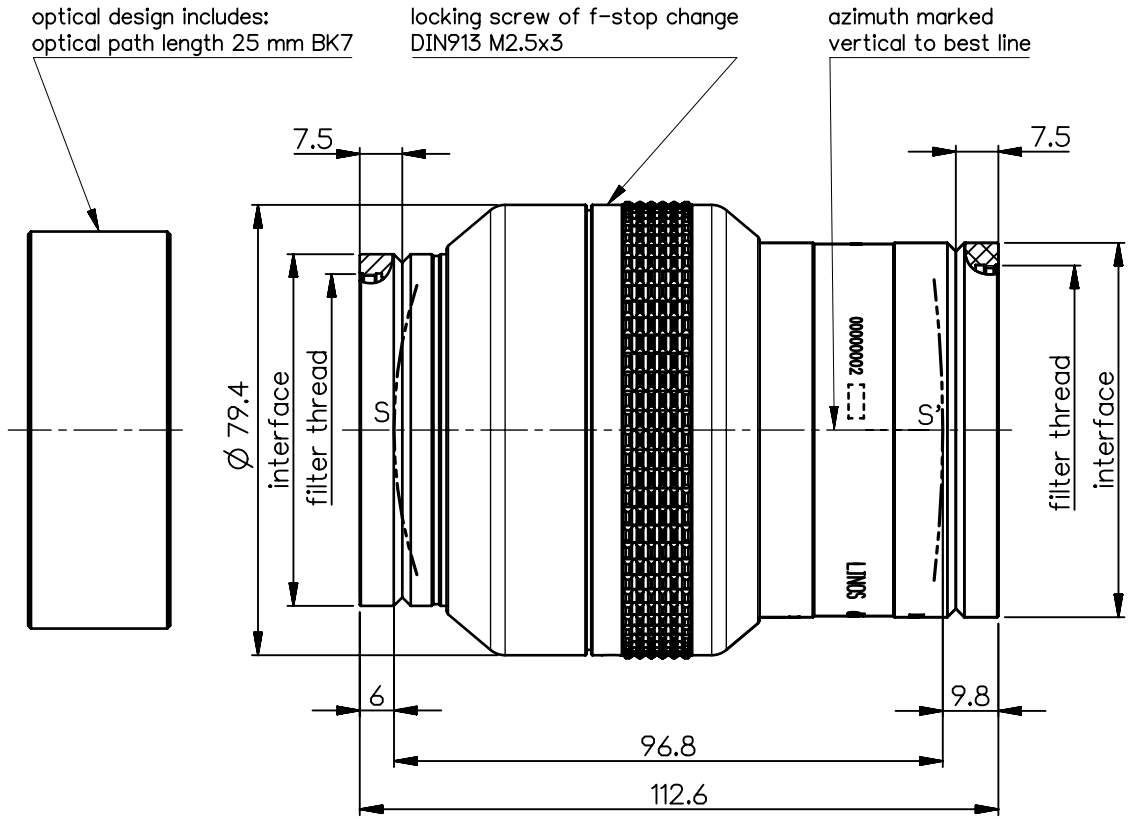
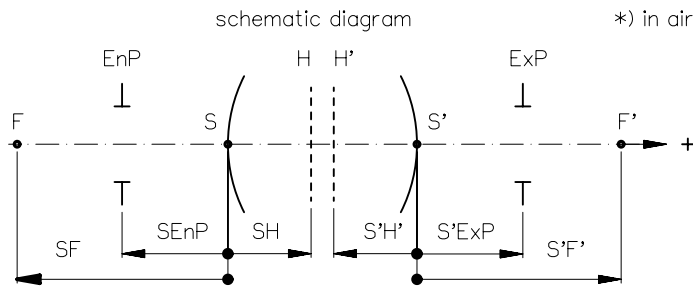


order number	lens name
0703-134-000-20	d.fine HR 2.4/128 3.33x
0703-130-823-00	d.fine HR prism module
0703-130-825-00	d.fine HR area scan module



\*\* f/2.4 - design value; numerical aperture NA: 0.13

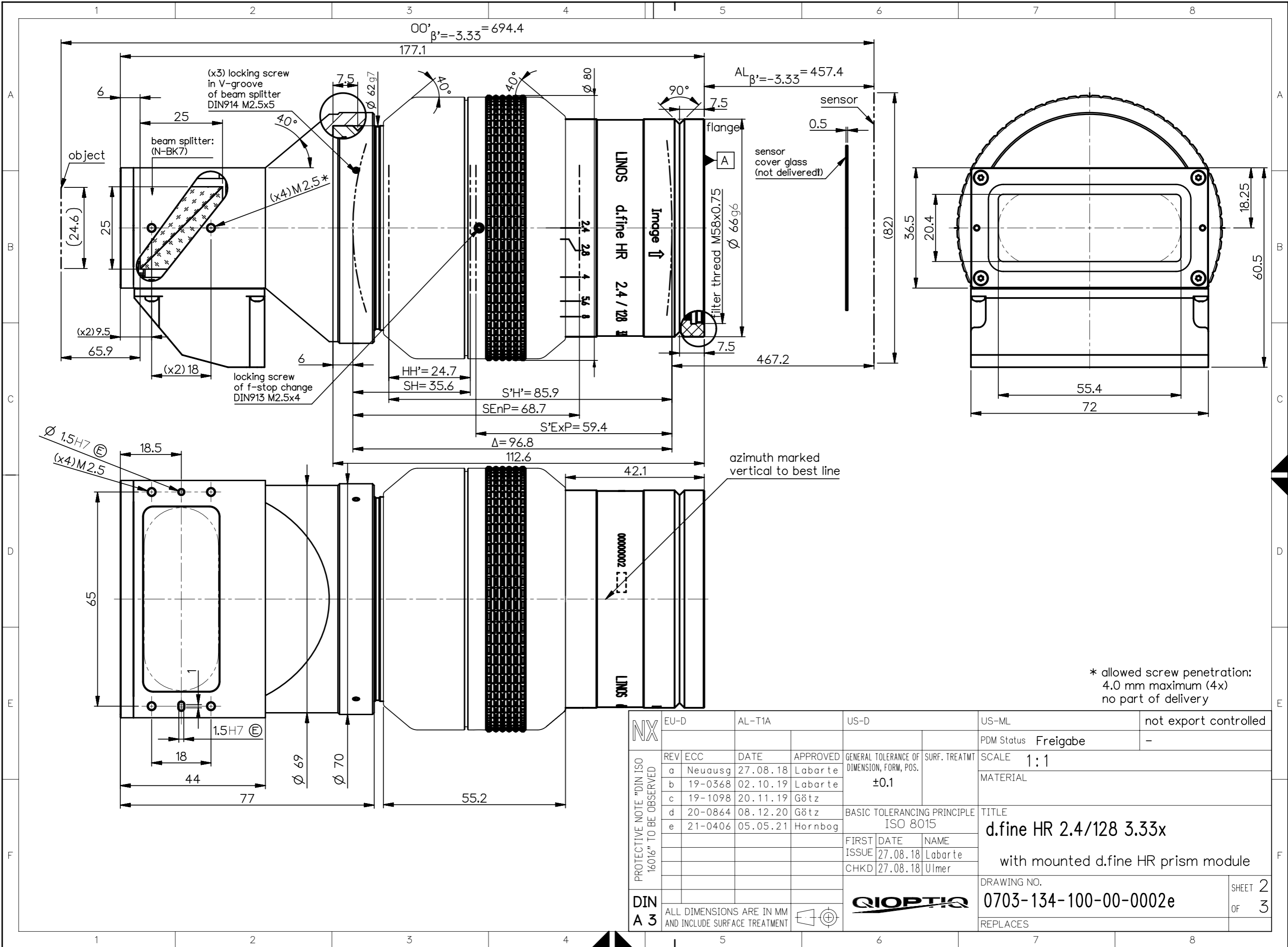
Specification	ON	7608-9151	
image circle max. (mm)	82	working distance (mm)	58 ... 62
focal length f' (mm)	127.7 (nom.)	interface	Ø62 g7 / Ø66 g6
magnification β' [range]	-3.33 [-3.2 ... -3.5]	filter thread	M55x0.50 / M58 x0.75
spectral range λ (nm)	400 - 750	weight (g)	1056



design includes CCD cover glass:	yes 0.5 mm N-ZK7		
SF (mm)	-92.1	f-stop	2.4**)
S'F' (mm) *	42.0	Ø EnP	52.2
HH' (mm) *	-24.7	Ø Exp	41.4
SH (mm)	35.6		
S'H' (mm) *	-85.9		
SEnP (mm)	68.7		
S'Exp (mm) *	-59.4		

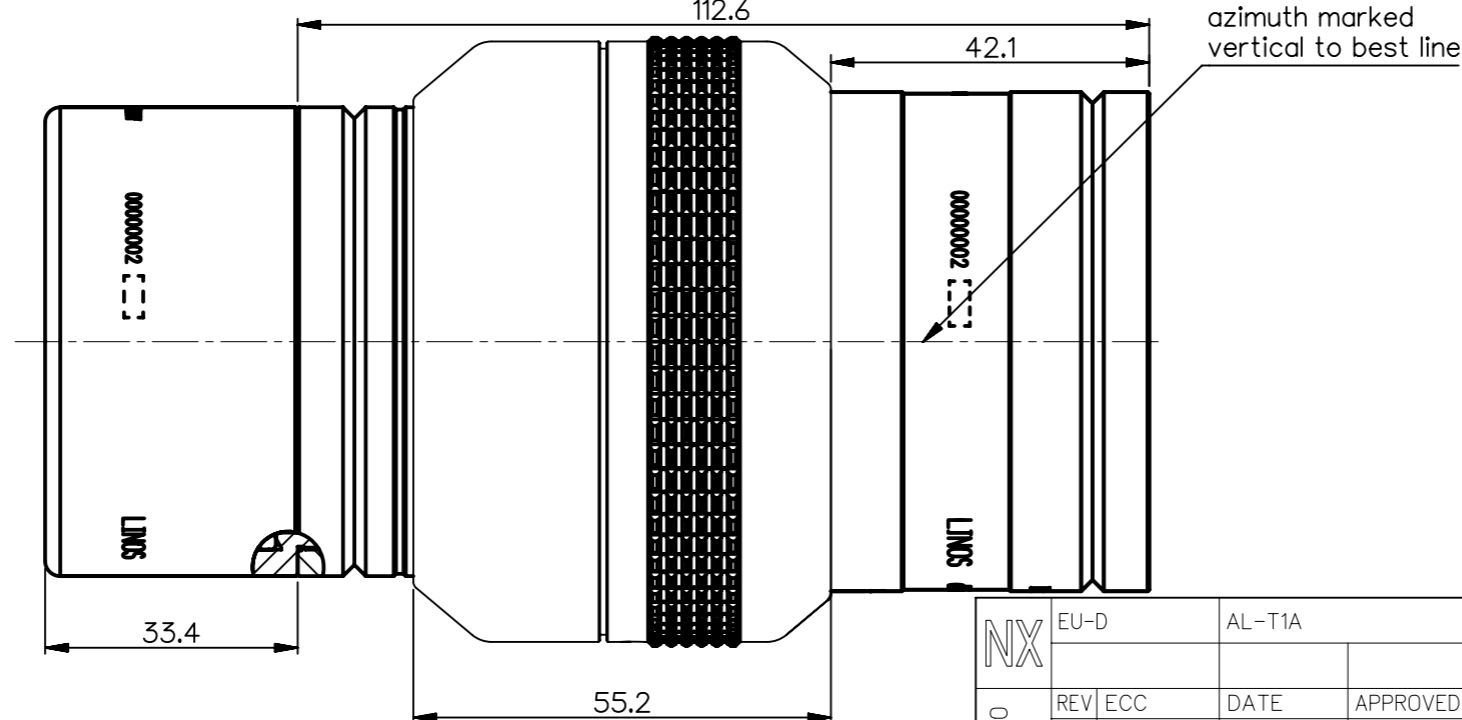
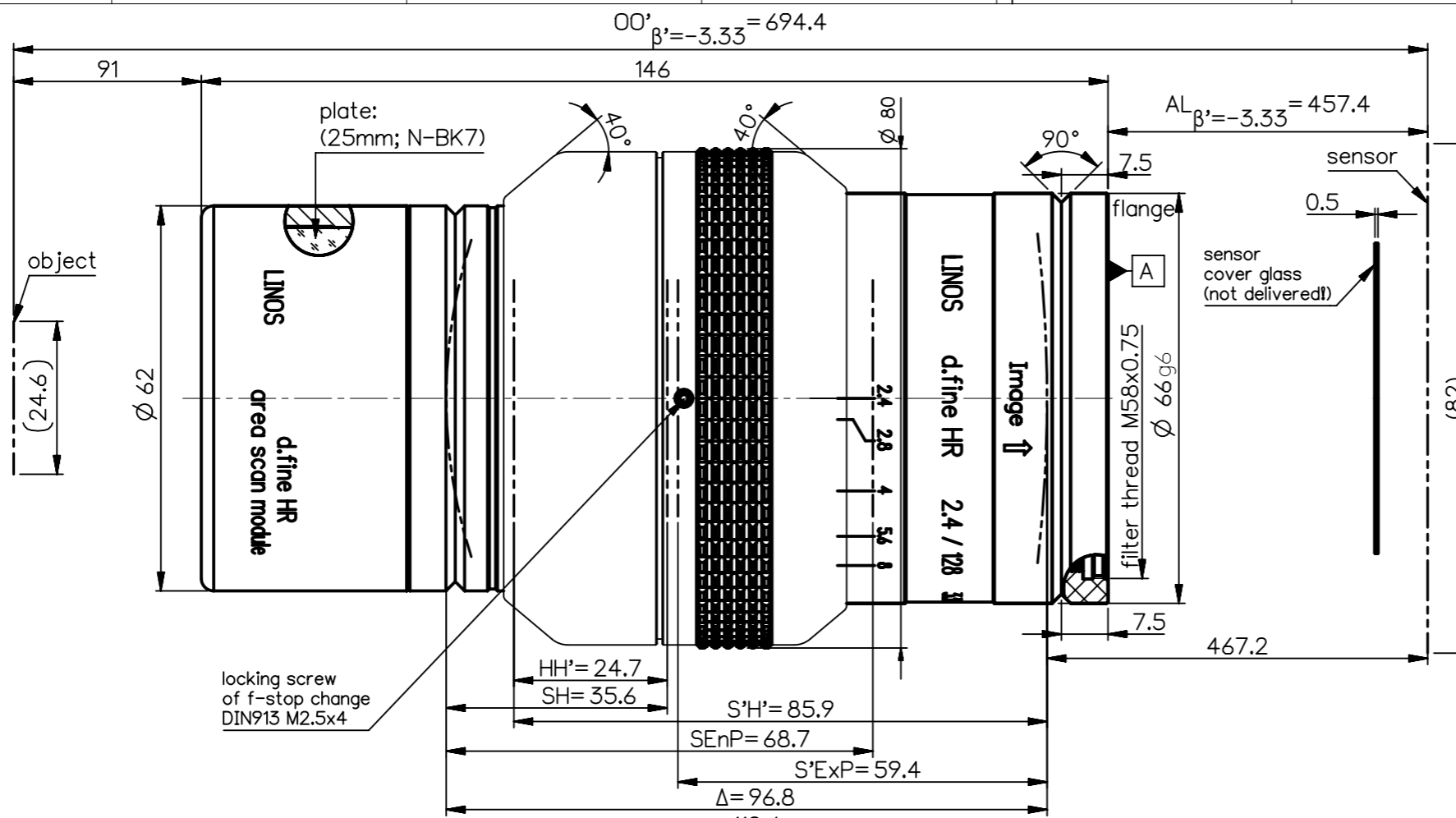
Schutzvermerk "DIN ISO 16016" beachten	EU-D	AL-T1A	US-D	US-ML	not export controlled
	Rev.	Aenderung	Datum	Freigabe	PDM-Status Freigabe
	a	Neuausg	18.12.19	Götz	Maßstab 3:4
	b	20-0864	19.10.20	Götz	Werkstoff
	c	19-1098	20.11.19	Götz	Benennung
d	20-0864	08.12.20	Götz	d.fine HR 2.4/128 3.33x	
e	21-0406	05.05.21	Hornbog	Tolerierung ISO 8015	
				Erster- Datum Name	
				stellung 18.12.19 Götz	
				Prüfung 18.12.19 Gressierer	
				Zeichnungsnummer	Blatt 1
DIN A 4	Alle Maße in mm, inklusive Oberflächenbehandlung			0703-134-100-00-0001e	von 1
				Ersatz für	





\* allowed screw penetration:  
4.0 mm maximum (4x)  
no part of delivery

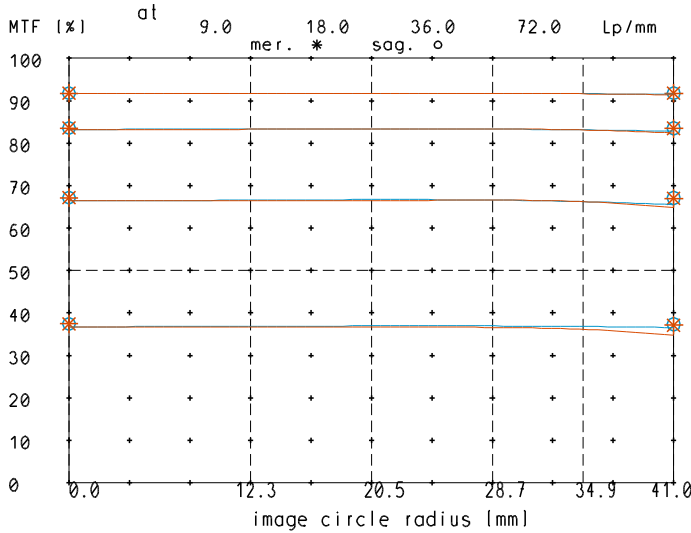
<b>NX</b> PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED DIN A 3	EU-D	AL-T1A	US-D	US-ML	not export controlled
	REV	ECC	DATE	APPROVED	PDM Status Freigabe
	a	Neuausg	27.08.18	Labarte	SCALE 1:1
	b	19-0368	02.10.19	Labarte	MATERIAL
	c	19-1098	20.11.19	Götz	TITLE
d	20-0864	08.12.20	Götz	GENERAL TOLERANCE OF DIMENSION, FORM, POS. ±0.1 BASIC TOLERANCING PRINCIPLE ISO 8015 <b>d.fine HR 2.4/128 3.33x</b> with mounted d.fine HR prism module	
e	21-0406	05.05.21	Hornbog		
FIRST ISSUE			DATE		NAME
CHKD			27.08.18	Ulmer	DRAWING NO.
ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT					<b>QIOPTIQ</b>
REPLACES				<b>0703-134-100-00-0002e</b>	SHEET 2 OF 3



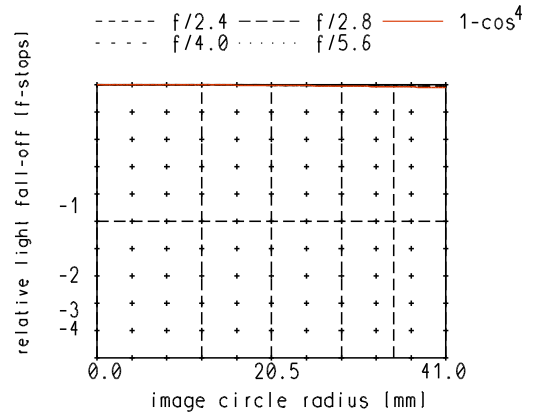
<b>NX</b> PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED <b>DIN A 3</b>	EU-D	AL-T1A	US-D	US-ML	not export controlled	
	REV	ECC	DATE	APPROVED	GENERAL TOLERANCE OF DIMENSION, FORM, POS.	
	a	Neuauag	27.08.18	Labarte	$\pm 0.1$	
	b	19-0368	02.10.19	Labarte		
	c	19-1098	20.11.19	Götz		
d	20-0864	08.12.20	Götz	BASIC TOLERANCING PRINCIPLE ISO 8015	TITLE	
e	21-0406	05.05.21	Hornbog		<b>d.fine HR 2.4/128 3.33x</b>	
				FIRST ISSUE	27.08.18	Labarte
				CHKD	27.08.18	Ulmer
				<b>QIOPTIQ</b>		TITLE
				ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT		<b>d.fine HR 2.4/128 3.33x</b>
				with mounted d.fine HR area scan module		DRAWING NO.
				0703-134-100-00-0003e		SHEET 3 OF 3
				REPLACES		

# d.fine\_HR\_2.4/128\_3.33x

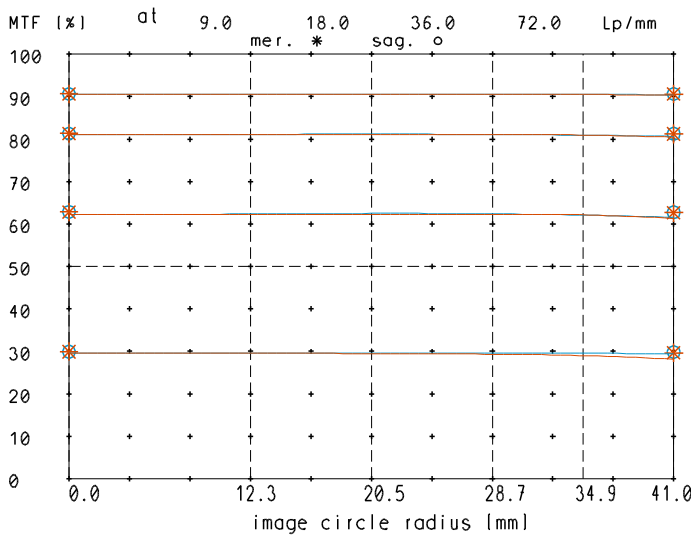
MTF at ratio 3.33 f/ 2.4



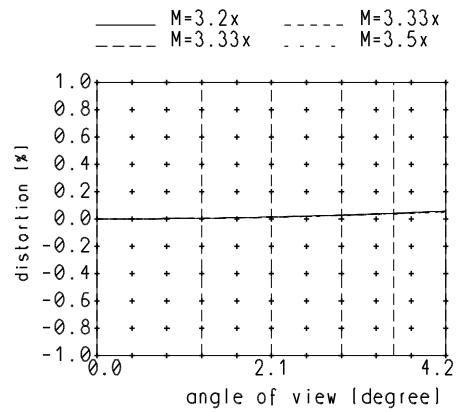
relative light fall-off at ratio 3.33



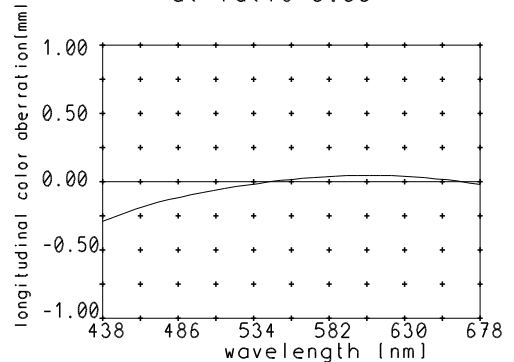
MTF at ratio 3.33 f/ 2.8



Distortion at ratio 3.2x to 3.5x



Longitudinal color aberration at ratio 3.33



— sagittal, o Diffraction limited value  
 — meridional \* Diffraction limited value

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.