

### **/// Musketeer gas spring hatch Q-line (Article code 4H13.2)**

The Musketeer gas spring hatch is a standardized water 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.

### **/// Class society approval**

The design and manufacture of the hatches is in full compliance with the class regulations regarding water tight 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 steel, 2 stainless steel adjustable hinges,  
4 closing points and 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 galvanized 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:**

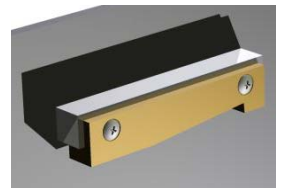
The standard hatch is equipped with four closing points.

#### **Hinges:**

The 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.

#### **Gas spring:**

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.



#### **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.

#### **Available sizes:**

Height: Minimum height 200mm, maximum height 800mm  
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.

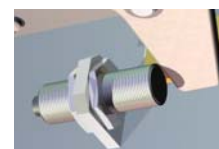
#### **Installation, operation and maintenance manual:**

Digital supplied on CD ROM in the English language (pdf format).

#### **Available options**

##### **Seal groove double coated (article code 3H13.001):**

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



##### **Close indication (article code 3H13.002):**

Proximity switch, Siemens M18, IP68 3RG4013 with 2 mtr cable and welding bracket. (Loose supplied)

##### **Locking pin into the cleating rod (article code 3H13.003):**

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 3H13.004):**

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 3H13.005):**

Hard copy in English language

##### **Hatch cover open holder (article code 3H13.006):**

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 3H13.007):**

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.



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**Thermal insulation (article code 3H13.008):**

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.

**/// Packing**

Packed according our standard packing instructions, on a wooden pallet.

**/// Available article codes**

Please specify article codes when asking for quotation or ordering

4H13.2. W x L x H =

Musketeer gasspring hatch, Steel cover, W x L x H= clear width X clear length X clear height in mm

**Example code: 4H13.2.600x600x600**

In case of rectangular clear width please specify hinge side as follows

Example code: 4H13.2.HS600x800x600, the hinge side (HS) is the short side

Specify options	:	
Specify class society	:	
Specify water pressure	:	Mwc
Quantity	:	