

ETM SC series

ETM SC series single column testing system for tension and compression applications where loads less than 5kN.

- Designed with strong linear motion guide and servo motor.
- Increased lateral stiffness to ensure linear crosshead travel.
- Servo motor equipped with precise planet-gear speed reducer providing higher efficiency and low noise.
- Wide range of test accessories allows to meets test requirements of different standards and for different materials.
- ETM SC series is suitable to test: plastics, wires, bars, biomaterials, adhesive materials, etc...

- ETM SC series is suitable to test: plastics, wires, bars, biomaterials, adhesive materials, etc...



Model		ETM 0.5 SC	ETM 1 SC	ETM 2 SC	ETM 5 SC
Load cell					
Load capacity	kN	0.5	1	2	5
	kgf	50	100	200	500
Calibration standard	-	ISO 7500			
Accuracy grade	%	0.5 of reading			
Testing load accuracy	%				
Deformation accuracy	%				
Displacement accuracy	%				
Force range	FS	0.2%-100%			
Force resolution	FS	1/500000			
Force accuracy	%	0.5 of reading			
Controller					
Sampling frequency	Hz	Up to 1000			
Closed loop control frequency	Hz	Up to 1000			
Resolution	bit	20			
Software					
Software	-	echoTestPilot			
Crosshead					
Position resolution	µm	0.042			
Crosshead speed	mm/min	0.001-750			
Crosshead speed accuracy	%	±1.0/±0.5 of set speed			
Crosshead travel (without grip)	mm	1000			
Main frame					
Frame type	-	Bench top single column			
Front opening space	mm	100			
Fixture adapter	mm	ø20			
Grip pin	mm	ø10			
Motor power	kW	0.2			
Power supply	V-Hz-ph	230-50/60-1			
Dimensions	mm	530x490x1590mm			
Weight	kg	90			

Accessories

Mechanical wedge action tensile grips

Model	Description	Max. force applied	Grip pin	Application
JW310B	Grip body	10kN	ø10mm	For metal and non-metal specimen
JW310F1	Tensile grip for flat specimens 0-20mm			
JW310R1	Tensile grip for round specimens ø4-9mm			
JW310R2	Tensile grip for round specimens ø9-14mm			
JW120B	Grip body	20kN	ø10mm	For metal and non-metal specimen
JW120F1	Tensile grip for flat specimens 0-6mm			
JW120F2	Tensile grip for flat specimens 6-12mm			
JW120F3	Tensile grip for file specimens 0-6mm			
JW120R1	Tensile grip for round specimens ø4-9mm			
JW120R2	Tensile grip for round specimens ø9-14mm			
JW130B	Grip body	30kN	ø10mm	For metal and non-metal specimen
JW130F1	Tensile grip for flat specimens 0-7mm			
JW130F2	Tensile grip for flat specimens 7-14mm			
JW130F3	Tensile grip for file specimens 14-21mm			
JW130R1	Tensile grip for round specimens ø4-9mm			
JW130R2	Tensile grip for round specimens ø9-14mm			
JW130R3	Tensile grip for round specimens ø14-19mm			

Pneumatic tensile grips

Model	Description	Max. force applied	Grip pin	Application
PNJ3001	Tensile grip for sample diameter ≤1mm	500N	ø10mm	For low force test of non-metal specimen
PNJ3002	Tensile grip for sample diameter ≤1mm (Nylon cord)	500N	ø10mm	For nylon cord
PNJ3003	Tensile grip with clamping width ≤25mm Sample thickness ≤6.5mm, no liner	500N	ø10mm	For low force test of non-metal specimen
PNJ3005	Tensile grip with clamping width ≤30mm Sample thickness ≤4mm, with liner	500N	ø10mm	For low force test of non-metal specimen
PNJ3010	Tensile grip with clamping width ≤150mm Sample thickness ≤7mm, no liner	1kN	ø10mm	For low force test of non-metal specimen
PNJ3004	Tensile grip with clamping width ≤25mm Sample thickness ≤6.5mm, no liner	1kN	ø10mm	For low force test of non-metal specimen
PNJ3006	Tensile grip for sample diameter ≤3mm	2kN	ø10mm	For low force test of non-metal specimen
PNJ3008	Tensile grip jaw 25x50mm Sample thickness ≤9mm with liner	2kN	ø10mm	For low force test of non-metal specimen
PNJ3009	Tensile grip for sample diameter ≤3mm	3kN	ø10mm	For low force test of non-metal specimen
PNJ3011	Tensile grip for flat specimens 0-4mm	3kN	ø10mm	For glass fiber specimen
PNJ3007	Tensile grip for flat specimens 0-10mm, width 50mm	5kN	ø10mm	For low force test of non-metal specimen
PNJ3012	Tensile grip with rubber coated jaw 25.4x25.4mm Sample thickness ≤14mm	10kN	ø10mm	For textile tensile test
PNJ3013	Tensile grip with rubber coated jaw 50.8x76.2mm Sample thickness ≤14mm	10kN	ø10mm	For textile tensile test
PNJ3014	Tensile grip with diamond jaw 25.4x25.8mm Sample thickness ≤14mm	10kN	ø10mm	For textile tensile test
PNJ3015	Tensile grip with diamond jaw 25.4x70mm Sample thickness ≤14mm	10kN	ø10mm	For textile tensile test

Compression fixtures

Model	Description	Max. force applied	Grip pin	Application
CP1200	Platen ø100mm	20kN	ø10mm	For compression test
CP1201	Platen ø200mm	20kN	ø10mm	For compression test

ETM SC series

Bending fixtures

Model	Description	Max. force applied	Grip pin	Application
BD2002	Bending nose R5mm	10kN	ø10mm	For bending test
	Support roller R2mm			
	Maximum span 160mm, adjustable			
	3-point bending, support roller exchangeable			
BD2003	Bending nose R3mm	10kN	ø10mm	For bending test
	Upper span 110mm adjustable			
	Lower span maximum 220mm adjustable			
	4-point bending, support roller fixed			
BD2004	Bending nose R5mm	20kN	ø10mm	For bending test
	Support roller R2mm			
	Maximum span 200mm, adjustable			
	3-point bending, support roller exchangeable			
BD2005	Bending nose R5mm	20kN	ø10mm	For bending test
	Support roller R2mm			
	Maximum span 200mm, adjustable			
	3-point bending, support roller exchangeable			
	Micrometer included			

Lever grips

Model	Description	Max. force applied	Grip pin	Application
LVG021	Lever grip with clamping width <22mm	2kN	ø10mm	For rubber tensile test
	Max. opening 10mm			
LVG022	Lever grip with clamping width <40mm	2kN	ø10mm	For rubber tensile test
	Max. opening 7mm			
LVG023	Lever grip with clamping width <40mm	5kN	ø10mm	For rubber tensile test
	Max. opening 12mm			

Peeling grips

Model	Description	Max. force applied	Grip pin	Application
PLG971	Grip for stainless steel composite pipe ID-OD 12-16; 16-20; 20-25; 26-32; 33-40	2kN	ø10mm	For stainless steel composite pipe peeling test
PLG972	Grip for metal bond sample width <20mm	3kN	ø10mm	For metal bond specimen 90° peeling test

Vice grips

Model	Description	Max. force applied	Grip pin	Application
VG3201	Sample thickness ≤8mm	500N	ø10mm	For plastic and film tensile and peeling test
	Vice grip with clamping width <32mm			
VG3202	Sample thickness ≤13.5mm	1kN	ø10mm	For wire, foil, film, fiber, rubber tensile test
	Vice grip with clamping width <25mm			
VG3203	Sample thickness ≤12mm	5kN	ø10mm	For sheet metal, fiber, plastic, rubber tensile test
	Vice grip with clamping width <70mm			

Wire, cord tensile grip

Model	Description	Max. force applied	Grip pin	Application
CWG021	Wire grip for sample diameter $\leq 1\text{mm}$	500N	$\varnothing 10\text{mm}$	For wire tensile test
CWG022	Wire grip for sample diameter $\leq 0.5\text{mm}$	500N	$\varnothing 10\text{mm}$	For wire tensile test
CWG023	Wire grip for sample diameter $\leq 1.5\text{mm}$	2kN	$\varnothing 10\text{mm}$	For wire tensile test
CWG024	Wire grip for sample diameter $\leq 1.5\text{mm}$	5kN	$\varnothing 10\text{mm}$	For wire tensile test

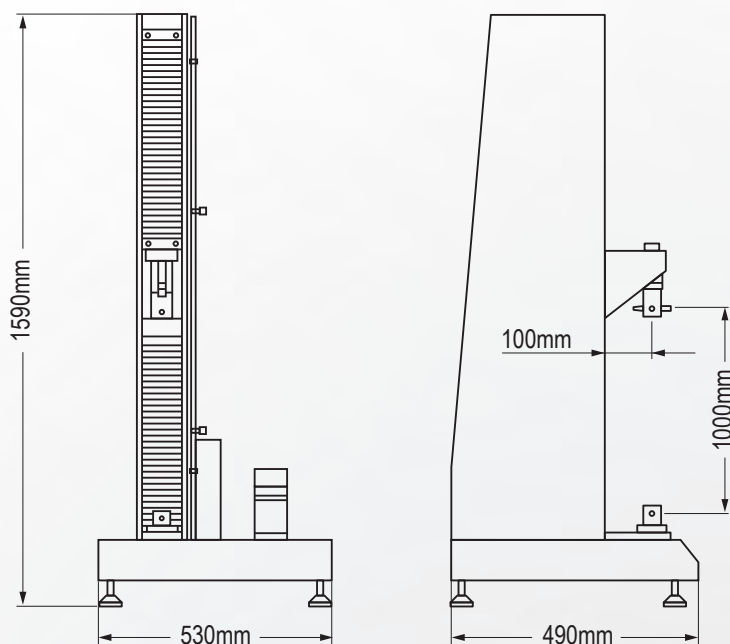
Other special grips are available on request

Computer System

Computer System	ECHOCS01	Computer
	ECHOCS02	Monitor
	ECHOCS03	Color printer
	ECHOCS04	Mouse
	ECHOCS05	Keyboard

Optional accessories

01ETM001	Front protection shield
----------	-------------------------





DEVCO S.r.l.

Via Marzabotto, 59 20037 Paderno Dugnano (MI)
Tel +39 0283591153 - Fax. +39 0295441300
www.devcosrl.it - e-mail: info@devcosrl.it

www.echo-lab.it