RUSKIN®

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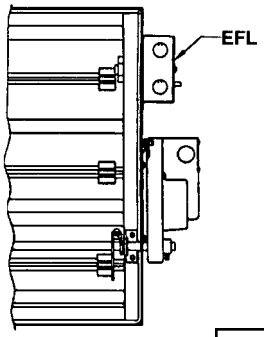
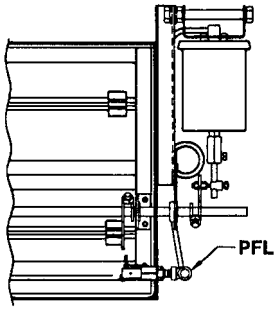
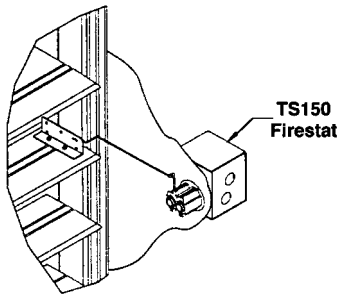
FIRE AND SMOKE DAMPER OPERATION OPTIONS

Ruskin fire/smoke dampers typically utilize quick detect, heat activated, controlled closure devices to make the damper close in the event of a fire. Normal fusible rods and links, when activated, allow instantaneous closure of the damper which can result in damage to the connecting duct work. The table below explains the operation options that are available with Ruskin fire and smoke dampers. Electric fuse links are typically factory installed on dampers utilizing electric actuators and pneumatic fuse links are typically factory installed on dampers utilizing pneumatic actuators.

Electric Controlled Closure	Pneumatic Controlled Closure	Controlled Closure/Smoke Management
		
SMOKE DETECTION/TEST/POWER FAILURE OPERATION		
When smoke is detected (via a smoke detector), during testing or if power failure occurs, the damper will close and remain closed. When the smoke signal ceases (smoke detector reset), the test is completed or power is restored the damper will automatically RESET to the open position. The damper automatically resets if nuisance alarms occur and the system is reset.	When smoke is detected (via a smoke detector), during testing or if power failure occurs, the damper will close and remain closed. When the smoke signal ceases, (smoke detector reset), the test is completed or power is restored the damper will automatically RESET to the open position. The damper automatically resets if nuisance alarms occur and the system is reset. **EP (electric-pneumatic switch), by others, must be present in system.**	When smoke is detected (via a smoke detector), during testing or if power failure occurs, the damper will close and remain closed. When the smoke signal ceases (smoke detector reset), the test is completed or power is restored the damper will automatically RESET to the open position. The damper automatically resets if nuisance alarms occur and the system is reset.
FIRE OPERATION		
When temperatures in excess of 165°F/74°C (212°F/100°C, 250°F/121°C or 350°F/177°C optional) are detected, the damper will close and lock. At no time shall the damper be disengaged from the actuator. **Upon cessation of the fire conditions, the damper can be reopened by pressing the reset button located on the damper assembly.**	When temperatures in excess of 165°F/74°C (212°F/100°C or 285°F/141°C optional) are detected, the damper will close and lock. At no time shall the damper be disengaged from the actuator. Upon cessation of the fire conditions, the damper can be reopened by easily replacing the fuse link on the PFL.	When the damper is in the power open position it will function like the EFL. Integral position indicator switches (SP100) allow the position of the damper to be shown in the fire command center or on a separate control panel. When closed, the damper CLOSED indicator light (on the separate control panel or in the fire command center) will light. The damper remains closed until an override signal for smoke management is initiated and the duct temperature has not exceeded the high limit. The High Limit Temperature Sensor prevents the damper from reopening when duct temperature is above damper's UL555S degradation test temperature of 250°F/121°C or 350°F/177°C. Upon cessation of the fire conditions, the damper can be reopened by pressing the RESET button located on the damper assembly.

