Malux solutions

TECHNICAL SPECIFICATION

Page	1/3
Ref	K55 HD-Ex
Date	30.6.2021
Person in charge	Mr Jyrki Sipari
phone	+358 19 57 45 723

MaluxFIN code: PA234500200-60-50

Description:
K55 HD-Ex VISULEX IP-CAMERA HD 60° SSt ExII 2GD
50m NET CABLE CAT7,ETHERNET CONNECTOR RJ45,BRACKET

including:

1,00 Stk   LS#2345.002.00

HD-Kamera K55-HD-Ex

VISULEX camera system
series: K55-HD-Ex
housing: stainless steel 1.4404
protection class IP 65

EC type-examination certificate
BVS 15 ATEX E 056 X
II 2G Ex db IIC T6 Gb
II 2D Ex tb IIIC T80°C Db

VISULEX camera K55-HD-Ex
mounted on a flange with a hinged bracket

camera module:
color - HD - camera

resolution:	1920 x 1080 (Full-HD)
power supply:	PoE IEEE802.3af
stream:	H.264, H265, H264+, H265+, MJPEG
light sensitivity:	0.08 Lux
image transfer rate:	30 frames per second
day/night switching:	auto, day, night
remote access:	web browser
ethernet interface:	100Base-TX
video transmission length:	max. 60 m

incl. mounting bracket stainless steel

Please note, some parts of the camera are liable to the US-control regulations (EAR99)

customs code no.: 85258900

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Page	2/3
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1,00 Stk L4502.300003
Festobjektiv 60° für HD Kameras
Visulex fixed focus lens
angle of view: 60°
for Visulex - Camera
Type K55-HD / K55-4K
M12-Mount
mounted in pos. 1
customs code no.: 90021100
Total weight: 5,10 g Weight per basis: 5,10 g Basis: 1,00 Stk

50,00 m L#3461.002.00
Netzwerkleitung CAT7 Flex
Lumiglas network cable
for use in VISULEX-HD cameras
4 x 2 x AWG26/7
PUR jacket
cable color: green
max. length: 60 meters
mounted in pos. 1
Please advise the correct length needed.
customs code no.: 85444993
Total weight: 2,50 kg Weight per basis: 0,05 kg Basis: 1,00 m

1,00 Stk L#7320.002.00
Stecker EPIC DATA PN AX RJ45
field attachable industrial ethernet connector
for VISULEX cameras
RJ45, straight, IP20
suitable for up to 10 Gbit/s
toolless assembly
mounted in pos. 3
customs code no.: 85366990
Total weight: 0,03 kg Weight per basis: 0,03 kg Basis: 1,00 Stk

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Page	3/3
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1,00 Stk   L6130.300001

Software Kamera

Milestone XProtect® Express+ Video Management Software
For Windows 10 Operating System
Enables Multi Camera Viewing
License Type - By Number Of Camera's
Configurable Admin & User rights
Connection Via Web Browser
48 Maximum Managable Video Sources
Supports H.265 and 4K UHD
incl. motion detection and recording
for pos. 1

Please note:
This product is a special manufacture for you.

Changes after beginning of the production are not possible without additional charges.

1,00 Stk   L6130.300002

Software Kamera Lizenz

Access license per camera for Milestone XProtect® Express+ Video Management Software
for pos. 1

Please note:
This product is a special manufacture for you.

Changes after beginning of the production are not possible without additional charges.

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K55 HD-Ex IP-CAMERA _SPECIFICATION_MaluxFIN_PA234500200-60-50

Lumiglas

VISULEX Cameras
K55-HD-Ex and K55-4K-Ex
⟨Ex⟩ II 2G Ex db IIC T6 Gb
II 2D Ex tb IIIC T80°C Db

- **Camera with fixed lens K55-HD-Ex/K55-4K-Ex**
  With these standard cameras, the lens is permanently adjusted to the object to be observed during installation (outdoor area/outdoor plant or process parts such as boilers or agitators).

- **Design and application:**
  - Pressure-resistant stainless steel housing with built-in colour CCD camera, 1/2.8", 0.08 Lux light sensitivity at F2.2; 40 IRE
  - Approved for Ex zones 1 and 2 as well as zones 21 and 22
  - Protection class IP 65

- **Application temperature range:** -10°C to +40°C

- **EU type examination certificate:** BVS 15 ATEX E 056 X
  ⟨Ex⟩ II 2G Ex db IIC T6 Gb
  II 2D Ex tb IIIC T80°C Db

- **Type of protection:** Ex d

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

- **Lenses with focal length:** 2.3
  Minimum distance lens to object: 0.3 m

- **Electrical connection:**
  via the network cable (POE)
  IEEE 802.3af (12 V DC – 5W)

- **Specification:**
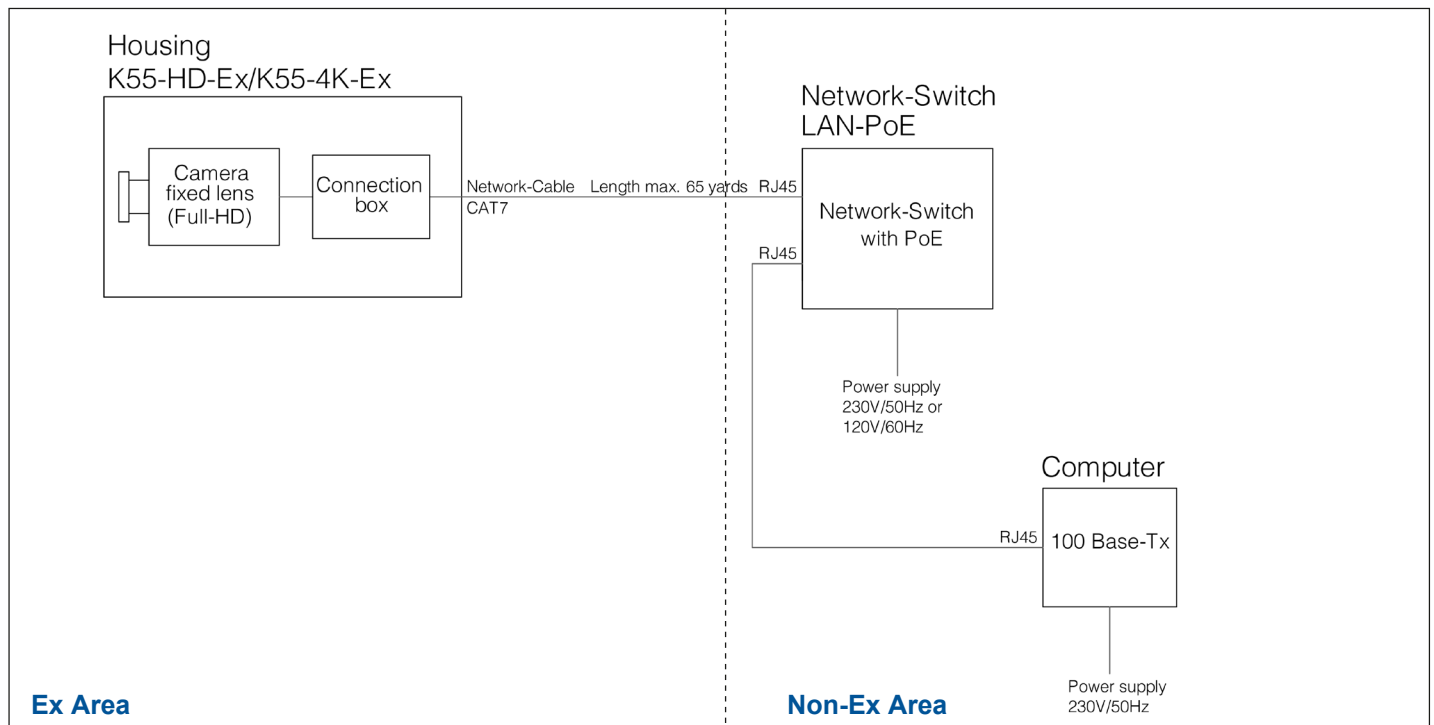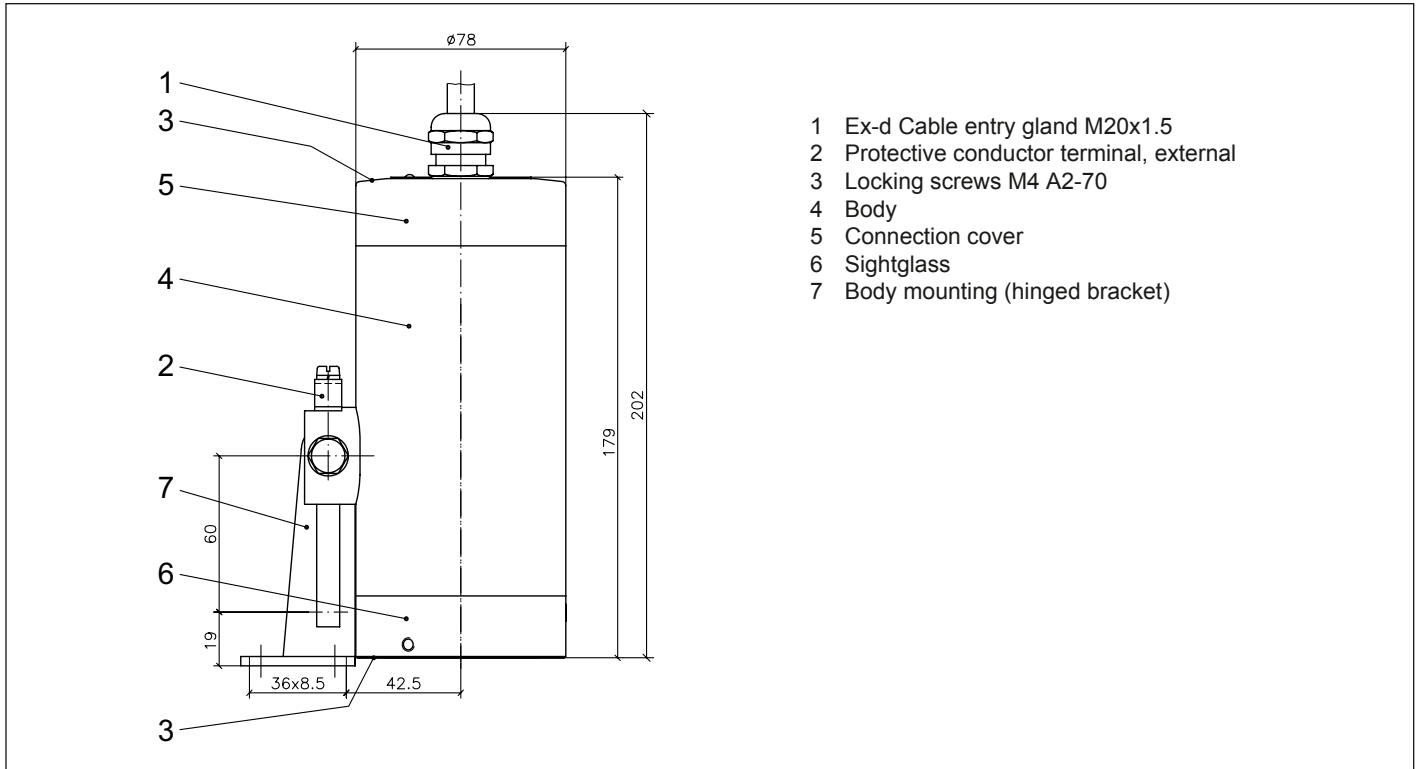 Image resolution max. 1920 x 1080 p/30 fps or 3840 x 2160 p

VISULEX camera K55-HD-Ex
mounted on a flange with a hinged bracket

- **Control line:**
  Network cable cat. 7 Flex, max. 60 m, 4x2xAWG 26, part no. L#3461.002.00

- **Weight:**
  3.2 kg without network cable

Ex Area

Housing
K55-HD-Ex/K55-4K-Ex

Camera fixed lens (Full-HD) → Connection box

Network-Cable　Length max. 65 yards　RJ45
CAT7

Non-Ex Area

Network-Switch
LAN-PoE

Network-Switch with PoE

RJ45

Power supply
230V/50Hz or
120V/60Hz

Computer

RJ45　100 Base-Tx

Power supply
230V/50Hz

PAPENMEIER

Lumiglas

- **Dimensions and technical data for VISULEX Cameras K55-HD-Ex and K55-4K-Ex:**

ø78

202
179
60
19

36x8.5   42.5

1   Ex-d Cable entry gland M20x1.5
2   Protective conductor terminal, external
3   Locking screws M4 A2-70
4   Body
5   Connection cover
6   Sightglass
7   Body mounting (hinged bracket)

- **Mounting:**

Similar to the internationally renowned Lumistar luminaires, the camera is secured to the cover flange of a circular sight glass fitting (to DIN 28120 or similar) using the hinged bracket included in the scope of supply (hinged bracket 1.4301). Alternatively, the special camera head can be mounted by way of a flanged adapter.

- **Illumination:**

- If there is not sufficient natural light in the vessel, an appropriately dimensioned Lumistar luminaire can be additionally 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.

	VISULEX Camera K55-HD-Ex	VISULEX Camera K55-4K-Ex
MOD (Min. Objekt Distance)	0.3 m	0.3 m
Image sensor	1/2.8" 2.0 MP	1/2.5" 8.29 MP
Resolution max.	1920 x 1080 p	3840 x 2160 p
Light sensitivity	~ 0.08 Lux at F2.2; 40 IRE	~ 0.05 Lux
Frame rate max.	30 fps	30/25 fps
Video compression	H.264, H.265, (+), MJPEG	H.264, H.265, (+), MJPEG
Focal length	2.3 mm; V = 75°, H = 135°	
Network protocol	TCP/IP, UDP, IPv4, IPv6, HTTP, HTTPS, FTP, RTP, UPNP, RTSP, RTCP, DHCP, OpenVPN	TCP/IP, UDP, IPv4, IPv6, HTTP, HTTPS, FTP, RTP, UPNP, RTSP, RTCP, DHCP, OpenVPN
Power supply	12 V – 5 W	12 V – 4.5 W
POE/RJ45	IEEE 802.3af	IEEE 802.3af / 44-57 V DC
ONVIF	ONVIF Profile S	ONVIF Profile S
Web Browser	MS Internet Explorer, Safari*, Mozilla*, Google Chrome*, Edge* (*Setup limited)	MS Internet Explorer, Safari*, Mozilla*, Google Chrome*, Edge* (*Setup limited)

- **Order data:**

e.g. VISULEX camera K55-HD-Ex, cable length 50 m, focal length 2.3 mm

PAPENMEiER