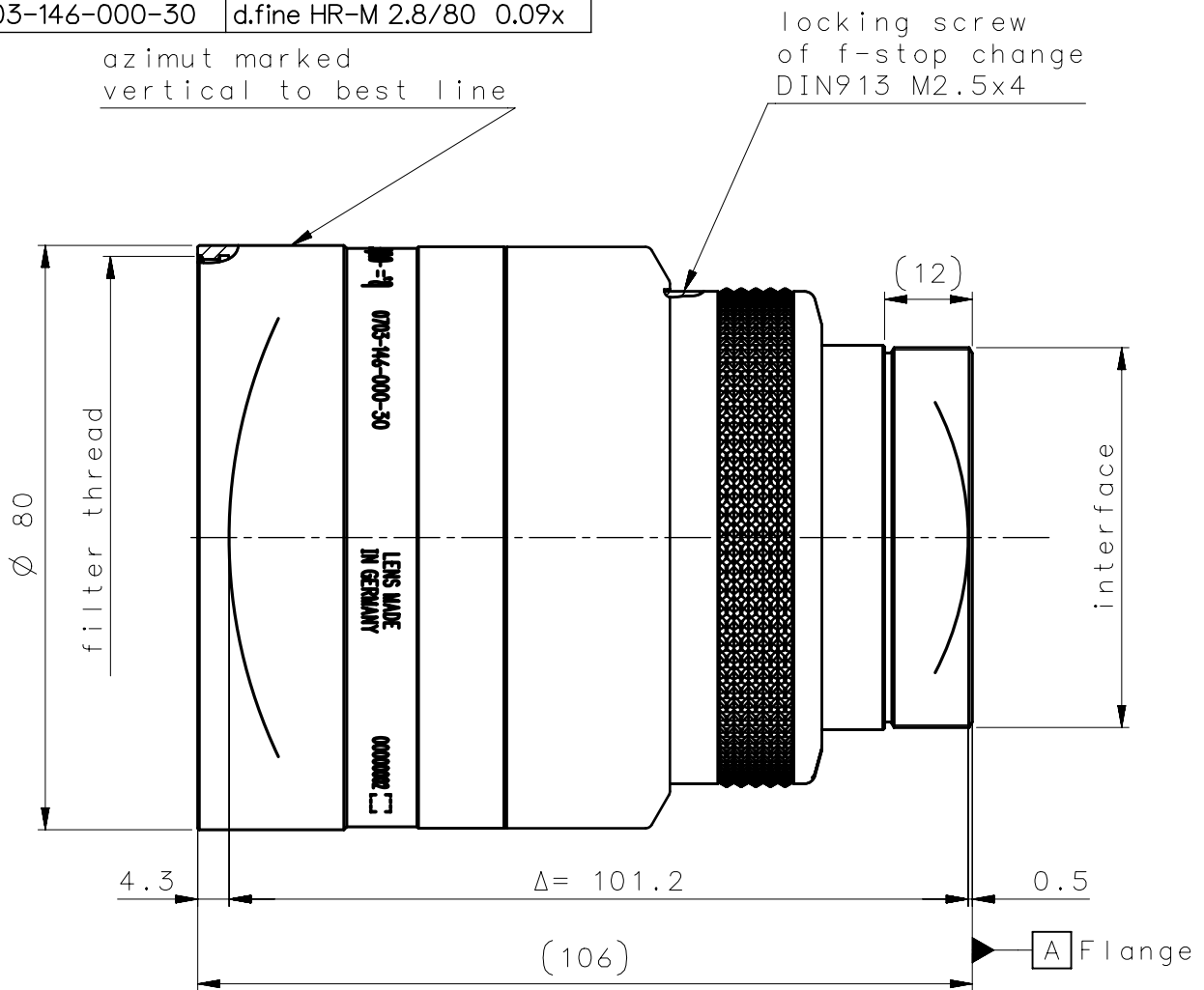


order number	lens name
0703-146-000-30	d.fine HR-M 2.8/80 0.09x

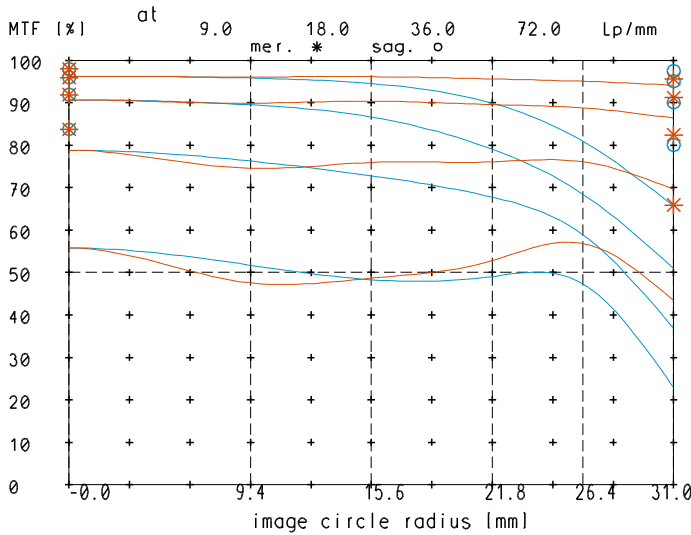


<b>Specification</b>		ON	7608-9211	
image circle max. (mm)	62.4	working distance (mm)	597 - 1997	
focal length f' (mm)	80.2	interface	M52 x0.5 ←→12mm	
magnification β' [range]	-0.09 [-0.04 ... -0.135]	filter thread	M77 x0.75	
spectral range λ (nm)	400 - 750	weight (g)	800	
schematic diagram		design includes CCD cover glass: yes 0.76mm D263		
*) in air		SF (mm)	-2.0	f-stop
		S'F' (mm) *)	51.1	∅ EnP
		HH' (mm) *)	-6.3	∅ Exp
		SH (mm)	78.4	
		S'H' (mm) *)	-29.1	
		SEnP (mm)	70.1	
		S'ExP (mm) *)	-38.3	

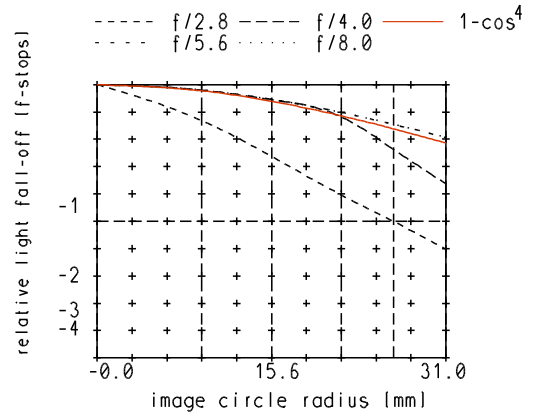
NX	EU-D		AL-T1A		US-D		US-ML		not export controlled	
	PDM Status		Freigabe						-	
	REV	ECC	DATE	APPROVED	GENERAL TOLERANCE OF DIMENSION, FORM, POS.	SURF. TREATMT	SCALE 1:1			
	a	Neuausg	03.05.22	Georgie			MATERIAL			
b	22-0589	12.07.22	Georgie			BASIC TOLERANCING PRINCIPLE ISO 8015		TITLE		
						FIRST DATE NAME		d.fine HR-M 2.8/80 0.2x		
						ISSUE 03.05.22 Georgiev				
						CHKD 12.05.22 Stauder				
						DRAWING NO.		0703-146-100-30-0001b		SHEET 1
DIN A 4						REPLACES				OF 1
ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT										

# d.fine\_HR-M\_2.8\_80\_0.09x

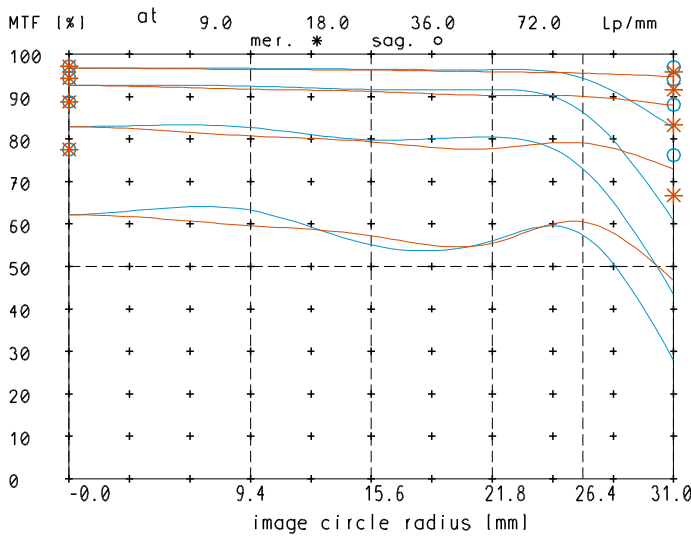
MTF at ratio 0.09x f/ 2.8



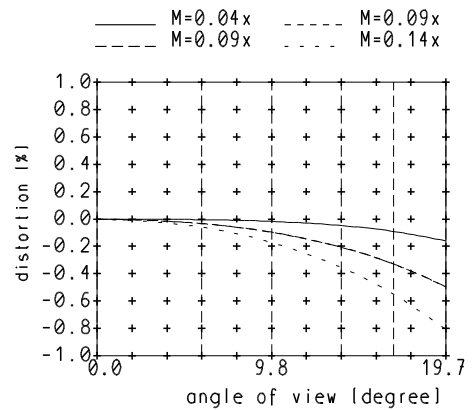
relative light fall-off at ratio 0.09x



MTF at ratio 0.09x f/ 4

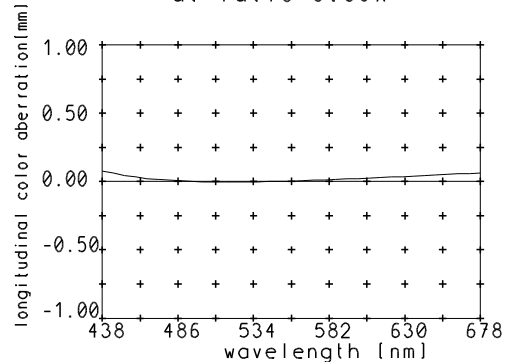


Distortion at ratio 0.04x to 0.14x



— sagittal, o 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.