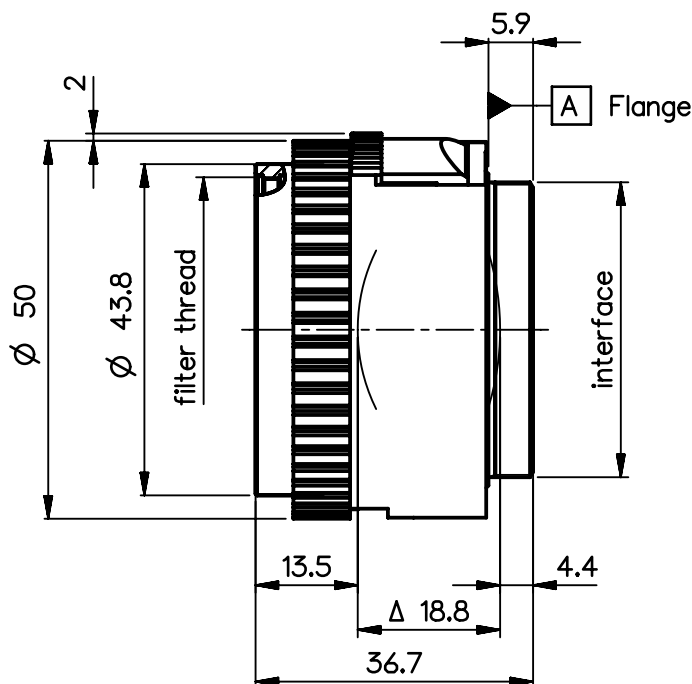
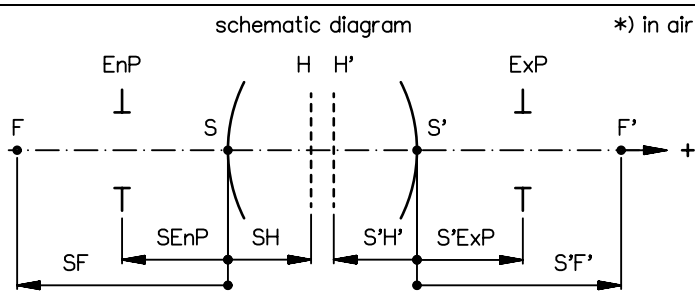


order number	lens name
0801-398-000-41	Rogonar-S 4.5/90



Specification		ON	7477-9002
image circle max. (mm)	84.0	working distance (mm)	252 - 794
focal length f' (mm) *	90.1	interface	M39 x1/26" (Leica)
magnification β' [range]	-0.25 [-0.5 ... -0.125]	filter thread	M40.5 x0.5
spectral range λ (nm)	400 - 750	weight (g)	80

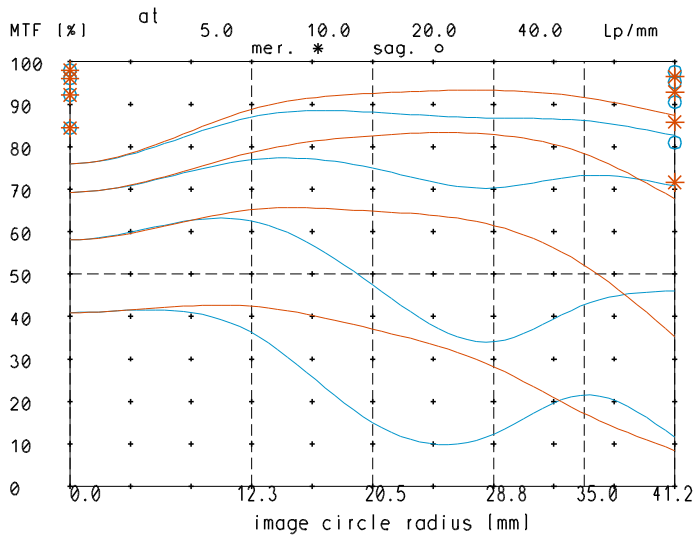


design includes CCD cover glass:		no		
SF (mm)	-84.0	f-stop	\varnothing EnP	\varnothing Exp
S'F' (mm) *	78.4	4.5	20.3	18.9
HH' (mm) *	1.2	5.6	16.3	15.2
SH (mm)	6.0	8	11.4	10.7
S'H' (mm) *	-11.7	11	8.3	7.7
SEnP (mm)	12.5	16	5.7	5.3
S'Exp (mm) *	-5.6	22	4.2	3.9

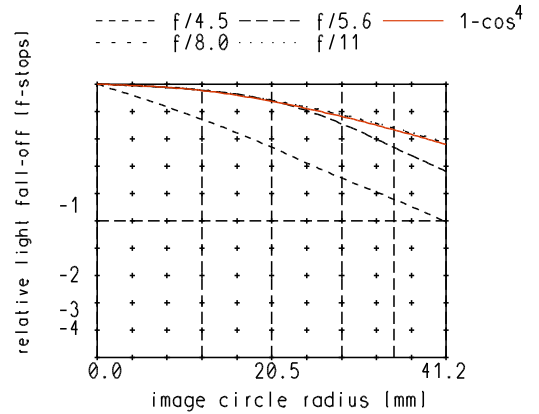
PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED	EU-D	AL-T1A	US-D	US-ML	not export controlled
	REV	ECC	DATE	APPROVED	PDM Status Freigabe
	a	Neuausg			-
	b	11-358	13.07.11	Kuehne	
c	14-0184	25.03.14	Schiff e		
d	14-0184	12.08.14	Schiff e		
GENERAL TOLERANCE OF DIMENSION, FORM, POS.				SCALE 1:1	
ISO 2768-mH				MATERIAL	
BASIC TOLERANCING PRINCIPLE ISO 8015				TITLE	
				Rogonar-S 4.5/90	
FIRST DATE NAME				DRAWING NO.	
ISSUE 11.07.11 Kuehne				0801-398-100-41-0001d	
CHKD 11.07.11 Riegg				SHEET 1	
				OF 1	
				REPLACES	
DIN A 4	ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT				

Rogonar-S_4.5/90

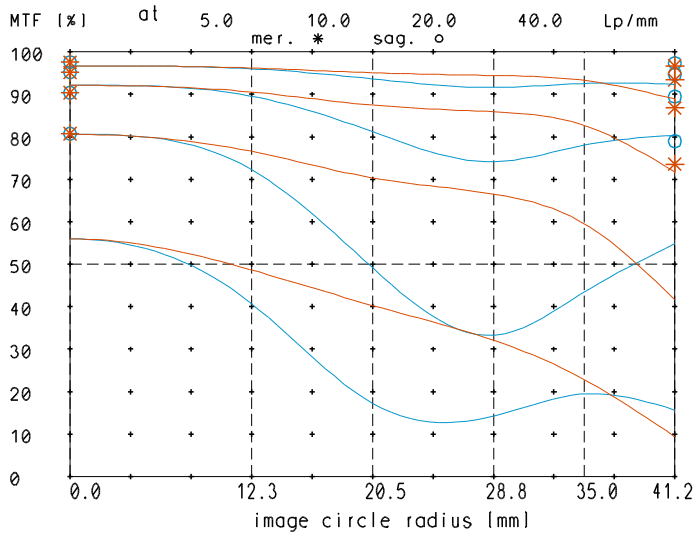
MTF at ratio -0.25 f/ 4.5



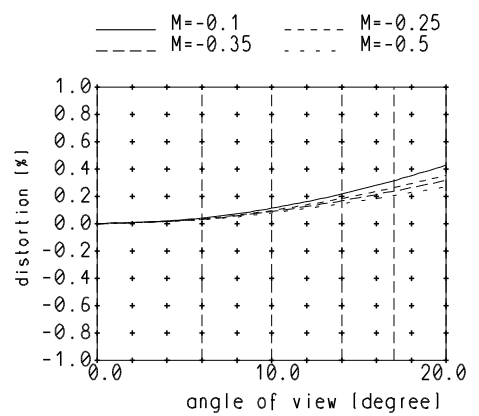
relative light fall-off at ratio -0.25



MTF at ratio -0.25 f/ 5.6

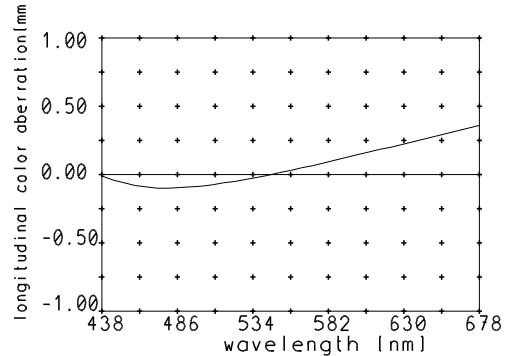


Distortion at ratio -0.1 to -0.5



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

Longitudinal color aberration at ratio -0.25



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.