









General information

BAIO® system: restraints, gaskets, clamp rings

Installing valves in the BAIO® system in connection with various types of pipe

Pipe material	Gasket	Axial restraint (tension restraint)	
Ductile iron pipes (GGG) acc. to DIN EN 545	<u>Water/sewage water:</u> BAIO® lip gasket (BLD®) in acc. with KTW-BWGL for water	Segment clamp 	Express ring 
Steel pipes with outside diameter in cast iron		528-00, Hawle Stop (cast iron) DN 8s - DN 200	527-00, BAIO® sit (Cast iron) DN 250 - 300
PVC-pipes in accordance with DIN 8061/8062	<u>Water/sewage water:</u> GKS gasket in accordance with KTW-BWGL for water	Corundum clamp 	Brass clamp 
		528-00, Hawle stop (PVC) DN 80 - DN 200	527-00, BAIO®-Sit (PVC) DN 250 - 300
PE pipes: PE 80, PE 100 in accordance with DIN 8074/75 SDR 11 / 17 / 17,6 PE-X pipes in accordance with DIN 16892/93 SDR 11 / 17 / 17,6	<u>Water/sewage water:</u> GKS gasket in accordance with KTW-BWGL for water	Helical toothed ring 	Helical toothed ring 
For pipes with a very smooth surface (such as PE-X pipes), we recommend roughening the pipe end in the clamping area!		528-00, Hawle stop (PE), Use support liner (order separately)! DN 80 - DN 200	527-00, BAIO® sit (PE) Use support liner (order separately)! DN 250 - 300
PE pipes: PE 80, PE 100 in accordance with DIN 8074/75 SDR 11 / 17 / 17,6	<u>Water/sewage water:</u> BAIO® lip gasket (BLD®) in acc. with KTW-BWGL for water		
PE-X-pipes in accordance to DIN 16892/93 SDR 11 / 17 / 17,6		452-00, PE fusion end with integral support liner and lock ring	
PE pipes: PE 80, PE 100 according to DIN 8074/75 SDR 11 / 17 / 17,6	<u>Water/sewage water:</u> GKS gasket in accordance with KTW-BWGL for water		
		528-01, Hawle E-stop restraint joint with electrofusion socket	

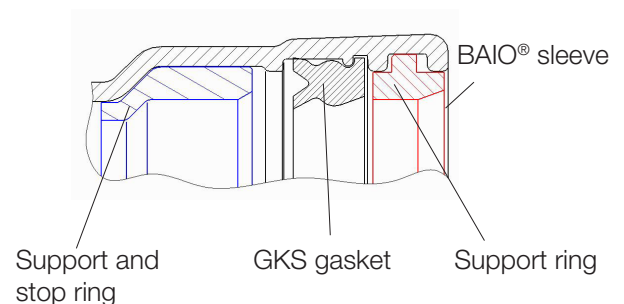
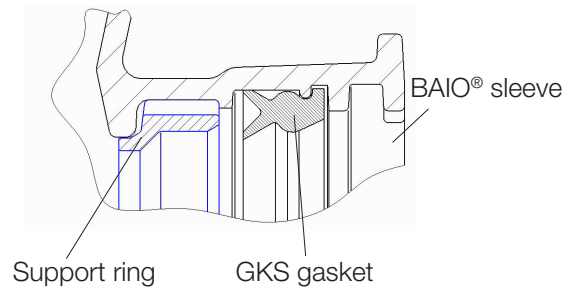
Notice: When connecting PE pipes a support liner must be used (590-00)

Accessories for gaskets in the Hawle BAIO® system

Installation of PE pipes DN 125 / d 125, DN 200 / d 200 and DN 250 / d 250 in BAIO® sleeves

For the following nominal diameters, in addition to the GKS gasket, a support ring needs to be inserted into BAIO® sleeves to prevent the pipe from bending too much! (Included when ordering the GKS gasket)

BAIO® sleeve DN	Pipe exterior ø (d) mm	Position of the support ring in the BAIO® sleeve
125	125	behind in the BAIO® lock
200	200	behind in the BAIO® lock
250	250	in front of and behind in the BAIO® lock



Installation of DN100/d125, DN150/d180 PE pipes in BAIO® sleeves

Connecting d125 PE pipes in DN 100 BAIO® sleeves or d180 PE pipes in DN 150 BAIO® sleeves is possible with the help of special SM fittings (order no. 532-00), which have been specially developed for this purpose. The GKS gasket is built into both of these SM fittings at the factory.

The 180 external diameter DN 150 HSM gate valve (451.150.1801) can also be used for external pipe diameters of 180. However, the spigot end of this gate valve only fits in the specially developed MMB fittings (542.150.1800, 542.180.1500, 542.180.1800).

Accessories in the Hawle BAIO® system

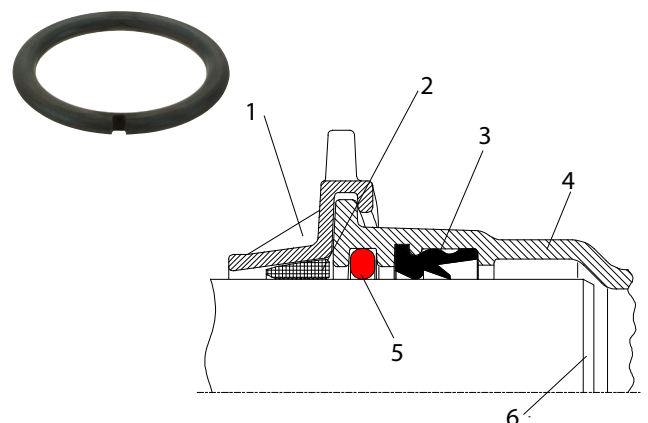
Below you can find important suitable accessories for the Hawle BAIO® system.

Dirt gasket for sockets (529-04)

When connecting plastic pipes in BAIO® sockets and heavily loamy or sandy soils we recommend the use of the socket dirt gasket, since during installation washed- or pressed-in contaminants could affect the seal effect. The socket dirt gasket must be inserted before the pipe is mounted into the annular gap in front of the GKS seal.

Explanation of picture:

- 1: Hawle stop
- 2: Grip ring
- 3: GKS gasket
- 4: BAIO® sleeve
- 5: Dirt gasket for sockets,
- 6: Plastic pipe chamfered (PE or PVC)



BAIO® system: twist-lock devices

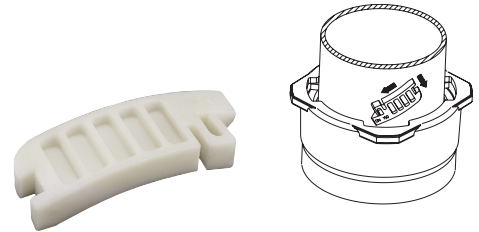
Dirt cover and locking ring (490-05)

All vertical BAIO® connections, such as hydrants, ventilation and air valve assemblies and fittings (e.g. spigot-socket piece in vertical installation) with BAIO® spigot must be secured against unintentional unlocking with the dirt cover and locking ring.



Twist-lock device for BAIO® spigot end - socket connections (529-05)

The twist-lock device prevents an unintentional unlocking of BAIO® spigot ends in BAIO® sockets (e.g. during extensive preliminary installations outside the trench).



You can find more information on the BAIO® system at the start of the price list in General Information.