

Product Information

Universal testing machine inspekt S 5kN

single spindle testing machine







The Universal Testing Machine inspekt S is an electromechanical desktop machine for loads up to 5kN and was designed for testing foams, plastics, light-weight materials and components. The test frame is divided into base plate and portal frame with a single-spindle-actuation-unit in the centre. The test area (between the base plate and moving traverse) corresponds to the standard test area provided for the application, which can withstand the machine load of 5kN.

The illustration above shows a specific configuration for testing flexible cellular materials, bonded and molded foams in accordance with the standards ASTM D 3574-B1 and ISO 3386-1 (load deflection). The upper circular compression pad has a diameter of 203mm and is directly attached on the load cell by using an universal joint. The lower base plate is made of Aluminium and comes with a breadboard in centre.

mechanical design	central actuation-unit with ball screw, portal frame made of aluminium profiles, driven by a DC-servomotor, Fmax=5kN, stiffness (system load frame-load cell max.capacity-adapter) 5 kN/mm, one testing room (up to nominal load), test area width (clearance): 810mm, crosshead travel (without grips): 490mm
standard functions	operation mode: stand alone or PC-control programmable control at selected load, stroke or strain values over-load protection, automatic calibration sample-break-detector, return-function, precice manual crosshead control by control panel with display (force, stroke)
capacity	5kN
testing speed	0,05 - 800mm/ min
return speed	vmax
force measurement range	in range of 0,8 - 100 % of load cell capacity class 1 (optional class 0,5) according EN 10002-2, ASTM E4, DIN EN ISO 7500 class 1)
force resolution	+/- 60.000 digits at integration time 20ms (standard)
stroke measurement	incremental input with sensor monitoring, storing of stroke position
stroke resolution	< 1μm
software-interface	USB 2.0 - Interface and LAN
data transfer rate	50Hz (standard)
optional card	1 analog or digital in- and output for load, strain or additional measuring devices are possible, +/-10V input for external devices, in- and outputcard for controlling of external devices, card for safety-devices
power consumption	115/230 VAC, 0,7 kVA, 50/60 Hz, 5- 40°C, 20- 80 % humidity
dimensions w x d x h	1020 x 810 x 1460mm
weight	80kg
noise emission	max. 65dB
options	- load cell 100N / 500N / 1kN / 3kN / 5kN - testing instruments (grips) for tensile tests - compression plates, flexure test kits, special fixtures, external devices - PC (current standard), operating system Windows® 2000 / XP - Software LABMASTER version: BASIC / SCIENCE
main connection for grips (coupling)	R20/8 (standard)