

# Namelist "Velocity\_Initialization"

This data setup is used to define the initial velocity field over the domain.

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## I\_Velocity\_Reference\_Value

- Type : real value
- Reference velocity along the I-direction.

## J\_Velocity\_Reference\_Value

- Type : real value
- Reference velocity along the J-direction.

## K\_Velocity\_Reference\_Value

- Type : real value
- Reference velocity along the K-direction.

## Initial\_Field\_Option\_For\_Velocity\_I

- Type : integer value
- Option to define the distribution of the I-velocity component over the domain :
  - 0 : Uniform distribution
  - 1 : Parabolic profile along the J-direction. In this case the reference velocity defines the space-averaged velocity.
  - 2 : Parabolic profile along the K-direction. In this case the reference velocity defines the space-averaged velocity.
  - 3 : Inlet profile is spread over the domain (suppose an inflow oriented along the I-direction is defined)

## Initial\_Field\_Option\_For\_Velocity\_J

- Type : integer value
- Option to define the distribution of the J-velocity component over the domain :
  - 0 : Uniform distribution
  - 1 : Parabolic profile along the I-direction. In this case the reference velocity defines the space-averaged velocity.
  - 2 : Parabolic profile along the K-direction. In this case the reference velocity defines the space-averaged velocity.
  - 3 : Inlet profile is spread over the domain (suppose an inflow oriented along the J-direction is defined)

## Initial\_Field\_Option\_For\_Velocity\_K

- Type : integer value
- Option to define the distribution of the J-velocity component over the domain :
  - 0 : Uniform distribution
  - 1 : Parabolic profile along the I-direction
  - 2 : Parabolic profile along the J-direction
  - 3 : Inlet profile is spread over the domain (suppose an inflow oriented along the K-direction is defined)

## White\_Noise\_Magnitude\_For\_Velocity\_I

- Type : real value
- Magnitude of the white noise on the I-velocity component.
- The magnitude is defined as a fraction of the local value I-velocity component ( i.e. 0.4 corresponds to 40% of the local velocity component)

## White\_Noise\_Magnitude\_For\_Velocity\_J

- Type : real value
- Magnitude of the white noise on the J-velocity component.

## White\_Noise\_Magnitude\_For\_Velocity\_K

- Type : real value
- Magnitude of the white noise on the K-velocity component.

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