

Corrugated Stainless Steel Tubing System

Introducing the Brymec Corrugated Stainless Steel Tubing System (CSST)

Corrugated Stainless Steel Tubing (CSST) is a flexible wall tube and compression fitting pipework system designed to supply natural gas or liquefied petroleum gas to appliances.

The system allows for fast easy routing of fixed pipework, often between meter and appliance. The high-quality stainless steel is annealed to be more pliable, this allows piping to be formed in contours and bends. Piping can be cut to length as required and with British Standard Pipe (BSP) adaptors for all sizes allows connection into other valves, appliances and systems with ease. The overall reduction in fittings and connections required compared to traditional methods greatly reduces labour and ensures maximum flow.



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Innovative Design Features

Flexible & Durable

The system allows for simple routing through complex building structures and designs.

Brymec Product Quality

Our CSST range has been carefully designed and selected to meet the highest quality standards. Products undergo stringent testing in compliance with our ISO 9001:2015 Quality Management System.

Brymec Warranty

We offer a 10-year warranty with our CSST and fittings.

Please call 0333 000 55 55 for more information or visit Brymec.com.





This Brymec product is not manufactured by and has no connection with GFS Flex



Minimum Tooling

The system has been designed to require minimum tooling, making it a quick and easy install. Tools required are as follows:

- Pipe cutter
- Sheath stripper
- Spanners

Corrugated Gas Pipe



Male BSPT Adaptors



STOCK NO.	SIZE
29019	DN15 x 30m
29020	DN15 x 75m
29022	DN20 x 30m
29023	DN20 x 75m
29024	DN25 x 30m
29025	DN25 x 45m
29026	DN25 x 75m
29028	DN32 x 45m
29029	DN32 x 75m

STOCK NO.	SIZE
29037	DN15 x 1/2"
29038	DN20 x 3/4"
29039	DN25 x 1"
29040	DN32 x 11/4"

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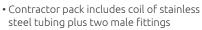
Female BSPT Adaptors



STOCK NO.	SIZE
29067	DN15 x 1/2"
29069	DN20 x 3/4"

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Stainless Steel Contractors Kits





STOCK NO.	SIZE
29005	DN20 x 5m
29006	DN20 x 10m
29007	DN20 x 15m
29009	DN25 x 5m
29010	DN25 x 10m
29011	DN25 x 15m
29013	DN32 x 5m
29014	DN32 x 10m
29015	DN32 x 15m

Straight Couplers



STOCK NO.	SIZE
29058	DN15
29059	DN20
29060	DN25
29061	DN32

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Copper Compression Adaptors



STOCK NO.	SIZE
29071	DN15 x 15mm
29072	DN20 x 15mm
29073	DN20 x 22mm
29074	DN25 x 22mm
29075	DN25 x 28mm
29076	DN32 x 22mm
29078	DN32 X 28mm
29077	DN32 x 35mm

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Flexible Yellow Ducting

• Yellow corrugated plastic ducting for underground applications or where embedded in concrete



STOCK NO.	SIZE	DESCRIPTION
39092	DN20-32	50mm x 50m
39093	DN32 - 40	63mm x 50m
39094	DN50	110mm x 50m

Silicone Tape

• Yellow self-amalgamating tape for sheath or fitting overwrap



STOCK NO.	SIZE
39085	25mm x 2m

Cutters



STOCK NO.	SIZE
29079	DN15-DN32
39080	DN15 - DN50

Technical Data & Uses

- Manufactured to BS EN 15266 CSST Gas installation in buildings
- Hose AISI 316L/AISI 304L Stainless Steel
- Yellow polyolefin sheath provides UV and corrosion resistance
- Maximum Operating Pressure (MOP) shall not exceed 0.5 bar as per BS EN15266
- Removable yellow clip for simple installation
- Fitting material Brass and Stainless steel

Fitting Tightening Torque

Tube Diameter DN	Min (Nm)	Max (Nm)
DN15	65	95
DN20	90	130
DN25	105	150
DN32	125	170

Remove the yellow ring between the nut and fitting, tighten the nut by using your hand firstly. Then use the correctly sized spanner to hold the fitting (ensure pipe does not twist) and tighten the nut to torque as indicated above. The nut will tighten to abut to the fitting body.

Tubing Bend Radius

Tube Diameter DN	Min Bending Radius	Recommended Bend Radius
DN15	25mm	75mm
DN20	30mm	90mm
DN25	45mm	125mm
DN32	60mm	140mm

CSST Fitting

Installation Instructions



Step 1

Cut tubing at required length with a tubing cutter between two corrugations. Tighten roller pressure slightly after each revolution. If the end of the tube is not smooth and there are burrs please cut tubing again.



Step 2

Cut yellow cover at 6th corrugation from the tubing end with a utility knife. Please pay attention to the number of corrugations.



Step 3

Please carefully peel off the yellow cover.



Step 4

Insert the tube into the fittings firmly until not seeing metal part of the tube.



Step 5

Remove yellow ring between nut and fittings.



Step 6

Firstly tighten the nut by hand when the tube is inserted into the fittings. Later tighten the nut with a wrench. When tightening the nut tubing should be kept fixed. The nuts are tightened until in abutment but not exceeding the torque values in the table.



Step 7

Cut the heat shrink tube to the length of cover the fittings and pipe connection area. After the assembly of end connection, slide the heat shrink tube over.



Step 8

Then use hot air gun to shrink the tube over the pipe and fittings.



Step 9

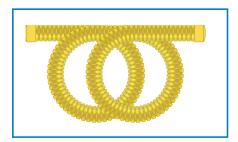
Cut and clean the heat shrink parts that come towards sealing face / thread of fittings with the utility knife. These instructions should be referenced in conjunction with the full instructions (technical guide) that can be downloaded from our website www.brymec.com. Alternatively please contact us for a copy.

Tel: 0333 000 5555. Emal: sales@brymec.com.

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Installation Considerations

• Keep tubing ends capped off to avoid dirt or debris entering the pipe, or the ends becoming damaged during installation.

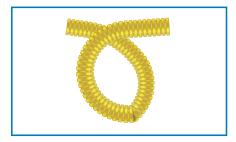


• Do not step on, hit or put any other object on the tubing – this may crush or deform the pipe.

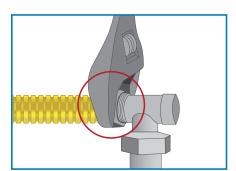




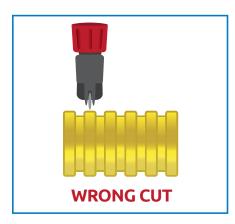
• Do not twist the pipe, this will cause deformity or damage

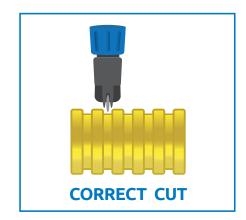


• Ensure that the pipe and fitting do not rotate when tightening the fitting nut. Rotation of the pipe may cause deformity or damage.

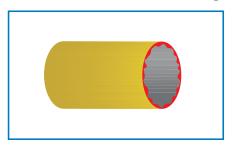


• The tubing must be cut in the valley of the grooves to ensure correct fitment to fittings.



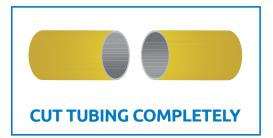


• **Do not** start installation if the tubing is burred. Cut the damaged pipe and start again.

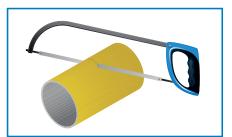


• Ensure the tubing is cut thru completely, **do not** break off.





• **Do not** cut the pipe with a saw, only use a manufacturer approved pipe cutter.



Testing Procedure

New Installations

The Brymec CSST System must be tightness tested using natural gas, propane or butane when installed in a property. This is only appropriate once the connection to the gas supply has been completed.

In an event where the gas connection has not been made, the system should be tested using pressurised air.

It is necessary for a visual inspection of joints to ensure they have been correctly fixed, and a check must be made to confirm no open ends are left unattended to on the system.

Following this, the procedure in IGE/UP/1B should be followed.

Existing Installations

The connected gas supply should be checked using natural gas, propane or butane.

Tightness testing for the gas should be carried out as per IGE/UP/1B depending upon whether the maximum operating pressure is less than 75 mbar or greater 75 mbar, and with a valve fitted to the installation tube for testing.

Purging

Any air in the system must be purged whenever a gas supply system is commissioned or re-commissioned after being turned off. This is in accord with the requirements from IGE/UP/1B.

It is important the system should pass a satisfactory tightness test first before purging. This test is indicated above in the new and existing installation sections.

Frequently Asked Questions

Q. Can jointing paste be used to terminate a Brymec CSST fitting?

Jointing paste should not be used in or on the interior portion of the fitting to tube point. If deemed necessary, a suitable gas safe thread compound or tape could be used on Male BSP threads, applied in accordance with manufacturers instructions.

Q. Is Brymec CSST compatible with copper and steel?

Yes. Brymec CSST can be used in combination with copper and steel. The male thread can be used as the connecting interface.

Q. Are there any specialist tools required to install the Brymec CSST system?

No specialist tools are needed. The system can be installed using a rotary tube cutter (suitable for stainless steel), utility knife and spanners / torque wrench.

Q. Do I need to use sealing tape to make the connection?

No. Our fittings are designed to grip the yellow sheath of the tubing and provide a secure seal without the use of further silicone tape to assist the integrity of the joint.

Q. Do I need to dis-assemble the fitting to attach the tubing?

No. The specially designed fitting means that there is no need to disassemble prior to attaching to the tubing. The disposable installation ring holds the fittings in the correct position to install without disassembly, making way for an easy and safe joint. This also means there is no risk of losing any components of the fitting.

Q. Is the Brymec CSST system compatible with other systems?

Yes. The Brymec CSST System can be compatable with other systems. Use the Brymec Gas CSST Male or Female Adaptors to provide a transition to BSP fittings appropriate to the other system. Only Brymec CSST fittings can be used on our tubing.

O. Can the pipe and fittings be buried in screed?

Brymec CSST pipe may be buried directly in screed if as a single continuous length without fittings and is correctly installed as per the specific requirements for this installation. Please refer to the technical guide and contact us to ensure suitability.

Terms of Business

1. BACKGROUND

- 1.1 These Terms apply to the Contract between Brymec and the Customer for the sale of Brymec Products. Any other terms, whether implied by custom or practice, or which the Customer may seek to include, are specifically excluded.
- 1.2 Capitalised words (such as 'Contract'), have a specific meaning which is set out in 10 below.

2. CONTRACT TO BUY PRODUCTS

- 2.1 The Products are described on Brymec's website and in its catalogue. Specifications for Products are subject to change, in which case, Brymec will endeavour to supply an equivalent or suitable alternative.
- 2.2 When the Customer wishes to place an order for Products, it will provide a purchase order to Brymec. If Brymec accepts such order, it will issue an Order Acceptance to the Customer, at which point the Contract shall come into existence.
- 2.3 The Customer is responsible for ensuring that the details in the Order Acceptance are complete and accurate.

3. DELIVERY

- 3.1 Each delivery of the Products will be accompanied by a delivery note that shows the date of the Order Acceptance, the relevant Brymec reference number, and the type and quantity of the Products.
- 3.2 Brymec shall deliver the Products to the Delivery Location at any time after Brymec notifies the Customer that the Products are ready.
- 3.3 Delivery is completed on the completion of unloading of the Products at the Delivery Location (and, if applicable, Signed For.)
- 3.4 Any dates quoted for delivery are approximate only, and the time of delivery is not of the essence. Brymec shall use all reasonable commercial efforts to meet any specific delivery dates. However, Brymec will not be liable for any delay in delivery of the Products.
- 3.5 If Brymec fails or is unable to deliver the Products for any reason (except for an Unforeseen Event), its liability shall be limited to the costs and expenses incurred by the Customer in obtaining replacement Products of similar description and quality in the cheapest market available, less the price of the Products. Brymec shall have no liability for any failure to deliver the Products to the extent that such failure is caused by an Unforeseen Event, or the Customer's failure to provide Brymec with adequate delivery instructions or any other instructions that are relevant to the supply of the Products.
- 3.6 Brymec may deliver the Products by instalments, which shall be invoiced and paid for separately. Any delay in delivery or defect in an instalment shall not entitle the Customer to cancel any other instalment.

4. OUALITY

4.1 Brymec warrants that, on delivery, the Products shall conform in all material respects with their description and any applicable Specification. For products sold by weight, or in the manufacturer's packaging, Brymec may supply quantities of up to 5% more or less than the amount ordered.

- 4.2 Subject to 4.3 below, if i) the Customer gives notice in writing to Brymec within 2 business days of delivery that the Products do not comply with the Specification, and ii) Brymec is given a reasonable opportunity to examine such Products, and iii) the Customer returns such Products to Brymec's place of business at the Customer's cost, Brymec shall, at its option, replace the defective Products or refund the price of the defective Products in full.
- 4.3 Brymec shall not be liable for the Products' failure to comply with the warranty set out in clause 4.1 if: i) the Customer makes any further use of such Products after giving notice under 4.2 above; ii) the defect arises because the Customer failed to follow good trade practice or instructions as to the storage, commissioning, installation or use of the Products; or iii) the Customer alters or attempts to repair such Products.
- 4.4 Other than as set out above, Brymec shall have no liability to the Customer in respect of the Products' failure to comply with the warranty set out in clause 4.1.

5. TITLE AND RISK

- 5.1 The risk in the Products shall pass to the Customer on completion of delivery.
- 5.2 Title to the Products shall not pass to the Customer until the earlier of:
 i) Brymec receives payment in full for the Products; and ii) the Customer
 resells the Products, in which case title to the Products shall pass to the
 Customer at the time specified in 5.4 below.
- 5.3 Until title to the Products has passed to the Customer, the Customer shall store the Products separately from all other products held by the Customer so that they remain readily identifiable as Brymec's property, maintain the Products in satisfactory condition, and keep them insured against all risks for their full price from the date of delivery.
- 5.4 The Customer may use or resell the Products before Brymec receives payment for the Products, in which case it does so as principal and not as Brymec's agent, and title to the Products shall pass from Brymec to the Customer immediately before the time at which such reuse or resale by the Customer occurs.

6. PRICE AND PAYMENT

- 6.1 The price of the Products shall be the price set out in the Order Acceptance issued by Brymec. Brymec may, by giving notice to the Customer at any time up to delivery, increase the price of the Products to reflect any increase in the cost of the Products that is due to i) any factor beyond Brymec's control (including foreign exchange fluctuations, increases in taxes and duties, and increases in labour, materials and other manufacturing costs), or ii) any request by the Customer to change the delivery date(s), quantities or types of Products ordered, or the Specification.
- 6.2 The price of the Products excludes amounts in respect of value added tax (VAT), which the Customer shall additionally be liable to pay.
- 6.3 Unless otherwise stated on the Order Acceptance, Brymec shall be responsible for the cost of insurance and transport of the Products to the Delivery Location.
- 6.4 Brymec may invoice the Customer for the Products on or at any time after the Products have been despatched.

- 6.5 Unless otherwise stated in the Order Acceptance, the Customer shall pay the invoice in full and in cleared funds by the end of the month following the month the invoice was dated to the bank account nominated by Brymec. Time for payment is of the essence.
- 6.6 If the Customer fails to make any payment due to Brymec under the Contract by the due date for payment, then Brymec shall be entitled to charge interest on the overdue amount at the rate of 4.0% per annum above the base rate from time to time of the Bank of England. Such interest shall accrue on a daily basis from the due date until actual payment of the overdue amount, whether before or after judgment. The Customer shall pay the interest together with the overdue amount.
- 6.7 The Customer shall pay all amounts due under the Contract in full without any set-off, counterclaim or deduction. Brymec may set off any amount owing to it by the Customer against any amount payable by Brymec to the Customer.

7. LIMITATION OF LIABILITY AND INSURANCE

- 7.1 Nothing in these Terms shall limit or exclude Brymec's liability for: (i) death or personal injury caused by its negligence; ii) fraud or fraudulent misrepresentation; iii) breach of the terms implied by section 12 of the Sale of Products Act 1979; or defective products under the Consumer Protection Act 1987.
- 7.2 Subject to 7.1 above, Brymec shall under no circumstances whatsoever be liable to the Customer, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any loss of profit, or any indirect or consequential loss arising under or in connection with the Contract; and
- 7.3 Brymec has obtained insurance cover in respect of its own legal liability for individual claims not exceeding £1,000,000 per claim. Therefore, Brymec's total liability to the Customer in respect of all other losses arising under or in connection with the Contract, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, shall in no circumstances exceed £1,000,000, and the Customer is responsible for making its own arrangements for the insurance of any excess loss.

8. UNFORESEEN EVENTS

Neither party shall be in breach of this Contract nor liable for delay in performing, or failure to perform, any of its obligations under this Contract if such delay or failure results from an Unforeseen Event. If the period of delay or non-performance continues for three months, the party not affected may terminate this Contract by giving one months' written notice to the affected party.

9. GENERAL

- 9.1 Assignment. The Customer may not assign, transfer, mortgage, charge, subcontract or deal in any other manner with any or all of its rights or obligations under the Contract without Brymec's prior written consent.
- 9.2 Confidentiality. Each party undertakes that it shall not at any time during this agreement, and for a period of 5 years after termination of this agreement, disclose to any person any confidential information concerning the business, affairs, customers, clients or

- suppliers of the other party, except as permitted by this paragraph. Each party may disclose the other party's confidential information: (i) to its employees, officers, representatives or advisers who need to know such information for the purposes of carrying out its obligations under or in connection with the Contract; and (ii) as may be required by law. No party shall use any other party's confidential information for any purpose other than to exercise its rights and perform its obligations under or in connection with this agreement.
- 9.3 Entire agreement. This Contract constitutes the entire agreement between the parties and supersedes and extinguishes all previous agreements and understandings between them, whether written or oral, relating to its subject matter. Each party agrees that it shall have no remedies in respect of any statement, representation, assurance or warranty (whether made innocently or negligently) that is not set out in this agreement.
- 9.4 Variation. No variation of this Contract shall be effective unless it is in writing and signed by the parties (or their authorised representatives).
- 9.5 Third party rights. No one other than a party to this Contract shall have any right to enforce any of its terms.
- 9.6 Law and jurisdiction. The Contract, and any dispute or claim arising out of or in connection with it shall be governed by and construed in accordance with the law of England and Wales. Each party agrees that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this Contract.

10. DEFINITIONS:

- 10.1 Brymec: Brymec Limited, whose registered office is at Unit C, Redlands, Coulsdon, Surrey, CR5 2HT.
- 10.2 **Terms:** the terms set out in this document.
- 10.3 **Contract:** the contract between Brymec and the Customer for the sale and purchase of the products in accordance with these terms
- 10.4 **Customer:** the business or person who purchases the Products from Brymec.
- 10.5 **Delivery Location:** the location for delivery of the Products set out in the Order Acceptance, or such other location as the parties may agree.
- 10.6 Order Acceptance: a form issued by Brymec in response to a Customer's order for Products, specifying Product details, quantities, prices and costs of transportation.
- 10.7 Products: the products (or any part of them) set out in the Order Acceptance.
- 10.8 Signed For: a Customer requirement stated in the Order Acceptance that a delivery of Product must be signed for at the Delivery Location.
- 10.9 **Specification:** any specification for the Products set out on Brymec's website or in its catalogue.
- 10.10 **Unforeseen Event:** an event or circumstance beyond a party's reasonable control.

Quality Policy

Brymec Ltd (the 'Organisation') aims to provide defect free products and services to its customer on time and within budget.

The Organisation operates a Quality Management System that has gained BS EN ISO 9001: 2015 certification, including aspects specific to the stockholding and supply of mechanical, plumbing and air conditioning products and services.

This gives us a platform to guarantee a structured approach to our continuous improvement cycle, and ensure we continue to meet and exceed the following key goals:

- Excellence of service to our customers, delivering on site, in full, on time; in the relentless pursuit of total customer satisfaction.
- Offering quality products and systems. We work with worldwide manufacturing plants (in line with our social and ethical policy) to source the best products for the UK market. We ensure that the products are fit for purpose and comply with the relevant approvals and standards. We also research and develop innovative solutions which will add value to our customers, developers and end users.
- To motivate, engage and continuously develop our team by providing training, coaching, knowledge sharing and investment to ensure their absolute competence.
- To continue to invest in technology, working to understand customers' needs and streamline their buying processes to maximise efficiencies via modern technology.

This quality policy is endorsed and regularly reviewed by our Senior Management Team, and its scope is communicated to all Brymec employees via our website and other appropriate methods.

Our vision is to become an essential and indispensable supplier to the Building Services Contractor by providing excellence of service, quality products and continually investing in technology.

In order to achieve our vision, we ensure Brymec is an organisation where people love to work, upholding our core values of excellence, courage and collaboration to actively engage our team in contributing towards providing the highest level of customer satisfaction

Luke Reiner

Managing Director

Ethical Global Procurement Policy

ETHICAL POLICY - SOURCING

At Brymec we recognise the importance of credibility, integrity and trustworthiness in our success as a business. We are committed to upholding high ethical standards in all our operations, everywhere in the world. We believe in the principles of honesty, fairness, and respect for individual and community freedoms. The ethics of our UK operations are demonstrated through responsible:

- business processes
- corporate governance
- custom and practice
- quality management
- safe working practices
- corporate social responsibility
- facility management
- equality & diversity
- anti-bribery & corruption
- employee care

The Ethical Trading Initiative Code forms the basis of this policy

Additionally, as we expand our network of suppliers to source products globally, it is increasingly necessary to ensure that the organisations that we undertake business with also meet our expectations of standards of supply.

As a minimum Brymec Ltd expects its supply partners to comply with all local laws and regulations and to respect internationally recognised human and labour rights as well as international initiatives for climate change.

In particular we require that suppliers ensure:

- Working hours and remuneration are reasonable and meet the required local wage and working time laws
- · Working conditions are safe and hygienic
- No discrimination is practised
- Employment is freely chosen
- Children are not employed, and local minimum age rules are in place
- Freedom of Association and the right to collective bargaining are respected
- No improper advantage, including the payment of bribes.
- Packaging and waste are subject to recycling and safe disposal quidelines
- That all sourcing of materials and manufacturing processes are subject to sustainability and renewability rules

Brymec carry out initial assessments and, on agreeing terms of business, provide the criteria against which the company has been measured by way of regulating ongoing requirements.

Brymec then carry out periodic on-site audits to ensure that compliance is maintained.

Brymec will work with its suppliers to guide and advise them in maintaining and improving required levels of environmental standards.

The Brymec Sourcing Director has responsibility for this policy and will report to the management meetings on any issues arising.

A copy of the full Ethical trading initiative can be found at **www.ethicaltrade.org.**

Warranty On Brymec Corrugated Stainless Steel Tubing Fittings



At Brymec, we place a huge emphasis on the quality of our range of branded products. To back this up, when using the Brymec CSST System, Brymec will provide warranty up to a maximum of 10 years.

This is a maximum 10-year guarantee against faults caused by defective manufacturing of Brymec CSST.

For full traceability, all fittings are etched or stamped with unique branding and fitting size.

For the warranty to apply:

1. Tooling

Approved tools that are well maintained and used as per manufacturer's detailed requirements.

2. Tube

Tube must be Brymec CSST only.

3. Environment

Brymec CSST must be installed in a suitable environment and be used for the correct application.

4. Installation

Current guidance for installation is in accordance with BS 6891:2015 or BS 5482:1 in domestic buildings, or in accordance with the Institution of Gas Engineers & Managers publication IGEM/UP/2 Latest Edition in other buildings.

Equipotential bonding of the gas installation should be completed conforming to BS 7671. On completion of installation, they shall be tested for gas tightness and purged in compliance with IGE/UP/1B. Please do ensure installation is in accordance with the latest guidance at time of construction/commissioning, as it is updated from time to time by the industry bodies.