

CRYSTA-PLUS M443 / 500 / 700 Series

Series 196 - Manual-floating type CMM

Manual floating type CMMs developed in the quest for high accuracy. The Crysta-Plus M is suited to a wide range of applications from simple dimensional to complex form measurement.

FEATURES :

- Smooth operation due to high-precision air bearings and lightweight moving members.
- Continuous fine feed over the entire measuring range.
- A temperature compensation system is available as an option.



Crysta-Plus M574



Crysta-Plus M7106

Model	Crysta-Plus M443	Crysta-Plus M544	Crysta-Plus M574	Crysta-Plus M776	Crysta-Plus M7106
No.	196-683 196-684D	196-591 196-592	196-596 196-597	196-342	196-352
Range X x Y x Z axis	400 x 400 x 300 mm	500 x 400 x 400 mm	500 x 700 x 400 mm	700 x 700 x 600 mm	700 x 1000 x 600 mm
Accuracy ⁽¹⁾	MPE _E : ±(3,0+4,0L/ 1000)µm MPE _P : 4,0 µm	MPE _E : ±(3,0+4,0L/ 1000)µm MPE _P : 4,0 µm	MPE _E : ±(3,0+4,0L/ 1000)µm MPE _P : 4,0 µm	MPE _E : ±(4,5+4,5L/ 1000)µm MPE _P : 5,0 µm	MPE _E : ±(4,5+4,5L/ 1000)µm MPE _P : 5,0 µm
Work table size	624 x 805 mm	764 x 875 mm	764 x 1175 mm	900 x 1440 mm	900 x 1740 mm
Workpiece	Max. height : 480 mm Max. loading : 180 kg	Max. height : 595 mm Max. loading : 180 kg	Max. height : 595 mm Max. loading : 180 kg	Max. height : 800 mm Max. loading : 500 kg	Max. height : 800 mm Max. loading : 800 kg
Mass (main unit)	360 kg	450 kg	575 kg	1451 kg	1697 kg

196-684D, 196-592 and 196-597 : models with temperature compensation

⁽¹⁾ According to ISO 10360-2 methods when using the TP20 probe system. L= measured length (mm).

DATA PROCESSING OPTIONS:



MCOSMOS



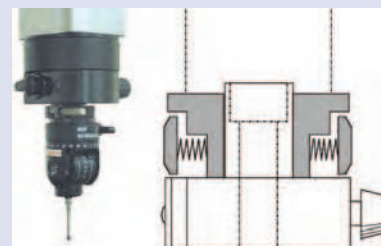
QM-DATA

Specifications

Digital step	0,5 µm
Work table material	Black granite
Work table tapped insert	M8 x 1.25 mm
Scales	High accuracy linear encoder
Guide system	Air bearing
Axis clamp	One-touch air clamp (screw clamp : M776, M7106)
Fine feed	Entire range



One-touch air clamp and fine feed for rapid and easy positioning



Ergonomically designed guide grip on Z-axis for reliable measurement (only for Crysta-Plus M776 and M7106)

Accuracy is specified for the following environmental conditions for the CMM

Temperature range		19°C - 21°C	15°C - 30°C*
Temperature change	Per hour	-	2.0 K
	Per 24 hours	-	5.0 K
Temperature gradient	Vertical	0.5 K/m	1.0 K/m
	Horizontal	0.5 K/m	1.0 K/m

*The values shown in bold in the table above apply when using the temperature compensation system (optional):



Crysta-Plus M brochure on request