

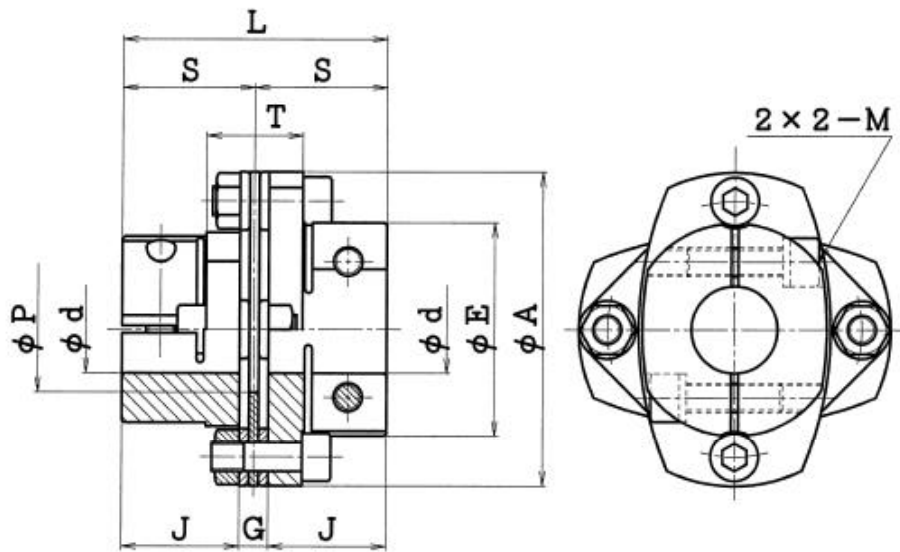
Specifications & Dimensions

SAKAI
Single Disk Coupling

LCS-B



Allowable Angular Misalignment: 0.5°
 Allowable Axial Displacement: ± 0.2 mm
 Maximum Speed: 8000r/min



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 (kg)	d	A	E	P	L	S	T	J	G	M
LCS-45B	12	1.47×10^4	59	0.33×10^{-4}	0.17	10 ~ 16	45	31	18	38.6	19.3	14.6	17	4.6	M4
LCS-55B	25	2.94×10^4	59	0.90×10^{-4}	0.30	10 ~ 19	55	38	21	44.8	22.4	16.8	20	4.8	M5
LCS-65B	40	5.88×10^4	124	2.05×10^{-4}	0.48	14 ~ 25	65	44	26	54.5	27.25	19.5	24.5	5.5	M6/M5
LCS-80B	80	11.8×10^4	74	5.19×10^{-4}	0.78	15 ~ 35	80	57	36	63.8	31.9	19.8	29	5.8	M8/M6
LCS-90B	180	17.6×10^4	89	1.00×10^{-3}	1.21	19 ~ 35	90	63	37	70.5	35.25	28.5	31	8.5	M8
LCS-100B	250	23.5×10^4	107	1.74×10^{-3}	1.73	20 ~ 40	100	70	41	82	41	30	36	10	M10/M8
LCS-125B	400	41.2×10^4	84	5.54×10^{-3}	3.70	32 ~ 42	125	88	51	97	48.5	38	42.5	12	M12
LCS-155B	800	64.7×10^4	59	1.58×10^{-2}	6.50	45 ~ 60	155	112	61	114	57	44	50	14	M14

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

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

Recommended shaft tolerance is h₆.

Specifications & Dimensions

Bore Size : d(Tolerance H7)

(Unit : mm)

Model Number	d															
	10	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35
LCS-45B																
LCS-55B																
LCS-65B																
LCS-80B																
LCS-90B																

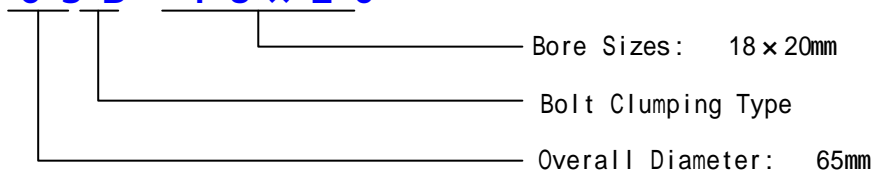
Model Number	d														
	20	22	25	28	30	32	35	38	40	42	45	48	50	55	60
LCS-100B															
LCS-125B															
LCS-155B															

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.

Ordering Example

LCS - 65B - 18 × 20



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)
LCS-45B	10	15.1	LCS-65B	14	48.9	LCS-80B	15	96.4
	12	18.1		15	52.4		16	103
	14	21.1		16	55.9		17	109
	15	22.7		17	59.4		18	116
	16	24.2		18	62.8		19	122
LCS-55B	10	24.8	LCS-65B	19	66.3	LCS-80B	20	129
	12	29.8		20	69.8		22	141
	14	34.7		22	76.8		24	154
	15	37.2		24	60.0		25	161
	16	39.7		25	62.0		28	180
	17	42.2			30		193	
	18	44.6			32		112	
19	47.1			35	122			

Specifications & Dimensions

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)
LCS-90B	19	122	LCS-100B	20	204	LCS-125B	32	479
	20	129		22	225		35	524
	22	141		25	256		38	569
	25	161		28	286		40	599
	28	180		30	307	42	628	
	30	193		32	327	45	922	
	32	206		35	358	48	984	
	35	225		38	244	50	1030	
			40	257	55	1130		
					60	1230		

Attachment on Shaft

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

Model Number	Bore Size (mm)	Clump Bolt Size	Fasten Torque (N·m)	Model Number	Bore Size (mm)	Clump Bolt Size	Fasten Torque (N·m)
LCS-45B	10 ~ 16	M4	4.0	LCS-90B	19 ~ 35	M8	34.3
LCS-55B	10 ~ 19	M5	8.3	LCS-100B	20 ~ 35	M10	67.6
LCS-65B	14 ~ 22	M6	13.7		38 ~ 40	M8	34.3
	24 ~ 25	M5	8.3	LCS-125B	32 ~ 42	M12	118
LCS-80B	15 ~ 30	M8	34.3	LCS-155B	45 ~ 60	M14	186
	32 ~ 35	M6	13.7				