

BigBoy

BPIR Declaration

Version: 19/02/24

Designated building product: Class 1

Declaration

Apex Valves Limited has provided this declaration to satisfy the provisions of Schedule 1(d) of the Building (Building Product Information Requirements) Regulations 2022.

Product/system

Name	BigBoy
Identifier	BB 32 BB 40 BB 50

Description

The BigBoy is a float control valve for maintaining a desired water level in a tank or reservoir with an extremely high flow rate. Typically used with a mains, pump or gravity fed supply with full on/full off control and soft closing to minimise water hammer. Patented self-cleaning mechanism minimises blockages. Can be used as a backup water supply control valve for rainwater harvesting, to keep the level topped up from a mains supply if the rainwater supply is insufficient.

The BigBoy floats can be combined to maintain the water level within 100mm (4") of the set height when tied vertically or within 40mm (1 1/2") when tied horizontally.

Specifications

- Working Pressure: 15 kPa- 1200 kPa (2-175 psi)
- Flow Rate: 1500 L/min (330 gal/min) @ 1200 kPa (175 psi)
- Temperature Range: 1°C - 60°C (34°F- 140°F)
- Available in BSP 32mm, 40mm and 50mm sizes (1 1/4", 1 1/2", 2")
- Service kit available

Scope of use

- Valve must be installed by a licensed plumber.
- Valve cannot be installed in the ground or where it can be submerged.
- Valves cannot be operated outside of the specified operating limits.
- Must be installed horizontally with the valve outlet facing downwards.
- Not to be used in dual purpose tanks used for storm water detention, in other words systems designed for slow requests of water run-off to the stormwater drain during and after a rainfall event.

Conditions of use

Refer to BigBoy installation instructions available from https://www.wattsnz.co.nz/products/plumbing-flow-control-solutions/float-valves-agricultural-solutions/float-valves/apex_bigboy and the relevant clauses from G12 or local regulations.

- Flush all pipes before installing the product.
- Install the product in a position where reasonable access is provided for maintenance and/or replacement. Wall fitting needs to be sufficiently strong to support the valve.
- Avoid installing in areas where the valve could be exposed to freezing.
- Undo the nut on the Bigboy thread and fit the Bigboy to the tank location. Ensure the rubber sealing washer is fitted on the inside of the tank. Screw the nut back on the thread and tighten to secure the BigBoy valve. Ensure that the valve outlet is pointed vertically downwards and that the nut is not overtightened. Use PTFE thread tape where required.
- For dual level installations (pump supply), unwind the cord and weights. The height of the bottom weight sets the minimum level of water in the tank. The height of the top weight should be adjusted to set the maximum water level in the tank. Clip the cord into both cleats on the weight.
- For single level installations (mains water supply), unwind the cord and weights. Clip the weights together and set the cord length. The height of the weights sets the desired water level in the tank, which will be maintained by BigBoy within 100mm. Clip the cord into the cleats.
- The height of the valve and the maximum water level in relation to the overflow discharge must comply with AS/NZS3500.1 and/or relevant local regulations.
- The minimum water level must be set to be higher than the tank outlet and allow at least 300mm of head if it is supplying a pump (or according to the pump manufacturer recommendations).
- Overflow discharge from the tank must be visible and any pump must have "dry run" protection.
- Every 6 months, check that the valve functions correctly by gently pushing the control level down for 5 seconds and checking that water flows through the open valve. Release the lever. When the weights are submerged, the valve should close. If the valve fails to shut off completely within 5 seconds after the lever is raised, it may be necessary to clean or repair it according to instructions provided.

- The diaphragm should be replaced every 50,000 cycles for high risk applications.
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Relevant building code clause

B2 Durability - B2.3.1 (c)

F2 Hazardous building materials - F2.3.1

G12 Water Supplies - G12.3.2, G12.3.7

Contributions to compliance

The BigBoy is commonly used as a float control valve to maintain a water level in a tank or reservoir that supplies water to a building from a mains, pump or gravity fed source.

- B2.3.1(c): The BigBoy has a durability of at least 5 years when installed according to instruction by a licensed plumber and maintained according to instruction. It exceeds the endurance test required in AS1910:2004 and has Watermark Approval under license WMKA20368.
- F2.3.1: Materials used are suitable for use in contact with drinking water, according to AS/NZS 4020:2018 and has Watermark Approval under license WMKA20368.
- G12.3.2(c): Materials used are suitable for use in contact with drinking water, according to AS/NZS 4020:2018.
- G12.3.7(a), (b) and (c): - Flow rate of Bigboy significantly exceeds the minimum acceptable flow rates given by G12/AS1 Table 3. BigBoy is supplied with a sealing washer to minimise risk of leaking at the tank wall connection. Bigboy is rated at 1200kPa, and hydrostatic pressure tested up to 3000 kPa in accordance with AS1910:2004. The BigBoy internals are easily accessible for servicing and the jet, diaphragm and spring can be easily replaced with the available repair kit.

Contact details

Manufacture location	New Zealand
Legal and trading name of manufacturer	Apex Valves Limited
Manufacturer address for service	367 Rosebank Road Auckland 1026
Manufacturer website	www.watts.nz.co.nz/our-story/brands/apex
Manufacturer email	orders@apexvalves.co.nz
Manufacturer phone number	0800500484
Manufacturer NZBN	9429035030607

Responsible person

As the responsible person as set out in Regulation 3, I confirm that the information supplied in this declaration is based on information supplied to the company as well as the company's own processes and is therefore to the best of my knowledge, correct.

I can also confirm that BigBoy is not subject to a warning or ban under [s26 of the Building Act](#).

Signed for and on behalf of **Apex Valves Limited**:



Jeremy White
Marketing Manager
February 2024

Appendix

Building code performance clauses

B2 Durability

B2.3.1

Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the *specified intended life* of the *building*, if stated, or:

(c) 5 years if: the building elements (including services, linings, renewable protective coatings, and fixtures) are easy to access and replace, and failure of those building elements to comply with the building code would be easily detected during normal use of the building.

F2 Hazardous building materials

F2.3.1

The quantities of gas, liquid, radiation, or solid particles emitted by materials used in the *construction* of *buildings*, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.

G12 Water Supplies

G12.3.2

A potable *water supply system* must be—

(c) installed using components that will not contaminate the water.

G12.3.7

Water supply systems must be installed in a manner that—

(a) pipes water to *sanitary fixtures* and *sanitary appliances* at flow rates that are *adequate* for the correct functioning of those *fixtures* and *appliances* under normal conditions; and

(b) avoids the likelihood of leakage; and

(c) allows reasonable access to components likely to need maintenance.