

1. Intended use / product description

Medium: Potable water/Sewage water

Max. operating pressure:

PE 100	PN 16
PE 80	PN 12,5
PE-X	PN 12,5

Material: Body: GJL-250/GJS-400 or POM, Hawle epoxy powder coated
Grip ring: Delrin,
O-ring: EPDM
Support liner: POM

Hawle push-in fittings can be used in underground pipeline construction and in distribution systems for both potable water supply and wastewater disposal (no application in installation).

For PE pipes (DIN 8074/EN 12201) and PE-X (DIN 16893) and on request, also for PVC pipes (DIN EN ISO 1452-2).

Reliable sealing for the pipe is provided by a large-volume O-ring made of highly elastic rubber. The respective grip ring holds the pipe. Even distribution of holding forces ensures that no notch stress is transferred to the pipe. Pulling on the pipe causes the grip ring to be pulled into the conical chamber and thus increases the tensile strength of the connection.

Cast fittings with internal or external threads should not be combined with components made of more precious materials (especially brass) in order to avoid contact corrosion.

Caution: With multiple use of the fitting, the grip ring and, if applicable, the O-ring must be replaced. When connecting PE pipes a support liner must always be used.

Hawle push-fit fittings for PE and PE-X pipes in sizes d 25 mm - d 63 mm in SDR 11 according to GW 335 - B4 or DIN 8076 are certified in accordance with the DVGW-type examination certificate (registration number DW-7511AR2048).

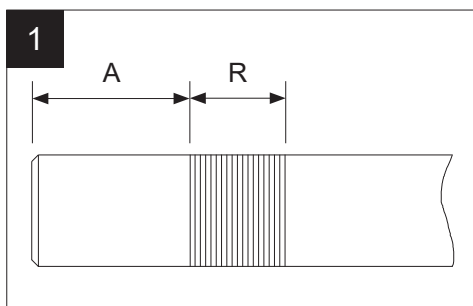
During installation and maintenance operations, the applicable standards and guidelines, accident prevention regulations and the regulations of professional associations are to be observed and complied with.

Installation and maintenance operations may be performed by qualified personnel only.

2. Assembly/Dismantling

2.1 Assembly

Caution: When using POM fittings with internal or external threads, the connection must be made with a belt wrench to avoid damaging the fitting!

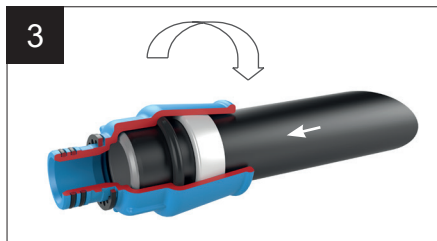


For pipes with a very smooth surface (e.g. PE-X pipes) we recommend roughening the pipe end only in the clamp area (see table) perpendicular to the pipe axis!

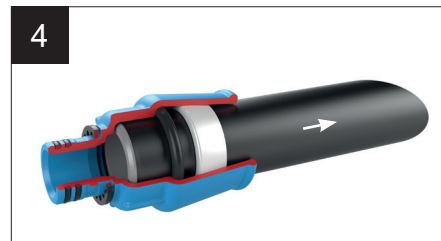
ISO Fitting	Roughening area R in mm	
	A	R
d 20	19,0	13,0
d 25	21,0	14,5
d 32	26,0	18,0
d 40	32,0	24,0
d 50	37,0	26,5
d 63	39,5	30,0
d 75	52,0	29,0
d 90	55,0	30,0
d 110	59,0	36,0
d 125	68,5	38,5
d 160	64,5	43,0



Use pipe end without notches and grooves on the surface. Cut pipe straight with sharp PE shears.
Insert the support liner into the PE pipe as far as it will go.
When using the included Hawle POM support liner, only deburr the cut surface (Chamfering tool Ord.No. 600-00 or Chamfering tool Ord.No. 598-00).
When using MS support liners, the tube should be chamfered at 30 °.

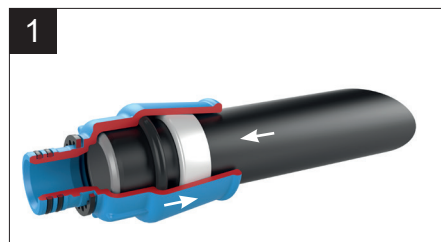


The pipe and fitting must be clean and free of lubricants. Mark the insertion length on the pipe.
Caution: Before assembly, the push-fit fitting must be checked for completeness and for correct seating of O-ring and clamp!
Push on the push-fit fitting completely, turning and rocking it while doing so.
As an assembly aid, only wet the pipe with clean water or Hawle installation spray (no grease or soap).

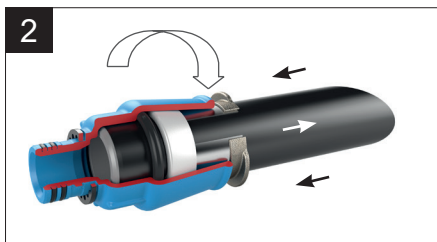


Check tensile strength and tightness by pressure test.

2.2 Disassembly



Release the load on the fitting or pipe in the mounting direction: (short jerk) !



Insert extractors (Ord. No. 601-00) completely. Pull out pipe by turning it.



When reusing the fitting, replace the grip ring. Inspect O-ring seal and replace if necessary.



The grip ring as shown in Fig. deform and press into the fitting. Ensure correct seating in the direction of pull.

3. Maintenance

Hawle push-fit fittings are maintenance-free.

4. Inbetriebnahme/Druckprüfung

After the successful installation, the unit has to be pressure-tested in the open trench acc. to the DVGW regulations observing the maximum operating pressures.

Should you have questions or need further information, please contact:

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