# **SELECTOR GUIDE**

		cc	NTR	OL O	PTIO	NS		МС	ראטכ	ring	OPTI	ONS		DEGRE TRA		CER	TIFIC	ATIC	ONS		ATER	RIAL INS		
(E)	N	lanu	al						Mobi	le	Stati	onary												
Мах. GPM (LPM)	Dual Hand-wheel	Single Hand-wheel	Tiller	Hydraulic	Electric	Wireless (RF)	EXM Tehcnology	Portable	Wheeled Cart	Apparatus	Fixed Installation	Elevated	Integral Ball Valve	Vertical	Horizontal	CE	Class I, Div 1	Class I, Div 2	FM Approved	Brass	Elk-O-Lite®	Stainless Steel	MONITOR SERIES	PAGE
300 (1136)					•	•	•			•	•			135°	180°						•		Sidewinder <sup>®</sup> EXM UHP	5-10
l _ €					•					٠				135°	334°	•					•		Sidewinder <sup>®</sup> Electric	5-14
500 (1893)			•					Ш		٠				135°	360°	$ldsymbol{ldsymbol{eta}}$		Ш		Ш	•		Sidewinder <sup>®</sup>	5-17
								•		Ш				43°	40°	·				Ш	•		R.A.M. <sup>®</sup>	5-24
700 (2650)					•	•	•			•	•			135°	350°						•		Sidewinder <sup>®</sup> EXM	5-2
35)	•		•								•	•		175°	360°					•			Manual Elevated	5-51
1000 (3785)									•					50°	90°					•			Portable Carts	5-56
					•	•	•			•	•			165°	350°						•		Cobra™ EXM 7200	5-4
		•						•		•				95°	360°	•					•		Stinger <sup>®</sup> 2.0	5-27
02	•		•							•	•			135°	360°	•					•		Vulcan <sup>®</sup>	5-30
1250 (4732)		•								•	•			130°	360°	•			•	•			Stingray <sup>®</sup>	5-36
1 . 3	•		•							•	•		•	135°	360°	•			•	•			Copperhead	5-39
			•								•			135°	360°	•			•	•			Python <sup>®</sup>	5-43
		•	•								•			130°	360°	•			•	•			Hydrant Mount	5-49
1500 (5678)					•	•	•			•	•			165°	350°						•		Cobra™ EXM 7250	5-4
<u> </u>					•					•	•			135°	347°	•				•	•		Scorpion <sup>®</sup> Electric	5-19
2000 (7571)	•		•							•	•			135°	360°	•					•		Scorpion <sup>®</sup>	5-22
	•		•							•	•			135°	360°	•				•			Spit-Fire	5-33
2500 (9463)					•	•	•			•	•			135°	350°						•		Scorpion <sup>®</sup> EXM	5-6
25 (94											•			150°	360°	•			•			•	Giant Python	5-46
3000 (11355)					•	•	•			•	•			135°	350°						•		SkyStream™ EXM	5-8

DIMENSIONAL ABBREVATIONS 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**

### **THREADS**



• Denotes flow or pressure rating

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

# Sidewinder EM

The Sidewinder EXM 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 Radio Frequency (RF) device. The monitor may be powered with 12 or 24 volts.

- 700 GPM flow
- Sealed to NEMA 4
- 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

Double Race Bearings

Absolute Position Feedback Sensors

Absolute Position Feedback Sensors

Manual Override

Double Race Bearings

Sealed High-Torque Motors

Torque Motors

5-2

# SIDEWINDER® EXM

	SPECIFICATIONS
Model	7100
Max Flow	700 GPM (2650 LPM)
Max Pressure	SD: 250 PSI (17.2 bar) continuous duty
	HD: 500 PSI (34.5 bar) continuous duty
Inlet	2.5" NPT, 2.5" BSPT
Outlet	2.5" Male NHT, 2.5" BSPP
Travel	V: -45° to +90° (135°)
	H: L175 to R175 (350°)
Voltage	11-27 VDC
Control	CAN bus (J1939)
Communication	2.4 Ghz digital radio frequency (unlicensed)
Material/Finish	Teflon impregnated, hard anodized Elk-O-Lite®
Swing Radius	SD: 7.92" / HD: 8.38"
Stow Height	13.21"
Weight	SD: 18 lbs. (8.16 kg.)
	HD: 19.5 lbs. (8.84 kg.)



# **Recommended Products**

Panel Mount	Handheld	Joystick	OEM Interface Module	Position Display	6000 Series Nozzle	Light Kit	Quick Connect
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

# **Components & Options Chart**

	COMPONE	NTS & OPTIONS	ILLUSTRATION	MODEL
	C. L. a. L.L.	15/30/45/60/95/125/150/200/FLUSH GPM	7	6000-200E
Electric Nozzles	Selectable	250/350/500/700/FLUSH GPM	7	6000-700E
	EXM Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM enabled component.	2	7010
Controllers	EXM Handheld Controller Kit	This package includes the panel mount controller (7010), handheld conversion kit (7020), & RF transceiver module (7061). Comes pre-assembled, configured, and ready to use.	3	7015
	EXM Joystick Controller	Joystick operator control unit suitable for connection to an EXM OEM Interface Module.	4	7030
	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	6	7051
Modules	EXM OEM Interface Module (Wireless RF & CAN)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	Not Pictured	7072
	EXM OEM Interface Module (Wired CAN only)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	5	7073
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	Not Pictured	7095
	External RF Antenna	10 ft extension for 7072 OEM Interface module	Not Pictured	7062
Accessories	2.5" Quick Connect	Allows for quick removal of the monitor	9	7150
Accessories	Light Kit	150w LED spot/flood from FRC. Operate and position from any Sidewinder EXM control device.	8	7080



# Cobra™ EM

The Cobra™ EXM 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 unprecented durability in a range of applications. The Cobra™ EXM 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 Radio Frequency (RF) 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



# COBRA™ EXM

	SPECIFICATIONS					
Model	7200 / 7250					
Max Flow GPM (LPM)	1250 (4731) / 1500 (5678)					
Max Pressure	SD: 250 PSI (17.2 BAR) continuous duty					
	HD: 500 PSI (34.5 BAR) continuous 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°) with Extended Travel					
	H: L175 to R175 (350°)					
Voltage	11-27 VDC					
Control	CAN bus (J1939)					
Communication	2.4 Ghz digital radio frequency (unlicensed)					
Material/Finish	Teflon impregnated, hard anodized Elk-O-Lite®					
Swing Radius	6" (180°), 8" (360°)					
Stow Height	16.75"					
Weight	31 Lbs.					



# **Recommended Products**

Panel Mount	Handheld	Joystick	OEM Interface Module	Position Display	X-Stream Series Nozzle	Light Kit	EXM CAN Stow Module
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

# **Components & Options Chart**

	COMPONE	NTS & OPTIONS	ILLUSTRATION	MODEL
		2.5" Inlet: 350-1000 GPM (1325-3785 LPM)	7	SM-1000E
Electric Nozzles	X-Stream Series Automatic	2.5" Inlet: 350-1250 GPM (1325-4731 LPM)	7	SM-1250E
	Automatic	3.5" Inlet: 500-1500 GPM (1893-5678 LPM)	7	SM-1500E
	EXM Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM enabled component.	2	7010
Controllers	EXM Handheld Controller Kit	This package includes the panel mount controller (7010), handheld conversion kit (7020), & RF transceiver module (7061). Comes pre-assembled, configured, and ready to use.	3	7015
	EXM Joystick Controller	4	7030	
	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	6	7051
Modules	EXM OEM Interface Module (Wireless RF & CAN)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	Not Pictured	7072
	EXM OEM Interface Module (Wired CAN only)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	5	7073
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	9	7095
	External RF Antenna	10 ft extension for 7070 OEM Interface module	Not Pictured	7062
Accessories	Light Kit	150w LED spot/flood from FRC. Operate and position from any Cobra EXM control device.	8	7083

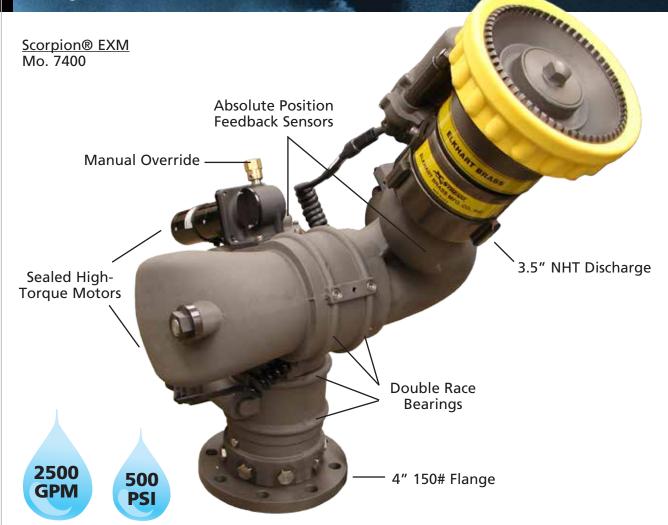


# Scorpion EM

The Scorpion EXM 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

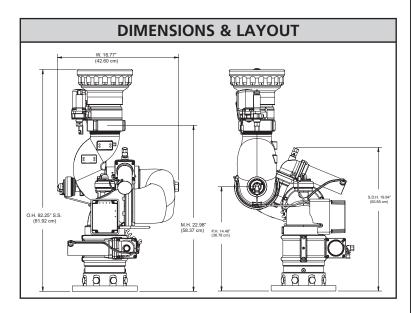
Integrated water valve control



5-6

# SCORPION® EXM

SPECI	FICATIONS
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	V: -45° to +90° (135°)
(Factory Settings)	H: L175 to R175 (350°)
Voltage	11-27 VDC
Control	CAN bus (J1939)
Communication	Digital radio frequency
	(unlicensed)
Material/Finish	Teflon impregnated, hard
	anodized Elk-O-Lite®
Stow Height	20"
Weight	52 Lbs.



# **Recommended Products**

Panel Mount	Handheld	Joystick	OEM Interface Module	Position Display	X-Stream Series Nozzle	Light Kit	External RF Antenna
(2)	(3)	(4)	(5)	(6)	(7)	(8)	O

# **Components & Options Chart**

	COMPONE	NTS & OPTIONS	ILLUSTRATION	MODEL
Electric Nameles	X-Stream Series	3.5" Inlet: 350-1250 GPM (1325-4731 LPM)	7	SM-1250E
Electric Nozzles	Automatic	3.5" Inlet: 500-2000 GPM (1893-7571 LPM)	7	SM-2000E
	EXM Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM enabled component.	2	7010
Controllers	EXM Handheld Controller Kit	This package includes the panel mount controller (7010), handheld conversion kit (7020), & RF transceiver module (7061). Comes pre-assembled, configured, and ready to use.	3	7015
	EXM Joystick Controller	Joystick operator control unit suitable for connection to an EXM OEM Interface Module.	4	7030
	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	6	7051
Modules	EXM OEM Interface Module (Wireless RF & CAN)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	Not Pictured	7072
	EXM OEM Interface Module (Wired CAN only)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	5	7073
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	Not Pictured	7095
	External RF Antenna	10 ft extension for 7070 OEM Interface module	9	7062
Accessories	Light Kit	150w LED spot/flood from FRC. Operate and position from any Scorpion EXM control device.	8	7085



# SkyStream™ EM

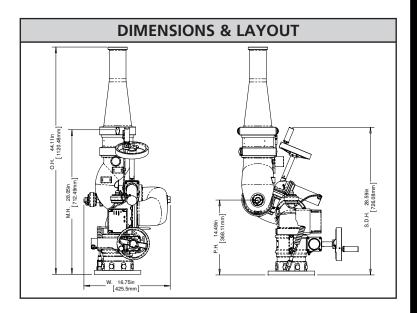
Taking the Scorpion EXM to the next level, the SkyStream EXM increases the flow capability to 3000 GPM (11355 LPM). With it's 5" NHT outlet, the SkyStream delivers best in class flow that provides a reach of up to 120 meters, making it ideal for use with fire apparatus, industrial pumper, and aerial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

SkyStream™ EXM Mo. 7500 2 3/4" Smooth Bore Nozzle Manual Override Handwheels Stream Shaper Sealed High-5" NHT Discharge **Torque Motors Double Race** Bearings 3000 **500 GPM** 4" 150# Flange PSI

5-8

SPECI	FICATIONS
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
Control	CAN bus (J1939)
Communication	Digital radio frequency
	(unlicensed)
Material/Finish	Teflon impregnated, hard
	anodized Elk-O-Lite®
Stow Height	28.6"
Weight	57.7 Lbs.



# **Recommended Products**

Panel Mount	Handheld	Joystick	OEM Interface Module	Position Display	Smooth Bore Nozzle	Light Kit	External RF Antenna
(2)	(3)	(4)	(5)	(6)	(7)	(8)	O

# **Components & Options Chart**

	COMPONE	NTS & OPTIONS	ILLUSTRATION	MODEL	
Nozzles	Smooth Bore	Smooth Bore 17" long, custom 2 3/4" Smooth Bore Nozzle for use with the SkyStream™ EXM.			
	EXM Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM enabled component.	2	7010	
Controllers	EXM Handheld Controller Kit	This package includes the panel mount controller (7010), handheld conversion kit (7020), & RF transceiver module (7061). Comes pre-assembled, configured, and ready to use.	3	7015	
	EXM Joystick Controller	Joystick operator control unit suitable for connection to an EXM OEM Interface Module.	4	7030	
	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	6	7051	
Modules	EXM OEM Interface Module (Wireless RF & CAN)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	Not Pictured	7072	
	EXM OEM Interface Module (Wired CAN only)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	5	7073	
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned monitor.	Not Pictured	7095	
	External RF Antenna	10 ft extension for 7070 OEM Interface module	9	7062	
Accessories	Light Kit	150w LED spot/flood from FRC. Operate and position from any Scorpion EXM control device.	8	7085	



# Sidewinder EM UHP

Taking the Sidewinder EXM 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).

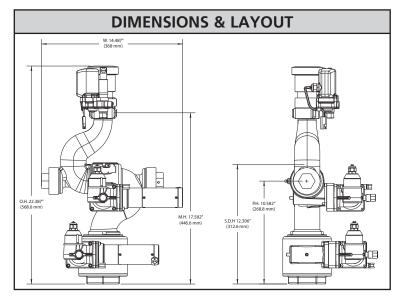
- 1500 PSI pressure
- Extreme Torque Motors
- Sealed to NEMA 4
- Teflon impregnated, hard anodized aluminum alloy
- · Programmable travel speeds, 3D travel limits, keep out zones, stow and oscillation

Sidewinder® EXM UHP Mo. 7161 Sealed High-**Torque Motors** Manual Override 1.5" NHT Discharge **Absolute Position** Fully-Vaned, Cast Feedback Sensors Aluminum Wateray **Double Race Bearings 1500** 2.5" NPT Base

5-10

# SIDEWINDER® EXM UHP

SPEC	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				
Control	CAN bus (J1939)				
Communication	Digital radio frequency				
	(unlicensed)				
Material/Finish	Teflon impregnated, hard				
	anodized Elk-O-Lite®				
Weight	27 Lbs.				



# **Recommended Products**

Pai Mo	Handheld	Joystick	OEM Interface Module	Position Display	5000-14E UHP Nozzle	EXM CAN Stow Module
(2)		(4)	(5)	(6)	(7)	(8)

# **Components & Options Chart**

	COMPONE	NTS & OPTIONS	ILLUSTRATION	MODEL
Electric Nozzle	Fixed	60 GPM (227 LPM) with Flush	7	5000-14E UHP
	EXM Panel Mount Controller	Complete panel mount operator control suitable for 2-wire connection to any EXM enabled component.	2	7010
Controllers	EXM Handheld Controller Kit	This package includes the panel mount controller (7010), handheld conversion kit (7020), & RF transceiver module (7061). Comes pre-assembled, configured, and ready to use.	3	7015
	EXM Joystick Controller	Joystick operator control unit suitable for connection to an EXM OEM Interface Module.	4	7030
	EXM Position Display Module	Monitor vertical and horizontal position display unit suitable for 2-wire connection to any EXM enabled component.	6	7051
Modules	EXM OEM Interface Module (Wireless RF & CAN)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	Not Pictured	7072
	EXM OEM Interface Module (Wired CAN only)	EXM system interface - allows connection of model 7030 Joystick or other simple OEM supplied electromechanical switches to EXM system.	5	7073
	EXM CAN Stow Module	Connects to lockout devices to prevent equipment damage due to an improperly positioned mointor.	8	7095
Accessories	External RF Antenna	10 ft extension for 7070 OEM Interface module	Not Pictured	7062



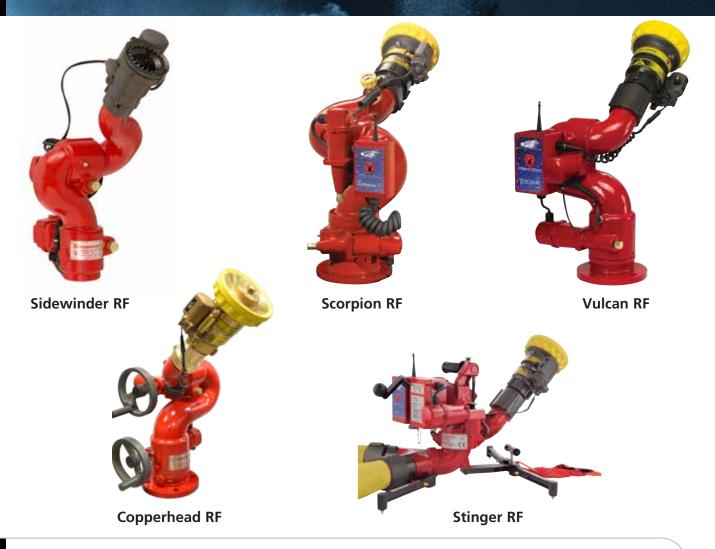
# Legacy RF Monitors

The RF series of Elkhart Brass monitors helped pave the way for wireless control of water cannons. This technology allowed operators to control master stream flow from multiple controller locations, including up to a quarter mile away utilizing a handheld controller.

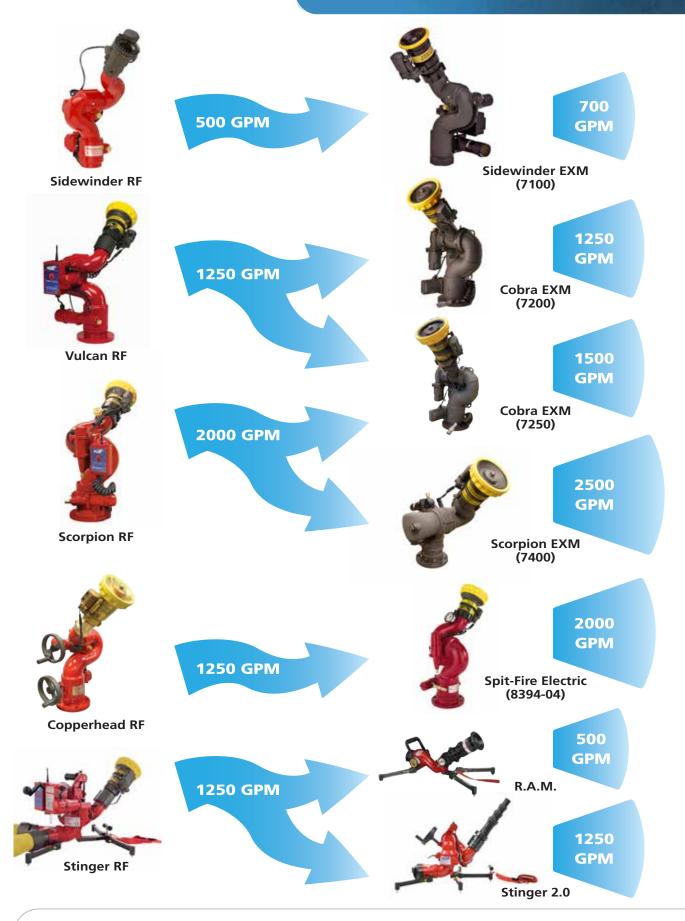
As wireless technology continues to evolve, Elkhart Brass has improved the capabilites of the wireless monitor with the EXM platform. The flexibility of the EXM platform (wireless control and/or hard-wired control via CAN bus) takes what was great about the RF series and adds valve control, improved flow efficiency, and upgraded wireless technology. The EXM system also allows for user programmable 3D Travel Limits, Keep-Out Zones, Travel Speeds, Stow Position, and Multi-axis Oscillation.

As a result of the continued success of the EXM platform, the RF series of monitors shown below are no longer available for order.

Please use the guide on the following page to select the recommended replacement for your RF product.



# RECOMMENDED RF REPLACMENT GUIDE





# Sidewinder Electric

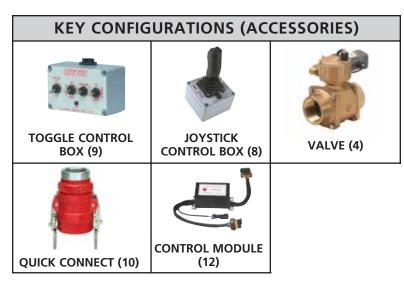
- Allows for more effective use of personnel while reducing the potential risk of injury — controls can be mounted inside vehicle
- Designed for wildland firefighting, de-icing, and dust abatement operations
- Weather-tight connectorized harness
- Epoxy encapsulated control module
- Available in 12V or 24V for DC operation
- Available with either a low-cost toggle box controller or full-sized joystick with integrated water valve trigger
- Double ball races with stainless steel bearings
- Available high speed water valve kit operates from joystick trigger

2" Fully-vaned waterway Fully enclosed stainless steel worm gears 200 **PSI** Available normal or high-speed travel **500 GPM Electric motors** feature manual override CE

5-14

# SIDEWINDER® ELECTRIC

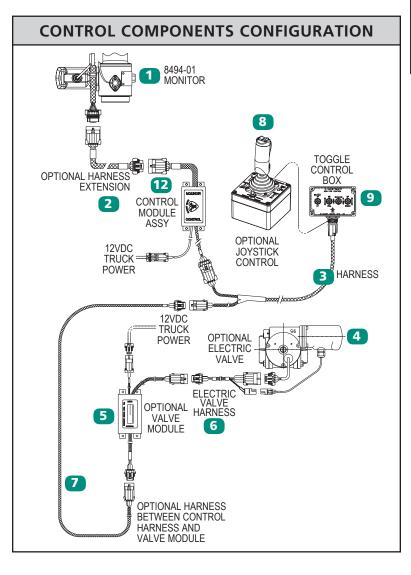
SPECIFICATIONS						
Max. GPM (LPM)	500 (1893)					
Inlet	Size	Type				
illiet	2"	NPT (F)				
Outlet	1.5" NHT					
Controls	Electric					
Material/Finish	Elk-O-Lite® w	ith red				
iviaterial/Tillisii	urethane enamel					
	26 psi at 500 gpm					
Friction Loss	13 psi at 350	gpm				
	3.9 psi at 200 gpm					
Travel	V -45° to +90° (135°)					
	H 180° or 334	ļ°				
Weight	16.5 Lbs.					
Max. Power	3.0 Amps at 1	I2V DC				
Requirement	(24V opt)					
Ratings and	CE					
Certifications	<sup>CE</sup>					



# DIMENSIONS & LAYOUT W. 8.56" (21.74 cm) O.H. 22.05" (56.01 cm) P.H. 9.34" (23.72 cm) (1)

### **ADDITIONAL INFORMATION**

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



# SIDEWINDER® ELECTRIC

# Sidewinder® Electric Selector Guide

INLET SIZE / TYPE	OUTLET	HORIZO TRA			ONTAL EED		TICAL EED	CON' MOI VOL			BASES	CERTIFICATION	MODEL
2.0" NPT	1.5″	180°	334°	Fast	Slow	Fast	Slow	12V DC	24V DC	2.0" NPT	2" NPT Quick Connect (Elk-O-Lite®)	CE	
•	•	S	0	0	S	0	S	S	0	s	0	•	8494-01
											10		Illustration

KEY s = standard o = option

# **Components & Options Chart**

COMPONENTS & C	OPTIONS		ILLUSTRATION	MODEL
	Selectable Gallonage	15/30/45/60/95/125/150/200 GPM	14	6000-200E*
Electric Nozzles		15, 30, 45 GPM <i>(specify)</i>		5000-04
	Fixed Gallonage	60, 95, 125, 150 GPM (specify)	11	5000-14
Electric Nozzles		175, 200, 250, 350, 400, 475 GPM (specify)		5000-24
	Automatic	20 - 120 GPM	13	SM-10FE
	Toggle Box	With valve on/off control	9	
Operator Controls	Joystick	With toggle for water on/off plus integrated water valve trigger	8	
	Control Module	With 6" power harness. Specify operating voltage (12V or 24 V)	12	
Monitor Control Module Assembly	Monitor to Control Module Harness	1', 5' or 30' length (specify) Note: These harnesses may be combined for intermediate length - i.e., 5+5+1=11' length	2	
	Operator (Joystick or Toggle) box to Control Module Harness	12' or 50' length (specify)	3	
	2" Valve	High speed 2920E 2" valve	4	81181001
	Valve End Caps	Available inlet and outlet options are the same as those offered on the 2920E series of valves, please see page 8-23 (FNPT end caps are standard)		
Valve Kit	Valve Control Module	With 6" power harness. Specify operating voltage (12V or 24 V)	5	
	Valve Control Module to Valve Harness	5′, 10′, 20′, 30′, or 40′ length (specify) Note: These harnesses may be combined for intermediate length – i.e., 5+10=15′ length	6	
	Valve Control Module to Operator (Joystick or Toggle) Harness	Optional. 1', 3', 5', 10' or 25' length <i>(specify)</i>	7	
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).		

<sup>\*</sup>Only available for use with 12V monitor option

## **Recommended Products**



5-17

# **Sidewinder**<sup>®</sup>

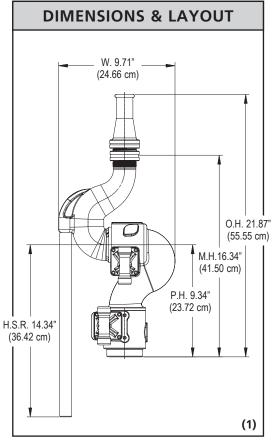
- Compact under 9" wide and requiring just 16" of clearance; perfect for wildland, dust abatement or small apparatus use — anywhere space is at a premium
- Designed specifically for the rigors of wildland and construction use
- 2" fully-vaned waterway
- Customizable gpm and pressure can be customized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



# di ce

# **SIDEWINDER®**

SPECIFICATIONS				
Max. GPM (LPM)	500 (1893)			
Inlet	Size	Type		
	2"	NPT (F)		
Outlet	1.5" NHT			
Control	Tiller			
Materials/Finishes	Brass or Elk-C	)-Lite® with		
iviateriais/i illisiles	red urethane enamel			
	26 psi at 500 gpm			
Friction Loss	14 psi at 350 gpm			
	4 psi at 200 gpm			
Travel	V -45° to +90° (135°)			
ITavei	H 360° (continuous)			
Weight	Variable			
vveigit	(see chart for	specifics)		
Ratings and				
Certifications				



# **ADDITIONAL INFORMATION**

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



# Sidewinder® Selector Guide

INLET SIZE/ TYPE	OUTLET SIZE	MATERIALS			BAS	ES		
2.0" NPT	1.5″	Brass	Elk-O-Lite®	2" NPT	2" NPT Quick Connect (Brass)	2" NPT Quick Connect (Elk-O-Lite®)	Weight (Lbs.)	MODEL
•	•		•	S		0	16	8492
•	•	•		S	0		48	8392
					2	2		Illustration

KEY s = standard o = option

# **Components & Options Chart**

COMPONENTS &	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**

TSFM-HP – PHANTOM®	TSM-30F – SELECT-O-MATIC®	4000-24 – CHIEF™
Page 1-12	Page 1-9	Page 1-6
185-B – SMOOTH BORE	281-A – STREAM SHAPER	
Page 1-26	Page 1-27	

# 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

5-19



200 PSI

Lightweight Elk-O-Lite® construction

2000 GPM

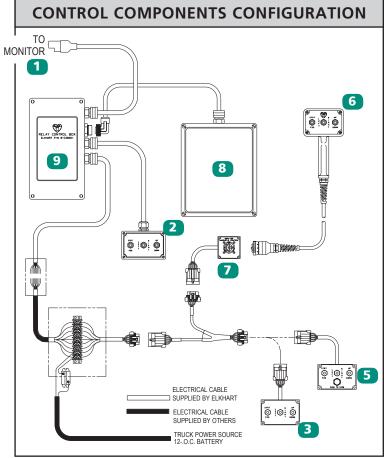
 $\epsilon$ 

# SCORPION® ELECTRIC

SPECIFICATIONS						
Max. GPM (LPM)	2000 (7570)					
	Size	Туре				
Inlet	4"	150# ANSI Flange				
Outlet	3.5" N	HT				
Controls	Electric					
Material/Finish	Elk-O-Lite® with					
	red urethane enamel					
Friction Loss	39 psi at 2000 gpm					
111611011 2033	15 psi at 1250 gpm					
Travel	V -45° to +90° (135°)					
liavei	H 347°					
Weight	Variable (see chart for specifics)					
Ratings and Certifications	CE					



# O.H. 36.65" (93.09 cm) P.H. 15.58" (39.57 cm) O.H. 36.65" (63.50 cm)



### **ADDITIONAL INFORMATION**

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

# SCORPION® ELECTRIC

# **Scorpion® Electric Selector Guide**

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

KEY s = standard o = option

# **Components & Options Chart**

COMPONENTS & OPTIONS	COMPONENTS & OPTIONS					
	Panel Mount Controller	3	81339001			
	Panel Mount Controller with Stow – adds stow button	5	81421001			
Operator Controls	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**



# **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).



# 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



Choice of manual controls — dual hand-wheel or tiller

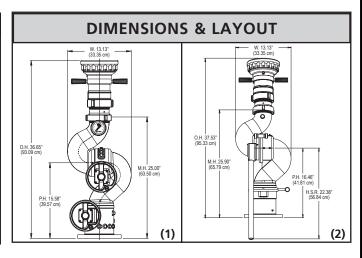
Fully vaned waterway







SPECIFICATIONS				
Max. GPM (LPM)	2000 (7	7570)		
	Size	Туре		
Inlet	4"	150# ANSI Flange		
Outlet	3.5" NHT			
Controls	Dual hand-wheel			
	"Big Stick®"			
Material/Finish	Elk-O-l	lite® 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	38 Lbs.			
Ratings and Certifications	CE			



# **Scorpion® Selector Guide**

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

KEY s = standard o = option

# **Components & Options Chart**

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



### **Recommended Products**



# **ADDITIONAL INFORMATION**

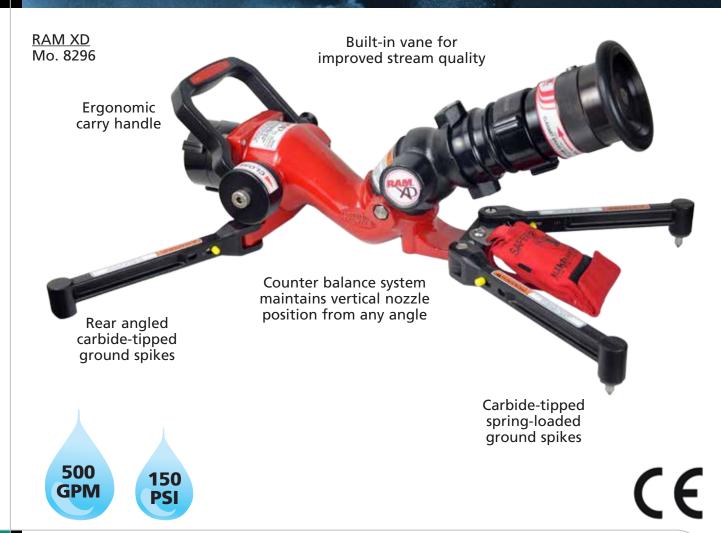
Technical Data on monitor performance may be found on page T-11.

RAPID ATTACK MONITOR – R.A.M.®





- 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



# RAPID ATTACK MONITOR - R.A.M.®

SPECIFICATIONS					
Max. GPM (LPM)	500 (1893)				
Inlet	Size	Туре			
iniet	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				
	V +14° to +51° (r	nanned)			
Travel	V +35° to +51° (unmanned)				
	H 20° in both directions (40°)				
Weight	17.7 (Lbs.)				
Ratings and Certifications	CE				



### **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**

	COMPONE	ENTS & OPTIONS	ILLUSTRATION	MODEL
	Fixed	Fixed 500 GPM (1893 LPM)		3896
R.A.N.™ Nozzle	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
	Triple Stack Tip	Outlets: 1", 1 ¼", & 1 ½"	4	ST-197-A
Smooth Bore Nozzle	Triple Stack Tip	Outlets: 1 ¼", 1 ³/8", & 1 ½"	4	ST-197-A
NOZZIC	Deluge Tip	Outlet: 1 ³/8"	5	181-A
	Mini Stream Shaper	For use with R.A.M. smooth bore nozzles	6	282-A Mini
Accessories	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 35° Sho slip grip mon incre addi the increase additional states and the states are additional states are additi

# 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.

5-26

# 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 3<sup>3</sup>/<sub>8</sub>" vaned waterway
- Patented monitor to base latching mechanism is user-friendly and provides visual indication
- Fully enclosed stainless steel worm gear
- Liquid filled pressure gauge
- Two carrying handles



ELKHART BRASS MFG. CO., INC. • 800.346.0250 • 1.574.295.8330 • FAX: 574.293.9914 • www.elkhartbrass.com

STINGER® 2.0

SPECIFICATIONS							
	Portable				Deck Mount		
Max. GPM (LPM)		1250 (473	32)		1250 (4732)		
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	l-wheel		Single hand-wheel			
Material/Finish	Elk-O-Lite®	with red uret	hane enamel	Elk-O-Lite® with red urethane enamel			
Friction Loss	27 psi at 12	50 gpm		25 psi at 1250 gpm			
	16 psi at 1000 gpm			16 psi at 1000 gpm			
Travel	V +35° to +75° (40°)			V -15° to +75° (95°)			
	H L45° to R45° (90°)			H 360° (continuous)			
Weight	29 Lbs. (wit	h 2 x 2.5" inl	ets)	22 Lbs.			

# Stinger® 2.0 Selector Guide

	INLET SIZES / TYPES							
	SINGLE				DUAL		ILLUSTRATION	MODEL
3.5" NHT	4.0" NHT	4.5" NHT	4.0" STORZ	5.0" STORZ	2.5" NHT	2.5"		
0	0	0	0	0	s	•	1	8297-2.0*
0	0	0	0	0	S	•	2	8397-2.0
				6	7			Illustration

KEY s = standard o = option

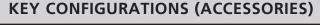
<sup>\*</sup> For the Break-a-Part version, the upper and lower unit may be purchased separately.





# **ADDITIONAL INFORMATION**

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



















**STORAGE** 

**ANSI FLANGE** BRACKET (3) TOP MOUNT (4)

LDH INLET **BASE (6)** 

THE PIPE™ 2.0 (9)

ADAPTER (8)

DECK MOUNT PROTECTIVE

**NPT TOP** COVER (10) MOUNT (5)

SIAMESE INLET **BASE (7)** 

# **Components & Options Chart**

COMPONENTS & OPTIONS		ILLUSTRATION	MODEL
	1 x 3" NPT Female (without Flange)	5	8298 P 2.0
Truck Mount Adapters	1 x 3" - 150# ANSI	4	8298 F 2.0
(8297-2.0)	2 x 2.5" Deck Mount	8	8299
Storage Bracket	Storage Bracket Truck storage mounting bracket for portable base or complete monitor		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
		Fisher Brass	
6-16	Page 6-7	Page 1-27	Page 1-26

# **Product Highlights**

The Stinger® (8297 2.0) adds excellent value as the "breakapart" 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

**VULCAN®** 

# **Vulcan**<sup>®</sup>

- Efficient design creates the most cost effective monitor in its flow class
- Low friction loss due to 3  $\Re$  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



5-29

# **VULCAN®**

SPECIFICATIONS							
Max. GPM (LPM)	1250 (4732)						
	Sizes	Types					
	4"	150# ANSI					
Inlets	r	Flange					
	3"	150# ANSI	NPT (F)				
	,	Flange	INFT (F)				
Outlet	2.5" NHT						
	Tiller						
Controls	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						
Triction 2000	12 psi at 1000 gpm						
Travel	V -45° to +90° (135°)						
ITavei	H 360° (continuous)						
Weight	Variable (see chart for specifics)						
Ratings and	CE						
Certifications	CE						





HAND WHEEL (1)

TILLER BAR (2)

# **Vulcan® Selector Guide**

INI	LET SIZES /	TYPES	OUTLET	CONTROLS			CERTIFICATION			
NPT	150# AN	SI Flange	SIZE	Hand-wheels		Tillers			MODEL	
3″	3″	4"	2.5" NHT	Fixed Base	Rotating Base	Bar	CE	Weight (Lbs.)	MODEL	
0	S	0	•			S	•	18	8500-02	
0	S	0	•		S			22	8500-03	
0	S	0	•	S				22	8500-03X	
				3	3 1,4				Illustration	

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
			Ethar Brass	
6-16	Page 6-7	Page 1-26	Page 1-27	5-51

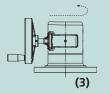
# **Components & Options**

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

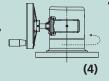
**VULCAN®** 

# **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**

- 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

**Spit-Fire** 

- Fully enclosed gearcase
- Steel worm gears
- #316 stainless steel balls in all swivel joints with grease fittings

Liquid-filled pressure gauge



# SPIT-FIRE

SPECIFICATIONS							
Max. GPM (LPM)	2000 (7570)						
	Size	Types					
Inlets	4"	150# ANSI Flange	NPT				
Outlet Size	3.5" NF	łT					
Controls	Dual hand-wheel						
	"Big Stick®" Tiller						
Material/Finish	Brass w	rith red urethane ena	mel				
Friction Loss	39 psi at 2000 gpm						
	15 psi at 1250 gpm						
Travel	V -45° to +90° (135°)						
Travei	H 360°						
Weight	126 Lbs.						
Ratings and	CE						
Certifications	CE						



HAND WHEEL (1)

TILLER (BIG STICK®) (2)

8394-04 (3)

# **Spit-Fire Selector Guide**

	INLET SIZ	ES/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	WIODEL	
	О	S	•	•			•	8394-021	
	0	S	•		•		•	8394-121	
		S	•			•		8394-04	
Ī				1	2	3		Illustration	

KEY s = standard o = option

# Recommended Products (8394-021 & 8394-121)

Necommende	o) cisabori be	334-021 Q 033	77-121)
SM-2000HF - SELF-EDUCTING	SM-2000B - SELECT-O-MATIC <sup>®</sup>	CSW-LB - SELECT-O-FLOW <sup>®</sup>	SM-2000BE X-STREAM <sup>0</sup>
Page 6-16	Page 6-7	Page 6-13	Page 6
181-3 - DELUGE TIP	84 - BUTTERFLY WAFER VALVE	284-B STREAM SHAPER	
	I		

Page 5-51



# **Components & Options Chart**

Page 1-26

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

Page 1-27

# de Cl

**SPIT-FIRE** 

# **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)
- 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.

5-35

# **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

Vaned elbow

Vaned elbow

Vaned elbow

PSI

1250
GPM

APPROVED

C E

# **STINGRAY®**

SPECIFICATIONS								
Max. GPM (LPM)	1250 (4732)							
	Sizes	Туре	s					
Inlets	4"	150# ANSI Flange						
iniets	3"	150# ANSI Flange	NPT (F)					
Outlet Size	2.5" NHT							
Control	Single han	d-wheel						
Material/Finish	Brass or Ell	k-O-Lite® with red ureth	ane enamel					
Friction Loss	27 psi at 1250 gpm							
Triction Loss	17 psi at 1000 gpm							
	9 psi at 750 gpm							
Travel	V -60° to +90° (150°)							
Havei	H 360° (continuous)							
Weight	Varies (See	specification chart)						
Ratings and Certifications	CE and FM	Approved						

# KEY CONFIGURATIONS (ACCESSORIES) PRESSURE GAUGE (3) BALL VALVE (4)

NOTE: Ball valve cannot be ordered separate from monitor as a stand alone part.

# **Stingray® Selector Guide**

	INLET SIZES / TYPES		OUTLET SIZE	VERTICAL TRAVEL		INTEGRAL COMPONENTS		MATI	MATERIALS CERTIFICATIONS		DIMENSIONS			_			
NPT	150 #		2.5″	-60° to +70°	-60° to +90°	Ball Valve	ssure uge	ass	O-Lite®		l proved	dth .)	pth .)	ight .)	Veight .bs.)	USTRATION	MODEL
3″	3″	4"	NHT	(130°)	(150°)	3″	Pre Ga	Bra	#	빙	AP <sub>I</sub>	Wi (In	De (In	H (F)	\ E E E	╛	MC
О	0	s	•	0	S	S		•		•		14.75	15.75	20.375	68.25	1	8393IV
0	0	S	•	S	0		0	•		•	•	14.75	15.75	15.75	47.5	2	8393
0	0	S	•	S	0		0		•	•		14.75	15.75	15.75	16.0	2	8393-A
						4	3										Illustration

KEY s = standard o = option

### **Recommended Products**



# **Components & Options Chart**

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

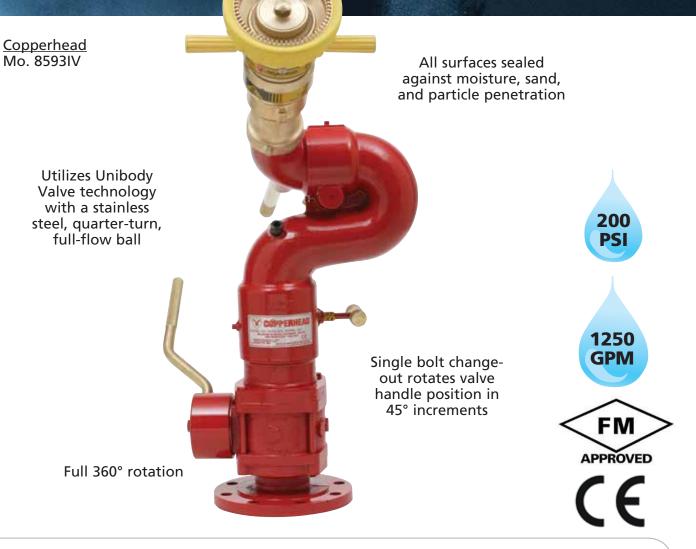
- Hydraulically balanced acetal ball
- Teflon impregnated seats
- Full flow ball valve

- 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.



## 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 31/8" patented vaned elliptical waterway
- Small footprint less than 15" wide and requires just 16" of clearance makes ideal for tight spaces



#### **COPPERHEAD**

SPE	CIFIC	ATIONS					
Max. GPM (LPM)	1250 (	4732)					
	Sizes	Туре	s				
Inlets	4"	150# ANSI Flange					
iniets	3″	150# ANSI Flange	NPT (F)				
Outlet	2.5" NHT						
Tiller							
Controls	Dual hand-wheel – rotating base						
	Dual h	and-wheel – fixe	d base				
Material/Finish	Brass v	with red urethan	e enamel				
Friction Loss	16 psi at 1250 gpm						
Copperhead	12 psi at 1000 gpm						
Friction Loss	21 psi	at 1250 gpm					
Copperhead IV	16 psi	at 1000 gpm					
	V -45°	to +90° (135°)					
Travel	V -49°	to +86° (135°)					
	H 360° (continuous)						
Weight	Variable (see chart for specifics)						
Ratings and Certifications	CE, FN	1 Approved					



#### **Copperhead Selector Guide**

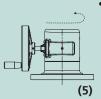
INL	ET SIZES	/ TYPES	OUTLET		CON	TROLS		VERTICAL TRAVEL			EGRAL PONEN	ΤS	CER'			
NPT	150# AN	ISI Flange	SIZE	Hand-	wheels	Til	llers	45 to +90°	to 5°	3" Ball	Valve	auge		poved	ء	MODEL
			2.5"	Fixed Base	Rotating Base	Copperhead Bar	Copperhead IV Bar	-45 +9(	-49 to +86°	Hand-	Tille.	sure G		Approved	Illustration	WODEL
3″	3"	4"	NHT	(68 Lbs.)	(68 Lbs.)	(58 Lbs.)	(87 Lbs.)	(135°)	(135°)	wheel	Tiller	Pressur	CE	FM	snIII	
0	S	0	•			S		•				0	•	•	3	8593-02
0	S	0	•			S		•				0	•	•	3	8593-02N
0	s	0	•		S			•				0	•	•	4,6	8593-03/ 294-11rev.06
0	s	0	•	S				•				0	•	•	4,5	8593-03X/ 294-11rev.06x
		S	•				S		•	0	S	0		•	1,2	8593IV
				4,5	4,6	3				2	1					Illustration

VALVE (1)

KEY s = standard o = option

#### **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:



• 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 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.

# de col

#### **COPPERHEAD**

#### **Recommended Products**



#### **Components & Options Chart**

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

- Weights are approximate and will vary by selected inlet.
- Marine Brass (85-5-5-5) construction is available on the Copperhead. Please inquire with our sales staff.
- Technical Data on monitor performance may be found on page
- T-11
- LA style handles available on the Copperhead. Please inquire with our sales staff.

PYTHON®

## **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



5-41



## de ce

#### **PYTHON®**

	S	PECIFICATIONS	5				
Max. GPM (LPM)	1250 (4732)						
	Sizes		Types				
	6"	150# ANSI Flange					
Inlets	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 wh	eel					
Controls	Tiller						
Material/Finish	Brass with re	ed urethane enamel o	r chrome-plated				
	24 psi at 125	50 gpm					
Friction Loss	18 psi at 100	00 gpm					
	11 psi at 750	) gpm					
Travel	V -45° to +9	0° (135°)					
llavei	H 360° (continuous)						
Weight	45.00 Lbs. (See specification chart)						
Ratings and	EM Approve	d CE	·	·			
Certifications	FM Approve	ru, CE					



#### **Python® Selector Guide**

				INL	ETS					OUTLET SIZE	MAX. (LP	GPM M)		CONT	ROLS	CEI	RT.		DIMEN	ISIONS		FINIS	HES	
					TYI HES					SIZE / TYPE (IN.)	1250	750	Gauge	Wheel			oved	n.)	(In.)	(In.)	(Lbs.)	thane	plated	
	NPT				AN:			)# A .AN(		NHT	(4732)	(2839)	ssur	Steering	er Bar		Approv	Width (In.	epth (Ir	Height (I	Weight (	d Uret	ome-	MODEL
2.5	3	4	2.5	3	4	6	2.5	3	4	2.5			Pre	Ste	Tille	GE	FM	Wi	De	Hei	We	Rec	Chi	Σ
0	0	0	0	О	S	0	0	0	0	•	•		0	0	S	•	•	18.0	31.5	17.5	45.0	•		299-11
0	0	0	0	0	S	0	0	0	0	•	•		0	0	S		•	18.0	31.5	17.5	45.0		•	299-11P
													3	2	1									Illustration

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
(a 11+ 6					4
Page 6-7	Page 6-12	Page 6-16	Page 1-27	Page 1-26	Page 5-51

#### **Components & Options Chart**

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

- 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.

5-43



- 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



**Giant Python** Mo. 299-20

Red urethane finish

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

3.5" flow-efficient waterway



2500 **GPM** 





#### **GIANT PYTHON®**

#### **Giant Python® Selector Guide**

INLET SIZES / TYPES				OUTLET SIZE	CERT	TIFICATIONS					
N	NPT		150# ANSI Flange			ANSI F	lange			E84 A	MODEL
3"	4"	3″	4"	6"	3"	4"	6"	3.5″	CE	FM Approved	
0	0	0	S	0	0	0	0	•	•	•	299-20
			1								Illustration

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
					4
Page 6-14	Page 6-7	Page 6-16	Page 1-26	Page 1-27	Page 5-51

#### **Components & Options Chart**

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

	SPECIFICATIONS								
Max. GPM (LPM)	2500 (9463)	2500 (9463)							
	Sizes		Types						
Inlets	6"	150# ANSI Flange	300# ANSI Flange						
illets	4"	150# ANSI Flange	300# ANSI Flange	NPT (F)					
	3"	150# ANSI Flange	300# ANSI Flange	NPT (F)					
Outlet Size	3.5" NHT	3.5" NHT							
Controls	Dual hand-v	vheel							
Material/Finish	Stainless ste	el with red urethane er	namel and brass trim						
Friction Loss	18 psi at 250	00 gpm							
Triction Loss	6 psi at 1250	gpm gpm							
Travel	V -60° to +9	0° (150°)							
ITavei	H 360° (continuous)								
Weight	126.00 Lbs.	126.00 Lbs.							
Ratings and Certifications	FM Approve	ed, CE							

- 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



5-45



# di di

#### **HYDRANT MOUNT**

	SPECIFICATION	S			
	8393H	299-11H			
Max. GPM (LPM)	1250 (4732)	750 (2839)			
Inlets	2.5" NHT (F)	2.5" NHT (F)			
Outlet Size	2.5" NHT	2.5" NHT			
Controls	Single hand-wheel				
Controls		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°)			
ilavei	H 360° (continuous)	H 360° (continuous)			
Weight Varies	85 lbs.	61 lbs			
Ratings and Certifications	CE and FM Approved	CE and FM Approved			

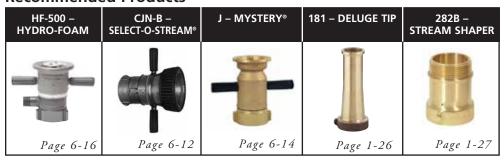
### **ADDITIONAL INFORMATION**

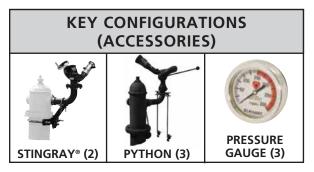
- For 8593H, the hydrant connection fits up to a 10.875" hydrant barrel and includes U-bolts, with nuts, in 10" and 8" sizes
- On all other hydrant mount monitors, the hydrant swivel connection attached to 2.5" hydrant nipple (includes elbow assembly and support rods)

#### **Hydrant Mount Selector Guide**

INLE	OUTLET	MAX. (LPI		VERTICAL TRAVEL	CONT	CONTROLS		CONTROLS CONNECTION TYPE				CERTIFIC	CATIONS	DII	MENSION		
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 (ln.)	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**





## **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



5-47





Manual Elevated Mo. 8394-02RC

> 200 PSI

1000 GPM

# di di

#### MANUAL ELEVATED

SPECIFICATIONS										
		299-11EL*	8394-02RC							
Max. GPM (LPM)		750	1000							
		Sizes / Types		Size / Type						
	6"	150# ANSI Flange								
Inlet	4"	150# ANSI Flange	4"	150# ANSI Flange						
Outlet		2.5" NHT	3.5" NHT							
Controls	Tille	r with locks	Dual hand-wheel							
Material/Finish		s and steel with urethane enamel	Brass with red urethane enamel							
Friction Loss	13 p	si at 750 gpm	10 psi at 1000 gpm							
(excludes head loss)	8 psi	at 500 gpm	6 psi at 750 gpm							
Travel	V -3	7° to +45° (78°)	V -45° to +90° (135°)							
Travei		0° (continuous)	H 360° (continuous)							
Florestian Haiseht		10'	Min. 0'							
Elevation Height	Max	. 40′	Max. 34'							
Weight	300	Lbs.	140 Lbs.							

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

#### 299-11EL

8394-02RC



- · 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'



- 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
- · Free standing to
  - 10' at 1000 gpm
  - 15' at 750 gpm
  - 20' at 500 gpm
- Up to 34' and/or higher flow requires use of support bearing
- 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

(2)

#### **Elevated Monitor Selector Guide**

INLET SIZES OUTLET SIZES			CONT	ROLS			ELEVATIO	N HEIGHT				
150# ANSI*		NI	łТ	ial Hand-wheel	er Handle	Galvanized Waterway	ser ipplies			Max Flow Limit @ Max Height	USTRATION	
4"	6"	2.5"	3.5"	Da	Tiller	g §	Riser Supp	Min.	Max.	GPM		MODEL
S	0	•			•	0	0	10′	40′	750	1	299-11EL*
S			•	•				0'	34'	500	2	8394-02RC

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

#### **Components & Options Chart**

COMPONENTS & OF	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
Companion Flange		4"150# ANSI Steel flange with bolts and gaskets		81317001
External Supply Item	ms			
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**



#### **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**



- 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.

#### **COMPANION FLANGE**

- 150# ANSI cast steel flanges, supplied with bolts and gasket. Specify:
- 3" (P/N 81315001)
- 4" (P/N 81317001)

#### **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 / Oulet

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



#### **Components & Options Chart**

COMPONENTS & C	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	20 ft	36793600
(select one)	30 ft	36793700
	40 ft	36793800

**ACCESSORIES** 



#### **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 inlet and outlet
- · Mounts horizontally
- Cast brass construction
- Good for saltwater applications
- Length: 3"
- Weight: 0.778 lbs.



#### **84 BUTTERFLY WAFER VALVE**

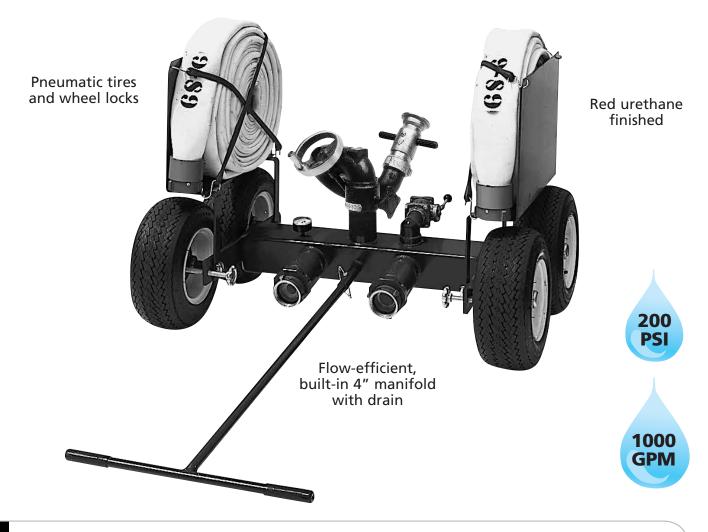
- Cast iron body with #316 stainless steel upper and lower stems
- · Pressure rated at 250 psi
- · Seat/seal is EPDM
- · Standard handle features 10 locking positions
- · Optional handle is gear operated
- Size: 3" (11.3 lbs.) or 4" (14.3 lbs.) (specify)
- · Thickness: 2"

PORTABLE CARTS

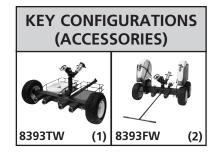


## **Portable Carts**

- 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 1⅓" or 2" coupler (please specify); to the vehicle for extra stability during flow; two hose beds each capable of holding two (2) 50' sections of 2½" 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 2½" hose, and an optional 1½" gated outlet
- Liquid-filled pressure gauge



SPE	CIFICATION	IS						
Max. GPM (LPM)	(See selector guide for specifics)							
	2 x 2.5" NHT (F)							
	Optional Addi	tional Cart Inlets						
Inlet Sizes/Types	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							
	GPM	Stingray® Carts (8393)						
Friction Loss	1000	56 psi						
	750	34 psi						
	500	12 psi						
Travel	V Variable (see chart for specifics)							
Traver	H L45° to R45° (90°)							
Weight	See selection of	chart for specifics						



#### **ADDITIONAL INFORMATION**

- 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**

		INLET OPTIONS					CART FEATURES				VERTICAL TRAVEL	CONTROLS						
Cart Type/ GPM (LPM)		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	1.875" Hitch	Pressure Gauge	Hose Beds	+20° to 70° (50°)	Single Hand-wheel	Width	(Inches	Height	Weight (Lbs.)	ILLUSTRATION	MODEL
2-Wheel/ 1000 (3875)	Stingray 8393	S	0	0	0	•		S	S	S	•	S	67.00	72.00	34.00	310.0	1	8393TW
4-Wheel/ 750 (2839)	Stingray 8393	s	0	0	0	•	S		s		•	S	67.00	72.00	34.00	230.0	2	8393FW
										1								Illustration

KEY s = standard o = option

- \* Clappered female swivel inlets.
  \*\* This feature will change the height of the end product.

#### **Recommended Products**

