

Specification

Description

Safebolt assembly including eyebolt with pivot pin, retaining collar and captivated low profile safebolt handnut

Size

Eyebolt: 3/4" BSW eyebolt with Ø 16mm eye, available length from 66mm to 175.3mm (Dimension C)
 Safebolt handnut & retaining collar: 3/4" BSW
 Pivot pin: Ø 16mm

Materials

304 stainless steel

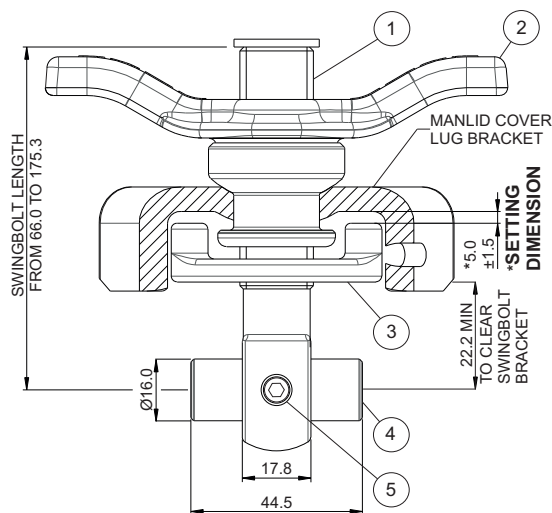
Options

Eyebolt: 3/4" eye - refer to Fort Vale
 Handnut: refer to the Range table

Special instructions

The customer must set the retaining collar and weld it in the correct position. Refer to the procedure below.

Section View: 496/4XXX



Range: Standard Safebolt Assemblies

Handnut Description	Part No.
Low profile stainless steel *Note	496/4XXX
Low profile anti-galling - stainless steel with brass thread insert *Note	496/EXXXSB
Extended anti-galling - stainless steel with brass thread insert *Note	496/CXXXSB

Parts List: 496/4XXX

Item	Description	Part No.
1	3/4" BSW eyebolt, 16mm eye *Note	540/0XXX
2	Low profile st.st. safebolt handnut	490/0305
3	Retaining collar	701/0050
4	Ø 16mm pivot pin	10913SS
5	M8 grubscrew	5111-002

NOTE: The eyebolt length changes the Part No.

IMPORTANT PRECAUTIONS

A safebolt must be installed opposite the manlid hinge. The safebolt retaining collar must be set by the customer. This includes a safebolt that is supplied as part of a manlid assembly and a safebolt supplied as a spare part.

How to set the safebolt retaining collar:

- With the safebolt assembly installed in the neckring lug bracket, start with the retaining collar at the bottom of the swingbolt thread. Engage the safebolt assembly with the manlid cover lug bracket.
- Do not tighten the handnut, there must be no compression on the seal.
- Measure the SETTING DIMENSION (Refer to the Section View).
- Disengage the safebolt assembly from the cover lug and move the retaining collar up to the correct position.
- Engage the safebolt assembly with the cover lug bracket again. Check that the SETTING DIMENSION is satisfactory. Adjust the position of the retaining collar if necessary.
- When the SETTING DIMENSION is satisfactory, tack weld the retaining collar to the eyebolt.
- The safebolt retaining collar is now set.

CAUTION: If you change the seal material type in your manlid cover, you must check the setting dimension again. It is possible that you must change the position of the retaining collar to be compatible with the new seal.

Please read the User Manual on page 2.

Overview

A safebolt is a special fastener that can be used on all standard manlid assemblies. It is a safety device that permits the controlled release of residual tank pressure before the manlid is opened.

If there is residual tank pressure, the manlid cover can open suddenly with force which can cause serious injury to the operator. A safebolt lets the operator break the seal between the manlid cover and the neckring while it holds the manlid cover in a retained position, thus preventing the risk of injury.

Precautions

Install the safebolt next to the manlid cover handle, opposite the hinge. Obey the SETTING DIMENSION - refer to the Section View on page 1.

When you operate a manlid assembly installed with a safebolt you must:

- release the safebolt last when you open the manlid.
- fasten the safebolt first when you close the manlid.

WARNING: Before you try to open the manlid, make sure that the vessel/system pressure is at zero. When all the vessel/system pressure is released, use an approved method to release all residual pressure before you loosen any fasteners. If you do not release all pressure, the manlid cover can open suddenly with force which can cause serious injury or death. Open the fasteners gradually in a diametrically opposite sequence.

Operation

This information is for general guidance only. For more information, please refer to our Installation & Operating Instructions - Hinged Manlid Assemblies.

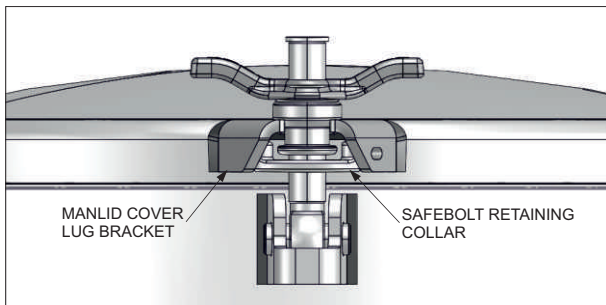


Figure 1 - Closed Position

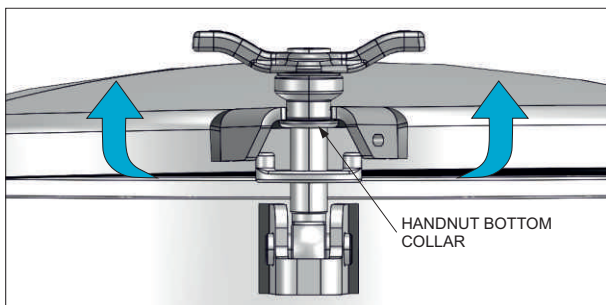


Figure 2 - Retained Position

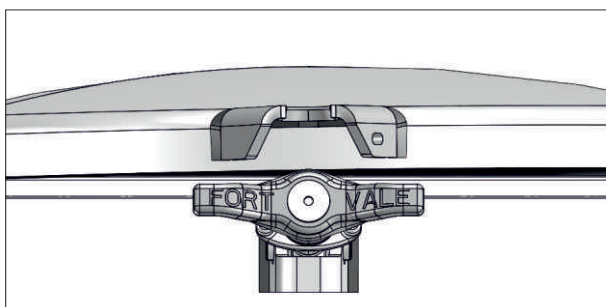


Figure 3 - Open Position

Closed Position

When the safebolt is in the closed position, the safebolt keeps the manlid cover closed. Refer to Figure 1.

If the handnut becomes loose accidentally, the safebolt retaining collar keeps the eyebolt in the vertical position. This prevents the manlid cover from opening suddenly if there was an increase of pressure in the vessel.

Retained Position

To operate the safebolt, loosen the handnut and keep the safebolt in the vertical position. When the handnut is loosened, the handnut bottom collar lifts the manlid cover up. This breaks the seal between the manlid seal and the neckring but keeps the manlid cover in a safe "retained position" to prevent it from opening suddenly. Refer to Figure 2.

Make sure that all residual pressure is released before you move the safebolt to the open position.

Open Position

To put the safebolt in the open position, turn the handnut until it touches the top retaining washer on the eyebolt. This gives clearance between the safebolt retaining collar and the manlid cover lug bracket. You can then rotate the safebolt assembly away from the manlid cover. Refer to Figure 3.

If the safebolt is difficult to rotate away, use the manlid cover handle to lift the manlid cover by a small amount.