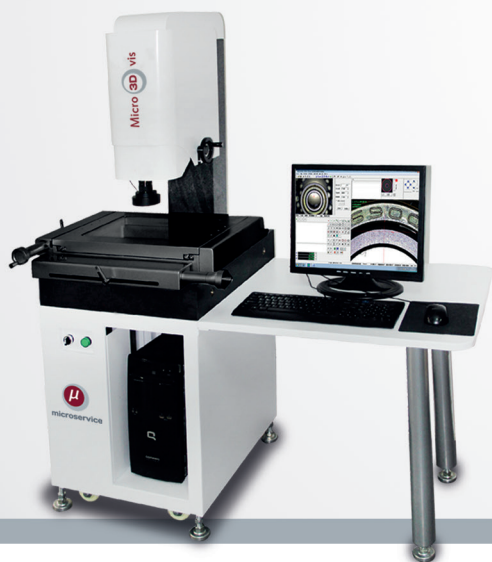


# Micro 3D vis

Visual Measuring Machines





			E	AC	AM
<b>Max. Cruise Speed</b>	Motorized (axes)	mm/s	-	0 - 100	0 - 100
	CNC (X-Y)	mm/s	-	200	300
	(Z)	-	-	100	30
<b>Max. Acceleration</b>	CNC (X-Y)	mm/s <sup>2</sup>	-	400	600
	(Z)	-	-	60	60

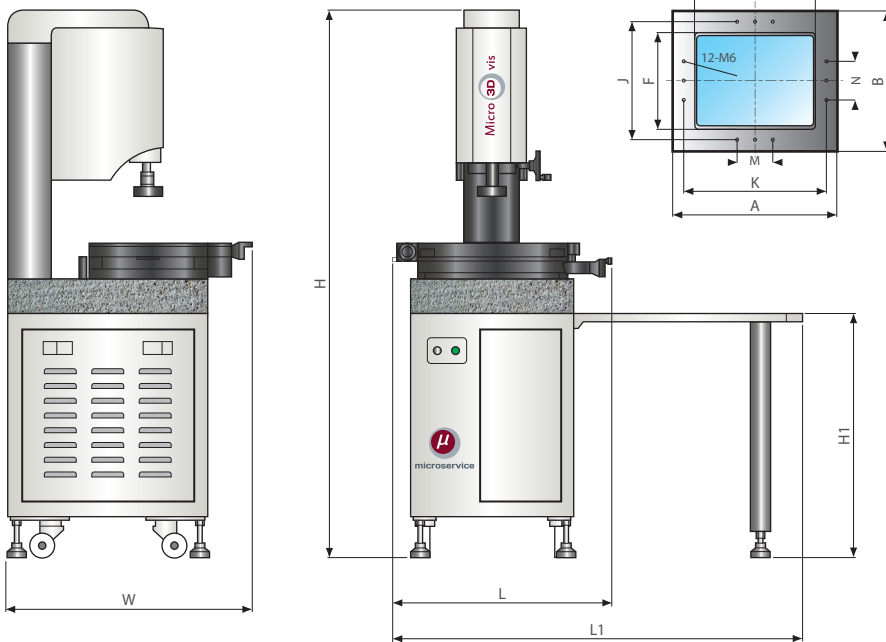
**CAMERA**

			E	AC	AM
<b>2D Measuring Error (XY), MPE as per ISO 10360-7:2011 <sup>1)</sup></b>	$E_{Uxy}$	μm	3 + L / 200	3 + L / 200	3 + L / 200
<b>Linear single axis measuring Error (Z), MPE as per ISO 10360-7:2011</b>	$E_{Uz}$	μm	5 + L / 200	5 + L / 200	5 + L / 200
<b>Repeatability Range, MPL as per ISO 10360-7:2011</b>	$R_U$	μm	5	3	3
<b>Probing Error on 2D circle as per ISO 10360-7:2011</b>	$P_{FV2D}$	μm	5	3	3

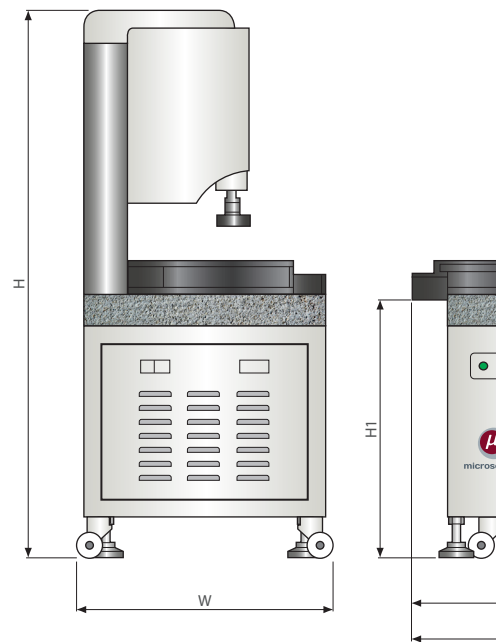
**INDEXING FIXED HEADS WITH TRIGGER PROBE**

			E	AC	AM
<b>Repeatability Range, MPL as per ISO 10360-2:2009</b>	$R_0$	μm	4	4	4
<b>Single Stylus form Error, MPE as per ISO 10360-5:2020</b>	$P_{Form.Sph.1x25x55:Tact}$	μm	5	5	5

**Series E**



**Series AC**



Model	Overall dimensions (L x W x H)	Overall dimensions with Desk (L1 x W x H)	Measuring Range	Table (A x B)
				mm
<b>E200</b>	570 x 695 x 1520	1200 x 695 x 1520	200 x 100 x 200	360 x 260
<b>E300</b>	675 x 750 x 1520	1255 x 750 x 1520	300 x 200 x 200	460 x 360
<b>E400</b>	772 x 900 x 1550	1455 x 900 x 1550	400 x 300 x 200	560 x 460
<b>AC300</b>	690 x 775 x 1665	1670 x 775 x 1665	300 x 200 x 180	460 x 360
<b>AC400</b>	794 x 963 x 1665	1774 x 963 x 1665	400 x 300 x 180	560 x 460
<b>AC500</b>	886 x 1113 x 1665	1865 x 1113 x 1665	500 x 400 x 180	660 x 560
<b>AM600</b>	1530 x 1336 x 1810	-	600 x 500 x 200	-
<b>AM800</b>	1730 x 1436 x 1810	-	800 x 600 x 200	-
<b>AM1000</b>	2200 x 1765 x 1825	-	1000 x 800 x 200	-
<b>AM1500</b>	2400 x 1965 x 1825	-	1500 x 1200 x 200	-

1) Measuring length L in mm.



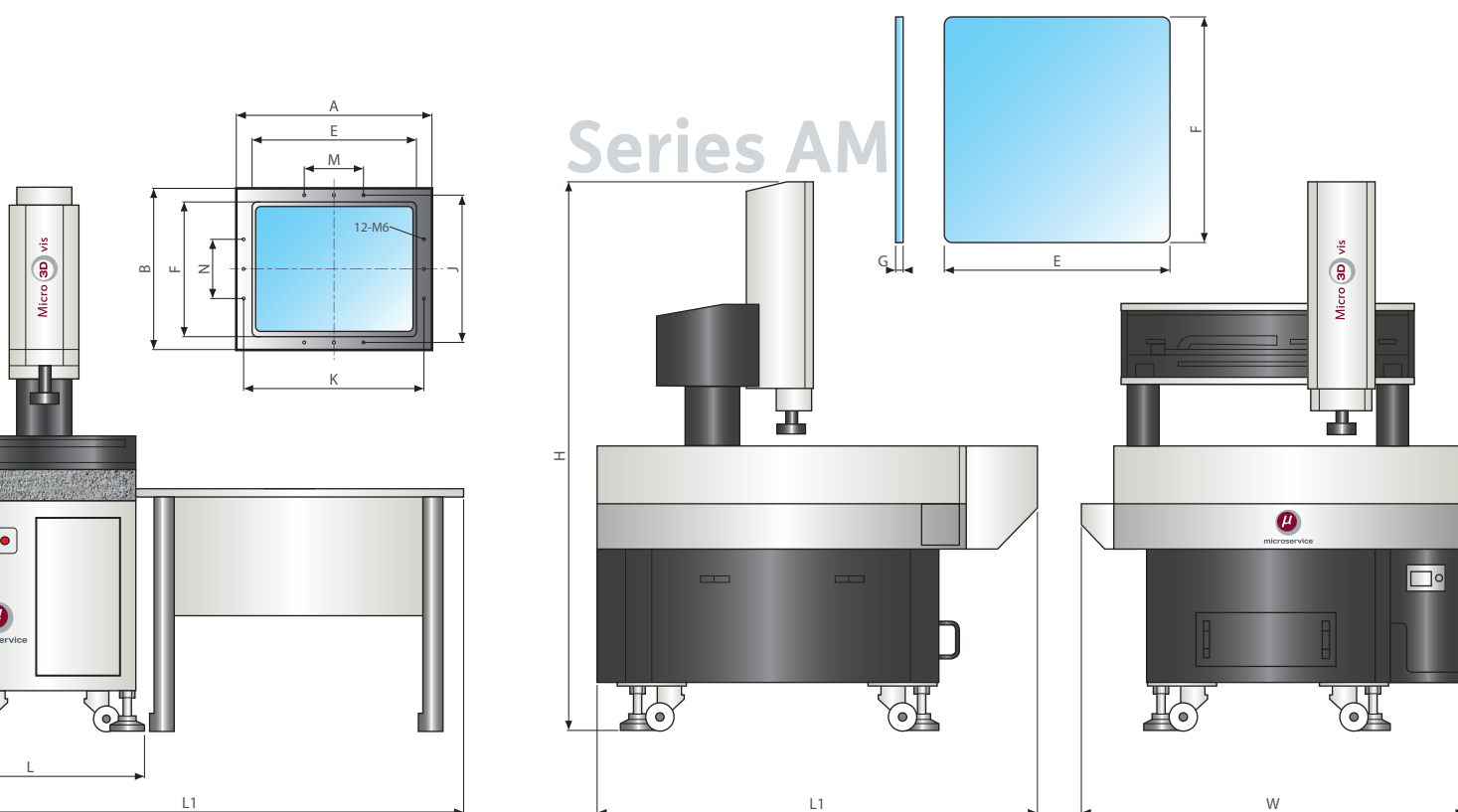
## METROLOGICAL SPECIFICATIONS

### TEMPERATURES

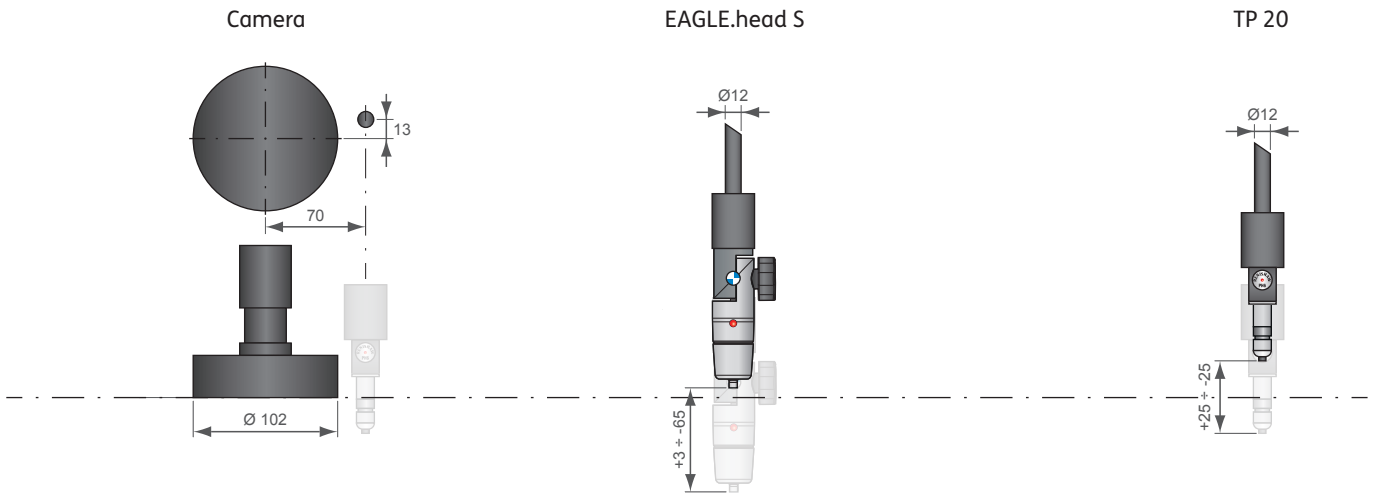
Measuring Reference Temperature	18 °C to 22 °C
Maximum air temperature variations	1 °C / h - 2,0 °C / 24h
Maximum spatial gradient	1 °C / m

### TOOLS / STYLUS CONFIGURATIONS

Camera	Standard
Touch Trigger Probe	Standard Force Module with $\varnothing 4$ x 10 mm styli



Glass (E x F x G)	Fixture Holes (K, J, M, N)	Box Dimensions	Max. Load	Net weight	Gross weight
				daN	
240 x 150	300, 205, 100, 100	900 x 1300 x 1100 (VMM divisa) 900 x 900 x 1700 (VMM su stand)	20	160	289
340 x 250	400, 305, 100, 100	900 x 1300 x 1100 (VMM divisa) 900 x 1000 x 1700 (VMM su stand)	25	230	308
450 x 360	505, 410, 200, 200	1200 x 1200 x 1730	25	300	450
340 x 250	400, 300, 100, 100	1200 x 1200 x 1850	20	490	590
450 x 360	485, 400, 200, 200	1200 x 1200 x 1850	25	656	756
550 x 460	605, 200, 510, 200	1300 x 1400 x 1850	25	800	910
748 x 673 x 15	-	1500 x 1700 x 2050	30	1144	1224
948 x 737 x 15	-	1600 x 1900 x 2050	30	1332	1412
1167 x 900 x 15	-	1900 x 2400 x 2050	30	2035	2115
1300 x 1000 x 15	-	2200 x 2600 x 2050	30	2151	2231



**TECHNICAL FEATURES**

<b>Mechanical frame</b>	Visual Measuring Machine, cantilever design (E, AC) or bridge design (AM)		
	<b>E</b>	<b>AC</b>	<b>AM</b>
<b>Sliding guideways</b>	XY: "V" shape linear guideways Z: "P" grade linear guideways	"P" grade linear guideways	
<b>Drive system</b>	XY ball screw Z grinding ball screw	XYZ grinding ball screw	
<b>Length measuring system</b>	Glass scale, 1 μm resolution		Steel scale, 1 μm resolution
<b>Motors</b>	AC Servo motor Z axis (S mod.)	XYZ AC Servo motors	
<b>CCD</b>	1.3 MP Digital color camera		
<b>Optics</b>	6,5:1 Optical Zoom manual	6,5:1 Optical Zoom 9 steps motorized	
<b>Optical Magnification   on 24" display</b>		0,7 ÷ 4,5 x	51,3 ÷ 330 x
<b>Working Distance</b>	63 mm		
<b>Field Of View (FOV) at 0,7 x</b>	6,6 x 4,8 mm		
<b>Profile Illumination</b>	LED diascope illumination, 256 levels		
<b>Surface Illumination</b>	LED Episcopic Coaxial Illumination. LED Ring-Light with 256 programmable level brightness	LED Episcopic Coaxial Illumination. LED Ring-Light with 4 concentric rings and 8 independent sectors, 256 programmable level brightness	
<b>Electronic Control</b>	SBK3000 / USB	SBK4000 / Serial line (Numerical Control)	
<b>Options</b>	Touch Probe; 0,5 x, 2 x lens		Touch Probe; 0,5 x, 2 x lens, Laser Probe

**ELECTRIC SUPPLY**

<b>Power Supply</b>	1/N/PE 115/230 V~ ± 10 %; 50 / 60 Hz (± 4 %)
<b>Max. power consumption</b>	2,5 kVA
<b>Typ. power consumption</b>	0,6 kVA

**ENVIRONMENT**

<b>Humidity</b>	40 % to 80 % UR (non condensing)
<b>Operating Temperature</b>	From 15 °C to 35 °C
<b>Acceptable Vibrations</b>	(Peak to Peak acceleration) 30 mm/s <sup>2</sup> from 1 to 10 Hz 15 mm/s <sup>2</sup> from 10 to 20 Hz 50 mm/s <sup>2</sup> from 20 to 100 Hz

**SAFETY**

**Regulations**

Micro 3D vis complies with EC machine directive 2006/42/EC and EMC directive 2004/108/EEC

**Disposal**

Microservice products and packaging returned to us are disposed of in accordance with applicable legal provisions.

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Specifications subject to change, due to the continuous improvement of the product.

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Text and design: Microservice.