

Technical Data OptiCentric® Bonding

Parameter	OptiCentric® Bonding 2D	OptiCentric® Bonding 5D
Application	Bonding in 2 degrees of freedom, Alignment with three actuators	
Max. diameter of the lens	200 mm	10 mm ... 180 mm ¹⁾
Max. diameter of the cell	10 mm ... 200 mm	20 mm ... 300 mm ¹⁾
Lens weight	< 10 kg	1 kg ¹⁾
Cell weight	< 10 kg	20 kg ¹⁾
Measuring accuracy	x/y < 0.1 µm z No (optional) Cell < 0.2 µm	x/y < 0.1 µm ²⁾ z < ± 1 µm Cell < 0.2 µm
Positioning accuracy	x or y: 2 µm	x,y,z: < 1 µm ²⁾ Θx, Θy < 2 arcsec
Process time	2 min ^{1), 2)}	< 5 min ^{2), 3)} (incl. loading)
Air bearing	Yes	

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Motorized stage	Yes	
Measurement in reflection	Yes	
Visual measurement head	Yes	
OptiSurf integration	Optional	
Dimensions (h x w x d)	2,500 mm x 2,000 mm x 700 mm	2,000 mm x 1,800 mm x 1,000 mm
Weight	300 kg	350 kg

1) depending on lens geometry

1) others on request

2) without UV curing

2) Depending on sample geometry

3) Without UV curing and depending on defined process steps

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Parameter	OptiCentric® 300 UltraPrecision	OptiCentric® 600 UltraPrecision	OptiCentric® 800 UltraPrecision
Measurement accuracy in VIS range ¹⁾	0.1 µm	0.1 µm	0.1 µm
Air bearing	Ø 300 mm	Ø 600 mm	Ø 800 mm
Sample diameter	400 mm	700 mm	900 mm
Sample height	1,000 mm (others on request)	1,500 mm (others on request)	1,500 mm (others on request)
Max. sample weight	450 kg	900 kg	1,200 kg
Measurement head for VIS spectral range ²⁾	Top: electronic ACM 500 mm EFL (Effective Focal Length) Bottom: electronic ACM, 300 mm EFL (Effective Focal Length)	Top: electronic ACM 500 mm EFL (Effective Focal Length) Bottom: electronic ACM, 300 mm EFL (Effective Focal Length)	Top: electronic ACM 500 mm EFL (Effective Focal Length) Bottom: electronic ACM, 300 mm EFL (Effective Focal Length)
Light source ³⁾	Green high power LED	Green high power LED	Green high power LED

1) In stable environment conditions in 100 mm height over the top surface of the air bearing

2) Other on request

3) Manual stage on request

Technical Data OptiCentric® Linear

Parameter	OptiCentric® Linear
Measurement accuracy	< 1 µm
Reference axis	Precise and error-compensated linear axis
Linear stage	Precise and error-compensated linear axis