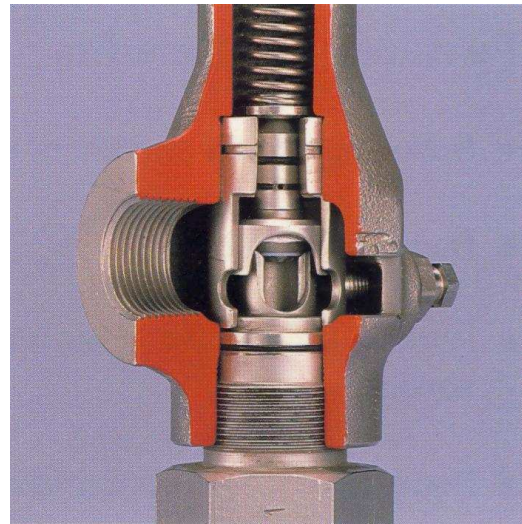


tycoFire & Integrated
Solutions**HIGH PRESSURE WATER MIST
COMPONENT DATA SHEET**Pressure Relief Valve - Multi Pump Units
Data Sheet Number – 9BIssue Date
APRIL
2009Page
1 of 1**MicroDrop**[®]

KEYSTONE

Specialized Series 80's for Liquid and steam



Model Numbering System

Series 80 safety relief valves are specified with a standard part number which is illustrated below. Please consult with the sales division to ensure the valve you require is available.

Screwed Valves with
orifice designations of
-4, -6, -8, F, G, H & J.

1	2	3	4	5	6
81	M	S	68	-4	/L

1 Model Type

- 81 – Plastic Seated – Gas Service
- 83 – Elastomer Seated – Gas Service
- 86 – Plastic Seated – Steam Service
- 81P – Plastic Seated – Liquid Service

2 Inlet Designation

- Blank – Screwed FNPT
- M – Screwed MNPT

3 Valve Material

- B – Bronze (-4, -6 & -8 orifices only)
- C – Carbon Steel
- S – Stainless Steel

4 Inlet and Outlet Size

(Number represents nominal size in eighths of an inch.)

Designation	Size
46	1/2" x 3/4"
48	1/2" x 1"
66	3/4" x 1"
68	3/4" x 1"
88	1" x 1"
1216	1 1/2" x 2"
1624	2" x 3"

5 Orifice Designation

-4	- 0.32 cm ² (0.048 in ²)*
-6 (D)	- 0.71 cm ² (0.110 in ²)*
-8 (E)	- 1.26 cm ² (0.196 in ²)*
F	- 1.98 cm ² (0.307 in ²)
G	- 3.25 cm ² (0.503 in ²)
H	- 5.06 cm ² (0.785 in ²)
J	- 8.30 cm ² (1.287 in ²)

6 Options

- Blank – Standard Valve
- /L – Packed Lift Lever
- /NACE – Materials to meet NACE MR-01-75
- /SPL – Special materials/ configuration/options.

Note: *When flanged versions are required for these orifice sizes, factory will assign the Model Number, followed by a full description of the flange size and pressure class and supplementary description when required.

81P for Liquid Service

The soft seated Type 81P is a balanced direct spring operated safety relief valve designed specially for liquid service. The valve is fully open with certified rated liquid relief capacity at only 10 percent overpressure. This prevents valve oversizing, necessary to compensate for undercapacity, and the related instability – often the cause of dangerous pressure pulsations and shock waves which are capable of damaging or destroying a safety valve and other system components. It is balanced against back pressure without using expensive bellows, providing a stabilised operation rarely found in liquid valves.

The Type 81P is designed to meet the latest requirements of Section VIII, Division 1 of the ASME Unfired Pressure Vessel Code.

Features

- Full opening at 10 percent overpressure, meets the latest safety valve codes.
- Stabilised against chatter and destructive surges.
- Balanced against back pressure without using expensive bellows.
- Soft seats maintain tightness even after repeated cycling.

Danfoss
SEMCO
FIRE PROTECTION