

Brymec Stainless Steel Press-fit System Technical Specification



System Overview

Suitable for use in domestic and commercial applications, supplying hygienic drinking water or for connecting heating or cooling systems.

Manufactured using the highest grade of corrosion resistant materials, Brymec Stainless Steel Press-fit is ideal for use in installations that requires ultimate system performance even in applications where the pipe work may be exposed to elements that would be considered too aggressive for other pipe materials. As well as the premium corrosion resistance, our Stainless Steel system retains it's aesthetic appearance long after other materials show significant signs of ageing.

The Brymec Stainless Steel Press-fit system covers sizes from 15-108mm, with a choice of either 3m or 6m pipe lengths. The comprehensive range of fittings provides you with freedom to design the optimum system to suit the needs of your project.

Installation of our Stainless Steel Press-fit system is safe, flame-free, fast and economical.

Technical information

Brymec Stainless Steel Pipe Technical Information									
OD	15mm	22mm	28mm	35mm	42mm	54mm	76mm	89mm	108mm
Nominal Wall Thickness - mm	0.6	0.7	0.8	1.0	1.2	1.2	1.5	2	2
Internal Diameter - mm	13.80	20.60	26.40	33.00	39.60	51.60	72.00	85.00	104.00
Pipe Weight - Kg/m	0.22	0.38	0.55	0.85	1.23	1.59	2.80	4.35	5.31
Water Volume - L/m	0.15	0.33	0.55	0.86	1.23	2.09	4.07	5.67	8.50
Pipe Weight With Water - Kg/m	0.37	0.71	1.10	1.71	2.46	3.68	6.87	10.02	13.81
Max. Operating Pressure	16 Bar - See table of Operating Conditions								
Max. Operating Temperature	See table of Operating Conditions overleaf								
Thermal Expansion Coefficient	0.017 mm (m*K) BS EN 806								
Thermal Conductivity	15 W/(m*K) @ 20°C								
Internal Roughness	0.0015								
Pipe Material	1.4404 (AISI 316L) to BS EN 10217-7:2021 (BS EN 10088)								
Pipe Reaction To Fire	A1 to BS EN 13501-1								
Pipe Identification Markings	Markings at 1m intervals with full production data according to BS EN 10312:2002								
Manufacturing Standard	BS EN 10312:2002 - TIG welded - tested to ISO 10893-2:2011								
Approvals	WRAS approved								

Brymec Stainless Steel Press Fittings Technical Information	
Body Material	1.4404 (AISI 316L) to BS EN 10088-1
O-ring Material	EPDM (Ethylene Propylene Diene Monomer rubber- UBA Elastomer) to BS EN 681-1 with engineered leak path
Safety	PET break-away press indicator foil, colour coded blue
Flat Sealing Gaskets	CNAF compressed fibre washers
Approved Press Profile	M-Profile
Thread Standard	BSP - R & Rp BS EN10226:-1 2004
Hygiene	Each apperture is fitted with a removeable PE protective cap
Approvals	WRAS
Test Standard	DVGW-W534

Operating Conditions

Brymec Stainless Steel Press-fit Operating Conditions			
Application	Comments	Max. Pressure	Max. Temp.
Mains cold water (MCW) / Boosted Cold Water (BCW)	Water main, tank fed or pump boosted systems	16 Bar	7°C - 20°C
Domestic Hot Water (DHW)	Hot water services, typically supplied from a stored water source	16 Bar	99°C
Low Temperature Hot Water (LTHW)	For space heating and / or low temperature processes and heat networks	16 Bar	95°C
Chilled water (CHW) and cooling	For use in space cooling and cooling processes	16 Bar	5°C - 18°C
Harvested Rainwater (HRW)	HRW services applications	10 Bar	7°C - 20°C
Chilled Condensate (CCW) or discharge systems		1 Bar	7°C - 20°C
Compressed Air	Class 1-3 to ISO 8753-1	16 Bar	7°C - 50°C
Private Water Supply	Must contact Brymec for advice	-	-

The above applications are typical industry conditions of use.
Please refer to Brymec Technical for any applications other than those mentioned in the above table.

Maximum permissible system conditions -20°C - 99°C at 16 Bar (120°C)

Certification



Warranty

The Brymec Stainless Steel Press-fit system is covered by a comprehensive 30 year warranty. Please refer to the Brymec terms and conditions for full details.

Installation and Tooling

For manufacturer’s warranties to apply, all products must be installed to Brymec’s latest installation instructions. All installers should hold a current manufacturer’s training certificate of not more than two years old. Correct tooling, as approved by Brymec, must always be used. All tools should be regularly maintained, calibrated and be of good serviceable quality (safety training MUST be sought).

Protection from Freezing

If risk of damage from freezing, a suitable anti-freeze additive must be used which must be suitable for use with 1.4404 (316L) Stainless Steel and EPDM rubber.

Protection from Corrosion

Applications in high chloride environments should be avoided. If insulation with a chlorine ion content above 5% is to be used, a corrosion barrier must be applied such as 0.06 mm thick aluminium foil, in accordance with BS5970.

Buried Services

Building materials such as standard concrete, mortar or plaster do not affect the Brymec Multilayer pipes or fittings. However, Water Regulations (water fittings) 1999 require pipes intended for the purposes of carrying drinking water must be able to be withdrawn from the building structure should they become damaged or need replacing.

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Equipotential Bonding

Brymec Stainless Steel Press-fit systems should be bonded in line with the requirements of the current edition of the IEE wiring regulations BS 7671: 2018.

Manufacturer Details

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Scan to download the Brymec Stainless Steel Press-fit Brochure and Technical Data Sheets.

Brymec reserves the right to make changes, without prior notification, to the specification of our Stainless Steel Press-fit products in line with our policy of continuous improvement and development.