

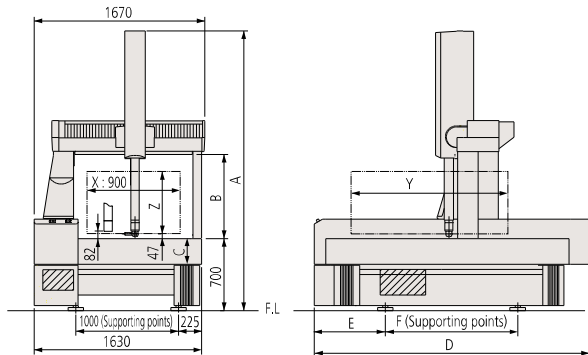
CRYSTA-Apex S 900 Series



NOTE: PC system & workstation provided are not as shown

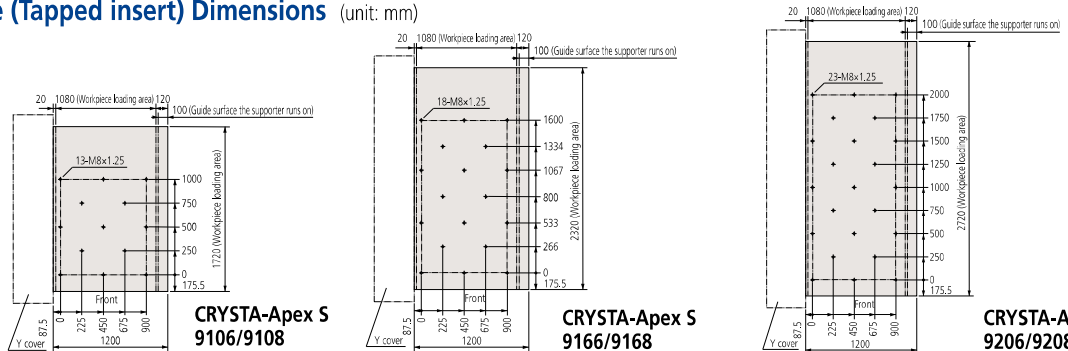
Note: This machine incorporates a main unit Startup system (relocation detection system), which disables operation when an unexpected vibration is applied or the machine is relocated. Be sure to contact your nearest Mitutoyo Sales Office prior to relocating this machine after initial installation.

CRYSTA-Apex S 900 Series Dimensions unit: inch (mm)



Model No.	A	B	C	D	E	F	Y	Z
CRYSTA-Apex S9106	107.5" (2730)	32" (800)	10" (250)	76.8" (1950)	18.5" (470)	39.4" (1000)	39.6" (1005)	23.8" (605)
CRYSTA-Apex S9166			11.8" (300)	106" (2690)	27.6" (700)	52" (1320)	63.2" (1605)	
CRYSTA-Apex S9206			11.8" (300)	121.7" (3090)	32" (800)	59.1" (1500)	79" (2005)	
CRYSTA-Apex S9108	123.3" (3130)	39.4" (1000)	10" (250)	76.8" (1950)	18.5" (470)	39.4" (1000)	39.6" (1005)	32.1" (805)
CRYSTA-Apex S9168			10" (250)	106" (2690)	27.6" (700)	52" (1320)	63.2" (1605)	
CRYSTA-Apex S9208			11.8" (300)	121.7" (3090)	32" (800)	59.1" (1500)	79" (2005)	

Measuring table (Tapped insert) Dimensions (unit: mm)



Model No.		CRYSTA-Apex S 9106 / [9108]	CRYSTA-Apex S 9166 / [9168]	CRYSTA-Apex S 9206 / [9208]
Measuring range	X axis	35.43" (900mm)		
	Y axis	39.36" (1000mm)	62.99" (1600mm)	78.3" (2000mm)
	Z axis	23.62" (600mm) / [31.49" (800mm)]		
Resolution	0.000004" (0.0001mm)			
Guide method	Air bearings on each axis			
Drive speed	8 - 300mm/s (CNC mode), max. speed: 519mm/s 0 - 80mm/s (J/S Mode: High Speed) 0 - 3mm/s (J/S Mode: Low Speed) 0.05mm/s (J/S Mode: Fine Speed)			
Max. measuring speed	8mm/s (3mm/s for Type Z800)			
Max. drive acceleration	2309mm/s ² [1732mm/s ²] (3D)			
Workpiece	Maximum height	31.49" (800mm) / [39.36" (1000mm)]		
	Maximum mass	2,645lbs. (1200kg)	3,306lbs. (1500kg)	3,968lbs. (1800kg)
Mass (including the control device and installation platform)		4,919lbs. (2231kg)	6,322lbs. (2868kg)	8,625lbs. (3912kg)
		[4,985lbs. (2261kg)]	[6,389lbs. (2898kg)]	[8,691lbs. (3942kg)]
Air supply	Pressure	58 PSI (0.4MPa)		
	Consumption	2.11CFM (60L/min) under normal conditions		
	Air source	3.53CFM (100L/min)		

CRYSTA-Apex S 900 Series Accuracy ISO 10360-2 unit: μm

Probe used	Maximum permissible error (E _{0,MPE}) ISO 10360-2:2009	Maximum permissible probing error (P _{FTU,MPE}) ISO 10360-5:2010
SP25M (Stylus: ø4 X 50mm)	1.7+3 L/1000 (temperature environment 1) 1.7+4 L/1000 (temperature environment 2)	1.7
TP200 (Stylus: ø4 X 10mm)	1.9+3 L/1000 (temperature environment 1) 1.9+4 L/1000 (temperature environment 2)	1.9
TP20 (Stylus: ø4 X 10mm)	2.2+3 L/1000 (temperature environment 1) 2.2+4 L/1000 (temperature environment 2)	2.2

* L = Selected measuring length (in mm). Table on opposite page describes temperature environments 1 and 2.

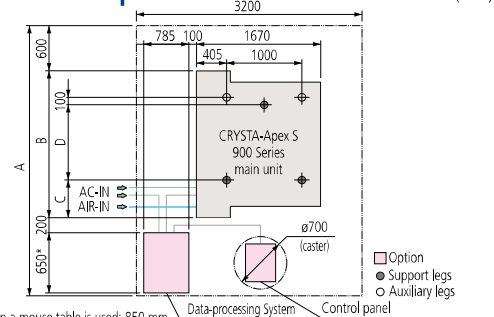
CRYSTA-Apex S 900 Series Accuracy ISO 10360-4 unit: μm

Probe used	Max. permissible scanning error (MPE _{THP})
SP25M (Stylus: ø4 X 50 mm)	2.3μm (50s)

CRYSTA-Apex S 900 Series Installation Temperature

Limits within which accuracy is guaranteed	Temperature Range	Temperature environment 1	Temperature environment 2	
	Rate of change	20±2 °C (64.4-71.6 °F)	2 °C per hour or less	2 °C per hour or less
	Gradient	2 °C in 24 hours or less	5 °C in 24 hours or less	1 °C or less per meter

Installation floor space unit: inch (mm)



* When a mouse table is used: 850 mm
When a 2-monitor dedicated rack is used: 1,000 mm

Model No.	A	B	C	D
CRYSTA-Apex S9106/9108	142" (3600)	76.8" (1950)	18.5" (470)	39.4" (1000)
CRYSTA-Apex S9166/9168	169" (4300)	106" (2690)	27.6" (700)	52" (1320)
CRYSTA-Apex S9206/9208	185" (4700)	121.7" (3090)	32" (800)	59.1" (1500)

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