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## Ezturn® software



### General description of the Ezturn® software:

Ezturn is a programming tool for all of Kübler's multi-turn encoders of the latest generation. These encoders are basically all programmable. The encoders are pre-set ex works with the default values given in the data sheet and the order key.

The purchase of a programming set allows

customers to program any encoder. The customer can thus tailor the encoder's default settings to specific applications or use the software for diagnostic purposes or as an information tool, for instance to make settings for a machine. All of these configurations can be saved. The software is compatible upwards.

### Functionality of the Ezturn® software

- Setting of the communication parameters
- RS232 encoder/PC interface
- Setting of a drive factor by means of the modification of the resolution per revolution, the number of revolutions and the total resolution
- Programming of the direction of rotation and code type
- Setting of a preset/electronic zero point
- Setting of diagnostic functions
- Setting of the outputs A1 ... A4
  - Limit switch values, max. 2
  - Alarm and status information
  - Battery monitoring
- Limiting max. number of bits to interface with PLCs
- Diagnostics and information for the set-up operation
- Data transmission from the PC to the encoder and inversely, also during operation
- Print-out of the current data and set parameters
- Convenient position output with the current set data
- Output of the software/hardware version number
- Terminal operation for direct instructions via the keyboard
- Diagnostics of the encoder connected

### Scope of delivery:

Interface converter  
 Connection cable from the interface converter to the encoder  
 90 ... 250 V AC power supply and CD-ROM  
 Order-code: 8.0010.9000.0004

**SSI Display Type 570**



**Your benefit**

- AC and DC supply voltage in one unit
- Master or slave mode
- Plug-in screw terminals
- SSI clock frequency from 100 Hz up to 1 MHz
- Display and outputs may be adjusted using scaling- and offset-features
- Large 15 mm high LED-display, 6 digits, with adjustable brightness

**Product features**

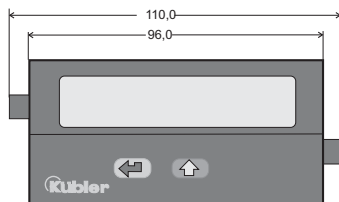
- Qualified for SSI protocols up to 25 bits
- Version with 2 optocoupler outputs to work as limit or preset values; also programmable with trail signal.
- Version with scaleable analogue output, resolution 14 bits, 0 ... 10 V, -10 ... +10 V, 0 ... 20 mA or 4 ... 20mA
- Gray or binary code
- 48 x 96mm DIN housing, IP 65

**Technical data:**

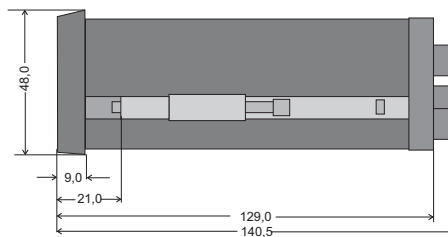
Supply voltage:	17 ... 30 V DC 115/230 V AC ± 12,5 %
Display:	15 mm high LED-display, 6 digits
Current consumption [DC]:	17 V: 190 mA; 24 V: 150 mA; 30 V: 120 mA
Power consumption [AC]:	7,5 VA
Sensor power supply:	24 V DC ± 15%, 120 mA
<b>Inputs:</b>	
SSI input frequency range:	100 Hz ... 1 MHz
Input reset:	PNP or NPN, programmable 5.1 mA 24 V DC/ R <sub>i</sub> = 4.7 kOhm
Input level:	Low: 0 ... 2 V High: 9 ... 35 V
Reset time:	min. 5 ms

<b>Outputs:</b>	
Scaleable analogue output:	0 ... 10 V, -10 ... +10 V or 0 ... 20 mA, 4 ... 20mA 0.570.011.E90
Resolution:	14 bits + sign
Accuracy:	0.1 %
Optocoupler output:	5 ... 35 V DC/150 mA 0.570.012.E00
Interface:	RS232 or RS485 (ISO 1745) 0.570.012.E05
Operating temperature:	0 ... +45 °C
Storage temperature:	-25 ... +70 °C
Protection class:	IP 65 (front)
EMC:	according to EC EMC directive 89/36/EC
Interference emissions:	EN 50081-2/EN 55011 class B
Interference resistance:	EN 6100-6-2
Weight:	approx. 200 g

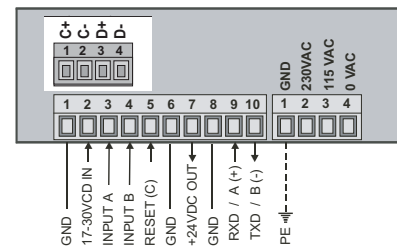
**Dimensions:**



Panel cut-out: 92 x 45mm

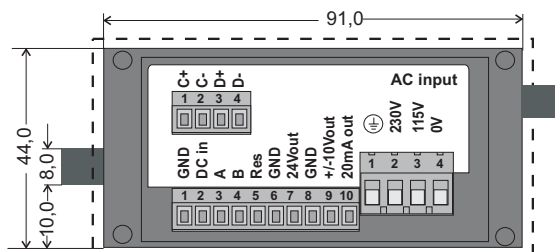


Display with serial interface 0.570.012.E05

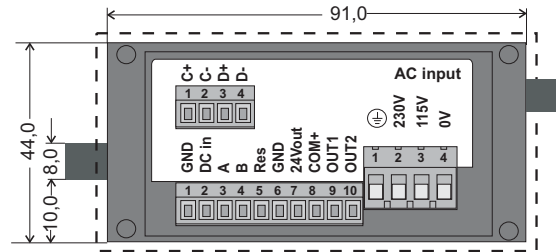


**Wiring diagram:**

Display with analogue output 0.570.012.E90



Display with 2 optocoupler outputs 0.570.011.E00



Do not connect A, B; C+, C- = clock signal SSI; D+, D- = data signal SSI

**Scope of delivery:**

- SSI-Display
- Seal
- Mounting kit
- Plug-in screw terminals
- Manual German/English

**Order code:**

- Display with 2 outputs: 0.570.011.E00
- Display with analogue outputs: 0.570.012.E90
- Display with serial interface: 0.570.012.E05

**Display Type 571**



**Your benefit**

- AC and DC supply voltage in one unit
- Measuring function can be programmed for RPM, speed (from elapsed time), machine cycle time, throughput and baking time (time interval), as well as numerous count and stop-watch functions
- Scalable display, programmed via 2 keys
- Large 15 mm high LED-display, 6 digit, with adjustable brightness

**Product features**

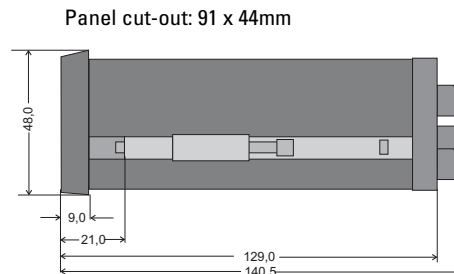
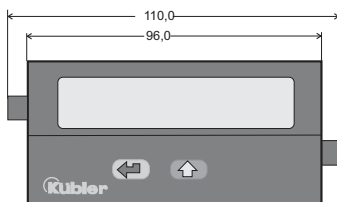
- Fast counting input, works with our LIMES measuring system (100kHz)
- Version with 2 optocoupler outputs for alarms
- Version with serial interface RS232/485 for importing and exporting data
- 48 x 96 mm DIN housing, IP65

**Technical data:**

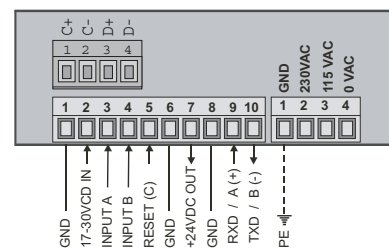
Supply voltage :	16 ... 35 V DC (Normal voltage: 24 V DC) 115/230 V AC ± 12.5 %
Display:	15 mm high LED display, 6 digits
Current consumption [DC]:	18 V: 120 mA; 24 V: 95 mA; 30 V: 80 mA
Power consumption [AC]:	7.5 VA
Sensor power supply :	24 V DC ± 15%, 120 mA (AC and DC supply)
<b>Inputs:</b>	3 Inputs (PNP, NPN and Namur) A, B = pulses, C = reset
Max. input frequency:	A, B = 25 kHz (100 kHz at count); C = 1 kHz
Accuracy:	±1 ppm ± 1 digit
Input level HTL:	Low: 0 ... 3.5 V High: 9 ... 35 V

<b>Outputs:</b>	
Analogue output: (0.571.012.E90)	0 ... +10 V, +10 ... -10 V and 0 ... 20 mA, 4 ... 20mA
Resolution:	14 bits + sign
Accuracy:	0.1 %
Optocoupler output: (0.571.011.E00)	5 ... 35 V DC/150 mA
Interface (0.571.012.E05)	RS232 and RS485 acc. to ISO 1745 Drivecom Protocol
Operating temperature:	0 ... +45 °C
Storage temperature:	-25 ... +70 °C
Protection	IP 65 (front)
EMC:	according to EC EMC directive 89/36/EC
Interference emissions:	EN 50081-2/EN 55011 Class B
Interference resistance:	EN 6100-6-2
Weight:	approx. 200 g

**Dimensions:**

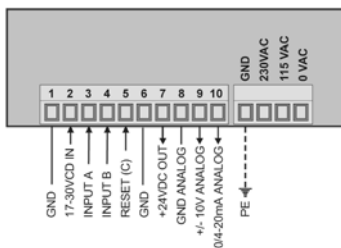


Display with serial Interface (0.571.012.E05)

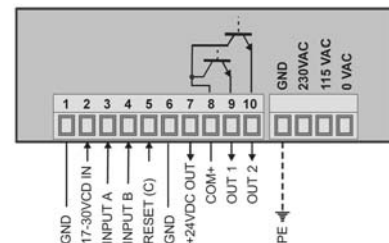


**Terminal assignment:**

Display with analog output (0.571.012.E90)



Display with 2 optocoupler outputs (0.571.011.E00)



**Scope of delivery:**

- Display 571
- Seal
- Mounting kit
- Plug-in screw terminals
- Manual German/English

**Order code:**

- Display with 2 outputs                      Order code: 0.571.011.E00
- Display with analogue outputs            Order code: 0.571.012.E90
- Display with ser. Interface                Order code: 0.571.012.E05

## Flanges



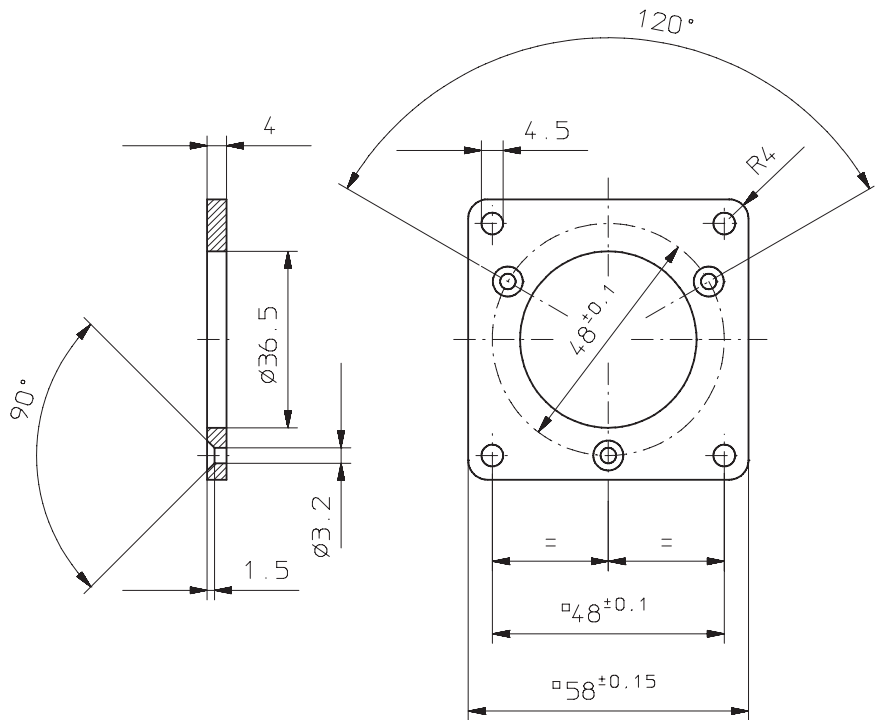
- Suitable for shaft encoders with clamping flange
- Mounting screws included
- Material aluminum

### Square flange:

Suitable for shaft encoders type series 58XX with clamping flange

Order code  
8.0010.2100.0000 (Kit)

Includes flange and screws for encoder mounting.

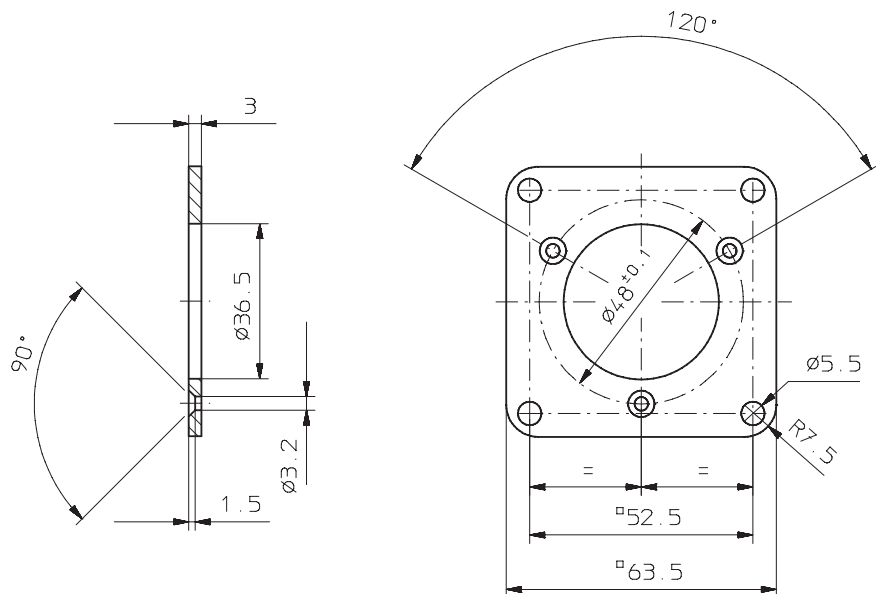


### Square flange:

Suitable for shaft encoders type series 58XX with clamping flange

Order code  
8.0010.2120.0000 (Kit)

Includes flange and screws for encoder mounting.



**Flanges**

**Square flange:**

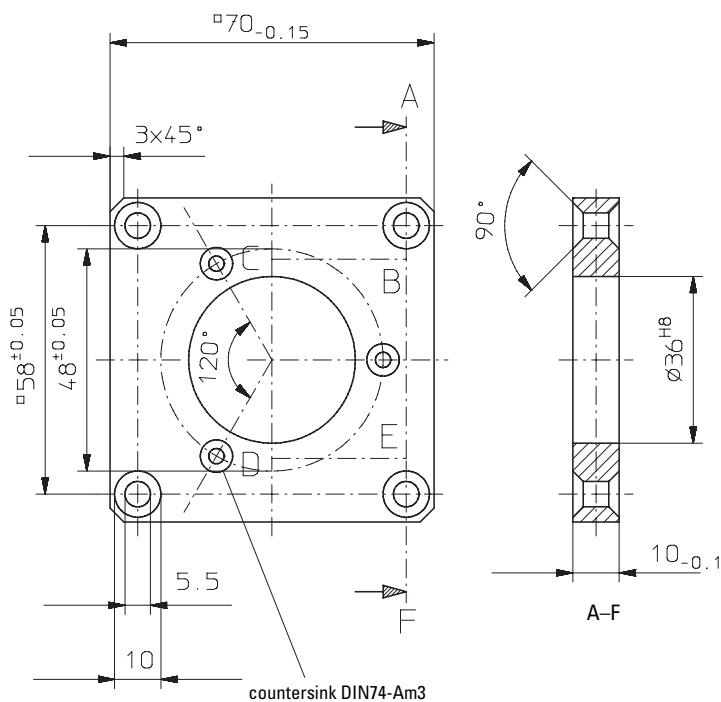
Suitable for shaft encoders type series 58XX with clamping flange

Material: aluminum

Order code

8.0010.2600.0000 (Kit)

Includes flange and screws for encoder mounting.



**Square flange:**

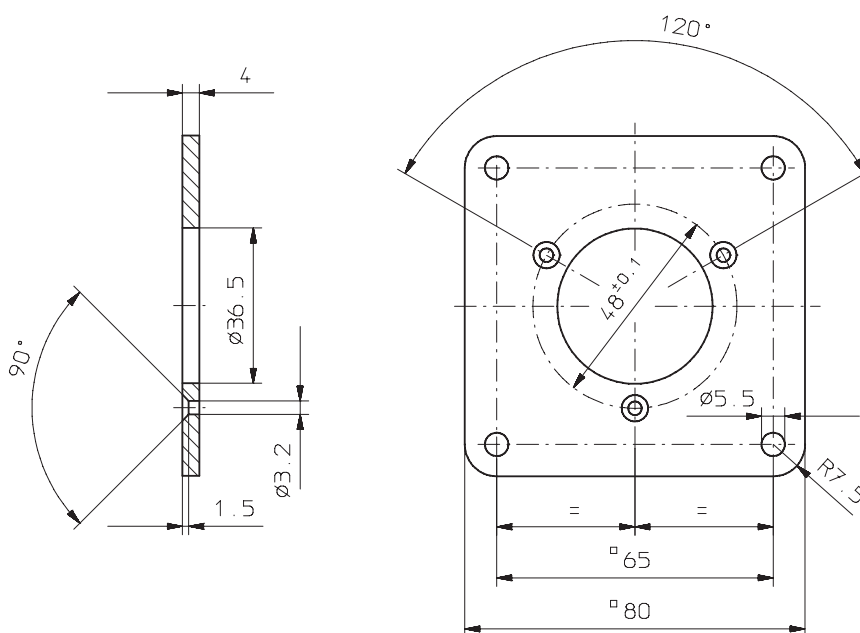
Suitable for encoders type series 58XX.1XXX.XXXX

with clamping flange

Order code

8.0010.2800.0000 (Kit)

Includes flange and screws for encoder mounting.



**Round flanges**



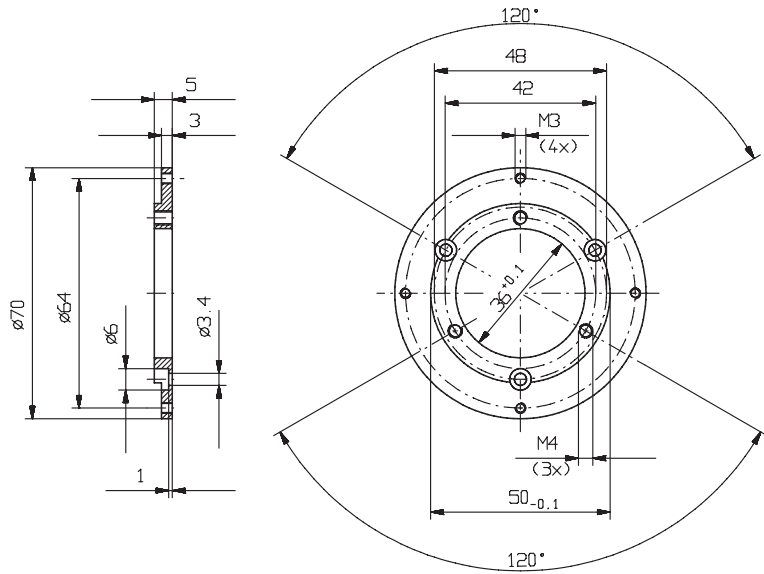
- Suitable for Kübler encoders with clamping flange
- Includes flange and screws for encoder mounting.
- Material aluminum

**Round bracket:**

Suitable for shaft encoders type series 58XX with clamping flange

Order code  
8.0010.2200.0000 (Kit)

Includes flange and screws for encoder mounting.

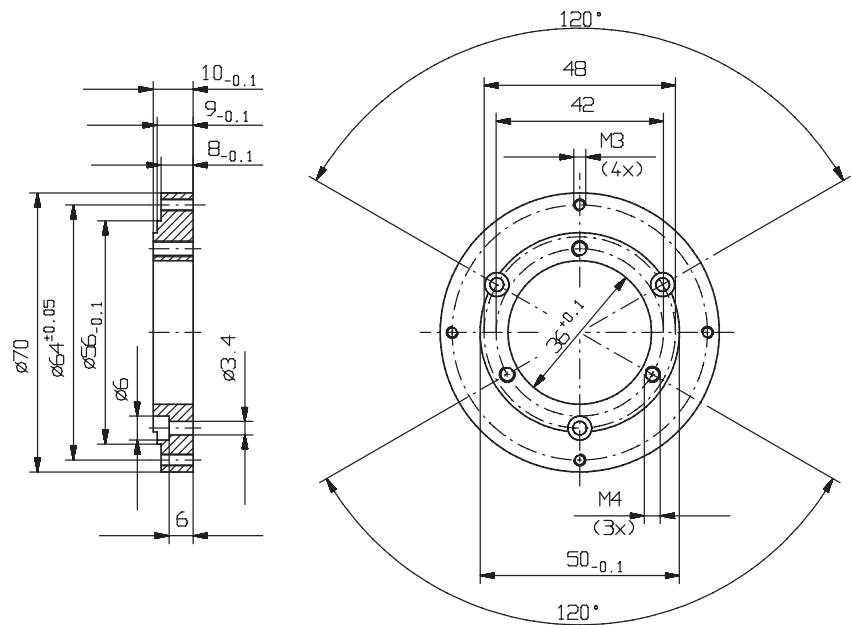


**Round bracket**

Suitable for shaft encoders type series 58XX with clamping flange

Order code  
8.0010.2500.0000 (Kit)

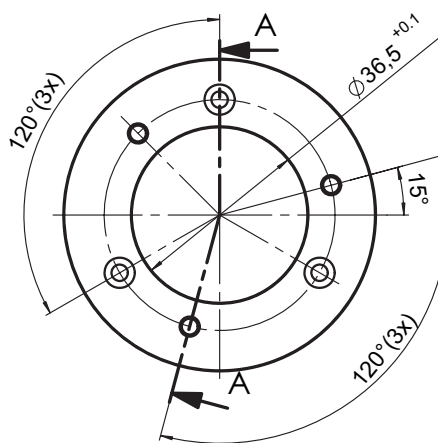
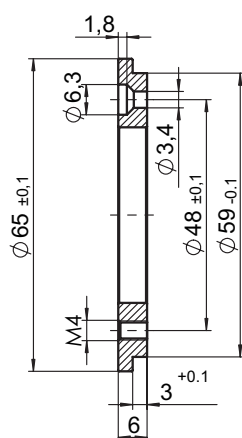
Includes flange and screws for encoder mounting.



## Adapter flange 65



- Suitable for encoders of the 58XX series with clamping flange
- With this adapter bracket, Kübler encoders with size 58 mm can replace encoders with diameter 65 and pitch circle diameter 48 mm
- Screws are included in delivery
- Material: aluminum



Order code  
8.0010.2230.0000 (Set)  
Includes flange and screws  
for encoder mounting.

**Flanges**

**Round flange (Euro flange REO 444):**

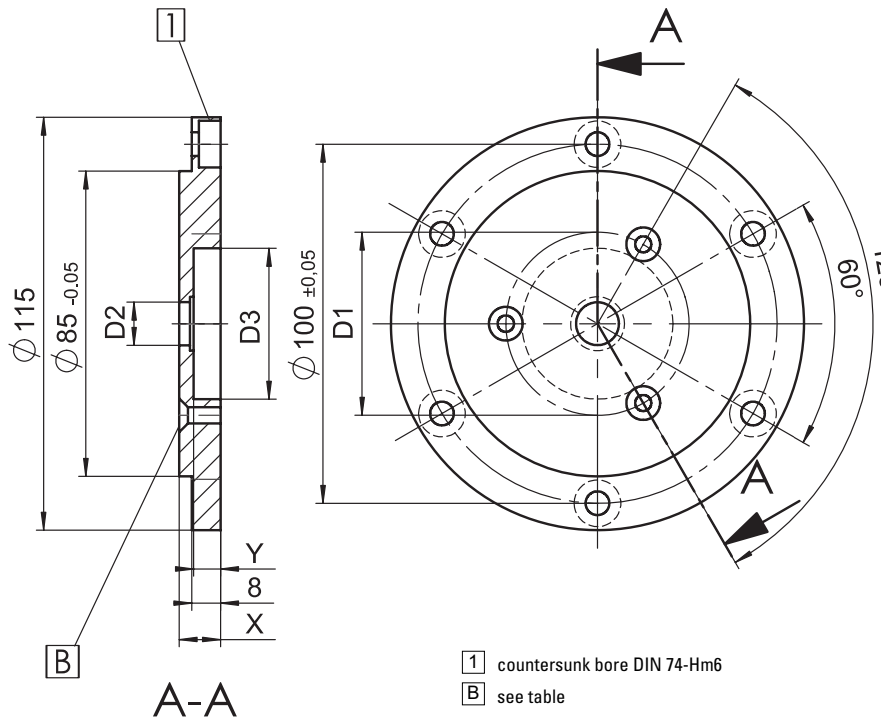
Suitable for shaft encoders

type series     58XX  
                   703X  
                   9000

Material: aluminum

Order code  
 see table (Kit)

Includes flange and screws for encoder mounting.



- 1 countersunk bore DIN 74-Hm6
- B see table

Encoder type	Order code	D1	D2	D3	X	Y	B
58XX:	8.0010.2160.0000	48	36	58	11	1	DIN 74-BM3
703XX	8.0010.2170.0000	51	12	42	11,5	7,5	DIN 74-BM4
9000	8.0010.2130.0000	60	40	90	11,5	6,5	DIN 74-BM6

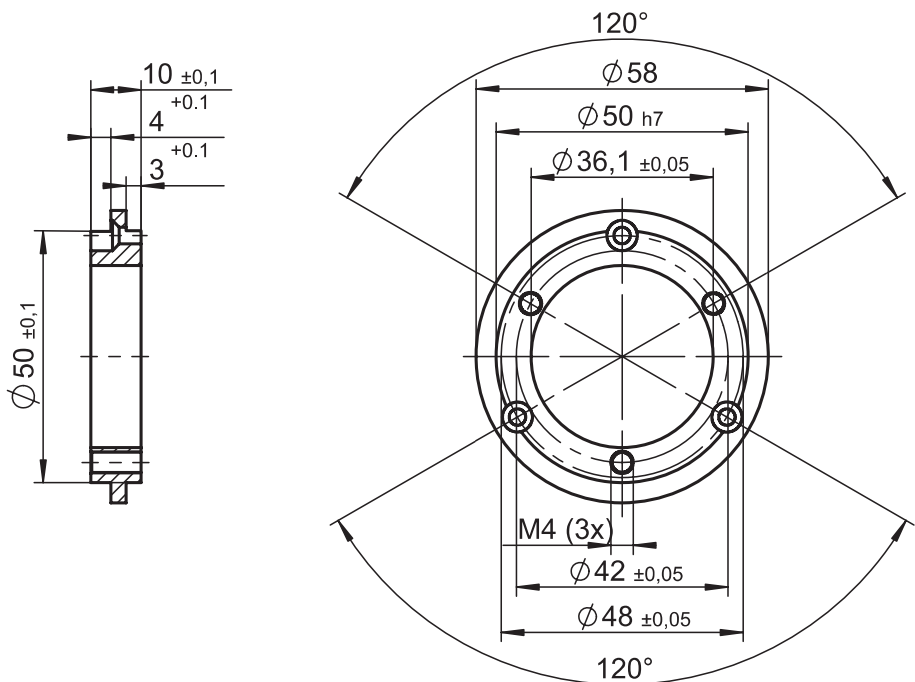
**Adapter flange**

For type series 58XX encoder

To mount encoders with clamping flange using the fastening eccentrics.

Includes flange and screws for encoder mounting.

Order code 8.0010.2180.0000 (Kit)



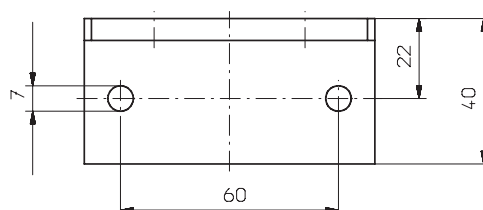
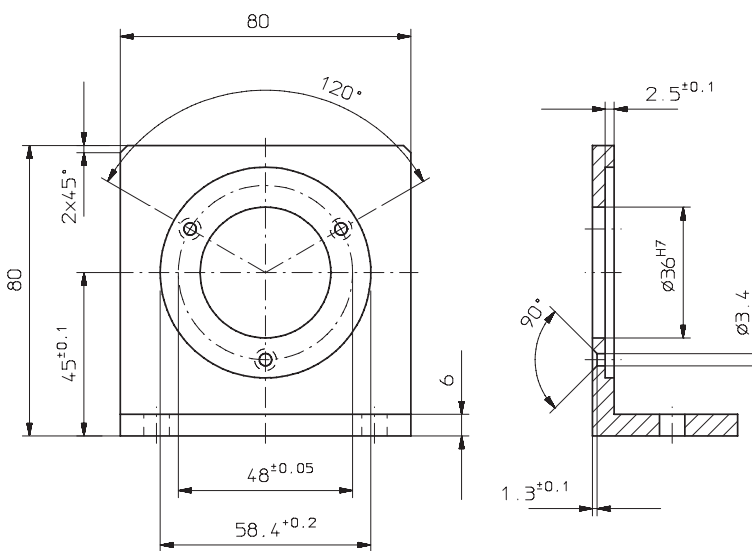
**Mounting attachment**

**Angular bracket:**

Suitable for shaft encoders type series 58XX with clamping flange

Order code 8.0010.2300.0000 (KIT)

Includes bracket and screws for encoder mounting.

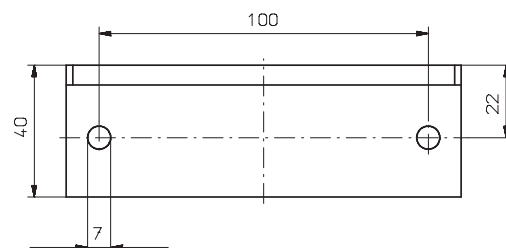
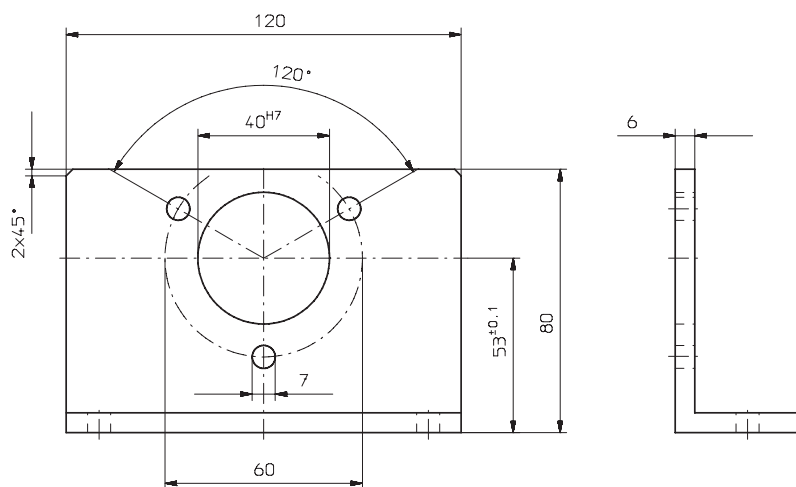


**Angular bracket:**

Suitable for shaft encoder 8.90XX.1XXX.XXXX  
Material: aluminum

Order code 8.0010.2400.0000 (Kit)

Includes bracket and screws for encoder mounting.



## Mounting attachment

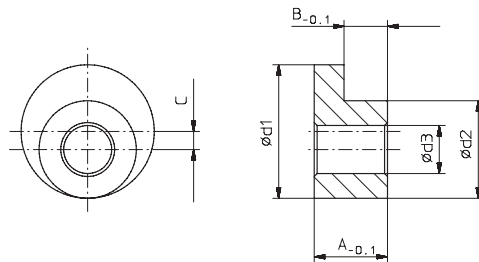


- Fastening eccentrics for rotary encoders with synchronous flange
- Including screws
- Material: ACu Zn 39 Pb 3
- Surface finish: galvanized Ni

Fastening eccentrics for shaft encoders with synchronous flange

**Note:**

Use at least three fastening eccentrics to mount the encoder.



Example



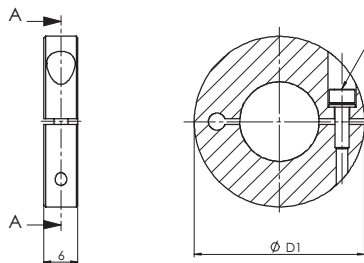
Dimensions table

d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	A	B	C	For encoder type	Order code (set)
6,8	5	2,8	3,5	2,25	0,9	8.3600.1XXX.XXXX	8.0010.4200.0000
8,9	6,5	3,2	5,6	2,9	1,2	8.58XX.2XXX.XXXX	8.0010.4100.0000
14	9	5,3	10	4,9	2,5	8.9000.1XXX.XXXX	8.0010.4300.0000

(set includes 4 eccentrics and 4 screws )

**Clamping ring, stainless steel**

Stainless steel, balanced clamping ring for high rotational speeds.



1 Screw DIN 912 A2 M2.5, maximum tightening torque 0.45 Nm.

Ordering designations

Order code:	For encoder with hollow shaft diameter
8.0000.4T00.0000	6.0 mm
8.0000.4U00.0000	8.0 mm
8.0000.4V00.0000	10.0 mm
8.0000.4W00.0000	12.0 mm

# Accessories

## Encoder mounting attachments

Pictures	Example of use	Use	Order code:	Pitch circle diameter	Suitable for encoders	Page
		For applications with high axial play	8.0010.4K00.0000 Long spring element	cylindrical pin 110 mm	A020, A02H 9080, 9081	313
		For applications with reduced mounting space	8.0010.4J00.0000 Short spring element	cylindrical pin 76 mm	A020, A02H, 9080, 9081	313
		For applications with axial and radial play with low dynamics for constant rotary movements	8.0010.4G00.0000 Tether square	A02X: 65 mm 9080: 60 mm 9081: 60 mm 1 screw	A020, A02H, 9080, 9081	313
		For applications with fastening points located on variable pitch circle diameters	8.0010.4E00.0000 Tether arm large	104 mm – 206 mm 1 screw	A020, A02H, 9080, 9081	314
		For applications with axial play and low dynamics	8.0010.4I00.0000 Spring element	3620: 60 mm 3720: 63 mm 5020: 44 mm 58XX: 65 mm Cylindric pin	3620, 3720, 5020, 582X, 587X, 588X	314
		For standard applications with axial and radial play, and high dynamics	8.0010.1602.0000	65 mm	582X, 587X, 588X	315
		For applications with high accuracy requirements	8.0010.4D00.0000	63 mm	582X, 587X, 588X	315
		For applications with axial and radial play, and low dynamics	8.0010.4R00.0000 Flexible fastening arm	80 mm – 170 mm 1 screw	5020, 582X, 587X, 588X	316
		For applications with axial and radial play, and high dynamics	8.0010.40L0.0000 Stator coupling	65 mm 3 screws	5020, 582X, 587X, 588X	316
		For applications with axial and radial play, for constant rotary movements	8.0010.40E0.0000 Flexible fastening arm	65 mm – 91,5 mm 1 screw	5020, 582X, 587X, 588X	316
		For applications with axial and radial play, and low dynamics	8.0010.40M0.0000 Flexible fastening arm	64,5 mm 1 screw	5020, 582X, 587X, 588X	317
		For applications with axial and radial play, and high dynamics	8.0010.4C00.0000 Double-winged stator coupling	46 mm 2 screws	3720, 3620	317
		For applications with limited axial play and low dynamics, and reduced mounting space	8.0010.4H00.0000 Spring element	3620: 42 mm 3720: 40 mm 5020: 58XX: 42 mm Cylindric pin	3620, 3720, 5020, 582X, 587X, 588X	317

# Accessories

## Encoder mounting attachments

### Mounting attachments

#### Mounting kit for large hollow shaft encoders

These attachments allow a wide range of mounting variants.

Suitable for the A02X and 908X encoders

#### Supplied as a comprehensive set Order code 8.0010.4A00.0000

The kit includes the following individual elements, which may also be ordered separately.

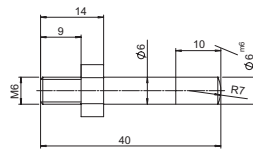
1 x long cylindrical pin with fastening thread  
Order code 8.0010.4700.0003

1 x long spring element  
Order code 8.0010.4K00.0000  
(The set includes the screws)

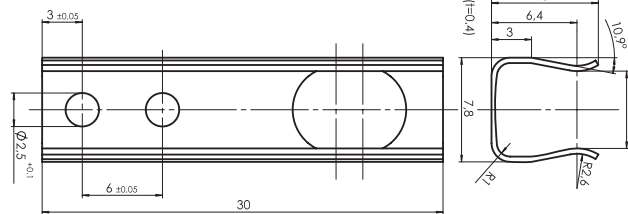
1 x short spring element  
Order code 8.0010.4J00.0000

Tether square  
Order code 8.0010.4G00.0000  
2 x Screws M2,5  
Order code N 630 049  
Screw M4 x 10  
Order code N 630 390

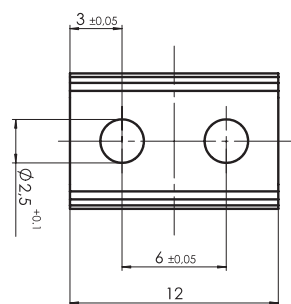
Washer  
Order code N.600.014



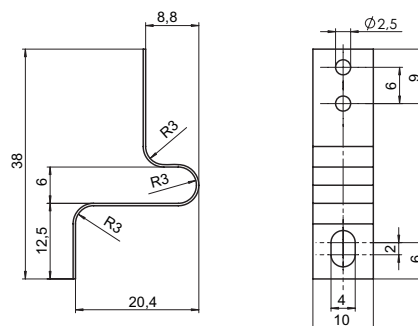
1 x long spring element  
Order code 8.0010.4K00.0000



1 x short spring element  
Order code 8.0010.4J00.0000



Tether square  
Order code 8.0010.4G00.0000



**Tether arm large**

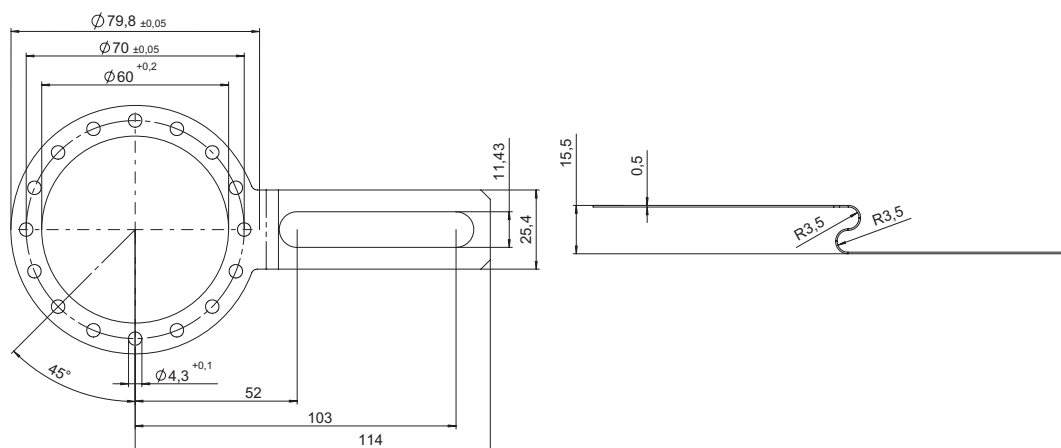


- For encoder types A020 and 908X
- Prevents radial play of the encoder
- The necessary axial play remains unchanged
- Material:
  - Mounting bracket: stainless steel
  - Screws: steel, galvanized

**Delivery includes:**

- Flexed spring device
- 3 screws

**Order code 8.0010.4E00.0000**



**Mounting set for hollow shaft encoders 58 mm**



Various mounting variants can be supplied

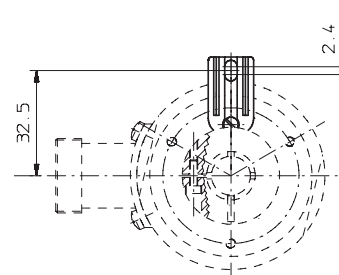
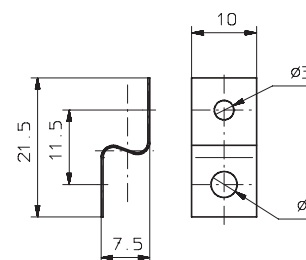
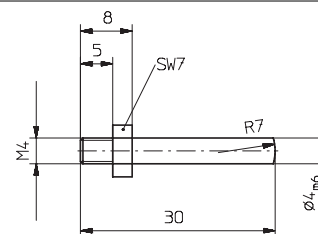
**Delivery includes:**

1 x cylindrical pin with thread  
Order code 8.0010.4700.0000

1 x mounting bracket  
Order code T.035.009  
incl. screw M3x5  
Order code N.630.305

1 x long torque support slot  
Order code 8.0010.4100.0000

**Complete set:**  
Order code 8.0010.4600.0000



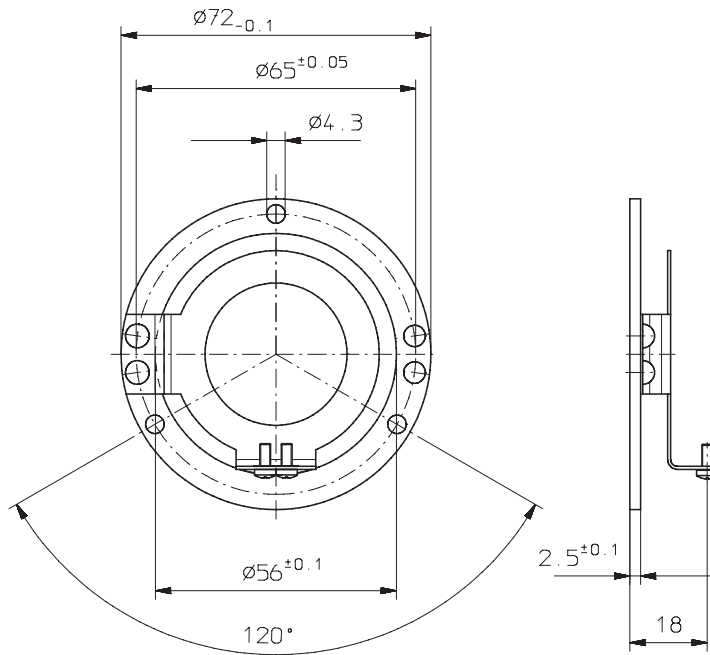
**Mounting attachments**



- Stator coupling for hollow shaft encoders type series 582X or 587X
- Mounting kit for hollow shaft encoder

**Stator coupling for hollow shaft encoders:**

For hollow shaft encoders type series 582X, 587X, 588X, 7030 or 7031  
 Delivered as a kit with 2 fixing screws  
 Order code 8.0010.1602.0000



**Double-winged stator coupling**

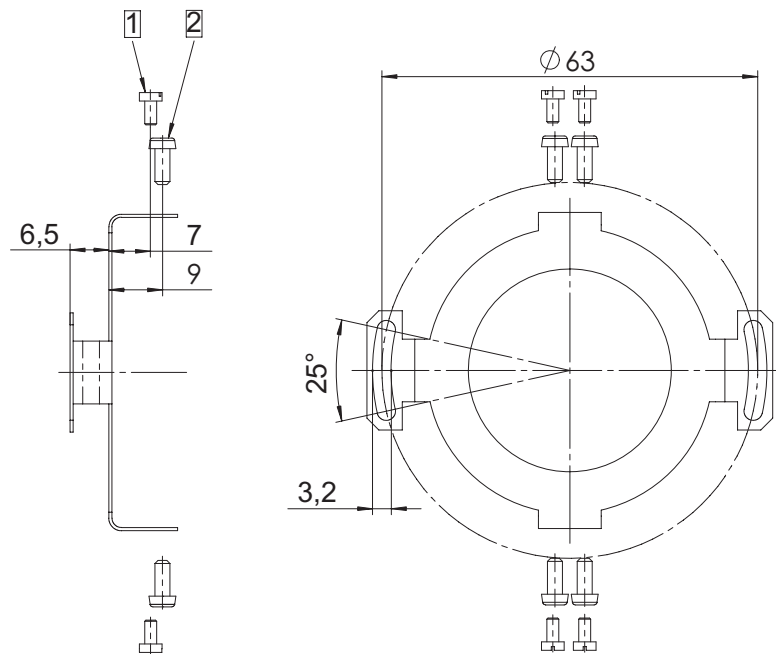
- For increased torsional strength
- For increased dynamic loads

Kit for hollow shaft encoders type 58XX comprising:

- 1 x stator coupling, double-winged
- 2 x 2 screws

Complete kit:

Order code 8.0010.4D00.0000



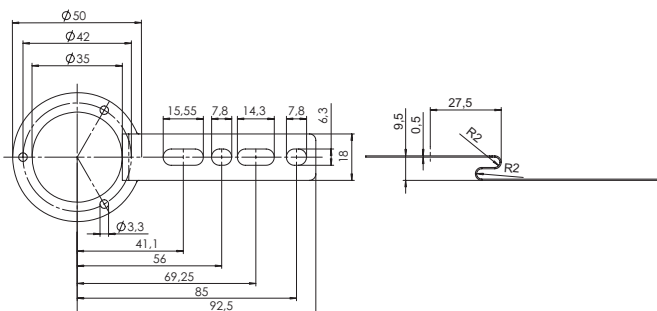
- 1 Fixing screw for 5882
- 2 Fixing screw for 582X, 587X

## Mounting attachments



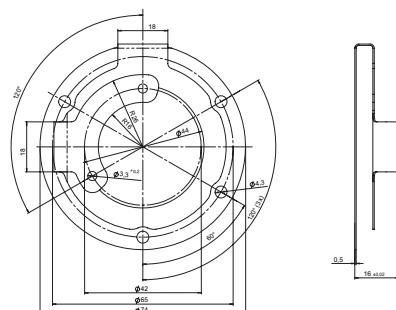
8.0010.4R00.0000  
Flexible fastening arm

Suitable for:  
5020, 582X,  
587X, 588X



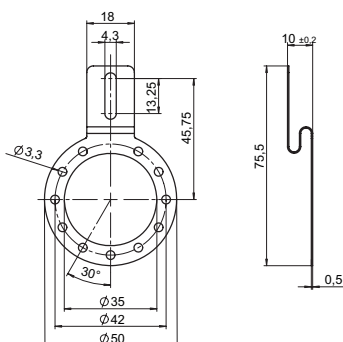
8.0010.40L0.0000  
Stator coupling (The kit includes the screws)

Suitable for:  
5020, 582X,  
587X, 588X



8.0010.40E0.0000  
Flexible fastening arm

Suitable for:  
5020, 582X,  
587X, 588X

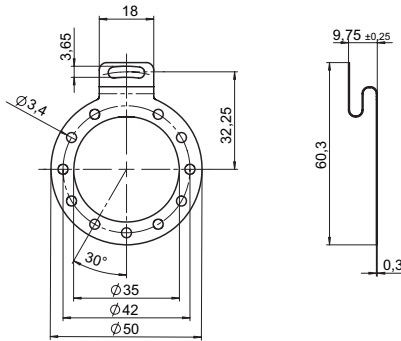


**Mounting attachments**



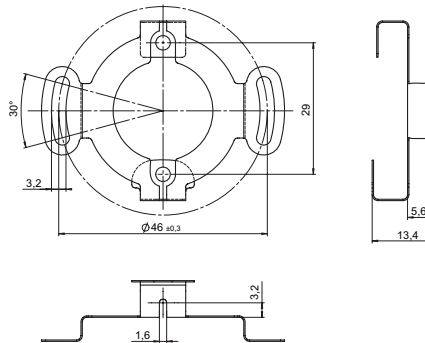
**8.0010.40M0.0000**  
Flexible fastening arm

Suitable for:  
5020, 582X,  
587X, 588X



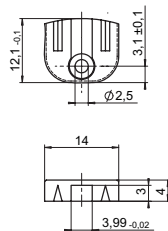
**8.0010.4C00.0000**  
Double-winged stator coupling

Suitable for:  
3720, 3620



**8.0010.4H00.0000**  
Spring element

Suitable for:  
3620, 3720.  
5020, 582X,  
587X, 588X



## Couplings



- Bellows type couplings are recommended as an inexpensive type of coupling
- They are also suitable to compensate larger angular displacements
- Spring washer type couplings for high speed applications
- Easy to mount, two parts

### Description and applications

Manufacturing and installation tolerances as well as the effects of temperature cause alignment errors between shafts in drive engineering which can sometimes lead to extreme overload on the bearings. This may result in increased wear of the bearings and may lead to premature failure of the encoder. By using couplings, these

alignment errors can be compensated, thereby reducing the load on the bearings to a minimum.

A distinction should be made between three different kinds of alignment error: radial, angular and axial displacement.

Whilst with torsion-free but bendable shaft couplings, axial shaft displacements

produce only static forces in the coupling, radial and angular displacements produce alternating stresses, restoring forces and moments which may have an impact on adjoining components (shaft bearings). Depending on the type of coupling, particular attention should be paid to radial shaft displacement which should be kept to a minimum.

### Areas of application:

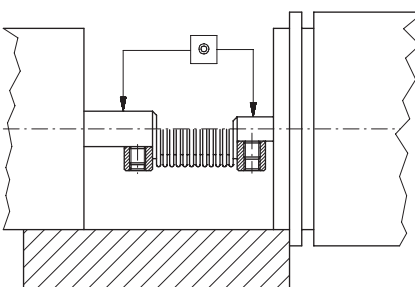
Metal bellows-type couplings (.1101 and 1201) are recommended as an inexpensive type of coupling. They are also suitable for compensating larger angle displacements.

Spring washer-type couplings (.1300 and .1401) are used mainly in those cases where high speeds and smaller angular displacements are involved. For applications where

electrical insulation between rotary encoder and drive is required, the electrically insulating spring washer-type coupling should be used.

### Installation instructions:

1. Check shaft for displacement; See technical data for details
2. Align and adjust coupling on shafts.



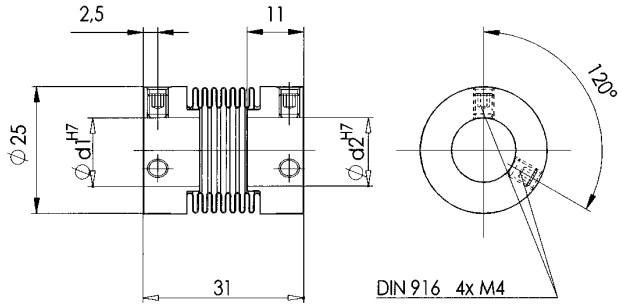
3. Tighten locking screws carefully. Avoid overtightening.
4. During installation protect the coupling from damage and from overbending.

### Technical data

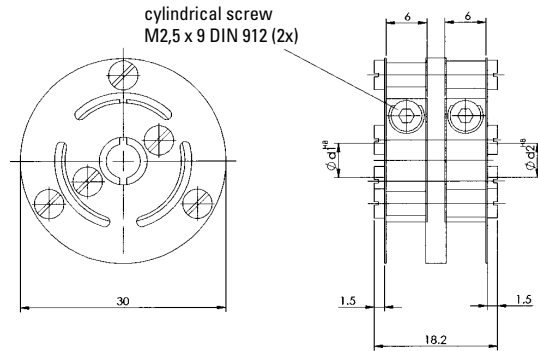
Type		8.0000.1101.XXXX	8.0000.1201.XXXX	8.0000.1301.XXXX	8.0000.1401.XXXX	8.0000.1501.XXXX
Max. speed	min <sup>-1</sup>	12000	12000	12000	12000	12000
Max. torque	Ncm	150	50	80	60	200
Max. radial displacement	mm	± 0.2	± 0.2	± 0.4	± 0.3	± 0.2
Max. angular displacement	Grad	± 1.5	± 1.5	± 3	± 2.5	± 1.5
Max. axial displacement	mm	± 0.7	± 0.5	± 0.4	± 0.4	± 0.6
Torsion spring parameter	Ncm/Grad	700	210	150	55	1300
Moment of inertia	gcm <sup>2</sup>	5.5	1.2	19	35	18
Weight approx.	g	14	6	16	30	24
Material: Flange		Al	Al	Al cu Mg Pb	diecast Zinc	Al
Bellow or spring washer/casing		stainless steel	stainless steel	Cu Sn 6 Vern.	PA 6,6 20% gf	stainless steel
Diameter d/d1 from ... to	mm	3...12	3...9	3...8	4...16	3...16
Max. tightening torque of locking screws	Ncm	150	70	80	80	180
Standard bore diameter	mm	12/12	8/6	6/6	12/12	15/12
		12/10	6/6	6/4	12/10	14/12
		10/10	6/4	6/4	10/10	14/10
		6/6	4/4		10/6	06/14
			10/8		6/6	
				3/8"/10		
				3/8"/6		
				1/4"/10		
				1/4"/6		

**Couplings**

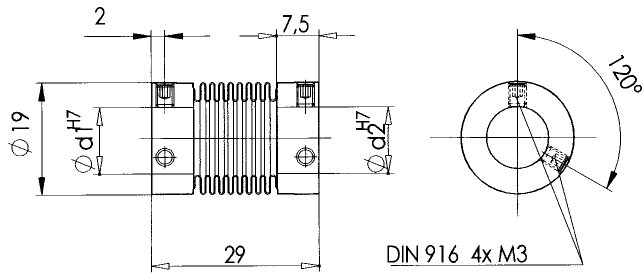
**Bellows-type coupling**  
Order code 8.0000.1501.XXXX



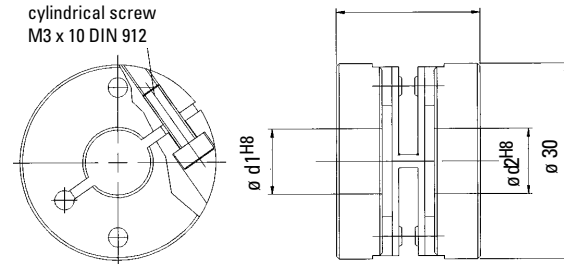
**Spring washer coupling**  
Order code 8.0000.1300.XXXX



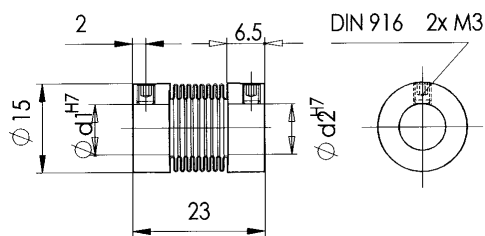
**Bellows-type coupling**  
Order code 8.0000.1101.XXXX



**Spring washer coupling**  
Order code 8.0000.1401.XXXX



**Bellows-type coupling**  
Order code 8.0000.1201.XXXX



Order code:

8.0000.1X0X.XXXX

Type of coupling	
1	Bellows-type $\varnothing$ 19 mm
2	Bellows-type $\varnothing$ 15 mm
3	Spring washer type
4	Spring washer type*
5	Bellows-type $\varnothing$ 25 mm

\* electronically isolated

Bore diameter  $d_2$  see table

Bore diameter  $d_1$   
e.g.:  $d_1 = 10$  mm and  $d_2 = 12$  mm  
=> XXXX.XXXX.101<sup>2</sup>  
for the bore diameter  
 $d_1 = 3/8$ " Code = A1  
 $d_1 = 1/4$ " Code = A2

Example: Coupling type 1401:  
 $d_1 = 3/8$ " and  $d_2 = 10$  mm:  
Order-Code = 1401.A110

**Bearing block: Separation of bearing load and sensor component**

- By separating the bearing load and the sensor technology the encoder is well protected even in harsh application conditions. This is, for example, a particular advantage with belts that can be tensioned differently such as occurs in lift construction (shaft copying)
- Simple upgrade, no mechanical adaptation
- Long service life, durable mounting

**Fits:**

– Compatible dimensions to existing encoders

**Flexible:**

– Versions for retrofitting to solid shaft encoders;  
 Versions for hollow shaft encoders for very small installation depth

**Upgradeable:**

– Simple and easy to upgrade and retrofit  
 – Increases the maximum bearing load by a number of times



**Mechanical characteristics:**

	Shaft	Hollow shaft
Speed:	max.3000 min <sup>-1</sup>	max.6000 min <sup>-1</sup>
Load capacity of the shaft:	radial: 400 N (optional 600 N), axial: 200 N	radial: 300 N, axial: 150 N
Weight:	approx. 400 g	
Material:	shaft: stainless steel, flange: anodised aluminum, grub screw, protection for bore nut: steel	

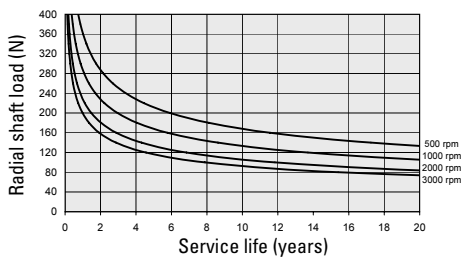
**Shaft version**



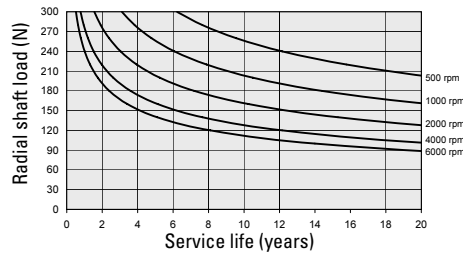
**Hollow shaft version**



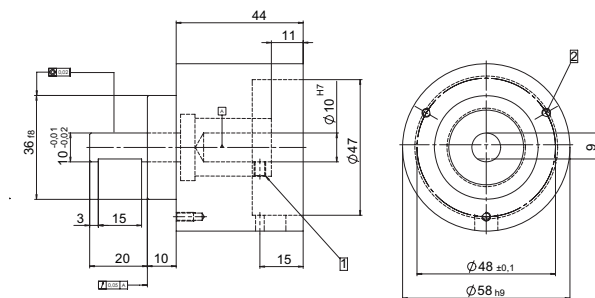
Service life dependent on the radial shaft load



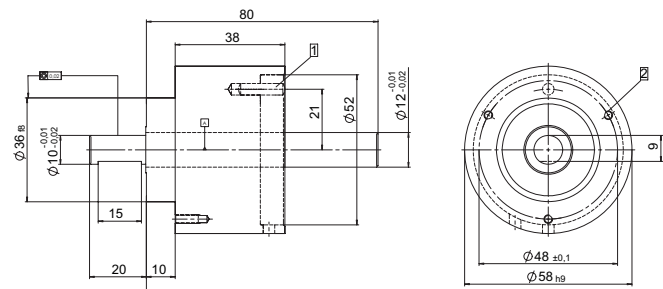
Service life dependent on the radial shaft load



**Dimensions:**



- 1 M4, SW2    2 M3, 5 depth (3 x 120°)



- 1 Cyl. pin DIN 7  $\varnothing 4 \times 16$     2 M3 x 8

**Order Code:**

Type	Bearing block for solid shaft encoder $\varnothing 58$ mm with clamping flange and shaft $\varnothing 10$ mm	Bearing block for hollow shaft encoder $\varnothing 58$ mm with hollow shaft $\varnothing 12$ mm
Art. No.	8.0010.8200.0006	8.0010.8400.0007

## Assembly bell



- easy and quick encoder mounting
- electrical and thermal insulation: use of fibre glass plastic
- complete delivery (kit)

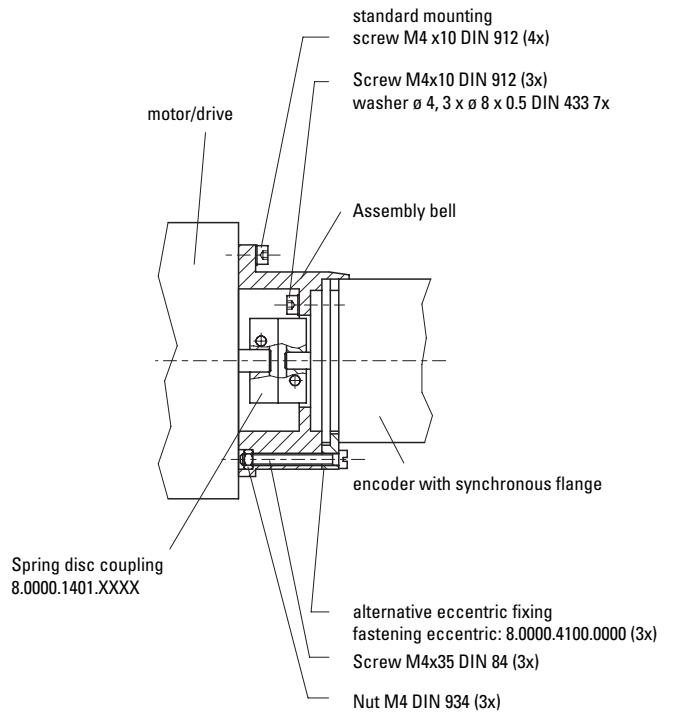
### Kit includes:

- Assembly bell
- Spring washer type coupling  
Order code 8.0000.1401.XXXX
- 4 x hexagon socket head cap screws  
DIN 912 M 4 x 12
- 3 x hexagon socket head cap screws  
DIN 912 M 4 x 10
- 7 x washers DIN 433 Ø4
- 3 x fastening eccentrics  
8.0000.4B00.0000
- 3 x hexagon head screws DIN 84 M 4 x 35
- 3 x hexagon nuts DIN 934 - M4

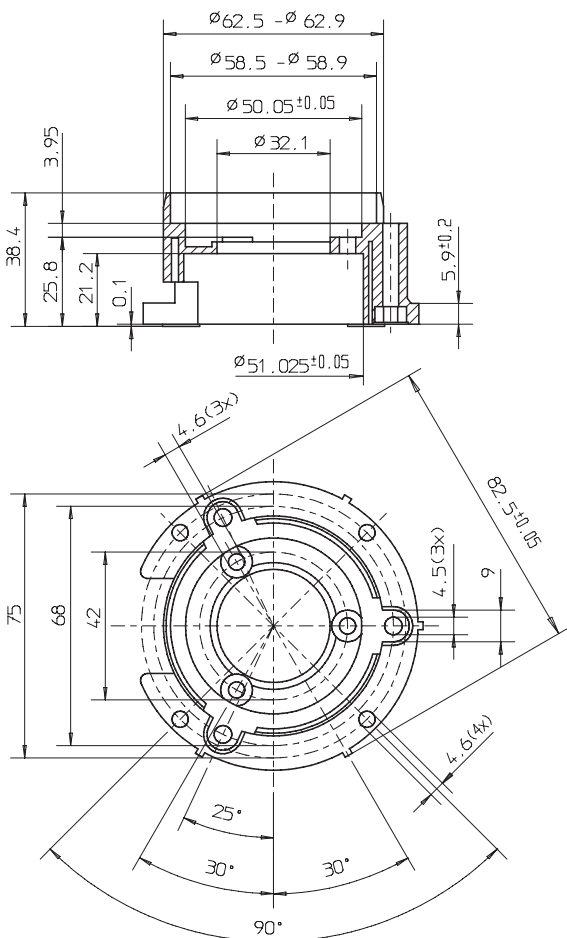
Example



### Mounting example:

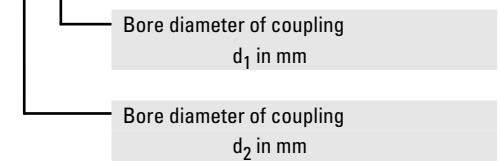


### Dimensions



### Order code:

8.0000.4500.XXXX



## Bearing box

### Description

In applications where the encoder is driven by use of gears, chains, belts etc. and the permitted axial and radial shaft loads are exceeded, we recommend the use of the special designed bearing box which has stronger bearings.

It can be combined with all encoders of the type series 58XX with clamping flange and shaft  $\varnothing 10 \times 20 \text{ mm}$ .

### Technical data

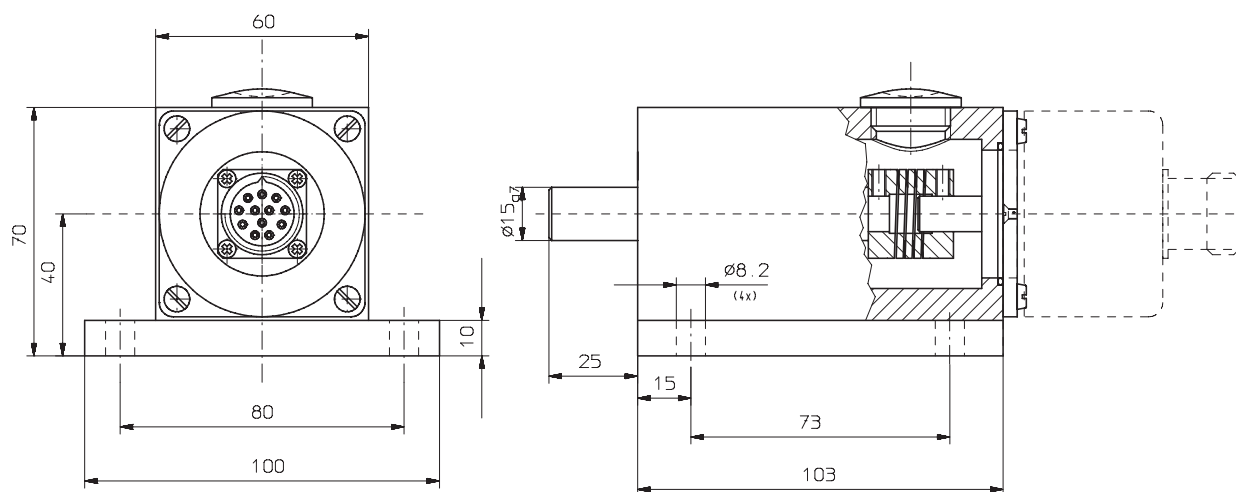
Suitable for encoders type series 58XX, with clamping flange and shaft  $\varnothing 10 \times 20 \text{ mm}$ .

Shaft load	axial: 150 N radial: 250 N
Lifetime of bearings:	50.000 h
Protection:	IP 65
max. speed:	4000 $\text{min}^{-1}$

### Kit includes:

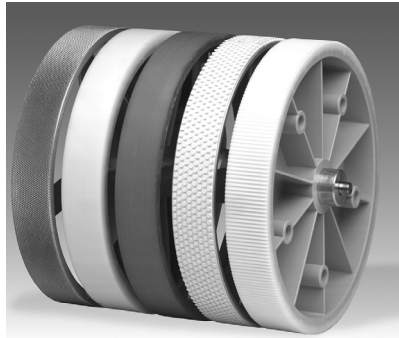
- Bearing box with lock cover and sealing
- Coupling for shaft  $\varnothing 10$
- Flange adapter 8.0010.2100.0000
- 3 x countersunk head screws  
DIN 63 M 3 x 8
- 4 x slotted cheese head screws  
DIN 84 M 4 x 8

### Dimensions



Order code  
8.0010.8200.0004

## Measuring wheels



- Measuring wheels are utilized in combination with encoders to measure material in the wood, paper, metal, textile and plastic industry.
- Various diameters, designed for use with Kübler encoders, available for metric and imperial systems.
- When selecting a measuring wheel, the first consideration is the type of material to be measured as this serves as the basis for determining the surface finish or coating of the measuring wheel.

### Surface of the measured material:

Surface of the measured material:	Recommended profile no.
Plastic e.g. PVC, PE, ...)	4, 5
Paper	4, 5
Cardboard	1, 4, 5
Wood	1, 4, 5
Textile	6, 9, 1
Bare metals	6
Varnished surfaces	6
Wire	5

### Measuring wheels on stock:

8.0000.3211.0004	8.0000.3542.0010
8.0000.3211.0006	8.0000.3542.0012
8.0000.3211.0010	8.0000.3552.0010
8.0000.3241.0006	8.0000.3552.0012
8.0000.3211.0010	8.0000.3562.0007
8.0000.3291.0004	8.0000.3562.0010
8.0000.3291.0006	8.0000.3592.0006
8.0000.3291.0010	8.0000.3592.0010
8.0000.3512.0010	8.0000.3592.0012
8.0000.3542.0007	8.0000.3751.0010

### Measuring wheels for metric system:

Measuring wheel	Profile	Coating	Coating hardness	Standard bore [mm] <sup>1)</sup>	Measuring width [mm]	Material of wheel body	Weight (approx.) [g]	Wheel No.
0.2 m ø 6,37 cm	1	diamond knurl		6	12	aluminum	40	211
	4	plastic (Hytrel), smooth	85 ... 90	4/6/10	12	plastic	35	241
	9	plastic (Hytrel), corrugated	85 ... 90	4/6/10	12	plastic	35	291
0.5 m ø 15,92 cm	1	diamond knurl		10	25	aluminum	350	512
	4	plastic (Hytrel), smooth	85 ... 90	7/10	25	plastic	260	542
	5	plastic (Vulkollan), smooth	85 ... 90	10	25	aluminum	320	552
	6	tufted rubber		10	25	aluminum	320	562
	9	plastic (Hytrel), corrugated	85 ... 90	7/10	25	plastic	260	592

### Measuring wheels for imperial system:

Measuring wheel	Profile	Coating	Coating hardness	Standard bore [mm] <sup>1)</sup>	Measuring width [mm]	Material of wheel body	Weight (approx.) [g]	Wheel No.
1 foot	1	diamond knurl	70 .. 75	6	9,7	aluminum	110	751

<sup>1)</sup> other bore diameters on request

### Please note:

If a measuring wheel is mounted directly on the shaft of a rotary encoder, the pressure force between the measuring wheel and

measured material should not exceed the radial shaft load listed in the data sheet of the encoder. In addition, the measuring wheels can only be used for in-house pur-

poses which are not subject to the stipulations of the German calibration code.

### Order code:

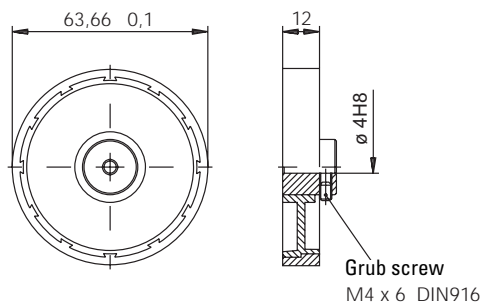
8.0000.3XXX.00XX

Measuring wheel no.

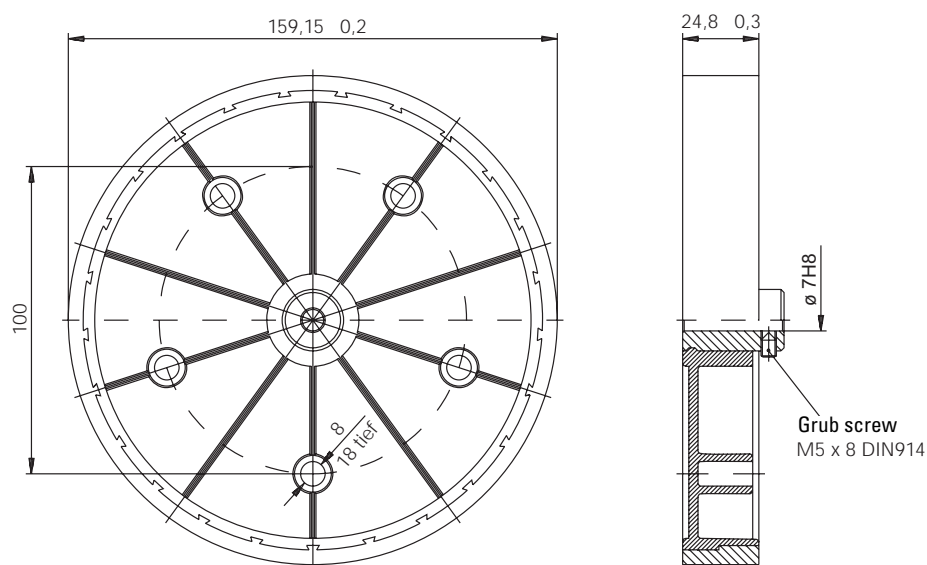
bore diameter

**Measuring wheels**

Dimensions:  
Type 3241 and 3291



Dimensions:  
Type 3542 and 3592



## Draw-wire accessories



- Guide pulley for draw-wire encoder

Order code 8.0000.7000.0031

**Stock types**  
Draw wire accessories



Extension cable, steel wire 2 m: Order code 8.0000.7000.0033

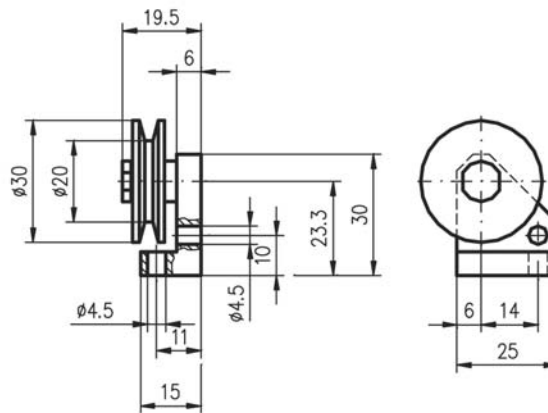
Extension cable, steel wire 5 m: Order code 8.0000.7000.0034

Extension cable, steel wire 10 m: Order code 8.0000.7000.0035

Extension cable, para wire 2 m: Order code 8.0000.7000.0032

Dimensions:

Guide pulley



Extension cable

