

Brymec Copper Press-fit Gas System Technical Specification



Brymec 
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System Overview

Suitable for use in domestic, commercial and industrial applications, supplying fuel gasses for the purposes of heating, industry and power generation.

Copper is the most versatile and widely accepted material in the Building Services industry. Brymec Copper Press-fit Gas is ideal for use in installations that requires high system performance.

The Brymec Copper Press-fit Gas 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 Copper Press-fit gas system is safe, reliable, flame-free, fast and economical.

Certification



(Tubes only)

Technical information

Copper Tube to EN 1057 Technical Information									
OD	15mm	22mm	28mm	35mm	42mm	54mm	67mm	76mm	108mm
Nominal Wall Thickness - mm	0.7	0.9	0.9	1.2	1.2	1.2	1.2	1.5	1.5
Internal Diameter - mm	14.30	21.10	27.10	33.80	40.80	52.80	65.80	74.50	106.50
Pipe Weight - Kg/m	0.28	0.53	0.68	1.13	1.36	1.77	2.21	3.12	4.46
Water Volume - L/m	0.16	0.35	0.58	0.90	1.31	2.19	3.40	4.36	8.91
Pipe Weight With Water - Kg/m	0.44	0.88	1.26	2.03	2.67	3.96	5.61	7.48	13.37
Max. Operating Pressure	See table of Operating Conditions overleaf								
Thermal Expansion coefficient	0.017 mm (m*K) BS EN 806								
Thermal Conductivity	386 W (m*K) @ 20°C								
Internal Roughness	0.002								
Approvals	BSi Kite marked								

Copper Press Gas Fittings Technical Information	
Body Material	Copper material CU-DHP CW024A as defined in BS EN 1976:2012
Threaded body material	Lead and zinc free CU threads
O-ring Material	HNBR (Hydrogenated Nitrile Butadiene Rubber) with engineered leak-path - Yellow identification for the use in Gas applications
Safety	PVC break-away press indicator foil, colour coded Yellow
Flat Sealing Gaskets	HNBR (Hydrogenated Nitrile Butadiene rubber) - Yellow identification for the use in Gas applications
Approved Press Profile	M-Profile
Thread Standard	BSP - R & Rp BS EN 10226:-1 2004
Manufacturing Standard	BS EN 1254-7:2021
Identification of Service	Marked with permanent Yellow 'Gas' identification as required by The Gas Safety (Installation and Use) Regulations 1998

Operating Conditions

Brymec Copper Press-fit Gas - Operating Conditions			
Application	Comments	Max. Pressure	Max. Temp.
Natural Gas - 2nd family to EN437	Indoors	1 Bar	-20°C - 70°C
	Outdoors	5 Bar	-20°C - 70°C
Liquified Petroleum Gases (LPG) - 3rd Family to EN437	Indoors	1 Bar	-20°C - 70°C
	Outdoors	5 Bar	-20°C - 70°C
Installation of all gas pipe work must be undertaken by a suitably qualified Gas Safe registered engineer.			
Installation of all Brymec Copper Gas Press-fit must follow the correct statutory regulations from The Gas Safety (installation & Use) Regulations 1998 (GSIUR), and the applicable installation requirements as detailed by IGEM and BSi, or equivalent local national standards.			

Warranty

The Brymec Copper Press-fit Gas system is covered by a comprehensive 25 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 Corrosion

Copper is generally very resistant to corrosion. However, for external application, in moisture rich environments or environments with high levels of alkalinity or acidity, various forms of corrosion can occur. If at risk from corrosion protection should be applied to prevent damage to the pipe. Regulations 7 and 18 from GSIUR should be observed.

Buried Services

When gas pipe work is entering into a property or is passing through any part of a building or structure, strict regulations from the regulations within GSIUR must be observed. Guidance can also be sought from HSE ACoP - Safety In The Installation And Use of Gas Systems and Appliances. The Approved Code of Practice provides additional practical advice on the GSIUR.

Identification of Gas Pipe Services

Regulation 23 of GSIUR requires pipework (other than in premises or part of premises used only as a dwelling or living accommodation) to be marked, e.g. colour coded, in any position accessible to inspection to identify that it is carrying gas. If a pipe service is to be painted, please refer to Brymec for approval for use of the paint product to be used. The application of paint prior to the completion of the tightness test could provide a temporary seal and falsify the test result.

Equipotential Bonding

Brymec Copper Press-fit Gas 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 Copper Press Gas System Brochure and Technical Data Sheets.

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