

Lumiglas-VISULEX-Ex-Camera Model K07-Ex

Data Sheet 07.72

• 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 software package, 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:

• 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 IP67
 - operating temperature range +5° C to 40° C
 - EC type test certificates: DMT 01 ATEX E 047
 - ⊕ II 2G EEx de II C T6/T4
 - ⊕ II 2D IP 67 T 80° C/T 130° C
 - Ignition protection type EEx d(e)
 - Explosion group: II C (all explosion groups; including explosion group II A and II B)
 - Temperature class: to T6
 - Electrical connection¹⁾: is made via control unit (non Ex area e.g. in control room) using transmission cable
 - Rated voltage: 24 V DC
 - Maximum voltage: 26.4 V DC
 - Rated output: up to 25 W, type K07-Ex
- ¹⁾ See also block diagram as well as data sheet 07.79.

• Mounting:

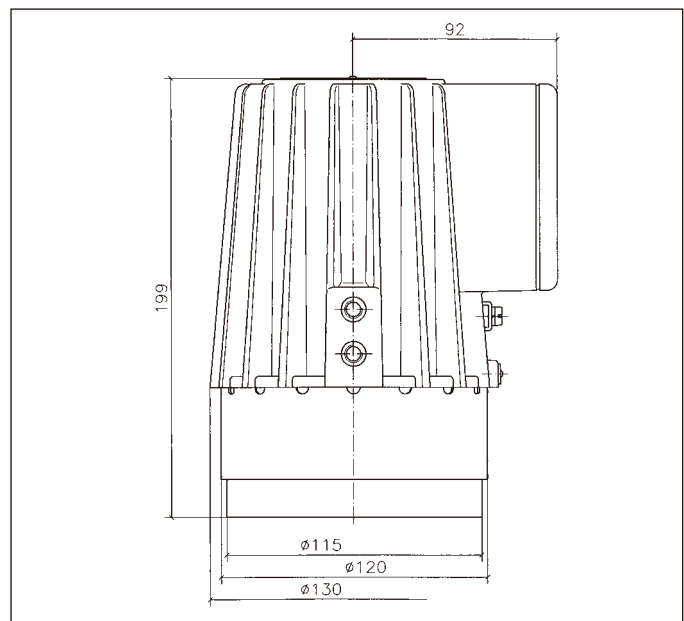
- as with the internationally renowned Lumiglas luminaires, the camera is attached to the cover flange of a circular sightglass fitting (DIN 28120 or similar) using the aluminium brackets supplied. Should the internals of the vessel not be sufficiently illuminated by natural light, then – depending on 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.



Lumiglas-VISULEX-Ex-Camera with zoom-lens model K07-Ex

• Dimensions, materials and attachment:

Camera-model	Body	Weight	Attachement
K07-Ex	Al alloy	2.7 kg appx	Al alloy brackets (included)



VISULEX-Ex-Camera, model K07-Ex

Ex-camera system

Technical Data:		
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 mm

The installation of other camera modules is possible

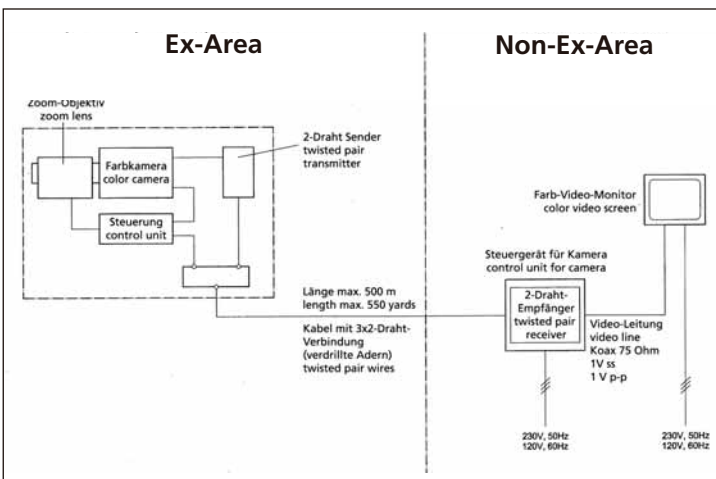
• Two wire transmitter (active or passive)

- distance between Ex camera and control unit:
active: up to 500 m, passive: max. 50 m

• Transmission cable:

- 6 core cable (in twisted pairs)
- length: up to 500 m
- technical spec.: control lead LIY 2 x 1.5 mm² and J2YV 2 x 2 x 0.6 mm²

• Block wiring diagram



• Ordering details

Item	Description	Housing	Part No. ¹⁾
1	Lumiglas VISULEX-Ex-Camera model K07-ZP-Ex/E incl. alloy angle brackets with Aktive 2 wire transmitter	AL Alloy	2348.017.00
2	Lumiglas VISULEX-Ex-Camera model K07-ZP-Ex/B incl. alloy angle brackets with Passive 2 wire transmitter	AL Alloy	2348.022.00
3	Transmission cable (length in full meters indicate!)		

¹⁾ please state wether 'PAL' or 'NTSC'