

Modular Endurance Testing System Jig for Rolling Test for Planar Object TCD111L + DX-FR-M

Roll up test for planar objects including Flexible Displays, OLED devices, Barrier Film, Flat Cables, Flexible Printed Circuits, Wearables & automobile applications

The test object is secured to a roller at one end with adhesive tape. The other end is held with a clamp. Tension is applied to the clamp with a weight. The sample is rolled up and unrolled on the roller.



FR-M

YUASA SYSTEM has been developing Tension-Free™ endurance testing systems since 2012. With our in-house expertise in mechanical, electrical, and software engineering, we have developed accurate testing methods for next generation devices, components, and materials. Tension-Free™ endurance testing reduces product design time by producing more consistent and reliable test data. Samples undergo the desired testing without being subjected to undesired tension introduced by the needs of the test equipment. As desired, our jigs also can operate with tension.

The TCD111L motor unit drives the test jig for rolling up and unrolling test samples. Fully automatic testing is possible.

The DX-FM-R rolling test jig can repeatedly roll up and unroll planar test objects, such as flexible displays, by rotating and reversing a roller. The machine provides evaluation tests of roll-up tension and friction between test pieces.

The TCD-FR-M is a floor standing test machine. It can handle longer samples than the DLDMLH-FR desktop test machine, 900 mm versus 314 mm.

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Provisional Specifications, subject to change without notice	
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Rolling Test for Planar Object	
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Specifications - Jig	Rolling Test Jig for Planar Object
Jig Model Number	DX-FR-M
Sample	Planar Objects
Sample Width	210 mm (8.27") maximum
Roll Up Amount	900 mm (35.4") maximum
Roll up Torque	0.67 Nm (0.5 ft lb)
Dimensions (mm)	516 mm x 450 mm (WD)
Dimensions (inches)	20.3" x 17.7" (WD)
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Specifications - Base Unit	Rotary Reciprocating Unit
Machine Model Number	TCD111L
Motor	Induction Gearmotor
Motor Power	3 phases, 90 W
Motor Gear Box	1/40
Counter	8 digit display (with preset)
Reciprocating Speed	10 ~ 90 rec/min
Reciprocating Angle	0 ~ ±180°
Permissible Torque	9.0 Nm maximum
Installation Temp range	+5 ~ +40° C (+41 ~ +104° F)
Installation Humidity	15 ~ 85% RH (no condensation)
Power Supply	AC (100~110V, 50Hz or 60 Hz, 1 Phase, 5A)
Power Supply (optional)	AC (200~240V, 50Hz or 60 Hz, 1 Phase, 5A)
Weight	about 60 kg (132.3 lb)
Dimensions (mm)	578.5 mm x 450 mm x 467.5 mm (WDH)
Dimensions (inches)	23.1" x 17.7" x 18.4" (WDH)
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Attached units	
System Model Number	TCD-FR-M
Dimensions (mm)	1000 mm x 450 mm (WD)
Dimensions (inches)	39.4" x 17.7" (WD)

US SERVICES AVAILABLE

Online training

Technical support

Installation & set-up

Maintenance

Guaranteed Warranty

www.yuasa-system.jp/en

YUASA YUASA SYSTEM CO., LTD.

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