Start → 

Computation loop through linear and spatial data structures

- Circular profile calculation with two WVQ-relations.
- Flow velocity calculation with the Darcy-Weisbach approach.
- Flood routing method according to Euler [1983].

Has circular profile? 

Yes → 

Angular profile parameter calculation.

Flow velocity calculation with the Manning-Strickler approach.

Calculation of the flood routing method for angular profiles.

No → 

WVQ computation loop:

- i = 1
- i = i + 1
- i ≤ n?
  - no → Has circular profile?
  - yes → Angular profile parameter calculation.

Is Darcy-Weisbach method selected? 

Yes → Flow velocity calculation with the Darcy-Weisbach approach.

Output parameters: 

- $L_{km}$, $K_{km}$, $n_{km}$, WVQ-relations

End → 

Output parameters:

- $L_{km}$, $K_{km}$, $n_{km}$, WVQ-relations