Operating and maintenance instructions for Wafer type tee piece with ZAK® outlets Order No. 859-00



1. Intended use / Product description



Medium: Potable water

Maximum operating pressure: 10 / 16 bar

Material: Body: GJS-400, Hawle-epoxy-powdercoating

O-rings: EPDM acc. DVGW W 270

Wafer-type tee-piece with ZAK® outlets and integrated flange gaskets (O-rings) for quick and easy installation between two flanges.

Via the ZAK® outlets, valves and fittings with ZAK® spigot ends can be installed with a restraint connection.

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 should only be carried out by qualified personnel.

2. Installation



Open-end wrench

- Inspect the O-rings for any damage
- Tighten the bolts crosswise (screw size see table)
- The selected tightening torque of the bolts must be sufficiently high to ensure that the flange ends are in metallic contact with each other during operation (maximum tightening torque depending on the bolt quality)
- Ensure installation is tension-free
- ZAK®-connection:

During the assembly of the Wafer type tee piece with ZAK $^{\circ}$ outlets in the pipe, the ZAK $^{\circ}$ -operating and maintenance instructions are given.

- The installation instructions must be observed so that the assembled isolation valves are in a vertical installation position.

Ord. No.	DN	re- duction	pres- sure range	screw		installation instructions
859 050 0460	DN50	2x ZAK46	PN16	4xM16	135 mm	Can only be used for installation in horizontally laid pipes between two flanges
859 065 0460	DN65	2x ZAK46	PN16	4xM16	140 mm	Can only be used for installation in horizontally laid pipes between two flanges
859 080 0461	DN80	2x ZAK46	PN16	8xM16	140 mm	Can only be used for installation in vertical laid pipes between two flanges (e.g. duckfoot bend, hydrant)
859 100 0460	DN100	2x ZAK46	PN16	8xM16	140 mm	Can only be used for installation in horizontally laid pipes between two flanges

859 100 0463	DN100	4x ZAK46	PN16	8xM16	140 mm	Can only be used for installation in vertical laid pipes between two flanges (e.g. duckfoot bend, hydrant)
859 125 0460	DN125	2x ZAK46	PN16	8xM16	140 mm	Can only be used for installation in horizontally laid pipes between two flanges
859 150 0460	DN150	2x ZAK46	PN16	8xM20	150 mm	Can only be used for installation in horizontally laid pipes between two flanges
859 150 0463	DN150	4x ZAK46	PN16	8xM20	150 mm	Can only be used for installation in vertical laid pipes between two flanges (e.g. duckfoot bend, hydrant)
859 150 0696	DN150	1x ZAK69	PN16	8xM20	170 mm	Can only be used for installation in horizontally and vertical laid pipes between two flanges
859 200 0460	DN200	2x ZAK46	PN16	12xM20	150 mm	Can only be used for installation in horizontally laid pipes between two flanges
859 200 0696	DN200	1x ZAK69	PN10	8xM20	170 mm	Can only be used for installation in horizontally and vertical laid pipes between two flanges
859 200 0463	DN200	4x ZAK46	PN16	12xM20	150 mm	Can only be used for installation in vertical laid pipes between two flanges (e.g. duckfoot bend, hydrant)
859 250 0460	DN250	2x ZAK46	PN16	12xM24	160 mm	Can only be used for installation in horizontally laid pipes between two flanges
859 300 0460	DN300	2x ZAK46	PN16	12xM24	160 mm	Can only be used for installation in horizontally laid pipes between two flanges
859 400 0460	DN400	2x ZAK46	PN16	16xM27	170 mm	Can only be used for installation in horizontally laid pipes between two flanges

3. Maintenance

The wafer-type tee-piece is maintenance-free.

4. Commissioning/Pressure test

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:

Hawle Armaturen GmbH
- Application Engineering Liegnitzer Str. 6
83395 Freilassing

Phone: +49 (0)8654 6303-0 Telefax: +49 (0)8654 6303-222

E-Mail: info@hawle.de Web: www.hawle.de