

# C O N T E N T S

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Inlet and outlet connections specified as follows: R = external taper thread; Rc = internal taper thread; Rp = internal parallel thread; Rs = long screw parallel external thread. All to BS21, ISO7/1: **DN, PN = flange to BS4504**

**WASK is the major manufacturer of 'main to meter' (service) fittings to many gas industries throughout the world. Alternative systems are produced for use with polyethylene and steel services and ferrous mains, enabling the engineer to select the most suitable system for each installation.**

Service fittings described in this leaflet include Crimp fittings for use with polyethylene pipes, Flexgrip fittings for polyethylene and steel pipes, weldable service tees for steel mains and pipe saddles for steel, cast and ductile iron mains.

## Description

### Crimp Fittings

This range has been specifically developed to provide an easy, yet positive method of connecting metric polyethylene pipe to metal pipe or ancillary equipment. Meter box adaptors, tees and elbows are manufactured from a combination of steel bar and malleable iron castings. PE pipe of sizes 16 to 63mm can be connected. Crimp fittings are, where appropriate, zinc plated and polyester coated grey to match the colour of GRP sleeves thus providing maximum resistance to corrosion. A Crimp joint is made by pushing the pipe onto the spigot of a fitting and crimping the copper ring with a rugged hand operated tool. 63mm factory assembled joints are crimped using a hydraulic press. The joint is designed to be stronger than the pipe and will resist end load pull-out well beyond loads at which failure of the polyethylene pipe occurs. 32mm SDR 11 and 50mm SDR 17 anti-shear sleeves may be fitted to couplings, adaptors and the outlet of top service tees as indicated in Codes of Practice. GRP protection sleeving location is provided for above ground applications.

### Malleable Iron Flexgrip Fittings

A comprehensive range is available for both polyethylene and/or steel services. Threads on service tees and plugs for connection to mains are parallel and incorporate the WASK Emid Seal. Where applicable, the size range extends up to 2in/63mm. 32mm SDR 11 and 50mm SDR 17 anti-shear sleeves may be fitted to couplings, adaptors and the outlet of top service tees as indicated in Codes of Practice. Malleable iron fittings can be supplied black (uncoated) or galvanised.

### Quality Assurance

WASK is a Registered Firm of Assessed Capability for the production of goods or services in accordance with BS EN ISO 9001 'Quality Systems - Model for QA in production, installation and servicing.



ISO 9001

### Approvals

Where applicable, fittings comply with the requirements of the following British Gas Engineering Standards:

#### GIS/PL3

'Specification for Mechanical Fittings/Joints for Polyethylene (PE) Pipe';

#### GIS/F2

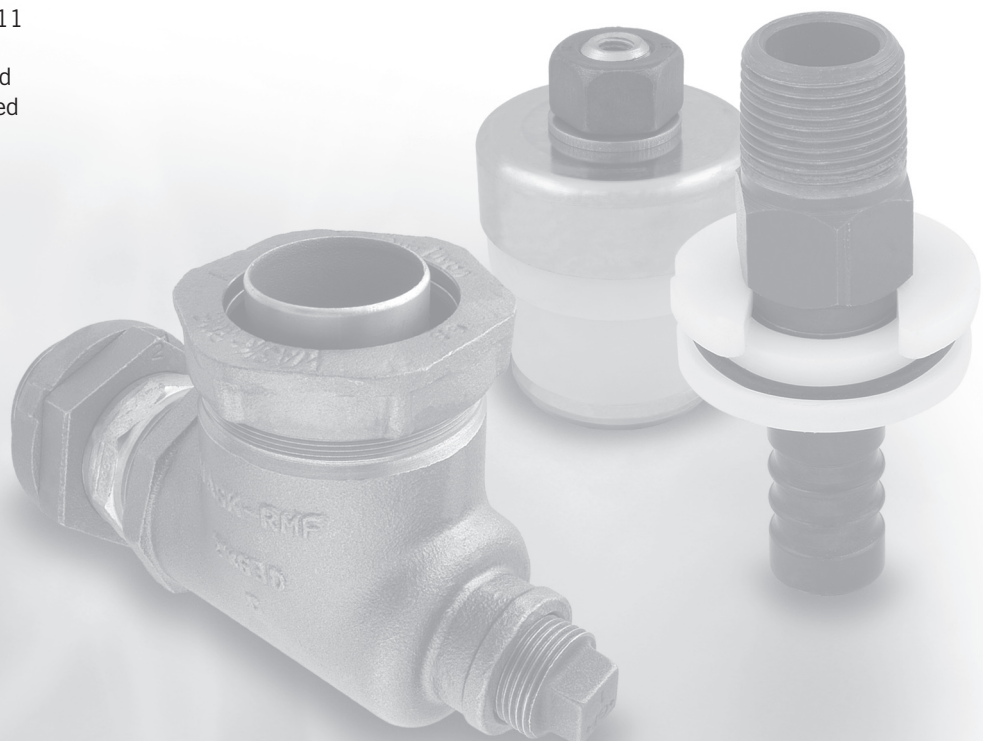
'Specification for Main to Service Pipe Fittings (for use up to 2bar)';

#### BS2494G

'Specification for Elastomeric Materials used in the Manufacture of Seals' (for gas mains and fittings up to 7bar);

#### GIS/PL2

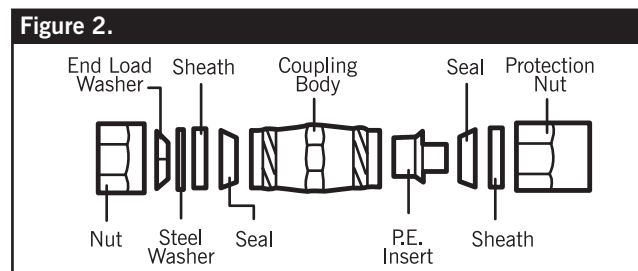
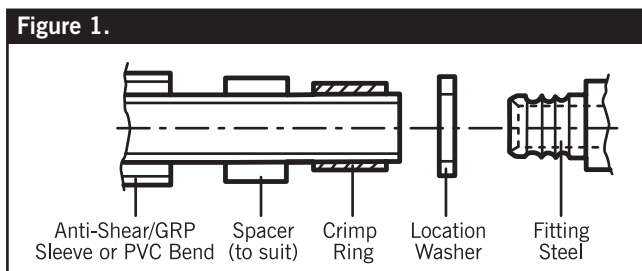
'Specification for Polyethylene (PE) Pipes and Fittings for Natural Gas and Suitable Manufactured Gas', Part 1 - Pipes. The engineer is requested to contact the Technical Support Department for the current approval status or with regard to the suitability and purpose of specific fittings.



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Inlet and outlet connections specified as follows: R = external taper thread; Rc = internal taper thread; Rp = internal parallel thread; Rs = longscrew parallel external thread. All to BS21, ISO7/1: **DN, PN = flange to BS4504**



## Joining

### Crimp Service Fitting

Figure 1 illustrates the following correct joining sequence:

- 1) Cut the polyethylene pipe to the required length. Ensure that the pipe is square and free from all burrs.
- 2) Slide the anti-shear/GRP sleeve or PVC bend onto the pipe as appropriate.
- 3) Slide the rubber spacer onto the pipe.
- 4) Remove and discard the cardboard protection. Slide the copper crimp ring onto the pipe.
- 5) Install the fitting in the required position (should subsequent rotation of the fitting be necessary).
- 6) Push the pipe fully onto the spigot of the fitting.
- 7) Slide the crimp ring down the pipe to touch the acetal location washer (which should be in contact with shoulder of the fitting).
- 8) Select the correct size of crimping tool and position centrally over the crimping ring. Close the jaws of the tool lightly over the crimp ring and once again, check that the tool is centrally positioned and completely covers the ring. Screw the arms of the tool fully together (i.e. until the tip of both jaws touch) to complete the joint.
- 9) Remove the crimp tool and slide the rubber spacer onto the crimped ring. Connect the fitting and locate the anti-shear/GRP sleeve or PVC bend as necessary.
- 10) Test the service to the appropriate industry standards.
- 11) Apply protective wrapping as appropriate.
- 12) Check for compliance against statutory regulations.

### Flexgrip Fittings

The correct joint assembly is shown in Figure 2. Where full end loading requirement is specified for steel joints, additional components are pre-assembled in the end nut.

#### Preparation of the pipe ends

- 1) Pipe ends should be cut square and all internal and external burrs removed. In addition, where surface corrosion and debris exist on metallic pipe, these should be removed using a wire brush.

#### Insertion of the pipe into the Flexgrip fitting

- a) Metallic Pipe
  - 2) Insert the end of the pipe into the fitting ensuring that the end extends beyond the internal rubber seal.
  - 3) Tighten the end nut to fully load the sealing rings.
- b) Polyethylene Pipe
  - 4) Unscrew the end nut of the fitting, remove the rubber backing washer and retaining ring and slide all three (in order) down the PE pipe.
  - 5) Remove the insert from the fitting and push onto the end of the pipe until the wall of the polyethylene becomes visible in the circular inspection hole of the insert.
  - 6) Replace the insert complete with the PE back into the fitting.
  - 7) Slide the rubber sealing ring, backing washer and the end nut up the pipe and reassemble in order onto the fitting.
  - 8) Tighten the end nut to fully load the sealing rings.

### Ordering

Care should be taken to ensure that correct code numbers and product descriptions are quoted to ensure receipt of the required fitting. Orders for saddles should include full details of saddle type, tapping size, pipe size, material and standard; also indicate if washers are required.

## Supply

### Packaging:

#### Crimp Fittings

Supplied in cardboard cartons in packs of 5, 10 and 20 units. (Depending on the type and size of fitting.) A full jointing instruction leaflet is supplied in each carton.

#### Flexgrip Fittings and Saddles

Supplied in strong cartons, complete with full jointing instructions.

### Availability

Direct from, WASK Customer Service Centre (tel: +44 (0)1473 277300), or from selected distributors, details are available on request.

### Health and Safety Statement

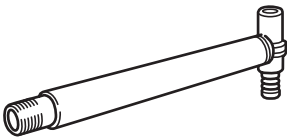
WASK complies with the COSHH regulations 1988 for the supply of products to our customers. Full details and data sheets are available on request.

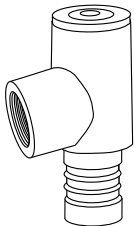
### Other Products

Literature is available for WASK's complete range of products including the PECAT\* range of mains fittings for use with MDPE and HDPE pipe and the advanced Transgrip range of fittings. Additionally we manufacture the highly acclaimed range of Teaset and Universal drilling, tapping, bagging-off and CCTV camera insertion equipment. For further details please write to WASK at the address given on the back cover.

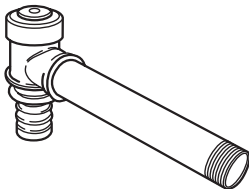
\*PECAT, WASK and Flexgrip are registered trademarks of CRANE Limited.

## ABOVE GROUND FITTINGS

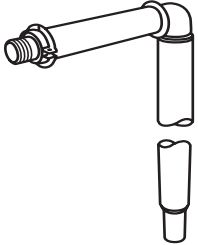
| Crimp House Entry Tee   |        | Part No.                    | Size (PE OD/SDR x Outlet x Through Wall Length) | For Use With Pipe |
|---|--------|-----------------------------|---|-------------------|
|  <p>A building entry system in steel incorporating various through-wall lengths with integral screw down stopper for outside safety shut-off. Usually supplied with a polyester coating to match GRP sleeve, close fit PE sleeve, anti-vandal plug, and star washer for security.</p> <p><i>Finish = Epoxy Polyester</i></p> | AF0090 | 20mm SDR9 x R3/4" x 150mm   | PE80  |                   |
|   | AF0091 | 20mm SDR9 x R3/4" x 345mm   | PE80  |                   |
|   | AF0092 | 20mm SDR9 x R3/4" x 500mm   | PE80  |                   |
|   | AF0104 | 20mm SDR9 x R3/4" x 610mm   | PE80  |                   |
|   | AF0102 | 20mm SDR9 x R3/4" x 910mm   | PE80  |                   |
|   | AF0103 | 25mm SDR11 x R3/4" x 1000mm | PE80  |                   |
|   | AF0093 | 25mm SDR11 x R3/4" x 150mm  | PE80  |                   |
|   | AF0094 | 25mm SDR11 x R3/4" x 345mm  | PE80  |                   |
|   | AF0095 | 25mm SDR11 x 3/4" x 500mm   | PE80  |                   |
|   | AF0096 | 32mm SDR11 x R1" x 150mm    | PE80  |                   |
|   | AF0097 | 32mm SDR11 x R1" x 345mm    | PE80  |                   |
|   | AF0098 | 32mm SDR11 x R1" x 500mm    | PE80  |                   |
|   | AF0119 | 32mm SDR11 x R1" x 610mm    | PE80  |                   |

| Crimp House Entry Tee Body   |        | Part No             | Size (PE OD/SDR x R) | For Use With Pipe |
|--|--------|---------------------|----------------------|-------------------|
|  <p><i>Finish = Epoxy Polyester</i></p> | AF0012 | 25mm SDR11 x R 3/4" | PE80                 |                   |
|  | AF0029 | 32mm SDR11 x R1"    | PE80                 |                   |

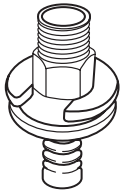
## Building Entry Tee

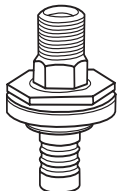
| Building Entry Tee  |        | Part No                  | Size (PE OD/SDR x R x Thro Wall Length) | For Use With Pipe |
|---|--------|--------------------------|---|-------------------|
|  <p>A building entry system incorporating an integral screw down stopper for outside safety shut off. Available in various through-wall lengths terminating in a screwed end. For use in industrial and commercial premises, governor and meter houses. The tee is supplied zinc plated and polyester coated and is supplied with a factory assembled PE tail and GRP sleeve. Alternative lengths of through-wall connection, PE and GRP tail available to order.</p> <p><i>Finish = Epoxy Polyester</i></p> | AK2000 | 63mm SDR11 x R2" x 150mm | 1.0 PE80<br>0.9GRP                      |                   |
|   | AK2001 | 63mm SDR11 x R2" x 345mm | 1.0 PE80<br>0.9GRP                      |                   |
|   | AK2002 | 63mm SDR11 x R2" x 500mm | 1.0 PE80<br>0.9GRP                      |                   |
|   | AK2003 | 63mm SDR11 x R2" x 610mm | 1.0 PE80<br>0.9GRP                      |                   |

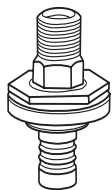
## Factory Entry Elbow

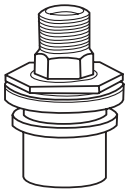
| Factory Entry Elbow  |        | Part No                        | Size (PE OD/SDR x Outlet x Through Wall Length) | Fitted With Pipe |
|--|--------|--------------------------------|---|------------------|
|  <p>A fully assembled factory tested building entry system for factories, commercial premises, governors and meter houses. Supplied zinc plated and polyester coated, various lengths of PE tail and GRP protection sleeves can be supplied.</p> <p><i>Finish = Epoxy Polyester (unless otherwise stated)</i></p> | AG2093 | 63mm SDR11 x R2" x 150mm       | 1.0 PE80 0.9GRP                                 |                  |
|  | AG2094 | 63mm SDR11 x R2" x 345mm       | 1.0 PE80 0.9GRP                                 |                  |
|  | AG2095 | 63mm SDR11 x R2" x 500mm       | 1.0 PE80 0.9GRP                                 |                  |
|  | AG2098 | 63mm SDR11 x R2" x 500mm       | 2.0 PE80 1.9GRP                                 |                  |
|  | AG2096 | 63mm SDR11 x R2" x 610mm       | 1.0 PE80 0.9GRP                                 |                  |
|  | AG2028 | 90mm SDR11 x 3" plain x 345mm  | 1.0 PE80 0.75GRP                                |                  |
|  | AG2061 | 90mm SDR11 x 3" plain x 500mm  | 2.0 PE80 1.5GRP                                 |                  |
|  | AG2022 | 90mm SDR11 x 3" plain x 610mm  | 2.0 PE80 1.5GRP                                 |                  |
|  | AG2058 | 90mm SDR11 x 3" plain x 610mm  | 1.0 PE80 0.75GRP                                |                  |
|  | AG2045 | 125mm SDR11 x 4" plain x 345mm | 1.0 PE80 0.75GRP                                |                  |
|  | AG2034 | 125mm SDR11 x 4" plain x 610mm | 1.0 PE80 0.75GRP                                |                  |
|  | AG2041 | 125mm SDR11 x 4" plain x 610mm | 2.0 PE80 1.5GRP                                 |                  |
|  | AG2050 | 180mm SDR17 x 6" plain x 345mm | 1.0 PE80 0.75GRP                                |                  |
|  | AG2048 | 180mm SDR17 x 6" plain x 610mm | 1.0 PE80 0.75GRP                                |                  |
|  | AG2074 | 180mm SDR17 x 6" plain x 610mm | 2.0 PE80 1.5GRP                                 |                  |
|  | AG0028 | F.E.E. RETAINING RING KIT      | (Finish = Zinc Plated)                          |                  |

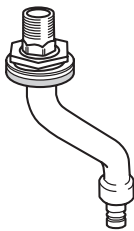
## Meter Box Adaptors

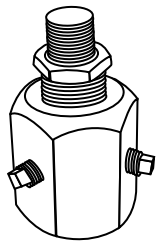
| Crimp 'C' Clip Meter Box Adaptor   |        | Part No            | Size (PE OD/SDR x R) | For Use With Pipe |
|--|--------|--------------------|----------------------|-------------------|
|  <p>Steel fitting with crimp joint. Used to terminate polyethylene service pipe at standard Transco GRP meter box. Once the joint is completed, the fitting is secured in position by a snap-on 'C' shaped plastic washer.</p> <p><i>Finish = Zinc Plated</i></p> | AJ0006 | 16mm SDR7 x R1/2"  | PE80                 |                   |
|  | AJ0008 | 20mm SDR9 x R3/4"  | PE80                 |                   |
|  | AJ0012 | 25mm SDR11 x R3/4" | PE80                 |                   |
|  | AJ0015 | 32mm SDR11 x R3/4" | PE80                 |                   |
|  | AJ0017 | 32mm SDR11 x R1"   | PE80                 |                   |

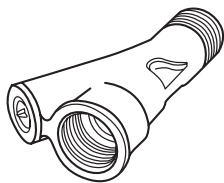
| Crimp Stab-in Meter Box Adaptor   |        | Part No                      | Size (PE OD/SDR x R) | For Use With Pipe |
|---|--------|------------------------------|----------------------|-------------------|
|  <p>For use where the meter box and service piping has been previously installed. Retained by a 'snap action' washer.</p> <p><i>Finish = Zinc Plated</i></p> | AJ0011 | 20mm SDR9 x R3/4" Top entry  | PE80                 |                   |
|   | AJ0014 | 25mm SDR11 x R3/4" Top entry | PE80                 |                   |

| Crimp Semi-concealed Meter Box Adaptor  |   | Part No | Size (PE OD/SDR x R)                        | For Use With Pipe |
|---|---|---------|---|-------------------|
|  | <p>Supplied with a heavy duty zinc plating for use on semi concealed meter boxes. Has additional seal to prevent ingress of groundwater.</p> <p><i>Finish = Zinc Plated</i></p> | AJ0010  | 20mm SDR9 x R3/4" Semi-concealed            | PE80              |
|   |   | AJ0013  | 25mm SDR11 x R3/4" Semi-concealed           | PE80              |
|   |   | AJ0035  | 25mm SDR11 x R3/4" Semi-concealed, Extended | PE80              |
|   |   | AJ0009  | 32mm SDR11 x R3/4" Semi-concealed           | PE80              |
|   |   | AJ0036  | 32mm SDR11 x R3/4" Semi-concealed, Extended | PE80              |


| Meter Box Adaptor for threaded Riser.   |   | Part No | Size (Steel x R) | For Use With Pipe |
|---|---|---------|------------------|-------------------|
|  | <p>For systems where the riser is a threaded steel pipe.</p> <p><i>Finish = Zinc Plated</i></p> | AJ3011  | Rc3/4" x R3/4."  | Steel             |

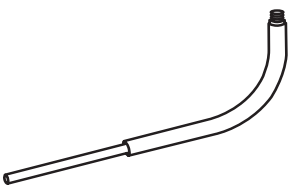
| Crimp Meter Box Adaptor (Corbelled Walls)   |   | Part No | Size (PE OD/SDR x R)            | For Use With Pipe |
|---|---|---------|---------------------------------|-------------------|
|  | <p>A standard adaptor, factory assembled to a pre-formed riser pipe to match corbelled wall specifications. Supplied with a polyester coating on zinc plated finish to match GRP sleeve.</p> <p><i>Finish = Epoxy Polyester</i></p> | AJ0001  | 20mm SDR9 x R3/4" Short Corbel  | PE80              |
|   |   | AJ0003  | 25mm SDR11 x R3/4" Short Corbel | PE80              |
|   |   | AJ0004  | 25mm SDR11 x R3/4" Long Corbel  | PE80              |

| Service Head Adaptor  |  | Part No | Size (PE OD/SDR x R x Rc)        | For Use With Pipe |
|---|--|---------|----------------------------------|-------------------|
|  | <p>This fitting is used where a PE service pipe enters a building below ground. It provides a site-assembled, concentric termination for the PE pipe and its steel carrier pipe to which the internal steel riser can be connected. Two vent plugs are included in the body to permit the insertion of grout into the annular space between the PE pipe and the steel carrier. The Service Head Adapter is designed, constructed and tested fully in accordance with clause 6.2.5. of GIS/PL/3." The use of such a fitting is recommended in IGEM publication IGE/G/5: <i>Gas in flats and other multi-occupancy buildings.</i></p> <p><i>Finish = Epoxy Polyester</i></p> | AZ0006  | LISA 20mm SDR9 x 3/4" x 1"       | PE80              |
|   |  | AZ0008  | LISA 25mm SDR11 x 3/4" x 1.1/4"  | PE80              |
|   |  | BB3024  | PECAT 25mm SDR11 x 3/4" x 1.1/2" | PE80              |
|   |  | BB3025  | PECAT 25mm SDR11 x 3/4" x 1.1/4" | PE80              |
|   |  | AZ0009  | LISA 32mm SDR11 x 3/4" x 1.1/2"  | PE80              |
|   |  | AZ0013  | LISA 32mm SDR11 x 1" x 2"        | PE80              |
|   |  | BB0004  | CRIMP 63mm SDR11 x 2" x 3"       | PE80              |

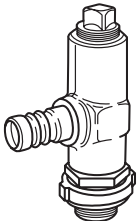
| Riser Valve  | Part No | Size (PE OD/SDR)                        | For Use With Pipe |
|--|---------|---|-------------------|
|  <p>A specialist product for use as an in line shut off valve for screwed steel services. Can be used on both internal and external riser systems.</p> <p><i>Finish = Zinc Plated</i></p> | BJ0007  | Rc $\frac{3}{4}$ " x Rc $\frac{3}{4}$ " | Steel             |

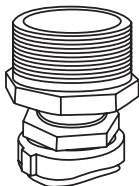
## BELOW GROUND FITTINGS

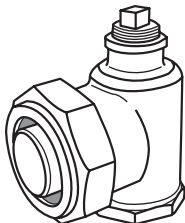
| Below Ground Entry PE CAT  | Part No | Size (PE OD/SDR x End Details) | Body Length MXPE length M, PE |
|--|---------|--------------------------------|-------------------------------|
|  <p>A factory assembled fitting for below ground entry into buildings. Comprises a steel sleeve, fully galvanised protection and sealed PE outer sleeve. Factory fitted PE service pipe. May be supplied with polyester finish in lieu of PE outer sleeve.</p> <p><i>Finish = Zinc Plated</i></p> | AE2046  | 20mm SDR9 x R3/4"              | 0.5x0.5 PE80                  |
|  | AE2043  | 25mm SDR11 x R3/4"             | 0.5x0.5 PE80                  |
|  | AE2044  | 32mm SDR11 x R1"               | 0.5x0.5 PE80                  |
|  | AE2045  | 63mm SDR11 x R2"               | 0.5x0.5 PE80                  |
|  | AE2025  | 90mm SDR11 x 3" Plain          | 0.5x0.5 PE80                  |
|  | AE2049  | 90mm SDR11 x 3" Plain          | 0.75x1.25 PE80                |
|  | AE2027  | 125mm SDR11 x 4" Plain         | 0.5 x 1.0 PE80                |
|  | AE2028  | 125mm SDR11 x 4" Plain         | 1.0x1.5 PE80                  |
|  | AE2048  | 125mm SDR11 x 4" Plain         | 0.75x1.25 PE80                |
|  | AE2047  | 180mm SDR17 x 6" Plain         | 0.75x1.25 PE80                |
|  | AE2052  | 180mm SDR17 x 6" Plain         | 1.2x1.5 PE80                  |
|  | AE2030  | 180mm SDR17x 6" Plain          | 0.5x1.0 PE80                  |
|  | AE2042  | 180mm SDR17x 6" Plain          | 1.0x1.5 PE80                  |

| Garage Entry  | Part No | Size (PE OD/SDR x Thread) | Vertical Length x Horizontal length x PE length |
|---|---------|---------------------------|---|
|  <p>A factory assembled fitting for below ground entry into buildings. Comprises a steel sleeve, fully galvanised protection and sealed PE outer sleeve. Factory fitted PE service pipe. May be supplied with polyester finish in lieu of PE outer sleeve. Preformed 90° bend suitable for garage installation, 2500mm length also suitable for garage entries to clear up-and-over doors. Metal end threaded or plain steel spigot.</p> | BY2001  | 25mm SDR11 x R3/4"        | 0.5x0.5x1.25 PE80                               |
|   | BY2002  | 25mm SDR11 x R3/4"        | 0.5x1.0x1.75 PE80                               |
|   | BY2003  | 25mm SDR11 x Rc3/4"       | 0.5x1.0x1.75 PE80                               |
|   | BY2004  | 32mm SDR11 x R1"          | 0.5x0.5x1.25 PE80                               |
|   | BY2005  | 32mm SDR11 x R1"          | 0.5x1.0x1.75 PE80                               |
|   | BY2010  | 32mm SDR11 x Rc1"         | 1.25x1.25x2.285 PE80                            |

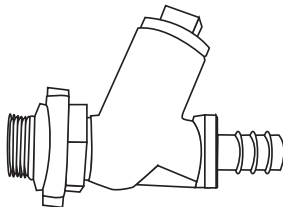
## Top Service Tees

| Crimp Top Service Tee   |  | Part No | Size (Thread x PE OD/SDR) | Main pipe, Service pipe |
|---|--|---------|---------------------------|-------------------------|
|  | <p>A steel fitting for the connection of a polyethylene service to a ferrous distribution main. Complete with integral screw down stopper and rubber seal onto the main. Crimp outlet with 50mm SDR 17 anti-shear sleeve spacer.</p> <p><i>Finish = Uncoated</i></p> | BF0013  | Rs3/4" x 20mm SDR9        | Steel, CI, PE80         |
|   |  | BF0014  | Rs3/4" x 25mm SDR11       | Steel, CI, PE80         |
|   |  | BF0015  | Rs3/4" x 32mm SDR11       | Steel, CI, PE80         |
|   |  | BF0016  | Rs1" x 20mm SDR9          | Steel, CI, PE80         |
|   |  | BF0017  | Rs1" x 25mm SDR11         | Steel, CI, PE80         |
|   |  | BF0018  | Rs1" x 32mm SDR11         | Steel, CI, PE80         |

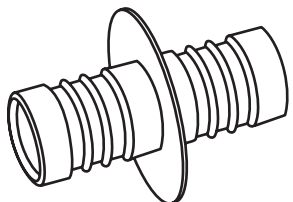
| Service Nipple  |  | Part No | Size (Rs x R)  | For Use With Pipe |
|---|--|---------|----------------|-------------------|
|  | <p>For use with the tee body. Incorporates an isolation stopper (not illustrated) for insertion under pressure into a main using the Wask Universal Drilling Machine. A range of reusable stoppers are available for use with full-bore valve installations.</p> <p><i>Finish = Uncoated</i></p> | AR0001  | Rs1" x R2"     | Steel, CI.        |
|   |  | AR0003  | Rs1.1/2" x R2" | Steel, CI.        |
|   |  | AR0004  | Rs2" x R2"     | Steel, CI.        |

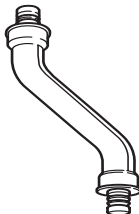
| FLEXGRIP Top Service Tee  |   | Part No | Size (Rs x PE OD/SDR)                               | Main pipe, Service pipe |
|---|---|---------|---|-------------------------|
|  | <p>A malleable iron fitting used with the service nipple. Allows an easily constructed joint of 63mm PE service to a ferrous distribution main. Can be supplied with anti-shear sleeve nut.</p> <p><i>Finish = Uncoated</i></p> | AP0019  | Rp2" x 2" n.b. Body only                            | Steel, CI, Steel        |
|   |   | AP0005  | Rp2" x 63mm SDR11 Body only                         | Steel, CI, PE80         |
|   |   | AP0006  | Rp2" x 63mm SDR11 Body only with Anti-shear Nut     | Steel, CI, PE80         |
|   |   | AP0012  | Rs1.1/2" x 63mm SDR11 Complete                      | Steel, CI, PE80         |
|   |   | AP0015  | Rs1.1/2" x 63mm SDR11 Complete; with Anti-shear Nut | Steel, CI, PE80         |
|   |   | AP0013  | Rs2" x 63mm SDR11 Complete                          | Steel, CI, PE80         |
|   |   | AP0014  | Rs2" x 63mm SDR11 Complete; with Anti-shear Nut     | Steel, CI, PE80         |

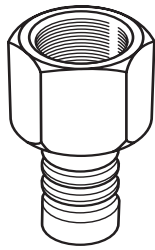
## Side Service Tee

| Crimp Side Service Tee  |   | Part No | Size (Rs x PE OD/SDR) | Main pipe, Service pipe |
|---|---|---------|-----------------------|-------------------------|
|  | <p>A malleable iron fitting for the connection of PE services on the side of a ferrous main utilising a Crimp joint. Supplied complete with integral screw down stopper and anti-shear sleeve spacer.</p> <p><i>Finish = Uncoated</i></p> | BJ0017  | Rs3/4" x 20mm SDR9    | Steel, CI, PE80         |
|   |   | BJ0018  | Rs3/4" x 25mm SDR11   | Steel, CI, PE80         |
|   |   | BJ0019  | Rs3/4" x 32mm SDR11   | Steel, CI, PE80         |
|   |   | BJ0014  | Rs1" x 20mm SDR9      | Steel, CI, PE80         |
|   |   | BJ0015  | Rs1" x 25mm SDR11     | Steel, CI, PE80         |
|   |   | BJ0016  | Rs1" x 32mm SDR11     | Steel, CI, PE80         |

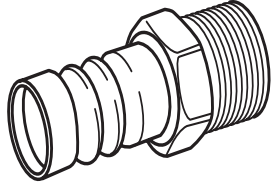
## Crimp Couplings and Transitions

| Crimp Coupling  |        | Part No                 | Size (PE OD/SDR) | For Use With Pipe |
|---|--------|-------------------------|------------------|-------------------|
|  <p>A steel fitting for the connection of two polyethylene pipes incorporating a permanent joint.</p> <p><i>Finish = Zinc Plated</i></p> | AH0013 | 16mm SDR7 x 20mm SDR9   | PE80             |                   |
|   | AH0014 | 20mm SDR9               | PE80             |                   |
|   | AH0007 | 20mm SDR9 x 25mm SDR11  | PE80             |                   |
|   | AH0011 | 25mm SDR11 x 32mm SDR11 | PE80             |                   |
|   | AH0035 | 32mm SDR11 x 20mm SDR9  | PE80             |                   |
|   |        |                         |                  |                   |

| Corbel Crimp Coupling  |        | Part No                 | Size (PE OD/SDR) | For Use With Pipe |
|--|--------|-------------------------|------------------|-------------------|
|  | AH0001 | 20mm SDR9 Short Corbel  | PE80             |                   |
|  | AH0002 | 25mm SDR11 Short Corbel | PE80             |                   |
|  | AH0003 | 32mm SDR11 Short Corbel | PE80             |                   |
|  |        |                         |                  |                   |

| Transition Coupling (Female Thread)   |         | Part No                                 | Size (PE OD/SDR x Thread) | For Use With Pipe |
|---|---------|---|---------------------------|-------------------|
|  <p>A one piece steel fitting for connecting polyethylene pipes to steel, giving full end load capability and complete with appropriate anti-shear sleeve spacer.</p> <p><i>Finish = Zinc Plated (unless otherwise stated)</i></p> <p><i>* Finish = Uncoated</i></p> | BD0032  | Crimp Riser Adapter 20mm SDR9 x Rc3/4"  | PE80                      |                   |
|   | BD0025  | Crimp Riser Adapter 25mm SDR11 x Rc3/4" | PE80                      |                   |
|   | BD0026  | Crimp Riser Adapter 32mm SDR11 x Rc1"   | PE80                      |                   |
|   | BD0005* | Crimp Transition 20mm SDR9 x Rc1"       | PE80                      |                   |
|   | BD0001* | Crimp Transition 20mm SDR9 x Rc3/4"     | PE80                      |                   |
|   | BD0006* | Crimp Transition 25mm SDR11 x Rc1"      | PE80                      |                   |
|   | BD0003* | Crimp Transition 25mm SDR11 x Rc3/4"    | PE80                      |                   |
|   | BD0008* | Crimp Transition 25mm SDR11 x Rc3/4"    | PE80                      |                   |
|   | BD0007* | Crimp Transition 32mm SDR11 x Rc1"      | PE80                      |                   |
|   | BD0028  | Crimp Transition 32mm SDR11 x Rc1"      | PE80                      |                   |
|   | BD0004* | Crimp Transition 32mm SDR11 x Rc3/4"    | PE80                      |                   |
|   | BD0027  | Crimp Transition 32mm SDR11 x Rc3/4"    | PE80                      |                   |
|   |         |   |                           |                   |

### Transition Coupling (Male Thread)



A steel fitting for the connection of a polyethylene service to a threaded socket. Crimp outlet with 50mm SDR 17 anti-shear sleeve spacer.

*Finish = Zinc Plated (unless otherwise stated)*

\* *Finish = Uncoated*

| Part No | Size (PE OD/SDR x Thread)              | For Use With Pipe |
|---------|--|-------------------|
| BC0014  | Crimp Riser Adapter 25mm SDR11 x R3/4" | PE80              |
| BC0019  | Crimp Riser Adapter 32mm SDR11 x R1"   | PE80              |
| BC0040  | Crimp Riser Adapter 32mm SDR11 x R3/4" | PE80              |
| BC0002* | Crimp Transition 16mm SDR7 x R3/4"     | PE80              |
| BC0001* | Crimp Transition 20mm SDR9 x R1/2"     | PE80              |
| BC0010  | Crimp Transition 20mm SDR9 x R1/2"     | PE80              |
| BC0039  | Crimp Transition 20mm SDR9 x R3/4"     | PE80              |
| BC0012  | Crimp Transition 20mm SDR9 x R3/4"     | PE80              |
| BC0046  | Crimp Transition 25mm SDR11 x R3/4"    | PE80              |
| BC0013  | Crimp Transition 25mm SDR11 x R3/4"    | PE80              |
| BC0006* | Crimp Transition 32mm SDR11 x R1"      | PE80              |
| BC0016  | Crimp Transition 32mm SDR11 x R1"      | PE80              |
| BC0015  | Crimp Transition 32mm SDR11 x R3/4"    | PE80              |

### Transition Adaptor + Frogs (Pressure Point Standpipe)



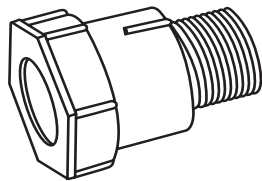
A steel fitting with full zinc plated protection. Factory assembled to PE pipe with tie irons for casting into concrete for test points and purge points, etc. Also available for on-site assembly.

*Finish = (Zinc Plated)*

| Part No | Size (Pipe x Thread)                            | For Use With Pipe    |
|---------|---|----------------------|
| BC2038  | PECAT Pressure Point Standpipe 32mm SDR11 x R1" | Fitted with 1.0 PE80 |
| BC2033  | PECAT Pressure Point Standpipe 63mm SDR11 x R2" | Fitted with 1.0 PE80 |

### Flexgrip Service Fittings Malleable Iron

#### Flexgrip Male Adaptor

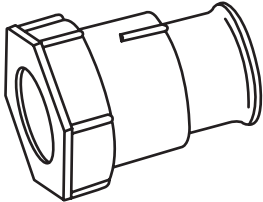


Malleable iron, used for the connection of polyethylene pipe to steel pipe where a screwed end is available. Malleable iron, using Flexgrip rubber joints and appropriate inserts for the rapid connection of polyethylene pipes. Part numbers shown opposite are for fittings without anti-shear sleeve retention nuts. If anti-shear nuts are required on R to PE fittings please contact Sales Office +44 (0)1473 277300.

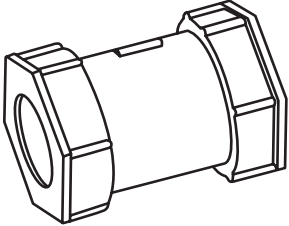
*Finish = Hot Dipped Galvanized (unless otherwise stated)*

\* *Finish = Uncoated*

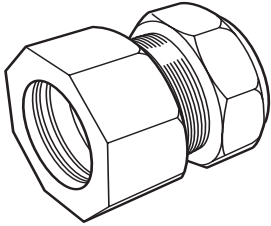
| Part No | Size (Thread x Pipe)           | For Use With Pipe |
|---------|--------------------------------|-------------------|
| CG0010  | R1" x 1" Locking Gas           | Steel             |
| CG0045  | R1" x 1" Locking Gas           | Steel             |
| CG0001* | R1.1/4" x 1/1/4" Locking Gas   | Steel             |
| CG0003* | R1.1/2" x 1.1/2" Locking Gas   | Steel             |
| CG0046  | R2" x 2" Locking Gas           | Steel             |
| CG0020  | R3/4" x 25mm SDR11 Locking Gas | PE80              |

| Flexgrip Female Adaptor   |         | Part No                           | Size (Thread x Pipe) | For Use With Pipe |
|---|---------|-----------------------------------|----------------------|-------------------|
|  <p>Malleable iron, used for the connection of polyethylene pipe to steel pipe where a screwed end is available. Malleable iron, using Flexgrip rubber joints and appropriate inserts for the rapid connection of polyethylene pipes. Part numbers shown opposite are for fittings without anti-shear sleeve retention nuts. If anti-shear nuts are required on Rc to PE fittings please contact Sales Office +44 (0)1473 277300.</p> <p><i>Finish = Hot Dipped Galvanized (unless otherwise stated)</i></p> <p><i>* Finish = Uncoated</i></p> | CG0023  | Rc1/2" x 1/2" Locking Gas         | Steel                |                   |
|   | CG0024  | Rc3/4" x 3/4" Locking Gas         | Steel                |                   |
|   | CG0026* | Rc1.1/4" x 1.1/4" Locking Gas     | Steel                |                   |
|   | CG0027  | Rc1.1/2" x 1.1/2" Locking Gas     | Steel                |                   |
|   | CG0028  | Rc2" x 2" Locking Gas             | Steel                |                   |
|   | CG0029  | Rc1/2" x 20mm SDR9 Locking Gas    | PE80                 |                   |
|   | CG0030  | Rc3/4" x 25mm SDR11 Locking Gas   | PE80                 |                   |
|   | CG0059  | Rc3/4" x 25mm SDR11 Locking Gas   | PE80                 |                   |
|   | CG0031  | Rc1" x 32mm SDR11 Locking Gas     | PE80                 |                   |
|   | CG0060  | Rc1" x 32mm SDR11 Locking Gas     | PE80                 |                   |
|   | CG0035  | Rc1.1/4" x 40mm SDR11 Locking Gas | PE80                 |                   |
|   | CG0032  | Rc1.1/2" x 50mm SDR11 Locking Gas | PE80                 |                   |
|   | CG0033  | Rc2" x 63mm SDR11 Locking Gas     | PE80                 |                   |
|   | CG0063  | Rc2" x 63mm SDR11 Locking Gas     | PE80                 |                   |

## Flexgrip Service Fittings Malleable Iron

| Flexgrip Coupling   |        | Part No                         | Size (Pipe x Pipe) | For Use With Pipe |
|---|--------|---------------------------------|--------------------|-------------------|
|  <p>Malleable iron, used for the connection of polyethylene pipe to steel pipe where a screwed end is available. Malleable iron, using Flexgrip rubber joints and appropriate inserts for the rapid connection of polyethylene pipes. Part numbers shown opposite are for fittings without anti-shear sleeve retention nuts.</p> <p>If anti-shear nuts are required on Rc to PE fittings please contact Sales Office +44 (0)1473 277300.</p> <p><i>Finish = Uncoated</i></p> | BM0200 | 3/4" x 20mm SDR9 Locking Gas    | Steel to PE        |                   |
|   | BM0201 | 3/4" x 25mm SDR11 Locking Gas   | Steel to PE        |                   |
|   | BM0202 | 1" x 32mm SDR11 Locking Gas     | Steel to PE        |                   |
|   | BM0203 | 1" x 20mm SDR9 Locking Gas      | Steel to PE        |                   |
|   | BM0204 | 1" x 25mm SDR11 Locking Gas     | Steel to PE        |                   |
|   | BM0205 | 1.1/4" x 32mm SDR11 Locking Gas | Steel to PE        |                   |
|   | BM0206 | 1.1/2" x 32mm SDR11 Locking Gas | Steel to PE        |                   |
|   | BM0213 | 2" x 63mm SDR11 Locking Gas     | Steel to PE        |                   |
|   | BM0214 | 3/4" Locking Gas                | Steel to Steel     |                   |
|   | BM0215 | 1" Locking Gas                  | Steel to Steel     |                   |
|   | BM0218 | 1.1/4" Locking Gas              | Steel to Steel     |                   |
|   | BM0209 | 1.1/2" x 1.1/4" Locking Gas     | Steel to Steel     |                   |
|   | BM0216 | 1.1/2" Locking Gas              | Steel to Steel     |                   |
|   | BM0217 | 2" Locking Gas                  | Steel to Steel     |                   |

## Flexgrip Locking Cap



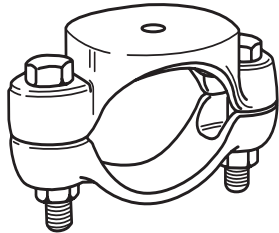
A malleable iron fitting for the rapid sealing of a pipe end.

*Finish = Uncoated*

| Part No | Size (Steel NB) | For Use With Pipe |
|---------|-----------------|-------------------|
| AN0200  | 3/4"            | Steel             |
| AN0201  | 1"              | Steel             |
| AN0202  | 1.1/4"          | Steel             |
| AN0203  | 1.1/2"          | Steel             |
| AN0204  | 2"              | Steel             |

## Pressure Drilling Saddle

### Pressure Drilling Saddle



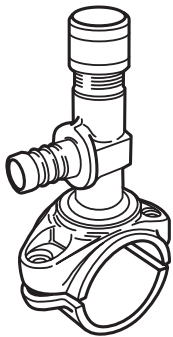
A malleable iron fitting for the rapid sealing of a pipe end.

*Finish = Uncoated*

| Part No | Size (Steel Pipe) | For Use With Pipe |
|---------|-------------------|-------------------|
| AA0024  | 3"                | Cl, AC            |
| AA0025  | 4"                | Cl, AC            |
| AA0026  | 5"                | Cl, AC            |
| AA0027  | 6"                | Cl, AC            |
| AA0028  | 8"                | Cl, AC            |
| AA0030  | 9"                | Cl, AC            |
| AA0016  | 2"                | Steel             |
| AA0017  | 3"                | Steel             |
| AA0019  | 4"                | Steel             |
| AA0020  | 6"                | Steel             |
| AA0022  | 8"                | Steel             |
| AA0023  | 10"               | Steel             |
| AA0029  | 12"               | Steel             |

## Punch Tees

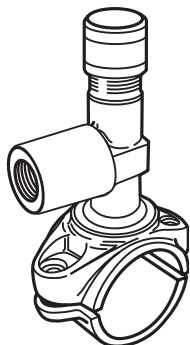
### Crimp Saddle Mounted Punch Tee

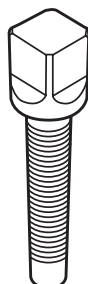


All sizes of punch are operated with a simple operating tool and a standard square drive wrench.

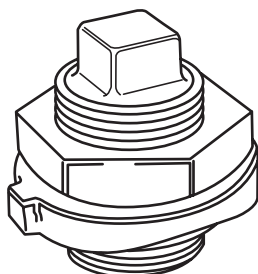
*Finish = Zinc Plated*


| Part No | Size (Steel Pipe x PE OD/SDR) | For Use With Pipe |
|---------|-------------------------------|-------------------|
| BH0002  | 3/4" x 20mm SDR9              | Steel             |
| BH0003  | 3/4" x 25mm SDR11             | Steel             |
| BH0005  | 1" x 20mm SDR9                | Steel             |
| BH0006  | 1" x 25mm SDR11               | Steel             |
| BH0017  | 1" x 32mm SDR11               | Steel             |
| BH0018  | 1.1/4" x 32mm SDR11           | Steel             |
| BH0007  | 1.1/2" x 20mm SDR9            | Steel             |
| BH0008  | 1.1/2" x 25mm SDR11           | Steel             |
| BH0009  | 1.1/2" x 32mm SDR11           | Steel             |
| BH0010  | 2" x 20mm SDR9                | Steel             |
| BH0011  | 2" x 25mm SDR11               | Steel             |
| BH0012  | 2" x 32mm SDR11               | Steel             |

| Threaded Saddle Mounted Punch Tee   |                              | Part No | Size (steel pipe x thread) |
|---|------------------------------|---------|----------------------------|
|  | For use with steel pipe only | BH0019  | 3/4" x Rc3/4"              |
|   |                              | BH0021  | 2" x Rc3/4"                |

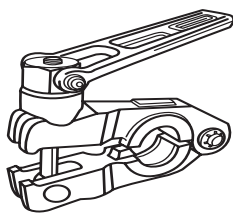
| Punch Operation Wrench   |   | Part No |  |
|--|---|---------|--|
|  | <p>A forged steel driver for the operation of the 3/8" punch used in forged steel punch tees. (Operated by ratchet spanner).</p> <p><i>Finish = Blued</i></p> | BH0016  |  |

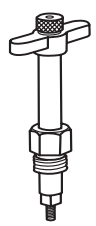
## Mains Completion Plugs

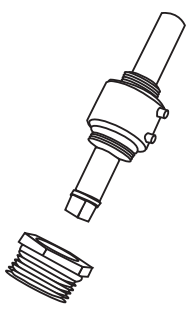
| Emid Mains Completion Plug  |  | Part No | Size Rs | For Use With Pipe |
|---|--|---------|---------|-------------------|
|  | <p>Malleable iron, suitable for the closure of tapped holes in distribution mains up to 2bar pressure.</p> <p><i>Finish = Uncoated</i></p> | AY0001  | 3/4"    | Cl, Steel         |
|   |  | AY0003  | 1"      | Cl, Steel         |
|   |  | AY0005  | 1.1/4"  | Cl, Steel         |
|   |  | AY0006  | 1.1/2"  | Cl, Steel         |
|   |  | AY0007  | 2"      | Cl, Steel         |

| Non-Tap Plug  |  | Part No | Size   | For Use With Pipe |
|---|--|---------|--------|-------------------|
|  | <p>Manufactured under licence from British Gas plc. Designed for the closure of non-tapped holes following flow stopping operations. Spare gaskets available separately.</p> <p><i>Finish = Uncoated</i></p> | AW0003  | 2.1/2" | Cl, Steel         |
|   |  | AW0005  | 3"     | Cl, Steel         |
|   |  | AW0007  | 4"     | Cl, Steel         |
|   |  | AW0009  | 5"     | Cl, Steel         |
|   |  | AW0011  | 6"     | Cl, Steel         |

## TOOLING

| Crimping Tool   |   | Part No | Size            | For Use With Pipe | Finish (Paint) |
|---|---|---------|-----------------|-------------------|----------------|
|  | <p>A one piece malleable iron tool for the rapid construction of a crimp joint. Features a metal to metal stop for accurate joint construction.</p> | BE0021  | TOOL CRIMP 16mm | PE80 Only         | Bronze         |
|   |   | BE0022  | TOOL CRIMP 20mm | PE80 Only         | Green          |
|   |   | BE0023  | TOOL CRIMP 25mm | PE80 Only         | Blue           |
|   |   | BE0024  | TOOL CRIMP 32mm | PE80 Only         | Yellow         |
|   |   | BE0009  | TOOL CRIMP 63mm | PE80 Only         | Orange         |

| Plug Lifter (Building Entry and 2" Top Tee)  |   | Part No.                           |
|--|---|------------------------------------|
|  | <p>To operate the internal plug of a building entry tee or 2"/63mm BET safely and without the escape of gas.</p> <p><i>Finish = Zinc Plated</i></p> | BE0128<br>(2"/63mm BET Only)       |
|  | <p>To operate the internal plug of a 2"/63mm Top Service Tee safely and without the escape of gas.</p> <p><i>Finish = Zinc Plated</i></p>           | EA056<br>(2"/63mm Top Service tee) |

| Stopper Key (House Entry Tee)   |   | Part No. |
|---|---|----------|
|  | <p>To operate the internal plug of Top Service tees, Side Service tees and House Entry tees, safely and without the escape of gas. Will also remove the caps with either a square socket or two 1/4" diameter holes.</p> <p><i>Finish = Zinc Plated</i></p> | BE0034   |