# PRODUCT FAMILY DATA SHEET

## S5LPLXXXX
### CORRECTAL® TAXX/XX

TELECENTRIC LENSES

WITH INTEGRATED COAXIAL ILLUMINATION

COLLIMATED FRONT LIGHT

POLARIZED BEAM SPLITTER

| DECISION GUIDE | NON-POLARIZED BEAMSPLITTER | POLARIZED BEAM-SPLITTER | POLARIZED BEAM-SPLITTER WITH RETARDATION PLATE |
|---|---|---|---|
| luminous intensity | very high | low | high |
| lighting homogeneity on top of diffuse object surfaces (i.e. grinded surfaces, paper…) | low; spot at the image center | high; low variation at the field edges, especially for large object fields | low; spot at the image center because of back reflections from the retardation plate, elimination in customized modification possible |
| lighting homogeneity on top of reflective surfaces (i.e. polished surfaces, glass, foils, metallic coated surfaces…) | high; small central spot inside the image field | low; strong variations at the field edges, characteristic attribute “cross” | very high |
| wavelength dependence | low | high; narrow band light source (i.e. LED) recommended | high; narrow band light source (i.e. LED) recommended |
| influence on polarization measurements | no | yes | yes |
| **Recommendation: Each possible case of the modularly setup should be checked for critical and new projects. The parameters of the measurement setup (requested resolution, illuminance, object surface condition, necessary illumination homogeneity) have an important influence on the best configuration.** | | | |



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## MECHANICAL INTERFACE FOR S5LPLXXXX/CCS

| | |
|---|---|
| fiber or spot port [mm] | Ø 8<br>depth 11.5 |
| clamping screws | M3 thread (3x) |
| wavelength [nm] | small bandwidth (±20 nm) between<br>400 and 700 |

## ELECTRICAL DATA FOR S5LPLXXXX/LED

| | |
|---|---|
| wavelength [nm] | 623 (±11) |
| max. continuous current [mA] | 350 |
| peak pulsed current [mA] | 700 |
| typical forward voltage [V] | 2.5 |
| connection | open wire ends GND/ +2.5V, cable length 300 mm |

## NOTES FOR S5LPLXXXX/LED

- operation only in DC mode
- operation either in continued or in flashed mode possible
- continuous operation only with limited current
- infinitely variable brightness by increasing the current up to max. value
- ambient temperature at max. continuous current: up to 60°C

Safety:
Attention!
• please avoid water and other liquids
• mounting can get hot during use

**No risk group defined. Please presume LED risk group 3 (DIN EN 62471:2009-03) at 350 mA – precautions necessary!**
**- Use laser protection eyewear for installation and adjustment of the illumination system**
**- Avoid direct eye exposure by mechanical separation of illumination path and operator**
**- Update safety instructions annually for operators who handle these illumination systems or work next to the application**

Warranty: Attention! Please do not open the lens, due to warranty issues. Warranty will be expired, if seal is broken.

Different LED types upon request



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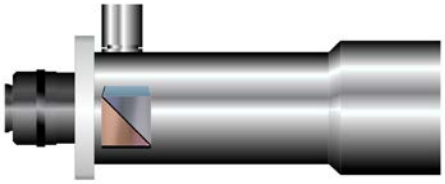
| modification | for lenses with slide-in unit (accessory: S5SET1150 or S5SET1151) | for lenses with add-on unit (accessory: S5SET8325/xxx, S5SET1560 or S5SET1199/xxx) |
|---|---|---|
| **polarizing filter adjustment (by rotating the lighting part (LED) part)** |  | |
| **retardation plate installation (half wave or quarter wave plate)** |  |  |
| **beam splitter exchange (non- polarized beam splitter S0SET9125/017)** |  orientation of the beam splitter  | beam splitter exchange upon request |



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