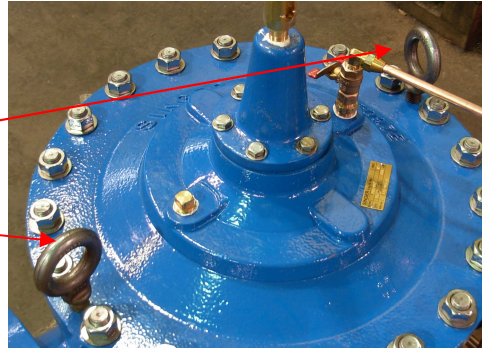


Lifting Instructions for Singer Valves

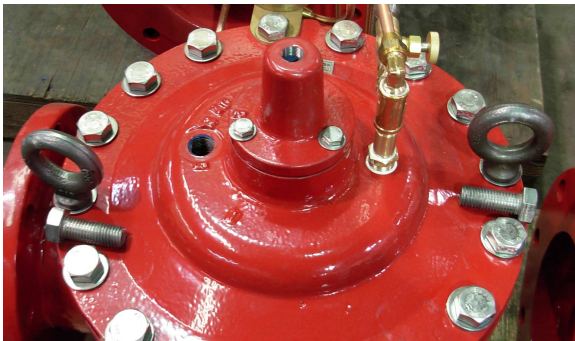
Valves can be heavy so attention to personal safety is important. Please ensure all manual lifts are in accordance with current health and safety guidelines.

Valves 8" (200mm) and larger are installed with $\frac{3}{4}$ " UNC lifting eye tappings on the bonnets. A standard lifting eye, rated for the lifting capacity of the valve weight should be utilized. Overhead cranes, lifting apparatus or block and tackle lifting equipment should be used and be rated for the weight of the valve.

Eye Bolt locations
(bolts supplied by others)



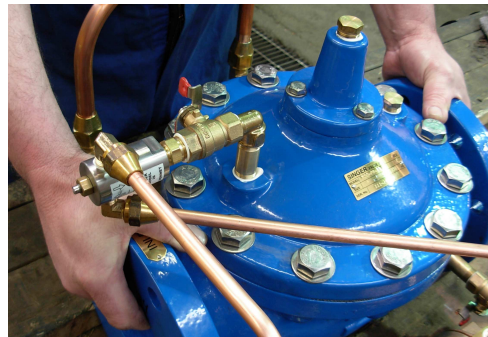
Care should be taken to protect the pilot systems from lifting damage. If necessary this may require spreader bars and slings to eliminate damage to the tubing. If slings are used be careful to position to eliminate the valve spinning in the sling or tipping to cause a safety hazard or causing damage to the pilot system.



Smaller valves can be lifted by removing two of the cover bolts and replacing with eye bolts temporarily. After lift, replace cover bolts and torque to recommended settings shown on valve tag.

Cover bolt sizes are shown in chart on next page.

If a manual lift is possible then lifting from each end of the valve body or from the underside of the bonnet is recommended.



Lifting Instructions for Singer Valves cont.

For details of storage and installation of valves into the pipelines please refer to Singer valve Instruction manuals.

Below is a table giving standard weights for 106 Type valve bodies. (The pilot system is not included in these weights).

Size mm	15	20	25	32	40	50	65	80	100	150	200
Approx Shipping Weight Kg	5	5	9	9	9	18	29	45	79	181	295

Cover Bolt Sizes

Size mm	15	20	25	32	40	50	65	80	100	150	200
Cover Bolt - UNC	5/16"	5/16"	3/8"	3/8"	3/8"	3/8"	1/2"	5/8"	5/8"	3/4"	3/4"