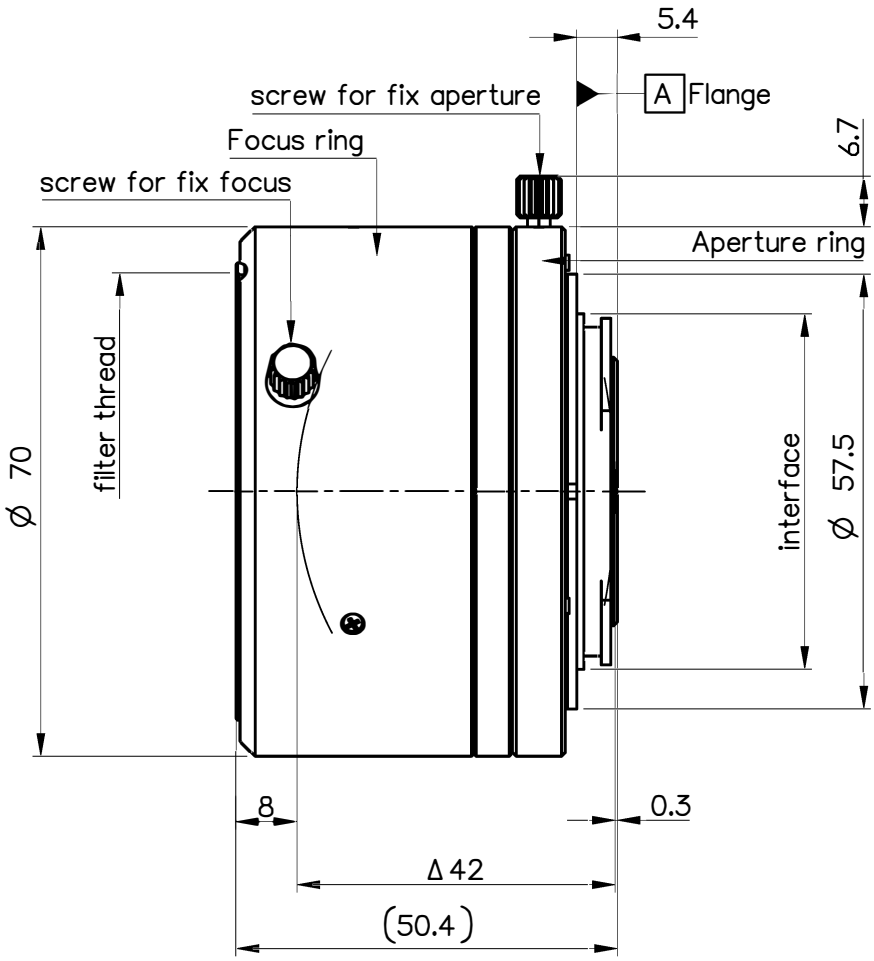
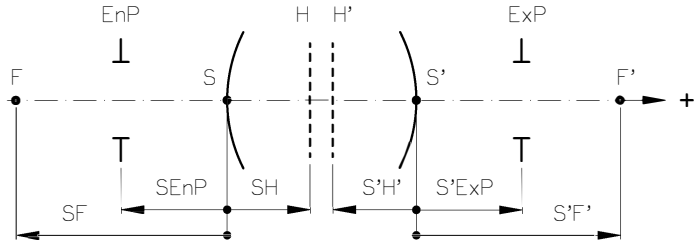
| order number | lens name | spectral range |
|---|---|---|
| 0009-243-000-40 | Inspec.x M 1.4/50 | 400-700nm |
| 0009-243-000-42 | Inspec.x M 1.4/50 NIR | 900-1350nm |




| Specification | | ON | |
|---|---|---|---|
| image circle max. (mm) | 43.5 | working distance (mm) | 355 - ∞ |
| focal length f' (mm) *) | 51.6 | interface | F-mount |
| magnification β' [range] | -0.07 [-0.15 ... 0] | filter thread | M58 x0.75 |
| spectral range λ (nm) | 400 - 700 | weight (g) | 350 |
| | | design includes CCD cover glass: | no |

schematic diagram *) in air




| | | f-stop | Ø EnP | Ø ExP |
|---|---|---|---|---|
| SF (mm) | -18.8 | | | |
| S'F' (mm) *) | 37.5 | 1.4 | | |
| HH' (mm) *) | -4.8 | 2.8 | | |
| SH (mm) | 32.8 | 4 | | |
| S'H' (mm) *) | -14.1 | 5.6 | | |
| SEnP (mm) | 26.9 | 8 | | |
| S'ExP (mm) *) | -27.8 | 16 | | |

NX

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

PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED

| REV | ECC | DATE | APPROVED |
|---|---|---|---|
| a | Neuausg | | |
| b | 11-358 | 20.07.11 | |
| c | 11-358 | 28.09.11 | |
| d | 14-0184 | 22.09.14 | |
| e | 14-0184 | 12.01.15 | |
| f | 14-0184 | 19.02.15 | |

GENERAL TOLERANCE OF DIMENSION, FORM, POS.: ISO 2768-mH

SURF. TREATMT

BASIC TOLERANCING PRINCIPLE: ISO 8015

| | DATE | NAME |
|---|---|---|
| FIRST ISSUE | 15.02.11 | |
| CHKD | 15.02.11 | |

SCALE 1:1

MATERIAL

TITLE: Inspec.x M1.4/50

DRAWING NO. 0009-243-100-00-0001f

SHEET 1 OF 1

REPLACES

DIN A 4

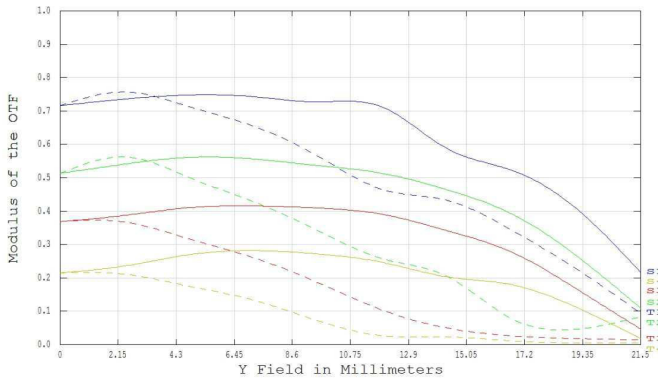
ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT

excelitas®

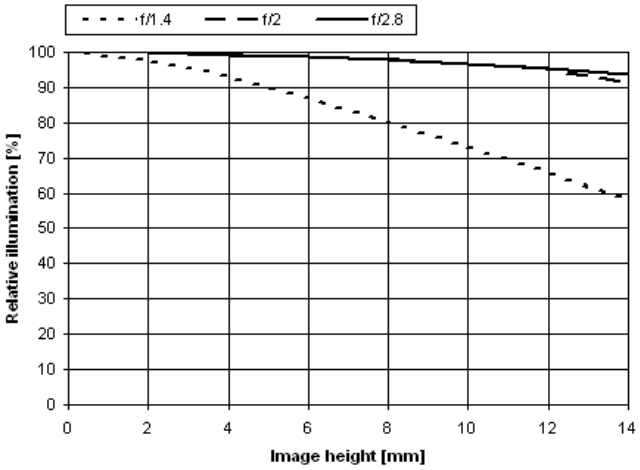
# Inspec.x M 1.4/50

## MTF at ratio = 0.07 f/1.4

MTF [%] for 5.0 10.0 20.0 40.0 Lp / mm

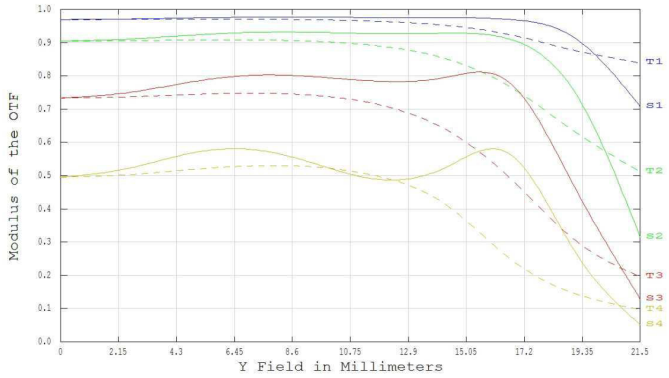



## Relative light fall off at ratio = 0.07

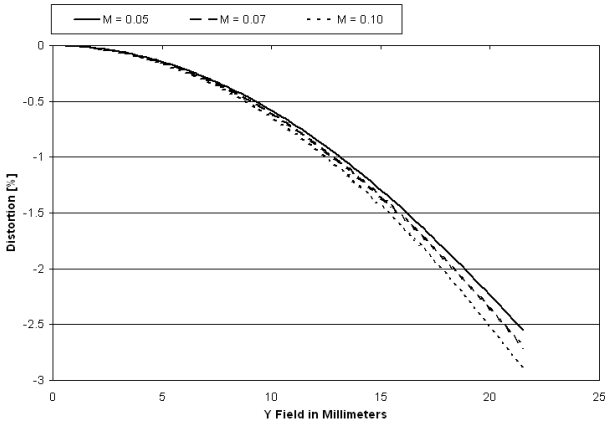



## MTF at ratio = 0,07 f/2.8

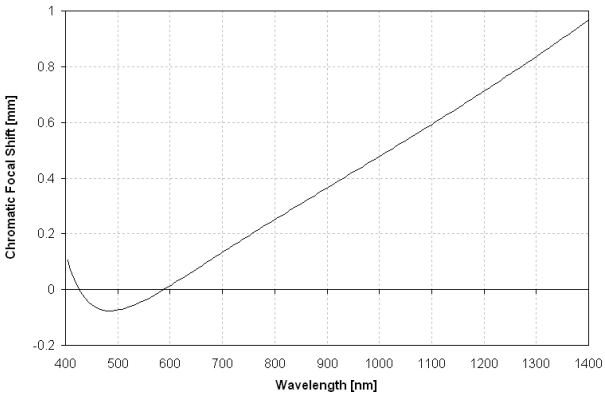
MTF [%] for 5.0 10.0 20.0 40.0 Lp / mm




## Distortion at ratio = 0.05x to 0.1x




## Longitudinal color aberration at ratio = 0.07




Spatial frequencies (Lp/mm) as well as diagrams for relative light fall off, distortion and color aberration refer to image (sensor) plane.