QualiMaster®





QualiMaster, honed for the utmost precision

QualiMaster measures the torque profile of barrels and evaluates all characteristic values. The robust rotary drive with adjustable sensor alignment meets the highest concentricity requirements. The torque sensor is equipped with a spring-loaded axis with axial force measurement so that it couples gently to the barrel. A balancing element eliminates radial forces. As a result, the QualiMaster achieves precise and reproducible measurement results.

Can be used as table-top device or integrated into an automation solution

As a table-top device, the QualiMaster is designed to perform automated measurements with manual placement. The QualiMaster Automat has a centring and retaining function for maximal process reliability in automation.

Powerful PC software with WiCoTRACE

The WiCoTRACE parameter and result management facilitates programming and enables parallel operation of up to 4 measuring channels. The measurement result is displayed graphically and is evaluated according to the desired quality criteria.



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- Measuring the torque profile of barrels and evaluating the characteristic parameters
- Fully automatic test sequence with good/bad evaluation
- Designed for long-term operation, robust mechanical construction
- Changeable torque sensors with automatic recognition for 5, 10, 20, 50 or 100 mNm
- Spring-loaded sensor axis and monitoring of axial force for a safe connection to the barrel
- Cardanic balancing device for elimination of radial forces
- Fast changing of piece holder
- Fine-tuning of the orientation of the sensor axis in relation to the drive axis
- Integrated status indicators and LED lighting for the work area
- Powerful test parameter and result management using WiCoTRACE for Windows PC (up to 4 measuring channels)

	QualiMaster	QualiMaster Automat
Foot for table-top device	•	
Foot for mounting with screws (4x M6)		•
Pneumatic centring and retaining function for reliable automatic placement		•
Interface for external control		•
WiCoTRACE	•	•

General

Operation	Computer software
2 push-buttons on the device	Windows PC Windows tablet
Display units	Windows PC
Interfaces	1x USB type A (device type B) 1x 9-pole D-sub 1x compressed air connection ¹ 6 bar
Dimensions	110 x 385 x 235 mm (W x H x D)
Weight	7.5 kg
WiCoTRACE	yes

Measurement

Measurement principle	Torque and angle of rotation measurement with controlled measuring drive
Torque sensor	Measuring ranges 5, 10, 20, 50 and 100 mNm (on demand) Precision < 1% FS Resolution 0.01 mNm
Drive unit	Radial runout ± 2 µm, Resolution ± 0.1°

Measurement conditions

Rotation speed	0.1 to 60 rpm
Vertical drive	regulated, with mechanical and electronic overload protection
Coupling process	Parametrable, clearance 5 to 1000 µm
Axial force	parametrable, 0 to 250 cN
Balancing device	± 0.3 mm (X and Y position)

 $^{^{\}scriptsize 1}$ QualiMaster Automat only.