

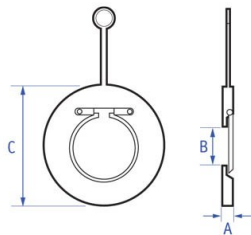


Single plate wafer pattern stainless steel check valve. Fits between flanges BS 4505 PN16.

## GENERAL INFORMATION

| Size  | Pattern No. | Pack 1 Qty | Code  | Barcode       | Discontinued |
|-------|-------------|------------|-------|---------------|--------------|
| 40mm  | V911        | 1          | 15415 | 5022050090539 | 20/08/2009   |
| 50mm  | V911        | 1          | 15416 | 5022050090584 | 20/08/2009   |
| 65mm  | V911        | 1          | 15417 | 5022050090638 | 20/08/2009   |
| 80mm  | V911        | 1          | 15418 | 5022050090676 |              |
| 100mm | V911        | 1          | 15419 | 5022050090713 |              |
| 125mm | V911        | 1          | 15420 | 5022050090751 |              |
| 150mm | V911        | 1          | 15421 | 5022050090799 |              |
| 200mm | V911        | 1          | 15422 | 5022050090836 | 20/08/2009   |
| 250mm | V911        | 1          | 15423 | 5022050090874 | 20/08/2009   |
| 300mm | V911        | 1          | 15424 | 5022050090911 | 20/08/2009   |

## DIMENSIONS (mm)



| Code  | Description | A   | B  | C   | Kg   |
|-------|-------------|-----|----|-----|------|
| 15418 | 80mm V911   | 54  | 16 | 144 | 1.70 |
| 15419 | 100mm V911  | 71  | 16 | 162 | 2.00 |
| 15420 | 125mm V911  | 95  | 16 | 194 | 3.00 |
| 15421 | 150mm V911  | 114 | 19 | 220 | 4.55 |

## GUARANTEE

### Pegler Yorkshire 5 Year Guarantee - Terms and Conditions

Products are subject to a 5 year guarantee that is between Pegler Yorkshire and the final purchaser of the product.

The guarantee is subject to proof of purchase being supplied.

This guarantee does not affect any statutory rights the consumer may have in law.

The guarantee covers manufacturing or material defects when installed in accordance with our instructions on specified tube materials and applications, and does not cover parts subject to normal wear and tear.

This product range has been designed for the use of homeowners, domestic and commercial applications and therefore the Guarantee is subject to the product being properly selected for their intended service conditions.

The guarantee is not applicable where the product is fitted contrary to the conditions in the fitting instructions.

This is reinforced where valves are covered by the European Pressure Equipment Directive (PED97/23/EC) where Installation, Operating and Maintenance Instructions are supplied with each product and/or carton.

Provided it is installed correctly and receives adequate preventative maintenance it should give years of trouble-free service.

Abusive behaviour and accidental damage to the product are not covered by this guarantee.

The extent of this liability is limited to the cost of the replacement of the defective item and not to installation or consequential damages.



**Installation, Operating  
and Maintenance Instructions**

**V911 Stainless Steel Wafer Type Swing Check Valve**



**V911**

**THE PRESSURE EQUIPMENT DIRECTIVE 97/23/EC and CE MARKING**

The Pressure Equipment Regulations 1999 (SI 1999/2001) have now been introduced into United Kingdom law. Valves with a maximum allowable pressure greater than 0.5 bar are covered by these new Regulations. Valves are categorised according to their maximum working pressure, size and rising level of hazard. The level of hazard varies according to the fluid being carried. Fluids are classified as Group 1, dangerous fluids or Group 2, all other fluids including steam. The Categories designated are SEP (sound engineering practice). Valves up to and including 25mm (1") are designated SEP regardless of the fluid group. Those identified as having increased hazard are Categorised as, I, II, III or IV. All valves designated as SEP do not bear the CE mark nor require a Declaration of Conformity. Categories I, II, III or IV carries the CE mark and require a Declaration of Conformity. Valves classified from the piping chart would not be included in Category IV.

**Section 1-Technical Details**

The Pegler Commercial stainless steel V911 series (available from Pegler Yorkshire Group) are intended prevent back flow in sections of pipe work and equipment in HVAC applications.

**1.1 Tube compatibility**

| <b>Valve Type</b> | <b>Flange Connection Specification</b>        |
|-------------------|---|
| V911 PN16         | Fits between flanges to BS EN1092-2:1997 PN16 |

**1.2 Pressure and Temperature ratings**

Valves must be installed in a piping system whose normal pressure and temperature does not exceed the stated rating of the valve. The maximum allowable pressure in valves as specified in the standard is for non shock conditions. Water hammer and impact should also be avoided.

If system testing will subject the valve to pressures in excess of the working pressure, this should be within the "shell test pressure for the body" to a maximum of 1.5 times the PN rating of the valve and conducted with the valve fully opened.

It may be hazardous to use these valves outside of their specified pressure and temperature limitations and also when not used for the correct application.

**Technical Performance Specification**

V911 all sizes rated at PN16

Comply with BS EN12334:2001

Self acting

Size range DN80-DN150

Fits between raised Flanges in accordance with BS EN1092-2:1997 PN16, and secured by the flange bolts.

EPDM seat.

V911 are supplied complete with lifting eye.



## **Section 2-Installation**

### **2.1 Electrical continuity**

All metallic pipework should comply with the equipotential bonding requirements of the current edition of the IEE wiring regulations (BS7671:2001). After all plumbing work has been completed continuity checks are to be conducted by a qualified electrician in accordance with the regulations.

### **2.2 Heat free**

The Pegler V911 Series offers Heat free jointing across its whole range of flanged valves. These valve connections must not be brazed.

### **2.3 Insulation**

For all Pegler V911 Series valves, it is recommended that you adhere to the insulation requirements as specified by the Water Supply (Water Fittings Regulations 1999, ensuring at all times that access for valve operation is taken into consideration.

### **2.4 Valve selection**

Valves must be properly selected for their intended services conditions. Provided it is installed correctly and receives adequate preventative maintenance it should give years of trouble free service. They must be compatible with the system design, pressure and temperature requirements and must be suitable for the fluids that they are intended to carry. Interactions between metals in the pipe system must be considered as part of the valve selection.

V911 Stainless steel swing check valve plate perform equally well in horizontal and vertical positions, taking regard of the directional flow arrow on the body.

### **2.5 Location/end of line service**

Valves must be provided with adequate support. Adjoining pipe work must be supported to avoid the imposition of pipeline strains on the valve body, which would impair its performance, Heavy valves may need independent support or anchorage.

To ensure ease of operation, adjustment, maintenance and repair, valve siting should be decided during the system design phase.

These check valves must not be used in an end of line application without a blanking flange being fitted on the downstream end of the valve.

### **2.6 Pre Installation- Health and Safety**

Before starting work on any installation a risk assessment must be made to consider the possibility of operational limits being exceeded and reduction or elimination of any potential hazards.

1. Protective clothing and safety equipment must be utilized as appropriate to the hazard presented by the nature of the process to which the valve is being installed or maintained.
2. Before installing or removing a valve the pipeline circulating pumps (when fitted) must be turned off. The pipeline must be depressurised, drained and vented. Valves must be fully opened to ensure release of any pipeline or valve pressure.
3. Fitters must be trained in manual and mechanical handling to enable them to safely lift and install Pegler valves.
4. The valve selected must be suitable for the required service conditions. The pressure and temperature limitations are indicated on the valve nameplates, body or data plate. They must not be exceeded.
5. The V911 is designed to prevent back flow in pipe lines protecting upstream equipment from potential contamination.
6. Any flushing fluid used to clean the pipeline must not cause any damage to the valve and its components.
7. Pegler valves must not be misused by lifting them by their hand wheels, levers or valve stems.
8. Pegler valves are not suitable for fatigue loading, creep conditions, fire testing, fire hazard environment, corrosive or erosive service, or for carrying fluids containing abrasive solids. There is no allowance for corrosion in the design of these valves. Design for this valve do not allow for decomposition of unstable fluids and must not be used where this could occur.
9. Pegler valves are not designed to withstand the effects of fire, wind, earthquakes and traffic.
10. All Health and Safety Rules must be followed when installing and maintaining valves.



### Installation – V911 stainless steel swing check valves

Prior to installation a check of the nameplate and body markings 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 of both valve and system before operation and excessive force during assembly.

Unpack the valve and check the bores are clean and free from foreign material. Valves must be provided with adequate support. Adjoining pipe work must be supported to avoid the imposition of pipeline strains on the valve body, which would impair its performance. Allow space for the removal of the strainer basket in the event that cleaning is required.

Valves should not be lifted without taking into consideration the weight for health and safety reasons.

Pipework must be assembled with the correct gaskets and mating flanges that are compatible with the V911 swing check valves. Prior to assembly the gasket and mating flange must be inspected to ensure that they are clean and free from damage.

Installing damage or unclean gaskets and mating flanges could lead to valve failure. Wafer pattern swing check valves should be assembled with the hinge pin in the horizontal position.

When assembled with the gasket and mating flanges correct size bolts must be used and tightened in sequence to ensure that the gasket is compressed equally across its surface to give the correct seal. All bolt holes should be utilized.

In systems where corrosion could be a potential hazard, wall thickness checks on the body and bonnet should be made. This requires either the removal of the valve from the pipeline or the removal of the bonnet with system at zero pressure. If the wall thickness of the valve has reduced by 25% then the valve should be replaced.

### Section 3 Testing

#### 3.1 TESTING

DN80 to DN150 - each products shall be pneumatically tested at 6 bar (90psig) for 5 sec. There shall be no signs of visible leakage from the Body / Bonnet joint, surfaces or seals.

After testing the valves shall be left fully 'Open'.

Type Testing-These tests shall be carried out at Pegler Limited on a sample basis in accordance with BS6001.

|                          | DN80 to DN150 |
|--------------------------|---------------|
| a) Hydrostatic body test | 24bar         |
| b) Hydraulic seat test   | 17.6bar       |
| c) Pneumatic body test   | 6 bar         |
| d) Pneumatic seat test   | 6 bar         |

#### PN rated valves

These valves are Categorised as S.E.P. (Sound Engineering Practice).

| PN | Non-shock pressure at temperature range    | Non-shock pressure at Maximum temperature |
|----|--|---|
| 16 | 16bar -10°C up to 120°C                    | 16.0bar at 120°C                          |
|    | Suitable for use with Group 2 Liquids only |   |

Not suitable for use with Group 1 Liquids, Group 1 or Group 2 Gases

#### Certification

Not applicable



### **Operation/ Commissioning**

The valve is self acting but may require cleaning after commissioning and then at regular intervals during its lifecycle.

In systems where corrosion could be a potential hazard, wall thickness checks on the body and bonnet should be made. This requires either the removal of the valve from the pipeline or the removal of the bonnet with system at zero pressure. If the wall thickness of the valve has reduced by 25% then the valve should be replaced.

### **We do not recommend any servicing or maintenance is carried out on these valves.**

Should a valve need replacing then the following should be taken into consideration.

The valve should be at zero pressure and ambient temperature before any valve replacement is carried out.

The correct fitting tools and equipment should be used for valve replacement work.

Separate means of draining the pipe work must be provided when carrying out any replacement of V909 Spring operated dual plate check valves.

Where there may be any system debris this should be collected and /or filtered by installation of the appropriate protective device.

### **3.2 Additives**

It is strongly recommended to consult a commissioning engineer in conjunction with the manufacturer prior to their use.

### **3.3 Warranty**

Products are subject to a 5 year guarantee that is between Pegler Yorkshire and the final purchaser of the product.

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The guarantee covers manufacturing or material defects and does not cover parts subject to normal wear and tear.

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### **Section 4-Storage**

Valves should be stored off the ground in a clean, dry, indoor area. Where desiccant bags are included these should be changed after a period of six months.

Pegler valves are supplied in appropriate packaging to give adequate protection from damage. Cast iron and steel valves may also have end protection caps.

When Pegler valves are fitted to pressure equipment or assemblies, suitable protective devices may be required.

### **PRODUCT LIFE SPAN**

When a valve is properly selected for its service conditions it should give years of trouble-free service provided it is installed correctly and receives adequate preventative maintenance. By not considering the compatibility of the system design and the pressure and temperature requirements the life expectancy of the valves can be adversely affected and valve failure may occur. The nature of the fluid being carried through the valve could also affect the valve performance as this could lead to premature valve failure. There may also be interactions between metals

in the pipe system and the valve which need to be considered. Appropriate flushing and cleaning of the pipe work installation should take place when commissioning the system as this would help extend the valve life.

**IOM V911**

**Single Plate Swing Check valve**

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27/04/12

**Pegler Yorkshire**

St. Catherine's Avenue,  
Doncaster, South Yorkshire, DN4 8DF.  
[www.pegleryorkshire.co.uk](http://www.pegleryorkshire.co.uk)



**Pegler Yorkshire**



**Section5 -Contact details**

For further details please contact our technical department: **0800 156 0050**

**Pegler Yorkshire Group Ltd  
St. Catherine's Avenue,  
Doncaster,  
South Yorkshire  
DN4 8DF**

[tech.help@peglyorkshire.co.uk](mailto:tech.help@peglyorkshire.co.uk)  
[www.peglyorkshire.co.uk](http://www.peglyorkshire.co.uk)