



CRYSTA-Apex V121210

Item number: 191-481

Images



Accuracy				
Probe configuration	Probe	SP50M	MPP110Q ¹⁾	SPR1 ¹⁾
	Module	DMCS-1	—	—
	Stroke (mm)	ø4×50	ø4×18	ø4×10
Length measurement error (µm [mm])	Temperature environment 1 ¹⁾	2.3 ± 3L/1000	—	2.5 ± 3L/1000
	Temperature environment 2 ¹⁾	2.3 ± 3L/1000	—	2.5 ± 3L/1000
Length measurement error (µm [mm])	Temperature environment 1 ¹⁾	2.3 ± 3L/1000	—	3.0 ± 3L/1000
	Temperature environment 2 ¹⁾	2.3 ± 3L/1000	—	3.0 ± 3L/1000
Repeatability (µm [mm])		1.9	—	2.0
Scanning mode form error on sphere (µm [mm])		2.3	2.3	2.5
Scanning mode line (µm [mm])		50	50	50
Single stylus form error (µm [mm])		2.0	—	2.2

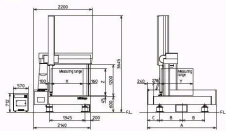
Testing and evaluation methods for form, function and force are as per ISO 10360-2:2009 (S 8 7440-2, 739 3).
Setting and evaluation methods for force are as per ISO 10360-5:2020 (S 8 7440-5, 7440-5:2020).
L = Measuring length (mm).
1) Available by custom order only. *2 See below table for temperature environments 1 and 2.

Temperature environment		Temperature environment 1	Temperature environment 2
Accuracy guaranteed conditions	Temperature range	18 to 25 °C	18 to 25 °C
	Rate of change	2 °C per hour	2 °C per hour
	Gradient	1 °C per meter	1 °C per meter

External dimensions/Measuring table clamping hole arrangement

CRYSTA-Apex V1200 Series

Unit: mm



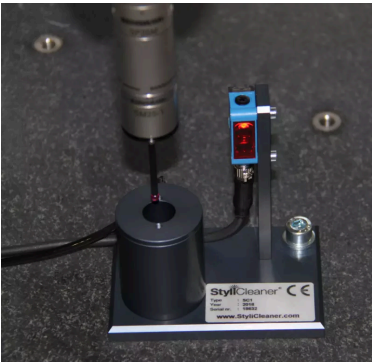
CRYSTA-Apex V121210

CRYSTA-Apex V122010

CRYSTA-Apex V123010

Model	CRYSTA-Apex V121210	CRYSTA-Apex V122010	CRYSTA-Apex V123010
X	1200	1200	3000
Y	1000	1000	1000
A	2000	1500	6000
B	1000	1000	1000
C	450	375	300

1) Not shown in this figure.
2) Not shown in this figure.



Description

The CRYSTA-Apex V1200, 1600 & 2000 series offers you up to 12,8m³ measuring volume and still keeps an excellent 4,5 µm accuracy or better.

This series is developed for supporting quality evaluation of volumetric parts. This high performance, cost effective coordinate measuring machine, designed and constructed according to Mitutoyo's extensive experience in CNC CMM technology.

Ready for touch trigger probe, scanning probe, optical probe and laser scanner probe.

Main benefits:

- Proven lightweight bridge-type construction with high rigidity air-bearings on every axis
- High accuracy, high speed and high acceleration
- Temperature sensors for compensation of machine and workpiece from 16° to 24°C and monitoring of the environmental temperature.
- ABS linear scales provide high environmental resistance and saves time at start-up as homing is not necessary
- UC480 controller supporting Multi-sensor and SMS functionality (Smart Measuring System)

Specification

Model:	CRYSTA-Apex V121210
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Range:	1200 x 1200 x 1000 mm
Accuracy:	E0, MPE from: (2,3+0,3L/100) µm
Max. drive speed:	6
Model:	CRYSTA-Apex V121210
Loading Weight:	2,000 kg
Loading Height:	1,000 mm
Digital step:	0.1 µm