# 模糊PID控制器的设计

表1 kp规则表

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| e  kp  ec | NB | NS | Z | PS | PB |
| NB | PB | PS | PS | PS | Z |
| NS | PS | PS | PS | Z | NS |
| Z | PS | PS | Z | NS | NS |
| PS | PS | Z | NS | NS | NS |
| PB | Z | NS | NS | NS | NB |

表2 kd规则表

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| e  kd  ec | NB | NS | Z | PS | PB |
| NB | PS | NB | NB | NB | PS |
| NS | Z | NS | NS | NS | Z |
| Z | Z | NS | NS | NS | Z |
| PS | Z | Z | Z | Z | Z |
| PB | PB | PS | PS | PS | PB |

模糊控制器输入为e，ec输出为kp，kd，

E区间【-0.3,0.3】

dE区间【-3,3】