

Prismafilter

Geavanceerde luchtwassers voor
industriële- & agrarische
bedrijven



SDP piping system

The flexible pipe system with push-fit connections for cold and hot (potable) water

Bezoek adres

Van Reedestraat 14a
7131 BE Lichtenvoorde

 Tel.: +31(0)544 379084

 www.prismafilter.nl

 info@prismafilter.nl

Smart push-fit fitting stands for security

The SDP pipe system excels with a more than complete range. The basic dimensions are \varnothing 15, 16, 20, 22, 25, 28, 32, 40 and 50 mm. As a result, the system can be used to transport hot and cold drinking water in both residential and non-residential construction. The polybutene pipes are available in rolls and lengths. Dismountable push-in fittings give you a free hand when expanding your installation, expansion of your installation.

The unique cable gland lock is an additional safety factor, as it ensures that the glands cannot vibrate loose and makes the threshold for 'unwanted' dismantling higher. The core of the plug-in fitting is the gripping ring. This is the ring that must 'hold' the inserted pipe at all times. The robust SDP grip ring is made of stainless steel, which gives a familiar and safe feeling. Cut off the tube, insert the support bush, insert the tube insert, push through and your reliable connection is ready!



Polybutene, for a durable installation

SDP pipes and fittings are made of polybutene (pb). A durable raw material for working with high temperatures and high pressure. Pb is distinguished by a high degree of flexibility, even at lower temperatures.

In addition, PB has many other strong properties, such as high impact resistance, corrosion-free and low heat and noise transmission (water hammer). (water hammer). Moreover, in addition to the fact that the fittings are demountable, polybutylene is fully recyclable, SDP also fits into your DUBO specification.

The SDP system is designed and tested for a minimum life expectancy of 50 years.



A professional system yet smoothly and reliably assembled

SDP knows your requirements: professional installation must be efficient but good. With the SDP flexible pipe system, you can achieve remarkable time savings without sacrificing reliability and quality.

You do not need special tools (apart from a pipe cutter) or electricity. Depending on the diameter and type of fitting, you make a reliable connection in 10 to 15 seconds. The optimum flexibility and light weight of the material also benefit the pace in the workplace. And, working from the roll, there is hardly any cutting loss. SDP gives a 10-year system guarantee and has the KIWA quality mark for the Dutch market. In short: SDP is the system for the professional installer.

SDP rolls off the roll nicely

Working with SDP off the roll is very easy. Thanks to the high degree of flexibility of the raw material polybutene and fabrication according to the 'straight coiling' principle, the tube comes off the inside of the roll packaging, when unrolling the tube not like a spiral behind you, but stays relatively flat. This saves you frustration, metres and time!



SDP combined with copper

SDP fittings can also be applied in combination with copper pipe. Think of renovations, but also transitions on sight work. With the SDP flexible pipe system, you have all the freedom to install as you wish.



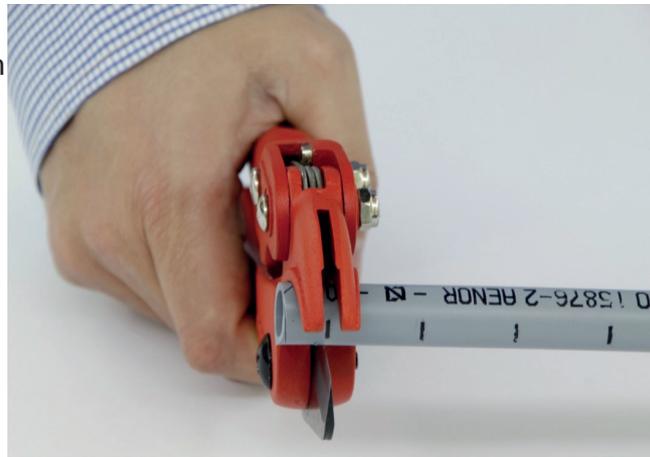
Assembly instruction:

How to assemble the SDP piping system is illustrated on the following pages. On our website you will find an instruction video.

The push-fit connection from SDP

->

Cut the pipe to size with the pipe cutter. Use the insert depth markings on the pipe.

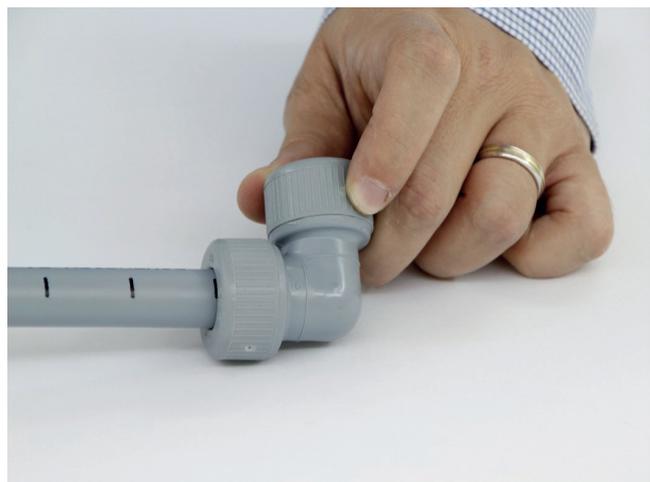


Insert the support sleeve. Always insert a support bushing into the pipe before fitting the fitting.



Insert the tube into the fitting.

Push the tube well through to the bumper in the fitting. A reliable fitting is made if the following marking mark is visible just outside the swivel (see image below).



WRONG



GOOD



SDP piping system

Smart, Durable and Professional: this is how you want to install a piping system. With the SDP flexible pipe system, you can save remarkable time without compromising on reliability and quality. The pipes are available in rolls and lengths. Removable push-in fittings give you a free hand when expanding your installation.

SDP pipes and fittings are made of polybutene (pb). This is a durable raw material for working with high temperatures and high pressure. Pb is distinguished by a high degree of flexibility, even at lower temperatures.



The SDP push-fit push-in fittings are completely pre-assembled and ready for use. There is no need to loosen the glands before inserting the pipe and, provided the fitting is left unopened after inserting the pipe, there is also no need to tighten the glands. A unique swivel lock makes unwanted dismantling more difficult and also prevents the swivel from vibrating loose. The push-fit couplings do not deform the pipe like press and clamp connections, thus ensuring a durable connection.

Features:

- No corrosion from hard or soft water
- No limescale or scale deposits
- Fittings with large flow capacity (less pressure loss than with e.g. press fittings)
- Fully plastic: no risk of collapse in concrete
- Low heat and noise transmission
- High temperature and pressure resistance
- Pipe is highly flexible and fully recyclable
- 10-year system guarantee; 50-year service life expectancy
- KIWA quality mark for cold and hot drinking water



Installation benefits:

- Ready-made push-fit fittings: insert, push through, done; no special tools required
- Lightweight, less than a quarter of the weight of a copper pipe
- Ideal for hard-to-reach places
- High impact resistance
- No annoying spirals when unrolling
- Low material loss and fewer fittings needed because of working from the roll
- Fittings are ready for assembly
- Assembled fittings can always be twisted
- No special tools, only a pipe cutter is needed (no gas burners or electricity at the workplace)
- Can be combined with traditional systems
- Suitable for prefab, new build and renovation

Mechanical properties

Product strength:

Resistant to working pressure:

- cold water: 20 °C - 1,20 MPa
- hot water: 70 °C - 1,00 MPa
90 °C - 0,60 MPa

Material strength and bond strength:

Diameter	Maximum tensile strength system pipe	Tested tensile strength joining
15 x 1,7 mm	705 N	81 kg
22 x 2,0 mm	1190 N	170 kg
28 x 2,5 mm	1960 N	258 kg

Bending radius:

The radius of SDP pipes from the roll is 8x the respective outside pipe diameter. The radius of produced pb pipes on lengths is 10x (up to 25 mm) or 15x (from 28 mm) the pipe diameter

Resistance:

Resistant to corrosion by hard or soft water; no scale or limestone deposits; resistant to a wide range of chemicals (for short periods of time).

Resistance list available.



Thermal properties

Expansion and thermal conductivity:

Linear coefficient of expansion:

0.13 mm per metre per degree °C. Coefficient of thermal conductivity: 0.22 W/(m.K)

Operating temperature: Maximum operating temperature: 95 °C

Maximum operating pressure at 95 °C: 0.35 MPa

Failure temperature:

100 °C

DH factor SDP polybutylene tubes:

Type of tube: PB mature tubes

DH factor non-insulated:

Surface mounted: 1.25 (ø 15) - 1.20 (ø 22)

Recessed: 1.25 (ø 15) - 1.20 (ø 22)

Comparison with other plastic systems:

Properties	Units	Pb (push-fit)	PP-R (welding)	PEX (push-fit)	ALU-PEX (multi-layer) (pressing)	Notes on the SDP pipe system (pb, push-fit)
Use of tools and electricity	Yes/no	No	Yes	No	Yes	Optimal freedom in the workplace
Coefficient of thermal expansion	mm/mK	0,13	0,18	0,2	0,026	Expansion absorbed by pipe flexibility
Flexibility of the pipe	Flexibility	Very flexible	Rigid	Slightly-flexible	Flexible-star	Also at low temperatures
Pressure loss in the fitting	mbar	Low	Medium	Medium	High	Thanks to sealing on the outside of the pipe
Pressure loss in a ø 25 mm bd with a flow rate of 0.8 l/s	Mbar/m	31,1 (25x2,3/S5)	56,7 (25x3,5/S3,2) 83,7 (25x4,2/S2,5)	56,7 (25x3,5/S3,2)	34,2 (25x2,5)	Polybutene is very strong, giving it a relatively small wall thickness and a large inside diameter.
Possibility of re-using the fitting	Yes/no	Yes	No	Yes, with tools	No	Durable and possibility of repair or extension
Thermal conductivity	w/mk	0,22	0,24	0,41	0,43	Outside of pipe becomes less hot/cold. Less rapid condensation.
Heat loss of the pipe	w/m	Low	High	Medium	High	Lower insulation thickness required
Sound conduction	m/s	620	1200	800	Unknown	No water hammer
Recyclable	Yes/no	Yes	Yes	Not possible	Difficult	Fits perfectly into a DUBO specification
Elasticity	n/mm ²	350	800	600	7000	Significant efficiency benefits achievable with high flexibility pb pipe
Long-term behaviour (residual breaking strength after 50 years at 70 °C)	N/mm ²	7,61	3,24	Unknown	No standard test	Pb retains its strength and temperature resistance even in the long term.



Decades of experience

Nueva Terrain, the manufacturer of SDP, has decades of experience in the production of pb systems and is the market leader in Spain in the field of drinking water pipe manufacturers. Also in the Netherlands, SDP has been used for decades to full satisfaction in use.

Quality marks

The range of pipes and fittings meets all strict requirements a the latest guidelines from KIWA regarding drinking water. Besides the KIWA quality mark and several national quality marks, it also has the DNV certificate for use in shipbuilding.

Guarantees

The SDP piping system is designed for and minimum life expectancy of 50 years. Extensive laboratory tests - and more importantly - the now wide and many years of practical experience underpin the (ample) feasibility of this high target number. When used and applied according to the installation instructions, the manufacturer Nueva Terrain gives a 10-year system guarantee on the SDP piping system.

