

## QUICK CLOSING VALVE USER MANUAL

### PRODUCT INFORMATION

Valve Name	: QUICK CLOSING VALVE
Nominal Diameter (DN)	: DN15-DN200
Material	: Cast Iron, Ductile Iron, Cast Steel, Stainless Steel, Bronze
Nominal Pressure (PN)	: DN15-150...16 bar DN200.....10BAR
Working Temperature	: -10°C ...+80°C

### APPLICATION AREAS

- Cold and hot water systems
- Fire fighting systems
- Pumping stations
- Storage tanks
- Pipe lines
- Fuel, Oil etc.

**\*NDFT is 120 microns unless otherwise specified by the purchaser. (for coated valves)**

## INSTALLATION AND OPERATION INSTRUCTIONS OF THE QUICK CLOSING VALVE

\*The valve are delivered with plastic protection covers in both flange ends and in the pipe connection to the release cylinder. The covers shall not be removed until the installation. If the covers have been removed inspect the internals carefully for dirt before installation.

\*The valves must be stored indoors well protected from dust and moisture.

\*Long time storing must be done in warm warehouses to avoid corrosion attack on unprotected areas inside the valve.

\*The valve has been designed for mounting on a tank wall or a pipeline connection. The valve are delivered to the surface, to which the flanged joint will be screwed with expansion bolts should be smooth and degreased.

\*Prior to mounting of the quick closing valve make sure that it is centered relative to the channel outlet.

\*The quick closing valve with a flanged joint may be mounted on a tank wall with the aid of expansion bolts.

\*If a quick closing valve is to be mounted on a working tank, the tank should be emptied and dried prior to the beginning of the assembly work. If it is to be mounted to the pipeline must be cleaned off all dirt such as sand, dust, welding residues etc.

The general rules of occupational safety and health in force at the works concerned should be observed when mounting and operating the quick closing valve.

\*Verify that the valve is suitable for the operating specifications of the medium (installation); such as maximum operating pressure, maximum operating temperature, corrosiveness and abrasiveness, etc.

\*The arrow, on the valve body, must be in the same direction of the liquid flow.

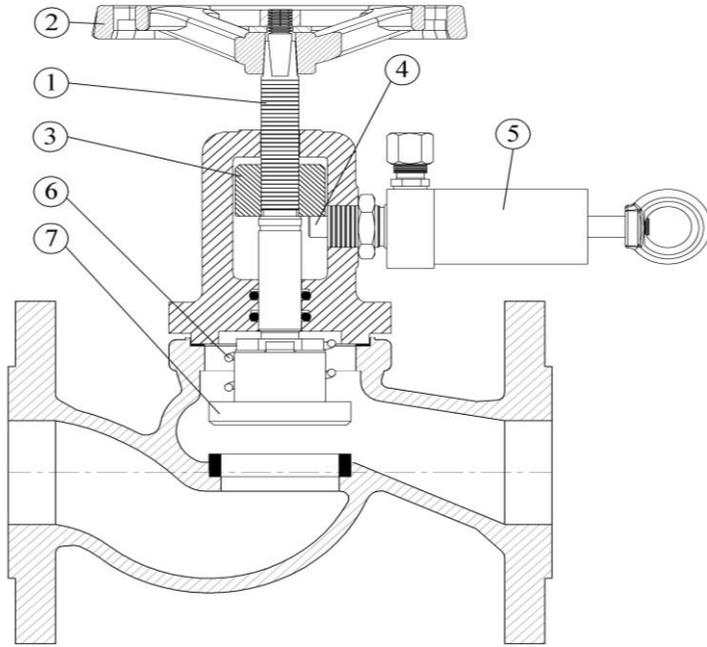
\*Verify that the distance between the flanges, where the valve will be connected, is equal to the length of the valve body.

\*Use suitable gaskets between the valve flanges and the counter flanges.

\*First, mount one side of the valve and only lightly fit the bolts. Do not fully tighten the bolts yet. Similarly, mount the other side of the valve. Finish by uniformly tightening the bolts, to avoid twisting the valve body, on both sides of the valve.

\*For detail information, please look at the DIKKAN catalogue of product or get in touch with our company.

## 1.1 Operating Principles:



The valve is a stop valve with a remote quick closing function but can also serve as a conventional stop valve by using the hand wheel (2).

-The quick closing action is instantly carried out by a spring (6), pre-compressed by turning the hand wheel.

-The stem (1) and attached disc (7) is hooked up by means of the setting nut (3).

-When the setting nut is released from loaded position - the valve will close.

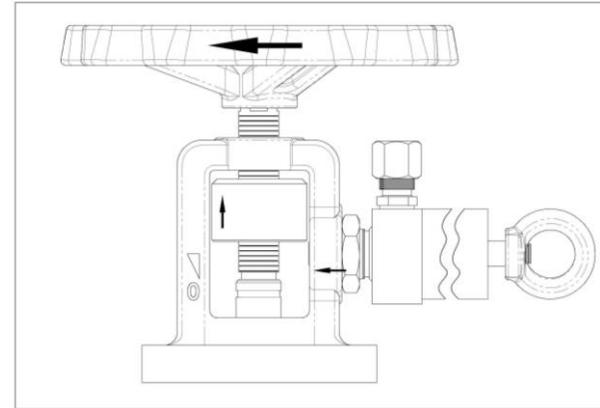
Release from loaded position is done by the release mechanism.

Retracting the piston rod (4) extension in the release cylinder (5) by hand will also close the valve.

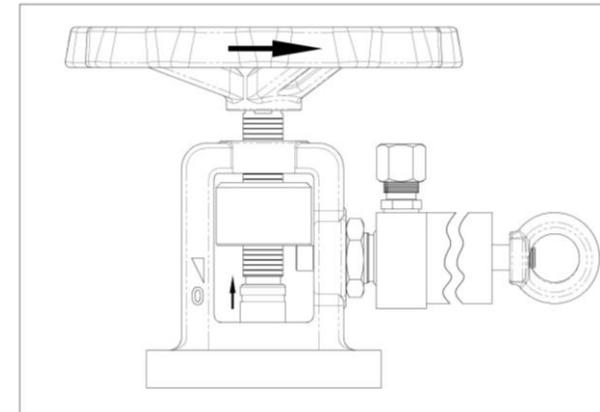
## 1.2 Closing of valve by the remote quick closing function:

The valve is quick closed by a remote hydraulic or pneumatic signal or by pulling back the piston rod (4) of the universal release cylinder (5) by a wire arrangement.

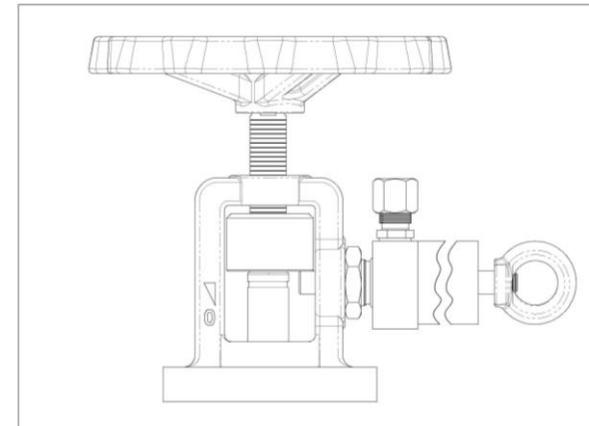
## 1.3 Loading the valve for Quick Closing:



Turn the hand wheel (2) in closing direction (clockwise) until the piston rod (4) in the cylinder comes out and holds the setting nut (3) in its upper position.



Turn the hand wheel (2) in opening direction (anticlockwise).



Stop the turning of the hand wheel (2) when the mechanical stop is felt and the setting nut (3) is in hard contact with the thread the end of the stem (1).

#### **1.4 Maintenance and Repair Instructions:**

Out of the guaranteed scope related with all products, maintenance and repair expenditures belong to the customer.

If there are leaking inside of the valves should be controlled seat and disc rings on this positions. Some foreigner bodies like dust and gravel may be influenced with liquids to the inside of the system, may be occurred like these defects. To avoid like these defects all system should be closed, and the valve pulled up from mounting place, if there are big defects on the seat surface should be informed to our company or authorized service. If there are simple defects, seat and wedge rings should be cleaned and greased (lubricating grease) then the valve should be remounted in place.

In case of leaking out of the valve, it may be occurred (happened) bonnet gasket, flange gasket, o-ring or gland packing. While the changing of bonnet and flange gaskets the system should be closed and be pulled up the "relevant parts and be changed new gaskets. If there is leaking o-ring or gland packing can be changed by similar new o-ring and gland packing. O-ring to be in touch with stem face should be greased (lubricated) very slightly.

**Don't weld** anywhere of valve.

\*Repairing and changing components cannot be done by end user. These shall be done by manufacturer

#### **Hydraulic oil**

The hydraulic oil used in the release cylinder must conform to contamination class NAS 1638-NAS9 (ISO 4406 21/18/15) in order to prevent damage to sealing elements.

10 µm filter shall be utilized in the system where the hydraulic oil is used.

Recommended hydraulic oil: Viscosity 15 - 46 cSt, (at. 40 °C approx.)

Control pressure max.: 8 bar