

Specifications & Dimensions

SAKAI Miniature
Double Disk Coupling

LAD-C

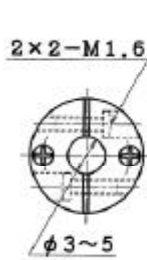


Allowable Parallel Misalignment: 0.1mm (LAD-12C 0.05mm)

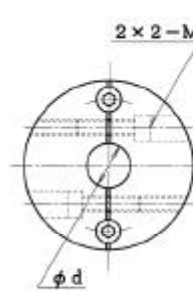
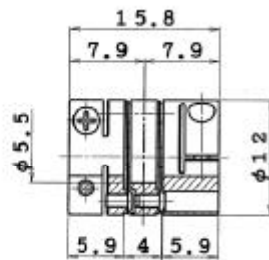
Allowable Angular Misalignment: 0.5°

Allowable Axial Displacement: ± 0.2 mm (LAD-12C ± 0.1mm)

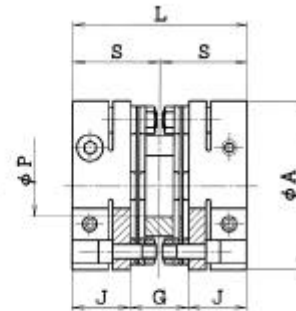
Maximum Speed: 8000r/min



LAD-12C



LAD-15C ~ 58C



Performance Rating and Dimension Specification

(Unit : mm)

Model Number	Allowable Torque (N·m)	Torsional Rigidity (N·m/rad)	Axial Spring Rate (N/mm)	Moment of Inertia (kg·m ²)	Weight (g)	d	A	P	L	S	J	G	M
LAD-12C	0.25	132	10	0.08×10^{-6}	3.7	Refer to the above drawing of LAD-12C							
LAD-15C	0.5	196	88	0.25×10^{-6}	8	3 ~ 5	15	3.5	20	10	7.7	4.6	M2
LAD-20C	1.0	490	39	0.90×10^{-6}	16	4 ~ 8	20	5.5	24	12	8.9	6.2	M2.5
LAD-25C	1.5	882	25	2.70×10^{-6}	31	6 ~ 10	25	7.5	30	15	11	8	M3
LAD-30C	2.0	1470	15	5.63×10^{-6}	43	6 ~ 14	30	11.5	31	15.5	11.5	8	M3
LAD-35C	4.0	2940	25	0.12×10^{-4}	67	8 ~ 16	35	12.5	35	17.5	12.5	10	M3
LAD-40C	6.0	3920	20	0.22×10^{-4}	89	10 ~ 20	40	16	40	20	14.6	10.8	M3
LAD-48C	12	5096	29	0.57×10^{-4}	170	12 ~ 24	48	18	52	26	17	18	M4
LAD-58C	25	9310	29	1.45×10^{-4}	296	12 ~ 24	58	21	60	30	20	20	M5

Bore Size : d (Tolerance H7)

(Unit : mm)

Model Number	d																
	3	4	5	6	6.35	7	8	9.525	10	11	12	14	15	16	19	20	24
LAD-12C																	
LAD-15C																	
LAD-20C																	
LAD-25C																	
LAD-30C																	
LAD-35C																	
LAD-40C																	
LAD-48C																	
LAD-58C																	

Moment of inertia and weight listed above are for maximum bore sizes.

Allowable axial displacement is within the situation of no angular misalignment.

Bore size marked indicates shafts can be insert beyond the ends of the hub's surface since the shaft size is within the diameter of the shaft through hole of the spacer and the disk spring.

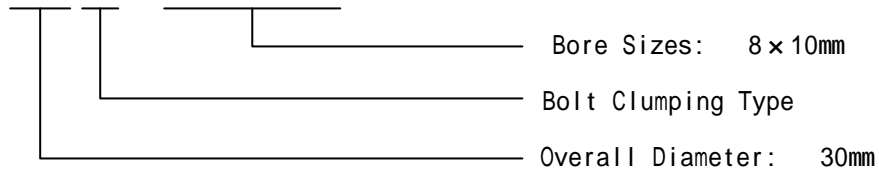
Bore size marked indicates shafts should not be inserted beyond the ends of the hub's surface to avoid the shafts from colliding with the disk spring in rotation.

Recommended shaft tolerance is h₆

Specifications & Dimensions

Ordering Example

LAD - 30C - 8 × 10



Clumping Capacity

Model Number	Bore Size (mm)	Clumping Capacity (N·m)	Model Number	Bore Size (mm)	Clumping Capacity (N·m)	Model Number	Bore Size (mm)	Clumping Capacity (N·m)	Model Number	Bore Size (mm)	Clumping Capacity (N·m)
LAD-12C	3	0.41	LAD-25C	7	5.8	LAD-35C	11	9.1	LAD-48C	12	17.3
	4	0.54		8	6.7		12	10.0		15	21.6
	5	0.68		9.525	7.9		14	11.6		16	23.1
LAD-15C	3	1.1	LAD-30C	10	8.3	LAD-40C	15	12.5	LAD-58C	19	27.4
	4	1.5		6	5.0		16	13.3		20	28.8
	5	1.8		7	5.8		10	8.3		24	34.6
LAD-20C	4	2.4	LAD-30C	8	6.7	LAD-40C	11	9.1	LAD-58C	12	28.2
	5	3.0		10	8.3		12	10.0		15	35.2
	6	3.6		11	9.1		14	11.6		16	37.5
	7	4.3		12	10.0		15	12.5		19	44.6
LAD-25C	8	4.9	LAD-35C	14	11.6	LAD-40C	16	13.3	LAD-58C	20	46.9
	6	5.0		8	6.7		19	15.8		24	56.3
	6.35	5.3		10	8.3		20	16.6			

Attachment on Shaft



Model Number	Bore Size (mm)	Clump Bolt Size	Fasten Torque (N·m)
LAD-12C	3 ~ 5	M1.6	0.14
LAD-15C	3 ~ 5	M2	0.4
LAD-20C	4 ~ 8	M2.5	0.8
LAD-25C	6 ~ 10	M3	1.4
LAD-30C	6 ~ 14	M3	1.4
LAD-35C	8 ~ 16	M3	1.4
LAD-40C	10 ~ 20	M3	1.4
LAD-48C	12 ~ 24	M4	2.8
LAD-58C	12 ~ 24	M5	5.9

Insert the shaft into the coupling to the certain position by hand. Then, tighten four clumping bolts by torque wrench at fasten torque which is mentioned in the above table.

Confirm shaft diameter with the bore size table whether the shaft can pass the shaft through hole of the spacer and the disk spring or not.

In case that the shaft diameter is larger than the diameter of the shaft through hole of the spacer and the disk spring (Confirm the ϕ and ϕ mark of the bore size table), the insert position of the shaft should be within the size J in the dimension specification table.