Vision & Control GmbH
Phone: +49 36 81 / 79 74 11
www.vision-control.com

vicolux® Telecentric Light - TZB38-B450-HP-24V

Short description: telecentric light, blue, lf diameter: 38 mm, 24V, switchable, high power

Order number: 1-33-286

EAN: 4251692647165

Characteristics

- telecentric LED lighting - parallel (collimated) beam path
- for the detection of inclusions and defects in transparent materials such as gemstones also suitable for the targeted highlighting of edges and surface structures in incident light
- ideal as backlight in combination with telecentric lenses
- low divergence, high light output
- lighting controller integrated in the housing - brightness pre-set
- 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
Operating mode	Continuous operation Switching operation
Operation voltage	24 VDC (19 - 29 V)
Power consumption	max. 3.56 W (146 mA at 24 VDC)
Continuous operation	
• Irradiance [1]	36 W/m²
• Illuminance [1]	2.8 klx
• Radiance [2]	107.4 kW/m²sr
• luminance [2]	8.3 Mcd/m²
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)	Risikogruppe 3
Ambient temperature	0 °C ... 45 °C
[1]	bei 200 mm Arbeitsabstand
[2]	bei 11 mrad

Can be combined with

Order number	Title	Description
TO30 blue vision series		
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

Accessories for Telecentric lights - TZB38-B450-HP-24V

Order number	Title	Description
Lens mount		
2-91-331	Mounting angle	Holder for telecentric lenses and lightings with with threaded hole M5

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Order number	Title	Description
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
Polarising filters		
2-91-220	Pole filter M40.5x0.5	linear polarizing filter, range 420 nm - 780 nm, filter thread M40.5x0.5
Filter adapter		
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
Deflection mirrow 90° series		
2-25-128	Deflection mirror 90-45	90° deflection, attachment for telecentric lenses and lightings with d = 45 mm
Connection cable M8-4pin		
1-11-611	Cable-M8-4p-5A-straight-1m	4x0.5mm², 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-612	Cable-M8-4p-5A-straight-2m	4x0.5mm², 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-613	Cable-M8-4p-5A-straight-3m	4x0.5mm², 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-614	Cable-M8-4p-5A-straight-5m	4x0.5mm², 5A, 30V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-609	Cable-M8-4p-4A-straight-5m	4x0.25mm², 4A, 60V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-607	Cable-M8-4p-4A-straight-10m	4x0.25mm², 4A, 60V, PUR, IP67, M8-4pin straight socket to free cable end
1-11-605	Cable-M8-4p-4A-angled-2m	4x0.25mm², 4A, 60V, PUR, IP67, M8-4pin angled socket to free cable end
1-11-604	Cable-M8-4p-4A-angled-5m	4x0.25mm², 4A, 60V, PUR, IP67, M8-4pin angled socket to free cable end
1-11-606	Cable-M8-4p-4A-angled-10m	4x0.25mm², 4A, 60V, PUR, IP67, M8-4pin angled socket to free cable end

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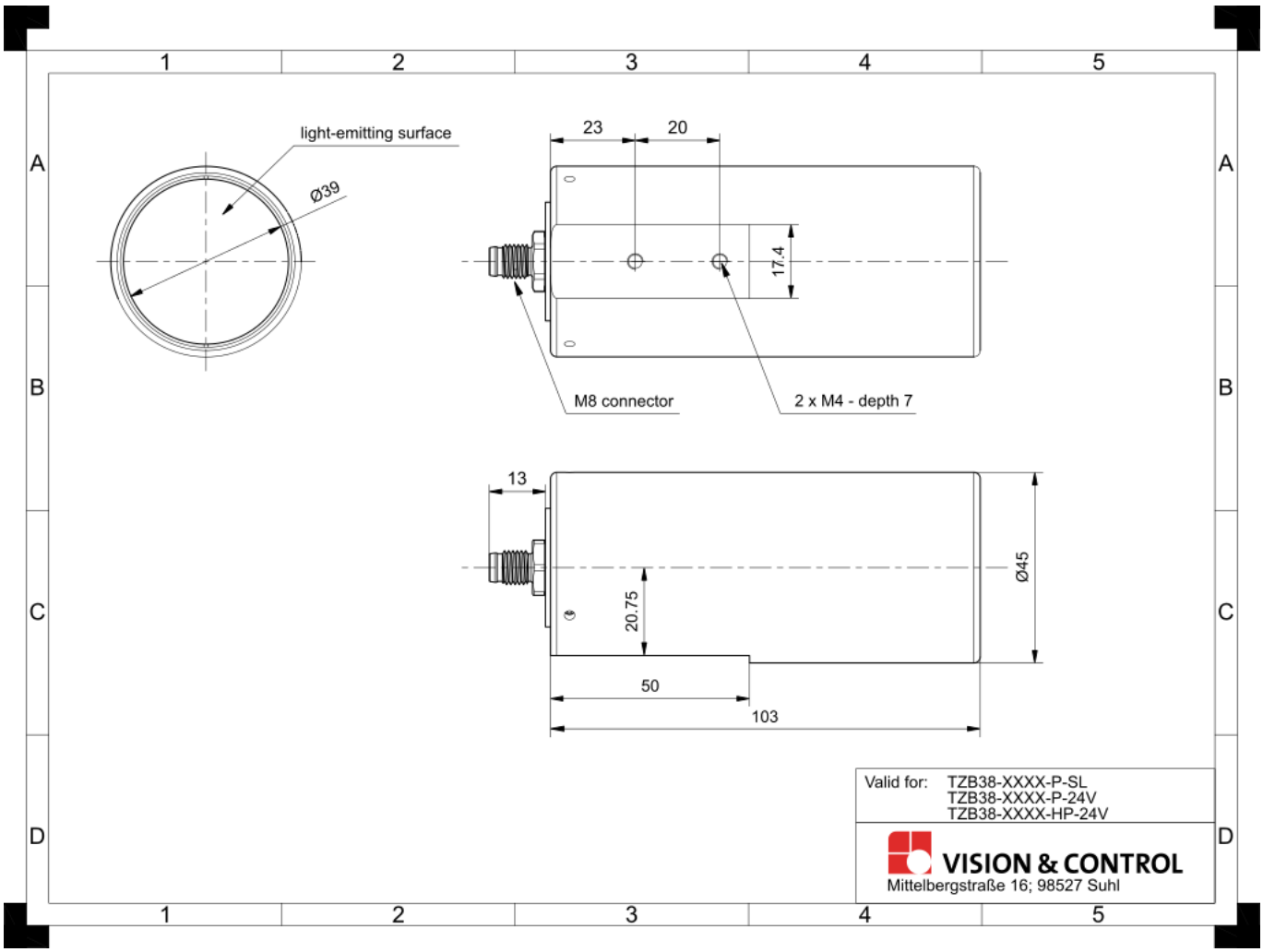
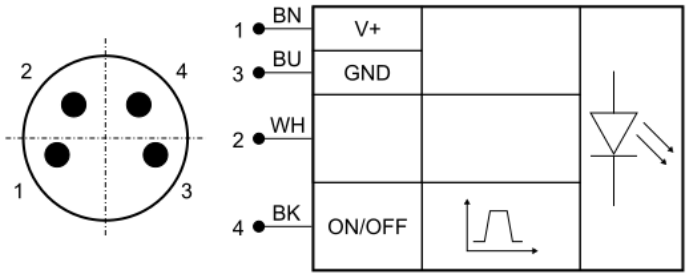
Order number	Title	Description
Extension cable M8-4pin		
1-11-093	Extension cable-M8-4p-5A-0.6m	4x0.5mm², 5A, 30V, PUR, IP67, M8-4pin straight socket to M8-4pin straight plug
1-11-094	Extension cable-M8-4p-5A-1.5m	4x0.5mm², 5A, 30V, PUR, IP67, M8-4pin straight socket to M8-4pin straight plug
1-11-095	Extension cable-M8-4p-5A-3.0m	4x0.5mm², 5A, 30V, PUR, IP67, M8-4pin straight socket to M8-4pin straight plug
Power supply		
4-40-218	Power supply 24V-120W-5A	for DIN rail mounting, without connection cable, type: SDR-120-24

Drawings



Dimensional drawing in mm



Pin	Core colour	Signal	Description
1	BN (brown)	V+	Operating voltage
2	WH (white)	NC	Do not use
3	BU (blue)	GND	Ground
4	BK (black)	ON/OFF	Switch input

Pin assignment: M8 connector