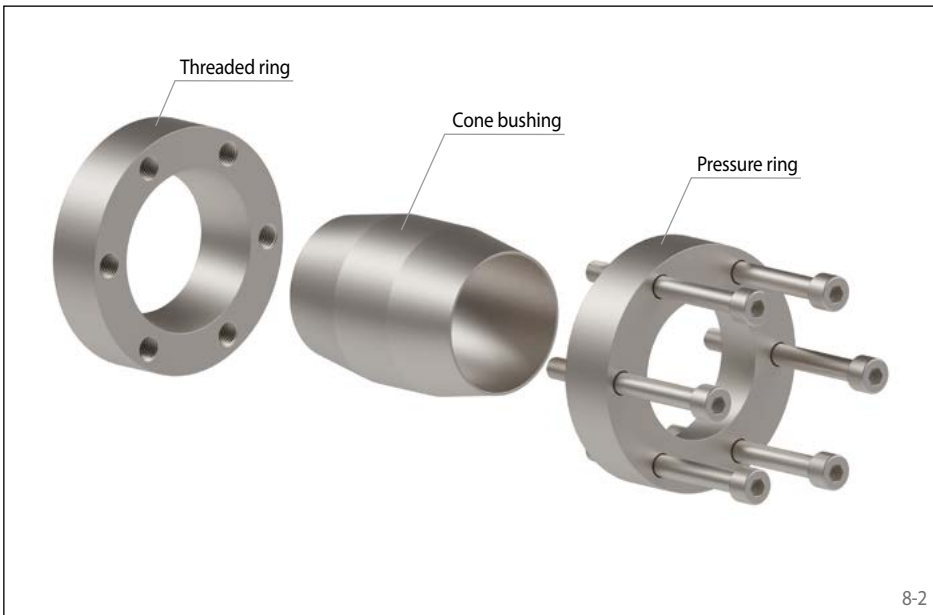




8-1

### Features

- Compact design
- Easy to remove
- For shaft diameters ranging from 14 mm to 100 mm
- Rigid and backlash free connections of the shaft ends
- Shafts are not weakened by keyways
- No fretting corrosion like with keyway connections
- Transmission of torque and/or axial forces
- Typical applications: Connection of shaft sections e.g. with slitter winders in the paper industry



8-2

### Order example

Order example	Code
Coupling design	RWK
Coupling size	0014
Type	EEO
Material of the hub: • Steel	STA
Hub, type: • standard	0
Hub, design: • Clamping ring hub, clamping screws from outside	SE
Bore diameter d	014

RWK 0014 EEO-STA-0SE014

### Transmissible torques and axial forces

The transmissible torques and axial forces listed on the following page are subject to the listed tolerances, surface finishes and material requirements. Please contact RINGSPANN in case of deviations.

#### Tolerances

- h8 for shaft diameter d

#### Surfaces

Average surface finish at the contact surfaces of the shafts  $R_z = 10 \dots 25 \mu\text{m}$ .

#### Materials

The following apply to the shafts:

- E-module  $\geq 170 \text{ kN/mm}^2$

### Simultaneous transmission of torque and axial force

The transmissible torques  $T_{K \max}$  which are shown in the table apply for axial forces  $F_{ax \max} = 0 \text{ kN}$  and conversely, the indicated axial forces  $F_{ax \max}$  apply to torques  $T_{K \max} = 0 \text{ Nm}$ . If torque and axial force are to be transmitted simultaneously, the transmissible torque and the transmissible axial force are reduced.

For a given axial force  $F_{AN \max}$ , the reduced torque  $T_{K \max r}$  is calculated as:

$$T_{K \max r} = \sqrt{T_{K \max}^2 - (F_{AN \max} \cdot \frac{d}{2})^2}$$

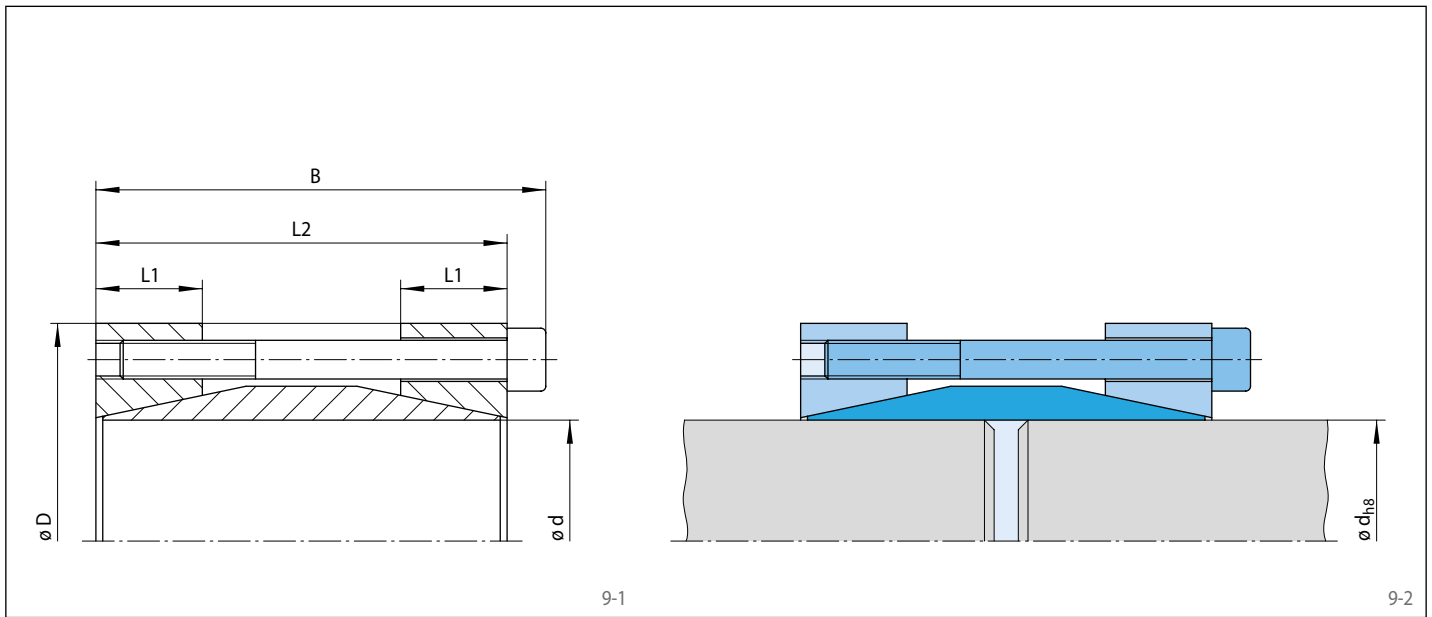
For a given torque  $T_{N \max}$ , the reduced axial force  $F_{ax \max r}$  is calculated as:

$$F_{ax \max r} = \frac{2}{d} \sqrt{T_{K \max}^2 - T_{N \max}^2}$$

$T_{K \max}$	= Max. transmissible torque of the coupling [Nm]
$T_{K \max r}$	= Reduced maximum torque of the coupling [Nm]
$T_{N \max}$	= Maximum torque occurring in the application [Nm]

$F_{AN \max}$	= Maximum axial force occurring in the application [kN]
$F_{ax \max}$	= Max. transmissible axial force [kN]
$F_{ax \max r}$	= Reduced axial force [kN]
d	= Shaft diameter [mm]

backlash free connection of two shaft ends



Coupling size d mm	Max. transmissible torque or axial force		Clamping screws				D mm	B mm	L1 mm	L2 mm	Weight kg
	$T_{K\max}$ Nm	$F_{ax\max}$ kN	Tightening torque $M_S$ Nm	Number	Size	Length					
0014	130	18	16	4	M 6	45	45	56	15	50	0,38
0015	140	18	16	4	M 6	45	45	56	15	50	0,35
0016	150	18	16	4	M 6	45	45	56	15	50	0,37
0017	160	18	16	4	M 6	45	45	56	15	50	0,40
0018	160	17	16	4	M 6	45	50	56	15	50	0,45
0019	170	17	16	4	M 6	45	50	56	15	50	0,44
0020	180	18	16	4	M 6	45	50	56	15	50	0,44
0022	310	28	16	6	M 6	55	55	66	18	60	0,50
0024	330	27	16	6	M 6	55	55	66	18	60	0,63
0025	350	28	16	6	M 6	55	55	66	18	60	0,61
0028	340	24	16	6	M 6	55	60	66	18	60	0,75
0030	370	24	16	6	M 6	55	60	66	18	60	0,71
0032	520	32	37	4	M 8	70	75	83	20	75	0,14
0035	570	32	37	4	M 8	70	75	83	20	75	1,33
0038	620	32	37	4	M 8	70	75	83	20	75	1,20
0040	650	32	37	4	M 8	70	75	83	20	75	1,19
0042	990	47	37	6	M 8	80	85	93	22	85	1,80
0045	1050	46	37	6	M 8	80	85	93	22	85	1,72
0050	1200	48	37	6	M 8	80	90	93	22	85	1,80
0055	1700	61	37	8	M 8	80	95	93	22	85	2,00
0060	1950	65	37	8	M 8	80	100	93	22	85	2,17
0065	2150	66	37	8	M 8	80	105	93	22	85	2,60
0070	2800	80	73	6	M 10	80	115	110	35	100	4,10
0075	2900	77	73	6	M 10	80	120	110	35	100	4,30
0080	4200	100	73	8	M 10	80	125	110	35	100	4,48
0090	4700	100	73	8	M 10	80	135	110	35	100	5,20
0100	7600	150	126	8	M 12	100	155	132	40	120	6,00

## Bending moments

Where there are bending moments in the application in addition to the torque  $T_{N\max}$  or the axial force  $F_{AN\max}$ , the transmissible torque or transmissible axial force is reduced compared to the values for  $T_{K\max}$  or  $F_{ax\max}$  as listed in the table. Please contact RINGSPANN.

## Mounting

The installation and operating instruction for Cone Clamping Coupling RWK ... EEO is available on request.