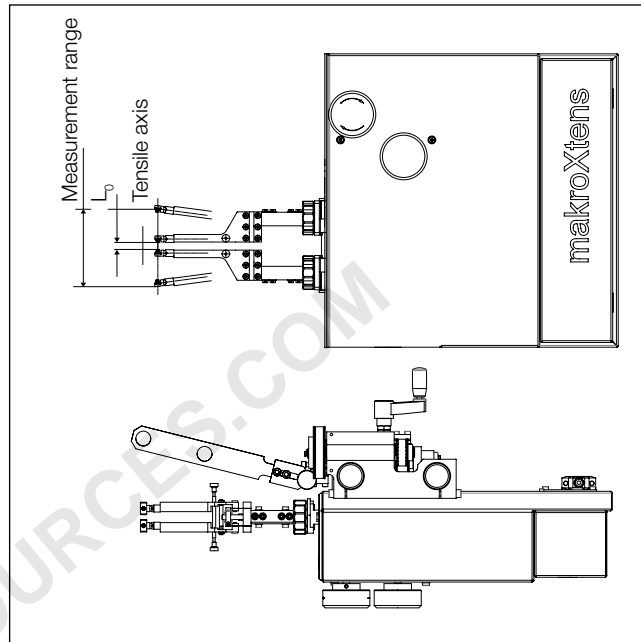
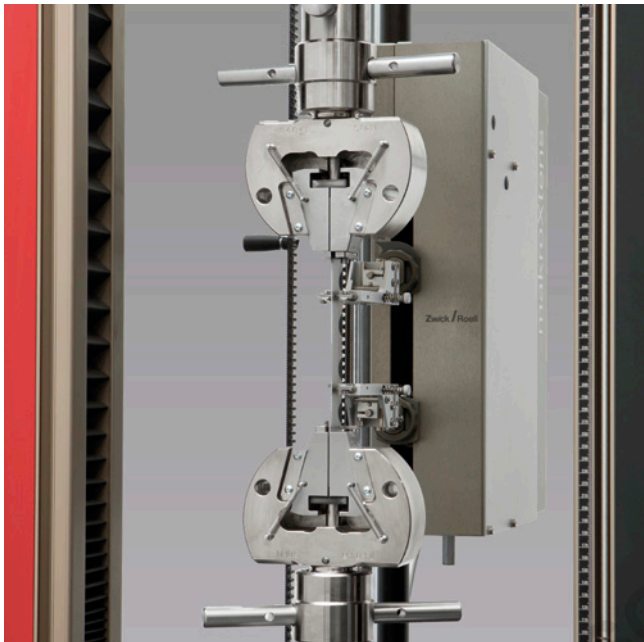


Product Information

makroXtens® II



Range of applications

Standard extensometer in the metals, plastics and automotive industries, with an installed base of over 6.000 systems. The makroXtens II is a versatile high-accuracy extensometer operating on the contact principle. Ideal for tensile, compression, flexure and cyclic tests on metals, plastics, composites and many other materials and for use with temperature chambers.

Advantages of the makroXtens® II

- Can be used up to specimen break, even with high forces and brittle specimen material
- Robust measuring system, also suitable for use in automated testing systems
- The unique integrated safety mechanism and the tilting knife-edges provide optimum protection for the system. If for example the sensor arm makes contact with the specimen grips, the machine is stopped immediately
- A maximum differential motion measurement error in the initial range of +/- 1 µm makes makroXtens II ideal for Young's modulus measurements on plastics also
- makroXtens II satisfies (at least) Accuracy Class 0.5 to ISO 9513 (first measurement point 20 µm), making it an optimum choice for tensile tests on metals and plastics
- The knife-edges can be adjusted for round or flat specimens by simply rotating them

- Minimal sensor-arm drag-forces ensure the physical properties of the specimen remain unimpaired
- Sensor-arm contact-force is freely adjustable, reducing the potential notching effect on the specimen
- The system is automatically tracked in the optimum position between the specimen grips, with no need for tedious readjustment. Maximum measurement travel is always available
- Intelligent tracking device (patent pending) for even greater measuring accuracy, particularly in the initial measuring range (HP versions)
- HP version of makroXtens II is ideally suited to strain-rate control on metals to ISO 6892-1 Method A(1) (closed loop) and to ASTM E 8 – 09 Method B
- Connection to testControl II via innovative EtherCat interface with high data transmission rate

Options

- Contact and non-contact transverse strain extensometers (e.g. for determination of r-value or Poisson's ratio)
- Combining with the fine-strain extensometer allows high-accuracy strain measurement in the initial range on both sides of the specimen
- Motorized gage length setting (controlled via testXpert II testing software)

Product Information

makroXtens® II

Type	makroXtens 100, P	makroXtens 100, HP	makroXtens 205, P	makroXtens 205, HP	makroXtens 300, P	makroXtens 300, HP	Unit
Item number	083938	083939	083940	083941	083942	083943	
Sensor arm length	Resolution in connection with sensor arms and length						
300 mm	0.06	0.006	0.06	0.006	0.06	0.006	µm
450 mm	0.09	0.009	0.09	0.009	0.09	0.009	µm
600 mm	0.12	0.012	0.12	0.012	0.12	0.012	µm
Sensor arm length	Measurement range in connection with sensor arms and length						
300 mm	75	75	75	75	75	75	mm
450 mm	112.5	112.5	112.5	112.5	112.5	112.5	mm
600 mm	150	150	150	150	150	150	mm
L ₀ range ⁽²⁾	to 100	to 100	to 205	to 205	to 300	to 300	mm
Dimensions							
Width	120	120	120	120	120	120	mm
Height	380	380	480	480	620	620	mm
Depth	375	375	375	375	375	375	mm
Drag force	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N
Max. specimen width	60 mm						
Accuracy grade:	0.5 (1) according to EN ISO 9513 ⁽¹⁾						
Here is required:							
Sensor arms:	300, 450 or 600 mm length						
For use with a temperature chamber:	drive unit						
Mounting parts							

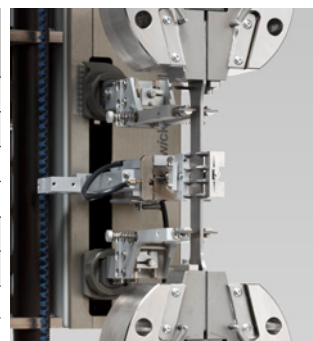
⁽¹⁾ Accuracy grade 0.5 when using sensor arms with a length of 300 mm and 450 mm.

Accuracy grade 1 when using sensor arms with a length of 600 mm.

⁽²⁾ Adjustment range from 5 mm possible via suitable sensor arms (standard 10 mm), with reduction of maximum value by 5 mm.

Contact transverse strain extensometer

	Meas. lines	Specimen		Meas. range	Resolution	Item number		
		width	thickness					
Swivelled-out up to 90°	4	10...25 mm	0...4 mm	≥ 6 mm	0.1 µm	060702		
					0.002 µm	061253		
	1	mm	mm		0.1 µm	084635		
					0.002 µm	084636		
					2	mm	0.1 µm	082678
							0.002 µm	084634
Swivelled-out up to 15°	2	10...15/ 20...25,4 mm	0...4 mm	4...9 mm	0.1 µm	084637		
					0.002 µm	084638		



Option: Drive unit for transverse strain extensometer

videoXtens transverse strain extensometer

Description	Item number
videoXtens transverse strain extensometer	1001420
Also required:	
videoXtens basic package	
Mounting kit for mounting on makroXtens II	
Free module bus slot on testControl II	

