

# Miniature Couplings

## Bellows Couplings

### Servo Insert Couplings

#### Line Shafts





# KBK – The Company

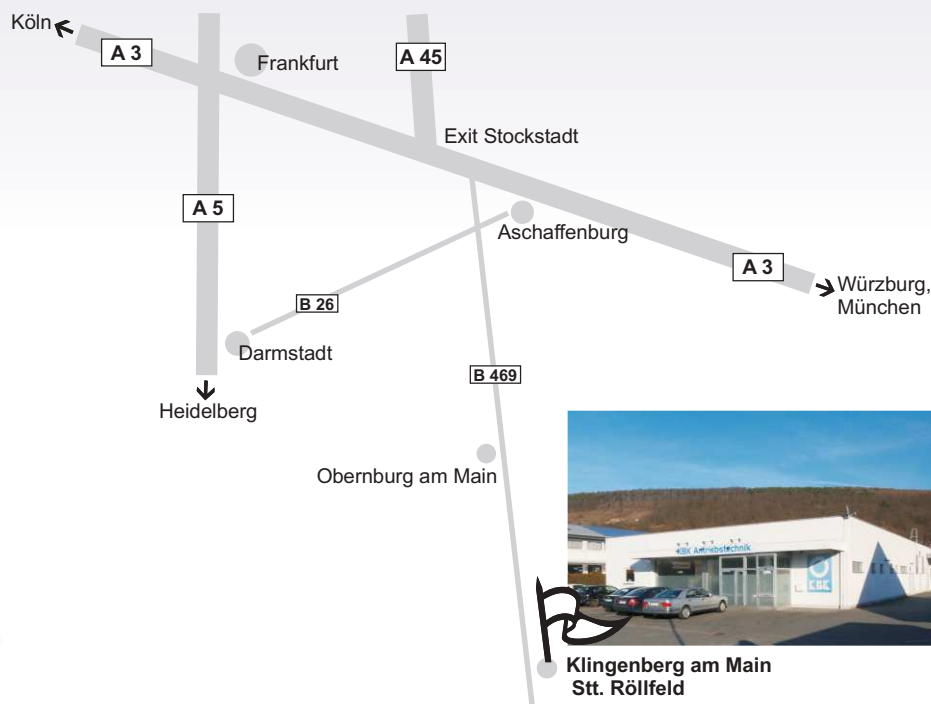
KBK Antriebstechnik GmbH was founded in July 2003.

Our vision of manufacturing high quality products “made in Germany” at competitive prices made us become the supplier of a steadily growing number of satisfied customers in 52 countries.

KBK products are the result of over thirty years experience in developing and manufacturing couplings and locking devices.

In 2010 we have extended not only our product range but also our production site to over 1000 square meters and have refurnished our NC turning lathes and Milling machines. This helps us to dispatch standard as well as customized products within two hours.

Our manufacturing facilities are located only 50 minutes from Frankfurt International Airport, which also enables us to provide worldwide short and punctual deliveries.





# CONTENTS

---

<b>Miniature Bellows Couplings</b>	Page 4
KB 1 - with set screws 0,05 - 10 Nm	Page 5
KB 2 - with collet clamps 0,1- 10 Nm	Page 6
KB 2H - with split hubs 0,5 - 10 Nm	Page 7
KB 2VA - stainless steel, glued or welded 0,1 - 10 Nm	Page 8
KB 3 - with expanding clamps 0,5 - 10 Nm	Page 9
<b>Bellows Couplings</b>	Page 10
KB 4 - with collet clamps up to 1400 Nm	Page 11
KB 4H - with split hubs up to 500 Nm	Page 12
KB 4Al - with aluminium collet clamps up to 500 Nm	Page 13
KB 4C - with compact collet clamps up to 500 Nm	Page 14
KB 4HC - with compact split hubs up to 500 Nm	Page 15
KB 4F - with flange adaptor up to 1400 Nm	Page 16
KB 4VA - stainless steel glued or welded up to 500 Nm	Page 17
KB 5 - inner conical hubs up to 5000 Nm	Page 18
KB 6 - outer conical hubs up to 5000 Nm	Page 19
KB 7 - for flange mounting up to 5000 Nm	Page 20
KB 8 - with expanding clamp up to 300 Nm	Page 21
<b>Servo Insert Couplings</b>	Page 22
KBE 1 - with set screws sizes 5 - 48	Page 23
KBE 2 - with collet clamps sizes 5 - 19	Page 24
KBE 2 - with collet clamps sizes 24 - 48	Page 25
KBE 2C - compact version with collet clamps sizes 7 - 38	Page 26
KBE 2H - with split hubs sizes 14 - 48	Page 27
KBE 2D - with collet clamps sizes 7 - 48	Page 28
KBE 3 - with outer conical hubs sizes 14 - 48	Page 29
KBE 3C - compact version with outer conical hubs sizes 14 - 48	Page 30
KBE 4 - with expanding clamps sizes 14 - 38	Page 31
Spider elements for servo insert couplings	Page 32
<b>Line Shafts</b>	Page 33
DRE - with elastomer inserts sizes 14 - 48	Page 34
DRB - with metal bellows sizes 4,5 - 500	Page 35





# SERVO INSERT COUPLINGS

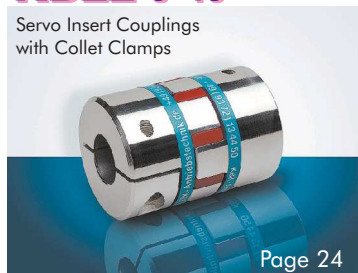
## **KBE1-5~48**

Servo Insert Couplings  
with Set Screws



## **KBE2-5~19**

Servo Insert Couplings  
with Collet Clamps



## **KBE2-24~48**

Servo Insert Couplings  
with Collet Clamps



## **KBE2C-7~38**

Servo Insert Couplings  
with Compact Version Collet Clamps



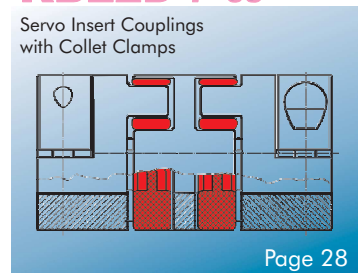
## **KBE2H-14~48**

Servo Insert Couplings  
with Split Hubs



## **KBE2D-7~38**

Servo Insert Couplings  
with Collet Clamps



## **KBE3-14~48**

Servo Insert Couplings  
with Outer Conical Hubs



## **KBE3C-14~48**

Servo Insert Couplings  
Compact Version with Outer Conical Hubs



## **KBE4-14~38**

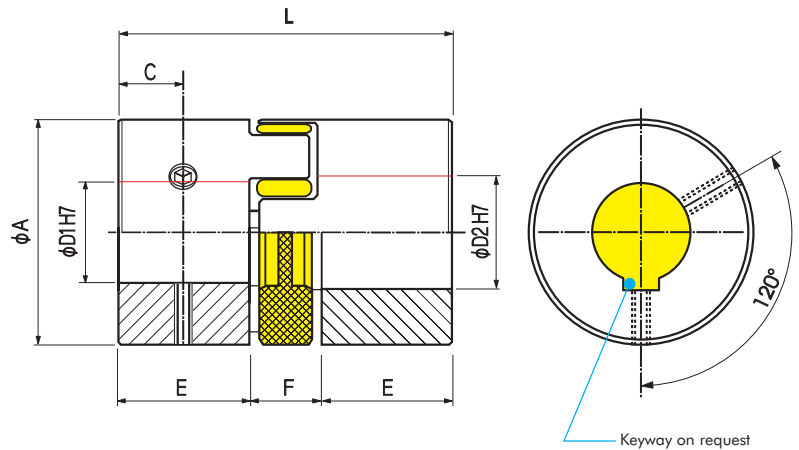
Servo Insert Couplings  
with Expanding Clamps



## Servo Insert Coupling



with Set Screws



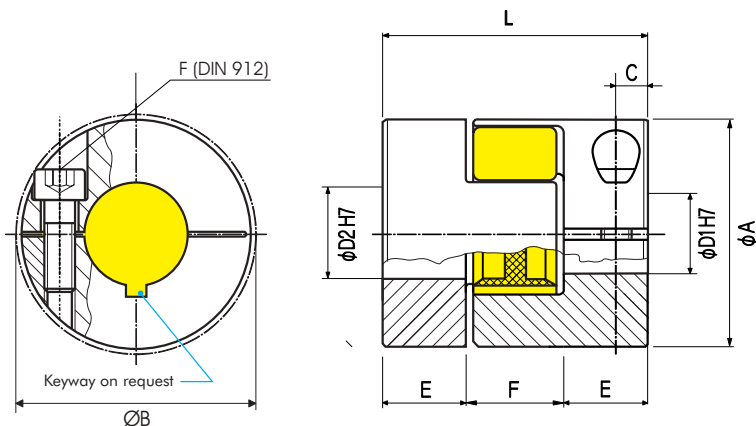
**Order Code:** KBE 1 - 14 - 10H7 - 12H7 ( - S )  
 Type                      Size                      Bohre D1(H7)                      Bohre D2(H7)                      Options

	Dimensions (mm)						Technical Ratings				
	Ø A	L	Ø D1-D2	E	F	C	F	Maximum Speed	Mass (per Hub)	Moment of Inertia J	Torque
	Outer Ø	Length	Bohre Sizes (H7) min ~ max				Screw (DIN 916) T <sub>A</sub> (Nm)	rpm. (1/min)	(g)	(kg mm <sup>2</sup> )	(Nm)
<b>KBE 1 - 5</b>	10	15	2 - 6	5	5	2.5	1 x M3 0.5	<b>47500</b>	1	0.034	0.5
<b>KBE 1 - 7</b>	14	22	4 - 7	7	8	3.5	2 x M3 1.3	<b>34000</b>	3	0.2	1.2
<b>KBE 1 - 9</b>	20	30	6 - 9	10	10	5	2 x M3 1.3	<b>24000</b>	9	1.1	3
<b>KBE 1 - 14</b>	30	35	6 - 16	11	13	5	1 x M4 3	<b>16000</b>	20	5.6	12.5
<b>KBE 1 - 19</b>	40	66	10 - 24	25	16	10	1 x M5 6	<b>12000</b>	80	36	17
<b>KBE 1 - 24</b>	55	78	16 - 28	30	18	10	1 x M5 6	<b>8500</b>	132	150	60
<b>KBE 1 - 28</b>	65	90	20 - 38	35	20	15	1 x M6 11	<b>7200</b>	253	330	160
<b>KBE 1 - 38</b>	80	114	20 - 45	45	24	15	1 x M8 25	<b>6000</b>	600	960	325
<b>KBE 1 - 42</b>	95	126	20 - 55	50	26	20	1 x M8 25	<b>4800</b>	1850	4900	450
<b>KBE 1 - 48</b>	105	140	20 - 60	56	28	20	1 x M8 25	<b>4300</b>	3200	8300	525

Material: Insert (KBE1-5 to KBE1-9): Polyurethan 92 Sh A (yellow)  
 Insert (KBE1-14 to KBE1-48): Polyurethan 98 Sh A (red)  
 Hubs: Aluminum



## Servo Insert Coupling



**Order Code: KBE 2 - 14 - 10H7 - 12H7 ( - S )**

Type                      Size                      Ø D1(H7)                      Ø D2(H7)                      (Options)

	Dimensions (mm)								Technical Ratings			
	ØA	L	Ø D1-D2	E	F	C	B	F	Maximum Speed	Mass (per Hub)	Moment of Inertia (per Hub) J	Torque
		Length	Bohre Sizes (H7) min ~ max				Max. Ø	Screw (DIN 912) TA (Nm)	rpm. (1/min)	(g)	(g cm <sup>2</sup> )	(Nm)
<b>KBE 2 - 5</b>	10	15	2 - 5	5	5	2.5	11.4	M1.6 0.5	<b>38000</b>	1	0.034	0.5
<b>KBE 2 - 7</b>	14	22	4 - 7	7	8	3.5	15	M2 0.37	<b>27000</b>	3.5	1	1.2
<b>KBE 2 - 9</b>	20	30	4 - 11	10	10	5	23.4	M2.5 0.75	<b>19000</b>	10	5.7	3
<b>KBE 2 - 14</b>	30	35	4 - 16	11	13	5	32.2	M3 1.4	<b>13000</b>	27	33	12.5
<b>KBE 2 - 19</b>	40	66	10 - 22	25	16	12	47	M6 11	<b>10000</b>	88	200	17

Transmissible Torque (Nm) of the Hubs

Higher torques possible! Please contact us.

	Ø Bohre (mm)															
	2	3	4	5	6	7	8	9	10	11	12	14	15	16	19	20
<b>KBE 2 - 5</b>	0.5	0.5	0.5													
<b>KBE 2 - 7</b>	0.8	0.8	0.9	0.95	1	1.1										
<b>KBE 2 - 9</b>			2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8						
<b>KBE 2 - 14</b>			3.4	4.7	4.8	5.0	5.1	5.3	5.5	5.6	5.8	6.1	6.3	6.5		
<b>KBE 2 - 19</b>									27	27	29	30	31	32	32	34

Hub: Bore Tolerance: H7 Keyway acc. DIN 6885 optional

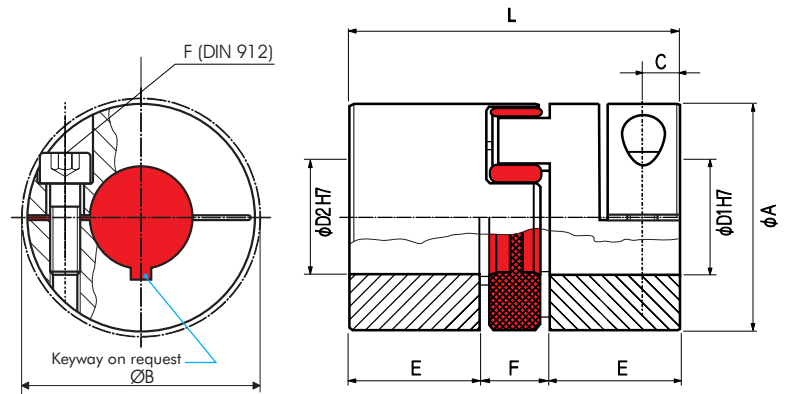
Material: Insert - Polyurethan  
Hubs - Aluminium

Hardness: up to Size 9: 92 Shore A (yellow)  
from Size 14: 98 Shore A (red)



## Servo Insert Coupling

with Collet Clamps



**Order Code: KBE 2 - 38 - 20H7 - 40H7 (- S)**

Type                      Size                      Ø D1(H7)                      Ø D2(H7)                      Options

	Dimensions (mm)								Technical Ratings			
	ØA	L	Ø D1-D2	E	F	C	B	F	Maximum Speed	Mass (per Hub)	Moment of Inertia (per Hub) J	Torque
		Length	Bore Sizes (H7) min ~ max				Max. Ø	Screw (DIN 912) TA (Nm)	rpm. (1/min)	(g)	(g cm <sup>2</sup> )	(Nm)
<b>KBE 2 - 24</b>	55	78	15 - 32	30	18	12	56.4	M6 11	<b>7000</b>	187	0.84	60
<b>KBE 2 - 28</b>	65	90	<b>19 - 38</b>	35	20	15	72.6	M8 25	<b>6000</b>	297	1.85	160
<b>KBE 2 - 38</b>	80	114	<b>20 - 45</b>	45	24	20	83.3	M8 25	<b>5000</b>	590	5.50	325
<b>KBE 2 - 42</b>	95	126	<b>25 - 50</b>	50	26	20	95	M10 70	<b>4000</b>	940	12.1	450
<b>KBE 2 - 48</b>	105	140	<b>25 - 55</b>	56	28	22	105	M12 120	<b>3750</b>	1300	20.2	525

Transmissible Torque (Nm) of the Hubs

Higher torques possible! Please contact us.

	Bohre (mm)																
	15	16	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50
<b>KBE 2 - 24</b>	39	43	44	46	47	49	50	52									
<b>KBE 2 - 28</b>			91	93.5	96	98	100	104	107	110	113						
<b>KBE 2 - 38</b>				107	110	112	114	118	121	123	127	131	134	137	141		
<b>KBE 2 - 42</b>								250	255	260	267	279	281	288	298		
<b>KBE 2 - 48</b>										445	457	470	472	508	520	534	543

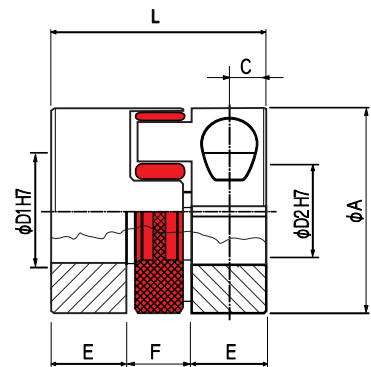
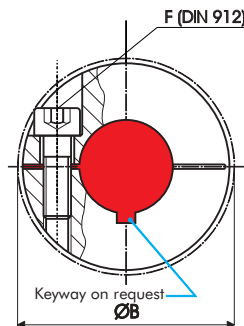
Hub:                      Bore Tolerance: H7      Keyway acc. DIN 6885 optional

Material:                      Insert - Polyurethan  
   Hubs - Aluminum

Hardness:                      98 Shore A (red)

### Servo Insert Coupling

Compact Version



**Order Code: KBE 2C - 38 - 20H7 - 40H7 (- S)**  
 Type                      Size                      Ø D1(H7)                      Ø D2(H7)                      Options

	Dimensions (mm)							Technical Ratings				
	Ø A	L	Ø D1-D2	E	F	C	B	G	Maximum Speed	Mass (per Hub)	Moment of Inertia (per Hub) J	Torque
	Outer Ø	Length	Bohre Sizes (H7) min ~ max				Max. Ø	Screw (DIN 912) TA (Nm)	rpm. (1/min)	(g)	(kg cm <sup>2</sup> )	(Nm)
<b>KBE 2C - 7</b>	14	18	3 - 7	5	8	2.5	16.6	M2 0.37	<b>27000</b>	3	0.085	1.2
<b>KBE 2C - 9</b>	20	24	4 - 11	7	10	3.5	21.3	M2.5 0.75	<b>19000</b>	8	4.8	3
<b>KBE 2C - 14</b>	20	32	4 - 16	9.5	13	5	30.5	M4 5	<b>13000</b>	23	28	12.5
<b>KBE 2C - 19</b>	40	50	8 - 21	17	16	8.5	45.7	M6 10	<b>10000</b>	66	0.15	17
<b>KBE 2C - 24</b>	55	58	10 - 32	20	18	10	56.4	M6 10	<b>7000</b>	139	0.59	60
<b>KBE 2C - 28</b>	65	62	14 - 35	21	20	11	72.6	M8 25	<b>6000</b>	204	1.27	160
<b>KBE 2C - 38</b>	80	86	15 - 45	31	24	15	83.3	M10 49	<b>5000</b>	445	4.14	325

Transmissible Torque (Nm) of the Hubs

Higher torques possible! Please contact us.

	Ø Bohre (mm)																								
	3	4	5	6	8	9	10	11	12	14	15	16	18	19	20	24	25	28	30	32	35	38	40	42	45
<b>KBE 2C - 7</b>	0.7	0.9	1.1	1.2																					
<b>KBE 2C - 9</b>		1.7	2.1	2.4	3.0	3.2	3.4	3.6																	
<b>KBE 2C - 14</b>			9	10.6	11.5	11.8	12.0	13.4	14	14.3	14.5	14.8													
<b>KBE 2C - 19</b>						25	25.7	26.3	27	28.4	29	29.7	31.1	31.7	32.4	25.0									
<b>KBE 2C - 24</b>							21	23	25	30	32	34	38	40	42	51	53	59	63	68					
<b>KBE 2C - 28</b>										54	58	62	70	74	78	93	97	109	116	124	136				
<b>KBE 2C - 38</b>											92	99	111	117	123	148	154	173	185	197	216	234	247	259	278

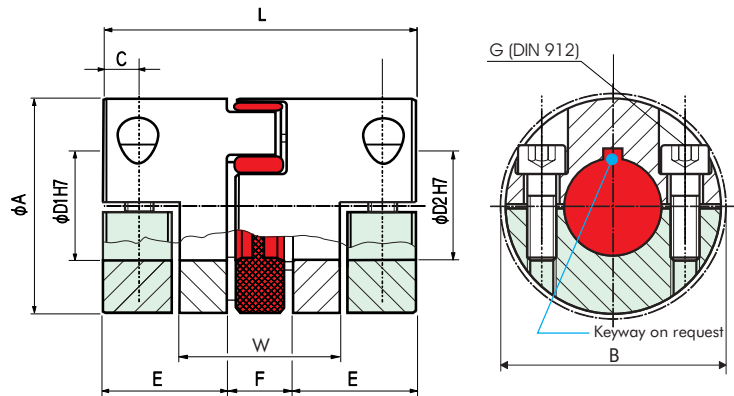
Hub: Bore Tolerance: H7 Keyway acc. DIN 6885 optional

Material: Insert - Polyurethan  
Hubs - Aluminium

Hardness: up to Size 9: 92 Shore A (yellow)  
from Size 14: 98 Shore A (red)



### Split Hubs



**Order Code:** KBE 2H - 19 - 10 - 12 (- S)

Type                      Size                      Ø D1 (H7)                      Ø D2 (H7)                      (Options)

KBE2H	Dimensions (mm)										Technical Ratings					
	Ø A	L	Ø D1/D2		E	W	F	C	Ø B	H	G	T <sub>A</sub>	Maximum Speed	Mass	Moment of Inertia	Torque
	Outer Ø	Total-length	Bohre Sizes								Screw DIN 912	(Nm)	rpm. (1/min)	(per Hub) (g)	(per Hub) J (kg cm <sup>2</sup> )	(Nm)
-14	30	35	4	14	11	19	13	5.0	35	10.5	M4	5	13000	32	0.05	12.5
-19	40	66	8	20	25	27	16	8.0	46	14.5	M6	10	10000	88	0.2	17
-24	55	78	10	28	30	34	18	10.5	57.5	20	M6	10	7000	187	0.84	60
-28	65	90	14	38	35	40	20	11.5	73	25	M8	25	6000	297	1.85	160
-38	80	114	18	45	45	48	24	15.5	83.5	30	M8	25	5000	590	5.50	325
-42	95	126	22	50	50	53	26	18.0	93.5	32	M10	49	4000	940	12.1	450
-48	105	140	22	55	56	61	28	18.5	105	36	M12	86	3750	1300	20.2	525

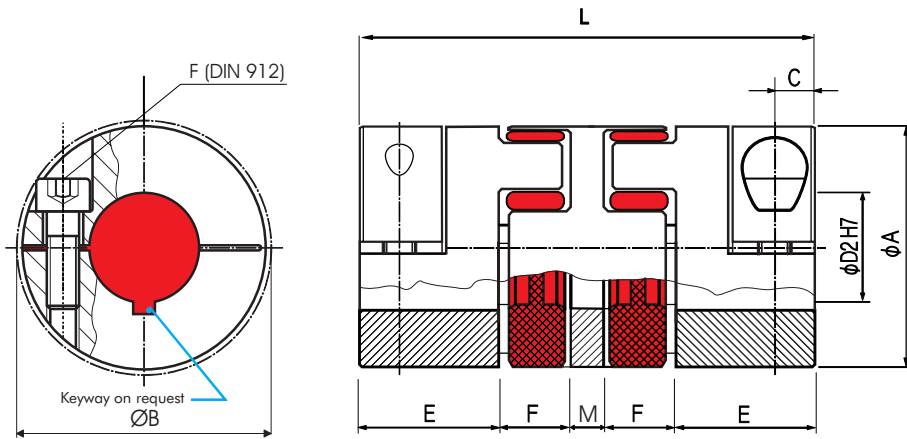
Transmissible Torque (Nm) of the split hubs without keyways

KBE2H	Ø Bohre (mm)																										
	4	6	8	10	11	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	46	48	50	55	
-14	3.5	4.8	5,1	5.5	5.6	6.1																					
-19			17	21	23	30	32	34	38	40	42																
-24				21	23	30	32	34	38	40	42	47	51	53	59												
-28						54	58	62	70	74	78	86	93	97	109	117	124	136	148								
-38									70	74	78	86	93	97	109	117	124	136	148	156	163	175					
-42												136	149	155	174	186	198	217	235	248	260	279	285	297	310		
-48												199	217	226	253	271	290	317	344	362	380	407	416	434	452	498	

Hub: Bore Tolerance: H7 Keyway acc. DIN 6885 on request

Material: Hubs - Aluminum (also available in Stainless Steel)  
Insert - Polyurethan 98 Shore A red

## Servo Insert Coupling



**Order Code: KBE 2D - 14 - 10H7 - 12H7 ( - S )**

Type                      Size                      Ø D1(H7)                      Ø D2(H7)                      Options

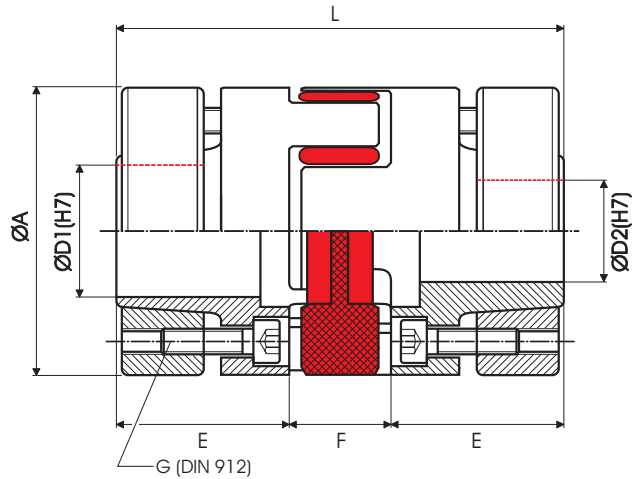
	Dimensions (mm)									Technical Ratings/Hub			
	ØA	L	Ø D1-D2	E	F	C	B	G	M	Maximum Speed rpm. (1/min)	Mass (per Hub) (g)	Moment of Inertia (per Hub) J (g cm <sup>2</sup> )	Torque (Nm)
		Length	Bore Sizes (H7) min ~ max				StörØ	Schraube (DIN 912) T <sub>A</sub> (Nm)					
<b>KBE 2D - 7</b>	14	34	4 - 7	7	8	3.5	15	M2 0.37	4	27000	5	1.5	1.2
<b>KBE 2D - 9</b>	20	45	4 - 11	10	10	5	23.4	M2.5 0.75	5	19000	15	8	3
<b>KBE 2D - 14</b>	30	56	4 - 16	11	13	5	32.2	M3 1.4	8	13000	42	51	12.5
<b>KBE 2D - 19</b>	40	92	10 - 22	25	16	12	45.7	M6 11	10	10000	116	265	17
<b>KBE 2D - 24</b>	55	112	15 - 32	30	18	14	56.4	M6 11	16	<b>7000</b>	548	2.3	60
<b>KBE 2D - 28</b>	65	128	19 - 38	35	20	15	72.6	M8 25	18	6000	853	5.1	160
<b>KBE 2D - 38</b>	80	158	20 - 45	45	24	20	83.3	M8 25	20	5000	14573	14.6	325

### Transmissible Torque (Nm) of the Hubs

	Ø Bore (mm)																									
	3	4	5	6	7	8	9	10	11	12	14	15	16	19	20	22	24	25	28	30	32	35	38	40	42	45
<b>KBE 2D - 7</b>	0.8	0.9	0.95	1	1.1																					
<b>KBE 2D - 9</b>		2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8																	
<b>KBE 2D - 14</b>		3.4	4.7	4.8	5.0	5.1	5.3	5.5	5.6	5.8	6.1	6.3	6.5													
<b>KBE 2D - 19</b>								27	27	29	30	31	32	32	34											
<b>KBE 2D - 24</b>											39	43	44	46	47	49	50	52								
<b>KBE 2D - 28</b>														91	93.5	96	98	100	104	107	110	113				
<b>KBE 2D - 38</b>															107	110	112	114	118	121	123	127	131	134	137	141

- ⊙ Hub: Bohre Tolerance: H7 Keyway acc. DIN 6885 on request
- ⊙ Material: Insert - Polyurethan, Hubs - Aluminium
- ⊙ Hardness: up to Size 9: 92 Shore A (yellow), from Size 14: 98 Shore A (red)

## Servo Insert Coupling



**Order Code:** KBE 3 - 48 - 40H7 - 35H7 ( - S )

Type                      Size                      Bore D1 (H7)                      Bore D2 (H7)                      Options

	Dimensions (mm)							Technical Ratings			
	Ø A	L	Ø D1-D2	E	F	G	Maximum Speed rpm. (1/min)	Mass (per Hub) (kg)	Moment of Inertia J (kg mm <sup>2</sup> )	Torque (Nm)	
	Outer Ø	Total Length	Bore Sizes (H7) min ~ max			Screw (DIN 912)					Torque to Tighten Clamps T <sub>A</sub> (Nm)
<b>KBE 3 - 14</b>	30	50	6 - 14	18.5	13	M3	1.34	<b>25000</b>	0.05	6	12.5
<b>KBE 3 - 19</b>	40	66	10 - 20	25	16	M4	2.9	<b>19000</b>	0.12	27	17
<b>KBE 3 - 24</b>	55	78	<b>15 - 28</b>	30	18	M5	6	<b>14000</b>	0.28	116	60
<b>KBE 3 - 28</b>	65	90	<b>19 - 38</b>	35	20	M5	6	<b>12000</b>	0.45	283	160
<b>KBE 3 - 38</b>	80	114	<b>20 - 45</b>	45	24	M6	10	<b>10000</b>	0.95	885	325
<b>KBE 3 - 42</b>	95	126	<b>28 - 50</b>	50	26	M8	35	<b>8000</b>	2.3	3032	450
<b>KBE 3 - 48</b>	105	140	<b>35 - 60</b>	56	28	M8	35	<b>7000</b>	3.2	5313	525

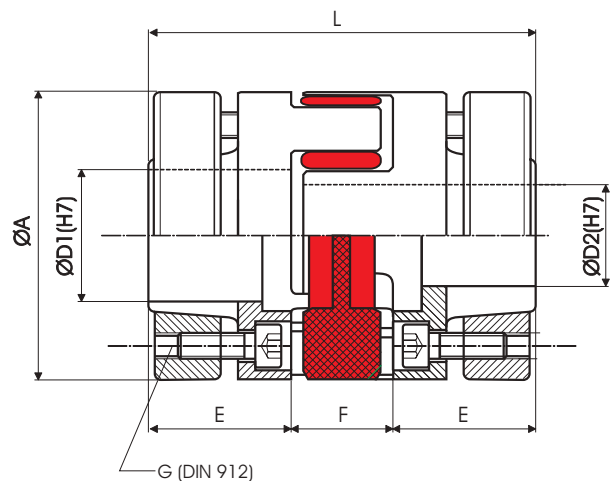
### Transmissible Torque (Nm) of the Hubs

	Ø Bore (mm)																				
	6	10	11	14	15	16	19	20	24	25	28	30	32	35	38	40	42	45	48	50	55
<b>KBE 3 - 14</b>	8.6	13.8	14.7	22.7																	
<b>KBE 3 - 19</b>		41	45	62	68	67	83	90													
<b>KBE 3 - 24</b>			48	67	74	72	90	97	112	120	143										
<b>KBE 3 - 28</b>					142	154	189	188	237	250	280	307	310	353	389						
<b>KBE 3 - 38</b>								269	337	356	398	436	424	501	533	572	585	644			
<b>KBE 3 - 42</b>										399	445	506	470	566	581	647	630	728	836	858	
<b>KBE 3 - 48</b>												775	819	955	999	1092	1091	1230	1381	1334	1540

Material: Insert: Polyurethan 98 Shore A (red)  
 Hubs: (KBE3-14 - KBE3-38) Aluminum  
 Hubs: (KBE3-42 - KBE3-48) Steel  
 Outer Cone: High Tensile Steel

## Servo Insert Coupling Compact Version

with Outer Conical Hubs



**Order Code:** KBE 3C - 48 - 40H7 - 35H7 ( - S )

Type                      Size                      Bore D1 (H7)                      Bore D2 (H7)                      Options

	Dimensions (mm)							Technical Ratings			
	Ø A	L	Ø D1-D2	E	F	G	Maximum Speed rpm. (1/min)	Mass (per Hub) (kg)	Moment of Inertia J (kg mm <sup>2</sup> )	Torque (Nm)	
	Outer Ø	Total Length	Bore Sizes (H7) min ~ max			Screw (DIN 912)					Torque to Tighten Clamps T <sub>A</sub> (Nm)
<b>KBE 3C - 14</b>	30	42	6 - 14	14.5	13	M3	1.34	<b>25000</b>	0.026	3	12.5
<b>KBE 3C - 19</b>	40	56	10 - 20	20	16	M4	3	<b>19000</b>	0.062	15	17
<b>KBE 3C - 24</b>	55	64	14 - 28	23	18	M5	6	<b>14000</b>	0.132	65	60
<b>KBE 3C - 28</b>	65	76	19 - 38	28	20	M5	6	<b>12000</b>	0.201	142	160
<b>KBE 3C - 38</b>	80	96	20 - 45	36	24	M6	10	<b>10000</b>	0.411	434	325
<b>KBE 3C - 42</b>	95	103	28 - 50	38.5	26	M8	25	<b>8000</b>	0.625	904	450
<b>KBE 3C - 48</b>	105	110	30 - 55	41	28	M10	49	<b>7000</b>	0.831	1467	525

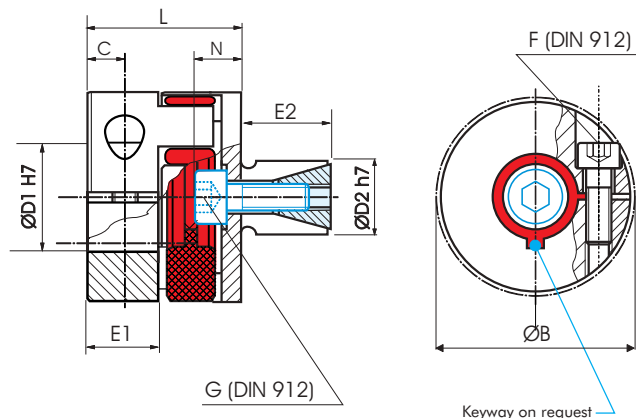
### Transmissible Torque (Nm) of the Hubs

	Ø Bore (mm)																					
	6	10	11	14	15	16	19	20	24	25	28	30	32	35	38	40	42	45	48	50	55	
<b>KBE 3C - 14</b>	5.4	7.5	11.3	24.7																		
<b>KBE 3C - 19</b>		17	20	41	49	36	56	64														
<b>KBE 3C - 24</b>				47	57	67	98	110	127	139	175											
<b>KBE 3C - 28</b>							121	133	201	219	248	285	253	307	329							
<b>KBE 3C - 38</b>								203	304	331	394	452	453	543	550	609	669	634				
<b>KBE 3C - 42</b>											444	508	535	638	692	763	754	858	964	976		
<b>KBE 3C - 48</b>												572	638	762	842	929	943	1074	1208	1136	1336	

Material: Insert: Polyurethan 98 Shore A (red)  
Hubs: Aluminum

## Servo Insert Coupling

with Expanding Clamp



**Order Code: KBE 4 - 38 - 40H7 - 35H7 ( - S )**

Type                      Size                      Bore D1 (H7)                      Bore D2 (H7)                      (Options)

	Dimensions (mm)											Technical Ratings			
	ØA	L	Ø D1	Ø D2	E1	E2	N	C	B	F	G	Maximum Speed	Mass (per Hub)	Moment of Inertia J	Torque
		Length	Bore Sizes (H7) min ~ max	Bore Sizes (H7) min ~ max					Max Ø	Screw (DIN 912) T <sub>A</sub> (Nm)	Screw (DIN 912) T <sub>A</sub> (Nm)	upm. (1/min)	(g)	(g cm <sup>2</sup> )	(Nm)
<b>KBE 4 - 14</b>	30	28	4 - 16	13 - 25	11	20	7	5	32.2	M3 1.4	M5 9	<b>20000</b>	137	0.13	12.5
<b>KBE 4 - 19</b>	40	40	10 - 22	14 - 30	17	25	10	9	45.7	M6 15	M6 12	<b>19000</b>	287	0.44	17
<b>KBE 4 - 24</b>	55	46	12 - 32	23 - 36	20	27	11	10	56.4	M6 15	M8 32	<b>14000</b>	756	2.18	60
<b>KBE 4 - 28</b>	65	51	19 - 38	26 - 42	21	32	16	11	72.6	M8 35	M10 60	<b>11500</b>	1350	5.87	160
<b>KBE 4 - 38</b>	80	68	20 - 45	38 - 60	31	45	20	15	83.3	M8 35	M12 110	<b>9500</b>	2500	16.7	325

Transmissible Torque (Nm) of Collet Clamp

	Ø D1 Bohrung (mm)																								
	4	6	8	9	10	11	12	14	15	16	18	19	20	24	25	28	30	32	35	38	40	42	45		
<b>KBE 4 - 14</b>	3.4	4.8	5.1	5.3	5.5	5.6	5.8	6.1	6.3	6.5															
<b>KBE 4 - 19</b>			24.3	25	25.7	26.3	27	28.4	29	29.7	31.1	31.7	32.4	25											
<b>KBE 4 - 24</b>					21	23	25	30	32	34	38	40	42	51	53	59	63	68							
<b>KBE 4 - 28</b>								54	58	62	70	74	78	93	97	109	116	124	136						
<b>KBE 4 - 38</b>									92	99	111	117	123	148	154	173	185	197	216	234	247	259	278		

Material:                      Insert: Polyurethan 98 Shore A (red)  
    Collet Clamp: Aluminum  
    Expanding Clamp: Steel

# Spider Elements for Couplings Type KBE

Size	Hardness	Moment of Inertia [Nm]	torsional stiffness static [Nm/rad]	torsional stiffness dynamic [Nm/rad]	Misalignment		
					axial [mm]	radial [mm]	angular [Grad]
5	92 ShA	0.5	5.16	16	+0.4/-0.2	0.06	1.0°
	98 ShA	0.9	8.3	25	+0.4/-0.2	0.04	0.9°
7	80 ShA	0.7	8.6	26	+0.6/-0.3	0.15	1.1°
	92 ShA	1.2	14.3	43	+0.6/-0.3	0.10	1.0°
	98 ShA	2.0	22.9	69	+0.6/-0.3	0.06	0.9°
64 ShD	64 ShD	2.4	34.3	103	+0.6/-0.3	0.04	0.8°
	80 ShA	1.8	17.2	52	+0.8/-0.4	0.19	1.1°
	92 ShA	3.0	31.5	95	+0.8/-0.4	0.13	1.0°
98 ShA	98 ShA	5.0	51.6	155	+0.8/-0.4	0.08	0.9°
	64 ShD	6.0	74.6	224	+0.8/-0.4	0.05	0.8°
	80 ShA	4.0	60.2	180	+1.0/-0.5	0.21	1.1°
14	92 ShA	7.5	114.6	344	+1.0/-0.5	0.15	1.0°
	98 ShA	12.5	171.9	513	+1.0/-0.5	0.09	0.9°
	64 ShD	16.0	234.2	702	+1.0/-0.5	0.06	0.8°
19	80 ShA	4.9	618	1065	+1.2/-0.5	0.15	1.1°
	92 ShA	10.0	1090	1815	+1.2/-0.5	0.10	1.0°
	98 ShA	17.0	1512	2540	+1.2/-0.5	0.06	0.9°
64 ShD	64 ShD	21.0	2560	3810	+1.2/-0.5	0.04	0.8°
	92 ShA	35	2280	4010	+1.4/-0.5	0.14	1.0°
	98 ShA	60	3640	5980	+1.4/-0.5	0.10	0.9°
24	64 ShD	75	5030	10896	+1.4/-0.5	0.07	0.8°
	92 ShA	95	4080	6745	+1.5/-0.7	0.15	1.0°
	98 ShA	160	6410	9920	+1.5/-0.7	0.11	0.9°
64 ShD	64 ShD	200	10260	20177	+1.5/-0.7	0.08	0.8°
	92 ShA	190	6525	11050	+1.8/-0.7	0.17	1.0°
	98 ShA	325	11800	17160	+1.8/-0.7	0.12	0.9°
38	64 ShD	405	26300	40335	+1.8/-0.7	0.09	0.8°
	92 ShA	265	10870	15680	+2.0/-1.0	0.19	1.0°
	98 ShA	450	21594	37692	+2.0/-1.0	0.14	0.9°
42	64 ShD	560	36860	69825	+2.0/-1.0	0.10	0.8°
	92 ShA	310	12968	18400	+2.1/-1.0	0.23	1.0°
	98 ShA	525	25759	45620	+2.1/-1.0	0.16	0.9°
48	64 ShD	655	57630	99750	+2.1/-1.0	0.11	0.8°



98 ShoreA



92 ShoreA



80 ShoreA



64 ShoreD