



CRYSTA-Apex V122010

Item number: 191-486

Images



Accuracy

Probe	SF50M	MPF110Q ¹⁾	SPR1 ¹⁾	TP100
Probe configuration	Module	—	—	STANDARD-FORCE
Probe configuration	Module	—	—	—
Probe configuration	Module	—	—	—
Length measurement error (mm)	Temperature environment 1 ¹⁾	2.3 + 3L/1000	2.3 + 3L/1000	2.3 + 3L/1000
Length measurement error (mm)	Temperature environment 2 ¹⁾	2.3 + 3L/1000	2.3 + 3L/1000	2.3 + 3L/1000
Length measurement error (mm)	Temperature environment 1 ¹⁾	2.3 + 3L/1000	2.3 + 3L/1000	2.3 + 3L/1000
Length measurement error (mm)	Temperature environment 2 ¹⁾	2.3 + 3L/1000	2.3 + 3L/1000	2.3 + 3L/1000
Repeatability (mm)	—	1.9	—	2.0
Scanning mode form error on sphere (mm)	2.3	2.3	2.5	—
Scanning mode form error on sphere (mm)	50	80	90	—
Scanning mode form error on sphere (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, 701 3).

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1. Available by custom order only. *2. See below table for temperature environments 1 and 2.

Temperature environment

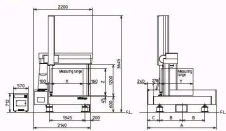
Temperature range	Temperature environment 1	Temperature environment 2
Temperature range	18 to 25 °C	18 to 25 °C
Rate of change	2 °C per hour	2 °C per hour
Gradient	1 °C per meter	1 °C per meter

Both vertically and horizontally.

External dimensions/Measuring table clamping hole arrangement

CRYSTA-Apex V1200 Series

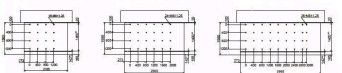
Unit: mm



CRYSTA-Apex V121210

CRYSTA-Apex V122010

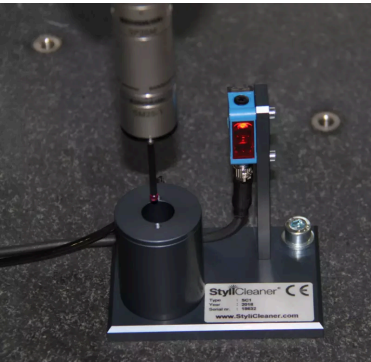
CRYSTA-Apex V123010



Measuring table clamping hole arrangement

Model	CRYSTA-Apex V121210	CRYSTA-Apex V122010	CRYSTA-Apex V123010
X	1200	1200	3000
Y	1000	1000	1000
A	2000	1000	6000
B	1000	1000	1000
C	400	350	350

1. Measuring table clamping hole arrangement. 2. Measuring table clamping hole arrangement.



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 V122010
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Range:	1200 x 2000 x 1000 mm
Accuracy:	E0, MPE from: V1200 (2,3+3L/1000) µm E0, MPE from: V1600 & V2000 (3,3+4,5L/1000) µm
Max. drive speed:	693 mm/s (3-axis)
Model:	CRYSTA-Apex V122010
Loading Weight:	2,500 kg
Loading Height:	1,000 mm
Digital step:	0.1 µm