mag.x system 125 optical configurations

Objective Plan Apochromat					Tube lens system											
					1x				1.73x				2.25x			
					f'_{tub} = 250 mm				f'_{tub} = 432.5 mm				f'_{tub} = 563 mm			
					2y' = 25 mm				2y' = 43.3 mm				2y' = 57 mm			
	WD	f'_{obj}	δ	R_0	M	2y	NA'	R'_0	M	2y	NA'	R'_0	M	2y	NA'	R'_0
Magn. / NA	mm	mm	µm	lp/mm		mm		lp/mm		mm		lp/mm		mm		lp/mm
2x / 0.08	24.8	125	± 42.7	293	2.0	12.5	0.04	147	3.5	12.5	0.023	85	4.5	12.5	0.018	65
5x / 0.2	13.0	50	± 6.8	733	5.0	5.0	0.04	147	8.7	5.0	0.023	85	11.25	5.0	0.018	65

NA	Numerical aperture in the object space = n · sin (σ)
WD	Working distance
f'_{obj}	Focal length of the objective
f'_{tub}	Focal length of the tube lens
δ_{obj}	Depth of field at 546 nm; $\delta_{obj} = \pm n \cdot \lambda/(2 \cdot NA^2)$
R'_0	Cut off frequency in image space at 546 nm
R_0	Cut off frequency in object space at 546 nm ; $R_0 = (2 \cdot NA)/\lambda$
2y'	Image field size (maximum detector diagonal)
2y	Object field size
M	Magnification of the overall system; $M = M_{obj} \cdot M_{tub}$

Order number	Description
G192-012-000	Objective lens LD-Plan Apo 5x/0.2
G192-011-000	Objective lens LD-Plan Apo 2x/0.08
G192-031-000	Tube lens 1x
G192-034-000	Tube lens 1.73x
G192-032-000	Tube lens 2.25x

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