

**VISULEX Ex-Camera K25ZP-Ex/K25ZN-Ex**

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

**• Camera with zoom lens K25ZP-Ex/K25ZN-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 the observed 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 stainless steel body (grade 1.4404, polished) with built-in colour CCD camera, 1/4" CCD sensor, 2 lux light sensitivity, a 2-wire transmitter with electronics, and an aluminium mounting bracket
- Approved for use in Ex zones 1 and 2 as well as zones 21 and 22
- Type of protection: IP 65

**• 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. Besides single racks, racks for up to 6 camera control modules are also 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 3P x AWG 20 C

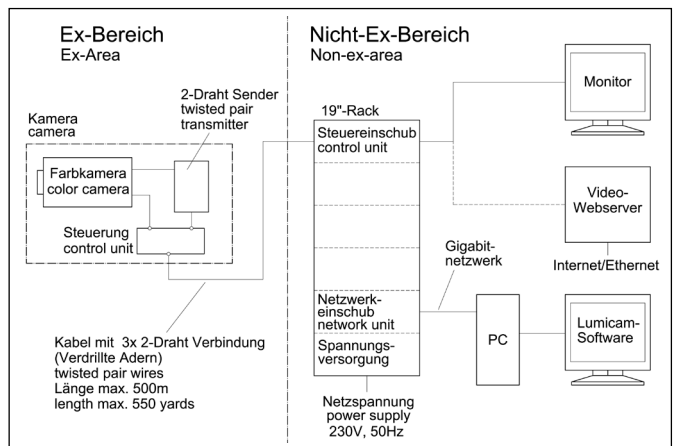
**• Weight:** 2.0 kg

CE 0158

3755.309 c



VISULEX Ex-camera K25ZP-Ex with zoom lens



Single-camera rack with video server



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

• **Mounting:**

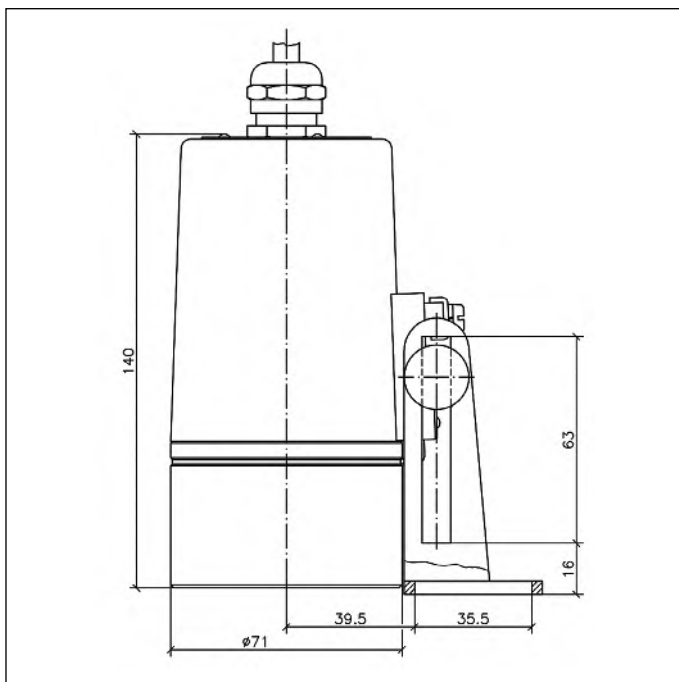
- The camera is attached to the cover flange of a circular sight glass fitting (DIN 28120 or similar) using the stainless steel bracket provided. The method used is the same as for the internationally approved Lumistar luminaires. If there is not sufficient natural light in the vessel, an appropriately dimensioned Lumistar 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.  
- Consistently uniform illumination should be ensured.

• **Dimensions and technical data for VISULEX Ex-Camera K25ZP-Ex/K25ZN-Ex:**

Camera	K25ZP-Ex (PAL)	K25ZN-Ex (NTSC)
Camera standard	CCIR (Europa)	EIA (USA)
Image sensor	1/4" CCD	1/4" CCD
Pixels	approx. 440,000	approx. 380,000
Light sensitivity	2 lux	2 lux
Resolution	460 lines (horizontal)	470 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	PAL	NTSC

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



• **Order data:**

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:**

VISULEX Ex-Camera K25ZP-Ex

- 370 m transmission cable (please state length in full metres)
- 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 further cameras at a later date.