

BI-TELECENTRIC LENS FOR DETECTORS UP TO 2/3"



Model:	TC 23 04	
Magnification (x):	2,00 +/- 3%	
Object Field (mm):	1/4" (3,6 x 2,7):	1,8 x 1,4
	1/3" (4,8 x 3,6):	2,4 x 1,8
	1/2" (6,4 x 4,8):	3,2 x 2,4
	1/1.8" (7,13 x 5,37):	3,6 x 2,7
	2/3" (8,8 x 6,6):	4,4 x 3,3
Working Distance (mm):	57,1 +/- 2	
Working F-number:	11	
MTF @70 lp/mm (%):	> 30	
Field Depth (mm):	0,2 @ F/ 11	
Image side N.A.:	0,045	
Object side N.A.:	0,090	
Telecentricity (degree):	< 0,08	
Distortion (%):	< 0,08	
Mount:	C	
Length (mm):	101,4	
Maximum external diameter (mm):	28,0	
Weigh (g):	130	

ACCESSORIES AND OPTIONS:



Collimated/Telecentric illumination:
compatible with LTCL23 illuminator;
green light suggested.



Coaxial illumination:
not available.



Back Light illumination:
Compatible with LTBK36 illuminator.



Clamping Mechanics:
the lens is light and can be directly
held by the camera.

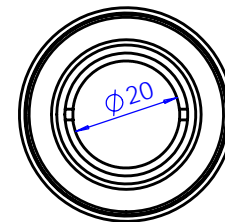
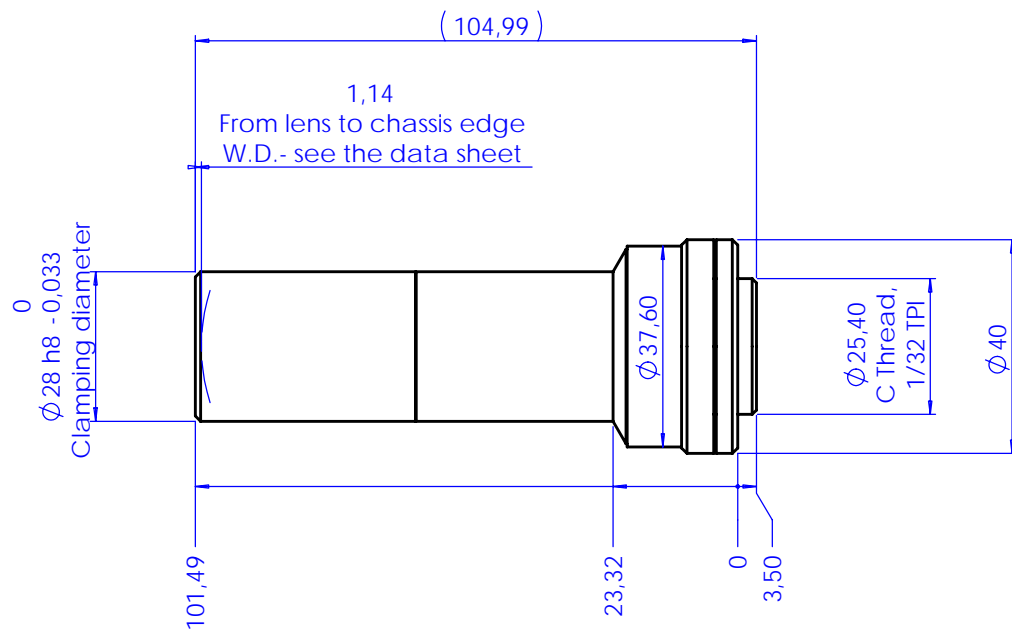


Direct illumination:
compatible with LTRN23 diffusive
anular illuminators.



Filters:
filter caps available on request.

Rev No.	Description	Date	Name
A	Layout	07/06/05	A.Vismara
B	Redesign: inox C thread, brand ring	25/09/08	A.Vismara



Material	N.A.		Mass	0.148 kg	Scale	1:1	
Surface treatment	N.A.		Project-Prod.Item/Instrument Telecentric lens 23 04				
Geometrical tolerance (ISO 2768-2)		Class	K	Undimensioned bevels	1x45°	Description ASSEMBLY	
Linear tolerance (ISO 2768-2)		Class	m	Undimensioned radii	R 0.5		
0.5	>3-	>6-	>30-	>120	>400-	>1000	>2000
+3	6	30	120	+400	1000	+2000	+4000
±0.1	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2
www.opto-engineering.com		Date		Name		Drawing No.	Sheet
		Designed	07/06/05	A.Vismara		02041-0-B	1/1
		Draw	25/09/08	A.Vismara			
		Checked	X	C. Sedazzari			
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