

# Flexalen PB U-Values

## U-value / thermal transmittance for pre-insulated PB-piping system Flexalen®

Calculation parameter

$\lambda_{\text{soil}}$ :	1.00 W/m·K
R soil surface to ambient air:	0.0685 m <sup>2</sup> ·K/W
$T_{\text{soil}}$ :	10.0 °C
Soil covering:	0.8 m

The U-values are in accordance with the European standard for flexible heating pipes systems EN15632 and calculated with  $\lambda_{\text{DECL}}$ -values at average service temperature, including heat transfer to soil.

Insulation class : according to European standard for Heating systems in Insulations EN 12828

Single line									
Service pipe OD [mm]	Flexalen® 600 Heating			Flexalen® PU			Flexalen® PU SL based on casing size SDR41.		
	Casing pipe OD [mm]	U-value [W/mK]	Insulation Class	Casing pipe OD [mm]	U-value [W/mK]	Insulation Class	Casing pipe OD [mm]	U-value [W/mK]	Insulation Class
25	90	0.148	5	91	0.098	6			
32	90	0.182	4	91	0.120	6			
40	90	0.230	3						
				111	0.123	6	110	0.126	6
50	125	0.178	5						
	125	0.219	4	126	0.135	6	125	0.137	6
63	160	0.182	5						
				125	0.290	3			125
75	160	0.222	4						
				142	0.152	6	140	0.157	6
				160	0.159	6	160	0.165	6
90	160	0.265	4						
				180	0.144	6	180	0.144	6
				160	0.336	3	182	0.174	6
110	200	0.354	3						
				200	0.199	6	200	0.158	6
				202	0.199	6	200	0.208	6
125	200	0.430	3						
				250	0.155	6	250	0.155	6
				200	0.205	6	200	0.260	5
140	200	0.430	3						
				225	0.205	6	250	0.182	6
				225	0.205	6	225	0.259	5
160	200	0.430	3						
				280	0.182	6	280	0.182	6
				250	0.276	5	250	0.276	5
225	200	0.430	3						
				315	0.187	6	315	0.187	6
				315	0.361	5	315	0.361	5
315	200	0.430	3						
				400	0.217	6	400	0.217	6
315	450	0.336	6						

The U-values are for one single pipe.

### Disclaimer

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Double line									
Service pipe OD [mm]	Flexalen 600 Heating			Flexalen PU			Flexalen® PU SL		
	Casing pipe OD [mm]	U-value [W/mK]	Class (-)	Casing pipe OD [mm]	U-value [W/mK]	Class (-)	Casing pipe OD [mm]	U-value [W/mK]	Class (-)
25+25				111	0.138	6	110	0.167	6
	125	0.221	6						
							160	0.110	6
32+32	125	0.283	6	126	0.153	6	125	0.182	6
	160	0.208	6						
							180	0.119	6
40+40				142	0.172	6	140	0.208	6
	160	0.255	6						
							200	0.129	6
50+50	160	0.338	5						
				182	0.162	6	180	0.188	6
							200	0.162	6
63+63	200	0.363	5	202	0.191	6	200	0.226	6
							250	0.159	6
75+75									
							250	0.203	6
							280	0.171	6
90+90							280	0.234	6
							315	0.189	6

The U-values are for complete twin pipe system (two medium pipes).