ZERO DISTORTION MACRO LENSES

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MC3-03X :

3X TO 0,3X MULTI-CONFIGURATION MACRO LENS

MC3-03X Zero Distortion MACRO lens is an opto-mechanical component used to look at different object sizes: from 3 up to 26 mm on a 2/3" detector (and proportionally less on smaller size detectors).

Through an adjustable knob, the desired magnification can be set and the best focus position adjusted: once the best focus is found, the moving element can be blocked by a screw- knob.

With additional spacers, included in the product package, it is possible to select the required range of magnification.

As the magnification increases, the F-number becomes higher in order to keep a good field depth without significant compromises on image resolution and image brightness.

While the magnification changes, the distortion remains nearly ZERO, making this lens perfectly adequate for measurement applications.

A diffusive ring illuminator, perfectly fitting the lens mechanics, is available as an accessory.

Number of spacers		Magnification Range X	W.D. (mm)	F-number	Field Depth (mm)	Distortion	DETECTOR/OBJECT FIELD SIZE 1/4" w 3,6 x h 2,7 (mm)	1/3" w 4,8 x h 3,6 (mm)	1/2" w 6,4 x h 4,8 (mm)	1/1.8" w 7,13 x h 5,37 (mm)	2/3" w 8,8 x h 6,6 (mm)
3	max.	3	28	20	0,2	<0,01%	1,2 x 0,9	1,6 x 1,2	2,13 x 1,6	2,38 x 1,79	2,93 x 2,2
	min.	2,5	9	18	0,3	<0,01%	1,44 x 1,08	1,92 x 1,44	2,56 x 1,92	2,85 x 2,15	3,52 x 2,64
2	max.	2,3	30,5	17	0,3	<0,01%	1,57 x 1,17	2,09 x 1,57	2,78 x 2,09	3,1 x 2,33	3,83 x 2,87
	min.	1,3	11	12	0,6	<0,01%	2,77 x 2,08	3,69 x 2,77	4,92 x 3,69	5,48 x 4,13	6,77 x 5,08
1	max.	1,6	35	14	0,5	<0,01%	2,25 x 1,69	3 x 2,25	4 x 3	4,46 x 3,36	5,5 x 4,13
	min.	0,7	32,5	9	1,4	<0,02%	5,14 x 3,86	6,86 x 5,14	9,14 x 6,86	10,2 x 7,67	12,6 x 9,43
0	max.	1	47	10	0,7	<0,02%	3,6 x 2,7	4,8 x 3,6	6,4 x 4,8	7,13 x 5,37	8,8 x 6,6
	min.	0,333	84	7	3,5	<0,05%	10,8 x 8,11	14,4 x 10,8	19,2 x 14,4	21,4 x 16,1	26,4 x 19,8

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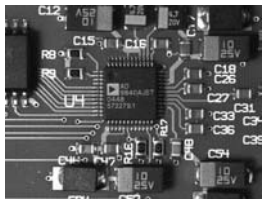

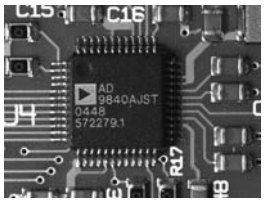

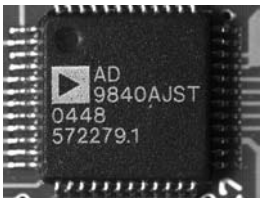

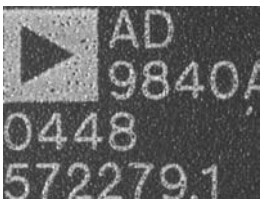

- OPTIMIZED FOR MACRO USE
- NEARLY ZERO DISTORTION
- TAILORED FOR 4 MICRON PIXEL SIZE
- OPTIMIZED FIELD DEPTH

APPLICATIONS:

- **Dimensional Measurement of precision mechanical parts**
- **Electronic components and boards inspection**
- **Web and tissue inspection**
- **Printing industry**
- **Microbiology**
- **Forensic Sciences**
- **Videomicroscopy**

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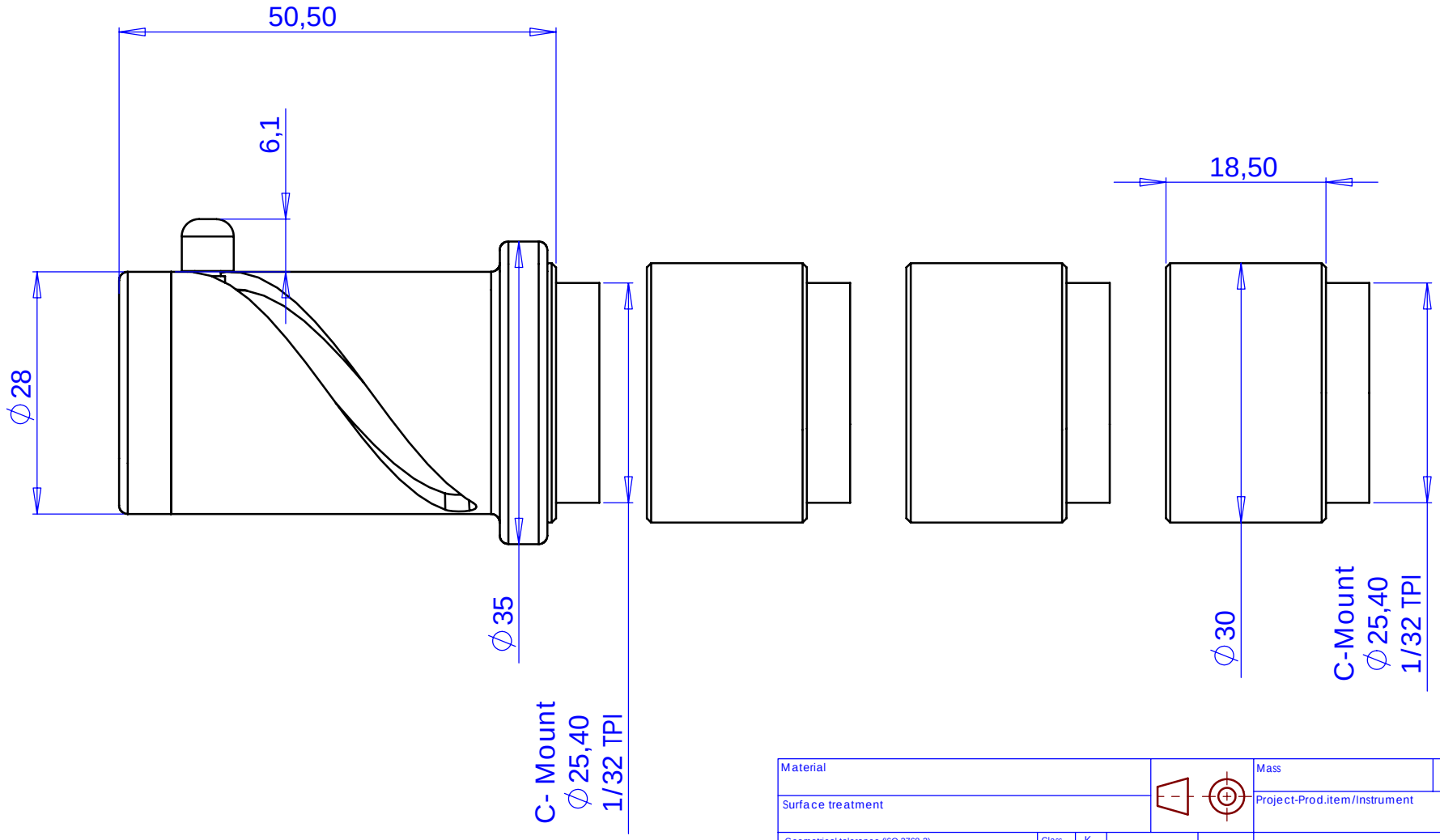
Rev No.	Description	Date	Name



Material										Mass	Scale 2:1
Surface treatment										Project-Prod.item/Instrument	
Geometrical tolerance (ISO 2768-2)								Class	K	Undimensioned bevels	1x45°
Linear tolerance (ISO 2768-2)								Class	m		
0.5 ÷3	>3÷ 6	>6÷ 30	>30÷ 120	>120 ÷400	>400÷ 1000	>1000 ÷2000	>2000 ÷4000			Undimensioned radii	R 0.5
±0.1	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2				

Description: MC 0.33X - 3X

	Date	Name
Designed		
Draw		
Checked		

Drawing No.

Sheet 1/1

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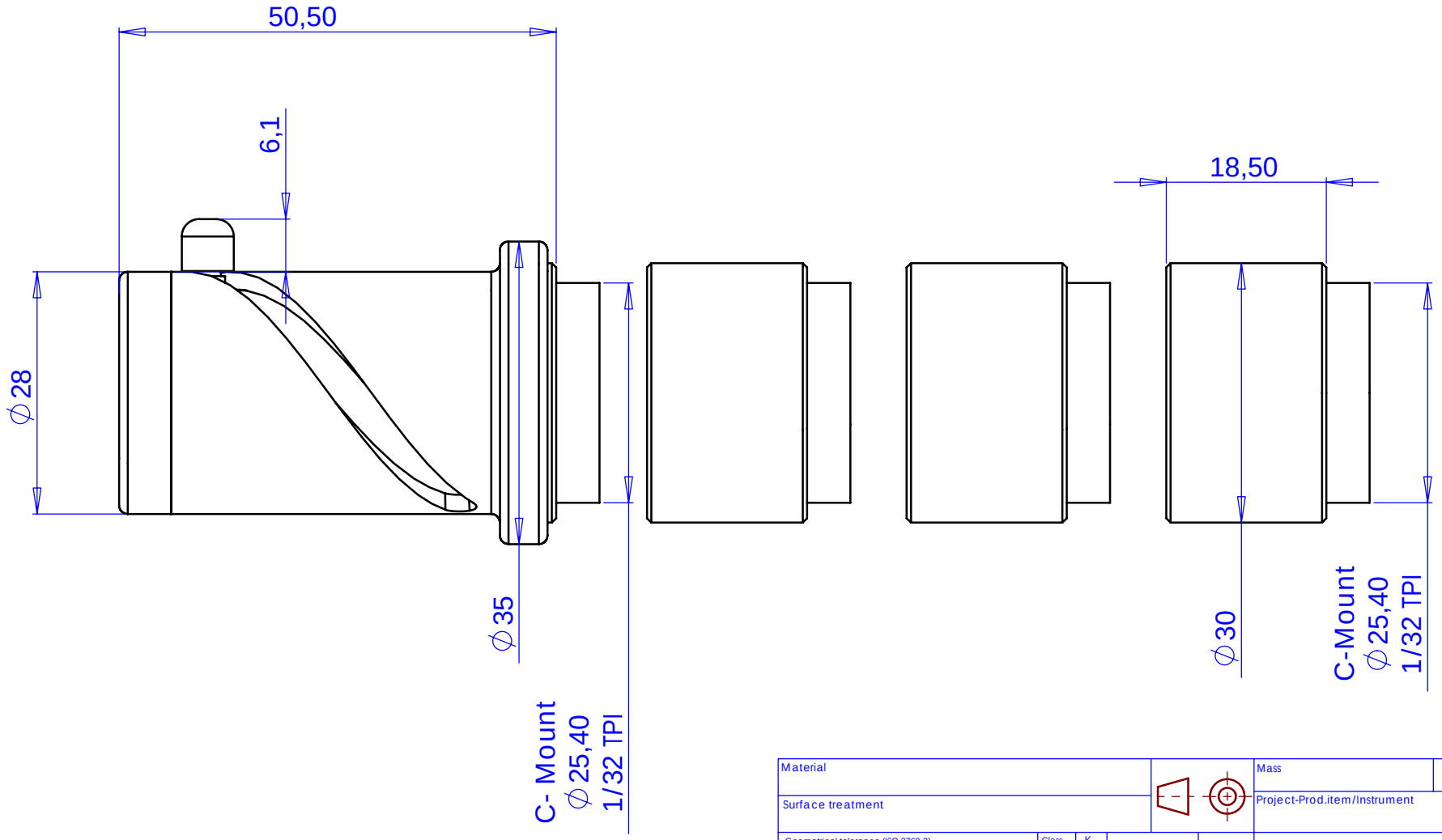

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