

WSAA PRODUCT APPRAISAL CERTIFICATE

Clover Pipelines Pty Ltd Connect VPC Mechanical Couplings

This appraisal covers PN16 rated couplings with the capability to connect pipes with a wide range of outside diameters including Series 1 PVC and DIOD pipes.

The scope of this appraisal applies to Connect VPC PN16 bolted unrestrained mechanical couplings in sizes DN 80 to DN 600. A listing of Quality and Product Certification Certificates and details of products are included in the attached Schedules A and B.

Product Category	Ductile iron bolted unrestrained couplings for waterworks purposes
PA Number:	PA 1728 Issue 4
Supplier	Clover Pipelines Pty Ltd
Brand	Connect VPC
Standards	AS/NZS 4998:2009 <i>Bolted unrestrained mechanical couplings for waterworks purposes</i>
WSAA Product Specification	WSA PS – 270 <i>Mechanical Couplings, Non-End Thrust Restraint for Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage</i>
Other Specifications	
Issue date	23 February 2023
Expiry date	22 February 2028
Recommendations	It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise Connect VPC couplings in sizes DN 80 to DN 600 for waterworks purposes, provided they are installed in accordance with WSAA Codes and the manufacturer's requirements, where specified.
Disclaimer	The disclaimer on Page 2 explains a number of very important limits on your ability to rely on the information in this Product Appraisal Certificate and the assessment criteria used to underlie it. Please read it carefully and take into account when considering the content in this Certificate.

1. Disclaimer

This Product Appraisal Certificate (Certificate) is issued by WSAA on the understanding that:

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

To maintain the recommendations of this Certificate any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Certificate including the product appraisal criteria underlying it 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. Certificates will be reviewed and reissued at regular intervals not exceeding five (5) years.

WSAA reserves the right to withdraw this Certificate at any time in its sole and absolute discretion for any reason.

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

Any enquiries regarding this Certificate should be directed to the Product Appraisal Manager Phone: 03 8605 7601 email carl.radford@wsaa.asn.au.

1.1. Issue of Certificate

This Certificate has been published and/or prepared by WSAA and nominated Project Manager and peer group of technical specialists (the Publishers).

The Certificate and the underlying product appraisal criteria have been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Certificate (the Recipients).

By accepting this Certificate, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Certificate and product appraisal criteria underlying it that the Recipient has understood and accepted the terms of this Disclaimer.

1.2. Limits on Reliance on Information and Recommendations

1.2.1. Disclaimer of liability

Neither the Publisher(s) nor any person involved in the preparation of the Certificate and product appraisal criteria underlying it accept(s) any liability for any loss or damage suffered by any person however caused (including negligence or the omission by any person to do anything) relating in any way to the Certificate or the product appraisal criteria underlying it. This includes (without limitation) any liability for any recommendation or information in the Certificate or any errors or omissions.

1.2.2. Intellectual Property and other rights

WSAA does not undertake any assessment of whether the importation, manufacture, sale or use of the Product the subject of this Certificate infringes the intellectual property rights or proprietary rights of any person. Recipients of the Certificate should undertake their own assessment of whether (as relevant) the importation, manufacture, sale or use of the relevant Products infringe the intellectual property rights or other proprietary rights of any person. If the Product infringes intellectual property rights or other proprietary rights there is potential for the supply of the Products to be interrupted.

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1.2.3. Need for independent assessment

The information and any recommendation contained (expressly or by implication) in this Certificate are provided in good faith (and subject to the limitations noted in this Certificate). However, you should treat the information as indicative only. You should not rely on that information or any such recommendation except to the extent that you reach an agreement to the contrary with the Publisher(s).

This Certificate does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it. The product appraisal criteria used in preparing this Certificate may not address all relevant aspects of the Product.

Recipients should seek independent evidence of any matter which is material to their decisions in connection with an assessment of the Product and consult their own advisers for any technical information required. Any decision to use the Product should take into account the reliability of that independent evidence obtained by the Recipient regarding the Product. Recipients should also independently verify and assess the appropriateness of any recommendation in the Certificate, 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.

1.3. No Updating

Neither the Publisher(s) nor any person involved in the preparation of this Certificate or the product appraisal criteria underlying it [has] [have] any obligation to notify you of any change in the information contained in this Certificate or of any new information concerning the Publisher(s) or the Product or any other matter.

1.4. 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 Certificate, or the accuracy, completeness or reasonableness of any recommendation in this Certificate.

SCHEDULE A - QUALITY AND PRODUCT CERTIFICATIONS

Copies of the following Quality and Product Certifications are available from WSAA.

SCHEDULE A1 CLOVER PIPELINES PTY LTD - MANAGEMENT SYSTEMS

27 Rex Road Campbellfield	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	AMI-QM-78026
Certifying Agency	ApprovalMark International
First Date of Certification	26 August 2019
Current Date of Certification	4 October 2022
Expiry Date of Certification	26 August 2025

SCHEDULE A2 CONNECT PRECISION PTY LTD - PRODUCT CERTIFICATION

66 Rundle Street Kent Town SA	
Product Standard/Spec.	AS/NZS 4998:2009
Certificate No.	OMK30060
Issuing Certification Body	IAPMO R&T OCEANA
First Date of Certification	8 June 2017
Current Date of Certification	8 June 2022
Expiry Date of Certification	7 June 2027



CONNECT VPC UNRESTRAINED COUPLINGS



Part Number	Nominal Pipe Size DN	Barrel Type	Barrel Length	Reach	
DGVPC100SB	100	Short	121	108	132
DGVPC150SB	150		136	158	182
DGVPC80	80	Long	176	88	103
DGVPC100	100		176	108	132
DGVPC150	150		176	158	182
DGVPC200	200		176	214	238
DGVPC225	225		176	242	269
DGVPC250	250		176	270	295
DGVPC300	300		216	330	356
DGVPC375	375		216	400	429
DGVPC450	450		216	488	512
DGVPC600	600		216	656	680



UNRESTRAINED MECHANICAL COUPLING

PVC, GRP, DUCTILE IRON AC
& STEEL PIPELINE SYSTEMS

Clover unrestrained mechanical couplings comply with AS/NZS 4998 for water and wastewater applications.

clover



FEATURES

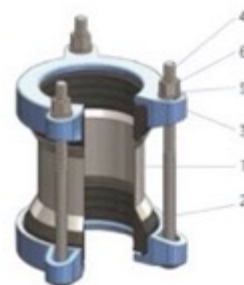
- Clover's high strength 316 stainless steel mechanical couplings join a wide range of pipe materials and can be used to join pipes with equal or differing outside diameters (range up to 27mm). This makes the coupling ideal for joining PVC-O, PVC-M, PVC-U, GRP, ductile iron, asbestos cement, and steel.
- Our couplings are manufactured with a lightweight 316 Stainless Steel barrel and fasteners and feature wedge shape EPDM Rubber Seals.
- Three bolt coupling design up to DN150 for fast field installation.
- Can be installed without disassembling which makes installation faster and simpler.
- Captive bolt head for one spanner operation, simplifying field assembly.
- Anti-Seize Coated nuts to prevent galling.

APPLICATIONS

The Clover unrestrained mechanical coupling range is suitable for connecting and repairing cold water piping systems. This product range does not provide longitudinal thrust restraint and is not recommended for use on polyethylene pipe.

TECHNICAL DATA

Size Range:	DN80 - DN600
Allowable Operating Pressure:	1600kPa
Maximum Temperature:	60°
Certifications:	AS/NZS 4998:2009 AS/NZS 4020 Product License OMK30060 WSAA Appraisal PA1728



COMPONENTS

ITEM	PART NAME	MATERIAL
1	Barrel	316 Stainless Steel
2	Seal	EPDM AS1646
3	Flange	Ductile Iron AS1831 Polymeric Coated
4	Bolt	316 Stainless Steel or Galvanised Steel
5	Hex Nut	316 Stainless Steel with Anti-Seize Coating or Galvanised Steel
6	Washer	316 Stainless Steel or Galvanised Steel

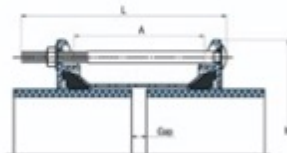


UNRESTRAINED MECHANICAL COUPLING



PVC, GRP, DUCTILE IRON AC
& STEEL PIPELINE SYSTEMS

SHORT SERIES



SHORT SERIES

DN	RANGE (REACH)	A (BARREL)	L	M	# BOLTS	NOMINAL SETTING GAP	MAX DEFLECTION EACH END MIN COUPLING REACH	MAX DEFLECTION EACH END MAX COUPLING REACH	PRODUCT CODE
	(mm)	(mm)	(mm)	(mm)		(mm)	(°)	(°)	
80	88-103	101	210	216	3	20	3	2	DGVPC080SB
100	108-132	121	210	243	3	20	3	2	DGVPC100SB
150	152-182	136	210	304	3	25	3	2	DGVPC150SB

LONG SERIES

DN	RANGE (REACH)	A (BARREL)	L	M	# BOLTS	NOMINAL SETTING GAP	MAX DEFLECTION EACH END MIN COUPLING REACH	MAX DEFLECTION EACH END MAX COUPLING REACH	PRODUCT CODE
	(mm)	(mm)	(mm)	(mm)		(mm)	(°)	(°)	
80	88-103	101	210	216	3	20	3	2	DGVPC080
100	108-132	121	210	243	3	20	3	2	DGVPC100
150	152-182	136	210	304	3	25	3	2	DGVPC150
200	214-238	176	285	353	5	35	3	2	DGVPC200
225	242-269	176	285	397	5	35	3	2	DGVPC225
250	270-295	176	285	417	6	35	3	2	DGVPC250
300	330-356	216	340	481	6	35	3	2	DGVPC300
375	400-429	216	340	565	8	35	3	2	DGVPC375
450	488-512	216	340	636	10	35	1.5	1	DGVPC450
600	656-680	216	340	818	14	35	1.5	1	DGVPC600

All fasteners supplied as M16. All dimensions are quoted in millimeters.

Contact Clover for information on additional sizes not shown on this data sheet.

Note that maximum deflection at actual max Pipe OD suitable for each clamp will be higher than the max deflection at maximum coupling reach.

The products shown form part of Clover's continuous improvement program and as such the product designs, specifications and materials may change without notice.

All warranties relating to accuracy, completeness, or suitability for any particular purpose and all liability for any loss, damage or costs incurred relating to the use of this information are excluded.

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Clover Pipelines Pty Ltd Locked Bag 2022, Somerton VIC 3062 T: (03) 8373 8000 cloverpipe.com.au



SUPPLIER CONTACTS

Clover Pty Ltd

Melbourne (Head Office, Victoria, South Australia and Tasmania)

237 Rex Road,
Campbellfield Vic 3061
Phone: 03 8373 8000
Email: sales.vic@cloverpipe.com.au

Sydney (New South Wales and Australian Capital Territory)

49-53 Newton Road
Wetherill Park NSW 2164
Phone: 02 8279 8000
Email: nsw@cloverpipe.com.au

Brisbane (Queensland and Northern Territory)

8/17 Boniface Street
Archerfield Qld 4108
Phone: 07 3073 7000
Email: qld@cloverpipe.com.au

Perth (Western Australia)

10 Radich Chase
Wangarra WA 6065
Phone: 08 6166 6800
Email: qld@cloverpipe.com.au

International Enquiries

Phone: +61 3 8373 8000