

KVA

VALVE INTERLOCK

MANUAL

HVL/LVL

KVA Valve Interlocks

Introduction

This installation manual provides instructions on Installation, Setting, Operation and Maintenance of BTS Valve Interlocks. For additional information, please contact us.

Technical Data

Material (Lock Assembly)	316 stainless steel
Temperature rating	– 40 to + 80 °C
Application areas	Shipbuilding Offshore Plant Oil & Gas Plant Petro Chemical Plant Power Plant
Ambient atmosphere	Industrial environment
Installation Position	Horizontal / Vertical
Weight (dependent on handwheel or lever)	
HVL	5.4 kg
LVL	4 kg

Warning (Reference : Product Liability)

If the victim proves that the following, it is assumed that the product was defective at the time of supply and the damage was caused by the defect. However, it does not apply if the manufacturer proves that the damage has been caused by other reason.

1. The damage occurred while the product was used normally.
2. The fact that damages under subparagraph 1 resulted from causes which fall under the substantial control area of the manufacturer.
3. The fact that damages under subparagraph 1 do not normally occur without a defect of the product.

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Installation

Attention

It is necessary to confirm that the valve to be installed can be operated arbitrarily by the operator and that The valve interlock possible to obtain permission. The valve interlock installer must have equipment and clothing for working at the site where the valve is installed.

The Valve Interlock must be installed by a competent and qualified person who has read and understood these installation instructions.

HVL (Handwheel Valve Lock)

1. Close or open valve fully and remove handle and handle nut.
2. After inserting the anchor on the valve's Yoke part, mount the lock adapter on the dive nut and fix it with Handle nut or customized nut.



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3. Mount the lock assembly to the lock adapter and fasten the anchor and handle with the screw.
4. Rotate Holder and Lock Adapter of lock assembly in 120° direction and fix it completely with screws.



5. Remove the setting cover from the lock assembly. After checking whether the handle is fully closed, fasten the left two set screws completely in the middle position and check if the left open key is released..
6. Check that the handle is fully open and fasten the two right set screws completely in the middle position. Finally, check whether the right key is released and the left key is trapped.



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LVL (Lever Valve Lock)

1. After the valve is fully closed or open, remove the lever from the stem.
2. Mount the anchor on the valve top flange and fasten it with the fixing screw



3. Fasten the Lock Adapter to the Valve Stem with the original washer & screw or customized screw.
5. Mount the lock assembly on the lock adapter and fasten it with anchor. Rotate the lever 45° and fix it completely with screws.



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Operation

Attention

Do not use excessive force or tools to insert or remove the key when operating the Valve Interlock.
Once installed, do not remove the Fixing Screw, Set Screw, Nut, and Fixing Pin etc. Future safety-related functions are no longer guaranteed.

1. The two keys must be correctly inserted in the lock assembly to open and close the valve.
2. When the valve is fully closed, the open key on the right is trapped and the close key on the left is freed.
3. When the valve is fully opened, the close key on the left is trapped and the open key on the right is freed.
4. After removing the key, check that the valve interlock is properly locked by turning the handwheel or lever.

Maintenance

Attention

Adjust check frequency according to the environment of application site.
In case of defects being detected please contact BTS for further actions.

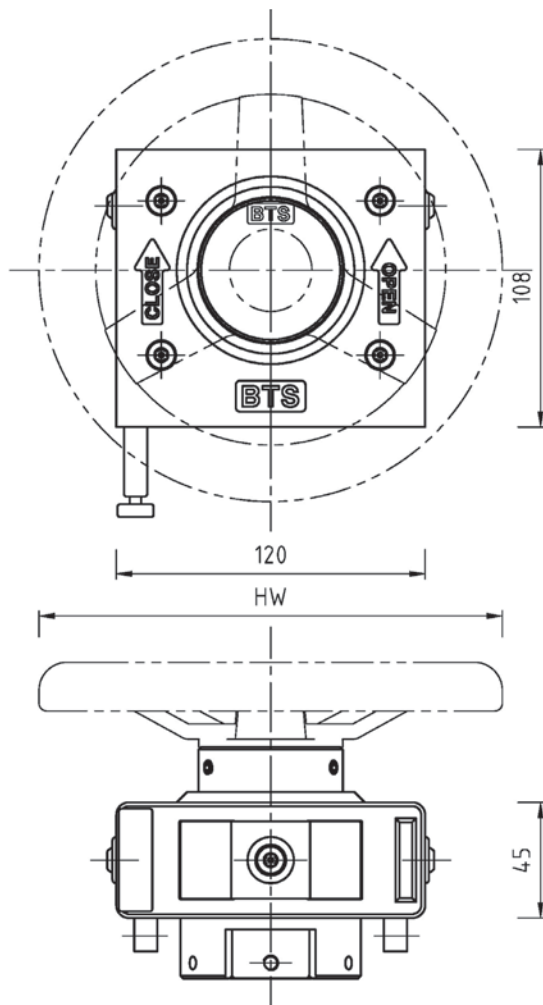
Periodic visual check by field supervisor and regular maintenance such as applying oil or grease to lock assembly is not necessary. If you find any other problem, such as a defect, you can contact the BTS for further action.

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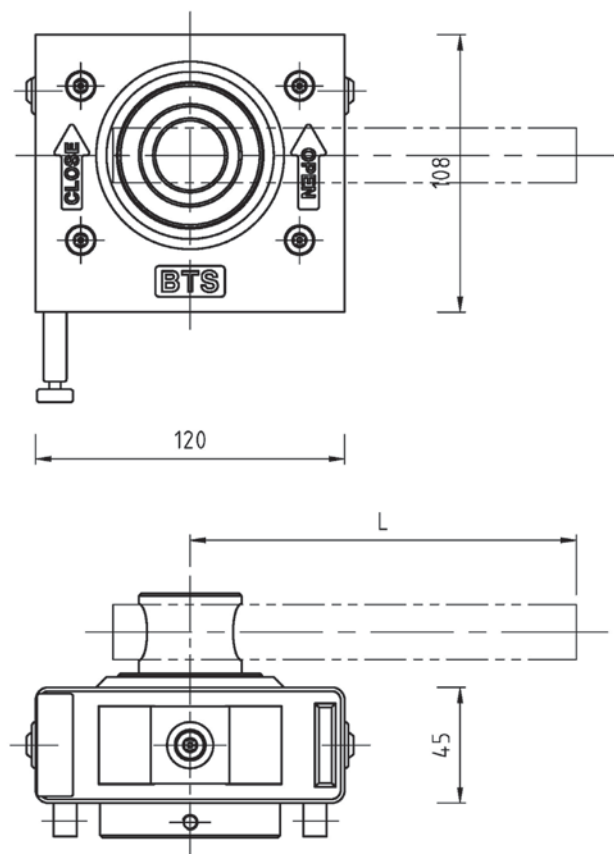
Dimensions (unit : mm)

HVL



HW : 180/280/380/500/ Optimum Size

LVL

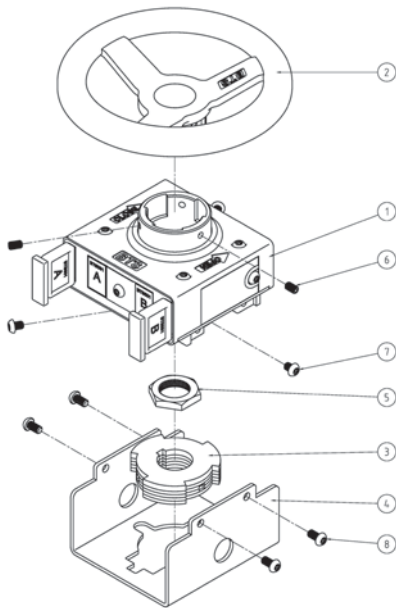


L : 150/250/350/450/550/650/ Optimum Size

HVL/LVL

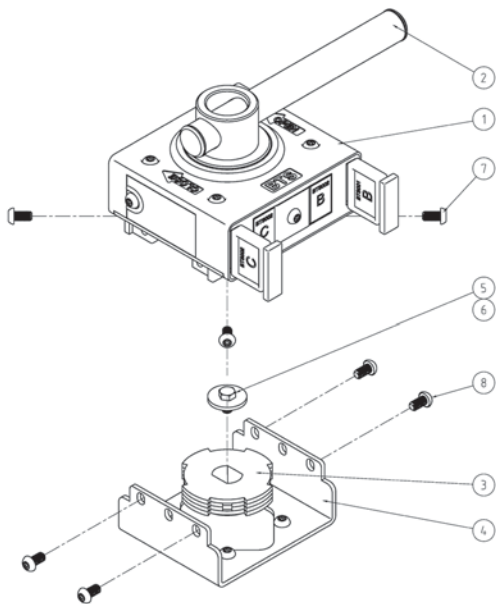
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HVL PARTS LIST



ITEM	DESCRIPTION	Q'TY	MATERIAL
1	LOCK ASSEMBLY	1	316 SS
2	HANDLE	1	CS/SS
3	LOCK ADAPTER	1	SS
4	ANCHOR	1	SS
5	NUT	1	SS
6	HANDLE SCREW	3	SS
7	ADAPTER SCREW	3	SS
8	ANCHOR SCREW	4	SS

LVL PARTS LIST



ITEM	DESCRIPTION	Q'TY	MATERIAL
1	LOCK ASSEMBLY	1	316 SS
2	LEVER	1	CS/SS
3	LOCK ADAPTER	1	SS
4	ANCHOR	1	SS
5	SCREW	1	SS
6	WASHER	1	SS
7	ADAPTER SCREW	4	SS
8	ANCHOR SCREW	4	SS



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