

Max. GPM (LPM)	CONTROL OPTIONS							MOUNTING OPTIONS					DEGREES OF TRAVEL		CERTIFICATIONS		MATERIAL OPTIONS			MONITOR SERIES	PAGE	
	Manual			Hydraulic	Electric	Wireless (RF)	EXM2 Technology	Mobile			Stationary		Integral Ball Valve	Vertical	Horizontal	CE	FM Approved	Brass	Elk-O-Lite®			Stainless Steel
	Dual Hand-wheel	Single Hand-wheel	Tiller					Portable	Wheeled Cart	Apparatus	Fixed Installation	Elevated										
300 (1200)					•	•	•				•	•		135°	180°				•		Sidewinder® EXM2 UHP	5-14
500 (2000)					•						•			135°	334°	•			•		BrushHawk	5-16
			•											135°	360°				•		Sidewinder®	5-19
750 (3000)						•	•							43°	40°	•			•		R.A.M.® XD	5-26
						•	•							135°	350°				•		Sidewinder® EXM2	5-2
1000 (4000)	•		•											175°	360°				•		Manual Elevated	5-49
									•					50°	90°				•		Portable Carts	5-54
1250 (5000)					•	•	•							165°	350°				•		Cobra™ EXM2 7200	5-4
			•								•			95°	360°	•			•		Stinger® 2.0	5-28
	•		•											135°	360°	•			•		Vulcan™	5-31
														130°	360°	•	•		•		Stingray®	5-37
	•		•											135°	360°	•	•		•		Copperhead	5-40
			•											135°	360°	•	•		•		Python®	5-43
			•											130°	360°	•	•		•		Hydrant Mount	5-47
1500 (6000)					•	•	•							165°	350°				•		Cobra™ EXM2 7250	5-4
2000 (8000)					•	•	•							165°	350°				•		Boa 2000	5-12
														135°	347°	•			•		Scorpion® Electric	5-21
	•		•											135°	360°	•			•		Scorpion®	5-24
	•		•											135°	360°	•			•		Spit-Fire	5-34
2500 (10000)					•	•	•							135°	350°				•		Scorpion® EXM2	5-6
														150°	360°	•	•		•		Giant Python	5-45
3000 (12000)					•	•	•							135°	350°				•		SkyStream™ EXM2	5-8
5000 (20000)					•	•	•							135°	350°				•		Magnum™ EXM2	5-10

DIMENSIONAL ABBREVIATIONS KEY:

- D.L. = Discharge Length
- H.H. = Handle Height
- H.S.R. = Handle Swing Radius
- M.H. = Monitor Height
- O.H. = Overall Height
- O.L. = Overall Length
- P.H. = Pivot Height
- P.R. = Pivot Radius
- W. = Width

ADDITIONAL INFORMATION

- Elkhart has trademarked the Elk-O-Lite® name for our proprietary aluminum alloy (cast alloy #356-A).

SYMBOLS



- Denotes flow or pressure rating

THREADS

- Throughout the monitor section, all threads – unless otherwise specified – are NHT. Additional thread information may be found on page T-13.

MONITORS



SIDEWINDER® EXM2

MONITORS

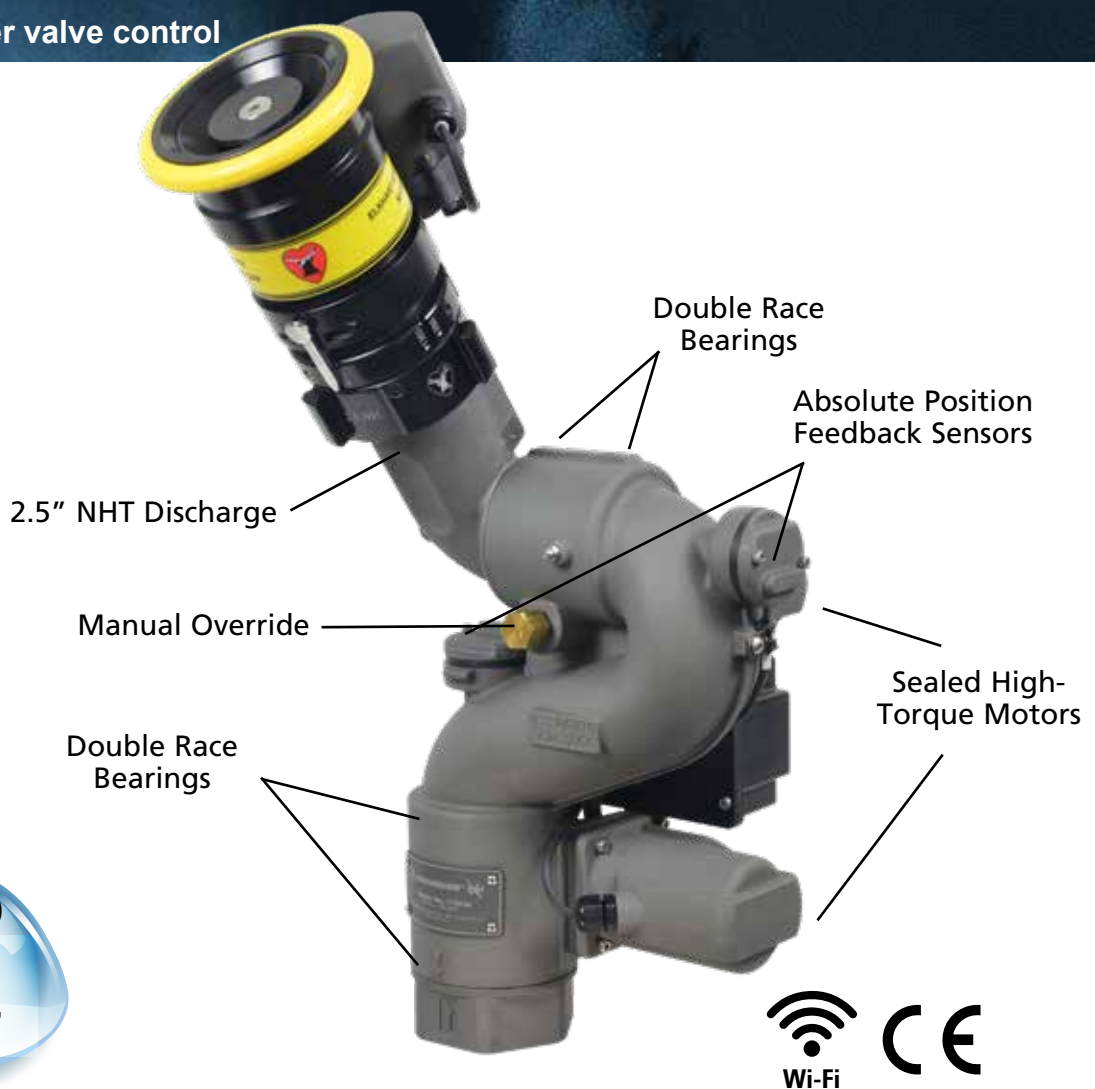
Sidewinder® EXM²

The Sidewinder EXM2 monitor is specially designed for severe duty cycles. Unique waterway swivel joints utilize stainless steel thrust rods, and axially aligned thrust bearings for unprecedented durability in mining, construction, and wildland firefighting applications. The monitor can be controlled by hardwired input devices via CAN bus J1939, or by an optional WiFi device. The monitor may be powered with 12 or 24 volts.

- 750 GPM (3000 LPM) flow
- Available in standard or heavy duty motor configurations
- Sealed to NEMA 4
- Patented, elliptical waterway is Teflon impregnated, hard anodized aluminum alloy
- Programmable travel speeds, 3D travel limits, keep out zones, stow, deploy and oscillation
- Integrated water valve control

5-2

Sidewinder® EXM2
Mo. 7100 SD
(Nozzle sold separately)



SPECIFICATIONS	
Model:	7100SDX2/7100HDX2
Max Flow:	750 GPM (3000 LPM)
Max Pressure:	600 PSI (42 bar)
Inlet:	2.5" NPT
Outlet:	2.5" NHT
Travel:	Vertical: -45° to +90° (135°) Horizontal: L175 to R175 (350°)
Voltage:	12 or 24 VDC compatible
Control:	CANbus J1939
Communication:	915 MHz RF - FCC 868 MHz RF - CE
Material/Finish:	Teflon impregnated, hard anodized Elk-O-Lite®
Stow Height	13.2" (335mm)
Weight:	18 lbs (8.2 kg)



Sidewinder® EXM2
Mo. 7100 HD

Recommended Products

Panel Mount	Handheld	Joystick	Position Display	6000 Series Nozzle	Light Kit	Quick Connect
(2) 	(3) 	(4) 	(5) 	(6) 	(7) 	(8) 

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Electric Nozzles	Selectable	15/30/45/60/95/125/150/200/FLUSH GPM	6	6000-200E
		250/350/500/700/FLUSH GPM	6	6000-700E
Controllers	EXM2 Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM2 enabled component.	2	7010X2
	EXM2 Wireless Handheld Controller Kit	Wireless remote control with powered docking station. Built-in charging circuit charges the remote whenever it is placed in the docking station.	3	7015X2
	EXM2 Joystick Controller	Proportional joystick with integrated CANbus communication. Hardwire joystick direct via CANbus to any EXM2 monitor.	4	7030X2
Modules	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	5	7051X2
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	Not Pictured	7095
Accessories	2.5" Quick Connect	Allows for quick removal of the monitor	8	7150
	Light Kit	Includes 3500 lumen FRC WorkPro spotlight, mounting bracket and power harness.	7	7091L
	Video Kit	Includes camera and mounting bracket, 7" color monitor and harnesses.	Not Pictured	7091V

MONITORS



COBRA™ EXM2

MONITORS

Cobra™ EXM²

The Cobra™ EXM2 monitor is specially designed to be compact, providing a greatly reduced swing radius. Unique waterway swivel joints utilize stainless steel thrust rods, and axially aligned thrust bearings for unprecedented durability in a range of applications. The Cobra™ EXM2 utilizes a cast, vaned waterway to minimize large-scale turbulence. The monitor can be controlled by hardwired input devices via CAN bus J1939, or by an optional WiFi device. The monitor may be powered with 12 or 24 volts.

- Extended Travel Lockout
- 1250 or 1500 GPM flow
- Industry leading 6" swing radius
- Available in standard or heavy duty motor configurations
- Patented, elliptical waterway is Teflon impregnated, hard anodized aluminum alloy
- Programmable travel speeds, 3D travel limits, keep out zones, stow and oscillation
- Integrated water valve control

5-4

Cobra™ EXM2
Mo. 7200 SD
(Nozzle sold separately)



1250
GPM
5000
LPM

500
PSI
34.5
bar

1500
GPM
6000
LPM

500
PSI
34.5
bar

SPECIFICATIONS	
Model:	7200X2/7250X2
Max Flow:	1250 GPM (5000 LPM) / 1500 GPM (6000 LPM)
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:	Vertical: -45° to +120° (165°) w/ Extended Travel Horizontal: L175 to R175 (350°)
Voltage:	12 or 24 VDC compatible
Control:	CANbus J1939
Communication:	915 MHz RF - FCC 868 MHz RF - CE
Material/Finish:	Teflon impregnated, hard anodized Elk-O-Lite®
Swing Radius:	6" (152mm) 180°, 8" (203mm) 360°
Stow Height:	16" (406mm)
Weight:	31 lbs (14 kg) / 32 lbs (14.5 kg)



Cobra™ EXM2
Mo. 7250 SD

Recommended Products

Panel Mount	Handheld	Joystick	Position Display	X-Stream Series Nozzle	Light Kit	EXM CAN Stow Module
(2) 	(3) 	(4) 	(5) 	(6) 	(7) 	(8) 

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Electric Nozzles	Selectable	2.5" Inlet: 350-1000 GPM (1325-3785 LPM)	6	SM-1000E
		2.5" Inlet: 350-1250 GPM (1325-4731 LPM)	6	SM-1250E
		3.5" Inlet: 500-1500 GPM (1893-5678 LPM)	6	SM-1500E
Controllers	EXM2 Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM2 enabled component.	2	7010X2
	EXM2 Wireless Handheld Controller Kit	Wireless remote control with powered docking station. Built-in charging circuit charges the remote whenever it is placed in the docking station.	3	7015X2
	EXM2 Joystick Controller	Proportional joystick with integrated CANbus communication. Hardwire joystick direct via CANbus to any EXM2 monitor.	4	7030X2
Modules	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	5	7051X2
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	8	7095
Accessories	Light Kit	Includes 3500 lumen FRC WorkPro spotlight, mounting bracket and power harness.	7	7089L
	Video Kit	Includes camera and mounting bracket, 7" color monitor and harnesses.	Not Pictured	7089V

MONITORS



SCORPION® EXM2

MONITORS

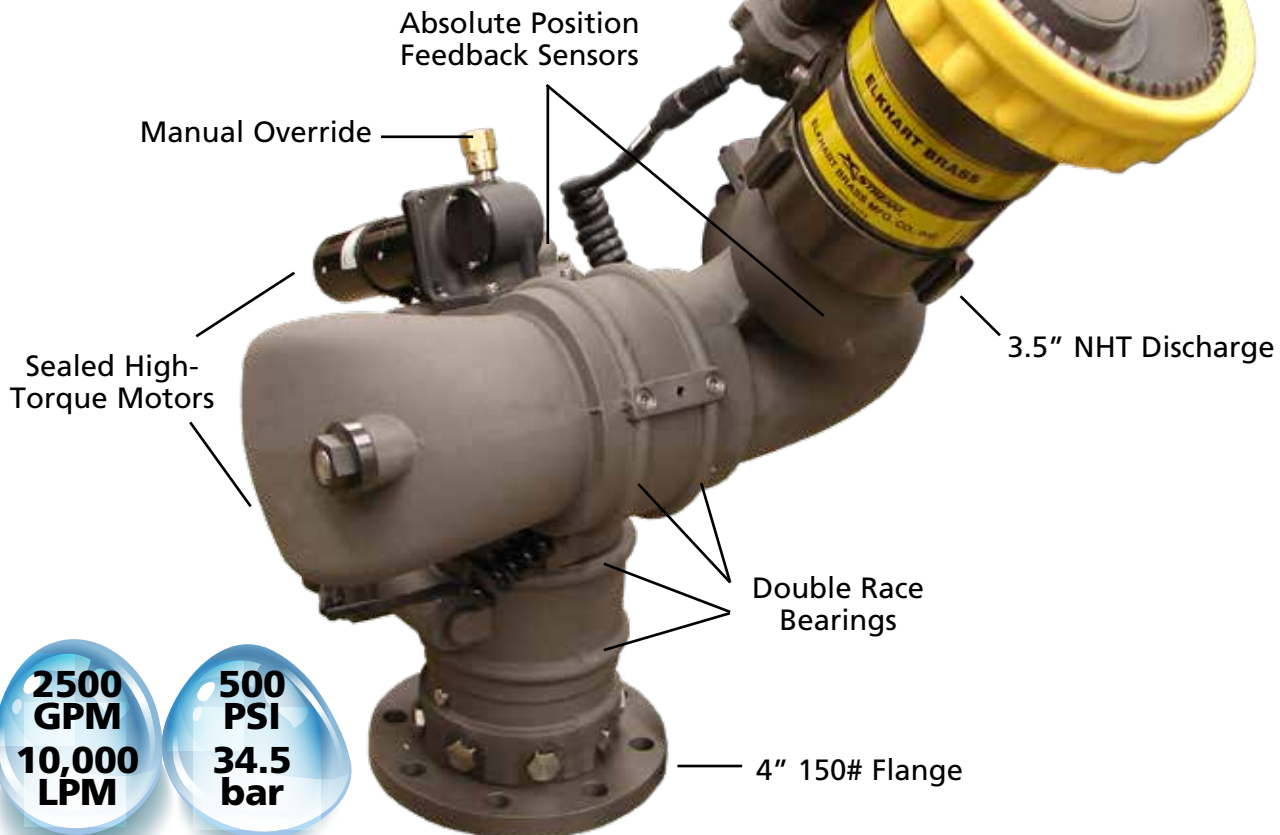
Scorpion® EXM²

The Scorpion EXM2 monitor is specially designed for severe duty cycles. Unique waterway swivel joints utilize stainless steel thrust rods, and axially aligned thrust bearings for unprecedented durability in all firefighting applications. With its 3.5" vaned waterway, the Scorpion EXM provides large flow with minimal turbulence. The monitor can be controlled by hardwired input devices via CAN bus J1939, or by an optional Radio Frequency (RF) device. The monitor may be powered with 12 or 24 volts.

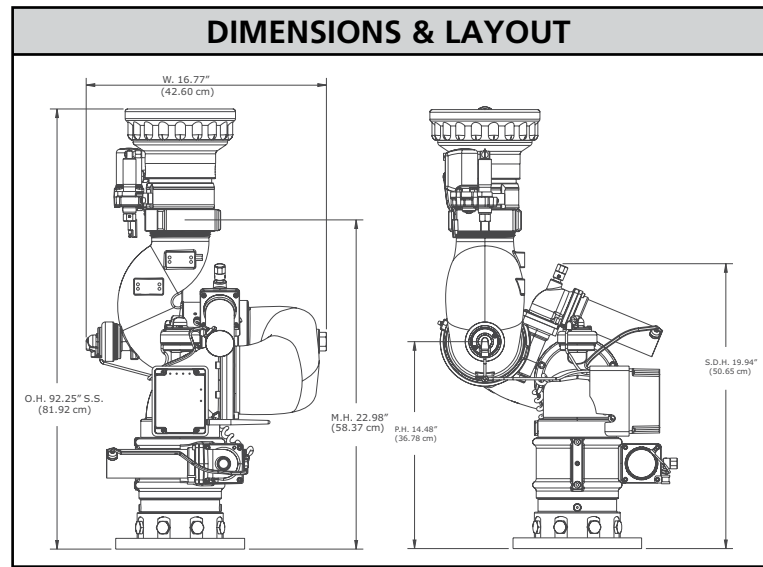
- 2500 GPM flow
- Large range of travel: -45° to +90° vertical & L175° to R175° horizontal (up to -80° or +120° vertical travel achievable with max travel of 135°)
- Patented, elliptical waterway is Teflon impregnated, hard anodized aluminum alloy
- Programmable travel speeds, 3D travel limits, keep out zones, stow and oscillation
- Integrated water valve control

5-6

Scorpion® EXM2
Mo. 7400
(Nozzle sold separately)



SPECIFICATIONS	
Model:	7400X2
Max Flow:	2500 GPM (10,000 LPM)
Max Pressure:	500 PSI (34.5 bar)
Inlet:	4" ANSI, DN100
Outlet:	3.5" Male NHT & BSPP
Travel:	Vertical: -45° to +90° (135°) Horizontal: L175 to R175 (350°)
Voltage:	12 or 24 VDC compatible
Control:	CANbus J1939
Communication:	915 MHz RF - FCC 868 MHz RF - CE
Material/Finish:	Teflon impregnated, hard anodized Elk-O-Lite®
Stow Height:	20" (508mm)
Weight:	52 lbs (23.6 kg)



Recommended Products

Panel Mount	Handheld	Joystick	Position Display	X-Stream Series Nozzle	Light Kit
(2)	(3)	(4)	(5)	(6)	(7)

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Electric Nozzles	X-Stream Series Automatic	3.5" Inlet: 350-1250 GPM (1325-4731 LPM)	6	SM-1250E
		3.5" Inlet: 500-2000 GPM (1893-7571 LPM)	6	SM-2000E
Controllers	EXM2 Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM2 enabled component.	2	7010X2
	EXM2 Wireless Handheld Controller Kit	Wireless remote control with powered docking station. Built-in charging circuit charges the remote whenever it is placed in the docking station.	3	7015X2
	EXM2 Joystick Controller	Proportional joystick with integrated CANbus communication. Hardwire joystick direct via CANbus to any EXM2 monitor.	4	7030X2
Modules	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	5	7051X2
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	Not Pictured	7095
Accessories	Light Kit	Includes 3500 lumen FRC WorkPro spotlight, mounting bracket and power harness.	7	7092L
	Video Kit	Includes camera and mounting bracket, 7" color monitor and harnesses.	Not Pictured	7092V

MONITORS



SKYSTREAM™ EXM2

MONITORS

SkyStream™ EXM²

Taking the Scorpion EXM to the next level, the SkyStream EXM increases the flow capability to 3000 GPM (11355 LPM). With it's 5" NHT outlet, the SkyStream delivers best in class flow that provides a reach of up to 120 meters, making it ideal for use with fire apparatus, industrial pumper, and aerial vehicles.

- 3000 GPM flow
- Large range of travel: -45° to +90° vertical & L175° to R175° horizontal
- Patented, elliptical waterway is Teflon impregnated, hard anodized aluminum alloy
- Programmable travel speeds, 3D travel limits, keep out zones, stow and oscillation
- Integrated water valve control

5-8

SkyStream™ EXM2
Mo. 7500
(Nozzle sold separately)

2 3/4" Smooth Bore Nozzle

Manual Override
Handwheels

Stream Shaper

Sealed High-
Torque Motors

5" NHT Discharge

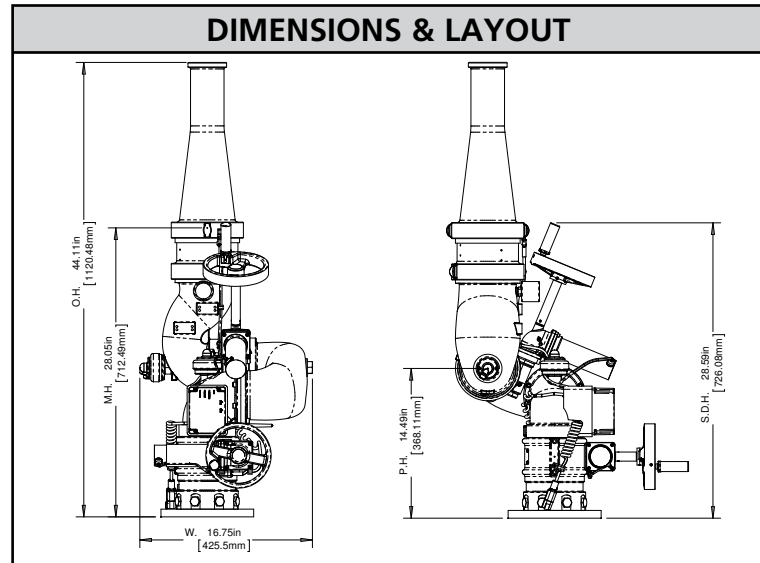
Double Race
Bearings

**3000
GPM
12,000
LPM**

**500
PSI
34.5
bar**

4" 150# Flange

SPECIFICATIONS	
Model:	7500X2
Max Flow:	3000 GPM (12,000 LPM)
Max Pressure:	500 PSI (34.5 bar)
Inlet:	4" ANSI, DN100
Outlet:	5" Male NHT & BSPP
Travel:	Vertical: -45° to +90° (135°) Horizontal: L175 to R175 (350°)
Voltage:	12 or 24 VDC compatible
Control:	CANbus J1939
Communication:	915 MHz RF - FCC 868 MHz RF - CE
Material/Finish:	Teflon impregnated, hard anodized Elk-O-Lite®
Stow Height:	20" (508mm) without optional handwheel
Weight:	58 lbs (26.3 kg)



Recommended Products

Panel Mount	Handheld	Joystick	Position Display	Smooth Bore Nozzle	Light Kit
(2)	(3)	(4)	(5)	(6)	(7)

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Nozzle	Smooth Bore	17" long, custom 2 3/4" Smooth Bore Nozzle for use with the SkyStream™ EXM2.	6	181-5A
Controllers	EXM2 Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM2 enabled component.	2	7010X2
	EXM2 Wireless Handheld Controller Kit	Wireless remote control with powered docking station. Built-in charging circuit charges the remote whenever it is placed in the docking station.	3	7015X2
	EXM2 Joystick Controller	Proportional joystick with integrated CANbus communication. Hardwire joystick direct via CANbus to any EXM2 monitor.	4	7030X2
Modules	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	5	7051X2
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	Not Pictured	7095
Accessories	Light Kit	Includes 3500 lumen FRC WorkPro spotlight, mounting bracket and power harness.	7	7092L
	Video Kit	Includes camera and mounting bracket, 7" color monitor and harnesses.	Not Pictured	7092V

MONITORS



MAGNUM™ EXM2

MONITORS

Magnum™ EXM²

With its large 6" inlet and unique waterway, the 7600 EXM is capable of providing 5000 GPM (18925 LPM) flow where you need it most. Designing the 7600 to be a part of the EXM2 family ensures the same level of quality and durability the industry has come to know. In addition, it has the same programmable EXM features such as 3D travel limits, keep-out zones, travel speeds, stow position, and oscillation.

- 5000 GPM flow
- Large range of travel: -60° to +90° vertical & L175° to R175° horizontal
- Patented, elliptical waterway is Teflon impregnated, hard anodized aluminum alloy
- Programmable travel speeds, 3D travel limits, keep out zones, stow and oscillation

5-10

Magnum™ EXM
Mo. 7600
(Nozzle sold separately)

CM-3000E & CM-5000E
Master Stream Nozzles

6" NHT Discharge

Sealed High-Torque Motors

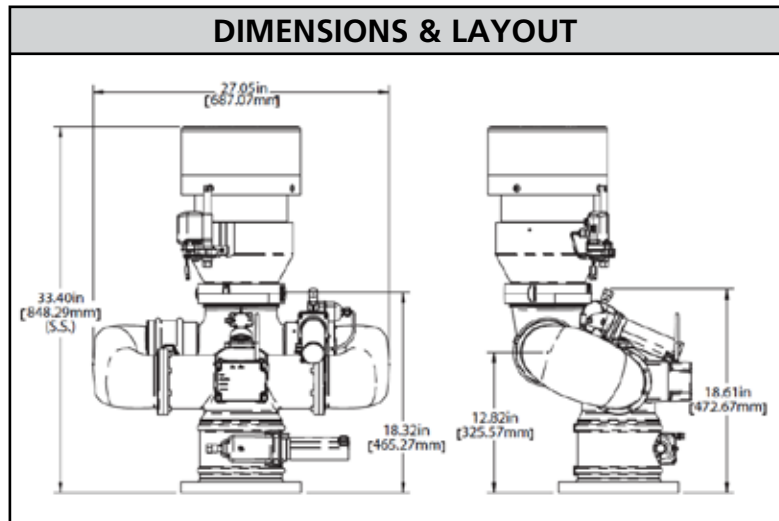
Manual Overrides

6" 150# Flange

5000
GPM
20,000
LPM

200
PSI
13.8
bar

SPECIFICATIONS	
Model:	7600X2
Max Flow:	5000 GPM (20,000 LPM)
Max Pressure:	200 PSI (13.8 bar)
Inlet:	6" 150# Flange
Outlet:	6" NHT
Travel:	Vertical: -60° to +90° (150°) Horizontal: L175 to R175 (350°)
Voltage:	12 or 24 VDC compatible
Control:	CANbus J1939
Communication:	915 MHz RF - FCC 868 MHz RF - CE
Material/Finish:	Teflon impregnated, hard anodized Elk-O-Lite®
Stow Height:	18.6" (472mm)
Weight:	115 lbs (52 kg) including nozzle



Recommended Products



Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Electric Nozzles	CM Series Fixed	6" Inlet: 3000 GPM (11355 LPM) @ 80 PSI (5.5 BAR)	6	CM-3000E
		6" Inlet: 5000 GPM (18925 LPM) @ 100 PSI (6.9 BAR)	6	CM-5000E
		6" Inlet: 3000 GPM (11355 LPM) @ 130 PSI (13.8 BAR)	6	CM-3000EX
Controllers	EXM2 Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM2 enabled component.	2	7010X2
	EXM2 Wireless Handheld Controller Kit	Wireless remote control with powered docking station. Built-in charging circuit charges the remote whenever it is placed in the docking station.	3	7015X2
	EXM2 Joystick Controller	Proportional joystick with integrated CANbus communication. Hardwire joystick direct via CANbus to any EXM2 monitor.	4	7030X2
Modules	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	5	7051X2
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	8	7095
Accessories	Light Kit	Includes 3500 lumen FRC WorkPro spotlight, mounting bracket and power harness.	7	7093L
	Video Kit	Includes camera and mounting bracket, 7" color monitor and harnesses.	Not Pictured	7093V



BOA 2000

MONITORS

BOA 2000

The efficient 4" vaned waterway and 3.5" discharge matched with an SM-2000E master stream nozzle delivers an effective stream while the power of the EXM2 provides all of the user-programmable options, including travel limits, oscillation, stow and keep-out zones.

Powered by:

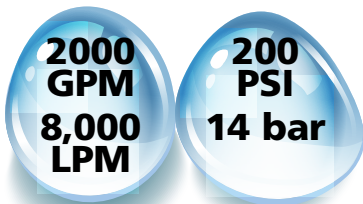


5-12

Boa 2000
Mo. 7451
(Nozzle sold separately)

EXM Control
Module

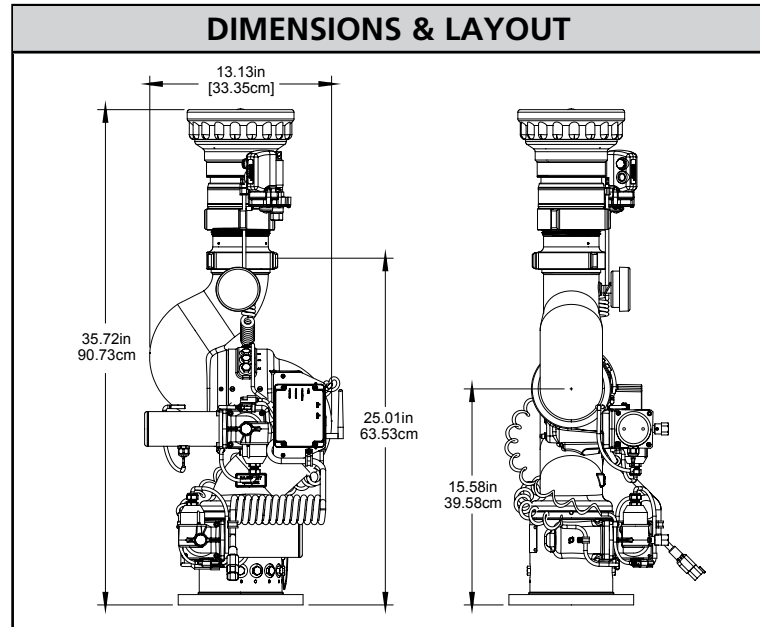
3.5" NHT Discharge



4" 150# Flange



SPECIFICATIONS	
Model	7451
Max Flow	2000 GPM (7570 LPM)
Max Pressure	200 PSI (13.8 bar)
Inlet	4" 150# Flange
Outlet	3.5" Male NHT
Travel (Factory Settings)	V: -45° to +120° (120°) H: L175 to R175 (350°)
Voltage	11-32 VDC
Control Communication	CAN bus (J1939) Digital radio frequency (unlicensed)
Material/Finish	Red urethane enamel, hard anodized Elk-O-Lite®
Stow Height	20"
Weight	47 Lbs. (21.3 kg)



Recommended Products

Panel Mount	Handheld	Joystick	Position Display	X-Stream Series Nozzle
(2)	(3)	(4)	(5)	(6)

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Electric Nozzles	X-Stream Series Automatic	3.5" Inlet: 350-1250 GPM (1325-4731 LPM)	6	SM-1250E
		3.5" Inlet: 500-2000 GPM (1893-7571 LPM)	6	SM-2000E
Controllers	EXM2 Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM2 enabled component.	2	7010X2
	EXM2 Wireless Handheld Controller Kit	Wireless remote control with powered docking station. Built-in charging circuit charges the remote whenever it is placed in the docking station.	3	7015X2
	EXM2 Joystick Controller	Proportional joystick with integrated CANbus communication. Hardwire joystick direct via CANbus to any EXM2 monitor.	4	7030X2
Modules	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	5	7051X2
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	Not Pictured	7095

MONITORS



SIDEWINDER® EXM2 UHP

Sidewinder® EXM² UHP

Taking the Sidewinder EXM2 to the next level, Elkhart's 7161 Sidewinder EXM Ultra-High Pressure (UHP) monitor has been designed and developed to meet U.S. Air Force specifications, and is now being offered for all other UHP needs; including Aircraft Rescue & Fire Fighting (ARFF).

- 1500 PSI pressure
- Extreme Torque Motors
- Sealed to NEMA 4
- Teflon impregnated, hard anodized aluminum alloy
- Programmable travel speeds, 3D travel limits, keep out zones, stow and oscillation

5-14

Sidewinder® EXM2 UHP
Mo. 7161
(Nozzle sold separately)

Sealed
High-Torque
Motors

Manual Override

Absolute Position
Feedback Sensors

1.5" NHT Discharge

Fully-Vaned, Cast
Aluminum Waterway

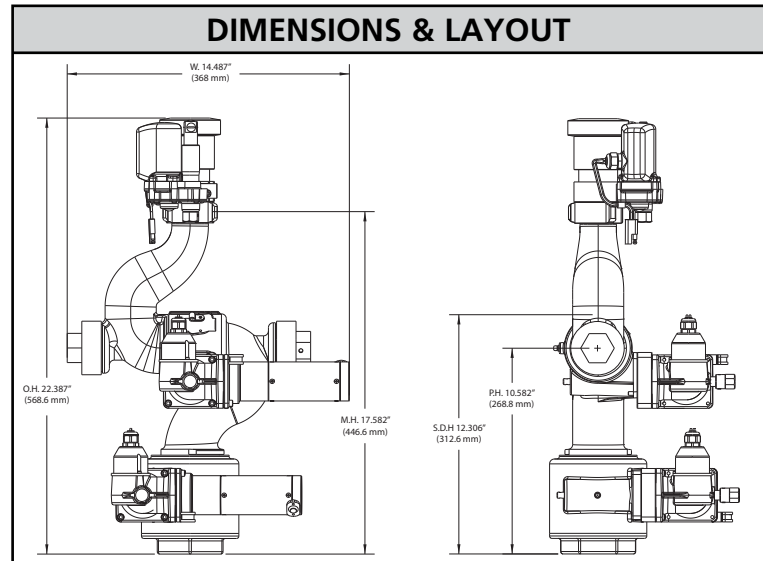
Double Race
Bearings

2.5" NPT Base







300
GPM
1200
LPM

1500
PSI
105
bar

SPECIFICATIONS	
Model:	7161X2
Max Flow:	300 GPM (1200 LPM)
Max Pressure:	1500 PSI (105 bar)
Inlet:	2.5" NPT
Outlet:	1.5" NHT
Travel:	Vertical: -45° to +90° (135°) Horizontal: L90 to R90 (180°)
Voltage:	12 or 24 VDC compatible
Control:	CANbus J1939
Communication:	915 MHz RF - FCC 868 MHz RF - CE
Material/Finish:	Teflon impregnated, hard anodized Elk-O-Lite®
Stow Height:	12.3" (313 mm)
Weight:	27 lbs (12.2 kg)



Recommended Products

Panel Mount	Handheld	Joystick	Position Display	5000-14E UHP Nozzle	EXM CAN Stow Module
(2) 	(3) 	(4) 	(5) 	(6) 	(7) 

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Electric Nozzle	Fixed	60 GPM (227 LPM) with Flush	6	5000-14E UHP
Controllers	EXM2 Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM2 enabled component.	2	7010X2
	EXM2 Wireless Handheld Controller Kit	Wireless remote control with powered docking station. Built-in charging circuit charges the remote whenever it is placed in the docking station.	3	7015X2
	EXM2 Joystick Controller	Proportional joystick with integrated CANbus communication. Hardwire joystick direct via CANbus to any EXM2 monitor.	4	7030X2
Modules	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	5	7051X2
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	7	7095



BRUSHHAWK™

MONITORS

BrushHawk™

- Allows for more effective use of personnel while reducing the potential risk of injury — controls can be mounted inside vehicle
- Double ball races with stainless steel bearings

5-16

(Nozzle sold separately)

12 or 24 VDC
compatible

1.5" NHT
discharge

Fully enclosed stainless
steel worm gears

2" Fully-vented
waterway

Electric motors
feature manual
override




1.5" or 2" inlet
options

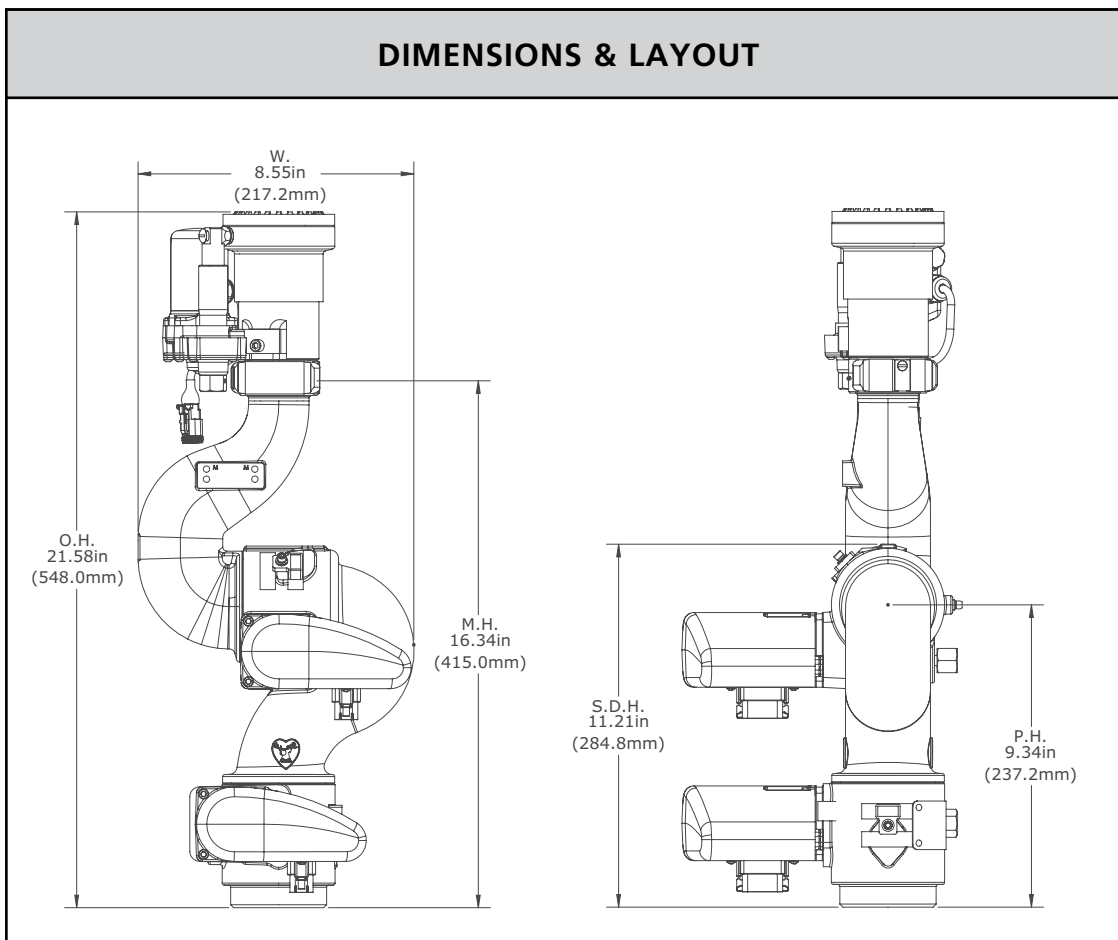
500
GPM
2000
LPM

200
PSI
14 bar



SPECIFICATIONS	
Max Flow	500 GPM (2000 LPM)
Inlet	Size
	1.5" or 2" NPT (F)
Outlet	1.5" NHT
Controls	Electric
Material/Finish	Elk-O-Lite® with red urethane enamel
Friction Loss	26 psi at 500 gpm
	13 psi at 350 gpm
	3.9 psi at 200 gpm
Travel	V 30°/+90° or -45°/+45°
	H L90°/R90° or L175°/R175°
Weight	13.5 lbs. (6.1 kg)
Max. Power Requirement	3.0 Amps at 12V DC (24V opt)
Ratings and Certifications	CE

KEY CONFIGURATIONS (ACCESSORIES)		
 <p>JOYSTICK CONTROL BOX (8)</p>	 <p>VALVE (4)</p>	 <p>QUICK CONNECT (10)</p>



ADDITIONAL INFORMATION

Technical Data on monitor performance may be found on page T-11.



BRUSHHAWK™

MONITORS

5-18

Sidewinder® Electric Selector Guide

INLET SIZE / TYPE		OUTLET SIZE	HORIZONTAL TRAVEL		BASES		CERTIFICATION	MODEL
1.5" NPT	2.0" NPT	1.5"	180°	334°	2.0" NPT	1.5" or 2" NPT Quick Connect (Elk-O-Lite®)	CE	
o	o	•	s	o	s	o	•	8495

KEY s = standard o = option

Components & Options Chart

COMPONENTS & OPTIONS			MODEL
Electric Nozzles	Selectable Gallonage	15/30/45/60/95/125/150/200 GPM	6000-200E
	Fixed Gallonage	15, 30, 45 GPM (<i>specify</i>)	5000-04
		60, 95, 125, 150 GPM (<i>specify</i>)	5000-14
		175, 200, 250, 350, 400, 475 GPM (<i>specify</i>)	5000-24
	Automatic	20 - 120 GPM	SM-10FE
Operator Controls	Joystick	With toggle for water on/off plus integrated water valve trigger	
Valve Kit 1", 2" or 2.5"	Harness - Joystick to monitor	2', 10', 15', 20', 30 or 40' length (<i>specify</i>)	
	Harness - Joystick to valve	2', 10', 15', 20', 30 or 40' length (<i>specify</i>)	
	Harness - Valve to monitor	2', 10', 15', 20', 30 or 40' length (<i>specify</i>)	

Recommended Products

5000-14 ELECTRIC NOZZLE	SM-10FE DE-ICING NOZZLE	281-A STREAM SHAPER	187CAF - SMOOTH BORE	6000-200E* ELECTRIC NOZZLE
(11)  <i>Page 6-4</i>	(13)  <i>Page 6-4</i>	 <i>Page 1-27</i>	 <i>Page 1-26</i>	(14)  <i>Page 6-9</i>

Sidewinder®

- Compact — under 9" wide and requiring just 16" of clearance; perfect for wildland, dust abatement or small apparatus use — anywhere space is at a premium
- Designed specifically for the rigors of wildland and construction use
- 2" fully-vaned waterway
- Customizable — gpm and pressure can be customized through nozzle selection
- Fast-action tiller control
- Double-ball races with stainless steel bearings



(Nozzle sold separately)

Available in your choice of two materials – Brass or Elk-O-Lite®

360° continuous horizontal rotation

Fully-vaned 2" waterway

**500
GPM
2,000
LPM**

**200
PSI
14 bar**



SIDEWINDER®

SPECIFICATIONS

Max Flow	500 GPM (2000 LPM)	
Inlet	Size	Type
	2"	NPT (F)
Outlet	1.5" NHT	
Control	Tiller	
Materials/Finishes	Brass or Elk-O-Lite® with red urethane enamel	
Friction Loss	26 psi at 500 gpm	
	14 psi at 350 gpm	
	4 psi at 200 gpm	
Travel	V -45° to +90° (135°)	
	H 360° (continuous)	
Weight	Variable (see chart for specifics)	
Ratings and Certifications		

KEY CONFIGURATIONS (ACCESSORIES)



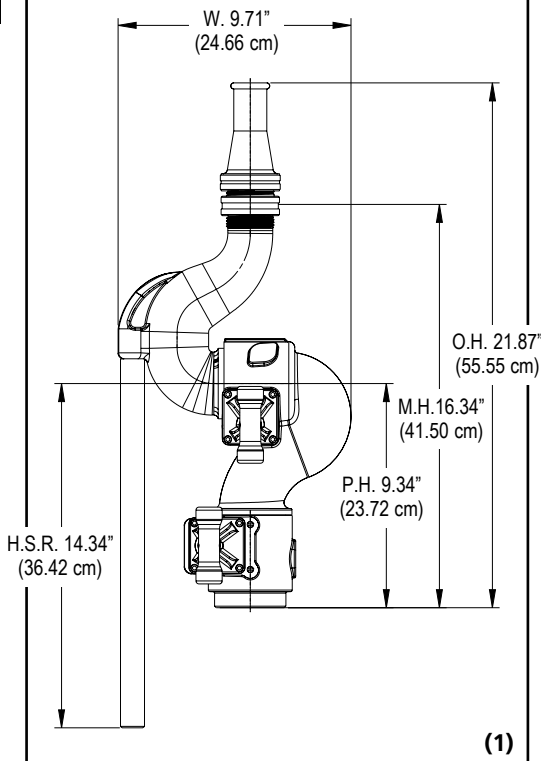
QUICK CONNECT (2)

Sidewinder® Selector Guide

INLET SIZE/TYPE	OUTLET SIZE	MATERIALS		BASES			Weight (Lbs.)	MODEL
		Brass	Elk-O-Lite®	2" NPT	2" NPT Quick Connect (Brass)	2" NPT Quick Connect (Elk-O-Lite®)		
2.0" NPT	1.5"			s		o	16	8492
				s	o		48	8392
					2	2		Illustration

KEY s = standard o = option

DIMENSIONS & LAYOUT



Components & Options Chart

COMPONENTS & OPTIONS	
Dust Cover for Quick Connect Bases	Aluminum 3" x 3" push plug with stainless steel chain and safety tether. Used with either the Quick Connect (to keep contaminants out of the waterway and seal) or the harness connector (to keep contaminants out of the plug assembly).

Recommended Products

TSM-HP – PHANTOM®	TSM-30F – SELECT-O-MATIC®	CHIEF XD MID-RANGE TIP
		
Page 1-15	Page 1-12	Page 1-3
185-B – SMOOTH BORE	281-A MINI – STREAM SHAPER	
		
Page 1-30	Page 1-33	

ADDITIONAL INFORMATION

Technical Data on monitor performance may be found on page T-11.

Scorpion® Electric

- Allows for more effective use of personnel while reducing the potential risk of injury
- Efficient at high flows — 4” fully -vaned waterway
- Extremely reliable system with built-in safety features:
 - Motors and control system components sealed to NEMA 4 rating
 - 10 vertical and 39 horizontal adjustable stop positions
 - Electronic controls with manual override
- Easy installation — monitor comes with:
 - NEMA 4 rated connectors
 - NEMA 4 rated controller
- Optional one-button automatic stow with choice of stow position (up or down) and output signal type (pulse or continuous)
- Liquid-filled pressure gauge

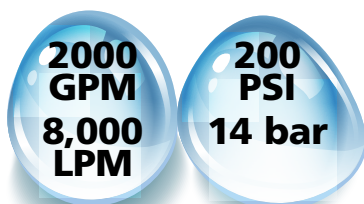


(Nozzle sold separately)

Shown with optional pressure gauge

Fully-vaned waterway for low friction loss and optimum stream quality

Lightweight Elk-O-Lite® construction





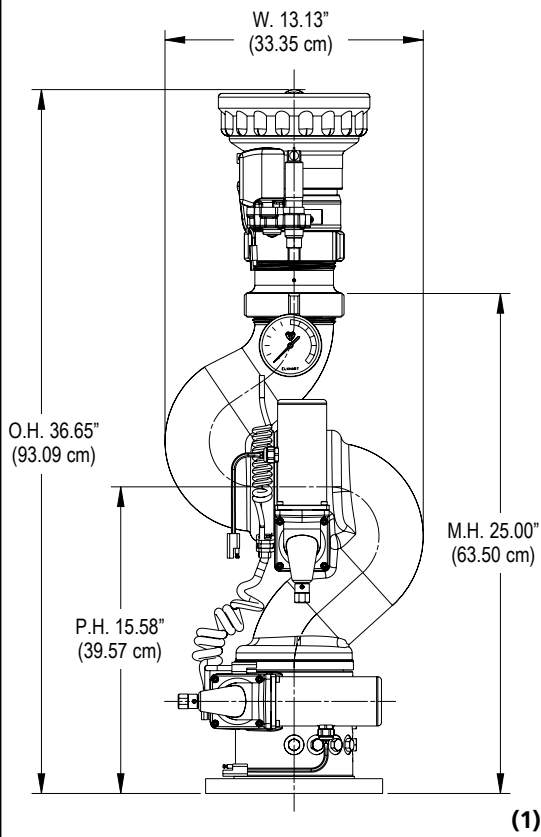
SPECIFICATIONS

Max. GPM (LPM)	2000 (7570)	
Inlet	Size	Type
	4"	150# ANSI Flange
Outlet	3.5" NHT	
Controls	Electric	
Material/Finish	Elk-O-Lite® with red urethane enamel	
Friction Loss	39 psi at 2000 gpm	
	15 psi at 1250 gpm	
Travel	V -45° to +90° (135°)	
	H 347°	
Weight	Variable (see chart for specifics)	
Ratings and Certifications	CE	

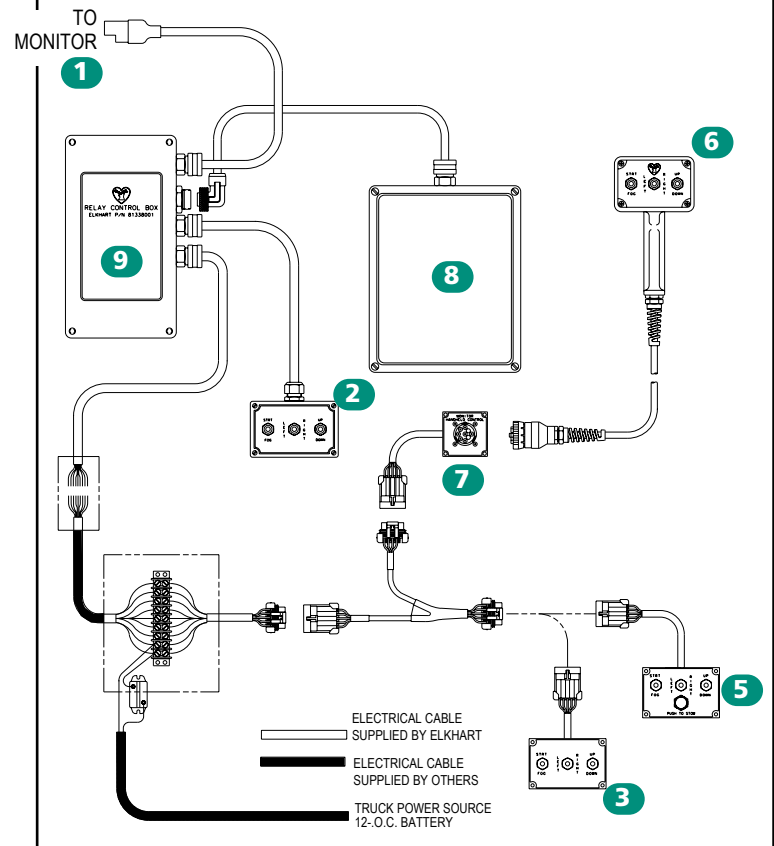
KEY CONFIGURATIONS (ACCESSORIES)

		
TOGGLE CONTROL BOX (2)	JOYSTICK CONTROL BOX (4)	
		
PANEL MOUNT CONTROL (3)	HAND HELD CONTROL (6)	HAND HELD RECEPTACLE (7)

DIMENSIONS & LAYOUT



CONTROL COMPONENTS CONFIGURATION



ADDITIONAL INFORMATION

• Technical Data on monitor performance may be found on page T-11.

Scorpion® Electric Selector Guide

INLET SIZE/ TYPE	OUTLET SIZE	CONTROL MODULE VOLTAGE	MATERIALS	CERTIFICATIONS	WEIGHT (Lbs.)	MODEL
4" 150# ANSI Flange	3.5" NHT	12V DC	Elk-O-Lite®	CE		
s	•	•	•	•	43	8294-04
			1			<i>Illustration</i>

KEY s = standard o = option

Components & Options Chart

COMPONENTS & OPTIONS	ILLUSTRATION	MODEL	
Operator Controls	Panel Mount Controller	3	81339001
	Panel Mount Controller with Stow – adds stow button	5	81421001
	Aerial Switch Box Controller	2	81340001
	Joy Stick Controller – operator control	4	
	Hand-held remote control (includes receptacle)	6	81309001
Relay Control Box	Allows the monitor to interact with the operator control	9	81480001
Optional Control	Hand held control receptacle	7	81242001
24V Converter	24V to 12V		81093001
Auxiliary Battery Pack	Back-up to truck power (12V)	8	81466001
Companion Flange Kit	4" 150# ANSI steel flange with bolts and gaskets		81317001

Recommended Products

SM-2000E – X-STREAM®	ST-195 – STACKED TIP	181-3 – DELUGE TIP	284A – STREAM SHAPER	84 – BUTTERFLY WAFER VALVE
				
<i>Page 6-7</i>	<i>Page 1-26</i>	<i>Page 1-26</i>	<i>Page 1-27</i>	<i>5-51</i>

Product Highlights

The Scorpion® Electric provides two user selectable settings – stow position and stow signal output.

- The programmable options for the stow position are: 1) discharge up and 2) discharge down.
- The programmable options for stow signal output are: 1) no output until sequence is complete (for use as aerial interlock) and 2) flashing on/off signal during travel with steady signal when complete (for in-cab notification).

MONITORS



SCORPION®

MONITORS

Scorpion®

- Lightweight Elk-O-Lite® construction makes this monitor perfect for aerial applications
- Efficient at high flows – 4” fully vaned waterway
- Choice of manual controls
 - Dual hand-wheel style delivers:
 - Full 360° horizontal rotation while allowing the lower hand-wheel to remain stationary
 - 10 vertical and 39 horizontal adjustable stop positions
 - Tiller, in the “Big Stick®” style, allows vertical and horizontal travel to be conveniently controlled with one handle
- Low maintenance
 - Stainless steel balls in all swivel joints with grease fittings
 - Fully enclosed gearcase
 - Steel worm gears
- Liquid-filled pressure gauge

5-24

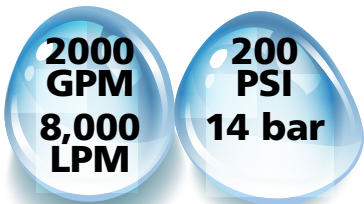
(Nozzle sold separately)

Pressure gauge

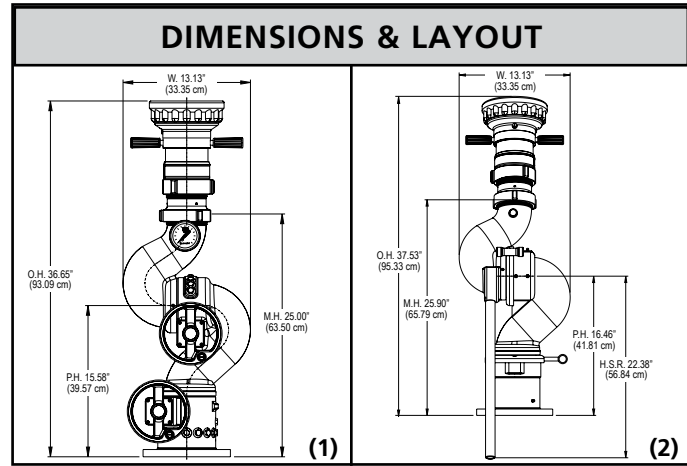
Steel worm gears

Choice of manual controls — dual hand-wheel or tiller

Fully vaned waterway



SPECIFICATIONS	
Max. GPM (LPM)	2000 (8000)
Inlet	Size
	Type
Outlet	4" 150# ANSI Flange
Controls	3.5" NHT
Material/Finish	Dual hand-wheel "Big Stick®"
Friction Loss	Elk-O-Lite® with red urethane enamel
Travel	39 psi at 2000 gpm
	15 psi at 1250 gpm
Weight	V -45° to +90° (135°)
Ratings and Certifications	H 360°
	38 Lbs.
	CE



Scorpion® Selector Guide

INLET SIZE/TYPE	OUTLET SIZE	CONTROLS		CERTIFICATION	MODEL
		Dual Hand-wheel	Big Stick® (Tiller)		
4" 150# ANSI Flange	3.5" NHT			CE	
s	•	•	•	•	8294-02
s	•	•	•	•	8294-131
		1	2		Illustration

KEY s = standard o = option

KEY CONFIGURATIONS (ACCESSORIES)

(TILLER)
"BIG STICK" (2)
STYLE

Components & Options Chart

COMPONENTS & OPTIONS	MODEL
Companion Flange Kits	4" 150# ANSI steel flange with bolts and gaskets 81317001

Recommended Products

SM-2000HF – SELF-EDUCTING	SM-1250 – X-STREAM®	CSW-L – SELECT-O-FLOW®	284-A – STREAM SHAPER	181-3A – DELUGE TIP	84 – BUTTERFLY WAFER VALVE
6-16	Page 6-7	6-13	Page 1-27	Page 1-26	5-51

ADDITIONAL INFORMATION

Technical Data on monitor performance may be found on page T-11.

MONITORS



RAPID ATTACK MONITOR – R.A.M.®

MONITORS

RAM XD™

- Easily deployed and operated by a single firefighter
- Patent pending hydraulic stability system harnesses reaction force to stabilize the monitor
- Four fold-out forged aluminum legs with carbide-tipped ground spikes extend to the largest footprint in its class for exceptional stability
- Rear ground spikes are angled to help carbide tips grip the surface
- Lock pin holds valve in a closed position to prevent accidental opening, allowing the R.A.M. to be carried attached to a charged line
- Patent pending design lowers friction loss and produces consistent stream quality in all ranges of motion
- Can be stored pre-connected
- Ergonomic U-shaped valve handle
- Attached safety strap includes storage pouch

5-26

RAM XD
Mo. 8296
(Nozzle sold separately)

Built-in vane for
improved stream quality

Ergonomic
carry handle



Rear angled
carbide-tipped
ground spikes

Counter balance system
maintains vertical nozzle
position from any angle

Carbide-tipped
spring-loaded
ground spikes

500
GPM
7,570
LPM

150
PSI
14 bar



SPECIFICATIONS	
Max Flow	500 GPM (1893 LPM)
Inlet	Size
	2.5" NHT (F)
Outlet Size	2.5" NHT
Controls	Manual
Material/Finish	Elk-O-Lite® with red urethane enamel
Friction Loss	9.5 psi at 500 gpm
	5.8 psi at 400 gpm
Travel	V +14° to +51° (manned)
	V +35° to +51° (unmanned)
	H 20° in both directions (40°)
Weight	19.25 (Lbs.)
Ratings and Certifications	CE

KEY CONFIGURATIONS (ACCESSORIES)



TRUCK STORAGE MOUNT (2)

Recommended Products

R.A.N.™	ST-197A STACKED TIP	181-A DELUGE TIP	282-A - MINI STREAM SHAPER	HF-500A HYDRO FOAM	Oscillating R.A.N.™
(3) 	(4) 	(5) 	(6) 	(7) 	(8) 
Page 6-5	Page 1-26	Page 1-26	Page 1-27	6-16	

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
R.A.N.™ Nozzle	Fixed	500 GPM (1893 LPM)	3	3896
	Selectable	250/350/500 GPM (946/1325/1893 LPM)	3	3895
	Oscillating	500 GPM (1893 LPM)	8	3890
Self-Educting Nozzle	Fixed	500 GPM (1893 LPM) with configurable ½, 1, or 3% foam proportioning.	7	HF-500A
Smooth Bore Nozzle	Triple Stack Tip	Outlets: 1", 1 ¼", & 1 ½"	4	ST-197-A
		Outlets: 1 ¼", 1 ⅛", & 1 ½"	4	ST-197-A
	Deluge Tip	Outlet: 1 ⅛"	5	181-A
Accessories	Mini Stream Shaper	For use with R.A.M. smooth bore nozzles	6	282-A Mini
	Mounting Bracket	Truck storage mounting bracket for R.A.M.	2	8296-MB

ADDITIONAL INFORMATION

- Technical Data on monitor performance may be found on page T-11.
- Please inquire with our sales staff for additional thread options.

Product Highlights



ACTIVE SAFETY SYSTEM

Should a firefighter stumble, slip or otherwise lose his grip on the R.A.M.®, the monitor automatically raises – increasing the down force for additional stability – to prevent the monitor from moving.



STINGER® 2.0

MONITORS

Stinger® 2.0

- Dual purpose break-apart monitor for use as a deck gun or portable monitor
- Numerous truck adapter and portable base options available to suit every need
- In portable mode, five forged aluminum legs with self-adjusting carbide-tipped ground spikes increase stability
- Rotation lock mechanism provides positive left-right lock with visual position indication
- By-passable safety stop at 35° above horizontal
- Safety strap for additional stability
- Lightweight for its class
- Most flow efficient in its class with a friction loss reducing 3³/₈" vaned waterway
- Patented monitor to base latching mechanism is user-friendly and provides visual indication of status
- Fully enclosed stainless steel worm gear
- Liquid filled pressure gauge
- Two carrying handles

5-28

Stinger 2.0

Mo. 8297

(Nozzle sold separately)

Fully enclosed stainless steel worm gear

Break-apart safety lock and handle

Quad Stacked Tips

Rotation lock lever

Stream Shaper

Latch pins with visual indicators

Safety Tie-down Strap

1250
GPM
5000
LPM

200
PSI
14 bar

Carbide-tipped,
spring-loaded,
ground spikes



SPECIFICATIONS					
	Portable			Deck Mount	
Max Flow	1250 GPM (5000 LPM)			1250 GPM (5000 LPM)	
Inlets	Sizes	Types		Sizes	Types
	2 x 2.5"	NHT	(1000 GPM)	1 x 3"	NPT (1250 GPM)
	1 x 4.5"	NHT	(1250 GPM)	1 x 3"	150# ANSI Flange (1250 GPM)
	1 x 4"	NHT	(1250 GPM)	2 x 2.5"	NHT (1000 GPM)
	1 x 3.5"	NHT	(1250 GPM)		
	1 x 5.0"	Storz	(1250 GPM)		
	1 x 4.0"	Storz	(1250 GPM)		
Outlet Sizes	2.5"	NHT		2.5"	NHT
Control	Single hand-wheel			Single hand-wheel	
Material/Finish	Elk-O-Lite® with red urethane enamel			Elk-O-Lite® with red urethane enamel	
Friction Loss	27 psi at 1250 gpm 16 psi at 1000 gpm			25 psi at 1250 gpm 16 psi at 1000 gpm	
Travel	V +35° to +75° (40°) H L45° to R45° (90°)			V -15° to +75° (95°) H 360° (continuous)	
Weight	29 Lbs. (with 2 x 2.5" inlets)			22 Lbs.	

Stinger® 2.0 Selector Guide

INLET SIZES / TYPES					DUAL	OUTLET SIZE	ILLUSTRATION	MODEL
SINGLE								
3.5" NHT	4.0" NHT	4.5" NHT	4.0" STORZ	5.0" STORZ	2.5" NHT	2.5"		
o	o	o	o	o	s	•	1	8297-2.0*
o	o	o	o	o	s	•	2	8397-2.0
				6	7			Illustration

KEY s = standard o = option

* For the Break-a-Part version, the upper and lower unit may be purchased separately.

8297 (1)



8397 (2)



ADDITIONAL INFORMATION

- Technical Data on monitor performance may be found on page T-11.
- Please inquire with our sales staff for additional thread options.



STINGER® 2.0

KEY CONFIGURATIONS (ACCESSORIES)

STORAGE BRACKET (3)	ANSI FLANGE TOP MOUNT (4)	LDH INLET BASE (6)	THE PIPE™ 2.0 (9)	DECK MOUNT ADAPTER (8)	PROTECTIVE COVER (10)	NPT TOP MOUNT (5)	SIAMESE INLET BASE (7)

Components & Options Chart

COMPONENTS & OPTIONS	ILLUSTRATION	MODEL
Truck Mount Adapters (8297-2.0)	1 x 3" NPT Female (without Flange)	5 8298 P 2.0
	1 x 3" - 150# ANSI	4 8298 F 2.0
	2 x 2.5" Deck Mount	8 8299
Storage Bracket	Truck storage mounting bracket for portable base or complete monitor	3 8297 MB
The PIPE™ (8297-2.0)	Increases the height of a deck mounted Stinger® 2.0 by 18 inches – constructed of Elk-O-Lite® (approximately 10 Lbs.)	9 8298 EX 2.0
Storage Bracket	Mounting bracket for storing the PIPE™ 2.0	8298 EX MB 2.0
Caution Light	For use with the PIPE™ – visual confirmation that The PIPE™ is attached	81258001
Anchor Kit	For portable monitors	81460001
Companion Flange Kit	3" 150# ANSI steel flange with bolts and gasket	81315001
Protective Cover	A shaped polymer covering for deck-mounted or portable mounted bases, designed to protect the swivel bearing and/or ring gear. Attached tether for securing the cover.	10

Recommended Products

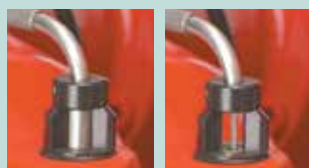
SM-1000HF – SELF-EDUCTING	SM-1250 – X-STREAM®	282-A – STREAM SHAPER	ST-194 – QUAD STACKED TIPS
6-16	Page 6-7	Page 1-27	Page 1-26

Product Highlights

The Stinger® (8297 2.0) adds excellent value as the "break-apart" capability makes it two monitors in one – both a deck mount and a portable unit.

Safety Aspects

Latch pin includes a visual position indicator which allows you to confirm, at a glance, that the pins are in the latched position.



Unlatched

Latched

Vulcan™

- Efficient design creates the most cost effective monitor in its flow class
- Low friction loss due to 3 3/8" patented elliptical waterway with vaned interior
- Small footprint — less than 15" wide and requiring just 16" of clearance — makes it ideal for tight spaces
- Lightweight Elk-O-Lite® construction is compatible with aerial platform applications or any other use where a lightweight, highly flow-efficient monitor is needed
- Several control options are available, allowing customization for your needs:
 - Tiller control option allows for faster controls
 - Dual hand-wheel control features fully enclosed stainless steel worm gears and are available with either fixed or rotating base hand-wheel controls
- Liquid filled pressure gauge with bumper guard

MONITORS

5-31

Vulcan
Mo. 8500-03
(Nozzle sold separately)



Patented waterway

Pressure gauge with bumper guard

Choice of control type, including fixed and rotating base on the dual hand-wheel

360° continuous rotation

**1250
GPM
5000
LPM**

**200
PSI
14 bar**





VULCAN™

MONITORS

SPECIFICATIONS			
Max Flow	1250 GPM (5000 LPM)		
Inlets	Sizes	Types	
	4"	150# ANSI Flange	
	3"	150# ANSI Flange	NPT (F)
Outlet	2.5" NHT		
Controls	Tiller		
	Dual hand-wheel – rotating base		
	Dual hand-wheel – fixed base		
Material/Finish	Elk-O-Lite® with red urethane enamel		
Friction Loss	16 psi at 1250 gpm		
	12 psi at 1000 gpm		
Travel	V -45° to +90° (135°)		
	H 360° (continuous)		
Weight	Variable (see chart for specifics)		
Ratings and Certifications	CE		



HAND WHEEL (1)








TILLER BAR (2)

Vulcan™ Selector Guide

INLET SIZES / TYPES			OUTLET SIZE	CONTROLS			CERTIFICATION	Weight (Lbs.)	MODEL
NPT	150# ANSI Flange			Hand-wheels		Tillers			
3"	3"	4"	2.5" NHT	Fixed Base	Rotating Base	Bar	CE		
o	s	o	•			s	•	18	8500-02
o	s	o	•		s			22	8500-03
o	s	o	•	s				22	8500-03X
				3	1,4	2			<i>Illustration</i>

KEY s = standard o = option

Recommended Products

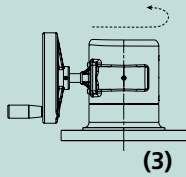
SM-1000HF – SELF-EDUCTING	SM-1250 – X-STREAM®	ST-194 – QUAD STACKED TIPS	282-A – STREAM SHAPER	84 – BUTTERFLY WAFER VALVE
				
6-16	Page 6-7	Page 1-26	Page 1-27	5-51

Components & Options

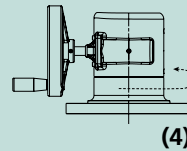
COMPONENTS & OPTIONS	ILLUSTRATION	MODEL
Companion Flange Kits	3" 150# ANSI steel flange with bolts and gaskets	81315001
	4" 150# ANSI steel flange with bolts and gaskets	81317001

Product Highlights

The Vulcan™ offers a several control options including the dual hand-wheel which features a choice of two base configurations – fixed base or a rotating base.



- The fixed base dual hand-wheel control allows the operator to remain in a stationary position while manipulating the horizontal movement of the monitor. The fixed nature of the horizontal control can be especially beneficial when operating space is limited.



- When using the rotating base dual hand-wheel control, the operator moves in tandem with the monitor while managing the monitor's horizontal travel. The rotating base allows the operator to maintain visual contact with the monitor's water direction.

ADDITIONAL INFORMATION

- Weights are approximate and will vary by selected inlet.
- Technical Data on monitor performance may be found on page T-11.



SPIT-FIRE

MONITORS

Spit-Fire

- Efficient at high flows – 4” fully vaned waterway
- Choice of manual controls
 - Dual hand-wheel style delivers:
 - Full 360° horizontal rotation while allowing the lower hand-wheel to remain stationary
 - 10 vertical and 7 horizontal adjustable stop positions
 - Tiller, in the “Big Stick®” style, allows vertical and horizontal travel to be conveniently controlled with one handle
- Corrosion resistant brass construction
- Low maintenance
 - Fully enclosed gearcase
 - Steel worm gears
 - #316 stainless steel balls in all swivel joints with grease fittings
- Liquid-filled pressure gauge

5-34

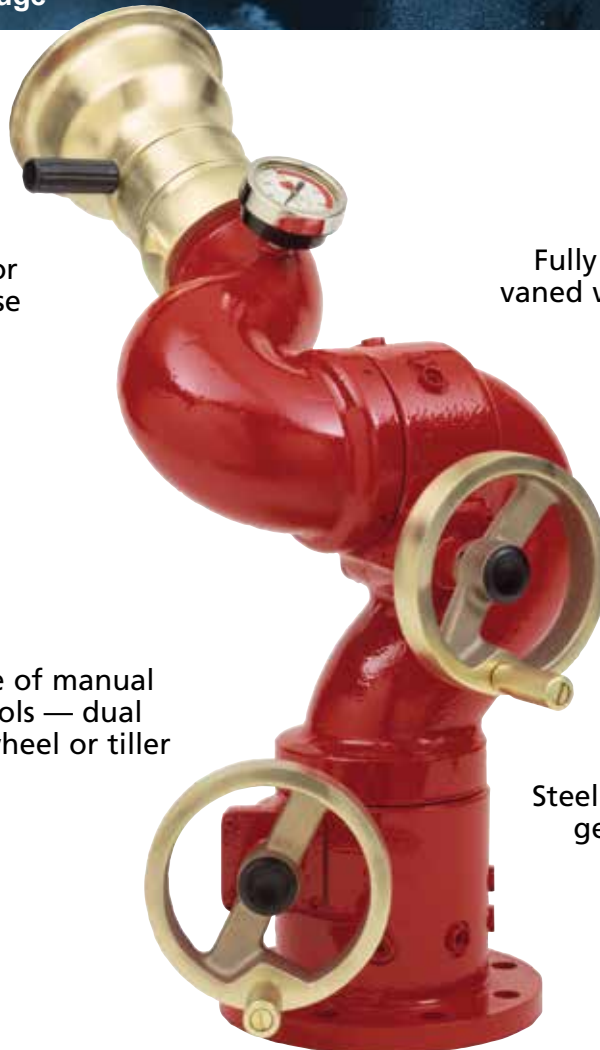
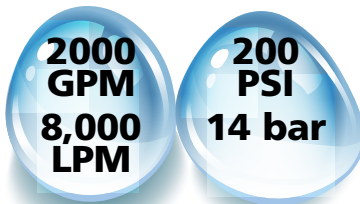
Spit-Fire
Mo. 8394-02
(Nozzle sold separately)

Designed for
industrial use

Fully cast-in
vaned waterway

Choice of manual
controls — dual
hand-wheel or tiller

Steel worm
gears



SPECIFICATIONS			
Max Flow	2000 GPM (8000 LPM)		
Inlets	Size	Types	
	4"	150# ANSI Flange	NPT
Outlet Size	3.5" NHT		
Controls	Dual hand-wheel		
	"Big Stick®" Tiller		
Material/Finish	Brass with red urethane enamel		
Friction Loss	39 psi at 2000 gpm		
	15 psi at 1250 gpm		
Travel	V -45° to +90° (135°)		
	H 360°		
Weight	126 Lbs.		
Ratings and Certifications	CE, FM Approved		



HAND WHEEL (1)



TILLER (BIG STICK®) (2)



8394-04 (3)

Spit-Fire Selector Guide

INLET SIZES/TYPES		OUTLET SIZE	CONTROLS			CERTIFICATION		MODEL
4" NPT	4" 150# ANSI Flange	3.5" NHT	Dual Hand-wheel	Tiller (Big Stick®)	Electric Operation 12V	CE	FM Approved	
o	s	•	•			•	•	8394-02
o	s	•		•		•	•	8394-121
	s	•			•			8394-04
			1	2	3			Illustration

KEY s = standard o = option

Recommended Products (8394-021 & 8394-121)


SM-2000HF - SELF-EDUCTING	SM-2000B - SELECT-O-MATIC®	CSW-LB - SELECT-O-FLOW®	SM-2000BE - X-STREAM®
			
Page 6-16	Page 6-7	Page 6-13	Page 6-7
181-3 - DELUGE TIP	84 - BUTTERFLY WAFER VALVE	284-B STREAM SHAPER	WPO-2000
			
Page 1-26	Page 5-51	Page 1-27	Page 5-53

RECOMMENDED PRODUCTS (8394-04)		
		
TOGGLE CONTROL BOX	JOYSTICK CONTROL BOX	
		
PANEL MOUNT CONTROL	HAND HELD CONTROL	HAND HELD RECEPTACLE



SPIT-FIRE

Water Powered Monitor Oscillator (8394-121)

Inlet	Max Operating Pressure	Speed	Arc of Oscillation	Material	Certification	MODEL	WPO-2000
4.0"	200 PSI (14 BAR)	0-30°/sec oscillating speed range - 24°/sec max @ 100 PSI (7 BAR)	15° to 120°	316 stainless steel		WPO-2000	

Product Highlights

- All construction features designed to minimize maintenance needs for increased industrial reliability:*
- Corrosion resistant brass construction (85-5-5-5 "Marine Brass" available on select products)
 - Fully enclosed gearcase
 - Cast brass swivel joints
 - #316 stainless steel balls in all swivel joints
 - Grease zerks for easy lubrication

ADDITIONAL INFORMATION

- *Technical Data on monitor performance may be found on page T-11.*
- *Marine Brass (85-5-5-5) construction is available. Please inquire with our sales staff.*

Stingray®

- Flow efficient 3" waterway allows for flows up to 1250 gpm
- All construction features designed to minimize maintenance needs
 - Choice of corrosion resistant brass or lightweight Elk-O-Lite® construction
 - Fully enclosed gearcase with stainless steel worm
 - Bronze balls in all swivel joints
 - Grease zerks for easy lubrication
- Flexible installation options include numerous base options and a hydrant mounting choice
- Compact size — 16" high or 21" high — is extremely versatile, allowing the monitor to serve a variety of real-world needs
- Built-in shut-off capabilities (with the Stingray® IV) from a full flow 3" ball valve



Stingray
Mo. 8393IV
(Nozzle sold separately)

1250
GPM
5000
LPM

200
PSI
14 bar








STINGRAY®

MONITORS

SPECIFICATIONS			
Max Flow	1250 GPM (5000 LPM)		
Inlets	Sizes		Types
	4"	150# ANSI Flange	
	3"	150# ANSI Flange	NPT (F)
Outlet Size	2.5" NHT		
Control	Single hand-wheel		
Material/Finish	Brass or Elk-O-Lite® with red urethane enamel		
Friction Loss	27 psi at 1250 gpm		
	17 psi at 1000 gpm		
	9 psi at 750 gpm		
Travel	V -60° to +90° (150°)		
	H 360° (continuous)		
Weight	Varies (See specification chart)		
Ratings and Certifications	CE and FM Approved		

KEY CONFIGURATIONS (ACCESSORIES)		
 STINGRAY® (2)	 PRESSURE GAUGE (3)	 BALL VALVE (4)

Stingray® Selector Guide

INLET SIZES / TYPES			OUTLET SIZE	VERTICAL TRAVEL		INTEGRAL COMPONENTS		MATERIALS		CERTIFICATIONS		DIMENSIONS				ILLUSTRATION	MODEL
NPT	150 # ANSI Flange		2.5"	-60° to +70°	-60° to +90°	Ball Valve	Pressure Gauge	Brass	Elk-O-Lite®	CE	FM Approved	Width (In.)	Depth (In.)	Height (In.)	Weight (Lbs.)		
3"	3"	4"		NHT	(130°)											(150°)	3"
o	o	s	•	o	s	s		•		•	•	14.75	15.75	20.375	68.25	1	8393IV
o	o	s	•	s	o		o	•		•	•	14.75	15.75	15.75	47.5	2	8393
o	o	s	•	s	o		o		•	•	•	14.75	15.75	15.75	16.0	2	8393-A
						4	3										Illustration

KEY s = standard o = option

Recommended Products

SM-1000HF – SELF-EDUCTING	IMS-500 SELECT-O-STREAM®	J-MYSTERY®	282B STREAM SHAPER	181-SMOOTH BORE	SM-1250B X-STREAM®
 <i>Page 6-16</i>	 <i>Page 6-12</i>	 <i>Page 6-14</i>	 <i>Page 1-27</i>	 <i>Page 1-26</i>	 <i>Page 6-7</i>

Components & Options Chart

COMPONENTS & OPTIONS	ILLUSTRATION	MODEL
Companion Flange Kits	3" 150# ANSI steel flange with bolts and gaskets	81315001
	4" 150# ANSI steel flange with bolts and gaskets	81317001

Product Highlights

Our Stingray® IV features a 3" integral quarter-turn full flow ball valve. The integrated valve eliminates the need for a separate valve; it is both easier to install and more reliable than a separate wafer valve. The benefits of the integrated valve include:

- 1) better total monitor efficiency as the friction loss between the traditional separate monitor and valve is reduced*
- 2) a turn-key package created by integrating the valve into the monitor*

Highlights of the Stingray® IV valve include:

- Hydraulically balanced acetal ball*
- Teflon impregnated seats*
- Full flow ball valve*

ADDITIONAL INFORMATION

- All flanges specified with the monitor are flat. Raised flanges are available with some inlet sizes. Please inquire with our sales staff.*
- Marine Brass (85-5-5-5) construction is available on some models. Please inquire with our sales staff.*
- Technical Data on monitor performance may be found on page T-11.*
- The Stingray® is also available in a portable cart version. Please see page 5-56 for details.*
- The Stingray® is also available in a hydrant mount version. Please see page 5-50 for details.*

MONITORS



COPPERHEAD

MONITORS

Copperhead®

- Rugged, corrosion resistant brass construction is ideal for use in refineries, chemical plants, off shore installations and for shipboard use
- Specific industrial reliability/maintenance-free features of the Copperhead IV include:
 - Sealed grease bearings with a built-in, one way, pressure release
 - Enclosed, stainless steel locking mechanism
 - Environmentally-sealed valve actuator
- Efficient design creates the most cost effective brass monitor in its flow class
- Low friction loss due to 3 $\frac{3}{8}$ " patented vaned elliptical waterway
- Small footprint — less than 15" wide and requires just 16" of clearance — makes it ideal for tight spaces

5-40

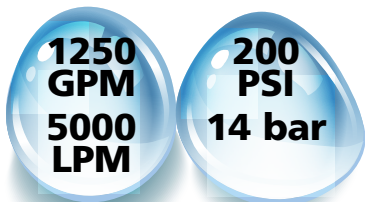
Copperhead
Mo. 8593IV
(Nozzle sold separately)

All surfaces sealed
against moisture, sand,
and particle penetration

Utilizes Unibody
Valve technology
with a stainless
steel, quarter-turn,
full-flow ball

Full 360° rotation

Single bolt change-
out rotates valve
handle position in
45° increments



SPECIFICATIONS			
Max Flow	1250 GPM (5000 LPM)		
Inlets	Sizes	Types	
	4"	150# ANSI Flange	
	3"	150# ANSI Flange	NPT (F)
Outlet	2.5" NHT		
Controls	Tiller		
	Dual hand-wheel – rotating base		
	Dual hand-wheel – fixed base		
Material/Finish	Brass with red urethane enamel		
Friction Loss Copperhead	16 psi at 1250 gpm 12 psi at 1000 gpm		
Friction Loss Copperhead IV	21 psi at 1250 gpm		
	16 psi at 1000 gpm		
Travel	V -45° to +90° (135°)		
	V -49° to +86° (135°)		
	H 360° (continuous)		
Weight	Variable (see chart for specifics)		
Ratings and Certifications	CE, FM Approved		



INTEGRATED VALVE (1)



TILLER BAR (3)



HAND WHEEL (4)

Copperhead Selector Guide

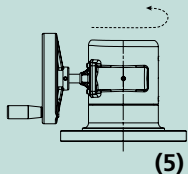
INLET SIZES / TYPES			OUTLET SIZE	CONTROLS				VERTICAL TRAVEL		INTEGRAL COMPONENTS		CERTIFICATION		MODEL	
NPT	150# ANSI Flange			Hand-wheels	Tillers		-45 to +90° (135°)	-49 to +86° (135°)	3" Ball Valve		Pressure Gauge	CE	FM Approved		
3"	3"	4"	Fixed Base (68 Lbs.)		Rotating Base (68 Lbs.)	Copperhead Bar (58 Lbs.)			Copperhead IV Bar (87 Lbs.)	Hand-wheel				Tiller	Illustration
o	s*	o*	•			s		•			o	•	•	3	8593-02
o	s	o	•		s			•			o	•	•	4,6	8593-03/ 294-11rev.06
o	s	o	•	s				•			o	•	•	4,5	8593-03X/ 294-11rev.06x
		s	•			s			•	o	s	o	•	1,2	8593IV
				4,5	4,6	3				2	1				Illustration

KEY s = standard o = option

*NOTE: 8593-02 with 3" & 4" 150# ANSI Flange are made from 85 Brass.

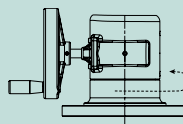
PRODUCT HIGHLIGHTS

In addition to offering the only brass dual hand-wheel monitor of this size on the market, Elkhart's Copperhead monitor boasts a choice of base configurations:



(5)

- The fixed base dual hand-wheel control allows the operator to remain in a stationary position while manipulating the horizontal movement of the monitor. The fixed nature of the horizontal control can be especially beneficial when operating space is limited.











(6)

- When using the rotating base dual hand-wheel control, the operator moves in tandem with the monitor while managing the monitor's horizontal travel. The rotating base allows the operator to maintain visual contact with the monitor's stream direction.

In most industrial settings where the traditional- 294-11 is currently used, the Copperhead would be an appropriate replacement. The Copperhead offers a choice of control styles as well as higher flow capacity.




Recommended Products

SM-1000HF – SELF-EDUCTING  <i>Page 6-16</i>	SM-1250B – X-STREAM®  <i>Page 6-7</i>	CSW-LB – SELECT-O-FLOW®  <i>Page 6-13</i>	181 – DELUGE TIP  <i>Page 1-26</i>
282B – STREAM SHAPER  <i>Page 1-27</i>	84 – BUTTERFLY WAFER VALVE  <i>Page 5-51</i>	CJB – SELECT-O-STREAM®  <i>Page 6-12</i>	IMS – SELECT-O-STREAM®  <i>Page 6-12</i>

Components & Options Chart

COMPONENTS & OPTIONS		ILLUSTRATION	MODEL
Companion Flange Kits	3" 150# ANSI steel flange with bolts and gaskets		81315001
	4" 150# ANSI steel flange with bolts and gaskets		81317001

Water Powered Monitor Oscillator (8593-02)

Inlet	Max Operating Pressure	Speed	Arc of Oscillation	Material	Certification	MODEL	WPO-2000
4.0"	200 PSI (13.8 BAR)	0-30°/sec oscillating speed range - 24°/sec max @ 100 PSI (6.9 BAR)	15° to 120°	316 stainless steel		WPO-2000	

ADDITIONAL INFORMATION

- Weights are approximate and will vary by selected inlet.
- Technical Data on monitor performance may be found on page T-11.
- LA style handles available on the Copperhead.

Python™

- Seamless brass 2.5" waterway for flows up to 1250 gpm
- Flexible installation options
 - Extensive base options
 - Two choices in manual controls — tiller or steering wheel
 - Hydrant mounting option
- All construction features designed to minimize maintenance needs
 - Corrosion resistant brass construction
 - Cast brass swivel joints
 - Bronze balls in all swivel joints
 - Stainless steel handles
 - Grease zerks for easy lubrication
- Positive twist locks for both vertical and horizontal movement



Python
 Mo. 299-11
 (Nozzle sold separately)



Tiller control
 allows fast action
 changes

Seamless tube

**1250
GPM**

**5000
LPM**

**200
PSI**

14 bar



MONITORS



PYTHON®

MONITORS

5-44

SPECIFICATIONS				
Max. GPM (LPM)	1250 (5000)			
Inlets	Sizes		Types	
	6"	150# ANSI Flange		
	4"	150# ANSI Flange	300# ANSI Flange	NPT (F)
	3"	150# ANSI Flange	300# ANSI Flange	NPT (F)
	2.5"	150# ANSI Flange	300# ANSI Flange	NPT (F)
Outlet Size	2.5" NHT			
Controls	Steering wheel			
	Tiller			
Material/Finish	Brass with red urethane enamel or chrome-plated			
Friction Loss	24 psi at 1250 gpm			
	18 psi at 1000 gpm			
	11 psi at 750 gpm			
Travel	V -45° to +90° (135°)			
	H 360° (continuous)			
Weight	45.00 Lbs. (See specification chart)			
Ratings and Certifications	FM Approved, CE			

KEY CONFIGURATIONS (ACCESSORIES)
 <p>STEERING WHEEL HANDLE (2)</p>
 <p>PRESSURE GAUGE (3)</p>

Python® Selector Guide

INLETS										OUTLET SIZE	MAX. GPM (LPM)		Pressure Gauge	CONTROLS		CERT.	DIMENSIONS				FINISHES		MODEL	
SIZES / TYPES (INCHES)										SIZE / TYPE (IN.)	1250 (4732)	750 (2839)		Steering Wheel	Tiller Bar	CE	FM Approved	Width (in.)	Depth (in.)	Height (in.)	Weight (Lbs.)	Red Urethane		Chrome-plated
NPT			150# ANSI FLANGE			300# ANSI FLANGE			NHT															
2.5	3	4	2.5	3	4	2.5	3	4	2.5				o	o	s	•	•	18.0	31.5	17.5	45.0	•		299-11
													3	2	1									<i>Illustration</i>

KEY s = standard o = option * Swivel

Recommended Products

SM-1250B – X-STREAM®	CJN-B – SELECT-O-STREAM®	SM-1000HF – SELF-EDUCTING	282B – STREAM SHAPER	181 – DELUGE TIP	84 – BUTTERFLY WATER VALVE
					
Page 6-7	Page 6-12	Page 6-16	Page 1-27	Page 1-26	Page 5-51

Components & Options Chart

COMPONENTS & OPTIONS		MODEL
Companion Flange Kits	3" 150# ANSI steel flange includes bolts and gaskets	81315001
	4" 150# ANSI steel flange includes bolts and gaskets	81317001
Drain Valve	Automatic ball drip drain valve	702

ADDITIONAL INFORMATION

- All flanges specified with the monitor are flat faced. Raised face flanges are available with some inlet sizes. Please inquire with our sales staff.
- Technical Data on monitor performance may be found on page T-11.
- The Python® is also available in a hydrant mount version. Please see page 5-50 for details.

Giant Python™

- 2500 gpm flow capacity — 3.5" waterway with seamless tube construction
- Double hand-wheel control for ease of operation and positive lock in any position
- All construction features designed to minimize maintenance needs
 - #304 stainless steel construction
 - Cast stainless swivel joints
 - Stainless steel balls in all swivel joints
 - Hand-wheel driven worm gears
- Liquid-filled pressure gauge



Red urethane finish

3.5" flow-efficient waterway

Hand-wheel rotates with monitor for continuous 360° horizontal travel

Giant Python
Mo. 299-20
(Nozzle sold separately)

2500
GPM
10,000
LPM

200
PSI
14 bar











GIANT PYTHON®

Giant Python® Selector Guide

INLET SIZES / TYPES								OUTLET SIZE	CERTIFICATIONS		MODEL
NPT		150# ANSI Flange			300# ANSI Flange			3.5"	CE	FM Approved	
3"	4"	3"	4"	6"	3"	4"	6"				
o	o	o	s	o	o	o	o	•	•	•	299-20
			1								<i>Illustration</i>

KEY s = standard o = option

Recommended Products

CJK – MYSTERY®	SM-2000B – X-STREAM®	SM-2000HF – SELF-EDUCTING	181-3 – DELUGE TIP	284B – STREAM SHAPER	84 – BUTTERFLY WAFER VALVE
					
<i>Page 6-14</i>	<i>Page 6-7</i>	<i>Page 6-16</i>	<i>Page 1-26</i>	<i>Page 1-27</i>	<i>Page 5-51</i>

5-46

Components & Options Chart

COMPONENTS & OPTIONS	ILLUSTRATION	MODEL
Companion Flange Kits	3" 150# ANSI steel flange with bolts and gaskets	81315001
	4" 150# ANSI steel flange with bolts and gaskets	81317001

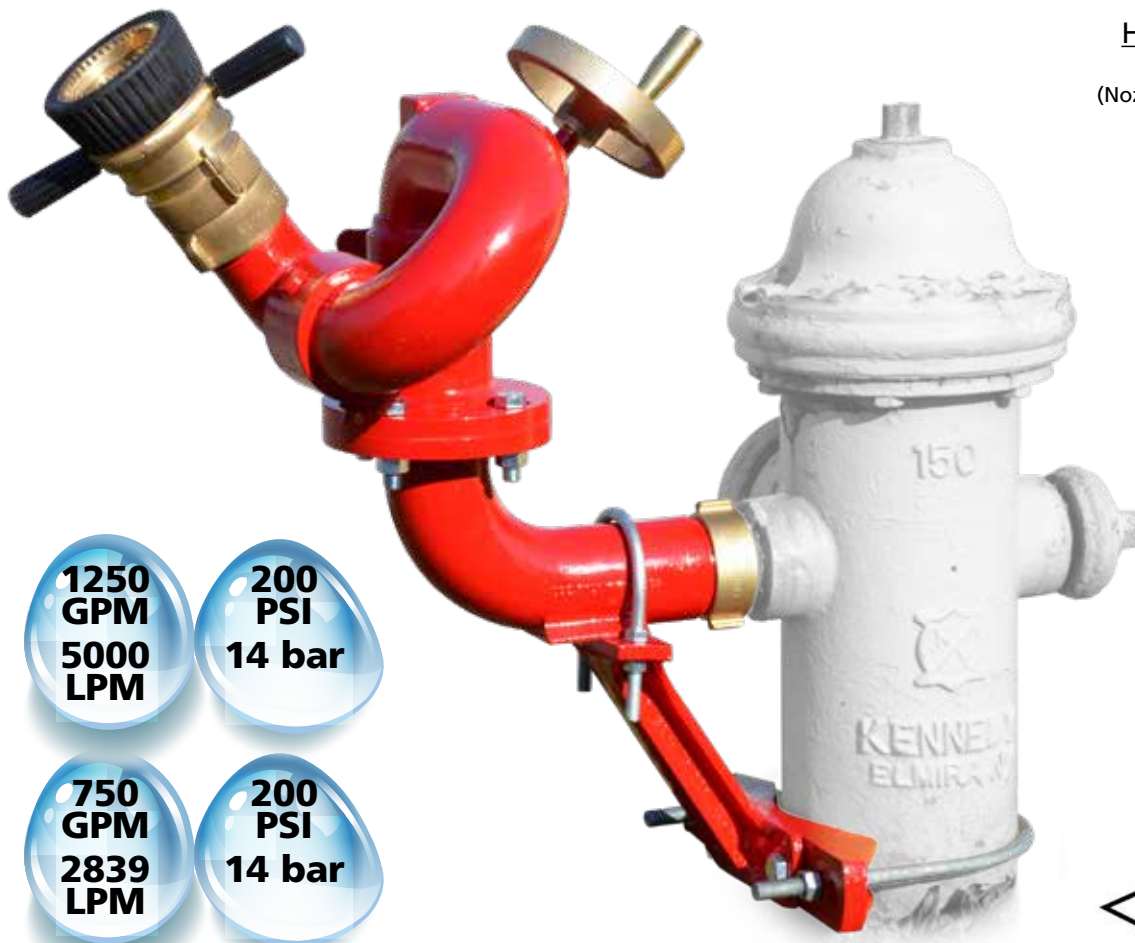
SPECIFICATIONS				
Max Flow	2500 GPM (10,000 LPM)			
Inlets	Sizes		Types	
	6"	150# ANSI Flange	300# ANSI Flange	
	4"	150# ANSI Flange	300# ANSI Flange	NPT (F)
	3"	150# ANSI Flange	300# ANSI Flange	NPT (F)
Outlet Size	3.5" NHT			
Controls	Dual hand-wheel			
Material/Finish	Stainless steel with red urethane enamel and brass trim			
Friction Loss	18 psi at 2500 gpm			
	6 psi at 1250 gpm			
Travel	V -60° to +90° (150°)			
	H 360° (continuous)			
Weight	126.00 Lbs.			
Ratings and Certifications	FM Approved, CE			

ADDITIONAL INFORMATION

- All flanges specified with the monitor are flat faced. Raised face flanges are available with some inlet sizes. Please inquire with our sales staff.
- Technical Data on monitor performance may be found on page T-11.

Hydrant Mount

- Several available size and flow options
- All construction features designed to minimize maintenance needs
 - Corrosion resistant brass construction
 - Bronze balls in all swivel joints
 - Grease zerks for easy lubrication
- Two choices in manual controls — tiller or hand-wheel



Hydrant Mount
Mo. 8393H
(Nozzle sold separately)

1250
GPM
5000
LPM

200
PSI
14 bar

750
GPM
2839
LPM

200
PSI
14 bar





HYDRANT MOUNT

SPECIFICATIONS		
	8393H	299-11H
Max Flow	1250 GPM (5000 LPM)	750 GPM (2839 LPM)
Inlets	2.5" NHT (F)	2.5" NHT (F)
Outlet Size	2.5" NHT	2.5" NHT
Controls	Single hand-wheel	
		Tiller
Material/Finish	Brass with red urethane enamel	Brass with red urethane enamel
	27 psi at 1250 gpm	11 psi at 750 gpm
Friction Loss	17 psi at 1000 gpm	
	9 psi at 750 gpm	
Travel	V -60° to +70° (130°)	V -60° to +70° (130°)
	H 360° (continuous)	H 360° (continuous)
Weight Varies	85 lbs.	61 lbs
Ratings and Certifications	CE and FM Approved	CE and FM Approved

ADDITIONAL INFORMATION

- For 8393H, the hydrant connection fits up to a 10.875" hydrant barrel and includes U-bolts, with nuts, in 10" and 8" sizes
- On all other hydrant mount monitors, the hydrant swivel connection attached to 2.5" hydrant nipple (includes elbow assembly and support rods)

Hydrant Mount Selector Guide

INLET	OUTLET	MAX. GPM (LPM)		VERTICAL TRAVEL	CONTROLS				CONNECTION TYPE	Pressure Gauge	CERTIFICATIONS		DIMENSIONS			ILLUSTRATION	MODEL
		1250 (4732)	750 (2839)		-60° to +70° (130)	Hand wheel	Tiller Bar	Nipple			Swivel	CE	FM Approved	Width (In.)	Height (In.)		
NHT 2.5"	NHT 2.5"	1250 (4732)	750 (2839)	-60° to +70° (130)	Hand wheel	Tiller Bar	Nipple	Swivel	Pressure Gauge	CE	FM Approved	Width (In.)	Height (In.)	Weight (Lb.)	ILLUSTRATION	MODEL	
S	•	•	•	S	•	•	•	•	0	•	•	14.75	37.5	85.0	2	8393H	
S	•	•	•	S	•	•	•	•	0	•	•	17.75	25.5	61	3	299-11H	
									3							Illustration	

Recommended Products

HF-500 – HYDRO-FOAM	CJN-B – SELECT-O-STREAM®	J – MYSTERY®	181 – DELUGE TIP	282B – STREAM SHAPER
				
Page 6-16	Page 6-12	Page 6-14	Page 1-26	Page 1-27

KEY CONFIGURATIONS (ACCESSORIES)

		
STINGRAY® (2)	PYTHON (3)	PRESSURE GAUGE (3)

Manual Elevated

- Free standing or riser mounted
- Designed to have the horizontal and vertical movement controlled at ground level
- Control options:
 - Lever/tiller
 - Gear Driven



Manual Elevated
Mo. 8394-02RC
(Nozzle sold separately)

**1000
GPM
4,000
LPM**

**200
PSI
14 bar**



MANUAL ELEVATED

SPECIFICATIONS				
	299-11EL*		8394-02RC	
Max Flow	750		1000	
Inlet	Sizes / Types		Size / Type	
	6"	150# ANSI Flange		
	4"	150# ANSI Flange	4"	150# ANSI Flange
Outlet	2.5" NHT		3.5" NHT	
Controls	Tiller with locks		Dual hand-wheel	
Material/Finish	Brass and steel with red urethane enamel		Brass with red urethane enamel	
Friction Loss (excludes head loss)	13 psi at 750 gpm		10 psi at 1000 gpm	
	8 psi at 500 gpm		6 psi at 750 gpm	
Travel	V -37° to +45° (78°)		V -45° to +90° (135°)	
	H 360° (continuous)		H 360° (continuous)	
Elevation Height	Min. 10'		Min. 0'	
	Max. 40'		Max. 34'	
Weight	300 Lbs.		140 Lbs.	

*All data supplied for 299-11EL assumes 10' riser pipe. Other lengths will change the data.

299-11EL



(1)

- Completely free standing
- Tiller handle operation for quick, easy stream directing
- Tubular steel horizontal drive sleeve for continuous 360° rotation
- Horizontal and vertical travel locks
- Available in standard heights from 10' to 40'

8394-02RC



(2)

- Base and upper that can be fabricated to any height (up to 34') with customer supplied intermediate pipe
- Lower base unit features chrome-plated brass worm gear and drive shaft
- Upper monitor unit features hardened steel worm gear, fully enclosed gear housing and stainless steel worm shaft
- 9" chrome hand-wheels
- Grease zerks furnished at swivel joints for easy lubrication
- Intermediate pipe attaches to upper monitor and base sections via NPT threads
- Intermediate pipe (4" schedule 40) and vertical drive rod (5/8") not included

Elevated Monitor Selector Guide

INLET SIZES		OUTLET SIZES		CONTROLS		Galvanized Waterway	Riser Supplies	ELEVATION HEIGHT		Max Flow Limit @ Max Height	ILLUSTRATION	MODEL
4"	6"	2.5"	3.5"	Dual Hand-wheel	Tiller Handle			Min.	Max.			
s	o	•			•	o	o	10'	40'	750 (2839)	1	299-11EL*
s			•	•				0'	34'	500 (1893)	2	8394-02RC

KEY: s = standard o = option
Specify length when ordering.
* Per client installation

Components & Options Chart

COMPONENTS & OPTIONS			ILLUSTRATION	MODEL
Support Bearing	8394-02RC	For monitor support when overall height exceeds monitor limits (for use with 500 GPM flowed at 20'; 750 GPM flowed at 15'; or 1000 GPM flowed at 10')	4	295
External Supply Items				
Riser Pipe	8394-02RC	4" intermediate riser pipe		
Drive Rod	8394-02RC	0.625" brass or stainless steel drive rod for linking the vertical drive unit to the monitor		

Recommended Products

CJ-B-RC – SELECT-O-STREAM®	283B – STREAM SHAPER	181 – DELUGE TIP
		
Page 6-12	Page 1-27	Page 1-26

ADDITIONAL INFORMATION

- Marine Brass (85-5-5-5) construction is available on some models. Please inquire with our sales staff.
- Other bases may be available on some models. Please inquire with our sales staff.
- Technical Data on monitor performance may be found on page T-11.
- Nozzle Reaction Force x Height (in feet) of monitor = torque (Foot Pounds) at base of monitor.

OPTIONS

295 SUPPORT BEARING



(4)

- Designed so that 4" waterway and vertical control rod can rotate inside of bearing. 3" NPT female for attaching to adjacent support
- Finish: red urethane enamel
- Weight: 31.5 lbs.

90° INTAKE BASE



- Used with 299-11EL & 8394-02RC monitors
- Carbon steel construction
- 6"-150# & 6"-300# flange inlet
- 4"-150#, 6"-150#, & 6"-300# flange outlet
- Full 4" waterway
- Red epoxy finish



ACCESSORIES

The Extender - 8598

For use with the Elkhart monitors and a range of other compact monitors, the Extender is designed to provide better clearance for the monitor which allows for a wider coverage range and addresses firefighter safety concerns. It is compatible with monitor and nozzle flow ratings of 1250 gpm (max) with 100 psi nozzle pressure (max inlet pressure rating of 200 psi).

The Extender deploys in 10 seconds and extends a full 18 inches. The Extender is designed to flow in both the full up and full down positions.

Safety features of the Extender include:

- An in-cab warning light to alert the driver to incomplete retraction
- Pressure switch to limit the movement when internal pressure exceeds 10 psi

The Extender is electrically actuated through a pump panel pushbutton control pad with actuator rated for a static load of up to 2500 pounds. The chassis 12VDC electrical system provides power for the Extender.

The Extender is compliant with applicable 2003 NFPA #1901 standards.

All mounting and wiring materials are included in the Extender package.

The Extender 8598 is available with the following options:

Inlet / Outlet

- 3" VIC / 3" MNPT
- 3" MNPT / 3" MNPT
- 3" VIC / 3" 150# Flange
- 3" MNPT / 3" 150# Flange
- 3" 150# Flange / 3" 150# Flange

Available with secondary panel mounted controller.



Manual Extender - 8599

18" or 12" rise

- Raises stream to prevent damage to apparatus equipment
- More ergonomic operating position
- Monitor operates in raised or lowered position
- Full 360° rotation in either position
- Automatically locks in up/down position
- Cannot be accidentally unlocked
- Prevents unintended extension under pressure
- Prevents unintended collapse when extended
- Built-in sensor for connection to cab indicator light

• Notifies personnel when Extender is NOT stowed and locked

3" waterway

- Capable of 1250 gpm flow

Mounting Options

- Dual bracket
- Plate and saddle bracket

Inlet Options

- 3" Victaulic
- 3" NPT
- 3" NPT with 150# Flange*

Outlet Options

- 3" NPT
- 3" NPT with 150# Flange*

*Flange sold separately



Easy-op latch design for safe and simple deployment

Components & Options Chart

COMPONENTS & OPTIONS		MODEL
Controller	with position indicator	81385101
	for primary/secondary controller	36824000
Harnesses	for caution lamp	36838000
	to chassis (power)	36792000
	5 ft	36793300
Power Sensor	10 ft	36793500
Harness (select one)	20 ft	36793600
	30 ft	36793700
	40 ft	36793800

Packages

Available in 18" or 12" rise

PACKAGE 1	PACKAGE 2	
Manual Extender	Manual Extender	
3" MNPT inlet	3" Victaulic inlet	
3" MNPT outlet	3" MNPT outlet	
Dual saddle brackets	Dual saddle brackets	
PACKAGE 3	PACKAGE 4	
Manual Extender	Manual Extender	
3" MNPT inlet	3" Victaulic inlet	
3" MNPT outlet	3" MNPT outlet	
Plate and saddle bracket	Plate and saddle bracket	



ANCHOR KIT

- Portable monitor (P/N 81460001)
 - Heavy duty spike
 - Mallet
 - Self-contained portable bag.



702 AUTOMATIC BALL DRIP DRAIN VALVE

- Drains at a rate of 2/3 gpm for up to 20' head of water when pressure drops below 10 psi
- 0.75" male NPT inlet and outlet
- Mounts horizontally
- Cast brass construction
- Good for saltwater applications
- Length: 3"
- Weight: 0.778 lbs.



84 BUTTERFLY WAFER VALVE

- Cast iron body with #316 stainless steel upper and lower stems
- Pressure rated at 250 psi
- Seat/seal is EPDM
- Standard handle features 10 locking positions
- Optional handle is gear operated
- Size: 3" (11.3 lbs.) or 4" (14.3 lbs.) – (specify)
- Thickness: 2"
- Not recommended for salt water application



90° INTAKE BASE FOR ELEVATED MONITORS

- Used with 299-11EL & 8394-02RC monitors
- Carbon steel construction
- 6"-150# & 6"-300# flange inlet
- 4"-150#, 6"-150#, & 6"-300# flange outlet
- Full 4" waterway
- Red epoxy finish

WPO-2000 WATER POWERED MONITOR OSCILLATOR

- Compatible for use with Elkhart Brass Manual Copperhead w/tiller bar or Manual Spitfire w/tiller bar monitors:
 - WPO-2000 (W/5.25" CLAMP) for the 8593-02 w/4"-150# FF flange
 - WPO-2000 (W/6.5" CLAMP) for the 8394-121 w/4"-150# FF flange
- 4" Inlet
- 200 PSI (13.8 BAR) max operating pressure
- 0-30°/sec oscillating speed range
- Arc of oscillation - 15° to 120°
- Brass & 316 stainless steel construction





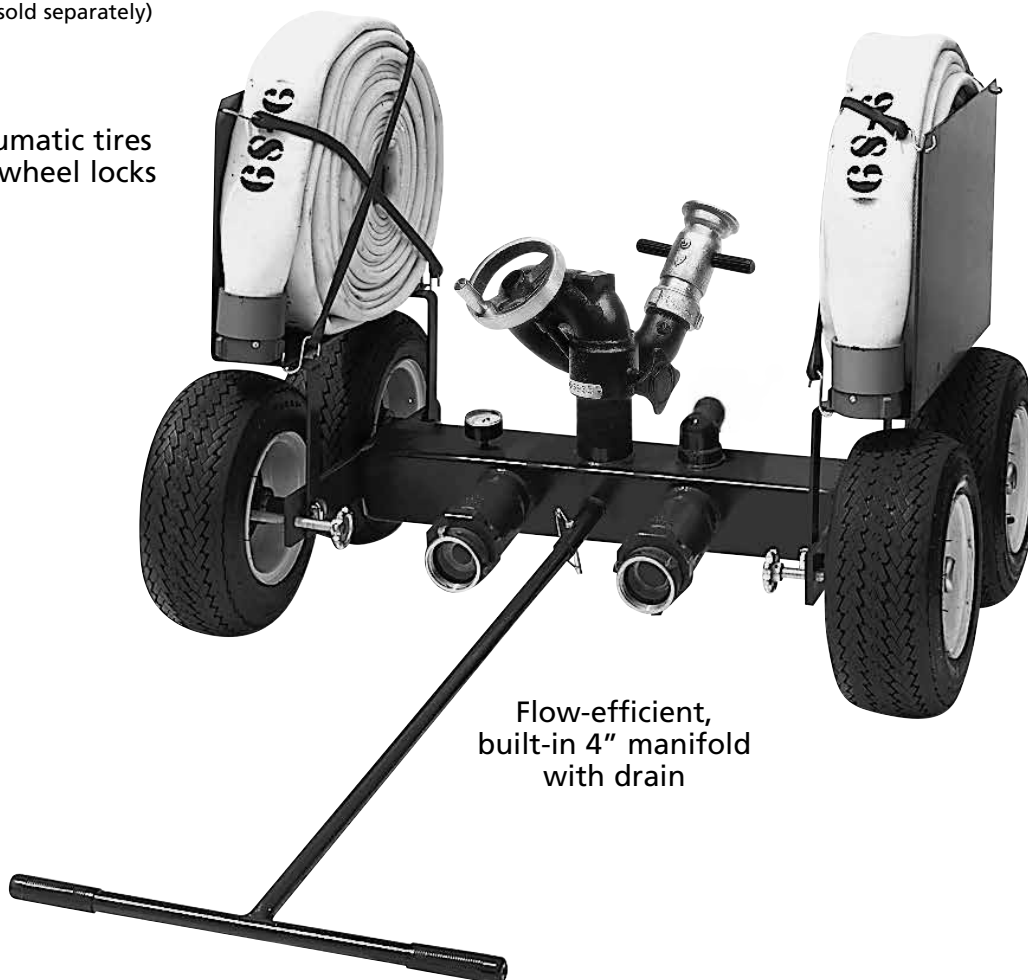
Portable Carts

- Portable wheeled carts come furnished with a flow-efficient, built-in 4" manifold
- Wheels feature pneumatic tires and wheel locks
- The monitors have stop positions at 45° on either side of center and 20° above horizontal
- Cart specific highlights include:
 - The two wheel cart attaches with a 1 $\frac{7}{8}$ " or 2" coupler; to the vehicle for extra stability during flow; two hose beds each capable of holding two (2) 50' sections of 2 $\frac{1}{2}$ " or 3" hose
 - The four wheel cart has a detachable "tee" handle, optional hose racks above the wheels — each capable of holding a 50' "donut roll" of 2 $\frac{1}{2}$ " hose
- Liquid-filled pressure gauge

5-54

(Nozzle sold separately)

Pneumatic tires
and wheel locks



Red urethane
finished



200
PSI

750
or
1000
GPM

Flow-efficient,
built-in 4" manifold
with drain

SPECIFICATIONS		
Max. GPM (LPM)	(See selector guide for specifics) 2 x 2.5" NHT (F)	
Inlet Sizes/Types	Optional Additional Cart Inlets	
	1 x 5" Storz	
	1 x 4" Storz	
	2 x 2.5" NHT (F) (Swivel)	
Outlet Size	2.5" NHT	
Controls	Single hand-wheel	
Material/Finish	Brass with red urethane enamel	
Friction Loss	GPM	Stingray® Carts (8393)
	*1000	56 psi
	750	34 psi
	500	12 psi
Travel	V Variable (see chart for specifics)	
	H L45° to R45° (90°)	
Weight	See selection chart for specifics	

*8393-TW only

KEY CONFIGURATIONS (ACCESSORIES)	
	
8393TW (1)	8393FW (2)

ADDITIONAL INFORMATION
<ul style="list-style-type: none"> • These monitor types are also available in monitor only and hydrant versions. • Please see page 5-35 for Stingray® (8393 series) details. • When flowing 1000 gpm, the cart must be attached to vehicle for safety.

Portable Cart Selector Guide

Cart Type/ GPM (LPM)	Monitor	INLET OPTIONS				OUT-LET	CART FEATURES				VERTICAL TRAVEL	CONTROLS	DIMENSIONS (Inches)			Weight (Lbs.)	ILLUSTRATION	MODEL	
		2 x 2.5" NHT*	2 x 2.5" NHT* +4" Storz	2 x 2.5" NHT* +5" Storz	4 x 2.5" NHT*		2.5" NHT	T Handle	Coupler	Pressure Gauge			Hose Beds	Width	Depth				Height
2-Wheel/ 1000 (3875)	Stingray 8393	s	o	o	o	•		⊗	s	s	+20° to 70° (50°)	•	s	67.00	72.00	34.00	310.0	1	8393TW
4-Wheel/ 750 (2839)	Stingray 8393	s	o	o	o	•	s		s	o	+20° to 70° (50°)	•	s	67.00	72.00	34.00	230.0	2	8393FW

KEY s = standard o = option

* Clappered female swivel inlets.

** This feature will change the height of the end product.

⊗ Storz inlet carts have 2.0" coupler - 2 x 2.5" & 4 x 2.5" NHT have 1.875" coupler

Recommended Products

SM-1000HF – SELF-EDUCTING	IMS-500 – SELECT-O-STREAM®	J – MYSTERY®	181 – DELUGE TIP	282B – STREAM SHAPER
				
Page 6-16	Page 6-12	Page 6-14	Page 1-26	Page 1-27