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injektor solutions

easuring system electronic scale

e standard in the graphics industry

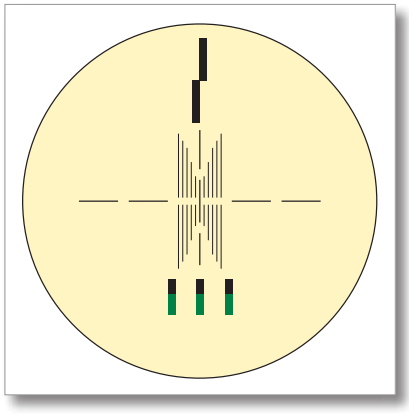


Use of the electronic scale makes length measurements simpler. The hardened stainless steel guide has an inductive strip. This provides the electronics with the information on the momentary position of the measuring carriage running play and wear-free on longitudinal ball bearings. The coated, four lens optical system with 10x magnification factor makes it possible to move precisely to the measuring point. The magnifier has a fine focus for adjustment to your specific correction. The magnifier is equipped with a reticule plate for exact positioning of the measuring carriage. The hard chrome vapour-coated graduations on this plate ensure precise readings.



An ingenious parallax control ensures that the viewing angle is perpendicular to the lens. This easy-to-read display with six millimetre high characters shows a maximum resolution of 0.10 millimetres or 0.0005 inches. A fine adjustment is located immediately next to the display. The vertical arresting screw arrests a part of the measuring carriage. The horizontal positioning screw moves the carriage sensitively to the measuring point. The zero point for the measurement can then be set by pressing the reset button. After moving the carriage to the second measuring point the result can be read off on the display. The system has an RS232 interface. This allows serial transfer of the values to the computer. An RS232-compatible interface cable with optical coupling or, as an alternative, a radio transfer system is available for data transfer.





Display of data on computer possible in Excel with software available as option. The two lateral positioning slides facilitate quick, parallel alignment of the scale with the item to be measured.

Model variety: Seven measuring lengths available from 180 to 1500 millimetres. Three types of reticule plates and various optical system complete the range. In addition to the reticule plate mentioned above, the PCB scale can be used exclusively for measuring hole intervals. Use of a standard 10x magnifier (ES version) is always required for the PCB scale.

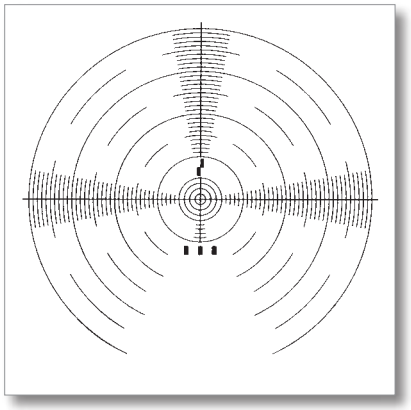


If a microscope is also to be used for particularly exact determination of the measuring point, it is possible to turn the microscope adapter so that the light beam passes through the free point in the scale. Reason: The 25x and 50x microscopes available as accessories, have their own scale with graduations and cross-hairs, which intersect the PCB scale. If it is known that very fine positioning

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dered with a video system for series measurements. The ES version can even be retrofitted with the USB video camera. Moving the to measuring points does not require assuming a bent posture over the microscope, relieving your back and eyes. It is then possible to move to the measuring points using the reticule plate or the measuring software reference functions. Single or double cross-hairs, tolerance circles, multi-shape masks and registration marks are available. Single measurements in the camera's field of view can be made with the normal metric measuring functions. For example, radiuses, angles, diameters, surfaces and distances can be determined. This allows compilation of comprehensive measurement documentation in combination with the data from the RS232 interface. On older computers, the electronic scale can be equipped alternatively with an analogue CCD camera and framegrabber. For use of an analogue camera with video monitor without PC.







The data

Available standard lengths	180 mm / 7 inch 300 mm / 12 inch 500 mm / 20 inch 800 mm / 32 inch 1000 mm / 40 inch 1300 mm / 52 inch 1500 mm / 60 inch
Resolution	0.01 mm / 0.0005 inch
Repetition accuracy	0.01 mm
Error band width	up to 500 mm = 0.03 mm up to 800 mm = 0.04 mm up to 1000 mm = 0.05 mm up to 1300 mm = 0.10 mm up to 1500 mm = 0.15 mm

LCD display, lithium battery 3V, Life expectancy approx. 4000 h
Temperature range: +10 to +40°C
RS232 kompatible Schnittstelle
Strichplatte: Standard oder PCB

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		Price excl. VAT.
	) mm with 10x magnifier	
ES-300-10	Measuring length 300 mm with 10x magnifier	
ES-500-10	Measuring length 500 mm with 10x magnifier	
ES-800-10	Measuring length 800 mm with 10x magnifier	
ES-1000-10	Measuring length 1000 mm with 10x magnifier	
ES-1300-10	Measuring length 1300 mm with 10x magnifier	
ES-1500-10	Measuring length 1500 mm with 10x magnifier	
ESM-180-25	Measuring length 180 mm with 25x microscope	
ESM-300-25	Measuring length 300 mm with 25x microscope	
ESM-500-25	Measuring length 500 mm with 25x microscope	
ESM-800-25	Measuring length 800 mm with 25x microscope	
ESM-1000-25	Measuring length 1000 mm with 25x microscope	
ESM-1300-25	Measuring length 1300 mm with 25x microscope	
ESM-1500-25	Measuring length 1500 mm with 25x microscope	
ESM-180-50	Measuring length 180 mm with 50x microscope	
ESM-300-50	Measuring length 300 mm with 50x microscope	
ESM-500-50	Measuring length 500 mm with 50x microscope	
ESM-800-50	Measuring length 800 mm with 50x microscope	
ESM-1000-50	Measuring length 1000 mm with 50x microscope	
ESM-1300-50	Measuring length 1300 mm with 50x microscope	
ESM-1500-50	Measuring length 1500 mm with 50x microscope	
ES-ADP	Adapter for microscopes in combination with ES versions	
ES-2008-25	25x microscope, play-free version for combination with ES	
ES-2008-50	50x microscope, play-free version for combination with ES	
ES-KF-2008	Replacement acrylic base for ES-2008 microscope	
ES-ELM	Auxiliary light for ES version	
ES-USB	USB camera system for mounting on ES versions with Metric BE, Colour camera USB 2.0 - 1280 x 1024 Pixels	
ES-RS232-WIN	RS-232 port Software and opto-cable for transfer to Excel	
ES-Enavit	Care and cleaning spray for electronic scale	
ES-FM	Radio module for data transfer instead of opto-cable (price applies only for delivery with new instrument.)	
ES-FM-NR	Retrofitting present electronic scale with radio module (It is necessary to send in the electronic scale for retrofitting.)	