

To7 Series Ex-d Camera Enclosures



Data sheet.

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 two 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 +85° 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- 0:2012, DIN EN 60079- 1:2007
DIN EN 60079-31:2009



Marking acc. to RL94/9/EG (ATEX):

Explosion protection (gas):

II 2G Ex d IIC Gb

Explosion protection (dust):

II 2D Ex t IIC Db IP68

Explosion protection (mining):

I M2 Ex d I Mb



Marking acc. to IECEx:

Explosion protection (gas):

Ex d IIC T6 Gb

Explosion protection (dust):

Ex t IIC T80° C Db IP68



Temperature range:

-60°C to +85°C



Mechanical characteristics

Housing material :

Stainless steel (corosion resistant steel according to EN 10027-2)

MNo.: 1.4301 (X5CrNi18-10), AISI 304 (V2A) - (standard)-

MNo.: 1.4305 (X8CrNiS18-9), AISI 303

MNo.: 1.4401 (X5CrNiMo17-12-2), AISI 316, (V4A)

MNo.: 1.4404 (X2CrNiMo17-12-2), AISI 316L, (V4A)

MNo.: 1.4571 (X6CrNiMoTi17-12-2), AISI 316Ti, (V4A)

Additional materials:

WNr.: 1.0330 (spring steel)

PTFE with glass micro beads (GYLON® Style 3504 blue),

Borosilicate glass (IImadur 10 I-420) -(standard)-

Silicone casting compound (Silcoset 105 inkl. Cure Agent 28)

VMQ (silicone)

Protection level:

IP 68 (IEC / EN 60529)

Modell:

VA1.1.K1.X

Dim. (w x h x d)/mm

79.0 x 79.0 x 128.0

Weight/g

2000

Void volume/cm³

360

VA1.1.K2.X

79.0 x 79.0 x 141.0

2500

360

VA1.2.K1.X

79.0 x 79.0 x 157.0

2200

480

VA1.2.K2.X

79.0 x 79.0 x 171.0

2700

480

VA2.1.K1.X

113.0 x 113.0 x 210.5

4200

1520

VA2.1.K2.X

113.0 x 113.0 x 226.0

5500

1520

VA2.2.K1.X

113.0 x 113.0 x 260.5

5100

1960

VA2.2.K2.X

113.0 x 113.0 x 277.0

6400

1960

Maximum quantity of cable glands:

VA1.X.K1.X 2x M20x1.5 + 1x M16x1.5

VA1.X.K2.X 1x M20x1.5 + 1x M16x1.5

VA2.X.K1.X 2x M25x1.5 + 2x M20x1.5

VA2.X.K2.X 2x M25x1.5 + 1x M20x1.5

Media resistance

General:

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

Stainless steel:

MNo. 1.4301 (standard):

Water, steam (water), humidity, mild organic and anorganic acids, optimized corrosion resistance due to electro-polishing possible

MNo. 1.4401:

Increased roughness, optimized corrosion resistance, permanent resistance against sea water (offshore plants) and aggressive

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 and angle of view:

VA1.x :

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

alpha = 100° (max. opening angle)

VA2.x :

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

alpha = 120° (max. opening angle)

To7 Serie



SAMCON

Prozessleittechnik GmbH

Schillerstrasse 17
D-35102 Lohra-Altenvers

info@samcon.eu
T: +49 6426 9231-0
F: +49 6426 9231-31



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

