



MORE LIGHT

Technical data Opticline CS

Model ¹⁾	CS155	CS305	CS308	CS314	CS608	CS614
Measuring capacity [mm]						
Max. diameter	50	50	80	140	80	140
Length ²⁾	150	300	300	300	600	600
Workpiece capacity						
Diameter [mm]	90	90	90	150	90	150
Length ²⁾ [mm]	150	300	300	300	600	600
Workpiece weight ³⁾ [N]	100	150	150	200	200	200
Resolution						
Diameter, length	≤0.2 µm					
Rotation	0.0018°					
Accuracy / MPE⁴⁾						
Diameter	(2.0+D[mm]/100) µm					
Length	(5.0+L[mm]/100) µm					
Repeatability (4s)⁵⁾						
Diameter	0.5 µm					
Length	3.0 µm					
Speed						
Measuring	automatically optimized: 10 – 80 mm/s					
Measuring rotation	1 rps					
Positioning	150 mm/s					
Positioning rotation	1 rps					
Measuring cycle	dependent on type and number of test characteristics – typically 3 ... 30 s					
Dimensions [mm]						
Measuring system [BxTxH]	690 x 570 x 920	690 x 570 x 1070	690 x 570 x 1070	700 x 750 x 1190	700 x 750 x 1490	700 x 750 x 1490
Weight [kg]						
Measuring system ⁶⁾	110	160	165	230	250	265
Clamping tool interfaces						
Morse taper headstock	MT2					
Morse taper tailstock	MT2					
Clamping stroke tailstock	manual, 20 mm					
Power supply						
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					
Option tactile probing system						
TSP	-					
BTS	-					
T3D	-					

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 10360-7 / 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.