

**Data Sheet UFS-354**

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## NITROGEN-PAC™ M SERIES MODEL NGM NITROGEN GENERATOR MODULES

**Description**

The FM Approved **UNITED Fire Systems NITROGEN-PAC™ Model NGM-5 through NGM-60 Nitrogen Generator Modules** are devices for generating 98% nitrogen as part of a **NITROGEN-PAC™ M Series** nitrogen-based corrosion inhibiting system. Each assembly consists of:

- An inlet port for attachment of a supply of compressed air
- High capacity particulate and coalescing filters to protect the nitrogen separator membrane from particles and moisture, thereby extending its lifespan
- An efficient nitrogen separator membrane that separates high-purity nitrogen from compressed air
- A factory-adjusted needle valve that creates back pressure to facilitate the efficient operation of the nitrogen separator membrane
- A test port allowing connection of a hand-held nitrogen purity analyzer verify proper generator operation
- Two (2) pressure gauges to monitor the gas pressure upstream and downstream of the separator membrane
- A three-way ball valve to permit bypassing of the separator membrane, sending compressed air directly to the fire sprinkler system piping for initial-fill. To prevent inadvertently leaving the **NITROGEN-PAC™ M Series** system in bypass mode, the enclosure door will not close when the ball valve is in the bypass position
- A heavy-duty enclosure with a latching door to protect all components of the nitrogen generator module. The door and enclosure are equipped with lift-off hinges for ease of access during maintenance

**FIGURE 1**

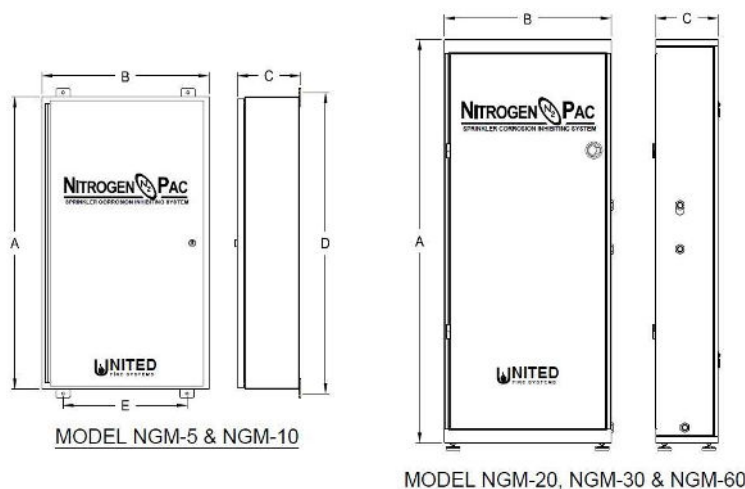
**NITROGEN-PAC™ M Series Model NGM  
Nitrogen Generator Modules**

**TABLE 1 – NITROGEN-PAC™ Model NGM Nitrogen Generator Modules - Maximum Sprinkler Pipe Volume**

Model No.	Maximum Sprinkler Pipe Volume (gallons)
NGM-5	2980
NGM-10	5000
NGM-20	10,000
NGM-30	18,000
NGM-60	31,100

**TABLE 2 – Data Sheets for Equipment To Be Used with NITROGEN-PAC™ Model NGM Nitrogen Generator Modules**

Data Sheet	Equipment
UFS-352	<b>Model CTA Compressor / Tank Assemblies</b>
UFS-353	<b>Model IRD-42 Refrigerated Dryer</b>
UFS-355	<b>Model NR-60 Nitrogen Receiver</b>

**FIGURE 2**

**NITROGEN-PAC™ M Series Model NGM  
Dimensions**

For downloadable architect's specifications and drawing details, go to:

[unitedfiresystems.com/product/nitrogen-pac-m-series](https://unitedfiresystems.com/product/nitrogen-pac-m-series)

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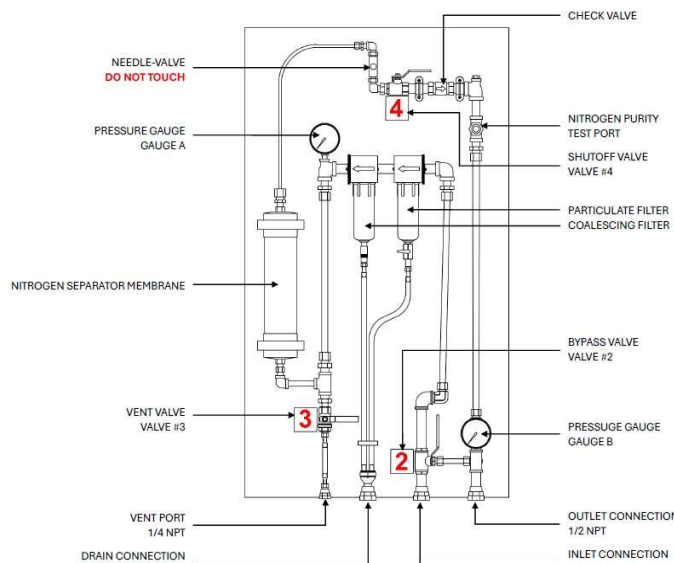
**NITROGEN-PAC™ M SERIES**  
**MODEL NGM NITROGEN GENERATOR MODULES**

**TABLE 3 – NITROGEN-PAC™ Model NGM Nitrogen Generator Modules**  
**Weights and Dimensions – Refer to Figure 2**

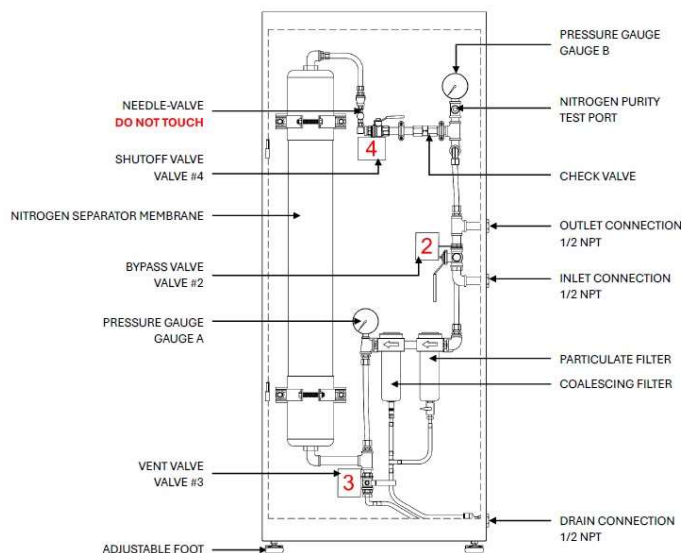
Model No.	Height (A) (inches)	Width (B) (inches)	Depth (C) (inches)	Vertical Distance Between Mounting Holes (D) (inches)	Horizontal Distance Between Mounting Holes (E) (inches)	Approx. Shipping Weight (lbs.)	Approx. Unpacked Weight (lbs.)
NGM-5	42	24	9-1/2	43-1/2	18	105	75
NGM-10	42	24	9-1/2	43-1/2	18	105	75
NGM-20	59-1/2	24	9	N / A	N / A	210	170
NGM-30	59-1/2	24	9	N / A	N / A	210	170
NGM-60	59-1/2	24	9	N / A	N / A	210	170

**TABLE 4 – NITROGEN-PAC™ Model NGM Nitrogen Generator Modules**  
**Recommended Minimum Clearances**

Model No.	Top	Bottom For Installation Access (inches)	Left (inches)	Right For Installation Access (inches)	Front To Allow for Opening Door (inches)
NGM-5	None	12	8	12	36
NGM-10	None	12	8	12	36
NGM-20	None	None	8	12	36
NGM-30	None	None	8	12	36
NGM-60	None	None	8	12	36

**FIGURE 3**

**NITROGEN-PAC™ M Series Model NGM-5 and NGM-10 –  
 Component Identification**

**FIGURE 4**

**NITROGEN-PAC™ M Series Model NGM-20, NGM-30, and  
 NGM-60 – Component Identification**

**IMPORTANT** – Refer to **UNITED Fire Systems** manual 30-NPMICM-001 for detailed design, installation, operation, and maintenance instructions, with checklists for carrying out procedures.

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