

Calculation of variations in pipe length

Initial data

Polypropylene - PP	Pipe material	90 °C	Maximum temperature
100 m	Pipeline length	-15 °C	Minimum temperature

Calculation results

0.18 [Polypropylene - PP]

Coefficient of linear thermal expansion

$0.18 * 100 \text{ [m]} * (90 - (-15)) \text{ [}^\circ\text{C]} = 1890 \text{ [mm]}$

Calculated thermal elongation of the pipeline section

-15 °C => 100.000 m

90 °C => 101.890 m
