Operating Instructions

Bullet Compact Camera

EC-912-1

STAHL

THE STRONGEST LINK.

Operating Instructions version: **01.00.00**
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Target group

These Operating Instructions are intended for the following groups of people:

- Project engineers
- Electricians and installers
- Operators
- Operating staff
- Maintenance staff

How to use this manual

- Read these Operating Instructions, especially the safety notes, carefully before use.
- Take note of all other applicable documents.
- Keep the Operating Instructions for the entire length of the service life of the device.
- Make the Operating Instructions accessible to operating and maintenance staff at all times.
- Pass the Operating Instructions on to each subsequent owner or user of the device.
- Update the Operating Instructions every time R. STAHL issues an amendment.

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Only return or package the devices after consulting R. STAHL. Contact the responsible representative from R. STAHL.
R. STAHL's customer service is available to handle returns if repair or service is required.

Contact customer service via E-mail or telephone:

- E-mail: service.dehm@r-stahl.com
- Telephone: +49 221 768 06 - 3000

Requesting a RMA ticked via our website:

- Go to r-stahl.com.
- Under "Support" > "RMA" > select "RMA-REQUEST".
- Fill out the form and send it in.
- You will automatically receive and E-mail with an RMA ticket.
- Print out the RMA ticket.
- Clearly copy the RMA number onto the outside of the package.
- Send the device with the RMA ticket included in the package to R. STAHL HMI Systems GmbH.

Notice to device designation

The table below lists the camera devices together with their marking on the type plate and the Operating Instructions.

Designation STAHL	Device designation original
EC-912-1 T08-VA1.2.K1.BOR-N.N-**AAA.B-C**	ExCam EC-912-1 T08-VA1.2.K1.BOR-N.N-**AAA.B-C** (PoE, 5m)

Position in code	Possible value	Description
AAA	xxx	Cabel length in metre (example: 005 = 5 m)
B	N	Non-armoured cable
	A	Armoured cable
C	P	RJ45 plug (standard)
	T	Open cable end (for Junction-Box)

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History of revisions

Product: EC-912-1
Title: User Manual for EC-912-1
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1				
2				

1 Introduction

The EC-912-1 is a compact, powerful IP camera with motorized varifocal lens. It is certified by ATEX, IECEx and more. The camera has a high-definition television resolution (1920x1080) and is equipped with a 1/2.8“ CMOS sensor for great image quality and incomparable light sensitivity.
The ExCam series is certified both in accordance with the European (ATEX) and international directive (IECEx). The explosion-protected housing is approved for ATEX group II for zones 1, 2, 21 and 22 including the explosion groups IIC / IIIC. To see other approvals, please visit our website at www.r-stahl.com
When designing the EC-912-1, we attached a very high importance to safety, mechanical precision and high quality of stainless steel.

2 Technical data

2.1 Explosion protection

Identification marks acc. to Directive 2014/34/EU:	Ⓔx II 2G (zone 1 and 2) Ⓔx II 2D (zone 21 and 22) Ⓔx I M2 [1]
Explosion protection (gas):	Ex db IIC T6 Gb
Explosion protection (dust):	Ex tb IIIC T80°C Db
Explosion protection (mining):	Ex db I Mb
Protection class:	IP 66/68 (IEC /EN 60529)
Ambient temperature (EX):	-30°C…+50°C
Named testing laboratory:	TÜV Rheinland (number 0035)
EU type approval certificate:	TÜV 18 ATEX 8218X (2018)
IECEx Certificate of Conformity:	TUR 18.0023X (2018)
INMETRO Certificate:	TÜV 23.0363X (2023)
EAC-Ex TUR Report:	TC RU C-DE.HA65.B.01652/22
Other certificates see:	r-stahl.com

Ⓔx **Attention!**
The instructions stated on the type plates have to be observed!

[1] Certification for mining only for models with armoured cable and plug termination.

2.2 Illustration of the model key

Ex product-name	Model variants				
1)	2) Type	3) Housing-combination	4) Temp.-range	5) Cable length [m]	6) Cable termin.
EC-912-1	T08-	VA1.2.K1.BOR-	N.N-	005.N-	P
	T08-	VA1.2.K1.BOR-	N.N -	005.A-	P

Table 2-1 Model key

Explanations:

1) EC-**912-1 =** Functional camera description of the Series (technical data/ specification of the individual camera module)

2) T**08** = Production- Type 08

3) **VA1**.2.K1.BOR = T07 ex d housing (stainless steel 1.4404) with small diameter $Ø_{VA1}$=79mm)
VA1.**2**.K1.BOR = T07 VA1.2 housing with medium body length ($L_{.R}$ = 158mm)
VA1.2.**K1**.BOR = K1 cable gland flange
VA1.2.K1.**BOR** = Borosilicate sight glass DIN7080 (standard, for video cameras within visible spectral range: λ = 350…2000 [nm] and photografical infrared range (NIR), not suitable for thermographic applications (MIR/ FIR)

4) N.**N**= Normal temperature range (T_{amb} < +50°C)
N.N= No PTC heater integrated (T_{amb} > -30°C)

5) **005.**N = Length of the connection line in meter at delivery; 5m is the standard cable length, max. cable length is: 005…100 [m]
005.**N** = Non armoured cable
005.**A** = Armoured cable

6) **P** = Plug- termination (*standard*)
CAT6, RJ-45 network plug (heavy duty), AWG 26-22,
contact assignment acc. To specification EIA/TIA-568**B**

2.3 Electrical parameters of the camera

Power supply of the camera via Ethernet (PoE):

Voltage supply:	PoE, IEEE 802.3af type 1 class 2
Maximum power consumption:	4.4 W
Typical power consumption:	3.0 W

2.4 Connection cable Ex-d - Ex-e (VB-CAM-CAT6-SKD02-T/ VB-CAM-CAT6-ARM-ASKD02-T)

Description:	Data transfer and power supply of the camera module (compliant with DIN EN 60079-14)
Jacket colour:	Green (GN), similar to RAL3001

VB-CAM-CAT6-SKD02-T:

Outside diameter:	8.9 ± 0.3 mm
Bending radius:	8 x D_a when installed and 4 x D_a after relocation
Data line:	4 x 2 x AWG23/1 CAT.6
Properties:	PUR halogen-free, flame-retardant, UV-resistant, chemical resistance, shielded

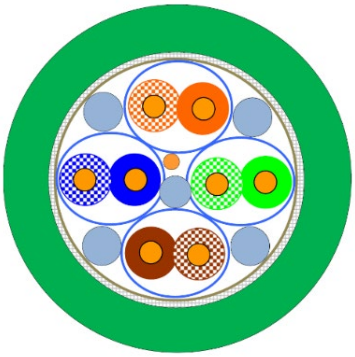


Figure 2-1 Sectional view of VB-CAM-CAT6 SKD02-T

System cable VB-CAM-CAT6-ARM-ASKD02-T:

Outside diameter:	12.0 ± 0.4 mm
Bending radius:	20 x D_a when installed and 10 x D_a after relocation
Data line:	4 x 2 x AWG23/1 CAT.6
Properties:	PUR halogen-free, flame-retardant, UV-resistant, chemical resistance, shielded

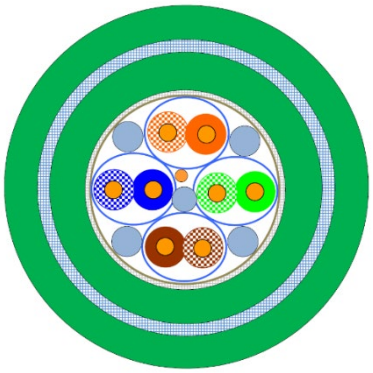


Figure 2-2 Sectional view of VB-CAM-CAT6-ARM-ASKD02-T

2.5 Video-technical characteristics

We use the eneo Module Network Camera in a pressure-resistant enclosure. For details, please refer to the Product Documentation, video-technical data of eneo®:

https://eneo-security.com/en/ism-72m2713w0a.html

2.6 Other technical data

	Camera (Ex-d)
Permissible ambient temperature	-30°C … +50°C
Protection class as per EN 60529/IEC 529	IP66/68 (Test conditions: 24h/3m water column 5°C)
Housing material	stainless steel, mat. no. 1.4404
Weight	about 2.6 kg
Dimensions	D79mm x 158mm

Table 2-2 Other technical data

3 Safety Instructions

Please absolutely observe the installation instruction's safety directions of the T08 ExCam series!

It is absolutely mandatory to adhere to the national safety regulations and regulations for prevention of accidents, as well as to the safety instructions given below in this User Manual!

Attention!
The camera is not suitable for use in zones 0 and 20. The ambient temperature, temperature class and explosion group written on the enclosure nameplate must be absolutely adhered to! The customer is not allowed to make any alterations of the camera! The camera must be operated in a proper and sound condition and only in the way intended.

Attention!
Repairs may only be carried out by using original parts from the manufacturer. Repairs which affect the explosion protection may only be carried out in accordance with the nationally applied regulations and exclusively by the manufacturer.

Attention!
Prior to installation, take external sources of heat or cold into account! The temperature ranges prescribed for storage, transport and operating must be adhered to!

Attention!
Adhere to the warnings given on the nameplate:

"WARNING – DO NOT OPEN IN HAZARD AREAS"

Using the camera in explosion-protected areas with regard to temperature and dust layers is defined in the respective national regulations.

When installing the ExCam, adhere to the requirements of the EN/IEC 60079-14.

4 Installation

For commissioning and operating the camera, the relevant national regulations, as well as the generally accepted rules of technology shall prevail. Before mounting the camera, thoroughly check it for any transport damage, especially on the housing and cable. Installation, electrical connection and the first start must only be carried out by qualified specialists.

Work preparation:

Attention!
Prepare your work carefully and in accordance with the relevant regulations.

Attention!
Depending on classification of hazard areas, it is imperative to obtain a work approval first!
When you open the pressure-resistant enclosure under voltage, it is absolutely necessary to prevent potentially explosive atmosphere!

To ensure the best image quality delivered by the network camera, plan the installation site carefully (consider light conditions, object distance or size, angle and minimum object distance to the focus).

- Use appropriate tools and aids.
- When working, ensure a safe stand.
- Make sure that any static charge is avoided.

Attention!
Please observe the national security, installation and accident prevention regulations (e.g. DIN EN 60079-14) and the safety instructions in this User Manual, as well as the ones in the Installation Guidelines!

Attention!
Adhere to the provisions of the IECEx, ATEX and
EX installation instructions for mounting and starting up!

The EC-912-1 consists of a flameproof camera housing (Ex-d), cable gland and cable. Mount the camera according to the desired field of view.

Optional mounting accessories

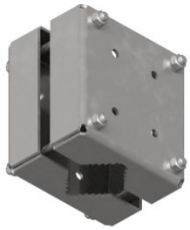
Wall bracket WB-EC-912-WMB-...		**WALL MOUNT WB-EC-912-WMB-VA0.x/1.x** Wall bracket for cameras of the T08-VA1.x-Series Suitable for hanging the cameras on walls. Material: Stainless steel 1.4404 Load bearing: 25 kg Dimensions: 80 x 100 x 205 mm
Hinge attach-ment HSG-IGH-EC-912-SCH-…		**Hinge attachment HSG-IGH-EC-912-SCH-VA0.x/1.x** Hinge attachment for cameras of the T08-VA1.x-Series For easy mounting on round sight glasses acc. to DIN 28120/28121 or similar Material: Stainless steel 1.4404 Dimensions: 29.2 x 40 x 73.1 mm
Pole adapter PMA-EC-912 PMB-…		**WALL MOUNT PMA-EC-912-PMB** Pole adapter for VA wall mount Material: stainless steel 1.4404 Suitable for pole diameters between 50 and 100 mm Load-bearing capacity: 50 kg Dimensions:120 x 180 (x 130 bei Mast Ø 60 mm)

Table 4-1 Mounting accessories

5 Electrical connection

Attention!
The electrical connection of the equipment may only be carried out by qualified and skilled personnel!

Attention!
It is absolutely necessary to ground the housing via the PA connection.

Attention!
Please observe the national security, installation and accident prevention regulations (e.g. DIN EN 60079-14) and the safety instructions in this User Manual, as well as the ones in the Installation Guidelines!

The delivered EC-912-1 is equipped with an electrical connection cable of the type VB-CAM-CAT6-SKD02-T or VB-CAM-CAT6-ARM-ASKD02-T. The maximum transmission range from the camera to the next active network interface is 100 meters and can be individually specified by the client. The user is NOT authorised to do electrical connection procedures inside the pressure-resistant enclosure.

5.1 Potential equalization

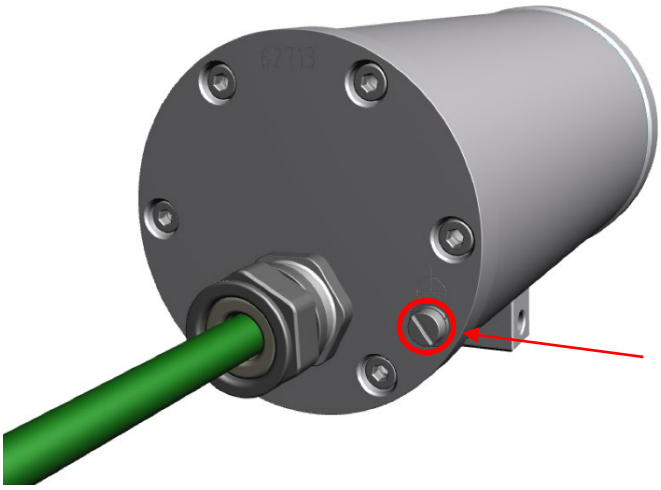


Figure 5-1 EC-912-1 Potential equalization

Potential equalization/grounding of the camera housing is absolutely necessary, in order to avoid static charges and thus the formation of sparks. For this purpose, a screw terminal is provided at the rear side, at the bottom (right) (see Figure 5-1). The cross-section of the potential equalization should comply with the National Ground Rules (at least 4mm^2).

Wiring table:

Potential	Colour (IEC 60757)	Cross-section	Comment
PA	GN/YE	4 mm² (rigid)	Terminal: Slotted screw M4x0.7 (DIN 84) with washer Ø9mm (DIN 125A), Keep 3 Nm tightening torque!

Table 5-1 Potential equalization

5.2 Connection work at the device (terminal box) and fuses

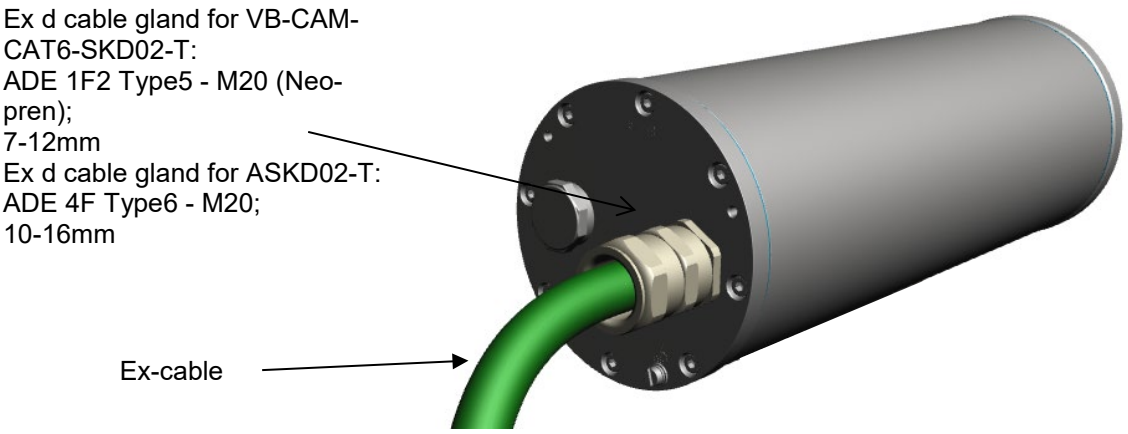


Figure 5-2 Ex-d Cable gland and cable

Power supply for the camera (PoE)

Voltage supply:	PoE, IEEE 802.3af type 1 class 2
Maximum power consumption:	4.4 W
Typical power consumption:	3.0 W

The figures 5.3 and 5.4 illustrate the potential cable terminations of the EC-912-1.
Possible terminations are: terminal box (not pre-installed) or plug.

Figure 5-3 EC-912-1 T08-VA1.2.K1.BOR-N.N-xxx.x-**T**

Figure 5-4 EC-912-1 T08-VA1.2.K1.BOR-N.N-xxx.x-**P**

Attention!
Never open the Ex-e terminal box under voltage!

Attention!
Adhere to the international installation regulations for connection chambers with increased safety (Ex-e).

Attention!
Adhere to attached separate User Manual for the Ex-e terminal box.

The pin assignment of the VB-CAM-CAT6-SKD02-T is executed in accordance with the standard EIA/TIA-568B as follows:

Camera (Ex-d) (T568B)	**Colour VB-CAM-CAT6-SKD02-T** (IEC60757)	**Terminal Ex e connection compartment**	**Cross-sectional surface**	**Comment**
Tx+	WH / OG	1	0.26 mm²	Solid conductor
Tx-	OG	2	0.26 mm²	Solid conductor
Rx+	WH / GN	3	0.26 mm²	Solid conductor
Rx-	GN	4	0.26 mm²	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.26 mm²	Solid conductor
(PoE +48 VDC)	BU	6	0.26 mm²	Solid conductor
(PoE GND)	WH / BN	7	0.26 mm²	Solid conductor
(PoE GND)	BN	8	0.26 mm²	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm²	Flex

Table 5-2. Wire assignment of terminal box

The pin assignment of the VB-CAM-CAT6-ARM-ASKD02-T is executed in accordance with the standard EIA/TIA-568B as follows:

Camera (Ex-d) (T568B)	**Colour VB-CAM-CAT6-ARM-ASKD02-T** (IEC60757)	**Terminal Ex e connection compartment**	**Cross-sectional surface**	**Comment**
Reinforcement	YE / GN	PE	2.5 mm^2	Flex
Tx+	WH / OG	1	0.26 mm^2	Solid conductor
Tx-	OG	2	0.26 mm^2	Solid conductor
Rx+	WH / GN	3	0.26 mm^2	Solid conductor
Rx-	GN	4	0.26 mm^2	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.26 mm^2	Solid conductor
(PoE +48 VDC)	BU	6	0.26 mm^2	Solid conductor
(PoE GND)	WH / BN	7	0.26 mm^2	Solid conductor
(PoE GND)	BN	8	0.26 mm^2	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm^2	Flex

Table 5-3 Wire assignment of terminal box

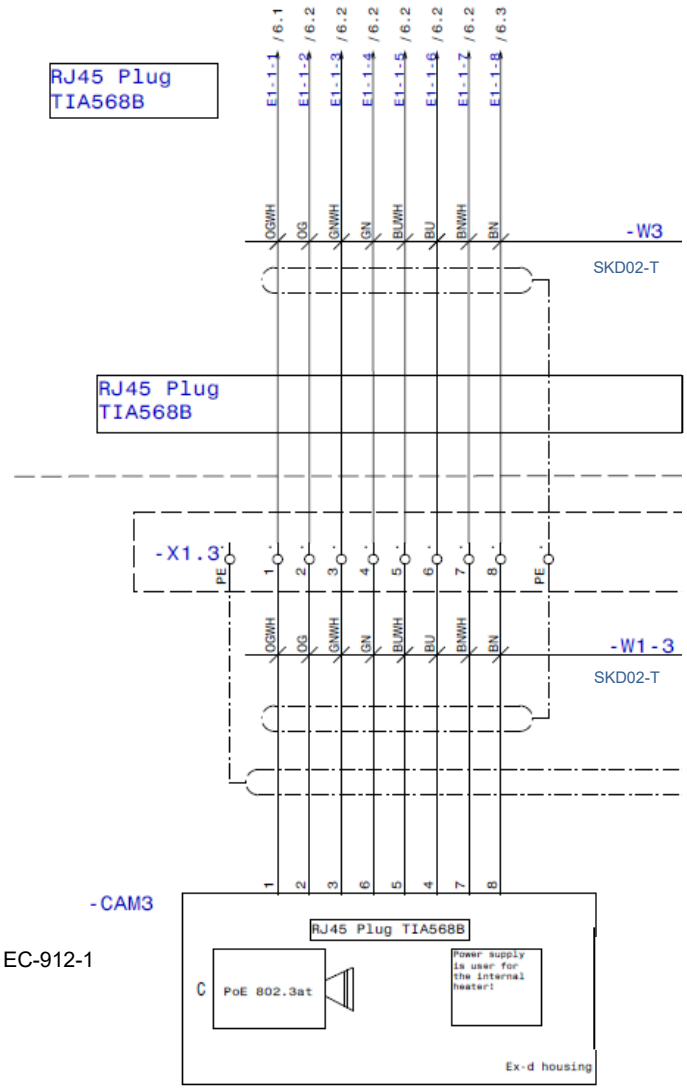


Figure 5-6 Sample circuit of terminal box

Attention!
Introduce the foiling up to about 15 mm close to the terminals, in order to prevent alien crosstalk. Make sure that the foiling cannot cause any short circuit of the data pairs!

Attention!
Bring the twisted pair composite up to about 10 mm close to the terminals, in order to ensure interference immunity.

Attention!
Use only terminals approved by the manufacturer.

Attention!
Finally, check your network installation with a Class-D Link Test.

5.3 External connection and protection

There are several options of routing the Ex e terminal box to a safe area:

5.3.1 Direct routing from the Ex e terminal box into the safe area

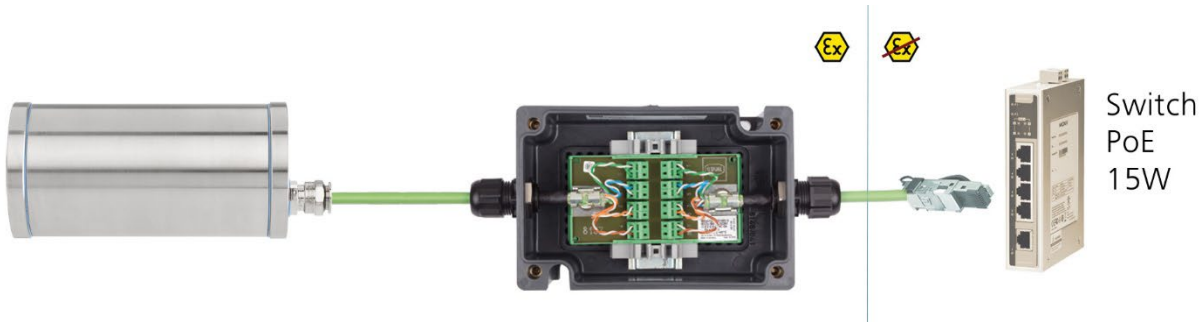


Figure 5-8 Ex e terminal box -> Safe area

In the case of direct routing from Ex e terminal box to the safe area, the voltage signal is led from the safe area to the terminal box. Please observe the terminal box assignment, as described above.

Attention!
Cables and wires must comply with the requirements of the IEC 60079-0/1/7 & 14.

Attention!
The supply line must have a sufficient cross-section. The cable protection must comply with national and international regulations.

5.3.2 Routing via Ex d connection compartment (optional accessories)

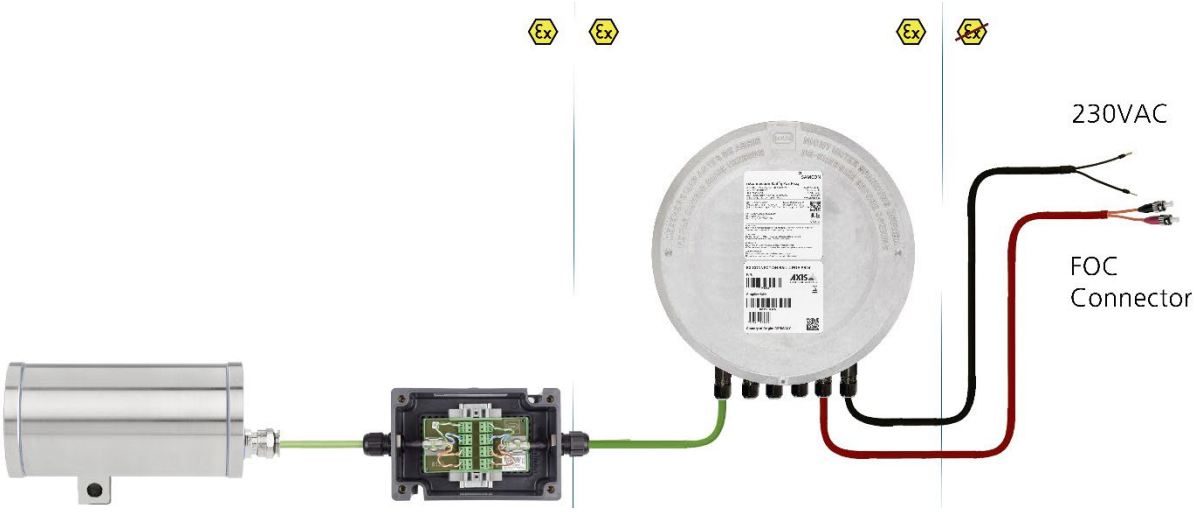


Figure 5-9 Ex e terminal box -> Ex d connection compartment

In the case of routing the Ex e terminal box into an Ex d connection compartment, larger installation distances can be managed.

Note:
In hazardous areas, the Ex d connection compartment (optional accessories) acts as a PoE+ switch, a media converter from copper to fibre-optic cable, as well as a power supply for the cameras.

5.3.3 Appropriate cables & cable entries

An integral part of the device safety is the correct selection of the cables, wires and cable entries.

Attention!
Cables and wires must comply with the requirements of the IEC 60079-0/1/7 & 14.

Attention!
The supply line must have a sufficient cross-section. The cable protection must comply with national and international regulations.

Particularly for installations requiring a suitable barrier gland, make sure that you handle them correctly and observe the rules and notes given in the respective mounting and assembly instructions.

5.3.4 Fusing

PoE power supply requires no fuses. The power supply fusing depends on the cable cross-section and length.

Attention!
Please pay attention to the national and international regulations regarding selectivity and line protection.

5.3.5 Plug assignments (RJ45)

The data transfer of the EC-912-1 uses a 100 Mbit/s Ethernet connection (100BASE-TX). If the cable termination uses a plug, the latter should be plugged into the RJ45 PoE slot of the network device (PSE). Prior to connecting it to the camera, the network device (PSE) can already be supplied with power, hence there is no „power ON“ priority which has to be observed.

Attention!
Use appropriate RJ45 plugs! Check the cable shielding, cross-section and the outside diameter!

Attention!
It is imperative to ensure a correct routing of the individual wires according to the EIA/TIA-568B"

Attention!
Finally, check your network installation with a Class-D Link Test.

5.3.6 Tests prior to switching on voltage

Attention!
Prior to starting the device, perform all tests as indicated by the national regulations. Furthermore, check the correct function and installation of the device in accordance with this User Manual and other applicable regulations.

Attention!
Incorrect installation or operation of the camera may lead to a loss of warranty!

Attention!
Do not switch on the camera at temperatures below 0°C!

6 Working inside the camera housing (Ex-d)

The customer may open the housing only if it is absolutely necessary. Only a hardware reset is a reason for this.

6.1 Preparation for work:

Attention!
Prepare your work carefully and in accordance with the relevant regulations.

Attention!
Depending on classification of hazard areas, it is imperative to obtain a work approval first!
If you adjust the camera yourself or open the pressure-resistant enclosure (Ex-d) under voltage, it is absolutely imperative to prevent potentially explosive atmosphere!

6.2 Opening the pressure-resistant housing

WARNING – MAY NOT BE OPENED IN HAZARD AREAS

Note: Depending on classification of hazard areas, it is imperative to obtain a work approval first!
Even after switching on the power supply, it is absolutely imperative to avoid potentially explosive atmosphere when opening the camera housing. Opening the housing requires disassembly and working in a safe (i.e. non-explosive!) area.

Attention!
Pay attention not to damage the thread surface of the flame-proof gap.

Attention!
Pay attention not to damage the housing seals. Keep them clean!

The EC-912-1 is equipped with a weather protection roof. This has to be removed prior to starting your work! To do so, loosen the 4x12mm button head screws M4*0.7 at the front and rear sides of the bracket holders (Figure 6-1).

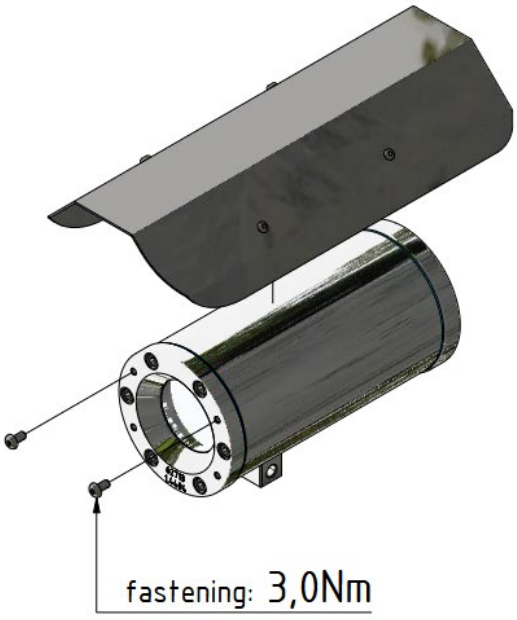


Figure 6-1 Removing the weather protection roof

To open the stainless-steel housing (T07 VA1.2.x.x) of EC-912-1, loosen the eight cylinder-head hexagon screws (DIN 912/ ISO 4762) together with their spring rings (DIN 127A) on the rear side of the cable and power supply flange (see Figure 6-2). Caution: do not touch the screw threads with your skin or clothes! On the threads, there is LOCTITE® 243™ (chemical basis is dimethacrylate ester) applied to prevent the bolted connection from un-intentional loosening because of impacts and vibrations and to seal them tightly. It is not permitted for the customer to open the front-side sight glass flange! There is no need of such an action.

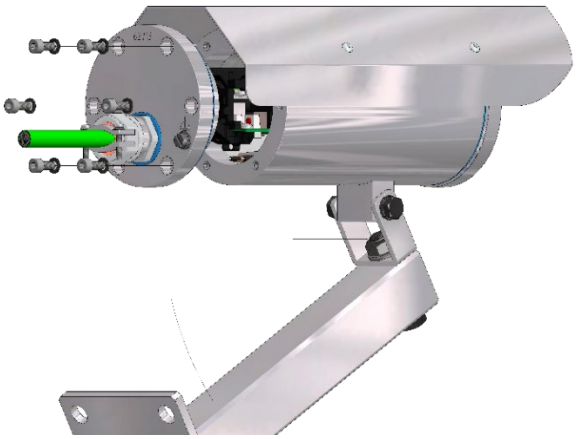


Figure 6-2 Opening EC-912-1

Carefully pull out the cable and supply flange to the rear, as straight as possible. Because of negative pressure, it may be difficult to remove the flange. The cylindrical clearance fit (H8f7 - DIN ISO 286) of the camera body and flange may not be tilted! Risk of damage to the flame-proof gap (DIN EN 60079-1:2012)!

Attention: The mounting adapter with the camera module and optics, as well as the temperature control, and (if applicable) auxiliary relays and terminal block are fixed on the cable and supply flange. Dealing with these components, too, you have to work very carefully and precisely in order to avoid canting and damage to the in-built components! The module must be carefully rotated and tilted slightly. Caution: do not touch the cylindrical fit surface with your skin or clothes! On the surface, there is oil lubricating paste to protect the surface against fretting corrosion and mechanical stresses.

When you open the housing, pay attention that you do not damage the GYLON® flat seal (blue, RAL5012) and do not make it dirty! The flat gasket is loosely attached to the cable and power supply flange. It is fixed only by the bolted connections!

Attention!
Pay attention not to damage the surface of the drill hole and the shaft (fitting) of the flame-proof gap.

Attention!
Pay attention not to damage the housing seals. Keep them clean!

6.3 Hardware Reset

To set all the parameters of the EC-912-1 (including the IP address) to default values, you should run a hardware reset.
The parameters can be reset via the web interface or manually. If the camera placed in the network can no longer be reached or its state is uncontrollable, the reset should be performed manually. To do so, proceed as follows:

1. Disconnect the camera installation module from the power supply.
2. Press and hold the reset button (see the illustration below) and, at the same time, connect the system to the voltage supply (PoE).
3. Hold the control button pressed for some seconds.
4. Release the control button. After about a minute, the EC-912-1 will return to factory defaults. If there is a DHCP server in the network, the IP address will be the following: 192.168.1.10.
5. IP address and password can be redefined. If the hardware reset is not satisfactory or the network camera shows serious conflicts or does not work as usual (errors in the browser visualisation, frozen images, control commands no longer processed, slowing down of the system, etc.), it may be necessary to re-install the current firmware, or to install an update (see Chapter 7).

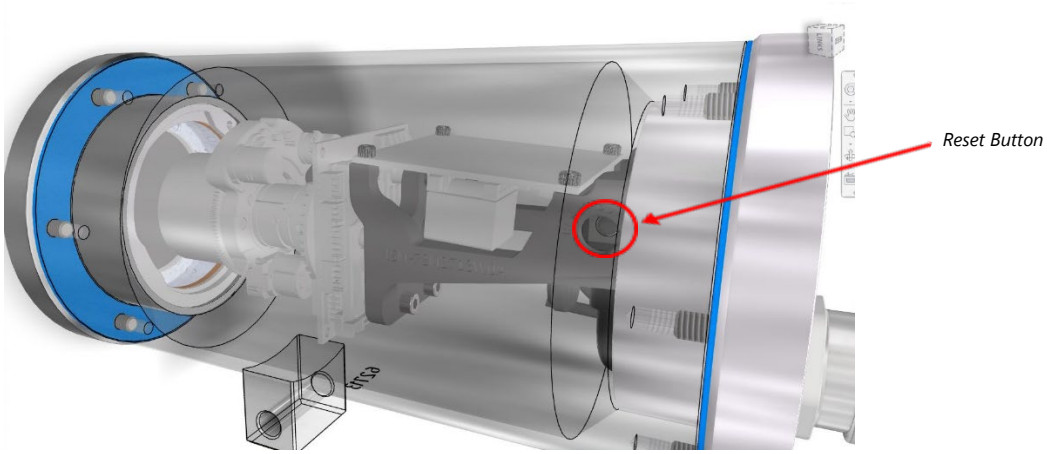


Figure 6-3 Structure of the camera

6.4 Closing of the pressure-resistant housing

For closing the housing, proceed in reverse order as when opening. Use exclusively original screws included in the supply.
The cable and power-supply flange (K1) is fixed by 8 cylinder-head screws M4*0.7 (ISO metric right-turning) with 12 mm thread length (DIN 912/ ISO 4762, grade 6g). Materials of bolted connections are identical to the pressure-resistant stainless steel housing (standard material no. 1.4404 AISI316L). Check whether the threaded holes are undamaged and clean. Before closing, it is also absolutely imperative to check the flame-proof gap (circular cylindrical fit).

Attention!
If any mechanical damages occurred to the fitting gap, it is no longer allowed to use the housing!

Attention!
Do not lock-in any foreign objects in the housing.

Dismantled screw locks (spring washers DIN 127A) must be used again.
The GYLON® gasket must be used in undamaged condition, according to the flange hole pattern, and placed between the flange and the hull. The lateral position of the flat surface / contact surface is arbitrary.
If, when closing the housing, you see that the surface of the fitting gap is dirty or insufficiently lubricated, clean it with a clean cloth and de-grease it with a suitable cleaning agent. Then re-grease it with lubricant suitable for this specific application (e.g., Molykote® P-40 gel for standard applications or special grease OKS 403 in the event of heavy seawater influence).

The screwed connections of flange and body components must always be tightened *crosswise* to a torque of **3 Nm**! Do not tighten the screw too strongly! It can cause rupture of the

cylinder head or over-stretching the threads, and thus to impairment of the pressure resistance or ignition protection class

Cylinder-head bolts for explosion-proof connection of the camera body with the flange component must always be tightened at a 3 Nm torque - crosswise and evenly! Use Loctite.

7 Commissioning, network access and visualization

The camera is configured via the device's own website, the video stream can be accessed via RTSP or you can integrate the camera into your video management system using the ONVIF protocol.

7.1 Network access

The camera obtains an IP address via DHCP. If there is no DHCP server on the network, the **default IP address is 192.168.1.10**

Default username: **admin**
Default password: **admin**

Without a DHCP server, please add multiple cameras to the network one after the other to avoid conflicts due to identical IP addresses.

To find out the IP address of the camera assigned via DHCP, you can display or assign it using the **eneo Site Manager**.

7.2 eneo Site Manager - assigning the IP address

Download the eneo Site Manager here:
https://eneo-security.com/en/eneo-site-manager.html

The eneo Site Manager automatically detects cameras present in the network and displays their IP addresses in a device list. The EC-912-1 has the designation “ISM-72M2713W0A”.

If necessary, you can also assign a static IP address to the camera. To do this, select the camera in the list, right-click to open the context menu and then the network settings. De-activate the DHCP checkbox and set the desired IP address.

7.3 Web interface, configuration and control

Enter the camera's IP address in your web browser and open the web interface. By automatically redirecting to https://... you may receive a message that the connection is not secure or private. Please confirm opening the website using the “Advanced” button.

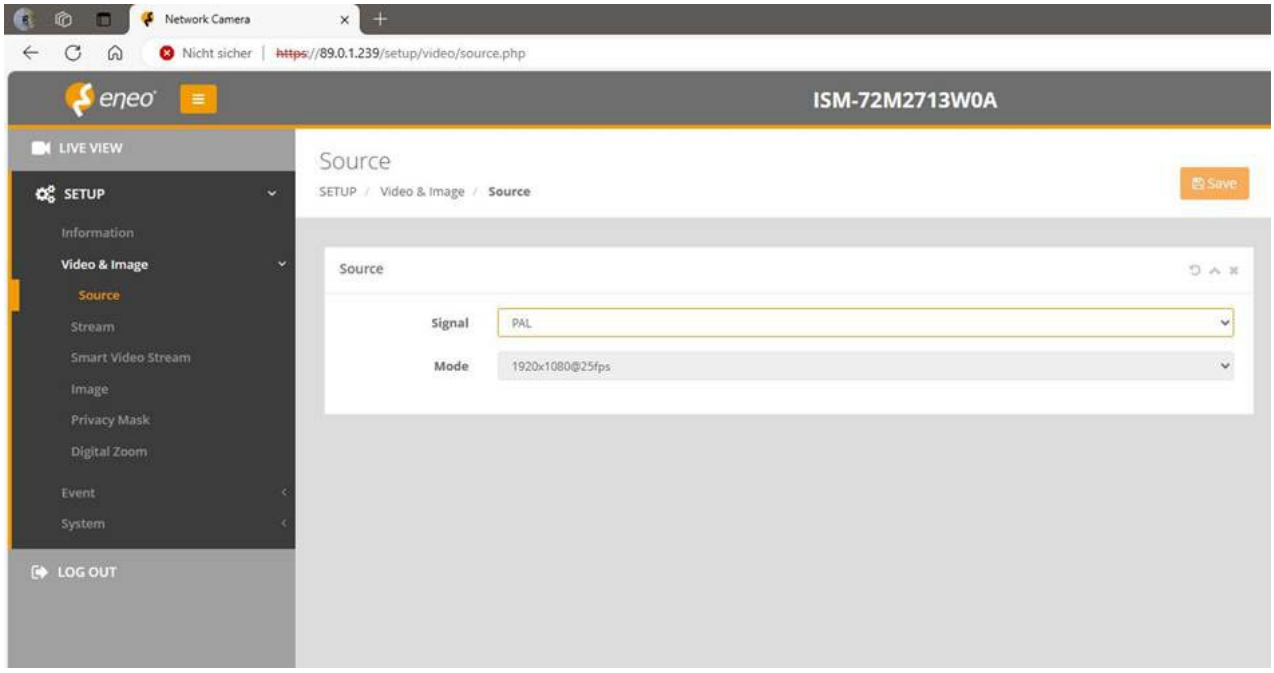
Default username: **admin**
Default password: **admin**

The web interface is intuitive and offers a variety of configuration options. Detailed documentation on the web interface can be found in the eneo operating instructions:

https://eneo-security.com/en/ism-72m2713w0a.html

234669_en_short_man.pdf (eneo-security.com)
234669_en_man.pdf (eneo-security.com)

When delivered the EC-912-1 is set to the applicable network frequency.
PAL = 50Hz (Europe) / NTSC = 60Hz (USA)



7.4 Visualization, RTSP video stream

The camera's video stream can be visualized via the following addresses:

RTSP
rtsp://<user>:<password>@<ip>:554/1/stream1
rtsp://<user>:<password>@<ip>:554/1/stream2
rtsp://<user>:<password>@<ip>:554/1/stream3

Example:
rtsp://admin:admin@192.168.1.10:554/1/stream1

JPG (Stream 3)
http://<ip>/cgi-bin/snapshot.jpg

MJPG (Stream 3)
http://<ip>/cgi-bin/jpegpush.cgi

7.5 ONVIF, VMS-Integration

The camera can be integrated into your video management system (VMS) via ONVIF Profile S and Profile T. We recommend AXIS Camera Station or ONVIF Device Manager for easy configuration.

8 Maintenance / Modification

The applicable regulations for the maintenance and servicing of electrical devices in potentially explosive atmospheres must be adhered to.

The required maintenance intervals are specific to the individual devices. The operating company has to determine these intervals depending on the application parameters. The maintenance tasks especially include examination of parts on which the ignition protection depends (e.g., proper condition of the casing, seals and cable entry points). If maintenance measures are necessary they have to be initiated and/or executed.

Repairs may only be carried out with original parts of the manufacturer. Damaged pressure-resistant housings have to be replaced completely. In case of doubt, send the part in question back to R. STAHL.
Reparations concerning the explosion protection must only be carried out in accordance with nationally applied regulations by the manufacturer or by an authorised electrical technician authorised by the manufacturer. Rebuilding of or alterations to the devices are not permitted.

9 Disposal / Recycling

When disposing of the device, nationally applicable regulations must be observed.
This Document is subject to alterations and additions.

10 Drawings & 3D models, certificates and further documentation

All drawings, 3D models, certificates and other information are available in the download area of the product page of the manufacturer.

If you wish additional technical information, please contact us at
support.dehm@r-stahl.com

11 Notes