



ZEISS O-DETECT 322

Specifications

Last updated: 2020-10



Seeing beyond

System description

Type according to ISO 10360-1:2000	O-DETECT 3/2/2: Column CMM
Operating mode	motorized / CNC
Sensor mounts	Fixed installation
Sensors	ZEISS (optical)
Software	ZEISS

Dynamic

3/2/2				
Travel speed	Motorized	in mm/s	Axes	0 to 100
	CNC	in mm/s	X, Y, Z-axes	300/300/100
		in mm/s	Vektor	435
Acceleration		in mm/s ²	X, Y, Z-axes	500/500/500
		in mm/s ²	Vektor	866

Sensors and accuracy

ZEISS INVENTA D1 ¹⁾



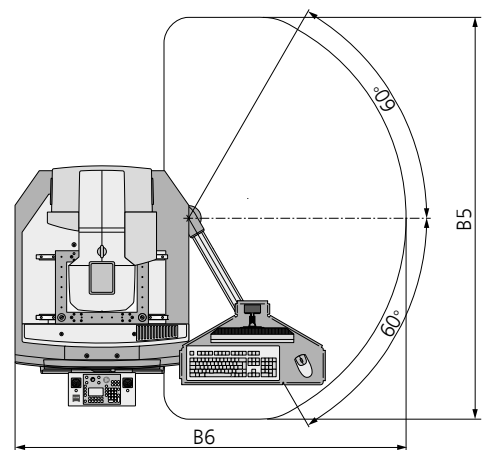
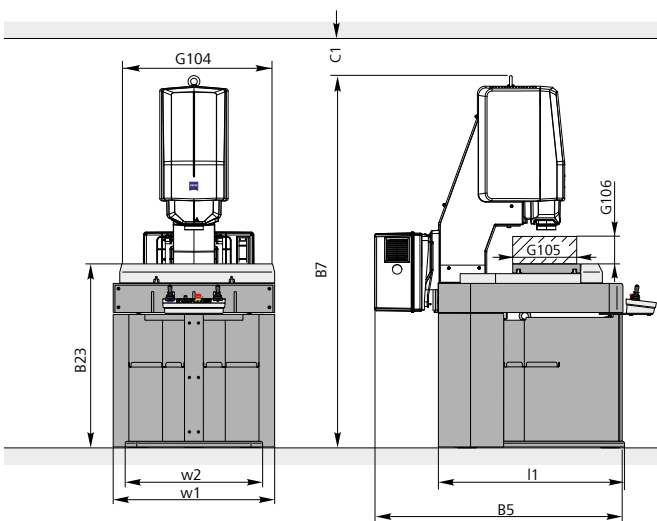
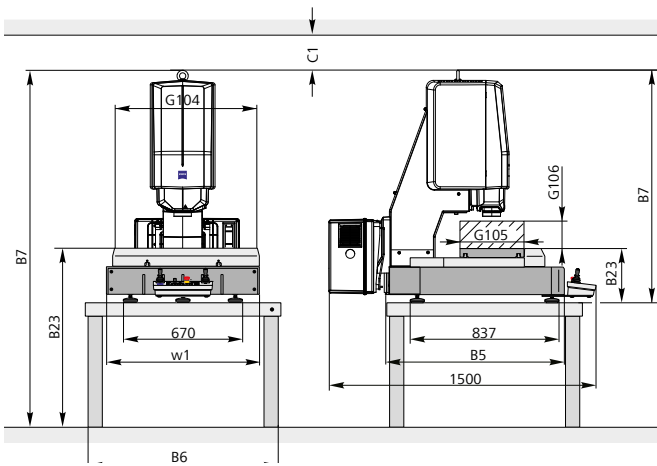
Optical 2D camera sensor with image processing functionality and autofocus, high-resolution optical system with continuous digital zoom, CMOS measuring camera chip, framerate 22Hz (full field of view) , region of interest depending >100Hz, max. probing speed 10 mm/s (Z axis), working distance 65 mm. Illumination: coaxial light (blue), transmitted light.

3/2/2				
Length measurement error MPE complies with ISO 10360-7:2011	EU XY (1D)	in µm	20 °C ± 2 °C	1,6 + L/200
	EU XY (2D)	in µm	20 °C ± 2 °C	1,9 + L/150
	EU XYZ (3D)	in µm	20 °C ± 2 °C	2,4 + L/150
Probing error MPE complies with ISO 10360-7:2011	PF2D	in µm	20 °C ± 2 °C	1,9
Probing error of the image processing system MPE complies with ISO 10360-7:2011	PFV2D	in µm	20 °C ± 2 °C	1,2
Repeatability range (of EUZ L = 0 mm - MPL complies with ISO 10360-7:2011)	RUZ	in µm	20 °C ± 2 °C	1,9

1) Laser class 1: EN (IEC) 60825-1:2002

ZEISS O-DETECT 3/2/2	Dimensions in mm						
	Measuring range			Overall machine dimensions			Working range (Max. workpiece size)
	X axis	Y axis	Z axis	Width	Length	Height	
	G104	G105	G106	B6	B5	B7	B17
Basic model	300	200	200	865 ¹⁾	1000 ²⁾	1305	∞
With standard base	300	200	200	865 ¹⁾	1000 ²⁾	1980	∞
With shopfloor base	300	200	200	approx. 1935	1960 ²⁾	2015	∞

	Dimensions in mm			Table height	Assembly clearance	Weight in kg	
	Footprint		Length			Max. workpiece	Measuring machine
	Width	Length					
	w1	w2 ³⁾	l1	B23	c1		
Basic model	865	765	1000	305	≥ 200	20	325
With standard base	865	740	1021	980	≥ 200	20	440
With shopfloor base	732	-	920	1015	≥ 200	20	490



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.

- 1) plus 2 × 500 mm assembly clearance.
- 2) plus 240 mm for control panel storage and 500 mm assembly clearance.
- 3) With disassembly of the cover parts during installation.

Requirements for operational readiness

Relative humidity	40 % - 70% (without condensation)
Environmental temperature	17 °C - 35 °C
Electrical power rating	3/2/2 1/N/PE 100 - 240V~(+10%); 50-60 Hz max. power consumption 600 VA Typical power consumption (thermal load): 170 W Amount of heat generated max. 2160 kJ/h





Environmental requirements

	3/2/2
Permissible humidity (without condensation)	40 % - 70 %
Environmental temperature	20 °C ± 2 °C
Temperature fluctuations	per day 2,0 K/d per hour 1,0 K/h spatial 1,0 K/m
Floor vibrations	ZEISS O-DETECT is equipped with an integrated vibration damping system and is therefore highly resistant to vibrations.

Technical features

	3/2/2
Length measurement system	Optical scales; reflected light system, photoelectric, resolution 0.08 µm
Controller	Type based on ZEISS C99L Protection type IP53
Data technology	Delivered with a fully equipped workstation.
Accessories (optional)	Part clamping set, pallet frame, workpiece temperature sensor, standard base, ShopFloor base, blue/white ringlight.

Approvals

Regulations	ZEISS O-DETECT complies with EC machinery 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.

Certifications/accreditations

Quality management system	ISO 9001:2015; VDA 6, Parts 4, 3. Issue 2017
Environmental management system	ISO 14001:2015
Occupational health & safety management systems	BS OHSAS 18001:2007
Accredited	ISO / IEC 17025:2005

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