

PMJ-tec AG

Industriestrasse 34
CH 1791
Courtaman
Switzerland

Tel: 00 41 26 68 47 400 Fax: 00 41 26 68 42 189

e-mail: info@pmj-tec.com

website: www.pmj-tec.com



Agrement Certificate

99/3650

Product Sheet 1

PMJ FITTINGS

PMJ NOMIC COUPLINGS

This Agrément Certificate Product Sheet⁽¹⁾ relates to PMJ Nomic Couplings, a range of couplings comprising a stainless steel collar and an EPDM gasket for jointing cast iron pipes from 50 to 300 mm, for the conveyance of above ground rainwater, domestic drainage and sewage in domestic, commercial and public buildings.

(1) Hereinafter referred to as 'Certificate'.

CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



KEY FACTORS ASSESSED

Performance of joints — joints made using the products remain watertight under normal conditions of pipeline movement (see section 6).

Resistance to chemicals — the products will be unaffected by the types and quantities of chemicals likely to be found in effluent (see section 8).

Resistance to elevated temperatures — the products will have adequate resistance to the temperatures likely to be found in domestic drainage and sewage (see section 9).

Durability — the products are expected to have a life expectancy equivalent to that of the pipework (see section 13).

The BBA has awarded this Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Third issue: 16 March 2022

Originally certificated on 27 October 1999

Hardy Giesler
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément

Bucknalls Lane
Watford
Herts WD25 9BA

©2022

tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk

Regulations

In the opinion of the BBA, PMJ Nomic Couplings, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations (the presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	H1(1)	Foul water drainage
Comment:		The products will contribute to conveying the flow of foul or surface water and minimise the risk of blockages or leakage. See section 4.1 of this Certificate.
Requirement:	H3(1)	Rainwater drainage
Comment:		The products can contribute to satisfying this Requirement. See section 4.1 of this Certificate.
Regulation:	7(1)	Materials and workmanship
Comment:		The products are acceptable. See section 13 and the <i>Installation</i> part of this Certificate.
Regulation:	7(2)	Materials and workmanship
Comment:		The products are not restricted by this Regulation. See section 10 of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:		The products can contribute to a construction satisfying this Regulation. See sections 12 and 13 and the <i>Installation</i> part of this Certificate.
Standard:	3.6	Surface water drainage
Standard:	3.7	Wastewater drainage
Comment:		A drainage system incorporating the products will satisfy the relevant requirements of these Standards, with reference to clauses 3.6.1 ⁽¹⁾⁽²⁾ , 3.6.5 ⁽¹⁾⁽²⁾ and 3.7.1 ⁽¹⁾⁽²⁾ . See section 4.1 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The products can contribute to satisfying the relevant Requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard. See section 6 of this Certificate.
Regulation:	12	Building standards applicable to conversions
Comment:		All comments given for the products under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 ⁽¹⁾⁽²⁾ and Schedule 6 ⁽¹⁾⁽²⁾ .
		(1) Technical Handbook (Domestic). (2) Technical Handbook (Non-Domestic).



The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	23(a)(i)	Fitness of materials and workmanship
Comment:	(iii)(b)(i)	The products are acceptable. See section 13 and the <i>Installation</i> part of this Certificate.
Regulation:	80(a)	Sanitary pipework
Regulation:	82(a)	Rainwater drainage
Comment:		The products can contribute to satisfying the relevant requirements of these Regulations. See section 4.1 of this Certificate.

Construction (Design and Management) Regulations 2015

Construction (Design and Management) Regulations (Northern Ireland) 2016

In the opinion of the BBA, there is no information in this Certificate, which relates to the obligations of the client, designer (including Principal Designer) and contractor (including Principal Contractor) under these Regulations.

Additional Information

NHBC Standards 2022

In the opinion of the BBA, PMJ Nomic Couplings, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapter 8.1 *Internal services*.

CE marking

The Certificate holder has taken the responsibility of CE marking the products in accordance with harmonised European Standard BS EN 877 : 1999.

Technical Specification

1 Description

1.1 PMJ Nomic Couplings are a range of couplings (see Figure 1) each consisting of a stainless steel collar A2 grade AISI 304 1.4301 and an ethylene propylene diene monomer (EPDM) gasket to DIN 4060 : 2016 (Hardness class B). The collar is tightened by galvanized or stainless steel nuts and bolts.

1.2 The couplings are available in the dimensions given in Table 1 and include:

- Unic — with a single nut and bolt tightening the collar
- Duo — with a double nut and bolt tightening the collar
- Grip — with a double nut and bolt tightening the collar but with additional grip rings for higher pressure applications
- Electo — with a double nut and bolt tightening the collar but with additional continuity clip to ensure electrical continuity through the joint.

Table 1 Product range

Coupling type ⁽¹⁾	Size										
	DN50	DN60	DN70	DN75	DN80	DN100	DN125	DN150	DN200	DN250	DN300
Unic	✓	X	✓	X	X	✓	✓	✓	X	X	X
Duo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grip	✓	X	✓	X	X	✓	✓	✓	✓	X	X
Electo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

(1) Adaptors and reducing connectors (Plasto and Redox) are also available but their performance is outside the scope of this Certificate.

Figure 1 PMJ Nomic Couplings



2 Manufacture

2.1 The couplings are manufactured from stainless steel, cut to size and profiled in an automated controlled process.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

2.3 The management system of PMJ-tec AG has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by IQNet and SQS (Certificate CH-12946).

Delivery and site handling

The couplings are packed in boxes and labelled, allowing traceability of production. Normal levels of care are required in handling and storage to prevent damage.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on PMJ Nomic Couplings.

Design Considerations

4 Use



4.1 PMJ Nomic Couplings are suitable for use in domestic, commercial and public buildings in accordance with BS EN 12056-2 : 2000, BS EN 12056-3 : 2000, BS EN 752 : 2017 and BS EN 877 : 1999 in above ground drainage systems for the conveyance by combined or separate systems of surface water or domestic sewage as is permitted to be discharged into public sewers by the *Water Industry Act 1991*, Chapter 56, the *Sewerage (Scotland) Act 1968* and the *Water and Sewerage Services (Northern Ireland) Order 2006*.

4.2 The couplings are for use in jointing cast iron pipes from 50 to 300 mm nominal outside diameter of the same nominal internal diameter complying with BS EN 877 : 1999. The nuts and bolts should be tightened to the recommended torque (see Table 2).

Table 2 Recommended torque settings

Coupling type	Tightening torque (N·m)
Unic	15
Duo	Max 8
Electo	Max 8
Grip	Max 8

4.3 The Electo coupling complies with the requirements of BS EN 877 : 1999, Annex NA8, in respect of electrical continuity.

4.4 Use of the products for untreated trade effluent is outside the scope of this Certificate.

5 Practicability of installation

The products are designed to be installed by a competent general builder, or a contractor, experienced with these types of products.

6 Performance of joints



6.1 When correctly made, the performance of joints will not be adversely affected by thermal expansion or contraction.

6.2 Joints made using the couplings remain watertight under conditions of pipeline movement in excess of that expected to occur.

7 Flow characteristics

Joints made using the couplings have no significant effect on the flow characteristics associated with drainage systems.

8 Resistance to chemicals

The products are suitable for use with the types and quantities of chemicals likely to be found in the effluents defined in section 4.1.

9 Resistance to elevated temperatures

The products have adequate resistance to the temperatures likely to be found in the effluents defined in section 4.1.

10 Properties in relation to fire



The collars have an A1 reaction to fire classification to BS EN 13501-1: 2018. The Certificate holder has not declared a reaction to fire classification for the EPDM gaskets.

11 Noise

PMJ Nomic couplings are designed with EPDM gaskets in such a way as to prevent direct contact between the ends of pipework components, which contributes to dissipating noise that arises from flushing within the buildings.

12 Maintenance



A system using the couplings can be cleared without difficulty, using standard rodding equipment. The couplings are protected by the pipe wall and therefore unlikely to be damaged.

13 Durability



When used within the conditions and recommendations given in this Certificate, the couplings are expected to have a life expectancy equivalent to that of the pipework.

14 Reuse and recyclability

The products comprise stainless steel and EPDM, which can be recycled.

Installation

15 General

PMJ Nomic Couplings must be installed in accordance with the Certificate holder's installation instructions. Typical applications are shown in Figure 2.

16 Procedure

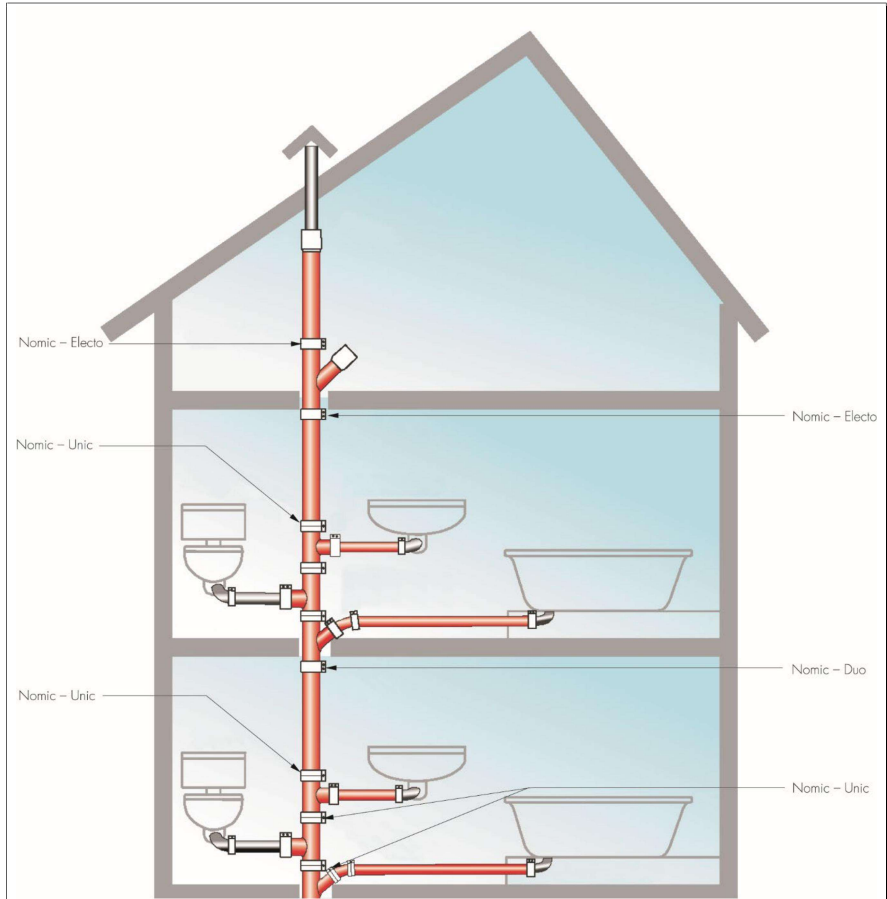
16.1 When inserting a junction or length of pipe into an existing pipeline, the pipe ends should be cut square. Any discontinuities on the external surface, eg mould joint lines on the barrel of iron pipes, may require smoothing to achieve a watertight joint.

16.2 Before making the connection, the coupling and the pipe ends must be clean.

16.3 To make a joint, the coupling is positioned centrally over the pipe ends and the gap.

16.4 The fitting of the coupling is completed by the tightening of the nuts and bolts to the steel collar, to the recommended torque (see Table 2).

Figure 2 Typical applications



Technical Investigations

17 Tests

Tests were carried out to determine:

- dimensional accuracy
- ease of jointing.

18 Investigations

18.1 A factory visit was carried out to assess the effectiveness of the quality control procedure.

18.2 An examination was made of an independent approval by Materialprüfungsamt Nordrhein-Westfalen (MPA-NRW) of Germany. PMJ Nomic Couplings were shown to satisfy the requirements of BS EN 877 : 1999, including:

- properties of EPDM sealing gasket
- watertightness at an internal pressure of 5 bar for sizes up to DN200 and 3 bar for DN250 and DN300
- watertightness at an external pressure of 0.5 bar
- effects of thermal cycling
- ease of jointing
- airtightness at an internal pressure of 10 mbar.

Bibliography

BS EN 752 : 2017 *Drain and sewer systems outside buildings – Sewer system management*

BS EN 877 : 1999 + A1 : 2006 *Cast iron pipes and fittings, their joints and accessories for the evacuation of water from buildings. Requirements, test methods and quality assurance*

BS EN 12056-2 : 2000 *Gravity Drainage Systems inside Buildings — Sanitary pipework, layout and calculation*

BS EN 12056-3 : 2000 *Gravity Drainage Systems inside Buildings — Roof drainage, layout and calculation*

BS EN 13501-1 : 2018 *Fire classification of construction products and building elements — Classification using data from reaction to fire tests*

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

DIN 4060 : 2016 *Joints of sewer and drain pipes with elastomeric seals — Requirements and testing on joints with elastomeric seals*

19 Conditions

19.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

19.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

19.3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

19.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

19.5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- actual installations of the product/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to CE marking.

19.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.