

THE EXM SERIES OF MONITORS EXTREME ENVIRONMENTS. EXTREME SOLUTIONS.



EXM

-
- Durability
 - Integration
 - Performance
 - Control
-

THE EXM SOLUTION: IT ALL ADDS UP

DURABILITY + TECHNOLOGY = THE TOTAL SOLUTION

Robust Joint Design

Each swivel joint contains 2 sets of stainless steel ball bearings, a hardened thrust rod and thrust bearings, engineered and manufactured to withstand the shearing action of water pressure while absorbing the effects of extreme vibration that damages weaker monitors.

Potted Electronics

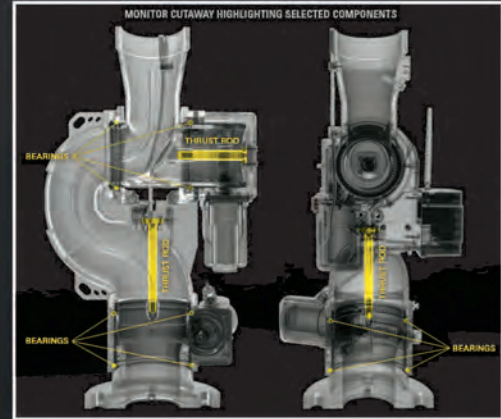
The EXM Control Module electronics are encased in a thermo-set plastic compound that provides resistance to shock and vibration, while blocking out moisture and other corrosive agents.

Heavy Duty Motors

Unlike the competition, EXM monitors utilize extreme durability/high frequency motors that provide a distinct advantage in continuous use applications such as construction, mining and de-icing. EXM motors also carry the extra torque required for operating AARF, de-icing and other specialty nozzles.

Teflon Impregnated Anodized Aluminum Alloy Waterway

The corrosion-resistant elliptical waterway, capable of withstanding up to 500 PSI operating pressure, reduces turbulence to provide an efficient method of water delivery resulting in reduced load on the apparatus pump.



DURABILITY + TECHNOLOGY = THE TOTAL SOLUTION

CANbus (J1939) Communication and RF options

The EXM system utilizes both CANbus and wireless control. Install a Panel Mount or Joystick controller, via CANbus, and add a wireless remote that can operate up to a 400 meter distance from the monitor. The EXM CANbus system can also be integrated directly into the vehicle's CANbus network for easy monitoring of the EXM system.



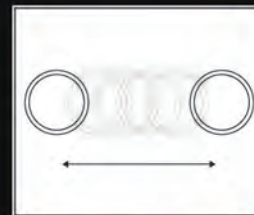
Absolute Position Technology

Position sensors integrated within the thrust rods of the monitor provide exact position feedback. This "absolute" technology retains the last known position of the monitor, so recalibration is not necessary in the event of a power interruption. The optional 7051 Position display module provides real-time visual indication of the monitor.

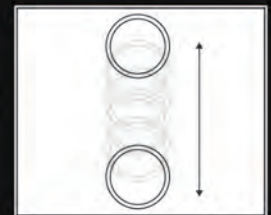


Programmable Multi-axis Oscillation

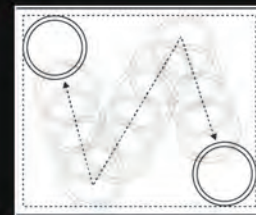
Horizontal, vertical or Multi-axis oscillation is easily programmed with any input controller. Just set the two endpoints of preferred travel and the monitor operates in the desired pattern until disabled by the user.



Horizontal Oscillation



Vertical Oscillation



Multi-Axis Oscillation

Programmable Travel Limits and Stow Position

Electronically-controlled travel limits allow the user to determine these limits based on individual needs. The programmable Stow Position returns the monitor to this user-defined position when not in use.

Programmable Keep-out Zones

Program a custom "keep-out" zone and never damage an expensive piece of apparatus mounted equipment again.



Field Diagnostic Capability

Upgrade software, download a diagnostic file or reprogram your system – from any EXM input controller.



This is how Elkhart Brass challenges our monitors so they are the right choice for you:

**DURABILITY
+ TECHNOLOGY
= THE TOTAL
SOLUTION**

Extreme Heat Test*

- Exposed to 185°F (85°C) for 24 hours

Extreme Cold Test*

- Exposed to -40°F (-40°C) for 24 hours

Solar Radiation Exposure*

- 24 hours cycle of infrared heat exposure

Temperature Shock Test*

- -40°F (-40°C) to 81°F (27°C)

Blowing Rain*

- 30 minutes blowing rain @ 60 feet (18 meters) per second

Blowing Dust*

- 12 hours exposure to blowing dust @ 30 feet (9 meters) per second

Blowing Sand*

- 6 hours exposure to blowing sand @ 59 – 95 feet (18 – 29 meters) per second

Vibration and Shock Testing*

- 3 axis vibration testing – 60 minutes per axis (40g shock impact on all 4 axes)

NEMA 4 Enclosure Test*

- Electrical Enclosures - 1.0" Diameter water stream (65 gpm/246 lpm) on all potential leak paths for duration of 5 minutes

High Pressure Test to Failure*

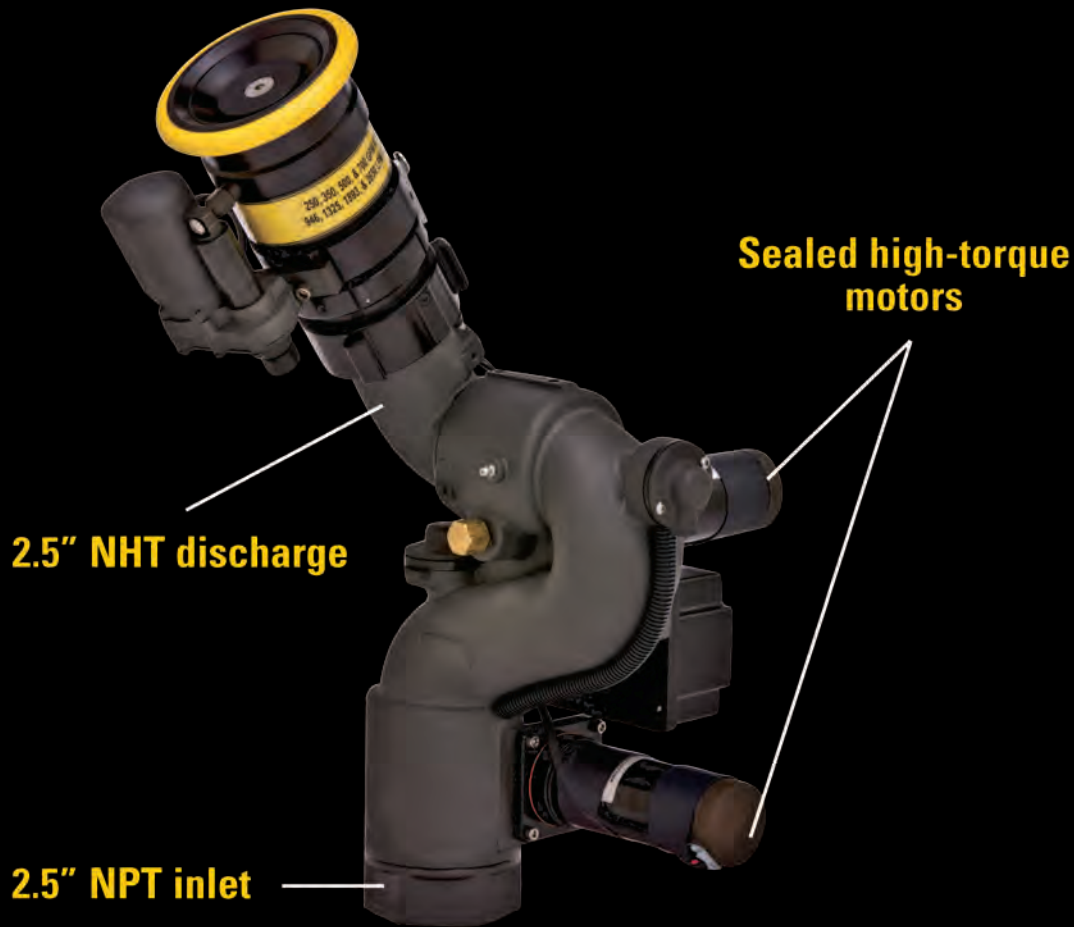
- Pressurized to failure – monitor held 2700 PSI for 1 minute then failed at 2800 PSI (186 bar)

High Pressure Cycle Test*

- 10,000 cycles while pressurized @ 250 PSI (17 bar)
- 4 hours cycling while pressurized @ 500 PSI (34 bar)

SIDEWINDER EXM™ (700 GPM)

At 700 GPM, the Sidewinder EXM provides a compact, durable solution for mining, construction and wildland firefighting. Available in **Standard Duty** and **Heavy Duty models**, the Sidewinder EXM delivers an excellent water stream when matched with a 6000 Series electric nozzle. The 7070 Joystick, with integrated water valve control, is the preferred control option for the Sidewinder EXM.



SPECIFICATIONS

Model	7100 SD/HD
Max Flow	700 GPM (2650 LPM)
Max Pressure	500 PSI (34.5 bar)
Inlet	2.5" NPT
Outlet	2.5" NHT
Travel	V: -45° to +90° (135°) H: L175 to R175 (350°)
Voltage	11-27 VDC
Weight	19 Lbs.

Vehicle Applications

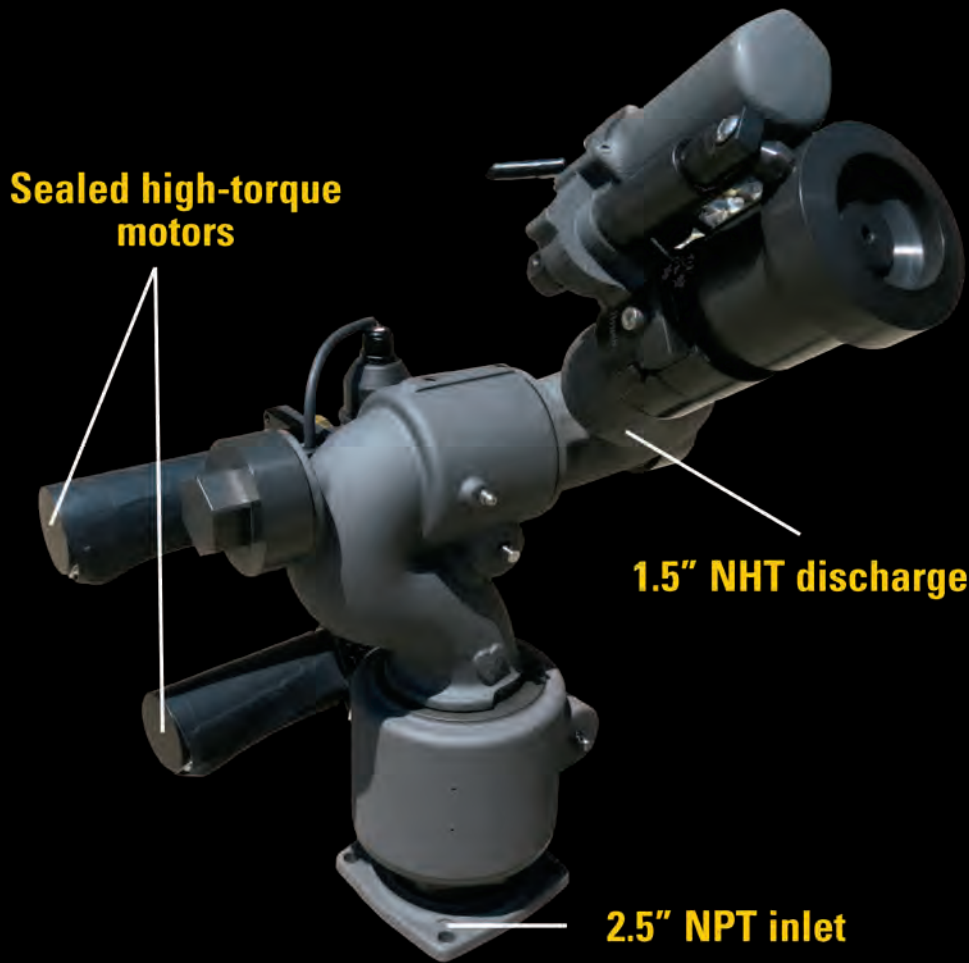
- Wildland
- AARF
- Military
- Construction and Mining

NOZZLE OPTIONS

		MODEL
Electric Nozzles	Selectable	15/30/45/60/95/125/150/200/FLUSH GPM
		250/350/500/700/FLUSH GPM
		6000-200E
		6000-700E

SIDEWINDER EXM UHP™ (300 GPM)

Designed to meet U.S. Military specifications, the **Ultra High Pressure** version of the Sidewinder EXM offers up to 300 GPM at 1500 PSI. Available in multiple flow options, the Sidewinder EXM UHP is the ideal monitor for rapid attack firefighting that requires significant stream penetration along with water conservation.



SPECIFICATIONS

Model	7161
Max Flow	300 GPM (1136 LPM)
Max Pressure	1500 PSI (103 bar)
Inlet	2.5" NPT
Outlet	1.5" NHT
Travel	V: -45° to +90° (135°) H: L90 to R90 (180°)
Voltage	11-27 VDC
Weight	27 Lbs.

Vehicle Applications

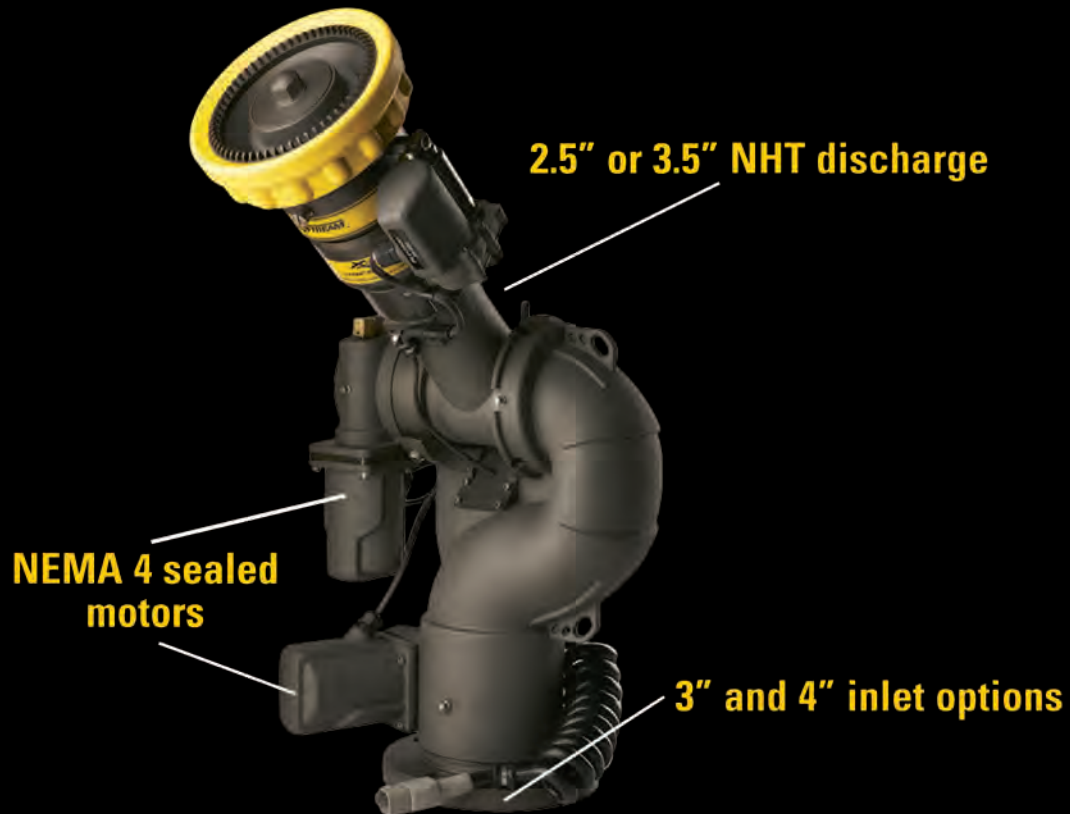
- Wildland
- AARF
- Military
- Construction and Mining

NOZZLE OPTIONS

		MODEL
Electric Nozzle	Fixed	60 GPM (227 LPM) with Flush 5000-14E UHP

COBRA EXM™ (1500 GPM)

Offered in either **1250 GPM or 1500 GPM** along with **Standard or Heavy Duty** versions, the Cobra EXM is the preferred monitor for aerial apparatus OEMs. With its 6" swing radius and 16" stow height, the Cobra EXM fits into small spaces on aerials and platforms. Add an SM Series nozzle and you have the perfect product for your new aerial device.



SPECIFICATIONS

Model	7200 / 7250 SD/HD
Max Flow GPM (LPM)	1250 (4731) / 1500 (5678)
Max Pressure	500 PSI (34.5 BAR) Limited Duty
Inlet	3"-150# Flg, 4"-150# Flg, 3" NPT, 3" BSPT, & DN80-PN16
Outlet	2.5" / 3.5" Male NHT & BSPP
Travel	V: -45° to +90° (135°) V: -45° to +120° (165°) w/ EXT H: L175 to R175 (350°)
Voltage	11-27 VDC
Swing Radius	6" (180°), 8" (360°)
Stow Height	16"
Weight	31 Lbs.

Vehicle Applications

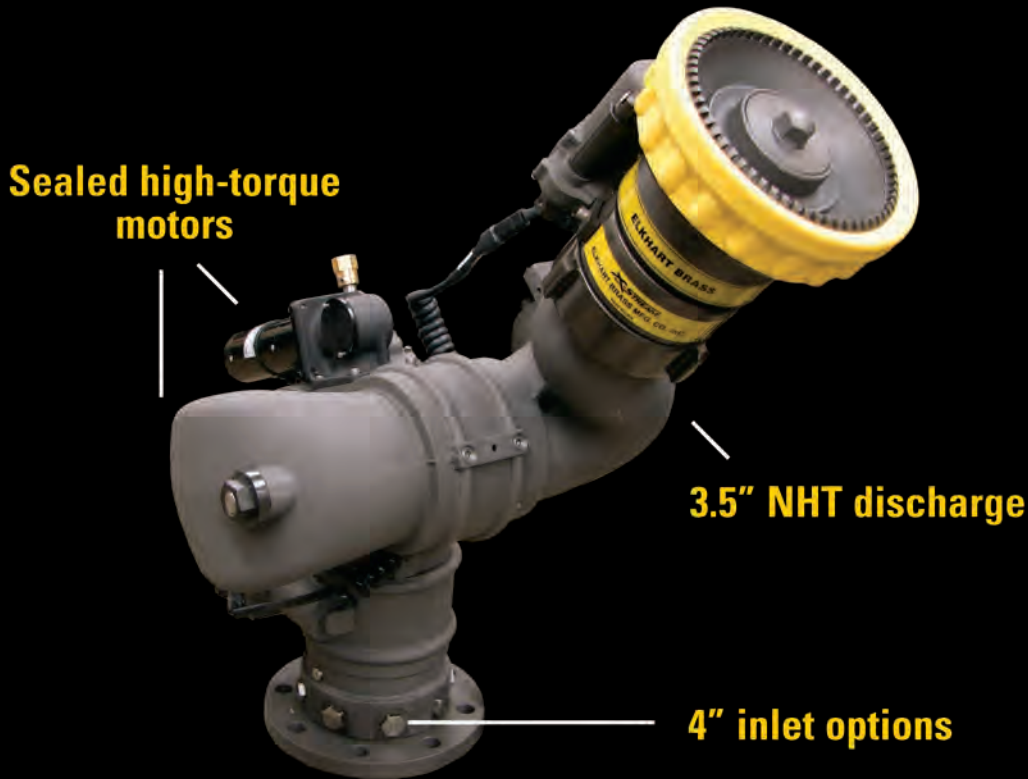
- Municipal Pumper
- Industrial Pumper
- Aerial Apparatus
- Construction and Mining

NOZZLE OPTIONS

		NOZZLE OPTIONS	MODEL
Electric Nozzles	X-Stream Series Automatic	2.5" Inlet: 350-1000 GPM (1325-3785 LPM)	SM-1000E
		2.5" Inlet: 350-1250 GPM (1325-4731 LPM)	SM-1250E
		3.5" Inlet: 500-1500 GPM (1893-5678 LPM)	SM-1500E

SCORPION EXM™ (2500 GPM)

With its 3.5" vaned waterway, the Scorpion EXM provides large flow – up to **2500 GPM** – with minimal turbulence. The stainless steel thrust rods, standard on all EXM monitors, make the Scorpion the most durable, dependable monitor for high-volume firefighting applications.



SPECIFICATIONS

Model	7400
Max Flow	2500 GPM (9463 LPM)
Max Pressure	500 PSI (34.5 bar)
Inlet	4" ANSI, DN100
Outlet	3.5" Male NHT & BSPP
Travel (Factory Settings)	V: -45° to +90° (135°) H: L175 to R175 (350°)
Voltage	11-27 VDC
Stow Height	20"
Weight	52 Lbs.

Vehicle Applications

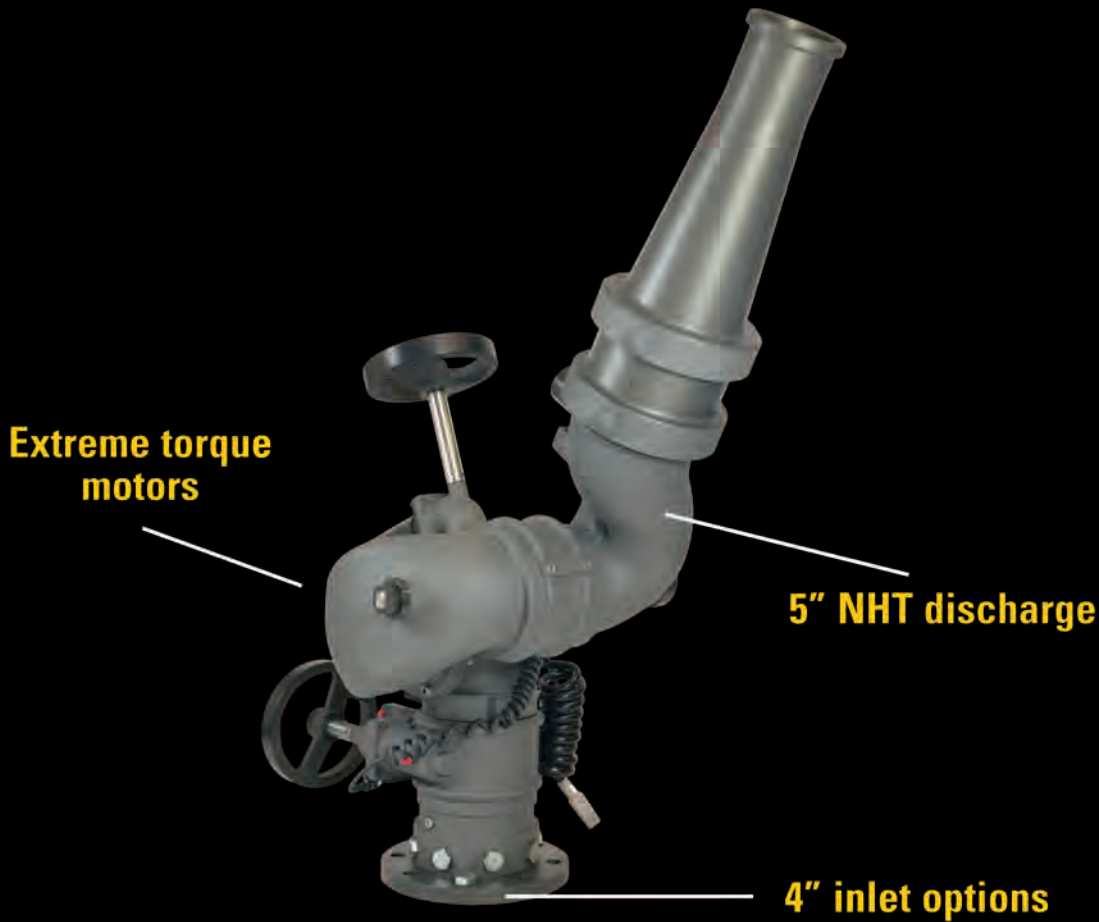
- Municipal Pumper
- Industrial Pumper
- Aerial Apparatus
- AARF
- Deicing

NOZZLE OPTIONS

NOZZLE OPTIONS		MODEL
Electric Nozzles	X-Stream Series	3.5" Inlet: 350-1250 GPM (1325-4731 LPM)
	Automatic	3.5" Inlet: 500-2000 GPM (1893-7571 LPM)
		SM-1250E
		SM-2000E

SKYSTREAM EXM™ (3000 GPM)

Taking the Scorpion to the next level, the SkyStream EXM brings a flow capability of **3000 GPM**. With its 5" outlet, the SkyStream delivers best-in-class flow that provides a reach of up to **400 feet (120 meters)**, making it ideal for fire apparatus, industrial pumpers and aerial vehicles.



SPECIFICATIONS

Model	7500
Max Flow	3000 GPM (11355 LPM)
Max Pressure	500 PSI (34.5 bar)
Inlet	4" ANSI, DN100
Outlet	5" Male NHT
Travel	V: -45° to +90° (135°)
(Factory Settings)	H: L175 to R175 (350°)
Voltage	11-27 VDC
Stow Height	28.6"
Weight	57.7 Lbs.

Vehicle Applications

- Industrial Pumper
- Aerial Apparatus
- AARF

NOZZLE OPTIONS

MODEL

Nozzles	Smooth Bore	17" long, custom 2 3/4" Smooth Bore Nozzle for use with the SkyStream™ EXM.	181-5A
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EXM SERIES OF MONITORS COMPONENTS



JOYSTICK CONTROLLER #7030

This Controller can be mounted inside the cab to control all monitor functions. The up-down/left-right motions can be operated simultaneously with pressure sensitive speed. The water valve can be opened or locked into position, and the nozzle pattern can also be changed using a thumb wheel.



PANEL MOUNT CONTROLLER #7010

This feature is a sealed controller for operation of the monitor, nozzle and water valve (optional). Separate push button switches are provided for up, down, left, right, fog and straight stream; valve open/close, valve preset, oscillation and auxiliary functions. (Powered with 12 or 24 Volts).



HANDHELD CONTROLLER WITH DOCKING STATION #7015

This is a sealed remote control containing everything necessary for operation of the monitor, nozzle and water valve (optional). The remote allows the operator to control the monitor from a significantly improved point of view. Separate push buttons are provided for multiple oscillation and auxiliary functions. The handheld remote, through the use of frequency hopping techniques, allows multiple transmitters to operate on a common site without interference.



OEM INTERFACE MODULE #7072/7073

This feature is used in conjunction with either the Elkhart Brass, or customer supplied, joystick or OEM installed switches. The OEM Interface Module may be configured to handle switching power or ground. There is also the option of mounting a joystick, or switches, in the apparatus cab to control all monitor functions, including oscillation. (Powered with 12 or 24 Volts).



POSITION FEEDBACK DISPLAY #7051

All EXM monitors come with Absolute Position Feedback sensors. These sensors provide constant feedback to the monitors' processor even when the monitor is moved via manual override. This information is then transmitted to the Position Feedback Display.



EXM CAN STOW MODULE #7095

This innovation provides electrical outputs to which an OEM can connect. This enables/disables truck operations based on whether an EXM monitor is stowed, or not. This is useful, for example, for a truck that has an aerial, or other movable object, that may hit the monitor if moved when not stowed, or used to turn OEM-supplied indicator lights on/off depending on the monitor stow state.



UNIBODY VALVE WITH E3F ELECTRIC ACTUATOR

This feature provides a convenient remote on/off and preset valve positioning control of the water supply to the monitor. The operator then has control of the unit from the safety of the vehicle cab, or handheld radio controller. The water valve motor speed prevents water hammer, yet closes quickly to help preserve the limited on-board water supply. (Powered with 12 or 24 Volts).



ELKHART BRASS
FIRE FIGHTING EQUIPMENT A SAFE FLEET BRAND

www.elkhartbrass.com • 574.295.8330



April 2016