

# RISERPACK<sup>™</sup> Model 8511

Pre-Assembled TESTANDRAIN® Riser with Hose Test Connection and Optional Pressure Reducing Valve



The AGF RISERPACK™ Model 8511 is a prepackaged floor control riser assembly designed for NFPA 13 wet fire sprinkler systems. The Model 8511 features a hose test connection, TESTANDRAIN® valve, flow switch, and pressure gauge with shutoff valve.

- The 1½" and 2" Model 8511 utilize a 1" FNPT TESTANDRAIN Model 2511 and are available with orifice sizes of 3/8" to 5/8" (ELO)
- 2½" and 3" Model 8511 utilize a 1¼" FNPT TESTANDRAIN Model 2511 and are available with orifice sizes of 3/8" to 3/4" (ESFR)
- 4" and 6" Model 8511 utlize a 2" groove TESTANDRAIN Model 2511 and are available with orifice sizes of 3/8" to K25

Reduce inlet water pressure by adding an optional in-line or angled Pressure Reducing Valve with pressure gauge and shutoff valve.

# **Pressure Reducing Valves**

|  |                  | In-Line | Angled |
|--|------------------|---------|--------|
|  | Factory Set      |         |        |
|  | Field Adjustable |         |        |

#### Features:

- NST Hose Test Connection
- Grooved Pipe Connections
- Water Flow Switch
- Pressure Gauge
- Optional Pressure Reducing Valve
- TESTANDRAIN® Valve with bypass and pressure relief valve

NOTE: It is important to note that the pressure rating of the relief valve indicates an operating range of pressure for both opening and closing of the valve. Standard relief valves are required to OPEN in a range of pressure between 90% and 105% of their rating. The valves are required to CLOSE at a pressure above 80% of that rating. The relief valve should be installed where it is easily accessible for maintenance. Care should be taken that the relief valve CANNOT be isolated from the system when the system is operational. A relief valve should NEVER have a shutoff valve or a plug downstream of its outlet.

# Model 8511 Base Manifold

| SIZE | AGF Item ID | Description                   |
|------|-------------|-------------------------------|
|      | 8530        | 1½" M8511 x 3/8" Orifice      |
|      | 8531        | 1½" M8511 x 7/16" Orifice     |
| 1½"  | 8532        | 1½" M8511 x 1/2" Orifice      |
|      | 8533        | 1½" M8511 x 17/32" Orifice    |
|      | 8534        | 1½" M8511 x 5/8" ELO Orifice  |
|      | 8540        | 2" M8511 x 3/8" Orifice       |
|      | 8541        | 2" M8511 x 7/16" Orifice      |
| 2"   | 8542        | 2" M8511 x 1/2" Orifice       |
|      | 8543        | 2" M8511 x 17/32" Orifice     |
|      | 8544        | 2" M8511 x 5/8" ELO Orifice   |
|      | 8560        | 2½" M8511 x 3/8" Orifice      |
|      | 8561        | 2½" M8511 x 7/16" Orifice     |
| 2½"  | 8562        | 2½" M8511 x 1/2" Orifice      |
| 2/2  | 8563        | 2½" M8511 x 17/32" Orifice    |
|      | 8564        | 2½" M8511 x 5/8" ELO Orifice  |
|      | 8565        | 2½" M8511 x 3/4" ESFR Orifice |
|      | 8570        | 3" M8511 x 3/8" Orifice       |
|      | 8571        | 3" M8511 x 7/16" Orifice      |
| 3"   | 8572        | 3" M8511 x 1/2" Orifice       |
| 3    | 8573        | 3" M8511 x 17/32" Orifice     |
|      | 8574        | 3" M8511 x 5/8" ELO Orifice   |
|      | 8575        | 3" M8511 x 3/4" ESFR Orifice  |
|      | 8580        | 4" M8511 x 3/8" Orifice       |
|      | 8581        | 4" M8511 x 7/16" Orifice      |
|      | 8582        | 4" M8511 x 1/2" Orifice       |
| 4"   | 8583        | 4" M8511 x 17/32" Orifice     |
|      | 8584        | 4" M8511 x 5/8" ELO Orifice   |
|      | 8585        | 4" M8511 x 3/4" ESFR Orifice  |
|      | 8586        | 4" M8511 x K25 Orifice        |
|      | 8590        | 6" M8511 x 3/8" Orifice       |
|      | 8591        | 6" M8511 x 7/16" Orifice      |
|      | 8592        | 6" M8511 x 1/2" Orifice       |
| 6"   | 8593        | 6" M8511 x 17/32" Orifice     |
|      | 8594        | 6" M8511 x 5/8" ELO Orifice   |
|      | 8595        | 6" M8511 x 3/4" ESFR Orifice  |
|      | 8596        | 6" M8511 x K25 Orifice        |

GRV x GRV Pilot Operated PRV's available for all manifold sizes. Contact factory for more info.

# **Adding a Pressure Reducing Valve?**

When adding an optional Pressure Reducing Valve follow the steps below to generate an AGF Item ID. **Note:** PRV selection guide only pertains to Direct Acting PRV's 1½" and 2½" manifolds.

## Step 1 - Manifold

Choose a desired manifold from the chart to the left and write the Item ID number in Step 1 below.

#### **Step 2 - PRV Orientation**

Choose a desired PRV orientation and write the corresponding call letters (IL or AB) in Step 2 below.

IL = In-Line (only available in 2½")
AB = Angled Body

## **Step 3 - Valve Style/Manufacturer**

Choose a desired PRV style and write the corresponding call letters (FAZW, POZW or FSZW) in Step 3 below. FSZW option continue to Step 4.

FAZW = Field Adjustable (only available in 2½")
Zurn Wilkins

POZW = Pilot Operated (In-line only 2", 2½", 3"-6")
Zurn Wilkins

FSZW = Factory Set, Non-Adjustable (2½" or 1½") Zurn Wilkins

## Step 4:

Choose desired Pressure Bonnet (Factory Set Model Only) and write the corresponding letter in Step 4 below. Refer to pressure charts on the next page to determine proper bonnet.

#### **Options:**

| N O P Q | R | S | Т | U |  |
|---------|---|---|---|---|--|
|---------|---|---|---|---|--|

# **Example:**

| Step 1   | Step 2      | Step 3 | Step 4* |
|----------|-------------|--------|---------|
| Manifold | Orientation | Style  | Bonnet  |
| 8560     | IL          | FSZW   | N       |

\*When selecting FAZW (Field Adjustable) or POZW (Pilot Operated) PRV Step 4 will be left blank.

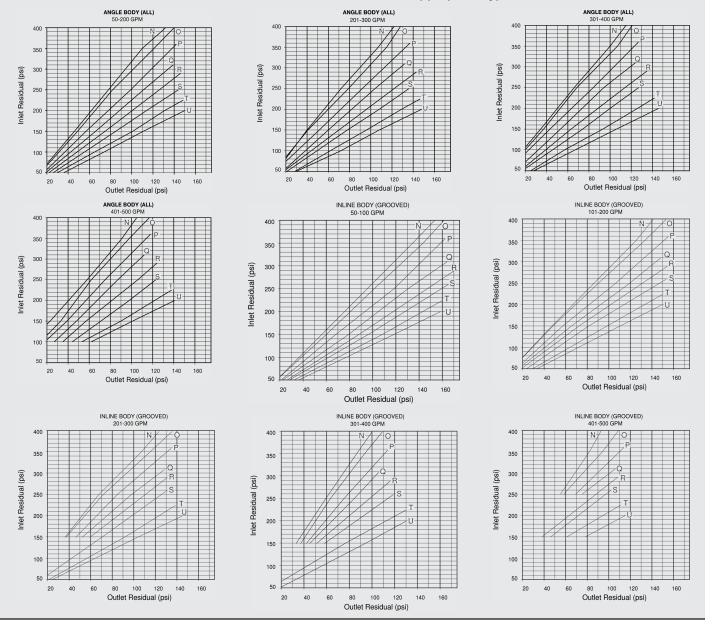
Fill out this table to create the AGF Item ID.

| Step 2      | Step 3 | Step 4 |
|-------------|--------|--------|
| Orientation | Style  | Bonnet |
|             |        |        |
|             |        |        |

## **Choosing the Correct Settings**

In choosing the correct setting for the Pressure Reducing Valve refer to the charts and the following procedures:

- 1. Determine the demand in gallons per minute required downstream of the valve.
- 2. To determine the static outlet pressure, locate the static chart. Determine the valve inlet static pressure shown on the vertical axis and draw a horizontal line from that pressure to the appropriate curve determined above, then draw a vertical line down to the horizontal axis and read the static outlet pressure.
- 3. Determine the standpipe residual or "flow pressure" at the valve inlet.
- 4. Locate the appropriate flow chart based on GPM required and body style.
- 5. Locate the inlet residual pressure on the vertical axis of the chart and draw a horizontal line from this pressure across the chart.
- 6. Locate the desired valve outlet residual pressure on the horizontal axis of the chart and draw a vertical line from this pressure.
- 7. The curve nearest the intersection of the two lines drawn is the appropriate type for the valve.



#### Sizes:

**2**½"

# Field Adjustable Pressure Reducing Valve

- Underwriters Laboratory listed at 400 PSI
- Underwriters Laboratory listed as a checking device
- Reduces pressure under flow (residual) and no flow (static) conditions
- Tamper-resistant setting
- Visual indicator for ON-OFF inspection
- Equipped with four ¼" ports inlet and outlet both sides
- Integral supervisory switch
- In-line or angle style cast brass body
- · Grooved inlet and outlet



#### Sizes:

| 2" | <b>2</b> ½" | 3" | 4" | 6" |
|----|-------------|----|----|----|
| _  | <b>-</b> /- | _  | _  |    |

# **Pilot Operated Pressure Reducing Valve**

- Underwriters Laboratory listed at 300 PSI
- Maintains constant downstream set pressure
- · Minimal pressure loss through valve
- Pilot spring range: 50-165 PSI outlet
- · Red epoxy coated cast iron body
- By-pass includes pressure gauges: 0-300 PSI
- · Grooved inlet and outlet





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