

**Garant**
**Video measuring microscope MM1 with TP20 probe system, Type: 300CNC/TP**

**Order data**

Order number	492560 300CNC/TP
GTIN	4062406160289
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)**

**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.

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

We reserve the right to make technical changes and to change the touch panel version.

## Technical description

Measuring range Y	200 mm
maximum component weight	20 kg
Measuring range Z	200 mm
Magnification at the screen (times)	23
Lens (times)	0.5
Measuring range X	300 mm
Field of view	14×9 mm
Working distance	80 mm
Weight	115 kg
Height	950 mm
Length	730 mm
Camera	6.4 megapixels, autofocus
maximum component height	200 mm
Width	900 mm
Length measurement variation $E_{1, Z\text{ axis tactile (1D)}}$	$4.0 + L/75$ (L in mm) $\mu\text{m}$
Length measurement variation $E_{UXY, MPE}$ optically (2D)	$2.9 + L / 100$ (L in mm) at $20\text{ °C} \pm 1\text{ K}$ $\mu\text{m}$
Power supply	Mains operated
Nominal voltage	240 V
Type of product	CNC video measuring microscope

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## Accessories

Lens for measuring microscopes MM1/MM2 Type 3	491912 3
Software option for MM1 Type DXF	491913 DXF
Base cabinet for measuring microscopes width×depth 1800X900 mm	491914 1800X900
Accessories for video measuring microscopes Type FEDER	491917 FEDER
Software option for MM1 Type PROFIL	491913 PROFIL
Dust cover Type 300	491919 300
Spare glass plate for video measuring microscope MM1 Type 300	491948 300