

Product Information

Materials testing machine with hydraulic drive Z400H / Z600H



Figure: Zwick Z600H with hydraulic grips

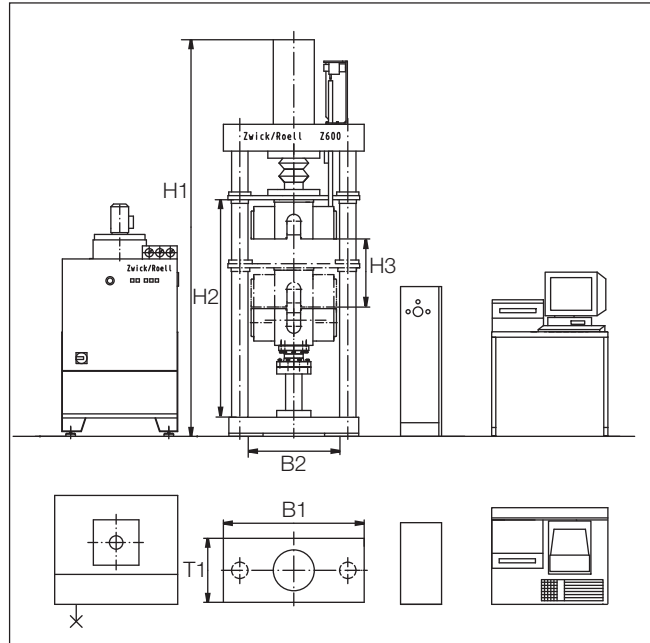


Figure: Drawing of Zwick Z600H with hydraulic grips

Key benefits

- These hydraulic materials testing machines have a single, central hydraulic drive.
- Optionally available with an adjustable top crosshead, allowing the test area to be adjusted to customers' requirements.
- High-resolution, channel-synchronized measurement technology provides extremely precise, accurate determination of material characteristic values. No range-switching is necessary as load signal resolution is available over the whole range.
- Wide measuring range allows even small test loads to be determined accurately without re-tooling.

Further advantages and features

- Extremely stiff, robust load frame.
- Standard tests using Zwick *testXpert*[®] software require only single-button operation.
- Modular design throughout the system allows the entire Zwick accessory range to be used, including a wide variety of extensometers, specimen grips and other test tools.
- Should new test requirements arise, additional test tools (e.g. calibration blocks) can very easily be installed by means of a T-slot or screw system.
- Can be tailored to customers' specific requirements (e.g. test devices, specimen grips, test speed ranges, testing software).

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Model	Z400H	Z400H	Z600H	Z600H
Fmax [kN]	400	400	600	600
Top crosshead	fixed	adjustable	fixed	adjustable
Number of lead columns	2	2	2	2
Stiffness of the load frame at Fmax (without specimen grips and load cell) approx. [kN/mm]	400	400	600	600
Dimensions of load frame				
H1 – Height [mm]	2913	max. 3213	2913	max. 3213
B1 – Width [mm]	1030	1030	1030	1030
T1 – Depth [mm]	500	500	500	500
Dimensions of test area				
H2 – Height [mm]	1578	max. 1878	1578	max. 1878
B2 – Width [mm]	670	670	670	670
H3 – Test stroke max. [mm]	500	500	500	500
Test speed max. [mm/min]	340	340	250	250
Weight				
without tools / specimen grips (with electronics) [kg]	1800	1950	1870	1900
with specimen grips [kg]	2500	2550	2470	2700
Specific floor loading [kg/cm ²]	1.5	1.5	1.5	1.5
Resolution of crosshead travel [µm]	0.16	0.16	0.16	0.16
Position accuracy [mm]	± 0.01	± 0.01	± 0.01	± 0.01
Item no.	• 358416	• 358421	• 358422	• 358423
	(BPC-F0400HN.F06)	(BPC-F0400HN.M06)	(BPC-F0600HN.F06)	(BPC-F0600HN.M06)

Environmental conditions	
Operating temperature [°C]	+10 ... +35
Storage temperature [°C]	-25 ... +55
Humidity range (not condensing) [%]	≤ 90
Electrical connection	
Mains voltage 3 Ph/N/PE ^{1 2} [V]	400
Mains frequency [Hz]	50
Drive power [kVA]	8.5
Fuse [A]	25
Noise level in 1m distance [dB(A)]	67
Color coating of rack	RAL7011 (iron gray), RAL7038 (agate gray)

¹ Three phase AC motor (L1, L2, L3), neutral wire N, protective earth PE

² < ± 10 % related to the mains voltage