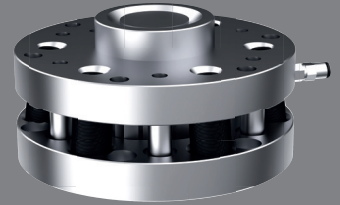


Compliance Device for assembly insertion with lock-up function - LA SERIES

Center Master® compensates for errors (position and/or angular and/or torsional) occurred during an assembly that various precision parts are press or loose fitted into the holes. Thereby, it reduces assembly failure, enhances product quality, and shortens the cycle time in production line.

Advantages

- Significant reduction of assembly failure due to center position errors
- Uniform press-fitting quality
- Wide range of applications
- Increased binding force between parts
- Saves assembly line construction time, reduces equipment investment cost
- Enhanced operation rate
- Longer life cycle of the assembler
- Simple maintenance



SPECIFICATIONS

Model (1)	Compliance center length P	Payload (2)	Compensation range			Elasticity coefficient (3)			Torsional direction	Allowable maximum force	Tube External Diameter	Weight
			Position error	Angle	Torsional angle	Axial direction Compression	Tensile	Horizontal direction				
CCR-LA6-060-060	60 mm	19.6 N	± 2 mm	± 2°	± 6.0°	1180.9 N/mm	143.1 N/mm	11.8 N/mm	3.0 Nm/rad	0.5 Mpa	Ø 4 mm	0.10 kg
	2.36 in	2.0 kgf	± 0.08 in	± 2°	± 6.0°	120.5 kgf/mm	14.6 kgf/mm	1.2 kgf/mm	30.6 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.22 lb
CCR-LA6-070-065	70 mm	19.6 N	± 2 mm	± 2°	± 6.6°	1180.9 N/mm	143.1 N/mm	11.8 N/mm	3.0 Nm/rad	0.5 Mpa	Ø 4 mm	0.10 kg
	2.76 in	2.0 kgf	± 0.08 in	± 2°	± 6.6°	120.5 kgf/mm	14.6 kgf/mm	1.2 kgf/mm	30.6 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.22 lb
CCR-LA6-080-070	80 mm	26.5 N	± 2 mm	± 2°	± 6.2°	1573.9 N/mm	191.1 N/mm	11.8 N/mm	4.2 Nm/rad	0.5 Mpa	Ø 4 mm	0.20 kg
	3.15 in	2.7 kgf	± 0.08 in	± 2°	± 6.2°	160.6 kgf/mm	19.5 kgf/mm	1.2 kgf/mm	42.9 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.44 lb
CCR-LA6-090-078	90 mm	26.5 N	± 2 mm	± 2°	± 5.5°	1573.9 N/mm	191.1 N/mm	11.8 N/mm	4.2 Nm/rad	0.5 Mpa	Ø 4 mm	0.20 kg
	3.54 in	2.7 kgf	± 0.08 in	± 2°	± 5.5°	160.6 kgf/mm	19.5 kgf/mm	1.2 kgf/mm	42.9 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.44 lb
CCR-LA6-100-084	100 mm	37.3 N	± 2 mm	± 2°	± 5.0°	1217.2 N/mm	225.4 N/mm	12.4 N/mm	6.1 Nm/rad	0.5 Mpa	Ø 4 mm	0.20 kg
	3.94 in	3.8 kgf	± 0.08 in	± 2°	± 5.0°	124.2 kgf/mm	23.0 kgf/mm	1.3 kgf/mm	62.2 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.44 lb
CCR-LA6-110-088	110 mm	37.3 N	± 2 mm	± 2°	± 4.6°	1217.2 N/mm	225.4 N/mm	12.4 N/mm	6.1 Nm/rad	0.5 Mpa	Ø 4 mm	0.30 kg
	4.33 in	3.8 kgf	± 0.08 in	± 2°	± 4.6°	124.2 kgf/mm	23.0 kgf/mm	1.3 kgf/mm	62.2 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.66 lb
CCR-LA6-120-095	120 mm	37.8 N	± 2 mm	± 2°	± 5.1°	1217.2 N/mm	225.4 N/mm	12.4 N/mm	7.0 Nm/rad	0.5 Mpa	Ø 4 mm	0.40 kg
	4.72 in	3.9 kgf	± 0.08 in	± 2°	± 5.1°	124.2 kgf/mm	23.0 kgf/mm	1.3 kgf/mm	71.4 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.88 lb
CCR-LA6-130-099	130 mm	37.8 N	± 2 mm	± 2°	± 5.1°	1217.2 N/mm	225.4 N/mm	12.4 N/mm	7.0 Nm/rad	0.5 Mpa	Ø 4 mm	0.40 kg
	5.12 in	3.9 kgf	± 0.08 in	± 2°	± 5.1°	124.2 kgf/mm	23.0 kgf/mm	1.3 kgf/mm	71.4 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.88 lb
CCR-LA6-140-108	140 mm	37.8 N	± 2 mm	± 2°	± 4.8°	1217.2 N/mm	225.4 N/mm	12.4 N/mm	7.0 Nm/rad	0.5 Mpa	Ø 4 mm	0.40 kg
	5.51 in	3.9 kgf	± 0.08 in	± 2°	± 4.8°	124.2 kgf/mm	23.0 kgf/mm	1.3 kgf/mm	71.4 kgf.cm/rad	72.52 psi	Ø 0.16 in	0.88 lb
CCR-LA6-150-130	150 mm	78.0 N	± 2 mm	± 2°	± 4.2°	1840.4 N/mm	407.7 N/mm	15.1 N/mm	7.7 Nm/rad	0.5 Mpa	Ø 4 mm	0.50 kg
	5.91 in	8.0 kgf	± 0.08 in	± 2°	± 4.2°	187.8 kgf/mm	41.6 kgf/mm	1.5 kgf/mm	78.6 kgf.cm/rad	72.52 psi	Ø 0.16 in	1.10 lb

(1) Model: customized order is available

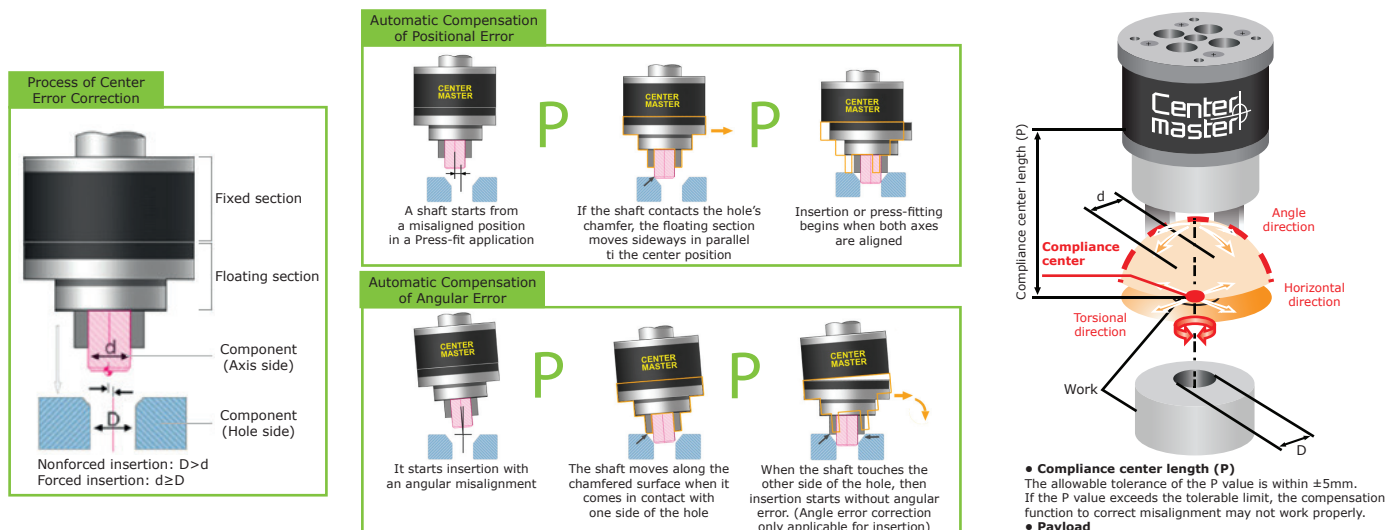
(2) This value can be doubled when Center Master is installed in the vertical direction upside down (reverse vertical).

(3) Elasticity coefficient indicates the elasticity at the compliance center (P) - the average value calculated until the plate runs into the stopper.

* Center Master® compensates up to +/-2 mm of positional error, but this value can vary depending on the chamfer size.

Ambient temperature: 0-55 °C (32-131 °F)

AUTOMATIC CORRECTION OF A POSITION/ANGLE ERROR



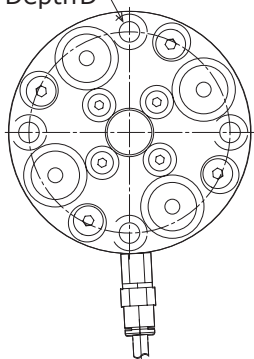
PRODUCT INFORMATION



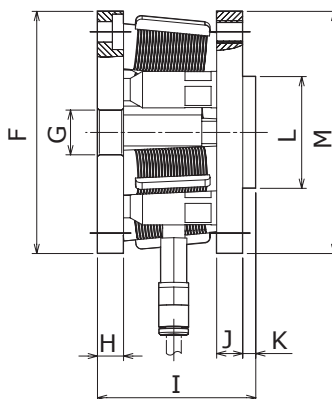
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A-B Drill hole

C counterbore, Depth D
P.C.D. E

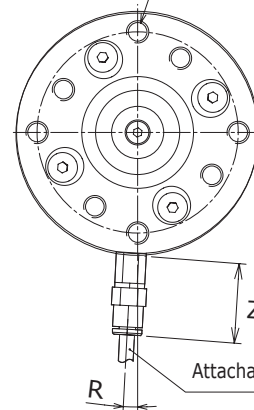


MACHINE SIDE



N-O (through)

P.C.D. P



TOOL SIDE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
CCR-LA6-060-060	3 (0.118)	5.5 (0.216)	9.5 (0.374)	3 (0.118)	48 (1.890)	60 (2.362)	12 ^{+0.02 -0 +0.001 -0} (0.472)	7 (0.276)	43 (1.693)	7 (0.276)	4 (0.157)	26 ^{+0 -0.02 +0 -0.001} (1.024)	60 (2.362)	3 (0.118)	M6	48 (1.890)	70°
CCR-LA6-070-065	4 (0.157)	5.5 (0.216)	9.5 (0.374)	3 (0.118)	54 (2.126)	65 (2.560)	12 ^{+0.02 -0 +0.001 -0} (0.472)	7 (0.276)	42.5 (1.673)	7 (0.276)	3.5 (0.138)	30 ^{+0 -0.02 +0 -0.001} (1.181)	65 (2.560)	4 (0.157)	M6	54 (2.126)	3°
CCR-LA6-080-070	4 (0.157)	5.5 (0.216)	9.5 (0.374)	3 (0.118)	58 (2.283)	70 (2.756)	12 ^{+0.02 -0 +0.001 -0} (0.472)	7 (0.276)	42.5 (1.673)	7 (0.276)	3.5 (0.138)	30 ^{+0 -0.02 +0 -0.001} (1.181)	70 (2.756)	4 (0.157)	M6	58 (2.283)	2°
CCR-LA6-090-078	4 (0.157)	6.6 (0.259)	11 (0.433)	4 (0.157)	65 (2.560)	78 (3.071)	16 ^{+0.02 -0 +0.001 -0} (0.629)	8 (0.315)	46.5 (1.831)	8 (0.315)	3.5 (0.138)	35 ^{+0 -0.02 +0 -0.001} (1.378)	78 (3.071)	4 (0.157)	M8	65 (2.560)	3°
CCR-LA6-100-084	4 (0.157)	6.6 (0.259)	11 (0.433)	4 (0.157)	70 (2.756)	84 (3.307)	16 ^{+0.02 -0 +0.001 -0} (0.629)	8 (0.315)	46.5 (1.831)	8 (0.315)	3.5 (0.138)	35 ^{+0 -0.02 +0 -0.001} (1.378)	84 (3.307)	4 (0.157)	M8	70 (2.756)	3°
CCR-LA6-110-088	4 (0.157)	6.6 (0.259)	11 (0.433)	4 (0.157)	75 (2.953)	88 (3.464)	16 ^{+0.02 -0 +0.001 -0} (0.629)	8 (0.315)	48 (1.890)	8 (0.315)	5 (0.196)	38 ^{+0 -0.02 +0 -0.001} (1.496)	88 (3.464)	4 (0.157)	M8	75 (2.953)	12°
CCR-LA6-120-095	4 (0.157)	6.6 (0.259)	11 (0.433)	4 (0.157)	80 (3.150)	95 (3.740)	16 ^{+0.02 -0 +0.001 -0} (0.629)	8 (0.315)	48 (1.890)	8 (0.315)	5 (0.196)	45 ^{+0 -0.02 +0 -0.001} (1.772)	95 (3.740)	4 (0.157)	M8	80 (3.150)	5°
CCR-LA6-130-099	4 (0.157)	6.6 (0.259)	11 (0.433)	4 (0.157)	85 (3.346)	99 (3.897)	16 ^{+0.02 -0 +0.001 -0} (0.629)	8 (0.315)	48 (1.890)	8 (0.315)	5 (0.196)	45 ^{+0 -0.02 +0 -0.001} (1.772)	99 (3.897)	4 (0.157)	M8	85 (3.346)	5°
CCR-LA6-140-108	4 (0.157)	9 (0.354)	14 (0.551)	5 (0.196)	88 (3.464)	108 (4.252)	16 ^{+0.02 -0 +0.001 -0} (0.629)	10 (0.394)	52 (2.047)	10 (0.394)	5 (0.196)	45 ^{+0 -0.02 +0 -0.001} (1.772)	108 (4.252)	4 (0.157)	M10	88 (3.464)	-5°
CCR-LA6-150-130	6 (0.236)	9 (0.354)	14 (0.551)	5 (0.196)	114 (4.488)	130 (5.118)	16 ^{+0.02 -0 +0.001 -0} (0.629)	18 (0.708)	67 (2.638)	18 (0.708)	14 (0.551)	55 ^{+0 -0.02 +0 -0.001} (2.165)	130 (5.118)	6 (0.236)	M10	114 (4.488)	57.5°

* Dimensions are in millimeters (inches).

** All dimensions are descriptive and subject to variation for technical upgrading. We reserve the right to make variations without prior notification



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