



Product Information

Universal testing machine inspekt solo 2.5 kN





General Product Description

With regard to material and component testing in the small load range, the Hegewald & Peschke MPT GmbH has developed the inspekt solo universal testing machine series in three different test room heights. The inspekt solo is a cost-efficient table-top device with low weight, high bending stiffness and suitable for tensile, compression and bending tests on various materials. In combination with the ergonomic design and the new brushless drive concept, a reliable and fast measurement is guaranteed with simple operation both in harsh production environments and in sterile laboratories.

Application:

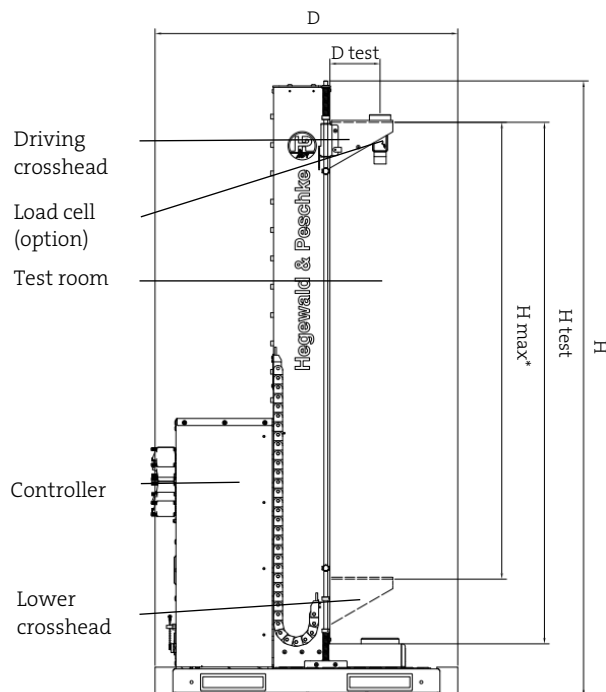
- testing of plastics, elastomer tensile tests
- lightweight materials and components, component tests
- spring testing, foils, textile testing

Essential Characteristics

- innovative brushless drive without gear drive
- reduced noise pollution due to low motor speed and optimized frequency range
- control by crosshead travel, speed or load
- high-precision force measurement using strain gauge force transducers
- compact workplace design
- designed for standing and seated operation at the work table due to very flat lower crosshead and lateral arrangement of the electronics
- large machine base plate for setting up accessories and storing tools or samples
- easy cleaning of the machine

Dimensions in [mm]:

	solo S	solo M	solo L
H (height)	705	1305	1605
H test (test room height)	475	1075	1375
H max * (max. test stroke)	365	965	1265
W absolute (width with control)	631		
D test (depth room width)	105		
D (depth)	631		



View universal testing machine with dimensions

* Crosshead travel without grips, adapter and load cell



Frame and Test Room Height

The inspekt solo single-spindle universal testing machine has a ball screw that is free of play in a C-frame design with spindle protection and an innovative brushless drive motor.

The inspekt solo universal testing machine is available in three different test room heights and can thus be optimally adapted to individual requirements.

inspekt solo M

Test room height: 1075mm (Item-No.: 10-008-211)

especially tensile tests on plastics, metals
(medium strains)

inspekt solo S

Test room height: 475mm

(Item-No.: 10-008-201)

especially

bending/compression tests



inspekt solo L

Test room height: 1375mm

(Item-No.: 10-008-221)

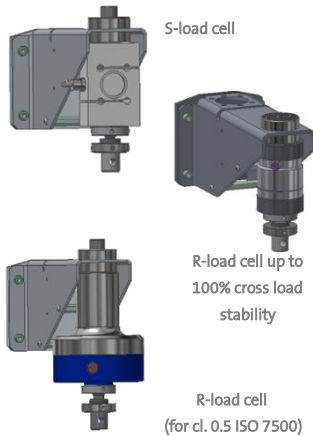
especially tensile tests on plastics,
silicones, elastomers (very high
strains)

Technical Data

Test load tension/compression	2.5kN		
Mechanical design	1 zero play recirculating ball screws, 1 rail, brushless drive		
Stiffness of the test frame incl. deformation of the load cell and tool adapter	2.7kN/mm		
Crosshead speed	1.5µm/min to 1200mm/min		
Max. resolution of crosshead travel measurement	<0.025µm		
Force measurement	Measuring range: class 1 in the range of 0.1 to 100% of nominal load (optionally class 0.5) depending on the force sensor used (according to DIN EN ISO 7500-1, ASTM E4)		
Force measurement resolution	24 bit (±8,388,608 Digits)		
Measurement and control electronics	Force and crosshead travel channel integrated Additionally 3 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		
Power ratings	230 VAC, 0.5 kVA, 50 Hz, 10 - 30 °C, 20 - 80 % humidity		
Weight	inspekt solo S: 48kg	inspekt solo M: 55kg	inspekt solo L: 60kg
Data processing	Ethernet (LAN) or USB, 50Hz (Standard), optional increased data acquisition rates		



Necessary Accessories



Standard Load Cells

Including H&P-factory calibration report class 1 acc. DIN EN ISO 7500-1 (class 0,5 optional, DAkkS calibration optional)

Force measuring range	S-load cell	R-load cell cross load stability up to 100% up to class 1. acc. to ISO 7500	R-load cell cross load stability up to 50% up to class 0.5 acc. to ISO 7500
10N	11-001-343		
20N	11-001-348		
50N	11-002-343		
100N	11-003-343		
200N	11-003-348		
500N	11-004-343	11-004-305	
1kN	11-005-343	11-005-350	
2kN	11-005-345	11-005-352	
2.5kN	11-005-347		11-005-325*

*for inspekt solo L and inspekt solo M and pressure tests on inspekt solo S

Adapters

Item number	Item
12-xxx-001	für S-load cell
12-xxx-002	für R-load cell

Optional Accessories



Safety Doors

The round safety door for the inspekt solo testing machine is made of transparent material and can be opened by sliding to the left. The safety door encloses the entire test area.

Item	for inspekt solo S	for inspekt solo M	for inspekt solo L
round safety door, closed on all sides	19-008-100	19-008-110	19-008-120
round safety door, closed on all sides, software monitoring	19-008-102	19-008-112	19-008-122
round safety door, closed on all sides, safe electrical locking	19-008-104	19-008-114	19-008-124

Extensometers and Holders

The use of long distance extensometers, video extensometers and extensometer holders is also possible.

Item number	Item	Extensometer holders
15-024-031	long distance extensometers L700, series table/blue/solo/duo	15-008-100
15-024-030	long distance extensometers L1100, series table/blue/solo/duo	
15-012-6x0	video extensometers ONE1	15-008-130
others on request		

T-groove plates

The T-groove plates are used for larger specimens and for specimens requiring variable mounting points. T-groove plates cannot be combined with a safety door.

Item number	Item
14-075-140	T-groove plate

Organization System for Tools

The T-wall with storage options for clamping devices, load cells and accessories can be mounted directly on the base plate of the machine. However, it cannot be combined with a safety door.

Item number	Item
19-008-901	organization system for tools

Hand Panels

The manual control units enable convenient work when changing specimens and tools directly on the load frame.

Item number	Item
10-030-880	Hand Panel RMCi 6
10-030-881	Hand Panel RMCi 7 (with emergency stop function) - necessary for the operation with a safety door

Workbenches

An ergonomically designed workplace with functional equipment is the basis for an efficient performance of tasks. In order to facilitate the design of the measuring workplace, we offer you the following accessories.

Item number	Item
19-008-801	color frame RAL 9006, 40mm strong beech wood panel, cable gland, cable duct, working height adjustable from 0.75 to 1.05m, load capacity up to 500kg area load W 0.75m x D 0.7m
19-008-810	color frame RAL 9006, 40mm strong beech wood panel, computer holder, cable gland, cable duct, working height adjustable from 0.75 to 1.05m, load capacity up to 1250kg area load W 1.5m x D 0.9m
19-008-820	color frame RAL 9006, 40mm strong beech wood panel, computer holder, cable gland, cable duct, working height adjustable from 0.75 to 1.05m, load capacity up to 1250kg area load W 2m x D 0.9m with base unit

