THERMAFLEX ®

Technical Data Sheet

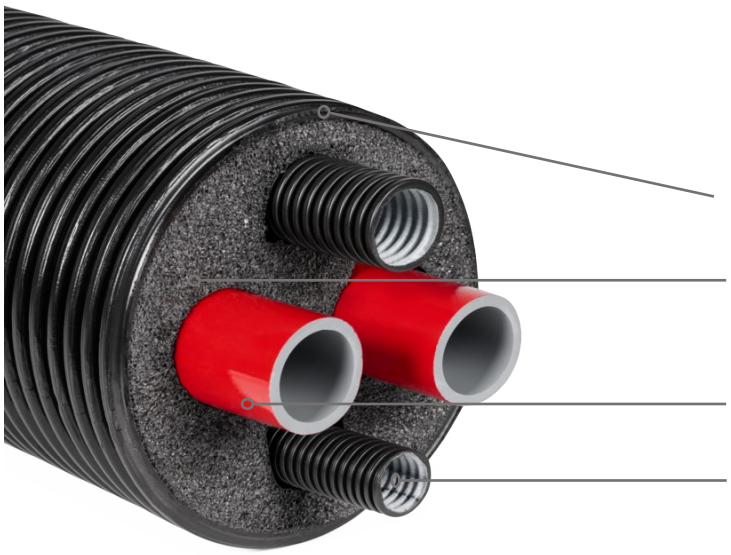
Flexalen® 600 HP

Pre-insulated piping system by Thermaflex®

Extremely flexible heat pump connection set

Benefits

- Extreme flexible for Fast and easy installation, Ideal for connecting Mono-block heat pumps.
- Highest pressure rating 95°C/8bar.
- The corrugated casing pipe, polyolefin foam and polybutylene service pipe are recyclable and Cradle to Cradle Certified® under the label of Flexalen® 600.
- Easy installation and fully compatible with mechanical fittings.



Design Flexalen® 600 HP

Corrugated PE Casing pipe
Flexibility and mechanical protection

Homogenous foamed Polyolefin foam
Closed-cell, CFC-free

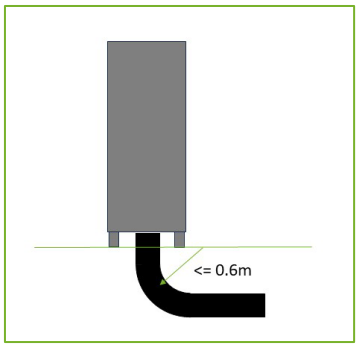
Polybutene service pipe, PB-H
With oxygen barrier

Corrugated Conduit pipe, Polyolefin
Easy insertion of cables

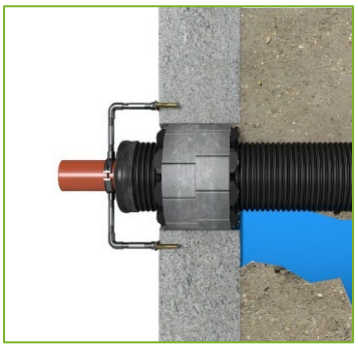
Applications

- Mono-block heat pump connection
- Connection of adjacent buildings

Disclaimer
All recommendations and information provided on this data sheet are based on our knowledge and experience. Product specifications are intended as guidelines. Since conditions of service are beyond our control, users must satisfy themselves that products are suitable for the intended use. No guarantee or warranty is given or implied or that any use of the products will not infringe rights belonging to other parties. We reserve the right to change product design and properties without notification.



Smallest bending radius max. 0.6m



One wall entry

Technical Properties Flexalen® 600

Flexalen® 600 is a pre-insulated flexible plastic pipe system produced conform the European standard EN15632-1,3 and KIWA system certified as well as third-party controlled according BRL KOMO 5609-2.

Flexalen® PB service pipe (EN-ISO 15876)	
Max. service temperature	95°C
Continuous operating temperature	80°C
Max. operating pressure	8bar (95°C)

Thermal Insulation
Polyolefin foam
Closed-cell structure, CFC-free

Conduit
Polyolefin material
Corrugated

Flexalen® 600 Warm losses*

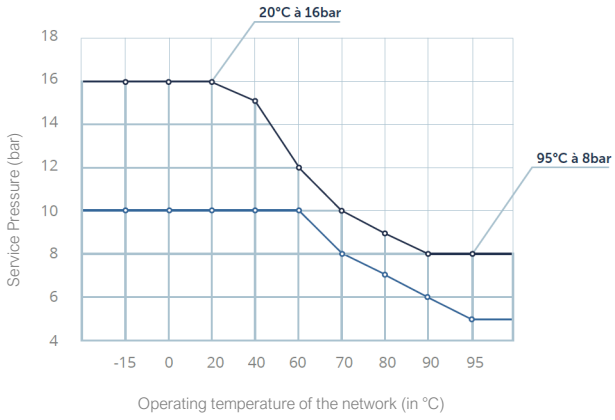
Warm loss q [W/m]							
Flexalen® 600 Double line	Average operating temperature T [°C]						
	20°C	30°C	40°C	50°C	60°C	70°C	80°C
32 + 32 / 125	3.11	6.23	9.34	12.45	15.57	18.68	21.79
40 + 40 / 160	2.81	5.61	8.42	11.22	14.03	16.83	19.64
50 + 50 / 160	3.72	7.44	11.15	14.87	18.59	22.31	26.03

Calculation parameter:

λ_{Soil}:	1.00 W/m·K
R soil surface to ambient air:	0.0685 m^2·K/W
T_{Soil}:	10.0 °C
Soil covering:	0.8 m

The warm loss characteristics are in accordance with the European standard for flexible heating pipes systems EN15632.

Flexalen® 600 Pressure rating



Up to OD110 20°C/16 bar 95°C/8 bar
≥OD125 20°C/10 bar 95°C/5 bar

Availability

Available as connection sets and by the meter

Set Content

Flexalen® 600 HP double pipe with conduits

4x compression fitting SDR11 male thread

2x end caps for quattro pipe

1x trace warning tape, 100m roll

Flexalen® 600 HP					Packaging		Product code
Service pipe OD x s [mm]	Conduit OD [mm]	Casing pipe OD [mm]	Min. bending radius [m]	Length [m] [1]	Dimensions [cm]	Weight [kg]	
2x 32/3.0	25 + 25	125	0.5	5	145 x 145 x 35	20,01	1143-125001-004
				10	145 x 145 x 35	29,96	1143-125002-004
				15	145 x 145 x 50	40,79	1143-125003-004
				20	145 x 145 x 50	50,74	1143-125004-004
2x 40/3.7	32 + 25	160	0.6	5	145 x 145 x 35	26,09	1143-160001-004
				10	145 x 145 x 35	41,31	1143-160002-004
				15	145 x 145 x 50	55,65	1143-160003-004
				20	145 x 145 x 50	61,27	1143-160004-004
2x 50/4.6	32 + 25	160	0.6	5	145 x 145 x 35	30,94	1143-160051-004
				10	145 x 145 x 50	47,76	1143-160052-004
				15	145 x 145 x 50	64,58	1143-160053-004
				20	- [2]	72,68	1143-160054-004

[1] Fixed length, other lengths available on request. Also available without carton as a pipe coil and attached accessories.
[2] Delivered on coil, without cardboard box.

By the meter

Product Code	Dimension	Service pipes OD x e [mm]	Service Pipes [DN]	Service pipes [inch]	Conduit 1	Conduit 2	Casing pipe OD [mm]	Weight [kg/m]	Smallest bending radius [m]	Coil I.D. max. [m]	Coil Width max. [m]	Coil Length max. [m]	Coil O.D. max. [m]
1140-125032-004	32 + 32 / 125	32 x 2.9	25	1"	25	25	125	2,00	0,50	1,50	1,2	300	2,9
1140-160040-004	40 + 40 / 160	40 x 3.7	32	1¼"	32	25	160	2,60	0,60	1,50	1,2	150	2,9
1140-160050-004	50 + 50 / 160	50 x 4.6	40	1½"	32	25	160	3,10	0,60	1,50	1,2	150	2,9

Accessories

Compression fitting system

End caps

Wall entries / Annular space sealing

House entry bend

Clamps (recommended)

Warning tape

Full range of accessories and tools