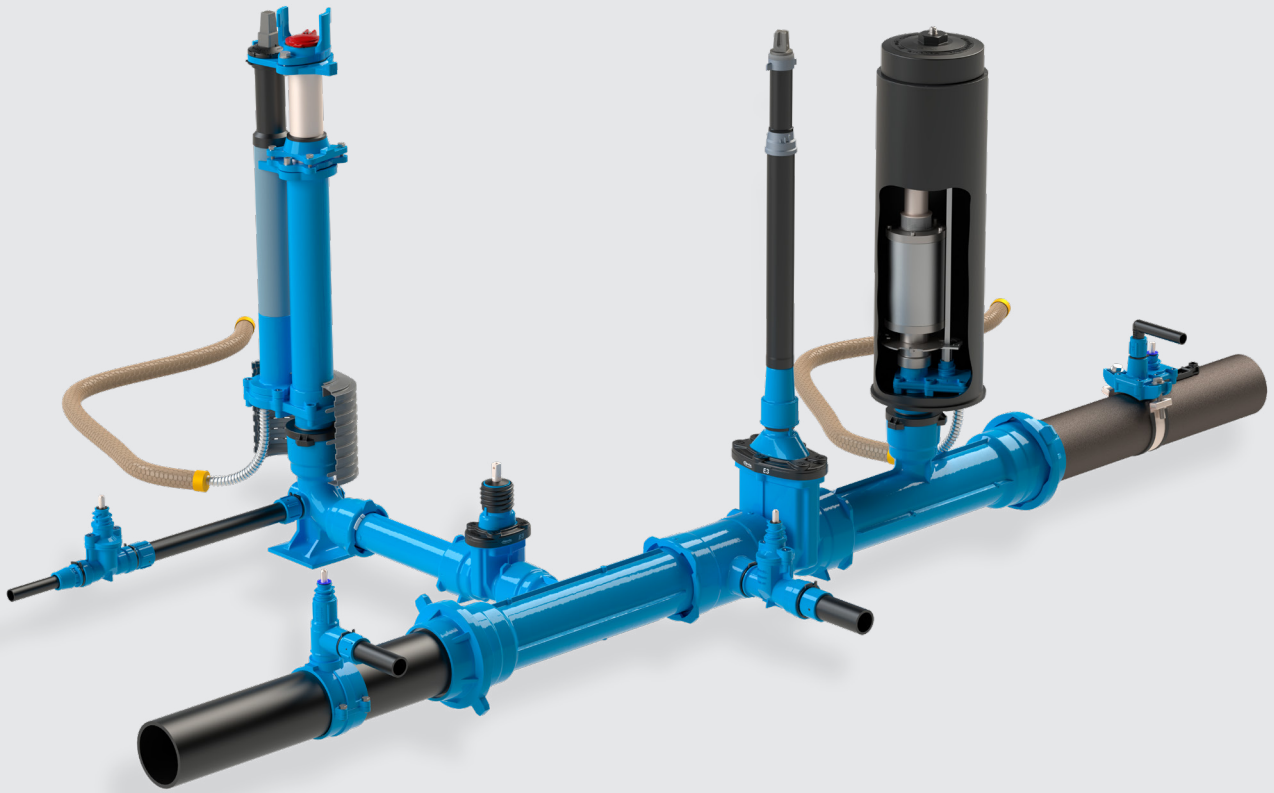




BAIO®-System & ZAK®-System

Simple and Time-saving Technology in
Pipeline Construction and Service Connections

Explanations

The scope of medium can be restricted within the product data sheets. In case of any inquiry or order point out the medium of each project.

In case of any questions, don't hesitate to contact our application engineers.



potable water products



sewage water products



gas products (according to DVGW G 260)



further information of „10 years quality warranty“ for potable water products:
www.hawle.de/en/10-years-quality-warranty/



You can find the latest information in our Hawle app. You can find more information on
www.hawle.de/app

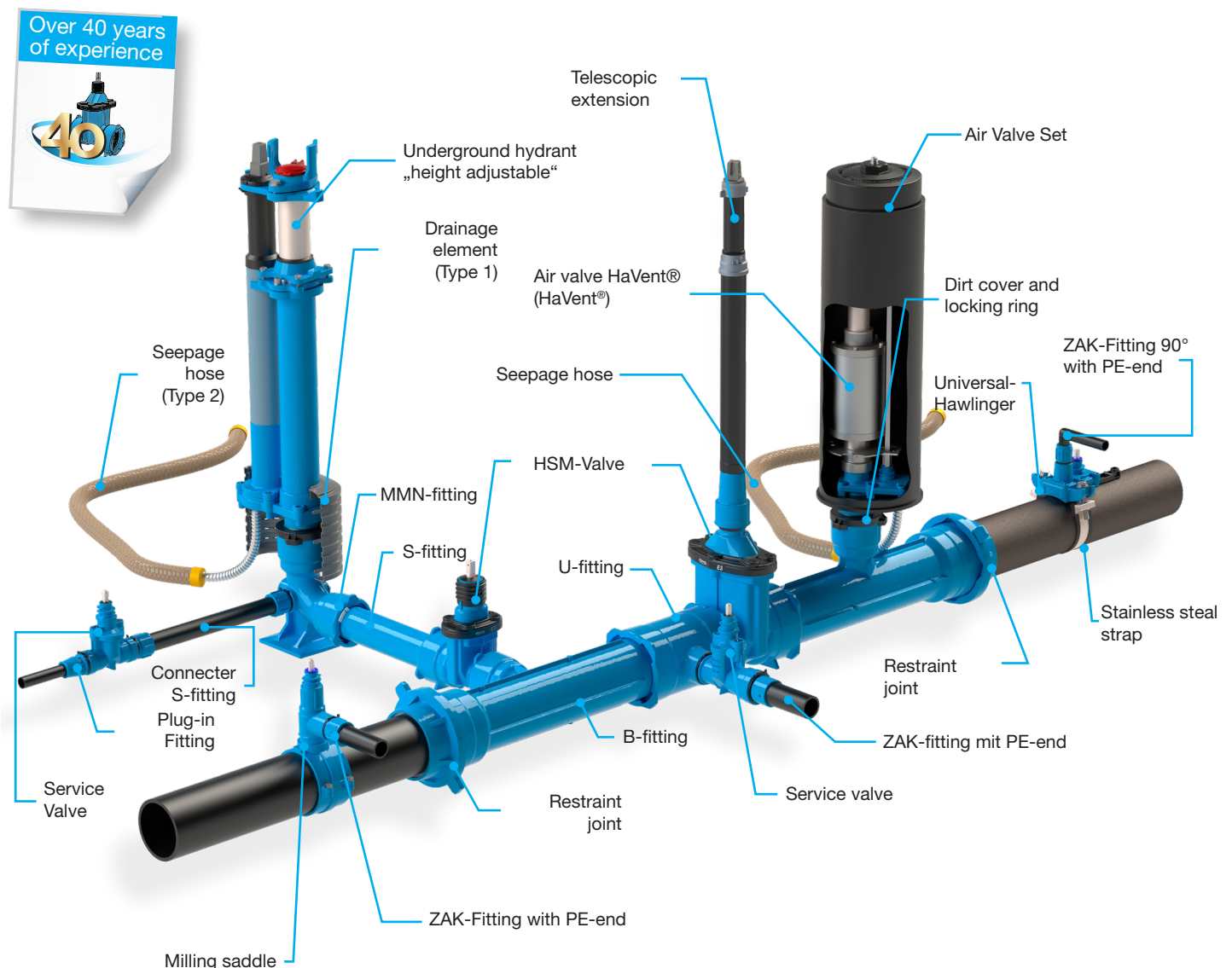
Significant Advantages of Threadless Connection Technology

For decades flangeless connections have been used for joining pipes and fittings in the construction of underground supply lines as this connection technology offers technical and economic advantages compared to conventional flange and welded connections. In the past, threaded connections were used in the construction of domestic supply lines. With this type of connection, contact corrosion frequently occurred on the bare transition areas, permanently damaging the connection or sealing through incrustation.

For this reason, we developed the Hawle BAIO® system at the beginning of the 1980s with the aim of providing the customer with a simple and stressless installation of pipeline parts and fittings, while at the same time guaranteeing a long service life of the system through integrated corrosion protection.

This idea evolved into the Hawle ZAK® system for the service connection sector in order to develop a long life for the service connection system. Both connection technologies have now become established and are state of the art.

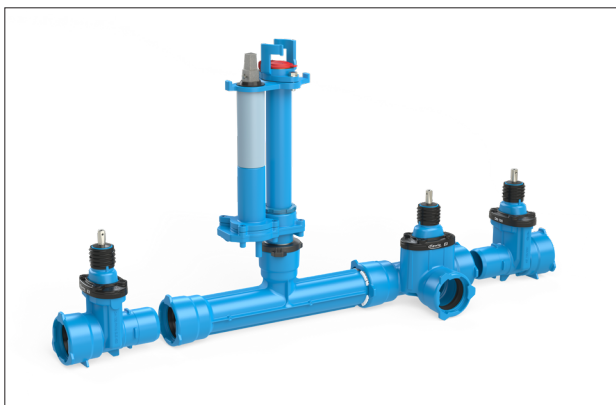
These generally accepted advantages can be transferred without restriction to the connection between pipelines and valves, as well as between the valves themselves. In addition to the technical advantages of this threadless connection system, the economic efficiency of the sleeve technology should also be mentioned. The compact design of the Hawle BAIO® system results in savings in storage and transport as well as in installation due to considerably shorter assembly times compared to conventional flange and welded joints (see diagram on pages 4 - 7).



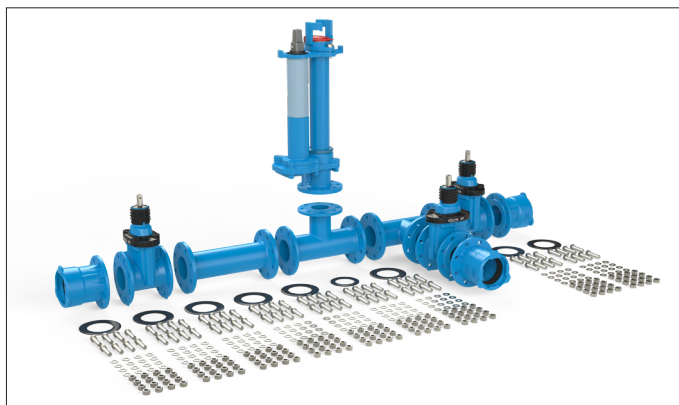
System Comparison: BAIO®-System or Flange-System

A Comparison of the BAIO®-System with flanged fittings

BAIO®-System: 5 components



Flange-System: 307 components



Technical features of the BAIO®-System:

- Medium: potable water, sewage, gas (When ordering, please specify the medium and pipe type, so that the correct seal is also supplied. Standard gasket: BAIO® lip seal for water)

The gaskets are pre-assembled at the factory. Gas seals must be marked. Gaskets not marked must not be used in the gas area.)

- Nominal widths DN 80 – DN 300
- Maximum operating pressure 16 bar
- Simple and fast installation

- A small number of components and connections*
- All-round flexible plug-in sleeve connection (up to 3° per spigot-end socket connection)
- Stress-free installation conditions
- Low storage costs
- Non-earthed Hawle-Stop restraint joint
- Integrated, robust corrosion protection through Hawle epoxy powder coating
- Universal use with cast iron, steel**, PE****, PVC and AC*** pipes

*Twist lock device: When installing BAIO® fittings (spigot-end socket connection), we generally recommend using the BAIO® twist lock device 529-05 to prevent subsequent unlocking of the components.

** with steel weld-in end 452-01

*** with cut-in socket fitting with multi-joint 530-01

**** Support liners must be used when connecting PE pipes.

ONE socket - FOUR pipe types:

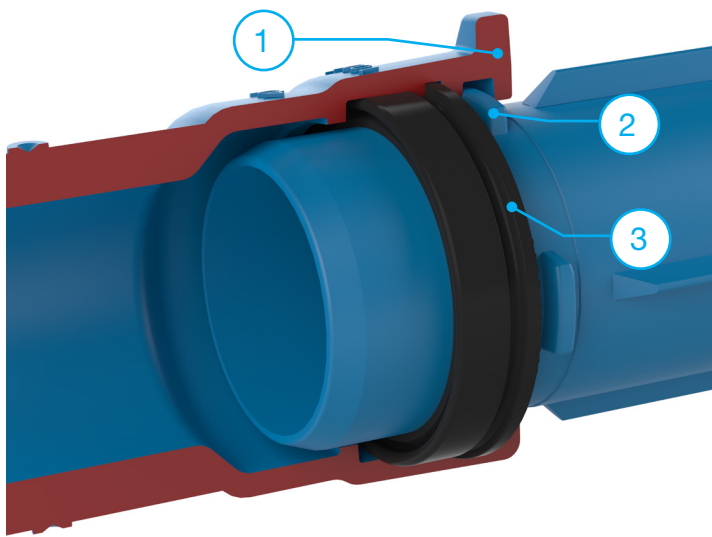
cast iron, PVC, PE and steel (use 452-01 steel weld-in ends). Depending on the type of pipe, different seals and restraining joints are to be used for force locking pipes longitudinally and compactly in BAIO® sockets. Please note the following overview at page 8.

BAIO® double function socket

The BAIO® double function socket is suitable for positive locking connections with BAIO® spigot ends as well as for connecting cast iron, steel**, PE and PVC pipes. With the Hawle-Stop restraint, order no. 528-00 or BAIO®-SIT, order no. 527-00, these pipes can be locked into Hawle-BAIO® push-in sockets with longitudinal force. The seal must be selected according to the pipe type. The BAIO® socket is supplied with the BAIO® lip seal (BLD® seal) as

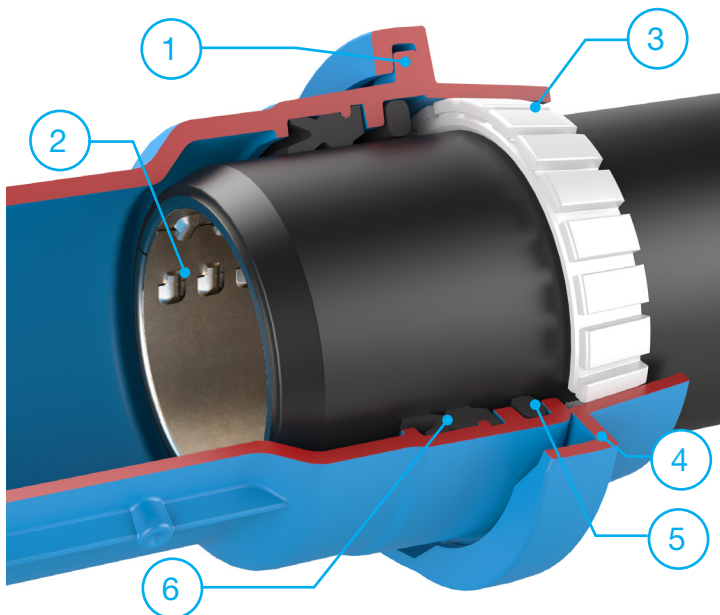
standard. It must be used when connecting BAIO® spigot ends, cast iron pipes and PE weld-in ends in BAIO® sockets. The GKS gasket must be used for PE and PVC pipes. Hawle support sleeves must always be used when connecting PE pipes.

Schematic diagram of a BAIO® spigot end/sleeve connection



- 1. retaining lugs (for locking ring)
- 2. locking cams
- 3. BAIO® lip seal BLD® (standard gasket)

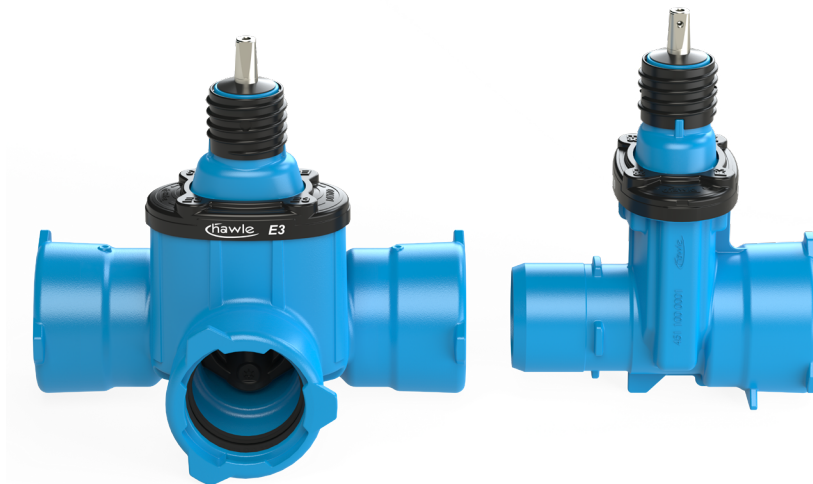
Schematic diagram of a restraint joint in the BAIO® system using a Hawle-Stop restraint, order no. 528-00 for PE pipe



- 1. retaining lugs (for locking ring)
- 2. Hawle support sleeve
- 3. swivel clamp (for PE pipes)
- 4. locking ring
- 5. Socket dirt gasket
- 6. GKS gasket

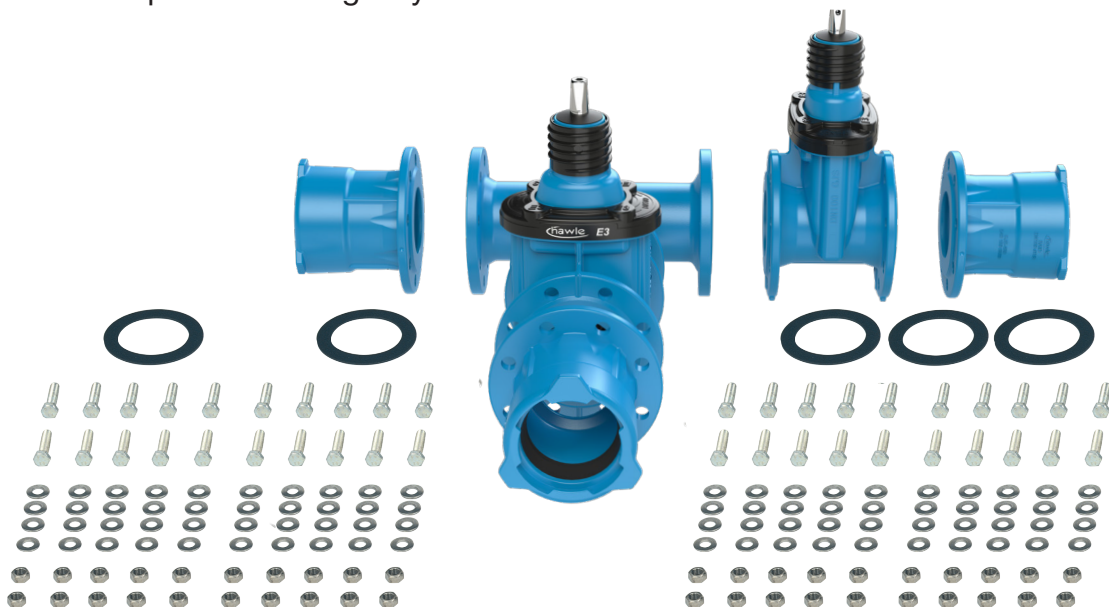
System Comparison: BAIO®-System or Flange-System

2 individual components: BAIO®-System



1 x MMB Combi-T gate valve "E3" (Order-no. 437-00) 1 x Gate valve "E3" with spigot/socket (Order-no. 451-00)

171 individual components: Flange-System



1 x T-fitting (Order-no. 851-00)

40 x Bolts

2 x Gate valves (Order-no. 470-00)

40 x Nuts

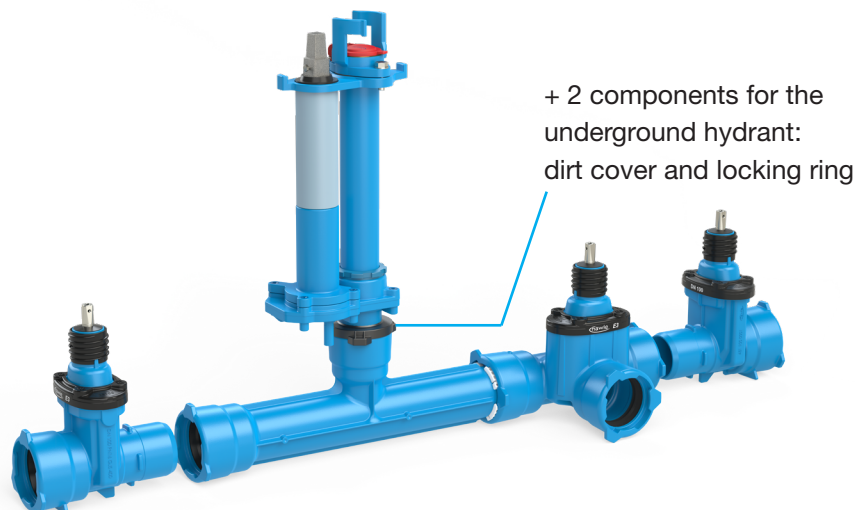
3 x EU-fitting (Order-no. 535-00)

80 x Washers

5 x Flat gaskets

System Comparison: BAIO®-System or Flange-System

5 individual components: BAIO®-System



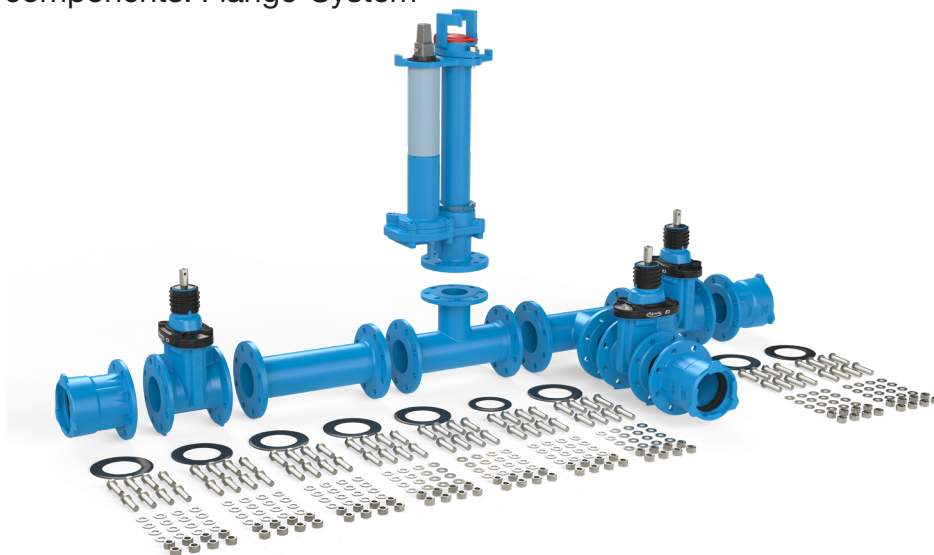
1 x Combi-T gate valve "E3" (Order-no. 437-00)

1 x Underground hydrant (Order-no. 490-00)

1 x Standard tee (Order-no. 537-00)

2 x Gate valve "E3" with spigot/socket (Order-no. 451-00)

307 individual components: Flange-System



2 x T-fitting (Order-no. 851-00)

9 x Flat gasket

1 x Flanged pipe fitting (Order-no. 850-01)

72 x Bolts

3 x Gate valves (Order-no. 470-00)

72 x Nuts

3 x EU-fitting (Order-no. 535-00)

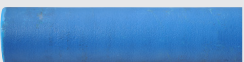
144 x Washes

1 x Underground hydrant (Order-no. 490-00)

One Push-fit Socket - four Types of Pipes



BAIO®-socket

Gasket	Grip ring	Locking ring	Pipe-type
BLD®	Grip ring PE	Hawle-Stop	ductile iron pipe DN 80 - DN 200
			
BLD®	express ring	BAIO®-Sit	ductile iron pipe DN 250 - DN 300
			
GKS	grip ring „Corundum“	Hawle-Stop	PVC-pipe DN 80 - DN 200
			
GKS	brass ring sliding ring	BAIO®-Sit	PVC-pipe DN 250 - DN 300
	 		
GKS	grip ring	Hawle-Stop	support liner PE/PEX-pipe DN 80 - DN 200
			 
GKS	grip ring	BAIO®-Sit	support liner PE/PEX-pipe DN 250 - DN 300
			 
BBD	Blutop- grip ring	Hawle-Stop	Blutop-pipe
			

BAIO®-System: Valves



437-00
Combi-T gate valve „E3“



437-00G
Combi-T gate valve „E3“ for gas



438-00
Combi III gate valve „E2“



439-00
BAIO®-Combi IV gate valve



450-00
Gate valve „E3“ with sockets



450-00G
Gate valve „E3“ with sockets
for gas

Operating pressure max.



No:

Description

Dimension

437-00	Combi-T gate valve „E3“ - BAIO® system	16 bar	-	-	DN 80 - DN 200
437-00G	Combi-T gate valve „E3“ - BAIO® system for gas	-	-	16 bar	DN 80 - DN 150
438-00	Combi III gate valve „E2“	16 bar	-	-	DN 100 - DN 200; *2 x ZAK 46; *2 x IG 1 1/2"; **BAIO® DN 80; **Flange DN 100 (*horizontal outlet, **vertical outlet)
439-00	BAIO®-Combi IV gate valve	16 bar	-	-	DN 100 - DN 200 vertical outlet: BAIO® DN 80 or Flansch DN 100
450-00	Gate valve „E3“ with sockets	16 bar	-	-	DN 80 - DN 300
450-00G	Gate valve „E3“ with sockets for gas	-	-	16 bar	DN 80 - DN 300

BAIO®-System: Valves & Pipe Fittings



451-00
Gate valve „E3“ with spigot/
socket



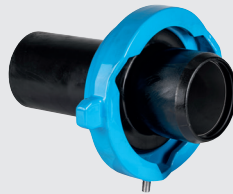
451-00G
Gate valve „E3“ with spigot/
socket for gas



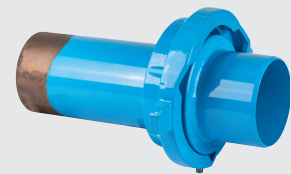
480-00
Sewage water knife gate valve
with sockets



483-00
Sewage water knife gate valve
spigot/socket



452-00
PE fusion end incl. lock ring



452-01G
Steel fusion end incl. lock ring
for gas

Operating pressure max.

No:	Description				Dimension
451-00	Gate valve „E3“ with spigot/ socket	16 bar	-	-	DN 80 - DN 300
451-00G	Gate valve „E3“ with spigot/ socket for gas	-	-	16 bar	DN 80 - DN 200
480-00	Sewage water knife gate valve with sockets	-	10 bar	-	DN 80 - DN 100
483-00	Sewage water knife gate valve spigot/socket	-	10 bar	-	DN 80 - DN 150
452-00	PE fusion end incl. lock ring	10/16 bar	10/16 bar	5/10 bar	DN 80 - DN 300
452-01G	Steel fusion end incl. lock ring for gas	-	-	16 bar	DN 80 - DN 200

BAIO®-System: Pipe Fittings



530-00
Cut-in socket fitting
with screw socket



530-01
Cut-in socket fitting with
WAGA-Multi/Joint®
multirange socket



530-02
Transition fitting with screw socket



530-03
Cut-in socket fitting with BAIO®
spigot end and Synoflex socket



531-00
S-fitting (spigot end fitting)



532-00
SM-fitting (spigot end /
socket fitting)

Operating pressure max.

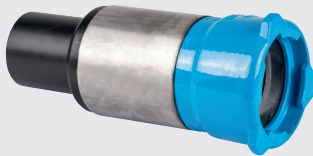


NO:	Description				Dimension
530-00	Cut-in socket fitting with screw socket	16 bar	16 bar	-	DN 80 - DN 300
530-01	Cut-in socket fitting with WAGA-Multi/Joint® multirange socket	16 bar	16 bar	-	DN 80 - DN 200
530-02	Transition fitting with screw socket	16 bar	16 bar	-	DN 80 - DN 200
530-03	Cut-in socket fitting with BAIO® spigot end and Synoflex socket	16 bar	16 bar	-	DN 200 - DN 300
531-00	S-fitting (spigot end fitting)	16 bar	16 bar	16 bar	DN 80 - DN 300
532-00	SM-fitting (spigot end / socket fitting)	16 bar	16 bar	1/16 bar	DN 80 - DN 200

BAIO®-System: Pipe Fittings



532-01
SM-fitting with ZAK® outlets



532-02
SM-fitting with PE end



532-03
Synoflex Transition piece to
BAIO®-System (SM-piece)



533-00
Socket fitting with steel tail



535-00
Flanged spigot fitting



536-00
Concentric tapers
(R reduced socket /
RU reduced spigot end)

Operating pressure max.

No:	Description				Dimension
532-01	SM-fitting with ZAK® outlets	16 bar	16 bar	-	DN 80 - 300, ZAK 46 (only DN 80 - DN 200), ZAK 69 (only DN 250, DN 300)
532-02	SM-fitting with PE end	16 bar	16 bar	1/5 bar	DN 80
532-03	Synoflex Transition piece to BAIO®-System (SM-piece)	16 bar	16 bar	-	DN 80 - DN 300
533-00	Socket fitting with steel tail	16 bar	-	1/5 bar	DN 80
535-00	Flanged spigot fitting	10/16 bar	10/16 bar	10/16 bar	DN 80 - DN 300
536-00	Concentric tapers (R reduced socket / RU reduced spigot end)	16 bar	16 bar	1/16 bar	DN 80 - DN 300

BAIO®-System: Pipe Fittings





537-00
 B-fitting,
 upper outlet: BAIO®-socket





537-01
 A-fitting
 upper outlet: Flange connection






538-00
 Double tee cross




538-01
 Double tee cross with vertical
 outlet



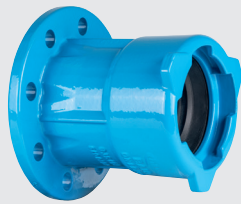



359-00
 Double strap pipe drilling
 saddle
 with BAIO® socket

Operating pressure max.

No:	Description				Dimension
537-00	B-fitting, upper outlet: BAIO®-socket	16 bar	16 bar	-	DN 80 - DN 200; upper outlet: DN 80
537-01	A-fitting upper outlet: Flange connection	16 bar	16 bar	-	DN 80 - DN 200; upper outlet: DN 80
538-00	Double tee cross	16 bar	16 bar	1/16 bar	DN 80 - DN 200
538-01	Double tee cross with vertical outlet	16 bar	-	-	DN 80 - DN 300 (MTT) DN 80 (FFR and EU)
359-00	Double strap pipe drilling saddle with BAIO® socket	16 bar	16 bar	5 bar	DN 80

BAIO®-System: Pipe Fittings



540-00
EU-fitting (flanged socket)



541-00
U-fitting (collar)



542-00
All socket tee



543-00
Double socket bend 90°



543-01
MSQ-fitting 90°



544-00
Double socket bend 45°

Operating pressure max.



No:

Description

Dimension

No:	Description				Dimension
540-00	EU-fitting (flanged socket)	10/16 bar	10/16 bar	1/10/16 bar	DN 80 - DN 300
541-00	U-fitting (collar)	16 bar	16 bar	1/16 bar*	without outlet / outlet ZAK 46/ 1 x 2", 2 x 2": DN 80 - 200 Outlet ZAK 69: DN 100 - 300
542-00	All socket tee	16 bar	16 bar	1/16 bar	DN 80 - DN 300
543-00	Double socket bend 90°	16 bar	16 bar	1/16 bar	DN 80 - DN 200
543-01	MSQ-fitting 90°	16 bar	16 bar	1/16 bar	DN 80
544-00	Double socket bend 45°	16 bar	16 bar	1/16 bar	DN 80 - DN 300

*only without Outlet

BAIO®-System: Pipe Fittings



544-01
Spigot socket bend 45°



545-00
Double socket bend 30°



546-00
Double socket bend 22°



546-01
Spigot socket bend 22°



547-00
Double socket bend 11°



548-00
Duckfoot bend

Operating pressure max.



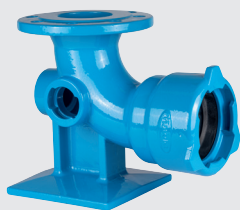
No:

Description

Dimension

No:	Description				Dimension
544-01	Spigot socket bend 45°	16 bar	16 bar	1/16 bar	DN 80 - DN 300
545-00	Double socket bend 30°	16 bar	16 bar	1/16 bar	DN 80 - DN 300
546-00	Double socket bend 22°	16 bar	16 bar	1/16 bar	DN 80 - DN 300
546-01	Spigot socket bend 22°	16 bar	16 bar	1/16 bar	DN 80 - DN 200
547-00	Double socket bend 11°	16 bar	16 bar	1/16 bar	DN 80 - DN 300
548-00	Duckfoot bend	16 bar	16 bar	-	DN 80 - DN 100 Optional outlets: 2 x 1½" F; 1 x ZAK 46; 2 x ZAK 46; 3 x ZAK 46

BAIO®-System: Pipe Fittings



549-00
EN-fitting



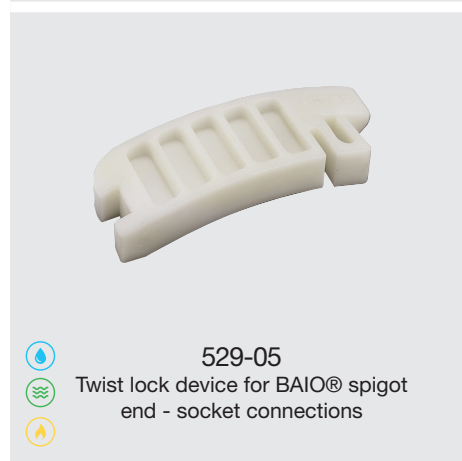
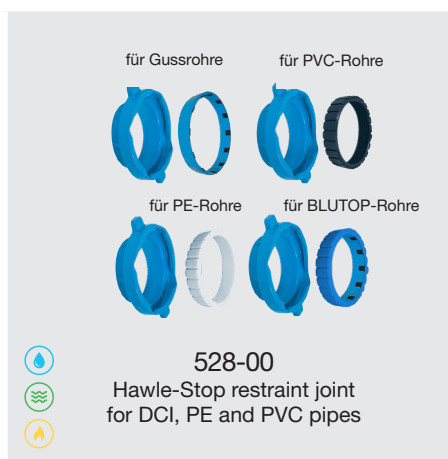
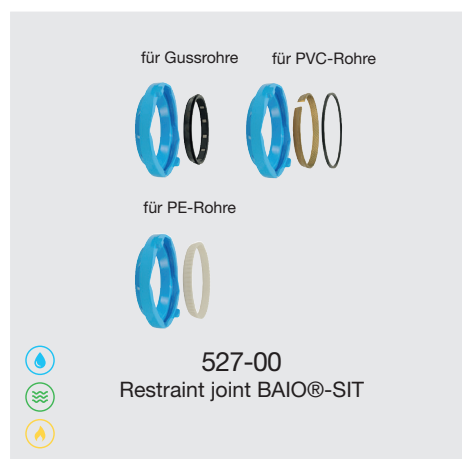
806-00
Socket end cap



807-00
Spigot end cap

No:	Description	Operating pressure max.			Dimension
					
549-00	EN-fitting	16 bar	16 bar	-	DN 80 - DN 150 Optional outlet: 2x 1½" F; 1x ZAK 46; 2x ZAK 46; 3x ZAK 46
806-00	Socket end cap	16 bar	16 bar	1/5 bar	DN 80 - DN 200 F: 1" - 1 1/2"
807-00	Spigot end cap	16 bar	16 bar	5 bar	DN 80 - DN 300 F: 1" - 2"

BAIO®-System: Restraint Joints / Accessories



No:	Description	Operating pressure max.			Dimension
527-00	Restraint joint BAIO®-SIT	16 bar	16 bar	1/16 bar	DN 250 - DN 300
528-00	Hawle-Stop restraint joint for DCI, PE and PVC pipes	16 bar	16 bar	1/16 bar	DN 80 - DN 200
490-05	Dirt cover and locking ring for BAIO®-spigot ends	16 bar	16 bar	-	DN 80
529-05	Twist lock device for BAIO® spigot end - socket connections	16 bar	16 bar	16 bar	DN 80 - DN 300

BAIO®-System: Gaskets



529-00
BAIO® lip gasket
(BLD®)



529-01
GKS gasket



529-01G
GKS gasket for gas



529-02
BAIO®-BLUTOP-gasket



529-03G
DCI pipe gasket for gas

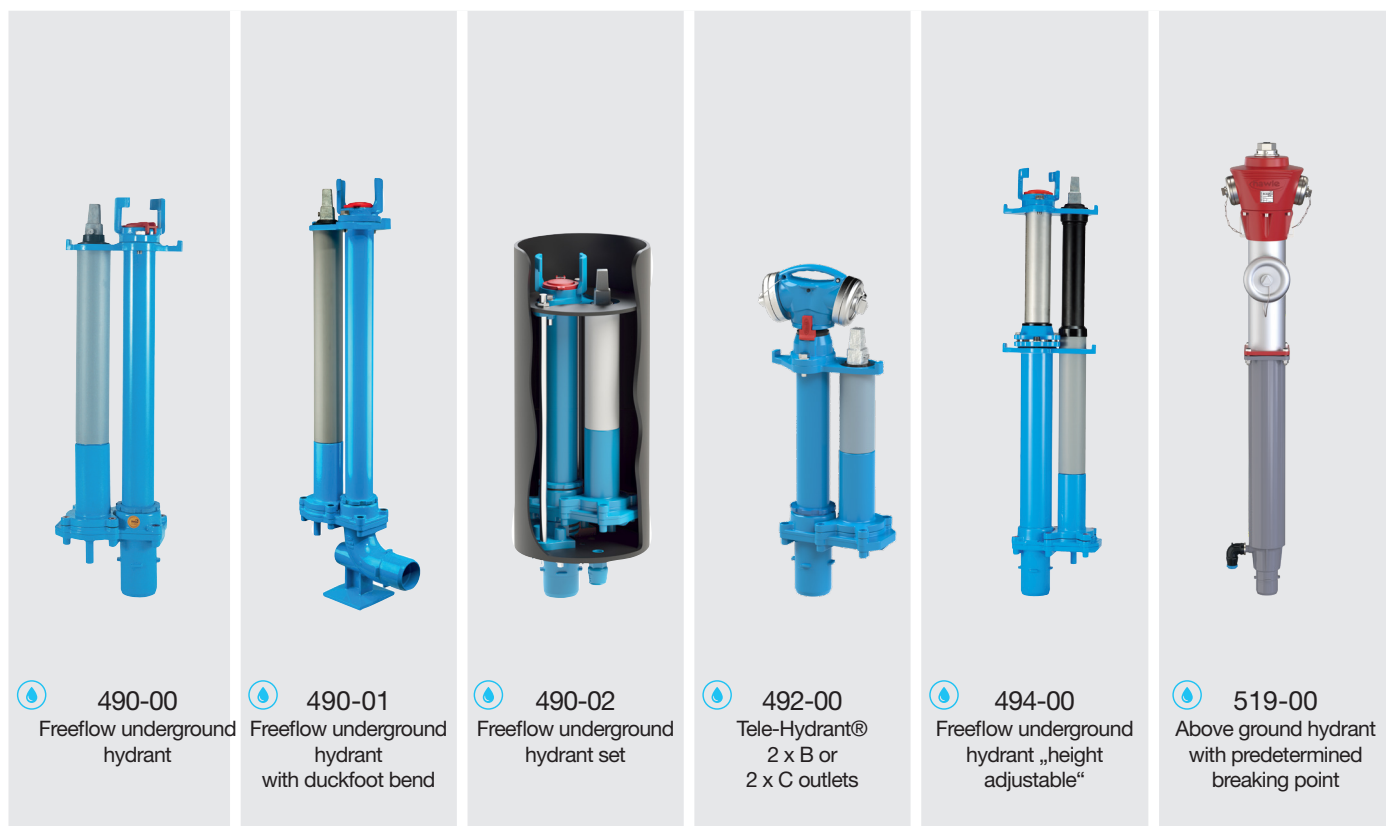


529-04
Dirt gasket for sockets

Operating pressure max.

No:	Description				Dimension
529-00	BAIO® lip gasket (BLD®)	16 bar	16 bar	-	DN 80 - DN 300
529-01	GKS gasket	16 bar	16 bar	-	DN 80 - DN 300
529-01G	GKS gasket for gas	-	-	1 bar (only PVC)	DN 80 - DN 300
529-02	BAIO®-BLUTOP-gasket	16 bar	16 bar	-	DN 80 - DN 150
529-03G	DCI pipe gasket for gas	-	-	16 bar	DN 80 - DN 300
529-04	Dirt gasket for sockets	-	-	-	DN 80 - DN 200

Additional Products with BAIO®-System



No:	Description	Operating pressure max.			Dimension
					
490-00	Freeflow underground hydrant	16 bar	-	-	DN 80 pipe cover depth: 0,77 m; 1,00 m; 1,25 m; 1,50 m; 1,80 m; 2,20m; 2,40 m*
490-01	Freeflow underground hydrant with duckfoot bend	16 bar	-	-	DN 80 pipe cover depth: 1,00 m; 1,25 m; 1,50 m
490-02	Freeflow underground hydrant set	16 bar	-	-	DN 80 pipe cover depth: 1,00 m; 1,25 m; 1,50 m
492-00	Tele-Hydrant® 2 x B or 2 x C outlets	16 bar	-	-	DN 80 pipe cover depth: 1,00 m; 1,25 m; 1,50 m*
494-00	Freeflow underground hydrant „height adjustable“	16 bar	-	-	DN 80 pipe cover depth: 1,00 - 1,30 m; 1,25 - 1,55 m; 1,30 - 1,65 m; 1,50 - 2,05 m; 2,00 - 2,55 m*
519-00	Above ground hydrant with predetermined breaking point	16 bar	-	-	DN 80 pipe cover depth: 1,25 m; 1,50 m*

* Special pipe cover and other connection tips on demand

Additional Products with BAIO®-System



985-00
Air valve set
for sewage water and
potable water



992-00
Air valve set HaVent® PN16



993-00
Air valve set for
potable water

Operating pressure max.



Dimension

No:	Description	Operating pressure max.			Dimension
985-00	Air valve set for sewage water and potable water	-	16 bar	-	DN 80 pipe cover depth: 1,25 m; 1,50 m
992-00	Air valve set HaVent®	16 bar	-	-	DN 80 pipe cover depth: 1,00 m; 1,25 m; 1,50 m; 1,75 m
993-00	Air valve set for potable Water	16 bar	-	-	DN 80 pipe cover depth: 1,00 m; 1,25 m; 1,50 m; 1,75 m

Technical Features of the ZAK®-System

ZAK®-System threadless connection

Locking and Sealing

When installing, only the ZAK® spigot end is inserted into the ZAK® socket fitting, locked by turning 90° clockwise and fully retracted. In order to lock the ZAK® spigot end in the ZAK® socket fitting, the connection must then be secured against unintentional disconnection by means of an anti-twist device. The bayonet connection, consisting of a corrosion-resistant socket fitting with an internal bayonet locking mechanism and a corrosion-resistant spigot end with locking lugs and double O-ring sealing, guarantees that the connection is reliably sealed.



Technical features

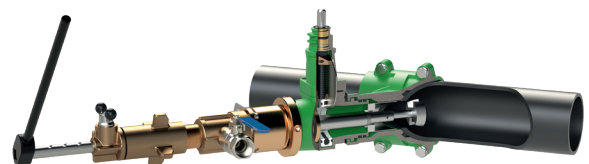
- Medium: drinking water, sewage water and gas
- Nominal diameters:
 - ZAK 34 corresponds to a dimension of 1"
 - ZAK 46 corresponds to a dimension of 1 ½"
 - ZAK 69 corresponds to a dimension of 2"
 - (ZAK 69 is not suitable for gas)
- Maximum operating pressure: drinking water 16 bar, sewage water 16 bar (gas upon request)
- Simple and fast installation
- Threadless connection technology
- Reduced tension through flexible connection
- Safe double O-ring sealing of the connection
- Long service life through integral corrosion protection
- No tools required for installation

Drilling in the ZAK®-System

The Hawle Hawlomat pipe drilling device enables you to drill cast iron, steel, PVC, PE and AC pipelines using a drilling saddle, for example in the ZAK® system. Drilling can be carried out in the areas of both drinking water and sewage water. The ZAK 69 system has been specially developed for the waste water sector. It is also possible to drill a retrofitted Hawle free-flow underground hydrant by means of an extra-long drilling spindle with a claw adapter.



Application example in the drinking water sector
Drilling an existing PE supply line using HAKU-Hawlinger ZAK 46



Application example in the waste water sector
Drilling a waste pipeline using a ZAK 69 service gate valve for sewage water with a HAKU pipe drilling saddle

Further information on our Hawlomat pipe drilling device or our rental drilling devices can be found in the Internet at www.hawle.de.

ZAK®-System: Pipe Drilling Saddles



226-00

Hawlinger with upper vertical ZAK® socket and lower tapered male thread or lower ZAK® spigot end



226-00G

Hawlinger with upper vertical ZAK® socket and lower tapered male thread or lower ZAK® spigot end for gas



227-00

Hawlinger with upper horizontal ZAK® socket in pipe direction



227-00G

Hawlinger with upper horizontal ZAK® socket in pipe direction for gas



228-00

Hawlinger with horizontal ZAK® socket 90° to pipe direction



229-03

Hawlinger with upper vertical ZAK® socket

Operating pressure max.

No:	Description				Dimension
226-00	Hawlinger with upper vertical ZAK® socket and lower tapered male thread or lower ZAK® spigot end	16 bar	-	-	Lower outlet: M 1 1/4", 2" conical or ZAK 46 Upper outlet: ZAK 34, ZAK 46
226-00G	Hawlinger with upper vertical ZAK® socket and lower tapered male thread or lower ZAK® spigot end for gas	-	-	5 bar	Lower outlet: M 2" conical or ZAK 46 Upper outlet: ZAK 46
227-00	Hawlinger with upper horizontal ZAK® socket in pipe direction	16 bar	-	-	Lower outlet: M 1 1/4" - 2" conical or ZAK 46, Upper outlet: ZAK 34, ZAK 46
227-00G	Hawlinger with upper horizontal ZAK® socket in pipe direction for gas	-	-	5 bar	Lower outlet: M 1 1/2" - 2" conical or ZAK 46, Upper outlet: ZAK 46
228-00	Hawlinger with horizontal ZAK® socket 90° to pipe direction	16 bar	-	-	Lower outlet: M 1 1/4" - 2" conical Upper outlet: ZAK 34, ZAK 46
229-03	Hawlinger with upper vertical ZAK® socket	16 bar	-	-	Lower outlet: d 63 mm Upper outlet: ZAK 34, ZAK 46

ZAK®-System: Pipe Drilling Saddles



229-03G
Hawlinger with upper vertical
ZAK® socket
for gas



229-04
Hawlinger with upper horizontal
ZAK® socket in pipe direction



229-04G
Hawlinger with upper horizontal
ZAK® socket in pipe direction for gas



229-05
Hawlinger with upper
horizontal ZAK® socket 90° to
pipe direction



229-05G
Hawlinger with upper
horizontal ZAK® socket 90° to
pipe direction for gas



236-00
HAKU Hawlinger
with vertical ZAK® socket

Operating pressure max.

No:	Description				Dimension
229-03G	Hawlinger with upper vertical ZAK® socket for gas	-	-	5 bar	Lower outlet: d 63 mm Upper outlet: ZAK 46
229-04	Hawlinger with upper horizontal ZAK® socket in pipe direction	16 bar	-	-	Upper outlet: d 63 mm Upper outlet: ZAK 34, ZAK 46
229-04G	Hawlinger with upper horizontal ZAK® socket in pipe direction for gas	-	-	5 bar	Lower outlet: d 63 mm Upper outlet: ZAK 46
229-05	Hawlinger with upper horizontal ZAK® socket 90° to pipe direction	16 bar	-	-	Lower outlet: d 63 mm Upper outlet: ZAK 34, ZAK 46
229-05G	Hawlinger with upper horizontal ZAK® socket 90° to pipe direction for gas	-	-	5 bar	Lower outlet: d 63 mm Upper outlet: ZAK 46
236-00	HAKU Hawlinger with vertical ZAK® socket	16 bar	-	-	Outlet ZAK 34, ZAK 46: Pipe: d 63, 75, 90, 110, 125, 140, 160, 180, 225, 250, 280, 315 mm Outlet ZAK 69: Pipe: d 110, 125, 140, 160, 180, 225 mm

ZAK®-System: Pipe Drilling Saddles



236-00G
HAKU Hawlinger
with vertical ZAK® socket
for gas



237-00
HAKU Hawlinger with horizontal
ZAK® socket in pipe direction



237-00G
HAKU Hawlinger with horizontal
ZAK® socket in pipe direction for gas



237-02
HAKU Hawlinger slewable with
horizontal ZAK® outlet



238-00
HAKU Hawlinger with
horizontal ZAK® socket 90°
to pipe direction



238-00G
HAKU Hawlinger with
horizontal ZAK® socket 90°
to pipe direction for gas

Operating pressure max.

No:	Description				Dimension
236-00G	HAKU Hawlinger with vertical ZAK® socket for gas	-	-	1 bar (only PVC)	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 90, 110, 125, 140, 160, 180, 225 mm
237-00	HAKU Hawlinger with horizontal ZAK® socket in pipe direction	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 75, 90, 110, 125, 140, 160, 180, 225, 250, 280, 315 mm
237-00G	HAKU Hawlinger with horizontal ZAK® socket in pipe direction for gas	-	-	1 bar (only PVC)	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 90, 110, 125, 140, 160, 180, 225, 280 mm
237-02	HAKU Hawlinger slewable with horizontal ZAK® outlet	16 bar	-	-	Outlet: ZAK 46 Pipe: d 90, 110, 125, 140, 160, 180, 225 mm
238-00	HAKU Hawlinger with horizontal ZAK® socket 90° to pipe direction	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 75, 90, 110, 125, 140, 160, 180, 225, 250, 280, 315 mm
238-00G	HAKU Hawlinger with horizontal ZAK® socket 90° to pipe direction for gas	-	-	1 bar (only PVC)	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 90, 110, 125, 140, 160, 180, 225 mm

ZAK®-System: Pipe Drilling Saddles



239-00
Hawlinger with upper
vertical ZAK® socket



239-00G
Hawlinger with upper
vertical ZAK® socket
for gas



239-01
Hawlinger with upper
horizontal ZAK® socket in
pipe direction



239-01G
Hawlinger with upper
horizontal ZAK® socket in
pipe direction for gas



239-02
Hawlinger with upper
horizontal ZAK® socket 90° to
pipe direction



239-02G
Hawlinger with upper
horizontal ZAK® socket 90° to
pipe direction for gas

Operating pressure max.

No:	Description				Dimension
239-00	Hawlinger with upper vertical ZAK® socket	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 90, 110, 125, 160, 180, 225 mm
239-00G	Hawlinger with upper vertical ZAK® socket for gas	-	-	10 bar	Outlet: ZAK 46 Pipe: d 90, 110, 125, 160, 180, 225 mm
239-01	Hawlinger with upper horizontal ZAK® socket in pipe direction	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 90, 110, 125, 160, 180, 225 mm
239-01G	Hawlinger with upper horizontal ZAK® socket in pipe direction for gas	-	-	10 bar	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 90, 110, 125, 160, 180, 225 mm
239-02	Hawlinger with upper horizontal ZAK® socket 90° to pipe direction	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: d 63, 90, 110, 125, 160, 180, 225 mm
239-02G	Hawlinger with upper horizontal ZAK® socket 90° to pipe direction for gas	-	-	10 bar	Outlet: ZAK 34, ZAK 46 Pipe: d 90, 110, 125, 160, 180, 225 mm

ZAK®-System: Pipe Drilling Saddles



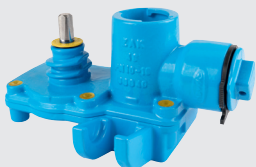
243-00
Universal Hawlinger with
vertical ZAK® socket



243-00G
Universal Hawlinger with vertical
ZAK® socket for gas



244-00
Universal Hawlinger with horizontal
ZAK® socket in pipe direction

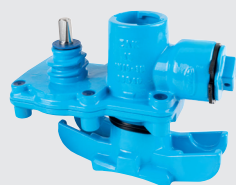


244-00G
Universal Hawlinger with
horizontal ZAK® socket in pipe
direction for gas

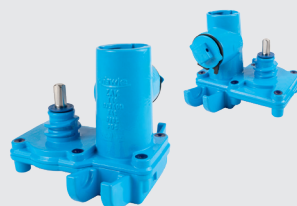
Operating pressure max.

No:	Description				Dimension
243-00	Universal Hawlinger with vertical ZAK® socket	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: DN 65 - 500 Outlet: ZAK 69 Pipe: DN 100 - 500
243-00G	Universal Hawlinger with vertical ZAK® socket for gas	-	-	5 bar	Outlet: ZAK 34, ZAK 46 Pipe: DN 65 - 500
244-00	Universal Hawlinger with horizontal ZAK® socket in pipe direction	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: DN 65 - 500
244-00G	Universal Hawlinger with horizontal ZAK® socket in pipe direction for gas	-	-	5 bar	Outlet: ZAK 34, ZAK 46 Pipe: DN 65 - 500

ZAK®-System: Pipe Drilling Saddles



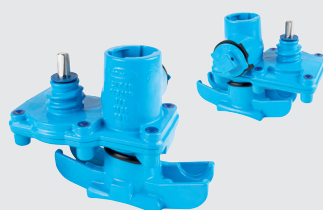
244-01
Universal Hawlinger with slewable
horizontal ZAK® outlet



245-00
Universal Hawlinger with horizontal ZAK® socket
90° to pipe
direction



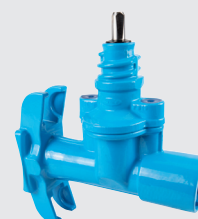
245-00G
Universal Hawlinger with horizontal ZAK® socket
90° to pipe
direction for gas



245-01
Universal Hawlinger slewable
with horizontal ZAK® socket
90° to pipe direction



245-02
Universal Hawlinger for later drilling with
vertical and horizontal ZAK® outlet 90° to
pipe direction



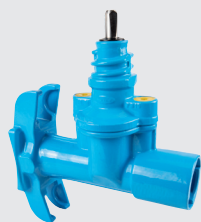
270-01
Valve saddle with ZAK® outlet

Operating pressure max.



No:	Description				Dimension
244-01	Universal Hawlinger with slewable horizontal ZAK® outlet	16 bar	-	-	Outlet: ZAK 46 Pipe: DN 65 - 500
245-00	Universal Hawlinger with horizontal ZAK® socket 90° to pipe direction	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: DN 65 - 500
245-00G	Universal Hawlinger with horizontal ZAK® socket 90° to pipe direction for gas	-	-	5 bar	Outlet: ZAK 34, ZAK 46 Pipe: DN 65 - 500
245-01	Universal Hawlinger slewable with horizontal ZAK® socket 90° to pipe direction	16 bar	-	-	Outlet: ZAK 46 Pipe: DN 65 - 500
245-02	Universal Hawlinger for later drilling with vertical and horizontal ZAK® outlet 90° to pipe direction	16 bar	-	-	Outlet: ZAK 46 Pipe: DN 65 - 500
270-01	Valve saddle with ZAK® outlet	16 bar	-	-	Outlet: ZAK 46 Pipe: DN 65 - 500

ZAK®-System: Pipe Drilling Saddles



270-01G

Valve saddle with ZAK® outlet for gas



313-00

HAKU milling valve with horizontal ZAK® socket



313-01

HAKU milling saddle for PE pipes with horizontal ZAK® outlet



352-00

Universal pipe drilling saddle with ZAK® socket



371-00

Universal pipe saddle with integrated shut-off function



371-00G

Universal pipe saddle with integrated shut-off function for gas

Operating pressure max.



No:	Description				Dimension
270-01G	Valve saddle with ZAK® outlet for gas	-	-	5 bar	Outlet: ZAK 46 Pipe: DN 65 - 500
313-00	HAKU milling valve with horizontal ZAK® socket	16 bar	-	-	Outlet: ZAK 46 Pipe: PE, SDR11: d 63-225mm PE, SDR17: d 63 - 315mm PVC, PN 10: d 63 - 280 mm PVC, PN 16: d 63 - 160 mm
313-01	HAKU milling saddle for PE pipes with horizontal ZAK® outlet	16 bar	-	-	Outlet: ZAK 46 Pipe: PE, SDR11: d63-225mm PE, SDR17: d 63-315mm
352-00	Universal pipe drilling saddle with ZAK® socket	16 bar	16 bar	5 bar	Outlet: ZAK 46, ZAK 69* Pipe: DN 65 - 500
371-00	Universal pipe saddle with integrated shut-off function	16 bar	16 bar	-	Outlet: ZAK 46 Pipe: DN 65 - 500
371-00G	Universal pipe saddle with integrated shut-off function for gas	-	-	5 bar	Outlet: ZAK 46 Pipe: DN 65 - 500

* ZAK 69 not for gas

ZAK®-System: Pipe Drilling Saddles



372-01
Shut-off adaptor with ZAK® outlets



522-00
HAKU pipe saddle with ZAK® outlet and auxiliary shut-off device



524-00
HAKU pipe saddle with 45° ZAK® outlet



525-01
HAKU pipe saddle with ZAK® outlet



525-01G
HAKU pipe saddle with ZAK® outlet for gas



526-00
HA-WELD® electrofusion saddle with ZAK® outlet

Operating pressure max.



No:

Description

Dimension

No:	Description				Dimension
372-01	Shut-off adaptor with ZAK® outlets	16 bar	16 bar	-	ZAK 46, ZAK 69
522-00	HAKU pipe saddle with ZAK® outlet and auxiliary shut-off device	16 bar	-	-	Outlet: ZAK 34, ZAK 46 Pipe: d 90, 110, 140, 160, 225 mm
524-00	HAKU pipe saddle with 45° ZAK® outlet	16 bar	16 bar	-	Outlet: ZAK 69 Pipe: d 63, 75, 90, 110, 140, 160, 225 mm
525-01	HAKU pipe saddle with ZAK® outlet	16 bar	16 bar	-	Outlet: ZAK 46, ZAK 69 Pipe: d 63, 75, 90, 110, 125, 140, 160, 180, 225 mm
525-01G	HAKU pipe saddle with ZAK® outlet or gas	-	-	1 bar (only PVC)	Outlet: ZAK 46 Pipe: d 63, 75, 90, 110, 125, 140, 160, 180, 225 mm
526-00	HA-WELD® - Schweißschellen mit ZAK®-Abgang	16 bar	-	10 bar	Outlet: ZAK 46 Pipe: d 90, d 110, d 125, d 160, d 225 mm

ZAK®-System: Service Valves



 **253-00**
Service valve with ZAK® spigot end
and ZAK® socket



 **253-00G**
Service valve with ZAK® spigot end
and ZAK® socket or gas



 **253-01**
Service valve with ZAK® sockets



 **255-00**
Service valve with ZAK® socket
and flange



 **255-00G**
Service valve with ZAK® socket
and flange for gas



 **281-00**
Service valve with ZAK® spigot end
and push fit socket

Operating pressure max.

No:	Description				Dimension
253-00	Service valve with ZAK® spigot end and ZAK® socket	16 bar	-	-	ZAK 46, ZAK 69
253-00G	Service valve with ZAK® spigot end and ZAK® socket or gas	-	-	5 bar	ZAK 46
253-01	Service valve with ZAK® sockets	16 bar	-	-	ZAK 46, ZAK 69
255-00	Service valve with ZAK® socket and flange	16 bar	-	-	ZAK 46 Flange DN 40, DN 50
255-00G	Service valve with ZAK® socket and flange for gas	-	-	5 bar	ZAK 46 Flange DN 40, DN 50
281-00	Service valve with ZAK® spigot end and push fit socket	16 bar	-	-	ZAK 34, ZAK 46 d 25, 32, 40, 50, 63 mm

ZAK®-System: Service Valves / Fittings



 **312-00**
Angled service valve with
ZAK® spigot end and push-fit socket



 **312-01**
Angled service valve swivel type
with ZAK® spigot-end and ZAK® socket



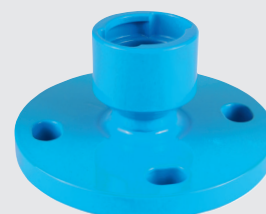
 **312-02**
Angled service valve swivel
type with ZAK® spigot and
ZAK® socket-end



 **483-01**
Service valve for sewage water
with ZAK® spigot end and
ZAK® socket



  **536-01**
Transition fitting BAIO®
spigot end / ZAK® socket



   **551-00**
Adaptor with flange and
ZAK® socket

No:	Description	Operating pressure max.			Dimension
					
312-00	Angled service valve with ZAK® spigot end and push-fit socket	16 bar	-	-	ZAK 34, ZAK 46 d 25, 32, 40, 50 mm
312-01	Angled service valve swivel type with ZAK® spigot-end and ZAK® socket	16 bar	-	-	ZAK 46
312-02	Angled service valve swivel type with ZAK® spigot and ZAK® socket-end	16 bar	-	-	ZAK 46
483-01	Service valve for sewage water with ZAK® spigot end and ZAK® socket	-	10 bar	-	ZAK 69
536-01	Transition fitting BAIO® spigot end / ZAK® socket	16 bar	16 bar	10 bar	ZAK 46, ZAK 69* DN 80
551-00	Adaptor with flange and ZAK® socket	16 bar	16 bar	10 bar	ZAK 46, ZAK 69* DN 40 - 80

* ZAK 69 not for gas

ZAK®-System: Fittings



616-00
Push-fit fitting with ZAK® spigot end



616-01
Push-fit fitting with detachable taper ring and ZAK® spigot end



616-02
Rehabilitation fitting with detachable taper ring and ZAK® spigot end



616-04
ZAK-Press-FIT®



616-05
ZAK-Press-FIT®, rehabilitation version



616-06
ZAK-Press-FIT® K

Operating pressure max.



No:

Description

Dimension

616-00

Push-fit fitting with ZAK® spigot end

16 bar

16 bar

-

ZAK 34, ZAK 46, ZAK 69
Pipe: d 25, 32, 40, 50, 63, 75 mm

616-01

Push-fit fitting with detachable taper ring and ZAK® spigot end

16 bar

16 bar

-

ZAK 46
Pipe: d 32, 40, 50 mm

616-02

Sanierungsfitting mit demontierbarem Konusring und ZAK®-Spitzende „Typ N“

16 bar

16 bar

-

ZAK 34, ZAK 46, ZAK 69
Pipe: d 32, 40, 50, 63 mm

616-04

ZAK-Press-FIT®

16 bar

-

-

ZAK 46
Pipe: d 32, 40, 50, 63 mm

616-05

ZAK-Press-FIT® rehabilitation version

16 bar

-

-

ZAK 46
Pipe: d 32, 40 mm

616-06

ZAK-Press-FIT® K

16 bar

-

-

ZAK 46
Pipe: d 32, 40, 50, 63 mm

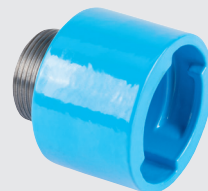
ZAK®-System: Fittings



618-00
ZAK® PE fusion end



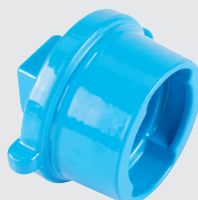
618-00G
ZAK® PE fusion end
for gas



618-01
Transition fitting with ZAK®
socket
and male thread



618-02
Adaptor ZAK® socket /
screw socket



618-03
ZAK® end cap



618-04
Transition fitting ZAK® (ZAK 46)
to male thread

Operating pressure max.

No:	Description				Dimension
618-00	ZAK® PE fusion end	16 bar	16 bar	-	ZAK 34, ZAK 46, ZAK 69 Pipe: d 32, 40, 50, 63 mm
618-00G	ZAK® PE fusion end for gas	-	-	10 bar	ZAK 34, ZAK 46 Pipe: d 32, d 40, d 50, d 63
618-01	Transition fitting with ZAK® socket and male thread	16 bar	16 bar	10 bar	ZAK 34, ZAK 46, ZAK 69* M: 1", 1 1/4", 1 1/2", 2", 3"
618-02	Adaptor ZAK® socket / screw socket	16 bar	16 bar	-	ZAK 34, ZAK 46 DN 40 - DN 50
618-03	ZAK® end cap	16 bar	16 bar	5 bar	ZAK 46, ZAK 69*
618-04	Transition fitting ZAK® (ZAK 46) to male thread	16 bar	-	-	ZAK 46 M: 1", 1 1/4"

* ZAK 69 not for gas

ZAK®-System: Fittings



 **618-05**
Transition fitting with ZAK®
spigot-end and female thread



 **626-00**
Transition fitting with
ZAK® socket



 **630-00**
Connector (S-fitting, short) with
two ZAK® spigot ends



 **630-01**
Connector (S-fitting) with
two ZAK® spigot ends



 **630-01G**
Connector (S-fitting) with
two ZAK® spigot ends for gas



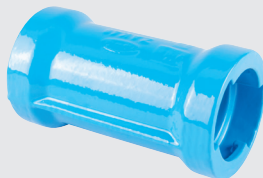
 **630-02**
Connector (S-fitting,
rotating-type)
with two ZAK® spigot ends

No:	Description	Operating pressure max.			Dimension
					
618-05	Transition fitting with ZAK® spigot-end and female thread	16 bar	16 bar	-	ZAK 46 F: 1 1/4", 1 1/2"
626-00	Transition fitting with ZAK® socket	16 bar	16 bar	-	ZAK 69 d 75
630-00	Connector (S-fitting, short) with two ZAK® spigot ends	16 bar	16 bar	-	ZAK 46, ZAK 69
630-01	Connector (S-fitting) with two ZAK® spigot ends	16 bar	16 bar	-	ZAK 46
630-01G	Connector (S-fitting) with two ZAK® spigot ends for gas	-	-	10 bar	ZAK 46
630-02	Connector (S-fitting, rotating-type) with two ZAK® spigot ends	16 bar	16 bar	-	ZAK 46

ZAK®-System: Fittings



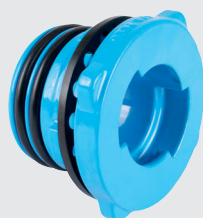
630-02G
Connector (S-fitting,
rotating-type)
with two ZAK® spigot ends for gas



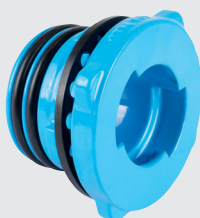
630-03
Transition piece with two
ZAK® sockets



630-04
Rotatable junction with ZAK®
spigot end/ socket



630-05
Reduction fitting with ZAK®
spigot end and ZAK® socket,
reduced



630-05G
Reduction fitting with ZAK®
spigot end and ZAK® socket,
reduced for gas



630-08
Transition from ZAK® spigot end
to ZAK® socket

Operating pressure max.



No:	Description				Dimension
630-02G	Connector (S-fitting, rotating-type) with two ZAK® spigot ends for gas	-	-	10 bar	ZAK 46
630-03	Transition piece with two ZAK® sockets	16 bar	16 bar	10 bar	ZAK 46, ZAK 69*
630-04	Rotatable junction with ZAK® spigot end/ socket	16 bar	16 bar	-	ZAK 46
630-05	Reduction fitting with ZAK® spigot end and ZAK® socket, reduced	16 bar	16 bar	-	ZAK 34, ZAK 46, ZAK 69
630-05G	Reduction fitting with ZAK® spigot end and ZAK® socket, reduced for gas	-	-	10 bar	ZAK 34, ZAK 46
630-08	Transition from ZAK® spigot end to ZAK® socket	16 bar	-	-	ZAK 34, ZAK 46

* ZAK 69 not for gas

ZAK®-System: Fittings



637-00
Transition fitting DCI pipe /
ZAK® socket



646-00
Rotating push-fit fitting 90° with
ZAK® spigot end and ZAK® socket



646-01
Rotating push-fit elbow 90°
with ZAK® spigot end



646-02
Rotating push-fit elbow 90°
with detachable taper ring and
ZAK® spigot end



647-00
Elbow 90° with ZAK® spigot end
and ZAK® socket



647-00G
Elbow 90° with ZAK® spigot end
and ZAK® socket for gas

No:	Description	Operating pressure max.			Dimension
637-00	Transition fitting DCI pipe / ZAK® socket	16 bar	16 bar	-	ZAK 46 DN 40
646-00	Rotating push-fit fitting 90° with ZAK® spigot end and ZAK® socket	16 bar	16 bar	-	ZAK 46
646-01	Rotating push-fit elbow 90° with ZAK® spigot end	16 bar	16 bar	-	ZAK 34, ZAK 46 Pipe: d 25, 32, 40, 50, 63 mm
646-02	Rotating push-fit elbow 90° with detachable taper ring and ZAK® spigot end	16 bar	16 bar	-	ZAK 34, ZAK 46 Pipe: d 32, 40, 50 mm
647-00	Elbow 90° with ZAK® spigot end and ZAK® socket	16 bar	16 bar	-	ZAK 46
647-00G	Elbow 90° with ZAK® spigot end and ZAK® socket for gas	-	-	10 bar	ZAK 46

ZAK®-System: Fittings



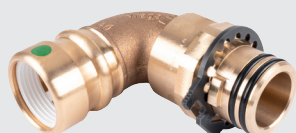
647-01
Elbow 90° with ZAK® spigot end
and push-fit socket



647-04
Elbow 90° with ZAK® spigot end
and PE fusion end



647-04G
Elbow 90° with ZAK® spigot end
and PE fusion end for gas



647-05
ZAK-Press-Fit®, elbow 90° with
swivel-type outlet



647-06
ZAK-Press-Fit® K
elbow 90° swivel-type outlet



649-00
Elbow 45° with ZAK® spigot end
and push-fit socket

Operating pressure max.

No:	Description				Dimension
647-01	Elbow 90° with ZAK® spigot end and push-fit socket	16 bar	16 bar	-	ZAK 34, ZAK 46 Pipe: d 25, 32, 40, 50, 63 mm ZAK 69 Rohr: d 50, 63 mm
647-04	Elbow 90° with ZAK® spigot end and PE fusion end	16 bar	16 bar	-	ZAK 34, ZAK 46 Pipe: d 32, 40, 50, 63 mm
647-04G	Elbow 90° with ZAK® spigot end and PE fusion end for gas	-	-	10 bar	ZAK 34, ZAK 46 Pipe: d 32, 40, 50, 63 mm
647-05	ZAK-Press-Fit®, elbow 90° with swivel-type outlet	16 bar	-	-	ZAK 46 Pipe: d 32, 40, 50, 63 mm
647-06	ZAK-Press-Fit® K elbow 90° swivel-type outlet	16 bar	-	-	ZAK 46 Pipe: d 32, 40, 50, 63 mm
649-00	Elbow 45° with ZAK® spigot end and push-fit socket	16 bar	16 bar	-	ZAK 69 Pipe: d 50, 63 mm

ZAK®-System: Fittings



649-01
Rotating push-fit elbow 45° with
ZAK® spigot end



651-00
Tee branch fitting with ZAK®
sockets at all ends



651-01
Tee branch fitting with
ZAK® sockets and
ZAK® spigot end



651-01G
Tee branch fitting with
ZAK® sockets and
ZAK® spigot end for gas



651-02
ZAK TT piece 46/46



651-03
Connector with ZAK® outlet
(ZAK 69), 45°

No:	Description	Operating pressure max.			Dimension
649-01	Rotating push-fit elbow 45° with ZAK® spigot end	16 bar	16 bar	-	ZAK 46 Pipe: d 32, 40, 50 mm
651-00	Tee branch fitting with ZAK® sockets at all ends	16 bar	16 bar	10 bar	ZAK 46, ZAK 69*
651-01	Tee branch fitting with ZAK® sockets and ZAK® spigot end	16 bar	16 bar	-	ZAK 46, ZAK 69
651-01G	Tee branch fitting with ZAK® sockets and ZAK® spigot end for gas	-	-	10 bar	ZAK 46
651-02	ZAK TT piece 46/46	16 bar	16 bar	10 bar	ZAK 46
651-03	Connector with ZAK® outlet (ZAK 69), 45°	16 bar	16 bar	-	ZAK 69 d 63 mm

* ZAK 69 not for gas

ZAK®-System: Fittings and Accessories



740-01
Synoflex Transition piece to
ZAK®-System



859-00
Wafer type tee piece with
ZAK® outlets

Operating pressure max.



No:	Description	Operating pressure max.			Dimension
740-01	Synoflex Transition piece to ZAK®-System	16 bar	16 bar	-	ZAK 46 Pipe: d 46 - 58, d 56 - 71 mm ZAK 69 Pipe: d 56 - 71 mm
859-00	Wafer type tee piece with ZAK® outlets	10/16 bar	-	-	Outlet: ZAK 46, ZAK 69 Pipe: DN 50 - DN 400

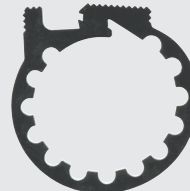
ZAK®-System: Accessories



249-00
ZAK® plug



249-00G
ZAK® plug for gas



616-03
Locking ring for ZAK® sockets

No:	Description	Operating pressure max.			Dimension
249-00	ZAK® plug	16 bar	16 bar	-	ZAK 34, ZAK 46, ZAK 69
249-00G	ZAK® plug for gas	-	-	10 bar	ZAK 34, ZAK 46
616-03	Locking ring for ZAK® sockets	-	-	-	ZAK 34, ZAK 46, ZAK 69

Hawle App



Hawle App

The new Hawle app unites the analogue and digital worlds. The Hawle app is the digital alternative to printed brochures, catalogues and price lists. Thanks to the new Hawle app, you can access all the latest materials on our extensive product portfolio quickly and easily. The content offered can be used both online and offline, allowing information to be retrieved even in the deepest dead zones. The Hawle app provides you with quick access to the „Hawle media library“, the „Hawle product catalogue“, „digital calipers“ and the „Hawle customer portal“, making it easier to locate interactive content and digital services. You will find all the latest videos on our products in our integrated Hawle media library.

Using the integrated QR code and EAN code scanner, you can now retrieve product information even faster and more accurately. What is more, all the information channels from the Hawle website and the Hawle social media channels are bundled together on the start screen of the app. This means you will always have the most important company news and information on our latest products at your fingertips. The integrated push notifications inform you of any updates to documents in real time. You can find more information on www.hawle.de/app



BIM daten and Hawle CAD

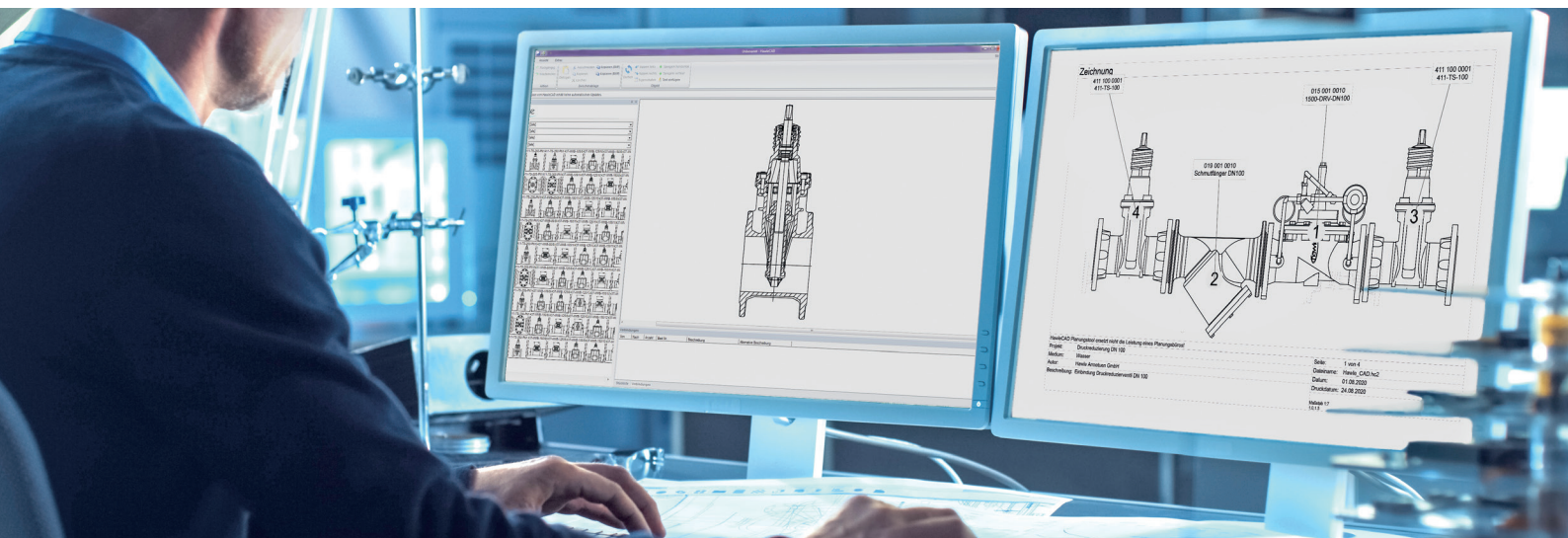
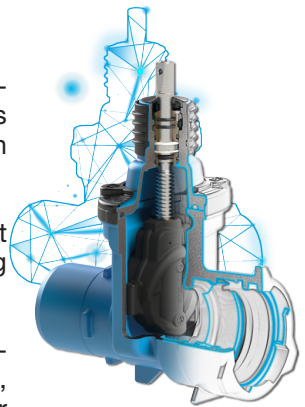
BIM data from Hawle

As a manufacturer of heavy-duty fittings, we would like to support you in the effective and time-saving planning of your construction projects. For this reason, we have prepared the Hawle products from our standard range „digitally“ for you. You can download our digital product data in more than 150 different file formats.

In addition to the digital geometry data, our digital product data also contains additional relevant information on the individual components, such as materials used, areas of application, operating pressures, etc.

With the BIM plugin, you can integrate our digital product data directly into your planning programme. The BIM plugin was developed for all common planning programmes such as ALLPLAN, Archicad, AutoCAD, Revit, BricsCAD, SketchUp (continuous expansion of the programmes). After installing the plugin, all Hawle BIM assemblies are available to you directly in your installed planning programme. You can quickly and easily add the desired products to your project from the library of your planning programme using drag and drop.

Do you have any questions about our BIM data? Please send us a message to bim@hawle.de
You can find more information at www.hawle.de/bim



Hawle CAD

- Planning of valve sequences or nodes with parts list output (incl. matching accessories)
- Extensive expansion of various product groups (e.g. BAIO® system, ZAK® system, flange connections, control valve and much more)
- Data export in DXF format and transfer to various planning programmes possible (e.g. AutoCAD, etc.)
- Generation and direct sending of enquiries based on drawings and parts lists possible



You can download the Hawle CAD free of charge here: www.hawle.de/cad



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