



# Bermad Water Technologies

## PRODUCT APPRAISAL REPORT 2042

Bermad C10/C30 Plastic Bodied Combination Air Valves for Water Supply Applications

**AS 4956:2017 Air valves for water supply**

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## Peer Reviewers

Name/Title	Organisation	Date
Product Appraisal Technical Advisory Group	WSAA	2 September 2020
WSAA Expert Panel	WSAA	2 September 2020
Peter Pittard, WSAA Consultant	WSAA	18 August 2020
Carl Radford, Product Appraisal Manager	WSAA	2 September 2020

## Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Based around our vision of 'customer driven, enriching life', WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We are proud of the collegiate attitude of our members which has led to industry-wide approaches to national water issues.

WSAA can demonstrate success in the standardisation of industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The WSAA Executive retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance to the urban water industry.

WSAA was formed in 1995 as a non-profit organisation to foster the exchange of information between industry, government and the community, and to promote sustainable water resource management.

The urban water industry is committed to anchoring its services to customers' values, and to enrich communities where water services have broad economic, environmental and social values. In line with this our main activities focus on four areas:

1. influencing national and state policies on the provision of urban water services and sustainable water resource management
2. promoting debate on environmentally sustainable development and management of water resources and the community health requirements of public water supplies
3. improving industry performance and establishing benchmarks and industry leading practices for water service processes; and
4. fostering the exchange of information on education, training, research, water and wastewater management and treatment and other matters of common interest.

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## 1 EXECUTIVE SUMMARY

Bermad Australia Pty Ltd trading as Bermad Water Technologies is an Australian company originally established in 1989 as the sole distributor of Bermad valves. The company has grown to become a leading supplier of a wide range of specialist valves that control, protect or measure.

Bermad CS Ltd is a private company established in 1965 in Evron, Israel to manufacture valves for the irrigation market. It is a well-respected global leader in the manufacture and supply of valves for control solutions for water supply, irrigation and fire protection.

The Bermad C10/30 air valves are manufactured by Bermad CS Ltd in Evron, Israel and distributed in Australia by Bermad Australia Pty Ltd, trading as Bermad Water Technologies.

This Appraisal is for Bermad C10 and C30 plastic bodied combination (double orifice) air valves in sizes DN 50 and DN 80 manufactured to AS 4956:2017 *Air valves for water supply*. The DN 50 valves have a 2" BSP threaded connection and the DN 80 valves have a DN 80 flanged connection with multiple drillings, one complying with the mating dimensions of AS/NZS 4087 Fig B5 PN16.

The valves allow for evacuation of air during pipeline filling, large volume air intake in network draining and protection against air accumulation and vacuum formation at elevations, slope change points and road/river crossings during operation.

Options are available for surge protection (to prevent damage to the valve and the system) or inflow prevention (to prevent intake of atmospheric air which may cause damage to pumps or disruption to syphons).

The C10 air valves have a pressure classification of PN12 and the C30 air valves have a pressure classification of PN16.

Bermad CS Ltd has ISO 9001 Quality Management System certification.

The Bermad C10/C30 air valves have StandardsMark ISO Type 5 product certification to AS 4956:2017.

This Appraisal has determined that the Bermad C10/C30 air valves included as detailed in this report meet the requirements of WSA PS-265 *Air Valves for Pressure Applications – Water Supply* and are considered as 'fit-for-purpose'.

### 1.1 Recommendations

It is recommended that WSAA members, subject to any specific requirements of the member accept or authorise the Bermad range of C10/C30 combination air valves, as detailed in this report, for use in water supply, provided they are installed in accordance with applicable WSAA codes and manufacturers' requirements, where specified.

## 2 THE APPLICANT

The Applicant is Bermad Australia Pty Ltd trading as Bermad Water Technologies.

### 2.1 The Supplier

Bermad Australia Pty Ltd trading as Bermad Water Technologies is an Australian company originally established in 1989 as the sole distributor of Bermad valves. The company has grown to become a leading supplier of a wide range of specialist valves that control, protect or measure. Products include control valves, pressure regulators, solenoid valves, diaphragm valves, pressure reducing valves, flow meters, and air release valves servicing the waterworks, mining, irrigation, fire protection and building markets. Many of the products are designed, engineered and assembled in Australia.

For more information see: <http://www.bermad.com.au/>.

## 2.2 The Manufacturer

Bermad CS Ltd is a private company established in 1965 in Evron, Israel to manufacture valves for the irrigation market and is a well-respected global leader in the manufacture and supply of valves for control solutions for water supply, irrigation and fire protection. The company has approximately 550 employees and is active in more than 80 countries around the world. Bermad specialises in supply of Automatic Hydraulic Control Valves and Air Control Valves.

Bermad has a strong commitment to Research and Development and is well known as an innovator in the control valve and instrumentation field.

## 3 THE PRODUCT

Bermad C10/C30 combination (double orifice) air valves are manufactured to AS 4956:2017 *Air valves for water supply*.

The DN 50 and DN 80 plastic bodied range of automatic air valves submitted for appraisal includes C10 air valves with a pressure classification of PN12 and C30 air valves with a pressure classification of PN16.

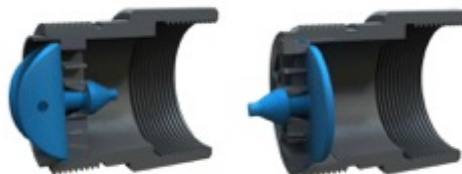
The DN 50 valves are supplied with a 2" BSP threaded connection and the DN 80 valves have a DN 80 flange connection with multiple drillings, one complying with the mating dimensions of AS/NZS 4087 Fig B5 PN16.

To enable clear differentiation the C10 is supplied with a grey body and black cover whilst the C30 is all black. See Figure 1.



**FIGURE 1 BERMAD C10 and C30 AIR VALVES**

Options are available for surge protection (to prevent damage to the valve and the system) or inflow prevention (to prevent intake of atmospheric air which may cause damage to pumps or disruption to syphons). See Figure 2.



**FIGURE 2 SURGE PROTECTION AND INFLOW PROTECTION DEVICES**

A summary of the Bermad C10/C30 air valve range is provided in Table 1 and is included in the ISO Type 5 StandardsMark Product Certification schedule in Appendix B. Additional information is provided in Appendix A.

**TABLE 1**  
**BERMAD C10/C30 AIR VALVE RANGE**

DN	End Connection	Pressure Classification	C10	C30
50	2" BSP	PN12	✓	
		PN16		✓
80	Flange	PN12	✓	
		PN16		✓

Other features of the valves include:

- Straight flow body for higher flow rates;
- Aerodynamic full body kinetic shield to prevent premature closing;
- Dynamic sealing to prevent leakage at low pressure;
- Corrosion resistant components;

The valves allow evacuation of air during pipeline filling, large volume air intake in network draining and protection against air accumulation and vacuum formation at elevations, slope change points and road/river crossings during operation.

#### **4 SCOPE OF THE APPRAISAL**

The scope of this appraisal includes Bermad C10/C30 plastic bodied combination air valves for water supply as detailed in Section 3.

#### **5 APPRAISAL CRITERIA**

##### **5.1 Quality Assurance Requirements**

The WSAA Product Appraisal Technical Advisory Group accepts air valves manufactured in compliance with AS 4956:2017 *Air valves for water supply* and duly certified by means of an ISO Type 5 product certification scheme undertaken by a JAS-ANZ accredited Conformity Assessment Body (CAB) or by an international accreditation system recognised by JAS-ANZ.

The manufacturer is generally expected to have a production management and control system that has been duly accredited in accordance with AS/NZS ISO 9001 as a prerequisite to undergoing a product certification audit.

The ISO Type 5 Product Certification Scheme shall meet the criteria described in WSA TN-08.

##### **5.2 Performance Requirements**

The Bermad C10/C30 air valves have been appraised for compliance with the material and performance requirements of AS 4956:2017 *Air valves for water supply*.

Appraisal criteria are also determined by the WSAA Product Appraisal Technical Advisory Group and regularly reviewed to ensure that the criteria reflect the requirements of WSAA members.

The following Product Specification is also relevant to this application:

WSA PS-265 – Air Valves for Pressure Applications – Water Supply.

A copy of the Product Specification is available at the following link:

<https://www.wsaa.asn.au/shop/product/35716>

## 6 COMPLIANCE WITH APPRAISAL CRITERIA

### 6.1 Compliance with Quality Assurance Requirements

Bermad has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No.IL-86237 issued to Bermad CS LTD by The Standards Institution of Israel.
- AS 4956 StandardsMark ISO Type 5 product certification Licence No. SMKP25537 issued to Bermad Water Technologies by SAI-Global.

Copies of the primary Quality Assurance and Product Certification licences have been included in Appendix B and are also available for downloading from the WSAA Members Website.WSAA.

### 6.2 Compliance with Performance Requirements

#### 6.2.1 Components material list

The Bermad C10/C30 air valves material specifications for the components are detailed below and are deemed to meet the minimum requirements specified in AS 4956.

**TABLE 2  
BERMAD C10/C30 AIR VALVES COMPONENT MATERIAL LIST**

Component	Material
Body and cover	Glass Reinforced Nylon
Float	Polypropylene / Glass Reinforced Nylon
Resilient seals	Elastomer
Drain valve	Grade 316 Stainless steel
Insect screen (integral in cover)	Glass Reinforced Nylon

#### 6.2.2 Flanges

The flange outlets on the valves have a DN 80 flanged connection drilled to suit various flange configurations, one complying with the mating dimensions of AS/NZS 4087 Fig B5 PN16.

#### 6.2.3 Type tests

AS 4956 specifies a comprehensive suite of performance tests to be undertaken in order to demonstrate compliance with the Standard.

Tests specified are:

- Static
  - Body strength
  - Seat leakage at high pressure
  - Seat sensitivity at low pressure
  - Ultraviolet light
  - Endurance



- Long term unseating capability
- Disinfection product resistance
- Dynamic
- Air discharge capacity
- Air intake capacity

The equipment required to conduct these tests is highly specialised and not generally available in commercial testing laboratories. The Bermad CS Ltd Testing Laboratory in Israel has been recognised by SAI-Global as a competent laboratory for testing air valves to AS 4956. A copy of Statement No. LAB40001 from SAI-Global has been submitted.

Test reports have been submitted by Bermad to demonstrate compliance of a DN 50 C10 air valve and a DN 50 C30 air valve to the performance type test requirements of AS 4956:2017. The DN 50 and DN 80 valves have identical internal constructions.

#### **6.2.4 Contact with drinking water**

AS 4956 requires compliance with AS/NZS 4020 *Testing of products for use in contact with drinking water*. Bermad has submitted Test Report Numbers 248643 dated 3 April 2019 and 255050 dated 10 July 2019 for a DN 50 C10 valve and a DN 20 C30 valve respectively to demonstrate compliance with AS/NZS 4020:2005.

### **7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION**

An Installation, Operation and Maintenance Manual is available together with other technical information and training videos. These can be sourced at: <https://www.bermad.com.au/products/irrigation-air-release-valve-combination-ir-c10/> for the C10 valves and at: <https://www.bermad.com.au/products/waterworks-pn16-air-release-valve-with-surge-protection-ww-c30-sp/> for the C30 valves.

In addition, Bermad offers full technical assistance to water agencies and designers to advise on the location and sizing of valves for specific pipeline and pump station designs and can assist with Auto-Cad drawings for a specific valve build. Customised seminars can be arranged to assist in design, operation and selection of air valves. They also offer operator training and assistance with the commissioning of valves in the field.

### **8 PRODUCT MARKING**

Bermad air valves are marked in accordance with AS 4956:2017 as described below. The manufacturers name and nominal size are cast on the body whilst the remaining information is marked on name plates attached to the valve.

Manufacturers Name: Bermad

Nominal Size: DN XXX

Year of manufacture: XXXX

Pressure class: PN12, PN16

Standard number: AS 4956

Serial Number:

Standards Mark logo: √√√√√

### **9 PACKAGING AND TRANSPORTATION**

Bermad air valves are suitably packed to prevent damage to components during handling, transportation and storage. Valves are fitted with covers to protect the face of the flanges during transportation and storage.

## **10 PRODUCT WARRANTY**

The products are covered by the normal commercial and legal requirements of the *Competition and Consumer Act 2010 (Cth)* and details of Bermad's warranty is included in their Standard Conditions of Sale.

## **11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD TESTING REPORT**

Bermad air valves have been utilised by Australian Water Agencies for many years. It is considered unnecessary to request further field trials for the purpose of this Appraisal.

## **12 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW**

There were no issues raised.

## **13 FUTURE WORKS**

No future works have been identified for this Appraisal.

## **14 DISCLAIMER**

This Product Appraisal Report (Report) is issued by the Water Services Association of Australia Limited on the understanding that:

This Report applies to the product(s) as submitted. Any changes to the product(s) either minor or major shall void this Report.

To maintain the recommendations of this Report any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Report and appropriate action. Appraisals and their recommendations will be the subject of continuous review dependent upon the satisfactory performance of products.

WSAA reserves the right to undertake random audits of product manufacture and installation. Where products fail to maintain appraised performance requirements the appraisal and its recommendations may be modified and reissued. Appraisal reports will be reviewed and reissued at regular intervals not exceeding five (5) years.

The following information explains a number of very important limits on your ability to rely on the information in this Report. Please read it carefully and take it into account when considering the contents of this Report.

Any enquiries regarding this report should be directed to the Program Manager, Carl Radford, Phone: 03 8605 7601 email [carl.radford@wsaa.asn.au](mailto:carl.radford@wsaa.asn.au).

### **14.1 Issue of Report**

This Report has been published and/or prepared by the Water Services Association of Australia Limited and nominated Project Manager and peer group of technical specialists (the Publishers).

The Report has been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Report (the Recipients).

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Recipients should also independently verify and assess the appropriateness of any recommendation in the Report, especially given that any recommendation will not take into account a Recipient's particular needs or circumstances.

WSAA has not evaluated the extent of the product liability and professional indemnity insurance that the provider of the product maintains. Recipients should ensure that they evaluate the allocation of liability for product defects and any professional advice obtained in relation to the product or its specification including the requirements for product liability and professional indemnity insurance.

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**14.4 No Warranty**

The Publisher(s) do[es] not, in any way, warrant that steps have been taken to verify or audit the accuracy or completeness of the information in this Report, or the accuracy, completeness or reasonableness of any recommendation in this Report.

## APPENDIX A - PRODUCT BROCHURES



# COMBINATION AIR VALVE

## Model C30

BERMAD C30 is a high quality combination air valve for a variety of water networks and operating conditions. It evacuates air during pipeline filling, allows efficient release of air pockets from pressurized pipes, and enables large volume air intake in the event of network draining.

With its advanced aerodynamic design, double orifice and Surge Protection device (optional), this valve provides excellent protection against air accumulation and prevents vacuum formation, with improved sealing in low pressure conditions.



C30-P

### Features & Benefits

- Straight flow body with large diameter automatic orifice: Higher than usual flow rates.
- Aerodynamic full-body kinetic shield: Prevents premature closing, without disturbing air intake or discharge.
- Dynamic sealing: Prevents leakage under low pressure conditions (1.5 psi; 0.1 bar).
- The boss on the base can be tapped with a thread for pressure gauge connection, check point or test drain for air valve function.
- Threaded Side outlet (2"; DN50) for connection of Surge Protection (code SP) or Inflow prevention (code IP) devices.
- Compact, simple and reliable structure with fully corrosion-resistant internal parts; lower maintenance and increased life span.
- Design in compliance with functional standard and water service standards.
- Factory approval and Quality Control: Performance and specification tested and measured with specialized test bench, including vacuum pressure conditions.



C30-C

### Additional Features & Accessories

- Surge Protection (code SP) device: Smoother operation, preventing damage to the valve and the system.
- Inflow Prevention (code IP) device: Prevents intake of atmospheric air in cases where this could lead to damaged pumps, required re-priming, or disruption of siphons.
- Service Ports fitted: 1/8";DN3 or 1/4";DN6 plug for pressure gauge connection, check point or test drain for air valve function.
- Extension with downwards outlet, only for inlet sizes 2-3"; DN50-80.

### Typical Applications

- Pipelines: Protection against air accumulation and vacuum formation at elevations, slope change points and road / river crossings.
- Water networks: Protection against air accumulation and vacuum formation.
- In proximity to control valves and water meters: Prevention of inaccurate pressure regulation and biased readings due to air existence in these devices.

All images in this catalog are for illustration only



**Inlet and Outlet Connections**

- Inlets:
  - Plastic Body (C30-P): male threaded ¾-2"; DN20-50, Flanged 2-3"; DN50-80
  - Ductile Iron Body (C30-C): male threaded 1-2"; DN25-50, Flanged 2"; DN50
- Outlets: Sideways, 2"; DN50 female threaded only for inlet sizes 2-3"; DN50-80

**Operational Data**

- Pressure Rating: 230 psi; ISO PN16
- Minimum operating pressure: 1.5 psi; 0.1 bar
- Maximum operating pressure: 230 psi; 16 bar
- Media and operating temperature: Water, 33-140°F; 1-60°C

**Materials**

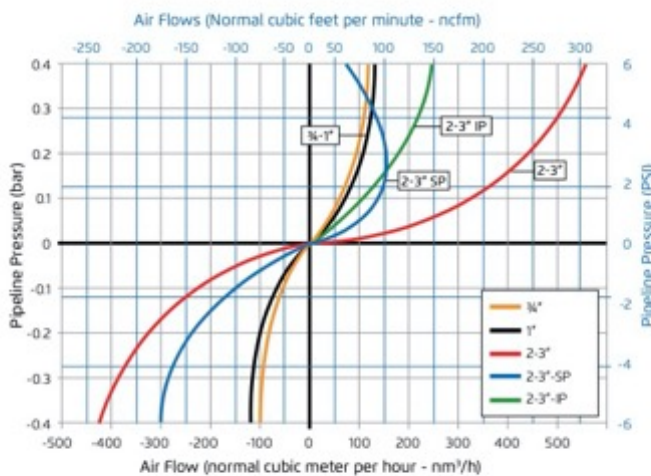
- Body
  - Glass-reinforced Nylon (code C30-P)
  - Ductile Iron (code C30-C), coated with Fusion Bonded Epoxy, Blue
- Float Assembly: Polypropylene, Glass Reinforced Nylon.
- Elastomers: EPDM, Optional - Viton.

**Orifice Specifications**

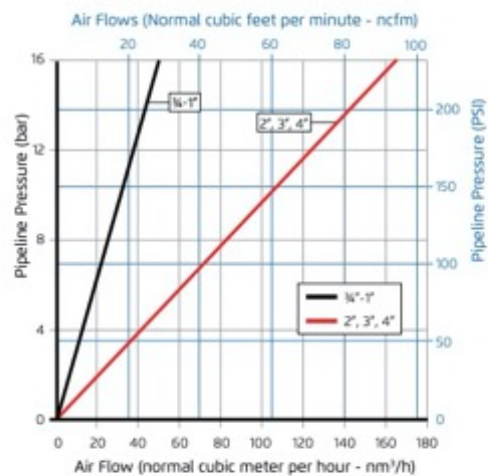
Inlet Sizes	Automatic Orifice	Kinetic Orifice		Surge Protection		
	Area	Diameter	Area	Number of holes	Hole Diameter	Total Area
	Sq Inch mm	Sq mm	inch mm	Sq inch Sq mm	inch mm	Sq inch Sq mm
¾" - 1"	0.008	0.795	0.497	—	—	—
DN20 - 25	5.4	20.2	320	—	—	—
2" - 3"	0.019	1.772	2.465	4	0.157	0.078
DN50 - 80	12.2	45.0	1,590	4	4	50

**Air Flow Performance Charts**

**Air Relief and Intake** (Pipeline Filling, Draining and Vacuum Conditions)



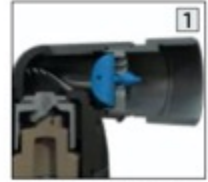
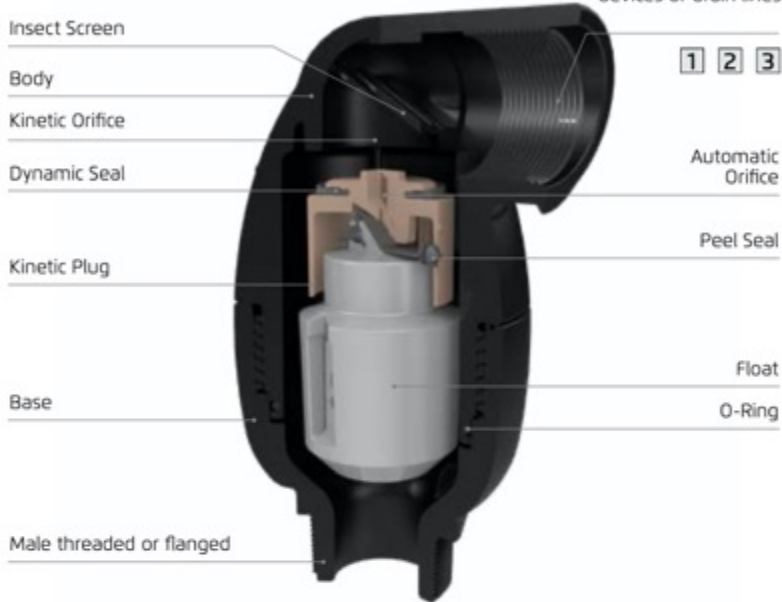
**Air Release** (Pressurized Operation)



Air relief and intake charts are based on actual measurements, measured in Bermad Air Flow test bench, according to EN-1074/4 standard and refer to Side outlet. Use Bermad Air software for optimized Sizing & Positioning of Air Valves.

**Cutaway - Glass Reinforced Nylon Body (C30-P)**

Female Threaded for retrofitting Surge Protection (Code SP) or Inflow Prevention (Code IP) devices or drain lines



Surge Protection (code SP), only for inlet sizes 2-3"; DN50-80



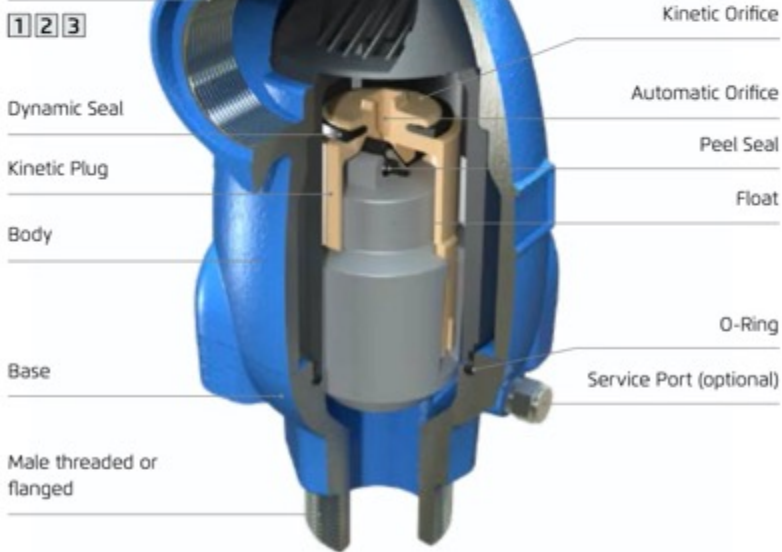
Inflow Prevention (code IP), only for inlet sizes 2-3"; DN50-80



Extension with downwards outlet, only for inlet sizes 2-3"; DN50-80

**Cutaway - Ductile Iron Body (C30-C)**

Female Threaded for retrofitting Surge Protection (Code SP) or Inflow Prevention (Code IP) features or drain lines



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Dimensions & Weights

Inlet Size	Connection	C30-P			C30-C		
		Width (D)	Height (H)	Weight	Width (D)	Height (H)	Weight
Inch	---	Inch	Inch	lbs	Inch	Inch	lbs
mm	---	mm	mm	Kg	mm	mm	Kg
3/4"	Threaded	3.819	6.299	0.99	--	--	--
DN20		97	160	0.45	--	--	--
1"	Threaded	3.819	6.299	0.99	7.087	4.331	4.85
DN25		97	160	0.45	180	110	2.2
2"	Threaded	5.630	9.055	2.87	6.181	9.764	13.66
DN50		143	230	1.3	157	248	6.2
2"	Flanged	6.496	9.449	4.30	7.480	9.843	22.70
DN50		165	240	1.95	190	250	10.3
3"	Flanged	7.874	9.449	4.96	--	--	--
DN80		200	240	2.25	--	--	--



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PCAWET1-C30 September 2018





## COMBINATION AIR VALVE

### Model C10

BERMAD C10 is a high quality combination air valve for a variety of irrigation networks and operating conditions.

It evacuates air during pipeline filling, allows efficient release of air pockets from pressurized pipes, and enables large volume air intake in the event of network draining.

With its advanced aerodynamic design, double orifice and Surge Protection device (optional), this valve, this valve provides excellent protection against air accumulation and vacuum formation, with improved sealing in low pressure conditions.

Specifically designed for irrigation applications.



### Features & Benefits

- Straight flow body with large diameter automatic orifice: Higher than usual flow rates.
- Aerodynamic full-body kinetic shield: Prevents premature closing without disturbing air intake or discharge.
- Dynamic sealing: Prevents leakage under low pressure conditions (1.5 psi; 0.1 bar).
- Compact, simple and reliable structure whose parts are fully corrosion, chemical and fertilizer resistant: Lower maintenance and increased life span.
- Design in compliance with functional standards.
- Factory approval and Quality Control: Performance and specification tested and measured with specialized test bench, including vacuum pressure conditions.
- Field proven designed for use in irrigation applications with water quality such as river water, channel water, dam water or treated effluent with high reliability.

### Additional Features & Accessories

- Surge Protection (code SP) device: Smoother operation, preventing damage to the valve and the system.
- Inflow Prevention (code IP): Prevents intake of atmospheric air in cases where this could lead to damaged pumps, required re-priming, or disruption of siphons.
- Service Ports fitted: 1/8"; DN3 or ¼"; DN6 plug for pressure gauge connection, check point or test drain for air valve function.
- Test point (code T)
- Extension with downwards outlet, only for inlet sizes 2-3"; DN50-80.

### Typical Applications

- Main Irrigation Networks: Protection against air accumulation and vacuum formation downstream of pumps, along supply lines and at elevations in main irrigation networks.
- Irrigation Control Heads: Protection against air accumulation and vacuum formation at filtration and fertilization stations and downstream of main control valves.
- Infield Systems: Protection against air accumulation and vacuum formation in proximity to water meters and automatic regulators.
- Landscape Irrigation: Protection against air accumulation and vacuum formation.
- Pumping stations: Maximising pumping efficiency, priming capabilities and reducing the possibility of pressure surges during power failure modes.

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**Inlet and Outlet Connections**

- Inlets: male threaded ¾-2"; DN20-50, Flanged 2-3"; DN50-80
- Outlets: Sideways, 2"; DN50 female threaded only for inlet sizes 2-3"; DN50-80

**Operational Data**

- Pressure Rating: 175 psi; ISO PN10 or ISO PN12
- Minimum operating pressure: 1.5 psi; 0.1 bar
- Maximum operating pressure: 150 psi; 10 bar, 175 psi; 12 bar
- Media and operating temperature: Water, 33-140°F; 1-60°C

**Materials**

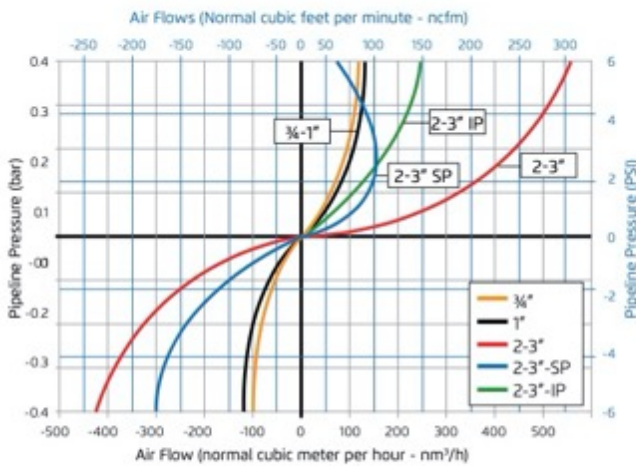
- Body: Glass-reinforced Nylon
- Float Assembly: Polypropylene, Glass Reinforced Nylon.
- Elastomers: EPDM, Optional - Viton

**Orifice Specifications**

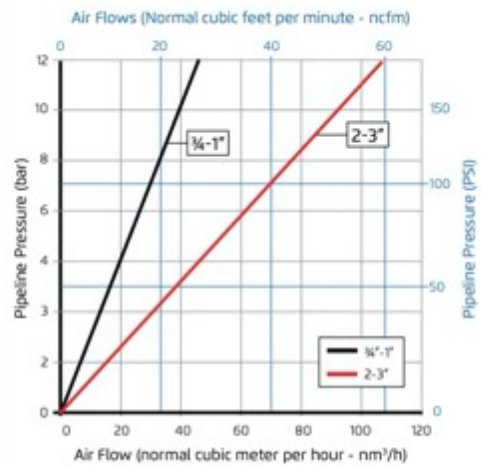
Inlet Sizes	Automatic Orifice	Kinetic Orifice		Surge Protection		
	Area	Diameter	Area	Number of holes	Hole Diameter	Total Area
	Sq Inch mm	inch mm	Sq inch Sq mm	—	inch mm	Sq inch Sq mm
¾" - 1"	0.008	0.795	0.497	—	—	—
DN20 - 25	5.4	20.2	320	—	—	—
2" - 3"	0.019	1.772	2.465	4	0.157	0.078
DN50 - 80	12.2	45.0	1,590	4	4	50

**Air Flow Performance Charts**

**Air Relief and Intake** (Pipeline Filling, Draining and Vacuum Conditions)



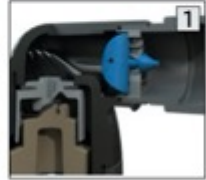
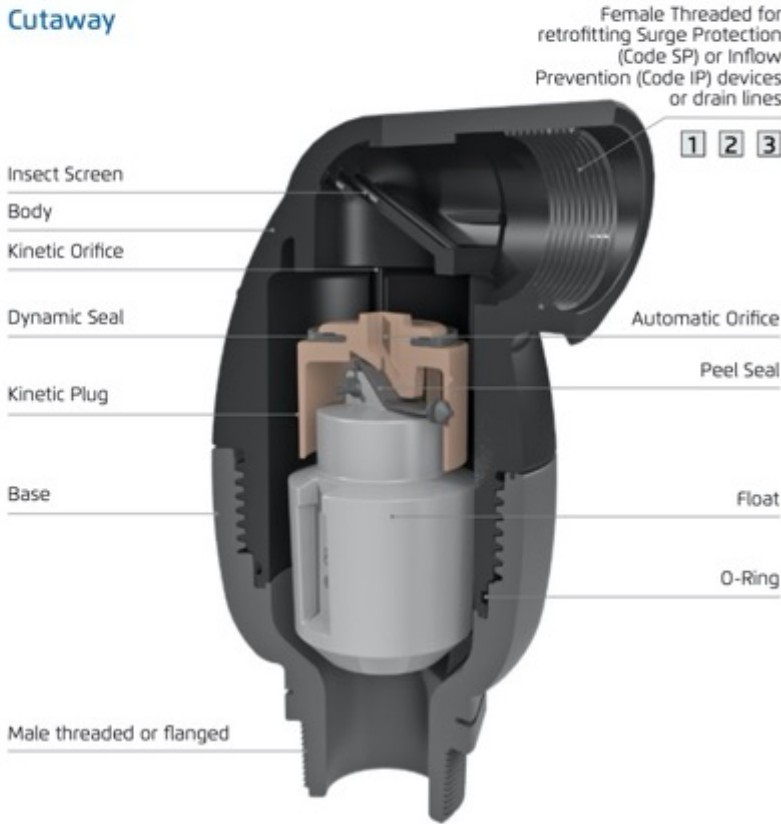
**Air Release** (Pressurized Operation)



Air relief and intake charts are based on actual measurements, measured in Bermad Air Flow test bench, according to EN-1074/4 standard and refer to Side outlet. Use Bermad Air software for optimized Sizing & Positioning of Air Valves.



**Cutaway**



Surge Protection (code C10-SP), only for inlet sizes 2-3"; DN50-80



Inflow Prevention (code C10-IP), only for inlet sizes 2-3"; DN50-80



Extension with downwards outlet, only for inlet sizes 2-3"; DN50-80

**Dimensions & Weights**

Inlet Size	Connection	Width (D)	Height (H)	Weight
Inch	---	Inch	Inch	lbs
mm	---	mm	mm	Kg
¼"-1"	Threaded	3.819	6.299	0.99
DN20-25		97	160	0.45
2"	Threaded	5.630	9.055	2.87
DN50		143	230	1.3
2"	Flanged	6.496	9.449	4.30
DN50		165	240	1.95
3"	Flanged	7.874	9.449	4.96
DN80		200	240	2.25

All images in this catalog are for illustration only



[www.bermad.com](http://www.bermad.com)

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PCAAE11-C10 September 2018

## APPENDIX B - QUALITY CERTIFICATIONS

Copies of the following Quality Certification Certificates are available for downloading from the WSAA Members Website.

**TABLE B1 BERMAD CS LTD– MANAGEMENT SYSTEMS**

Evron, Israel	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	56178
Certifying Agency	The Standards Institution of Israel
First Date of Certification	16 July 1995
Current Date of Certification	23 December 2018
Expiry Date of Certification	22 September 2021

**TABLE B2 BERMAD WATER TECHNOLOGIES – PRODUCT CERTIFICATION**

26 Brand Drive Thomastown VIC	
Quality Systems Standard	AS 4956:2017
Certification Licence No.	SMKP25537
Certifying Agency	SAI-Global
First Date of Certification	19 April 2013
Current Date of Certification	6 July 2020
Expiry Date of Certification	18 April 2023



THE INTERNATIONAL CERTIFICATION NETWORK

# CERTIFICATE

IQNet and  
THE STANDARDS INSTITUTION OF ISRAEL  
hereby certify that the organization

*Bermad Cs Ltd*

*Evron, Israel*

*for the following field of activities*

*Design, production and testing of control valves,*

*metering valves, Water meters, valves for*

*fire protection and air valves.*

*has implemented and maintains a*

## Management System

*which fulfils the requirements of the following standard*

### ISO 9001:2015

<i>Issued on :</i>	<i>23 . 12 . 2018</i>
<i>Date of expiration:</i>	<i>22 . 12 . 2021</i>
<i>Date of initial approval:</i>	<i>16 . 07 . 1995</i>

*This attestation is directly linked to the IQNET partner's original certificate and shall not be used as a stand alone document*



*Alex Stoichitoiu*  
*Alex Stoichitoiu*  
 President of IQNet

Registration number: **IL-86237**

*Ilan Carmit*  
 Acting Director General



IQNet PR713 (07/2017)

**IQNet Partners\***: AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy CQC China CQM China CQS Czech Republic  
 Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifiointi Oy Finland INTECO  
 Costa Rica IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland NYCE-SIGE Mexico PCBC  
 Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia  
 SIRIM QAS International Malaysia SGS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia  
 IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

\* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under [www.iqnet-certification.com](http://www.iqnet-certification.com)

[www.sii.org.il](http://www.sii.org.il)



# STANDARDSMARK LICENCE

SAI Global hereby grants:

## Bermad Water Technologies

ABN 62 093 801 220

7 Inglewood Drive, Thomastown, VIC 3074, Australia

### StandardsMark Licence

Manufactured to:

**AS 4956-2008 - Air valves for water supply**

**& AS 4956-2017 - Air valves for water supply**

"the StandardsMark Licensee" the right to use the STANDARDSMARK as shown below only in respect of the goods described and detailed in the Schedule which are produced by the Licensee or on behalf of the Licensee\* and which comply with the appropriate Standard referred to above as from time to time amended. The Licence is granted subject to the rules governing the use of the STANDARDSMARK and the Terms and Conditions for certification and licence. The Licensee covenants to comply with all the Rules and Terms and Conditions.

**Licence No: SMKP25537**

**Issued** : 6 July 2020

**Expires** : 18 April 2023

**Originally Certified** : 19 April 2013

**Current Certification** : 6 July 2020

Heather Mahon  
General Manager Technical Services  
SAI Global Assurance



\* For details of manufacture, refer to the licensee

The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (ACN 108 716 669) ("SAI Global") 680 George Street, Sydney NSW 2000, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to [www.saiglobal.com](http://www.saiglobal.com), for the list of product models.



## SCHEDULE TO STANDARDSMARK LICENCE

SAI Global hereby grants:

### Bermad Water Technologies

7 Inglewood Drive, Thomastown, VIC 3074, Australia

StandardsMark Licence

Manufactured to:

**AS 4956-2017 - Air valves for water supply**

Model identification of the goods on which the STANDARDSMARK may be used:

Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Pressure Classification (PN)	End Connection Designation	Material Designation	Date Endorsed
C10	BERMAD	AIR RELEASE VALVE	DOUBLE ORIFICE	DN80	PN10	3" FLANGED	PA 6 GF33 BLACK + PA 6 GF30 GRAY	24 Jun 2020
C10	BERMAD	AIR RELEASE VALVE	DOUBLE ORIFICE	DN50	PN10	2" BSPT	PA 6 GF33 BLACK + PA 6 GF30 GRAY	24 Jun 2020
C30	BERMAD	AIR RELEASE VALVE	DOUBLE ORIFICE	DN80	PN16	3" FLANGED	PA 6 GF33 BLACK	24 Jun 2020
C30	BERMAD	AIR RELEASE VALVE	DOUBLE ORIFICE	DN50	PN16	2" BSPT	PA 6 GF33 BLACK	24 Jun 2020

**AS 4956-2008 - Air valves for water supply**

Model identification of the goods on which the STANDARDSMARK may be used:

Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Pressure Classification (PN)	End Connection Designation	Material Designation	Date Endorsed
C70	Bermad	Air Valve	Double Orifice	150 (6")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Double Orifice	200 (8")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Double Orifice	100 (4")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Double Orifice	50 (2")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Double Orifice	80 (3")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Anti-Slam	150 (6")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Anti-Slam	200 (8")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Anti-Slam	100 (4")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Anti-Slam	50 (2")	16 and 35	Flange	Ductile Iron	26 Apr 2016
C70	Bermad	Air Valve	Anti-Slam	80 (3")	16 and 35	Flange	Ductile Iron	26 Apr 2016

End of Record

**Licence No: SMKP25537**

**Issued Date: 6 July 2020**

This schedule supersedes all previously issued schedules



\* For details of manufacture, refer to the licensee

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## **APPENDIX D - SUPPLIER CONTACTS**

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26 Brand Drive

Thomastown VIC 3074

Telephone: 03 9464 2382

Email: [info@bermad.com.au](mailto:info@bermad.com.au)





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Docklands VIC 3008

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Sydney NSW 2000  
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Sydney NSW 2001

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email: [info@wsaa.asn.au](mailto:info@wsaa.asn.au)

[www.wsaa.asn.au](http://www.wsaa.asn.au)