

IZIFIT SECURITY

FOR ALL YOUR PIPES

DUCTILE IRON FITTINGS FOR PRESSURISED PLASTIC PIPES



PIPELINE SOLUTIONS FOR THE FUTURE

A single ductile iron fitting for all PE (polyethylene), PVC-U (unplasticised polyvinyl chloride) and PVC-BO (biaxially oriented polyvinyl chloride) pipe systems for transporting **drinking water under pressure**.



Quick



- > Ready-to-install fittings with pre-fitted gaskets
- > Assembly of fittings and valves with no tightening
- > Compliance with work rates

Easy



- > Integral handle for the fittings
- > Assembly by hand or leverage
- > Easy on-site installation
- > Essential watertight seal functions guaranteed

Universal



- > A unique product for all plastic pipes
- > Anchored or non-anchored
- > Stock optimisation

So simple!



A strong, reliable system

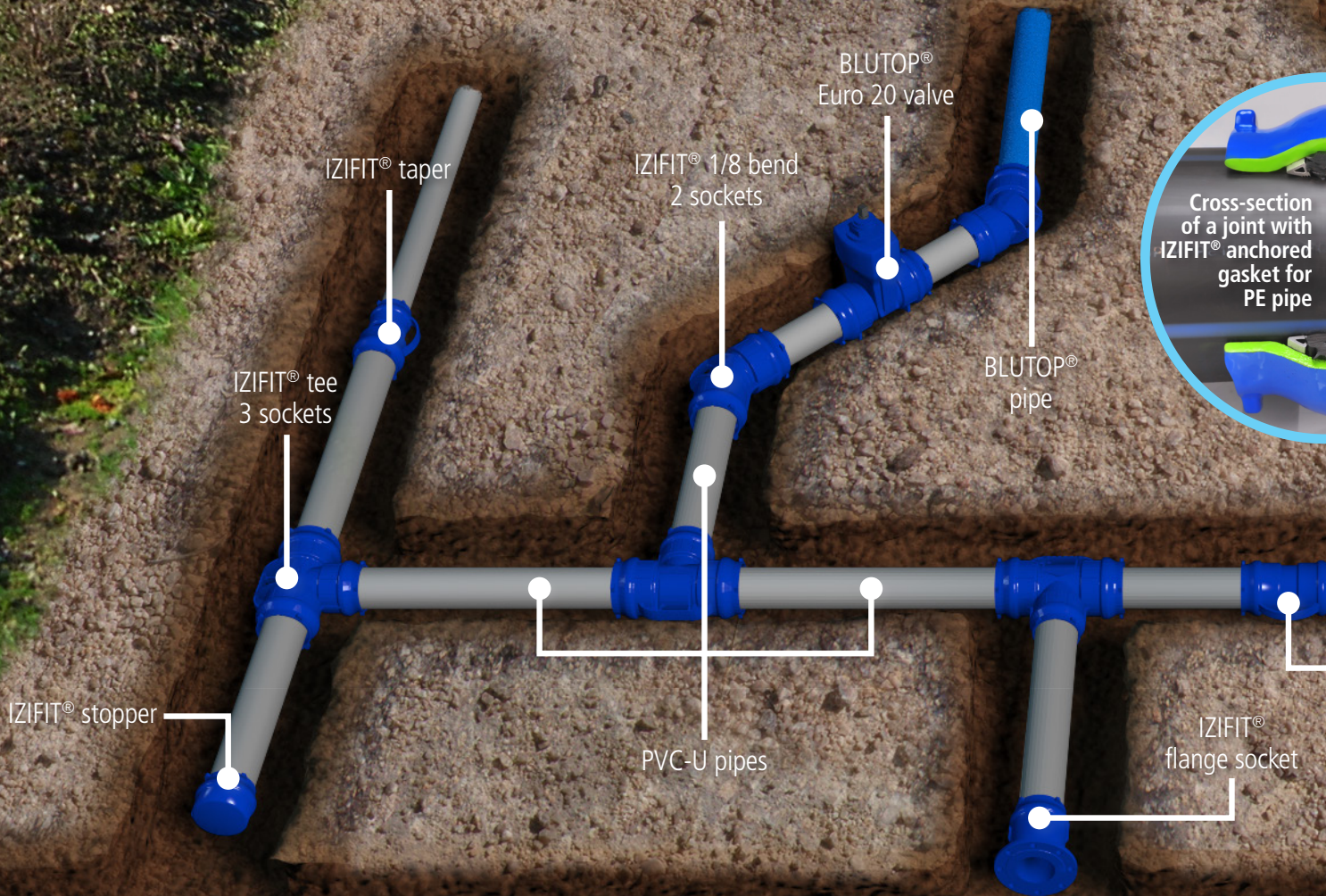
- IZIFIT® joints have been designed and tested in accordance with very stringent methods and standards (NF T 54-948-2010 for PVC-BO and EN 12842-2012 for PE and PVC-U). Special tests are performed at PAM to guarantee unrivalled reliability.

French innovation

- The seals and the anchoring system were designed in France by the PAM Research and Development Centre. The unique technology developed and patented by Saint-Gobain PAM enables an **allowable operating pressure** of up to **16 bar**.

A durable system

- The **250 µm blue epoxy coating** (in accordance with standard NF EN 14901), the stainless steel and the high-quality EPDM elastomer afford excellent resistance over time.



The picture above is designed to illustrate the IZIFIT® range and does not represent an actual site

The IZIFIT® solution makes connecting pipes quick and easy.

Ready-to-fit fittings

- IZIFIT® fittings are delivered with their gaskets pre-fitted, making on-site installation easier and helping work to stay on schedule. PAM recommends always anchoring PE pipes.

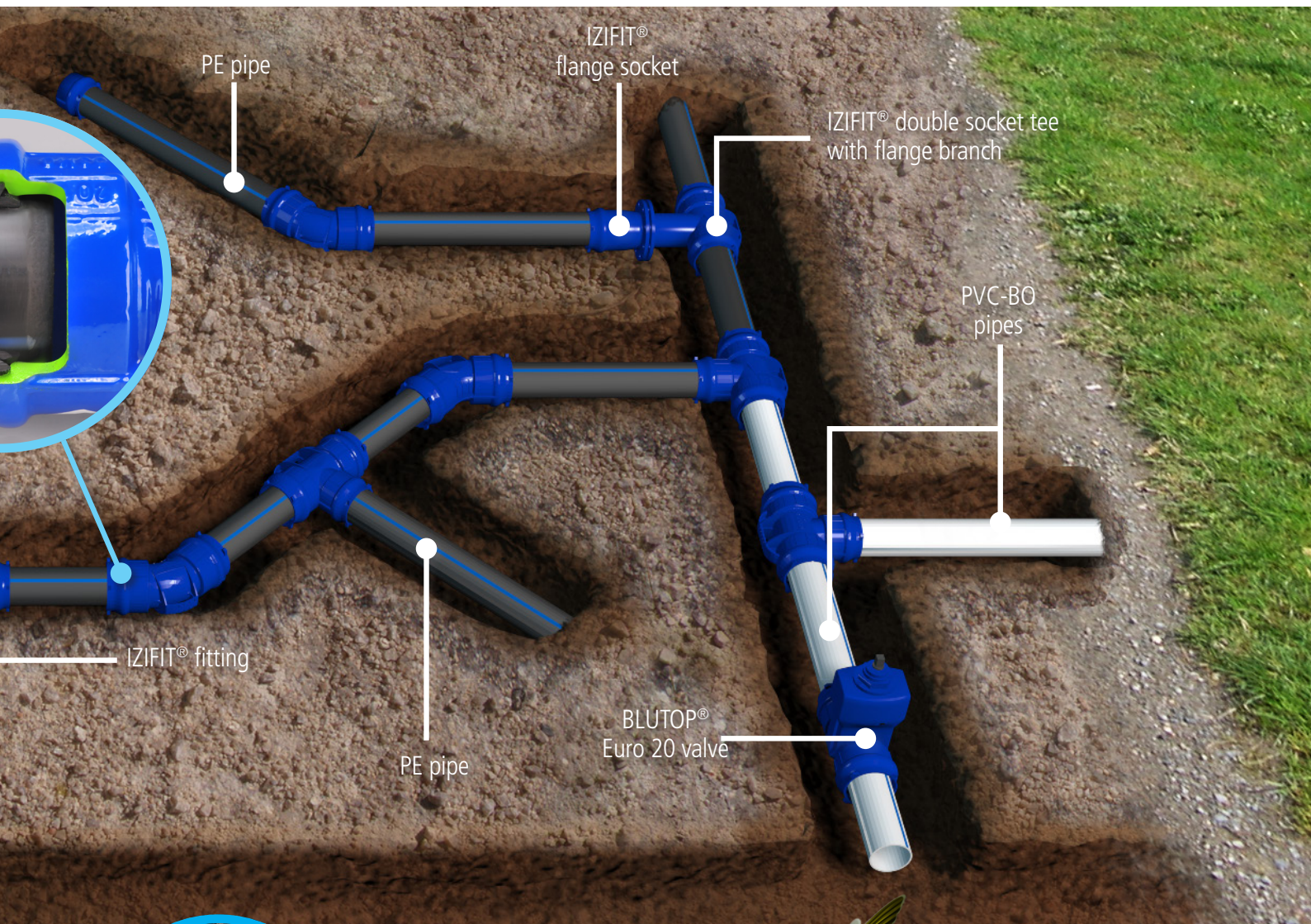
Save time and money

- The anchoring system with metal inserts built into the gasket enables quick and easy installation of fittings and eliminates the need for concrete thrust blocks.

Tolerance and flexibility

- The **angular deviation** tolerated by the IZIFIT® fittings is **6°** regardless of the gasket used. The axial clearance tolerated by the joints enables the pipes to accommodate ground movements while absorbing the corresponding mechanical stresses.

to join pipes



Light and easy to handle

Designed with an integral handle, IZIFIT® fittings are lightweight and portable. They make adjustment work much easier.



Manual leverage assembly

The IZIFIT® junction has been specially designed to reduce to a minimum the force needed for assembly. The integral handle and the multiple contact points on IZIFIT® fittings make assembly easy using leverage and standard work tools.



Safe storage and transport

For transport and storage, the sockets are protected with caps.

IZIFIT® fittings can be fitted to all types of plastic water pipes, including PVC-BO (biaxially oriented polyvinyl chloride). IZIFIT® is a comprehensive range of multi-purpose fittings (bends, tees, flange spigots, tapers, stoppers, semi-sliding collars, etc.), for anchored or non-anchored connections regardless of the fitting and depending on the context.



IZIFIT® bend 1/4 PN 10-16 bar			
DN/OD	weight in kg	non-anchored	anchored
63	3.30	KZL63CA	(*)
75	4.40	KTL75CA	KVL75CA
90	5.50	KTL90CA	KVL90CA
110	7.10	KTM11CA	KVM11CA
125	8.80	KTM12CA	KVM12CA
140	9.50	KZM14CA	(*)
160	11.69	KZM16CA	
200	16.42	KZM20CA	
225	19.40	KZM22CA	



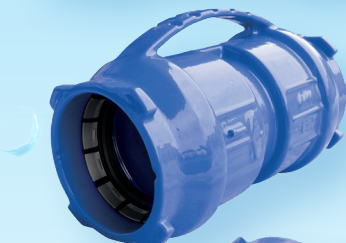
IZIFIT® bend 1/8 PN 10-16 bar			
DN/OD	weight in kg	non-anchored	anchored
63	3.07	KZL63CB	(*)
75	4.20	KTL75CB	KVL75CB
90	5.10	KTL90CB	KVL90CB
110	6.20	KTM11CB	KVM11CB
125	7.00	KTM12CB	KVM12CB
140	8.65	KZM14CB	(*)
160	10.10	KZM16CB	
200	13.26	KZM20CB	
225	16.01	KZM22CB	



IZIFIT® bend 1/16 PN 10-16 bar			
DN/OD	weight in kg	non-anchored	anchored
63	2.57	KZL63CD	(*)
75	3.40	KTL75CD	KVL75CD
90	4.40	KTL90CD	KVL90CD
110	5.50	KTM11CD	KVM11CD
125	6.60	KTM12CD	KVM12CD
140	6.97	KZM14CD	(*)
160	8.44	KZM16CD	
200	11.42	KZM20CD	
225	13.67	KZM22CD	



IZIFIT® bend 1/32 PN 10-16 bar			
DN/OD	weight in kg	non-anchored	anchored
75	3.50	KTL75CE	KVL75CE
90	3.80	KTL90CE	KVL90CE
110	5.80	KTM11CE	KVM11CE
125	6.70	KTM12CE	KVM12CE



IZIFIT® non-sliding collar PN 10-16 bar			
DN/OD	weight in kg	non-anchored	anchored
63	2.56	KZL63MN	(*)
90	4.00	KTL90MN	KVL90MN
110	4.90	KTM11MN	KVM11MN
125	5.50	KTM12MN	KVM12MN
140	6.61	KZM14MN	(*)
160	8.02	KZM16MN	
200	10.93	KZM20MN	
225	12.88	KZM22MN	



IZIFIT® semi-sliding collar PN 10-16 bar			
DN/OD	weight in kg	non-anchored	anchored
75	5.30	KTL75MM	(**)
90	6.30	KTL90MM	
110	7.30	KTM11MM	
125	8.80	KTM12MM	

a comprehensive range



IZIFIT® fittings are delivered with their gaskets fitted.
 (*) For diameters 63 and 140 to 225, anchoring with gland (see page 9).
 (**) please contact us
 (1) PN10
 (2) PN16
 Datas and photographs not contractually binding.

IZIFIT® taper PN 10-16 bar				
DN/OD	Ø mm	weight in kg	non-anchored	anchored
75	63	2.89	KZL75VE0B	(*)
90	75	3.70	KTL90VE0C	KVL90VE0C
110	75	4.60	KTM11VE0C	KVM11VE0C
	90	5.00	KTM11VE0D	KVM11VE0D
125	75	5.00	KTM12VE0C	KVM12VE0C
	90	5.20	KTM12VE0D	KVM12VE0D
	110	5.50	KTM12VE0E	KVM12VE0E
140	90	5.51	KZM14VE0D	(*)
	110	5.91	KZM14VE0E	
	125	6.29	KZM14VE0G	
160	75	6.02	KZM16VE0C	
	90	6.37	KZM16VE0D	
	110	6.72	KZM16VE0E	
	125	7.01	KZM16VE0G	
200	140	7.43	KZM16VE0H	
	125	8.97	KZM20VE0G	
	140	9.28	KZM20VE0H	
225	160	9.87	KZM20VE0J	
	110	9.94	KZM22VE0E	
	140	10.50	KZM22VE0H	
	160	10.96	KZM22VE0J	
	200	11.94	KZM22VE0K	

IZIFIT® double socket tee with flange branch PN 10-16 bar				
DN/OD		weight in kg	non-anchored	anchored
body	pipe			
63	40	5.14	KZL63TD1A	(*)
	60	6.20	KZL63TD1C	
75	40	5.80	KTL75TD1A	KVL75TD1A
	60	7.80	KTL75TD1C	KVL75TD1C
	65	8.20	KTL75TD1D	KVL75TD1D
90	40	6.80	KTL90TD1A	KVL90TD1A
	60	8.60	KTL90TD1C	KVL90TD1C
	65	8.70	KTL90TD1D	KVL90TD1D
	80	9.40	KTL90TD1E	KVL90TD1E
110	40	7.60	KTM11TD1A	KVM11TD1A
	60	9.40	KTM11TD1C	KVM11TD1C
	65	9.50	KTM11TD1D	KVM11TD1D
	80	11.00	KTM11TD1E	KVM11TD1E
	100	12.20	KTM11TD1F	KVM11TD1F
125	40	9.20	KTM12TD1A	KVM12TD1A
	60	10.80	KTM12TD1C	KVM12TD1C
	65	11.10	KTM12TD1D	KVM12TD1D
	80	11.50	KTM12TD1E	KVM12TD1E
	100	12.20	KTM12TD1F	KVM12TD1F
140	125	15.00	KTM12TD1G	KVM12TD1G
	40	9.34	KZM14TD1A	(*)
	60	11.04	KZM14TD1C	
	80	12.35	KZM14TD1E	
	100	14.03	KZM14TD1F	
160	125	16.28	KZM14TD1G	
	40	10.60	KZM16TD1A	
	60	12.35	KZM16TD1C	
	80	13.73	KZM16TD1E	
	100	15.40	KZM16TD1F	
200	125	17.74	KZM16TD1G	
	150	20.16	KZM16TD1J	
	40	14.32	KZM20TD1A	
	60	16.27	KZM20TD1C	
	80	17.74	KZM20TD1E	
225	100	19.67	KZM20TD1F	
	125	22.05	KZM20TD1G	
	150	24.54	KZM20TD1J	
	200 (1)	29.09	KZM20TD1K	
	200 (2)	29.09	KZM20TD2K	
225	60	18.23	KZM22TD1C	
	80	19.71	KZM22TD1E	
	100	21.75	KZM22TD1F	
	150	26.67	KZM22TD1J	
	200 (1)	31.62	KZM22TD1K	
	200 (2)	31.62	KZM22TD2K	



IZIFIT® all socket tee PN 10-16 bar				
DN/OD		weight in kg	non-anchored	anchored
body	pipe			
75	75	5.60	KTL75TE0C	KVL75TE0C
90	75	6.40	KTL90TE0C	KVL90TE0C
	90	6.80	KTL90TE0D	KVL90TE0D
110	75	7.50	KTM111TE0C	KVM111TE0C
	90	7.80	KTM111TE0D	KVM111TE0D
	110	8.70	KTM111TE0E	KVM111TE0E
125	75	8.80	KTM12TE0C	KVM12TE0C
	90	9.20	KTM12TE0D	KVM12TE0D
	110	10.00	KTM12TE0E	KVM12TE0E
	125	11.00	KTM12TE0G	KVM12TE0G
140	110	10.55	KZM14TE0E	(*)
	125	11.46	KZM14TE0G	
	140	11.90	KZM14TE0H	
160	110	11.93	KZM16TE0E	(*)
	125	12.66	KZM16TE0G	
	140	13.25	KZM16TE0H	



IZIFIT® flange spigot PN 10-16 bar				
DN/OD	DN flange	weight in kg	non-anchored	anchored
63	60	3.62	KZL63BU1C	/
75	60	4.15	KTL75BU1C	
75	65	4.15	KTL75BU1D	
90	80	4.70	KTL90BU1E	
110	100	6.00	KTM11BU1F	
125	125	7.90	KTM12BU1G	
140	125	8.56	KZM14BU1G	
160	150	10.64	KZM16BU1J	
200	200 (1)	14.78	KZM20BU1K	
	200 (2)	14.78	KZM20BU2K	
225	225 (1)	15.51	KZM22BU1K	
	225 (2)	15.51	KZM22BU2K	



IZIFIT® flange socket PN 10-16 bar				
DN/OD	DN flange	weight in kg	non-anchored	anchored
63	60	3.88	KZL63BE1C	(*)
75	60	5.30	KTL75BE1C	KVL75BE1C
75	65	5.30	KTL75BE1D	KVL75BE1D
90	80	5.50	KTL90BE1E	KVL90BE1E
110	100	6.70	KTM11BE1F	KVM11BE1F
125	125	8.20	KTM12BE1G	KVM12BE1G
140	125	9.15	KZM14BE1G	(*)
160	150	11.22	KZM16BE1J	
200	200 (1)	15.18	KZM20BE1K	
	200 (2)	15.18	KZM20BE2K	
225	200 (1)	16.38	KZM22BE1K	
	200 (2)	16.38	KZM22BE2K	



IZIFIT® duckfoot bend PN 10-16 bar				
DN/OD	DN bridle	weight in kg	non-anchored	anchored
75	80	8.30	KTL75DF0E	KVL75DF0E
90	80	8.00	KTL90DF0E	KVL90DF0E
110	80	11.40	KTM11DF0E	KVM11DF0E
125	80	13.60	KTM12DF0E	KVM12DF0E

IZIFIT® fittings are delivered with their gaskets fitted.

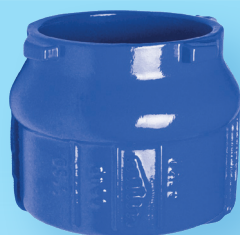
(*) For diameters 63 and 140 to 225, anchoring with gland (see page 9).

(1) PN10

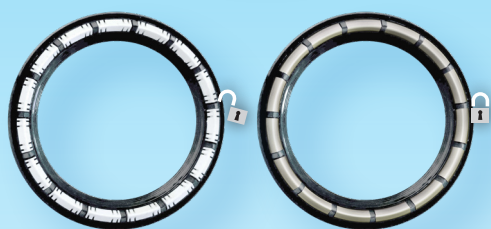
(2) PN16

Datas and photographs not contractually binding.

a comprehensive range



IZIFIT® stopper PN 10-16 bar			
DN/OD	weight in kg	non-anchored	anchored
75	1.60	KTL75BH	KVL75BH
90	2.00	KTL90BH	KVL90BH
110	2.20	KTM11BH	KVM11BH
125	3.00	KTM12BH	KVM12BH
140	3.51	KZM14BH	(*)
160	4.24	KZM16BH	



IZIFIT® gasket PN 10-16 bar				
DN/OD	non-anchored		anchored	
	part number	weight in kg	part number	weight in kg
75	JXL75BA	0.059	JIL75CA	0.109
90	JXL90BA	0.067	JIL90CA	0.105
110	JXM11BA	0.081	JIM11CA	0.146
125	JXM12BA	0.108	JIM12CA	0.189



Lubricating paste	
packaging	part number
Can 0.850 kg	158128








Anchored gland PN 10-16 bar		
DN/OD	weight in kg	part number
63	1.56	JZL63VX
140	2.80	JZM14VX
160	3.10	JZM16VX
200	4.18	JZM20VX
225	4.64	JZM22VX

Mechanical properties of fittings

The metallurgical properties of IZIFIT® fittings are recommended in standard EN 545.

Property	Unit	Fittings
Minimum tensile strength, Rm	MPa	420
Minimum elongation at break, A	%	5
Maximum Brinell hardness	HB	250
Minimum module of elasticity	GPa	170

Allowable operating pressure

Material	PVC-U				PE		PVC-BO	
	non anchored 		anchored 		anchored 		non anchored 	anchored 
Joint type	PN10	PN16	PN10	PN16	PN10	PN16	PN16	PN16
DN/OD								
63	10	16	10*	16*	10*	16*	16	-
75	10	16	10	16	10	16	16	10
90	10	16	10	16	10	16	16	10
110	10	16	10	16	10	16	16	10
125	10	16	10	16	10	16	16	10
140	10	16	10*	16*	10*	16*		
160	10	16	10*	16*	10*	16*		
200	10	16	10*	16*	10*	16*		
225	10	16	10*	16*	10*	16*		

Standard EN 12842 Ductile iron fittings for PVC and PE piping systems

* with anchored gland

Technical specifications of epoxy coating of fittings

The main properties of the epoxy coating used for IZIFIT® fittings are given in the table below. These properties satisfy the requirements of standard EN 14901

Performance tests	Criteria
Non-porosity	No electrical puncture with holiday detector at 1,500 V
Impact strength	No electrical puncture with holiday detector at 1,500 V with impact of 5 J
Durability - Thermal ageing resistance in water	After the testing procedure, the coating must have an average adhesion of at least 6 MPa
Indentation hardness	The depth of indentation measured after 48 hours must not exceed 30% of the original measured thickness of the coating. The increase in the measured depth of indentation between 24 hours and 48 hours must be less than that measured between 0 and 24 hours and must not exceed 5% of the original measured thickness of the coating.
Durability - Thermal ageing resistance in air	After the testing procedure, the coating must be free from porosity

and mechanical properties

Application based on soil properties


The fittings in the IZIFIT® range can be buried in most soils, as defined in standard EN 545 2010 Appendix D.2.2 "applications", with the exception of:

- acidic, peaty soils;
- soils containing waste, ash or dairy products or contaminated with industrial waste or wastewater;
- soils under the groundwater table with resistivity of less than 500 Ω cm.



ATTESTATION

Centre émetteur : Metz
N° CB188/14 6136580 TG n°1



APPROVAL CERTIFICATE / ATTESTATION
Issuing unit / BV METZ

Agissant dans le cadre des conditions générales d'intervention de la Division France de Bureau Veritas, et à la demande de la société
Acting within the scope of the general conditions of the division France of Bureau Veritas and at the request of

SAINT GOBAIN PAM
91, Avenue de la Libération
54076 NANCY
CEDEX

Certifié, après examen de la documentation technique de Saint-Gobain PAM, et supervision des essais. Les essais de types réalisés sur les raccords IZIFIT DE 75 à 125 (version non verrouillée et verrouillée) ont donné des résultats conformes aux exigences des normes suivantes :

- EN12842 2012 pour les tuyaux PE et PVC
- NF T54948 2010 pour les tuyaux PVC bi-orientés

Conditions de réalisation :

Caractéristiques du tuyau	Tuyau PVC			Tuyau PE		Tuyau PVC biorienté		
	PN16	PN10	PN16	PN10	PN16	PN16	PN16	PN16 Avec liner
Version IZIFIT	Non verrouillée	Verrouillée		Verrouillée		Non verrouillée	Verrouillée	Verrouillée
PFA in bar	16	10	16	10	16	16	10	16


Bureau Veritas certifies, that after Saint-Gobain PAM technical documentation examination, and supervision of the tests, the type tests carried out on IZIFIT fittings range DE 75 to 125 (not restrained version and restrained version) have given results in accordance with the following standards:

- EN 12842 2012 for PVC and PE pipes
- NF T 54948 2010 for bi-oriented PVC pipes

Conditions of implementation:

Pipe characteristics	PVC Pipe			PE Pipe		Bi-oriented PVC Pipe		
	PN16	PN10	PN16	PN10	PN16	PN16	PN16	PN16 With liner
IZIFIT version	Not restrained	Restrained		Restrained		Not restrained	Restrained	Restrained
PFA in bar	16	10	16	10	16	16	10	16

Bureau Veritas Metz, on 11th April 2014 / le 11 avril 2014
Surveyor / Inspecteur T. GARCIA



Bureau Veritas - Immeuble "Le 1628" - 67171 Bd du Château - 92200 NEUILLY-SUR-SEINE

Quality, standards and certificates

Quality management:

PAM quality management system complies with standard ISO 9001 for the design, manufacture and marketing of the IZIFIT® range.

The compliance of this quality management system is certified by a third party.

Environmental management:

The production sites for the fittings in the IZIFIT® range are ISO 14001-certified.

Standardisation:

The following French and European standards apply to the IZIFIT® range:

- EN 805 - General design of the range
- EN 681.1 - Gaskets
- EN 12842 - For PE and PVC-U
- NF T54948 - For biaxially oriented PVC pipes
- EN 14901 - Epoxy coating of fittings and accessories

Health compliance certificate:

The organic coatings, the components and the lubricants used for IZIFIT® products are suitable for contact with drinking water in accordance with current regulations in force in the markets concerned (ACS, CLP, WRAS, KTW certificates, etc.)



HOW TO CONTACT PAM

AUSTRIA

Saint-Gobain Rigips AUSTRIA GesmbH
Vertriebsbüro PAM
Archenweg 52
6020 Innsbruck
Tel: +43 512 34 17 17 -0

BELGIUM

Saint-Gobain PAM BELGIUM
Raatshovenstraat, n°2
3400 – LANDEN
Tel: +32 11 88 01 00

FINLAND

Saint-Gobain PAM FINLAND
Strömberginkuja 2
00380 HELSINKI
Tel: +358 207 424 600

GREECE

Saint-Gobain HELLAS
5 KLEISOURAS STR,
14452 METAMORGOSI ,ATHENS GREECE
Tel: +30 210 2831804

NORWAY

Saint-Gobain BYGGEVARER
Nils Hansens vei 13,
0667 OSLO
Tel: +47 23 17 58 60

THE NETHERLANDS

Saint-Gobain PAM Netherlands
Markerkant 10-17
1316 AB ALMERE
Tel: +31 36 53 333 44

POLAND

Saint-Gobain Construction Products POLSKA SP Z O.O.
Ul. Cybernetyki 9
PL - 02-677 WARSZAWA
Tel: +48 22 751 41 72

PORTUGAL

Saint-Gobain PAM PORTUGAL, S.A.
Rua das Marinhas do Tejo , n° 15
2690-361 SANTA IRIA DE AZÓIA
Tel: +351 218 925 000

CZECH REPUBLIC

Saint-Gobain PAM CZ
Budova DOCK II,
Smrčková ulice,
Praha 8 – Libeň
Tel: +420 311 712 611

ROMANIA

Saint-Gobain Construction Products Romania S.r.l.
SGCPRo SRL
Soseaua Pipera nr.43, Cladirea Floreasca Park,
corpul A, etajul 3, birourile 25-41, cod 014254,
sector 2, Bucuresti, Romania
Tel: +40 21 207 57 29

SLOVAKIA

Saint-Gobain Construction Products, s.r.o.
Dlha 1780/6
90031 Stupava
Tel: +421 (0) 2 654 569 61

Enquiries from other EU and overseas countries:
please consult Saint-Gobain PAM Canalisation



**Saint-Gobain PAM Canalisation •
Head office**

21, avenue Camille Cavallier
54705 Pont-à-Mousson Cedex • FRANCE
Phone : +33 (0) 383 807 350
www.pamline.com