

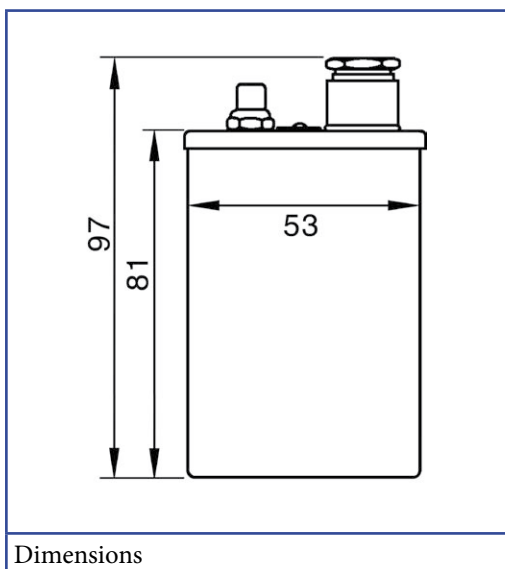


Light fittings for sterile applications
for use in safe areas

Sightglass light fittings type: BKVLR A onto metal fused sightglasses



Sightglass light fitting type BKVLR 20 HDA, 20 W, 24 V, with built-in momentary push-button "D", on metal fused sightglass for aseptic flange connections to DIN 11864-2, DN 50



Dimensions

The miniature sightglass light fittings BKVLR A of the series STERI-LINE **entirely in stainless steel** offer the following main features and advantages:

- Very interesting prices due to high series production
- Only one size for use on different sightglass diameters
- **Brilliant and dazzle free illumination**, even of difficult media
- **Extremely small dimensions** providing **high lighting power**
- Quick change of bulbs **without** necessity to demount the installed luminaire!

Application:

- On metal fused sightglasses and flanges (see the respective data sheet), mainly in the pharmaceutical, biotechnological and food processing industries.

Operating conditions:

- Independent of internal vessel pressure and vacuum.

Construction:

- Housing **in stainless steel**. Cable gland Pg 9, vertical. On request with rectangular cable gland ("K2"). Built-in reflector. Bulb socket for halogen bulbs of 20, 50 or 100 Watts. Built-in push-button for momentary operation "D" (types BKVLR A 20/50 also available **without**, on request). The light fitting is built to be mounted directly onto the collar of a sightglass fitted with the respective adapter. The sealing towards the sightglass is guaranteed by an O-ring being part of the adapter piece.

Electrical data:

- Supply: AC or DC
- Terminal voltage: 24 or 12 V*
- Power: 20, 50 or 100 W (dependent on type)
- Maximum current: 4,2 A

* Transformers with 24 V secondary voltage in open design (IP 00) for mounting into control panels or switch boards as well as in closed version (IP 65) may be supplied for different primary voltages and power capacities.

Bulb sockets:

- Power 20 W: 2 pins socket G4
- Power 50 / 100 W: 2 pins socket GY 6.35

Enclosure protection degree:

- IP 65, dust and spray water tight, to EN 60529 / DIN VDE 0470 part 1.

Survey on standard types:

Typ	BKVLR 20HDA*	BKVLR 50HDA*	BKVLR 100HDA
Jmenovitý výkon	20W	50W	100W
Napětí na svorkách**	24V	24V	24V
Žárovka	Halogenová	Halogenová	Halogenová
Hmotnost	0,30 kg	0,30 kg	0,30 kg

* For the version without push-button, the correct type designation omits the "D".

** Types with 20 and 50 W also available in 12 V.

Mounting:

- The light fitting is put onto the adapter ring of the respective sightglass and fixed by means of a hexagonal socket cap screw.

Important remarks:

- Please indicate in case of order type and size (DN) of the sightglass on which the luminaire has to be mounted.
- **In case of repeated use within a short period, the temperature raise of the housing has to be observed!**

1) All dimensions in mm.

2) Subject to changes without preliminary notice.



Sightglass light fittings type: BKVLR A for Triclamp fittings

Stainless steel sightglass light fittings
for metal fused sightglasses for Triclamp



Light fitting miniLUX STERI-LINE, type BKVLR 20 HDA, 20 W, 24 V, mounted on metal fused sightglass, DN 100

Application:

- On metal fused sightglasses for Triclamp fittings to DIN 32676 / ISO 2852 for the optimal illumination of small and pilot reactors as well as vessels for sterile and aseptic applications, mainly in the pharmaceutical, biotechnological, cosmetic and food processing industries.
- On demand also available for mounting on metal fused sightglasses for Triclamp fittings in aseptic version to DIN 11864-3.

Advantages:

- Brilliant and glare free illumination
- Extremely small dimensions
- For sterile applications
- High security
- Easy installation

Light fitting series miniLUX® STERI-LINE (for safe areas only):

- Supply: Alternative or direct current (AC / DC)
24 V (Standard), 12 V (Option)
- Power: 20, 50, 100 W
- Housing: Stainless steel
- Bulb: Halogen
- Protection mode: IP 65, dust and spray water tight to EN 60529 / DIN VDE 0470 part 1
- For more technical details see data sheet miniLUX STERI-LINE, series BKVLR A

Metal fused sightglass:

Approvals:

- A3 Standard for food processing

Technical data:

- Test base: DGRL 97 / 23 / EG, AD 2000 standards, DIN 7079-1 May 1999
- Materials to VdTÜV specifications and the respective DIN/EN standards
- Glass quality: Borosilicate glass to DIN 7080

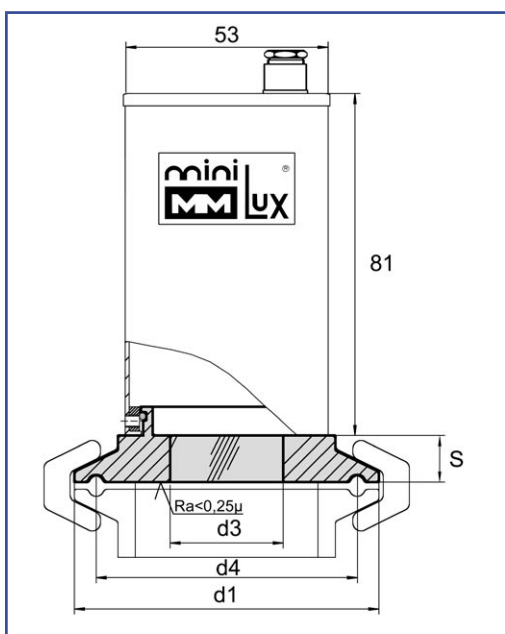
Material certificates:

- Certificate of conformity to EN 10204-3.1B

Operating conditions:

- Pressure: -1 to 10 / 16 bar (see table)
- Temperatures:
Ring materials: 1.4462 -30 °C až +280 °C
2.4602 -60 °C až +300 °C
2.4610 -60 °C až +300 °C

Dimensions:



Dimensions with mounted light fitting

Nominal diameter			d1	d3	d4	S	Max. operating pressure (bar)
DN (DIN)	DN (ISO)	Inch					
25/32/40	20/25	1", 1½"	50,5	25	43,5	12	16
50	40	2"	64	30	56,5	12	16
-	50	2½"	77,5	34	70,5	12	10
65	65	3"	91	34	83,5	12	10

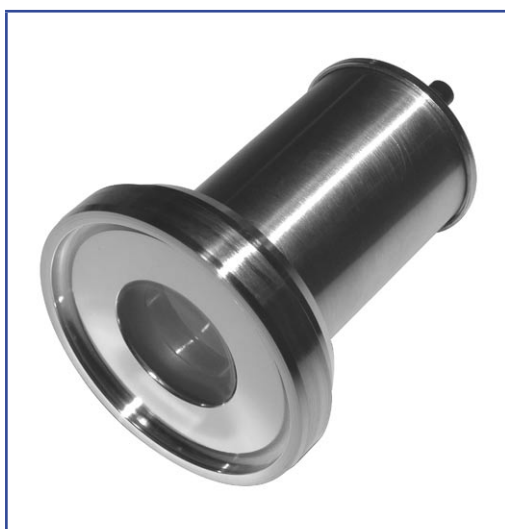
1) All dimensions in mm

2) Subject to changes without preliminary notice.



Sightglass light fittings type: BKVLR A for aseptic connection to DIN 11864-1

Stainless steel light fittings on metal fused sightglasses for aseptic connections



Light fitting miniLUX STERI-LINE, type BKVLR 20 HDA, 20 W, 24 V, mounted on metal fused sightglass to DIN 11864-1

Application:

- On metal fused sightglasses for aseptic connections to DIN 11864-1 for the optimal illumination of small and pilot reactors as well as vessels for sterile and aseptic applications, mainly in the pharmaceutical, biotechnological, cosmetic and food processing industries.

Advantages:

- Brilliant and glare free illumination
- Extremely small dimensions
- Aseptic
- High security
- Easy installation
- CIP and SIP cleaning possible

Light fitting series miniLUX® STERI-LINE (for safe areas only):

- Supply: Alternative or direct current (AC / DC)
24 V (Standard), 12 V (Option)
- Power: 20, 50, 100 W
- Housing: Stainless steel
- Bulb: Halogen
- Protection mode: IP 65, dust and spray water tight
to EN 60529 / DIN VDE 0470 part 1
- For more technical details see data sheet miniLUX STERI-LINE, series BKVLR A

Metal fused sightglass:

Technical data:

- Test base: DGRL 97 / 23 / EG, AD 2000 standards, DIN 7079-1 May 1999
- Materials to VdTÜV specifications and the respective DIN/EN standards
- Glass quality: Borosilicate glass to DIN 7080

Material certificates:

- Certificate of conformity to EN 10204-3.1

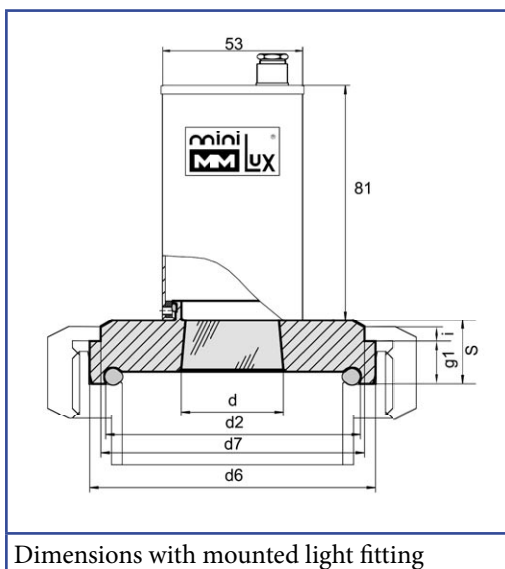
Operating conditions:

- Pressure: -1 to 25 bar
- Temperatures:
Ring materials:

1.4462	-30 °C až +280 °C
2.4602	-60 °C až +300 °C
2.4605	-60 °C až +300 °C
2.4610	-60 °C až +300 °C

Dimensions:

DN	PN	d2	d6	d7	d	g1	S	O-Ring
40	25	48,66	54,9	48	28	10	14	40 x 5,0
50	25	60,66	66,9	61	34	11	15	52 x 5,0
65	25	76,66	84,9	79	37	12	20	68 x 5,0
80	25	91,66	98,9	93	37	12	20	83 x 5,0
100	25	110,66	118,9	114	37	15	25	102 x 5,0



Dimensions with mounted light fitting

1) All dimensions in mm

2) Subject to changes without preliminary notice.



Sightglass light fittings type: BKVLR A for aseptic connection to DIN 11864-2

Stainless steel light fittings on metal fused sightglasses for aseptic connections



Light fitting miniLUX STERI-LINE, type BKVLR 20 HDA, 20 W, 24 V, mounted on metal fused sightglass to DIN 11864-2, DN 50

Application:

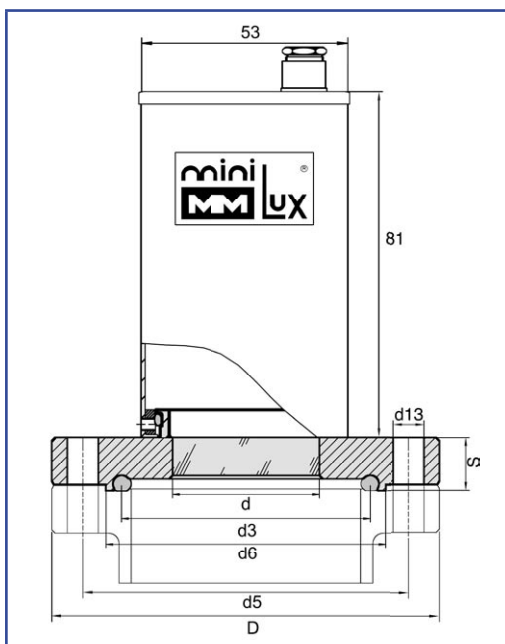
- On metal fused aseptic grooved flanges for mounting onto aseptic flanges of the form A for the optimal illumination of small and pilot reactors as well as vessels for sterile and aseptic applications, mainly in the pharmaceutical, biotechnological, cosmetic and food processing industries.

Advantages:

- Brilliant and glare free illumination
- Extremely small dimensions
- The sightglass and the form of the gasket correspond to the recommendations of the EHEDG (European Hygienic Equipment Design Group)
- To ASME BPE 2002 (Bioprocessing Equipment)
- Fulfil the requirements of the GMP regulations regarding property, cleaning and possibility of sterilisation
- High security
- CIP and SIP cleaning possible

Light fitting series miniLUX® STERI-LINE (for safe areas only):

- Supply: Alternative or direct current (AC / DC)
24 V (Standard), 12 V (Option)
- Power: 20, 50, 100 W
- Housing: Stainless steel
- Bulb: Halogen
- Protection mode: IP 65, dust and spray water tight
to EN 60529 / DIN VDE 0470 part 1
- For more technical details see data sheet miniLUX STERI-LINE, series BKVLR A



Dimensions with mounted light fitting

Metal fused sightglass:

Technical data:

- Test base: DGRL 97 / 23 / EG, AD 2000 standards, DIN 7079-1 May 1999
- Materials to VdTÜV specifications and the respective DIN/EN standards
- Glass quality: Borosilicate glass to DIN 7080

Material certificates:

- Certificate of conformity to EN 10204-3.1

Operating conditions:

- Pressure: -1 to 16 bar
- Temperatures:
Ring materials: 1.4462 -30 °C až +280 °C
2.4602 -60 °C až +300 °C
2.4610 -60 °C až +300 °C

Dimensions:

Nominal diameter (DN)			PN	D	d	d3	d5	d6	d13	S	O-Ring
DIN 11850	ISO 1127	ISO 2037 BS 4825									
40	-	-	16	82	35	44,56	65	53,6	4xØ9	14	40 x 5
-	42,4	-	16	82	35	44,96	65	54,0	4xØ9	14	40,5x5
-	48,3	-	16	88	37	50,86	71	59,9	4xØ9	14	46,5x5
-	-	2"	16	92	40	54,36	75	63,4	4xØ9	16	50x5
50	-	-	16	94	40	56,56	77	65,6	4xØ9	16	52x5
-	60,3	-	16	103	40	62,86	85	71,9	4xØ9	16	58,5x5
-	-	2 1/2"	16	107	45	66,76	89	75,8	8xØ9	18	62x5

1) All dimensions in mm

2) Subject to changes without preliminary notice.



Sightglass light fittings type: BKVLR A for NA-Connect™

Stainless steel light fittings for metal fused sightglass for NA-Connect™



Light fitting miniLUX STERI-LINE, type BKVLR 20 HDA, 20 W, 24 V, mounted on metal fused sightglass NA-Connect™, DN 50

Application:

- On metal fused sightglasses for NA-Connect™-connections for the optimal illumination of small and pilot reactors as well as vessels for sterile and aseptic applications, mainly in the pharmaceutical, biotechnological, cosmetic and food processing industries.

Advantages:

- Brilliant and glare free illumination
- Extremely small dimensions
- High security
- Easy installation
- For sterile applications
- CIP cleaning possible

Light fitting series miniLUX® STERI-LINE (for safe areas only):

- Supply: Alternative or direct current (AC / DC)
24 V (Standard), 12 V (Option)
- Power: 20, 50, 100 W
- Housing: Stainless steel
- Bulb: Halogen
- Protection mode: IP 65, dust and spray water tight
to EN 60529 / DIN VDE 0470 part 1

• For more technical details see data sheet miniLUX STERI-LINE, series BKVLR A

Metal fused sightglass:

Technical data:

- Test base: DGRL 97 / 23 / EG, AD 2000 standards, DIN 7079-1 May 1999
- Materials to VdTÜV specifications and the respective DIN/EN standards
- Glass quality: Borosilicate glass to DIN 7080

Material certificates:

- cCertificate of conformity to EN 10204-3.1

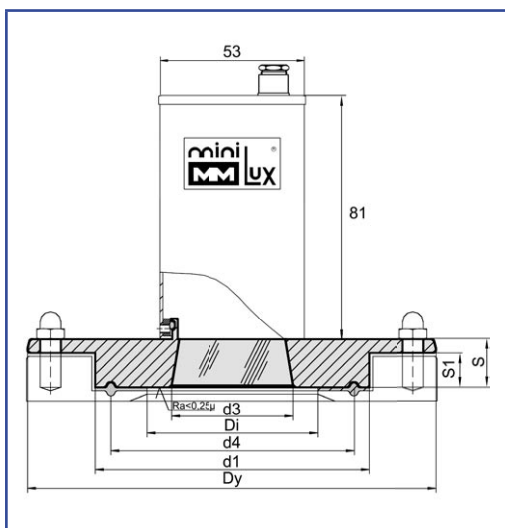
Operating conditions:

- Temperatures:
- Ring materials:

1.4462	-30 °C až +280 °C
2.4602	-60 °C až +300 °C
2.4610	-60 °C až +300 °C

NA-Connect™:

- Materials welding flange: AISI 316L / DIN 1.4435
- Nominal pressure: 7 bar (PN 7)
- Nominal temperature: 150 °C



Dimensions with mounted light fitting

Dimensions:

Nominal diameter		NA-Connect welding flange		d1	d3	d4	S1	S	Dy	Di
Inch	DN	DIN	Tube OD							
1" / 1½"	25/32/40	NAC-DIN-40	NAC-OD-1½"	50,5	30	43,5	7	13	85	35,5
2"	50	NAC-DIN-50	NAC-OD-2"	64,0	35	56,5	8	14	100	48,5
2½"	-	-	NAC-OD-2½"	77,5	35	70,5	8	15	112	60,2
3"	65	NAC-DIN-65	NAC-OD-3"	91,0	35	83,5	8	18	131	72,0

1) All dimensions in mm

2) Subject to changes without preliminary notice.



Stainless steel light fittings
for sterile applications

Sightglass light fittings type: BKVLR A for metal fused sightglass flanges



Light fitting miniLUX STERI-LINE, type BKVLR 20 HDA, 20 W, 24 V, mounted on a metal fused sightglass flange for sterile applications, DN 50

Application:

On metal fused sightglass flanges for mounting onto:

- base flanges to DIN 28117 or similar
- weldnecks with flat face

for the optimal illumination of small and pilot reactors as well as vessels for sterile and aseptic applications, mainly in the pharmaceutical, biotechnological, cosmetic and food processing industries.

IMPORTANT: Only for use with parallel flat face flanges without seal recess. We recommend the use of Belleville spring washers, 2 pcs. for each connection hole.

Advantages:

- Brilliant and glare free illumination
- Extremely small dimensions
- Aseptic
- High security
- Easy installation
- CIP and SIP cleaning possible

Light fitting series miniLUX® STERI-LINE (for safe areas only):

- Supply: Alternative or direct current (AC / DC)
24 V (Standard), 12 V (Option)
- Power: 20, 50, 100 W
- Housing: Stainless steel
- Bulb: Halogen
- Protection mode: IP 65, dust and spray water tight to EN 60529 / DIN VDE 0470 part 1

• For more technical details see data sheet miniLUX STERI-LINE, series BKVLR A

Metal fused sightglass flange:

Technical data:

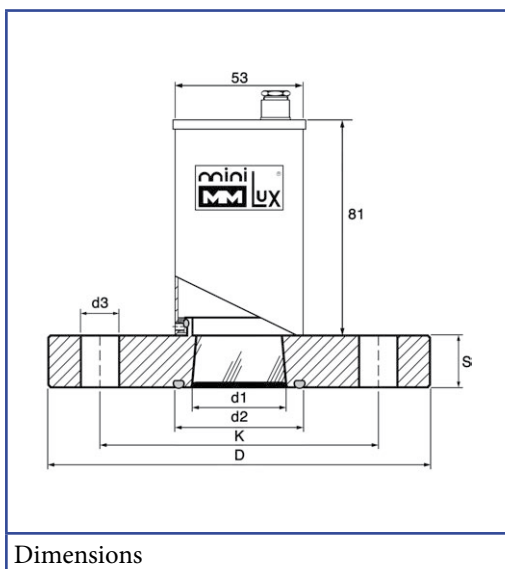
- Test base: DGRL 97 / 23 / EG, AD 2000 standards, DIN 7079-1 May 1999
- Materials to VdTÜV specifications and the respective DIN/EN standards
- Glass quality: Borosilicate glass to DIN 7080

Material certificates:

- Certificate of conformity to EN 10204-3.1

Operating conditions:

- Pressure: -1 to 16 bar
- Temperatures:
Ring materials: 1.4462 -30 °C až +280 °C
2.4602 -60 °C až +300 °C
2.4605 -60 °C až +300 °C
2.4610 -60 °C až +300 °C



Dimensions

Dimensions:

DN	PN	D	K	S	d1	d2	d3	Number of holes	O-Ring *	Spring washer*
50	16	165	125	21	38	66	18	4	58,74x3,53	31,5/16,3x1,25
65	16	185	145	23	38	86	18	4	78,97x3,53	31,5/16,3x1,25

* Not contained in our delivery

1) All dimensions in mm

2) Subject to changes without preliminary notice.