

# LINEAR MOTION CONTROL

**Technical Data Sheet** 

## **Linear Couplings**

The connection between the input and output side of the coupling is via two sets of backlash free leaf-springs.

The coupling components are made of highstrength aluminum. Spring elements are made of a special spring steel.



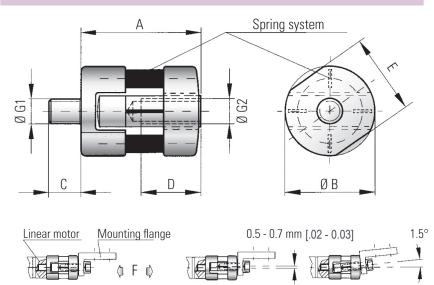




## **Features**

- Zero backlash in axial direction
- Compensates angular misalignments up to 1.5° and lateral misalignments up to 0,7 mm [0.028 in]
- Low mass & weight = low inertia
- Compact Design
- Designed for high tensile and compressive forces in highly dynamic applications

### **Dimensions**



Zerobacklash in axial direction

lateral and angular elastic

Model - LC			Series					
		70	150	300	500	800	2000	
Pressure Force	N [lbs]	F	70 [16]	150 [34]	300 [68]	500 [112]	800 [180]	2000 [450]
Overall Length	mm [in]	А	24 [.94]	33 [1.30]	41,5 [1.63]	52 [2.05]	62 [2.44]	93 [3.66]
Outer Diameter	mm [in]	В	18 [.71]	22 [.87]	30 [1.18]	42 [1.65]	50 [1.97]	72 [2.83]
Outer Diameter of Thread		G <sub>1</sub> G <sub>2</sub>	M5	M6	M8	M10	M12	M16
Max Tightening Torque (Thread)	Nm [ft-lbs]		4 [3]	7 [5]	18 [13]	30 [22]	60 [4.4]	170 [125]
Thread Length	mm [in]	С	6,5 [.26]	8 [.31]	10 [.39]	13 [.51]	18 [.71]	24 [.94]
Thread Length	mm [in]	D	10 [.39]	12 [.47]	16 [.63]	20 [.79]	24 [.94]	32 [1.26]
Key Width	mm [in]	E	16 [.63]	20 [.79]	27 [1.06]	38 [1.50]	46 [1.81]	60 [2.36]
Weight (Approx.)	g [oz]		11 [.4]	23 [.80]	57 [2.24]	135 [4.8]	236 [8.3]	580 [20.5]
Lateral Restoring Force	N [lbs]		10 [2.2]	18 [4.0]	48 [10.8]	96 [22.4]	122 [27.4]	180 [40.5]
Lateral	mm [in]	Max. Values	0,5 [.019]	0,5 [.019]	0,5 .019]	0,7 [.028]	0,7 [.028]	0,7 [.028]
Angular			1.5°	1.5°	1.5°	1.5°	1.5°	1.5°
Product Number			976910	976920	976930	976940	976950	976960

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**Product Specifications** 

#### Material:

Coupling components are made of highstrength aluminum. Spring elements are made of a special spring steel.

#### Structure:

**Input Side:** Internal Metric Thread **Output Side:** External Metric Thread The connection between the input and output side of the coupling is via two sets of backlash free leaf-springs systems.

#### **Temperature Range:**

-30 to +120° C [ 3.6 to 270° F ]

#### Backlash:

Absolutely backlash free

#### Brief Overloads:

Accepts 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.

## **Mounting Instructions**

- Mounting "Wrench flats" have been machined into the coupling hubs to aid in mounting and dismounting the coupling.
- While mounting, be careful not to damage the leaf spring.

## 

Do not exceed the tightening torque during mounting.

## WARNING

The maximum lateral and angular misalignment values must not be exceeded.

## **Model Nomenclature**



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