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## vicolux<sup>®</sup> Telecentric Light - TZB38-B450-P-SL

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<b>Short description:</b>	telecentric light, blue, If diameter: 38 mm, smart light
<b>Order number:</b>	1-33-232
<b>EAN:</b>	4251692646922



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### Characteristics

- flashable telecentric LED lighting - parallel (collimated) beam path
  - for flashing during inspection of moving objects
  - for optical measurement technology for the targeted highlighting of edges and surface structures in transmitted and incident light;  
for the detection of inclusions and defects in transparent materials such as gemstones
  - ideal as backlight in combination with telecentric lenses
  - low divergence, high light output
  - safe operation due to vicolux<sup>®</sup> smart light Controller (e.g. DLC3005)
  - connection: M8 plug on the casing
  - diverse attachment options and extensive accessories
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## Technical data

Light-emitting surface	Diameter: 38 mm
Light design	Telecentric
Light colour (typ.)	Blue, 450 nm
Special feature	Flashable with flash controller
<b>Continuous operation</b>	
• Power consumption	max. 2.3 W
• Irradiance <sup>1</sup>	38 W/m <sup>2</sup>
• Illuminance <sup>1</sup>	3.0 klx
• Radiance <sup>2</sup>	107.4 kW/m <sup>2</sup> sr
• luminance <sup>2</sup>	8.4 Mcd/m <sup>2</sup>
<b>Flash mode</b>	
• Power consumption	max. 6.4 W
• Irradiance <sup>1</sup>	73 W/m <sup>2</sup>
• Illuminance <sup>1</sup>	5.2 klx
• Radiance <sup>3</sup>	226.3 kW/m <sup>2</sup> sr
• luminance <sup>3</sup>	16.2 Mcd/m <sup>2</sup>
Housing material	Aluminium, black anodised
Optical material	Glass
Filter thread	-
Weight	280 g
Degree of protection	IP 50
Safety class	Class III, safety extra low voltage (SELV)
Risk group (DIN EN 62471)	Dauerbetrieb: Risikogruppe 3 Blitzbetrieb: Risikogruppe 2
Ambient temperature	0 °C ... 45 °C

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1	bei 200 mm Arbeitsabstand
2	bei 11 mrad
3	bei 1.7 mrad

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## Notices

The lighting can only be operated in conjunction with a lighting controller or a suitable current source.

vicolux® smart light lighting controllers limit the electrical parameters automatically and also monitor the temperature of the device.

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## Can be combined with

Order number	Title	Description
<b><i>TO30 blue vision series</i></b>		
2-05-547	TO30/4.3-100-V-BW	Telecentric Lens, C-mount, sensor opt. 1/4", aperture F8 - F22, blue
2-05-551	TO30/4.3-100-F8-BW-RF	Telecentric Lens, C-mount, sensor opt. 1/4", aperture F8, vibration-proof, blue
2-05-555	TO30/4.3-100-F14-BW-RF	Telecentric Lens, C-mount, sensor opt. 1/4", aperture F14, vibration-proof, blue
2-05-548	TO30/6.0-100-V-BW	Telecentric Lens, C-mount, sensor opt. 1/3", aperture F8 - F22, blue
2-05-552	TO30/6.0-100-F10-BW-RF	Telecentric Lens, C-mount, sensor opt. 1/3", aperture F8, vibration-proof, blue
2-05-556	TO30/6.0-100-F14-BW-RF	Telecentric Lens, C-mount, sensor opt. 1/3", aperture F14, vibration-proof, blue
2-05-549	TO30/9.1-85-V-BW	Telecentric Lens, C-mount, sensor opt. 1/1.8", aperture F10 - F22, blue
2-05-553	TO30/9.1-85-F10-BW-RF	Telecentric Lens, C-mount, sensor opt. 1/1.8", aperture F10, vibration-proof, blue
2-05-557	TO30/9.1-85-F14-BW-RF	Telecentric Lens, C-mount, sensor opt. 1/1.8", aperture F14, vibration-proof, blue
2-05-550	TO30/11.1-80-V-BW	Telecentric Lens, C-mount, sensor opt. 2/3", aperture F10 - F22, blue
2-05-554	TO30/11.1-80-F10-BW-RF	Telecentric Lens, C-mount, sensor opt. 2/3", aperture F10, vibration-proof, blue
2-05-558	TO30/11.1-80-F14-BW-RF	Telecentric Lens, C-mount, sensor opt. 2/3", aperture F14, vibration-proof, blue
<b><i>LED Controller DLC3005</i></b>		
1-30-202	DLC3005	LED lighting controller, digital, cont./flash current: 4.8A/18A, wall mounting
1-30-209	DLC3005-R	LED lighting controller, digital, cont./flash current: 4.8A/18A, DIN rail mounting

## Accessories for Telecentric lights - TZB38-B450-P-SL

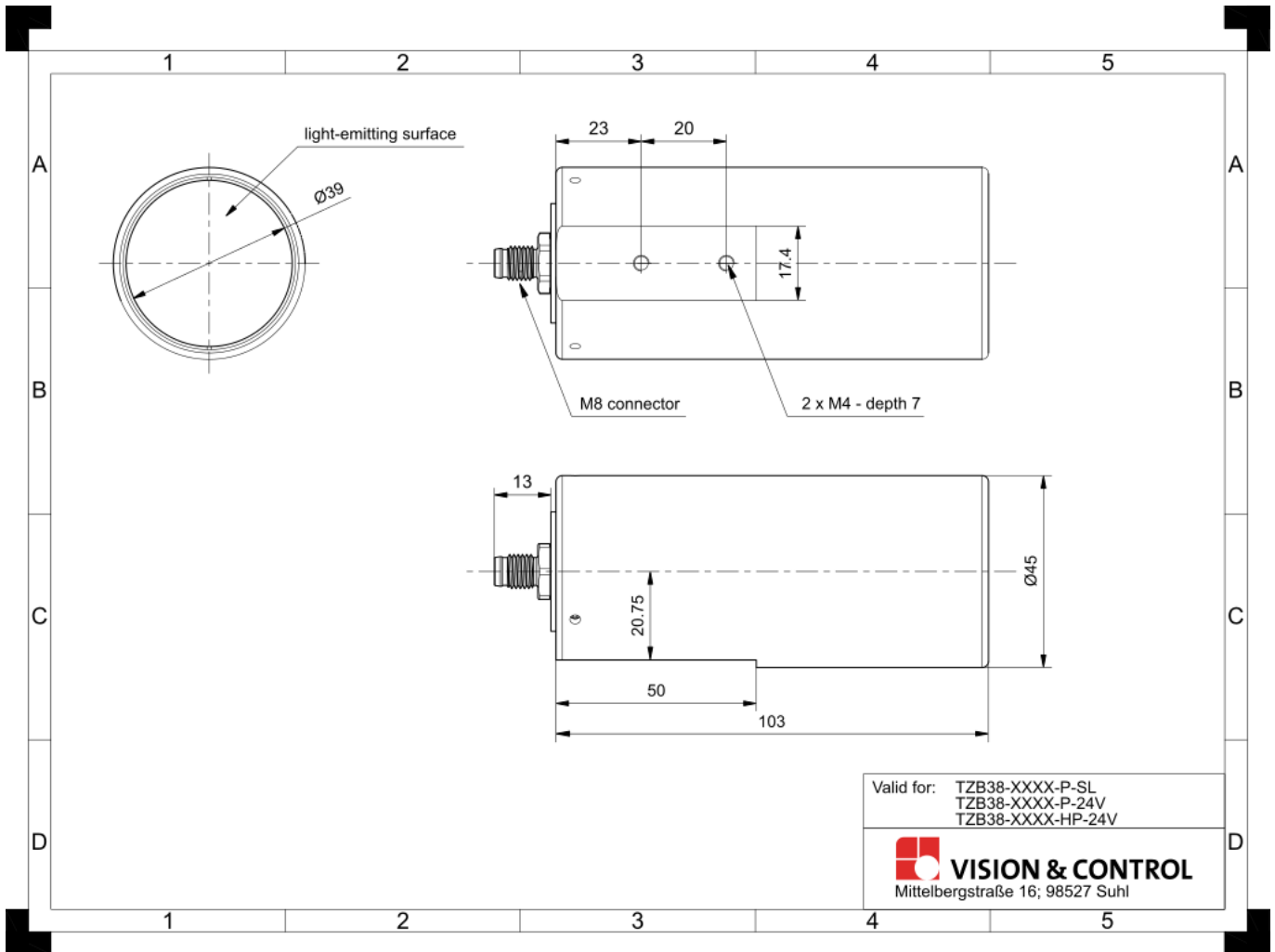
<b>Order number</b>	<b>Title</b>	<b>Description</b>
<b><i>Lens mount</i></b>		
2-91-331	Mounting angle	Holder for telecentric lenses and lightings with with threaded hole M5
2-91-332	Mounting angle SH	Holder for telecentric lenses and lightings with with slotted hole for M4-M6
2-90-139	Lens Holder d45	Holder for telecentric lenses and lightings with d = 45 mm
2-91-330	Lens Holder d45 wide	Holder for telecentric lenses and lightings with d = 45 mm, width = 32 mm
<b><i>Polarising filters</i></b>		
2-91-220	Pole filter M40.5x0.5	linear polarizing filter, range 420 nm - 780 nm, filter thread M40.5x0.5
<b><i>Filter adapter</i></b>		
2-91-189	Filter adapter d45-M40.5	slip-on adapter for use of a M40.5x0.5 filter on lenses with 45 mm clamping diameter
<b><i>Deflection mirror 90° series</i></b>		
2-25-128	Deflection mirror 90-45	90° deflection, attachment for telecentric lenses and lightings with d = 45 mm
<b><i>Connection cable M8-4pin</i></b>		
1-11-611	Cable-M8-4p-5A-straight-1m	4x0.5mm <sup>2</sup> , 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-612	Cable-M8-4p-5A-straight-2m	4x0.5mm <sup>2</sup> , 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-613	Cable-M8-4p-5A-straight-3m	4x0.5mm <sup>2</sup> , 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-614	Cable-M8-4p-5A-straight-5m	4x0.5mm <sup>2</sup> , 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-609	Cable-M8-4p-4A-straight-5m	4x0.25mm <sup>2</sup> , 4A, 60V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-607	Cable-M8-4p-4A-straight-10m	4x0.25mm <sup>2</sup> , 4A, 60V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-605	Cable-M8-4p-4A-angled-2m	4x0.25mm <sup>2</sup> , 4A, 60V, PUR, IP67, M8-4pin angled socket to free cable end

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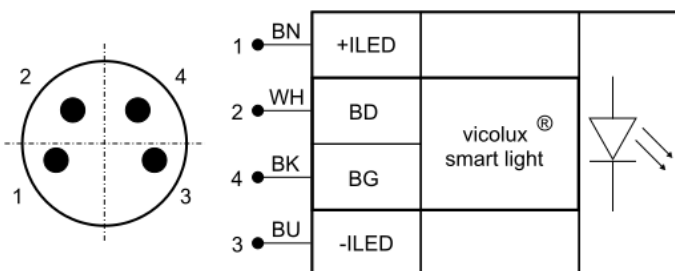
<b>Order number</b>	<b>Title</b>	<b>Description</b>
1-11-604	Cable-M8-4p-4A-angled-5m	4x0.25mm <sup>2</sup> , 4A, 60V, PUR, IP67, M8-4pin angled socket to free cable end
1-11-606	Cable-M8-4p-4A-angled-10m	4x0.25mm <sup>2</sup> , 4A, 60V, PUR, IP67, M8-4pin angled socket to free cable end
<b><i>Extension cable M8-4pin</i></b>		
1-11-093	Extension cable-M8-4p-5A-0.6m	4x0.5mm <sup>2</sup> , 5A, 30V, PUR, IP67, M8-4pin straight socket to M8-4pin straight plug
1-11-094	Extension cable-M8-4p-5A-1.5m	4x0.5mm <sup>2</sup> , 5A, 30V, PUR, IP67, M8-4pin straight socket to M8-4pin straight plug
1-11-095	Extension cable-M8-4p-5A-3.0m	4x0.5mm <sup>2</sup> , 5A, 30V, PUR, IP67, M8-4pin straight socket to M8-4pin straight plug

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## Drawings



Dimensional drawing in mm



Pin	Aderfarbe	Signal	Beschreibung
1	BN (braun)	+ILED	LED-Anode, positiver Stromeingang
2	WH (weiß)	BD	Data Channel für vicolux <sup>®</sup> smart light Module <sup>(1)</sup>
4	BK (schwarz)	BG	Data Channel für vicolux <sup>®</sup> smart light Module <sup>(1)</sup>
3	BU (blau)	-ILED	LED-Kathode, negativer Stromeingang

<sup>(1)</sup> Nur in Verbindung mit vicolux<sup>®</sup> smart light Beleuchtungscontrollern verwenden.

Pin assignment: M8 connector