

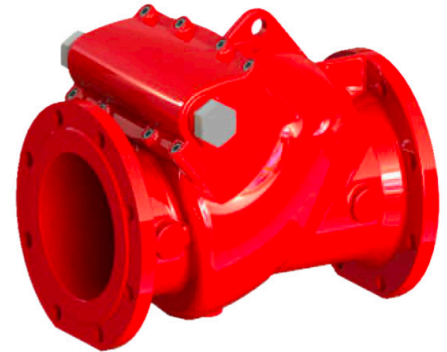
825 Series Swing Check Valve, Flanged Ends INSTALLATION, OPERATION & MAINTENANCE

Technical Performance Specification

- Size 2"-16"
- Max Working Pressing: 350 psi
- UL/ULC Listed and FM Approved

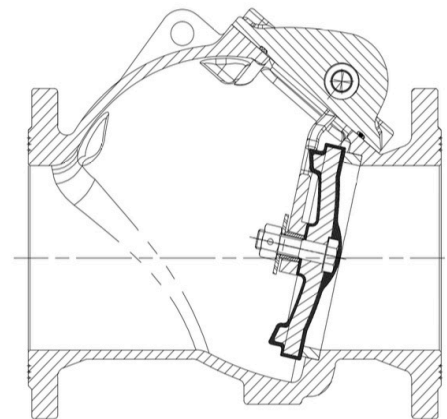
If the limits of use specified in these instructions are exceeded or if the valve is used on applications for which it was not designed, a potential hazard could result.

824VE Series Check Valve allows max 5 m/sec flow velocity.



Basic Valve Schematic and Material Specifications

COMPONENTS			
PART		MATERIAL	ASTM SPECIFICATION
Body		Ductile Iron	A536 Grade 65-45-12
Body Seat Ring		Bronze	B62 C83600
Disc		Ductile Iron with EPDM Fully Encapsulated	
Hinge	2"-6"	Stainless Steel	A351 Grade CF8
	8"-16"	Ductile Iron	A536 Grade 65-45-12
Gasket		Rubber	D2000 EPDM
Bonnet		Ductile Iron	A536 Grade 65-45-12
Hinge Pin		Stainless Steel	A276 Type 304
Hinge Pin Plug		Stainless Steel	A276 Type 304



Layout and Siting

These Check valves may be installed in horizontal pipework and vertical pipework if the flow is in an upwards direction. Valves must be provided with adequate support. Adjoining pipework must be supported to avoid the imposition of pipeline strains on the valve body. Heavy valves may need independent support or anchorage.

Note: Check valves must not be fitted in vertical pipework with the flow downwards.

Installation

Prior to installation, a check of the identification plate and body marking must be made to ensure that the correct valve is being installed.

Valves are precision manufactured items and as such, should not be subjected to misuse such as careless handling, allowing dirt to enter the valve through the end ports, lack of cleaning both valve and system before operation and excessive force during bolting.

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All special packaging material must be removed.

Note: The valve must be installed with the direction arrow on the body coincident with the direction of flow in the pipeline. For vertical pipework the flow direction should be upwards only.

In horizontal pipework, the valve must be installed with cover at uppermost position.

When large valves are provided with lifting eye bolt, these should be used to lift the valve.

Immediately prior to valve installation, the pipework to which the valve is to be fastened should be checked for cleanliness and freedom from debris.

Valve end protectors should only be permanently removed immediately before installation. The valve interior should be inspected through the end ports to determine whether it is clean and free from foreign matter.

At the conclusion of installation and before operating, all dust deposits shall be removed from the equipment.

Operating

The Swing Check valve is self-acting.

Maintenance

The valve should be at zero pressure prior to any maintenance.

Maintenance Engineers & Operators are reminded to use correct fitting tools and equipment.

Tools causing showers of sparks are only permissible if:

- No hazardous explosive atmosphere is present.
- Dust deposits have been removed and no dust cloud is present.

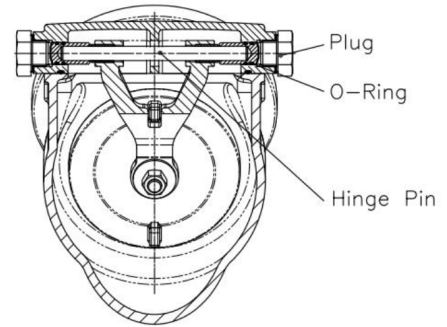
A full risk assessment and methodology statement must be compiled prior to any maintenance. This must include the removal of dust deposits by good housekeeping.

A maintenance program should therefore include checks on the development of unforeseen conditions, which could lead to failure.

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Maintenance of Leakage at Plug

1. The valve should be at zero pressure.
2. Using a small, flat bladed screwdriver, remove the hot melt glue that covers the Bonnet Screws. Loosen and remove the Bonnet Screws.
3. Remove the bonnet and disc assembly.
4. Turn the plug left and remove it.
5. Check the O-Ring and replace them if they are damaged.
6. Reinstall the plug, bonnet and disc assembly.
7. Tighten Bonnet Screws.



Bonnet Gasket Replacement

1. The valve should be at zero pressure.
2. Using a small, flat bladed screwdriver, remove the hot melt glue that covers the Bonnet Screws. Loosen and remove the Bonnet Screws.
3. Remove the bonnet and disc assembly.
4. Replace the Bonnet Gasket.
5. Reinstall the bonnet and disc assembly.
6. Tighten Bonnet Screws.