JENOPTIK

MORE LIGHT

Technical data Opticline CA, AMV and WMS

Model[1]	CA305	CA310	CA314	CA605	CA610	CA614	CA618	CA614-AE	CA618-AE	VMS305	AMV923H	AMV923V	WMS1023	WMS1332
Measuring capacity [mm]														
Max. diameter	50	100	140	50	100	140	180	140	180	50	230	230	320	320
Length[2]	300	300	300	600	600	600	580	600	580	300	805	830	1000	1300
Workpiece capacity														
Diameter [mm]	149			149			199	149	199	150	270	270	320	320
Length[2] [mm]	300			600			600	600	600	250	805	830	1000	1300
Workpiece weight[3] [N]	200			200			200	200	200	50	300	300	750	1200
Resolution														
Diameter	0.1 µm							0.1 µm		0.1 µm	0.1 µm		0.1 µm	
Length	0.1 µm							0.1 µm		0.1 µm	0.1 µm		0.1 µm	
Rotation	0.0018°							0.0005°		0.018°	0.0018°		0.0005°	
Accuracy / MPE[4]														
Diameter	(1.7+D[mm]/100) µm													
Length	(4.6+L[mm]/100) 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 number of test characteristics – typically 3 … 30 s													
Dimensions [mm]														
Measuring system [B x T x H]	1900 x 1600 x 2350 (including housing and switching cabinet)									780 x 650 x 912	2760 x 1000 x 2100[7]	1250 x 1250 x 2265[7]	1500 x 1500 x 2900[7]	1500 x 1500 x 3200[7]
Weight [kg]														
Measuring system[6]	540	550	560	560	570	580	640	580	640	270	2000		3000	
Clamping tool interfaces														
Morse taper headstock	MK2									special	MK3		MK4	
Morse taper tailstock	MK2										MK3		MK3	
Clamping stroke tailstock	stroke variable over complete clamping range[8]										analog CA		analog CA	
Power supply														
Connection	AC–PH, N, PE									3PH, PE	3PH, PE		3PH, PE	
Voltage	200-240/100-120 V									400/480 V	400/480 V		400/480 V	
Power frequency	50/60 Hz									50/60 Hz	50/60 Hz		50/60 Hz	
Max. consumption	1.5 kVA									2 kVA	4 kVA		3 kVA	
Fuse	16 A									16 A	16 A		16 A	
Option tactile probing system														
TSP	–	yes		–	yes					–	–		–	
BTS	–	–		–	–					–	yes		yes	
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. When using an optional tactile probing system, the length (measuring/workpiece capacity) may be reduced depending on type.

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 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.

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) Rough guideline dimensions excluding switching cabinet. Exact dimensions depend on the project.

8) Motorized positioning and clamping. Optional: tailstock with motorized positioning and manual clamping. Measuring stroke 20 mm.

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