

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
- Safest choice with homogeneous welding or best performing compression fittings system
- Thermaflex service: Support with integrated network design, calculation tools, training and on-site support



Design Flexalen® 600 HP

Corrugated PE Casing pipeFlexibility and mechanical protection

Homogenous foamed Polyolefin foam

Closed-cell, CFC-free

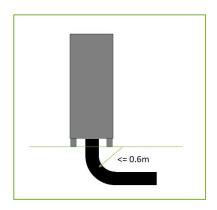
Polybutene service pipe, PB-H With oxygen barrier

Corrugated Conduit pipe, Polyolefin Easy insertion of cables

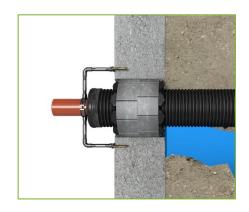
Applications

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





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 Heat losses*

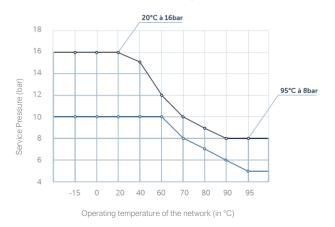
Heat loss q [W/m]										
Flexalen®	Average operating temperature T [°C]									
Double line	20°C	30°C	40°C	50°C	60°C	70°C	80°C			
32 + 32 / 125	2.8	5.7	8.5	11.3	14.2	17.0	19.8			
40 + 40 / 160	2.6	5.1	7.7	10.2	12.8	15.3	17.9			
50 + 50 / 160	3.4	6.8	10.1	13.5	17.0	20.3	23.7			

Calculation parameter:

 $\begin{array}{lll} \lambda_{Soil}: & 1.00 \text{ W/m-K} \\ \text{R soil surface to ambient air:} & 0.0685 \text{ m}^2\text{-K/W} \\ T_{Soil}: & 10.0 \, ^{\circ}\text{C} \\ \text{Soil covering:} & 0.8 \text{ m} \end{array}$

The heat loss characteristics are in accordance with the European standard for flexible heating pipes systems EN15632. Heat losses are for the standard Flexalen® 600 pre-insulated pipe.

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	НР				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]	
				5	145 x 145 x 35	20,01	1143-125001-004
2 22/2 02	25 . 25	425	0.5	10	145 x 145 x 35	29,96	1143-125002-004
2x 32/3.03 25 + 25 125 0.5	0.5	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			
	0.6	10	145 x 145 x 35	41,31	1143-160002-004		
	0.6	15	145 x 145 x 50	55,65	1143-160003-004		
	20	145 x 145 x 50	61,27	1143-160004-004			
				5	145 x 145 x 35	30,94	1143-160051-004
		10	145 x 145 x 50	47,76	1143-160052-004		
2x 50/4.6	32 + 25	160	0.6	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.

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	11/4"	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	11/2"	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

 $^{^{\}rm 2}$ delivered on coil, without cardboard box.