# Аксессуары, комплектующие для энкрдеров, безопасных мониторов, счетчиков

Технические характеристики

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#### Extension cable Paraleine

With extension cables, the actual measuring range can be used without any loss of resolution. We offer numerous extension cables in our portfolio for this purpose.

2 m

8.0000.7000.0032



#### Extension cable steel

With extension cables, the actual measuring range can be used without any loss of resolution. We offer numerous extension cables in our portfolio for this purpose.

2 m 8.0000.7000.0033 5 m 8.0000.7000.0034 10 m 8.0000.7000.0035



## Guide pulley

With guide pulleys, linear movements can also be directed around obstacles. This not only increases their flexibility but can also compensate for installation tolerances. Idler pulleys can also act to clean off dirt and break ice.

#### Technical data:

Installation angle (anodized aluminum)
Guide pulley (plastic POM)
Ball bearing (Type 696-2R5)

#### Scope of delivery:

2 x countersunk screws for side fixing 2 x Allen screws for fixing on a flat surface



#### Extension cable steel

With extension cables, the actual measuring range can be used without any loss of resolution. We offer numerous extension cables in our portfolio for this purpose.

5 m	8.0000.7000.0048
0,5 m	8.0000.7000.0051
1 m	8.0000.7000.0052
6,5 m	8.0000.7000.0053
3 m	8.0000.7000.0055



#### EMC shield terminal

For EMC-compliant installation of the encoder

Mounting on top hat rail

Shield diameter

8.0000.4G06.0312 (03-12 mm)

Weight approx. 7.4 g Clamp (spring steel, galvanized) Foot (spring steel)

8.0000.4G06.0312



Configuration strip

8.CS.1111.xxxx

**Mechanical CAD / STEP** 8.0000.4G06.0XXX



#### Configuration strips

The configuration strip for the respective rated speed is inserted into the L ES03sensor during commissioning. An L EDvisualizes the respective taught-in rated speed with a flashing pattern. In this way, the certifying agency can also validate the configuration at any time.

Corresponding configuration strips are available for different rated speeds.

8.CS.1111.XXX



#### Safe mounting kit

The L ES.MKmounting kit contains all the components you need to install the Ants L ES02 sensor and its code tape in the lift shaft.

8.LES.MK.0001 Safe

L ES.MK- Mounting kit

**Mechanical CAD / STEP** L ES.MK

8.L EX.ZB.0002Slides



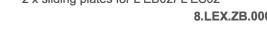
#### Sliding plates

The sliding plates for the lateral guidance of the coded band L EX.BAin the sensors L EB02and L ES02.

Scope of delivery:

2 x sliding plates for L EB02/ L ES02

8.LEX.ZB.0002





#### Carabiner

Carabiner for fastening the code band L EX.BAto the rail fastening plates.

Scope of delivery: 1 x carabiner

**Data sheet** 8.L EX.ZB.0007 Carabiner DE E



## Locking element

Data 8.LEX.ZB.0013 Locking el

The locking element is used for fastening the slides in the Ants LEB02 and Ants LES02 sensors.

The locking element is to be replaced in case of deformations or damages.

Scope of delivery: 1 x locking element 1 x oval head screw M3.5 x 12

8.LEX.ZB.0013



## **Linear measuring technology**

Incremental magnetic measurement system sensor head, magnetic band

Limes LI50 / B2

Resolution min. 5 µm

Accessories / Displays Codix 560, preset counter - Counter, tachometer, time counter and position display in one device 6.560.010.XXX - Scalable display 6-digit - Readable via RS232/485 interface or configurable via MODBUS or CR/LF protocol **571T touch, multifunction preset counters** - Measuring function for RPM, speed, speed from elapsed time, machine cycle 6.571T.01X.XXX time, throughput time (reciprocal rotary speed), as well as numerous count 8-digit functions such as position display - Fast counting input (250 kHz/HTL, 1 MHz/RS422) - 4 switching outputs as limit values (response time < 1 ms) - Scalable analog output (response time < 150 ms), resolution 16 bit - Serial interface RS232 or RS485 for reading in and out the data



Measuring wheel in different surfaces: cross knurls, knobs, plastic smooth or ribbed and natural rubber smooth

Measuring wheels for measuring the length of products in movement, e.g. in the paper, metal, textile, wood or plastic industry. Different wheel surfaces to meet the requirements of the various surfaces of the product to be measured – different circumferences, designed for use with Kübler encoders, available for metric and imperial systems. For evaluation, you can rely on a multitude of counters and displays from our Codix portfolio.

8.0000.3XXX.00XX

Data sheet Measuring wheels

Mechanical CAD / STEP

Measuring wheels



#### O-Ring

Spare part for corresponding measuring wheels with circumference 200 mm, 300 mm, 6" and 12".

8.0000.7000.00XX



#### Pulley and toothed belt

The pulley with the toothed belt, combined with a rotary encoder, results in a flexible length measuring set for measuring positions and speeds. The complete system is easy to mount and compensates for unevenness or mounting tolerances within the application.

8.0000.AXX1.XXXX 8.0000.B1X1.XXXX



#### Rack and pinion

Measuring system with movable, spring-loaded encoder holder (with rack and pinion) for optimum contact pressure and protection of the encoder shaft.

Optimally matched components: One rotation of the pinion corresponds to a travel of 50 mm.

8.0010.7000.0001 8.0000.7000.000X



Encoder spring arm for incremental encoders KIS50, 5000 and 5805 as well as for absolute encoders M58, F58 and 58

The encoder spring arm MWE60 in combination with an encoder and a measuring wheel is the ideal solution for reliable speed, position and distance measurement in applications with linear movements. An integrated spring ensures the contact pressure of the measuring wheel on the

measuring surface, which is necessary for reliable measured value acquisition. The desired contact pressure is individually adjustable.

MWE60 - Encoder spring arm

Mechanical CAD / STEP MWE60 Encoder spring arm





Fixing components for hollow	v shaft encoders	For enc	oders up to ø	58 m	m					0	ver	/ie\	N		
						ncren enco			Absolute enc	singl oders			olute enco		
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	3620, 3720	KIH50, 5020, 5026	5834 Motor-Line	5823, 5824, 5825, 5834	3671, M3678, F3673, F3678	5873, 5878, 5870, 5872	5873 Motor-Line	F3683, F3688	M3681, M3683, M3688	5883, 5888, F5883, F5888	F5883M, F5888M
	Spring element, short For applications with limited axial play and low dynamics, and reduced mounting space	36XX 42 [1.65] M36XX 42 [1.65] F36XX 42 [1.65] 37XX 40 [1.57] 50XX 42 [1.65] 58XX 42 [1.65] F58XX 42 [1.65]	8.0010.4H00.0000  Connection to the application: cylindrical pin	4	X	X		X	Х	X		X	X	X	Х
	Spring element, long For applications with axial play and low dynamics	36XX 61,4 [2.42] M36XX 61,4 [2.42] F36XX 61,4 [2.42] 37XX 61,4 [2.42] 50XX 67,4 [2.65] 58XX 73,4 [2.89] F58XX 73,4 [2.89]	8.0010.4100.0000  Connection to the application: cylindrical pin	4	X	X		X	Х	X		X	X	X	X
	Torque stop, short (flexible) For applications with axial and radial play, low dynamics	64.5 [2.54]	8.0010.40M0.0000  Connection to the application: 1 screw	4		Х		X		X				х	Х
	Torque stop, medium (flexible) For applications with axial and radial play for constant rotary move- ments	65 91.5 [2.56 3.60]	8.0010.40E0.0000  Connection to the application: 1 screw	4		X		X		X				X	X
	Torque stop, long (flexible) For applications with axial and radial play and low dynamics	80 170 [3.15 6.69]	8.0010.4R00.0000  Connection to the application: 1 screw	5		Х		X		X				Х	X
Si non	Stator coupling, double-winged For applications with axial and radial play and high dynamics	46 [1.81]	8.0010.4C00.0000  Connection to the application: 2 screws	5	X				Х						х
	Stator coupling, double-winged For applications with high demands for accuracy	63 [2.48]	8.0010.4D00.0000  Connection to the application: 2 screws	5		Flansch C + D	Х	X		X	х			Х	
	Stator coupling, for fixing to side of encoder  For standard applications with axial and radial play, and high dynamics	65 [2.56]	8.0010.1602.0000  Connection to the application: 3 screws	6		Flansch C + D		Х		Х				X	X
	Stator coupling, for fixing to front of encoder For applications with axial and radial play and high dynamics	65 [2.56]	8.0010.40L0.0000  Connection to the application: 3 screws	6		Х		X		X				X	X
	Spring tether element For applications with low axial and radial play and low dynamics	42 84.5 [1.65 3.33]	8.0010.40W0.0000  Connection to the application: 1 screw	6		Х		Х		Х				Х	Х



Fixing components for hollow	Fixing components for hollow shaft encoders For encoders up to ø 58 mm					0	<b>Overview</b>							
						ncren enco				ıte sing ncode			olute multi encoders	
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	5834FSx	5020	5823, 5824, 5825	5823, 5824, 5825	5873FSx	5873, 5878	5873 Motor-Line	5883FSx	5883, 5888, F5883, F5888,	F5883M, F5888M
	Stator coupling  Designed for functional safety thanks to the 4-screw-principle.	63 [2.48]	8.0010.40B2.00FS  Connection to the application: 4 screws	7	Х	X	X	X	X	X	X	X	х	
	Torque stop, flexible Designed for functional safety. For applications with axial and radial play and low dynamics.	79 285 [3.11 11.22]	8.0010.4047.00FS  Connection to the application: 1 screw	7	Х	х	X		Х	Х		Х	Х	х
	Torque stop set, rigid  Designed for functional safety. For applications with very low axial and radial play and low dynamics.	65 287 mm [2.56 11.30]	8.0010.4051.00FS  Connection to the application: cylindrical pin	8	Х	X	Х		X	X			х	X



Fixing components for hollow shaft e	ncoders For encoders > ø 58 m	For encoders > ø 58 mm Overvi					
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	А020, А02Н	H120	
	Spring element, short  For applications with reduced mounting space  76 [2.99]  Connection to the application: cylindrical pin			9	Х		
	Spring element, long For applications with high axial play						
	Torque stop, short For applications with axial play	8.0010.4T00.0000  Connection to the application: s. details	9	Х			
	Torque stop, long For applications with fastening points located on variable pitch circle diameters	104 206 [4.09 8.11]	8.0010.4E00.0000  Connection to the application: 1 screw	10	Х		
	Tether arm, long  For applications with low axial and radial play, flexible in use	Length = 70 [2.75]: Length = 100 [3.94]: Length = 150 [5.91]: 262 422 [10.32 16.61]	8.0010.40\$0.0000 8.0010.40\$T0.0000 8.0010.40\$U0.0000 Connection to the application: 1 screw	10	Х	х	
	Tether arm,   Length = 70 [2.75]:   8.0010.40\$\text{S1.00}			11		х	
	Stator coupling  For applications with axial and radial play and high dynamics	119 [4.69]	8.0010.40V0.0000  Connection to the application: 2 screws	11	Х	Х	



Fixing components for ho	ollow shaft encoders For encoders up t	o ø 58 mm	Details
Dimensions / Details	Dimensions in mm [inch]		Order no.
Spring element, short	12,1-0.1 3,9 00 3,1±0,1	Scope of delivery: - spring element (plastic) - 1 screw for fixing to the encoder  Connection to application: - cylindrical pin (8.0010.4700.0000) (not supplied)	8.0010.4H00.0000
Spring element, long	4 [0.16] 3 [0.12] 18,6 [0.73] 24 [0.95] 2,4 2,4 2,4	Scope of delivery: - spring element (plastic) - 1 screw for fixing to the encoder  Connection to application: - cylindrical pin (8.0010.4700.0000) (not supplied)	8.0010.4100.0000
Cylindrical pin, long with fastening thread	8 5 5 SW7 R7 2 30	suitable for spring element short (8.0010.4H00.0000) and long (8.0010.4I00.0000)	8.0010.4700.0000 <sup>1)</sup>
Torque stop, short	9,75±0,25 9,75±0,25 80 9,75±0,25 80 9,75±0,25 80 9,75±0,25 80 9,75±0,25	Scope of delivery: - Fastening arm (stainless steel) - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40M0.0000
Torque stop, medium	18 4.3 10 ±0.2 10	Scope of delivery: - Fastening arm (stainless steel) - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40E0.0000 <sup>1)</sup>

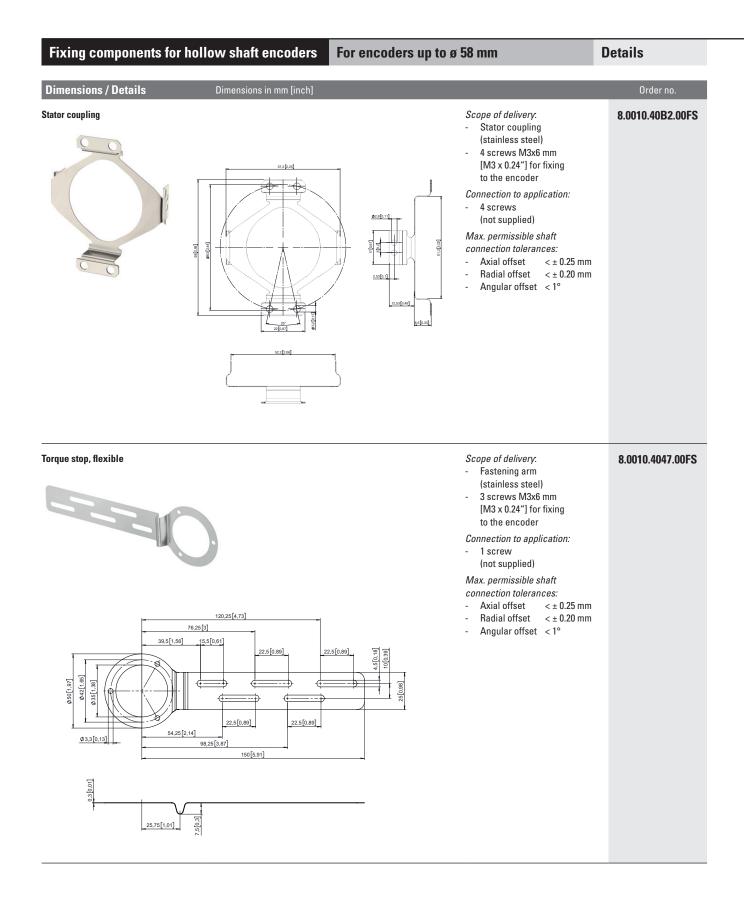


#### Fixing components for hollow shaft encoders For encoders up to ø 58 mm **Details Dimensions / Details** Torque stop, long Scope of delivery. 8.0010.4R00.0000 Ø 50 Fastening arm (stainless steel) Ø42 3 screws for fixing to the Ø35 encoder Connection to application: 1 screw (not supplied) Ø3,3 41.1 69,25 85 Stator coupling, double-winged Scope of delivery: 8.0010.4C00.0000 for front fixing onto the encoder Stator coupling flange (stainless steel) 2 screws for fixing to the encoder Connection to application: 2 screws (not supplied) Stator coupling, double-winged Scope of delivery. 8.0010.4D00.0000 Stator coupling for side fixing onto the encoder flange Ø63 [2,48] (stainless steel) 4 screws M2.5 x 6 [0.24] for fixing to the encoders 6,5 [0,26] Connection to application: 9 [0,35] 2 socket head screws M3 x 8 [0.32] with washer (supplied)



#### Fixing components for hollow shaft encoders For encoders up to ø 58 mm **Details** Dimensions / Details Stator coupling Scope of delivery. 8.0010.1602.0000 for side fixing onto the encoder Stator coupling Ø 65 ±0,05 flange (stainless steel) Ø4,3 2 screws for fixing to the encoder Connection to application: 3 screws (not supplied) Scope of delivery. Stator coupling 8.0010.40L0.0000 for front fixing onto the encoder Stator coupling flange (stainless steel) 2 screws for fixing to the encoder Connection to application: 3 screws (not supplied) 0,5 16 <sub>±0,05</sub> Ø42 Ø65 Spring tether element 8.0010.40W0.0000 Scope of delivery: spring tether element 1 screw for fixing to the encoder Connection to application: 1 screw (not supplied) Clamping ring for hollow for Stainless steel, for high rotational В D1 shaft ø encoder speeds 582X 6 [0.236] 29 [1.14] 10 [0.39] 8.0000.4V00.0000 6.2 [0.244] 30 [1.18] 12 [0.47] 8.0000.4W00.0000 5020 6.2 [0.244] 30 [1.18] 12 [0.47] 8.0010.4W01.0000 1 screw DIN 912 A2 M2.5, max. tightening torque 0.45 Nm





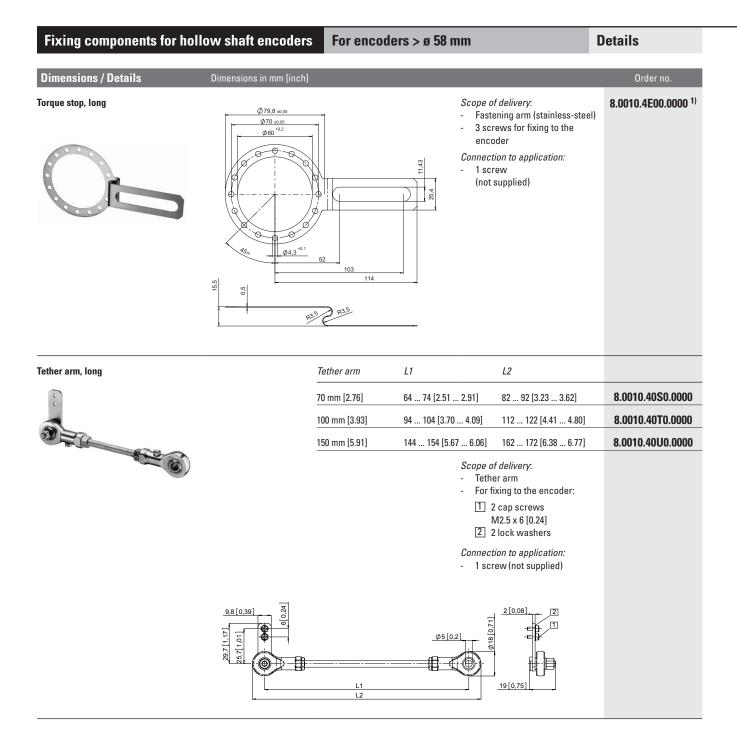


For encoders up to ø 58 mm Fixing components for hollow shaft encoders **Details** Dimensions / Details Torque stop set, rigid Scope of delivery. 8.0010.4051.00FS Fastening arm (stainless steel) 3 screws M3x6 mm [M3 x 0.24"] for fixing to the encoder Connection to application: 1 cylindrical pin 150 [5,91] 143,5 [5,65] 8.0010.4049.0075 110 [4,33] (not supplied) Max. permissible shaft 8 [0,31] 25 [0,98] 25 [0,98] connection tolerances: Axial offset < ± 0.25 mm Radial offset  $< \pm 0.20 \text{ mm}$ Angular offset < 1° 25 [0,98] 25 [0,98] 25 [0,98] Ø3,3[0,13] 92.5 [3.64] 127,5 [5,02] 57,5 [2,26] Cylindrical pin (replacement) suitable for: 8.0010.4049.0075 torque stop **□6[0,24]** 8.0010.4051.00FS



Fixing components for h	ollow shaft encoders	For encoders > ø 58	mm	Details
Dimensions / Details	Dimensions in mm [inch]			Order no.
Spring element, short	6 [0.24]	23 0 27	Scope of delivery: - Spring element (stainless steel - 2 screws for fixing to the encoder  Connection to application: - Cylindrical pin (8.0010.4700.0003) (not supplied)	8.0010.4J00.0000
Spring element, long	3 [0.12] 6 [0.24] 30 [1.18]	2 [0.08]	Scope of delivery: - Spring element (stainless steel - 2 screws for fixing to the encoder  Connection to application: - Cylindrical pin (8.0010.4700.0003) (not supplied)	8.0010.4K00.0000
Cylindrical pin, long with fastening thread	14 [0.55] 9 [0.35] 7 [0.35] 9 [0.35] 9 [0.35] 9 [0.35]	10 [0.39] © © © Ø	suitable for spring element short (8.0010.4J00.0000) and long (8.0010.4K00.0000)	8.0010.4700.0003
Torque stop, short	35.4 [1.39]  35.4 [1.39]  57  51  97  97  97  97  97  97  97  97  97  9	87 3.43 87	Scope of delivery:  1 Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: 2 Hexagonal nut 3/8 - 16 UNC 3 Washer (isolating) 4 Hexagonal screw 3/8 16 UNC x 1" 5 Washer D10.4 x 15 x 15 (supplied)	8.0010.4T00.0000 <sup>1)</sup>







#### Fixing components for hollow shaft encoders For encoders $> \emptyset$ 58 mm **Overview Dimensions / Details** Tether arm Tether arm, long L1 L2 8.0010.40S1.0000 64 ... 74 [2.51 ... 2.91] 82 ... 92 [3.23 ... 3.62] 70 mm [2.76] 112 ... 122 [4.41 ... 4.80] 100 mm [3.93] 94 ... 104 [3.70 ... 4.09] 8.0010.40T1.0000 8.0010.40U1.0000 150 mm [5.91] 144 ... 154 [5.67 ... 6.06] 162 ... 172 [6.38 ... 6.77] Scope of delivery: Tether arm For fixing to the encoder: 1 2 cap screws M2,5 x 12 [0.47] 2 lock washers Connection to application: 1 screw (not supplied 16[0,63] 2,5[0,1] Ø5[0,2] 15,75[0,62] 20,75[0,82] 19[0,75] L2 **Stator coupling** 8.0010.40V0.0000 Scope of delivery. Stator coupling (stainless steel) 4 screws for fixing to the encoder Connection to application: 2 screws (not supplied) 20 [0.79] Ø3.3 [0.13] 0,4 6,9 [0.27] 17,5 [0.69]



Dimensions / Details Dimensions in mm [inch]		Order no.
Protective cover	For applications with a very high degree of pollution, Kübler now offers a protective cover for  Improved reliability  Extension of the service life of the encoder  Scope of delivery:  Protective cover  Fastening arm (8.0010.4T00.0000)  3 screws for fixing to the encoder	8.0010.40Y0.000
Tapered shaft mounting kit or A02H with hollow shaft, ø 38 mm [1.50"]	For use in upgrading for tapered shaft mounting. Tapered shafts are used for high-precision direct coupling. An isolation insert is also included in the mounting kit; this reliably protects the encoder from shaft currents. Included in the set: Insert for cone blind hole, cone 1:10,	8.0010.4028.000
	<ul> <li>17 mm [0.67"] length</li> <li>Isolation insert</li> <li>Allen screw for central fixing</li> </ul>	
	<ul> <li>Isolation insert</li> <li>Allen screw for central fixing</li> <li>Ø D1:</li> </ul>	0.0040.4004.00
	Isolation insert     Allen screw for central fixing  Ø D1: 12 mm [0.47"]	8.0010.4091.000
	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 1[0,04] 14 mm [0.55"]	8.0010.4027.000
	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 14 mm [0.55"] 15 mm [0.59"]	8.0010.4027.000 8.0010.4038.000
emperature range -40°C +115°C [-40°F +239°F]	Isolation insert     Allen screw for central fixing      Ø D1:     12 mm [0.47"]     14 mm [0.55"]     15 mm [0.59"]     16 mm [0.63"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 14 mm [0.55"] 15 mm [0.59"] 16 mm [0.63"] 18 mm [0.71"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  50[1,97]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  ### D1:   12 mm [0.47"]     14 mm [0.55"]     15 mm [0.59"]     16 mm [0.63"]     18 mm [0.71"]     20 mm [0.79"]     25 mm [0.98"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  ings.	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4012.000
emperature range -40°C +115°C [-40°F +239°F]  olation inserts prevent currents from passing through the encoder bearinese currents can occur when using inverter controlled three-phase or	• Isolation insert • Allen screw for central fixing  ### D1:    12 mm [0.47"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000
olation inserts prevent currents from passing through the encoder bearingsecurrents can occur when using inverter controlled three-phase or exter motors and considerably shorten the service life of the encoder bear more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  ### D1:    12 mm [0.47"]     14 mm [0.55"]     15 mm [0.59"]     16 mm [0.63"]     18 mm [0.71"]     20 mm [0.79"]     25 mm [0.98"]     30 mm [1.18"]     32 mm [1.26"]     arings.     and   us an	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4016.000 8.0010.4015.000
emperature range -40°C +115°C [-40°F +239°F]  colation inserts prevent currents from passing through the encoder bear insecurrents can occur when using inverter controlled three-phase or exter motors and considerably shorten the service life of the encoder bear more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  32 mm [1.26"]  arings.  nd us an	8.0010.4027.000 8.0010.4019.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000
solation inserts prevent currents from passing through the encoder bear hese currents can occur when using inverter controlled three-phase or ctor motors and considerably shorten the service life of the encoder bear or more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  32 mm [1.26"]  ings.  AC  arings. and us an  1/2"  5/8"  3/4"	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000 8.0010.4090.000
solation insert for hollow shaft, ø 38 mm [1.50"] imperature range -40°C +115°C [-40°F +239°F]  solation inserts prevent currents from passing through the encoder bear these currents can occur when using inverter controlled three-phase or extor motors and considerably shorten the service life of the encoder bear for more details please call our technical hotline (+49 7720 3903 92) or service info@kuebler.com)	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  32 mm [1.26"]  arings.  nd us an	8.0010.4027.000 8.0010.4019.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000



Fixing components fo	or hollow shaft encoders	For encoders up to	ø 58 mm	Details
Dimensions / Details	Dimensions in mm [inch]			Order no.
Spring element, short			Scope of delivery: - spring element (plastic) - 1 screw for fixing to the encoder  Connection to application: - cylindrical pin (8.0010.4700.0000) (not supplied)	8.0010.4H00.0000
Spring element, long		24 [0.95] 18,6 [0.73] 2,4	Scope of delivery: - spring element (plastic) - 1 screw topolitising to the encoder 3 [0.12] Connection to application: - cylindrical pin (8.00 to 4700.0000) (not supplied)  Suitable for spring element	8.0010.4100.0000
Cylindrical pin, long with fastening thread	0	A	suitable for spring element short (8.0010.4H00.0000) and long (8.0010.4I00.0000)	8.0010.4700.0000
Torque stop, short			Scope of delivery: - Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40M0.0000
Torque stop, medium			Scope of delivery: - Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40E0.0000



#### **Connection of motor and encoder**

#### **Couplings**

#### Bellows and spring washer couplings





Bellows couplings provide cost-effective connection of the motor and encoder. They are also able to correct any angular errors between the drive and encoder.

Spring washer couplings are used with high speeds.

#### Order code Couplings

8.0000 . 1 XXX . XX X

a Type of coupling

102 = Bellows-type ø 19 mm [0.75"]

202 = Bellows-type ø 15 mm [0.59"]

301 = Spring washer type, ø 30 mm [1.18"], one-part

401 = Spring washer type,

ø 30 mm [1.18"], three part, plug-in

502 = Bellows-type ø 25 mm [0.98"]

**b** Bore diameter d1 (see technical data)

Note:

for the bore diameter

d1 = 1/4" please enter Code A2

**G** Bore diameter d2 (see technical data)

Example:  $d1 = 10 \text{ mm } [0.39^{"}] \text{ and } d2 = 12 \text{ mm } [0.47^{"}]$ 

Order no. = 8.0000.1X0X.**1012** 

Stock types 8.0000.1102.1010

Technical data							
Туре			8.0000.1 <b>1</b> 02.XXXX	8.0000.1 <b>2</b> 02.XXXX	8.0000.1 <b>3</b> 01.XXXX	8.0000.1 <b>4</b> 01.XXXX	8.0000. 1 <b>5</b> 02.XXXX
Maximum speed		min <sup>-1</sup>	10000	10000	12000	12000	10000
Maximum torque		Ncm	120	40	80	60	200
Maximum displacement	radial axial angular	mm mm -	± 0.3 ± 0.5 ± 4°	± 0.25 ± 0.45 ± 4°	± 0.4 ± 0.4 ± 3°	± 0.3 ± 0.4 ± 2.5°	± 0.35 ± 0.54 ± 4°
Torsion spring stiff	ness N	lm/rad	150	85	150	30	183
Radial spring stiffn	ess	N/mm	10	20	6	40	17.8
Moment of inertia		gcm <sup>2</sup>	9.5	2.1	19	35	20
Max. tightening tor	que	Ncm	150	70	80	80	120
Working temperatu	ire		-30°C +120°C [-22°F +248°F]	-30°C +120°C [-22°F +248°F]	-30°C +120°C [-22°F +248°F]	-10°C +80°C [+14°F +176°F]	-30°C +120°C [-22°F +248°F]
Weight approx.			16 g [0.56 oz]	6.5 g [0.23 oz]	16 g [0.56 oz]	30 g [1.06 oz]	24 g [0.85 oz]
Material bellow or s	pring washer/o	flange casing	Al, anodized stainless steel	Al, anodized stainless steel	Al, anodized stainless steel	Al, anodized PA 6.6 gf.	Al, anodized stainless steel
Diameter d/d1 from	to mm	[inch]	3 12 [0.12 0.47]	3 9 [0.12 0.35]	3 8 [0.12 0.32]	4 16 [0.16 0.47]	3 16 [0.12 0.63]
Standard bore diameter	(d1 / d2) mm	[inch]	12 / 12 [0.47 0.47] 12 / 10 [0.47 0.39] 10 / 10 [0.39 0.39] 10 / 08 [0.39 0.32] 10 / 06 [0.39 0.24] 08 / 08 [0.32 0.32] 06 / 06 [0.24 0.24]	08 / 06 [0.32 0.24] 06 / 06 [0.24 0.24] 06 / 04 [0.24 0.16] 04 / 04 [0.16 0.16]	06 / 06 [0.24 0.24]	12 / 12 [0.47 0.47] 12 / 10 [0.47 0.39] 10 / 10 [0.39 0.39] 10 / 06 [0.39 0.24] 06 / 06 [0.24 0.24] 1/4" / 10 1/4" / 06	15 / 12 [0.59 0.47] 14 / 12 [0.55 0.47] 14 / 10 [0.55 0.39] 10 / 10 [0.39 0.39] 06 / 06 [0.24 0.24]

#### **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 flexible 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.





#### **Connection of motor and encoder**

#### **Couplings**

#### Bellows and spring washer couplings

#### Metal bellows-type couplings (.1102, .1202 und .1502)

## Metal bellows-type couplings are recommended as an inexpensive type of coupling. They are also suitable for compensating larger angle displacements.

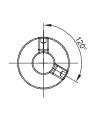
#### Spring washer-type couplings (.1301 und .1401)

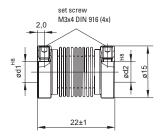
Spring washer couplings are used primarily where high speeds and minimal axial errors occur. For applications requiring potential separation between the encoder and the drive, use the electrically isolating spring washer coupling.

#### **Dimensions**

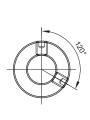
Dimensions in mm

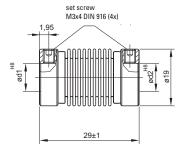
Bellows-type coupling ø 15 [0.59] (8.0000.1202.XXXX)



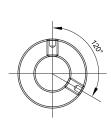


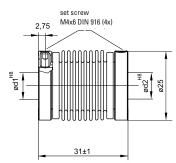
Bellows-type coupling ø 19 [0.75] (8.0000.1102.XXXX)



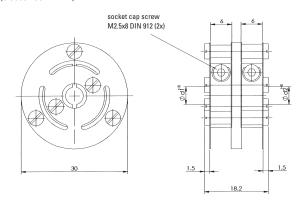


Bellows-type coupling ø 25 [0.98] (8.0000.1502.XXXX)

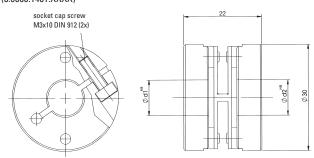




Spring washer-type coupling, one-part (8.0000.1301.XXXX)

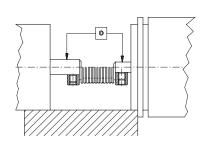


Spring washer-type coupling, three part, plug-in (8.0000.1401.XXXX)



#### **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.





#### **Connection of motor and encoder**

#### **Couplings**

#### **Bellows couplings (FS)**



Bellows couplings provide cost-effective connection of the motor and encoder. They are also able to correct any angular errors between the drive and encoder.

These bellows couplings (FS) are used for safe connection of applications and Sendix SIL encoders.

The safety-oriented bellows coupling has, in addition to the metallic bellows, internal claws that ensure the driving of the encoder in case of breakage of the bellows connection.

Order code	8.0000	1 X	FS	XX	XX
Couplings	Туре	<b>a</b>		0	Θ

a Type of coupling

5 = bellows coupling ø 25 mm [0.98"]

Bore diameter d1 (see technical data)

Bore diameter d2 (see technical data)

Example: d1 = 10 mm and d2 = 12 mm

order no. = 8.0000.15FS.**1012** 

Accessory		Order no.
Screw retention	Loctite 243. 5 ml	8.0000.4G05.0000

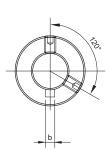
#### Technical data

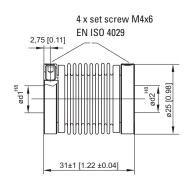
Mechanical characteristics						
Max. speed		10000 min <sup>-1</sup>				
Max. torque		200 Ncm				
Max. shaft offset	radial axial angular	± 0.3 mm ± 0.45 mm ± 3°				
Torsion spring stiffness		183 Nm/rad				
Radial spring stiffness		17.8 N/mm				
Moment of inertia		9.1 gcm <sup>2</sup>				
Headless set screw tightenin	Headless set screw tightening torque					
	min. max.	80 Ncm 100 Ncm				

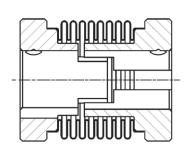
Working temperature range		-30°C +120°C [-22 +248°F]
Weight approx.		54 g
Material	flange bellows	stainless steel 1.4104 stainless steel 1.4571
Standard bore diameter	(d1 / d2)	10 / 10 mm [0.39 / 0.39"] 10 / 12 mm [0.39 / 0.47"] 12 / 12 mm [0.47 / 0.47"]
Insertion depth	min. max.	6 mm [0.24"] 11 mm [0.43"]

#### **Dimensions**

Dimensions in mm [inch]







#### Nut DIN 6885

nut width b	d1 / d2
3 [0.12]	10 [0.39]
4 [0.16]	12 [0.47]



#### **Connection of motor and encoder**

#### Flexible shaft coupling

## **Double loop coupling**



The safe, uncomplicated and economical solution, if drive shafts with angular, radial and/or axial displacement are to be friction-locked together.

#### Order no. size 1

Bore diameter both sides 6 mm [0.24"]

8.0000.1J01.0606

#### Order no. size 2

Bore diameter both sides 10 mm [0.39"]

Bore diameter 11 mm [0.43"] and 12 mm [0.47"] with keyway

8.0000.1K01.1010 <sup>1)</sup> 8.0000.1L01.1112

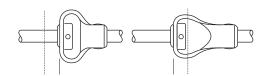
Technical data					
	Size 1	Size 2			
Max. speed	3000 min <sup>-1</sup>	3000 min <sup>-1</sup>			
Max. torque	0.5 Nm	2.0 Nm			
Max. offset of shafts radial axial angular	± 2 mm ± 2 mm ± 10°	± 3 mm ± 4 mm ± 12°			
Torsion spring stiffness	13 Nm/rad	28 Nm/rad			
Radial spring stiffness	13 N/mm	7 N/mm			
Moment of inertia	41 gcm <sup>2</sup>	106 gcm <sup>2</sup>			
Max. clamping torque	100 Ncm	100 Ncm			
Weight, approx.	33 g [1.16 oz]	85 g [3.35 oz]			
Temperature range	-30°C + 80°C [-22°F +176°F]				
Material flange connecting element	steel galvanized Polyurethane				

#### **Functional principle**

Compensation of an angular misalignment Compensation of a radial misalignment



Compensation of a axial misalignment





**Connection of motor and encoder** Flexible shaft coupling **Double loop coupling Dimensions** Dimensions in mm Size 1 Size 2 4 JS9 (+0,015) 2,5 [0.10] 11 / 12 [0.43 / 0.47] 6/6 [0.24 / 0.24] with keyway [0.24] Ø6 H8 ø48<sup>±1</sup> [1.89] ø12 [0.47] H8(+0,027) 4x DIN916 M3 x 4 [0.16] 29<sup>±1,5</sup> [1.14] 46 ±2 [1.81] Size 2 10 / 10 [0.39 / 0.39] ø11 [0.43] H8(+0,027) 13.6.401 4x DIN916 M4 x 6 [0.24] 46<sup>±2</sup> [1.81]



## Fixing components for shaft encoders

**Overview** 

				encoders		Abs. singleturn encoders		Abs. multiturn encoders		
Figure	Description	Order no.	Details s.page	5000, KIS50, 5814, 5006, 5803, 5804, 5805	7000, 7100	5853, 5858, 5852	7053, 7058, 7153, 7158	5863, 5868, F5863, F5868	M5861, M5863, M5868	7063, 7068, 7163, 7168
	Flange, square Suitable for shaft encoders with clamping flange  58.0 [2.28"], 4 [0.16"] thick  63.5 [2.5"], 3 [0.12"] thick  70.0 [2.76"], 10 [0.39"] thick  80.0 [3.15"], 4 [0.16"] thick	8.0010.2100.0000 8.0010.2120.0000 8.0010.2600.0000 8.0010.2800.0000	675 675 675 675	X X X		X X X		X X X	X X X	
e e	Flange ø 65 mm [2.56"]  With this adapter flange, Küber encoders with size 58 mm [2.28"] can replace encoders with diameter 65 mm [2.56"] and pitch circle diameter 48 mm [1.89"]	8.0010.2230.0000	676	Х		Х		Х	Х	
	Flange, ø 115 mm [4.53"] Euroflange	8.0010.2160.0000 8.0010.2170.0000	676	х	х	X	х	Х	Х	х
	Flange, ø 58 mm [2.28"]  Converts encoders with a clamping flange into synchro flange.	8.0010.2180.0000	676	Х		Х		Х	Х	
	Flange, ø 90 mm [3.54"]  Mechanically compatible with former encoder Type 9000	8.0010.2270.0000	677	Х		Х		Х	Х	
	Angular flange 80 mm x 80 mm x 40 mm [3.15" x 3.15" x 1.57"]	8.0010.2300.0000	677	Х		Х			Х	
	Assembly bell  Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling — supplied as complete set	8.0000.4500.XXYY	678	Х		Х		Х	Х	
	Fastening eccentrics  For shaft encoders with synchronous flange. Use at least three fastening eccentrics to mount the encoder.	8.0010.4200.0000 8.0010.4100.0000	679	see table page 679						
	Robust bearing unit  Matching shaft encoders with clamping flange and shaft 10 mm [0.39"]	8.0010.8200.000C	680	Х		Х		Х	Х	
	Bearing box	8.0010.8200.0004	681	Х		Х		Х	Х	

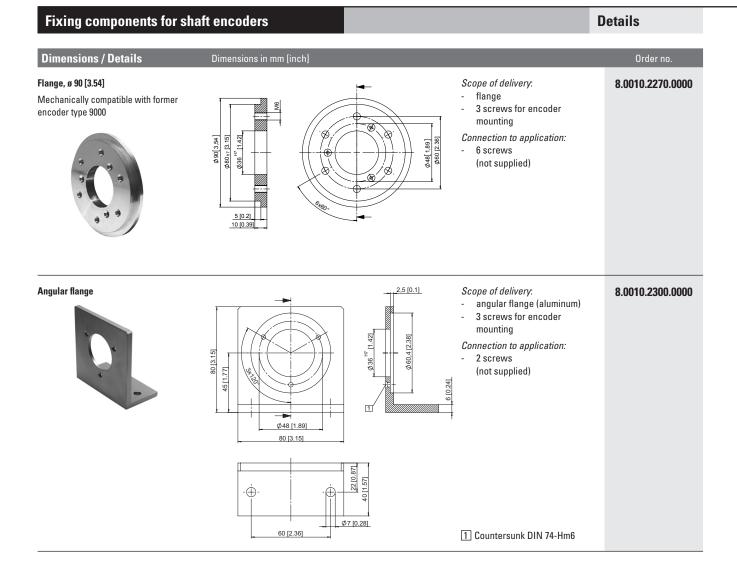


## Fixing components for shaft encoders **Details** Dimensions / Details Flange, square Scope of delivery. flange (aluminum) 3 screws for fixing to the encoder 120• Connection to application: 4 screws (not supplied) Ø36.5 8.0010.2100.0000 "48<sup>±0.1</sup> □58<sup>±0.15</sup> 120. 8.0010.2120.0000 ø36.5 °63.5 $\bigoplus$ 8.0010.2600.0000 Ø36 H8 [1.42 Ø48 [1.89] □58 [2.28] 120• 8.0010.2800.0000 <sup>0</sup>80



#### Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 65 [2.56] Scope of delivery: 8.0010.2230.0000 flange (aluminum) With this adapter flange, Kübler en-3 screws for fixing to the coders with size 58 [2.28] can replace encoder encoders with diameter 65 [2.56] and 1,8 pitch circle diameter 48 [1.89]. Connection to application: 3 screws (not supplied) Ø65 ±0,1 Flange, ø 115 [4.53], encoder type D1 В Euroflange (Euro REO 444) 1 [0.039] DIN 74-BM3 8.0010.2160.0000 580X/5000 48 [1.89] 36 [1.42] 58 [2.28] 11 [0.43] 8.0010.2170.0000 70XX 51 [2.01] 12 [0.47] 42 [1.65] 11.5 [0.45] 7.5 [0.30] DIN 74-BM4 Scope of delivery: flange (aluminum) 1 3 screws for encoder mounting Connection to application: (not supplied) Ø85. 1 Countersunk DIN 74-Hm6 B See table B A-A Flange, ø 58 [2.28] Scope of delivery. 8.0010.2180.0000 120° flange (aluminum) Converts encoders with a clamping Ø58 3 screws for encoder flange into synchro flange. Ø50 h7 mounting Ø36,1 ±0,05 Connection to application: 3 screws (not supplied) Ø 50 ±0,1 Ø42 ±0,05 Ø48 ±0,05







Dimensions / Details

#### Fixing components for shaft encoders

#### **Details**

#### Assembly bell

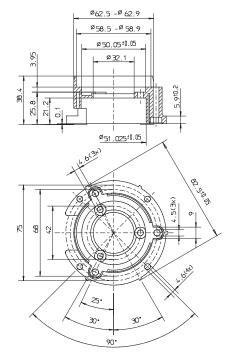
#### - Easy and quick encoder mounting

- Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling
- Supplied as complete set





#### Dimensions in mm linch



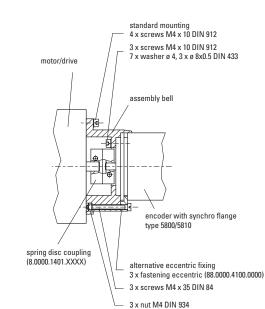
#### Scope of delivery.

- Assembly bell
- Spring washer type coupling (8.0000.1401.XXXX)
- 4 hexagon socket head cap screws DIN 912 M4 x 12 [0.47]
- 3 hexagon socket head cap screws DIN 912 M4 x 10 [0.39]
- 7 washers DIN 433 ø 4 [0.16]
- 3 fastening eccentrics (8.0000.4B00.0000)
- 3 hexagon head screws DIN 84 M 4 x 35 [0.16 x 1.38]
- 3 hexagon nuts DIN 934 M4

#### Urder no.

#### 8.0000.4500.XXYY

- XX = Coupling diameter d1 in mm
- YY = Coupling diameter d2 in mm





#### Fixing components for shaft encoders **Details** Dimensions / Details D1 D2 D3 Α В С **Fastening eccentrics** encoder type for encoders with synchro flange 3610 - Suitable for Kübler encoders with 3651 2.8 3.5 2.25 0.9 synchro flange 6.8 M3658 8.0010.4200.0000 - Material ACu Zn 39 Pb 3 [0.27] [0.20][0.11] [0.14] [0.09][0.035]F3653 / F3658 - Surface finish: galvanized Ni F3663 / F3668 5000 5803 / 5804 / 5805 5853 / 5858 9.6 6.5 3.2 5,6 2.9 1.55 5863 / 5868 [0.13] [0.38] [0.26] [0.22] [0.11] [0.06] 8.0010.4100.0000 F5863 / F5868 5852 7053 / 7058 7063 / 7068 Scope of delivery: 3 eccentrics 3 screws (Use at least three fastening eccentrics to mount the encoder)



## Fixing components for shaft encoders

**Overview** 

				Incremental encoders		Abs. singleturn encoders		Abs. multit			
Figure	Description	Order no.	Details s.page	5000, KIS50, 5814, 5006, 5803, 5804, 5805	7000, 7100	5853, 5858, 5852	7053, 7058, 7153, 7158	5863, 5868, F5863, F5868	M5861, M5863, M5868	7063, 7068, 7163, 7168	
	Flange, square Suitable for shaft encoders with clamping flange  58.0 [2.28"], 4 [0.16"] thick  63.5 [2.5"], 3 [0.12"] thick  70.0 [2.76"], 10 [0.39"] thick  80.0 [3.15"], 4 [0.16"] thick	8.0010.2100.0000 8.0010.2120.0000 8.0010.2600.0000 8.0010.2800.0000	675 675 675 675	X X X X	4	X X X X	7	X X X X	X X X X	7	
e e	Flange ø 65 mm [2.56"]  With this adapter flange, Küber encoders with size 58 mm [2.28"] can replace encoders with diameter 65 mm [2.56"] and pitch circle diameter 48 mm [1.89"]	8.0010.2230.0000	676	Х		X		X	X		
	Flange, ø 115 mm [4.53"] Euroflange	8.0010.2160.0000 8.0010.2170.0000	676	Х	х	X	х	X	Х	Х	
	Flange, ø 58 mm [2.28"]  Converts encoders with a clamping flange into synchro flange.	8.0010.2180.0000	676	Х		Х		Х	Х		
	Flange, ø 90 mm [3.54"]  Mechanically compatible with former encoder Type 9000	8.0010.2270.0000	677	Х		X		Х	Х		
	Angular flange 80 mm x 80 mm x 40 mm [3.15" x 3.15" x 1.57"]	8.0010.2300.0000	677	Х		Х			Х		
	Assembly bell  Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling — supplied as complete set	8.0000.4500.XXYY	678	Х		Х		Х	Х		
	Fastening eccentrics  For shaft encoders with synchronous flange. Use at least three fastening eccentrics to mount the encoder.	8.0010.4200.0000 8.0010.4100.0000	679	see table page 679							
	Robust bearing unit  Matching shaft encoders with clamping flange and shaft 10 mm [0.39"]	8.0010.8200.000C	680	Х		Х		Х	Х		
	Bearing box	8.0010.8200.0004	681	Х		Х		Х	Х		

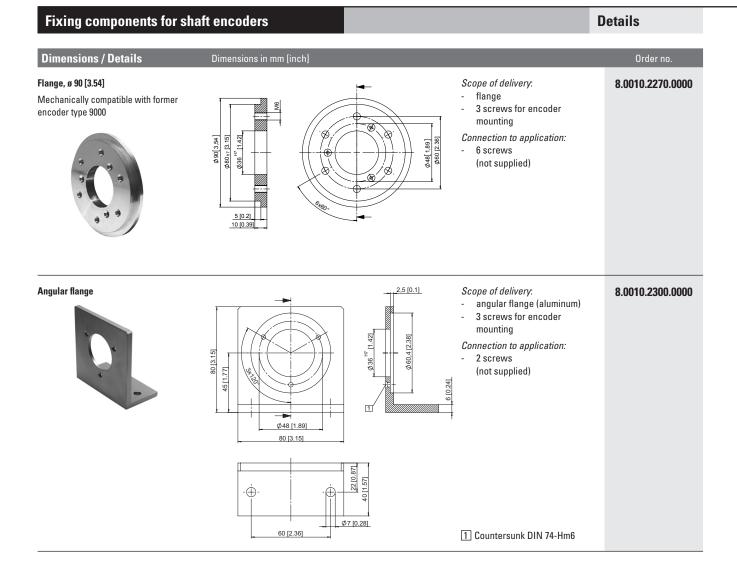


# Fixing components for shaft encoders **Details** Dimensions / Details Flange, square Scope of delivery. flange (aluminum) 3 screws for fixing to the encoder 120• Connection to application: 4 screws (not supplied) Ø36.5 8.0010.2100.0000 "48<sup>±0.1</sup> □58<sup>±0.15</sup> 120. 8.0010.2120.0000 ø36.5 °63.5 $\bigoplus$ 8.0010.2600.0000 Ø48 [1.89] □58 [2.28] 120• 8.0010.2800.0000



#### Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 65 [2.56] Scope of delivery: 8.0010.2230.0000 flange (aluminum) With this adapter flange, Kübler en-3 screws for fixing to the coders with size 58 [2.28] can replace encoder encoders with diameter 65 [2.56] and 1,8 pitch circle diameter 48 [1.89]. Connection to application: 3 screws (not supplied) Ø65 ±0,1 Flange, ø 115 [4.53], encoder type D1 В Euroflange (Euro REO 444) 1 [0.039] DIN 74-BM3 8.0010.2160.0000 580X/5000 48 [1.89] 36 [1.42] 58 [2.28] 11 [0.43] 8.0010.2170.0000 70XX 51 [2.01] 12 [0.47] 42 [1.65] 11.5 [0.45] 7.5 [0.30] DIN 74-BM4 Scope of delivery: flange (aluminum) 1 3 screws for encoder mounting Connection to application: (not supplied) Ø85. 1 Countersunk DIN 74-Hm6 B See table B A-A Flange, ø 58 [2.28] Scope of delivery. 8.0010.2180.0000 120° flange (aluminum) Converts encoders with a clamping Ø58 3 screws for encoder flange into synchro flange. Ø50 h7 mounting Ø36,1 ±0,05 Connection to application: 3 screws (not supplied) Ø 50 ±0,1 Ø42 ±0,05 Ø48 ±0,05







Dimensions / Details

#### Fixing components for shaft encoders

#### **Details**

#### Assembly bell

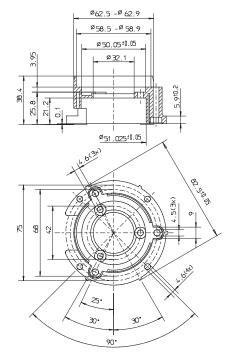
#### - Easy and quick encoder mounting

- Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling
- Supplied as complete set





#### Dimensions in mm linch



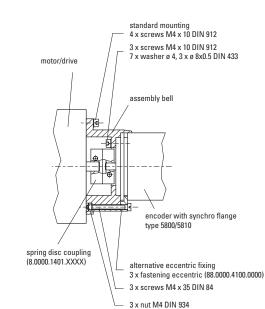
#### Scope of delivery.

- Assembly bell
- Spring washer type coupling (8.0000.1401.XXXX)
- 4 hexagon socket head cap screws DIN 912 M4 x 12 [0.47]
- 3 hexagon socket head cap screws DIN 912 M4 x 10 [0.39]
- 7 washers DIN 433 ø 4 [0.16]
- 3 fastening eccentrics (8.0000.4B00.0000)
- 3 hexagon head screws DIN 84 M 4 x 35 [0.16 x 1.38]
- 3 hexagon nuts DIN 934 M4

#### Urder no.

#### 8.0000.4500.XXYY

- XX = Coupling diameter d1 in mm
- YY = Coupling diameter d2 in mm





#### Fixing components for shaft encoders **Details** Dimensions / Details D1 D2 D3 Α В С **Fastening eccentrics** encoder type for encoders with synchro flange 3610 - Suitable for Kübler encoders with 3651 2.8 3.5 2.25 0.9 synchro flange 6.8 M3658 8.0010.4200.0000 - Material ACu Zn 39 Pb 3 [0.27] [0.20][0.11] [0.14] [0.09][0.035]F3653 / F3658 - Surface finish: galvanized Ni F3663 / F3668 5000 5803 / 5804 / 5805 5853 / 5858 9.6 6.5 3.2 5,6 2.9 1.55 5863 / 5868 [0.38][0.26] [0.13] [0.22][0.11] [0.06] 8.0010.4100.0000 F5863 / F5868 5852 7053 / 7058 7063 / 7068 Scope of delivery: 3 eccentrics 3 screws (Use at least three fastening eccentrics to mount the encoder)

## Cables and connectors



M12 Connector, Field-wireable connector

Male connector 5-pin

**05.BMSWS** 8151-8.5

U

**Data sheet** M12 pin, 5pin, B-coded



M12 Connector, Field-wireable connector

Male connector 5-pin

**05.BMSWS** 8251-8.5

ij

**Data sheet** M12 pin, angled, 5-pin, B-coded



M12 Connector, Field-wireable connector

Female connector 5-pin **05.BMWS** 8151-8.5

ij,

**Data sheet** M12 socket. 5-pin, Bcoded



M12 Connector, Field-wireable connector

Female connector 5-pin **05.BMWS** 8251-8.5

ij.

**Data sheet** M12 socket, angled, 5-pin, **B-coded** 



M12 Connector, Field-wireable connector

Analog

RS422 |

Open Collector NPN

BISS

Female connector 8-pin 05.CMB 8181-0

u

**Data sheet** M12 socket, 8-pin, A-coded



M12 Connector, Field-wireable connector

Male connector 8-pin

05.CMBS 8181-0

ij

**Data sheet** M12 pin, 8pin, A-coded





## Cables and connectors



M12 Connector, Field-wireable connector

Male connector 5-pin

**05.BMSWS** 8151-8.5

U

**Data sheet** M12 pin, 5pin, B-coded



M12 Connector, Field-wireable connector

Male connector 5-pin

**05.BMSWS** 8251-8.5

ij

**Data sheet** M12 pin, angled, 5-pin, B-coded



M12 Connector, Field-wireable connector

Female connector 5-pin **05.BMWS** 8151-8.5

ij,

**Data sheet** M12 socket. 5-pin, Bcoded



M12 Connector, Field-wireable connector

Female connector 5-pin **05.BMWS** 8251-8.5

ij.

**Data sheet** M12 socket, angled, 5-pin, **B-coded** 



M12 Connector, Field-wireable connector

Analog

RS422 |

Open Collector NPN

IBISS INTERFACE

Female connector 8-pin

05.CMB 8181-0

u

**Data sheet** M12 socket, 8-pin, A-coded



M12 Connector, Field-wireable connector

Male connector 8-pin

05.CMBS 8181-0

**Data sheet** M12 pin, 8pin, A-coded







### **Connection of motor and encoder**

### **Couplings**

### Bellows and spring washer couplings





Bellows couplings provide cost-effective connection of the motor and encoder. They are also able to correct any angular errors between the drive and encoder.

Spring washer couplings are used with high speeds.

### Order code Couplings

8.0000 . 1 XXX . XX &

a Type of coupling

102 = Bellows-type ø 19 mm [0.75"]

202 = Bellows-type ø 15 mm [0.59"]

301 = Spring washer type, ø 30 mm [1.18"], one-part

401 = Spring washer type,

ø 30 mm [1.18"], three part, plug-in

502 = Bellows-type ø 25 mm [0.98"]

**b** Bore diameter d1 (see technical data)

Note:

for the bore diameter

d1 = 1/4" please enter Code A2

Bore diameter d2 (see technical data)

Example:  $d1 = 10 \text{ mm } [0.39^{\circ\prime\prime}] \text{ and } d2 = 12 \text{ mm } [0.47^{\circ\prime\prime}]$ 

Order no. = 8.0000.1X0X.1012

Stock types 8.0000.1102.1010

Technical data							
Туре			8.0000.1 <b>1</b> 02.XXXX	8.0000.1 <b>2</b> 02.XXXX	8.0000.1 <b>3</b> 01.XXXX	8.0000.1 <b>4</b> 01.XXXX	8.0000. 1 <b>5</b> 02.XXXX
Maximum speed	n	nin <sup>-1</sup>	10000	10000	12000	12000	10000
Maximum torque	1	Vcm	120	40	80	60	200
Maximum	radial	mm	± 0.3	± 0.25	± 0.4	± 0.3	± 0.35
displacement	axial		± 0.5	± 0.45	± 0.4	± 0.4	± 0.54
	angular	-	± 4°	± 4°	± 3°	± 2.5°	± 4°
Torsion spring stiff	ness Nm	/rad	150	85	150	30	183
Radial spring stiffn	ess N	/mm	10	20	6	40	17.8
Moment of inertia	g	jcm²	9.5	2.1	19	35	20
Max. tightening tor	que	Vcm	150	70	80	80	120
Working temperatu	ire		-30°C +120°C [-22°F +248°F]	-30°C +120°C [-22°F +248°F]	-30°C +120°C [-22°F +248°F]	-10°C +80°C [+14°F +176°F]	-30°C +120°C [-22°F +248°F]
Weight approx.			16 g [0.56 oz]	6.5 g [0.23 oz]	16 g [0.56 oz]	30 g [1.06 oz]	24 g [0.85 oz]
<b>Material</b> bellow or s	fla pring washer/ca		Al, anodized stainless steel	Al, anodized stainless steel	Al, anodized stainless steel	AI, anodized PA 6.6 gf.	Al, anodized stainless steel
Diameter d/d1 from	to mm [i	nch]	3 12 [0.12 0.47]	3 9 [0.12 0.35]	3 8 [0.12 0.32]	4 16 [0.16 0.47]	3 16 [0.12 0.63]
Standard bore diameter	(d1 / d2) mm [ii		12 / 12 [0.47 0.47] 12 / 10 [0.47 0.39] 10 / 10 [0.39 0.39] 10 / 08 [0.39 0.32] 10 / 06 [0.39 0.24] 08 / 08 [0.32 0.32] 06 / 06 [0.24 0.24]	08 / 06 [0.32 0.24] 06 / 06 [0.24 0.24] 06 / 04 [0.24 0.16] 04 / 04 [0.16 0.16]	06 / 06 [0.24 0.24]	12 / 12 [0.47 0.47] 12 / 10 [0.47 0.39] 10 / 10 [0.39 0.39] 10 / 06 [0.39 0.24] 06 / 06 [0.24 0.24] 1/4" / 10 1/4" / 06	15 / 12 [0.59 0.47] 14 / 12 [0.55 0.47] 14 / 10 [0.55 0.39] 10 / 10 [0.39 0.39] 06 / 06 [0.24 0.24]

### **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 flexible 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.





### **Connection of motor and encoder**

### **Couplings**

### Bellows and spring washer couplings

### Metal bellows-type couplings (.1102, .1202 und .1502)

## Metal bellows-type couplings are recommended as an inexpensive type of coupling. They are also suitable for compensating larger angle displacements.

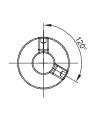
### Spring washer-type couplings (.1301 und .1401)

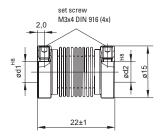
Spring washer couplings are used primarily where high speeds and minimal axial errors occur. For applications requiring potential separation between the encoder and the drive, use the electrically isolating spring washer coupling.

#### **Dimensions**

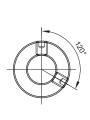
Dimensions in mm

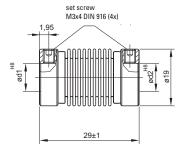
Bellows-type coupling ø 15 [0.59] (8.0000.1202.XXXX)



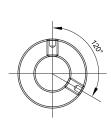


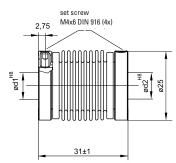
Bellows-type coupling ø 19 [0.75] (8.0000.1102.XXXX)



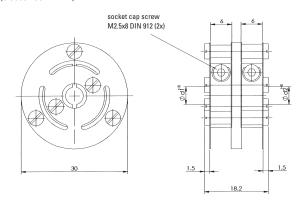


Bellows-type coupling ø 25 [0.98] (8.0000.1502.XXXX)

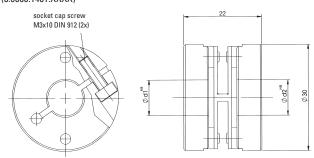




Spring washer-type coupling, one-part (8.0000.1301.XXXX)

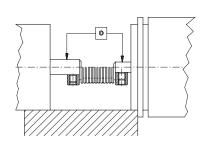


Spring washer-type coupling, three part, plug-in (8.0000.1401.XXXX)



#### **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.





### **Connection of motor and encoder**

### **Couplings**

### **Bellows couplings (FS)**



Bellows couplings provide cost-effective connection of the motor and encoder. They are also able to correct any angular errors between the drive and encoder.

These bellows couplings (FS) are used for safe connection of applications and Sendix SIL encoders.

The safety-oriented bellows coupling has, in addition to the metallic bellows, internal claws that ensure the driving of the encoder in case of breakage of the bellows connection.

Couplings Type a G
--------------------

a Type of coupling

5 = bellows coupling ø 25 mm [0.98"]

Bore diameter d1 (see technical data)

Bore diameter d2 (see technical data) Example: d1 = 10 mm and d2 = 12 mm

order no. = 8.0000.15FS.**1012** 

Accessory		Order no.
Screw retention	Loctite 243, 5 ml	8.0000.4G05.0000

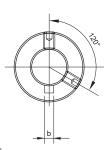
### Technical data

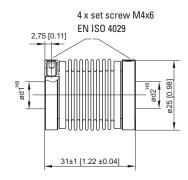
Mechanical characteri	stics	
Max. speed		10000 min <sup>-1</sup>
Max. torque		200 Ncm
Max. shaft offset	radial	± 0.3 mm
	axial	± 0.45 mm
	angular	± 3°
Torsion spring stiffness		183 Nm/rad
Radial spring stiffness		17.8 N/mm
Moment of inertia		9.1 gcm <sup>2</sup>
Headless set screw tighteni	ing torque	
	min.	80 Ncm
	max.	100 Ncm

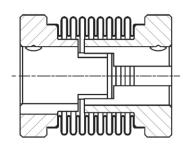
Working temperature range		-30°C +120°C [-22 +248°F]
Weight approx.		54 g
Material	flange bellows	stainless steel 1.4104 stainless steel 1.4571
Standard bore diameter	(d1 / d2)	10 / 10 mm [0.39 / 0.39"] 10 / 12 mm [0.39 / 0.47"] 12 / 12 mm [0.47 / 0.47"]
Insertion depth	min. max.	6 mm [0.24"] 11 mm [0.43"]

#### **Dimensions**

Dimensions in mm [inch]







### Nut DIN 6885

nut width b	d1 / d2
3 [0.12]	10 [0.39]
4 [0.16]	12 [0.47]



## **Connection of motor and encoder**

## Flexible shaft coupling

## **Double loop coupling**



The safe, uncomplicated and economical solution, if drive shafts with angular, radial and/or axial displacement are to be friction-locked together.

### Order no. size 1

Bore diameter both sides 6 mm [0.24"]

8.0000.1J01.0606

### Order no. size 2

Bore diameter both sides 10 mm [0.39"]

Bore diameter 11 mm [0.43"] and 12 mm [0.47"] with keyway

8.0000.1K01.1010 <sup>1)</sup> 8.0000.1L01.1112

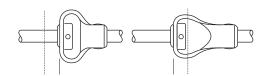
Technical data		
	Size 1	Size 2
Max. speed	3000 min <sup>-1</sup>	3000 min <sup>-1</sup>
Max. torque	0.5 Nm	2.0 Nm
Max. offset of shafts radial axial angular	± 2 mm ± 2 mm ± 10°	± 3 mm ± 4 mm ± 12°
Torsion spring stiffness	13 Nm/rad	28 Nm/rad
Radial spring stiffness	13 N/mm	7 N/mm
Moment of inertia	41 gcm²	106 gcm <sup>2</sup>
Max. clamping torque	100 Ncm	100 Ncm
Weight, approx.	33 g [1.16 oz]	85 g [3.35 oz]
Temperature range	-30°C + 80°C [-2	22°F +176°F]
Material flange connecting element	steel galvanized Polyurethane	

### **Functional principle**

Compensation of an angular misalignment Compensation of a radial misalignment



Compensation of a axial misalignment





### **Connection of motor and encoder** Flexible shaft coupling **Double loop coupling Dimensions** Dimensions in mm Size 1 Size 2 4 JS9 (+0,015) 2,5 [0.10] 11 / 12 [0.43 / 0.47] 6/6 [0.24 / 0.24] with keyway [0.24] Ø6 H8 ø48<sup>±1</sup> [1.89] ø12 [0.47] H8(+0,027) 4x DIN916 M3 x 4 [0.16] 29<sup>±1,5</sup> [1.14] 46 ±2 [1.81] Size 2 10 / 10 [0.39 / 0.39] ø11 [0.43] H8(+0,027) 13.6.401 4x DIN916 M4 x 6 [0.24] 46<sup>±2</sup> [1.81]





Fixing components for hollow	v shaft encoders	For enc	oders up to ø	<b>58</b> m	m					0	ver	viev	N		
							nenta ders		Absolute enc	singl oder				multi oders	
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	3620, 3720	KIH50, 5020, 5026	5834 Motor-Line	5823, 5824, 5825, 5834	3671, M3678, F3673, F3678	5873, 5878, 5870, 5872	5873 Motor-Line	F3683, F3688	M3681, M3683, M3688	5883, 5888, F5883, F5888	F5883M, F5888M
	Spring element, short For applications with limited axial play and low dynamics, and reduced mounting space	36XX 42 [1.65] M36XX 42 [1.65] F36XX 42 [1.65] 37XX 40 [1.57] 50XX 42 [1.65] 58XX 42 [1.65] F58XX 42 [1.65]	8.0010.4H00.0000  Connection to the application: cylindrical pin	4	X	X	<u> </u>	X	X	X	ш	X	X	X	X
	Spring element, long For applications with axial play and low dynamics	36XX 61,4 [2.42] M36XX 61,4 [2.42] F36XX 61,4 [2.42] 37XX 61,4 [2.42] 50XX 67,4 [2.65] 58XX 73,4 [2.89] F58XX 73,4 [2.89]	8.0010.4100.0000  Connection to the application: cylindrical pin	4	Х	X		Х	Х	Х		Х	Х	Х	X
	Torque stop, short (flexible) For applications with axial and radial play, low dynamics	64.5 [2.54]	8.0010.40M0.0000  Connection to the application: 1 screw	4		Х		Х		X				X	Х
	Torque stop, medium (flexible) For applications with axial and radial play for constant rotary move- ments	65 91.5 [2.56 3.60]	8.0010.40E0.0000  Connection to the application: 1 screw	4		Х		Х		Х				х	Х
	Torque stop, long (flexible) For applications with axial and radial play and low dynamics	80 170 [3.15 6.69]	8.0010.4R00.0000  Connection to the application: 1 screw	5		Х		Х		X				х	Х
Som of the second	Stator coupling, double-winged For applications with axial and radial play and high dynamics	46 [1.81]	8.0010.4C00.0000  Connection to the application: 2 screws	5	Х				Х						Х
	Stator coupling, double-winged For applications with high demands for accuracy	63 [2.48]	8.0010.4D00.0000  Connection to the application: 2 screws	5		Hansch C + D	X	Х		X	Х			х	
	Stator coupling, for fixing to side of encoder  For standard applications with axial and radial play, and high dynamics	65 [2.56]	8.0010.1602.0000  Connection to the application: 3 screws	6		Flansch C + D		X		Х				Х	Х
	Stator coupling, for fixing to front of encoder For applications with axial and radial play and high dynamics	65 [2.56]	8.0010.40L0.0000  Connection to the application: 3 screws	6		Х		Х		Х				х	Х
	Spring tether element For applications with low axial and radial play and low dynamics	42 84.5 [1.65 3.33]	8.0010.40W0.0000  Connection to the application: 1 screw	6		X		X		X				х	х



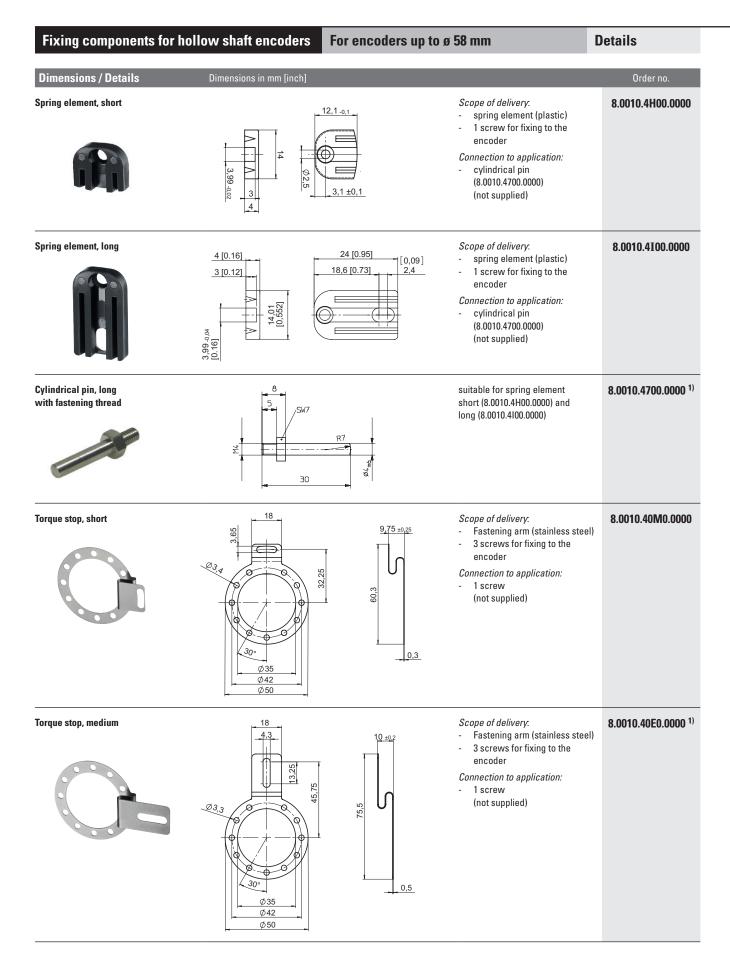
Fixing components for hollow	v shaft encoders	For end	coders up to g	ž 58 m	m					0	ver	viev	N	
							nenta ders			ıte sing ncode:			olute multi encoders	
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	5834FSx	5020	5823, 5824, 5825	5823, 5824, 5825	5873FSx	5873, 5878	5873 Motor-Line	5883FSx	5883, 5888, F5883, F5888,	F5883M, F5888M
	Stator coupling  Designed for functional safety thanks to the 4-screw-principle.	63 [2.48]	8.0010.40B2.00FS  Connection to the application: 4 screws	7	X	X	X	X	X	X	X	X	Х	
	Torque stop, flexible Designed for functional safety. For applications with axial and radial play and low dynamics.	79 285 [3.11 11.22]	8.0010.4047.00FS  Connection to the application: 1 screw	7	X	X	X		Х	Х		X	Х	X
	Torque stop set, rigid  Designed for functional safety. For applications with very low axial and radial play and low dynamics.	65 287 mm [2.56 11.30]	8.0010.4051.00FS  Connection to the application: cylindrical pin	8	Х	Х	Х		Х	Х			Х	X



Fixing components for hollow shaft e	ncoders For encoders > ø 58 m	ım	0vei	view		
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	A020, A02H	H120
	Spring element, short For applications with reduced mounting space	76 [2.99]	8.0010.4J00.0000  Connection to the application: cylindrical pin	9	X	
	Spring element, long For applications with high axial play	110 [4.33]	8.0010.4K00.0000  Connection to the application: cylindrical pin	9	X	
	Torque stop, short For applications with axial play	149 [5.87]	8.0010.4T00.0000  Connection to the application: s. details	9	X	
	Torque stop, long For applications with fastening points located on variable pitch circle diameters	104 206 [4.09 8.11]	8.0010.4E00.0000  Connection to the application: 1 screw	10	Х	
	Tether arm, long  For applications with low axial and radial play, flexible in use	Length = 70 [2.75]: Length = 100 [3.94]: Length = 150 [5.91]: 262 422 [10.32 16.61]	8.0010.40\$0.0000 8.0010.40T0.0000 8.0010.40U0.0000 Connection to the application: 1 screw	10	Х	х
	Tether arm, long  For applications with low axial and radial play, flexible in use	Length = 70 [2.75]: Length = 100 [3.94]: Length = 150 [5.91]: 262 422 [10.32 16.61]	8.0010.40\$1.0000 8.0010.40\$1.0000 8.0010.40\$1.0000 Connection to the application: 1 screw	11		Х
	Stator coupling  For applications with axial and radial play and high dynamics	119 [4.69]	8.0010.40V0.0000  Connection to the application: 2 screws	11	Х	х







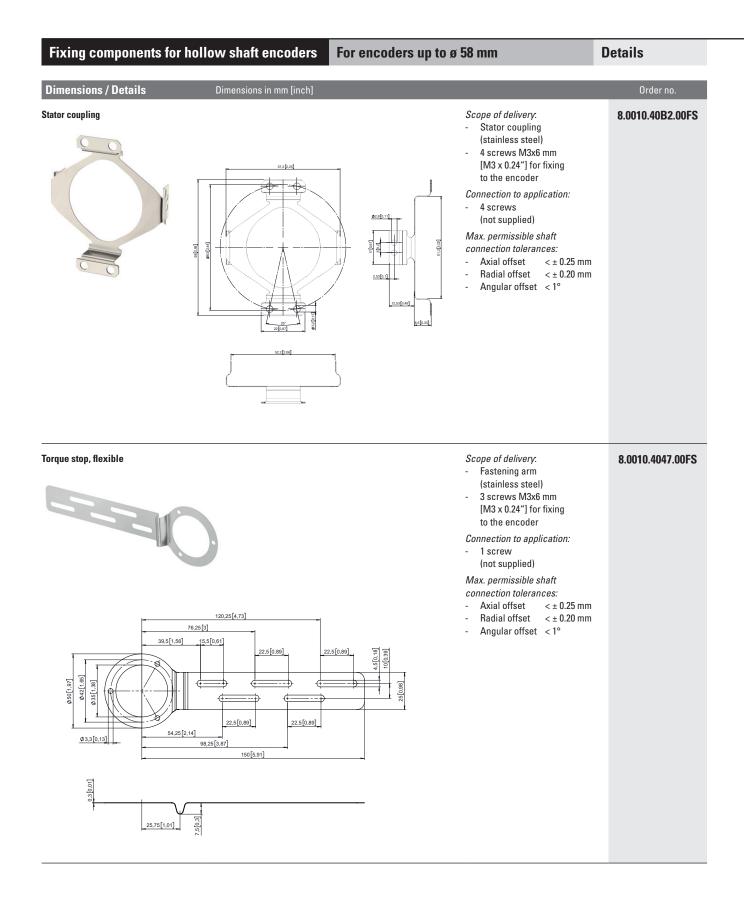


### Fixing components for hollow shaft encoders For encoders up to ø 58 mm **Details Dimensions / Details** Torque stop, long Scope of delivery. 8.0010.4R00.0000 Ø 50 Fastening arm (stainless steel) Ø42 3 screws for fixing to the Ø35 encoder Connection to application: 1 screw (not supplied) Ø3,3 41.1 69,25 85 Stator coupling, double-winged Scope of delivery: 8.0010.4C00.0000 for front fixing onto the encoder Stator coupling flange (stainless steel) 2 screws for fixing to the encoder Connection to application: 2 screws (not supplied) Stator coupling, double-winged Scope of delivery. 8.0010.4D00.0000 Stator coupling for side fixing onto the encoder flange Ø63 [2,48] (stainless steel) 4 screws M2.5 x 6 [0.24] for fixing to the encoders 6,5 [0,26] Connection to application: 9 [0,35] 2 socket head screws M3 x 8 [0.32] with washer (supplied)



### Fixing components for hollow shaft encoders For encoders up to ø 58 mm **Details** Dimensions / Details **Stator coupling** Scope of delivery. 8.0010.1602.0000 for side fixing onto the encoder Stator coupling Ø 65 ±0,05 flange (stainless steel) Ø4,3 2 screws for fixing to the encoder Connection to application: 3 screws (not supplied) Scope of delivery. Stator coupling 8.0010.40L0.0000 for front fixing onto the encoder Stator coupling flange (stainless steel) 2 screws for fixing to the encoder Connection to application: 3 screws (not supplied) 0,5 16 <sub>±0,05</sub> Ø42 Ø65 Spring tether element 8.0010.40W0.0000 Scope of delivery: spring tether element 1 screw for fixing to the encoder Connection to application: 1 screw (not supplied) Clamping ring for hollow for Stainless steel, for high rotational В D1 shaft ø encoder speeds 582X 6 [0.236] 29 [1.14] 10 [0.39] 8.0000.4V00.0000 6.2 [0.244] 30 [1.18] 12 [0.47] 8.0000.4W00.0000 5020 6.2 [0.244] 30 [1.18] 12 [0.47] 8.0010.4W01.0000 1 screw DIN 912 A2 M2.5, max. tightening torque 0.45 Nm





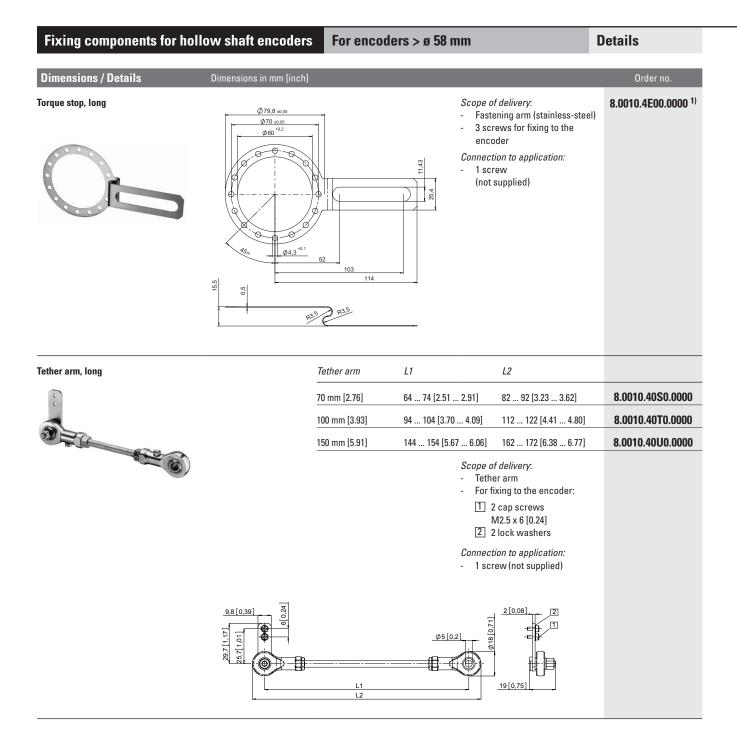


For encoders up to ø 58 mm Fixing components for hollow shaft encoders **Details** Dimensions / Details Torque stop set, rigid Scope of delivery. 8.0010.4051.00FS Fastening arm (stainless steel) 3 screws M3x6 mm [M3 x 0.24"] for fixing to the encoder Connection to application: 1 cylindrical pin 150 [5,91] 143,5 [5,65] 8.0010.4049.0075 110 [4,33] (not supplied) Max. permissible shaft 8 [0,31] 25 [0,98] 25 [0,98] connection tolerances: Axial offset < ± 0.25 mm Radial offset  $< \pm 0.20$  mm Angular offset < 1° 25 [0,98] 25 [0,98] 25 [0,98] Ø3,3[0,13] 92.5 [3.64] 127,5 [5,02] 57,5 [2,26] Cylindrical pin (replacement) suitable for: 8.0010.4049.0075 torque stop **□6[0,24]** 8.0010.4051.00FS



Fixing components for h	ollow shaft encoders	For encoders > ø 58	mm	Details
Dimensions / Details	Dimensions in mm [inch]			Order no.
Spring element, short	6 [0.24]	23 0 27	Scope of delivery: - Spring element (stainless steel - 2 screws for fixing to the encoder  Connection to application: - Cylindrical pin (8.0010.4700.0003) (not supplied)	8.0010.4J00.0000
Spring element, long	3 [0.12] 6 [0.24] 30 [1.18]	2 [0.08]	Scope of delivery: - Spring element (stainless steel - 2 screws for fixing to the encoder  Connection to application: - Cylindrical pin (8.0010.4700.0003) (not supplied)	8.0010.4K00.0000
Cylindrical pin, long with fastening thread	14 [0.55] 9 [0.35] 7 [0.35] 9 [0.35] 9 [0.35] 9 [0.35]	10 [0.39] © © © Ø	suitable for spring element short (8.0010.4J00.0000) and long (8.0010.4K00.0000)	8.0010.4700.0003
Torque stop, short	35.4 [1.39]  35.4 [1.39]  57  51  97  97  97  97  97  97  97  97  97  9	87 3.43 87	Scope of delivery:  1 Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: 2 Hexagonal nut 3/8 - 16 UNC 3 Washer (isolating) 4 Hexagonal screw 3/8 16 UNC x 1" 5 Washer D10.4 x 15 x 15 (supplied)	8.0010.4T00.0000 <sup>1)</sup>







### Fixing components for hollow shaft encoders For encoders $> \emptyset$ 58 mm **Overview Dimensions / Details** Tether arm Tether arm, long L1 L2 8.0010.40S1.0000 64 ... 74 [2.51 ... 2.91] 82 ... 92 [3.23 ... 3.62] 70 mm [2.76] 112 ... 122 [4.41 ... 4.80] 100 mm [3.93] 94 ... 104 [3.70 ... 4.09] 8.0010.40T1.0000 8.0010.40U1.0000 150 mm [5.91] 144 ... 154 [5.67 ... 6.06] 162 ... 172 [6.38 ... 6.77] Scope of delivery: Tether arm For fixing to the encoder: 1 2 cap screws M2,5 x 12 [0.47] 2 lock washers Connection to application: 1 screw (not supplied 16[0,63] 2,5[0,1] Ø5[0,2] 15,75[0,62] 20,75[0,82] 19[0,75] L2 **Stator coupling** 8.0010.40V0.0000 Scope of delivery. Stator coupling (stainless steel) 4 screws for fixing to the encoder Connection to application: 2 screws (not supplied) 20 [0.79] Ø3.3 [0.13] 0,4 6,9 [0.27] 17,5 [0.69]



Dimensions / Details Dimensions in mm [inch]		Order no.
Protective cover	For applications with a very high degree of pollution, Kübler now offers a protective cover for  Improved reliability  Extension of the service life of the encoder  Scope of delivery:  Protective cover  Fastening arm (8.0010.4T00.0000)  3 screws for fixing to the encoder	8.0010.40Y0.000
Tapered shaft mounting kit or A02H with hollow shaft, ø 38 mm [1.50"]	For use in upgrading for tapered shaft mounting. Tapered shafts are used for high-precision direct coupling. An isolation insert is also included in the mounting kit; this reliably protects the encoder from shaft currents. Included in the set: Insert for cone blind hole, cone 1:10,	8.0010.4028.000
	<ul> <li>17 mm [0.67"] length</li> <li>Isolation insert</li> <li>Allen screw for central fixing</li> </ul>	
	<ul> <li>Isolation insert</li> <li>Allen screw for central fixing</li> <li>Ø D1:</li> </ul>	0.0040.4004.00
	Isolation insert     Allen screw for central fixing  Ø D1: 12 mm [0.47"]	8.0010.4091.000
	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 1[0,04] 14 mm [0.55"]	8.0010.4027.000
	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 14 mm [0.55"] 15 mm [0.59"]	8.0010.4027.000 8.0010.4038.000
emperature range -40°C +115°C [-40°F +239°F]	Isolation insert     Allen screw for central fixing      Ø D1:     12 mm [0.47"]     14 mm [0.55"]     15 mm [0.59"]     16 mm [0.63"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 14 mm [0.55"] 15 mm [0.59"] 16 mm [0.63"] 18 mm [0.71"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  50[1,97]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  ### D1:   12 mm [0.47"]     14 mm [0.55"]     15 mm [0.59"]     16 mm [0.63"]     18 mm [0.71"]     20 mm [0.79"]     25 mm [0.98"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  ings.	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4012.000
emperature range -40°C +115°C [-40°F +239°F]  olation inserts prevent currents from passing through the encoder bearingse currents can occur when using inverter controlled three-phase or	• Isolation insert • Allen screw for central fixing  ### D1:    12 mm [0.47"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000
olation inserts prevent currents from passing through the encoder bearingsecurrents can occur when using inverter controlled three-phase or exter motors and considerably shorten the service life of the encoder bear more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  ### D1:    12 mm [0.47"]     14 mm [0.55"]     15 mm [0.59"]     16 mm [0.63"]     18 mm [0.71"]     20 mm [0.79"]     25 mm [0.98"]     30 mm [1.18"]     32 mm [1.26"]     arings.     and   us an	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4016.000 8.0010.4015.000
emperature range -40°C +115°C [-40°F +239°F]  colation inserts prevent currents from passing through the encoder bear insecurrents can occur when using inverter controlled three-phase or exter motors and considerably shorten the service life of the encoder bear more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  32 mm [1.26"]  arings.  nd us an	8.0010.4027.000 8.0010.4019.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000
solation inserts prevent currents from passing through the encoder bear hese currents can occur when using inverter controlled three-phase or ctor motors and considerably shorten the service life of the encoder bear or more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  32 mm [1.26"]  ings.  AC  arings. and us an  1/2"  5/8"  3/4"	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000 8.0010.4090.000
solation insert for hollow shaft, ø 38 mm [1.50"] imperature range -40°C +115°C [-40°F +239°F]  solation inserts prevent currents from passing through the encoder bear these currents can occur when using inverter controlled three-phase or extor motors and considerably shorten the service life of the encoder bear for more details please call our technical hotline (+49 7720 3903 92) or service info@kuebler.com)	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  32 mm [1.26"]  arings.  nd us an	8.0010.4027.000 8.0010.4019.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000



Fixing components fo	or hollow shaft encoders	For encoders up to	ø 58 mm	Details
Dimensions / Details	Dimensions in mm [inch]			Order no.
Spring element, short			Scope of delivery: - spring element (plastic) - 1 screw for fixing to the encoder  Connection to application: - cylindrical pin (8.0010.4700.0000) (not supplied)	8.0010.4H00.0000
Spring element, long		24 [0.95] 18,6 [0.73] 2,4	Scope of delivery: - spring element (plastic) - 1 screw Application: - 1 screw Application: - 3 [0.12] Connection to application: - cylindrical pin (8.00 10.4700.0000) (not supplied)  suitable for spring element	8.0010.4100.0000
Cylindrical pin, long with fastening thread	0	A	suitable for spring element short (8.0010.4H00.0000) and long (8.0010.4I00.0000)	8.0010.4700.0000
Torque stop, short			Scope of delivery: - Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40M0.0000
Torque stop, medium			Scope of delivery: - Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40E0.0000



## Fixing components for shaft encoders

**Overview** 

				Incremental Abs. singleturn encoders		Abs. multiturn encoders				
Figure	Description	Order no.	Details s.page	5000, KIS50, 5814, 5006, 5803, 5804, 5805	7000, 7100	5853, 5858, 5852	7053, 7058, 7153, 7158	5863, 5868, F5863, F5868	M5861, M5863, M5868	7063, 7068, 7163, 7168
	Flange, square Suitable for shaft encoders with clamping flange  58.0 [2.28"], 4 [0.16"] thick  63.5 [2.5"], 3 [0.12"] thick  70.0 [2.76"], 10 [0.39"] thick  80.0 [3.15"], 4 [0.16"] thick	8.0010.2100.0000 8.0010.2120.0000 8.0010.2600.0000 8.0010.2800.0000	675 675 675 675	X X X X	4	X X X X	7	X X X X	X X X X	7
e e	Flange ø 65 mm [2.56"]  With this adapter flange, Küber encoders with size 58 mm [2.28"] can replace encoders with diameter 65 mm [2.56"] and pitch circle diameter 48 mm [1.89"]	8.0010.2230.0000	676	Х		X		X	X	
	Flange, ø 115 mm [4.53"] Euroflange	8.0010.2160.0000 8.0010.2170.0000	676	Х	х	X	х	X	Х	Х
	Flange, ø 58 mm [2.28"]  Converts encoders with a clamping flange into synchro flange.	8.0010.2180.0000	676	Х		Х		Х	Х	
	Flange, ø 90 mm [3.54"]  Mechanically compatible with former encoder Type 9000	8.0010.2270.0000	677	Х		X		Х	Х	
	Angular flange 80 mm x 80 mm x 40 mm [3.15" x 3.15" x 1.57"]	8.0010.2300.0000	677	Х		Х			Х	
	Assembly bell  Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling — supplied as complete set	8.0000.4500.XXYY	678	Х		Х		Х	Х	
	Fastening eccentrics  For shaft encoders with synchronous flange. Use at least three fastening eccentrics to mount the encoder.	8.0010.4200.0000 8.0010.4100.0000	679	see table page 679						
	Robust bearing unit  Matching shaft encoders with clamping flange and shaft 10 mm [0.39"]	8.0010.8200.000C	680	Х		Х		Х	Х	
	Bearing box	8.0010.8200.0004	681	Х		Х		Х	Х	

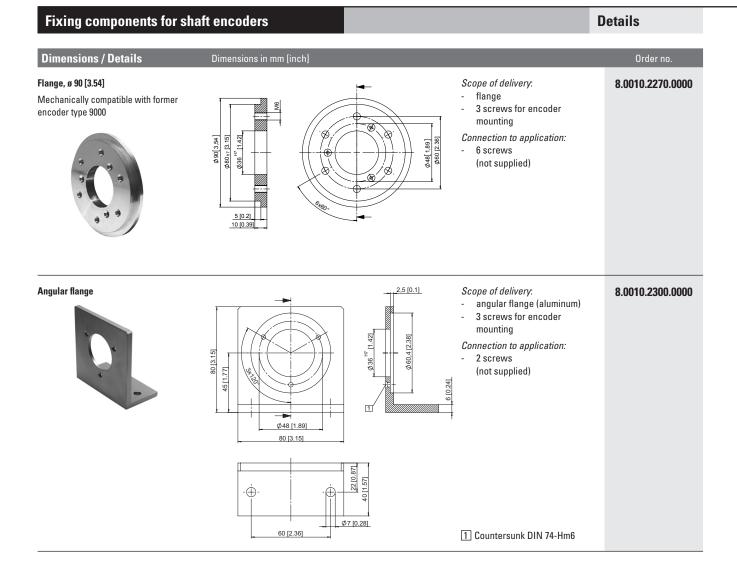


# Fixing components for shaft encoders **Details** Dimensions / Details Flange, square Scope of delivery. flange (aluminum) 3 screws for fixing to the encoder 120• Connection to application: 4 screws (not supplied) Ø36.5 8.0010.2100.0000 "48<sup>±0.1</sup> □58<sup>±0.15</sup> 120. 8.0010.2120.0000 ø36.5 °63.5 $\bigoplus$ 8.0010.2600.0000 Ø48 [1.89] □58 [2.28] 120• 8.0010.2800.0000



### Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 65 [2.56] Scope of delivery: 8.0010.2230.0000 flange (aluminum) With this adapter flange, Kübler en-3 screws for fixing to the coders with size 58 [2.28] can replace encoder encoders with diameter 65 [2.56] and 1,8 pitch circle diameter 48 [1.89]. Connection to application: 3 screws (not supplied) Ø65 ±0,1 Flange, ø 115 [4.53], encoder type D1 В Euroflange (Euro REO 444) 1 [0.039] DIN 74-BM3 8.0010.2160.0000 580X/5000 48 [1.89] 36 [1.42] 58 [2.28] 11 [0.43] 8.0010.2170.0000 70XX 51 [2.01] 12 [0.47] 42 [1.65] 11.5 [0.45] 7.5 [0.30] DIN 74-BM4 Scope of delivery: flange (aluminum) 1 3 screws for encoder mounting Connection to application: (not supplied) Ø85. 1 Countersunk DIN 74-Hm6 B See table B A-A Flange, ø 58 [2.28] Scope of delivery. 8.0010.2180.0000 120° flange (aluminum) Converts encoders with a clamping Ø58 3 screws for encoder flange into synchro flange. Ø50 h7 mounting Ø36,1 ±0,05 Connection to application: 3 screws (not supplied) Ø 50 ±0,1 Ø42 ±0,05 Ø48 ±0,05







Dimensions / Details

### Fixing components for shaft encoders

### **Details**

## Assembly bell

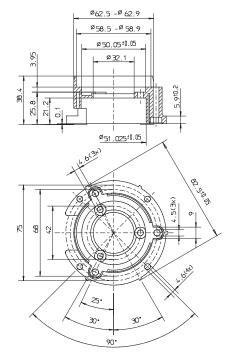
### - Easy and quick encoder mounting

- Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling
- Supplied as complete set





#### Dimensions in mm linch



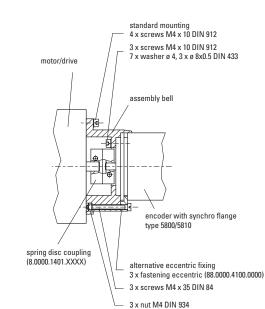
### Scope of delivery.

- Assembly bell
- Spring washer type coupling (8.0000.1401.XXXX)
- 4 hexagon socket head cap screws DIN 912 M4 x 12 [0.47]
- 3 hexagon socket head cap screws DIN 912 M4 x 10 [0.39]
- 7 washers DIN 433 ø 4 [0.16]
- 3 fastening eccentrics (8.0000.4B00.0000)
- 3 hexagon head screws DIN 84 M 4 x 35 [0.16 x 1.38]
- 3 hexagon nuts DIN 934 M4

#### Urder no.

#### 8.0000.4500.XXYY

- XX = Coupling diameter d1 in mm
- YY = Coupling diameter d2 in mm





#### Fixing components for shaft encoders **Details** Dimensions / Details D1 D2 D3 Α В С **Fastening eccentrics** encoder type for encoders with synchro flange 3610 - Suitable for Kübler encoders with 3651 2.8 3.5 2.25 0.9 synchro flange 6.8 M3658 8.0010.4200.0000 - Material ACu Zn 39 Pb 3 [0.27] [0.20][0.11] [0.14] [0.09][0.035]F3653 / F3658 - Surface finish: galvanized Ni F3663 / F3668 5000 5803 / 5804 / 5805 5853 / 5858 9.6 6.5 3.2 5,6 2.9 1.55 5863 / 5868 [0.38][0.26] [0.13] [0.22][0.11] [0.06] 8.0010.4100.0000 F5863 / F5868 5852 7053 / 7058 7063 / 7068 Scope of delivery: 3 eccentrics 3 screws (Use at least three fastening eccentrics to mount the encoder)

## Cables and connectors



M12 Connector with cable ,

Preassembled cable set

Analog Push-Pull HTL

\_\_\_\_ TTL VCos

Open Collector NPN

BISS

oin m

Female connector 8-pin PVC Ø 6,7 mm ± 0,2 mm

8 x 0,25 mm<sup>2</sup>

05.00.6041.8211.XXXM

"Data sheet M12 cordset, PVC, socket, 8-pin, Acoded, open

end



M12 Connector with cable,

Preassembled cable set

Analog Push-Pull HTL

RS422 TTI Sin Co

Open Collector NPN

BISS

Female connector 8-pin PVC Ø 6,7 mm ± 0,2 mm 8 x 0,25 mm<sup>2</sup> 05.00.6041.8311.XXXM

J

Data sheet M12 cordset, PVC, female 8-pin, Acoded, angled, open end



M12 Connector with cable ,

Preassembled cable set

Analog output HTL

SinCos

Open Collector NPN

<u>55</u>

BISS

Female connector 8-pin PUR  $\emptyset$  6,3 mm  $\pm$  0,2 mm  $8 \times 0,25 \text{ mm}^2$ 

05.00.6051.8211.XXXM

11

Data sheet
M12 cordset,
PUR, socket,
8-pin, Acoded, open
end



M12 Connector with cable,

05.00.6051.8284.XXXM Preassembled cable set

Analog Push-Pull

Open Collector NPN

BISS INTERFACE

Female connector 8-pin

Male connector 8-pin PUR Ø  $6,3 \text{ mm} \pm 0,2$ mm 8 x 0,25 mm<sup>2</sup>

05.00.6051.8284.XXXM

**Data sheet** M12 cordset, PUR, socket 8-pin, A-coded + pin



M12 Connector with cable,

Preassembled cable set

Analog Push-Pull

Sin Cos RS422 I

BISS

Female connector 8-pin PUR Ø 6,3 mm

Female

± 0,2 mm

connector 8-pin

PUR Ø 6,3 mm

8 x 0,25 mm<sup>2</sup>

± 0,2 mm 8 x 0,25 mm<sup>2</sup> 05.00.6051.8311.XXXM

**Data sheet** M12 cordset, PUR, socket, angled, 8-pin,

A-coded, open end



M12 Connector with cable,

Preassembled cable set

Analog Push-Pull HTL

RS422

05.00.6051.F211.XXXM

**Data sheet** M12 cordset. PUR, socket, V4A, 8-pin, Acoded, open end



M12 Connector with cable,

Preassembled cable set

Analog Push-Pull

Female connector 8-pin PUR Ø 6,2 mm ± 0,2 mm 4 x 2 x 0,25 mm<sup>2</sup>

05.00.60E1.8211.XXXM

**Data sheet** M12 cordset, PUR, socket, 8-pin, Acoded, open



IBISS INTERFACE



### M12 Connector, Field-wireable connector

Female connector 8-pin 05.CMB 8181-0

**Data sheet** M12 socket, 8-pin, A-coded









## M12 Connector with cable,

Preassembled cable set

Analog Push-Pull output RS422

connector 8-pin PVC Ø 7,2 mm ± 0,2 mm 8 x 0,205 mm<sup>2</sup>

Female

05.E-WKC 8T-PX3-930-XXXX

**Data sheet** M12 cordset, PVC, socket, 8-pin, Acoded, angled, with integrated control LEDs, open end





### M12 Connector, for the Ex-area Field-wireable connector

Analog

Female connector 8-pin 8.0000.5136.0000.Ex

**Data sheet** M12 socket, Ex 1/21 + Ex 2/22, 8-pin, Acoded





### M12 Connector, Stainless steel V4A Field-wireable connector

Analog RS422

Female connector 8-pin 8.0000.5136.0000.V4A

**Data sheet** M12 socket. stainless steel V4A, 8-pin, Acoded





Cable Connector with cable, Printed circuit board connector Preassembled cable set







Male connector 12-pin PVC Ø  $7,0 \text{ mm} \pm 0,3$ 16 x 0,14 mm<sup>2</sup>

8.0000.6D91.XXXX.0097 Data sheet

**PCB** connector, PVC, socket, 12-pin, open end 

## Fixing components for shaft encoders

**Overview** 

				Incremental Abs. singleturn encoders		Abs. multiturn encoders				
Figure	Description	Order no.	Details s.page	5000, KIS50, 5814, 5006, 5803, 5804, 5805	7000, 7100	5853, 5858, 5852	7053, 7058, 7153, 7158	5863, 5868, F5863, F5868	M5861, M5863, M5868	7063, 7068, 7163, 7168
	Flange, square Suitable for shaft encoders with clamping flange  58.0 [2.28"], 4 [0.16"] thick  63.5 [2.5"], 3 [0.12"] thick  70.0 [2.76"], 10 [0.39"] thick  80.0 [3.15"], 4 [0.16"] thick	8.0010.2100.0000 8.0010.2120.0000 8.0010.2600.0000 8.0010.2800.0000	675 675 675 675	X X X X	4	X X X X	7	X X X X	X X X X	7
e e	Flange ø 65 mm [2.56"]  With this adapter flange, Küber encoders with size 58 mm [2.28"] can replace encoders with diameter 65 mm [2.56"] and pitch circle diameter 48 mm [1.89"]	8.0010.2230.0000	676	Х		X		X	X	
	Flange, ø 115 mm [4.53"] Euroflange	8.0010.2160.0000 8.0010.2170.0000	676	Х	х	X	х	X	Х	Х
	Flange, ø 58 mm [2.28"]  Converts encoders with a clamping flange into synchro flange.	8.0010.2180.0000	676	Х		Х		Х	Х	
	Flange, ø 90 mm [3.54"]  Mechanically compatible with former encoder Type 9000	8.0010.2270.0000	677	Х		X		Х	Х	
	Angular flange 80 mm x 80 mm x 40 mm [3.15" x 3.15" x 1.57"]	8.0010.2300.0000	677	Х		Х			Х	
	Assembly bell  Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling — supplied as complete set	8.0000.4500.XXYY	678	Х		Х		Х	Х	
	Fastening eccentrics  For shaft encoders with synchronous flange. Use at least three fastening eccentrics to mount the encoder.	8.0010.4200.0000 8.0010.4100.0000	679	see table page 679						
	Robust bearing unit  Matching shaft encoders with clamping flange and shaft 10 mm [0.39"]	8.0010.8200.000C	680	Х		Х		Х	Х	
	Bearing box	8.0010.8200.0004	681	Х		Х		Х	Х	



# Fixing components for shaft encoders **Details** Dimensions / Details Flange, square Scope of delivery. flange (aluminum) 3 screws for fixing to the encoder 120• Connection to application: 4 screws (not supplied) Ø36.5 8.0010.2100.0000 "48<sup>±0.1</sup> □58<sup>±0.15</sup> 120. 8.0010.2120.0000 ø36.5 °63.5 $\bigoplus$ 8.0010.2600.0000 Ø48 [1.89] □58 [2.28] 120• 8.0010.2800.0000



### Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 65 [2.56] Scope of delivery: 8.0010.2230.0000 flange (aluminum) With this adapter flange, Kübler en-3 screws for fixing to the coders with size 58 [2.28] can replace encoder encoders with diameter 65 [2.56] and 1,8 pitch circle diameter 48 [1.89]. Connection to application: 3 screws (not supplied) Ø65 ±0,1 Flange, ø 115 [4.53], encoder type D1 В Euroflange (Euro REO 444) 1 [0.039] DIN 74-BM3 8.0010.2160.0000 580X/5000 48 [1.89] 36 [1.42] 58 [2.28] 11 [0.43] 8.0010.2170.0000 70XX 51 [2.01] 12 [0.47] 42 [1.65] 11.5 [0.45] 7.5 [0.30] DIN 74-BM4 Scope of delivery: flange (aluminum) 1 3 screws for encoder mounting Connection to application: (not supplied) Ø85. 1 Countersunk DIN 74-Hm6 B See table B A-A Flange, ø 58 [2.28] Scope of delivery. 8.0010.2180.0000 120° flange (aluminum) Converts encoders with a clamping Ø58 3 screws for encoder flange into synchro flange. Ø50 h7 mounting Ø36,1 ±0,05 Connection to application: 3 screws (not supplied) Ø 50 ±0,1 Ø42 ±0,05 Ø48 ±0,05



## Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 90 [3.54] Scope of delivery. 8.0010.2270.0000 flange Mechanically compatible with former 3 screws for encoder encoder type 9000 mounting Connection to application: 6 screws (not supplied) Scope of delivery. Angular flange 2,5 [0.1] 8.0010.2300.0000 angular flange (aluminum) 3 screws for encoder mounting Connection to application: 2 screws 45 [1.77] (not supplied) Ø48 [1.89] 80 [3.15] 22 [0.87] -— Ø7 [0.28] 60 [2.36] 1 Countersunk DIN 74-Hm6



Dimensions / Details

#### Fixing components for shaft encoders

#### **Details**

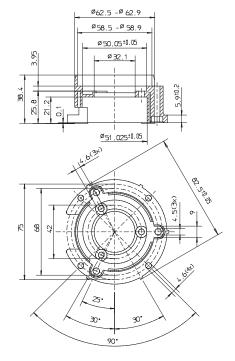
#### Assembly bell

- Easy and quick encoder mounting
- Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling
- Supplied as complete set





#### Dimensions in mm [incl



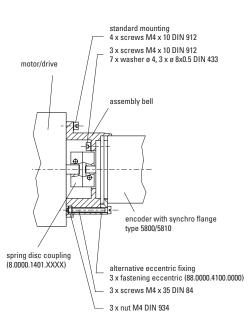
#### Scope of delivery.

- Assembly bell
- Spring washer type coupling (8.0000.1401.XXXX)
- 4 hexagon socket head cap screws DIN 912 M4 x 12 [0.47]
- 3 hexagon socket head cap screws DIN 912 M4 x 10 [0.39]
- 7 washers DIN 433 ø 4 [0.16]
- 3 fastening eccentrics (8.0000.4B00.0000)
- 3 hexagon head screws DIN 84 M 4 x 35 [0.16 x 1.38]
- 3 hexagon nuts DIN 934 M4

#### Urder no.

#### 8.0000.4500.XXYY

- XX = Coupling diameter d1 in mm
- YY = Coupling diameter d2 in mm





#### Fixing components for shaft encoders **Details** Dimensions / Details D1 D2 D3 Α В С **Fastening eccentrics** encoder type for encoders with synchro flange 3610 - Suitable for Kübler encoders with 3651 2.8 3.5 2.25 0.9 synchro flange 6.8 M3658 8.0010.4200.0000 - Material ACu Zn 39 Pb 3 [0.27] [0.20][0.11] [0.14] [0.09][0.035]F3653 / F3658 - Surface finish: galvanized Ni F3663 / F3668 5000 5803 / 5804 / 5805 5853 / 5858 9.6 6.5 3.2 5,6 2.9 1.55 5863 / 5868 [0.38][0.26] [0.13] [0.22][0.11] [0.06] 8.0010.4100.0000 F5863 / F5868 5852 7053 / 7058 7063 / 7068 Scope of delivery: 3 eccentrics 3 screws (Use at least three fastening eccentrics to mount the encoder)



## Fixing components for shaft encoders

**Overview** 

				Incremer encode		Abs. sin			s. multit ncoder	
Figure	Description	Order no.	Details s.page	5000, KIS50, 5814, 5006, 5803, 5804, 5805	7000, 7100	5853, 5858, 5852	7053, 7058, 7153, 7158	5863, 5868, F5863, F5868	M5861, M5863, M5868	7063, 7068, 7163, 7168
	Flange, square Suitable for shaft encoders with clamping flange  58.0 [2.28"], 4 [0.16"] thick  63.5 [2.5"], 3 [0.12"] thick  70.0 [2.76"], 10 [0.39"] thick  80.0 [3.15"], 4 [0.16"] thick	8.0010.2100.0000 8.0010.2120.0000 8.0010.2600.0000 8.0010.2800.0000	675 675 675 675	X X X X	4	X X X X	7	X X X X	X X X X	7
e e	Flange ø 65 mm [2.56"]  With this adapter flange, Küber encoders with size 58 mm [2.28"] can replace encoders with diameter 65 mm [2.56"] and pitch circle diameter 48 mm [1.89"]	8.0010.2230.0000	676	Х		X		X	X	
	Flange, ø 115 mm [4.53"] Euroflange	8.0010.2160.0000 8.0010.2170.0000	676	Х	х	Х	х	Х	Х	Х
	Flange, ø 58 mm [2.28"]  Converts encoders with a clamping flange into synchro flange.	8.0010.2180.0000	676	Х		Х		Х	Х	
	Flange, ø 90 mm [3.54"]  Mechanically compatible with former encoder Type 9000	8.0010.2270.0000	677	Х		Х		Х	Х	
	Angular flange 80 mm x 80 mm x 40 mm [3.15" x 3.15" x 1.57"]	8.0010.2300.0000	677	Х		Х			Х	
	Assembly bell  Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling — supplied as complete set	8.0000.4500.XXYY	678	Х		Х		Х	Х	
	For shaft encoders with synchronous flange. Use at least three fastening eccentrics to mount the encoder.	8.0010.4200.0000 8.0010.4100.0000	679	see table page 679						
	Robust bearing unit  Matching shaft encoders with clamping flange and shaft 10 mm [0.39"]	8.0010.8200.000C	680	Х		Х		Х	Х	
	Bearing box	8.0010.8200.0004	681	Х		Х		Х	Х	



# Fixing components for shaft encoders **Details** Dimensions / Details Flange, square Scope of delivery. flange (aluminum) 3 screws for fixing to the encoder 120• Connection to application: 4 screws (not supplied) Ø36.5 8.0010.2100.0000 "48<sup>±0.1</sup> □58<sup>±0.15</sup> 120. 8.0010.2120.0000 Ø36.5 °63.5 $\bigoplus$ 8.0010.2600.0000 Ø48 [1.89] □58 [2.28] 120• 8.0010.2800.0000



#### Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 65 [2.56] Scope of delivery: 8.0010.2230.0000 flange (aluminum) With this adapter flange, Kübler en-3 screws for fixing to the coders with size 58 [2.28] can replace encoder encoders with diameter 65 [2.56] and 1,8 pitch circle diameter 48 [1.89]. Connection to application: 3 screws (not supplied) Ø65 ±0,1 Flange, ø 115 [4.53], encoder type D1 В Euroflange (Euro REO 444) 1 [0.039] DIN 74-BM3 8.0010.2160.0000 580X/5000 48 [1.89] 36 [1.42] 58 [2.28] 11 [0.43] 8.0010.2170.0000 70XX 51 [2.01] 12 [0.47] 42 [1.65] 11.5 [0.45] 7.5 [0.30] DIN 74-BM4 Scope of delivery: flange (aluminum) 1 3 screws for encoder mounting Connection to application: (not supplied) Ø85. 1 Countersunk DIN 74-Hm6 B See table B A-A Flange, ø 58 [2.28] Scope of delivery. 8.0010.2180.0000 120° flange (aluminum) Converts encoders with a clamping Ø58 3 screws for encoder flange into synchro flange. Ø50 h7 mounting Ø36,1 ±0,05 Connection to application: 3 screws (not supplied) Ø 50 ±0,1 Ø42 ±0,05 Ø48 ±0,05



## Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 90 [3.54] Scope of delivery. 8.0010.2270.0000 flange Mechanically compatible with former 3 screws for encoder encoder type 9000 mounting Connection to application: 6 screws (not supplied) Scope of delivery. Angular flange 2,5 [0.1] 8.0010.2300.0000 angular flange (aluminum) 3 screws for encoder mounting Connection to application: 2 screws 45 [1.77] (not supplied) Ø48 [1.89] 80 [3.15] 22 [0.87] -— Ø7 [0.28] 60 [2.36] 1 Countersunk DIN 74-Hm6



Dimensions / Details

#### Fixing components for shaft encoders

#### **Details**

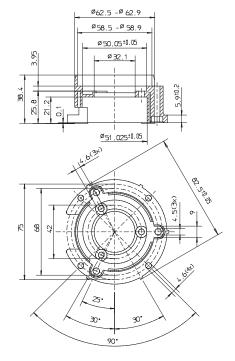
#### Assembly bell

- Easy and quick encoder mounting
- Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling
- Supplied as complete set





#### Dimensions in mm [incl



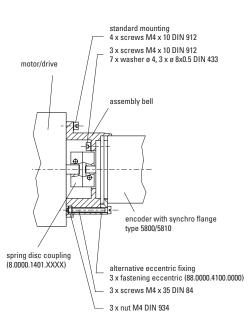
#### Scope of delivery.

- Assembly bell
- Spring washer type coupling (8.0000.1401.XXXX)
- 4 hexagon socket head cap screws DIN 912 M4 x 12 [0.47]
- 3 hexagon socket head cap screws DIN 912 M4 x 10 [0.39]
- 7 washers DIN 433 ø 4 [0.16]
- 3 fastening eccentrics (8.0000.4B00.0000)
- 3 hexagon head screws DIN 84 M 4 x 35 [0.16 x 1.38]
- 3 hexagon nuts DIN 934 M4

#### Urder no.

#### 8.0000.4500.XXYY

- XX = Coupling diameter d1 in mm
- YY = Coupling diameter d2 in mm





#### Fixing components for shaft encoders **Details** Dimensions / Details D1 D2 D3 Α В С **Fastening eccentrics** encoder type for encoders with synchro flange 3610 - Suitable for Kübler encoders with 3651 2.8 3.5 2.25 0.9 synchro flange 6.8 M3658 8.0010.4200.0000 - Material ACu Zn 39 Pb 3 [0.27] [0.20][0.11] [0.14] [0.09][0.035]F3653 / F3658 - Surface finish: galvanized Ni F3663 / F3668 5000 5803 / 5804 / 5805 5853 / 5858 9.6 6.5 3.2 5,6 2.9 1.55 5863 / 5868 [0.38][0.26] [0.13] [0.22][0.11] [0.06] 8.0010.4100.0000 F5863 / F5868 5852 7053 / 7058 7063 / 7068 Scope of delivery: 3 eccentrics 3 screws (Use at least three fastening eccentrics to mount the encoder)



## Fixing components for shaft encoders

**Overview** 

				Incremer encode		Abs. sin			s. multit ncoder	
Figure	Description	Order no.	Details s.page	5000, KIS50, 5814, 5006, 5803, 5804, 5805	7000, 7100	5853, 5858, 5852	7053, 7058, 7153, 7158	5863, 5868, F5863, F5868	M5861, M5863, M5868	7063, 7068, 7163, 7168
	Flange, square Suitable for shaft encoders with clamping flange  58.0 [2.28"], 4 [0.16"] thick  63.5 [2.5"], 3 [0.12"] thick  70.0 [2.76"], 10 [0.39"] thick  80.0 [3.15"], 4 [0.16"] thick	8.0010.2100.0000 8.0010.2120.0000 8.0010.2600.0000 8.0010.2800.0000	675 675 675 675	X X X X	4	X X X X	7	X X X X	X X X X	7
e e	Flange ø 65 mm [2.56"]  With this adapter flange, Küber encoders with size 58 mm [2.28"] can replace encoders with diameter 65 mm [2.56"] and pitch circle diameter 48 mm [1.89"]	8.0010.2230.0000	676	Х		X		X	X	
	Flange, ø 115 mm [4.53"] Euroflange	8.0010.2160.0000 8.0010.2170.0000	676	Х	х	Х	х	Х	Х	Х
	Flange, ø 58 mm [2.28"]  Converts encoders with a clamping flange into synchro flange.	8.0010.2180.0000	676	Х		Х		Х	Х	
	Flange, ø 90 mm [3.54"]  Mechanically compatible with former encoder Type 9000	8.0010.2270.0000	677	Х		Х		Х	Х	
	Angular flange 80 mm x 80 mm x 40 mm [3.15" x 3.15" x 1.57"]	8.0010.2300.0000	677	Х		Х			Х	
	Assembly bell  Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling — supplied as complete set	8.0000.4500.XXYY	678	Х		Х		Х	Х	
	For shaft encoders with synchronous flange. Use at least three fastening eccentrics to mount the encoder.	8.0010.4200.0000 8.0010.4100.0000	679	see table page 679						
	Robust bearing unit  Matching shaft encoders with clamping flange and shaft 10 mm [0.39"]	8.0010.8200.000C	680	Х		Х		Х	Х	
	Bearing box	8.0010.8200.0004	681	Х		Х		Х	Х	

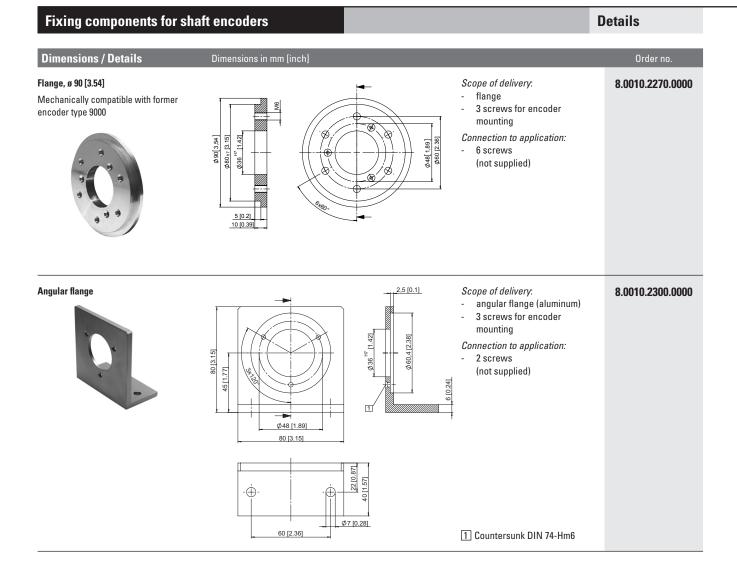


# Fixing components for shaft encoders **Details** Dimensions / Details Flange, square Scope of delivery. flange (aluminum) 3 screws for fixing to the encoder 120• Connection to application: 4 screws (not supplied) Ø36.5 8.0010.2100.0000 "48<sup>±0.1</sup> □58<sup>±0.15</sup> 120. 8.0010.2120.0000 Ø36.5 °63.5 $\bigoplus$ 8.0010.2600.0000 Ø48 [1.89] □58 [2.28] 120• 8.0010.2800.0000



#### Fixing components for shaft encoders **Details** Dimensions / Details Flange, ø 65 [2.56] Scope of delivery: 8.0010.2230.0000 flange (aluminum) With this adapter flange, Kübler en-3 screws for fixing to the coders with size 58 [2.28] can replace encoder encoders with diameter 65 [2.56] and 1,8 pitch circle diameter 48 [1.89]. Connection to application: 3 screws (not supplied) Ø65 ±0,1 Flange, ø 115 [4.53], encoder type D1 В Euroflange (Euro REO 444) 1 [0.039] DIN 74-BM3 8.0010.2160.0000 580X/5000 48 [1.89] 36 [1.42] 58 [2.28] 11 [0.43] 8.0010.2170.0000 70XX 51 [2.01] 12 [0.47] 42 [1.65] 11.5 [0.45] 7.5 [0.30] DIN 74-BM4 Scope of delivery: flange (aluminum) 1 3 screws for encoder mounting Connection to application: (not supplied) Ø85. 1 Countersunk DIN 74-Hm6 B See table B A-A Flange, ø 58 [2.28] Scope of delivery. 8.0010.2180.0000 120° flange (aluminum) Converts encoders with a clamping Ø58 3 screws for encoder flange into synchro flange. Ø50 h7 mounting Ø36,1 ±0,05 Connection to application: 3 screws (not supplied) Ø 50 ±0,1 Ø42 ±0,05 Ø48 ±0,05







Dimensions / Details

#### Fixing components for shaft encoders

#### **Details**

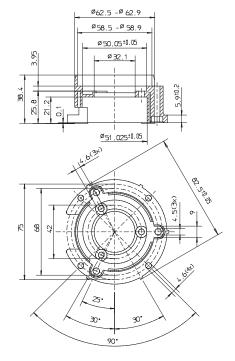
#### Assembly bell

- Easy and quick encoder mounting
- Electrical and thermal isolation by means of glass fiber reinforced plastic and isolating spring washer coupling
- Supplied as complete set





#### Dimensions in mm [incl



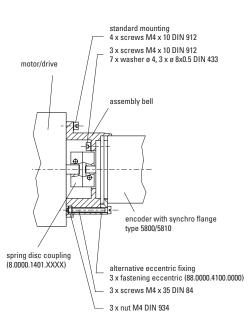
#### Scope of delivery.

- Assembly bell
- Spring washer type coupling (8.0000.1401.XXXX)
- 4 hexagon socket head cap screws DIN 912 M4 x 12 [0.47]
- 3 hexagon socket head cap screws DIN 912 M4 x 10 [0.39]
- 7 washers DIN 433 ø 4 [0.16]
- 3 fastening eccentrics (8.0000.4B00.0000)
- 3 hexagon head screws DIN 84 M 4 x 35 [0.16 x 1.38]
- 3 hexagon nuts DIN 934 M4

#### Urder no.

#### 8.0000.4500.XXYY

- XX = Coupling diameter d1 in mm
- YY = Coupling diameter d2 in mm





#### Fixing components for shaft encoders **Details** Dimensions / Details D1 D2 D3 Α В С **Fastening eccentrics** encoder type for encoders with synchro flange 3610 - Suitable for Kübler encoders with 3651 2.8 3.5 2.25 0.9 synchro flange 6.8 M3658 8.0010.4200.0000 - Material ACu Zn 39 Pb 3 [0.27] [0.20][0.11] [0.14] [0.09][0.035]F3653 / F3658 - Surface finish: galvanized Ni F3663 / F3668 5000 5803 / 5804 / 5805 5853 / 5858 9.6 6.5 3.2 5,6 2.9 1.55 5863 / 5868 [0.38][0.26] [0.13] [0.22][0.11] [0.06] 8.0010.4100.0000 F5863 / F5868 5852 7053 / 7058 7063 / 7068 Scope of delivery: 3 eccentrics 3 screws (Use at least three fastening eccentrics to mount the encoder)



#### Stator coupling

For hollow shaft encoders with flange ø 50 ... 58 mm Mounting radius 32.5 mm

For lateral mounting on the encoder flange. For applications with axial and radial play at high dynamics.

Scope of delivery

- Stator coupling (stainless steel)
- 4 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 3 screws

8.0010.1602.0000

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.1602.0000



#### Fastening arm, medium (flexible)

For hollow shaft encoders with flange ø 50 ... 58 mm
Mounting radius 32.5 ... 45.75 mm
For applications with axial and radial play with constant rotary movements.

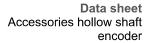
Scope of delivery

- Torque support (stainless steel)
- 3 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8,0010,40E0,0000



Mechanical CAD / STEP 8.0010.40E0.0000

DE E

DE E



#### Stator coupling

For hollow shaft encoders with flange ø 50 ... 58 mm

Mounting radius 32.5 mm

For lateral mounting on the encoder flange.

For applications with axial and radial play at high dynamics.

Scope of delivery

- Stator coupling (stainless steel)
- 4 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 3 screws

8.0010.40L0.0000

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.40L0.0000 DE E



#### Fastening arm, short (flexible)

For hollow shaft encoders with flange ø 50 ... 58 mm Mounting radius 32.25 mm For applications with axial and radial play at low dynamics.

**Mechanical CAD / STEP** 

Accessories hollow shaft

**Data sheet** 

Data sheet

encoder

Accessories hollow shaft

encoder

8.0010.40M0.0000

Scope of delivery

- Torque support (stainless steel)
- 3 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8.0010.40M0.0000



#### Spring tether element

For hollow shaft encoders with flange ø 50 ... 58 mm For applications with low radial and axial play and low dynamics.

Scope of delivery

- Wire spring element
- 1 screw for mounting on the encoder.

Connection to the application (not included in delivery)

- 1 screw

8.0010.40W0.0000



#### Torque pin, long with fastening thread

For hollow shaft encoders with flange ø 36 ... 58 mm With mounting thread.

Suitable for:

- Spring element short (8.0010.4H00.0000)
- Spring element long (8.0010.4I00.0000)

8.0010.4700.0000

**Data sheet** Accessories hollow shaft encoder DE E

DE E

DE E



#### Stator coupling, double-winged

For hollow shaft encoders with flange ø 50 ... 58 mm Mounting radius 31.5 mm

For lateral mounting on the encoder flange. For applications with high accuracy requirements.

Scope of delivery

- Stator coupling (stainless steel)
- 4 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 2 screws

8.0010.4D00.0000

**Data sheet** Accessories hollow shaft encoder

DE E

**Mechanical CAD / STEP** 8.0010.4D00.0000



Spring element, short

For hollow shaft encoders with flange ø 36 ... 58 mm Mounting radius 16 ... 27 mm

For applications with limited axial play at low dynamics and limited installation space.

Scope of delivery

- Spring element (plastic)
- 1 screw for mounting on the encoder

Connection to the application (not included in

- Parallel pin 8.0010.4700.0000

8.0010.4H00.0000

**Data sheet** Accessories hollow shaft encoder

**Mechanical CAD / STEP** 8.0010.4H00.0000

DE E

DE E

DE E

Spring element, long

For hollow shaft encoders with flange ø 36 ... 58 mm Mounting radius 30.7 ... 36.7 mm For applications with high axial play, at low dynamics.

Scope of delivery

- Spring element (plastic)
- 1 screw for mounting on the encoder

Connection to the application (not included in delivery)

- Parallel pin 8.0010.4700.0000

8.0010.4100.0000

Data sheet Accessories hollow shaft encoder

**Mechanical CAD / STEP** 8.0010.4100.0000

Fastening arm, long, (flexible)

For hollow shaft encoders with flange ø 50 ... 58 mm Mounting radius 36.5 ... 85 mm For applications with axial and radial play at low dynamics.

Scope of delivery

- Torque support (stainless steel)
- 3 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8.0010.4R00.0000

**Data sheet** Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.4R00.0000

Stainless steel clamping ring

For encoder 5020 With hollow shaft ø 12 mm. For applications with high speeds.

8.0010.4W01.0000

Data sheet Accessories hollow shaft encoder

DE E





Fixing components for hollov	w shaft encoders For encoders up to ø 58 mm						Overview								
						ncren enco			Absolute	singl oders				multi ders	
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	0	KIH50, 5020, 5026	5834 Motor-Line	5823, 5824, 5825, 5834	3671, M3678, F3673, F3678	5873, 5878, 5870, 5872	5873 Motor-Line	F3683, F3688	M3681, M3683, M3688	5883, 5888, F5883, F5888	F5883M, F5888M
	Spring element, short  For applications with limited axial play and low dynamics, and reduced mounting space	36XX 42 [1.65] M36XX 42 [1.65] F36XX 42 [1.65] 37XX 40 [1.57] 50XX 42 [1.65] 58XX 42 [1.65] F58XX 42 [1.65]	8.0010.4H00.0000  Connection to the application: cylindrical pin	4	X	X		X	Х	X		X	Х	X	х
	Spring element, long For applications with axial play and low dynamics	36XX 61,4 [2.42] M36XX 61,4 [2.42] F36XX 61,4 [2.42] 37XX 61,4 [2.42] 50XX 67,4 [2.65] 58XX 73,4 [2.89] F58XX 73,4 [2.89]	8.0010.4100.0000  Connection to the application: cylindrical pin	4	Х	Х		Х	Х	X		Х	Х	Х	Х
	Torque stop, short (flexible) For applications with axial and radial play, low dynamics	64.5 [2.54]	8.0010.40M0.0000  Connection to the application: 1 screw	4		X		X		х				X	X
	Torque stop, medium (flexible) For applications with axial and radial play for constant rotary move- ments	65 91.5 [2.56 3.60]	8.0010.40E0.0000  Connection to the application: 1 screw	4		X		Х		X				х	Х
	Torque stop, long (flexible) For applications with axial and radial play and low dynamics	80 170 [3.15 6.69]	8.0010.4R00.0000  Connection to the application: 1 screw	5		х		Х		х				X	х
Som Con	Stator coupling, double-winged For applications with axial and radial play and high dynamics	46 [1.81]	8.0010.4C00.0000  Connection to the application: 2 screws	5	Х				Х						Х
	Stator coupling, double-winged For applications with high demands for accuracy	63 [2.48]	8.0010.4D00.0000  Connection to the application: 2 screws	5		Flansch C + D	X	Х		X	X			X	
	Stator coupling, for fixing to side of encoder  For standard applications with axial and radial play, and high dynamics	65 [2.56]	8.0010.1602.0000  Connection to the application: 3 screws	6		Flansch C + D		Х		Х				Х	X
	Stator coupling, for fixing to front of encoder For applications with axial and radial play and high dynamics	65 [2.56]	8.0010.40L0.0000  Connection to the application: 3 screws	6		Х		Х		X				X	X
	Spring tether element For applications with low axial and radial play and low dynamics	42 84.5 [1.65 3.33]	8.0010.40W0.0000  Connection to the application: 1 screw	6		X		Х		X				х	х



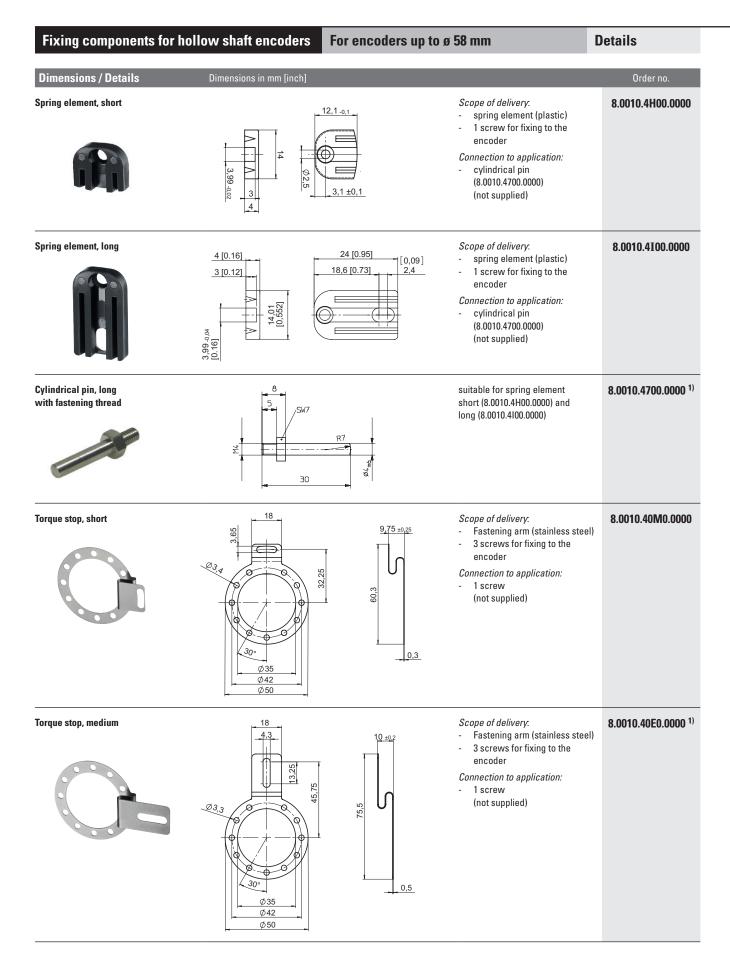
Fixing components for hollow shaft encoders For encoders up to ø 58 mm							0	Overview						
									ute sinç ncode			olute multi encoders		
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	5834FSx	5020	5823, 5824, 5825	5823, 5824, 5825	5873FSx	5873, 5878	5873 Motor-Line	5883FSx	5883, 5888, F5883, F5888,	F5883M, F5888M
	Stator coupling  Designed for functional safety thanks to the 4-screw-principle.	63 [2.48]	8.0010.40B2.00FS  Connection to the application: 4 screws	7	X	X	X	X	Х	X	X	X	х	
	Torque stop, flexible  Designed for functional safety. For applications with axial and radial play and low dynamics.	79 285 [3.11 11.22]	8.0010.4047.00FS  Connection to the application: 1 screw	7	Х	Х	х		X	Х		Х	Х	X
	Torque stop set, rigid  Designed for functional safety. For applications with very low axial and radial play and low dynamics.	65 287 mm [2.56 11.30]	8.0010.4051.00FS  Connection to the application: cylindrical pin	8	Х	Х	Х		X	X			Х	X



Fixing components for hollow shaft encoders For encoders > ø 58 mm Over									
Figure	Description	Pitch circle diameter in mm [inch]	Order no.	Details s. page	А020, А02Н	H120			
	Spring element, short For applications with reduced mounting space	76 [2.99]	8.0010.4J00.0000  Connection to the application: cylindrical pin	9	X				
	Spring element, long For applications with high axial play	110 [4.33]	8.0010.4K00.0000  Connection to the application: cylindrical pin	9	X				
	Torque stop, short For applications with axial play	149 [5.87]	8.0010.4T00.0000  Connection to the application: s. details	9	X				
	Torque stop, long For applications with fastening points located on variable pitch circle diameters	104 206 [4.09 8.11]	8.0010.4E00.0000  Connection to the application: 1 screw	10	Х				
	Tether arm, long  For applications with low axial and radial play, flexible in use	Length = 70 [2.75]: Length = 100 [3.94]: Length = 150 [5.91]: 262 422 [10.32 16.61]	8.0010.40\$0.0000 8.0010.40\$T0.0000 8.0010.40\$U0.0000 Connection to the application: 1 screw	10	Х	х			
	Tether arm, long  For applications with low axial and radial play, flexible in use	Length = 70 [2.75]: Length = 100 [3.94]: Length = 150 [5.91]: 262 422 [10.32 16.61]	8.0010.40\$1.0000 8.0010.40\$1.0000 8.0010.40\$1.0000 Connection to the application: 1 screw	11		Х			
	Stator coupling  For applications with axial and radial play and high dynamics	119 [4.69]	8.0010.40V0.0000  Connection to the application: 2 screws	11	Х	х			







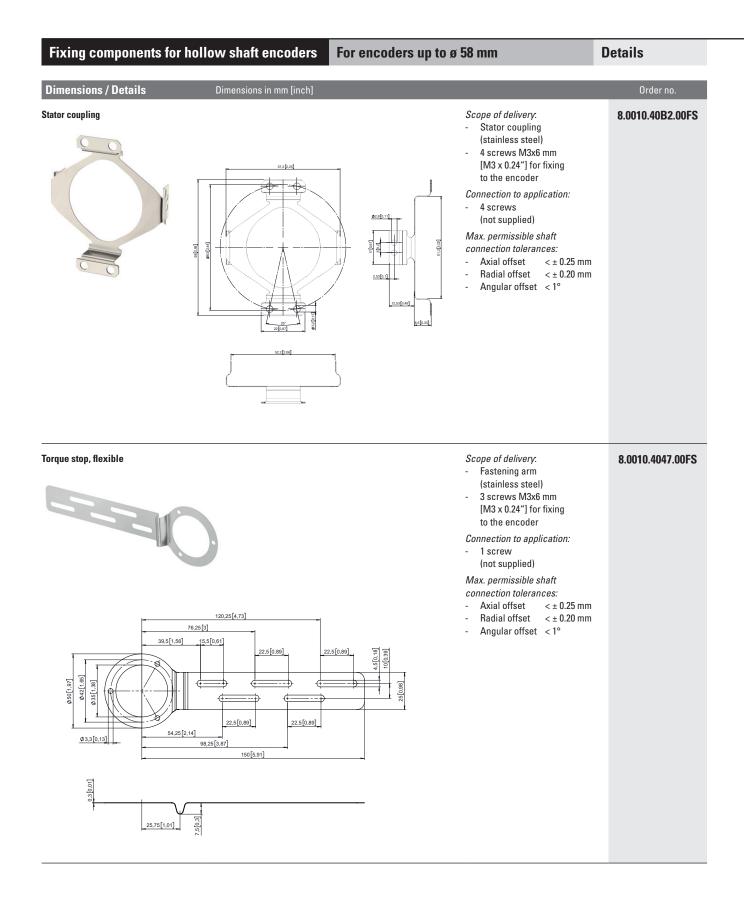


## Fixing components for hollow shaft encoders For encoders up to ø 58 mm **Details Dimensions / Details** Torque stop, long Scope of delivery. 8.0010.4R00.0000 Ø 50 Fastening arm (stainless steel) Ø42 3 screws for fixing to the Ø35 encoder Connection to application: 1 screw (not supplied) Ø3,3 41.1 69,25 85 Stator coupling, double-winged Scope of delivery: 8.0010.4C00.0000 for front fixing onto the encoder Stator coupling flange (stainless steel) 2 screws for fixing to the encoder Connection to application: 2 screws (not supplied) Stator coupling, double-winged Scope of delivery. 8.0010.4D00.0000 Stator coupling for side fixing onto the encoder flange Ø63 [2,48] (stainless steel) 4 screws M2.5 x 6 [0.24] for fixing to the encoders 6,5 [0,26] Connection to application: 9 [0,35] 2 socket head screws M3 x 8 [0.32] with washer (supplied)



#### Fixing components for hollow shaft encoders For encoders up to ø 58 mm **Details** Dimensions / Details **Stator coupling** Scope of delivery. 8.0010.1602.0000 for side fixing onto the encoder Stator coupling Ø65 ±0,05 flange (stainless steel) Ø4,3 2 screws for fixing to the encoder Connection to application: 3 screws (not supplied) Scope of delivery. Stator coupling 8.0010.40L0.0000 for front fixing onto the encoder Stator coupling flange (stainless steel) 2 screws for fixing to the encoder Connection to application: 3 screws (not supplied) 0,5 16 <sub>±0,05</sub> Ø42 Ø65 Spring tether element 8.0010.40W0.0000 Scope of delivery: spring tether element 1 screw for fixing to the encoder Connection to application: 1 screw (not supplied) Clamping ring for hollow for Stainless steel, for high rotational В D1 shaft ø encoder speeds 582X 6 [0.236] 29 [1.14] 10 [0.39] 8.0000.4V00.0000 6.2 [0.244] 30 [1.18] 12 [0.47] 8.0000.4W00.0000 5020 6.2 [0.244] 30 [1.18] 12 [0.47] 8.0010.4W01.0000 1 screw DIN 912 A2 M2.5, max. tightening torque 0.45 Nm





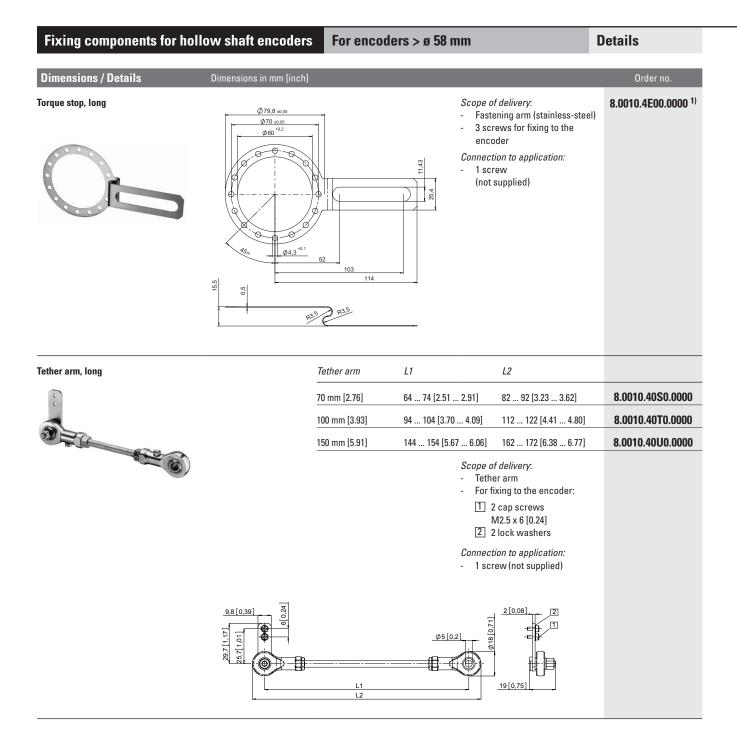


For encoders up to ø 58 mm Fixing components for hollow shaft encoders **Details** Dimensions / Details Torque stop set, rigid Scope of delivery. 8.0010.4051.00FS Fastening arm (stainless steel) 3 screws M3x6 mm [M3 x 0.24"] for fixing to the encoder Connection to application: 1 cylindrical pin 150 [5,91] 143,5 [5,65] 8.0010.4049.0075 110 [4,33] (not supplied) Max. permissible shaft 8 [0,31] 25 [0,98] 25 [0,98] connection tolerances: Axial offset < ± 0.25 mm Radial offset  $< \pm 0.20 \text{ mm}$ Angular offset < 1° 25 [0,98] 25 [0,98] 25 [0,98] Ø3,3[0,13] 92.5 [3.64] 127,5 [5,02] 57,5 [2,26] Cylindrical pin (replacement) suitable for: 8.0010.4049.0075 torque stop **□6[0,24]** 8.0010.4051.00FS



Fixing components for h	ollow shaft encoders	For encoders > ø 58	mm	Details
Dimensions / Details	Dimensions in mm [inch]			Order no.
Spring element, short	6 [0.24]	23 0 27	Scope of delivery: - Spring element (stainless steel - 2 screws for fixing to the encoder  Connection to application: - Cylindrical pin (8.0010.4700.0003) (not supplied)	8.0010.4J00.0000
Spring element, long	3 [0.12] 6 [0.24] 30 [1.18]	2 [0.08]	Scope of delivery: - Spring element (stainless steel - 2 screws for fixing to the encoder  Connection to application: - Cylindrical pin (8.0010.4700.0003) (not supplied)	8.0010.4K00.0000
Cylindrical pin, long with fastening thread	14 [0.55] 9 [0.35] 7 [0.35] 9 [0.35] 9 [0.35] 9 [0.35]	10 [0.39] © © © Ø	suitable for spring element short (8.0010.4J00.0000) and long (8.0010.4K00.0000)	8.0010.4700.0003
Torque stop, short	35.4 [1.39]  35.4 [1.39]  57  51  97  97  97  97  97  97  97  97  97  9	87 3.43 87	Scope of delivery:  1 Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: 2 Hexagonal nut 3/8 - 16 UNC 3 Washer (isolating) 4 Hexagonal screw 3/8 16 UNC x 1" 5 Washer D10.4 x 15 x 15 (supplied)	8.0010.4T00.0000 <sup>1)</sup>







#### Fixing components for hollow shaft encoders For encoders $> \emptyset$ 58 mm **Overview Dimensions / Details** Tether arm Tether arm, long L1 L2 8.0010.40S1.0000 64 ... 74 [2.51 ... 2.91] 82 ... 92 [3.23 ... 3.62] 70 mm [2.76] 112 ... 122 [4.41 ... 4.80] 100 mm [3.93] 94 ... 104 [3.70 ... 4.09] 8.0010.40T1.0000 8.0010.40U1.0000 150 mm [5.91] 144 ... 154 [5.67 ... 6.06] 162 ... 172 [6.38 ... 6.77] Scope of delivery: Tether arm For fixing to the encoder: 1 2 cap screws M2,5 x 12 [0.47] 2 lock washers Connection to application: 1 screw (not supplied 16[0,63] 2,5[0,1] Ø5[0,2] 15,75[0,62] 20,75[0,82] 19[0,75] L2 **Stator coupling** 8.0010.40V0.0000 Scope of delivery. Stator coupling (stainless steel) 4 screws for fixing to the encoder Connection to application: 2 screws (not supplied) 20 [0.79] Ø3.3 [0.13] 0,4 6,9 [0.27] 17,5 [0.69]



Dimensions / Details Dimensions in mm [inch]		Order no.
Protective cover	For applications with a very high degree of pollution, Kübler now offers a protective cover for  Improved reliability  Extension of the service life of the encoder  Scope of delivery:  Protective cover  Fastening arm (8.0010.4T00.0000)  3 screws for fixing to the encoder	8.0010.40Y0.000
Tapered shaft mounting kit or A02H with hollow shaft, ø 38 mm [1.50"]	For use in upgrading for tapered shaft mounting. Tapered shafts are used for high-precision direct coupling. An isolation insert is also included in the mounting kit; this reliably protects the encoder from shaft currents. Included in the set: Insert for cone blind hole, cone 1:10,	8.0010.4028.000
	<ul> <li>17 mm [0.67"] length</li> <li>Isolation insert</li> <li>Allen screw for central fixing</li> </ul>	
	Isolation insert     Allen screw for central fixing  ø D1:	
	Isolation insert     Allen screw for central fixing  Ø D1: 12 mm [0.47"]	8.0010.4091.000
	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 1[0,04] 14 mm [0.55"]	8.0010.4027.000
	• Isolation insert • Allen screw for central fixing  Ø D1: 12 mm [0.47"] 50[1,97] 14 mm [0.55"] 15 mm [0.59"]	8.0010.4027.000 8.0010.4038.000
mperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  ### D1:  12 mm [0.47"]  50[1,97]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  50[1,97]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  ### D1:   12 mm [0.47"]     14 mm [0.55"]     15 mm [0.59"]     16 mm [0.63"]     18 mm [0.71"]     20 mm [0.79"]     25 mm [0.98"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4012.000
emperature range -40°C +115°C [-40°F +239°F]	• Isolation insert • Allen screw for central fixing  ø D1: 12 mm [0.47"] 14 mm [0.55"] 15 mm [0.59"] 16 mm [0.63"] 18 mm [0.71"] 20 mm [0.79"] 25 mm [0.98"] 30 mm [1.18"] angs. AC 32 mm [1.26"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4012.000
polation inserts prevent currents from passing through the encoder bearing essecurrents can occur when using inverter controlled three-phase or actor motors and considerably shorten the service life of the encoder bearing through the encoder bear into the controlled three-phase or actor motors and considerably shorten the service life of the encoder bearing through the encoder bearing throug	• Isolation insert • Allen screw for central fixing  ### D1:    12 mm [0.47"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000
olation inserts prevent currents from passing through the encoder bearingsecurrents can occur when using inverter controlled three-phase or exter motors and considerably shorten the service life of the encoder bear more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  ### D1:    12 mm [0.47"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000
colation inserts prevent currents from passing through the encoder bear these currents can occur when using inverter controlled three-phase or actor motors and considerably shorten the service life of the encoder bear or more details please call our technical hotline (+49 7720 3903 92) or ser	• Isolation insert • Allen screw for central fixing  ### D1:    12 mm [0.47"]	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4011.000 8.0010.4012.000 8.0010.4015.000 8.0010.4013.000 8.0010.4070.000
solation insert for hollow shaft, ø 38 mm [1.50"] femperature range -40°C +115°C [-40°F +239°F]  solation inserts prevent currents from passing through the encoder bear these currents can occur when using inverter controlled three-phase or ctor motors and considerably shorten the service life of the encoder bear or more details please call our technical hotline (+49 7720 3903 92) or ser mail (info@kuebler.com)	• Isolation insert • Allen screw for central fixing  Ø D1:  12 mm [0.47"]  14 mm [0.55"]  15 mm [0.59"]  16 mm [0.63"]  18 mm [0.71"]  20 mm [0.79"]  25 mm [0.98"]  30 mm [1.18"]  30 mm [1.18"]  and us an  1/2"  5/8"	8.0010.4027.000 8.0010.4038.000 8.0010.4019.000 8.0010.4080.000 8.0010.4011.000



Fixing components fo	or hollow shaft encoders	For encoders up to	ø 58 mm	Details
Dimensions / Details	Dimensions in mm [inch]			Order no.
Spring element, short			Scope of delivery: - spring element (plastic) - 1 screw for fixing to the encoder  Connection to application: - cylindrical pin (8.0010.4700.0000) (not supplied)	8.0010.4H00.0000
Spring element, long		24 [0.95] 18,6 [0.73] 2,4	Scope of delivery: - spring element (plastic) - 1 screw topolitising to the encoder 3 [0.12] Connection to application: - cylindrical pin (8.00 to 4700.0000) (not supplied)  Suitable for spring element	8.0010.4100.0000
Cylindrical pin, long with fastening thread	0	A	suitable for spring element short (8.0010.4H00.0000) and long (8.0010.4I00.0000)	8.0010.4700.0000
Torque stop, short			Scope of delivery: - Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40M0.0000
Torque stop, medium			Scope of delivery: - Fastening arm (stainless steel - 3 screws for fixing to the encoder  Connection to application: - 1 screw (not supplied)	8.0010.40E0.0000



#### Screw retention Loctite 243 (5 ml)

Loctite 243 is a universally usable screw retention. Screws and nuts are secured against loosening due to vibrations and sealed in the same time.

8.0000.4G05.0000

Data sheet Screw retention Locitite

**Data sheet** 

**EMC** shield terminal

Mechanical CAD / STEP 8.0000.4G06.0XXX



#### EMC shield terminal

For EMC-compliant installation of the encoder cable

Mounting on top hat rail

Shield diameter

8.0000.4G06.0312 (03-12 mm)

Weight approx. 7.4 g Clamp (spring steel, galvanized) Foot (spring steel)

8.0000.4G06.0312



#### Torque stop, flexible

For hollow shaft encoders with flange ø 58 mm

Mounting radius 39.5 ... 142.75 mm

Designed for functional safety technology.

For applications with axial and radial play at low dynamics.

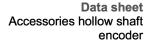
Scope of delivery

- Torque support (stainless steel)
- 3 M3x6 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8.0010.4047.00FS



Mechanical CAD / STEP 8.0010.4047.00FS

Operation Manual 8.0010.4047.00FS -Accessories torque stop, flexible (FS)



#### Cylindrical pin (replacement)

For hollow shaft encoders with flange ø 58 mm
Designed for functional safety technology.

suitable for: Torque brackets 8.0010.4051.00FS

8.0010.4049.0075

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.4049.0075



#### Fastening arm set, rigid

For hollow shaft encoders with flange ø 58 mm

Mounting radius 32.5 ... 143.5 mm

Designed for functional safety technology.
For applications with very low axial and radial play at low dynamics.

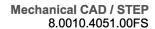
Scope of delivery

- Torque support (stainless steel)
- 3 screws M3x6 for mounting to the encoder

Connection to the application (not included in delivery)

- 1 torque pin 8.0010.4049.0075

8.0010.4051.00FS



Operation Manual 8.0010.4051.00FS -Accessories torque stop, rigid (FS)



Stator coupling (FS)

For hollow shaft encoders with flange ø 58 mm

Mounting radius 31.5 mm

Designed for functional safety technology by 4-screw principle.

Scope of delivery

- Stator coupling (stainless steel)
- 4 screws M3x6 for mounting to the encoder

Connection to application (not included in delivery)

- 4 screws

8.0010.40B2.00FS

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.40B2.00FS

> Operation Manual Supplement to stator coupling operating instructions (FS)



Clamping ring with hollow shaft ø 10 mm, stainless steel

For rotary encoder 582x With hollow shaft ø 10 mm. For applications with high speeds.

8.0000.4V00.0000

Data sheet
Accessories hollow shaft
encoder



Clamping ring with hollow shaft ø 12 mm, stainless steel

For rotary encoder 582x With hollow shaft ø 12 mm. For applications with high speeds.

8.0000.4W00.0000

Data sheet Accessories hollow shaft encoder



Stator coupling

For hollow shaft encoders with flange ø 50 ... 58 mm
Mounting radius 32.5 mm
For lateral mounting on the encoder flange.
For applications with axial and radial play at high dynamics.

Scope of delivery

- Stator coupling (stainless steel)
- 4 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 3 screws

8.0010.1602.0000



Torque stop, flexible

For hollow shaft encoders with flange ø 58 mm

Mounting radius 39.5 ... 142.75 mm

Designed for functional safety technology.

For applications with axial and radial play at low dynamics.

Scope of delivery

- Torque support (stainless steel)
- 3 M3x6 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8.0010.4047.00FS

Data sheet
Accessories hollow shaft
encoder

Mechanical CAD / STEP 8.0010.1602.0000

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.4047.00FS

Operation Manual 8.0010.4047.00FS Accessories torque stop, flexible (FS)



#### Fastening arm set, rigid

For hollow shaft encoders with flange ø 58 mm

Mounting radius 32.5 ... 143.5 mm

Designed for functional safety technology.
For applications with very low axial and radial play at low dynamics.

Scope of delivery

- Torque support (stainless steel)
- 3 screws M3x6 for mounting to the encoder

Connection to the application (not included in delivery)

- 1 torque pin 8.0010.4049.0075

8,0010,4051,00FS



Operation Manual 8.0010.4051.00FS -Accessories torque stop, rigid (FS)



### Stator coupling (FS)

For hollow shaft encoders with flange ø 58 mm

Mounting radius 31.5 mm

Designed for functional safety technology by 4-screw principle.

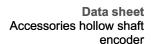
Scope of delivery

- Stator coupling (stainless steel)
- 4 screws M3x6 for mounting to the encoder

Connection to application (not included in delivery)

- 4 screws

8.0010.40B2.00FS



Mechanical CAD / STEP 8.0010.40B2.00FS

> Operation Manual Supplement to stator coupling operating instructions (FS)



#### Fastening arm, medium (flexible)

For hollow shaft encoders with flange ø 50 ... 58 mm

Mounting radius 32.5 ... 45.75 mm

For applications with axial and radial play with constant rotary movements.

Scope of delivery

- Torque support (stainless steel)
- 3 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8.0010.40E0.0000



Mechanical CAD / STEP 8.0010.40E0.0000



#### Stator coupling

For hollow shaft encoders with flange ø 50 ... 58 mm Mounting radius 32.5 mm For lateral mounting on the encoder flange. For applications with axial and radial play at high dynamics.

Scope of delivery

- Stator coupling (stainless steel)
- 4 screws for mounting on the encoder

Connection to the application (not included in

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.40L0.0000

#### 8.0010.40L0.0000



Fastening arm, short (flexible)

For hollow shaft encoders with flange ø 50 ... 58 mm
Mounting radius 32.25 mm
For applications with axial and radial play at low dynamics.

Scope of delivery

- Torque support (stainless steel)
- 3 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8.0010.40M0.0000



### Spring tether element

For hollow shaft encoders with flange ø 50 ... 58 mm

For applications with low radial and axial play and low dynamics.

Scope of delivery

- Wire spring element
- 1 screw for mounting on the encoder.

Connection to the application (not included in delivery)

- 1 screw

8.0010.40W0.0000



#### Torque pin, long with fastening thread

For hollow shaft encoders with flange ø 36 ... 58 mm With mounting thread.

Suitable for:

- Spring element short (8.0010.4H00.0000)
- Spring element long (8.0010.4100.0000)

8.0010.4700.0000

Data sheet Accessories hollow shaft encoder

**Data sheet** 

**Data sheet** 

encoder

Accessories hollow shaft

encoder

Accessories hollow shaft

Mechanical CAD / STEP

8.0010.40M0.0000



#### Stator coupling, double-winged

For hollow shaft encoders with flange ø 50 ... 58 mm Mounting radius 31.5 mm

For lateral mounting on the encoder flange. For applications with high accuracy requirements.

Scope of delivery

- Stator coupling (stainless steel)
- 4 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 2 screws

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.4D00.0000



### Spring element, short

For hollow shaft encoders with flange ø 36 ... 58 mm Mounting radius 16 ... 27 mm

For applications with limited axial play at low dynamics and limited installation space.

Scope of delivery

- Spring element (plastic)
- 1 screw for mounting on the encoder

Connection to the application (not included in delivery)

- Parallel pin 8.0010.4700.0000

8.0010.4H00.0000



#### Spring element, long

For hollow shaft encoders with flange Ø 36 ... 58 mm Mounting radius 30.7 ... 36.7 mm For applications with high axial play, at low dynamics.

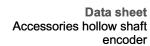
Scope of delivery

- Spring element (plastic)
- 1 screw for mounting on the encoder

Connection to the application (not included in delivery)

- Parallel pin 8.0010.4700.0000

8.0010.4100.0000



**Data sheet** 

encoder

Accessories hollow shaft

**Mechanical CAD / STEP** 

8.0010.4H00.0000

Mechanical CAD / STEP 8.0010.4I00.0000



#### Fastening arm, long, (flexible)

For hollow shaft encoders with flange ø 50 ... 58 mm
Mounting radius 36.5 ... 85 mm
For applications with axial and radial play at low dynamics.

Scope of delivery

- Torque support (stainless steel)
- 3 screws for mounting on the encoder

Connection to the application (not included in delivery)

- 1 screw

8.0010.4R00.0000

Data sheet Accessories hollow shaft encoder

Mechanical CAD / STEP 8.0010.4R00.0000



## **EMC** shield terminal



## Order number

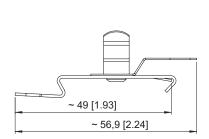
Shield diameter 3.0 ... 12.0 mm

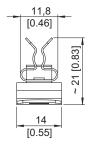
8.0000.4G06.0312

Material	
Clamp	spring steel, galvanized
Foot	spring steel

#### **Dimensions**

Dimensions in mm [inch]







#### **Safety modules** Safety-M compact **Dimensions / Details** Order no. The display can be removed on all Safety-M compact Display and programming unit Suitable for our devices. The high-contrast OLED has a touch screen with safety modules intuitive menu guidance. Safety-M compact: Editing, saving and loading of parameters and display with individually scalable process and speed values for SMC1.x, SMC2.x 8.SMCB.100 optimal operability and diagnostics in the plant. The display can be used optionally as a storage and copy unit for the speed monitor. Programmable with the Safety-M compact programming cable set 05.C162RK1. Technical data: Mounting pluggable, mechanical-magnetic lock Interface pin strip, 8-pin (rear side) Power supply via basic module SMCx appr. 100 mA Current consumption Ambient temperature -20 °C ... +55 °C [-4 °F ... +131 °F] Storage temperature -25 °C ... +70 °C [-13 °F ... +158 °F] Dimensions (WxHxD) 50 x 80 x 15 mm [1.97 x 3.15 x 0.59"] Weight appr. 50 g Protection IP20 Material front side: Polycarbonate rear side: Polystyrene OLED 128 x 64 pixels (1.54") Display Brightness adjustable Keyboard Touch screen (6 capacitive keys) Key tones beep, can be switched off Data memory Flash, EEPROM Memory cycles 1 million EMC guideline 2014/30/EU CE compliant acc. to RoHS guideline 2011/65/EU Software OSxx The OSxx software allows PC-based configuration of the Suitable for our Online on our Safety-M compact family. safety modules homepage Safety-M compact: SMC1.x, SMC2.x www.kuebler.com/ SOFTsoftware WARE



**Mounting frame** 

#### Dimensions / Details Dimensions in mm [inch] Order no. Mounting frame with cut-out suitable for: description: 92 x 45 mm [3.62 x 1.77"] for snap-on mounting on for counters 96 x 48 mm [3.78 x 1.89"] Codix 54x, 55x, 56x, 57x grey G300005 35 mm [1.38"] top-hat DIN rail 130,5 [5.138] 160 [6.299] 70 [2.756] suitable for: Mounting frame with cut-out description: 50 x 50 mm [1.97 x 1.97"] for counters 53 x 53 mm [2.09 x 2.09"] and for snap-on mounting on BVa 15.21, HVa 15.21, MVs 16.2x chromated G300003 55 x 55 mm [2.16 x 2.16"] 35 mm [1.38"] top-hat DIN rail (cut-ou 45 x 45 mm [1.77 x 1.77"] via via supplied adapter for: 901, Codix 907 / 908, Codix 923 / 924, supplied adapter for counter 48 x 48 mm [1.89 x 1.89"]) H 57, HC 77, HW 66, HW 66 M, 145 [5.709] 41 [1.614] \_,22 [0.866] □ 50<sup>+0.5</sup> [1.969<sup>+0.02</sup>] 5.5 10.2171 600 70 [2.756] Mounting frame with cut-out description: suitable for: 50 x 25 mm [1.97 x 0.98"] for counters 53 x 28 mm for snap-on mounting on B 1x.2x, HB 2x.2x., H 37.2 chromated G300004 35 mm [1.38"] top-hat DIN rail (cut-out 45 x 22.2 mm [1.77 x 0.94"] via separate adapter T008180 or T008165 for via supplied adapter T008180 for: counter 48 x 24 mm [1.89 x 0.94"]) Codix 13x, 14x, 52x, 53x, W 15.5, W 16.5, W 17.5, H 37.5 via adapter T008165: H 37 101 [3.977] 45 [1.772] 45 [1.772] 756] 70 [2.

**Details** 



**Mounting frame** 

#### Dimensions / Details Dimensions in mm [inch] Order no. Mounting frame with cut-out suitable for: description: 92 x 45 mm [3.62 x 1.77"] for snap-on mounting on for counters 96 x 48 mm [3.78 x 1.89"] Codix 54x, 55x, 56x, 57x grey G300005 35 mm [1.38"] top-hat DIN rail 130,5 [5.138] 160 [6.299] 70 [2.756] suitable for: Mounting frame with cut-out description: 50 x 50 mm [1.97 x 1.97"] for counters 53 x 53 mm [2.09 x 2.09"] and for snap-on mounting on BVa 15.21, HVa 15.21, MVs 16.2x chromated G300003 55 x 55 mm [2.16 x 2.16"] 35 mm [1.38"] top-hat DIN rail (cut-ou 45 x 45 mm [1.77 x 1.77"] via via supplied adapter for: 901, Codix 907 / 908, Codix 923 / 924, supplied adapter for counter 48 x 48 mm [1.89 x 1.89"]) H 57, HC 77, HW 66, HW 66 M, 145 [5.709] 41 [1.614] \_,22 [0.866] □ 50<sup>+0.5</sup> [1.969<sup>+0.02</sup>] 5.5 10.2171 600 70 [2.756] Mounting frame with cut-out description: suitable for: 50 x 25 mm [1.97 x 0.98"] for counters 53 x 28 mm for snap-on mounting on B 1x.2x, HB 2x.2x., H 37.2 chromated G300004 35 mm [1.38"] top-hat DIN rail (cut-out 45 x 22.2 mm [1.77 x 0.94"] via separate adapter T008180 or T008165 for via supplied adapter T008180 for: counter 48 x 24 mm [1.89 x 0.94"]) Codix 13x, 14x, 52x, 53x, W 15.5, W 16.5, W 17.5, H 37.5 via adapter T008165: H 37 101 [3.977] 45 [1.772] 45 [1.772] 756] 70 [2.

**Details** 



#### Bezel adapter set

Adapter front frame 72x36mm to 48x24mm for cutout 68x33mm to cutout 45x22.2mm. Available as a set in black and silver anodized.

2 front frame black and silver, 1 balance frame.

162.704.set

Data sheet Adapter front bezel



#### Blind housing 13x, 14x

Blind housing for 22.2x45mm and 25x50mm cutout.

Blind housing, clamping bracket, seals, adapter front frame.

G.003.836



#### Sealing cover K1

Flexible sealing cap for front frame F1B and adapter front frame N003001 made of soft PVC with painted sheet steel frame and mounting screws. IP65 protection according to DIN 40050 when installed. Suitable for B15.31, B16.31, B16.30, B18.30, F1B15.01, F1B16.01, F1B16.00 and F1B18.00. With adapter frame N.003.001 for 130, 131, 132, 133, 134, 135, 136, 140, 141, 142, 143, 520, 521, 522, 523, 524, 52U, 52P, 52T.

Sealing cap (PVC) with sheet steel frame, 2 mounting screws M4x15.

Grau G.008.300 Schwarz G.008.301 Data sheet Sealing cover

Data sheet Enclosure blind



### Mounting frame, 24x48

For the installation of all counters, timers, process devices with DIN dimensions 24x48mm or 50x25mm. Cutout 25x50mm. For snap-on mounting on 35mm DIN top hat rail.

Meter holder (chrome-plated sheet steel), DIN hat-rail adapter (fiber-reinforced polyamide).

G.300.004

Data sheet Mounting frame



#### Bezel adapter

Adapter front frame 50x60mm for cutout F1B 54x29mm to 45x22.2mm for screw fastening with seal. Available in black.

N.003.001

Data sheet Adapter front bezel (2)



#### Transparent cover, lockable

Data sheet Transparent cover 2

Screw-on transparent cover for front frame F1B and adapter front frame N003001, 1 DV, lockable for dimension F1. With seal over M4 mounting screws with own frame. Suitable for B15.31, B16.31, B16.30, B18.30, F1B15.01, F1B16.01, F1B16.00 and F1B18.00. With adapter frame N.003.001 for 130, 131, 132, 133, 134, 135, 136, 140, 141, 142, 143, 520, 521, 522, 523, 524, 52U, 52P, 52T.

Transparent cover, seal, 2 mounting screws.

N.003.002



### Sealing gasket N.511029

Outer dimension: 48 x 24 [1.89 x 0.945"] Inner dimension: 45 x 22 [1.772 x 0.866"]

N.511029

Data sheet Gaskets



#### Bezel adapter 37.1

Adapter front frame 37.1 for front panel cutout 50x25mm to 45x22.2mm with screw fastening. Available in black, gray and anthracite.

 Schwarz
 T.008.161

 Anthrazit
 T.008.181

Data sheet Adapter front bezel



### Slip on bezel 37.2

Adapter front frame 37.2 for front panel cutout 50x25mm to 45x22.2mm. Available in black, gray and anthracite.

 Schwarz
 T.008.165

 Anthrazit
 T.008.180

Data sheet Adapter front bezel



#### Bezel adapter

Adapter front frame 48x48mm to 48x24mm for cutout 45x45mm to cutout 45x22.2mm. Available in black.

T.008.883

Data sheet Adapter front bezel (2)



#### Front bezel F2B

Plastic front frame F2B for 54x54mm cutout and 946 socket in dimension F2 for one Bva, HVa or 2 B, HB meter. Pluggable from the front.

Beige G.007.503 Schwarz G.007.504 Data sheet Front bezel



#### Sealing cover K2

Flexible sealing cap for dimension F2, IP65 protection. Suitable for BVa15.13, BVa15.31, BVa15.33 and HVa15.31 within F2B. 2 B counters or 2 HB counters and MVs16.03 in frame F2M and junction box 926.1. 716, 717 901, 907, 908, 923, 924 with adapter frame 45 (T.008.860).

Grau G.008.302 Schwarz G.008.303 Data sheet Sealing cover



#### Socket box type 946.1

Socket type 946.1 (plastic). Pluggable from the front

G.008.439

Data sheet Socket box 2



### Rail mount frames SR1, SR2, SR3

The SR 1, SR 2, and SR 3 mounting rail frames can be snapped onto TS 35x7.5 and TS 35x15 mounting rails according to DIN EN 50022 or TS 32 according to DIN EN 50035.

Electromechanical and electronic totalizer, preset or hour meters can be plugged into the built-in sockets.

 SR1
 G.300.000

 SR2
 G.300.001

 SR3
 G.300.002

Data sheet DIN rail mount





### Mounting frame, 48x48

For the installation of all meters, timers with the DIN dimensions 48x48mm. Cutout 50x50mm. For snap-on mounting on 35mm DIN top hat rail

Meter holder (chrome-plated sheet steel), DIN hat-rail adapter (fiber-reinforced polyamide).

G.300.003

Data sheet Mounting frame



#### Sealing gasket N.511020

Outer dimension: 60 x 75 [2.363 x 2.953"] Inner dimension: 50 x 50 [1.969 x 1.969"]

N.511020



#### **Details** Adapter front bezel Dimensions / Details Order no. Adapter front bezel, 60 x 75 mm [2.36 x 1.97"] suitable for: cut-out: for cut-out 50 x 50 mm [1.97 x 1.97"] 901, Codix 907 / 908, Codix 923 / 924, with screw mounting black T008860 for counters 48 x 48 mm to cut-out 45 x 45 mm [1.77 x 1.77"] H 57, HC 77, HW 66, HW 66 M 60 [2.363] $\odot$ 45 [1.772] □ 48 [1.89] □ 50 [1.969] 75 [2.953] 63 [2.481] $\odot$ 3.8 [0.15] Adapter front bezel, 72 x 72 mm [2.83 x 2.83"] cut-out: suitable for: for cut-out 68 x 68 mm [2.68 x 2.68"] 901, Codix 907 / 908, Codix 923 / 924, with clip mounting grey T008176 for counters 48 x 48 mm to cut-out 45 x 45 mm [1.77 x 1.77"] H 57, HC 77, HW 66, HW 66 M black T008177 (Mating clip must be ordered separately) mating clip T009420 □ 72 [2.835] 7.5 [0.295] 6 [0.236] □ 45.4 [1.788] □ 48.1 [1.894] 6 [0.236] suitable for: Adapter front bezel, ø 72 mm [2.83"] cut-out: for cut-out ø 60 mm [2.36"] 901, Codix 907 / 908, Codix 923 / 924, with clip mounting black N510226 to cut-out 45 x 45 mm [1.77 x 1.77"] H 57, HC 77, HW 66, HW 66 M for counters 48 x 48 mm Ø 72 [2.835] 7 [0.276] 1.5 [0.059] ø 59.5 [2.343] □ 45.5 [1.792] □ 48.5 [1.91]

Sealing gasket N.511011  Outer dimension: 39 x 40 [1.536 x 1.575"]  Inner dimension: 33.3 x 22 [1.311 x 0.866"]  N.511011	Data sheet Gaskets
Sealing gasket N.511030  Outer dimension: 55 x 31.5 [2.166 x 1.286"] Inner dimension: 37 x 24 [1.061 x 0.945"]  N.511030	Data sheet Gaskets
Sealing gasket N.511040  Outer dimension: 36 x 24 [1.457 x 1.024"]  Inner dimension: 33.3 x 22 [1.311 x 0.866"]  N.511040	Data sheet Gaskets
Sealing gasket N.511043  Outer dimension: 55 x 26 [2.166 x 1.061"]  Inner dimension: 33.3 x 22 [1.311 x 0.866"]	<b>Data sheet</b> Gaskets

N.511043



## **IO-Link Master USB**

#### IOL1A.1K1341.ZZ1UU1



The IO-Link Master USB is suitable for quick and easy parameterization of devices with an IO-Link interface.





#### **Characteristics**

- · Process and service data can be read and written with the corresponding IODD.
- Pin 4 (C/Q) of the master can be operated both in IO-Link (IOL) and in standard IO (SIO) mode, depending on the DTM parameterization.
- Support for all common transmission speeds: 4.8 kBit/s (COM1), 38.4 kBit/s (COM2) and 230.4 kBit/s (COM3).
- · Connection of the master via the supplied cable with USB-B mini interface. This is also used to supply the connected IO-Link devices with power.
  - For devices with high power consumption (> 2.5 W), the external plug-in power supply unit must also be used.
- · The latest version of the DTM is available for download at: kuebler.com/dtm

### Order no.

10-Link Master USB

IOL1A.1K1341.ZZ1UU1

Cables and connectors		Order no.
Preassembled cables	M12 female connector with coupling nut, 4 pin, A coded, straight (stainless steel V4A) M12 male connector with external thread, 4 pin, A coded, straight (stainless steel V4A) 2 m [6.56'] PUR cable	05.00.6061.D4D2.002M
	M12 female connector with coupling nut, 4 pin, A coded, straight M12 male connector with external thread, 4 pin, A coded, straight 2 m [6.56'] PUR cable	05.00.6061.6462.002M
	M12 female connector with coupling nut, 5 pin, A coded, angled M12 male connector with external thread, 5 pin, A coded, straight 2 m [6.56'] PUR cable	05.00.6061.6364.002M



## **10-Link Master USB**

### IOL1A.1K1341.ZZ1UU1

## Technical data

Electrical characteristics	
Supply voltage	24 V DC
Max. Load current	40 mA via USB-B 1.6 A via plug-in power supply unit
Network connection	USB-B
Connection IO-Link port	M12 x 1, A coded

Interface characteristics IO-Link			
10-Link	1-channel operation in IOL or SIO mode		
Function	SIO, COM1, COM2, COM3		
Number of IO-Link ports	1		
Network	USB		

Mechanical characteristics			
<b>Dimensions (W x H x D)</b> 54 x 41 x 24 mm [2.16 x 1.61 x 0.94			
Weight	96 g [3.39 oz]		
Operating temperature	-5 °C +55 °C [+23 °F +131 °F]		
Storage temperature	-25 °C +70 °C [-13 °F +158 °F]		
Protection	IP40		

#### **Terminal assignment**

Interface	M12 connector, female contacts, 5-pin, A-coded					
IO-Link	Signal	+V	n.c.	0 V	C/Q	n.c.
	Pin:	1	2	3	4	5

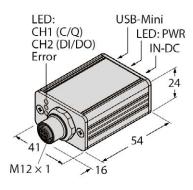


+V: Supply voltage 24 V DC 0 V: Supply voltage ground GND (0 V)

C/Q: IO-Link

#### **Dimensions**

Dimensions in mm [inch]

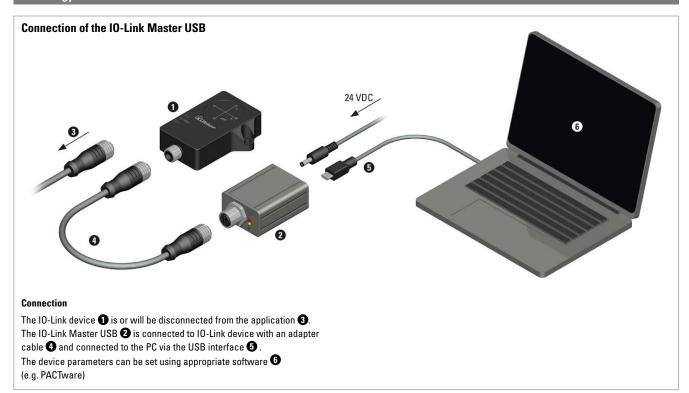




## **10-Link Master USB**

## IOL1A.1K1341.ZZ1UU1

## Technology in detail



### По вопросам продаж и поддержки обращайтесь:

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