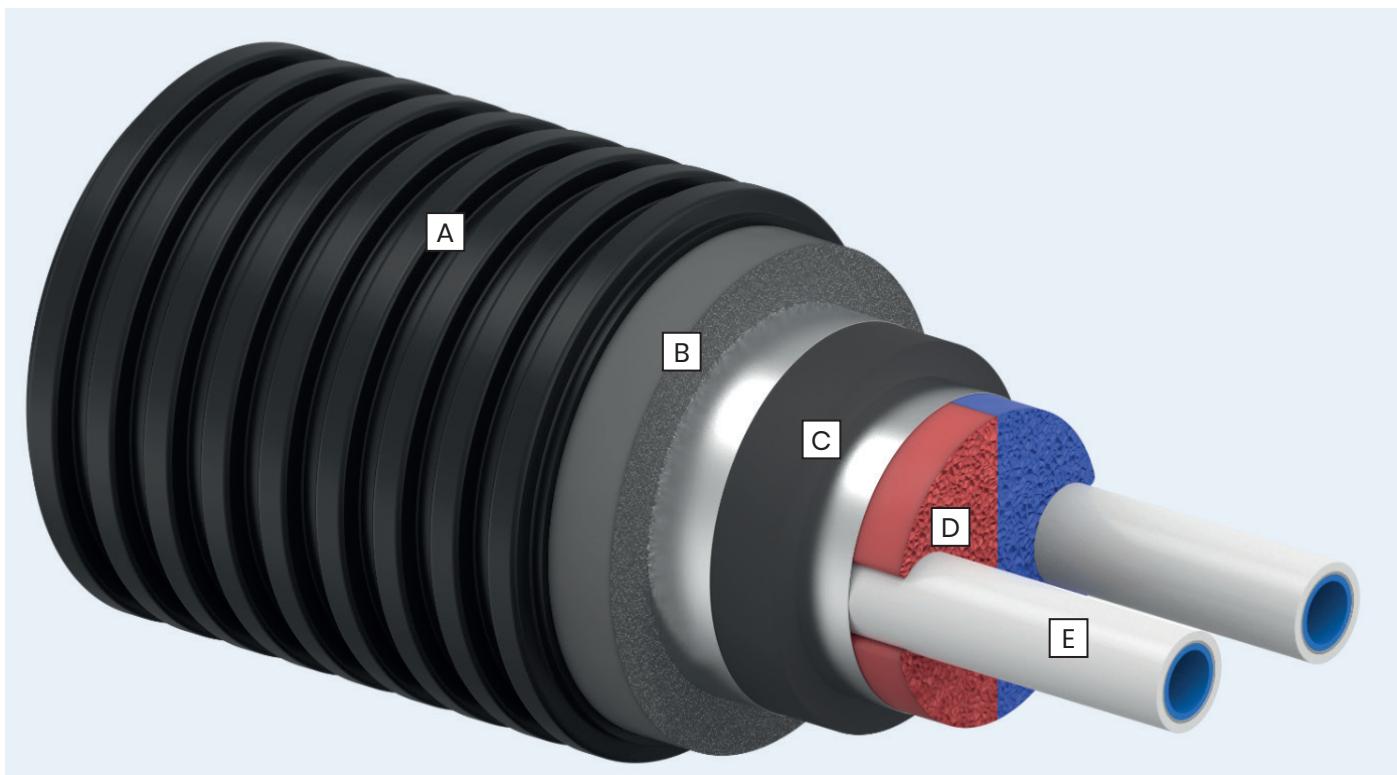


Uponor Ecoflex VIP Thermo Twin MLCP

uponor

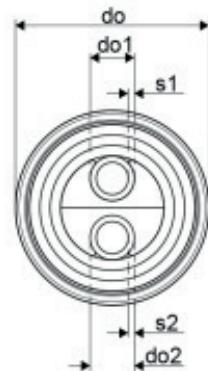


System description



Pos.	Short text
A	- Jacket pipe Corrugated polyethylene (HDPE)
B	- Soft Insulating material elastic closed-cell PE-X foam
C	- VIP Insulating material VIP "Vacuum insulation Panel"
D	- Centre profil Polyethylene profil to avoid confusion of flow and return line.
E	- Medium pipe Multilayer composite pipe

Uponor Ecoflex VIP Thermo Twin PN6 (SDR 11)



Type	Medium pipe do1 x s1 [mm]	Medium pipe do2 x s1 [mm]	Casing do [mm]	Bending radius [m]	Weight [kg/m]	Volume medium pipe [l/m]	Coil length [m]	U-Value [W/K+m ²]
2x 16/90	16 x 2,0	16 x 2,0	90	0,25	1,13	0,113	100	0,120
2x 20/90	20 x 2,25	20 x 2,25	90	0,3	1,23	0,189	100	0,125
2x 25/140	25 x 2,5	25 x 2,5	140	0,4	1,95	0,314	100	0,122
2x 32/140	32 x 3,0	32 x 3,0	140	0,5	2,24	0,531	100	0,145

Max. Temperature- / Pressure load 90 °C / 10 bar

Heat loss calculation

Example heat loss table reading

Flow temperature: $\vartheta_f = 80 \text{ }^\circ\text{C}$

Return temperature: $\vartheta_r = 60 \text{ }^\circ\text{C}$

Ground temperature: $\vartheta_g = 10 \text{ }^\circ\text{C}$

$$\vartheta_{\text{av}} = \frac{1}{2} \cdot (80 \text{ }^\circ\text{C} + 60 \text{ }^\circ\text{C}) = 70 \text{ }^\circ\text{C}$$

$$\Delta\vartheta = \vartheta_{\text{av}} - \vartheta_g = 70 \text{ }^\circ\text{C} - 10 \text{ }^\circ\text{C} = 60 \text{ K}$$

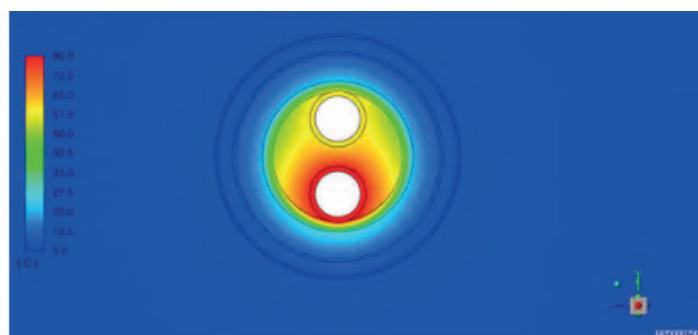
Twin pipe installation

Example Ecoflex VIP Thermo Twin 25/140

Heat loss for flow and return:

$$q = 7,3 \text{ W/m} \text{ (from the table)}$$

Heat flow in twin pipe installation



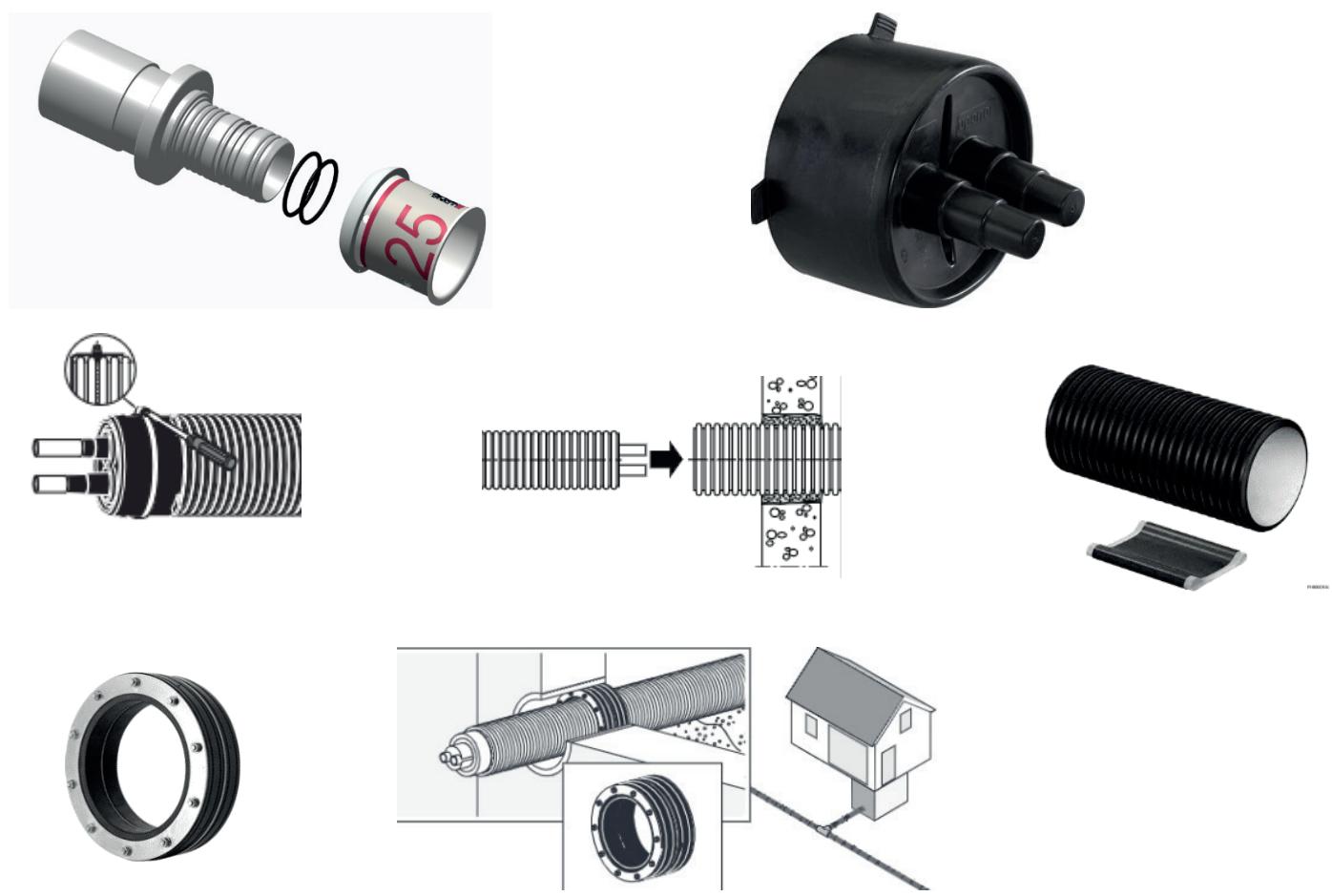
Ecoflex VIP Thermo Twin MLC

Type	Heat loss q [W/m] for corresponding temperature difference $\Delta\vartheta$ [K]					
	30	40	50	60	70	80
2x 16/90	3,6	4,8	6	7,2	8,4	9,6
2x 20/90	3,7	5	6,2	7,5	8,7	10
2x 25/140	3,7	4,9	6,1	7,3	8,5	9,7
2x 32/140	4,3	5,8	7,2	8,7	10,1	11,6

Accessories complete the Uponor Ecoflex VIP Thermo Twin MLC pipe system.

New is the weldable fittings shown in the picture.

All other traditional fittings are according to the assortment we have in our program.



**Moving
>Water**

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