

Door Closing Power Measuring System SCHATZ® 5005+



- Specified parameters
- Memory capacity up to 5,000 measurements
- Battery-supplied operation for 8 hours
- Comprehensive, intelligent self-testing system for the identification of operating statuses

Application

Within the car body construction sector, respectively the final assembly, the smooth and easy closability of car doors after their installation is a significant factor.

The door closing-power measuring system 5413-5005+ is a mobile measuring system for the measurement of the door closing-power and was especially developed for this purpose.

It is suited to perform spot samples in the auditing sector or the establishment of characteristics in the laboratory.

Due to the network-independent battery operation, the device is suited for continuous in situ testing.

The spring unit warrants for reproducible results and features most simple handling.

The also provided calibration unit enables the regular monitoring of the measured results.

Description

The system consists of the spring unit with the integrated traction force sensor, the measurement and evaluation unit and the calibration device for the determination of the spring constant.

The door is manually opened until the drawing force is reached. The door is subsequently closed by the spring unit and the internal micro-processor calculates the energy and power which was required to close the door.

Up to 5,000 established measurement values for 800 screw locations/stations can be stored.

Door Closing Power Measuring System

SCHATZ® 5005+



Technical Data

Door Closing Power Measuring System	
Model Number	5413-5005+
Part Number	90075002 Language Package L1 (D/GB/F/E/NL/PT) 90075003 Language Package L2 (D/GB/H/CZ/PL/TRK)
Measurable tractive force, max.	140 N
Sensor Capacity	500 N
Memory Capacities	5,000 Measurements 500 Measurement Devices 800 Screw Locations
Measurement Units	Force N Energy N·m
Calculation base	$E = \frac{1}{C} \left[F_1 \times F_0 - F_0^2 + \frac{1}{2} (F_1 - F_0)^2 \right]$
Resolution of measured values	Force 1 N Energy 0,01 N·m
Accuracy Category (for complete measurement chain)	0.25 % acc. to DIN 1319 T3; 1 acc. to DIN 51309
Filter	100 Hz
Signal Amplifier	DC Precision Amplifier
Nominal Sensitivity	0,5 mV/V ... 5 mV/V
Sensor Connection	120 Ohm ... 1.000 Ohm
Power Supply of the DMS-Bridge	5 V DC
Electrical Supply	100 V – 240 V, 47 Hz ... 63 Hz universal power supply unit with 3 adaptor plugs, power supply unit for battery operation with fast-charge function, (Mains-/Battery Operation)
Operational/Charging Period	8 h / 3h at battery operation
Keyboard	Plastic foil keyboard 21 keys
Display/Monitor	Display, illuminated, 320 x 240 Pixel, 120 mm x 89 mm LEDs for operational display
Plug-In Connections	Line adapter: External Voltage Socket 12 Volt Sensor: ODU.16s ODU.12s (only A-Version) Serial Interfaces: D-Sub.9s Control In-/Outputs: D-Sub.15p Barcode: ODU.5s
Casing Protection Category	IP32
Ambient Conditions	Operation: +10 °C to +40 °C Storage: -10 °C to +50 °C Respectively at max. 95 % rel. humidity
Dimensions (L x W x H)	Measurement device 277 mm x 185 mm x 90 mm Spring unit 60 mm x 475 mm x 33 mm Calibration device 120 mm x 700 mm x 75 mm
Weight	Measurement device 1.8 kg Spring unit 1.5 kg Calibration device 4.9 kg
Accessories	Plastic Transport Case, Power Supply Unit Optional: Bar Code Scanner, Shock Protection, Printer