SYMBOL OF EXCELLENCE IN WEST GERMAN OPTICS

CARL ZEISS

CARL ZEISS, INC.

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PRICE LIST

Optical Systems For The Microscope

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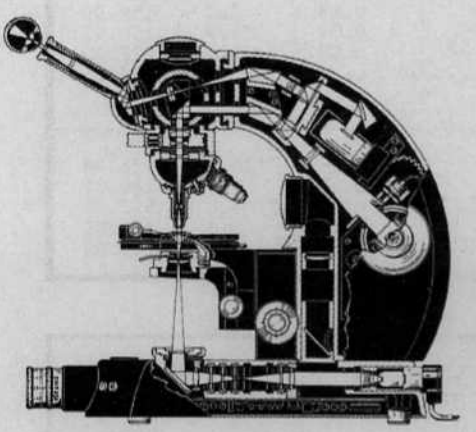

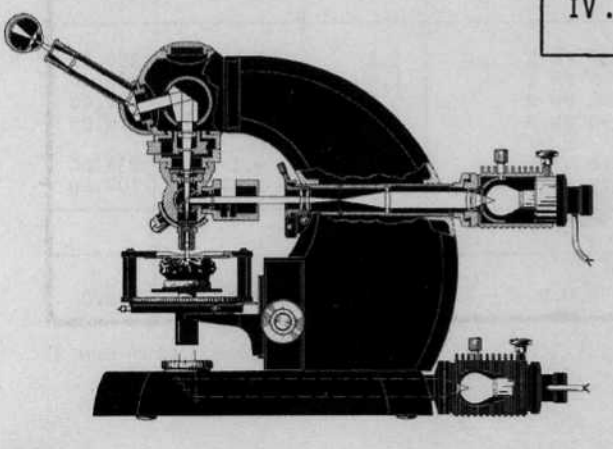

I. OBJECTIVES (Object-thread seat distance is 46 mm)

a) Achromats

Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	Focal Length mm	$
For Brightfield				
46 01 00	Achromat 3.2/0.07	30.0	34.9	31.00
46 04 00	Achromat 10/0.22	5.0	16.7	54.00
46 06 00	Achromat 25/0.45	0.9	7.0	144.00
46 07 00	Achromat 40/0.65	0.47	4.5	84.00
46 17 06	Achromat 40/0.85 oil	0.35	4.6	251.00
46 17 08	Achromat 40/0.85 oil (D=1.5mm)	0.35	4.6	279.00
46 08 00	Achromat 63/0.80	0.14	3.0	159.00
46 19 00	Achromat 100/1.25 oil	0.09	1.9	150.00
46 19 06	Achromat 100/1.25 oil w/iris	0.09	1.9	237.00
For Phase Contrast				
46 04 01	Achromat 10/0.22 Ph 1	5.0	16.7	126.00
46 07 01	Achromat 40/0.65 Ph 2	0.47	4.5	186.00
46 17 09	Achromat 40/0.85 Ph3oil (D=1.5mm)	0.35	4.6	417.00
46 08 01	Achromat 63/0.80 Ph 2	0.14	3.0	301.00
46 19 01	Achromat 100/1.25 Ph3oil	0.09	1.9	285.00

b) Planachromats

	For Brightfield				
*	46 20 10	Planachromat 1.0/0.04	4.4	134.7	299.00
*	46 20 13	Planachromat 1.6/0.032-5/0.104	32.0-1.5	41.2-20.8	463.00
	46 01 10	Planachromat 2.5/0.08	9.0	56.0	108.00
	46 03 10	Planachromat 6.3/0.16	4.9	27.1	185.00
	46 04 10	Planachromat 10/0.22	4.8	15.8	224.00
	46 05 10	Planachromat 16/0.35	2.8	10.4	239.00
	46 06 10	Planachromat 25/0.45	1.4	7.0	272.00
	46 20 16	Planachromat 32/0.65	0.3	5.6	330.00
	46 07 10	Planachromat 40/0.65	0.7	4.13	337.00
	46 07 15	LD-Planachromat 40/0.60 corr. (D = 1.3 mm)	1.5	4.1	732.00
	46 19 10	Planachromat 100/1.25 oil	0.09	1.67	588.00
	46 19 16	Planachromat 100/1.25 w/iris oil	0.09	1.67	640.00
	For Phase Contrast				
	46 05 11	Planachromat 16/0.35 Ph 1	2.8	10.4	350.00
	46 06 11	Planachromat 25/0.45 Ph 2	1.4	7.0	368.00
	46 07 11	Planachromat 40/0.65 Ph 2	0.7	4.13	458.00
	46 08 13	Planachromat 63/0.90 Ph 3 in corr. mount	0.09	2.7	376.00
	46 07 16	LD-Planachromat 40/0.60 corr. Ph 2	1.5	4.1	834.00
	46 19 11	Planachromat 100/1.25 oil Ph 3	0.09	1.67	702.00
	For Specimen without Cover Glass				
	46 08 60	Planachromat 63/0.90 O.D.	0.09	3.0	458.00

* Not Parfocal.

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c) Neofluars

	Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	Focal Length mm	$
	For Brightfield				
	46 03 20	Neofluar 6.3/0.20	10.8	23.6	202.00
	46 04 20	Neofluar 10/0.30	4.0	16.4	239.00
	46 05 20	Neofluar 16/0.40	0.9	10.8	265.00
	46 06 20	Neofluar 25/0.60	0.54	7.1	319.00
	46 07 20	Neofluar 40/0.75	0.33	4.5	329.00
	46 08 12 -9903	Plan-Neofluar 63/0.90 corr.	0.09	2.7	612.00
*	46 18 20	Neofluar 63/1.25 oil	0.6	2.8	624.00
*	46 19 20	Neofluar 100/1.30 oil	0.24	1.92	411.00
	For Phase Contrast				
	46 05 21	Neofluar 16/0.40 Ph 2	0.9	10.8	351.00
	46 06 21	Neofluar 25/0.60 Ph 2	0.54	7.1	408.00
	46 07 21	Neofluar 40/0.75 Ph 2	0.33	4.5	421.00
	46 08 23	Neofluar 63/0.90 Ph corr.	0.12	3.0	449.00
	46 08 13 -9903	Plan-Neofluar 63/0.90 Ph3 corr.	0.09	2.7	707.00
	46 18 21	Neofluar 63/1.25 oil Ph3	0.6	2.8	726.00
	46 19 21	Neofluar 100/1.30 oil Ph3	0.24	1.92	512.00

d) Planapochromats

	For Brightfield				
	46 02 40	Planapochromat 4/0.16	2.5	35.1	366.00
	46 04 40	Planapochromat 10/0.32	0.35	14.6	478.00
	46 06 40	Planapochromat 25/0.65	0.14	6.3	525.00
	46 07 42	Planapochromat 40/0.95 corr.	0.09	4.25	884.00
	46 17 46	Planapochromat 40/1.0 oil w/iris	0.22	4.05	769.00
	46 18 40	Planapochromat 63/1.4 oil	0.09	2.57	1,145.00
	46 19 40	Planapochromat 100/1.3 oil	0.09	1.64	1,118.00
	46 19 46	Planapochromat 100/1.3 oil w/iris	0.09	1.64	1,182.00
	For Phase Contrast				
	46 06 41	Planapochromat 25/0.65 Ph 2	0.14	6.3	631.00
	46 07 43	Planapochromat 40/0.95 Ph corr.	0.09	4.25	993.00
	46 17 47	Planapochromat 40/1.0 Ph oil w/iris	0.22	4.05	877.00
	46 18 41	Planapochromat 63/1.4 Ph oil	0.09	2.57	1,240.00
	46 19 41	Planapochromat 100/1.3 Ph oil	0.09	1.64	1,206.00

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e) Water Immersions

Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	Focal Length mm	$
46 17 02	Achromat 40/0.75 water	1.6	4.6	261.00
46 17 03	Achromat 40/0.75 Ph water	1.6	4.6	354.00
46 17 90	Slip-on Cap for water immersion			24.00

*91 00 76 Funnel stop for objectives up to and including serial No. 4860447 . . . . . $ 49.00
*91 00 77 Funnel stop for objectives above serial No. 4860447 . . . . . 49.00

f) For Polarized Light

	Catalog Numbers	Effective Magnification/ Numerical Aperture	Working Distance mm	Focal Length mm	$
*	46 20 11	Planachromat 1.0/0.04 (Pol)	4.4	134.7	353.00
	46 01 18	Planachromat 2.5/0.08 Pol Z	8.7	56.0	189.00
	46 04 08	Achromat 10/0.22 Pol Z	5.0	16.7	185.00
	46 06 28	Neofluar 25/0.60 Pol Z	0.54	7.1	366.00
	46 07 08	Achromat 40/0.85 Pol Z	0.36	4.7	240.00
	46 08 28	Neofluar 63/0.90 Pol Z	0.12	3.0	387.00
	46 19 08	Achromat 100/1.25 Pol Z oil	0.09	1.9	291.00

g) Long Working Distance Objectives for 1.5 mm Cover Glasses

Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	$
42 21 01	LD-Epiplan 4/0.1 SM (D=1.5)	8	310.00
42 21 02	LD-Epiplan 8/0.2 SM (D=1.5)	6.2	329.00
42 21 03	LD-Epiplan 16/0.3 SM (D=1.5)	4.1	408.00
42 21 04	LD-Epiplan 40/0.6 SM (D=1.5)	3.4	538.00

h) Ultrafluar Objectives

46 20 58	Ultrafluar 10/0.20	7.4	16.4	1,001.00
46 20 60	Ultrafluar 32/0.40 glycerin imm.	0.45	6.0	1,221.00
46 20 63	Ultrafluar 100/0.85 glycerin imm.	0.12	1.79	1,793.00
46 20 64	Ultrafluar 100/1.25 glycerin imm.	0.07	1.77	2,291.00
For phase contrast				
46 20 70	Ultrafluar 32/0.40 glycerin imm.	0.45	6.0	1,631.00
46 20 73	Ultrafluar 100/0.85 glycerin imm.	0.12	1.79	2,075.00
For polarized light				
46 20 59	Ultrafluar 10/0.20	7.4	16.4	1,085.00
46 20 61	Ultrafluar 32/0.40 glycerin imm.	0.46	6.0	1,363.00
46 20 65	Ultrafluar 100/1.25 glycerin imm.	0.07	1.77	2,528.00

* Not parfocal.

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i) Jamin-Lebedeff Interference Equipment

Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	Focal Length mm	$
47 44 03*	Attachment I 10/0.22	2.26		1,246.00
47 44 06*	Attachment II 40/0.65	0.2		1,333.00
47 44 08*	Attachment III 100/1.0 oil	0.08		1,403.00
47 44 13**	Attachment I 10/0.22	2.26		1,235.00
47 44 16**	Attachment II 40/0.65	0.2		1,321.00
47 44 18**	Attachment III 100/1.0 oil	0.08		1,393.00
* For Standard 18 and WL microscopes ** For Universal, Ultraphot and Photomicroscope				

j) UD Achromats for universal stage

46 20 42	Achromat UD 6.3/0.12	19.0	30.4	88.00
46 20 44	Achromat UD 16/0.17	13.5	15.6	117.00
46 20 45	Achromat UD 20/0.57	4.2	12.6	232.00
46 20 46	Achromat UD 40/0.65	6.8	6.9	394.00

OBJECTIVES FOR REFLECTED LIGHT (Object - thread seat distance = 33 mm)

a) Epiplan Objectives HD (for bright and dark field)
thread = M 24 mm

Set of Four	Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	$
▲	46 02 69	Epiplan 4/0.10 HD	1.0	212.00
	46 03 69	Epiplan 8/0.20 HD	1.0	222.00
▲	46 05 69	Epiplan 16/0.35 HD	1.0	256.00
	46 05 59	Epi Achromat 16/0.32 HD	1.0	112.00
▲	46 07 69	Epiplan 40/0.85 HD	0.23	332.00
▲	46 08 69	Epiplan 80/0.95 HD	0.09	489.00
	46 19 69	Epiplan 100/1.25 HD	0.25	634.00

b) LD-epiplan Objectives (with long working distance) thread = W 0.8"

Catalog Number	For Specimen with Cover Glass D = 1.5mm		For Specimen without Cover Glass D = 0		$
	Effective Magnification/ Numerical Aperture	Working Distance mm	Use With Protection Cap	Working Distance mm	
46 21 01 46 29 11	LD-Epiplan 4/0.1	8.0	Cap LD 4	7.5	260.00 24.00
46 21 02 46 29 12	LD-Epiplan 8/0.2	6.2	Cap LD 8	5.7	279.00 24.00
46 21 03 46 29 13	LD-Epiplan 16/0.3	4.1	Cap LD 16	3.6	355.00 24.00
46 21 04 46 29 14	LD-Epiplan 40/0.6	3.4	Cap LD 40	2.3	482.00 24.00
46 20 97	LD-Epiplan 40/0.6	-	no protection cap needed.	3.1	439.00

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c) Antiflex Immersion Objectives - thread = 24 mm

Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	$
46 11 63	Epiplan-Antiflex immersion 2.5/0.08 methylen	0.3	318.00
46 13 64	Epiplan-Antiflex immersion 8/0.20 oil	0.4	316.00
46 13 63	Epiplan-Antiflex immersion 6.3/0.16 methylen	0.3	337.00
46 15 54	Antiflex-Epi-Achromat 16/0.40 oil	0.45	328.00
46 15 53	Antiflex-Epi-Achromat 16/0.40 methylen immersion	0.35	381.00
46 17 54	Antiflex-Epi-Achromat 40/0.65 oil	0.5	363.00
46 17 53	Antiflex-Epi-Achromat 40/0.65 methylen immersion	0.25	421.00

d) Epiplan - Objectives in mount 45mm for UM Microscope thread = W 0.8"

Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	$
46 20 31	Epiplan St. M. 4/0.10	9.0	174.00
46 20 32	Epiplan St. M. 8/0.20	7.2	216.00
46 20 33	Epiplan St. M. 16/0.35	2.8	259.00
46 20 34	Epiplan St. M. 40/0.85	0.23	347.00
46 20 35	Epiplan St. M. 80/0.95	0.09	421.00
46 20 36	Epiplan St. M. 100/1.25 oil	0.25	550.00
46 20 37	Epiplan St. M. 16/0.35 Ph	2.8	348.00
46 20 38	Epiplan St. M. 40/0.85 Ph	0.23	443.00
46 20 39	Epiplan St. M. 100/1.25 Ph oil	0.25	654.00

e) Epiplan "Pol" Objectives (in short mount, 22mm, to be used with thread = W 0.8" centering change ring 46 62 56)

Catalog Number	Effective Magnification/ Numerical Aperture	Working Distance mm	$
46 20 01	Epiplan 4/0.1 Pol	9.0	221.00
46 20 02	Epiplan 8/0.2 Pol	7.1	259.00
46 20 03	Epiplan 16/0.35 Pol	2.7	304.00
46 20 04	Epiplan 40/0.85 Pol	0.23	399.00
46 20 80	Epiplan 80/0.95 Pol	0.09	472.00
46 21 23	LD-Epiplan 16/0.30 Pol	3.5	416.00
46 29 15	Protection Cap LD 16 Pol		43.00
46 21 24-9901	LD-Epiplan 40/0.6 Pol	2.3	523.00
46 29 16	Protection Cap LD 40 Pol		43.00
46 20 06	Epiplan 4/0.1 Pol oil	0.3	302.00
46 20 07	Epiplan 8/0.2 Pol oil	0.3	320.00
46 20 08	Epi-Achromat 16/0.4 Pol oil	0.85	258.00
46 20 09	Epi-Achromat 40/0.85 Pol oil	0.5	292.00
46 20 05-9903	Epiplan 100/1.25 Pol oil	0.25	640.00

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