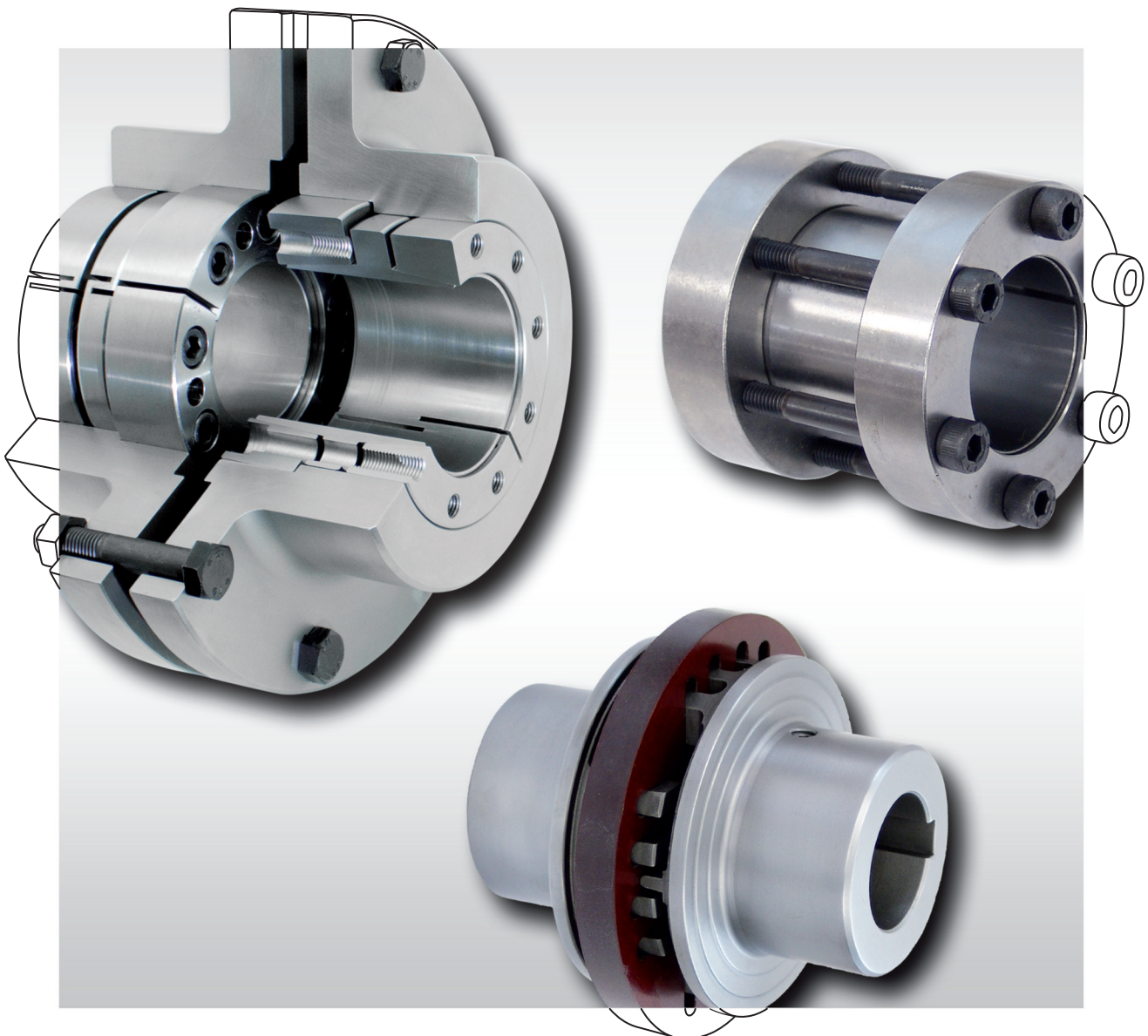


# Shaft Couplings

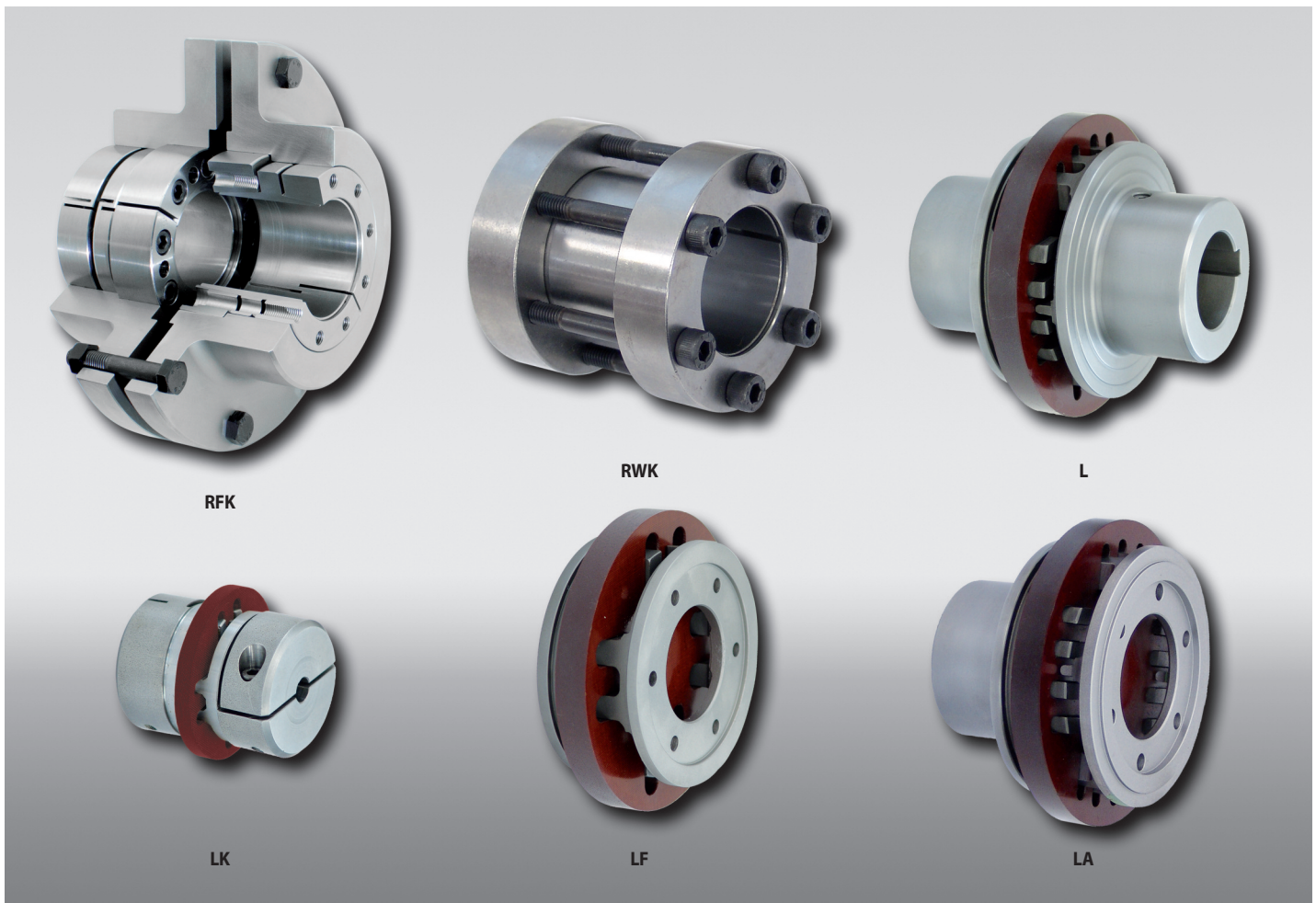
Tru-Line Flange-Couplings • Rigid Shaft Couplings • Flexible Couplings



Edition 2015/2016

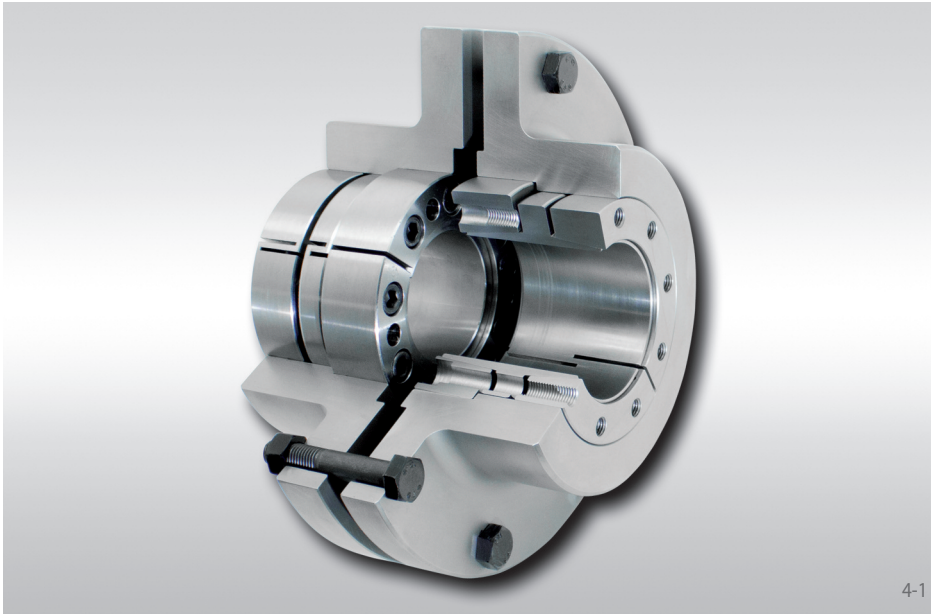


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# Tru-Line Flange-Couplings RFK

## with backlash free cone-clamping-connections



### Features

- Compact design
- Small axial space required for installation
- Fast disassembly for minimal downtime
- High shaft tolerance h8 permissible
- No weakening of shafts by feather keys
- No fretting corrosion as with keyway connections
- Proven solution in many applications, particularly in mining

### Applications

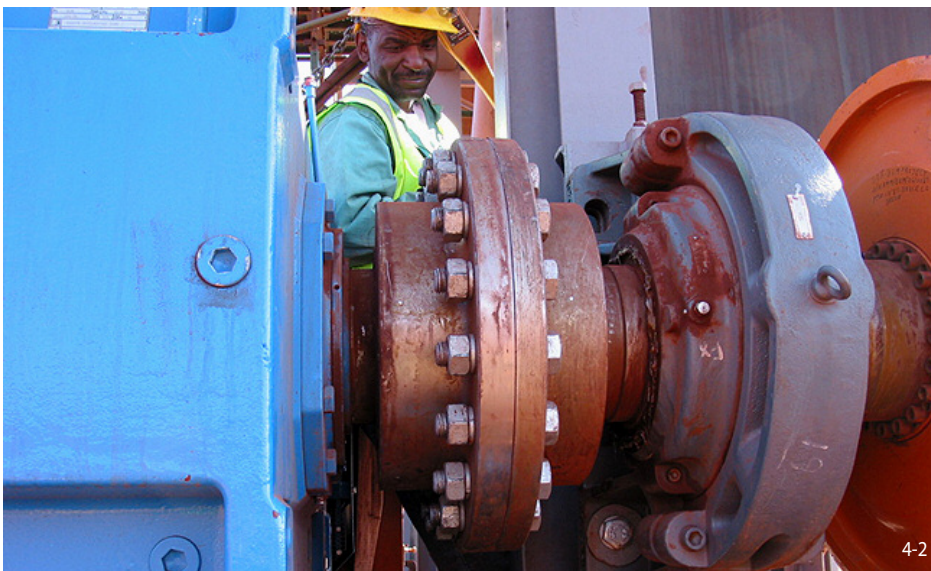
A rigid and easy to disassemble shaft coupling solution for:

- Conveyor belts
- Elevators
- Bucket elevators
- Escalators and moving walkways
- Many other applications

### Application

Tru-Line Flange-Couplings RFK are particularly suitable for coupling freely suspended motor gear units on a rocker with a torque support.

However, they can neither compensate radial-angle nor axial shaft misalignments. If this is required, then please use the Flexible Couplings L... described from page 8 onwards.



Tru-Line Flange-Coupling RFK 350 F - 350 M connects the gear of the drive unit to the head drum of an iron ore conveyor belt system in South Africa

### Transmissible torques

The transmissible torques listed on page 5 are subject to the following tolerances, surface characteristics and material requirements. Please contact us in the case of deviations.

#### Tolerances

- h8 for shaft diameter d
- h8 for shaft diameters  $d_F$  or  $d_M$

#### Surfaces

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

#### Materials

We will be happy to recommend suitable shaft materials taking DIN 743 as a basis (12/2012 edition). In doing so we will take the surface pressures prescribed for the Tru-Line Flange-Couplings RFK into account.

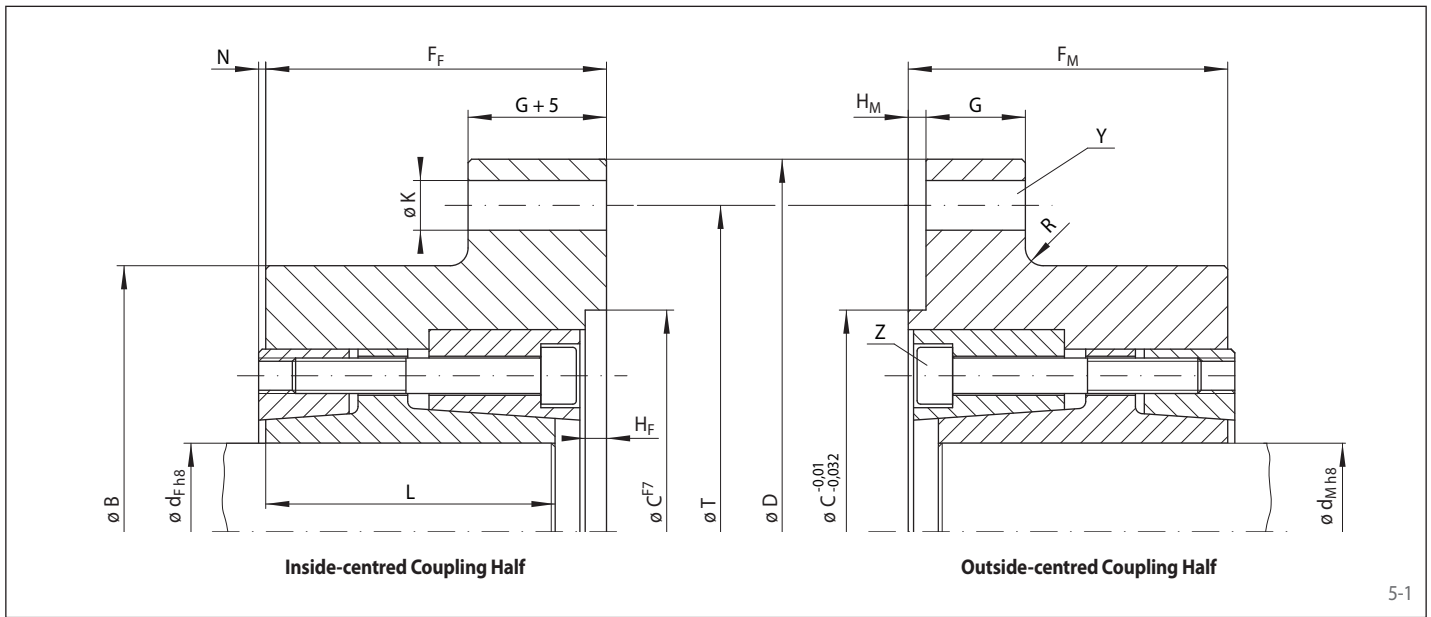
### Simultaneous transmission of torque, axial force and bending moment

Where there are axial forces and/or bending moments in the application in addition to the torque  $M_A$ , the transmissible torque is reduced compared to the values for M as listed in the tables.

We will select the proper coupling for each application based upon the allowed transmissible torque under existing bending moment conditions. Our selection calculations are in accordance with the latest scientific knowledge and know how in the industry and include the proper safety factor to prevent fretting corrosion. Please contact us.

# Tru-Line Flange-Couplings RFK

with backlash free cone-clamping-connections



Tru-Line Flange-Coupling RFK Size Coupling Half		Shaft $d_F$ or $d_M$ mm	Max. transmissible torque M Nm	B	C	D	$F_F$	$F_M$	G	$H_F$	$H_M$	K	L	N	R	T	Connection screws		Clamping screws		Weight kg
inside-centred	outside-centred			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	$\gamma^*$	Tightening torque Nm	Z	
50 F	50 M	min. 25 max. 50	2500 5250	120	100	190	70	65	10	5	3	11	60	5	10	160	8 x M 10 x 45	71	8 x M 8	42	7,5 6,8
70 F	70 M	min. 50 max. 70	6300 10000	170	150	260	88	81	15	5	3	15	75	5	15	230	8 x M 14 x 60	195	9 x M 10	83	32 30
90 F	90 M	min. 70 max. 90	16000 20000	200	180	320	103	96	25	7	5	18	90	6	15	280	8 x M 16 x 75	300	9 x M 12	144	39 37
115 F	115 M	min. 95 max. 115	28000 35500	230	300	400	115	105	30	10	6	25	100	8	40	350	8 x M 24 x 100	1020	7 x M 14	229	47 45
140 F	140 M	min. 115 max. 140	45000 56000	270	300	400	115	105	30	10	6	25	100	8	20	350	8 x M 24 x 100	1020	10 x M 14	229	55 51
170 F	170 M	min. 140 max. 170	90000 112000	330	300	560	145	135	36	12	8	32	128	10	30	480	18 x M 30 x 120	2030	11 x M 16	354	112 105
210 F	210 M	min. 170 max. 210	160000 200000	390	300	560	145	135	36	12	8	32	128	10	20	480	18 x M 30 x 120	2030	16 x M 16	354	137 125
211 F	211 M	min. 170 max. 210	160000 200000	430	350	630	145	135	40	12	8	32	128	10	20	550	18 x M 30 x 130	2030	16 x M 16	354	160 148
250 F	250 M	min. 210 max. 250	265000 315000	470	350	630	160	150	40	12	8	32	140	10	10	550	18 x M 30 x 130	2030	14 x M 20	692	199 183
270 F	270 M	min. 250 max. 270	375000 400000	510	550	710	179	169	40	12	8	32	158	10	30	630	24 x M 30 x 130	2030	16 x M 20	692	259 249
290 F	290 M	min. 270 max. 290	450000 490000	550	550	710	179	169	40	12	8	32	158	10	15	630	24 x M 30 x 130	2030	18 x M 20	692	286 275
320 F	320 M	min. 290 max. 320	520000 540000	580	550	750	200	190	40	12	8	32	180	10	15	680	28 x M 30 x 130	2030	20 x M 20	692	318 338
350 F	350 M	min. 320 max. 350	590000 625000	630	550	800	200	190	45	12	8	32	180	10	15	720	28 x M 30 x 150	2030	20 x M 20	692	401 380

Paired coupling halves of the same color can be interchanged due to matching flange patterns. The maximum torques of the smaller coupling half apply.  
 \* Number of connection screws Y in accordance DIN EN ISO 4014 property class 10.9 or 12.9 for RFK 50 on pitch circle T.

## Example for ordering

Tru-Line Flange-Coupling RFK with inside-centred coupling half for shaft diameter 210 mm and outside-centred coupling half for shaft diameter 140 mm:

- RFK 210 F - 170 M,  $d_F = 210$ ,  $d_M = 140$

## Mounting

Please request our installation and operating instructions for Tru-Line Flange-Couplings RFK.

# Rigid Shaft Couplings RWK 500

for backlash free connection of two shaft ends



## Features

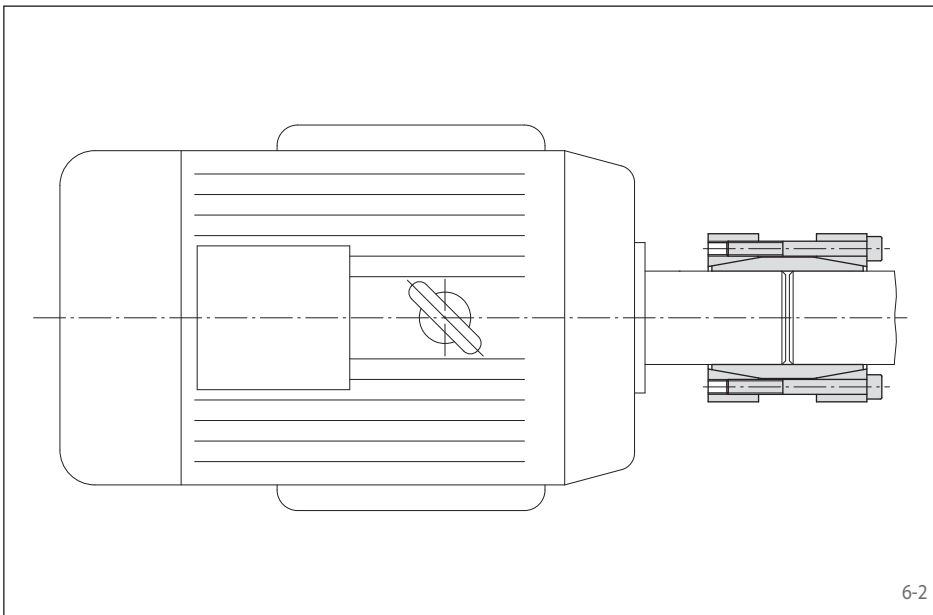
- Compact design
- Easy to release
- For shaft diameters between 14 mm and 100 mm
- Rigid and backlash free connection of shaft ends
- No weakening of shafts by feather keys
- No fretting corrosion as with keyway connections
- Transmission of torques and axial forces

## Application example

Simple and cost-effective connection of two shaft ends with a Rigid Shaft Coupling RWK 500.

Shaft coupling RWK 500 (for smaller torques and larger axial mounting distances) is particularly suitable for coupling freely suspended motor gear units on a rocker with a torque support.

However, they can neither compensate radial-angle nor axial shaft misalignments. If this is required, then please use the Flexible Couplings L... described from page 8 onwards.



## Transmissible torques and axial forces

The transmissible torques and axial forces listed on page 7 are subject to the following tolerances, surface characteristics and material requirements. Please contact us in the case of deviations.

### Tolerances

- h8 for shaft diameter d

### Surfaces

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

### Materials

The following apply to the shaft and the hub:

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

## Simultaneous transmission of torque and axial force

The transmissible torques M which are shown in the tables apply for axial forces  $F = 0 \text{ kN}$  and conversely, the indicated axial forces F apply to torques  $M = 0 \text{ Nm}$ . 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  $F_A$ , the reduced torque  $M_{\text{red}}$  is calculated as:

$$M_{\text{red}} = \sqrt{M^2 - (F_A \cdot \frac{d}{2})^2}$$

For a given torque  $M_A$ , the reduced axial force  $F_{\text{red}}$  is calculated as:

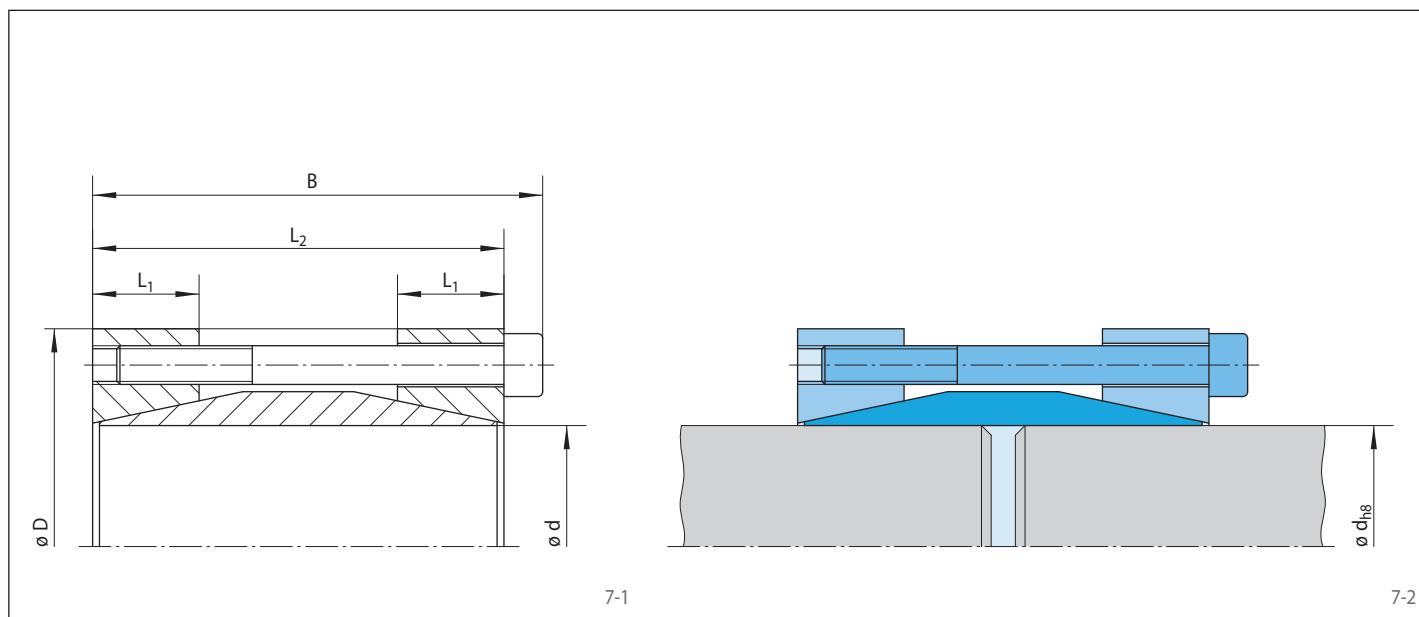
$$F_{\text{red}} = \frac{2}{d} \sqrt{M^2 - M_A^2}$$

### Formula symbols

M	=	Max. transmissible torque according to table [Nm]
$M_A$	=	Maximum actual application torque [Nm]
$M_{\text{red}}$	=	Reduced torque [Nm]

$F_A$	=	Maximum actual application axial force [kN]
$F_{\text{red}}$	=	Reduced axial force [kN]
d	=	Shaft diameter [mm]

for backlash free connection of two shaft ends



Size d mm	Max. transmissible torque or axial force		Tightening torque M <sub>S</sub> Nm	Clamping screws			D mm	B mm	L <sub>1</sub> mm	L <sub>2</sub> mm	Weight kg
	M Nm	F kN		Number	Size	Length					
14	130	18	16	4	M 6	45	45	56	15	50	0,38
15	140	18	16	4	M 6	45	45	56	15	50	0,35
16	150	18	16	4	M 6	45	45	56	15	50	0,37
17	160	18	16	4	M 6	45	45	56	15	50	0,40
18	160	17	16	4	M 6	45	50	56	15	50	0,45
19	170	17	16	4	M 6	45	50	56	15	50	0,44
20	180	18	16	4	M 6	45	50	56	15	50	0,44
22	310	28	16	6	M 6	55	55	66	18	60	0,50
24	330	27	16	6	M 6	55	55	66	18	60	0,63
25	350	28	16	6	M 6	55	55	66	18	60	0,61
28	340	24	16	6	M 6	55	60	66	18	60	0,75
30	370	24	16	6	M 6	55	60	66	18	60	0,71
32	520	32	37	4	M 8	70	75	83	20	75	0,14
35	570	32	37	4	M 8	70	75	83	20	75	1,33
38	620	32	37	4	M 8	70	75	83	20	75	1,20
40	650	32	37	4	M 8	70	75	83	20	75	1,19
42	990	47	37	6	M 8	80	85	93	22	85	1,80
45	1050	46	37	6	M 8	80	85	93	22	85	1,72
50	1200	48	37	6	M 8	80	90	93	22	85	1,80
55	1700	61	37	8	M 8	80	95	93	22	85	2,00
60	1950	65	37	8	M 8	80	100	93	22	85	2,17
65	2150	66	37	8	M 8	80	105	93	22	85	2,60
70	2800	80	73	6	M 10	80	115	110	35	100	4,10
75	2900	77	73	6	M 10	80	120	110	35	100	4,30
80	4200	100	73	8	M 10	80	125	110	35	100	4,48
90	4700	100	73	8	M 10	80	135	110	35	100	5,20
100	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  $M_A$  or the axial force  $F_A$ , the transmissible torque or transmissible axial force is reduced compared to the values for M or F as listed in the tables. Please contact us.

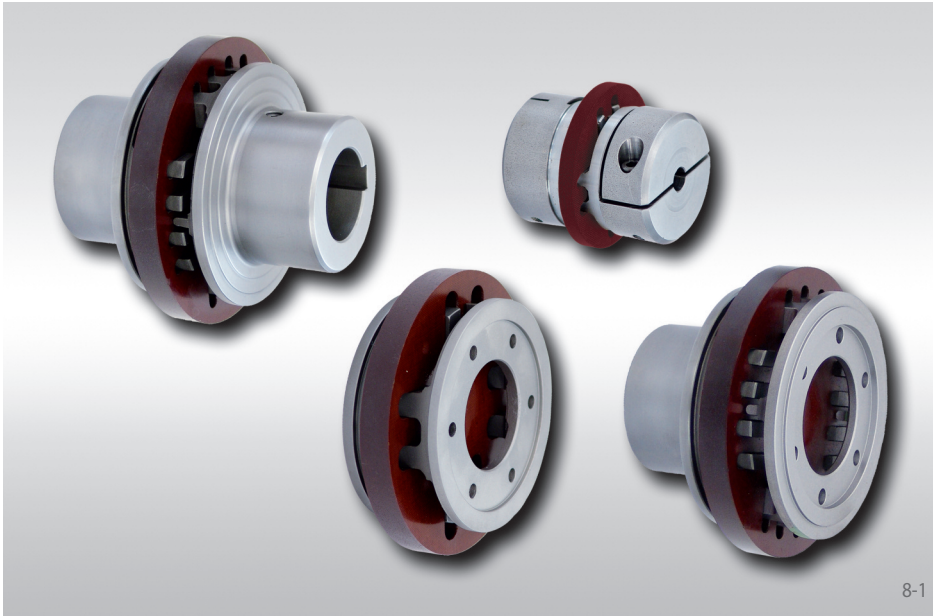
## Example for ordering

Rigid Shaft Coupling RWK 500 for shaft diameter  $d = 50$  mm:

- RWK 500,  $d = 50$

## Mounting

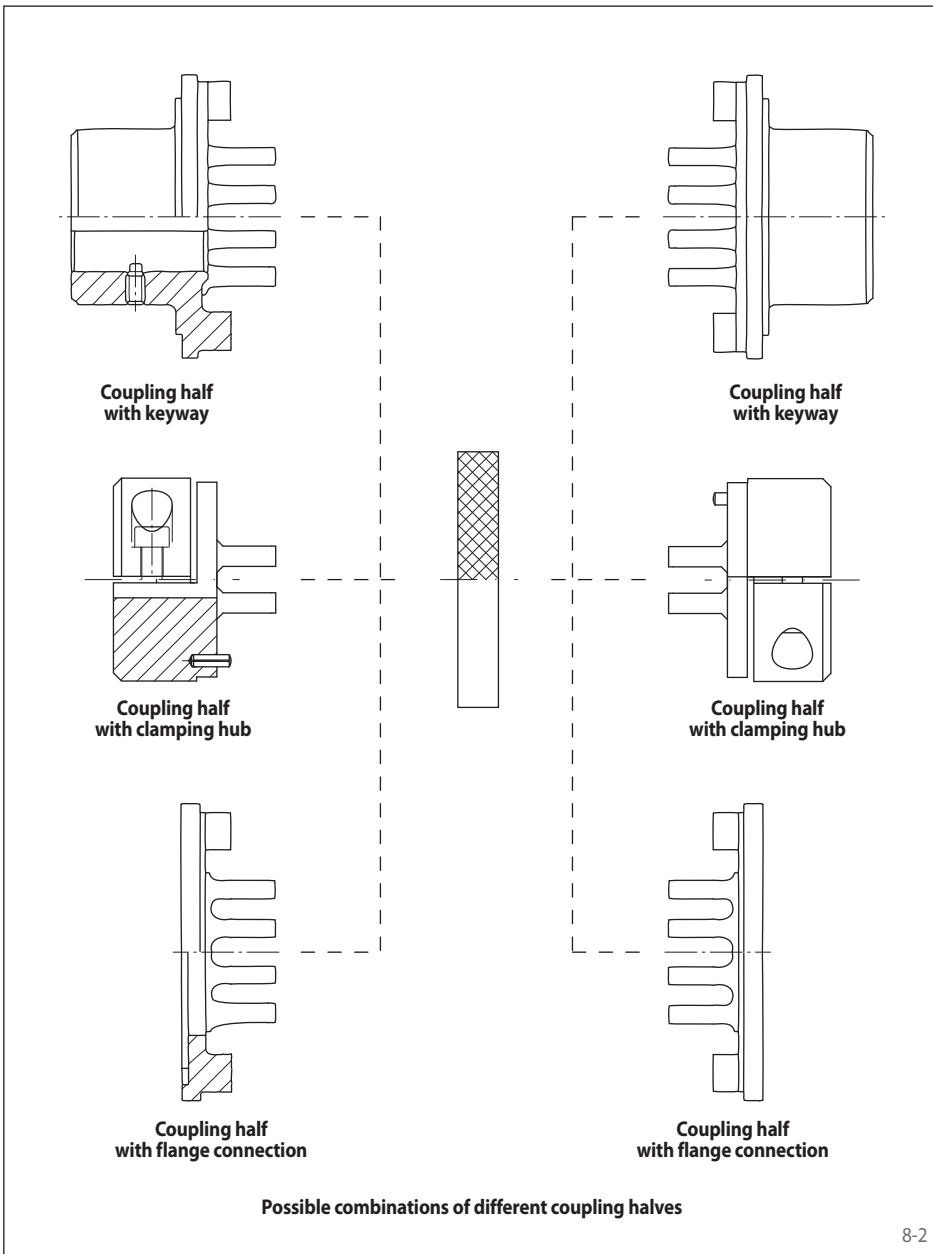
Please request our installation and operating instructions for Rigid Shaft Coupling RWK 500.



## Features

- Compact design
- Small dimensions
- Electrical insulation
- No stick-slip action
- Large radial shaft misalignment permissible
- For angular misalignments of up to 3°
- Torsionally rigid
- Minimal restoring forces on adjacent machine parts

8-1



## Configuration

The RINGSPANN Flexible Couplings are based on the proven Oldham principle. They consist of a flexible disc made of highly wear-resistant plastic resin and two coupling halves made of steel or spherical graphite iron. Different coupling solutions can be achieved by combining different coupling halves (see Fig. 8-2). The robust design of only three basic elements guarantees excellent reliability and easy mounting.

The driving dogs of the two hubs engage by sliding into corresponding slots of the flexible disc, the slots being offset by 90°, thereby compensating very large parallel misalignments of the shafts, if necessary. Furthermore, the support dogs - offset by 90° to the driving dogs - can compensate angular misalignments of up to 3°.

The rotation movement is always transmitted angle true. The particularly large, low-stress transmission surfaces are not subject to any elastic distortion or play and therefore no fatigue.

Driving dogs and flexible disc should be greased with graphite paste or molybdenum disulphide as recommended in the operating instructions. This is not necessary if the couplings run in oil.

Care must be taken that the Flexible Couplings are not affected by undue axial forces caused, for example, by heat expansion of the shafts. If necessary, the coupling has to be mounted with axial tolerance between support dogs and flexible disc.

8-2



## Selecting the size of the Flexible Coupling

The size of the Flexible Coupling is selected on the basis of the maximum load torque according to the familiar formula:

$$M_L = 9550 \cdot P/n \text{ [Nm]}$$

In this formula:

$$M_L = \text{Load torque of driven machine [Nm]}$$

P = Power required for driving the machine, which is in most cases lower than the nominal power of the motor [kW]

n = Coupling speed [ $\text{min}^{-1}$ ]

The load torque requirement  $M_L$  calculated according to this formula is an average value, but in reality the transmitted torque M through the coupling is irregular, according to the irregularity of the driving power and the machine. The maximum peak torque of the drive, the selection torque  $M_A$ , should be lower than the transmissible torque M of the selected coupling according to the table.

$$M_A < M$$

Where the precise irregularities of the torque, thus the selection torque  $M_A$  are not known a service factor f should be applied:

$$M_A = 9550 \cdot P/n \cdot f \text{ [Nm]}$$

This factor f is dependant on the type of drive and type of driven machine, refer to table below.

In this formula:

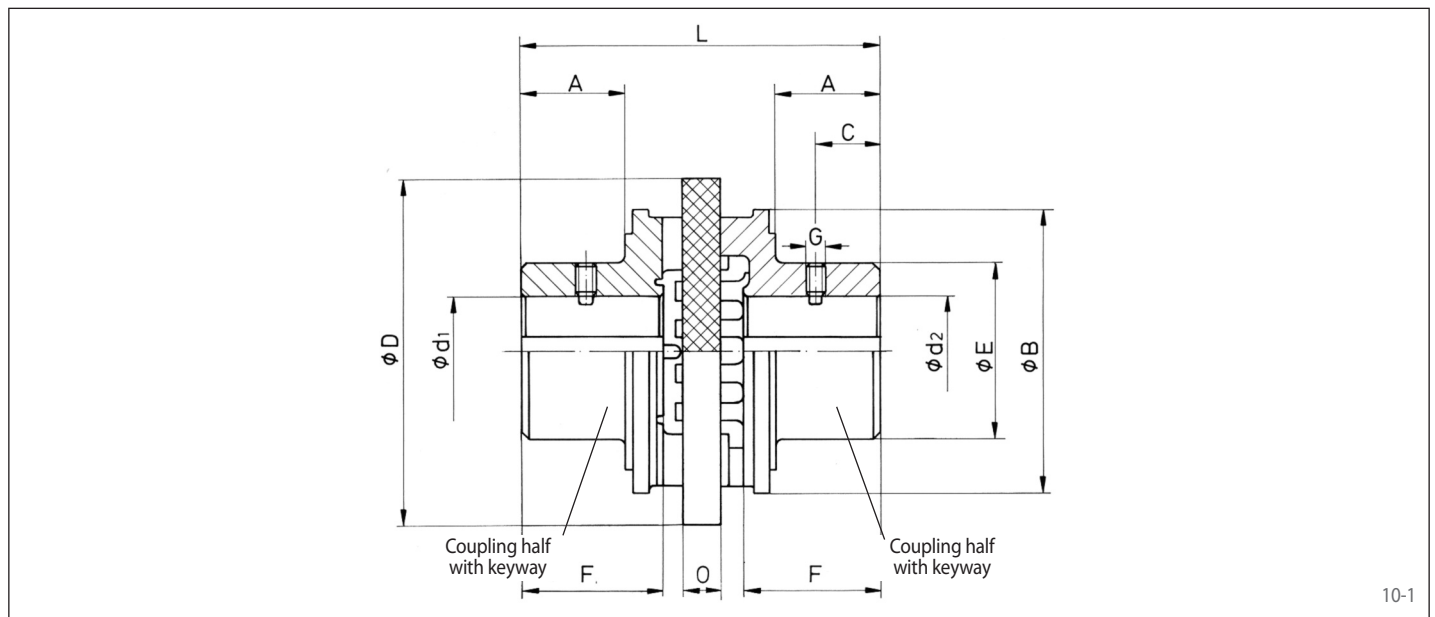
$M_A$  = Selection torque [Nm]

f = Service factor

## Service factor f

Type of driven machine	Driven by			
	Belt drives, electric motors	Combustion engines 4 and 6 cylinders	Combustion engines 2 and 3 cylinders, single cylinder, steam engines	Single cylinder combustion engines
Belt drives, small generators, small ventilators, rotary blowers	1,5	1,7	1,9	2,2
Small hoists, larger ventilators, light machines for metal, wood and textile, small conveyors	1,8	2,0	2,2	2,5
Hoists for heavy loads, heavier conveyors, hanging conveyors, mixers, textile machines with high inertias	2,0	2,2	2,4	2,7
Presses, sheers, stumping machines, reciprocating pumps, calendars, pan grinders, hammer mills	2,5	2,7	2,9	3,2
Welding generators, stone crushers, pinch roll drives, reciprocating compressors and reciprocating pumps without flywheels, rolling mills	3,0	3,2	3,4	3,7

## Hubs with keyways



10-1

### Technical Data and Dimensions

Coupling size	Max. torque M Nm	Max. speed min <sup>-1</sup>	Inertia J kgm <sup>2</sup>	Max. parallel misalignment mm	Rough bore d <sub>1</sub> or d <sub>2</sub> mm	Finished bore d <sub>1</sub> or d <sub>2</sub>		A mm	B mm	C mm	D mm	E mm	F* mm	G mm	L mm	O mm	Weight with rough bore kg
						min. mm	max. mm										
L 10	2	13000	0,0001	0,50	4,3	5	15	-	-	7	32	26	13	M 4	35	6	0,10
L 12	4	10500	0,0002	0,60	5	6	18	-	-	10	40	32	16	M 4	42	4	0,20
L 16	8	8400	0,0003	0,80	7	8	25	-	-	10,5	50	40	18,5	M 5	51	6	0,38
L 20	16	6800	0,0004	1,00	9	10	30	-	-	17	63	50	25	M 6	64	6	0,78
L 27	32	5350	0,0008	1,35	11	12	40	-	-	24	80	65	32	M 6	85	8	1,70
L 35	85	4100	0,0013	1,75	15	16	35	33	90	25	110	53	42	M 8	112	12	1,90
L 42	190	3400	0,0039	2,10	19	20	42	41	110	30	135	66	53	M 8	136	14	3,70
L 50	500	2670	0,0097	2,50	29	30	50	51	135	40	160	85	62	M 10	159	16	6,30
L 70	1000	2140	0,0268	3,50	33	34	70	65	163	45	200	104	79	M 12	200	20	12,10
L 90	2000	1700	0,1110	4,50	48	50	90	81	202	60	250	150	100	M 12	247	25	28,90
L 110	4000	1350	0,2911	5,50	58	60	110	101	254	70	315	175	124	M 12	312	32	50,90
L 140	8000	1050	0,9767	7,00	72	75	140	130	330	90	400	216	160	M 12	402	40	104,00

\* Hub lengths F<sub>1</sub> and F<sub>2</sub> can be shortened with corresponding changes to dimensions A, C and L.

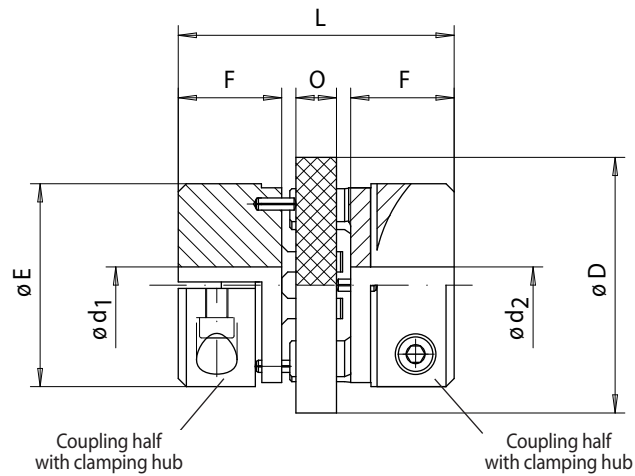
### Please specify when ordering:

- Whether supply is required with rough bores as per catalogue or finished bores.
- If finish bored, give diameters d<sub>1</sub> and d<sub>2</sub>. Tolerance of finished bores is H7. Keyways as per DIN 6885, p. 1.

### Example for ordering

Flexible Coupling L 90 with finished bore d<sub>1</sub> 55 mm and finished bore d<sub>2</sub> 87 mm:

- L 90, d<sub>1</sub> = 55 mm, d<sub>2</sub> = 87 mm



11-1

### Technical Data and Dimensions

Coupling size	Max. torque M Nm	Max. speed min <sup>-1</sup>	Inertia J kgm <sup>2</sup>	Max. parallel misalignment mm	Finished bore d <sub>1</sub> or d <sub>2</sub>		D mm	E mm	F mm	L mm	O mm	Weight with rough bore kg
					min. mm	max. mm						
LK 10	2	13000	0,0001	0,5	5	10	32	26	13	35	6	0,10
LK 12	4	10500	0,0002	0,6	6	14	40	32	16	42	4	0,20
LK 16	8	8400	0,0003	0,8	8	20	50	40	18,5	51	6	0,38
LK 20	16	6800	0,0004	1,0	10	25	63	50	25	64	6	0,78
LK 27	32	5350	0,0008	1,35	12	35	80	65	32	85	8	1,70

#### Please specify when ordering:

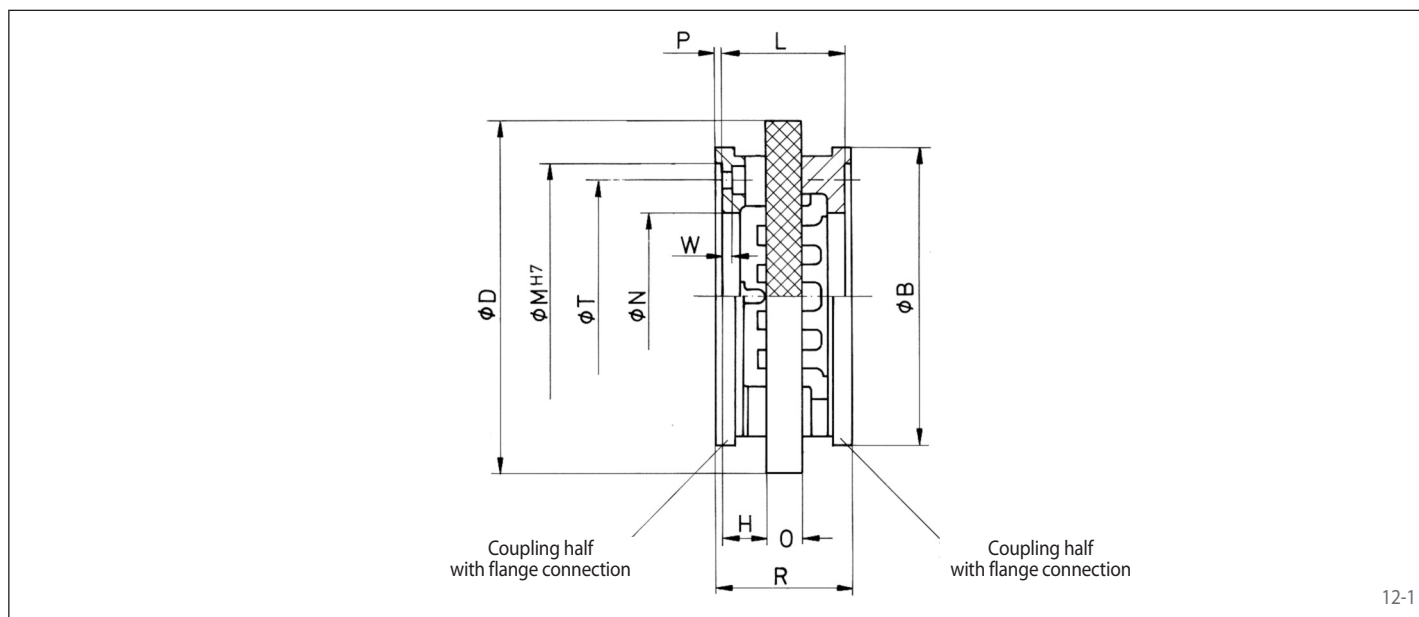
- If finish bored, give diameters d<sub>1</sub> and d<sub>2</sub>. Tolerance of finished bores is H7.

#### Example for ordering

Flexible Coupling LK 16 with finished bore d<sub>1</sub> 8 mm and finished bore d<sub>2</sub> 15 mm:

- LK 16, d<sub>1</sub> = 8 mm, d<sub>2</sub> = 15 mm

## Flange connection

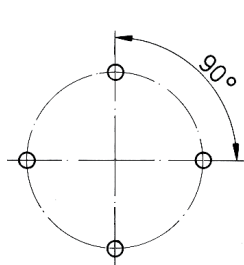


12-1

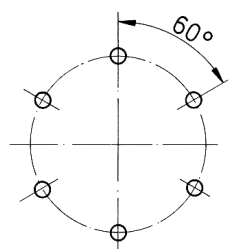
## Technical Data and Dimensions

Coupling size	Max. torque M Nm	Max. speed $\text{min}^{-1}$	Inertia J $\text{kgm}^2$	Max. parallel misalignment mm	B mm	D mm	H mm	L mm	M <sup>H7</sup> mm	N mm	O mm	P mm	R mm	T mm	W mm	Z	Hole pattern <sup>1)</sup>	Weight with rough bore kg
LF 35	85	4100	0,0009	1,75	90	110	14,5	41	75	45	12	2,5	46	65	3,5	M 6	1	0,7
LF 42	190	3400	0,0026	2,1	110	135	15,5	45	90	52	14	2,5	50	75	4,5	M 6	2	1,4
LF 50	500	2670	0,0053	2,5	135	160	18,0	52	100	65	16	4,5	61	88	4,5	M 8	2	1,9
LF 50.1	500	2 670	0,0051	2,5	135	160	17,5	51	125	76	16	3,0	57	108	5,0	M 8	3	1,7
LF 70	1000	2140	0,0138	3,5	163	200	21,0	62	135	90	20	4,0	70	115	5,5	M 10	2	3,2
LF 90	2000	1700	0,0453	4,5	202	250	26,5	78	170	104	25	4,5	87	150	7,0	M 10	4	7,0
LF 110	4000	1350	0,1314	5,5	254	315	32,0	96	200	146	32	5,0	106	180	5,0	M 12	3	12,3
LF 140	8000	1050	0,5203	7,0	330	400	44,0	128	250	157	40	5,0	138	225	8,0	M 16	3	31,2

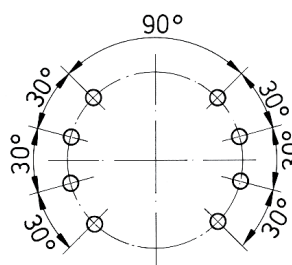
<sup>1)</sup> Arrangement of fastening holes for screws Z (DIN EN ISO 4762) on pitch circle T. The hole pattern on the other coupling half is rotated by 90°.



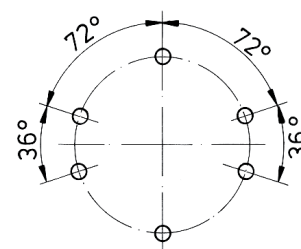
Hole pattern 1



Hole pattern 2



Hole pattern 3



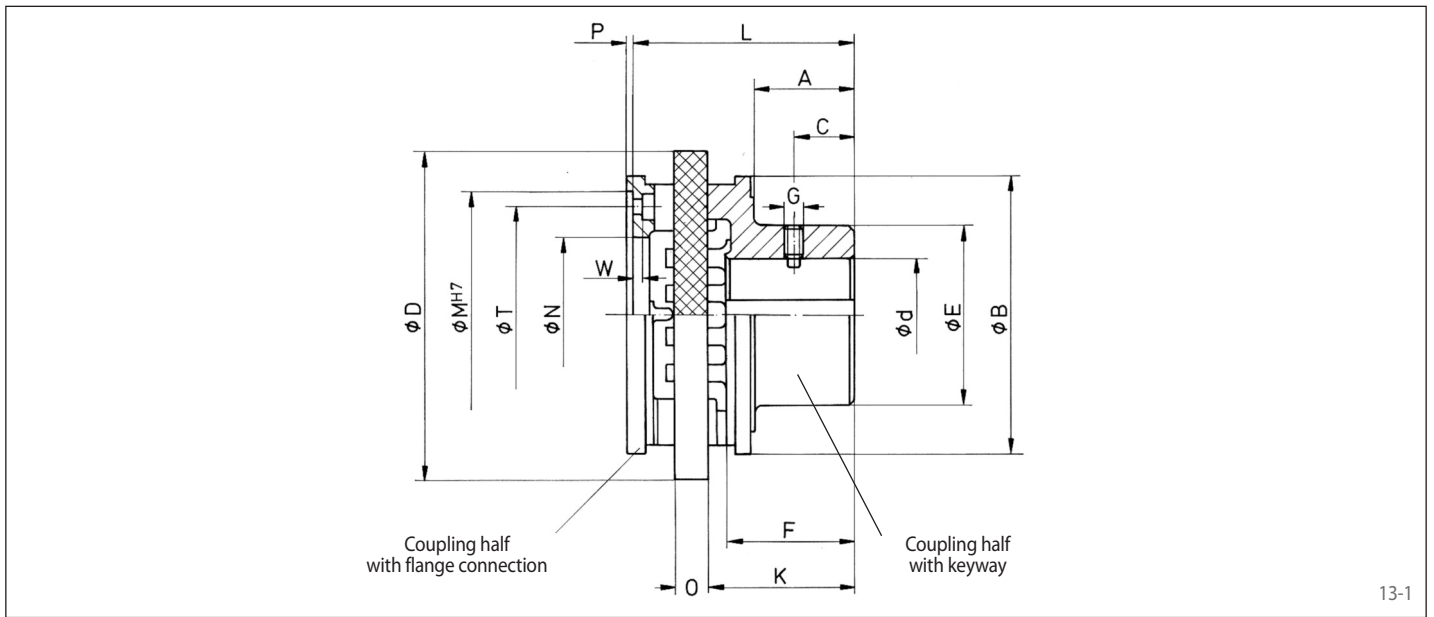
Hole pattern 4

## Example for ordering

Flexible Coupling LF 110:

- LF 110

## Flange connection and hubs with keyway



13-1

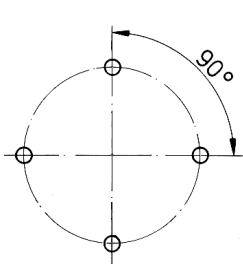
### Technical Data and Dimensions

Coupling size	Max. torque M Nm	Max. speed min <sup>-1</sup>	Inertia J kgm <sup>2</sup>	Max. parallel misalignment mm	Rough bore		Finished bore d		A	B	C	D	E	F*	G	K	L	MH <sup>7</sup>	N	O	P	T	W	Z	Hole pattern <sup>1)</sup>	Weight with rough bore kg
					d	mm	min. mm	max. mm																		
LA 35	85	4100	0,0011	1,75	15	16	35	33	90	25	110	53	42	M 8	50,0	76,5	75	45	12	2,5	65	3,5	M 6	1	1,3	
LA 42	190	3400	0,0032	2,1	19	20	42	41	110	30	135	66	53	M 8	61,0	90,5	90	52	14	2,5	75	4,5	M 6	2	2,6	
LA 50	500	2670	0,0075	2,5	29	30	50	51	135	40	160	85	62	M 10	71,5	105,5	100	65	16	4,5	88	4,5	M 8	2	4,1	
LA 50.1	500	2670	0,0074	2,5	29	30	50	51	135	40	160	85	62	M 10	71,5	105,0	125	76	16	3,0	108	5,0	M 8	3	4,0	
LA 70	1000	2140	0,0203	3,5	33	34	70	65	163	45	200	104	79	M 12	90,0	131,0	135	90	20	4,0	115	5,5	M 10	2	7,7	
LA 90	2000	1700	0,0782	4,5	48	50	90	81	202	60	250	150	100	M 12	111	162,5	170	104	25	4,5	150	7,0	M 10	4	18,0	
LA 110	4000	1350	0,2113	5,5	58	60	110	101	254	70	315	175	124	M 12	140	204,0	200	146	32	5,0	180	5,0	M 12	3	31,6	
LA 140	8000	1050	0,7485	7,0	72	75	140	130	330	90	400	216	160	M 12	181	265,0	250	157	40	5,0	225	8,0	M 16	3	67,6	

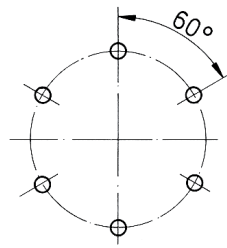
Keyways as per DIN 6885, p. 1.

\*The hub length F can be shortened with corresponding changes to dimensions A, C, K and L.

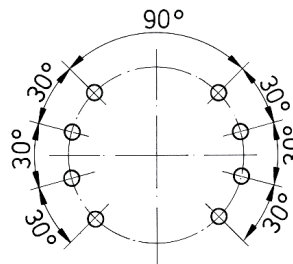
<sup>1)</sup> Arrangement of fastening holes for screws Z (DIN EN ISO 4762) on pitch circle T for coupling half with flange connection.



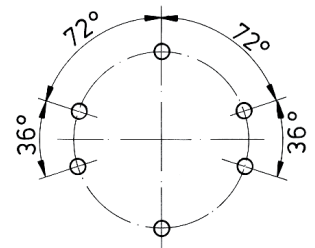
Hole pattern 1



Hole pattern 2



Hole pattern 3



Hole pattern 4

### Please specify when ordering:

- Whether supply is required with rough bore as per catalogue or finished bore.
- If finished bore, give diameter d. Tolerance of finished bore is H7. Keyway as per DIN 6885, p. 1.

### Example for ordering

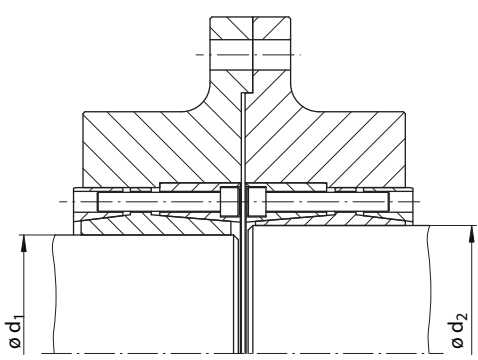
Flexible Coupling LA 90 with finished bore 50 mm:

- LA 90, d = 50 mm

# Questionnaire for RINGSPANN Tru-Line Flange-Couplings RFK

Please photocopy or use the PDF-File from our website!

Company: .....	Department: .....
Address: .....	Name: .....
.....	Enquiry Ref.: .....
Phone: .....	Date: .....
Fax: .....	E-mail: .....

<p><b>1. Where will the Tru-Line Flange-Couplings be used?</b></p> <p>1.1 Type of machine, machine group or installation:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>1.2 Drawing of the coupling with dimensions of journals of the shafts</p> 
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<p><b>2. Operating data</b></p> <p>Drive power <math>P_n</math> ..... [kW]</p> <p>Max. shaft speed <math>n_M</math> ..... [<math>\text{min}^{-1}</math>]</p> <p>Nominal torque <math>M_N</math> ..... [Nm]</p> <p>Max. torque <math>M_{\text{max}}</math> ..... [Nm]</p> <p>Minimum safety factor <math>S_{\text{min}}</math> ..... [1]</p> <p>Installation conditions <input type="checkbox"/> Outside <input type="checkbox"/> In a closed room</p>	<p>Temperature range from ..... [<math>^{\circ}\text{C}</math>] to ..... [<math>^{\circ}\text{C}</math>]</p> <p>Max. bending moment <math>M_b</math> ..... [Nm]</p> <p>Max. radial force <math>F_{\text{rad}}</math> ..... [N]</p> <p>Max. axial force <math>F_{\text{ax}}</math> ..... [N]</p>
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<p><b>3. Dimensions</b></p> <p><b>Shaft 1/Flange 1</b></p> <p>Shaft diameter <math>d_1</math> ..... [mm]</p> <p>Shaft material .....</p> <p>Shaft tolerance <math>T_{1W}</math> ..... [mm]</p> <p>Average surface roughness <math>R_{z1}</math> ..... [<math>\mu\text{m}</math>]</p>	<p><b>Shaft 2/Flange 2</b></p> <p>Shaft diameter <math>d_2</math> ..... [mm]</p> <p>Shaft material .....</p> <p>Shaft tolerance <math>T_{2W}</math> ..... [mm]</p> <p>Average surface roughness <math>R_{z2}</math> ..... [<math>\mu\text{m}</math>]</p>
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<p><b>4. Estimated requirements</b></p> <p>..... Pieces (one-off)      ..... Pieces/month      ..... Pieces/year</p>
--

<p><b>5. Enclosures</b></p> <p><input type="checkbox"/> Specifications      <input type="checkbox"/> Data sheet      <input type="checkbox"/> Sketch/drawing</p>
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## Tru-Line Flange-Couplings RFK

To be filled out in addition when using motor gear unit on rocker

Please photocopy or use the PDF-File from our website!

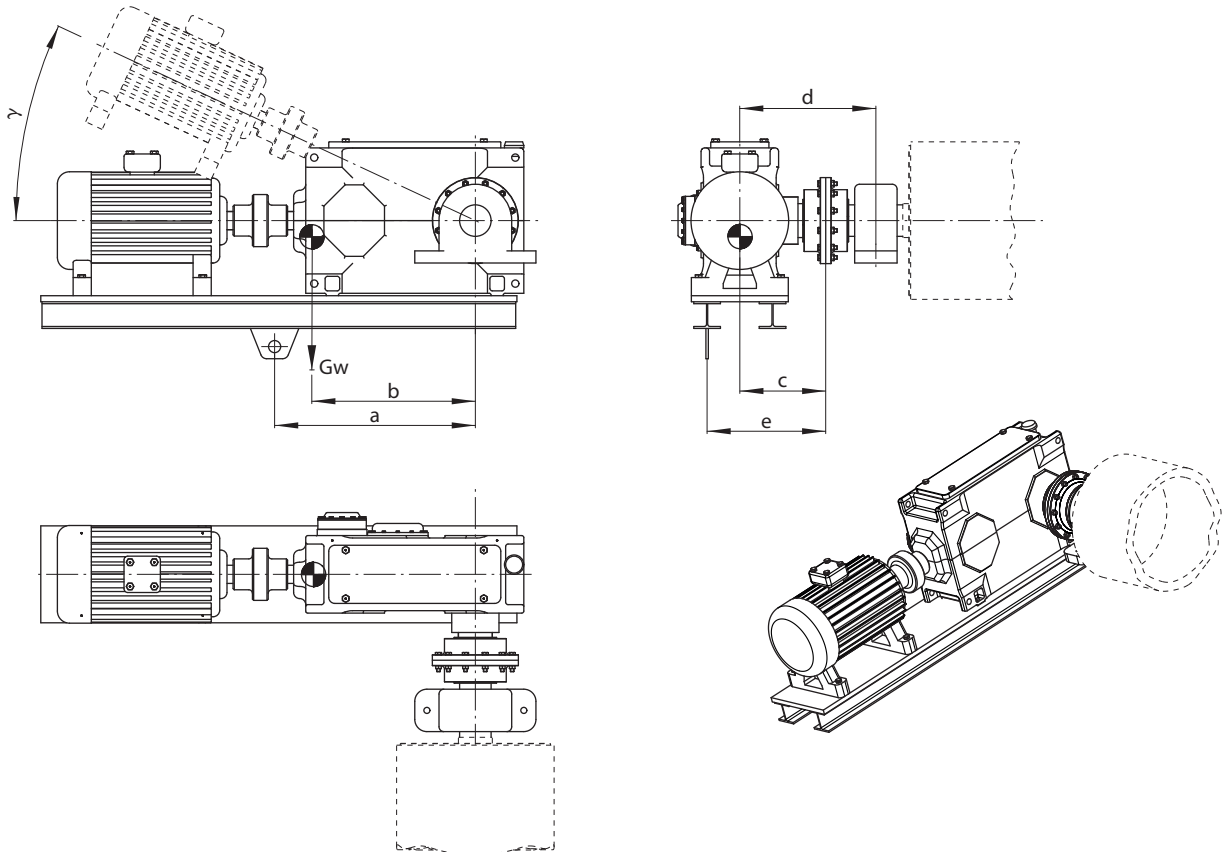
Company: .....  
 Address: .....  
 Phone: .....  
 Fax: .....

Department: .....  
 Name: .....  
 Enquiry Ref.: .....  
 Date: .....  
 E-mail: .....

Tru-Line Flange-Couplings RFK are primarily used in conveyor systems where the drive unit is compactly arranged on a rocker with a torque support or similar mechanisms. Here, bending moments are applied in the shafts on

both sides of the Tru-Line Flange-Coupling. These are caused by the reaction force of the drive torque in the torque support and the weight of the rocker. In order to avoid fatigue failures of these shafts, a suitable verification

calculation is to be performed, in accordance for example with the state of the art of DIN 743, 2012 edition. We will be happy to assist you with this, but we do need the questionnaire to be filled out completely first.



### 2.1 Addition to operating data

If the installation conditions are different, please send us a description and drawing. We will be happy to look at these and make suggestions.

### 3.1 Addition to dimensions

Distance to the torque support a \_\_\_\_\_ [mm]      Distance to the centre of gravity b \_\_\_\_\_ [mm]  
 e \_\_\_\_\_ [mm]      c \_\_\_\_\_ [mm]  
 Distance to the bearing d \_\_\_\_\_ [mm]  
 Angle  $\gamma$  \_\_\_\_\_ [°]  
 Total weight  $G_w$  \_\_\_\_\_ [kg]

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