



David Moss Group Pty Ltd

PRODUCT APPRAISAL REPORT 1414 Issue 3

Damos Polyethylene (PE) Pressure Pipe

AS/NZS 4130:2018 Polyethylene pipes for pressure applications

Issue 1 Published: 23 June 2015

Issue 2 Published: 16 March 2020

Issue 3 Published: 18 November 2021

Document History

The following information indicates the changes made to this document.

Date	Version
5 May 2015	Issue 1 Peer Review
23 June 2015	Issue 1 Publication
13 March 2020	Issue 2 Client Review
16 March 2020	Issue 2 Publication
17 November 2021	Issue 3 Client Review
18 November 2021	Issue 3 Publication

Peer Reviewers

Name/Title	Organisation	Date
Product Appraisal Technical Advisory Group	WSAA	25 May 2015
WSAA Expert Panel	WSAA	25 May 2015
Peter Pittard, WSAA Consultant	WSAA	15 May 2015
Carl Radford, Product Appraisal Manager	WSAA	23 July 2015
Peter Pittard, WSAA Consultant	WSAA	13 March 2020
Carl Radford, Product Appraisal Manager	WSAA	16 March 2020
Peter Pittard, WSAA Consultant	WSAA	18 November 2021
Carl Radford, Product Appraisal Manager	WSAA	18 November 2021

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.

Copyright

This document is copyrighted. Apart from any use as permitted under the Copyright Act 1968, no part of this document may be reproduced or transmitted in any form or by any means, electronically or mechanical, for any purpose, without the express written permission of Water Services Association of Australia Limited.

© Copyright 2021 by WATER SERVICES ASSOCIATION of Australia Limited **All rights reserved.**

CONTENTS

1 EXECUTIVE SUMMARY	5
1.1 Recommendations	5
2 THE APPLICANT.....	5
3 THE PRODUCT.....	6
4 SCOPE OF THE APPRAISAL.....	6
5 APPRAISAL CRITERIA.....	6
5.1 Quality Assurance Requirements	6
5.2 Performance Requirements	7
6 COMPLIANCE WITH APPRAISAL CRITERIA.....	7
6.1 Compliance with Quality Assurance Requirements	7
6.2 Compliance with Performance Requirements.....	7
6.2.1 Polyethylene (PE) compounds	7
6.2.2 Type Tests.....	7
6.2.3 Suitability for contact with drinking water	8
6.2.4 Colour coding	8
6.2.5 Batch release tests	8
7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION	8
8 PRODUCT MARKING	9
9 PACKAGING AND TRANSPORTATION.....	9
10 PRODUCT WARRANTY	9
11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD-TESTING REPORT.....	10
12 DISCLAIMER.....	10
12.1 Issue of Report.....	10
12.2 Limits on Reliance on Information and Recommendations.....	10
12.2.1 Disclaimer of liability.....	10
12.2.2 Intellectual Property and other rights.....	10
12.2.3 Need for independent assessment.....	11
12.3 No Updating	11
12.4 No Warranty.....	11
APPENDIX A – PRODUCT LITERATURE	12
APPENDIX B - QUALITY CERTIFICATIONS.....	17
APPENDIX C - SUPPLIER CONTACTS	22

1 EXECUTIVE SUMMARY

David Moss Group Pty Ltd is a privately-owned group of companies that can trace its heritage back to 1936. The Group is predominantly focussed on the manufacture and supply of PE and PVC pipe and fittings and underground ventilation. Other companies within the Group provide specialised piping solutions, crushing and screening products and other specialist products and services.

This Appraisal is for a range of Series 1 PE100 plain wall pipes manufactured in sizes from DN 16 to DN 1200 with pressure classifications from PN 4 to PN 25 in accordance with AS/NZS 4130:2018 – *Polyethylene (PE) pipes for pressure applications*.

This Issue 3 is to clarify the availability of High Stress Crack Resistant (HSCR) pipes. Quality certifications have also been updated.

Issue 2 was to confirm compliance with the use of recyclate materials and thermal stability batch release test frequency requirements now included in AS/NZS 4130:2018 Amdt 1:2020 and also to replace the previous version of the appraisal that had reached its 5-year expiry date.

Pipes are offered in lengths of 6 m, 12 m, 20 m and 21 m for all sizes and pressure ratings. DN 16 to DN 140 pipes are available in coil lengths of 100 m whilst DN 160 pipe is available in coil lengths of 80 m or 100 m for PN 12.5, PN 16 and PN 20 pipes.

Damos PE100 pipes are available as black, black with blue, purple or cream stripes or co-extruded jackets for drinking water, non-drinking water and pressure sewer applications respectively.

High Stress Crack Resistant (HSCR) PE100 pipes are also available in the range described above.

David Moss Group Pty Ltd has Quality Management System certification to ISO 9001:2015 covering both the Neerabup and Geebung sites.

The Damos PE100 pipe range is covered by a Type 5 StandardsMark Product Certification to AS/NZS 4130:2018.

This Appraisal has determined that Damos PE 100 pipe meets the requirements of WSA PS 207 – *Polyethylene (PE) Pipes for Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage* and WSA PS 215 – *Polyethylene (PE) Property Service Pipes for Pressure Applications – Drinking Water and Non-Drinking 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 Damos range of PE100 and PE100 HSCR pipes for use in water supply and sewerage pressure pipelines, provided they are installed in accordance with WSAA Codes and the manufacturers requirements, where specified.

2 THE APPLICANT

The David Moss Group Pty Ltd is a privately owned group of companies that can trace its heritage back to 1936. The Group is predominantly focussed on the manufacture and supply of PE and PVC pipe and fittings and underground ventilation products. Other Group companies provide specialised piping solutions, crushing and screening products and other specialist products and services.

David Moss Corporation Pty Ltd was incorporated in Perth in 1960 and its operations at Neerabup WA manufactures PE and PVC pipes and fittings for the water, gas, industrial, mining and agricultural segments.

In 2013 David Moss Group acquired the Mining, Industrial and Civil Division of Australian PE pipe manufacturer PPI Corporation and incorporated those operations into David Moss Queensland Pty Ltd, with its manufacturing operations located at Geebung QLD.

The two manufacturing sites each have PE pipe extrusion moulding capabilities and polyethylene fabrication operations for the manufacture of associated fittings.

Each site has its own laboratory and testing facilities.

3 THE PRODUCT

This Appraisal is for a range of Series 1 PE100 plain wall pipes manufactured in sizes from DN 16 to DN 1200 with pressure classifications from PN 4 to PN 25 in accordance with AS/NZS 4130:2018 – *Polyethylene (PE) pipes for pressure applications*.

Pipes are offered in lengths of 6 m, 12 m, 20 m and 21 m for all sizes and pressure ratings. DN 16 to DN 140 pipes are available in coil lengths of 100 m whilst DN 160 pipe is available in coil lengths of 80 m or 100 m for PN 12.5, PN 16 and PN 20 pipes.

Damos PE100 pipes are available as black, black with blue, purple or cream stripes or co-extruded jackets for drinking water, non-drinking water and pressure sewer applications respectively.

The details are as follows:

- Series 1
- Material Classification: PE100
- Pressure Classifications: PN4, PN6.3, PN8, PN10, PN12.5, PN16, PN20, PN25.
- Sizes – DN 16, DN 20, DN 25, DN 32, DN 40, DN 50, DN 63, DN 75, DN 90, DN 110, DN125, DN 140, DN 160, DN 180, DN 200, DN 225, DN 250, DN 280, DN 315, DN 355, DN 400, DN 450, DN 500, DN 560, DN 630, DN 710, DN 800, DN 900, DN 1000, DN 1200.

High Stress Crack Resistant (HSCR) PE100 pipes are also available in the complete range described above.

HSCR PE100 pipe resists crack initiation which may be caused by surface damage during handling and installation or point loads during service. The high resistance to slow crack growth can extend the pipe service life significantly and also allows for design alternatives using lower pipe wall thicknesses. HSCR PE100 pipes are also well suited to trenchless installations. See Appendix A for additional information.

4 SCOPE OF THE APPRAISAL

The Scope of this Appraisal is for a range of PE 100 pressure pipe as detailed in Section 3 and included in the Type 5 StandardsMark product certification included in Appendix B.

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts PE 100 pipes manufactured in compliance with AS/NZS 4130:2018 *Polyethylene (PE) pipes for pressure applications* and duly certified by means of an ISO Type 5 product certification scheme undertaken by a JAS-ANZ accredited Certification 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

Damos PE100 PE pressure pipe has been appraised for compliance with AS/NZS 4130:2018 *Polyethylene (PE) pipes for pressure applications*. It is a requirement of AS/NZS 4130 that the compound used has in turn been demonstrated to comply with the requirements of AS/NZS 4131.

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 Specifications are relevant to this application.

- WSA PS 207 – *Polyethylene Pipe (PE) Pipes for Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage*
- WSA PS 215 – *Polyethylene Pipe (PE) Property Service Pipes (PE) Pipes for Pressure Applications – Drinking Water and Non-Drinking Water Supply*

Copies of the Product Specifications are available at the following link:

<https://www.wsaa.asn.au/shop/product/53481>

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

David Moss has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No. QEC3125 issued to David Moss Group Pty Ltd by SAI-Global.
- AS 4130:2018 ISO Type 5 StandardsMark Product Certification Licence No. SMKP20544 issued to David Moss Group Pty Ltd by SAI-Global.

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

6.2 Compliance with Performance Requirements

6.2.1 Polyethylene (PE) compounds

David Moss has provided certificates of compliance for the following black PE100 compounds that are used for the manufacture of the pipe:

PE100 compounds: SCG H1000PC, SCG H112PC, IRPC P901BK, Sabic P6006AD.

PE100 HSCR compounds: Lyondell Basell CRP100 and Qenos HCR193B.

These PE compounds are all listed in PIPA POP004 as complying with AS/NZS 4131 and AS/NZS 4020.

Lyondell Basell CRP100 and Qenos HCR193B are also listed in POP004 as meeting the requirements of POP016 High Stress Crack Resistant PE100.

The PE100 based striping or jacketing/co-extruded compound used is BE2216 (Blue) and RD1937 (Lilac), manufactured by Martogg and is also listed in POP004 as compliant to AS/NZS 4131.

6.2.2 Type Tests

Damos has provided copies of Type Test reports for the original Appraisal to demonstrate compliance with the performance requirements of AS/NZS 4130. These tests demonstrate resistance to internal pressure, reversion, thermal stability and slow crack growth resistance and are only required to be repeated for new material formulation.

6.2.3 Suitability for contact with drinking water

The PE100 compounds utilised in the manufacture of Damos PE pipes are listed in PIPA POP004 as complying with AS/NZS 4020:2005.

6.2.4 Colour coding

Damos PE 100 pressure pipe complies with the colour coding scheme specified in AS/NZS 4130:2018:

- (a) Solid black pipe with blue stripes no darker than RAL 5012 for water supply reticulation networks.
- (b) Solid black pipe with purple stripes no lighter than RAL 310 70 15 nor darker than RAL 330 40 40 for recycled water applications.
- (c) Solid black pipe with cream stripes no lighter than RAL 080 90 20 nor darker than RAL 075 80 20 for sewerage applications.

6.2.5 Batch release tests

The Batch Release Test requirements of AS/NZS 4130:2018 Amdt 1:2020 requires a thermal stability test to be undertaken at commencement of production of a batch and at a maximum frequency of 24 hours thereafter. The Standard also requires that clean rework generated from the manufacturers own production of pipe may be used if it is derived from the same grade of resin as used for the relevant production. In such cases the manufacturer shall treat this run as a new batch.

David Moss Pty Ltd has provided a copy of their procedures to verify compliance to these requirements.

7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

PE pressure pipe has been a commonly used product in the urban water industry for many years. Damos PE pipe is compatible with fittings manufactured in accordance with AS/NZS 4129 *Fittings for polyethylene pipes for pressure applications*.

For specific design and installation information relating to PE pressure pipelines and PE gravity pipelines refer to the WSAA Polyethylene Pipeline Code - WSA 01 available at the WSAA web site www.wsaa.asn.au or AS/NZS 2033:2008 *Installation of polyethylene pipe systems*.

Electrofusion welding, butt fusion and mechanical compression fittings may be used for joining pipe-to-pipe or fitting-to-pipe. All welding shall be performed by welders who have successfully completed training by a Registered Training Organisation, endorsed by the Plastics Industry Pipe Association for the relevant welding method(s).

The Plastics Industry Pipe Association provides technical guidelines for jointing in the following documents.

POP001 *Electrofusion Jointing of Pipe and fittings for Pressure Applications*.

POP003 *Butt Fusion Jointing of PE Pipes and Fittings – Recommended Parameters*.

POP001 contains recommendations for equipment required, for jointing, maintenance, servicing and calibration procedures, records to be kept and the training program to be respected to produce good fusion joints in polyethylene pipes.

POP003 is a guide to the butt fusion of polyethylene pipe using AS/NZS 4130 material as a basis, recommending the butt fusion procedures and parameters as specified in ISO 21307.

Copies of these documents can be downloaded from the PIPA website www.pipa.com.au.

8 PRODUCT MARKING

Damos pipes are marked in accordance with the requirements of AS/NZS 4130:2018 as follows:

- Trademark: DAMOS
- Product Code: e.g., P2501116BK
- Pipe Brand: DAMOS PRESSURE or DAMOS HSCR
- Extrusion line: e.g., EX4
- Pipe Series Number: S1
- Nominal outside diameter, classification and SDR: e.g., DN200 PN16 SDR11
- PE material classification: PE100
- Standard number: AS/NZS 4130
- StandardsMark No: 20544
- Date of manufacture using the ISO system: e.g., 210914 (i.e., 14th September 2021)
- Time of manufacture: e.g., 00:57
- Special Application information: e.g., RECYCLED WATER - DO NOT DRINK or SEWAGE

Example for PE100 pipe: DAMOS P200116BK DAMOS PRESSURE EX4 S1 DN200 PN16 SDR11 PE100 AS/NZS 4130 WLIC#20544√√√√√ 21.09.14 00:57

Example for HSCR PE100 pipe: DAMOS PH2500912SB DAMOS HSCR EX3 S1 DN250 PN20 SDR9 PE100 AS/NZS 4130 WLIC # 20544 √√√√√ 21.06.10 12:45

9 PACKAGING AND TRANSPORTATION

David Moss advises that transport, handling and storage as set out in AS/NZS 2033 is recommended. David Moss has documented packaging and delivery procedures for transporting pipes of various sizes from their plants. Pipe is packaged using timber bases and scalloped slats between each row, as well as strapping to minimise movement during transport.

Agencies should ensure pipe is inspected when delivered to site to see that there has been no transport damage caused by movement and abrasion or serious distortion caused by excessive tightening of holding straps.

Pipes are delivered by road transport and delivered directly to site, unless advised otherwise by customers.

The Plastics Industry Pipe Association also provides technical guidelines for Packaging, Handling and storage of Polyethylene pipe and fittings in POP005 Packaging, Handling, and Storage of Polyethylene Pipes and Fittings.

Copies of these documents can be downloaded from the PIPA website www.pipa.com.au.

10 PRODUCT WARRANTY

The products are covered by the normal commercial and legal requirements of the *Competition and Consumer Act 2010 (Cth)*, which covers manufacture to the relevant standard, and details of David Moss Group's warranty is included in their terms and conditions of sale.

11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD-TESTING REPORT

Damos PE 100 pipe is already approved by many Australian Water Agencies.

12 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.

12.1 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).

By accepting this Report, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

12.2 Limits on Reliance on Information and Recommendations

12.2.1 Disclaimer of liability

Neither the Publisher(s) nor any person involved in the preparation of the Report 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 Report or the product appraisal criteria underlying it. This includes (without limitation) any liability for any recommendation or information in the Report or any errors or omissions.

12.2.2 Intellectual Property and other rights

The Water Services Association of Australia Limited does not undertake any assessment of whether the importation, manufacture, sale or use of the Product the subject of this Report infringes the intellectual property rights or proprietary rights of any person. Recipients of the report 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.

From time to time the Water Services Association of Australia Limited and the other Publishers may receive notice of allegations that the importation, manufacture, sale or use of the Product infringes intellectual property rights or other proprietary rights. The Water Services Association of Australia Limited's policy is to not refer to such allegations in its reports or take any other steps to put Recipients on notice of such allegations, unless and until it is aware that the allegations have been admitted or proved in Court. As such, Recipients acknowledge, agree and accept that the Water Services Association of Australia Limited may have information in its possession about intellectual property rights infringement allegations or other infringement allegations in relation to the Product which are not referred to or disclosed in this Report and which are not otherwise communicated to Recipients.

12.2.3 Need for independent assessment

The information and any recommendation contained (expressly or by implication) in this Report are provided in good faith (and subject to the limitations noted in this Report). 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 Report does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it (Product). The product appraisal criteria used in preparing this Report 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 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.

12.3 No Updating

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

12.4 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 LITERATURE

OD	SDR41/PN4			SDR 33/PN5			SDR26/PN6.3			SDR21/PN8			SDR17/PN10			SDR13.6/PN12.5			SDR11/PN16			SDR9/PN20			SDR7.4/PN25			OD	
	MEAN BORE	WT	KG/M	MEAN ID	MIN WALL	KG/M	MEAN BORE	WT	KG/M	MEAN BORE	WT	KG/M	MEAN BORE	WT	KG/M	MEAN BORE	WT	KG/M	MEAN BORE	WT	KG/M	MEAN BORE	WT	KG/M	MEAN BORE	WT	KG/M		
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.5	1.6	0.08	12.1	1.8	0.08	11.2	2.2	0.10	16		
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.5	1.6	0.10	15.9	1.9	0.11	15.0	2.3	0.13	14.0	2.8	0.15	20
25	-	-	-	-	-	-	-	-	-	-	-	-	21.5	1.6	0.12	20.9	1.9	0.14	20.0	2.3	0.17	19.0	2.8	0.20	17.5	3.5	0.24	25	
32	-	-	-	-	-	-	-	-	-	-	28.5	1.6	0.16	27.9	1.9	0.19	26.8	2.4	0.23	25.8	2.9	0.27	24.3	3.6	0.33	22.6	4.4	0.39	32
40	-	-	-	-	-	-	-	-	-	-	35.9	1.9	0.23	34.8	2.4	0.29	33.6	3.0	0.36	32.1	3.7	0.43	30.4	4.5	0.51	28.3	5.5	0.60	40
50	-	-	-	-	-	-	-	-	-	-	44.8	2.4	0.37	43.6	3.0	0.45	42.1	3.7	0.55	40.2	4.6	0.67	38.1	5.6	0.79	35.4	6.9	0.94	50
63	-	-	-	-	-	-	57.8	2.4	0.47	56.6	3.0	0.58	54.9	3.8	0.72	53.0	4.7	0.87	50.7	5.8	1.05	47.9	7.1	1.26	44.8	8.6	1.5	63	
75	-	-	-	70.0	2.3	0.55	68.8	2.9	0.67	67.3	3.6	0.83	65.4	4.5	1.02	63.3	5.5	1.22	60.6	6.8	1.47	57.2	8.4	1.77	52.2	10.3	2.11	75	
90	-	-	-	84.0	2.8	0.79	82.5	3.5	0.98	80.8	4.3	1.18	78.5	5.4	1.46	76.0	6.6	1.75	72.6	8.2	2.13	68.6	10.1	2.56	64.0	12.3	3.02	90	
110	104.2	2.7	0.94	102.7	3.4	1.17	110.8	4.3	1.46	98.7	5.3	1.78	96.0	6.6	2.17	92.8	8.1	2.63	88.9	10.0	3.16	84.0	12.3	3.80	78.1	15.1	4.52	110	
125	118.3	3.1	1.23	116.7	3.9	1.51	114.8	4.8	1.84	112.3	6.0	2.27	109.3	7.4	2.77	105.5	9.2	3.39	100.9	11.4	4.10	95.5	14.0	4.90	88.9	17.1	5.82	125	
140	132.5	3.5	1.54	130.8	4.3	1.88	128.5	5.4	2.33	125.8	6.7	2.85	122.4	8.3	3.48	118.2	10.3	4.24	113.2	12.7	5.12	106.9	15.7	6.16	99.5	19.2	7.31	140	
160	151.5	4.0	2.00	149.6	4.9	2.43	146.8	6.2	3.05	143.7	7.7	3.73	139.9	9.5	4.55	135.1	11.8	5.54	129.2	14.6	6.72	122.3	17.9	8.02	113.9	21.9	9.52	160	
180	170.6	4.4	2.48	168.3	5.5	3.07	165.4	6.9	3.80	161.8	8.6	4.69	157.4	10.7	5.75	151.9	13.3	7.03	145.4	16.4	8.49	137.6	20.1	10.15	128.2	24.6	12.04	180	
200	189.6	4.9	3.06	186.8	6.2	3.85	183.7	7.7	4.72	179.7	9.6	5.81	174.9	11.9	7.09	169.0	16.0	8.62	161.6	18.2	10.47	152.8	22.5	12.56	142.5	27.3	14.85	200	
225	213.3	5.5	3.87	210.4	6.9	4.79	206.8	8.6	5.93	202.2	10.8	7.34	196.7	13.4	9.00	190.0	16.6	10.95	181.8	20.5	13.25	172.1	25.1	15.84	160.2	30.8	18.82	225	
250	236.8	6.2	4.84	233.7	7.7	5.94	229.7	9.6	7.34	224.9	11.9	8.99	218.8	14.8	11.03	211.2	18.4	13.49	202.2	22.7	16.30	191.3	27.9	19.53	178.0	34.2	23.23	250	
280	265.4	6.9	6.00	261.8	8.6	7.43	257.4	10.7	9.16	251.7	13.4	11.35	245.0	16.6	13.85	236.6	20.6	16.90	226.5	25.4	20.43	214.1	31.3	24.55	199.4	38.3	29.13	280	
315	289.7	7.7	7.54	294.5	9.7	9.42	289.4	12.1	11.76	283.4	15.0	14.26	275.6	18.7	17.54	266.1	23.2	21.43	254.8	28.6	25.86	240.9	35.2	31.06	224.6	43.0	36.8	315	
355	336.6	8.7	9.59	332.0	10.9	11.91	326.3	13.6	14.74	319.4	16.9	18.10	310.5	21.1	22.33	300.0	26.1	27.16	287.2	32.2	32.83	271.1	39.6	39.36	253.0	48.5	46.76	355	
400	379.3	9.8	12.16	374.0	12.3	15.17	367.7	15.3	18.70	359.7	19.1	23.08	350.1	23.7	28.22	338.1	29.4	34.45	323.6	36.3	41.68	306.0	44.7	50.04	285.2	54.6	59.31	400	
450	426.8	11.0	15.34	420.9	13.8	19.11	413.7	17.2	23.64	404.7	21.5	29.19	393.8	26.7	35.76	380.3	33.1	43.63	364.0	40.9	52.78	344.4	50.2	63.25	320.7	61.5	75.14	450	
500	474.0	12.3	19.09	467.7	15.3	23.57	459.7	19.1	29.16	449.7	23.9	36.02	437.7	29.6	44.05	422.6	36.8	53.84	404.5	45.4	65.13	382.7	55.8	78.07	-	-	-	500	
560	531.1	13.7	23.78	523.7	17.2	29.66	514.9	21.4	36.55	503.8	26.7	45.08	490.1	33.2	55.34	473.3	41.2	67.55	453.2	50.8	81.59	428.6	62.5	97.94	-	-	-	560	
630	597.5	15.4	30.08	589.3	19.3	37.42	579.2	24.1	46.32	566.9	30.0	56.94	551.5	37.3	69.93	532.6	46.3	85.38	509.7	57.2	103.38	482.2	70.3	123.94	-	-	-	630	
710	673.3	17.4	38.28	664.1	21.8	47.55	652.7	27.2	58.87	638.7	33.9	72.50	621.4	42.1	88.94	600.2	52.2	108.47	574.4	64.5	131.32	543.3	79.3	157.53	-	-	-	710	
800	758.7	19.6	48.54	748.4	24.5	60.24	735.6	30.6	74.56	719.8	38.1	91.90	700.3	47.4	112.78	676.4	58.8	137.59	647.5	72.5	166.44	612.3	89.3	199.87	-	-	-	800	
900	853.7	22.0	61.22	841.9	27.6	76.31	827.6	34.4	94.31	809.8	42.9	116.28	787.5	53.5	143.14	760.8	66.2	174.31	728.3	81.7	210.80	-	-	-	-	-	-	900	
1000	948.4	24.5	75.80	935.6	30.6	93.99	919.6	38.2	116.37	899.7	47.7	143.66	875.3	59.3	176.32	847.6	72.5	212.30	810.4	90.2	258.81	-	-	-	-	-	-	1000	
1200	1138.1	29.4	109.12	1122.8	36.7	135.20	1103.5	45.9	167.60	1079.7	57.2	206.78	1057.3	67.9	242.87	1014.6	88.2	309.58	809.0	90.9	378.17	-	-	-	-	-	-	1200	
1400	1327.6	34.4	148.90	1309.8	42.9	184.29	1288.1	53.2	226.80	1259.8	66.7	281.16	1226.8	82.4	343.03	1183.8	102.9	421.19	971.0	109.1	514.74	-	-	-	-	-	-	1400	
1600	1517.4	39.3	194.15	1497.0	49.0	240.51	1471.1	61.3	298.48	1439.8	76.2	367.17	1402.2	94.1	447.74	1352.9	117.6	550.15	-	-	-	-	-	-	-	-	-	1600	
1800	1707.9	43.8	243.60	1685.4	54.5	301.16	1654.7	69.1	378.48	1619.9	85.7	464.40	1577.5	105.9	566.61	-	-	-	-	-	-	-	-	-	-	-	-	1800	
2000	1897.4	48.8	301.50	1872.6	60.6	371.99	1838.4	76.9	467.69	1799.9	95.2	573.30	1752.9	117.6	699.20	-	-	-	-	-	-	-	-	-	-	-	-	2000	

SDR - Nominal ratio of outside diameter to wall thickness | PN - Pressure rating at 20°C (Mpa multiplied by 10) AS/NZS 4130:2003

TECHNICAL INFORMATION

GRADE	DAMOS WEAR-TUFF	METHOD
COLOUR	BLACK	
CLASIFICATION	MRS 11.2MPa	ISO 12162:2009 ISO 9080:2012
MELT FLOW RATE (190°C, 5kg)	0.17 g/10min	ISO 1133:2011
DENSITY COMPOUND	0.960 g/cm	ISO 1183-1:204(A)
TENSILE STRENGTH AT YIELD	24MPa	ISO 527-2:2012
RESISTANCE TO SLOW CRACK GROWTH	>1,000 HOURS	ISO 13477:2009
RESISTANCE TO RAPID CRACK PROPAGATION(RCP)	>10 BAR	ISO 13477:2008
STANDARD COMPLIANCE	ISO 4427-1 / EN 12201-1 ISO4437-1 / EN 1555-1 AS/NZ 4131 / ASTM D3350	



WALL THICKNESS TABLE

Nominal O.D	PN 4/ SDR45.5		PN 5/SDR36		PN 6.3/ SDR29.7		PN 8/ SDR23.4		PN 10/SDR19		PN 12.5/ SDR15		PN 16/ SDR12.2		PN 20/SDR10		PN 25/ SDR 8	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
20																		
32																		
40																		
50							2.1	2.5	2.6	3.0	3.3	3.7	4.1	4.6				
63							2.7	3.1	3.3	3.8	4.1	4.6	5.2	5.8				
75							3.2	3.6	4.0	4.5	4.9	5.5	6.1	6.9				
90							3.8	4.3	4.8	5.3	5.9	6.6	7.4	8.2				
110	2.4	2.7	3.0	3.4	3.7	4.2	4.7	5.3	5.8	6.5	7.2	8.0	9.0	10.0	11.0	12.2	13.5	14.9
125	2.7	3.1	3.4	3.8	4.2	4.8	5.3	6.0	6.6	7.4	8.2	9.1	10.2	11.4	12.6	13.9	15.3	16.9
140	3.1	3.5	3.8	4.3	4.8	5.3	6.0	6.7	7.4	8.2	9.1	10.1	11.5	12.7	14.1	15.6	17.1	19.0
160	3.5	3.9	4.3	4.9	5.4	6.1	6.8	7.6	8.5	9.4	10.4	11.6	13.1	14.5	16.1	17.8	19.6	21.6
180	3.9	4.4	4.9	5.5	6.1	6.8	7.7	8.6	9.5	10.6	11.7	13.0	14.8	16.3	18.1	20.0	22.0	24.3
200	4.4	4.9	5.4	6.1	6.8	7.6	8.5	9.5	10.6	11.7	13.0	14.4	16.4	18.1	20.1	22.2	24.5	27.0
225	4.9	5.5	6.1	6.8	7.6	8.5	9.6	10.7	11.9	13.2	14.7	16.2	18.4	20.4	22.6	24.9	27.5	30.4
250	5.5	6.1	6.8	7.6	8.5	9.4	10.7	11.9	13.2	14.6	16.3	18.0	20.5	22.6	25.1	27.7	30.6	33.8
280	6.1	6.8	7.6	8.5	9.5	10.6	12.0	13.3	14.8	16.4	18.3	20.2	23.0	25.3	28.1	31.0	34.3	37.8
315	6.9	7.7	8.6	9.5	10.7	11.9	13.5	14.9	16.6	18.4	20.5	22.7	25.8	28.5	31.6	34.9	38.6	42.5
355	7.8	8.6	9.6	10.7	12.1	13.4	15.2	16.8	18.8	20.7	23.1	25.6	29.1	32.1	35.6	39.3	43.5	47.9
400	8.7	9.7	10.9	12.0	13.6	15.0	17.1	18.9	21.1	23.4	26.1	28.8	32.8	36.2	40.2	44.3	49.0	54.0
450	9.8	10.9	12.2	13.5	15.3	16.9	19.2	21.3	23.8	26.3	29.3	32.4	36.9	40.7	45.2	49.8	55.1	60.7
500	10.9	12.1	13.6	15.0	17.0	18.8	21.4	23.6	26.4	29.2	32.6	36.0	41.0	45.2	50.2	55.3		
560	12.2	13.5	15.2	16.8	19.0	21.0	23.9	26.4	29.6	32.7	36.5	40.3	45.9	50.6	56.2	61.9		
630	13.8	15.2	17.1	18.9	21.4	23.6	26.9	29.7	33.3	36.7	41.1	45.3	51.6	56.9	63.3	69.7		
710	15.5	17.2	19.3	21.3	24.1	26.6	30.3	33.5	37.5	41.4	46.3	51.0	58.2	64.1	71.3	78.5		
800	17.5	19.3	21.7	24.0	27.2	30.0	34.2	37.7	42.3	46.6	52.2	57.5	65.6	72.2	80.3	88.5		
900	19.7	21.7	24.4	27.0	30.6	33.7	38.5	42.4	47.6	52.4	58.7	64.7	73.8	81.2				
1000	21.8	24.1	27.1	30.0	34.0	37.5	42.7	47.1	52.9	58.2	65.2	71.8	82.0	90.3				
1200	26.2	28.9	32.6	35.9	40.8	44.9	51.3	56.5	63.4	69.9	78.2	86.2	98.4	108.3				

DAMOS HSCR

PE100 WITH EXCEPTIONAL STRESS CRACK RESISTANCE

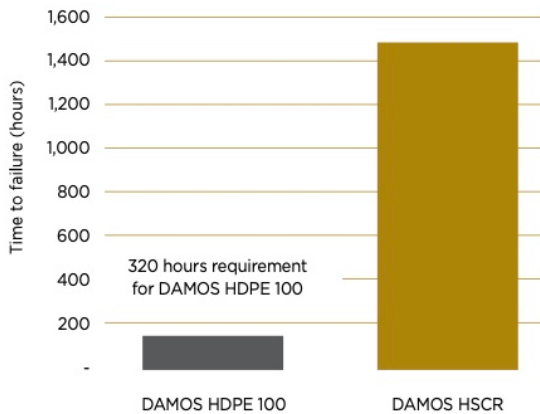
DAMOS HSCR is a PE100 resin with high stress crack resistance and is a new class of PE100 material. DAMOS HSCR has many times greater stress crack resistance than standard PE100 resin. DAMOS HSCR enables you to work with your designer to achieve more efficient pipelines, longer lasting pipe networks or reduced installation costs.



REDUCED WALL THICKNESS

- Slow crack growth initiation can lead to brittle failure. DAMOS HSCR has increased resistance to slow crack growth initiation.
- The potential to downgauge pipe (reduce wall thickness) can be made possible with the appropriate use of design factors and "fit-for-purpose" design methodology.
- Downgauging decreases costs while increasing efficiency. Reduced material usage lowers pipe costs, while improved flow decreases pumping costs.

Stress Crack Resistance Performance Hessel Accelerated Creep Test



LOWER INSTALL COST

- DAMOS HSCR has increased resistance to slow crack growth initiation which can be caused by scratches and notches during installation.
- DAMOS HSCR can withstand deeper notches reducing the risk of impacting upon pipe service life when compared to standard PE100 grades.
- DAMOS HSCR can enable installation using lower cost backfill. The high stress crack resistance of DAMOS HSCR reduces the risk of crack initiation due to point loads associated with these installation methods.



INCREASED SERVICE LIFE

- The exceptional resistance to slow crack growth of DAMOS HSCR can lead to increased pipe service life, lower maintenance costs and reduced replacement rates.
- There is the potential for stress concentration to initiate slow crack growth wherever "squeeze-off" is used to manage pipeline flows for planned or emergency maintenance. DAMOS HSCR increases resistance to the initiation of slow crack growth wherever these stress concentrators are present.

PRESSURE
ELECTRICAL
COMMS
GAS
RURAL
SOLABLOC
FIRE
NEXGEN
HIVIS
PVC
FITTINGS
SERVICES
FABRICATION

DAMOS HSCR

WORLD-CLASS PE100 GRADE FOR PRESSURE PIPE

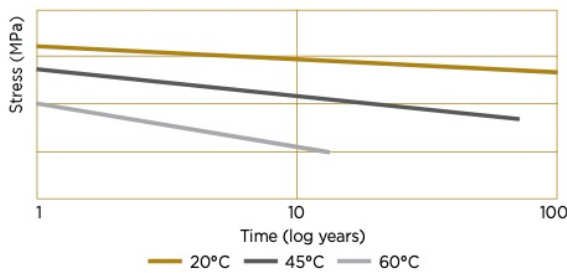
DAMOS HSCR is designed to meet or exceed the key performance requirements for hydrostatic strength (MRS10), slow crack growth resistance (SCGR) and resistance to rapid crack propagation (RCP). Over many years, the mining, water and gas industries have taken advantage of the proven world class performance of DAMOS HSCR, using it in pressure pipe in large volumes.



BEYOND MINIMUM REQUIRED STRENGTH (MRS)

For DAMOS pipe grades, we maintain Pipe Pressure data beyond the minimum requirements of the PE100 standard. Working with DAMOS Technical Service, your pipe design can be optimised to achieve;

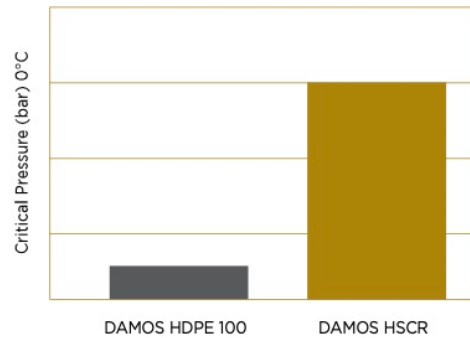
- Maximum lifetime design
- Elevated usage temperature



HIGH RESISTANCE TO RAPID CRACK PROPAGATION (RCP)

DAMOS HSCR has passed Rapid Crack Propagation (RCP) tests at critical pressures well above the requirements of the standard. RCP performance data for sub-zero application temperature is also available. RCP performance enables pipe designers to specify:

- Lower in-use temperatures
- Higher safety margins for fluid containment



PIPE CAPACITY OF TRUCKS

COILS		STRAIGHT LENGTHS SDR17 - 20M			
SIZE	COILS PER TRUCK	SIZE	LENGTHS	SIZE	LENGTHS
50mm x 150m	56	110	483	400	38
63mm x 100m	42	125	380	450	30
75mm x 100m	36	140	304	500	24
90mm x 100m	30	160	230	560	19
110mm x 100m	18-20	200	150	630	15
125mm x 100m	14-16	225	114	710	11
140mm x 100m	9	250	94	800	9
160mm x 80m	9	280	76	900	6
		315	61	1000	6
		355	48	1200	4

PLEASE NOTE: These are average quantities only. Some trucks may be able to carry more lengths, while some will carry less depending on bolster/gate height. Please also note: extendible trucks maybe subject to weight (21,500 kgs) rather the number of pipes.

PIPE COIL DIMENSIONS

PIPE DIAMETER	COIL			
	OUTSIDE DIAMETER	INSIDE DIAMETER	WIDTH	LENGTH M
20	1200	800	220	200
25	1400	800	220	200
32	1440	800	220	200 (up to 2000)
40	1520	800	220	150 (up to 1500)
50	1800	1000	250	150 (up to 1000)
63	1930	1300	300	100 (up to 750)
75	2100	1500	375	100 (up to 500)
90	2620	1900	360	100 (up to 300)
110	3000	2200	440	100 (up to 250)
125	3250	2570	500	60 (up to 100)
140	3400	2570	600	60 (up to 100)
160	3402	2570	640	100

PLEASE NOTE: The following dimensions are based on volume and not weight. To be used as a guide only.

APPENDIX B - QUALITY CERTIFICATIONS

Copies of the following Quality Certification Certificates are available from WSAA.

DAVID MOSS GROUP PTY LTD - MANAGEMENT SYSTEM

26 Turnbull Road Neerabup WA 60 Prosperity Place Geebung QLD	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	QEC3125
Certifying agency	SAI-Global
First date of certification	11 February 2002
Current date of certification	16 April 2021
Expiry date of certification	26 April 2024

TABLE B2

DAVID MOSS GROUP PTY LTD - PRODUCT CERTIFICATION

26 Turnbull Road Neerabup WA 60 Prosperity Place Geebung QLD	
Product Standard/Spec	AS/NZS 4130:2018
Certificate No.	SMKP20544
Certifying agency	SAI-Global
First date of certification	6 October 2005
Current date of certification	10 10 March 2021
Expiry date of certification	5 October 2025



CERTIFICATE OF REGISTRATION

This is to certify that:

David Moss Group Pty Ltd

ABN 23 156 543 725

Trading as

David Moss Corporation Pty Ltd

ABN 64 009 124 681

26 Turnbull Road Neerabup WA 6031 AUSTRALIA

In association with

David Moss Queensland Pty Ltd

ABN 69 159 866 627

60 Prosperity Place Geebung QLD 4034 AUSTRALIA

operates a

QUALITY MANAGEMENT SYSTEM

which complies with the requirements of

ISO 9001:2015

for the following scope

The registration covers the Quality Management System for the manufacturing and marketing of Polythene and PVC pipes and conduits rubber products for the water supply sewage, drainage electrical mining gas rural and telecommunication industries. The registration also covers the fabrication of Polyethylene pipe fittings and the hire of poly welding equipment.

Certificate No: QEC3125

Issued: 16 April 2021

Originally Certified: 11 February 2002

Expires: 26 April 2024

Current Certification: 16 April 2021

Frank Camasta
Global Head of Technical Services
SAI Global Assurance



Registered by:

SAI Global Certification Services Pty Ltd (ACN 108 716 669) 680 George Street Sydney NSW 2000 Australia with SAI Global Pty Limited 680 George Street Sydney NSW 2000 Australia ("SAI Global") and subject to the SAI Global Terms and Conditions for Certification. While all due care and skill was exercised in carrying out this assessment, SAI Global accepts responsibility only for proven negligence. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. To verify that this certificate is current please refer to SAI Global On-Line Certification register at <http://register.saiglobal.com/>





STANDARDSMARK LICENCE

SAI Global hereby grants:

David Moss Group Pty Ltd

ABN 23 156 543 725

Trading As

David Moss Corporation Pty Ltd

ABN 64 009 124 681

26 Turnbull Road, Neerabup, WA 6031, Australia

In association with

David Moss Queensland Pty Ltd

ABN 69 159 866 627

Geebung, 60 Prosperity Place, Geebung, QLD, 4034, Australia

StandardsMark Licence

Manufactured to:

AS/NZS 4130:2018 - Polyethylene (PE) pipes for pressure applications

"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: SMKP20544

Issued : 11 March 2021

Expires : 5 October 2025

Originally Certified : 6 October 2005

Current Certification : 10 March 2021

Frank Camasta
Global Head of 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, for the list of product models.



SCHEDULE TO STANDARDSMARK LICENCE

SAI Global hereby grants:

David Moss Group Pty Ltd

26 Turnbull Road, Neerabup, WA 6031, Australia

StandardsMark Licence

Manufactured to:

AS/NZS 4130:2018 - Polyethylene (PE) pipes for pressure applications

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

Model Identification	Model Name	Brand Name	Product Description	Product Application	Product Type	Pipe Series	Compound Designation	Nominal Size (DN)	SDR	Pressure Classification (PN)	Colour/Striping/Jacket	Date Endorsed
P016XXYYCC	D1-PE Pipe DN16	DAMO S	DN16 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	16	11,9,7,4	16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P020XXYYCC	D2- PE Pipe DN20	DAMO S	DN20 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	20	13,6,11,9,7,4	12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P025XXYYCC	D3- PE Pipe DN25	DAMO S	DN25 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	25	17,136,6,11,9,7,4	8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P032XXYYCC	D4- PE Pipe DN32	DAMO S	DN32 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	32	21,17,136,6,11,9,7,4	8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P040XXYYCC	D5- PE Pipe DN40	DAMO S	DN40 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	40	21,17,136,6,11,9,7,4	8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P050XXYYCC	D6- PE Pipe DN50	DAMO S	DN50 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	50	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P063XXYYCC	D7- PE Pipe DN63	DAMO S	DN63 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	63	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P075XXYYCC	D8- PE Pipe DN75	DAMO S	DN75 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	75	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P080XXYYCC	D9- PE Pipe DN80	DAMO S	DN80 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	80	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P1000XXYYCC	D29- PE Pipe DN1000	DAMO S	DN1000 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	1000	41,26,21,17,13,6,11,9	4,6,3,8,10,12,5,16,20	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P110XXYYCC	D10- PE Pipe DN110	DAMO S	DN110 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	110	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P1200XXYYCC	D30- PE Pipe DN1200	DAMO S	DN1200 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	1200	41,26,21,17,13,6,11	4,6,3,8,10,12,5,16	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P125XXYYCC	D11- PE Pipe DN125	DAMO S	DN125 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	125	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021

Licence No: SMKP20544

Issued Date: 11 March 2021

This schedule supersedes all previously issued schedules



* 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 the Schedule for the list of product models.

SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Model Name	Brand Name	Product Description	Product Application	Product Type	Pipe Series	Compound Designation	Nominal Size (DN)	SDR	Pressure Classification (PN)	Colour/Striping/Jacket	Date Endorsed
P140XXYYCC	D12-PE Pipe DN140	DAMO S	DN140 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	140	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P160XXYYCC	D13-PE Pipe DN160	DAMO S	DN160 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	160	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P180XXYYCC	D14-PE Pipe DN180	DAMO S	DN180 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	180	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P200XXYYCC	D15-PE Pipe DN200	DAMO S	DN200 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	200	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P225XXYYCC	D16-PE Pipe DN225	DAMO S	DN225 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	225	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P250XXYYCC	D17-PE Pipe DN250	DAMO S	DN250 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	250	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P280XXYYCC	D18-PE Pipe DN280	DAMO S	DN280 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	280	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P315XXYYCC	D19-PE Pipe DN315	DAMO S	DN315 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	315	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P355XXYYCC	D20-PE Pipe DN355	DAMO S	DN355 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	355	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P400XXYYCC	D21-PE Pipe DN400	DAMO S	DN400 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	400	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P450XXYYCC	D22-PE Pipe DN450	DAMO S	DN450 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	450	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P500XXYYCC	D23-PE Pipe DN500	DAMO S	DN500 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	500	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P560XXYYCC	D24-PE Pipe DN560	DAMO S	DN560 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	560	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P630XXYYCC	D25-PE Pipe DN630	DAMO S	DN630 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	630	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P710XXYYCC	D26-PE Pipe DN710	DAMO S	DN710 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	710	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P800XXYYCC	D27-PE Pipe DN800	DAMO S	DN800 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	800	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021
P900XXYYCC	D28-PE Pipe DN900	DAMO S	DN900 PE100 SDR XX pipe	WATER & GAS	PE100 Pipe	Series 1	PE100, PE80	900	41,26,21,17,13,6,11,9,7,4	4,6,3,8,10,12,5,16,20,25	Black, Yellow (sleeve), Stripe Yellow & Other Colours	9 Mar 2021

End of Record

Licence No: SMKP20544

Issued Date: 11 March 2021

This schedule supersedes all previously issued schedules



* 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 the Schedule for the list of product models.

APPENDIX C - SUPPLIER CONTACTS**DAVID MOSS GROUP PTY LTD****David Moss Corporation**

Address	26 Turnbull Road Neerabup Western Australia 6031
Phone	08 9306 3344
Email	sales@davidmoss.com.au

David Moss Queensland

Address	60 Prosperity Place Geebung QLD 4034
Phone	07 3865 8318
Email	brisales@damosqld.com.au

David Moss Kalgoorlie

Address	280-282 Hay Street, Kalgoorlie, Western Australia 6430
Phone	08 9091 8559
Email	sales@davidmoss.com.au



Melbourne Office

Level 8, Suite 8.02
401 Docklands Drive
Docklands VIC 3008

Sydney Office

Level 9 420 George Street
Sydney NSW 2000
GPO Box 915
Sydney NSW 2001

P +61 (0) 3 8605 7666
email: info@wsaa.asn.au

www.wsaa.asn.au