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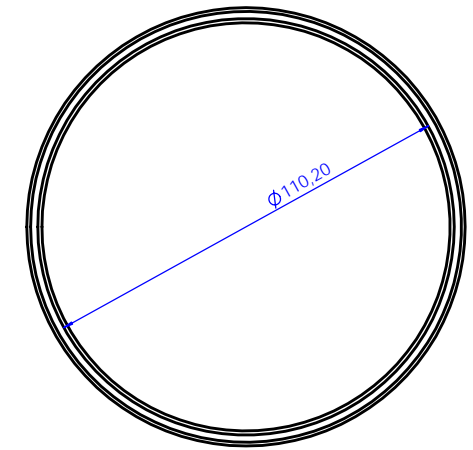
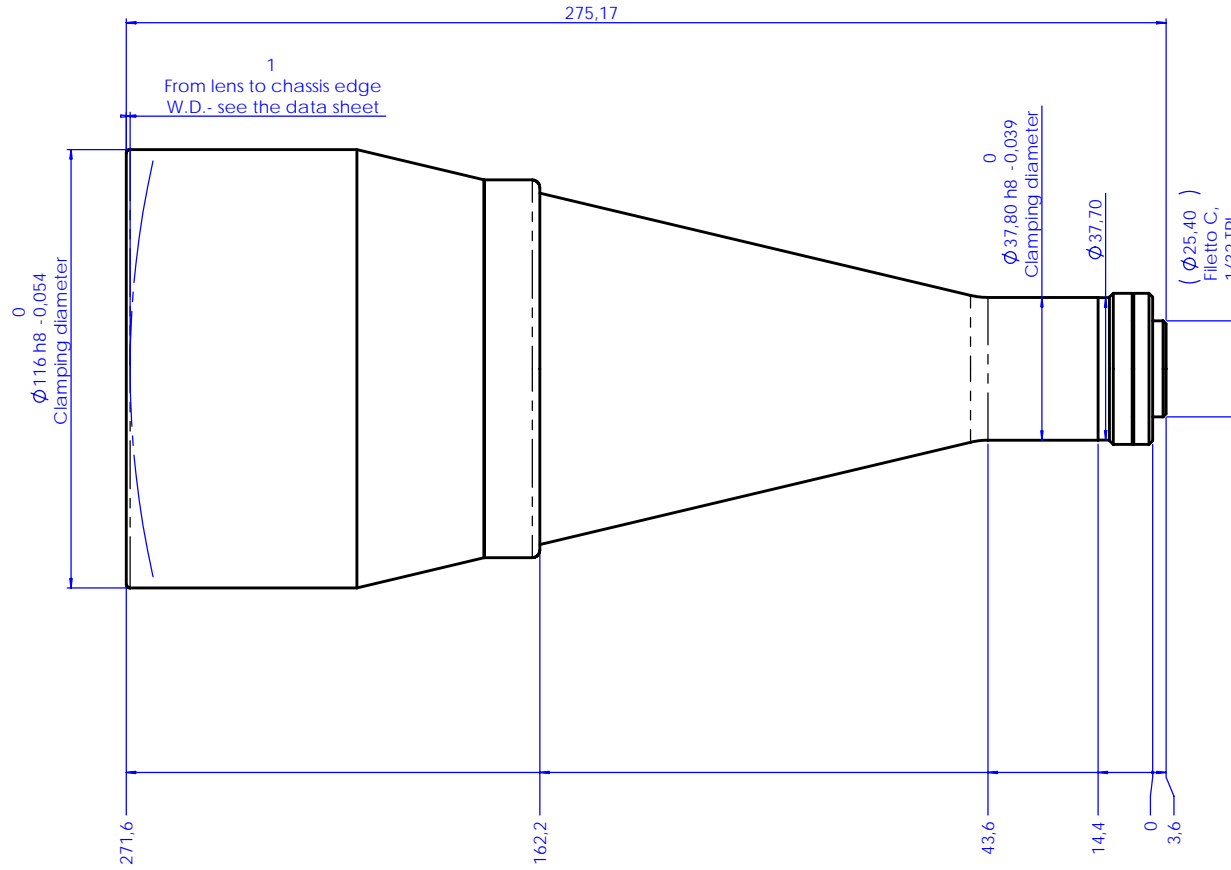
## BI-TELECENTRIC LENS FOR 1/2" AND 1/1.8" TO 1/4" MATRIX DETECTORS

<b>Model:</b>	<b>TC 12 80</b>		
<b>Magnification (X):</b>	0.08		
<b>Object Field (mm):</b>	1/4" (3,6 x 2,7):	45.0	x 33.8
	1/3" (4,8 x 3,6):	60.0	x 45.0
	1/2" (6,4 x 4,8):	80.0	x 60.0
	1/1.8" (7,13 x 5,37):	89.1	x 67.1 (5)
	2/3" (8,8 x 6,6):	diam.	= 82.5
<b>Working Distance (mm):</b>	227.7 +/- 7		
<b>Working F-number:</b>	8		
<b>MTF @70 lp/mm (%):</b>	>50		
<b>Field Depth (mm):</b>	90.0	@	F/ 8
<b>Image side N.A.:</b>	0.062		
<b>Object side N.A.:</b>	0.005		
<b>Telecentricity (degree):</b>	<0,08		
<b>Distortion (%):</b>	<0,1		
<b>Mount:</b>	C		
<b>Length (mm):</b>	272		
<b>Maximum external diameter (mm):</b>	116		
<b>Weigh (g):</b>	1560		

### NOTES:

- 1) The inner aperture diaphragm can be supplied on request with smaller apertures in order to achieve a larger Field Depth
- 2) Compatible with LT RN 64 diffusive ring light
- 3) Specific "Teleclamp80" mechanical interface available
- 4) Can be coupled to a collimated light illuminator like LT CL 80
- 5) Small vignetting at the image corners possible with a 1/1.8" detector

Rev No.	Description	Date	Name
A	First light	10/05/06	A.Vismara



Material	N.A.	Mass	1.56 kg	Scale	1:1																		
Surface treatment	N.A.																						
Geometrical tolerance (ISO 2768-2)		<table border="1"> <thead> <tr> <th>Class</th> <th>K</th> <th>Undimensioned Bevels</th> </tr> </thead> <tbody> <tr> <td>0.5</td> <td>&gt;3-</td> <td>&gt;6-</td> </tr> <tr> <td>&gt;3</td> <td>6</td> <td>30</td> </tr> <tr> <td>&gt;0.1</td> <td>&gt;0.1</td> <td>&gt;0.2</td> </tr> <tr> <td></td> <td>&gt;0.3</td> <td>&gt;0.5</td> </tr> <tr> <td></td> <td>&gt;0.8</td> <td>&gt;1.2</td> </tr> </tbody> </table>				Class	K	Undimensioned Bevels	0.5	>3-	>6-	>3	6	30	>0.1	>0.1	>0.2		>0.3	>0.5		>0.8	>1.2
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Description		1x45° R 0.5 <b>Assembly</b>																					
Project/Prod./Item/Instrument		Telecentric lens 23 80																					
Drawing No.		02421-0-A																					
Sheet		1/1																					
		Date: 10/05/06 Name: A.Vismara Draw: 10/05/06 Name: A.Vismara Checked: x Name: C.Sedazzari																					
OPTO ENGINEERING S.r.l. - 46100 Mantova Italy - Via Cremona, 28 - Tel/Fax: +39 0376 229585 - e-mail: info@opto-engineering.com - http://www.opto-engineering.com																							