PIPE (on GlobalGeom)

Description   (See also: Keys)

This statement defines the pipe elements in a geometry. A pipe is one straight part of a pipeline. Pipe data such as geometrical data: elevation, diameter, roughness, number and length of sections for discretization are specified.

If the temperature option is WALL or FASTWALL in OPTIONS, a WALL for the pipe must be specified.

PIPE (on GlobalGeom) Keys

(See also: Description)

Key	Type Unit:( )	Parameter set Default:[ ]	Description
AREA	Real (m2)		Total cross-sectional flow area in case of equivalent pipes. Equivalent pipe means one single pipe representing a number of equal parallel pipes with a correct total flow area.
DIAMETER	Real (m)		Hydraulic diameter of the pipe. Equivalent to the pipe's inner diameter for normal pipe flow.
ELEVATION	Real (m)		End point elevation relative to starting point of the pipe.
IDIAMETER	Real (m)		Inner diameter of external pipe for annulus flow.
LABEL	String	[PIPE]	Pipe label. Pipe labels cannot be formatted as a number (e.g. "1") or as a number range (e.g. "1-4").
LENGTH	Real (m)		Length of the pipe.
LSEGMENT	RealList (m)		Section lengths.
NEQUIPIPE	Real		Total number of pipes represented in the equivalent pipe. The total flow area in the equivalent pipe will correspond to this number of original parallel pipes.
NSEGMENT	Integer		Number of sections in the pipe.
ODIAMETER	Real (m)		Outer diameter for internal pipe for annulus flow. Zero for internal flow.
ROUGHNESS	Real (m)		Absolute roughness of the pipe wall.
WALL	Symbol	WALL		Label of the wall used.
XEND	Real (m)		x-coordinate of the pipe end.
YEND	Real (m)		y-coordinate of the pipe end.
ZEND	Real (m)	[0]	z-coordinate of the pipe end.