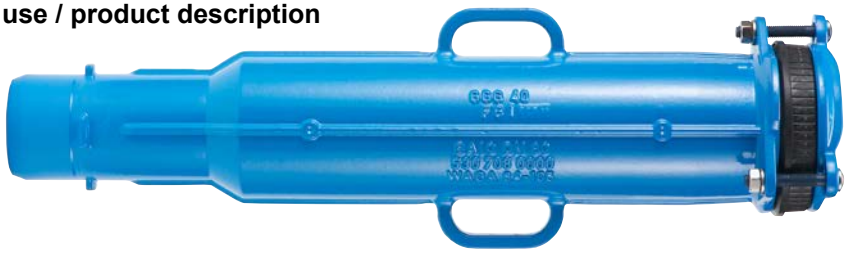
Operating and maintenance instructions for

Cut-in socket fitting - System BAIO®
with Georg Fischer WAGA MULTI/JOINT®-multi-range socket
Order No. 530-01

1. Intended use / product description



Medium: Potable water, municipal waste water
Max. operating pressure: Potable water: 16 bar
Waste water: 16 bar
Material: Body/lock ring: GJS 400, Hawle epoxy powder coating
Seals: EPDM in accordance with DVGW W270
Nuts/bolts: stainless steel

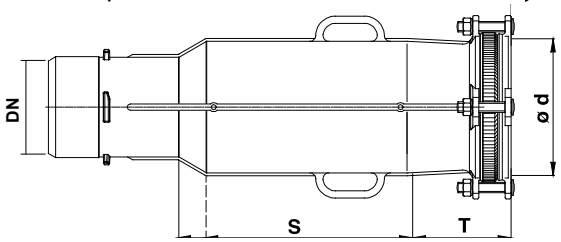
Cut-in socket fitting for the subsequent integration of valves and fittings of the BAIO® system into pipelines made of cast iron, steel, PE, PVC, glass fibre reinforced plastic and AC. On the one hand with BAIO® spigot end for a restraint connection with BAIO® sockets, on the other hand with flexible overlap area and MULTI/JOINT® multi-range socket.

WARNING:

- No longitudinal force locking with AC pipes (cement bonded materials) and glass fibre reinforced plastic pipes guaranteed. Disassembly of the Uni/Fikser is not necessary.
- PE pipes: A support sleeve must always be used when connecting PE pipes. Hawle support liner version from 2017 (see picture) or original Georg Fischer WAGA support sleeve.
  PVC pipes: When connecting PVC pipes SDR21 or thicker, the use of support liner is not necessary.
  For PVC pipes > SDR21, the original Georg Fischer WAGA support sleeve must be used.

During installation and maintenance operations, the applicable standards and guidelines, accident prevention regulations and the regulations of professional associations are to be observed and complied with.
Installation and maintenance operations may be performed by qualified personnel only.

Table 1: Technical data of the BAIO® EMS piece with MULTI/JOINT® multi-range socket



Order No.	DN	Coupling range d_{min} - d_{max}	Minimum insertion depth T	Displacement range S	Screws	max. tightening torque
530 708 0000	80	84 - 105 mm	84 mm	414-426	3 x M12	60 Nm
530 710 0000	100	104 - 132 mm	90 mm	374-395	3 x M16	100 Nm
530 712 5000	125	132 - 155 mm	90 mm	369-389	4 x M16	100 Nm
530 715 0000	150	154 - 192 mm	110 mm	361-390	4 x M16	120 Nm
530 720 0000	200	192 - 232 mm	110 mm	355-392	6 x M16	120 Nm

2. Installation

	Torque wrench

2.1 Installing the BAIO® connection

When installing the BAIO® spigot end in the pipeline, the BAIO® installation instructions must be observed.

2.2 Installing the MULTI/JOINT® multi-range socket

- Check pipe type and pipe outside diameter and compare with Table 1.
- Prepare the MULTI/JOINT® coupling for installation.
- Loosen screw nuts as far as screw end; do not remove screw nuts.
- Remove the hygiene-protection cap from the socket; make sure that the Fikser are not removed from their position.
- Ensure that all Fikser are positioned correctly.
- Prepare the pipe to be connected. Remove any rust, burr, dirt, impairments and coatings from the pressure bearing pipe surface.
- PE pipes must be processed with a suitable peeling device if necessary.
- When using PE pipes and PVC pipes >SDR21: mount support liner.
- Insert the pipe to be connected. The minimum insertion depth according to table 1 must be observed.
- The maximum permissible deflection of up to +/- 8° must be adhered to.
- Tighten the screws crosswise to the maximum tightening torque specified in table 1.
- Only when installing PE pipes below 0 °C should the bolts/nuts be retightened with a torque wrench after 30 minutes. In all other installation situations, retightening is not necessary.

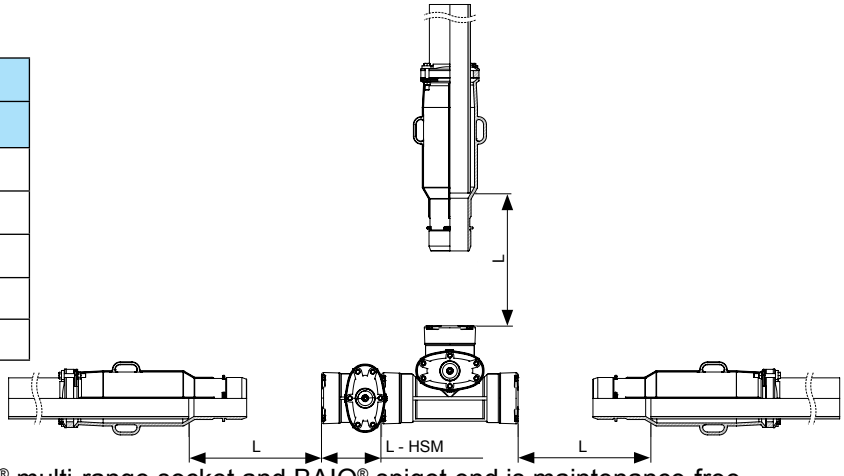
2.3 Disassembling and reusing the MULTI/JOINT® coupling

- Remove pressure from the pipeline.
- Loosen the screw nuts crosswise up to the screw end until the coupling area slackens.
- Dismantle pipe.
- Dismantle coupling, clean with water, check for any damage, replace damaged parts, or complete coupling, if necessary.
- Apply a suitable lubricant to the seal.
- Mount the coupling on the BAIO-Cut-in socket fitting. Ensure that the seal side of the ring is placed on the body.
- Carry out installation as described in section 2.2.

2.4 Retrofitting the BAIO® system into an existing pipeline / restoring gate valves with the cut-in socket fitting with MULTI/JOINT® multi-range socket and BAIO® spigot end

Table 2: Installation dimensions in mm

DN	Cut-in socket fitting		HSM
	L_{min}	L_{max}	L
80	230	527	210
100	244	494	215
125	240	477	240
150	285	517	250
200	250	580	275



3. Maintenance

The cut-in socket fitting with MULTI/JOINT® multi-range socket and BAIO® spigot end is maintenance-free.

4. Commissioning and pressure testing

After successful installation, a pressure test must be carried out in an open pipe trench in accordance with DVGW regulations.

If you have any other questions or if you need more information please contact:

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