Static calculation of pipes

English

This tool calculates static loads and deformations on smooth pipes, according to **UNE 53331 IN**. Pipelife recommends using the last version of EasyPipe98 from IngSoft GmbH for calculations according the latest version of ATV-DVWK-A 127.

Pipe

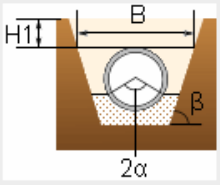
◉ Standard smooth pipe

Material	PVC	
Outside diameter	300	[mm]
Wall thickness	9	[mm]

○ Pragma pipe

Configuration

B	1	[m]
H1	2	[m]
β	70	[°]
Bedding angle 2α	120°	
Soil density ρ	20	[kN/m³]



Soil configuration (backfill and sidewalls)

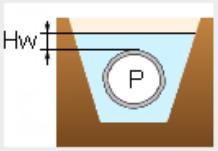
Backfill installation type	Compacted backfill in all the height of the trench
Backfill soil type	Group 1 - non cohesive
Backfill compaction	95%
Sidewalls soil type	Group 1 - non cohesive
Sidewalls compaction	95%

Advice

Ground water/internal pressure

☑ Ignore ground water/internal pressure

Ground water height	1	[m]
Internal pressure	2	[bar]



Traffic

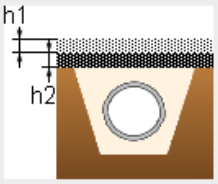
☑ Ignore traffic

Truck	LT 12 - 12 tons, 2 axles
Frequency	Normal

Paving

☐ Ignore paving

h1	0.1	[m]
Ep1	2000	[MPa]
h2	0.5	[m]
Ep2	1000	[MPa]



Advice