



MORE LIGHT

## Technical data Opticline C

Model <sup>1)</sup>	C203	C305	C308	C314	C605	C608	C614	C908	C914	C1214
<b>Measuring capacity [mm]</b>										
Max. diameter	36	50	80	140	50	80	140	80	140	140
Length <sup>2)</sup>	250	300	300	300	600	600	600	900	900	1200
<b>Workpiece capacity</b>										
Diameter [mm]	150	150			150			150		150
Length <sup>2)</sup> [mm]	250	300			600			900		1200
Workpiece weight <sup>3)</sup> [N]	100	200			200/300/600 <sup>11)</sup>			200/300/600 <sup>11)</sup>		200/300/600 <sup>11)</sup>
<b>Resolution</b>										
Diameter, length	0.1 µm									
Rotation	0.0006°									
<b>Accuracy / MPE<sup>4)</sup></b>										
Diameter	(1.0+D[mm]/200) µm									
Length	(2.6+L[mm]/200) µm									
<b>Repeatability (4s)<sup>5)</sup></b>										
Diameter	0.3 µm									
Length	1.2 µm									
<b>Speed</b>										
Measuring	automatically optimized: 10 – 80 mm/s									
Measuring rotation	1 rps									
Positioning	200 mm/s									
Positioning rotation	1 rps									
Measuring cycle	dependent on type and number of test characteristics – typically 3 ... 30 s									
<b>Dimensions [mm]</b>										
Measuring system [W x D x H]	700 x 840 x 1055				700 x 840 x 1355			700 x 840 x 1655		880 x 840 x 2070
Measuring system with T3D [W x D x H]	810 x 840 x 1055				810 x 840 x 1355			810 x 840 x 1655		905 x 840 x 2070
<b>Weight [kg]</b>										
Measuring system <sup>6)</sup>	250 – 290				300 – 340			320 – 360		500 – 540
<b>Clamping tool interfaces</b>										
Morse taper headstock	MT2									
Morse taper tailstock	MT2									
Clamping stroke tailstock	manual, quick adjustment with holding function, 20 mm									
<b>Power supply</b>										
Connection	AC-PH, N, PE									
Voltage	200 – 240/100 – 120 V (127 V on demand)									
Power frequency	50/60 Hz									
Max. consumption	1.5 kVA									
Fuse	16 A									
<b>Optional tactile probing system TSP<sup>4)7)8)</sup></b>										
Accuracy/MPEE1 axial run-out	–	1.5 µm			1.5 µm			1.5 µm		1.5 µm
Accuracy/MPEE1 length <sup>9)</sup>	–	(3.6 + L [mm]/200) µm			(3.6 + L [mm]/200) µm			(3.6 + L [mm]/200) µm		(3.6 + L [mm]/200) µm
Repeatability 4s length (n=10)	–	(1.6+L[mm]/500) µm			(1.6+L[mm]/500) µm			(1.6+L[mm]/500) µm		(1.6+L[mm]/500) µm
Max. length <sup>10)</sup>	–	280 mm	280 mm	250 mm	580 mm	580 mm	550 mm	880 mm	850 mm	1150 mm
<b>Optional tactile probing system T3D<sup>4)7)8)</sup></b>										
Accuracy/MPE length	–	(3.6+D [mm]/200) µm			–	(3.6+D [mm]/200) µm		(3.6+D [mm]/200) µm		–
Accuracy/MPE diameter	–	(3.7+L [mm]/200) µm			–	(3.7+L [mm]/200) µm		(3.7+L [mm]/200) µm		–
Repeatability 4s length	–	1.5 µm			–	1.5 µm		1.5 µm		–
Repeatability 4s diameter	–	1.2 µm			–	1.2 µm		1.2 µm		–
Max. length <sup>10)</sup>	–	250 mm			–	550 mm		850 mm		–

Footnotes 1) to 11) on the back.

- <sup>1)</sup> Environmental conditions: not chemically aggressive, not explosive, not radioactive. Temperature range from +10° C to +40° C, max. relative humidity 85 % without condensation. Dust aerosol values: according to TRGS 900 (Industrial safety regulations and technical rules for workplace environment and hazardous substances).
- <sup>2)</sup> Intermediate tips from the standard scope of delivery. Length may be reduced depending on the clamping device.
- <sup>3)</sup> Max. mass moment of inertia: 0.04 kg/m<sup>2</sup>. Improper workpiece positioning may lead to damage.
- <sup>4)</sup> Maximum permissible error according to EN ISO 10360 / VDI/VDE 2617, relating to DAkkS reference standard (uncertainty D: 0.3 µm and L: 0.4 µm). Environmental conditions in accordance with VDI/VDE 2617, 18 – 22° C, class 3 (gradient 1 K/h, 2 K/24h, 0.5 k/m). Mechanical ambient conditions in accordance with EN 60721-3-3 class 3M1.
- <sup>5)</sup> Typical range over 25 repeat measurements on ground part surfaces. In accordance with VIM, International Dictionary of Metrology.
- <sup>6)</sup> Weight depends on configuration in terms of variants and options.
- <sup>7)</sup> Verification with and relating to standard(s) from Jenoptik.
- <sup>8)</sup> Probing systems in conjunction with optional high-precision headstock HpSS (axial and radial run-out accuracy 1 µm).
- <sup>9)</sup> Distance between end faces.
- <sup>10)</sup> Limitation of the measuring capacity possible when using a tactile probe system (depending on the clamping devices, the probe arm geometry and the probe element used). Information valid for standard scope of delivery. Further limitations of the measuring capacity possible when using alternative solutions for clamping devices or probe arms.
- <sup>11)</sup> Weight 300 N and 600 N available with high-precision headstock only (option HpSS). 600 N when workpiece positioning without knocks or strong forces.