

General description

The hatch is a standardized weather tight hatch. It is supplied as a completely finished and tested hatch; ready to weld in. It is equipped with the well-known Winel Musketeer closing mechanism. The hatch can be executed in 4 base models.

- 4H11.1. No opening support
- 4H11.2. Gas spring
- 4H11.3. Spring loaded
- 4H11.4. Counterweight

Class society approval

The design and manufacture of the hatches is in full compliance with the class regulations regarding hatches and can be individual approved by all major classification societies. Which rules and regulations are applicable depends on the type of vessel, classification society and the position on the ship. We assume that the approved door & hatch plan covers the approval to place this door on that specific position.

Specification

Cover:

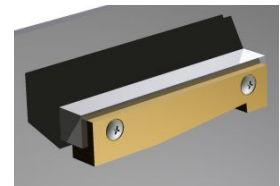
8 mm plate with 45x20mm EPDM shore 45 seal.
Welding: Continuously

Coaming:

8 mm steel plate material, Round corners ($r=100$), the gasket side is rounded ($r=2$) to prevent damaging of the seal. Stainless steel hatch stoppers are placed on the position of the closing points.

Operation:

Central closed Musketeer system with stainless steel closing points. Self braking cleats operate with single action on the handle. Light operation due to 1:33 force transmission. Cleats are fully adjustable. The brass wedges are placed inside the frame and are in the clear opening of the hatch (size: 20 mm).



Closing points:

The standard hatch is equipped with three closing points.

Bearing material:

Orkot® Marine Bearings are manufactured from a unique synthetic composition incorporating solid lubricants for dry running to ensure outstanding wear life. Virtually no swelling in sea water and very low thermal coefficient of expansion provide dimensional stability in arctic and tropical seas. They do not corrode or promote corrosion of the housing and tolerate both edge loading and misalignment.



4H11.1 Qline hatch, Weather tight, R=100 corner, Winel musketeer, no opening support

The two hinges are adjustable in height. Adjusting can be done with standard tools. The hinge bracket and foundation is made of stainless steel. The hinge points have a fixed turning point. In case of rectangular clear opening the hinge side needs to be specified.



4H11.2 Q line hatch, Weather tight, R=100 corner, Winel musketeer, gas spring

The two hinges are adjustable in height. Adjusting can be done with standard tools. The hinge bracket and foundation is made of stainless steel. The hinge points have a fixed turning point. In case of rectangular clear opening the hinge side needs to be specified. Two steel gas springs are placed inside the hatch. One gas spring is connected to the hatch cover with a fixed point and the other gas spring is equipped with a bracket with an elongated hole. Advantage of the system is a balanced opening force.

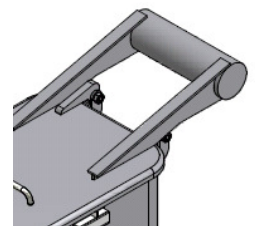
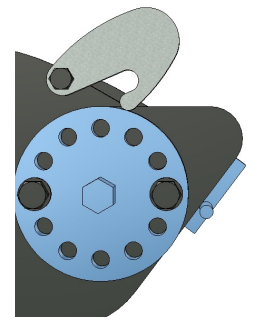


4H11.3 Q line hatch, Weather tight, R=100 corner, Winel musketeer, spring loaded

The spring loaded hinges is built from steel plate material. The central axle and the spring force adjustment rings are made of stainless steel. Adjusting can be done with standard tools. By removing the four bolts in the force adjustment rings and turning the central axle with a torque wrench, you can adjust the torque force of the spring. In open position the spring systems is creating an extra open hold force on the hatch cover to keep the cover in open position (hatch open hold function). In open situation the gravity and the torque force keeps the hatch in open position consequence is that closing force of the cover in the first 0-10 degrees is higher.

4H11.4 Q line hatch, Weather tight, R=100 corner, Winel musketeer, counterweight

The two hinges are adjustable in height. Adjusting can be done with standard tools. The hinge bracket and foundation are made of stainless steel. The hinge points have a fixed turning point. In case of rectangular clear opening the hinge side needs to be specified. On the cover two brackets with a counter weight is mounted. The counter weight optimizes the opening force. The hatch opens 95 degrees. During closing of the hatch cover the gravity force of the counter weight is giving a higher initial force to close the hatch cover. This is reduced after the weight of the cover is lowering the force. Material of the counterweight is steel. Open position is limited by the counter weight touching the coaming



Available sizes:

Height:	Minimum height	200mm, maximum height	1000mm
Clear width:	Minimum width	600mm, maximum width	1000mm
Clear length:	Minimum length	600mm, maximum length	1000mm

Surface treatment:

Shot blasted SA2,5 and primed with one layer of Hempel shop primer E1527C, minimal 20 Mu, Cleating rods, cleats, handle and mounting materials: stainless steel.

Packing

Wooden pallet.

Available article codes

Please specify article codes when asking for quotation or ordering:

Code	Description
4H11.1	Qline hatch, Weather tight, R=100 corners, Winel musketeer, no opening support
4H11.2	Qline hatch, Weather tight, R=100 corners, Winel musketeer, gas spring
4H11.3	Qline hatch, Weather tight, R=100 corners, Winel musketeer, spring loaded
4H11.4	Qline hatch, Weather tight, R=100 corners, Winel musketeer, counter weight
.	<i>Separation sign</i>
1	Steel cover
2	Aluminium cover
.	<i>Separation sign</i>
600-1000mm	Clear width: (hinge side)
600-1000mm	Clear length: (non hinge side)
200-1000mm	Height: (note: counterweight hatch is minimum height 600mm)

Example code: 4H11.21.800x600x600

Qline hatch, Weather tight, R=100 corners, Winel musketeer, gas spring, Steel cover, Clear width(hinge side) 800 mm, Clear length 600 mm, Clear height 600 mm.

Specify options :
 Specify class society :
 Quantity :

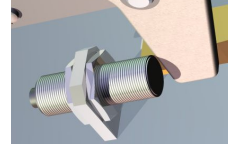
 **Available options****Seal groove double coated (article code 3H11.001):**

Seal groove double coated white CM7566 & seal glued into the groove.

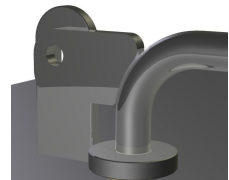
Close indication (article code 3H11.002):

Proximity switch, Siemens M18, IP68 3RG4013 with 2 meter cable and welding bracket.

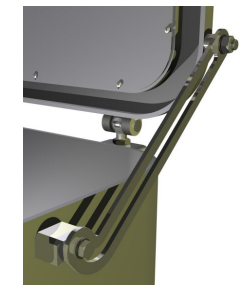
(Loose supplied)

**Locking pin into the cleating rod (article code 3H11.003):**

A pin locking device is added on the cleating system. A stainless steel pin is mounted on the lever of the musketeer mechanism. By using this pin the musketeer system is locked from the inside of the door.

**Hasp & Eye on the handle (article code 3H11.004):**

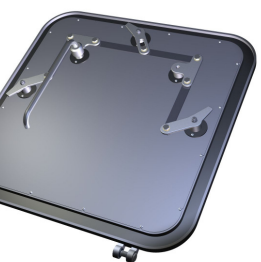
Added on the cleating system is a pin locking device. A stainless steel pin is mounted on the lever of the musketeer mechanism. By using this pin the musketeer system is locked from the inside of the door.

**Hardcopy installation, operation and maintenance manual (article code 3H11.005):**

Hard copy in English language

Hatch cover open holder (article code 3H11.006):

A stainless steel hatch cover open holder is placed on the outside of the hatch. When the hatch cover is opened the open holder keeps the hatch in open position. To close the cover the open holder needs to be lifted up. The open holder is standard placed on the right side of the hatch.

**Acoustic insulation (article code 3H11.007):**

An insulation system is added on the cover between the stiffeners as described in the product sheet TD001. The insulation is covered by a 2 mm galvanized cover plate. The closing mechanism is visible.

Thermal insulation (article code 3H11.008):

An insulation system is added on the cover between the stiffeners as described in the product sheet TD003. The insulation is covered by a 2 mm galvanized cover plate. The closing mechanism is visible.