



LIGHT MICROSCOPY OBJECTIVES

v05

August 2023

Objectives (Zeiss)	Magnification	Immersion Type	N.A.	Working Distance (mm)	Location(s)
EC Plan-Neofluar 2.5x/0.085 M27 (420320-9902)	2.5x	Air	0.085	8.8	TGXS, Storage
EC Plan-Neofluar 2.5x/0.075 (440310-9903)	2.5x	Air	0.075	9.5	Storage
LSFM 5x/0.1 (400900-9010)	5x	Air	N/A	N/A	Storage
LSFM 5x/0.1 foc (400900-9030)	5x	Air	N/A	N/A	Lightsheet Z.1 (2)
EC Plan-Neofluar 5x/0.16 (420330-8210)	5x	Air	0.16	18.5	Storage
EC Plan-Neofluar 5x/0.16 foc (400100-9560)	5x	Air	0.16	18.5	Lightsheet Z.1
EC Plan-Neofluar 5x/0.16 (420330-9901)	5x	Air	0.16	18.5	LSM 980
Plan-Apochromat 5x/0.16 M27 (420630-9900)	5x	Air	0.16	12.1	Axio Imager.Z1 with ApoTome.2
Apo Calibration LSM (420639-9000-700)	5x	Air	N/A	N/A	Storage
Fluar 5x/0.25 (440125-0000)	5x	Air	0.25	12.5	Storage
LSFM 10x/0.2 (400900-9000)	10x	Air	N/A	N/A	Storage
LSFM clearing 10x/0.2 (400900-9000-710)	10x	Air	N/A	N/A	Storage
LSFM 10x/0.2 foc (400900-9020)	10x	Air	N/A	N/A	Lightsheet Z.1 (2)
EC Plan-Neofluar 10x/0.30 M27 (420340-9900)	10x	Air	0.3	5.5	Storage
EC Plan-Neofluar 10x/0.3 M27 (420340-9901)	10x	Air	0.3	5.2	LSM 980 with Airyscan, Axio Imager.Z1 with ApoTome.2, TGXS
EC Plan-Neofluar 10x/0.3 Ph1 M27 (420341-9911)	10x	Air	0.3	5.2	Storage
Plan-Apochromat 10x/0.45 M27 (420640-9900)	10x	Air	0.45	2.0	LSM 980, Axio Imager.Z1 with ApoTome.2, Storage

Plan-Apochromat 10x/0.45 M27 (420640-9901)	10x	Air	0.45	2.0	LSM 980 NLO with Airyscan
W N-Achroplan 10x/0.3 M27 (420947-9900)	10x	Water-dipping	0.3	2.6	Storage
W Plan-Apochromat 10x/0.5 M27 75mm (421440-9900)	10x	Water-dipping	0.5	3.7	Lightsheet Z.1
C-Apochromat 10x/0.45 W M27 (421747-9900)	10x	Water	0.45	1.8	Storage
LD Achrostatigmat 20x/0.3 Ph1 (440147)	20x	Air	0.3	1.0 – 2.2	Storage
EC Plan-Neofluar 20x/0.50 M27 (420350-9900)	20x	Air	0.5	2.0	TGXS
Plan-Apochromat 20x/0.8 M27 (420650-9901)	20x	Air	0.8	0.55	LSM 980 with Airyscan, Axio Imager.Z1 with ApoTome.2, TGXS, Panoramic 250
Plan-Apochromat 20x/0.8 M27 (420650-9902)	20x	Air	0.8	0.55	LSM 980 NLO with Airyscan
Plan-Apochromat 20x/0.8 M27 (420650-9903)	20x	Air	0.8	0.55	LSM 980
Plan-Apochromat 20x/0.8 Ph2 M27 (420651-9911)	20x	Air	0.8	0.55	Storage (2)
W Plan-Apochromat 20x/1.0 Corr DIC M27 75mm (421452-9700)	20x	Water-dipping	1.0	2.4	Lightsheet Z.1, Storage
W Plan-Apochromat 20x/1.0 DIC M27 75mm (421452-9800)	20x	Water-dipping	1.0	1.8	LSM 980 NLO with Airyscan
W Plan-Apochromat 20x/1.0 DIC CG=0.17 M27 75mm (421452-9880)	20x	Water-dipping	1.0	1.7	MOSAIC (3)
Clr Plan-Apochromat 20x/1.0 Corr nd=1.38 M32 85mm (421459-9773)	20x	Clearing	1.0	5.6	Lightsheet Z.1
Clr Plan-Neofluar 20x/1.0 Corr nd=1.45 M32 85mm (421459-9970)	20x	Clearing	1.0	5.6	Lightsheet Z.1
Clr Plan-Neofluar 20x/1.0 Corr nd=1.53 M32 85mm (421459-9870)	20x	Clearing	1.0	5.6	Lightsheet Z.1



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LD LCI Plan-Apochromat 25x/0.8 Imm Corr DIC M27 (420852-9870)	25x	Water, Silicone oil, Gly, Oil	0.8	0.57 @#1.5	LSM 980 with Airyscan
LD LCI Plan-Apochromat 25x/0.8 Imm Corr DIC M27 (420852-9871)	25x	Water, Silicone oil, Gly, Oil	0.8	0.57 @#1.5	LSM 980 NLO with Airyscan, LSM 980
C-Achroplan 32x/0.85 W Corr M27 (420967-9970)	32x	Water	0.85	1.1	LSM 980 with Airyscan
EC Plan-Neofluar 40x/1.30 Oil DIC M27 (420462-9900)	40x	Oil	1.3	0.21	LSM 980 with Airyscan
Plan-Apochromat 40x/0.95 Corr M27 (420660-9970)	40x	Air	0.95	0.25	TGXS, Storage
Plan-Apochromat 40x/1.3 Oil DIC M27 (420762-9800)	40x	Oil	1.3	0.21	Storage
Plan-Apochromat 40x/1.3 Oil DIC M27 (420762-9800-799)	40x	Oil	1.3	0.21	LSM 980 NLO with Airyscan
LD LCI Plan-Apochromat 40x/1.2 Imm Corr DIC M27 (420862-9970-799)	40x	Water, Silicone oil, Gly	1.2	0.41 @#1.5	LSM 980 with Airyscan
W Plan-Apochromat 40x/1.0 DIC M27 (421462-9900)	40x	Water-dipping	1.0	2.5	Axio Imager.Z1 with ApoTome.2, Storage
C-Apochromat 40x/1.2 W Corr M27 (421767-9970)	40x	Water	1.2	0.28 @#1.5	Storage
C-Apochromat 40x/1.2 W Corr M27 (421767-9971-711)	40x	Water	1.2	0.28 @#1.5	Storage
C-Apochromat 40x/1.2 W Corr M27 (421767-9973-713)	40x	Water	1.2	0.28 @#1.5	LSM 980 with Airyscan
LD C-Apochromat 40x/1.1 W Corr M27 (421867-9970)	40x	Water	1.1	0.62 @#1.5	LSM 980 with Airyscan, LSM 980
C-Apochromat 63x/1.2 W Corr M27 (421787-9970-799)	63x	Water	1.2	0.28 @#1.5	Storage
Plan-Apochromat 63x/1.4 Oil DIC M27 (420782-9900)	63x	Oil	1.4	0.19	Axio Imager.Z1 with ApoTome.2, Storage (2)



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Plan-Apochromat 63x/1.4 Oil DIC M27 (420782-9900-799)	63x	Oil	1.4	0.19	LSM 980 with Airyscan, LSM 980 NLO with Airyscan, LSM 980, Storage
alpha Plan-Apochromat 100x/1.46 Oil DIC M27 (420792-9800)	100x	Oil	1.46	0.11	Storage (2)
Plan-Apochromat 100x/1.40 Oil DIC M27 (420792-9900)	100x	Oil	1.4	0.17	Storage
alpha Plan-Fluar 100x/1.49 Oil M27 (421190-9800)	100x	Oil	1.49	0.08	Storage
Plan-Apochromat 100x/1.40 Oil DIC (440782-9902)	100x	Oil	1.4	0.17	Storage

Objectives (Nikon)	Magnification	Immersion Type	N.A.	Working Distance (mm)	Location(s)
CFI Plan Fluor 4X (MRH00045)	4x	Air	0.13	17.2	MuVi SPIM (2)
CFI Plan Fluor 10X (MRH00101)	10x	Air	0.3	16	LLSM (2)
CFI Plan Fluor 10X (MRH00105)	10x	Air	0.3	16	MuVi SPIM (2)
CFI Plan Fluor 10X W (MRH07120)	10x	Water-dipping	0.3	3.5	MuVi SPIM (4)
CFI Plan Apo Lambda 10X (MRD00105)	10x	Air	0.45	4.0	Eclipse Ti, Storage
CFI Plan Apo Lambda S 10X (MRD70100)	10x	Air	0.45	4.0	CSU-W1 SoRa
CFI Plan Apo Lambda D 10X (MRD70170)	10x	Air	0.45	4.0	CSU-W1
CFI Super Fluor 10X (MRF00100)	10x	Air	0.5	1.1	Storage
CFI75 LWD 16X W (MRP07220)	16x	Water-dipping	0.8	3.0	Storage
CFI Plan Apo Lambda 20X (MRD00205)	20x	Air	0.75	1.0	CSU-W1 SoRa, Eclipse Ti
CFI Plan Apo Lambda D 20X (MRD70270)	20x	Air	0.8	0.8	CSU-W1
CFI90 20XC Glyc (MRD71220)	20x	Clearing	1.0	8.2	MuVi SPIM



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CFI75 Apo 25XC W (MRD77220)	25x	Water-dipping	1.1	2.0	LLSM (2), MuVi SPIM
CFI Apo LWD Lambda S 40XC WI (MRD77410)	40x	Water	1.15	0.61 – 0.59	CSU-W1 SoRa, CSU-W1
CFI Plan Apo Lambda S 40XC Sil (MRD73400)	40x	Silicone oil	1.25	0.3	CSU-W1 SoRa, CSU-W1
CFI Plan Fluor 40X Oil (MRH01401)	40x	Oil	1.3	0.2	CSU-W1 SoRa, Eclipse Ti
CFI Plan Apo VC 60XC WI (MRD07602)	60x	Water	1.2	0.31 – 0.28	Eclipse Ti, Storage
CFI Plan Apo VC 60X Oil (O17DICN2WD013)	60x	Oil	1.4	0.13	Storage
CFI Plan Apo Lambda 60X Oil (MRD01605)	60x	Oil	1.4	0.13	Eclipse Ti
CFI Apo Lambda S 60X Oil (MRD71600)	60x	Oil	1.4	0.14	CSU-W1
CFI Plan Apo Lambda D 60X Oil (MRD71670)	60x	Oil	1.42	0.15	CSU-W1 SoRa
CFI Apo TIRF 60XC Oil (MRD01691)	60x	Oil	1.49	0.16 – 0.07	CSU-W1 SoRa, Storage
CFI Plan Apo Lambda 100X Oil (MRD01905)	100x	Oil	1.45	0.13	CSU-W1 SoRa, Eclipse Ti
CFI Plan Apo Lambda D 100X Oil (MRD71970)	100x	Oil	1.45	0.13	CSU-W1
CFI Apo TIRF 100XC Oil (MRD01991)	100x	Oil	1.49	0.16 – 0.09	CSU-W1 SoRa
CFI SR HP Plan Apo Lambda S 100XC Sil (MRD73950)	100x	Silicone oil	1.35	0.31 – 0.28	CSU-W1 SoRa

Objectives (Olympus)	Magnification	Immersion Type	N.A.	Working Distance (mm)	Location(s)
PLAPON2X	2x	Air	0.08	6.2	BX51
UPLFLN4X	4x	Air	0.13	17.0	BX51
XLFLUOR4X/340	4x	Air	0.28	28.8 – 30.0	MuVi SPIM
UPLFLN10X	10x	Air	0.3	10.0	BX51



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UPLSAPO20X	20x	Air	0.75	0.65	STED
UPLXAPO20X	20x	Air	0.8	0.6	iSIM
XLUMPLFLN20XW	20x	Water-dipping	1.0	2.0	MuVi SPIM (2)
UPLSAPO30XS	30x	Silicone oil	1.05	0.8	STED
UPLSAPO60XW	60x	Water	1.2	0.28	STED
UPLSAPO60XS2	60x	Silicone oil	1.3	0.3	iSIM
UPLXAPO60XO	60x	Oil	1.42	0.15	STED
UPLAPO100XOHR	100x	Oil	1.5	0.12	iSIM
UAPON100XOTIRF	100x	Oil	1.49	0.1	Storage
UPLSAPO100XO	100x	Oil	1.4	0.13	BX51
MVPLAPO0.63X	4 – 40x	Air	0.15	87.0	MVX10
MVPLAPO1X	6.3 – 63x	Air	0.25	65.0	MVX10 (2)
MVPLAPO2XC	12.5 – 125x	Air	0.5	20.0	MVX10 (2)

Objectives (Other)	Magnification	Immersion Type	N.A.	Working Distance (mm)	Location(s)
Custom (Special Optics, HH-PO159319)	N/A	Water-dipping	0.65	3.74	LLSM (2)
TL20X-MPL (Thorlabs)	20x	Water-dipping	0.6	5.5	MOSAIC, Storage (damaged)