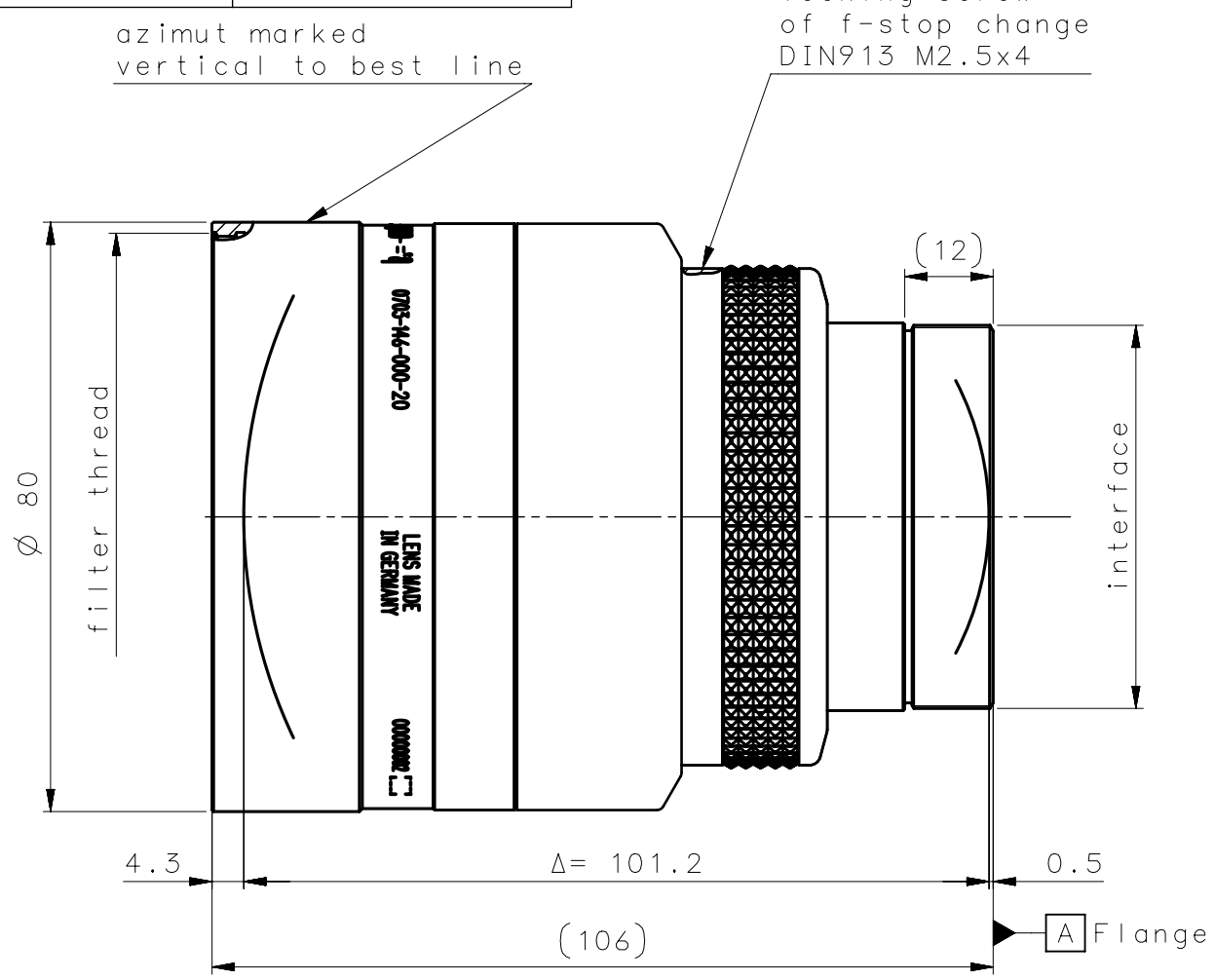
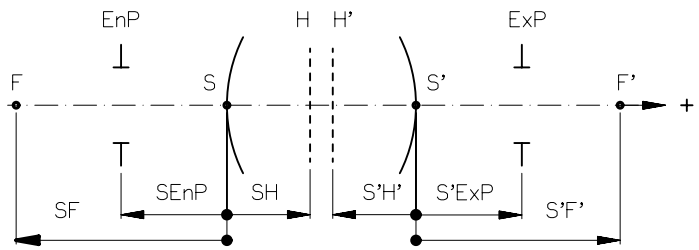
order number	lens name
0703-146-000-20	d.fine HR-M 2.8/80 0.2x



Specification	
image circle max. (mm)	62.4
focal length f' (mm)	81.0
magnification β' [range]	−0.2 [−0.14 ... −0.27]
spectral range λ (nm)	400 – 750

schematic diagram *) in air



ON	7608-9201
working distance (mm)	298 – 576
interface	M52 x0.5 ◄► 12mm
filter thread	M77 x0.75
weight (g)	800
design includes CCD cover glass:	yes 0.76mm D263

		f-stop	Ø EnP	Ø ExP
SF (mm)	−2.0			
S'F' (mm) *)	51.1	2.8	27.2	31.9
HH' (mm) *)	−7.7	4	19.8	23.1
SH (mm)	79.0	5.6	14.1	16.5
S'H' (mm) *)	−29.9	8	9.9	11.6
SEnP (mm)	67.1	11	7.2	8.4
S'ExP (mm) *)	−43.8	16	4.9	5.8

NX

PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED

DIN A 4

EU-D	AL-T1A	US-D	US-ML	not export controlled
			PDM Status Freigabe	–

REV	ECC	DATE	APPROVED
a	Neuausg	11.01.22	Georgie
b	22-0589	07.07.22	Georgie
c	22-0991	28.10.22	Georgie

GENERAL TOLERANCE OF DIMENSION, FORM, POS. | SURF. TREATMT

BASIC TOLERANCING PRINCIPLE ISO 8015

	DATE	NAME
FIRST ISSUE	11.01.22	Georgiev
CHKD	28.02.22	Stauder

ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT

QIOPTIQ

SCALE 1:1

MATERIAL

TITLE

d.fine HR-M 2.8/80 0.2x

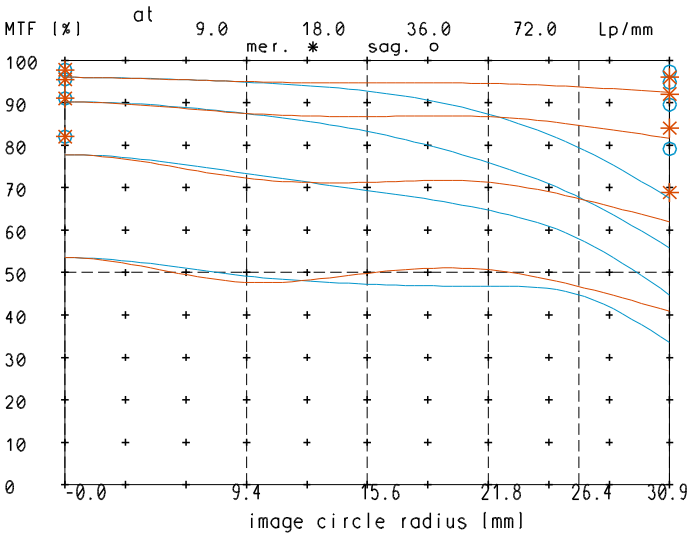
DRAWING NO. 0703-146-100-20-0001c

SHEET 1 OF 1

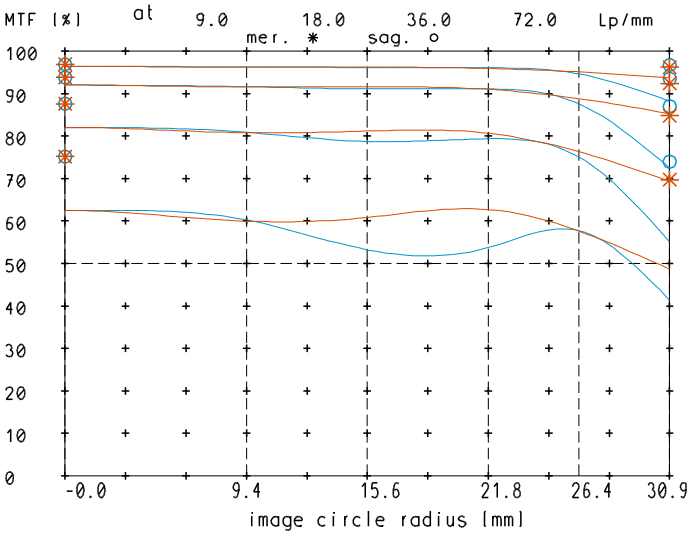
REPLACES

d.fine_HR-M_2.8_80_0.2x

MTF at ratio 0.2x f/ 2.8

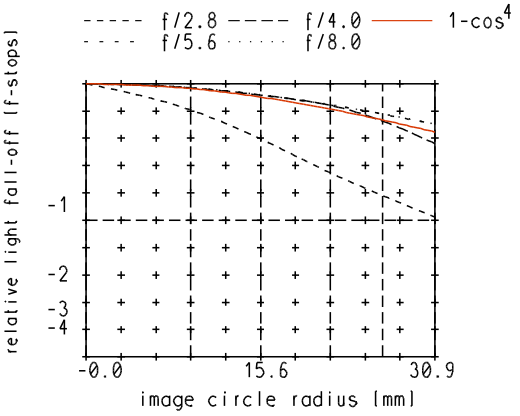


MTF at ratio 0.2x f/ 4

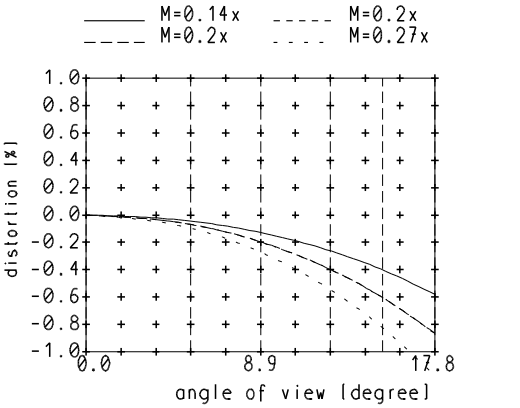


sagittal, o Diffraction limited value
meridional * Diffraction limited value

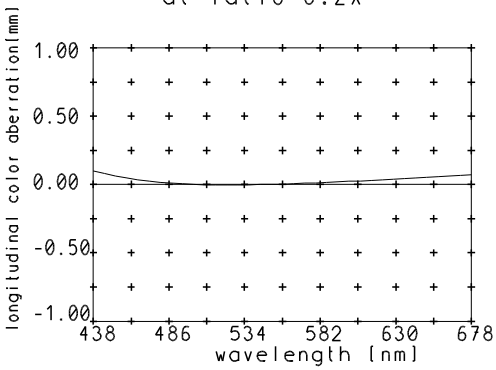
relative light fall-off at ratio 0.2x



Distortion at ratio 0.14x to 0.27x



Longitudinal color aberration at ratio 0.2x



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.