HydroMet
Pipes, Valves and Fittings

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MiniMet 100 & 150mm Valves

CONTENTS

We are pleased to advise Hydromet in recent times commissioned AWQC to carry out an updated and significant testing program of sampled components supplied into the marketplace on behalf of Hydromet, with the result of this testing program conforming with the requirements of AS/NZS 4020.

WaterMark Certification – NATA approved test reports form part of the conditions of WaterMark certification which is maintained for over 40 models of backflow prevention valves under the MiniMet and MetCheck ranges. These valves are certified on the Hydromet WM license WM-022473 and Hydromet are subject to annual surveillance by IAPMO Oceania for continued compliance with the WaterMark Certification Scheme.

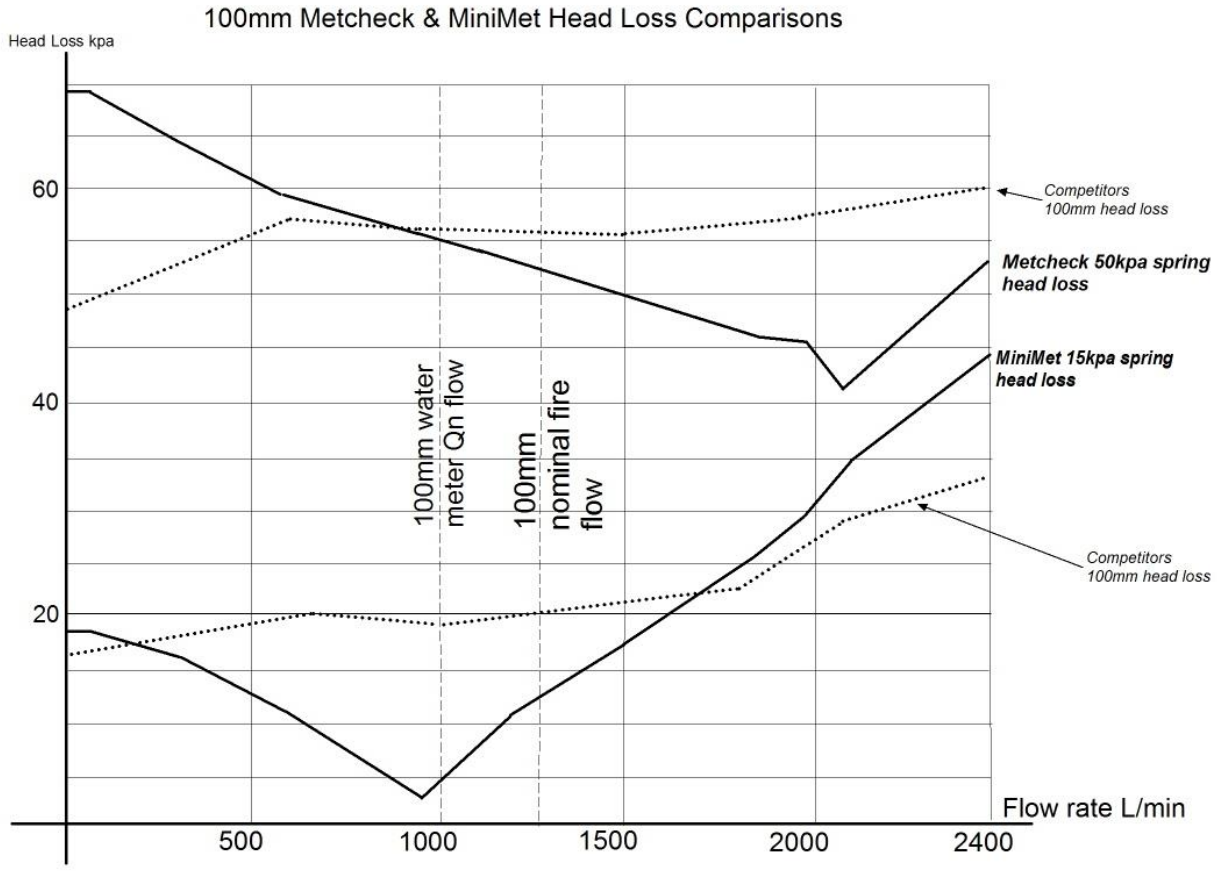
AS/NZS 2845.1 – All MiniMet and MetCheck valves have been tested to, and conform with, the requirements of AS/NZS 2845.1. All MiniMet and MetCheck valves have a classification of either a low or medium hazard rating, as defined in Volume 3 of the NCC, the Plumbing Code of Australia.

Flanged stainless steel pipework – The AS/NZS 4020 test reports also extend to cover the various SS316 flanged pipes manufactured by Hydromet, with these components being available to suit the installation of any backflow prevention valve or water meter assemblies.

Why Choose a MiniMet Valve

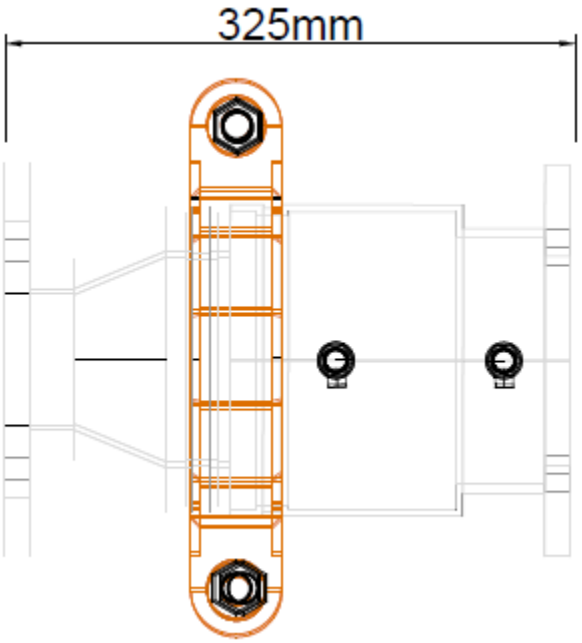
- **The valve Body is made from 316 Sch10 Stainless Steel to ensure the maximum resistance to corrosion with no rusting internal debris or blistering paint passing through checks, damaging seals, or causing severe damage to the internal componentry.**
- **Valves can be returned to the Hydromet Factory for a 10-year service. New Serial numbers are used to record the valves history as part of the watermark accreditation.**
- **Earth support tags can be supplied if current is suspected to be within the valve assembly of the pipe line. Earth leakage can reduce the life span of any valve assembly due to osmosis which will attack the valves close to weld lines.**
- **Full back up technical support from the Manufacturer.**
- **Made in Queensland with quick access to all spare parts and accessories for every application.**
- **All Hydromet Valves are rated to PN16 in all models.**
- **Valves come with optional strainer boxes, valve support stands, Met-Coated Nuts and Bolts anti-galling specific for high tension applications, and numerous J & S -Pipe rises all in 316 Stainless Steel to accommodate a full assembly.**
- **Ribbed seal anti-slip gaskets purposely designed by Hydromet.**
- **The MiniMet Valves have the lowest head loss of any Single Check backflow valve on the market.**
- **Due to the lightweight 316 Sch10 Stainless Steel design the MiniMet is the lightest SCV available.**
- **5 Year warranty on the main body and a 12 Month Warranty on all moving parts. We are unable to cover components that are shown to be damages by debris, or incorrect installation. E.g. installation for an electric cut off switch downstream causing corrosion.**

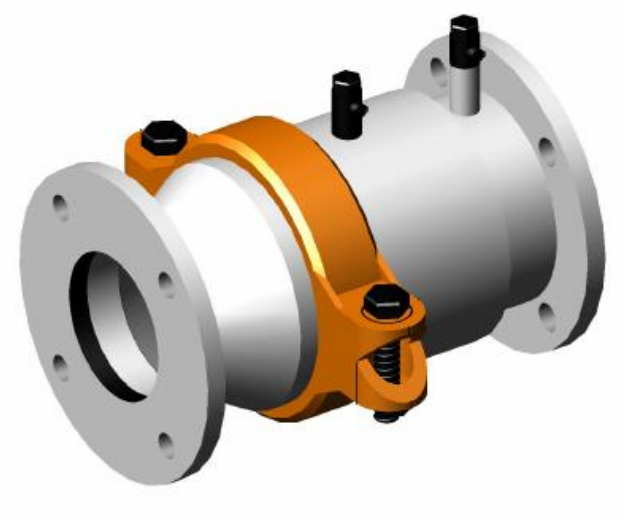
Why Choose a MiniMet Valve

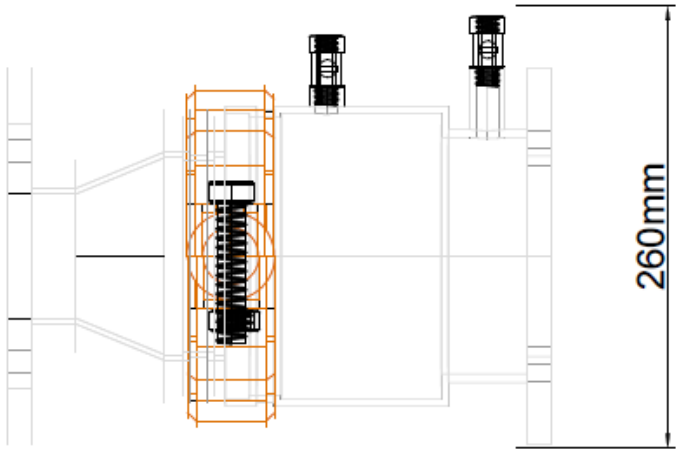


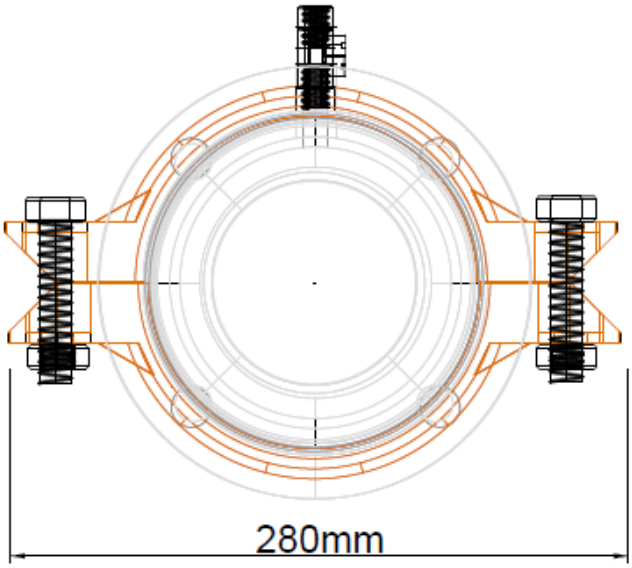
Technical Drawings & Specifications

100mm MiniMet

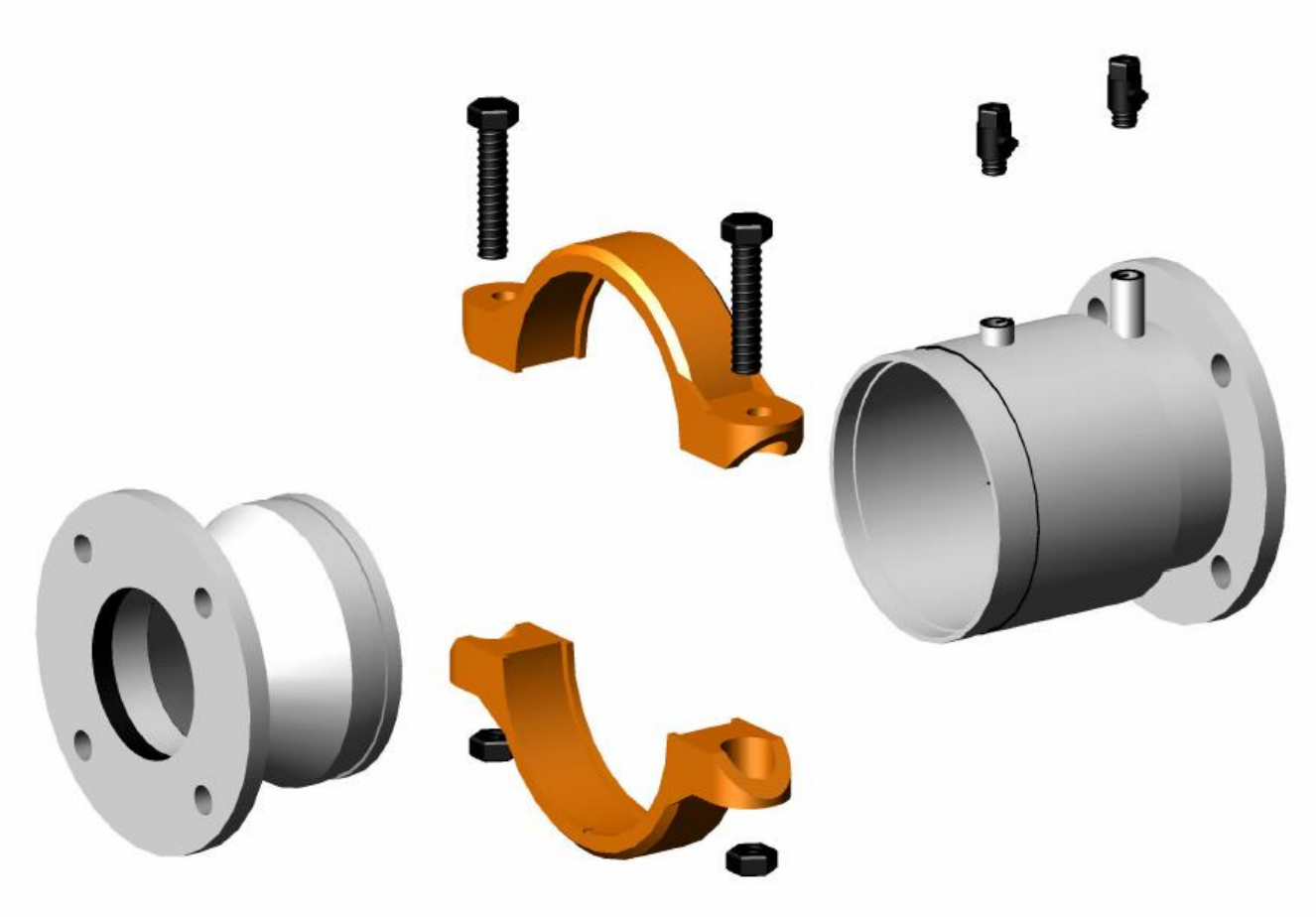






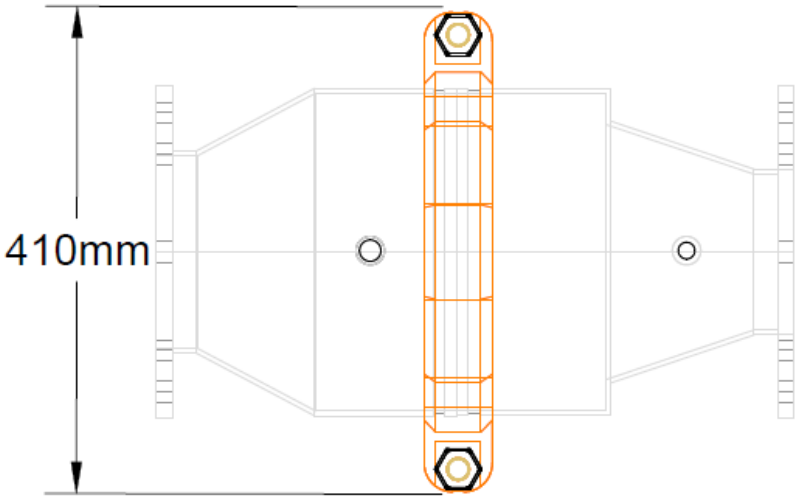


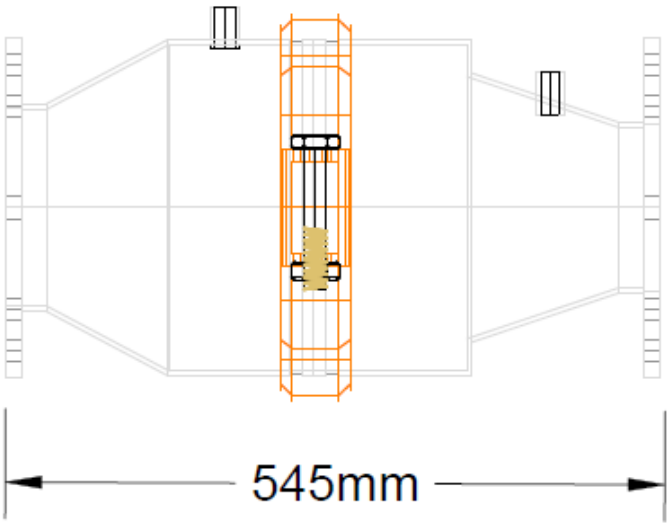
Technical Drawings & Specifications

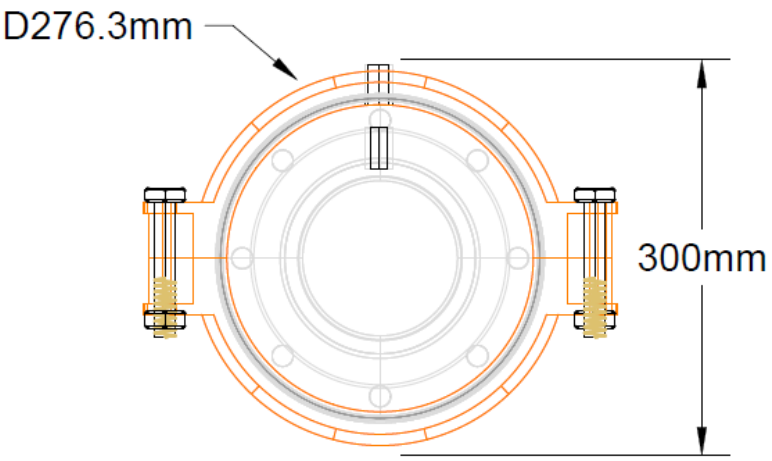


Technical Drawings & Specifications

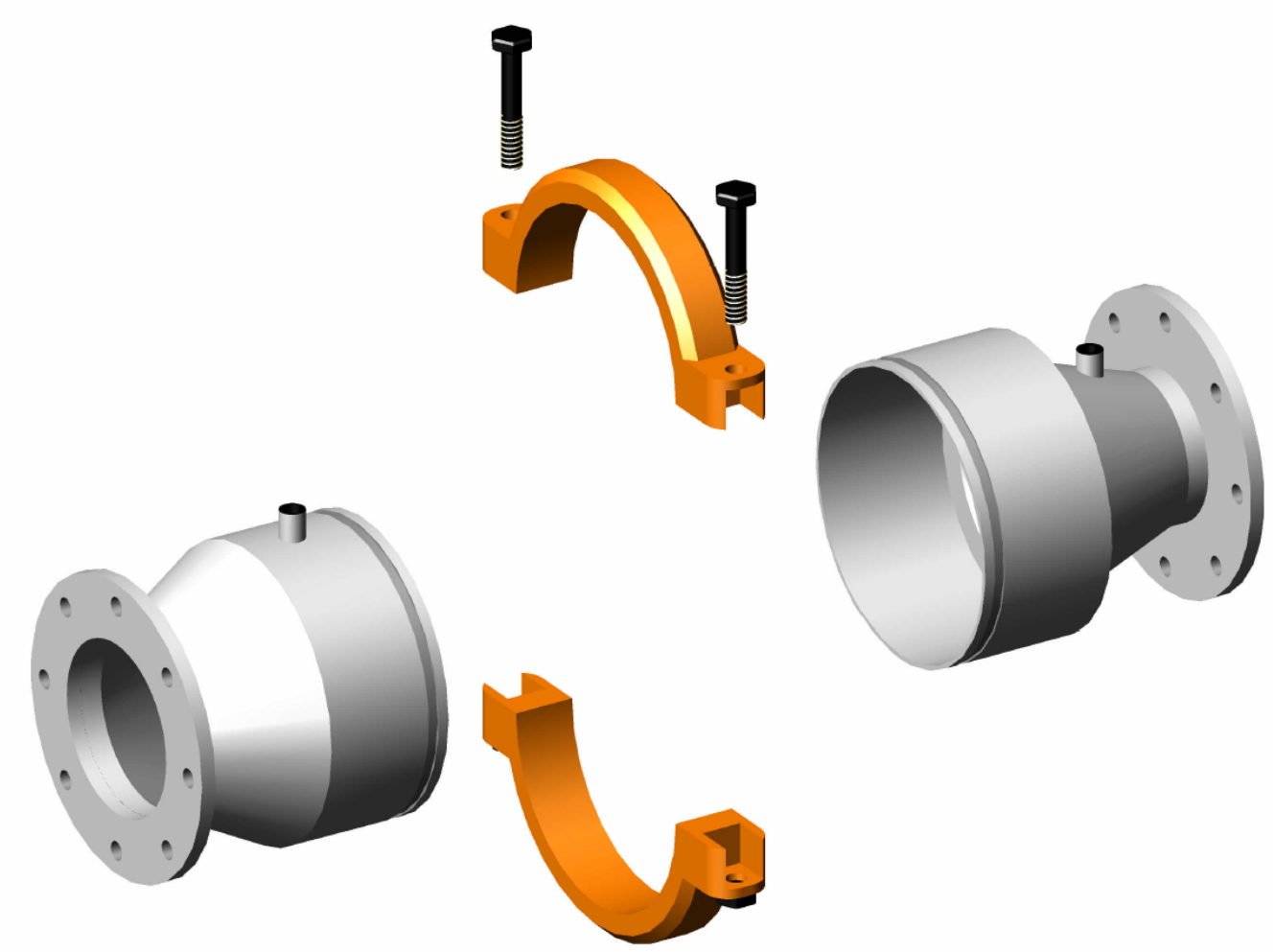
150mm MiniMet







Technical Drawings & Specifications



MetCheck & MiniMet valves are designed to the following parameters:

- Manufactured to AS2845.1 2010
- Size Range: 100mm to 150mm. Other sizes by negotiation.
- Temperature Range: +1°C to +60°C.
- End Connections: Flanged to AS4087 **PN16** rated minimum.
- Max Working Pressure: Standard options: -
    - Flanged T/D to AS4087 PN16: 1600kpa
    - Flanged T/E to AS4087 PN16: 1600kpa
- Max Shell Pressure, and Back Pressure: 1.5 times Max Working Pressure above.

Servicing Instructions

Installation Instructions:

- MetCheck & MiniMet Valves should be installed by a licensed plumber. Appropriate PPE (Personal Protection Equipment), should be worn by those installing.
- All site risk assessment should be carried out before attempting to install. Installation should be carried out in accordance with AS3500 of the plumbing code.
- The MetCheck & MiniMet should be installed in accordance with the direction of flow arrow, relative to the direction of flow of the water. All end connection bolts should be tightened appropriately, to overcome leaks.
- Minimum clearance: - sufficient space around the valve
- Isolation valves should be installed immediately upstream and downstream of MetChecks and MiniMets.
- Strainers are not normally used in main pipelines, in fire situations.

Commissioning Instruction:

- MetCheck & MiniMet Valves should be installed by a licensed plumber, with a license endorsed for backflow prevention.
- Commissioning and testing should be conducted in accordance with AS2845.3 2010
- Commissioning should be carried out after installation and prior to allowing normal water flow through the valve.

Servicing Instructions

Maintenance Instructions:

MetCheck & MiniMet Valves should be maintained by a licensed plumber, with a license endorsed for backflow prevention.

Alternatively, MetCheck & MiniMet Valves should be maintained by a person, as authorized by the manufacturer.

Any commissioning and testing after maintenance, should be conducted in accordance with AS/NZS 2845.1: 2010, by a licensed plumber

Maintenance is based upon the need for maintenance determined by the annual testing standards as per AS/NZS 2845.1: 2010.

If the main check valve does not meet the minimum test requirements as per AS2845.1: 2010, then the fault should be found and rectified.

Fault Finding:

If the differential pressure is holding, but below the differential pressure pass rate, typically the check module spring has become weak. If the differential pressure drops to zero, typically the check module rubber seals are leaking.

Identifying which check valve needs maintenance, the individual check module should be removed, and parts cleaned or replaced as necessary.

Often a good flush at high flow will clear any lingering debris, and may fix the problem. Retest after flushing.

Maintaining the Main Check Modules:

For the main check module, remove the Victaulic roll grove fittings.
In the MetCheck detector this valve has four bolts and two couplings.
In the MiniMet, this valve has two bolts and one coupling.

Once the couplings are removed, slide the sealing ring to one side.
In the MetCheck detector, the vessel containing the check module should be supported during this process so that it does not drop to the ground and cause any damage. This will expose the back end of the check module.

Locate the circlip and spacer at the back end of the module, and remove both.

Pull out the check module. This should come out by hand or with a slight tap from the front of the Check body.

If the check module needs to be serviced by replacing the orange rubber seal, remove the four nuts at the back of the check module, and disassemble the module.
Maintenance can now proceed on the module.

Reassembly is the opposite of disassembly.

Spare Parts:

Main valve: -

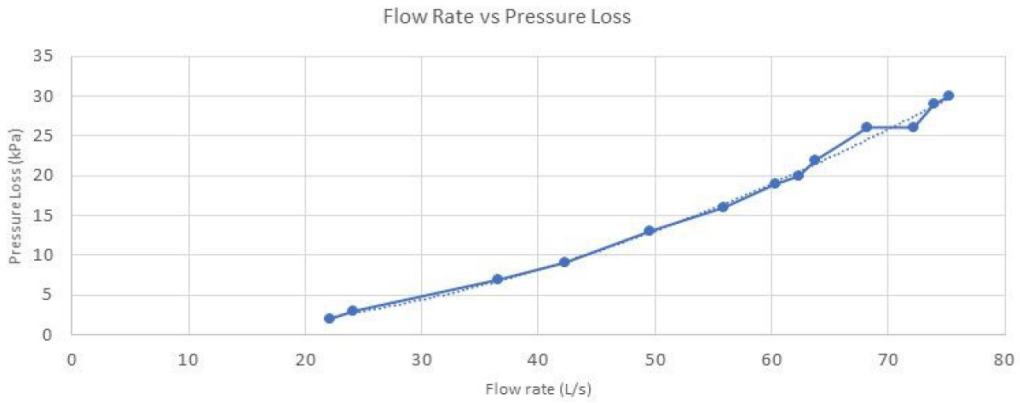
- Check module rubber seal.
- Module to body O-Ring
- Complete module, 15kpa nominal
- Complete module, 50kpa nominal
- Circlip
- Spacer

MiniMet 150AT

Description: DN150 Flange to Flange Single Check Assembly

Rated Flow and Pressure Loss:

DN150 Single Check Detector Assembly (Testable) (SCAT) – Pressure loss curve applicable standard: AS/NZS2845.1 Clause 18.1 General Requirements.
General: Test specified in 17, other than 17.5.3
Scope: The testing below is outside of the applicable requirements for a SCDAT.
Test Method: Appendices K & Z



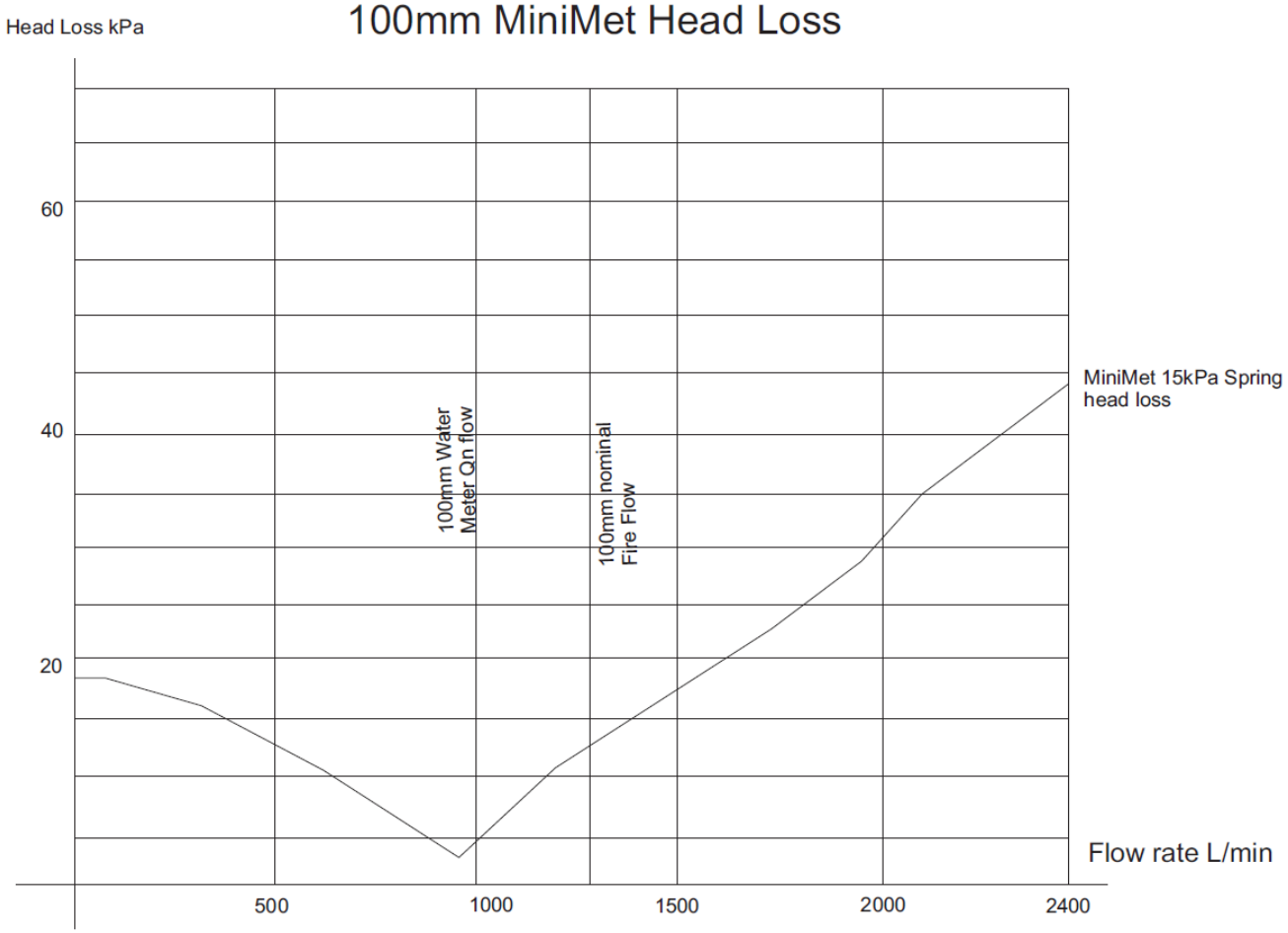
Requirements	
A maximum pressure loss across the device of 35kPa, the rated flow shall be as given in Table 17.1	
Test Conditions	**Observation**
Test Rig Pressure loss across rig = 3kPa Testing Flow rate (L/s) = 63kPa Upstream (kPa) = 250 Downstream (kPa) = 225	Pressure loss (kPa) = 22

MiniMet 100AT

Pressure Drop:

Tested in accordance with AS/NZS 2845.1 Clause 18.4.2
Test Method: Appendix U as per Australian Standards **COMPLIES**

Test Requirements	Observations
When tested in accordance with Appendix K, with a maximum pressure loss acress the device of 175kPa, the rated flow shall be as given in Tabke 7.1.	Pressure loss Across the Rig = 1kPa Pressure Loss (kPa) = 30



IAPMO R&T OCEANA

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www.jas-anz.org/register

IAPMO R&T Oceana is a product certification body which inspects and arranges for the independent laboratory testing of samples taken from the manufacturer's stock or from the market or a combination of both, to verify compliance of the requirements of applicable Standards and Specifications. This activity is coupled with periodic surveillance of the manufacturer's factory and any major subcontractor's site/s as well as the assessment of the manufacturer's Quality Assurance System. This certification is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO R&T Oceana of the product acceptance by Authorities Having Jurisdiction.

CERTIFICATE OF CONFORMITY

IAPMO R&T Oceana hereby grants to:

S&J Property Trust discretionary Trading trust for SBH Enterprises Pty Ltd T/A Hydromet

A.B.N.: 83 185 316 113

Unit 3, 34 Cessna Drive, Caboolture,, QLD 4510 Australia

the right to use the WaterMark in accordance with the ABCB Manual for the WaterMark Certification Scheme;– Australian Standards; WaterMark Technical Specifications; and the Plumbing Code of Australia; only in respect of the certified product as described in the WaterMark Certificate of Conformity – Schedule of Certified Product (Refer also IAPMO Product Listing Directory). The Certificate is granted subject to the rules governing the WaterMark Certification Scheme and the Terms and Conditions of the Approved User Agreement and IAPMO Oceana's WaterMark Governance Rules.

Evaluated to:

AS/NZS 2845.1-2010 (Inc. Amdt 1)

Water supply - Backflow prevention devices - Materials, design and performance requirements

Manufacturer:

Refer to Licence Holder

Licence No.:	WM-022473	**First Certified:**	14 October 2015
Certification Date:	11 January 2022	**Expiry Date:**	13 October 2025

CEO, The IAPMO Group

This WaterMark certification is for the period indicated herein and is void after the date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of IAPMO R&T Oceana, or any evidence of non-compliance with applicable Standards, Specifications or of inferior workmanship, may be deemed sufficient cause for revocation of this certification. Reproduction of or reference to this certificate for advertising purposes may be made only by specific written permission of IAPMO R&T Oceana. Any alteration of this certificate could be grounds for revocation of this certification.

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