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About Navitar Zoom

## Zoom 7000

- Working distance 5" to infinity.
- Parfocal over entire zoom range.
- Highest mag. 1.1X at 5" (at camera).



The Zoom 7000 is a close- focusing macro video lens which is versatile and specifically designed to be used in applications where objects over 1" in diameter must be imaged. It offers unsurpassed clarity and parfocal zoom capabilities and is compatible with cameras 2/3" or smaller.

The Zoom 7000 is ideal for quality assurance or assembly applications where an easy-to-view, sharp and true-to-life magnified image of your product can mean the difference between a shippable, top-quality end product and a costly manufacturing failure.

The Zoom 7000 offers a 6:1 zoom ratio or a 6X magnification power over a focal range of 18 mm to 108 mm. It comes with a close-up lens for imaging at distances from 5" to 12". When the close-up lens is removed, the working distance extends from 24" to infinity. Focus and aperture control are standard Zoom 7000 features. Navitar also offers a version of the Zoom 7000 for 3-chip cameras with a bayonet or C-thread mount (part # 1-11898).

### Example . . . . .

**Object size** = 100 mm x 50 mm  
**Camera format** = 2/3"

**Criteria:** All edges should be visible at low magnification and high magnification should show the object at maximum magnification.

Looking at the chart below, a 10" working distance would allow a 108 mm wide object to be imaged into a 2/3" camera. Therefore, something slightly less than 10" would do for an object 100 mm wide and would provide maximum magnification at high zoom.

### Zoom 7000 Field of View High Magnification

W.D.	2/3" High Mag. (H x V)	1/2" High Mag. (H x V)	1/3" High Mag. (H x V)	1/4" High Mag. (H x V)
5"	8 x 6	5.8 x 4.4	4.3 x 3.2	2.9 x 2.2
6"	10 x 7.5	7.3 x 5.5	5.4 x 4.1	3.7 x 2.8
7"	12 x 9	8.7 x 6.6	6.5 x 4.9	4.4 x 3.3
8"	14 x 10.5	10.2 x 7.7	7.6 x 5.7	5.1 x 3.9
9"	16 x 12	11.7 x 8.8	8.6 x 6.5	5.9 x 4.4

10"	18 x 13.5	13.1 x 99	9.7 x 7.3	6.6 x 5.0
11"	20 x 15	14.6 x 11	10.8 x 8.1	7.3 x 5.5
12"	22 x 16.5	16.1 x 12	11.9 x 8.9	8.1 x 6.0
Remove the Close-Up Lens				
2'	42 x 30	30.7 x 21.9	22.7 x 21.1	15.4 x 11.0
2'6"	54 x 39	39.4 x 28.5	29.2 x 25.9	19.7 x 14.3
3'	66 x 48	48.2 x 35	35.6 x 25.9	24.1 x 17.5
3'6"	78 x 57	56.9 x 41.6	42.1 x 30.8	28.5 x 20.8
4'	90 x 66	65.7 x 48.2	48.6 x 36.5	32.9 x 24.1
Taken from 2/3", 1/3 & 1/4" camera monitor systems with an approximate 10% overfill. All dimensions are in mm.				

### Zoom 7000 Field of View Low Magnification

W.D	2/3" Low Mag. (H x V)	1/2" Low Mag. (H x V)	1/3" Low Mag. (H x V)	1/4" Low Mag. (H x V)
5"	48 x 36	35 x 26.3	25.9 x 19.4	17.5 x 13.2
6"	60 x 45	43.8 x 32.9	32.4 x 24.3	21.9 x 16.5
7"	72 x 54	42.6 x 39.4	38.9 x 29.2	26.3 x 19.7
8"	84 x 63	61.3 x 46	45.5 x 34	30.7 x 23.0
9"	96 x 72	70.1 x 52.6	51.8 x 38.9	35.1 x 26.3
10"	108 x 81	78.8 x 59.1	58.3 x 43.7	39.4 x 29.6
11"	120 x 90	87.6 x 65.7	64.8 x 48.6	43.8 x 32.9
12"	132 x 99	96.4 x 72.3	71.3 x 53.5	48.2 x 36.2
Remove the Close-up Lens				
2'	252 x 180	184 x 131.4	136.1 x 97.2	92.0 x 65.7
2'6"	324 x 234	236.5 x 170.8	175 x 126.4	118.3 x 85.4
3'	396 x 288	289.1 x 210.2	213.8 x 155.5	144.6 x 105.1
3'6"	468 x 342	341.6 x 249.7	252.7 x 184.7	170.8 x 124.9
4'	540 x 396	394.2 x 289.1	291.6 x 213.8	197.1 x 144.6
Taken from 2/3", 1/3 & 1/4" camera monitor systems with an approximate 10% overfill. All dimensions are in mm.				

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