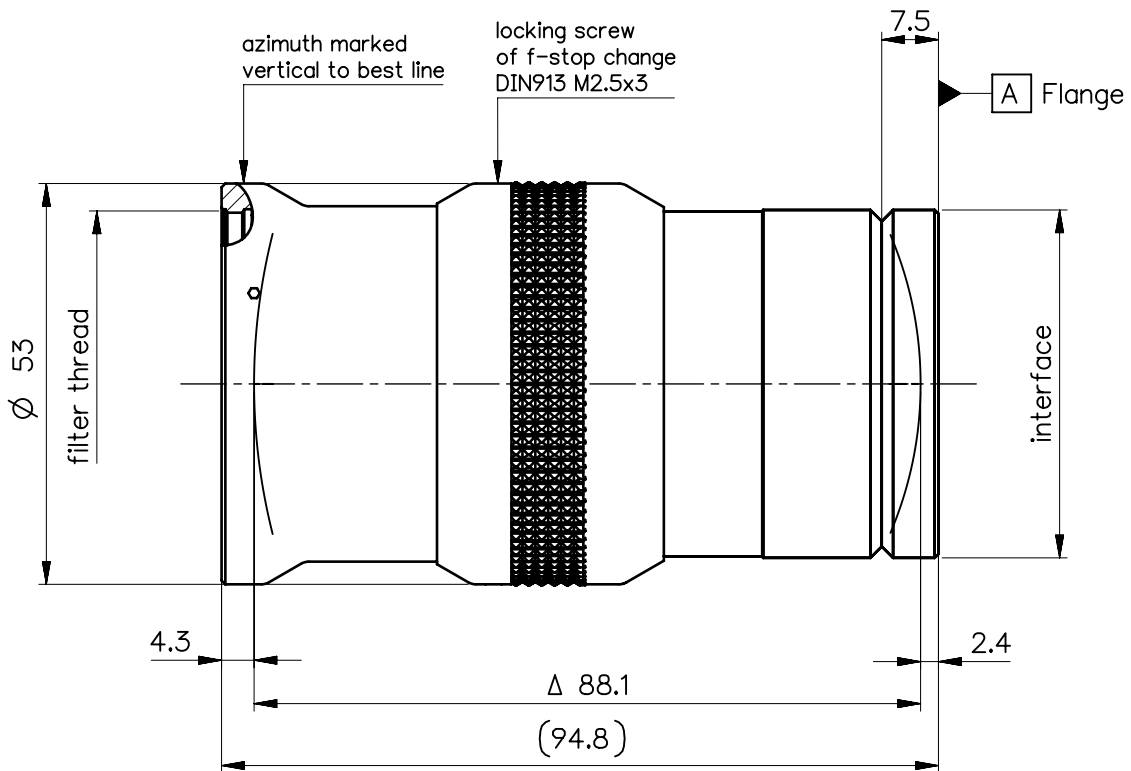


order number	lens name
0703-104-000-20	inspec.x L 4/105 -3x

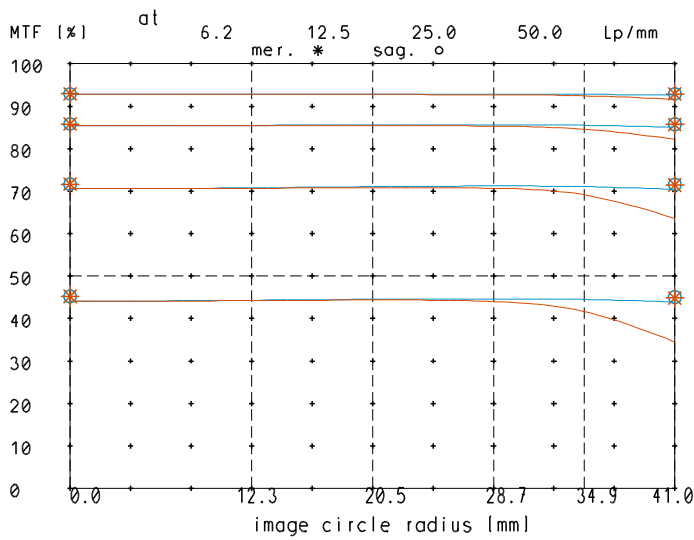


Specification		ON	7604-9351	
image circle max. (mm)	82	working distance (mm)	84 - 78	
focal length f' (mm)	105.3	interface	V-groove $\varnothing 46$ h7	
magnification β' [range]	-3 [-2.8 ... -3.3]	filter thread	M46 x0.75	
spectral range λ (nm)	400 - 750	weight (g)	440	
schematic diagram		design includes CCD cover glass: yes 0.4mm Suprasil		
*) in air		SF (mm)	-50.6	f-stop
		S'F' (mm) *)	40.8	\varnothing EnP
		HH' (mm) *)	-31.3	\varnothing Exp
		SH (mm)	54.8	
		S'H' (mm) *)	-64.5	
		SEnP (mm)	56.7	
		S'Exp (mm) *)	-62.5	

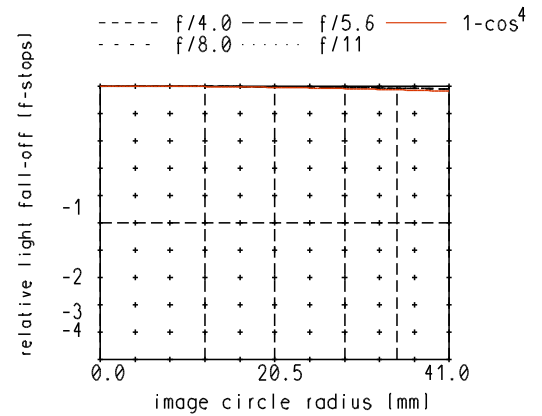
NX PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED	EU-D	AL-T1A	US-D	US-ML	not export controlled
	REV	ECC	DATE	APPROVED	PDM Status Freigabe
	a	Neuausg			-
	b	11-358	21.02.12	Kuehne	
c	14-0184	19.08.14	Schiffe		
d	15-0640	31.07.15	Bo ll		
GENERAL TOLERANCE OF DIMENSION, FORM, POS.				SCALE 1:1	
BASIC TOLERANCING PRINCIPLE				TITLE	
				inspec.x L 4/105 -3x	
				FIRST ISSUE	31.03.10
				NAME	Labarte
				CHKD	31.03.10
				NAME	Schaeffler
				DRAWING NO.	0703-104-100-00-0001d
ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT				REPLACES	
				SHEET	1
				OF	1

inspect_x_L_4/105_-3x

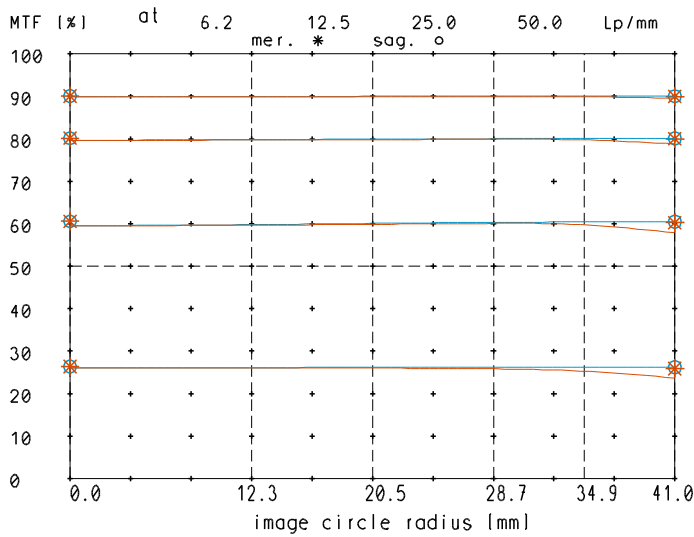
MTF at ratio -3.0 f/ 4.0



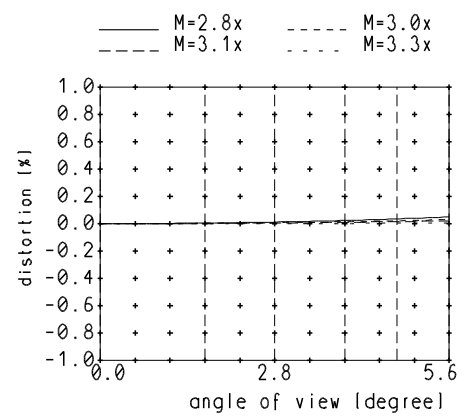
relative light fall-off at ratio -3.0



MTF at ratio -3.0 f/ 5.6

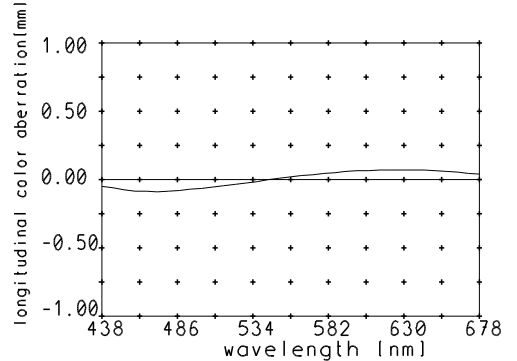


Distortion at ratio 2.8x to 3.3x



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

Longitudinal color aberration at ratio -3.0



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.