



Linear Series

CONTOURECORD 1710DX3/SD3

High-Accuracy Contour Detector

Laser Optical Diffraction Scale Employed

Space-Saving DX model Allows Efficient Use of a Measuring Room



CONTOURECORD 1710DX3



CONTOURECORD 1710SD3

Printer is optional

High-Accuracy Contour Detector With Laser Optical Diffraction Scale

- Indication accuracy of detector: $\pm(1.8+|2H|/100) \mu\text{m}$
- Resolution: $0.1 \mu\text{m}$ (full range)
- This detector allows high-accuracy contour measurements and evaluations of precision processing components.

High-Speed Measurement Dramatically Enhances Productivity

- Contour Measurement: 20 mm/s max.
- Moving Speed: 60 mm/s max.
- Measurement Efficiency: 10 times better (compared to previous models)

Linear Motor Drive **patented**

- A linear motor drive ensures high accuracy and high-speed movement.
- Low vibration ensures more stable measurement at high magnifications.

*See page 8 for the details of the linear drive.

Specifications

Model		CONTOURECORD 1710DX3/SD3								
		-12	-13	-14	-15	-22	-23	-24	-25	
Measuring range	Z-axis (vertical)	50 mm								
	X-axis (horizontal)	100 mm				200 mm				
Accuracy	Detector	Z-axis indication accuracy (vertical)	$\pm(1.8+ 2H /100) \mu\text{m}$ (H: Measuring height mm)							
		Resolution	0.1 μm /Full range							
	Tracing driver	X-axis Indication accuracy (horizontal)	$\pm(1.0+L/100) \mu\text{m}$ (L: Measuring length (mm)), Measuring pitch: 0.1 μm min.							
		Resolution	0.016 μm							
Straightness accuracy		1 $\mu\text{m}/100 \text{ mm}$				2 $\mu\text{m}/200 \text{ mm}$				
Sensing method	Z-axis: Detector (vertical)	Laser optical diffraction scale								
	X-axis: Tracing driver (horizontal)	Linear scale								
Speed	Column up/down speed (Z-axis)	10 mm/s								
	Measuring speed (X-axis)	0.03 mm/s to 20 mm/s								
	Moving speed (X-axis)	60 mm/s max.								
Detector	Stylus, measuring force	Replaceable, 10 mN to 30 mN, and stepless(retract) function								
	Stylus radius (stylus material)	25 μmR (24° conical carbide), one piece equipped as standard								
	Measuring direction, position	Pull/push and Up/down directions, Max. following angle: 77°								
Operation range	Tracing driver stroke	100 mm				200 mm				
	Column up/down stroke	226 mm	426 mm	626 mm	226 mm	426 mm	626 mm			
Granite table	Dimensions	600 x 317 mm		1000 x 450 mm		600 x 317 mm		1000 x 450 mm		
	Permissible loading weight*	37 kg	28 kg	93 kg	84 kg	31 kg	22 kg	87 kg	78 kg	
Other	Installation dimensions*	Width	1250 mm		1650 mm		1250 mm		1650 mm	
		Depth	800 mm		900 mm		800 mm		900 mm	
		Height	1480 mm	1680 mm	1880 mm	1480 mm	1680 mm	1880 mm		
	Weight*	225 kg	235 kg	420 kg	430 kg	230 kg	240 kg	425 kg	435 kg	
Power supply, frequency, consumption		Single phase AC 100 V $\pm 10\%$ (grounding required), 50 Hz/60 Hz, 670 VA								

* Dimensions and weight are for the DX type.