

Start



```
graph TD; Start((Start)) --> Init[Initialize PID parameters]; Init --> GetVel[Get required and current velocities]; GetVel --> CalcPID[Calculate PID values based on the parameters]; CalcPID --> ReturnVel[Return the target velocity]; ReturnVel --> Stop((Stop))
```

This flowchart illustrates a sequential process for PID control. It begins with a circular 'Start' node, followed by four rounded rectangular process nodes: 'Initialize PID parameters', 'Get required and current velocities', 'Calculate PID values based on the parameters', and 'Return the target velocity'. The process concludes with a circular 'Stop' node. All steps are connected by downward-pointing arrows, indicating a linear flow.

Initialize PID
parameters

Get required
and current
velocities

Calculate PID values
based on the
parameters

Return the target
velocity

Stop