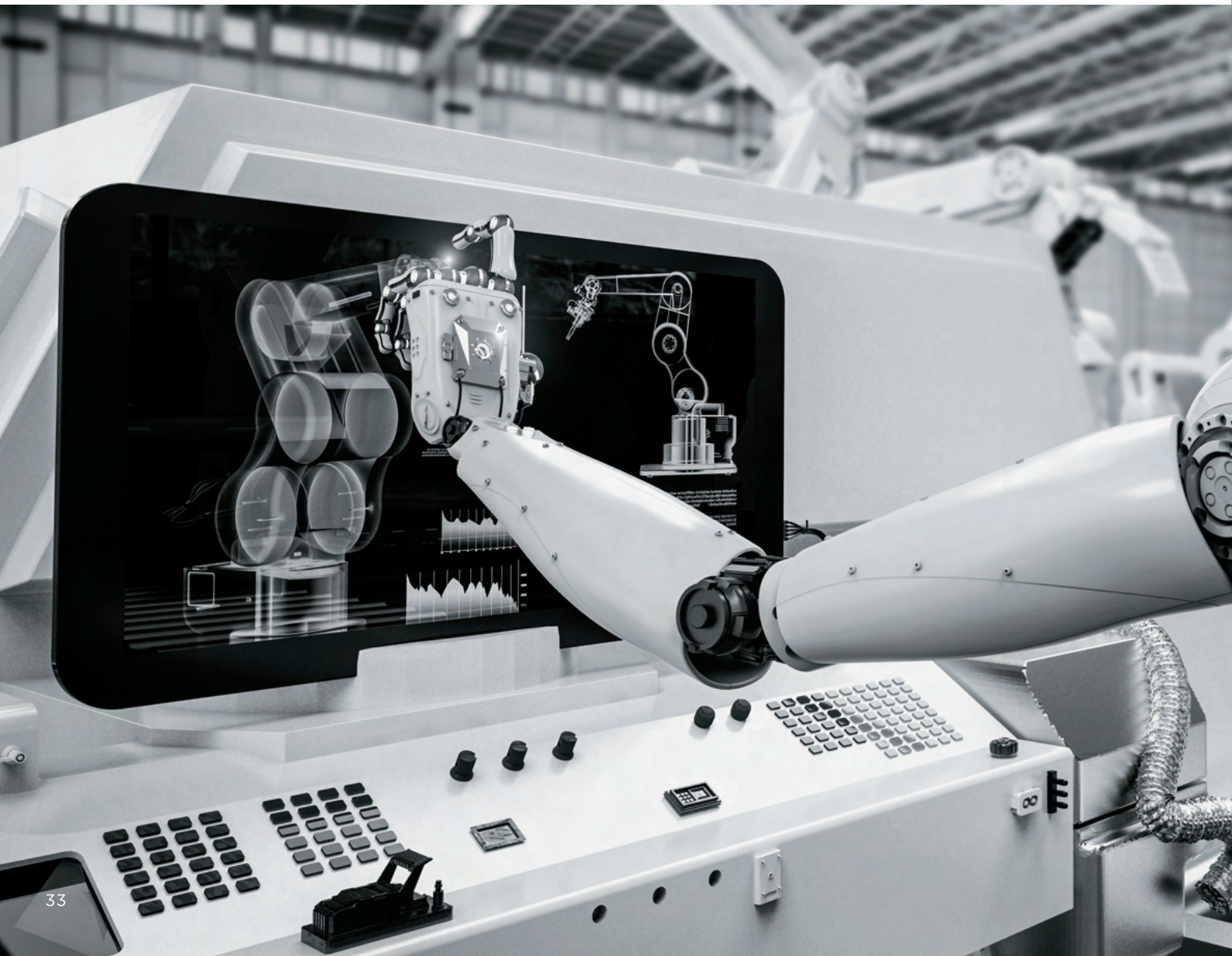
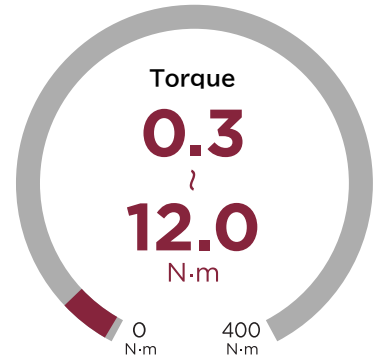
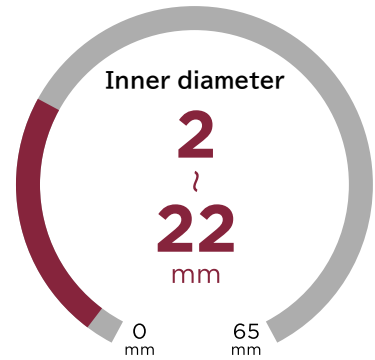


# Lateral Couplings

# ML series

ML / MLL / MLC / MLXC



**ML**

Set screw

**MLL**

Clamp

**MLC**

Clamp

**MLXC**

Clamp

## Features

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### Principle

A lateral coupling is equipped with a torque ring, which 4 pivot pins bonded together in the shape of a cross. 2 hubs on the ends are interlocked via pivot pins. It is classified as flexible coupling and compensates misalignments by taking advantage of sliding.

### Misalignment

Large angular misalignment compensation

### Hub-Shaft Connection

#### Set screw

Fixes a shaft by digging sets crews into the shaft directly

#### Clamp

Fixes a shaft using elastic deformation of hub notch by tightening cap screws

### Fail-Safe

Torque rings fracture to disengage torque transmission when there is excessive overload

### Backlash

Zero backlash

### Electric isolation

Electrically isolated

### Magnetic properties

No magnetic properties except screws



## Lateral Couplings

# ML/MLL/ MLC/MLXC

Coupling size  
**18 ~ 70**

Inner diameter  $^{+0.03}_0$   
**2 ~ 22 mm**

Torque  
**0.3 ~ 12.0 N·m**

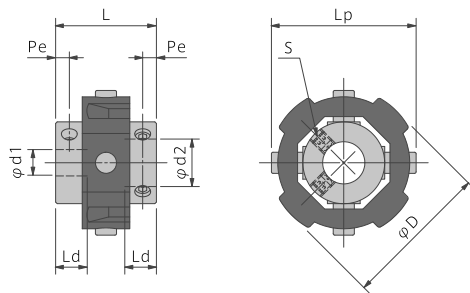


### Specifications

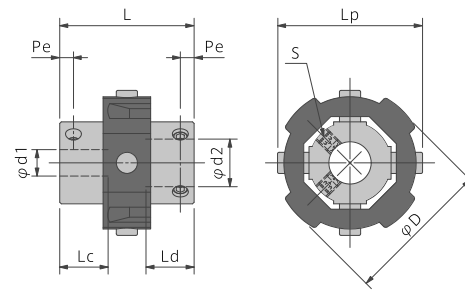
Type	Size	Inner diameter	Torque	Lateral misalignment	Angular misalignment	Inertia	Torsional Spring constant	Axial Spring constant	Mass
		d1, d2 [mm]	[N·m]	[mm]	[°]	[kg·m <sup>2</sup> ×10 <sup>-8</sup> ]	[N·m/rad]	[N/mm]	[g]
ML	18	2~5	0.3	1	10	20	25	155	7
MLL		6	0.3	1	10	20	25	155	7
MLC		3~6	0.3	1	5	55	25	155	11
ML	27	3~8	1.7	1	10	91	92	350	16
MLL		9, 10	1.7	1	10	91	92	350	16
MLC		4~8	1.7	1	5	220	92	350	26
MLC	33	9, 10	0.9	1	5	220	92	350	26
MLL		5~12	2.5	1	10	165	146	300	17
MLC		5~10	2.5	1	10	183	146	300	20
ML	41	6~12	3.5	1	10	476	299	250	30
MLL		14~16	3.5	1	10	476	299	250	30
MLC		6~12	3.5	1	10	550	299	250	40
MLXC	70	8~22	12.0	1	10	7,315	1,300	540	189

## Drawings

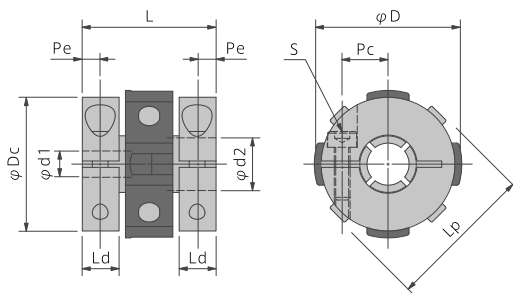
ML-18 ML-27 ML-41



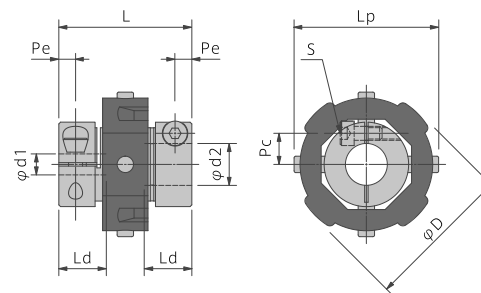
MLL-18 MLL-27 MLL-33 MLL-41



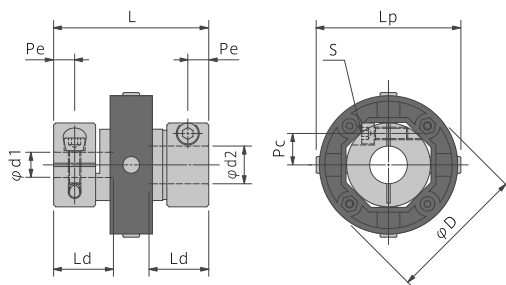
MLC-18 MLC-27



MLC-33 MLC-41



MLXC-70



## Dimensions

Type	Size	Inner diameter	Overall length	Pivot pin length	Outer diameter	Clamp ring diameter	Mounting length	Distance	Distance	Set screw	Cap screw	Torque
		d1, d2 [mm]	L [mm]	Lp [mm]	D [mm]	Dc [mm]	Ld [mm]	Pe [mm]	Pc [mm]	S [mm]	S [mm]	[N·m]
ML	18	2~5	14.2	18.0	18.0	—	4.6	2.3	—	M3	—	0.72
MLL		6	19.1	18.0	18.0	—	7.0	2.3	—	M3	—	0.72
MLC		3~6	19.1	18.0	19.1	19.1	7.0	2.7	6.2	—	M2.5	1.2
ML	27	3~8	19.1	28.0	27.6	—	6.1	2.6	—	M3	—	0.72
MLL		9, 10	25.4	28.0	27.6	—	9.3	2.5	—	M3	—	0.72
MLC		4~8	25.4	28.0	27.6	25.4	9.3	3.5	8.7	—	M3	2.1
MLC	33	9, 10	25.4	28.0	27.6	25.4	9.3	3.5	8.7	—	M3	2.1
MLL		5~12	30.7	33.7	33.7	—	10.9	3.9	—	M4	—	2.0
MLC		5~10	30.7	33.7	33.7	—	10.9	4.2	7.3	—	M2.5	1.2
ML	41	6~12	28.4	41.4	41.4	—	8.6	3.8	—	M5	—	3.9
MLL		14~16	38.1	41.4	41.4	—	13.5	4.8	—	M5	—	3.9
MLC		6~12	38.1	41.4	41.4	—	13.5	4.8	8.9	—	M4	4.8
MLXC	70	8~22	74.0	69.0	66.0	—	28.5	10.0	15.0	—	M6	16.3

## Materials

Size	Hub		Clamp ring		Torque ring
	Material	Surface treatment	Material	Surface treatment	Material
18, 27	Free-cutting brass	—	Aluminum alloy	Non-chromium chemical conversion treatment	Acetal
33, 41, 70	Aluminum alloy	Non-chromium chemical conversion treatment	—	—	