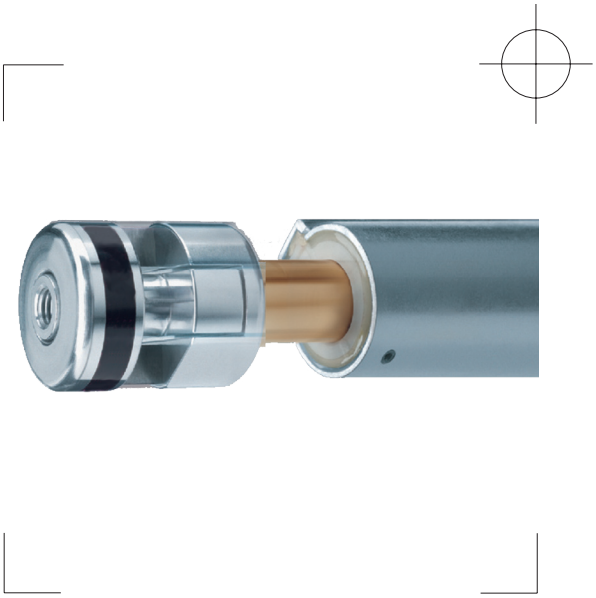
LINEAR MOTION CONTROL

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.

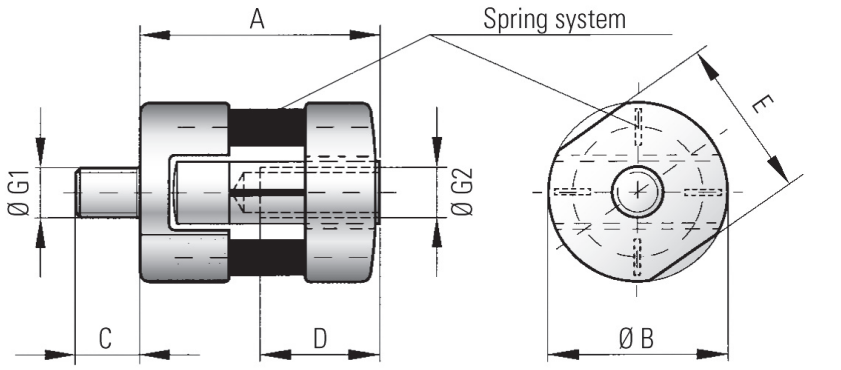
The coupling components are made of high-strength aluminum. Spring elements are made of a special spring steel.

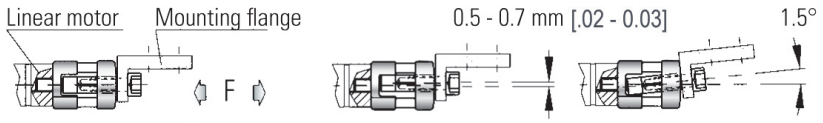


Features

- 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]	A	24 [.94]	33 [1.30]	41,5 [1.63]	52 [2.05]	62 [2.44]	93 [3.66]
Outer Diameter	mm [in]	B	18 [.71]	22 [.87]	30 [1.18]	42 [1.65]	50 [1.97]	72 [2.83]
Outer Diameter of Thread		G_1 G_2	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]	C	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]	Max. Values	10 [2.2]	18 [4.0]	48 [10.8]	96 [22.4]	122 [27.4]	180 [40.5]
Lateral	mm [in]		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

Product Specifications

Material:
Coupling components are made of high-strength 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.

CAUTION

Do not exceed the tightening torque during mounting.

WARNING

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

Model Nomenclature

LC - XX - XX

Model
Series / Nominal Tensile Force
Thread Size

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