JENOPTIK

MORE LIGHT

Technical data Opticline C1000

Model[1]	C1014	C1023	C1023-75AE
Measuring capacity [mm]			
Max. diameter	140	230	230
Length[2]	1000	1000	1000
Workpiece capacity			
Diameter [mm]	300		300
Length[2] [mm]	1000		1000
Workpiece weight[3] [N]	400		750
Resolution			
Diameter, length	0.1 µm		0.1 µm
Rotation	0.0018°		0.0005°
Accuracy / MPE[4]			
Diameter	(1.7+D[mm]/200) µm		
Length	(4.6+L[mm]/200) µm		
Repeatability (4s)[5]			
Diameter	0.5 µm		
Length	3 µm		
Speed			
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 quantity of test characteristics – typically 3 ... 30 s		
Dimensions [mm]			
Measuring system [W x D x H]	1785 x 1700 x 2650		
Weight [kg]			
Measuring system[6]	2200		
Clamping tool interfaces			
Morse taper headstock	MT3		MT4
Morse taper tailstock	MT3		MT3
Clamping stroke tailstock	manual, 40 mm		pneumatic, 40 mm
Power supply			
Connection	AC-PH, N, PE		3PH, PE
Voltage	200 – 240/100 – 120 V (127 V on demand)		400/480 V
Power frequency	50/60 Hz		50/60 Hz
Max. consumption	2 kVA		3 kVA
Fuse	16 A		16 A
Optional tactile probing system[4][7][8]	BTS		BTS
Precision axial run-out	3 µm		1.5 µm
Precision length[9]	(7.6 + L [mm]/100) µm		(7.6 + L [mm]/100) µm

1) 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).

2) Intermediate tips from the standard scope of delivery. Length may be reduced depending on the clamping device.

3) Workpiece positioning without knocks or strong lateral forces. Max. mass moment of inertia: 0.04 kg/m². Improper workpiece positioning may damage the headstock or bearings.

4) Maximum permissible error following EN ISO 10360 / VDI/VDE 2617, relating to DAkkS reference standard. Specifications plus uncertainty of calibration masters Ucal 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.

5) Typical range over 25 repeat measurements on ground part surfaces. In accordance with VIM, International Dictionary of Metrology.

6) Weight depends on configuration in terms of variants and options.

7) Verification with and relating to standard(s) from Jenoptik.

8) 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.

9) Distance between end faces.

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