

EBCO

Service Connections

Screw Down Swivel Ferrules

Benefits

- *EBCO Swivel Ferrules are quick and simple to install and provide a permanent, leak free connection using a tried and tested design.*
- *The range of EBCO Swivel Ferrules has been developed to enable users to make connections to almost any type of mains and service pipe, either underpressure or dry.*
- *EBCO ferrules can provide years of service in even the most aggressive soil and water conditions.*
- *EBCO Swivel Ferrules are specifically designed to operate at pressures up to 16 bar (240 psi) subject to the ratings of pipe and strap if used.*

The EBCO range of swivel ferrules can be used to connect PE, copper and threaded steel service pipes to almost any type and size of mains pipe material from 32mm diameter.

Compression outlet Ferrules can be used to connect to PE pipes from 20mm (1/2") to 63mm (2")



General application

The EBCO Swivel Ferrule provides a quick, permanent, leak free service connection, consisting of a stem with an spindle/inner plug for valve isolation and a 360° swivel outlet at 90° to the stem. 1/2" to 1" ferrules are fitted with a square head and 1 1/2" to 2" ferrules have a squared spindle. The ferrule outlet provides a direct

connection to the service line from 1/2" to 2" nominal bore diameter (20mm to 63mm PE pipe OD) via an integral joint in the ferrule banjo so no adaptor is needed. EBCO ferrules will provide service connections dry or underpressure directly into cast iron, ductile iron and steel mains. Asbestos cement and PVC mains can also be tapped via a Flat Boss Strap.

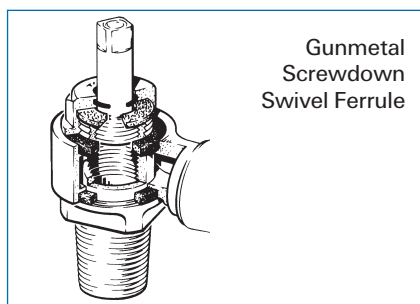
Screwdown Pattern Swivel Ferrule Dimensions and Technical Data

DN	1/2" (20mm)	3/4" (25mm)	1" (32mm)	1 1/2" (50mm)	2" (63mm)	1 1/2" x 2" (63mm)
A (mm) Open	108	105	116	151	168	151
A (mm) Close	92	90	97	130	137	130
B (mm) Open	58	58	65	93	100	93
B (mm) Close	42	42	46	72	70	72
C (mm)	78	85	100	152	148	148
D (mm)	54	68	75	108	103	103
E (mm)	11	11	16	22	25	25
F (mm)	10	10	13	19	19	19

Technical data

Material:

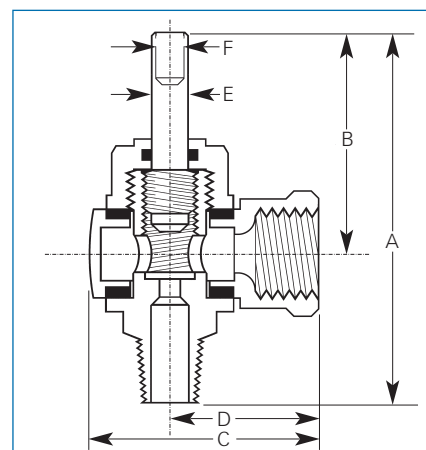
Stem:	Gunmetal BS1400 LG2
Banjo:	Gunmetal BS1400 LG2
Banjo Washer	EPDM
Friction Washer	Polypropylene
Compression Gland	Nitrile BS2494: 1986 Type W (ISO 4633)
Insert	Dona Copper BS2871 Part 2: 1972 106 phosphorous deoxidised non arsenical
Thrust Nut	Gunmetal BS1400 LG2
Top Cap:	Gunmetal BS1400 LG2
Working Pressures:	Up to 16 Bar (240 p.s.i.)



Gunmetal
Screwdown
Swivel Ferrule

Technical help

For further product specifications, technical data and general information please contact our Customer Service Department at the telephone number shown below.



Screwdown Compression Ferrule Tending Specification

General

The ferrules shall be designed with a compression outlet for PE,

All ferrules shall be designed as a main stem with a 360° swivel outlet at 90° to the stem and control of water flow via a threaded spindle/inner plug. The inlet shall be a male taper thread to BS 21, ISO 7/1.

The ferrule shall be designed for use underground and to handle potable water at temperatures of up to 40°C.

The ferrule shall be capable of working at pressures up to 16bar (240psi) without leakage.

The ferrule shall be easily 'shut off' by means of a spindle extending from the top cap.

The ferrule shall have 'EBCO' or 'Edward Barber' cast into the Banjo.

Description of Design

The design of the ferrule shall permit service pipe installation via conventional drilling and tapping machines dry or underpressure, with or without service saddles.

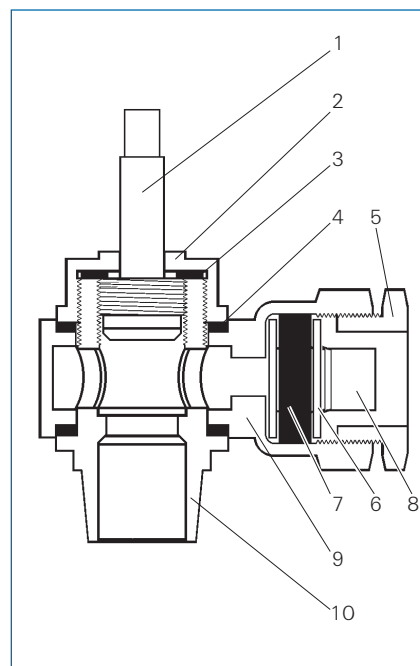
The design of the ferrule shall further permit use with conventional drilling machines which mount onto the ferrule/strap assembly to drill the main via the ferrule stem waterway, dry or underpressure.

Construction

The ferrule stem, banjo, threaded spindle and top cap shall be manufactured of gunmetal / bronze to BS 1400 LG2. The banjo washers and the 1 1/4" to 2" top cap washer shall be manufactured in EPDM rubber to BS 2494. The 1/2" to 1" top cap washer shall be manufactured in Polypropylene or Nitrile Rubber and shall provide the sealing between the outer body and ferrule stem.

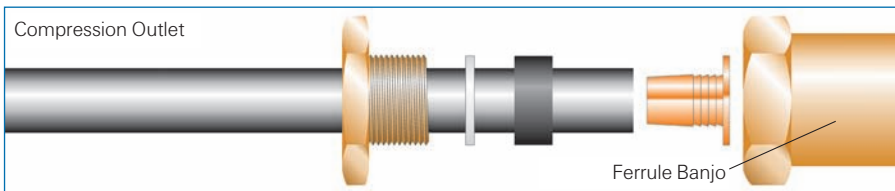
The compression outlet for Polyethylene pipe shall consist of the following:

- Compression Outlet with Gunmetal Bronze body and compression nut with pipe insert, thrust washer and compression gland.



Compression Connection Assembly Instructions

Ensure the pipe is cut square then disassemble the end of the fitting to be connected. Slide the thrust nut then the friction washer, then the compression gland rubber over the end of the pipe to be connected. Insert the serrated copper insert into the pipe and securely hammer it fully home with a soft faced mallet. Place the end of the pipe into the fitting's body and screw the thrust nut fully into the body, securely locating the friction washer and sealing rubber inside the body of the fitting. Once the thrust nut has been hand tightened use a spanner and tighten a further 1 1/2 to 2 turns to form a fully sealed connection. The connection is now made.



Notes

When ordering please specify the size and service pipe specification to ensure the compatibility of the supplied connection's component parts.

Ferrules should not be inserted directly into PVC or AC mains. The walls of these pipes are not strong enough to hold the stem. The manufacturers of ductile iron and steel mains pipe should be consulted for their specific recommendations regarding tapping directly into these pipe materials. Typically it is advised that the nominal diameter of the tapping should not exceed 1/4 of the nominal diameter of the main for direct ferrule insertion without a strap or 1/3 of the nominal diameter when a strap is used. For tappings larger than this a Tapping Tee should be used. (for further information on the UPE range of Tapping Tees please refer to the separate data sheet: Underpressure Tees (reference number TUPE007)

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Parts List - SD Swivel Ferrules

Item	Description
1	Spindle Inner Plug
2	Top Cap
3	Top Cap Washer (x2)
4	Banjo Washer
5	Thrust Nut
6	Friction Washer
7	Compression Gland
8	Copper Insert
9	Banjo
10	Stem

Associated Products



EBCO flat boss straps are designed for making service connections into PVC, asbestos cement, cast iron, ductile iron and steel mains. A ferrule can then be inserted into the main via the strap boss using drilling and tapping equipment whilst the main is pressurised or dry.

These fittings are designed for the conveyance of cold potable water. Save with the express written approval of EBCO, no warranty is given that the fittings are suitable for any other purpose.

We reserve the right to change the design and specification without notice.

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