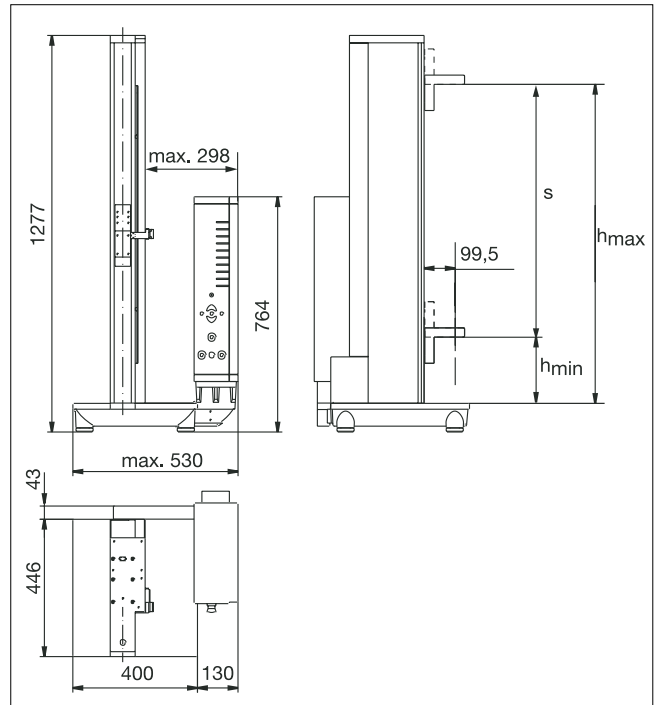


## Product Information

zwicki table-top machines up to 2.5 kN with *testControl* electronics



### Application area

- Wide applicational spectrum from plastics and elastomer testing as well as paper-, textile-, foam materials and wire tests up and even components testing

### Advantages/characteristics

System of simplest operation

- Operation with standard PC and *testXpert*® software for highest operator comfort, analysis and statistical data processing
- Operation without PC via option „Stand Alone“ with colour display and direct data management
- Automatic sensor detection and intelligent help for all dangerous and error situations

System of most modern technology

- Highest machine availability by use of robust and sturdy industrial drive systems
- Controlled drive and positioning through adaptive control and fully automatic controller adjustment
- Testing to standards at rapid processes via 500 Hz online test data transmission

System with modular design

- Modular system for mechanics, software and electronics for low price configurations to suit requirements
- 3 additional module slots for connecting further measurement systems

System with future

- High investment security through individual configuration possibilities
- Compatibility concept for continuous component expansion
- Continuous further development of the „System test machine“
- ISO 9000 and CE conformity

Further advantages

- Low weight and space-saving installation on a table enables the site of operation/testing to be varied as required
- Electronics telescopic mounted at the base for best accessibility even with extra-wide specimen/testing device or use with protective shields
- Optionally expandable with a manual extensometer for direct extension measurement
- Optional extension of test area depth to 205 mm

## Product Information

zwicki table-top machines up to 2.5 kN with *testControl* electronics

Order item	TC-FR1.0TH.D09	TC-FR2.5TN.D09		Unit	
	Value	TC-FR2.5TS.D09 Value	Value	TC-FR2.5TH.D09 Value	
<b>Load frame</b>					
Test load $F_N$ in tensile/compression direction	1	2.5	2.5	2.5	kN
Height approx. <sup>(1)</sup>	1577	777	1277	1577	mm
Width (with electronics console) <sup>(2)</sup>	400 (405 / 472.5 / 530)				mm
Depth (with electronics console)	489 (573)	489 (573)	489 (573)	489 (573)	mm
Overall weight approx.	70	56	65	70	kg
Height of the test area $h_{min} \dots h_{max}$ :					
angled moving crosshead mounted upwards	227...1373	227...573	227...1073	227...1373	mm
angled moving crosshead rotated 180°	57...1203	57...403	57...903	57...1203	mm
(without accessories)					
Maximum travel $s$ of the mounting square :	if $H < h_{min}$ :	$s = h_{max} - h_{min}$			
	if $H > h_{min}$ :	$s = h_{max} - H$			
H = sum of the mounting dimensions of the complete testing equipment (load cell, grips/testing device, mounting stud)					
Width of the test area	infinite				
Depth of the test area (test axis to profile)	99.5	99.5	99.5	99.5	mm
Finish	RAL 7038 agate grey and RAL 7037 dusty grey				
Ambient temperature	+ 10 ... + 35	+ 10 ... + 35	+ 10 ... + 35	+ 10 ... + 35	°C
Air humidity	20 ... 90	20 ... 90	20 ... 90	20 ... 90	%
Noise level measured at maximum speed	67	67	67	67	dB(A)
<b>Drive system</b>					
Crosshead speed $v_{min} \dots v_{nom}$	0.1 ... 1800	0.1 ... 800	0.1 ... 800	0.1 ... 800	mm/min
Accuracy of the set speed	0.034	0.01	0.01	0.01	% of $v_{nom}$
Drive system's travel resolution	0.00023	0.0001	0.0001	0.0001	mm
Positioning, repetition accuracy	± 2	± 2	± 2	± 2	µm
<b>Measurement and control electronics</b>					
Force measurement	Grade 0.5 / 1 see load cell, to DIN EN ISO 7500-1 (DIN 51220, DIN 51302), ISO R147, ASTM E4, BS 1610 Grade A, NF A 03-501				
Measurement range	up to 165 % of $F_N$				
Real resolution in tensile/compression direction	162.000 ... 912.000				Points
Recording rate, internal	500				Hz
Test data group transmission rate to the PC	100 (500 optional)				Hz
Zero-point correction	automatic at measurement begin				
Meas. signal runtime correction for all channels	yes				
Output interface	RS232				
Required PC connection (for PC operation)	COM 1				
<b>Power ratings</b>					
Electrical connections	120/230	120/230	120/230	120/230	V (Ph,N,PE)
Power rating	0.4	0.4	0.4	0.4	kVA
Mains frequency	50/60	50/60	50/60	50/60	Hz
<b>Options</b>					
e.g. extensometer, additional upper crosshead, extension of test area depth to 205 mm, machine connection lead to B.S./US standard and 500 Hz online test data transmission					

<sup>(1)</sup> with option „Additional crosshead“ height is increased by 9 mm

<sup>(2)</sup> position of electronics console: normal position / first telescopic position / second telescopic position; for electronics with option „Stand Alone“ each single dimension is increased by 45 mm