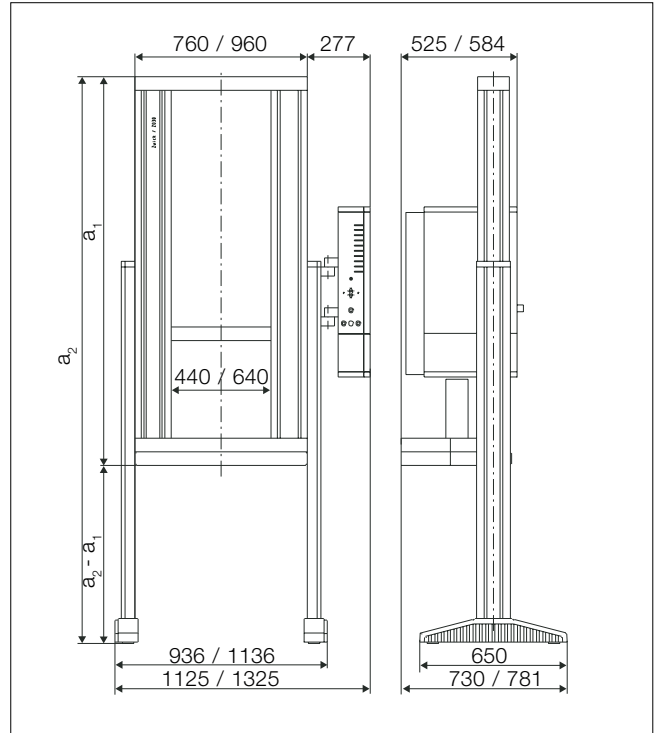


Product Information

Table-top machines Z030 up to Z100 of the Allround-Line



Picture and drawing include machine with leg profiles (option)

General advantages of the Allround-Line with the Zwick electronics *testControl*

System with simplest operation

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

System with most modern technology

- Highest machine availability through the use of maintenance free AC servo drives with direct power supply and real-time operating system
- 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 purpose designed and low price machine configurations

- One additional module slot for connecting further measurement systems, optionally 3 additional slots

System with future

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

Special advantages of the table-top machines

- Setup on a table or on leg profiles for positioning the test area at optimum operating height
- Value for money solution for standard test tasks
- Wide, easy accessible test area
- Compact construction through patented aluminium profile load frame construction with concentric arrangement of the drive lead screw and crosshead guide
- T-Slots for simple mounting of machine accessories

Product Information

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Data	Value
Load frame	
Finish	RAL 7011 iron grey and RAL 7038 agate grey
Ambient temperature	+ 10 ... + 35 °C
Air humidity	20 ... 90 %
Drive system	
Positioning, repetition accuracy	± 2 µm
Permissible feedback energy at cyclic tests	diagram available upon request
Measurement and control electronics	
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	automatically at measurement begin
Measurement signal runtime correction for all channels	yes
Output interface	RS 232
Required PC connection (for PC operation)	COM 1
Power ratings	
Mains frequency	50/60 Hz

testControl plus

Description	Order item
Option <i>testControl plus</i> : Additional basic equipment of the measurement and control electronics <i>testControl</i> with two slots.	TC-OPPLUS

Options on request, e.g.

- Supplementary crossheads
- Safety shields
- Precision crosshead guide
- Leg profiles
- 500 Hz Online test data processing and further options for the electronics
- Test equipment

Product Information

Table-top machines Z030 up to Z100 of the Allround-Line

Order item	T1- FR030TH.A1K	T1- FR050TH.A1K	T1- FR100THWA2K	T1- FR100THWA4K	T1- FR100TEWA2K ⁽²⁾	T1- FR100TEWA4K ⁽²⁾	
Load frame							
Test load F_N in tensile / compression direction	30	50	100	100	100	100	kN
Test area width	440	440	640	640	640	640	mm
Height of the lower test area, without accessories	1355	1355	1355	1355	1755	1755	mm
Height of the upper test area, without accessories (supplem. crosshead required)	1400	1400	1400	1400	1800	1800	mm
Height without leg profiles a_1	1714	1714	1769	1769	2169	2169	mm
Height with leg profiles a_2	1829 ... 2694	1829 ... 2694	1884 ... 2694	1884 ... 2694	2284 ... 3094	2284 ... 3094	mm
Width without leg profiles	760	760	960	960	960	960	mm
Width with leg profiles (and electronics console) ⁽¹⁾	936 (1125)	936 (1125)	1136 (1325)	1136 (1325)	1136 (1325)	1136 (1325)	mm
Depth without leg profiles ⁽⁴⁾	525	525	584	584	584	584	mm
Depth with leg profiles ⁽⁴⁾	730	730	781	781	781	781	mm
Overall weight with electronics console, without leg profiles	240	240	450	450	470	470	kg
Noise level at maximum speed	67	61	< 55	73	< 55	73	dB(A)
Drive system							
Crosshead speed $v_{min} \dots v_{Nom}$	0.0005 ... 1000	0.0005 ... 600	0.0005 ... 750	0.0005 ... 1500	0.0005 ... 750	0.0005 ... 1500	mm/min
Accuracy of the set speed	0.017	0.02	0.003	0.003	0.003	0.003	% of v_{Nom}
Drive system's travel resolution	0.0271	0.0163	0.0207	0.0207	0.0207	0.0207	μm
Power ratings							
Electrical connections ⁽³⁾	230	230	400	400	400	400	V
Power rating	2.3	2.3	4	6	4	6	kVA

⁽¹⁾ For electronics with option „Stand Alone“ increases the width by 45 mm

⁽²⁾ Leg profiles are included in the scope of supply of this test machine

⁽³⁾ Power supply: 230 V: 50/60 Hz, 1Ph/N/PE resp.
400 V: 50/60 Hz, 3Ph/N/PE

⁽⁴⁾ Inclusive electronics console