

## Telecentric measurement lenses

vicotar®

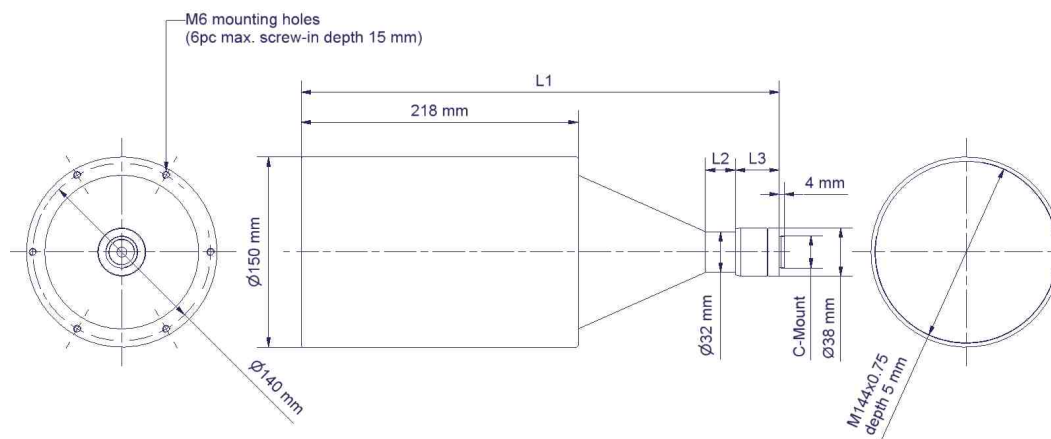
T360 series

### Product features

- Object side telecentric light path
- Application for matrix and line cameras up to sensor diagonal/length 16 mm
- Maximum object field diameter 126 mm
- Low telecentric error
- Manual operated iris aperture with fixing
- Robust industrial design: dust-proof, shock-proof
- C-mount (thread connection)



### Engineering drawing



Download Manual



Download CAD-File



Up to 1.2" imager

### Properties

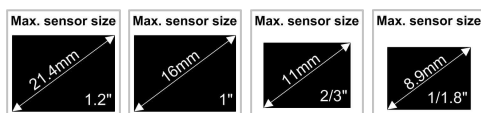
#### Optical properties

Spectral range 380...900nm / colour-corrected / fast lenses

#### Mechanical properties

Flange focal distance 17.53mm / max. diameter of lenses 150mm / focal filter thread M144 x 0.75 / environmental temperature -10°C ... 50°C

### Options



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### Optical data

Name	Order no.	Lateral magnification	Object side depth of field [mm]*	Field of view for 1.2" sensor [mm <sup>2</sup> ]	Field of view for 1" sensor [mm <sup>2</sup> ]	Field of view for ¾" sensor [mm <sup>2</sup> ]	Field of view for 1/1.8" sensor [mm <sup>2</sup> ]	Field of view for ½" sensor [mm <sup>2</sup> ]	Field of view for ⅓" sensor [mm <sup>2</sup> ]
T360/0,19a	2-05-247	-0.189 = -1:5.291	21 (5)	81 × 81	68 × 50	47 × 35	38 × 29	34 × 25	25 × 19
T360/0,13a	2-05-246	-0.131 = -1:7.64	31 (8)		99 × 73	67 × 50	54 × 41	49 × 37	37 × 27
T360/0,09a	2-05-245	-0,089 = -1:11.22	50 (13)			99 × 74	80 × 61	72 × 54	54 × 40
T360/0,07a	2-05-244	-0.073 = -1:13.77	59 (15)				98 × 74	88 × 66	66 × 50

\*Object side depth of field at a circle of confusion 40 (10) μm and a middle aperture setting.

We provide technical information to the distortion or the telecentric error of a certain lens by our technical support upon request.

Size of imaging device:

1.2" - 15.16 x 15.16 mm<sup>2</sup> | 1" - 12.8 x 9.6 mm<sup>2</sup> | ¾" - 8.8 x 6.6 mm<sup>2</sup> | 1/1.8(=5/9)" - 7.1 x 5.4 mm<sup>2</sup> | ½" - 6.4 x 4.8 mm<sup>2</sup> | ⅓" - 4.8 x 3.6 mm<sup>2</sup>

### Mechanical data

Name	Order no.	Max. object field diameter	Image side aperture (adjustable)	Working distance	Working distance with IR-filter*	Total length L1	Length L2	Length L3	Weight
T360/0,19a	2-05-247	113	0.08...0.027	356 ± 4 mm		408 mm	26 mm	63 mm	4500 g
T360/0,13a	2-05-246	122 mm	0.12...0.029	205 ± 3 mm		392 mm	24 mm	44 mm	4400 g
T360/0,09a	2-05-245	123 mm	0.17...0.027	264 ± 3 mm		376 mm	24 mm	34 mm	4300 g
T360/0,07a	2-05-244	123 mm	0.21...0.028	194 ± 3mm		374 mm	24 mm	32 mm	4400 g

\*A daylight suppression filter IR M20.5 x 0.5 can be screwed-on to the telecentric vicotar® objectives from camera side. Removing the IR suppression filter from camera effects alteration of working distance.

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### Important advice

#### Anxiliary adjusting device

The optical axis must be aligned perpendicularly to object level / plane of measurement to realize exact measurement. This auxiliary adjusting device lower time and effort for setup. Please find further information in the corresponding data sheet.

#### Care instruction

Clean easily dirty lens with an optics brush or cleaned air. Adherent contamination can be removed by using an optical cleaning tissue. Please use only alcohol as a solvent, do not use acetone or other chemicals.

### Accessories

Order no.	Name	Description
2-90-126	OH 360	lens holder for T360 -series,
2-91-131	IR M20.5 x 0.5	daylight suppression filter for telecentric lens-systems
5-10-114	JH 20	adjustment-help for 20mm depth of focus

### Intended use for accessories

**Note:**

This area is reserved for future examples that will demonstrate the cooperation of lighting components and accessories.

We're going to show you the variety of combinations of the Vision & Control component system!

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