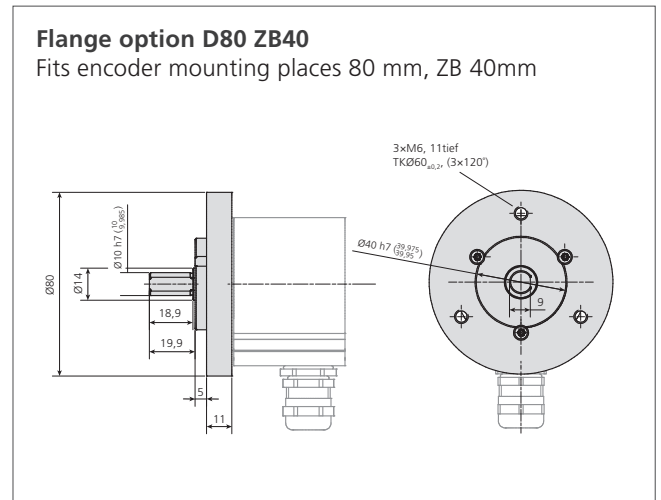
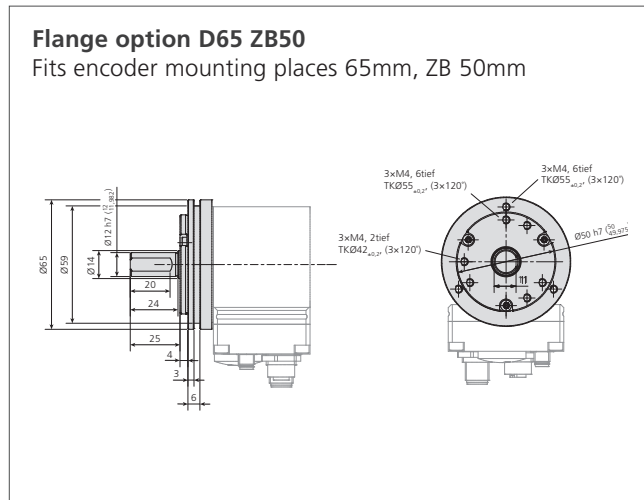
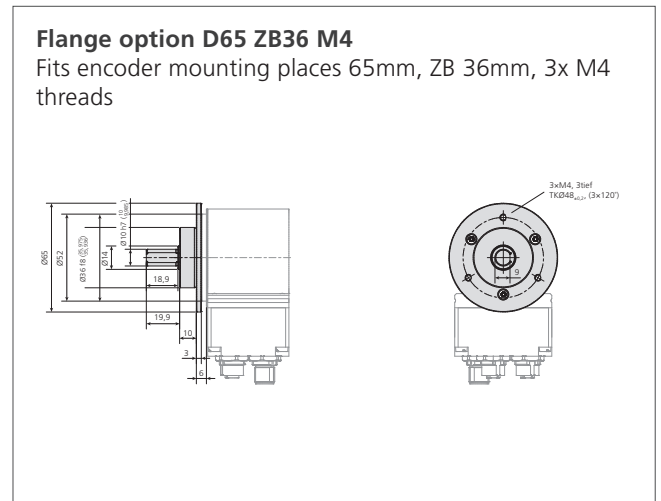
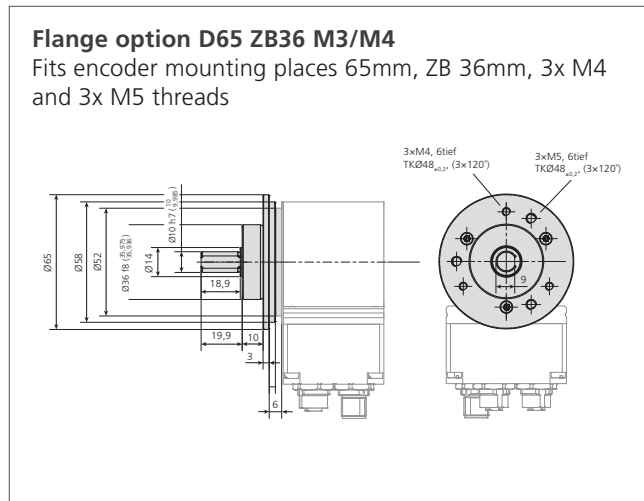


## Square flange ZB 31,75 (1,25")



Can't find the right variant? Please contact us (info@tr-electronic.de). Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

# Flanges



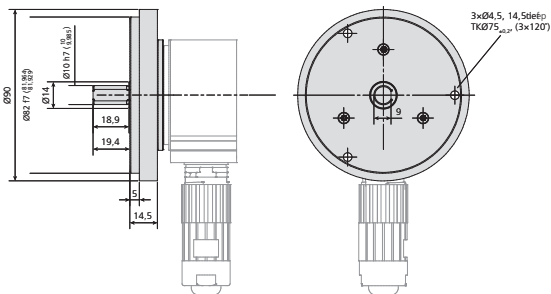
Can't find the right variant? Please contact us (info@tr-electronic.de). Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at www.tr-electronic.com or on request.



# Flanges

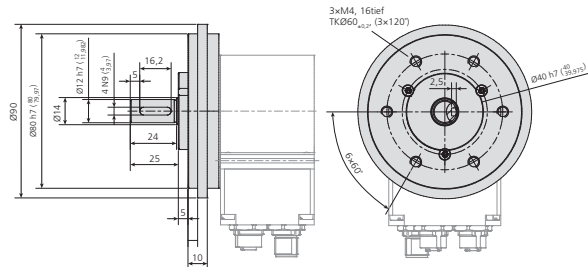
## Flange option D90 ZB82

Fits encoder mounting places 90mm, ZB 82mm



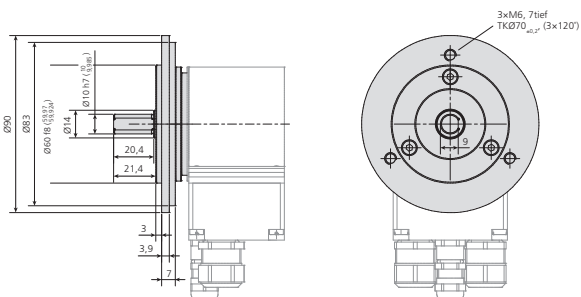
## Flange option D90 ZB80,40

Fits encoder mounting places 90mm, ZB 80mm, 40mm



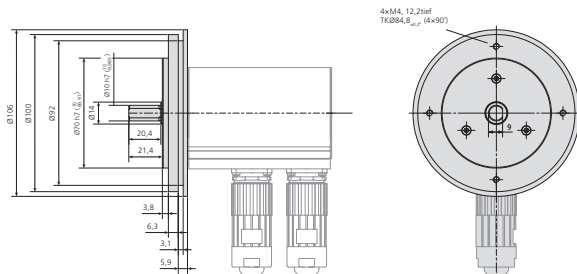
## Flange option D90 ZB 60

Fits encoder mounting places 90mm, ZB 60mm



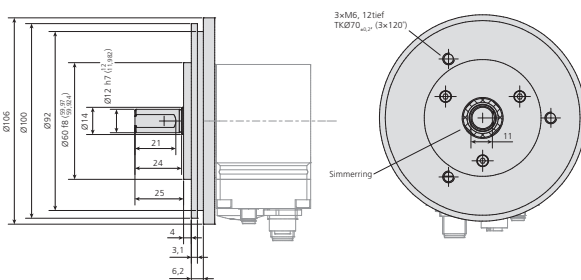
## Flange option D106 ZB70

Fits encoder mounting places 106mm, ZB 70mm



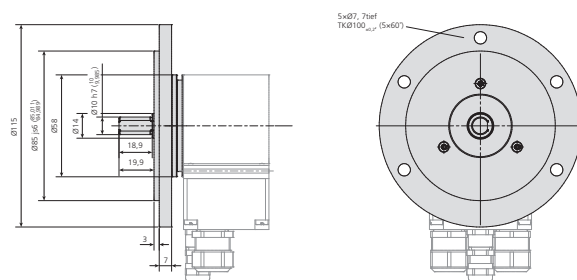
## Flange option D106 ZB60

Fits encoder mounting places 106mm, ZB 60mm



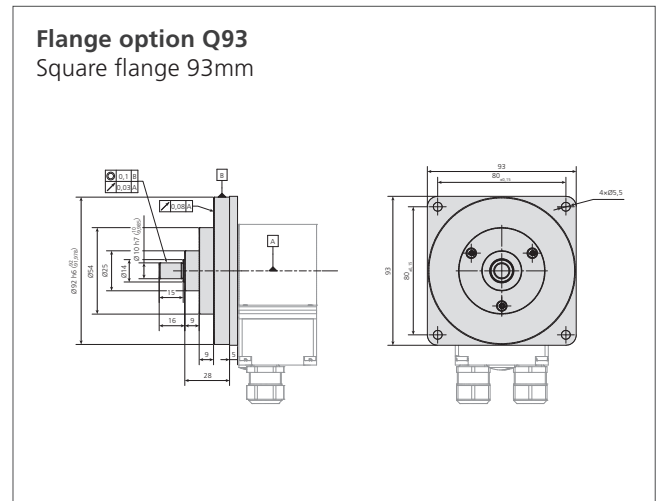
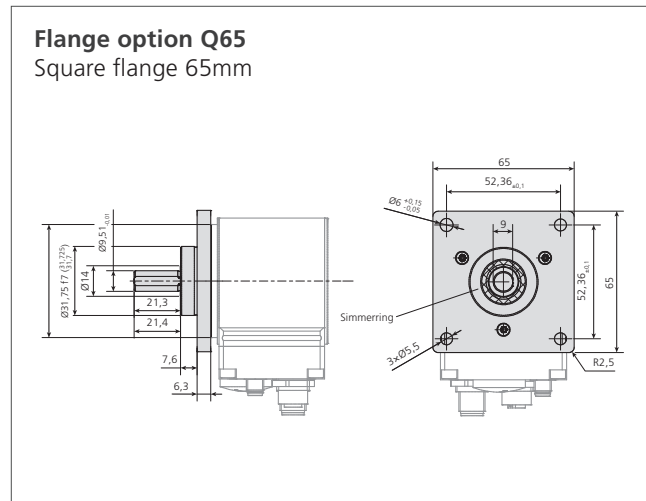
## Flange option D115 ZB85

Fits encoder mounting places 115mm, ZB 85mm



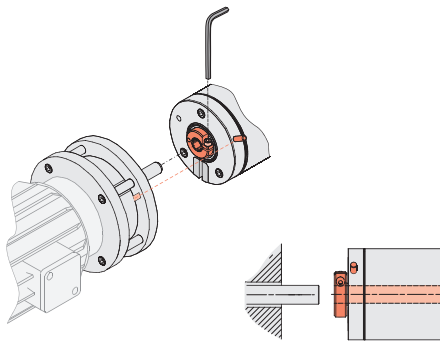
Can't find the right variant? Please contact us (info@tr-electronic.de). Illustrations are schematic diagrams. Binding dimension drawings and CAD data for specific order numbers at [www.tr-electronic.com](http://www.tr-electronic.com) or on request.

# Flanges

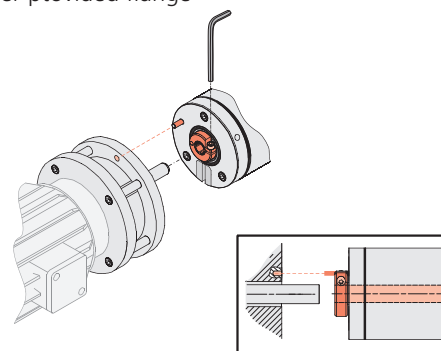


# Assembly Examples

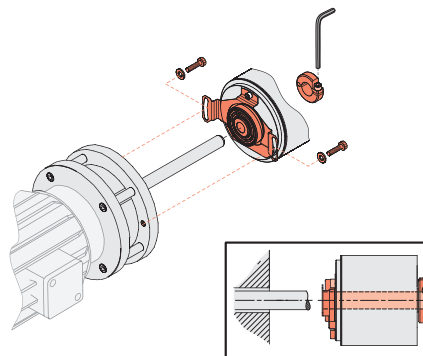
**Blind- and hollow-shaft - encoder fixation**  
Pin, radial, fits into a groove of customer-provided flange



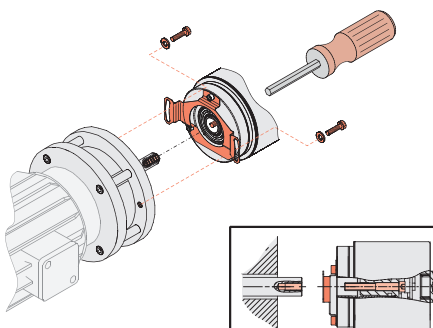
**Blind- and hollow-shaft - encoder fixation**  
Pin, axial in encoder flange fits into bore/groove of customer-provided flange



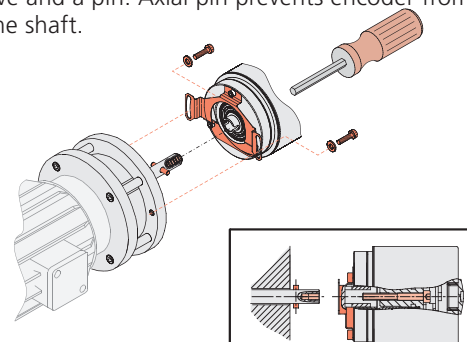
**Blind- and hollow-shaft - encoder fixation**  
Sheet-metal torque support, here with clamping ring.



**Blind- and hollow-shaft - encoder fixation**  
Axial screw attaches the shaft to the encoder. Here with a sheet-metal torque support.



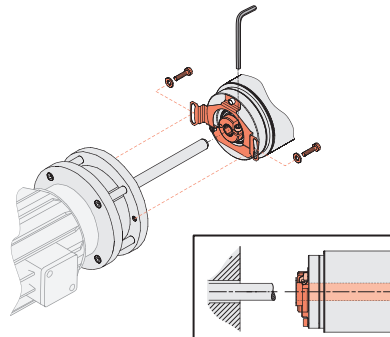
**Blind- and hollow-shaft - shaft fixation**  
Transmission of torque is done by form closure by a V-groove and a pin. Axial pin prevents encoder from falling off the shaft.



## Assembly Examples

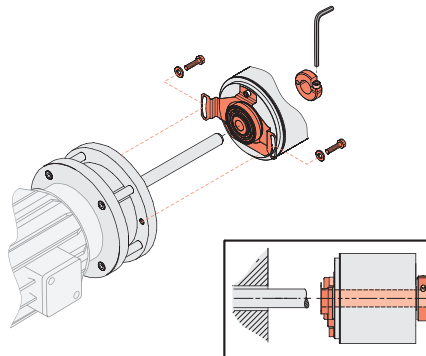
### Blind- and hollowShaft - shaft fixation

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



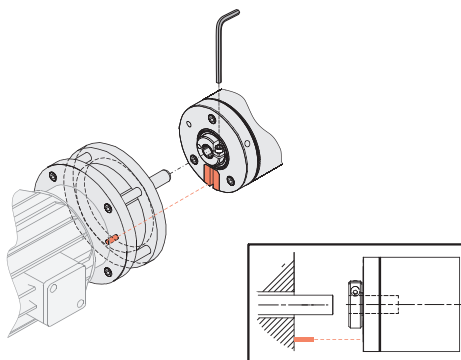
### Blind- and hollow-shaft - shaft fixation

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



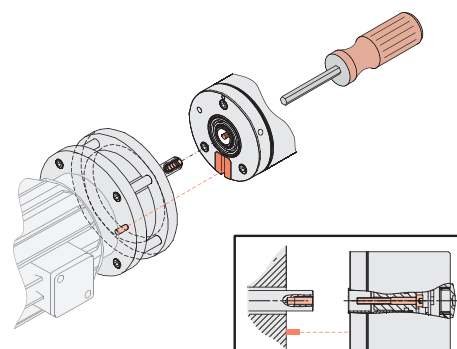
### Blind shaft

Pin/groove axial, clamping ring

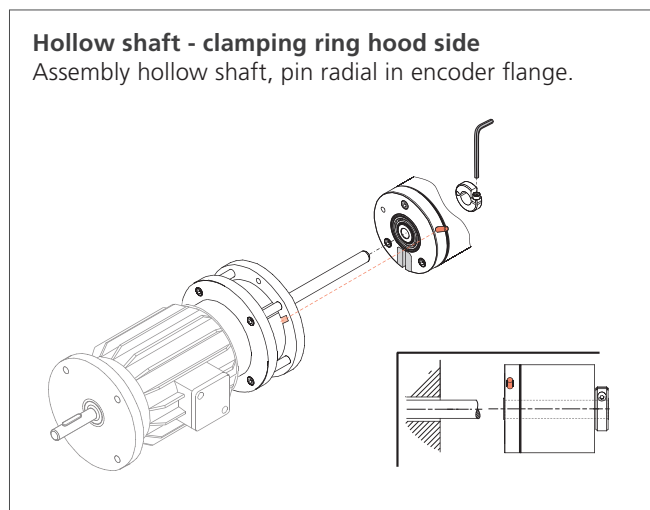
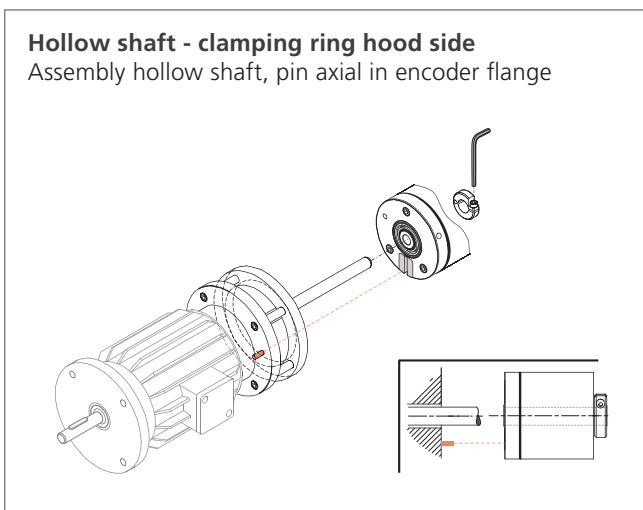
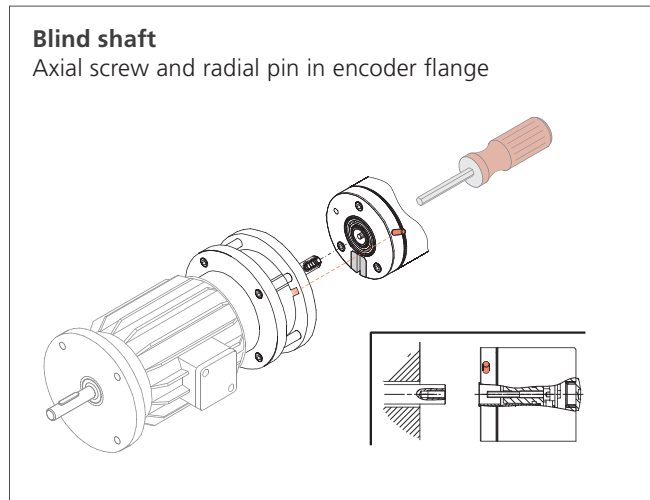
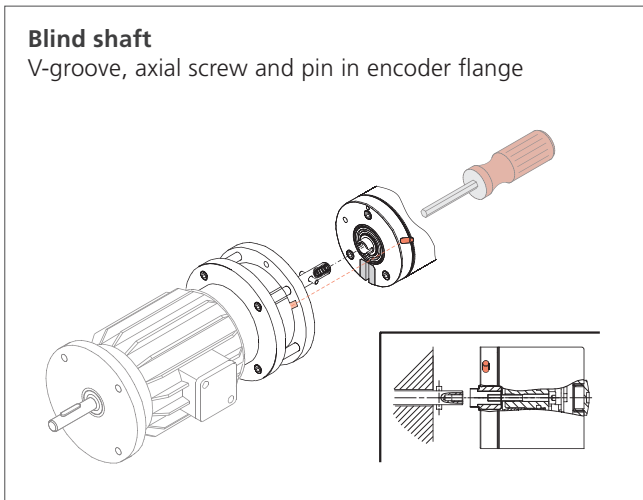
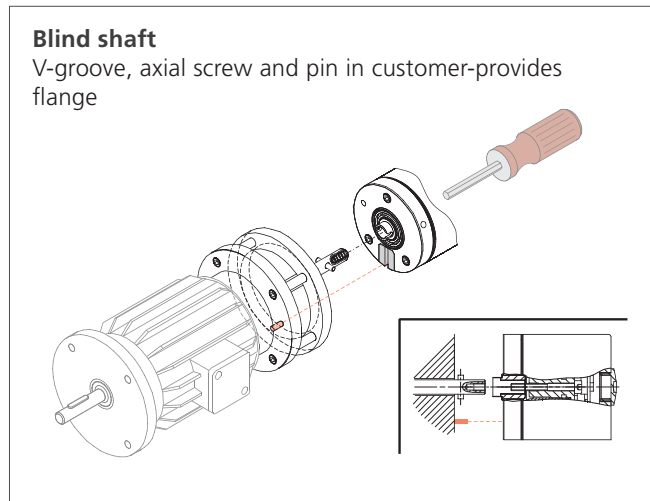
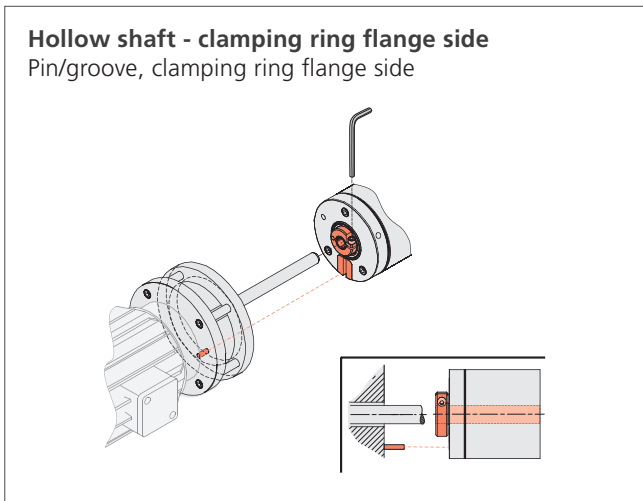


### Blind shaft

Axial screw



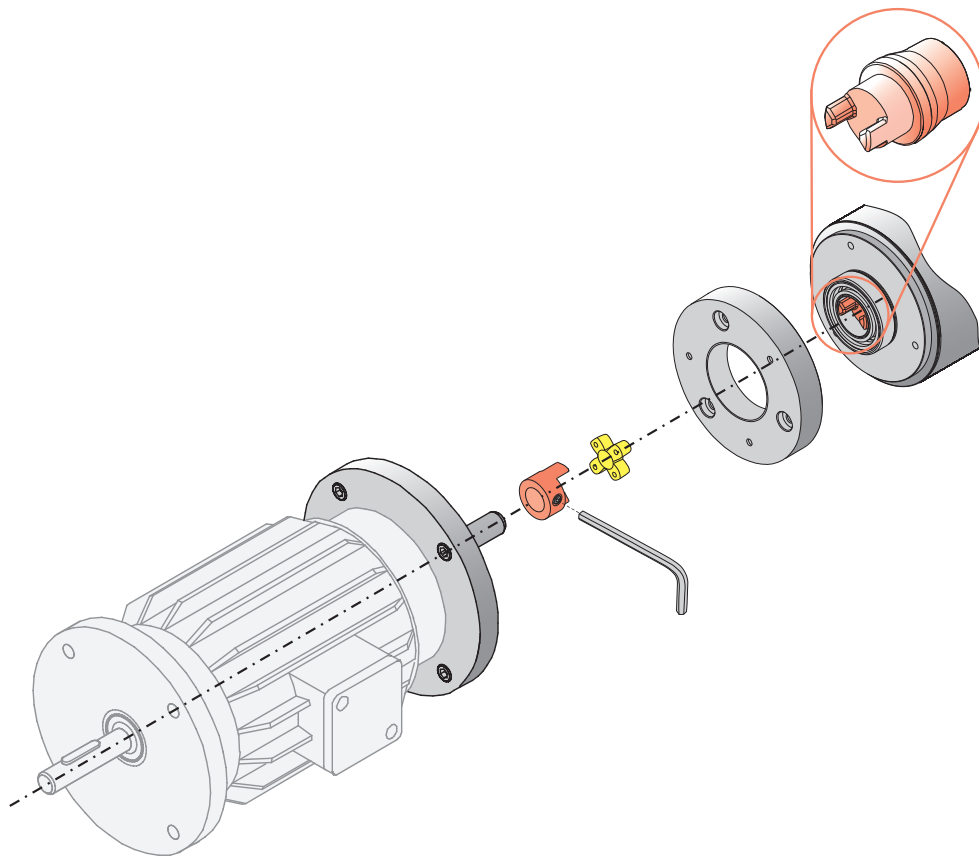
# Assembly Examples



## Assembly Examples

### Integrated coupling

Assembly with integrated coupling





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# TR-Electronic – your partner in automation

## Rotary encoders

**Absolute encoder, incremental rotary encoder, wire-actuated encoder**

Rotary encoders with optical and magnetic scanning functions register the precise position in a wide variety of applications and industries. In medical engineering, miniature versions ensure correct positioning while SIL3-approved absolute rotary encoders provide the necessary safety. We offer not only high-quality rotary encoders (from Ø 22 to 160 mm) for almost any application but also a comprehensive range of accessories.

## Linear encoders

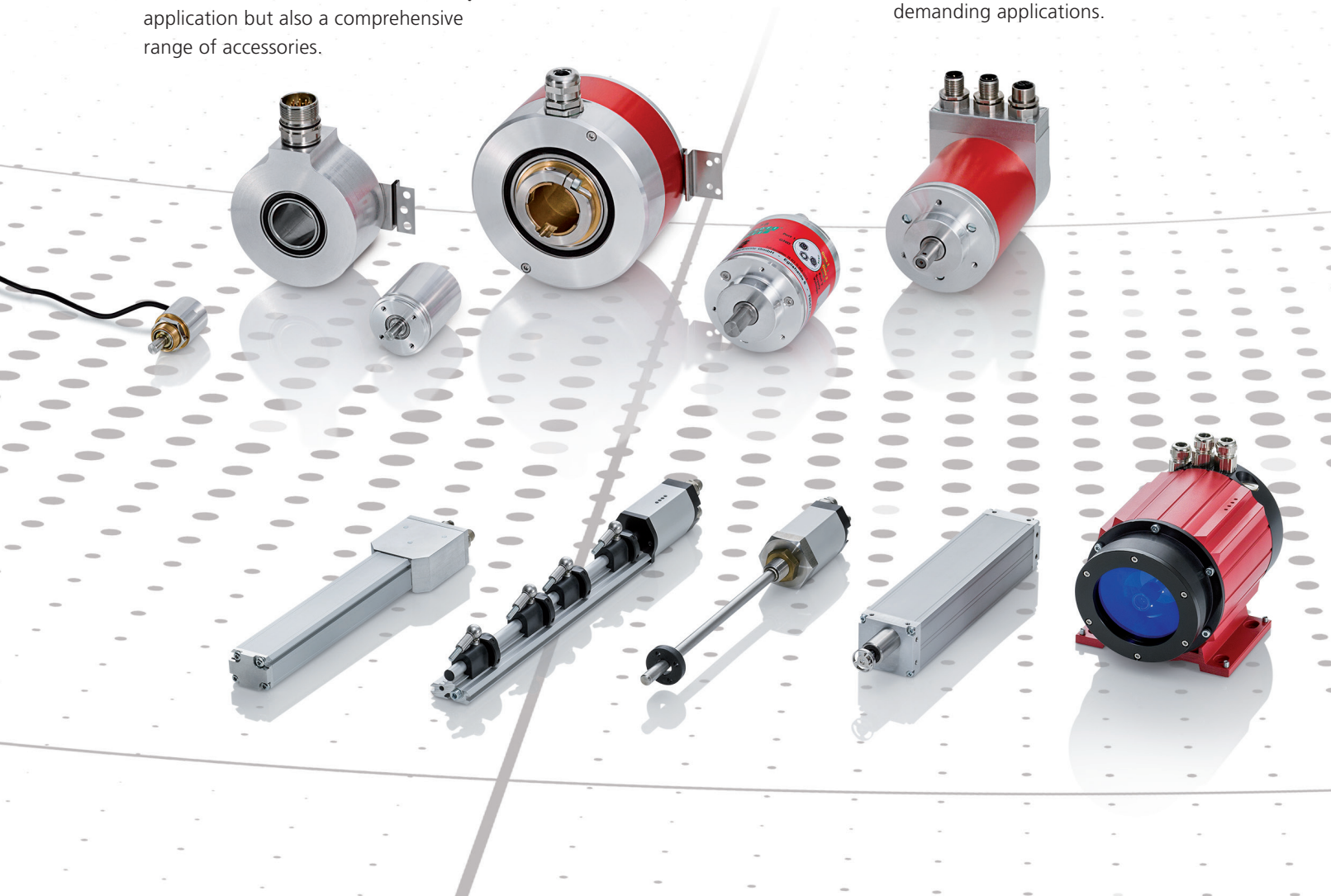
**Linear absolute measuring systems, laser displacement measurement**

Linear encoders register linear motions in machines, tools and systems according to the specific requirements of different technologies. Linear encoders allow measuring distances of max. 20 m almost without any wear. This value is max. 240 m for laser measuring systems. Machines and systems can be precisely controlled to reach their desired positions.

## Motion

**Servo drives, compact drives, process drives**

Intelligent encoTRive drives are available with the current field bus systems, such as PROFIBUS, PROFINET and CANopen, within a power range of up to 300 watts. These drives are configured to meet customer requirements and can be freely combined with a precision gear, holding brake and I/O. Values of up to 4,350 rpm and a powerful 200 Nm are available to cope with demanding applications.





## Components

**Industrial PC, field bus I/O,  
PLC, HMI controller**

Industrial PCs are available in numerous variants and offer customized calculation power for PC-assisted automation. Programmable logic controllers (PLC) are the traditional means for automation. HMI controllers establish the interface for the user. Field bus nodes, I/O modules and cam controllers complete the range of automation components.

## Automation

**Consulting and implementation  
for new machines and retrofitting**

You want to set up a largely automated new machine or retrofit and modernize your existing machine with automation systems? Then you need our extensive expert knowledge and our more than 20 years of experience.

## Unidor

**Blanking and forming,  
systems, controls and sensors**

Pioneering blanking and forming technology for more than 30 years, we are your reliable partner in the world of blanking and pressing and have proved this with the thousands of machines which we have successfully installed all over the world. Sensors, controls and systems ensure optimal results in machines, tools and retrofit projects.

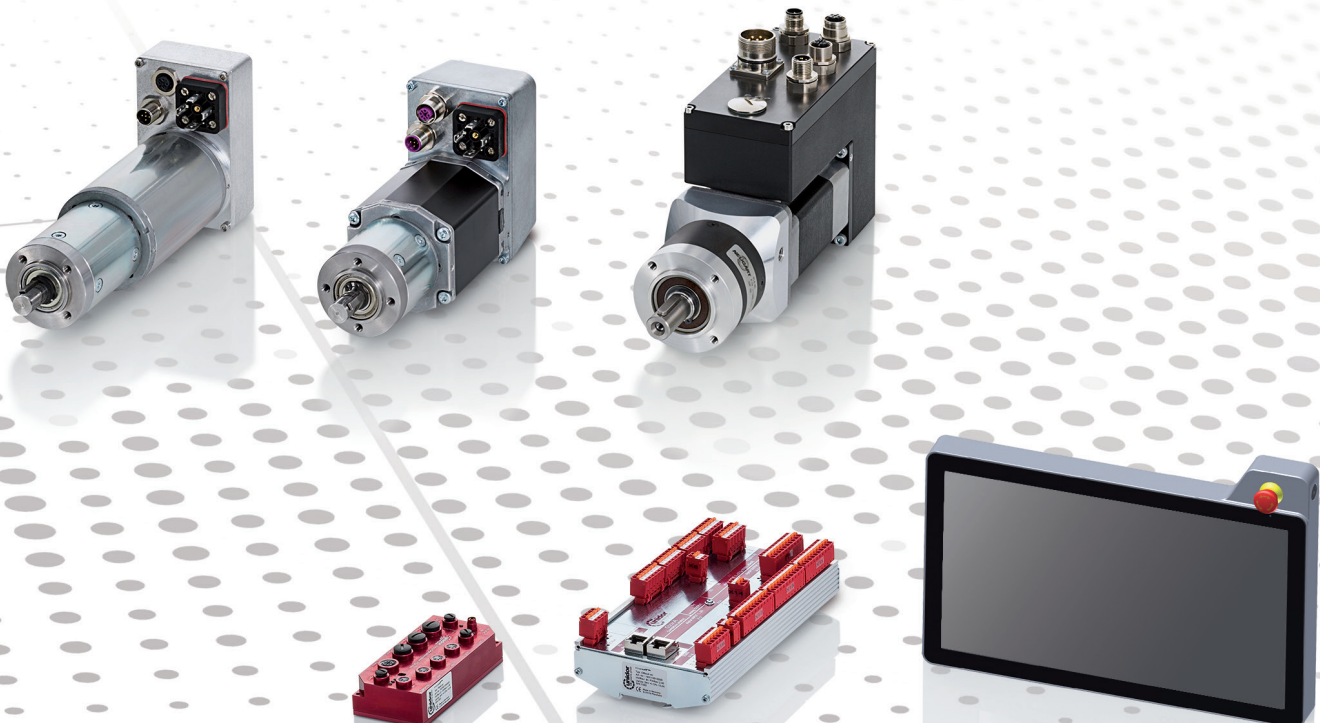


photo background: elias99/Fotolia.com

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Fax: +49/7425 228-33

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AR-1419 Buenos Aires  
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Fax: +54/11 - 4574 2400  
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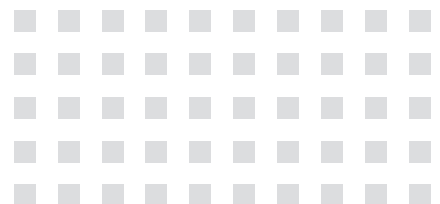
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