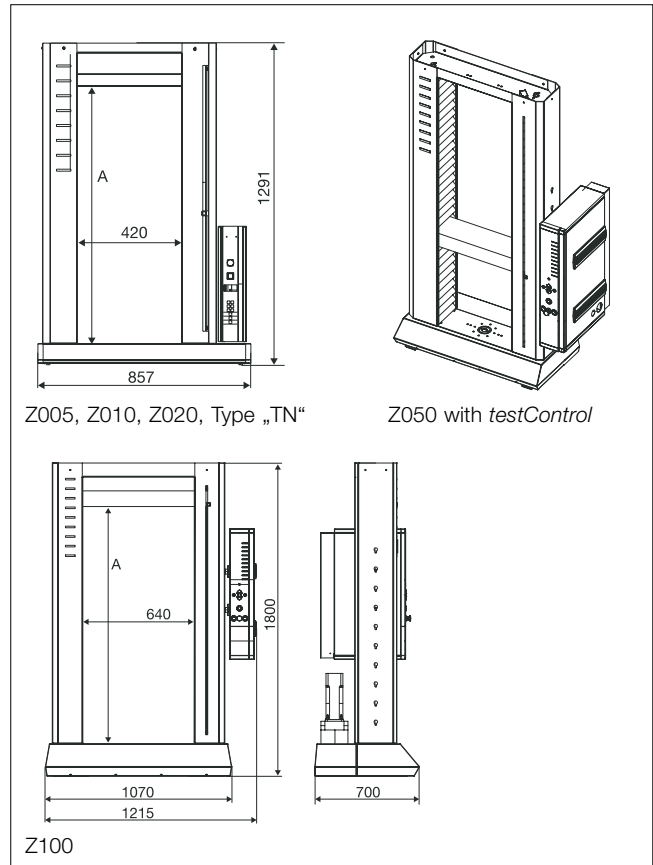


Product Information

ProLine table-top machines Z005 up to Z100



Range of application









Function testing on components and simple materials testing

Advantages/Characteristics

- High value, single/twin column load frame
- Robust and durable industrial operation
- Precise crosshead guidance via steel columns/ polished linear axis with carriages seated on ball bearings
- The wide force/measurement range encompasses an expansive range of applications
- Attractive, pricewise, test solutions for routine and standard applications
- Simple operateability
- A high standard of comfort and user ergonomics is created in synergy with the test software *testXpert*[®]
- *testXpert*[®] standard test programs for ProLine guarantee intuitively operateable test sequences that are tailor made for the respective applications at lowest possible prices
- CE Conform design
- Setting the machines up on existing industrial furniture enables the test area to be positioned at an optimum height for the operator
- Zwick shows the way with a delivery time of 2 weeks for all ProLine products of the Pure Portfolio

Product Information

ProLine table-top machines Z005 up to Z100

Order item	 T1-FB100TN	 T1-FB050TN	 DO-FB050TN	 DO-FB030TN	 DO-FB020TN	 DO-FB010TN	 DO-FB005TN	 DO-FB005TS	
Load frame									
Test load F_N in tensile/compr. direction	100	50	50 ⁽¹⁾	30 ⁽¹⁾	20 ⁽¹⁾	10 ⁽¹⁾	5	5	kN
Test area width	440	440	440	440	420	420	420	420	mm
Height of the test area (Dimension A) ⁽⁴⁾	1364	1374	1374	1374	1041	1041	561	561	mm
Max. travel of the moving crosshead ⁽⁴⁾	1283	1293	1293	1293	976	976	496	496	mm
Height	1800	1739	1739	1739	1291	1291	791	791	mm
Width	1070	850	850	850	857	857	857	857	mm
Width with electronics console	1215	1007	964	964	857	857	857	857	mm
Depth	600	423	423	423	346	346	346	346	mm
Depth with electronics console	600	509	423	423	346	346	346	346	mm
Total weight with electron. console	≅ 540	≅ 250	≅ 250	≅ 250	133	130	90	90	kg
Lower mounting stud (included in scope of supply) dia.	60	36	36	36	36	20	20	20	mm
Drive unit									
Crosshead speed $v_{min} \dots v_{Nom}$ (<i>testControl</i>) resp. v_{set} (Doli I)	0.0005 ... 300	0.0005 ... 600	0.1 ⁽²⁾ ... 180	0.1 ⁽²⁾ ... 300	0.1 ⁽²⁾ ... 500	0.1 ⁽²⁾ ... 1000	0.1 ⁽²⁾ ... 500	0.1 ⁽²⁾ ... 500	mm/min
Accuracy of the set speed	1	1	1	1	1	1	1	1	% of v_{Nom}, v_{Set}
Drive system's travel resolution	0.0081	0.016	0.015	0.025	0.045	0.09	0.05	0.05	μm
Positioning, repetition accuracy	± 2	± 2	± 2	± 2	± 3	± 2	± 2	± 2	μm
Measurement and control electronics									
Electronics	tc ⁽³⁾	tc ⁽³⁾	Doli I	Doli I	Doli I	Doli I	Doli I	Doli I	
Power ratings									
Electrical connections	115/230	115/230	115/230	115/230	115/230	115/230	115/230	115/230	V(PH,N,PE)
Mains frequency	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	Hz
Power rating	2.3	2.3	0.6	0.6	0.6	0.6	0.6	0.6	kVA

⁽¹⁾ Valid at F_{max} is: 75% of v_{max} , valid at v_{max} is: 75% of F_{max}

⁽²⁾ This speed is valid for the operation with Stand Alone, via use of a PC a minimum speed of 0.001 mm/min can be realised

⁽³⁾ $tc = testControl$: Measurement range up to 165% von F_N , with load cell F_{max} 2.5 kN up to 130% of F_N , real resolution in tensile / compression direction 162,000 ... 912,000 Points, Internal recording rate 500 Hz, Test data group transmission rate to the PC 100 Hz.

Doli I: Measurement range up to 150 % of F_N with load cell F_{max} 2.5 kN up to 120% of F_N , Real resolution in tensile/compression direction 100,000 Points, Internal recording rate 400 Hz, Test data group transmission rate to the PC 50 Hz

⁽⁴⁾ Without accessories

Data for all load frames

Finish: Z005/Z010/Z020: RAL 7011 iron grey, RAL 7038 agate grey, RAL 3031 orient red

Z030/Z050/Z100: RAL 7037 dusty grey, RAL 7038 agate grey

Ambient temperature + 10 ... + 35 °C, air humidity (non condensing) 20 ... 90 %

Measurement and control electronics

Force measurement: Grade 0.5 / 1 depending upon the load cell, according to ISO 7500-1 (DIN 51220, DIN 51302), ISO R147, ASTM E4, BS 1610 Grade A, NF A 03-501

Zero-point correction automatically at beginning of measurement, measurement signal runtime correction for all channels, output interface RS232, required PC connection (for PC operation): COM1