Hegewald & Peschke
Meß- und Prüftechnik GmbH

Product information

Universal testing machine inspekt blue 5 kN

zertifiziert nach DIN EN ISO 9001
TÜV CERT
Zert. Nr. 08/100/9044/3

Hegewald & Peschke, Meß- und Prüftechnik GmbH
Am Gründchen 1, 01683 Nossen, Germany
Telefon: +49 35242 445-0
E-Mail: info@Hegewald-Peschke.com
https://www.Hegewald-Peschke.com

Modern load frame design for various applications

- Load frame extremely variable in height and width → optimum adaptation to different specimen and component sizes
- Connection of peripheral devices (e.g. furnaces, temperature chambers) and additional measuring and control channels (e.g. extensometers, measuring probes, optical sensors) possible

Innovative construction guarantees highest measuring precision

- Use of backlash-free precision ball screws with larger diameter (preloaded in aluminium support profiles) and special nut system
  - → **Precise load transmission**
  - → **High lateral force stability**
  - → **Increased axial rigidity**
- Brushless drive for static material testing as well as for alternating and continuous loads
- Reduced noise emission due to low motor speed and optimized frequency range

Innovative control electronics for maximum measurement resolution & extensive functionality

- High modularity and control precision
- Adaptive controller
- High-quality signal converters for maximum resolution
- Standard functions:
  - Force, displacement, strain control
  - Overload protection
  - Automatic sensor identification incl. calibration data storage
  - Specimen break detection
  - Return function
  - Manual positioning via hand panel or our testing software *LabMaster*

Our testing machines speak your language: LabMaster - the testing software from Hegewald und Peschke

- User-friendly usage concept
- Complete software including all test modules (tensile, compression, bending, peel test) without additional costs
- Universally applicable: simple and complex test procedures: standard-compliant and customer-specific
- High flexibility for integration of external devices, data import and export as well as free configuration of test procedures

Highest safety with maximum operating convenience

- CE-compliant protective housing optionally available for every application
- Sustainable: capable for cost-efficient and application-oriented updates/upgrades

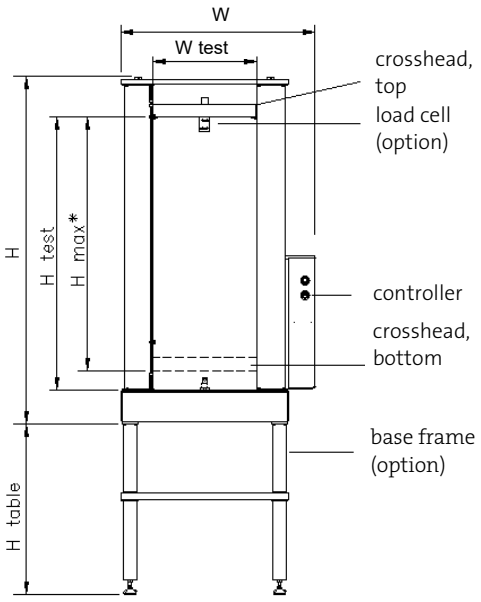
Technical data:

Nominal load	5 kN
Mechanical structure	2 backlash-free recirculating ball screw, covered spindle, brushless drive
Stiffness of the test frame	15 kN/mm (incl. deformation of load cell and tool adapter)
Test speed	0.016 µm/min – 2000 mm/min *(optionally expandable)*
Resolution of crosshead travel measurement	<0.02 µm
Force measuring range	Class 1 (optionally class 0.5) from 0.1 - 100 % of the nominal load depending on the load cell used (according to DIN EN ISO 7500-1, ASTM E4)
Force measurement resolution	24 bit (±8.388.608 Digits)
Measuring, control and regulating electronics	Load and traverse path channel integrated 3 additional free slots for expansion cards for analog/digital inputs/outputs for force, displacement, strain gauges, as well as +/-10V input for external measuring devices, safety door connection
Data transmission	Ethernet (LAN) or USB, 50 Hz (standard), *optionally higher data acquisition frequency*
Electrical connection	230 VAC, 0.5 kVA, 50 Hz, 10 - 30°C, 20- 80 % humidity
Main test tool connection	R20/8
Options necessary for operation	Hand panel with force-displacement display for manual positioning and setup operation, load cell, clamping tool/testing tool, adapter set, LabMaster user software, PC, Windows© operating system

Dimensions/weight:

	[mm]
H (height)	1420
H test (test room height)	1080
H max (max. test stroke without test tools, adapter and load cell)	1025
W (width)	790
W test (test room width)	420
Depth	520
H table (height table)	685

Weight: 120 kg

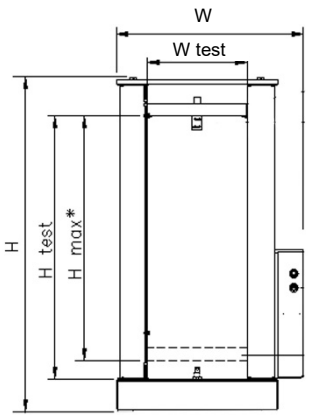


Further options:

- Base table for modification to floor model (standard height: 685 mm)
- Temperature control equipment (e.g. ovens, temperature chambers)
- Clip-on extensometers, long-distance extensometers, optical strain gauges
- Protective devices
- T-groove plates, etc. for component tests
- Modified moving crosshead:
  - With load cell displacement unit for test applications outside the standard test axis
  - For mounting several load cells next to each other
  - With pass-through hole for guide bushings (e.g. of compression plates for spring testing)
- Lower fixed crosshead with through bushing for testing below the test frame




Option: extended height and width of the test room



Extension in [mm]	H +250	W +190	W +190 H +250	W +330	W +330 H +250	W +620	W +620 H +250
Item number	10-039-011	10-039-031	10-039-041	10-031-051	10-039-061	10-039-071	10-039-081
Weigth [kg]	140	170	190	230	250	320	340
H [mm]	1670	1420	1670	1420	1670	1420	1670
H test [mm]	1335	1070	1305	1070	1305	1045	1280
H max [mm]	1245	995	1215	995	1215	970	1190
W [mm]	790	980		1120		1410	
W test [mm]	420	610		750		1040	
Depth [mm]	520	550		550		550	
Stiffness [kN/mm]	18	12		10		8	