

## Lumiglas-VISULEX--Camera, Stainless Steel Model K25-Ex

Data Sheet 07.75

### • Camera with zoom lens

The zoom lens of this camera model is operated remotely from the plant control room. The observer can therefore adjust the setting to suit his individual needs. The **LumiCam system and control software package**, developed by Lumiglas VISULEX offers a number of real advantages in this respect.

This LumiCam-software, based on Windows and using a PC or Notebook, offers the user the following functions for the control of the camera remotely set up on the subject:



### • Detail-setting of

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

Detailed information in data sheet 07.79.

### • Technical data:

#### Construction and scope of application

- Pressure tight body containing built in colour CCD camera 1/4"-CCD sensor, 2.5 Lux sensitivity, and a two wire transmitter with electronics
  - approved for use in Ex-zones 1 & 2
  - protection type IP 67
  - operating range: ambient temperature +5° C to 40° C
  - EC type test certificates: BVS-06-ATEX-E 064  
  

  - Ignition protection type EEx d
  - Explosion group: IIC (all explosion groups; including explosion group IIA and IIB)
  - Temperature class: to T6
  - Electrical connection<sup>1)</sup>: is made via transmission cable to control unit (non Ex area e. g. in control room)
  - Rated voltage: 24 V DC ±10 %
  - Rated output: Type K25-Ex up to 8 W
- <sup>1)</sup> See also block diagram as well as data sheet 07.79.

### • Mounting:

- As with the internationally renowned Lumiglas luminaires, the camera is attached to the cover flange of a circular sightglass fitting (DIN 28120 or similar) using the aluminium brackets supplied. Should the internals of the vessel not be sufficiently illuminated by natural light, then – depending on size of fitting – a Lumiglas luminaire can be added.
- Depending on process and reactor size separate lighting and camera glasses should be considered. This will also have to take vessel surface area, medium and port angle of incidence. Take care for a constant symmetrical illumination!

### • Transmission cable:

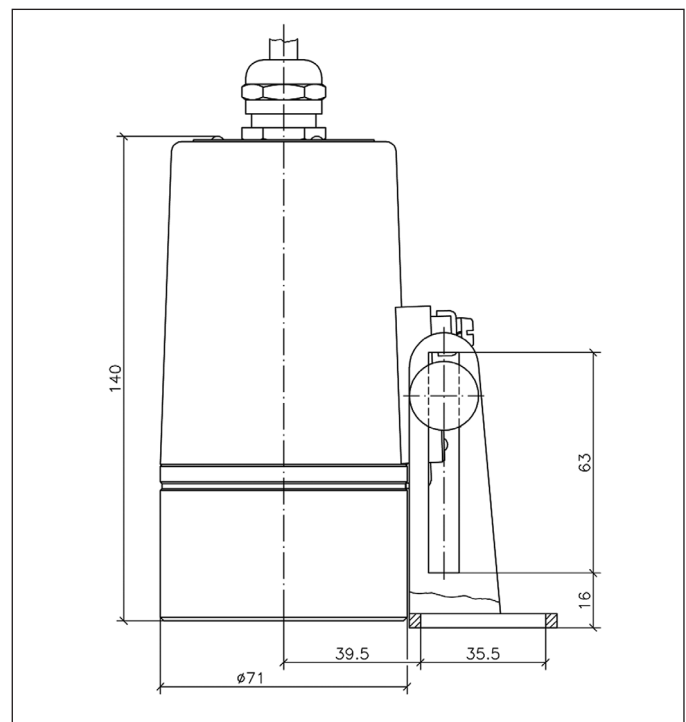
The Ex-camera will be supplied including with 5 m transmission cable, fitted at manufacturer's work. Other cable lengths on request!



Lumiglas-VISULEX-Ex-Camera with zoom-lens model K25-Ex

### • Dimensions, materials and attachment:

camera-model	body	weight	attachement
K25-Ex	stainless steel 1.4404, polished	ca. 2,0 kg appx (without transmission cable)	stainless steel hinged bracket (included) 1.4301



Ex-Camera, model K25-Ex

# Ex-camera system



## Technical Data (concerning camera features):

Camera-standard	CCIR (Europe)	EIA (USA)
Image sensor	1/4"-CCD	1/4"-CCD
Pixels	appx 440.000	appx 380.000
Light sensitivity	2 lux	2 lux
Resolution	460 lines (horizontal)	470 lines (horizontal)
Electronic shutter speed	automatically, 1/1-1/10,000	automatically, 1/1-1/10,000
S/N ratio	>50 dB	>50 dB
Aperture control	automatically or manually	automatically or manually
Colour system	PAL	NTSC

## Lens (standard design):

Type of lens	Zoom-lens
Focal length	F = 4.2 to 42.0 m
Zoom, optical	10 x
Zoom, digital	4 x additionally
Horizontal viewing angle at 1/4"	4.6° to 46°
Minimum distance between lens and subject	10 to 1000 mm

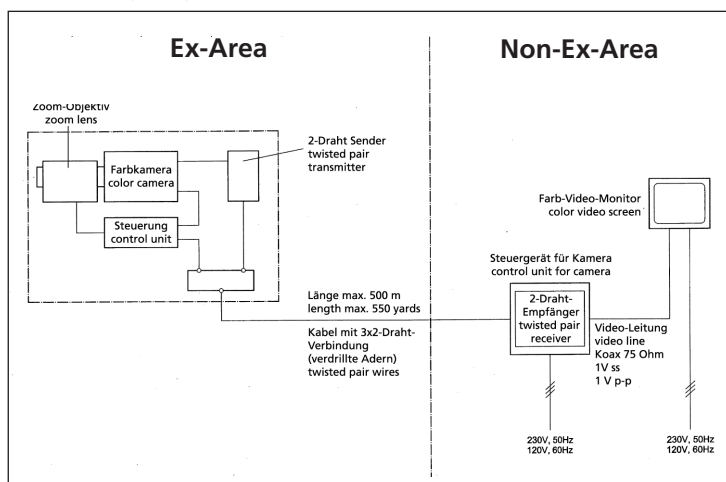
### • Two wire transmitter

distance between Ex camera and control unit:  
up to 500 m

### • Transmission cable:

- 6 core cable (in twisted pairs)
- length: up to 500 m
- technical spec. control lead: in twisted pairs, shielded cables, 3 P x AWG 20C, black (suppl. Metrofunk), or similar, 3 x 2 x 0,56 mm<sup>2</sup>

### • Block wiring diagram



### • Ordering details

item	description	housing	part no.
1	Lumiglas VISULEX-Ex-Camera  model K25 ZP-Ex (PAL) model K25 ZN-Ex (NTSC)  inclusive stainless steel hinged bracket with two wire transmitter and 5 m transmission	stainless steel	2348.026.00 2348.076.00
2	additional transmission cable (length in full meters indicate!)		

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