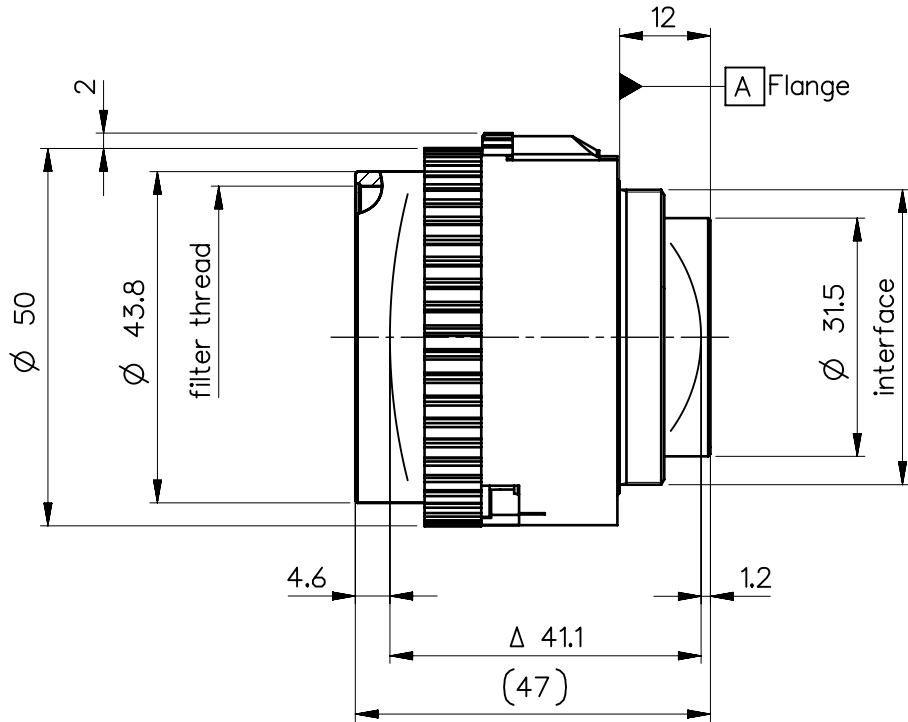
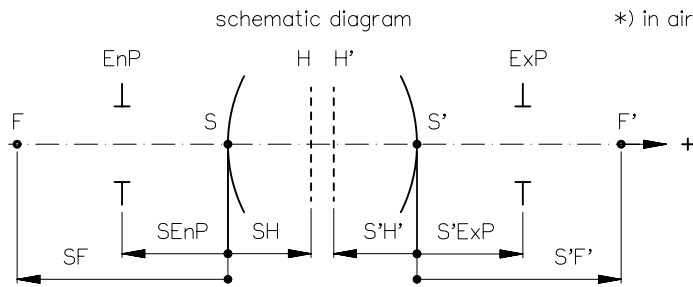


order number	lens name
0703-092-000-40	Apo-Rodagon-N 4/80



Specification		ON	7512-9202
image circle max. (mm)	86	working distance (mm)	218 - 1298
focal length f' (mm)	83.5	interface	M39 x1/26" (Leica)
magnification β' [range]	-0.1 [-0.5 ... -0.067]	filter thread	M40.5 x0.5
spectral range λ (nm)	400 - 750	weight (g)	130

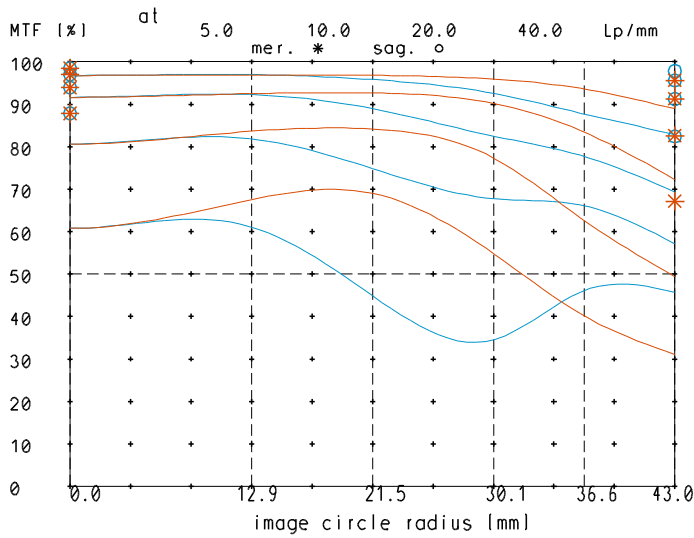


design includes CCD cover glass:		no	
SF (mm)	-56.2	f-stop	4
S'F' (mm) *	67.2	Ø EnP	20.9
HH' (mm) *	-2.5	Ø Exp	21.0
SH (mm)	27.3		15.0
S'H' (mm) *	-16.3		10.5
S'EnP (mm)	26.6		7.6
S'Exp (mm) *	-17.0		7.6

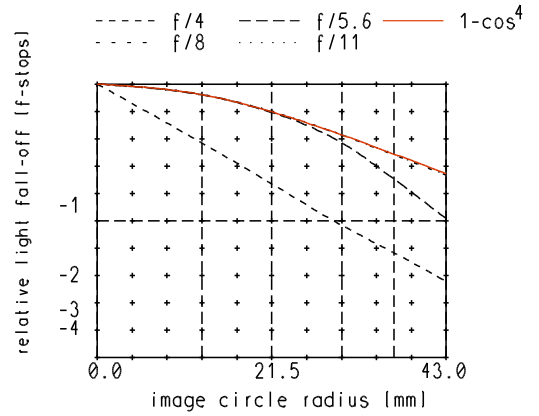
PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED	EU-D	AL-T1A	US-D	US-ML	not export controlled
	REV	ECC	DATE	APPROVED	PDM Status Freigabe
	a	Neuausg			-
	b	11-358	13.07.11	Kuehne	SCALE 1:1
	c	12-0185	27.03.12	Schuber	MATERIAL
	d	12-0185	25.04.12	Schuber	TITLE
	e	14-0184	18.08.14	Schiffle	Apo-Rodagon-N 4/80
f	16-0383	17.06.16	Bo ll		
			FIRST ISSUE	DATE	NAME
			21.10.08		Kuehne
			CHKD	03.12.08	Schaeffler
DIN A 4	ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT				
				DRAWING NO.	SHEET 1 OF 1
				0703-092-100-00-0001f	
				REPLACES 0703-009-100-00	

Apo-Rodagon-N_80

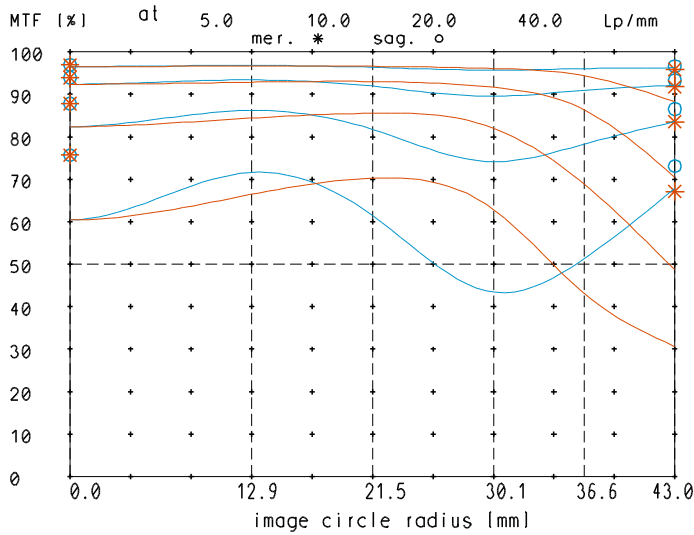
MTF at ratio 0.1x f/4



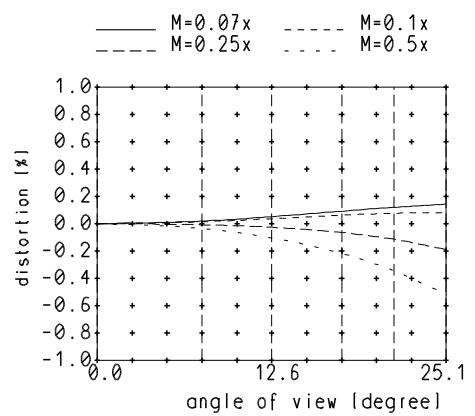
relative light fall-off at ratio 0.1x



MTF at ratio 0.1x f/8

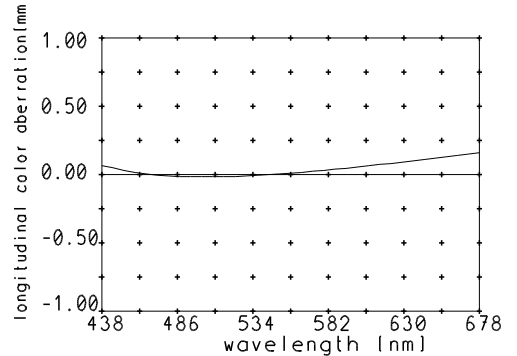


Distortion at ratio 0.07x to 0.5x



— sagittal. o Diffraction limited value
 — meridional * Diffraction limited value

Longitudinal color aberration at ratio 0.1x



Named frequencies (line pairs/mm) in modular transfer function (MTF) as well as diagrams of relative light fall-off, distortion and longitudinal color aberration refer to film plane.