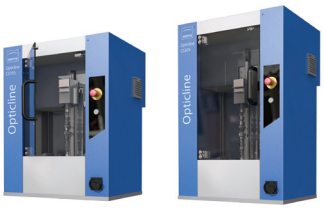
Technical data
Opticline CS series



Opticline[1]	CS155	CS305	CS308
Measuring capacity [mm]			
Diameter	50	50	80
Length[2]	150	300	300
Workpiece capacity			
Diameter [mm]	90	90	90
Length[2] [mm]	150	300	300
Workpiece weight [N][3]	100	150	150
Resolution			
Diameter, length	≤0.2 µm, high precision scales, CCD high speed camera		
Rotation	0.0018°		
Temperature compensation			
Measuring system	included, multiple temperature probes with intelligent compensation system		
Workpiece	optional (manual only)		
Maximum permissible error[4] MPE_{E1}			
Diameter	(2.0+D[mm]/100) µm		
Length	(5.0+L[mm]/100) µm		
Repeatability (4s, n=25)[5]			
Diameter	0.5 µm		
Length	3.0 µm		
Speed			
Measuring	automatically optimized: 10 – 80 mm/s		
Measuring rotation	1 rps		
Positioning	200 mm/s		
Positioning rotation	1 rps		
Measuring cycle	depending on type and quantity of test features, typical 3...30 s		
Dimensions [mm]			
Measuring system [WxDxH]	690 x 570 x 920	690 x 570 x 1070	690 x 570 x 1070
Weight (depending on setup)			
Measuring system [kg]	110	120	125
Clamping tool interfaces			
Morse taper headstock	MT2		
Morse taper tailstock	MT2		
Clamping stroke tailstock	manual, 20 mm		
Measurement computer			
Hardware	measurement and evaluation computer, external		
Operating system	Windows 10 64Bit		
Power supply			
Connection	AC – PH, N, PE		
Voltage	200 – 240/100 – 120 V (127 V on request)		
Power frequency | consumption	50/60 Hz | 1.5 kVA		
Fuse	16 A		
Emission sound pressure level	≤70 dB(A)		

1) Environmental conditions: not chemically aggressive, not explosive and not radioactive. Temperature range from +10° C to +40° C, max. relative humidity 85 % without condensation. Dust aerosol values according to TRGS 900.
2) Between tips from the standard scope of delivery. Length may be reduced depending on the clamping devices.
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) MPE according to EN ISO 10360 / VDI/VDE 2617, verified with calibrated masters. Environmental conditions according to VDI/VDE 2627 at +18° C to +22° C, class 3 conditions (gradient 1 K/h, 2K/24h, 0.5 K/m). Mechanical ambient conditions according to EN 60721-3-3 class 3M1.
5) Typical range over 25 repeat measurements on ground workpiece surfaces. In accordance with VIM, International Dictionary of Metrology.

JENOPTIK Industrial Metrology Germany GmbH
Alte Tuttlinger Strasse 20 | 78056 Villingen-Schwenningen
Germany | Phone +49 7720 602-0 | Fax +49 7720 602-444
metrology@jenoptik.com | www.jenoptik.com