RANGER 3+ Nozzle Quick Attack Skid Package

Description
WILLIAMS FIRE & HAZARD CONTROL® (WILLIAMS)
RANGER 3+ Nozzle Skid offers a modular Quick Attack platform with a water/foam nozzle for early response operations. Applicable uses include fire suppression, vapor mitigation, and personnel protection during flammable liquid and gas related events. This skid can help deliver water, foam, and dry chemicals to process areas, terminal operations, loading racks, docks, and pump stations where large equipment logistics may be difficult.

The RANGER 3+ Nozzle Skid is a self-contained, remote-controlled unit designed with a “drop in” mount that quickly converts a duty-approved vehicle into a robust response asset. The skid is designed for use with a GVWR class 3 or higher rated vehicle with dual-wheel rear axle configuration for optimal performance, and should be mounted per the vehicle manufacturer’s instructions.

The flexible mount design of the skid reduces the need for a dedicated response vehicle. The universal mounting rail system and hardware included with the skid package easily secures to most duty-rated vehicles. Equipped with fully adjustable, water/foam nozzle, the unit delivers up to 4,000 gpm (15,141 Lpm) of water or foam solution.

Features
Advanced Hybrid Nozzle Technology
The RANGER 3+ Nozzle Skid is capable of performing as an automatic pressure or fixed gallonage nozzle:
- Automatic pressure nozzle
  - Responds to varying flow rates to maintain a nearly constant tip pressure of 100 psi (6.9 bar)
  - Maximizes reach distance
  - Useful for incidents in which water supply is not established or flow rate is inadequate
- Fixed gallonage nozzle
  - Fixed position plugs allow a fixed flow setting between 1,000 gpm to 4,000 gpm (3,785 Lpm to 15,141 Lpm)
- Self-educting nozzle
- Foam concentrate proportioning at 3% up to 3,000 gpm (11,356 Lpm) and at 1% up to 4,000 gpm (15,141 Lpm)
- Full wrap-around handle
- Manual override valve
- Easy pattern control, ranging from full fog to straight stream

Efficient Waterway and Monitor
- Integrated 6 in. stainless steel inlet manifold
- Full-flow 6 in. waterway
- Standard Storz couplings for minimal friction loss and maximum efficiency and durability
- Mountable monitor with 6 in. stainless steel waterway
- 360° horizontal rotation; from 30° down to 75° up vertical movement
- Control stops in actuators
- Physical limit stops for elevation and rotation

Safety and Usability
This RANGER 3+ Nozzle Skid unit utilizes electric remote controls rather than hydraulic controls for improved safety and usability. The control system includes the following components:
- Wireless remote control module with an effective range of up to 300 ft (92 m)
- Local controls on the base of the unit
- Manual overrides for all functions of the system
- On-board deep cycle battery
- Smart battery charger
- Integrated hydraulic pump and controls

This remote-controlled unit is fully self-contained, requires no additional power supply and once recharged, provides hours of operation.
Performance Data

<table>
<thead>
<tr>
<th>Flow Rate gpm (Lpm)</th>
<th>Nozzle Angle 30°</th>
<th>Nozzle Angle 45°</th>
<th>Nozzle Angle 80°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum Range ft (m)</td>
<td>Maximum Height ft (m)</td>
<td>Height Location ft (m)</td>
</tr>
<tr>
<td>1000</td>
<td>211 (64)</td>
<td>34 (10)</td>
<td>143 (44)</td>
</tr>
<tr>
<td>2000</td>
<td>286 (87)</td>
<td>45 (14)</td>
<td>191 (58)</td>
</tr>
<tr>
<td>3000</td>
<td>309 (94)</td>
<td>49 (15)</td>
<td>207 (63)</td>
</tr>
<tr>
<td>4000</td>
<td>333 (102)</td>
<td>53 (16)</td>
<td>223 (68)</td>
</tr>
</tbody>
</table>

Notes: 1. The data for straight stream in still air to 5 mph (8 km/h) tail wind conditions using water only. 2. Foam decreases range by 5% to 20% in still air. Winds increase stream aspiration and reduce range further.

Accessories Data

Universal Mounting Rail System

The universal mounting rail system included with the RANGER 3+ Nozzle Skid package contains universal mounting rails, universal rail frame mounts, hardware, and installation instruction. Custom rail mounting brackets (sold separately) are available for some specific vehicle models.

Ordering Information

Contact WILLIAMS customer service at Johnson Controls with specific application requirements for custom configuration as well as additional information.

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