



This manual contains important information concerning installation, use, operability and instructions to avoid the incorrect use of Starline ball valves. Please read carefully the instructions and keep this manual for eventual references or clarifications.

**2.0 APPLICABILITY**

This manual can be applied to all CE-marked Starline ball valves according to " P.E.D. 97/23 CE " directive

**3.0 DELIVERY**

- ✓ All Starline valves are shipped in appropriate packing in open position with protection caps at the ends.
- ✓ All Starline valves have the relating identification product documentation : invoice – packing list – delivery notes – Standard test certificate 3.1B – instruction manual n. 124-CE – declaration of conformity to P.E.D. 97/23 CE directive – serial number.
- ✓ **For an easy and fast identification the invoice and the test certificate, together with the declaration of CE conformity have the same number.**

**4.0 STORAGE**

Generally, all valves should be stored in weatherproof buildings and protected from ambient conditions, salt laden atmosphere and the ingress of foreign matter.

If the ball valves are not for immediate use, please take care of the following instructions:

- ✓ Leave the valves stored in their boxes during the whole storage period.
- ✓ The ball valves have to be in open position during the whole storage period.
- ✓ Remove the plastic protective caps on the ends of the valves only when installing.

If the ball valves have to be stocked for a long time we recommend periodic inspections to ensure that valves are un-damaged, clean and free from foreign materials. Any rust, dirt and foreign materials will need to be carefully removed by qualified engineers prior to use.

**5.0 IDENTIFICATION / TRACEABILITY**

All Starline valves are fitted with a stainless steel identification plate carrying the following data:

CE.....	: CE marking and number given to us by the Notify Body	✓	BODY	: body and flanges material
TYPE	: Code identifying the bore-type of the valve	✓	TRIM	: stem, ball, seat retainer and trunnion material
	Body/trim material – seats and seals material	✓	ENDS	: type of ends
DN	: nominal diameter	✓	DATE	: month and year of manufacturing
PN	: maximum working pressure at room temperature	✓	S.N°	: serial number
	: maximum operating pressure at min. operating temperature	✓	STARLINE	: manufacturer's name
	: maximum operating pressure at max. operating temperature			

The heat code and number and the type of material are marked on the body and on the connections.

The above data are easily traceable on our standard test certificate according to UNI EN10204 TYPE 3.1B

Starline logo is marked on the body of the valves.

**6.0 INSTALLATION**

Prior to installation ensure that the pipework is clean and free from all foreign materials – rust, weld, etc.

- ✓ Before the assembly the ball valves will have to be operated for at least 2 complete cycles.
- ✓ Before installing be sure that the tube has not dirty parts (calamine, residues of welding or burring, encrustments or something else)
- ✓ Be sure that the line is free from tractions, torsions and that the valve is in axis with the tube.
- ✓ The valves can be installed in every position.
- ✓ The bi-directional valves can be installed with the possibility of flow in both directions.
- ✓ Uni-directional valves will be marked with a flow arrow and care must be taken to install correctly.
- ✓ Valves should be installed by qualified personnel and initially with the valve in open position.

**7.0 OPERATION**

- ✓ Normal operation is made by turning lever or hand wheel clockwise to close and anti clockwise to open.
- ✓ Valve position is indicated by the lever – lever in line is open / lever across line valve is closed.
- ✓ For automated valves follow the specific instructions that will accompany the valve assembly.
- ✓ The best results and a longer life of the valves are possible in normal functional conditions according to the charts showing the Pressure/Temperature Rating and to the characteristics of the medium.

**8.0 USE**

The best results and a longer life of Starline ball valves are possible in normal functional conditions and if used:

- a) Within the pressure/temperature limits indicated on the tag applied on the valve. For intermediate combinations of pressure/temperature please refer to the charts on Starline catalogues relating to the seat materials.
- b) With the materials of the body/trim of the valve compatible with the chemical characteristics of the medium.
- c) Valves should be used in the fully open or closed positions.

**9.0 WARNINGS**

- a) **The end user must have suitable safety and control devices to avoid over pressure and over temperature..**
- b) Due to the many and complex chemical formulas of the mediums, their compatibility with the valve material is not of Starline competence and it always has to be verified by the end user. During the design phase Starline has foreseen a corrosion allowance of at least 3 mm for each valve in order to avoid problems due to erosion or corrosion.
- c) The use of the valves in a semi open position for a long time can damage the body seat material.
- d) The end user will have to foreseen external factors like: freezing, dynamic effects due to the line vibration, exceptional phenomena like wind, earthquakes, flooding, etc.
- e) For valves placed in plants in particularly humid areas, in the nearby of the sea or other hostile places the material of the valve will have to be taken in consideration together with external protective painting as far as external corrosion is concerned
- f) Valves without heating jackets will not be used for medium that, due to the temperature, can harden or crystallize.
- g) Valves without "T" handle or stem extension cannot be used on insulated lines.
- h) Valves without Starline locking system cannot be used where it can be dangerous the accidental opening or closing of the valve.
- i) Floating valves without supplementary hole cannot be used in case of instable fluids which, if trapped in the body cavity (valves in closed position) can be subject to the risk of increasing of pressure due to the increasing of temperature.
- j) Valves without cavity filler and special cleaning / polishing should not be used for hygienic service.
- k) Valves without fugitive emission extensions cannot be used for toxic or dangerous medium with the risk of dispersion in the environment.
- l) For fluids like oxygen, hydrogen or chlorine where the contact with oil or grease can create explosions valves that have not been properly cleaned, degreased and sealed in suitable boxes cannot be used. Avoid any kind of contamination till the moment of use. The same precautions have to be applied to valves for cryogenic services.
- m) The maintenance has to be made by Starline-authorized people using original repair kits. Starline also recommends a partial maintenance after 2 years of service and a complete maintenance after 5 years.

**10.0 GUARANTEE AND CE-MARKING INVALIDATION**

The above instructions **must** be followed - if in doubt please contact Starline or their official agent.

Any mis-use, unauthorized modification, refurbishment by unqualified staff and the use of spares not of Starline origin will invalidate our Guarantee and CE mark.

0	First Emission	Cortesi N.	Trapletti L.	Santo R.	30/11/2001
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