

Technical Specifications Formtracer SV-C 3100

Measuring instrument		SV-C 3100 S4	SV-C 3100 H4	SV-C 3100 W4	SV-C 3100 S8	SV-C 3100 H8	SV-C 3100 W8
Contour measurement							
Measuring range	X axis	100 mm			200 mm		
	Z1 axis	50 mm			50 mm		
Linear displacement accuracy	X axis	(1+0,01L) μm			(1+0,02L) μm		
	Z1 axis	(2,0+ 4H /100) μm			(2,0+ 4H /100) μm		
Traverse linearity	X axis	0,8 μm / 100 mm			2 μm / 200 mm		
Resolution	X axis	0,05 μm			0,05 μm		
	Z1 axis	0,2 μm			0,2 μm		
	Z2 axis	1,0 μm			1,0 μm		
Measuring system	X axis	Linear scale			Linear scale		
	Z1 axis	Linear scale			Linear scale		
	Z2 axis	ABS scale			ABS scale		
Standard stylus	Carbide, tip radius 25 μm , tip angle 12°			Carbide, tip radius 25 μm , tip angle 12°			
Measuring speed	0,02 mm/s to 5,0 mm/s			0,02 mm/s to 5,0 mm/s			
Drive speed	X axis	up to 80 mm/s			up to 80 mm/s		
	Z2 axis	up to 20 mm/s			up to 20 mm/s		
Measuring force	10 to 30 mN			10 to 30 mN			
Data transfer	USB			USB			
Surface measurement							
Measuring range	X axis	100 mm			200 mm		
Measuring range / Resolution	Z axis	800 μm / 0,01 μm 80 μm / 0,001 μm 8 μm / 0,0001 μm			800 μm / 0,01 μm 80 μm / 0,001 μm 8 μm / 0,0001 μm		
Traverse linearity	X axis	0,15 μm / 100 mm			0,5 μm / 200 mm		
Measuring system	X axis	Linear scale			Linear scale		
	Z axis	Inductive			Inductive		
Standard stylus	angle 60°, radius 2 μm			angle 60°, radius 2 μm			
Measuring speed	0,02 mm/s to 5,0 mm/s			0,02 mm/s to 5,0 mm/s			
Drive speed	X axis	up to 80 mm/s			up to 80 mm/s		
	Z2 axis	up to 20 mm/s			up to 20 mm/s		
Measuring force	0,75 mN			0,75 mN			
Skid	radius 40mm			radius 40mm			
Stand	Standard motorized			Standard motorized			
Base	Granite			Granite			
Angle adjustment feed	$\pm 45^\circ$			$\pm 45^\circ$			
Column moving range	300 mm	500 mm		300 mm	500 mm		
Dimensions (B x T)	[mm]	600 x 450	600 x 450	1000 x 450	600 x 450	600 x 450	1000 x 450
Controller mass	14 Kg			14Kg			
Main unit mass	140 Kg	150 Kg	220 Kg	145 Kg	155 Kg	220 Kg	

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