

# To7 Series Ex-d Camera Enclosures



## Data sheet.

[www.samcon.eu](http://www.samcon.eu)

The **To7 housing series** is an extremely powerful camera housing concept suitable for hazardous areas and is certified according to European regulations (ATEX) as well as international ones (IECEx). The housings' certification comprises ATEX group I (mining) and die ATEX group II (gas & dust). In accordance with the requirements of the impact and free-fall tests (DIN EN 60079: 0 2012), the housings are suitable for fix and mobile (portable) applications!

### Modular design

The heart of the modular design is the four housing bodies which differ in diameter. Instead of executing the flange connections disposing of threads, we have decided for an execution with cylinder thread flanges. So no matter how you configure the housing – it is always extremely robust and safe!

### Media resistance and sealings

Due to the high-quality materials used for the T07 Series, it meets the requirements of a comprehensive media resistance list! It is also possible to freely select different stainless steel alloys to reflect the best execution for the applicable application. The particularly designed GYLON (PTFE) flat sealing does not only ensure the housing to be watertight (IP68) but also supports the resistance towards several chemicals.

### Temperatures

Also with regard to the allowed ambient temperature range the new housing series sets new standards as the ambient temperature can range between -60°C and +160°C!

### Our explosion proof housing - your device

You look for a tough but also elegant protection housing for your device series? You opt for a modular housing design but you do not want to make any compromises regarding the application possibilities? Our housing series might provide the solution for your problem. If you are interested in receiving additional information, please do not hesitate to contact us at any time – we are looking forward to assisting you further!

## Data.



### Explosion protection

Declaration of conformity:

DIN EN 60079- 0:2014, DIN EN 60079- 1:2015  
DIN EN 60079-31:2014



Marking acc. to Directive 2014/34/EU (ATEX):

Explosion protection (gas):

II 2G Ex db IIC Gb

Explosion protection (dust):

II 2D Ex tb IIIC Db

Explosion protection (mining):

I M2 Ex db I Mb\*



Marking acc. to IECEx:

Explosion protection (gas):

Ex db IIC Gb

Explosion protection (dust):

Ex tb IIIC Db

Explosion protection (mining):

Ex db I Mb\*



\* Not valid for T07-VA2.x.x.BOR5 and VA0.X.GER models

Temperature range:

-60°C to +160°C



### Mechanical characteristics

Housing material :

Stainless steel (corrosion resistant steel according to EN 10027-2)  
MNo.: 1.4404 (X2CrNiMo17-12-2), AISI 316L, (V4A), (standard)  
Further stainless steels upon request

Additional materials:

WNR.: 1.0330 (spring steel)  
PTFE with glass micro beads (GYLON® Style 3504 blue),  
Borosilicate glass (Illumadur 10 I-420) -(standard)-  
Silicone casting compound  
VMQ (silicone)

Protection level:

IP 68 (IEC / EN 60529)

Model:

VA0.1.K1.BOR

Dim. (w x h x d)/mm

48.0 x 48.0 x 127.0

Weight/g

500

Void volume/cm<sup>3</sup>

136

VA0.1.K1.GER

48.0 x 48.0 x 127.0

540

136

VA0.4.K1.BOR

48.0 x 48.0 x 172.0

600

200

VA0.4.K1.GER

48.0 x 48.0 x 172.0

600

200

VA1.2.K1.BORX

79.0 x 79.0 x 158.0

2200

480

VA2.0.K1.BORX

113.0 x 113.0 x 160.5

3600

1080

VA2.1.K1.BORX

113.0 x 113.0 x 210.5

4100

1520

VA2.2.K1.BORX

113.0 x 113.0 x 260.5

5100

1960

VA2.3.K3.BOR3

113.0 x 113.0 x 310.5

5900

2350

VA4.1K.BOR1

216.0 x 216.0 x 145.0

13660

3580

VA4.1K.P51

216.0 x 216.0 x 236.0

11300

4880

Quantity of cable glands:

VA0.X.K1.X 1x M20x1.5

VA1.X.K1.X 1x M20x1.5

VA1.X.K2.X 1x M16x1.5

VA2.X.K1.X 2x M20x1.5

VA2.X.K2.X 1x M20x1.5

VA2.X.K3.X 2x M20x1.5

VA4.X.K1 2x M20x1.5 + 1x M25x1.5

### Media resistance

General:

Acetone, alcohol, acetylene, ammonia, aniline, benzene, butane, chlorine, pressurized water, pressurized air, ethane, crude oil, fluorine, glycerin, sea water, methane, oils, phosphoric acid, propane etc. (excerpt)

Stainless steel:

MNo.1.4404:

Resistance against aggressive acids and also media containing chlorine (highly acid environments), not suitable for permanent sea water applications

### Sight glass

Dimensions:

VA0.x :

DxT = 40 x 10 [mm] D1= 35 [mm] (visible)

VA1.x :

DxT = 48 x 10 [mm] D1= 40 [mm] (visible)

VA2.x :

DxT = 80 x 10 [mm] D1= 72 [mm] (visible)

VA4.x :

DxT = 150 x 15 [mm] D1= 120 [mm] (visible)

# T07 Serie



## SAMCON

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VA1.2.K1.BOR Housing with roof,  
wall mount bracket and  
titan-screws



VA2.2.K1.BOR Housing with roof,  
wall mount bracket and  
titan-screws

