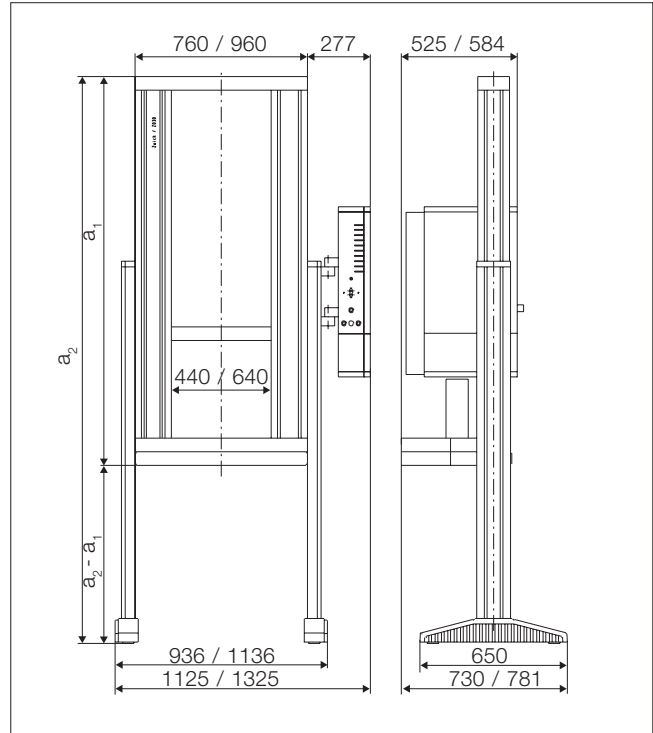


Product Information

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

- Includes one additional module slot for the connecting of further measurement systems, optionally up to 9 additional slots available
- An I/O module provides 2 analog output channels per slot or other inputs/outputs

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 table or 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

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

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 Hz (optionally 500 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 options

Description	Item number
Option <i>testControl</i> plus: Additional basic equipment of the measurement and control electronics	325224
<i>testControl</i> with two slots	
BUS expansion including 6 additional slots, in addition to option <i>testControl</i> plus Z030 - Z050	
The BUS expansion adds 6 additional slots. Thus enabling up to 10 measurement channels to be opened simultaneously	
For testing machines Z030 - Z050 with test load F_N 30 or 50 kN	324845
For testing machines Z100 with test load F_N 100 kN	324847

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

Type	Z030 TH	Z030 TE	Z030 THW	Z030 TEW	Z050 TH	Z050 TE	
Item number	320330	015467 ⁽²⁾	015495	015496 ⁽²⁾	320332	015480 ⁽²⁾	
Load frame							
Test load F_N in tensile / compression direction	30	30	30	30	50	50	kN
Test area width	440	440	640	640	440	440	mm
Height of the lower test area, without accessories	1355	1755	1325	1725	1355	1755	mm
Height of the upper test area, without accessories (supplem. crosshead required)	1400	1800	1365	1765	1400	1800	mm
Height without leg profiles a_1	1714	2114	1714	2114	1714	2114	mm
Height with leg profiles a_2	1829 ... 2694	2229 ... 3094	1829 ... 2694	2229 ... 3094	1829 ... 2694	2229 ... 3094	mm
Width without leg profiles	760	760	960	960	760	760	mm
Width with leg profiles (and electronics console) ⁽¹⁾	936 (1125)	936 (1125)	1136 (1325)	1136 (1325)	936 (1125)	936 (1125)	mm
Depth without leg profiles ⁽⁴⁾	525	525	525	525	525	525	mm
Depth with leg profiles ⁽⁴⁾	730	730	730	730	730	730	mm
Overall weight with electronics console, without leg profiles	240	260	300	340	240	260	kg
Noise level at maximum speed	67	67	67	67	61	61	dB(A)
Drive system							
Crosshead speed $v_{min} \dots v_{Nom}$	0.0005 ... 1000	0.0005 ... 1000	0.0005 ... 1000	0.0005 ... 1000	0.0005 ... 600	0.0005 ... 600	mm/min
Accuracy of the set speed	0.017	0.017	0.017	0.017	0.02	0.02	% of v_{Nom}
Drive system's travel resolution	0.0271	0.0271	0.0271	0.0271	0.0163	0.0163	μm
Power ratings							
Electrical connections ⁽³⁾	230	230	230	230	230	230	V
Power rating	2.3	2.3	2.3	2.3	2.3	2.3	kVA

⁽¹⁾ The width of electronics with option Stand Alone is 45 mm higher

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

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

⁽⁴⁾ Inclusive electronics console

Product Information

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

Type	Z050 THW	Z050 TEW	Z100 THW	Z100 THW	Z100 TEW	Z100 TEW	
Item number	015498	015499 ⁽²⁾	325431	320334	325433 ⁽²⁾	324685 ⁽²⁾	
Load frame							
Test load F_N in tensile / compression direction	50	50	100	100	100	100	kN
Test area width	640	640	640	640	640	640	mm
Height of the lower test area, without accessories	1325	1725	1355	1355	1755	1755	mm
Height of the upper test area, without accessories (supplem. crosshead required)	1365	1765	1400	1400	1800	1800	mm
Height without leg profiles a_1	1714	2114	1769	1769	2169	2169	mm
Height with leg profiles a_2	1829 ... 2694	2229 ... 3094	1884 ... 2694	1884 ... 2694	2284 ... 3094	2284 ... 3094	mm
Width without leg profiles	960	960	960	960	960	960	mm
Width with leg profiles (and electronics console) ⁽¹⁾	1136 (1325)	1136 (1325)	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	300	340	450	450	470	470	kg
Noise level at maximum speed	61	61	< 55	73	< 55	73	dB(A)
Drive system							
Crosshead speed $v_{min} \dots v_{Nom}$	0.0005 ... 600	0.0005 ... 600	0.0005 ... 750	0.0005 ... 1500	0.0005 ... 750	0.0005 ... 1500	mm/min
Accuracy of the set speed	0.02	0.02	0.003	0.003	0.003	0.003	% of v_{Nom}
Drive system's travel resolution	0.0163	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⁾ The width of electronics with option Stand Alone is 45 mm higher

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