

Lumiglas VISULEX Camera K 25-Ex



II 2G Ex d IIC T6 Gb
II 2D Ex tb IIIC T80°C Db

Camera with zoom lens K 25-Ex:

The zoom lens of this camera is operated remotely from an external control room where the technical settings can be adjusted to meet the specific requirements.

LumiCam system and control software provides the following functions for controlling the camera focused on a surface or object using PC controls with a Windows interface:

Precision setting for

- Zoom
- Focus
- Aperture, shutter, gain
- Documentation aids such as date and time
- Preset positions

Design and applications:

- Pressure-resistant 316 stainless steel body (polished) with built-in color CCD camera, 1/4" CCD sensor, 2 lux light sensitivity, a 2-wire transmitter with electronics, and a stainless mounting bracket
- Approved for use in Ex zones 1 and 2 as well as zones 21 and 22
- Type of protection: IP 67

Ambient temperatures: between +5°C and +40°C

EC type examination certificate: BVS 08 ATEX E 131



II 2G Ex d IIC T6 Gb
II 2D Ex tb IIIC T80°C Db

Ignition protection type: Ex de

Explosion groups: IIC (includes IIA and IIB)
IIIC (includes IIIA and IIIB)

Zoom lens (standard version)

- Minimum lens-to-object distance: 100 mm
- Focal length F = 4.2 to 42.0 mm
- Optical zoom: 10 x
- Digital zoom: 4 x more
- Horizontal viewing angle at 1/4": 4.6° to 46°

Electrical connection:

- Link-up is established via control line to the **control unit** (camera rack with camera control modules and video server, if needed) which should be ordered separately. The CU must be installed and operated **outside the potentially explosive area**. A camera control module is required for each camera (or alternatively a video server) which is inserted into the rack. Single racks or racks for up to 6 camera control modules are available.
- **Camera supply voltage:** 24 V DC (supplied by the control unit), Rated power: up to 8 W, 2-wire transmission

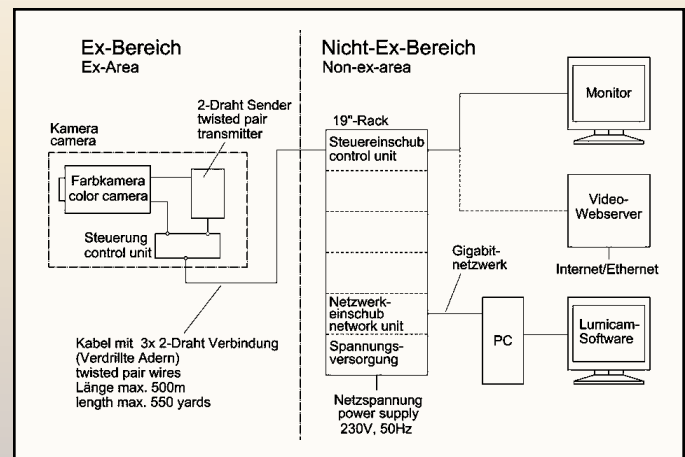
Control line:

- 6-core cable (3 twisted pairs)
- Length: up to approx. 500 m (between Ex camera and control unit) - Transmission line 3 Px AWG 20C

• **Weight:** 2.0 kg



Lumiglas VISULEX K 25-Ex camera with zoom lens



Single-camera rack with video server



6-camera rack equipped with three camera modules and three video servers

Lumiglas VISULEX camera K 25-Ex

Mounting:

- The camera is attached to the cover flange of a circular sight glass fitting (DIN 28120 or similar) using the stainless bracket provided. The method used is the same as for the internationally approved Lumiglas luminaires. If there is not sufficient natural light in the vessel, an appropriately dimensioned Lumiglas luminaire can additionally be installed.
- A separate arrangement consisting of light glass and camera glass is a further option for consideration. This combination depends on the process and the reactor size as well as on the surface of the vessel, the medium in question, and the angle of incidence.
- Camera can be mounted onto a sanitary ferrule connection using a MetaClamp sanitary sight window.
- Consistently uniform illumination should be ensured.

Dimensions and technical data for Lumiglas VISULEX camera K 25-Ex:

Camera	NTSC	PAL
Camera standard	EIA (USA)	CCIR (Europa)
Image sensor	1/4" CCD	1/4" CCD
Pixels	approx. 380,000	approx. 440,000
Light sensitivity	2 lux	2 lux
Resolution	470 lines (horizontal)	460 lines (horizontal)
Electronic shutter speeds	Automatic, 1/1-1/10,000	Automatic, 1/1-1/10,000
Signal-to-noise ratio	>50 dB	>50 dB
Aperture control	Automatic or manual	Automatic or manual
Colour system	NTSC	PAL

Control unit (rack and module)	Single-camera rack	6-camera rack
Power input	Max. 15 W	Base load 5 W; the rating increases by 15 W per module (max. 95 W)
Fuse protection (due to starting current)	1.6 A	6.3 A
Dimensions mm (H x W x D)	160 x 180 x 300	160 x 470 x 300

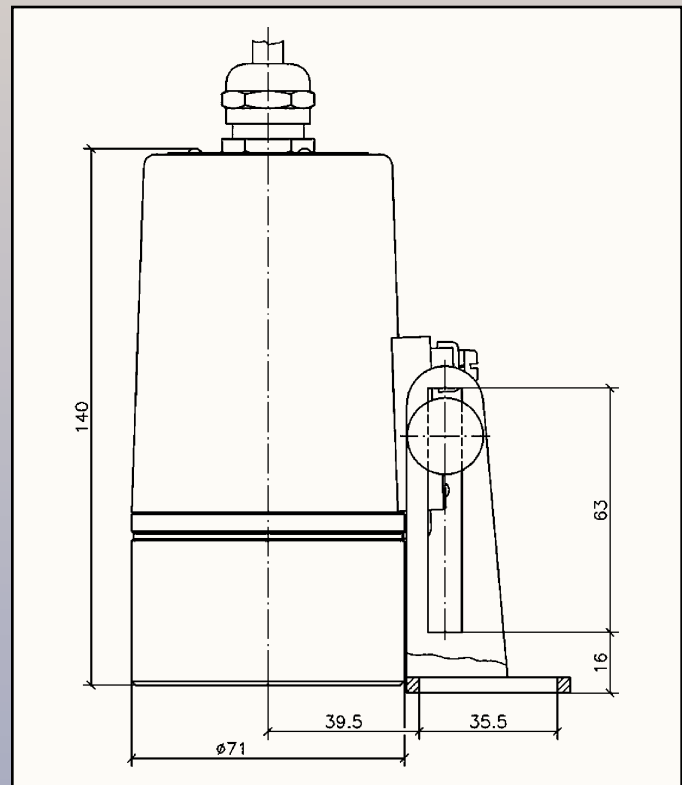
Item	Component	Part No.
1	Single-camera rack	1590.053.00
2	6-camera rack	1590.051.00
3	Camera control module	1123.008.00
4	Network unit	1128.001.00
5	Network unit with video server	1128.002.00
6	Transmission cable	3465.000027

For example:

Lumiglas VISULEX camera K 25-Ex

- Important: please specify whether PAL or NTSC is required
- 370 m transmission cable (please state length in full meters)
- Rack for 1 or 6 cameras (see table above)
- Camera control module, Part No. 1123.008.00

We recommend the 6-camera rack for connecting additional cameras at a later date.



All dimensions in mm unless stated otherwise. Subject to change without prior notice.