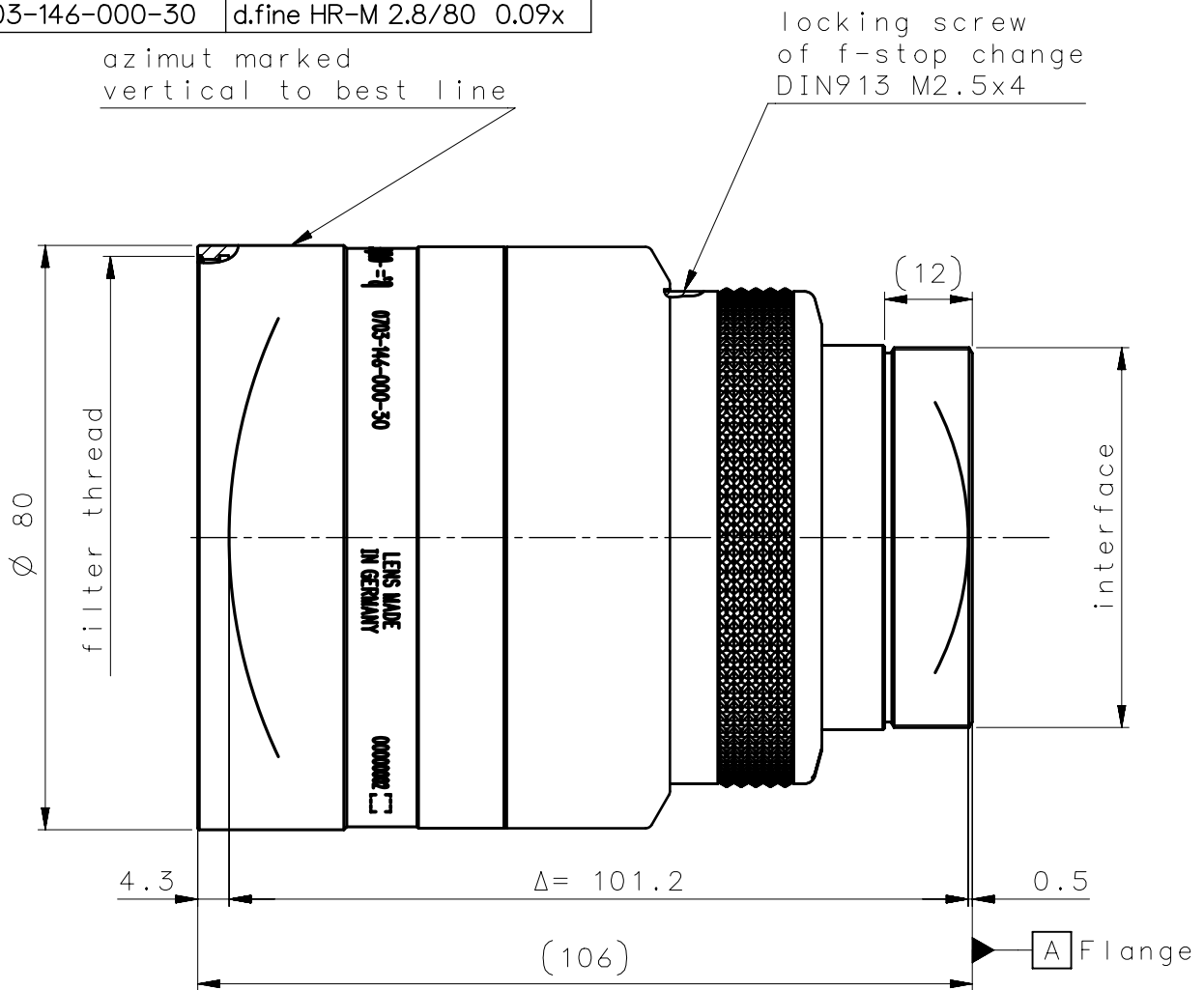


order number	lens name
0703-146-000-30	d.fine HR-M 2.8/80 0.09x



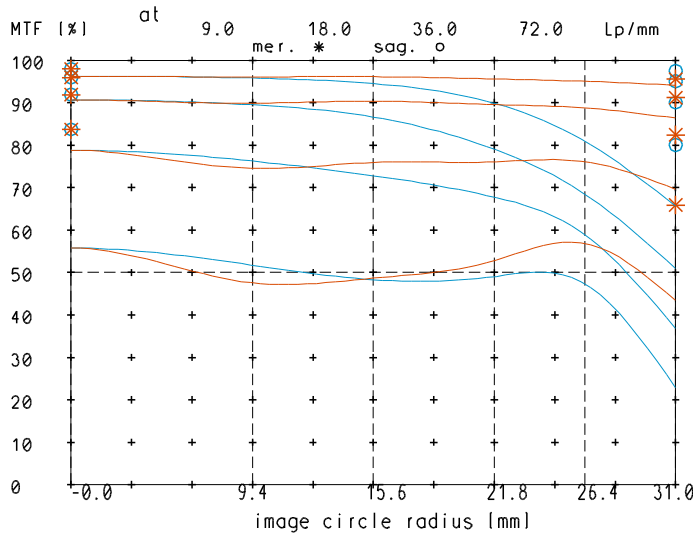
Specification		ON	7608-9211
image circle max. (mm)	62.4	working distance (mm)	597 - 1997
focal length f' (mm)	80.2	interface	M52 x0.5 \leftrightarrow 12mm
magnification β' [range]	-0.09 [-0.04 ... -0.14]	filter thread	M77 x0.75
spectral range λ (nm)	400 - 750	weight (g)	800
schematic diagram		design includes CCD cover glass: yes 0.76mm D263	
*) in air		SF (mm)	1.8
		f-stop	2.8
		\varnothing EnP	27.4
		\varnothing Exp	30.6
		HH' (mm) *	-6.3
		SH (mm)	78.4
		S'H' (mm) *	-29.1
		SEnP (mm)	70.1
		S'Exp (mm) *	-38.3

NX	EU-D	AL-T1A	US-D	US-ML	not export controlled
	REV	ECC	DATE	APPROVED	PDM Status Freigabe
	a	Neuausg	03.05.22	Georgie	-
	b	22-0589	12.07.22	Georgie	
PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED	GENERAL TOLERANCE OF DIMENSION, FORM, POS.			SCALE	1:1
	BASIC TOLERANCING PRINCIPLE ISO 8015			MATERIAL	
	FIRST ISSUE	DATE	NAME	TITLE	
	12.05.22	12.05.22	Stauder	d.fine HR-M 2.8/80 0.09x	
DIN A 4	ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT			DRAWING NO.	0703-146-100-30-0001b
				REPLACES	
					SHEET 1 OF 1

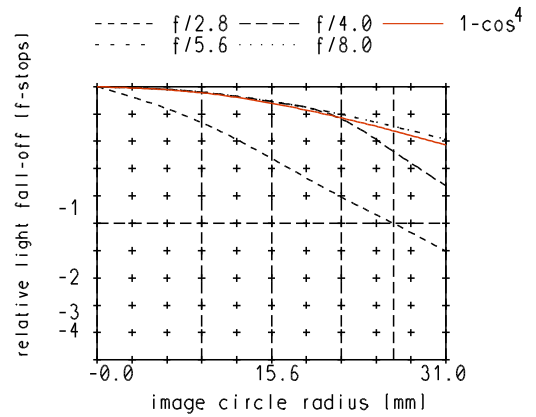


d.fine_HR-M_2.8_80_0.09x

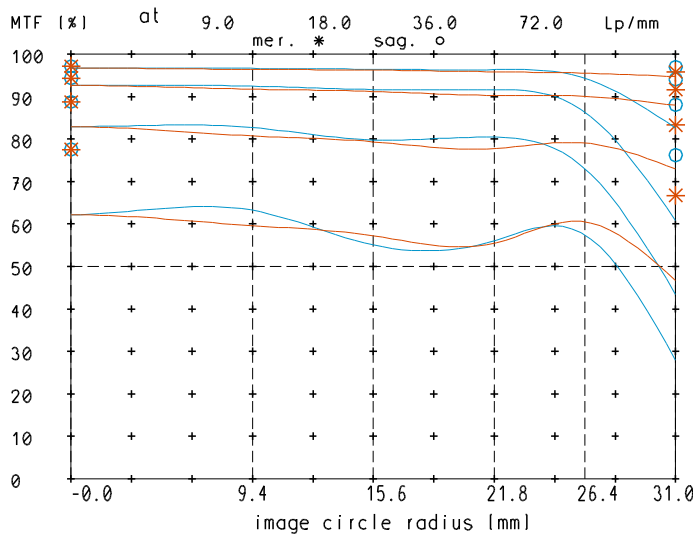
MTF at ratio 0.09x f/ 2.8



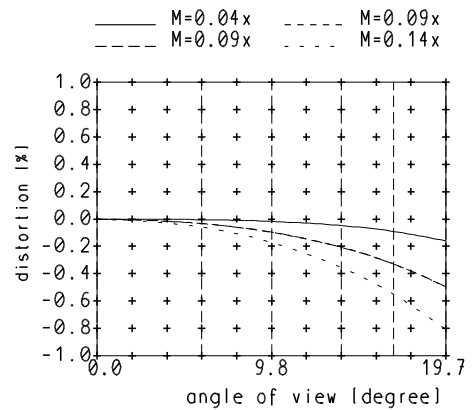
relative light fall-off at ratio 0.09x



MTF at ratio 0.09x f/ 4

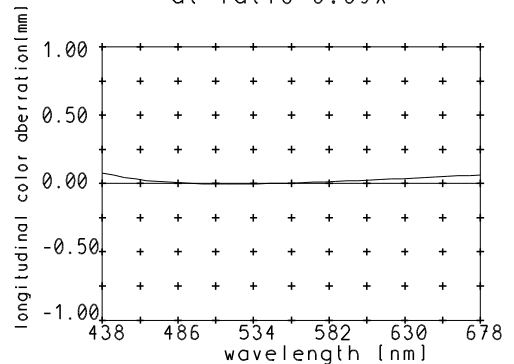


Distortion at ratio 0.04x to 0.14x



— sagittal, ○ Diffraction limited value
— meridional * Diffraction limited value

Longitudinal color aberration at ratio 0.09x



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.