

## 1 Flow sensors: Velocity

If a pipe goes from  $d = 9 \text{ cm}$  to  $d = 6 \text{ cm}$  and velocity in the  $9 \text{ cm}$  section is  $2,21 \text{ m/s}$ , what is the average velocity of the  $6 \text{ cm}$  section?

## 2 Flow sensors: Flow Rate

What is the flow rate through a PE pipe 50 for PN6 standard if average velocity is  $5 \text{ m/s}$ ?

### Comments

First of all we should know the inside diameter of the pipe corresponding to the European PN standards.

For instance, use [Polyethylene pipe dimensions according European Standards](#)

## 3 Flow Rate: solid flow

A conveyor belt moves at  $0,21 \text{ m/s}$ , a load cell (weighting platform) with a length of  $110 \text{ cm}$  is reading  $3,5 \text{ kg}$  of material on platform. What is the flow rate of the material on the belt?