



Hawle Synoflex
Multi-range sockets fittings

Explanatory notes on the brochure

General media information in the product descriptions may apply subject to certain restrictions. Kindly always state the relevant medium in your given application when you place an order or submit a query.

If you have any further questions about our products, please do not hesitate to contact our employees of the application engineering division at any time.



Products for use in connection with potable water



Products for use in municipal sewage treatment (www.hawle.de/grenzwerte-abwasser)



In general, products sold by us are subject to the statutory warranty period of 2 years from the date of delivery at Hawle. Due to the high quality of Hawle products, we are able to offer you an extended warranty of 5 years for products manufactured by us. For more details, please see our website at: www.hawle.de/en/warranty-extension/



Information on our “10-year quality guarantee” for Hawle potable water products are available at the following link: www.hawle.de/en/10-years-quality-warranty/

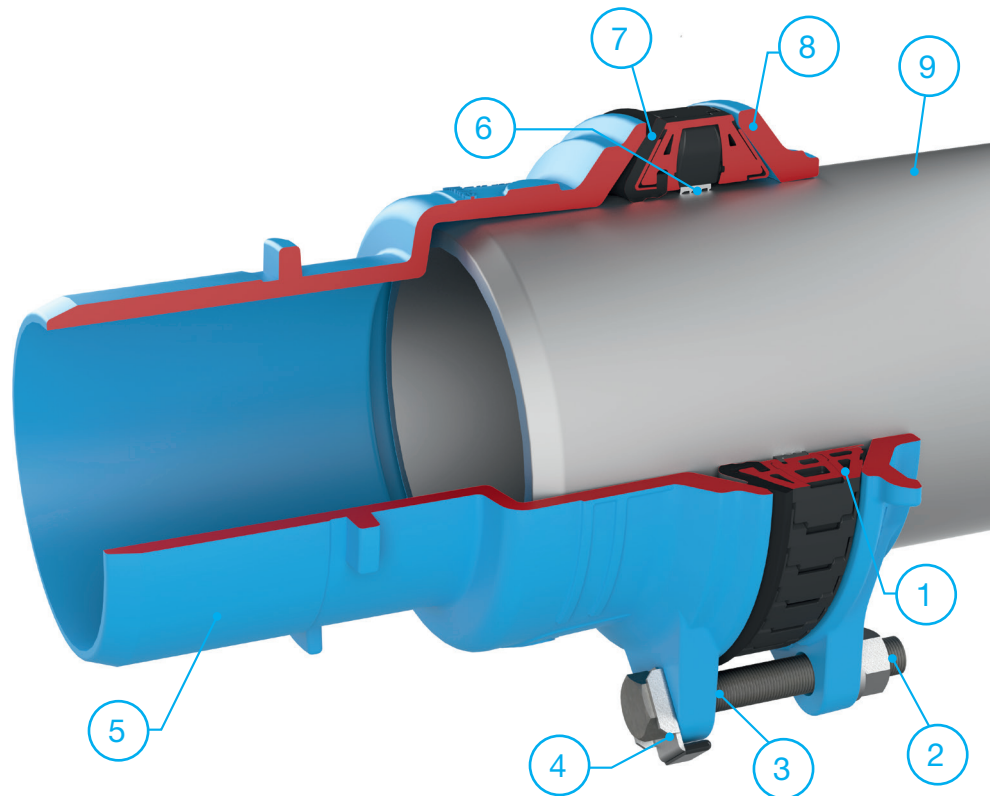


For current information, please see our Hawle app. Further information is available at www.hawle.de/en/downloads/hawle-app/hawle-app/

Structure of Hawle Synoflex

Hawle Synoflex is suitable for establishing tensile restraint connections with all commercially available pipe types used for water supply. Various pipes (steel, cast iron PE, PVC, asbestos cement) can be joined with corrosion protection using the patented Synoflex system. No tensile restraint is created when connecting asbestos cement

pipes; however, it is not necessary to remove the clamping elements. The Synoflex ring adapts to any pipe simply by pressing the quick-clamp lugs. In addition, Synoflex can accommodate an angle compensation of 8° (+/- 4° per socket) max.



No.	Short designation	Material
1	Synoflex ring	POM
2	Bolts and nuts	Stainless steel, molybdenum disulfide
3	Spacer sleeves	POM
4	Bolt head anti-twist protection	Stainless steel, with elastomer protective caps
5	Body (example: Synoflex transition to BAIO® system 532-03)	GJS-400, Hawle epoxy powder coating
6	Clamping elements	Steel, corrosion-resistant
7	Gasket	EPDM according to KTW-BWGL for water (evaluation criteria for products and materials in contact with potable water)
8	Clamping ring	GJS-400, Hawle epoxy powder coating
9	Pipe	Steel (example)

Features of Hawle Synoflex

Adaptable

- Suitable for cast iron, steel, PE, PVC and asbestos cement pipes
- Tensile restraint on pipes made of cast iron, steel, PE and PVC
- When connecting PE pipes, always use support liners.
- Caution: No tensile restraint is created when connecting AC pipes - no need to remove the clamping elements. For tensile restraint, a conventional concrete abutment must be established.
- Synoflex can accommodate an angle compensation of 8° (+/- 4° per socket) max.
- Clamping elements become anchored in the pipe without weakening it and guarantee high pressures.
- The elastomer sealing fits snugly against the pipe and seals reliably.
- The Synoflex product range is suitable for numerous installation situations. This saves storage capacity and costs.
- Operating temperature: 0 - 40°C

Easy to install

- The fold-out Synoflex ring immediately adapts to the pipe in question by simply pressing the quick-clamp lugs together, while the loose nuts can be quickly adjusted.
- The bolt head anti-twist protections allow for tightening the screws with one hand only.
- In case of unfavorable construction conditions, screws, including bolt head anti-twist protections, can be removed and turned by 180 degree. This means that installation using a torque wrench is always possible.
- Bolted connections are coated with molybdenum disulfide to prevent friction between nuts and bolts.
- The clamping elements are firmly anchored in the Synoflex ring and are held securely in place even when the pipe is pushed in or pulled out.
- Hawle Synoflex can be dismantled and reused again - we recommend replacing bolts and nuts. If the Synoflex ring is damaged, replace the ring.

Durable

- Body and clamping ring are made of high-quality ductile cast iron GJS-400.
- Hawle epoxy powder coating according to heavy-duty corrosion protection (GSK) ensures durable corrosion protection.
- Bolts, nuts, flat washers and anti-twist protections are made of high-quality stainless steel.
- Hawle Synoflex is maintenance-free and designed for a long service life.

Please also note the operating and maintenance instructions for Hawle Synoflex at www.hawle.de.

Note



When connecting PE pipes, always use support liners, e.g., 590-00 support liner made of stainless steel or steel coated for PE pipes.

Details of Hawle Synoflex

Technical data

Medium:	Potable water, sewage
Max. operating pressure:	DN 40 - DN 300: 16 bar DN 350 - DN 400: 10 bar DN 450 - DN 600: 16 bar
Nominal diameters:	DN 40 - DN 600
Standard/Testing base:	DIN EN 14525
Connecting types:	Flange - socket, same nominal width and reduced (740-00/740-02) Socket - socket, same nominal width and reduced (741-00/741-02) Socket - System 2000 (741-01) Socket - end cap (742-00) Socket - BAIO® spigot end (530-03/532-03) Socket - ZAK® socket (740-01)
Tensile restraint connection:	Cast iron pipe steel pipe PE pipe (always use a support liner) PVC pipe
No tensile restraint connection:	Asbestos cement pipe (concrete abutment)
Angle compensation:	8° (+/- 4° per socket) max.

Connector - Synoflex DN 150 PE / AC *



* Note: When connecting PE pipes, always use support liners; no restraint connection with AC pipes.

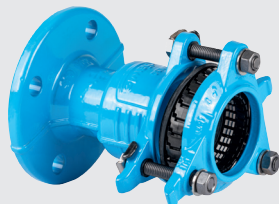
Adjustment range of the Hawle Synoflex socket

DN	PN	Maximum operating pressure	Adjustment range Synoflex socket (mm)
40	16	16 bar	d 46 - 58
50	16	16 bar	d 56 - 71
65	16	16 bar	d 71 - 88
80	16	16 bar	d 85 - 105
100	16	16 bar	d 104 - 132
125	16	16 bar	d 131 - 160
150	16	16 bar	d 155 - 192
200	16	16 bar	d 198 - 230
225	16	16 bar	d 230 - 260
250	16	16 bar	d 265 - 310
300	16	16 bar	d 313 - 356
350	10	10 bar	d 352 - 396
400	10	10 bar	d 398 - 442
450	16	16 bar	d 448 - 485
500	16	16 bar	d 498 - 535
600	16	16 bar	d 602 - 640

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740-00
EU-fitting - Synoflex



740-02
Reducer, EU-fitting - Synoflex





741-00
Connector - Synoflex



No.	Description	Maximum operating pressure		Nominal diameter
				
740-00	EU-fitting - Synoflex (flanged socket)	10/16 bar	10/16 bar	DN 50/50 - DN 600/600
740-02	Reducer, EU-fitting - Synoflex (flanged socket)	10/16 bar	10/16 bar	DN 80/65 - DN 250/200
741-00	Connector - Synoflex	10/16 bar	10/16 bar	DN 40/40 - DN 600/600

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 741-01
 Connector - Synoflex/System 2000



 741-02
 Reducer, connector - Synoflex



 742-00
 End cap - Synoflex

Maximum operating pressure





Nominal diameter


No.	Description			Nominal diameter
741-01	Connector - Synoflex/System 2000	10/16 bar	10/16 bar	DN 80/d90 - DN 400/d400
741-02	Reducer, connector - Synoflex	16 bar	16 bar	DN 80/65 - DN 300/250
742-00	End cap - Synoflex	10/16 bar	10/16 bar	DN 50 - DN 400 with female thread 2"



Hawle Synoflex transition pieces to BAIO[®] and ZAK[®]



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

 **532-03**
 Synoflex transition piece to BAIO[®] system (SM-fitting)

 **740-01**
 Synoflex transition piece to ZAK[®] system

No.	Description	Maximum operating pressure		Nominal diameter
				
530-03	Cut-in socket fitting with BAIO [®] spigot end and Synoflex socket	16 bar	16 bar	DN 200 - 300
532-03	Synoflex transition piece to BAIO [®] system (SM-fitting)	16 bar	16 bar	DN 80 - 300
740-01	Synoflex transition piece to ZAK [®] system	16 bar	16 bar	ZAK 46/DN 40, ZAK 46/DN 50, ZAK 69/DN 50

End cap - Synoflex DN 100 PE*



* Note: When connecting PE pipes, always use support liners.

Installation examples of Hawle Synoflex

Connector - Synoflex DN 400 PE / AC *



* Note: When connecting PE pipes, always use support liners; no restraint connection with AC pipes.

Connector - Synoflex DN 250 cast iron



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We deliver based on our familiar General Terms and Conditions of Sale (GTC), which are available for downloading.
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