

Garant
Video measuring microscope MM1 with TP20 probe system, Type: 200CMZ/TP

Order data

Order number	492560 200CMZ/TP
GTIN	4062406574307
Item class	41P

Description
Version:

CNC-controlled video measuring microscope with quicker image processing, high-resolution colour camera, and a multi-touch panel based on a PC, easy to operate, suitable for the workshop environment.

Incident light: 56 white LEDs in 2 concentric rings. 1 ring and 4 segments can each be separately switched and dimmed.

Transillumination: Long-life LEDs, telecentric, can be switched and dimmed. **Solid granite base** with surface-hardened indexing table and high-precision guides.

- **Easy installation and use of measurement programmes.**
- **Practical automation of measuring processes, for example pallet measurements.**
- **Modern user-friendly measurement software for intuitive operation.**

Optical measurement system with additional Renishaw TP20 type tactile measurement system for measuring regular geometries that cannot be measured optically.

- **Quick and simple tactile measurement.**
- **Creation of automated measurement procedures (optical and tactile)**

With motorised zoom lens, magnification from 0.3× to 3.5 and coaxial light for uniform illumination of components.

Supplied with:

All-in-One PC, wireless mouse and keyboard, dust cover, power supply unit, test certificate, and multi-lingual user manual.

Optional extras:

Lens No. 491912, software option No. 491913, cutting edge cleaner No. 354788.

Attention:

German version. Order free UK adapter plug No. 08 1174_GB.

Note:

Length measurement variation $E_{UXY, MPE}$ according to DIN EN ISO 10360-7, measured with magnification factor = 0.5.

Length measurement variation $E_{OZ, MPE}$ according to DIN EN ISO 10360-2, measured with a straight edge finder ($\varnothing = 2.5$ mm, length 20 mm).

Permissible ambient conditions: $20^{\circ}\text{C} \pm 1$ K, temperature gradient $\Delta_{th} = 0.5$ K/h, $\Delta_{td} = 4.0$ K/d, measured with a calibrated standard.

Measuring range X: 200 mm

Measuring range Y: 100 mm

Measuring range Z: 100 mm

Length measurement variation $E_{UXY, MPE}$ optically (2D): $2.9 + L / 100$ (L in mm) at $20^{\circ}\text{C} \pm 1$ K μm

Length measurement variation $E_{1, Z \text{ axis}}$ tactile (1D): $4.0 + L/75$ (L in mm) μm

Lens (times): 0.3 – 3.5

Technical description

Length measurement variation $E_{1, Z \text{ axis}}$ tactile (1D)	$4.0 + L/75$ (L in mm) μm
Camera	6.4 megapixels, autofocus
Measuring range Y	100 mm
Length	500 mm
Width	600 mm
Power supply	Mains operated
Weight	60 kg
Nominal voltage	240 V
Working distance	80 mm
Measuring range X	200 mm
Magnification at the screen (times)	10 - 162
maximum component height	100 mm
Lens (times)	0.3 – 3.5
Height	770 mm
Field of view	24×16 – 2×1 mm

Length measurement variation $E_{UXY, MPE}$ optically (2D)	2.9 + L / 100 (L in mm) at 20 °C ±1 K μm
Measuring range Z	100 mm
maximum component weight	20 kg
Type of product	CNC video measuring microscope

Accessories

Accessories for video measuring microscopes Type 300	491917 300
Anti-slip mat	491955
Software option for MM1 Type PROFIL	491913 PROFIL
Lens for measuring microscopes MM1/MM2 Type 3	491912 3
Base cabinet for measuring microscopes width×depth 1800X900 mm	491914 1800X900
Software option for MM1 Type DXF	491913 DXF
Dust cover Type 300	491919 300
Accessories for video measuring microscopes Type FEDER	491917 FEDER