



NEW

HOMMEL-ETAMIC F435/F455

Enhanced productivity and functionality

- Precise and reliable determination of all form and positional tolerances
- Optional roughness and waviness measurement with new probe generation
- Automatic centering and leveling for fast workpiece alignment and effective measurement of series parts
- Innovative, user friendly evaluation software TURBO FORM



Precision is our business.



New probe generation



Compact desktop version



Ergonomic measuring station

Scope of delivery HOMMEL-ETAMIC F435/F455

F435 desktop	Art. 1005 9999
F435 with instrument table	Art. 1006 0126
F455 desktop	Art. 1005 9654
F455 with instrument table	Art. 1006 0127

- High precision, air mounted rotational axis, automatic centering and leveling, max. workpiece weight 400 N
- Measurement axis in Z direction with rotary encoder, travel 350/550 mm
- Measurement axis in R direction with high resolution glass scale, travel 220 mm
- New probe generation FT1.1 with $\pm 1000 \mu\text{m}$ measuring range incl. stylus (fast probe changing thanks to magnetic coupling)
- Instrument table GTF3 with inlaid stone plate
- Windows 7 based measuring instrument, 22" TFT color flat screen, mouse, network card, CD-writer
- Evaluation software TURBO FORM for Windows

Optional:

- Roughness and waviness measurement (in connection with GTF3 and air damping)
- Automatic tilt and rotation module MDS for fully automatic axial and radial measurements, tilt range 90° , rotation range: 270°
- Instrument table GTF3 with air damping
- High resolution glass scale in Z direction
- Twist measurement according to MBN 31007-07 V02
- Several precision-chucks
- Magnification standard with test certificate
- Probe arm set to cover standard measuring tasks

Technical data HOMMEL-ETAMIC F435/F455

Workpiece volume

Distance C/Z axis	350 mm
Max. test diameter	430 mm
Max. measuring height	350/550 mm

Rotation axis (C axis)

Table diameter	250 mm
Workpiece alignment	automatic
Roundness error $\mu\text{m}+\mu\text{m}/\text{mm}$ measuring height	0.02+0.0005
Roundness error $\mu\text{m}+\mu\text{m}/\text{mm}$ measuring height*	0.01+0.00025
Axial runout error $\mu\text{m}+\mu\text{m}/\text{mm}$ radius	0.02+0.0005
Axial runout error $\mu\text{m}+\mu\text{m}/\text{mm}$ radius*	0.015+0.00025
Centering range	± 2 mm
Leveling range	$\pm 0.6^\circ$
Measuring speed	1-12 1/min.
Bearing	air
Max. load	400 N

Vertical axis (Z axis)

Measuring distance	350/550 mm
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Horizontal axis (R axis)

Measuring distance	220 mm
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Dimensions/weight measuring system

Length	780 mm
Width	500 mm
Height	865/1065 mm
Weight	311 kg

All accuracy data in accordance with DIN 1101. Roundness deviations measured with filter 0-15 S/r; 6 rpm.; LSCI. Straightness deviations measured with cut-off 2.5 mm; 100 mm/min.; LSLI. All data refer to $20^\circ\text{C} \pm 1^\circ\text{C}$.

* Values as maximum deviation from the reference circle LSCI, filter 0-15 S/r LSC, 6 rpm.