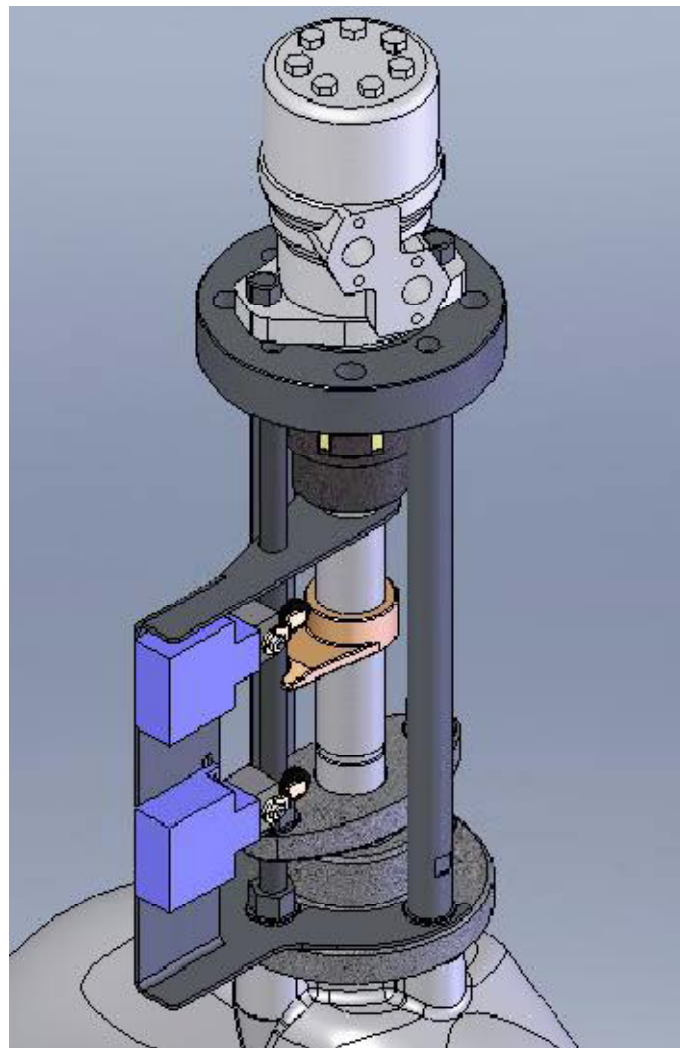


Installation and operating manual

Hydraulic Actuator (Hull mounted) for LK Gate Valve DN500



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1. General information

This manual gives instructions on installation of the Hydraulic Actuator Kit together and shall be read carefully before installation is started. It is in the responsibility of the installer to ensure that the work is carried out in a satisfactorily manner, approved materials are used and that the installation meets applicable rules and regulations.

Regional safety requirements must be applied and observed both at installation and maintenance as well as in repair work.

It is the installer/owners responsibility to define responsibility and competence of personnel for the installation. In case of problems which cannot be solved from information in this manual the supplier of the actuators shall be contacted.

The notes and warnings defined in following chapters must be followed as this information concerns your safety.

The manufacturer reserves the right to introduce technical modifications at any time.

Installation of hydraulic power pack and connection of pipes to the actuator is not included in this manual.

2. Safety precautions

2.1. Significance of symbols



Warning of general danger.

2.2. General warnings



Always use protecting glasses when there is risk for splinters.
Be sure that the hydraulic pressure is correctly adjusted before starting.
Make sure that the limit switches are properly adjusted before taking the valve into use.
Keep away from rotating parts when the motor is activated by the hydraulic system.
Protection of rotating parts is to be arranged by the installer.

3. Components in kit 62539

Part name:	Art.No.	pcs
Hydraulic motor:	90744	1
Flange:	62542	1
Flexible coupling:	62519	2/2
Bracket	62523	1
Limit switch:	81363	2
Bolt's:	M6S M12 X 40 A4-70	3
	M6S M5 X 12 A4-70	4
Washer's:	SRKB 12,5X35X2 A2-70	1
	BRB 5,3X10X1,2 A4-70	4
Nut:	DIN 985 M5 A4-70	4
Stop screw:	P6SS M8X15	2

4. Before mounting

The welding flange 62542 (fig.1) is made in SS EN S235JR steel plate and supposed to be welded into the hull of the ship.

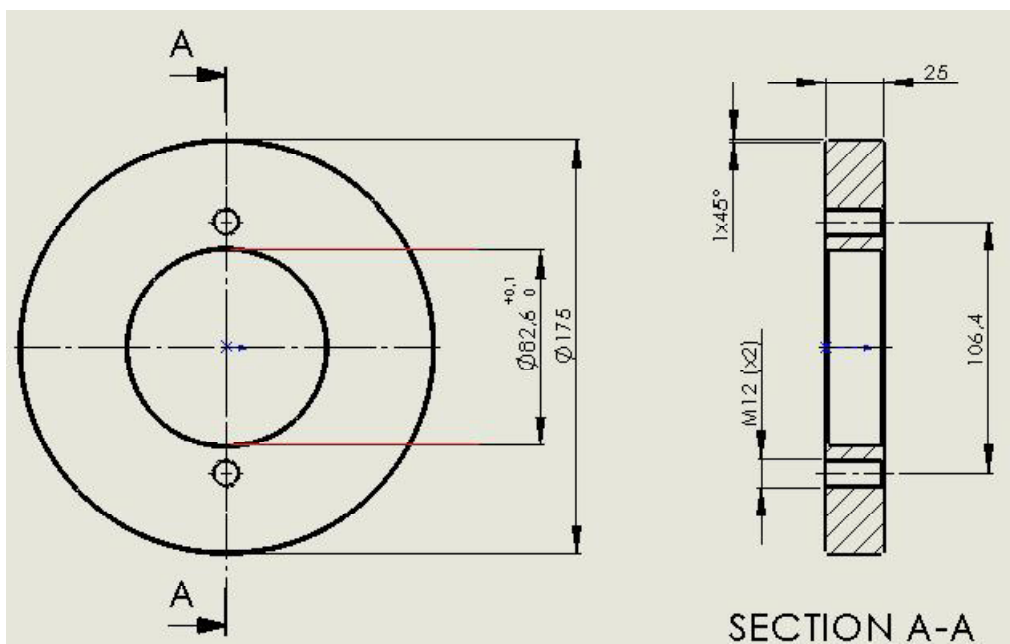


Fig. 1

To ensure good function, accuracy in mounting the flange in the hull must be ensured. It is essential that the centre line of the flange and the centre line of the valve are coincident (fig 2, 3) and the distance between centre of the valve opening and the upper side of the flange must be $1352,5 \text{ mm} \pm 1,5 \text{ mm}$ (fig. 3)

OBS this measure is valid only for the model with circular gland housing

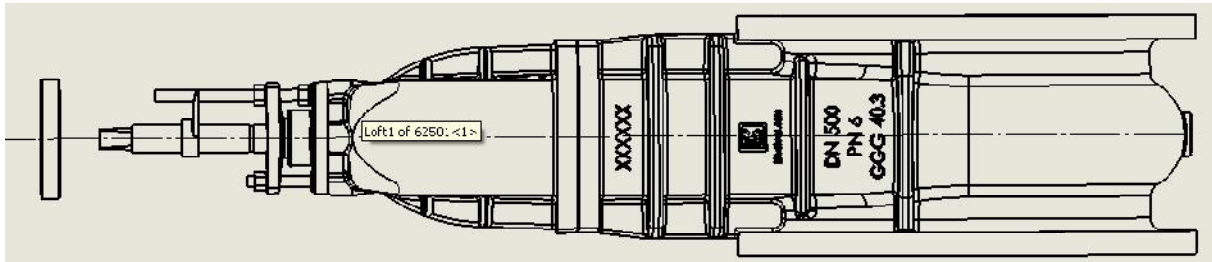


Fig. 2

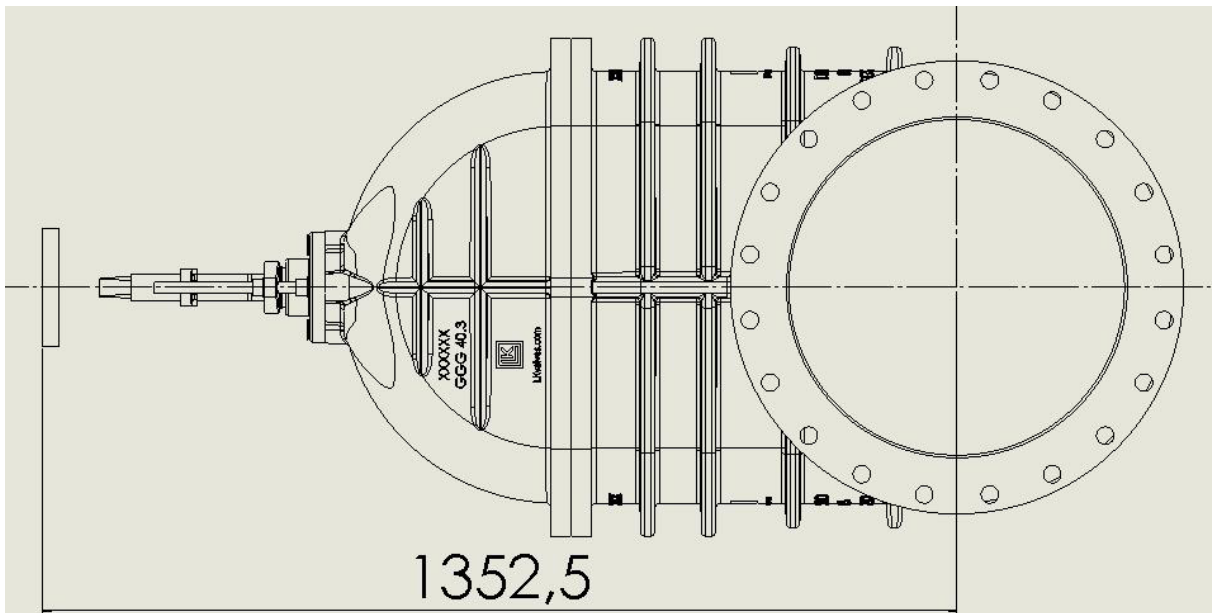


Fig. 3

4.1. Mounting the parts

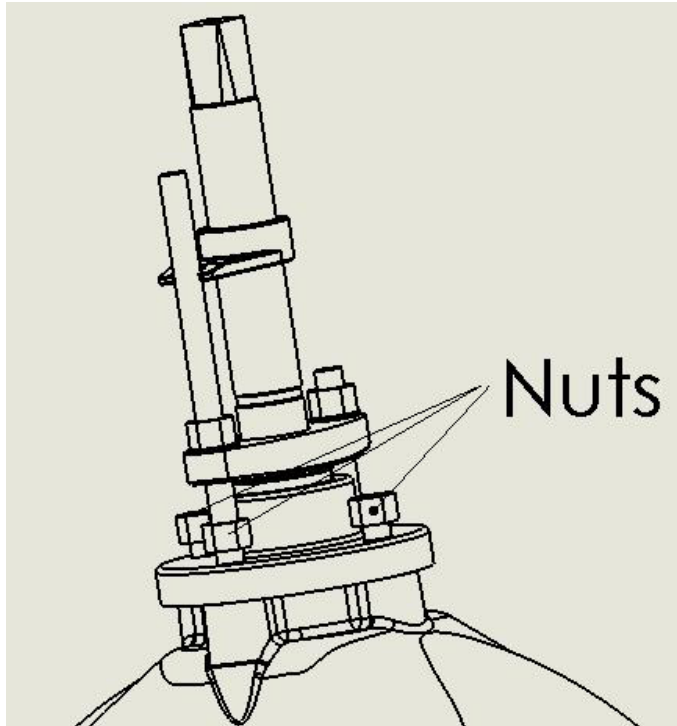


Fig. 4

Start by loosening the nut on the pin bolts on opposite sides of the spindle and on the guidance rod (fig.4) such as there is approximately 5 mm space between the nuts and the stuffing box flange.

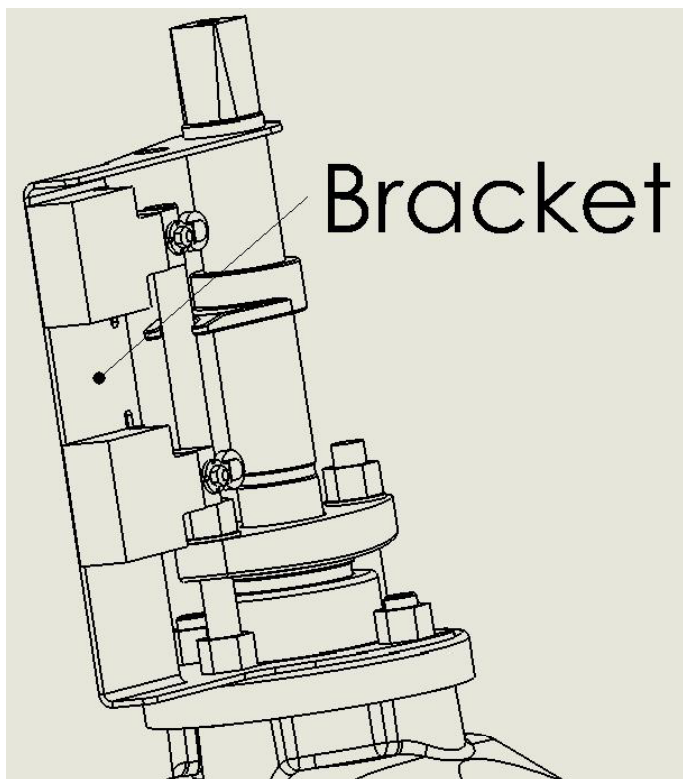


Fig. 5

Pull the bracket over the spindle and push it under the nuts on the pin bolts. Tighten these to fixate the bracket. (Fig. 5)

Make sure that the limit switches are properly adjusted before taking the valve into use.

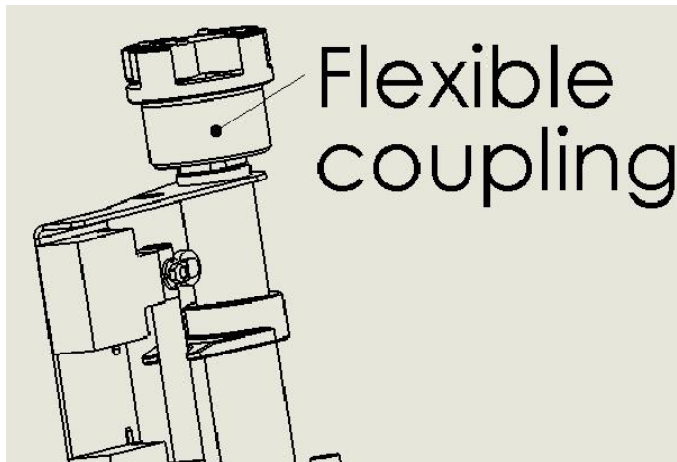


Fig. 6

Mount one half of the flexible coupling 62519 on the spindle of the valve (fig. 6)

Tighten it with M12X40 bolt and large washer 12,5X35X2

Tighten stop screw P6SS M8X15

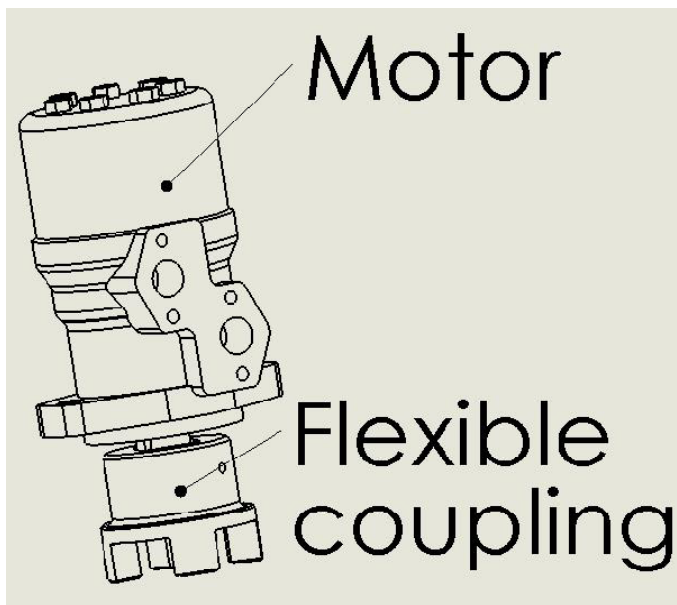


Fig. 7

Fit the second half of the flexible coupling on the hydraulic motor 91744 (Fig. 7) without tightening the stop screw P6SS M8X15.

Place the package on the flange and fasten it with two M6S M12X40 (Secure with Loctite 243 on the thread).

Make sure that the two halves of the flexible coupling have a split larger than 0 mm and less than 1 mm

Tighten stop screw P6SS M8X15.

ATTENTION!

Make sure that the limit switches are properly adjusted before taking the valve into use.

Not considering that the flange is welded in the hull of the vessel, the upper part of the valve is now supposed to look like figure 8.

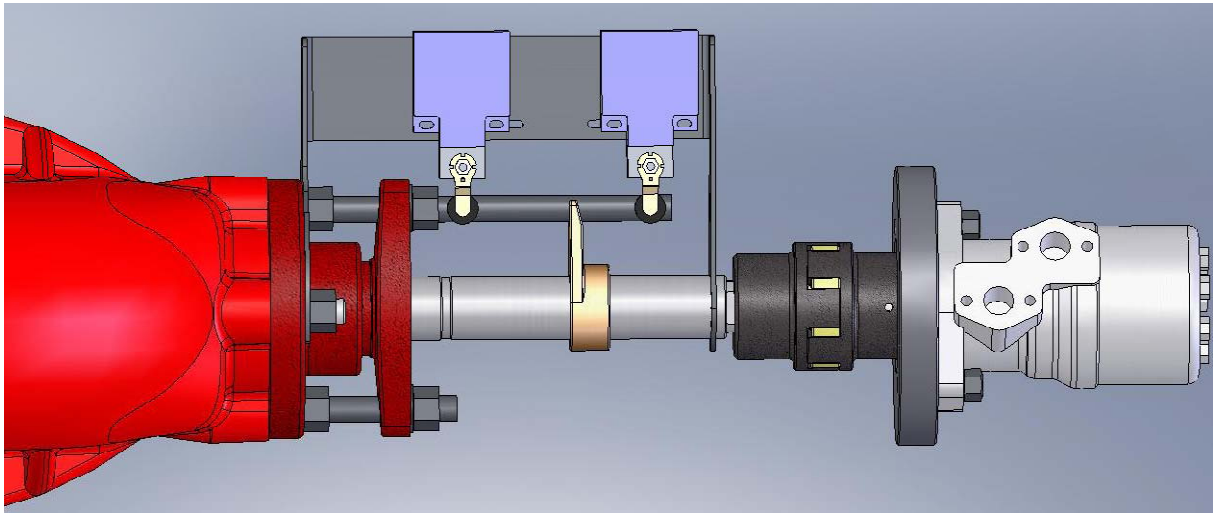


Fig. 8

5. Contact info

Your Hydraulic Actuator kit is designed and manufactured by:

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