

## Synchronisation sets



### Material:

Elastomer spider, polyurethane Shore 98A.  
Intermediate tube and clamping hub, aluminium.  
Expanding mandrel steel.  
Screws steel.

### Version:

Bright.

### Sample order:

nIm 20330-6016X500  
(include length  $L4 = 500$  mm)

### Note:

The synchronisation set enables two parallel linear axes to be operated with just one motor.

Synchronisation sets consist of two couplings, which are connected with a synchronous shaft. They are produced to the appropriate length. Suitable for lengths up to max. 3000 mm.

### Advantages of the elastomer dog coupling:

- Hub with expanding mandrel, can be mounted axially
- Play-free with vibration absorption
- Excellent retaining force
- Excellent concentric accuracy
- Short design
- Easy to assemble
- Can be mounted axially on spigot side
- Electrical insulation
- Nominal torque up to 53 Nm

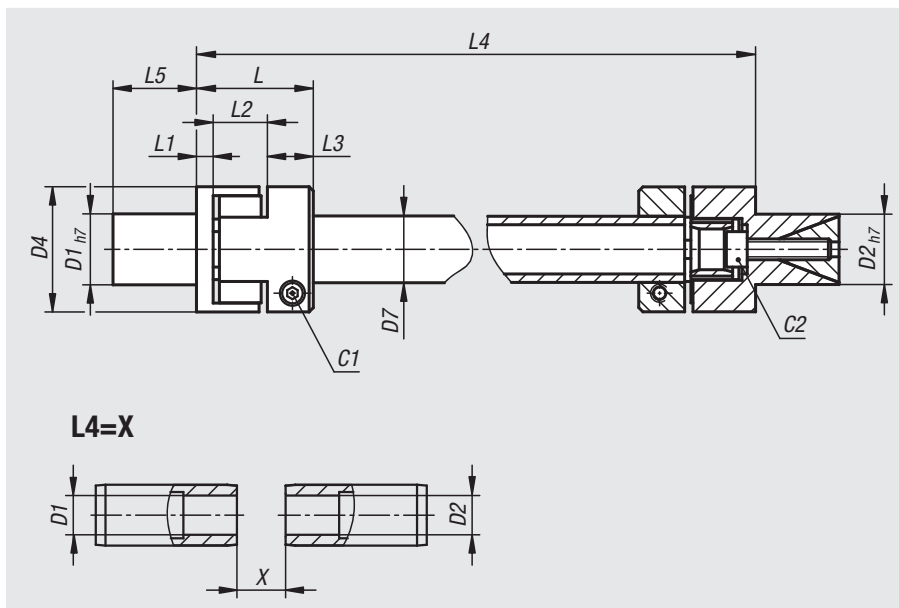
### Assembly:

An axial displacement of the attachment parts is not required as the intermediate tube can be inserted as a spacer between the coupling halves.

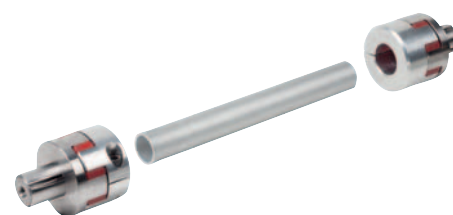
Both coupling halves with expanding mandrel are fully inserted into the hub bores of the linear units. The frictional connection is achieved by tightening the screws in the expanding mandrel to the specified torque. Push the coupling halves, together with the clamping hub and elastomer spider, onto the intermediate tube. Bring the intermediate tube into position and connect the coupling halves by manually applying a low level of axial force. Tighten the screws on both clamping hubs to the specified torque.

### Drawing reference:

$X$  = distance between shafts



## Synchronisation sets



Order No.	Size	C1	C2	D1	D2	D4	D7	L	L1	L2	L3	L4 min.	L5	Nominal torque Nm
20330-6016X	60	M3	M5	17	17	32,2	16	28	4	13	11	80	20	6,5
20330-8025X	80	M6	M8	24	24	56,4	25	46	8	18	20	130	27	53

Order No.	Size	Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> ) 0,5 m	Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> ) 1,0 m	Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> ) 2,0 m	Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> ) 3,0 m	Max. rpm	tightening torque of screw C1 Nm	tightening torque of screw C2 Nm
20330-6016X	60	0,024	0,031	0,044	0,058	20000	1,4	9
20330-8025X	80	0,326	0,352	0,404	0,455	14000	15	32