

**ZERO AXIAL BACKLASH.**

# LINEAR COUPLINGS

**SERIES LK | 70 – 2,000 N**



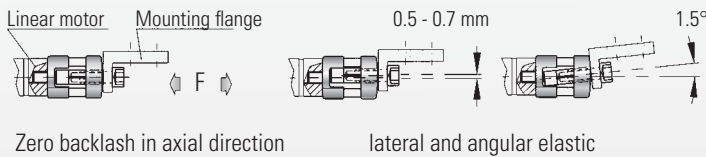
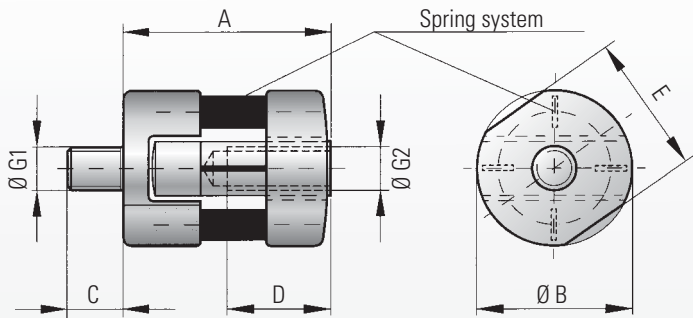
**R+W**<sup>®</sup>  
COUPLING TECHNOLOGY

[www.rwcouplings.com](http://www.rwcouplings.com)



# MODEL LK

## LINEAR COUPLINGS



### Properties:

- Zero backlash in axial direction
- compensates angular misalignments up to 1.5° and lateral misalignments up to 0.7 mm (0,028 inch)
- low mass & weight = low inertia
- compact design
- designed for high tensile and compressive forces in highly dynamic applications

### Material:

Coupling components are made of high-strength aluminium. Spring elements are made of special spring steel

### Structure:

Input side: internal metric thread  
Output side: external metric thread  
The input - and output connection is effected by a backlash free spring system

### Temperature range:

-30 to + 120° C (3.6 F to 270 F)

### Backlash:

absolutely backlash-free

### Brief overloads:

Acceptable up to 1.5 times the rated value

### Service life:

These couplings have an infinite life and are maintenance free if operated within performance limits.

### Special Design:

Custom bores, threads, and material available upon request.

### Ordering specifications

LK / 70 / XX

Model  
Series/Nominal tensile force\*  
Special e.g. VA-Design

Model LK		Series						
		70	150	300	500	800	2000	
Pressure force (N)	F	70	150	300	500	800	2000	
Overall length (mm)	A	24	33	41.5	52	62	93	
Outer diameter (mm)	B	18	22	30	42	50	72	
Outer diameter of thread (mm)	G <sub>1/2</sub>	M5	M6	M8	M10	M12	M16	
Max. tightening torque thread (Nm)		4	7	18	30	60	170	
Thread length (mm)	C	6.5	8	10	13	18	24	
Thread length (mm)	D	10	12	16	20	24	32	
Key width (mm)	E	16	20	27	38	46	60	
Weight approx. (g)		11	23	57	135	236	580	
Lateral restoring force (N)		10	18	48	96	122	180	
lateral  (mm)	max. values	0.5	0.5	0.5	0.7	0.7	0.7	
angular  (Degree)		1.5	1.5	1.5	1.5	1.5	1.5	

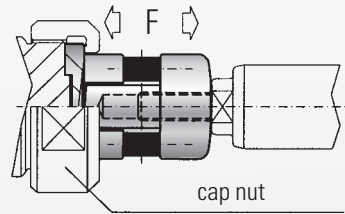
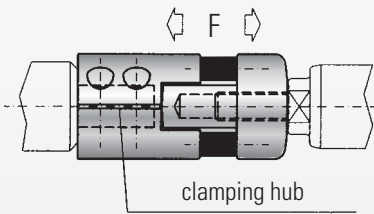
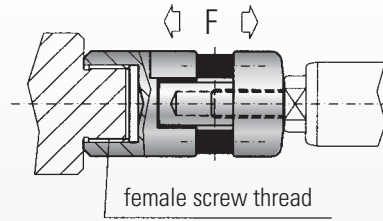
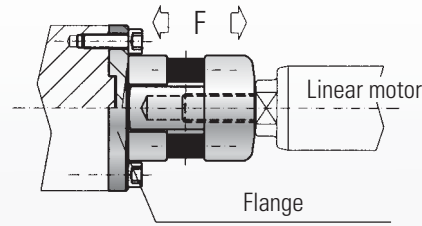
### Mounting Instructions

- Mounting: "Wrench flats" have been machined into the coupling hubs to aid in the mounting and dismounting of the coupling.
- **Caution: Do not exceed the tightening torque during mounting (see table)!**
- While mounting, ensure not to damage leaf-spring system
- **Maximum lateral and angular misalignment value must not be exceeded.**

The information mentioned in this document is based on our present knowledge and experiences and does not exclude the manufacturer's own substantial testing of the equipment. So this is no obligatory assurance even with regard to protection rights of Third Parties. The sale of our products is subject to our General Conditions of Sale and Delivery.

# Special Designs

## CYLINDRIC LINEAR COUPLINGS

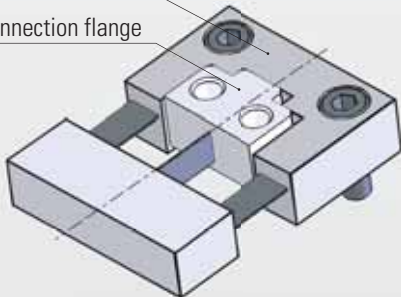


## FLATENED LINEAR COUPLINGS

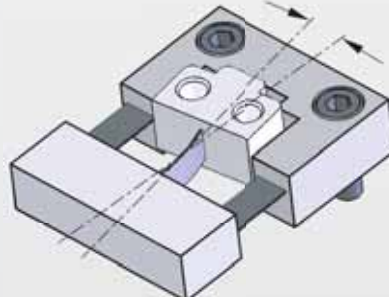
- Backlash free and space saving linear motor, or linear guidance connection

Tightening flange

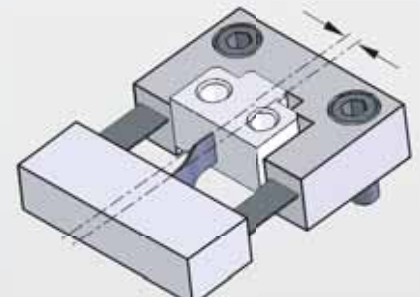
Connection flange



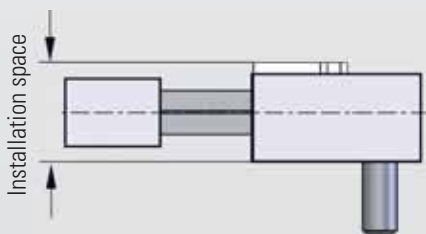
Top view



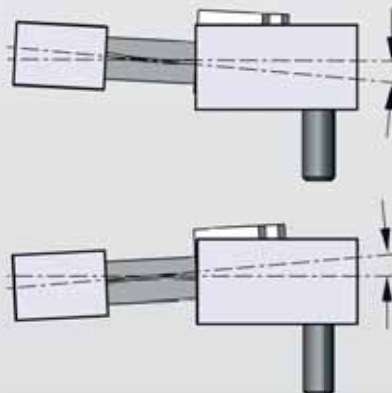
Angular misalignment



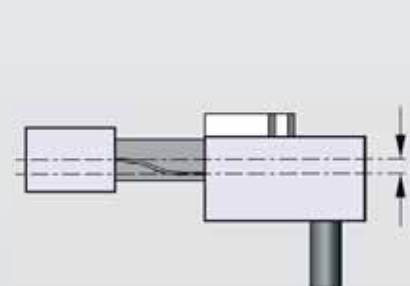
Lateral misalignment (sideways)



Side view



Angular misalignment (horizontal)



Lateral misalignment (horizontal)

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Know-how for  
your particular  
application.**

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## THE R+W-PRODUCT RANGE



### **TORQUE LIMITERS** **Series SK + ST**

From 0.1 – 160,000 Nm, Bore diameters 3 – 290 mm  
Available as a single position, multi-position, load holding, or full disengagement version  
Single piece or press-fit design



### **BELLOWS COUPLINGS** **Series BK / BX**

From 2 – 100,000 Nm  
Bore diameters 3 – 280 mm  
Single piece or press-fit design



### **LINE SHAFTS** **Series ZA / ZAE / EZ / EZV**

From 5 – 25,000 Nm  
Bore diameters 5 – 140 mm  
Available up to 6 mtr. length



### **MINIATURE BELLOWS COUPLINGS** **Series MK**

From 0.05 – 10 Nm  
Bore diameters 1 – 28 mm  
Single piece or press-fit design



### **SERVOMAX<sup>®</sup>** **ELASTOMER COUPLINGS** **Series EK**

From 2 – 25,000 Nm, Shaft diameters 3 – 170 mm  
backlash-free, press-fit design



### **ECOLIGHT<sup>®</sup>** **ELASTOMER COUPLINGS** **Series TX 1**

From 2 – 810 Nm  
Shaft diameters 3 – 45 mm



### **LINEAR COUPLINGS** **Series LK**

From 70 – 2,000 N  
Thread M5 – M16



### **POLYAMIDE COUPLINGS** **MICROFLEX** **Series FK 1**

Rated torque 1 Ncm  
Bore diameters 1.5 – 2 mm