

Product Overview | Relief Valve

7177A Relief Valves are used with or in place of 7142A and 7152A Oil Pressure Regulators.

Relief Valves avoid build-up of pressure upstream of regulators or other equipment, which can occur particularly when burners are turned down to low flows.

Relief valve selection usually is not critical since gph capacities exceed those of pumps encountered in normal piping systems.

When sizing a relief valve, for every application, the max pressure conditions, the wide-open regulator flow, capacity, and constant downstream demand should be determined. This is then used to select the appropriate relief valve for the application.

Relief valves can be installed in any position.

Outlet pressure is adjusted by loosening locknut and turning spring adjusting screw on top of regulator, then tightening locknut.

More trim options are available upon request to Fives North American Combustion, Inc.

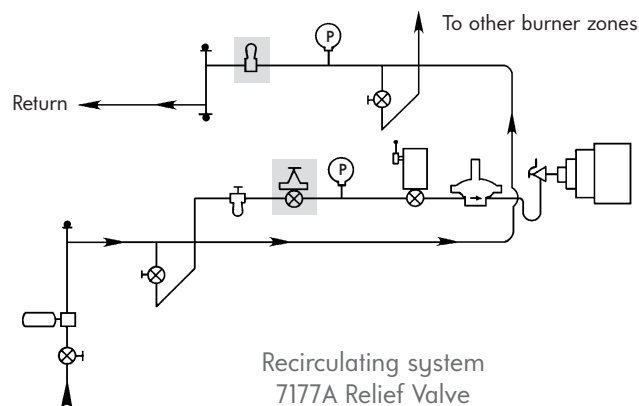
- 7177A Relief Valves have a 25-75 psig spring or 70-140 psig. Other spring ranges are available upon request
- Body: cast iron with stainless trim.
- Diaphragm: neoprene.
- Seat: nitrile.
- Maximum temperature: 180°F.

CAPACITIES (0.85 sp gr oil @ 48 SSU)

| Designation | Size (inches) | Relief pressure setting (psig) | Pressure Build-up over Relief setting (psig) | | | | | | | | |
|--------------------|---------------|--------------------------------|--|-------|--------|--------|--------|--------|--------|--------|---------|
| | | | 5 GPM | 7 GPM | 10 GPM | 15 GPM | 20 GPM | 30 GPM | 50 GPM | 75 GPM | 100 GPM |
| 7177A-03 | 1/4 | 35 | 5.2 | 5.4 | 7.8 | 9.0 | 10.2 | 10.8 | 13.0 | 15.2 | 16.3 |
| | | 50 | 5.1 | 6.4 | 8.4 | 9.9 | 11.9 | 11.9 | 14.1 | 16.3 | 17.4 |
| | | 75 | 5.6 | 7.1 | 9.2 | 10.8 | 13.0 | 14.0 | 16.3 | 17.4 | 18.4 |
| 7177A-01 | 1/2 | 35 | 13.0 | 15.2 | 19.5 | 22.8 | 26.0 | 29.3 | 34.7 | 39.0 | 43.4 |
| | | 50 | 13.0 | 16.3 | 20.6 | 24.9 | 29.3 | 31.5 | 38.0 | 41.2 | 45.6 |
| | | 75 | 14.1 | 18.4 | 23.9 | 28.2 | 32.5 | 35.8 | 41.2 | 44.5 | 48.8 |
| 7177A-0 7177A-1 | 3/4 and 1 | 35 | 26.0 | 30.4 | 38.0 | 44.5 | 51.0 | 55.3 | 62.9 | 70.5 | 78.1 |
| | | 50 | 29.3 | 34.7 | 42.3 | 48.8 | 56.4 | 59.7 | 68.3 | 74.8 | 82.4 |
| | | 75 | 31.5 | 38.0 | 47.7 | 55.3 | 62.9 | 67.2 | 74.8 | 81.3 | 87.9 |

Note: In 7177A Relief Valves initial flow or bubble point occurs at 5 psig below relief setting. Tight shutoff point occurs at 8 psig below relief setting.

LIGHT OIL PIPING SCHEMATIC



To order, specify: 7177A-(code)-(specify end of spring range) Relief Valve

Examples: 7177A-03-75 1/4" relief valve with 25-75 psi spring

7177A-01-140 1/2" relief valve with 70-140 psi spring