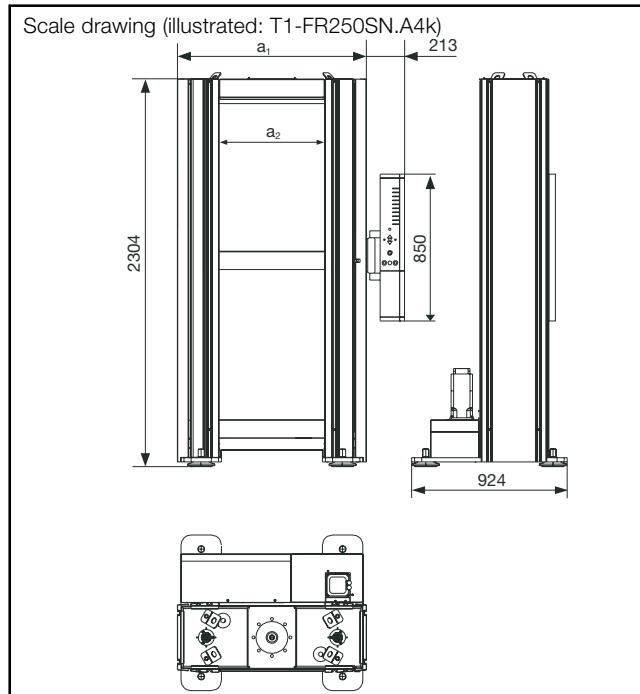


## Product Information

Floor machines from Z050 up to Z250 of the Allround-Line



Floor machine T1-FR100SN.A4K



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

System of simplest operation

- Operation with standard PC and *testXpert*<sup>®</sup> 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 of most modern technology

- Highest machine availability by use of maintenance free AC servo drives with direct mains 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 low price configurations to suit requirements
- One additional module slot for connecting a further measurement system, optionally 3 additional slots

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

### Special advantages of the floor machines

- Large test area
- High load frame rigidity
- Functional load frame cover panels with T-slots offer the possibility of fixing a wide range of accessories
- Variabel test area layout through a height adjustable crosshead
- Play free guide and ball lead screw for no-problem working at tensile and compression loading
- Safe base with shock absorbing elements which can be levelled, and free space for lifting the machine with a lift truck

## Product Information

Floor machines from Z050 up to Z250 of the Allround-Line

Data	Value
<b>Load frame</b>	
Distance from the wall	> 500 mm
Noise level at maximum speed	70 dB(A)
Finish	RAL 7011 iron grey and RAL 7038 agate grey
Ambient temperature	+ 10 ... + 35 °C
Air humidity	20 ... 90 %
<b>Drive system</b>	
Positioning, repetition accuracy	± 2 µm
Permissible feedback energy at cyclic tests	Diagram available upon request
<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 (optionally 500) Hz
Zero-point correction	Automatic at measurement begin
Measurement signal runtime correction for all channels	Yes
Output interface	RS 232
Required PC connection (for PC operation)	COM 1
<b>Power ratings</b>	
Mains frequency	50/60 Hz
Electrical connection	400 V (3 PH, N, PE)

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

### testControl plus

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

## Product Information

Floor machines from Z050 up to Z250 of the Allround-Line

Order item	T1- FR0050SN.A80	T1- FR0050SN.A4K	T1- FR0050SW.A80	T1- FR0050SW.A4K	T1- FR100SN.A80	T1- FR100SN.A4K	T1- FR100SW.A80	T1- FR100SW.A4K	T1- FR150SN.A4K	T1- FR150SW.A4K	T1- FR250SN.A4K	T1- FR250SW.A4K	
<b>Load frame</b>													
Test load $F_N$ in tensile / compression direction	50	50	50	50	100	100	100/ 50 <sup>(1)</sup>	100/ 50 <sup>(1)</sup>	150	150/ 100 <sup>(1)</sup>	250	250/ 100 <sup>(1)</sup>	kN kN
Height	2304	2304	2304	2304	2304	2304	2304	2304	2304	2304	2304	2304	mm
Width $a_1$	1123	1123	1523	1523	1123	1123	1523	1523	1123	1523	1123	1523	mm
Width with electronics console <sup>(3)</sup>	1336	1336	1736	1736	1336	1336	1736	1736	1336	1736	1336	1736	mm
Depth	924	924	924	924	924	924	924	924	924	924	924	924	mm
Test area width $a_2$	630	630	1030	1030	630	630	1030	1030	630	1030	630	1030	mm
Test area height <sup>(2)</sup>													
upper	1760	1760	1765	1765	1760	1760	1765	1765	1678	1660	1678	1660	mm
lower, adjustable crosshead top	1830	1830	1765	1765	1830	1830	1765	1765	1720	1660	1720	1660	mm
lower, adjust. crosshead bottom	1824	1824	1765	1765	1824	1824	1765	1765	1715	1660	1715	1660	mm
upper & lower	1740	1740	1650	1650	1740	1740	1650	1650	1603	1505	1603	1505	mm
Max. travel of moving crosshead <sup>(2)</sup>													
upper	1568	1568	1518	1518	1451	1451	1400	1400	1304	1244	1304	1244	mm
lower, adjustable crosshead top	1617	1617	1567	1567	1617	1617	1566	1566	1528	1448	1528	1448	mm
lower, adjust. crosshead bottom	1622	1622	1572	1572	1505	1505	1456	1456	1336	1256	1336	1256	mm
upper & lower	1420	1420	1370	1370	1203	1203	1153	1153	1050	930	1050	930	mm
Overall weight with electronics	1070	1070	1570	1570	1070	1070	1570	1570	1470	2100	1470	2100	kg
<b>Drive system</b>													
Crosshead speed	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	mm/min
$V_{min} \dots V_{Nenn}$	... 400	... 2000	... 400	... 2000	... 200	... 1000	... 200	... 1000	... 900	... 900	... 600	... 600	
Accuracy of the set speed	0.004	0.004	0.004	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	% von $v_{Nenn}$
Drive system's travel resolution	0.0270	0.0270	0.0270	0.0270	0.0136	0.0136	0.0136	0.0136	0.0123	0.0123	0.0082	0.0082	$\mu m$
<b>Power ratings</b>													
Power rating	5	5	5	5	5	5	5	5	5,5	5,5	6	6	kVA

<sup>(1)</sup> The second value indicates the limited test load when testing in the additional test axes.

<sup>(2)</sup> For a description to these dimensions please see previous page.

<sup>(3)</sup> With option „Stand Alone“ increases the width by 45 mm.