

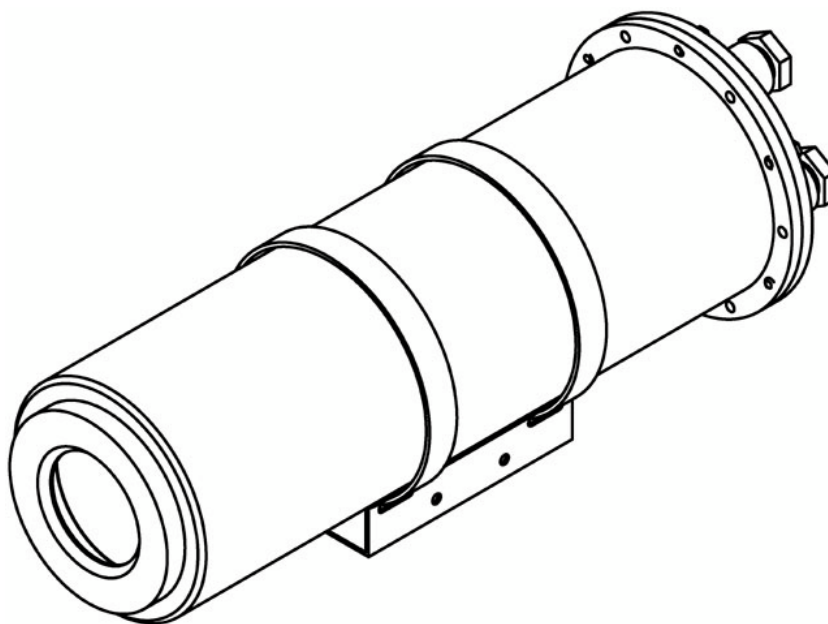


Ex marking: Exd II CT6 (H<sub>2</sub>) / EExd II CT6

Ex certificate: CNEx05.0222

Nemko 05ATEX1209

License: XK06-123-00251



## **Veilux SVEX-T100 Explosion Proof Camera Housing**

# **MANUAL BOOK**



## SAFETY NOTES

1. Please carefully read the Manual Book before your operation.
2. Please shut off before maintenance and repair.
3. Do not open camera body under too much humidity, otherwise the humid air getting into camera inside cannot easily vaporize because of good sealing of camera flameproof, and this humidity may damage camera spare parts and damage picture quality of camera.
4. Please connect cables correctly according to the Manual Book.
5. Pay attention to protect the flameproof surface of camera while install or un-install camera.
6. Please do not break up or reconstruct the product.

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## 1. BRIEF

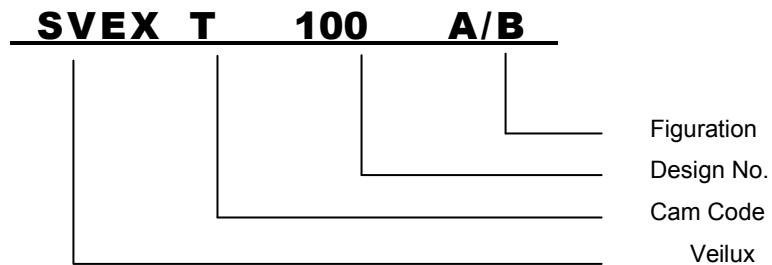
This **SVEX-T100 EXPLOSIONPROOF CAMERA HOUSING** as a new monitoring equipment adopts advanced production techniques and matured quality management system to make its quality, performance and appearance a leading position in explosion proof monitoring products. This camera housing owns advantage of small volume, light weight and easy installation features.

Strictly according to European Directive EC/94/9 and EN50014, Standards of GB3836.1-2000 GB3836.1—2000 Electrical apparatus for explosive atmosphere: General requirements, GB3836.2-2000 Electrical apparatus for explosive atmosphere: Flameproof „d” and GB12476.1-2000 Electrical apparatus for explosive dust: Using enclosure and limiting surface temperature for protecting electrical apparatus Chapter 1: Technical requirements, this camera owns advantage of small volume, light weight and easy installation features and could be used in petroleum, chemical industry, jetty, port, mine, space, army and foodstuff area.

SVEX-T100 EXPLOSIONPROOF CAMERA HOUSING has two specifications: the standard one which could be installed zoom lens camera, and the smaller one which could be installed focus lens camera or PTZ camera.

## 2. TECHNICAL DATA

### 2.1 Type Code



### 2.2 Certificate

Ex Mark	Exd II CT6 (H2) / EExd II CT6
Ex Certificate	CNEX05.0222 / Nemko 05ATEX1209
License	XK06-123-00251

### 2.3 Model

SVEX-T100A	Explosionproof camera housing, standard size
SVEX-T100B	Explosionproof camera housing, smaller size

### 2.4 Electric

Input voltage	220VAC / 24VAC / 12VDC, 50/60Hz
Input voltage range	±10%
Working current	≤0.5A
Camera power	12VDC or 220VAC/50Hz
Heater (Optional)	Work while it is under -10℃±5℃
Power consumption	≤20W (Heater included)
Electric connection	2-core cable for camera power 4-core cable for lens control Video cable for video signal output

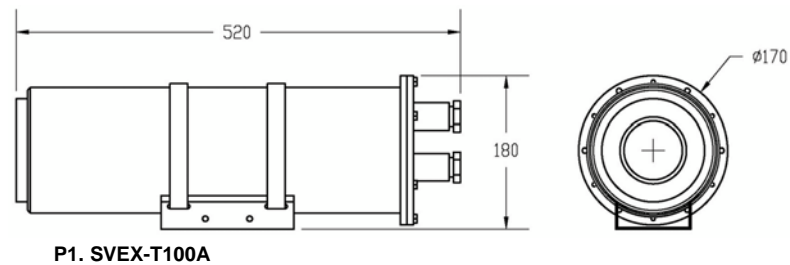
## 2.5 Mechanical

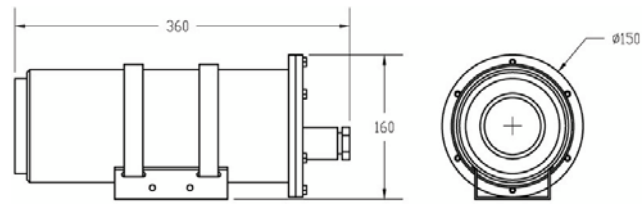
Material	Stainless 304
IP level	IP68
Outer dimension	
SVEX-T100A	520(L) x 180(H) x 170(W) mm
SVEX-T100B	360(L) x 160(H) x 150(W) mm
Inner dimension	
SVEX-T100A	260(L) x 90(H) x 70(W) mm
SVEX-T100B	190(L) x 70(H) x 50(W) mm
Viewing window	Thickness 10mm
Viewing window area	
SVEX-T100B	Φ66mm
SVEX-T100B	Φ60mm
Weight/Shipping weight	
SVEX-T100A	12Kg / 14Kg
SVEX-T100B	8Kg / 10Kg
Cable outlet	
SVEX-T100A	3
SVEX-T100B	2
Cable outlet screw thread specification	G-3/4"
Mounting	Electro motion pan tilt, half-fixed pan tilt, fixed bracket

## 2.6 Environmental

Air pressure	86~106KPa
Environment temperature	-25℃~+60℃
Relative humidity	U95%RH (+25℃)

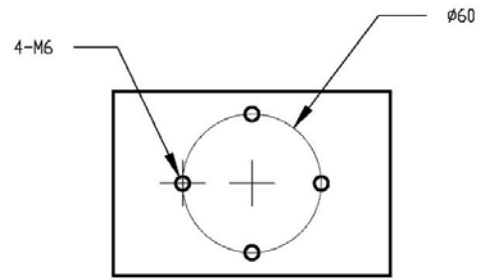
## 2.7 Dimension





P2. SVEX-T100B

## 2.8 Installation Size

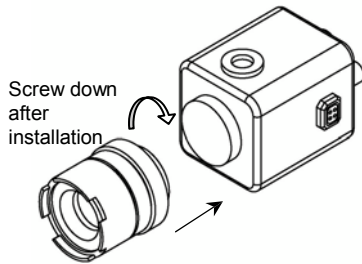


P3. Camera bottom fixing holes

### 3. INSTALLATION

#### 3.1 Installation of camera and lens

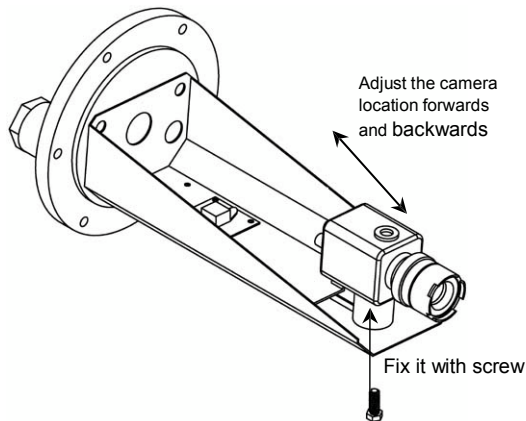
Before installation, please read the manual book carefully, to see if the CCD specification is accorded with the connection format; 1/3 inch CCD camera could install 1/3 inch or 1/2 inch lens, 1/2 inch CCD camera could only install 1/2 inch lens, if not, there will be dark corner at the edge of picture.



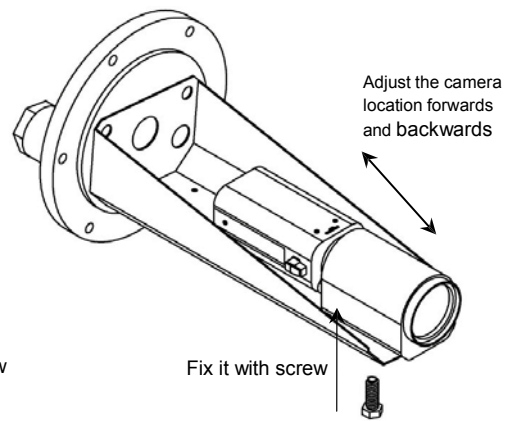
**P4. Lens installation**

After installation of lens and camera, adjust the back focus of camera; observe the definition of test card on the monitor.

Install the lens and camera on the drawer board of the camera housing, adjust its position .to ensure there is no dark corner on the edge of picture when it is put into the housing.



**P5. Install camera and focus lens on the drawer board**



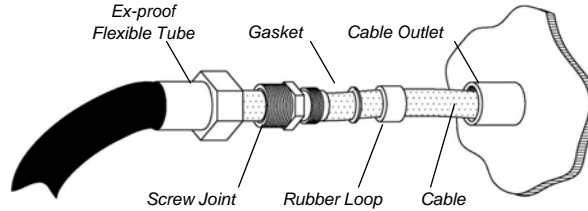
**P6. Install camera and zoom lens on the drawer board**



## 3.2 Cable Working

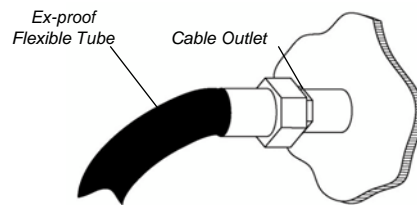
### 3.2.1 Use Ex-proof Flexibility Tube

- a. As Picture 7, put on the Ex-proof flexibility part to cable, remove the Tighten Nut, keep the original gasket and rubber loop (or use the spare parts).



PICTURE 7.

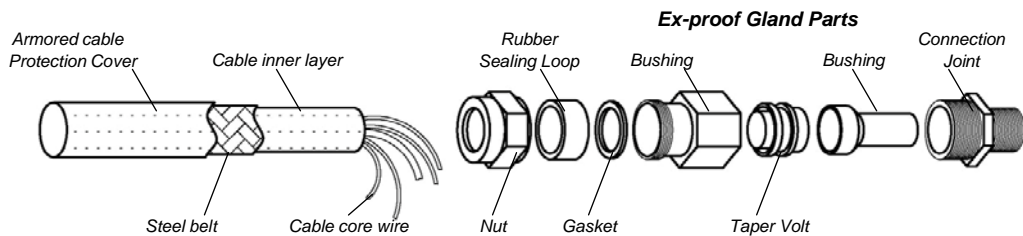
- b. As Picture 8, firstly turn tight the screw connection head and then tight the Ex-proof Flexibility Tube.



PICTURE 8.

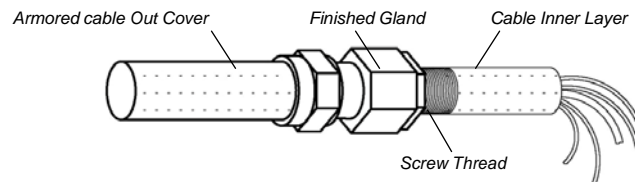
### 3.2.2 Use Armored Cable

- a. As Picture 9, remove proper length cable protection cover and cut off not used part.



PICTURE 9.

- b. As Picture 10, install Ex-proof Gland to Armored Cable, as the method please refer to Document for Installation of Ex-proof Gland.

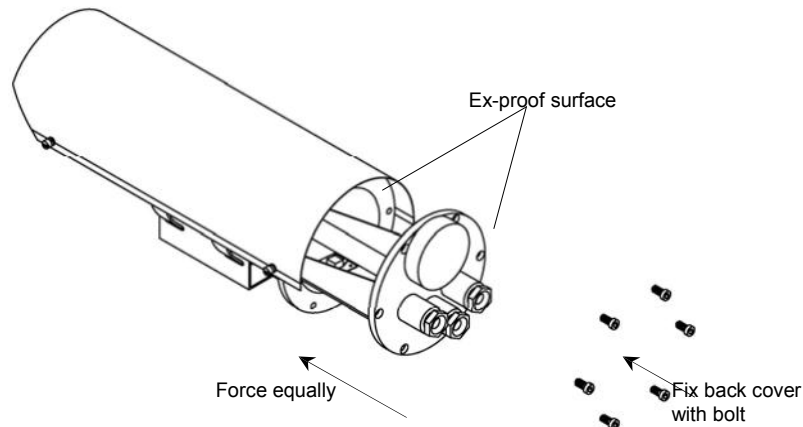


PICTURE 10.

c. Armored cable with ex-proof Gland could connect with any ex-proof equipment directly

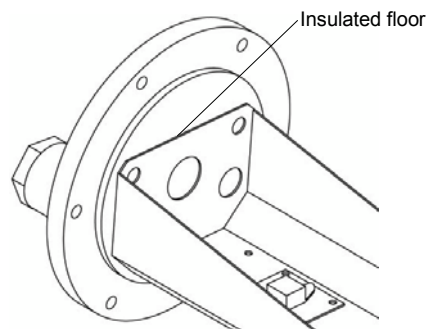
### 3.3 Camera housing installation

Due to the high ex-proof level, the explosion proof surface of housing should be rather rigor, when installed, pay special attention to the protection of ex-proof surface; As P9, back cover and back housing are all ex-proof surface. Do not nick when installed.



#### P11. Install the back cover carefully

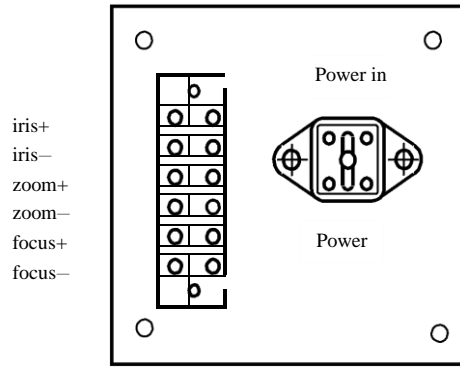
There is insulated shim between the drawer board and back cover, if you need to take down, be carefully of its insulated performance; after finishing installation, and test the insulated resistance, which must be higher than 100 MΩ. At the center of back cover, it is outside earthing bolt, which should be connected reliably with earth.



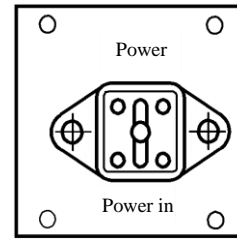
#### P12. Be careful of the insulated floor between back cover and drawer board

### 3.4 Terminal housing

See picture:

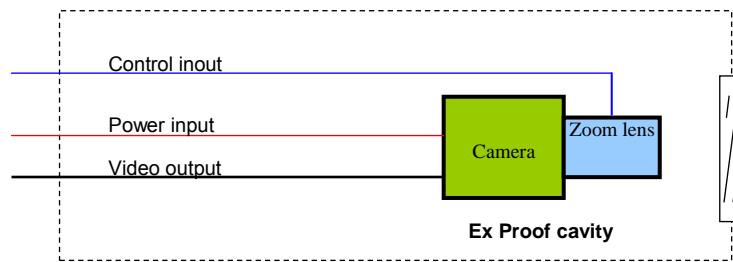


P13. SVEX-T100A terminal housing



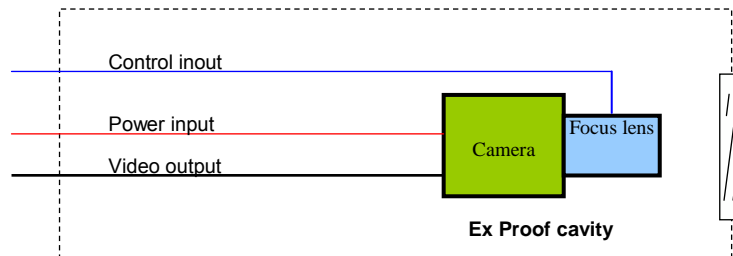
P14. SVEX-T100B terminal housing

### 3.5 Inside structure: SVEX-T100A



P15. SVEX-T100A inside structure

### 3.6 Inside structure: SVEX-T100B

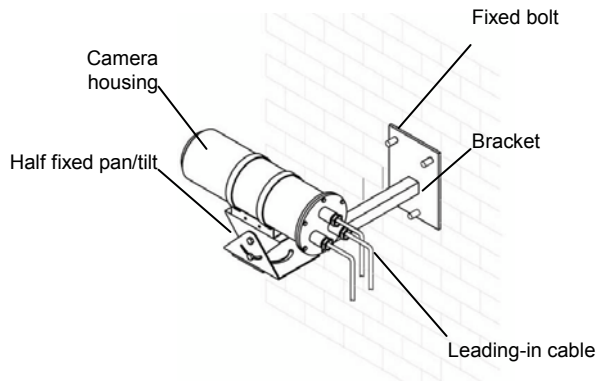


P16. SVEX-T100B inside structure

### 3.7 Install housing to electronic pan/tilt

Please refer to the manual book of electronic pan/tilt

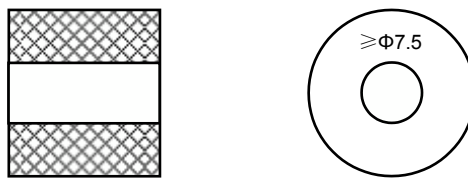
### 3.8 Install housing to fixed bracket



P17. SVEX-T100 bracket installation

### 3.9 Notes for installation

- „ Please carefully check before installation. Stop immediately while there is any unconformity
- a. If there is ex-marking license
- b. The ex-marking satisfy environment use
- c. All ex-proof and flameproof parts are complete enough for structure
- „ Choose the right cable, the diameter of leading-in cable matches with aperture of airproof glue loop.  
Choose the minimum cable outer diameter according to the airproof glue loop surface mark. Make sure that after tight the tighten nut, the gap between airproof glue loop and cable as well as the gap between airproof glue loop and leading-in settings meet the explosion proof requirements.
- „ Setup the nameplate and warning mark “Do not open while energized” on the obvious place of the product surface.
- „ When installing the connection, choose the airproof loop with inner hole  $\Phi 8$ . surface casting  $\geq \Phi 7.5$ . When selecting the outer diameter of cable, it is required to match with the inner hole diameter of airproof loop. As p 18:



P18. Airproof ring

## 4. FLAMEPROOF STRUCTURE

- „ Completely consider every special circs, when the explosive air getting into ex-proof structure, which may lead to explosion because of some reason and to confirm and ensure camera housing performance based on its structure gap, length and max temperature it will get to.
- „ Enclosure shall burden water pressure testing for 1.5Mpa for 10~12 seconds without leakage as pass, which is ordered in GB3836.2-2000.
- „ Camera surface temperature max shall not over +80℃ while it is working.
- „ The introduce setting of camera is tighten nut.
- „ Window glass adopts steel glass to burden Impact and Heat change testing.

## 5. TROUBLE SHOOTING

Problems	Reason	Method	Note
No image	Power off	Change the fuse	Eliminate by yourself
		Check the connection	Eliminate by yourself
	Signal off	Check the connection	Eliminate by yourself
	Camera error	Change the camera	Contact with manufacturer
	Lens error	Change the lens	Contact with manufacturer

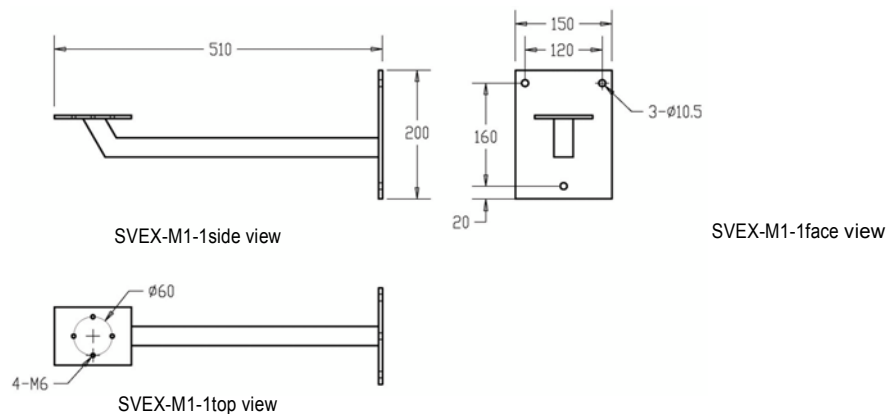
## 6. SHIPPING AND STORAGE

After package, without rain or snow fall directly to product, shipment could do by air or sea and store for one year under the environment of 0℃~+40℃, humidity < 90%.

## 7. ACCESSORIES INSTALLATION

When leaving factory, 8mm airproof rubber loops are installed inside of every camera outlet. 8mm bushing and tighten nut installed in the cable entry without cable. Provide airproof rubber loop with 10mm,12mm each and one drier. Additionally with copper made screw of 1/4" 6mm, 12mm each as accessories.

Other accessories: (Please purchase in addition)



## 8. QUALITY GUARANTEE

For any camera produced by Veilux, we promise a one year to repair warranty. During Guarantee period, we supply free service except following situations:

- „ User does not operate as manual book requires
- „ User un-install the whole product by themselves
- „ Lightning or Act of God

If there are additional agreements between Veilux and buyer, then agreements shall be strictly done

## 9. COMPANY COMMITMENT

- „ Veilux owns the final design changing and final specification rights and no responsibility to inform user.
- „ This manual book belongs to Veilux rights, without permits or any book inform, any company or private copy of whole or part of the book shall be prohibited.



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