

**Prepared for all challenges -  
today and tomorrow**

ZEISS CONTURA



# ZEISS CONTURA

## Key Characteristics



**Versatility**



**Variety of Optical Sensors**



**Ergonomic**



**Rotary Table**



**Options**



**Future-proof**



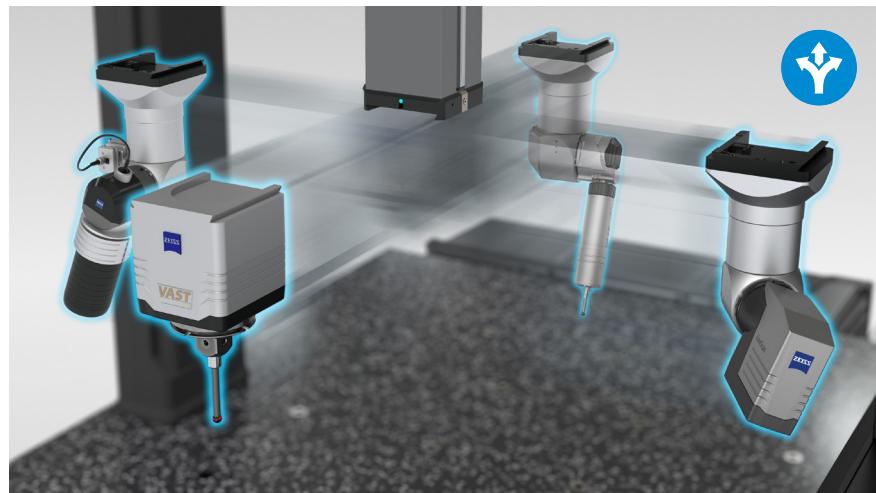
**Performance**



## Versatility

ZEISS CONTURA stands for absolute versatility and flexibility. The new generation is equipped with the ZEISS multi application sensor system (mass) technology, which makes it possible to exchange different sensor technologies quickly and easily.

With ZEISS CONTURA, you are already prepared today for the measurement tasks of tomorrow, as you can easily adapt to changing customer requirements.



### Option: Opticals sensors



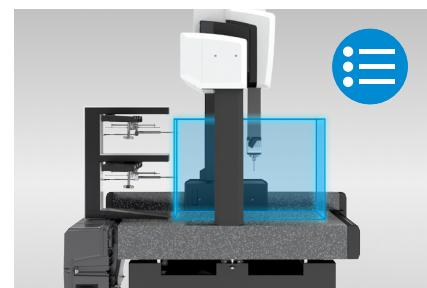
ZEISS CONTURA combines the performance of tactile and optical measurement tasks on a single device: from 2D image sensors to chromatic white light sensors to triangulation lasers. With ZEISS CONTURA, the world of optical sensors is now available.

### Option: Rotary Table



The new flexible rotary table can be installed in the measuring range as a surface-mounted variant when needed and can then be conveniently moved out of the measuring range again. This option enables measurements in four axes.

### Option: ProMax E



With the ProMax E option, ZEISS offers an automated probe changing magazine to guarantee the complete measuring volume during the changing process. It automatically moves into the measuring range and replaces the probe systems safely and accurately.

### Ergonomic



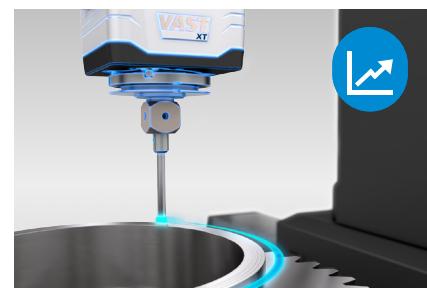
Small measuring rooms require a measuring device to adapt with the available space. The optimized height and width of the CMM, but also by well thought-out special features with regard to ergonomics, it is possible to work comfortably for the user.

### Future-proof



ZEISS CONTURA is also ready for Industry 4.0. The ZEISS Smart Services range of digital services allows the performance of the device to be monitored while on the move in real time.

### Performance



ZEISS CONTURA makes it possible to reduce the measuring time to a minimum while maintaining reliable accuracy. This is guaranteed by functions such as ZEISS VAST navigator or ZEISS VAST performance in conjunction with ZEISS VAST measuring heads.

# Prepared for all challenges - today and tomorrow

## ZEISS CONTURA

ZEISS CONTURA is available in six space-saving sizes.

The device is also available with the HTG (High Temperature Gradient) option - for larger temperature ranges.

ZEISS service offers excellent global customer support with the shortest response times in the industry.

### ZEISS CONTURA Sizes

7/7/6

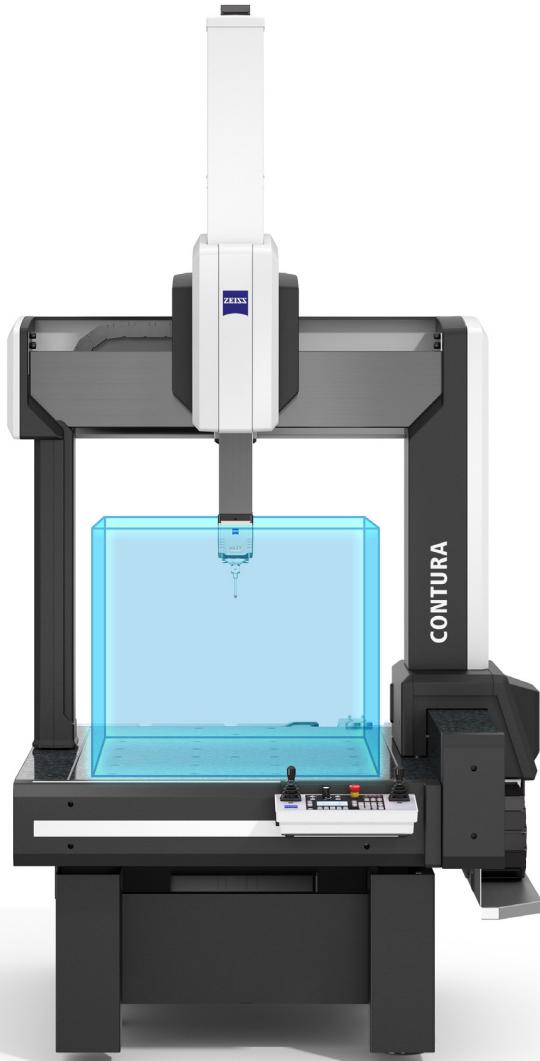
7/10/6

9/12/8

9/18/8

12/18/8

12/24/8



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**ZEISS CONTURA®**

Specifications

## ZEISS CONTURA active sensors and accuracy

The functionality of the device and its specifications are only achievable when using original accessories by ZEISS. The specified parameters are observed in the application of the internal test instructions for acceptance testing and in the use of the released standards in accordance with the ISO 10360 series.

### ZEISS VAST XT gold ZEISS VAST XTR gold



Active scanning and multipoint sensor. Scanning measuring rate up to 500 points/s.  
Variable measuring force (50-1000 mN) for data acquisition.  
ZEISS VAST XT gold: stylus: max. length = 500 mm, max. weight = 500 g incl. stylus adapter,  
min. stylus tip diameter = 0.5 mm.  
ZEISS VAST XTR gold: max. length (rigid) = 500 mm, max. length (during rotation) = 350 mm, max. weight = 500 g,  
including stylus adapter, min. stylus tip diameter = 0.5 mm.

			7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10
<b>Length measurement error</b> <sup>1,2)</sup> MPE complies with ISO 10360-2:2009	E0 / E150 18°C - 22°C 18°C - 26°C	in µm in µm	1.4 + L/350 1.4 + L/250	1.5 + L/350 1.5 + L/250	1.5 + L/350 1.5 + L/250	1.8 + L/350 1.8 + L/250	2.0 + L/350 2.0 + L/250
<b>Repeatability range of E0</b> MPL complies with ISO 10360-2:2009	R0	in µm	1.2	1.4	1.4	1.5	1.5
<b>Scanning error</b> MPE complies with ISO 10360-4:2000	THP	in µm	2.0	2.5	2.5	3.5	3.5
Required measuring time MPT	τ	in s	40	40	40	40	40
<b>Form measurement error</b> <sup>3)</sup> MPE for roundness complies with ISO 12181 (VDI/VDE 2617 sheet 2.2)	RONt (MZCI)	in µm	1.5	1.7	1.7	1.9	1.9
<b>Single stylus form probing error</b> MPE complies with ISO 10360-5:2010	PFTU	in µm	1.4	1.5	1.5	1.8	1.8
<b>Multi-stylus form probing error</b> MPE complies with ISO 10360-5:2010	PFTM <sup>4)</sup>	in µm	2.5 4.1 <sup>5)</sup>	3.5 4.1 <sup>5)</sup>	3.5 4.1 <sup>5)</sup>	3.9 4.5 <sup>5)</sup>	3.9 4.5 <sup>5)</sup>
<b>Multi-stylus dimension probing error</b> MPE complies with ISO 10360-5:2010	PSTM <sup>4)</sup>	in µm	1.2	2.1	2.1	2.5	2.5
<b>Multi-stylus location probing error</b> MPL complies with ISO 10360-5:2010	PLTM <sup>4)</sup>	in µm	1.7 2.9 <sup>5)</sup>	2.4 2.9 <sup>5)</sup>	2.4 2.9 <sup>5)</sup>	2.8 3.3 <sup>5)</sup>	2.8 3.3 <sup>5)</sup>

## ZEISS CONTURA RDS sensors and accuracy

The functionality of the device and its specifications are only achievable when using original accessories by ZEISS. The specified parameters are observed in the application of the internal test instructions for acceptance testing and in the use of the released standards in accordance with the ISO 10360 series.

### ZEISS RDS-D-CAA



Dynamic ZEISS RDS articulating unit for optical and contact sensors.  
Front-to-back and lateral tilt range of ±180°, large measuring range, rotation increments of 2.5°,  
CAA correction for automatic qualification of all 20.736 angular positions for scanning sensors  
(ZEISS VAST XXT TL3 compact design) and multiple-point sensors (ZEISS XDT TL3).

<b>ZEISS XDT, ZEISS VAST XXT TL3 compact design</b>	ZEISS VAST XXT TL3 compact design on ZEISS RDS: scanning and multiple-point sensor. ZEISS XDT TL3 on ZEISS RDS: multiple-point sensor.					
			7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8
<b>Length measurement error</b> <sup>2,6)</sup> MPE complies with ISO 10360-2:2009	E0 / E40 18 °C - 22 °C 18 °C - 26 °C	in µm in µm	1.5 + L/350 1.5 + L/250	1.6 + L/350 1.6 + L/250	1.6 + L/350 1.6 + L/250	1.9 + L/350 1.9 + L/250
<b>Repeatability range of E0</b> MPL complies with ISO 10360-2:2009	R0	in µm	1.5	1.6	1.6	1.9
<b>Scanning error</b> MPE complies with ISO 10360-4:2000	THP	in µm	2.7	2.8	2.8	3.6
Required measuring time MPT	τ	in s	50	50	50	50
<b>Form measurement error</b> <sup>3)</sup> MPE for roundness complies with ISO 12181 (VDI/VDE 2617 sheet 2.2)	RONt (MZCI)	in µm	1.7	1.8	1.8	1.9
<b>Single stylus form probing error</b> MPE complies with ISO 10360-5:2010	PFTU	in µm	1.5	1.6	1.6	1.9

1) ZEISS VAST XT gold: acceptance test with 60 mm stylus and 8 mm stylus tip. Also valid for other stylus (Ø 3 x 33 mm, Ø 5 x 50 mm, Ø 8 x 114 mm and Ø 12 x 92 mm were tested).

2) Measuring length L in mm. Measured with RDS angle position A=0° and B=0°.

3) Roundness in Scanning Mode on a 50 mm ring gauge for Vscan = 5 mm/s, filter 50 UPR.

4) Measuring location near the calibration position to document sensor properties.

5) Applies to ZEISS VAST XTR gold.

6) ZEISS VAST XXT: acceptance test with TL3 module; 50 mm stylus and 3 mm stylus tip diameter. E40 acceptance applies only in conjunction with RDS-D.

## ZEISS CONTURA RDS sensors and accuracy

The functionality of the device and its specifications are only achievable when using original accessories by ZEISS. The specified parameters are observed in the application of the internal test instructions for acceptance testing and in the use of the released standards in accordance with the ISO 10360 series.

### ZEISS RDS-D-CAA



Dynamic ZEISS RDS articulating unit for optical and contact sensors.  
Front-to-back and lateral tilt range of  $\pm 180^\circ$ , large measuring range, rotation increments of  $2.5^\circ$ ,  
CAA correction for automatic qualification of all 20.736 angular positions for scanning sensors  
(ZEISS VAST XXT TL3) and multiple-point sensors (ZEISS XDT TL3).

### ZEISS VAST XXT



ZEISS VAST XXT TL1/TL3/TL4 on ZEISS RDS: scanning and multiple-point sensor. Scanning measuring rate up to 500 points/s.  
Stylus length with module: TL1 = 30-125 mm, maximum stylus weight = 10 g  
Stylus length with module: TL3 = 30-150 mm, maximum stylus weight = 15 g  
Stylus length with module: TL4 = 125 - 250 mm, maximum stylus weight = 10 g  
TL1/TL3/TL4 maximum sensor extension = 100 mm, minimum stylus tip diameter = 0.3 mm

			7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10
<b>Length measurement error</b> <sup>2) 6)</sup>	E0 / E40 (TL1/TL3) MPE complies with ISO 10360-2:2009						
18 °C - 22 °C	in µm	1,5 + L/350	1,6 + L/350	1,6 + L/350	1,9 + L/350	2,1 + L/350	
18°C bis 26°C	in µm	1,5 + L/250	1,6 + L/250	1,6 + L/250	1,9 + L/250	2,1 + L/250	
E0 / E40 (TL4)							
18 °C - 22 °C	in µm	2,9 + L/350	3,1 + L/350	3,1 + L/350	3,3 + L/350	3,3 + L/350	
<b>Repeatability range of E0</b> MPL complies with ISO 10360-2:2009	R0 (TL1/TL3) R0 (TL4)	in µm	1,5 2,9	1,6 3,0	1,6 2,9	1,9 3,2	2,1 3,2
<b>Scanning error</b> MPE complies with ISO 10360-4:2000	THP (TL1/TL3) THP (TL4)	in µm	2,7 3,9	2,8 4,1	2,8 3,9	3,6 4,9	3,6 4,9
Required measuring time MPT	$\tau$	in s	50	50	50	50	50
<b>Form measurement error</b> <sup>3)</sup> MPE for roundness complies with ISO 12181 (VDI/VDE 2617 sheet 2.2)	RONt (MZCI) (TL1/TL3) RONt (TL4)	in µm	1,7 2,9	1,8 3,1	1,8 2,9	1,9 3,2	1,9 3,2
<b>Single stylus form probing error</b> MPE complies with ISO 10360-5:2010	PFTU (TL1/TL3) PFTU (TL4)	in µm	1,5 2,9	1,6 3,1	1,6 2,9	1,9 3,2	1,9 3,2

## ZEISS CONTURA direct sensors and accuracy

The CMM specifications are only valid when using original accessories by ZEISS. The specified parameters are observed in the application of the internal test instructions for acceptance testing and in the use of the released standards in accordance with the ISO 10360 series.

### ZEISS VAST XXT <sup>1)</sup>



ZEISS VAST XXT TL3: scanning and multiple-point sensor  
ZEISS XDT TL3: multiple-point sensor

Scanning measuring rate up to 500 points/s.  
Stylus length with module: TL3 = 30-150 mm, maximum stylus weight = 15 g  
minimum stylus tip diameter = 0.3 mm

			7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10
<b>Length measurement error</b> <sup>2)</sup> MPE complies with ISO 10360-2:2009	E0 / E40 18 °C - 22 °C 18 °C - 26 °C	in µm	1.5 + L/350 1.5 + L/250	1.6 + L/350 1.6 + L/250	1.6 + L/350 1.6 + L/250	1.9 + L/350 1.9 + L/250	2.1 + L/350 2.1 + L/250
<b>Repeatability range of E0</b> MPL complies with ISO 10360-2:2009	R0	in µm	1.5	1.6	1.6	1.9	2.1
<b>Scanning error</b> MPE complies with ISO 10360-4:2000	THP	in µm	3.0	3.1	3.1	3.9	3.9
Required measuring time MPT	$\tau$	in s	50	50	50	50	50
<b>Form measurement error</b> <sup>3)</sup> MPE for roundness complies with ISO 12181 (VDI/VDE 2617 sheet 2.2)	RONt (MZCI)	in µm	1.7	1.8	1.8	1.9	1.9
<b>Single stylus form probing error</b> MPE complies with ISO 10360-5:2010	PFTU	in µm	1.5	1.6	1.6	1.9	1.9

### ZEISS ViScan <sup>2)</sup>



Optical 2D image sensor with autofocus on ZEISS RDS-D.  
Working distance (depending on lens): 75 - 90 mm.

			7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10
<b>Length measurement error</b> <sup>5)</sup> MPE complies with ISO 10360-7: 2011	EU(XY)	in µm	$10^{-4} + L/350$	$10^{-4} + L/350$	$10^{-4} + L/350$	$10^{-4} + L/350$	$10^{-4} + L/350$
<b>MPE probing error of the image editing system as per ISO 10360-7:2011</b>	PFV2D	in µm	$10^{-4}$	$10^{-4}$	$10^{-4}$	$10^{-4}$	$10^{-4}$

1) Acceptance test with TL3 module; stylus length of 50 mm and stylus tip diameter of 3 mm.

2) The use of optical probes requires calibration with contact probe (e.g. ZEISS VAST XXT)

3) Roundness in Scanning Mode on a 50 mm ring gauge for Vscan = 5 mm/s, filter 50 UPR.

4) Measured with ZEISS ViScan 1x lens

5) Measuring length L in mm. Measured with RDS angle position A=0° and B=0°

ZEISS LineScan <sup>1) 2)</sup>		Optical laser triangulation scanner on ZEISS RDS-D.					
		7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10	
8 mm Measuring range							
32 mm Working distance							
<b>Probing dispersion</b> <sup>4)</sup> MPL complies with ISO 10360-8:2013	P[Form.Sph.D95 %:Tr:ODS]	in µm	3.3	3.3	3.3	3.3	4.9
<b>Dispersion on sphere</b>	1 Sigma	in µm	0.9	0.9	0.9	0.9	1.35
25 mm Measuring range							
63 mm Working distance							
<b>Probing dispersion</b> <sup>4)</sup> MPL nach ISO 10360-8:2013	P[Form.Sph.D95 %:Tr:ODS]	in µm	12	12	12	12	12
<b>Dispersion on sphere</b>	1 Sigma	in µm	4	4	4	4	4
50 mm Measuring range							
94 mm Working distance							
<b>Probing dispersion</b> <sup>4)</sup> MPL complies with ISO 10360-8:2013	P[Form.Sph.D95 %:Tr:ODS]	in µm	20	20	20	20	20
<b>Dispersion on sphere</b>	1 Sigma	in µm	5	5	5	5	5
100 mm Measuring range							
220 mm Working distance							
<b>Probing dispersion</b> <sup>4)</sup> MPL complies with ISO 10360-8:2013	P[Form.Sph.D95 %:Tr:ODS]	in µm	50	50	50	50	50
<b>Dispersion on sphere</b>	1 Sigma	in µm	12	12	12	12	12

ZEISS LineScanOne <sup>1) 3)</sup>		Optical laser triangulation scanner on ZEISS RDS-D.					
		7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10	
70 mm Measuring range							
75 mm Working distance							
<b>Probing dispersion</b> <sup>4)</sup> MPL complies with ISO 10360-8:2013	P[Form.Sph.D95 %:Tr:ODS]	in µm	20	20	20	20	20
<b>Dispersion on sphere</b>	1 Sigma	in µm	5	5	5	5	5

- 1) The use of optical probes requires calibration with contact probe (e.g. ZEISS VAST XXT). Temperature range 18 °C - 26 °C.
- 2) Laser class 2M: the accessible laser beam lies in the visible spectral range that is safe for the eye at a short exposure time (0.25 s) as long as the cross section is not reduced by optical instruments (e.g. magnifiers, lens elements, telescope).
- 3) Laser class 1: Laser devices of this class can be used without further protective measures if the reasonably foreseeable conditions are complied with during normal operation. Class 1 lasers are not subject to notification.
- 4) Probing dispersion in the center of the measuring range on suitable sphere (30 mm diameter) with matte surface. The information on the working distance is based on the center of the measuring range.

### ZEISS DotScan

Measuring rang 1 mm <sup>1)</sup>



Optical confocal white light distance sensor on RDS-D CAA,  
Scanning measuring rate up to 1000 points/s, Working distance 10,5 mm, resolution 28 nm,  
measurable surface inclination to beaming direction 90° ±30° <sup>2)</sup>, measuring spot diameter 8 µm

				7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10
<b>Unidirectional length measurement error</b> MPE complies with ISO 10360-8:2013	E[Uni:Tr:ODS] in sensor direction	in µm	18 °C - 22 °C	1.7 + L/350	1.8 + L/350	1.8 + L/350	2.0 + L/350	2.2 + L/350
<b>Dimension probing error</b> MPE complies with ISO 10360-8:2013	P[Size.Sph.1x25:Tr:ODS] in sensor direction	in µm	18 °C - 22 °C	5	5	5	5	5

### ZEISS DotScan

Measuring rang 3 mm <sup>1)</sup>



Optical confocal white light distance sensor on RDS-D CAA,  
Scanning measuring rate up to 1000 points/s, Working distance 21,5 mm, resolution 36 nm,  
measurable surface inclination to beaming direction 90° ±24° <sup>2)</sup>, measuring spot diameter 9 µm

				7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10
<b>Unidirectional length measurement error</b> MPE complies with ISO 10360-8:2013	E[Uni:Tr:ODS] in sensor direction	in µm	18 °C - 22 °C	2.0 + L/350	2.1 + L/350	2.1 + L/350	2.3 + L/350	2.5 + L/350
<b>Dimension probing error</b> MPE complies with ISO 10360-8:2013	P[Size.Sph.1x25:Tr:ODS] in sensor direction	in µm	18 °C - 22 °C	5	5	5	5	5

### ZEISS DotScan

Measuring rang 10 mm <sup>1)</sup>



Optical confocal white light distance sensor on RDS-D CAA,  
Scanning measuring rate up to 1000 points/s, Working distance 55 mm, resolution 60 nm,  
measurable surface inclination to beaming direction 90° ±17° <sup>2)</sup>, measuring spot diameter 16 µm

				7/7/6 7/10/6	9/12/6 9/18/6	9/12/8 9/18/8	12/18/8 12/24/8	12/18/10 12/24/10
<b>Unidirectional length measurement error</b> MPE complies with ISO 10360-8:2013	E[Uni:Tr:ODS] in sensor direction	in µm	18 °C - 22 °C	3.0 + L/350	3.1 + L/350	3.1 + L/350	3.3 + L/350	3.5 + L/350
<b>Dimension probing error</b> MPE complies with ISO 10360-8:2013	P[Size.Sph.1x25:Tr:ODS] in sensor direction	in µm	18 °C - 22 °C	5	5	5	5	5

### Sensor overview

	active	direct	RDS	
	VAST XT gold	VAST XTR gold	VAST XXT	XDT
<b>Multipoint</b>	■	■	■	■ ■ ■
<b>Passive scanning</b>		■		■ ■
<b>Active scanning</b>	■	■		
<b>Optical scanning</b>				■ ■ ■
<b>Rotatable / tilttable</b>				■ ■ ■ ■ ■ ■
<b>Max. stylus length <sup>3)</sup></b>	500 mm	350/500 mm	250 mm	150 mm <sup>5)</sup>
<b>Max. stylus weight <sup>3)</sup></b>	500 g	500 g	15 g <sup>4)</sup>	15 g <sup>5)</sup> 15 g <sup>5)</sup>
<b>Navigator</b>	■	■		

1) The use of optical probes requires calibration with contact probe (e.g. ZEISS VAST XXT).

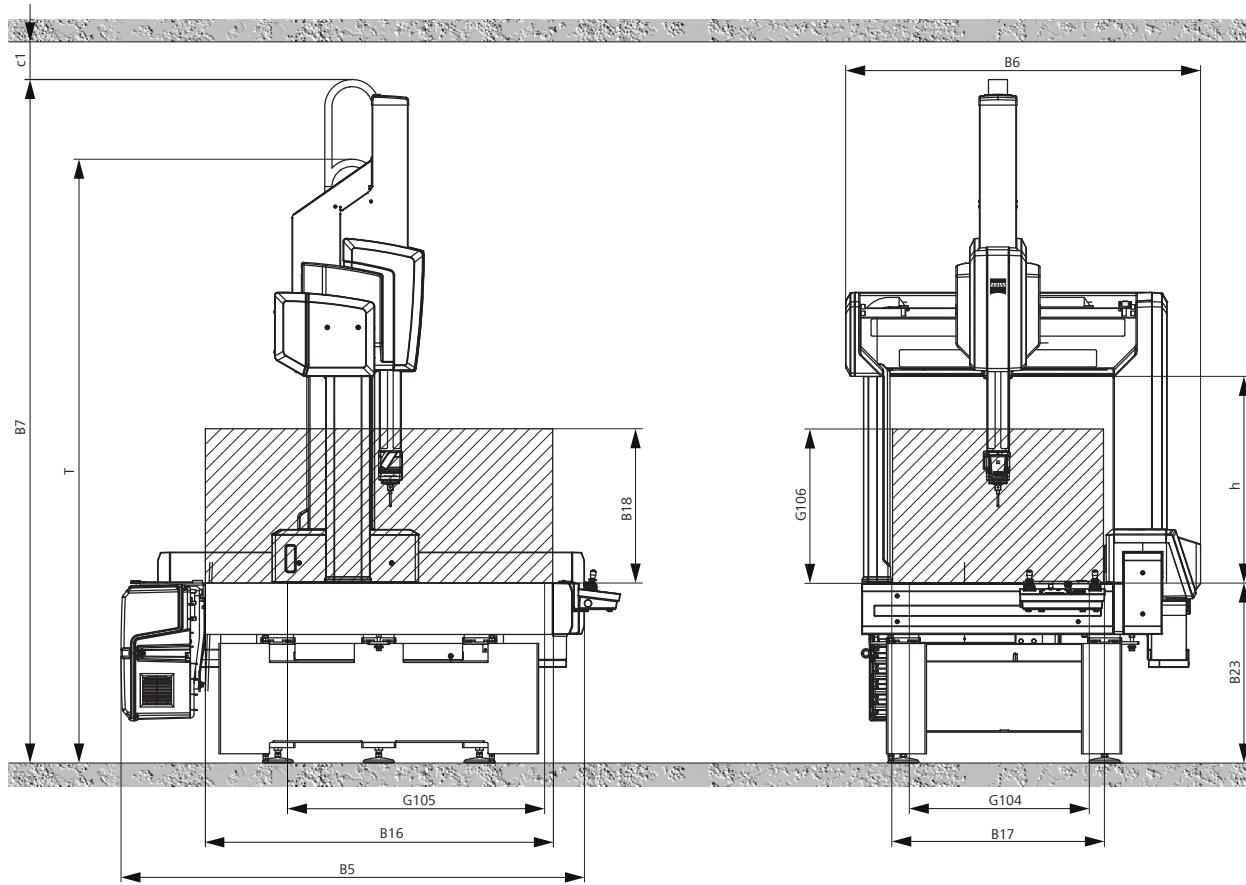
2) Depending on the reflection behavior of the surface.

3) Depending on the application, limiting the parameters for a stylus system may be useful.

4) ZEISS VAST XXT: depending on model. TL 3: 30 - 150mm 15g, TL4: 125 - 250mm 10g.

5) Only TL3

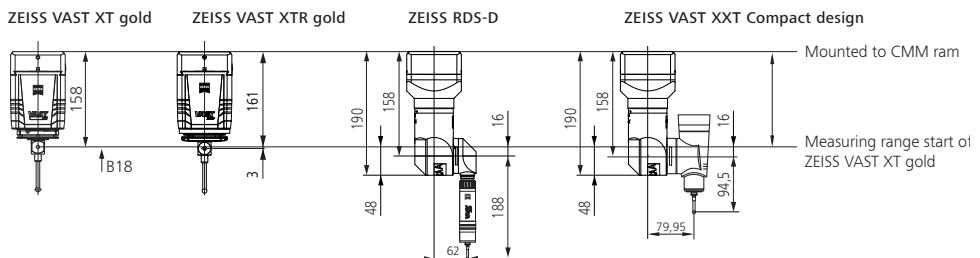
ZEISS CONTURA sizes	Dimensions in mm													Weight in kg	
	Measuring range			Overall CMM dimensions			Working range (Max. workpiece size)				Table height	As- sembly space	Transport height <sup>2)</sup>	CMM	Max. workpiece
	X axis	Y axis	Z axis	Length	Width	Height	Length	Width	Height	Height	Height	Height	Height	C1	T
	G104	G105	G106	B5	B6	B7	B16	B17	B18	h	B23	c1	T		
7/7/6	700	700	600 <sup>1)</sup> 1503 <sup>3)</sup>	1603 1503 <sup>3)</sup>	1381	2658	1050	827	660 <sup>1)</sup>	804	700	≥200	2348	1200	730
7/10/6	700	1000	600 <sup>1)</sup> 1813 <sup>3)</sup>	1913 1813 <sup>3)</sup>	1381	2658	1350	827	660 <sup>1)</sup>	804	700	≥200	2348	1570	730
9/12/6	900	1200	600 <sup>1)</sup> 2103 <sup>3)</sup>	2213 2103 <sup>3)</sup>	1581	2658	1650	1027	660 <sup>1)</sup>	804	700	≥200	2348	2280	1200
9/18/6	900	1800	600 <sup>1)</sup> 2703 <sup>3)</sup>	2911 2703 <sup>3)</sup>	1581	2658	2250	1027	660 <sup>1)</sup>	804	700	≥200	2348	2960	1200
9/12/8	900	1200	800 <sup>1)</sup> 2103 <sup>3)</sup>	2213 2103 <sup>3)</sup>	1581	3060	1650	1027	860 <sup>1)</sup>	1004	700	≥200	2650	2300	1200
9/18/8	900	1800	800 <sup>1)</sup> 2703 <sup>3)</sup>	2911 2703 <sup>3)</sup>	1581	3060	2250	1027	860 <sup>1)</sup>	1004	700	≥200	2650	2980	1200
12/18/8	1200	1800	800 <sup>1)</sup> 2703 <sup>3)</sup>	2911 2703 <sup>3)</sup>	1881	3060	2250	1327	860 <sup>1)</sup>	1004	700	≥200	2650	3380	1200
12/18/10	1200	1800	1000 <sup>1)</sup> 2703 <sup>3)</sup>	2911 2703 <sup>3)</sup>	1881	3460	2250	1327	1060 <sup>1)</sup>	1204	700	≥200	2950	3400	1200
12/24/8	1200	2400	800 <sup>1)</sup> 3301 <sup>3)</sup>	3631 3301 <sup>3)</sup>	1881	3060	2850	1327	860 <sup>1)</sup>	1004	700	≥200	2650	4900	1200
12/24/10	1200	2400	1000 <sup>1)</sup> 3301 <sup>3)</sup>	3631 3301 <sup>3)</sup>	1881	3460	2850	1327	1060 <sup>1)</sup>	1204	700	≥200	2950	4920	1200



1) Applies to ZEISS VAST XT gold. The measuring range (G106) and the maximum workpiece height (B18) are reduced by at least 50 mm when other probes are used.

2) Transport height of the secured machine group without pallet or Z mast.

3) Without HTG / Bellows Option



Note: the given dimensions and weights are approximate values. Subject to change. Actual appearance of specific sizes may vary from illustration.  
Dimensioning based on DIN 4000-167:2009.

#### Technical features

Length measuring system	Photoelectric reflected light system, 0.08 µm resolution
Controller	Type: ZEISS C99m Protection type: IP54
Accessories (optional)	Multi-sensor Rack for storage of stylus systems

#### Environmental requirements <sup>1)</sup>

Relative humidity	40 % - 70 % (without condensation)	
Measuring reference temperature	X700/X900/X1200	Option HTG
	18 °C - 22 °C	18 °C - 26 °C
Per day:	1.5 K/d	1.5 K/d
Per hour:	1.0 K/h	1.0 K/h
Spatial:	1.0 K/m	1.0 K/m
Floor vibrations	ZEISS CONTURA is equipped with standard vibration damping (limits upon request). Upon request, we can provide assistance for vibration studies.	

#### Readiness for operation

Relative humidity	40 % - 70 % (without condensation)	
Ambient temperature	17 °C - 35 °C	
Power rating	ZEISS C99m	100-240V VAC ~ (±10 %); 50-60 Hz (±3.5 %) Max. power consumption: 800 VA Typical power consumption: 200 W Amount of heat generated: max. 2200 kJ/h The use of the PowerSaver included in the delivery package ensures that no energy is consumed during the downtimes of a ZEISS CONTURA, thus enabling environmentally friendly operation and saving resources.
Compressed air supply	Supply pressure min. 6 bar, max. 8 bar, pre-cleaned. Max. consumption 80NL/min for ZEISS CONTURA.  The use of the AirSaver included with delivery ensures that compressed air is not used during ZEISS CONTURA downtimes, thus enabling environmentally friendly operations.  Air quality complies with ISO 8573-1:2010 [6:4:4], Particle: class 6; Water/Oil: class 4 Particle, class 6: max. particle size 15 µm, max. dirt particle concentration ≤ 5 mg/m <sup>3</sup> Water, class 4: max. compressed air dew point +3°C Oil, class 4: max. oil concentration of 5 mg/m <sup>3</sup> If the air supply does not comply with the above requirements, an additional air filter unit and, if necessary, a membrane dryer must be inserted in the compressed air line.	

1) To ensure specified accuracies.

**System description**

Type according to ISO 10360-1:2000	Moving bridge CMM		
Operating mode	motorized / CNC		
Sensor mounts	Fixed installation		
Software	ZEISS CALYPSO, ZEISS GEAR PRO		
Travel speed	Motorized	Axes	0 to 70 mm/s
	CNC	Vector	max. 475 mm/s
Acceleration		Vector	max. 1.85 m/s <sup>2</sup>
Scanning speed <sup>1)</sup>			max. 150 mm/s

**Approvals**

Regulations ZEISS CONTURA complies with EC machine directive 2006/42/EC, the EMC directive 2014/30/EU and the RoHS directive 2011/65/EU.

**Disposal**

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

**Certification/accreditation**

Quality management system	ISO 9001:2015
Environmental management system	ISO 14001:2015
Occupational health & safety management systems	ISO 45001:2018
Accredited	ISO / IEC 17025

1) For ZEISS CONTURA with activ probe head and navigator function.

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