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| **Reaction Force Calculation 泄放反力计算** | | By |  | |
| According to 计算依据 | | | **API 520.2-2015** | |
| **Data Input 数据输入** | | | **Sketch** | |
| Mass flow, W  额定泄放量 | kg/s | **$$001** | A  F | |
| Inlet pressure, P1  泄放状态入口压力 | MPa(A) | **$$002** |
| Outlet pressure, P2  安全阀背压 | MPa(A) | **$$003** |
| Discharge temperature, T  泄放温度 | K | **$$004** |
| Relative molecular mass, M  气体相对摩尔质量 | g/mol | **$$005** |
| Ratio of the specific heats, k  气体绝热指数 | / | **$$006** |
| Vent pipe inner diameter, d  泄放管内直径 | mm | **$$007** |
| **Calculation 计算结果** | | | | |
| Outlet area at discharge point, A  泄放点出口面积 | mm2 |  | | **$$008** |
| Outlet static pressure, P  安全阀泄放出口静压力 | kPa | -100 | | **$$009** |
| Reaction force at the point  of discharge to the atmosphere, F  泄放点处的反作用力 | N |  | | **$$010** |