



PLASSON AUSTRALIA PTY LTD

PRODUCT APPRAISAL REPORT PA 1604 Issue 2a

Electrofusion, Compression Joint and Pushfit Fittings for PE Pipe

AS/NZS 4129:2020 Fittings for polyethylene (PE) pipes for pressure applications

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Document History

The following information indicates the changes made to this document.

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2 August 2021	Issue 2a Publication (clarification of size for mechanical saddles)

Peer Reviewers

Name/Title	Organisation	Date
Product Appraisal Technical Advisory Group	WSAA	20 July 2016
WSAA Expert Panel	WSAA	13 July 2016
Carl Radford, Product Appraisal Manager	WSAA	8 September 2016
Peter Pittard, WSAA Consultant	WSAA	13 May 2021
Carl Radford, Product Appraisal Manager	WSAA	28 May 2021

Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak industry body that supports the Australian Urban Water Industry. Its members and associate members provide water and sewerage services to approximately 20 million Australians and many of Australia's largest industrial and commercial enterprises.

The Association facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. It is proud of the collegiate attitude of its 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 influences, to monitor emerging issues of importance to the urban water industry. WSAA is regularly consulted and its advice sought by decision makers when developing strategic directions for the water industry.

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

The Association's 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

Plasson Australia Pty Ltd provides a wide range of solutions for connecting PE pipe. Plasson Australia, a wholly owned subsidiary of Plasson Limited (Israel), supplies their products including technical, marketing and sales support to end users via a network of resellers throughout Australia and the Pacific region.

This Appraisal is for a range of Plasson polyethylene (PE) electrofusion and polypropylene (PP) compression joint fittings and pushfit fittings manufactured in accordance with AS/NZS 4129 *Fittings for polyethylene (PE) pipes for pressure applications*. The fittings are for use with PE pipes complying with AS/NZS 4130 *Polyethylene (PE) pipes for pressure applications* for the conveyance of drinking water, non-drinking water and sewage in buried and above ground pressure applications.

This Issue 2 is to extend the range of electrofusion fittings and include a range of PP compression joint fittings and pushfit fittings. The report has been reviewed to enable the expiry date to be extended for an additional five years.

The fittings included in the scope of this Appraisal are:

- PE100 electrofusion fittings in sizes from DN 20 to DN 630 (depending on fitting type) with PN16 pressure classification. The fitting range includes couplers, elbows, tees, end caps, adaptors, transition couplings and saddles.
- PP compression joint fittings in sizes DN 20 to DN 110 (depending on fitting type) with PN16 pressure classification and mechanical saddles from DN 63 to DN 180. The fittings range includes couplings, elbows, tees and adaptors.
- PP pushfit fittings in sizes DN 20 to DN 63 with PN16 pressure classification. The fitting range includes couplers, elbows, tees, end caps and adapters.

The product range is detailed in Appendix A.

Plasson Ltd holds an ISO 9001:2015 Quality Management System Licence.

The Plasson fittings range has ISO Type 5 ApprovalMark product certification to AS/NZS 4129:2020 *Fittings for polyethylene (PE) pipes for pressure applications*.

This Appraisal has determined that Plasson electrofusion, compression joint and pushfit fittings, as detailed in this report, meet the requirements of WSA PS 208 *Plastics Fittings for Pressure Applications with PE Pipe – Drinking Water, Non-Drinking Water Supply and Sewerage* 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 Plasson range of electrofusion, compression joint and pushfit fittings, as detailed in this report, for use in applications including drinking and non-drinking water supply and sewerage pressure applications provided pipeline design and installation is in accordance with relevant Standards, WSAA Codes and the manufacturer's requirements.

2 THE APPLICANT

The Applicant is Plasson Australia Pty Ltd.

2.1 The Supplier

Plasson Australia Pty Ltd provides a wide range of solutions for connecting PE pipe. Plasson Australia, a wholly owned subsidiary of Plasson Limited (Israel), supplies their products including technical, marketing and sales support to end users via a network of resellers throughout Australia and the Pacific region.

For more information see the Plasson website at www.plasson.com.au.

2.2 The Manufacturer

Plasson Limited, headquartered in Israel, operates in more than 100 countries with approximately 2000 employees and over 25 subsidiaries operating worldwide. The Flow Solutions Division provides a wide range of solutions for connecting PE pipe. Plasson's products can be found in municipal water distribution systems, gas conveyance systems, industrial fluids transfer, wastewater systems, communication, mines and agriculture.

3 THE PRODUCT

This Appraisal is for a range of Plasson polyethylene (PE) electrofusion and polypropylene (PP) compression joint and pushfit fittings manufactured in accordance with AS/NZS 4129:2020 *Fittings for polyethylene (PE) pipes for pressure applications*. The fittings are for use with PE pipes complying with AS/NZS 4130 *Polyethylene (PE) pipes for pressure applications* for the conveyance of drinking water, non-drinking water and sewage in buried and above ground pressure applications.

The fittings included in this Appraisal are:

- PE100 electrofusion fittings in sizes from DN 20 to DN 630 (depending on fitting type) with PN16 pressure classification. The fittings range includes couplers, elbows, tees, end caps, adaptors, transition couplings and saddles.
- PP compression joint fittings in sizes DN 20 to DN 110 (depending on fitting type) with PN16 pressure classification and mechanical saddles from DN 63 to DN 180. The fittings range includes couplings, elbows, tees and adaptors.
- PP pushfit fittings in sizes DN 20 to DN 63 with PN16 pressure classification. The fitting range includes couplers, elbows, tees, end caps and adapters.



Electrofusion



Compression Joint



Pushfit

FIGURE 1 EXAMPLE OF COUPLINGS

See Appendix A for a complete listing of products.

Plasson also offers an electrofusion Flex Restraint used to restrain thrust and can replace traditional more expensive methods. Each unit restrains 3100 kg of axial force and multiple units can be used around the pipe surface to multiply the amount of thrust which can be restrained. This product is not included in the Scope of this appraisal as there is no applicable standard to enable product certification to be achieved.

Electrofusion control boxes and other electrofusion tooling are also available from Plasson but are not included in the scope of this appraisal.

4 SCOPE OF THE APPRAISAL

The scope of this Appraisal applies to a range of PE100 electrofusion fittings and Polypropylene compression joint and pushfit fittings described in Section 3, detailed in Appendix A and included in the ISO Type 5 ApprovalMark Product Schedule.

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts PE electrofusion, PP compression joint and PP pushfit fittings manufactured in compliance with AS/NZS 4129:2020 *Fittings for 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 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

Plasson electrofusion, compression joint and pushfit fittings have been appraised for compliance with AS/NZS 4129:2020 *Fittings for polyethylene (PE) pipes for pressure applications*.

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 relevant to this application.

WSA PS 208 *Plastics Fittings for Pressure Applications with PE Pipe – Drinking Water, Non-Drinking Water Supply and Sewerage*

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

Plasson has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No. 94173 issued to Plasson Ltd by The Standards Institution of Israel
- AS/NZS 4129:2020 ApprovalMark ISO Type 5 product certification Licence No. AMI 02018 issued to Plasson Australia Pty Ltd by ApprovalMark International.

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

6.2 Compliance with Performance Requirements

6.2.1 Polyethylene Material

AS/NZS 4129 requires PE compounds used in the manufacture of PE fittings to comply with AS/NZS 4131.

Plasson has provided documentation to indicate that Ineos ELTEX TUB 121 N6000 is utilised for the manufacture of the fittings. This compound is listed in PIPA POP004A as complying with AS/NZS 4131 and has satisfied the requirements of POP016, which designates the compound as High Stress Crack Resistant (HSCR).

6.2.2 Polypropylene Material

The PP fittings are manufactured using Hostalen PP H1022 12, a black coloured polypropylene block copolymer (PPB). This product type is listed in AS/NZS 4129 as an

acceptable material and test reports have been submitted to demonstrate compliance with the requirements of that standard.

6.2.3 Metal materials

The copper alloy utilised in transition fittings is C35200 to AS/NZS 1568. A typical material test report and dezincification test report have been submitted to demonstrate compliance.

The stainless steel utilised in transition fittings is Grade 316. A typical material test report has been submitted to demonstrate compliance

6.2.4 Effect on water

Ineos ELTEX TUB 121 N6000 is listed in POP004A and includes confirmation that re-certification to AS/NZS 4020:2005 was confirmed in December 2018.

Plasson has submitted copies of a test reports from Eurofins (NATA Accreditation No. 15773) dated 13th June 2017 and 8th November 2017 to demonstrate compliance of the polypropylene and brass materials to AS/NZS 4020:2005.

6.2.5 Type Testing

The required type testing of the Plasson electrofusion fittings and saddles to demonstrate compliance to AS/NZS 4129 was submitted for Issue 1 of this appraisal and are only required to be repeated in the case of any change to the material or design of the products.

Type testing requirements to demonstrate compliance for the compression joint fittings and pushfit fittings are detailed in AS/NZS 4129 and include:

- (a) Leak tightness under internal pressure. 1.5 x PN for 1 hour
- (b) Long term pressure test for leak tightness under internal pressure. 1.2 x PN for 1000 hours
- (c) Resistance to pull-out.
- (d) Leak tightness under internal pressure when subjected to bending
- (e) Leak tightness under negative pressure

Reports have been submitted to satisfactorily demonstrate compliance with the requirements.

7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

7.1.1 General

The Plasson website provides comprehensive product information including installation instructions and training videos. See relevant links below:

www.plasson.com.au www.plasson.com/content/page/Video-Library

7.1.2 Installation

Plasson has provided the following installation information relating to specific products:

Tapping Saddles are typically used to make meter connections to polyethylene lines. A cutting mechanism is used with a wrench to cut a hole in the polyethylene pipe. A spigot outlet is used with a compression or electrofusion fitting to make the connection to the meter. No special tools are needed when using tapping saddles. Bolts are done up with a wrench and the electrofusion process is conducted as normal

Large Bore Saddles are used to save time and cost of installation on large polyethylene lines typically DN 250 and above.

The Large Bore Saddle is significantly easier and faster to install than an equal or reducing spigot tee which is the product it typically replaces.

The Large Bore Saddle has an inbuilt test spigot to enable testing of the welding prior to the removal of the coupon. A set of tools is required to install a large bore saddle including a clamp and ratchet set to enable the electrofusion process and a drill and core cutter to cut out the coupon.

Adjustable Elbows are used to provide a stress-free electrofusion installation (PIPA requirement) when pipes are slightly misaligned in a trench. The fitting can adjust 12° per side (up to 24° for the two-sided elbow) in any direction. Once fused, it becomes a fixed joint. No special tools are needed when using Adjustable Elbows. The electrofusion process is conducted as normal.

Flex Restraint (not appraised) is used to restrain thrust and can replace traditional more expensive methods. Each unit restrains 3100 kg of axial force and multiple units can be used around the pipe surface to multiply the amount of thrust which can be restrained. A set of straps are needed to install the Flex Restraint.

Additional equipment required for installation is available from Plasson Australia.

7.1.3 Product Repair

Repair of these products is not possible.

7.1.4 Product Training

For Large Bore Saddles and Flex Restraints, it is suggested that Plasson Australia provide oversight of installation of the products for new contractors and or when training is required.

No special training is required for tapping saddles or adjustable elbows.

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

Electrofusion welding and butt fusion 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 (PIPA) provides technical guidelines for electrofusion welding in the following documents.

- POP001 Electrofusion Jointing of Pipe and fittings for Pressure Applications and
- 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 <http://www.pipa.com.au>.

8 PRODUCT MARKING

Products are marked in accordance with AS/NZS 4129 as follows:

These markings are provided on the body of the fitting –

- Manufacturer's name: Plasson
- Date or batch code:
- Nominal size: e.g., 63
- Material type: e.g., PE100, PP
- Pressure class: PN16
- Standard number: AS/NZS 4129

- ApprovalMark Certification Licence No: Lic. No. 02018
- Bar code

The following markings are provided on the packaging:

- Manufacturer's name: Plasson
- Fitting name and diagram:
- Date, batch code and bar code:
- Nominal size: e.g., 450-710X160
- The number of fittings in the box:
- Bar code



FIGURE 2 MARKING ON PACKAGING

9 PACKAGING AND TRANSPORTATION

Plasson PE electrofusion fittings are supplied individually in sealed plastic bags and packed in cardboard cartons to protect the fittings during transport and handling.

Fittings should be stored in a cool, dry area, out of direct sunlight and transported in their cardboard cartons.

Steps should be taken to prevent:

- damage to the sealed plastic bags;
- large temperature fluctuations which may result in the build-up of moisture within the bags;
- prolonged exposure to sunlight which may result in degradation of the plastic bags.

Smaller compression fittings are supplied in plastic bags for handling convenience whilst large compression fittings are supplied unbagged. The fittings are supplied in cardboard cartons.

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 Plasson's warranty is included in their terms and conditions of sale.

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

Plasson has been providing products to Australian water agencies since 1978 and have multiple approvals in place.

12 DISCUSSION

The Plasson nominated range of electrofusion fittings provide connection to PE pipelines using electrofusion jointing which offers a permanently sealed and jointed system providing the electrofusion process is carried out correctly. An electrofusion jointed PE pipeline has the potential for life expectancy equal to and in some cases well beyond other pipeline materials and jointing systems. The PE material is corrosion resistant and correctly made joints are permanently fused to provide a high level of joint integrity against leakage and/or

infiltration over the long-term. Similar to other plastics pipe systems, PE is susceptible to fatigue from cyclic pressure changes and additional design considerations must be taken into account if used in a pumped pipeline. Refer to WSAA Technical Note TN4 and design material available from Plasson.

PE pipelines are susceptible to permeation of specific organic chemicals (as are other pipeline systems) and care must be exercised if designing for installation in contaminated ground and/or brownfield sites. Seek further advice from Plasson for such installations.

13 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW

There are no outstanding issues.

14 FUTURE WORKS

No future works have been identified.

15 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.

15.1 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 to each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

15.2 Limits on Reliance on Information and Recommendations

15.2.1 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.

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15.2.3 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. 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.

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.

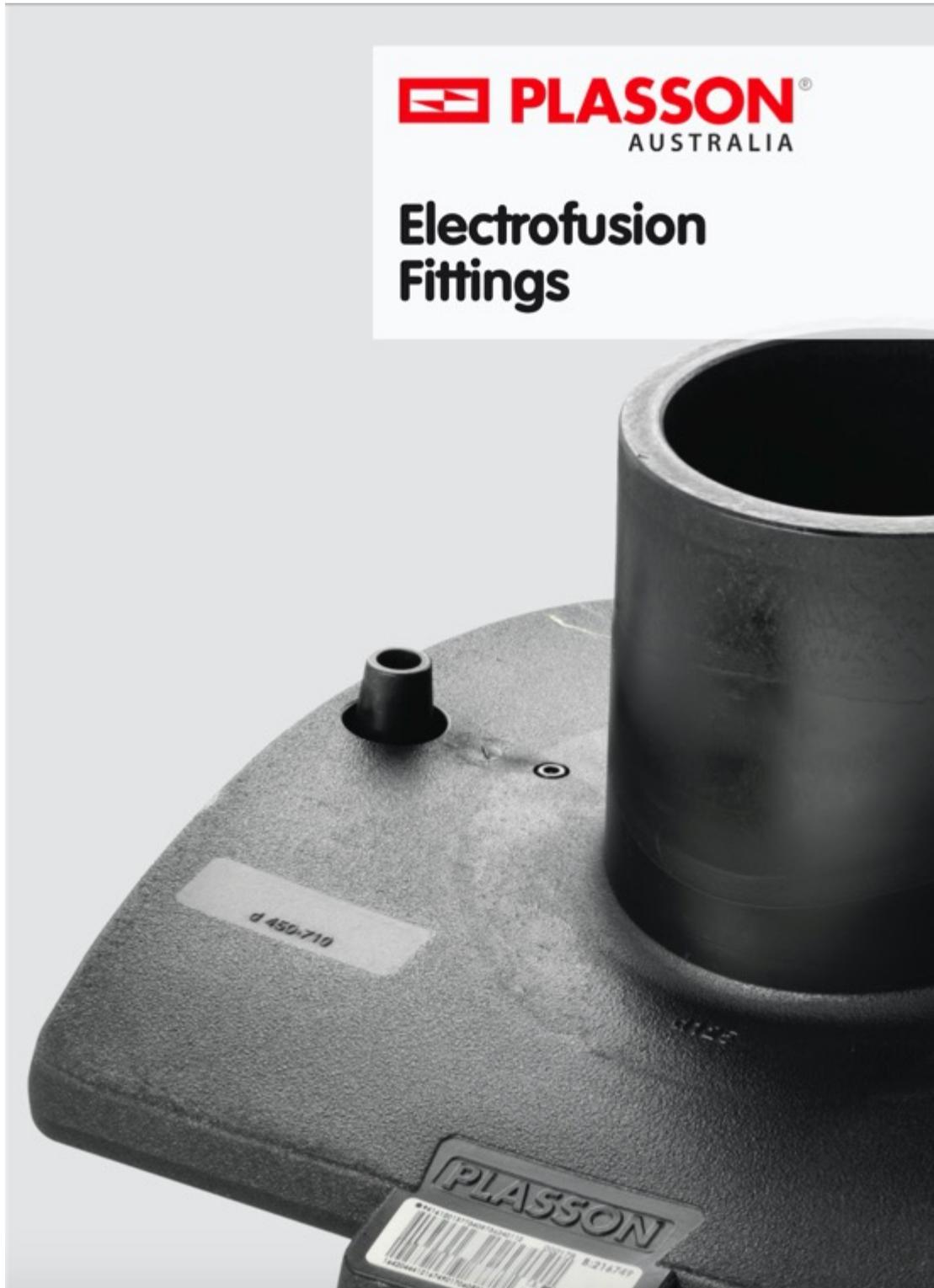
No Warranty

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

The Plasson website provides comprehensive product information including installation instructions and training videos. The cover pages for Product Catalogues are reproduced below. The complete catalogues and other literature are available from:

<https://www.plasson.com.au/catalogues>





Metric Compression Fittings



 **PLASSON**[®]

Plasson Series 1

The New Compact Fitting



Technical Catalogue

2011-2012

Global Presence - Local Commitment

 **PLASSON**[®]

PE ELECTROFUSION FITTINGS		
Family Code	Catalogue Family Name	Size Range
COUPLER		
4901	COUPLER - PN16	20 - 630
4911	COUPLER - REDUCING COUPLER	20 - 180
4977	PE CAST IRON FLANGE COUPLER	63 - 225
BOW - 22.5 DEG		
4908	22.5° ELBOW	90 - 180
BOW - 45 DEG		
4906	45° ELBOW	32 - 250
4926	45° TRANSITION ELBOW - MALE BRASS OUTLET	32 - 63
4936	45° TRANSITION ELBOW - FEMALE BRASS OUTLET	32 - 63
4946	45° TRANSITION ELBOW - FEMALE FREE NUT BRASS OUTLET	32 - 63
BOW - 90 DEG		
4905	90° ELBOW	20 - 250
4915	90° DUCKFOOT ELBOW	90
4925	90° TRANSITION ELBOW - MALE BRASS OUTLET	20 - 63
4935	90° TRANSITION ELBOW - FEMALE BRASS OUTLET	20 - 63
4945	90° TRANSITION ELBOW - FEMALE FREE NUT BRASS OUTLET	20 - 63
EW - ADJUSTABLE		
4947	ADJUSTABLE ELBOW - DOUBLE SIDED	90 - 250
4947	ADJUSTABLE ELBOW - SINGLE SIDED	90 - 250
4747	ADJUSTABLE ELBOW - SINGLE SIDED (WASTE WATER)	160
TEE		
4904	TEE EQUAL	20 - 250
4914	TEE REDUCING	25 - 250
4924	TEE REDUCING WITH DOUBLE OUTLET	40 - 63
4904	FULL FACED FLANGED HYDRANT TEE	110 - 250
4994	DUCTILE IRON FLANGED TEE	110 - 250
END CAP		
4912	END CAP - INCL. COUPLING AND PLUG	20 - 250
4912	END PLUG	20 - 315
ADAPTORS		
4971	MALE ADPATOR PE100	25 - 63
4961	FEMALE ADAPTOR PE100	20 - 63
4971	TRANSITION COUPLER - MALE BRASS OUTLET	20 - 75
4921	TRANSITION COUPLER - MALE STAINLESS STEEL OUTLET	32 - 63
4931	TRANSITION COUPLER - FEMALE BRASS OUTLET	20 - 63
4941	TRANSITION COUPLER - MALE FREE NUT OUTLET	32 - 63
4941	TRANSITION COUPLER - FEMALE FREE NUT OUTLET	20 - 63
BRANCH SADDLE		
4958	BRANCH SADDLE WITH UNDERPART	63 - 315
4981	BRANCH SADDLE WITH RED WIRE UNDERPART	125 - 250
4958	LARGE BORE BRANCH SADDLE	250 - 630
4938	SENSOR SADDLE	110 - 630
4938	TRANSITION SADDLE WITH BRASS OUTLET	63 - 630
4952	REPAIR SADDLE	63 - 180
4952	LARGE BORE REPAIR SADDLE	250 - 630
4958	HYDRANT BRANCH SADDLE WITH FULL FACE FLANGED SADDLE	90 - 315
TAPPING SADDLE		
4963	TAPPING SADDLE WITH UNDERPART	40 - 250
4983	WELDING CAP FOR TAPPING SADDLE	40 - 57

PP COMPRESSION JOINT FITTINGS		
Family Code	Catalogue Family Name	Size Range
COUPLING		
7010	COUPLING	20 - 110
7610	SLIP/REPAIR COUPLING	20 - 110
7110	REDUCING COUPLING	20 - 110
7017	UNIVERSAL ADAPTOR	20 - 50
7810	COUPLING WITH MALE THREADED OFFTAKE	40 - 75
ADAPTOR - THREADED		
7020	MALE ADAPTOR	20 - 110
7030	FEMALE ADAPTOR	20 - 110
7037	FEMALE ADAPTOR WITH PARALLEL THREAD	25 - 32
ELBOW - 45 DEG		
7060	ELBOW 45 DEG	32 - 110
7450	ELBOW 45 DEG WITH MALE THREAD	20
ELBOW - 90 DEG		
7050	ELBOW 90 DEG	20 - 110
7510	REDUCING ELBOW 90 DEG	20
7057	UNIVERSAL ELBOW 90 DEG	20 - 35
7350	ELBOW ADAPTOR 90 DEG - MALE SPIGOT	40 - 63
7850	MALE ADAPTOR ELBOW 90 DEG	20 - 110
7150	FEMALE ADAPTOR ELBOW 90 DEG	20 - 75
7750	WALLPLATE ELBOW	20 - 25
TEE - 90 DEG		
7040	TEE	20 - 110
7340	REDUCING TEE	20 - 110
7740	INCREASING TEE	20
7810	SLIP/ REPAIR TEE	20 - 63
7840	TEE WITH THREADED MALE OFFTAKE	20 - 63
7140	TEE WITH THREADED FEMALE OFFTAKE	20 - 110
7146	SLIP/ REPAIR TEE WITH FEMALE OFFTAKE	40 - 63
7146	REDUCING TEE WITH FEMALE OFFTAKE	20 - 32
END PLUG		
7120	END PLUG	20 - 110
FLANGE WITH METAL BACKING RING		
7220	FLANGED COUPLING WITH METAL BACKING RING	50 - 110
7230	FLANGED ADAPTOR WITH METAL BACKING FLANGE	50 - 160
7226	REDUCED COMPRESSION FLANGE	63
PE TO COPPER		
7113	POLY TO COPPER CONNECTOR	20 - 32
7043	POLY TO COPPER TEE	20 - 32
7056	POLY TO COPPER ELBOW 90 DEG	20 - 25
ADAPTORS		
7940	MODULAR ADPTOR	20 - 63
7250	BARRELL UNION ADAPTOR WITH MALE THREAD	25 - 63
7930	REDUCING SET	25 - 110
PE TO POLYBUTYLENE		
7112	POLY TO POLYBUTYLENE CONNECTOR	25
7435	POLY TO POLYBUTYLENE KIT	25
PE TO PVC CONNECTOR		
7016	PE TO PVC CONNECTOR	63 - 110
TAPPING SADDLE		
1631	PLASSADDLE - MECHANICAL TAPPER	63 - 180

PP SERIES 1 PUSHFIT FITTINGS		
Family Code	Catalogue Family Name	Size Range
1001	COUPLER	20-63
1012	END PLUG	20-63
1002	MALE ADAPTER	20-63
1003	FEMALE ADAPTER	20-63
1011	REDUCING COUPLING	20-63
1004	90° TEE	20-63
1005	90° ELBOW	20-63
1085	90° ELBOW WITH THREADED MALE OFFTAKE	20-63
1011C	POLY COPPER CONNECTOR	20-32
1014	90° TEE WITH THREADED FEMALE OFFTAKE	20-32
1015	90° ELBOW WITH THREADED FEMALE OFFTAKE	20-63
1034	REDUCING TEE	20-32
1075	WALL PLATE ELBOW	20-25
1051	REDUCING ELBOW	20-25
1072	BRASS MALE ADAPTER	20-63
1073	BRASS FEMALE ADAPTER	20-63

APPENDIX B - QUALITY CERTIFICATIONS

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

**TABLE B1
PLASSON LIMITED - MANAGEMENT SYSTEMS**

Kibbutz Ma'agan Michael, Israel.	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	IL 94173
Certifying Agency	The Standards Institution of Israel
First Date of Certification	5 May 1993
Current Date of Certification	3 February 2021
Expiry Date of Certification	3 February 2024

**TABLE B2
PLASSON AUSTRALIA PTY LTD - PRODUCT CERTIFICATION**

61 Dunning Avenue Rosebery NSW	
Product Standard/Spec.	AS/NZS 4129:2020
Certificate No.	AMI 02018
Issuing Certification Body	ApprovalMark International
First Date of Certification	5 March 2015
Current Date of Certification	4 May 2021
Expiry Date of Certification	19 January 2026



CERTIFICATE

THE STANDARDS INSTITUTION OF ISRAEL
has issued an IQNet recognized certificate that the organization:

PLASSON LTD.
Kibbutz Ma'agan Michael, Israel

Has implemented and maintains a Quality Management System

For the following scope:

Development, manufacturing and marketing of injection moulded plastic products.

which fulfils the requirement of the following standard:

ISO 9001:2015

Issued on:	03/02/2021
Date of initial approval:	05/05/1993
Date of expiration:	03/02/2024

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration number: IL - 94173




Alex Stoichitoiu
President of IQNet


Avital Weinberg
Director, Quality & Certification Division 

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 EAGLE Certification Group USA
FCAV Brazil FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifointi Oy Finland INTECO Costa Rica
IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland
NYCE-SIGE México PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia
SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

www.sii.org.il

The Product Schedule attached to this Certificate contains 65 pages. A copy may be obtained directly from Plasson or from WSAA.



CERTIFICATE OF CONFORMITY



ApprovalMark International hereby grants:

PLASSON AUSTRALIA PTY LTD
Green Central, 61 Dunning Ave
Rosebery, NSW 2018
AUSTRALIA

ISO Type 5 Certificate of Conformity

Evaluated to:

AS/NZS 4129:2020 – Fittings for Polyethylene (PE) pipes for pressure applications

The ISO Type 5 License shall comply with all the terms and conditions as stipulated by the governance of the operating rules of the ISO Type 5 Scheme and shall comply with the standard requirements at all times including when the standard is amended. The ISO Type 5 License only covers the product which is identified in the attached product schedule.

Certificate No. AMI 02018

Issued: 4th May 2021
Expires: 19th January 2026

Original Issue: 5th March 2015

John PRASAD
Director

ApprovalMark International Pty Ltd
20/33 Holbeche Road, Arndell Park 2148, Australia
www.approvalmark.com



Registered by: ApprovalMark International Pty Ltd (ABN 69 143 259 974) Unit 20, 33 Holbeche Road, Arndell Park NSW 2148 Australia. The assessment was carried with appropriate skill and assessment by ApprovalMark International Pty Ltd; however it will only accept its responsibility for proven negligence. The certificate remains the property of ApprovalMark International Pty Ltd.

ApprovalMark™

APPENDIX C - SUPPLIER CONTACTS

Plasson Australia Head Office

Suite 2.03 Grand Central

61 Dunning Avenue

Rosebery NSW 2018

Phone: 1300 752 776

Email: sales@plasson.com.au

Reece Civil Stores:

Website store locator: <https://www.reece.com.au/aboutus/contactus>



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

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