



## BRASS TACKS HARD FACTS



Nozzle Selection and Comparison

### ENGINE COMPANY EDUCATION & FACT BASED EQUIPMENT SELECTION

Utilizing some of the country's top engine company instructors, we are checking our emotions at the door and presenting the pros and cons of the relevant engine company topics in the fire service. Part Art. Part Science.

This educational video series will be sure to leave you better informed about nozzles, flows, your fire flow system, and engine company operations as a discipline.

Watch the entire series at [www.BrassTacksHardFacts.com](http://www.BrassTacksHardFacts.com)



Standpipe Operations

### TOPICS COVERED

- Standpipe Operations
- Testing & Evaluation
- The Nozzle
- Topics of the Trade
- Portable Monitors
- The Art of Engine Work



Portable Monitor Attack with RAM XD



## EVERYTHING NEEDED FOR FLOW TESTING NOW AT YOUR FINGERTIPS!

- Smooth Bore Discharges & Flow/Pressure
- Nozzle Reaction for Smooth Bore Nozzles
- Nozzle Reaction for Fog Nozzles
- Pump Discharge Pressure for standard layouts, with ability to input hose coefficient depending on make and inside diameter
- Pump Discharge Pressure with elevation changes and appliances
- Pump Discharge Pressure for high-rise layouts
- Fire flow formula calculators for both the NFA and Iowa Formulas
- Also included in the app are direct links to the Brass Tacks Hard Facts video series



Calculating Nozzle Reaction

AVAILABLE FOR  
FREE DOWNLOAD














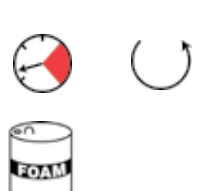
# HANDLINE NOZZLES





















## SELECTOR GUIDE

# HANDLINE NOZZLES










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	AVAILABLE BASE	PRODUCT	DESCRIPTION	MATERIAL		"QUICK-KEY"					
				Brass	Elk-O-Lite®						
<b>FIXED</b> <b>CHIEF XD™ &amp; XD SHUTOFFS</b>	<table border="1"> <tr> <td>1.0</td> <td>1.5</td> <td>2.5</td> </tr> <tr> <td>•</td> <td>•</td> <td>•</td> </tr> </table> Available GPM (LPM) 95-300 (360-1136)	1.0	1.5	2.5	•	•	•	 <i>Page 1-4</i> <ul style="list-style-type: none"> <li>Dual drive shutoff with full round metal ball</li> <li>Forged Aluminum shutoff body and bale handle</li> <li>Spinning stainless steel</li> <li>Fixed flow</li> </ul>	Brass	Elk-O-Lite®	
1.0	1.5	2.5									
•	•	•									
<b>FIXED</b> <b>CHIEF™</b>	<table border="1"> <tr> <td>1.0</td> <td>1.5</td> <td>2.5</td> </tr> <tr> <td>•</td> <td>•</td> <td>•</td> </tr> </table> Available GPM (LPM) 15-350 (57-1325)	1.0	1.5	2.5	•	•	•	 <i>Page 1-9</i> <ul style="list-style-type: none"> <li>Wide selection of flow and pressure</li> <li>Ideal for low pressure use</li> <li>Fixed flow</li> </ul>	Brass	Elk-O-Lite®	
1.0	1.5	2.5									
•	•	•									
<b>AUTOMATIC</b> <b>SELECT-O-MATIC®</b>	<table border="1"> <tr> <td>1.0</td> <td>1.5</td> <td>2.5</td> </tr> <tr> <td>•</td> <td>•</td> <td>•</td> </tr> </table> Available GPM (LPM) 10-325 (38-1230)	1.0	1.5	2.5	•	•	•	 <i>Page 1-12</i> <ul style="list-style-type: none"> <li>Maintains effective stream reach throughout flow range</li> <li>Ideal for AFFF application</li> <li>Wide flow range / automatic flow</li> </ul>	Brass	Elk-O-Lite®	
1.0	1.5	2.5									
•	•	•									
<b>SELECTABLE</b> <b>PHANTOM®</b>	<table border="1"> <tr> <td>1.0</td> <td>1.5</td> <td>2.5</td> </tr> <tr> <td>•</td> <td>•</td> <td>•</td> </tr> </table> Available GPM (LPM) 15-200 (57-757)	1.0	1.5	2.5	•	•	•	 <i>Page 1-15</i> <ul style="list-style-type: none"> <li>Firefighter chooses flow and stream</li> <li>Rugged and easy to use</li> <li>Wide flow range/constant flow</li> </ul>	Brass	Elk-O-Lite®	
1.0	1.5	2.5									
•	•	•									
<b>SELECTABLE</b> <b>SELECT-O-FLOW®</b>	<table border="1"> <tr> <td>1.0</td> <td>1.5</td> <td>2.5</td> </tr> <tr> <td></td> <td>•</td> <td>•</td> </tr> </table> Available GPM (LPM) 40-250 (151-946)	1.0	1.5	2.5		•	•	 <i>Page 1-17</i> <ul style="list-style-type: none"> <li>Firefighter chooses flow and stream</li> <li>High flow range/constant flow</li> <li>Rugged all brass versions</li> </ul>	Brass	Elk-O-Lite®	
1.0	1.5	2.5									
	•	•									
<b>VARIABLE</b> <b>MYSTERY®</b>	<table border="1"> <tr> <td>1.0</td> <td>1.5</td> <td>2.5</td> </tr> <tr> <td></td> <td>•</td> <td>•</td> </tr> </table> Available GPM (LPM) 60-250 (227-946)	1.0	1.5	2.5		•	•	 <i>Page 1-19</i> <ul style="list-style-type: none"> <li>Original fog nozzle</li> <li>Variable flow</li> </ul>	Brass	Elk-O-Lite®	
1.0	1.5	2.5									
	•	•									



		AVAILABLE BASE	PRODUCT	DESCRIPTION	MATERIAL		"QUICK-KEY"
<b>FIXED</b>	<b>SELECT-O-STREAM®</b>	1.0	 <p><i>Page 1-21</i></p>	<ul style="list-style-type: none"> <li>Convenient detents for stream selection</li> <li>Rugged all brass construction with chrome finish</li> <li>Fixed Flow</li> </ul>	Brass	Elk-O-Lite®	 
		1.5					
		Available GPM (LPM) 60-250 (227-946)					
<b>FIXED/VARIABLE</b>	<b>INDUSTRIAL FOG &amp; ELECTRICAL FOG</b>	1.0	 <p><i>Page 1-23</i></p>	<ul style="list-style-type: none"> <li>Durable and simple to use</li> <li>Designed for corrosive conditions</li> <li>For use on Class "C" fires</li> <li>Narrow to wide fog only</li> </ul>	Brass	Elk-O-Lite®	  
		1.5					
		Available GPM (LPM) 12-250 (45-946)					
<b>FIXED</b>	<b>MARINE</b>	1.0	 <p><i>Page 1-25</i></p>	<ul style="list-style-type: none"> <li>85-5-5-5 Brass construction</li> <li>Designed for corrosive conditions</li> <li>Accepted US Navy Specifications</li> </ul>	Brass	Elk-O-Lite®	   
		1.5					
		Available GPM (LPM) 95-250 (360-946)					
	<b>BALL SHUT-OFFS, &amp; PLAYPIPES</b>	1.0	 <p><i>Page 1-6</i></p>	<p><i>LEGACY</i></p>  <p><i>Page 1-27</i></p>	Brass	Elk-O-Lite®	
		1.5					
		Available GPM (LPM) 118-209 (447-791)					
	<b>SPECIAL USE</b>	1.0	 <p><i>Page 1-35</i></p>	<ul style="list-style-type: none"> <li>Forestry</li> <li>Wat-R-Wall</li> <li>Cellar</li> <li>Bresnan</li> </ul>	Brass	Elk-O-Lite®	 
		1.5					
		Available GPM (LPM)					

**KEY:**

								
Low Pressure Available	Ball Shut-off Available	Twist Shut-off Available	Rebuild/Retro Available	Electrical	Foam Compatible	U.S. Coast Guard/Navy Approved	Underwriters Laboratories	Factory Mutual

# HANDLINE NOZZLES



CHIEF XD™

HANDLINE NOZZLES

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1.5" Mid-Range Chief XD Nozzle

The Chief XD takes the industry standard for handline nozzles to a whole new level. It offers accurate high volume flows at low tip pressures and is built tough like no other nozzle for Xtreme Duty, or XD. The Chief XD is the only handline nozzle that offers a forged shutoff body and forged metal bale handle for maximum strength. It also includes as standard a full round metal ball for the best stream performance, as well as fixed molded urethane or spinning stainless steel metal teeth that don't break. All indicators and markings are laser etched, with no labels to peel off or scratch. Ergonomic grip inserts help with handling and can also be color coded. It's durability and efficiency ensures an embedded level of safety for you and your crew, fire after fire.

- Accurate & wide range of flows
- Available with 50, 75, or 100 psi operating pressure
- Fixed gallonage from straight stream to full fog
- Forged aluminum shutoff body and bale handle
- Laser etched markings
- Dual drive shutoff with full round metal ball
- Spinning stainless steel or fixed molded urethane teeth
- Color coded bumper along with bale handle & pistol grip inserts



1.5" Mid-Range Chief XD Nozzle

## Chief XD Tips

### Mid-Range 1.5" / Rigid Base

150 @ 50	125 @ 75	95 @ 100
160 @ 50	150 @ 75	125 @ 100
175 @ 50	175 @ 75	150 @ 100
	185 @ 75	175 @ 100
	200 @ 75	

### High-Range 1.5" / Rigid Base

185 @ 50	250 @ 75	250 @ 100
210 @ 50	300 @ 75	
250 @ 50		
265 @ 50		

## Chief XD Nozzles

### Mid-Range 1.5" / Free Swivel Base

150 @ 50	125 @ 75	95 @ 100
160 @ 50	150 @ 75	125 @ 100
175 @ 50	175 @ 75	150 @ 100
	185 @ 75	175 @ 100
	200 @ 75	

### High-Range 1.5" / Free Swivel Base

185 @ 50	250 @ 75	250 @ 100
210 @ 50	300 @ 75	
250 @ 50		
265 @ 50		

### High-Range 2.5" / Free Swivel Base

185 @ 50	250 @ 75	250 @ 100
210 @ 50	300 @ 75	
250 @ 50		
265 @ 50		

## Chief XD Nozzles with Pistol Grip

### Mid-Range 1.5" / Free Swivel Base

150 @ 50	125 @ 75	95 @ 100
160 @ 50	150 @ 75	125 @ 100
175 @ 50	175 @ 75	150 @ 100
	185 @ 75	175 @ 100
	200 @ 75	

### High-Range 1.5" / Free Swivel Base

185 @ 50	250 @ 75	250 @ 100
210 @ 50	300 @ 75	
250 @ 50		
265 @ 50		

### High-Range 2.5" / Free Swivel Base

185 @ 50	250 @ 75	250 @ 100
210 @ 50	300 @ 75	
250 @ 50		
265 @ 50		



Mid-Range Tip



High-Range Tip



1.5" Mid-Range



1.5" Mid-Range



2.5" High-Range

### Specify when ordering:

- Flow rate & pressure
- Bumper, bale handle, and pistol grip insert color (orange standard)
- Spinning stainless steel metal teeth (standard) or fixed molded urethane teeth
- Inlet threads





# HANDLINE NOZZLES



## XD™ NOZZLE OPTIONS

HANDLINE NOZZLES

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### Colors

Choose bumper color, bale insert, and pistol grip insert color (orange is standard on Chief XD)



Orange



Red



Yellow



Glow



Tan



Pink



Green



Blue



Black



White



Gray



Purple

### Teeth

Choose from spinning stainless steel metal or fixed molded urethane teeth.



Spinning Stainless Steel  
(Standard)



Fixed Molded Urethane

### Inlet Threads

- NHT (Standard)
- NPSH
- BSPP
- Others available. Please provide thread spec: ODM (Outside Diameter Male), TPI (Threads Per Inch), and Province/City. (Ex. 3.030 x 8 NYFD Thread)

Use our Online  
Configurator to design  
your own XD Nozzle!  
[XDconfigurator.com](http://XDconfigurator.com)



2.5" XD Shutoff with 188-XD Smooth Bore

Elkhart Brass XD Shutoffs and Playpipes are designed and constructed for rugged use and reliable performance. They are built strong with forged shutoff bodies and forged metal bale handles earning the title Xtreme Duty, or XD. They provide an excellent foundation for break-apart applications using smooth bore or fog nozzle tips. Elkhart Brass XD Shutoffs are available with a variety of options, including built-in smooth bore discharges that can be used with fog nozzle tips for maximum versatility.

- Dual drive shutoff with full round metal ball
- Forged aluminum shutoff body
- Forged metal bale handle
- Attention to detail in waterway alignment and smoothness of operation throughout
- Laser etched markings
- Color coded pistol grip and bale handle inserts

1.5" XD Shutoff with ST-185-XD Smooth Bore







## XD™ SHUTOFFS

### XD Shutoffs

**1.5" Shutoff** Free Swivel Base  
1.5" Inlet 1.5" Outlet

**1.5" Shutoff** Free Swivel Base / Pistol Grip  
1.5" Inlet 1.5" Outlet

**2.5" Shutoff** Free Swivel Base  
2.5" Inlet 1.5" Outlet

**2.5" Shutoff** Free Swivel Base / Pistol Grip  
2.5" Inlet 1.5" Outlet

### XD Shutoffs with Integral Smooth Bore

Available discharge sizes: 7/8", 15/16", 1", 1-1/16", 1-1/8",  
1-3/16", 1-1/4"

**1.5" Shutoff** Free Swivel Base  
1.5" Inlet 1.5" Outlet

**1.5" Shutoff** Free Swivel Base / Pistol Grip  
1.5" Inlet 1.5" Outlet

**2.5" Shutoff** Free Swivel Base  
2.5" Inlet 1.5" Outlet

**2.5" Shutoff** Free Swivel Base / Pistol Grip  
2.5" Inlet 1.5" Outlet

### XD Playpipes

**2.5" Shutoff** Free Swivel Base  
2.5" Inlet 1.5" Outlet

**2.5" Shutoff** Free Swivel Base / Ladder Hook  
2.5" Inlet 1.5" Outlet



*Specify when ordering:*

- Bale and Pistol Grip insert colors (black standard)
- Inlet/Outlet threads
- Integral Smooth Bore discharge size (if applicable)



1.5" XD Shutoff



1.5" XD Shutoff w/Pistol Grip



2.5" XD Shutoff



2.5" XD Shutoff w/Pistol Grip



1.5" XD Shutoff w/Smooth Bore



1.5" XD Shutoff w/Smooth Bore & Pistol Grip



2.5" XD Shutoff w/ Smooth Bore



2.5" XD Shutoff w/Smooth Bore & Pistol Grip



2.5" XD Playpipe



2.5" XD Playpipe w/ Ladder Hook

# HANDLINE NOZZLES

XD™ SMOOTH BORE

Elkhart Brass took two classic smooth bore tips to the next level. The 187-XD and 188-XD smooth bore tips feature durable urethane bumpers and laser etching. Extra knurling has also been added for increased control and grip.

## Available Sizes:

- 7/8"
- 15/16"
- 1"
- 1-1/16"
- 1-1/8"
- 1-3/16"
- 1-1/4"



1.5" XD Shutoff with 187-XD Smooth Bore

- Lightweight aluminum construction
- Laser etched flow rates
- Durable urethane molded bumper



"Short Barrel"  
187-XD

"Long Barrel"  
188-XD

HANDLINE NOZZLES

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XD™ SMOOTH BORE

## Smooth Bore Single Tips

**185-XD** 1.5" Inlet / 1.5" Outlet / 4.5" Length  
Available Discharges: 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4"

**187-XD** 1.5" Inlet / 4.5" Length  
Available Discharges: 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4"

**188-XD** 1.5" Inlet / 7.0" Length  
Available Discharges: 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4"



185-XD



187-XD



188-XD

## Smooth Bore Stacked Tips

**ST-185-XD** 1.5" Inlet / 6.625" Length / FDNY Stack  
Available Discharges: 1/2" & 7/8", 15/16", 1-1/8", 1-3/16"

**ST-185-XD-IFD** 1.5" Inlet / 7.625" Length / Indy Stack  
Available Discharges: 1-1/8" & 1-1/4"

**ST-185-XD-CAFS** 1.5" Inlet / 6.625" Length / CAFS Stack  
Available Discharges: 15/16" & 1-1/8"

**ST-190-XD** 1.5" Inlet / 9.0" Length / Triple Stack  
Available Discharges: 1" & 1-1/8" & 1-1/4"



ST-185-XD



ST-185-XD-IFD



ST-185-XD-CAFS



ST-190-XD

*Specify when ordering:*

- Inlet threads (FNH or FNPSH)
- Smooth Bore discharge size (if applicable)



### Colors

Choose bumper color (black is standard on XD Smooth Bores)



Orange



Red



Yellow



Glow



Tan



Pink



Green



Blue



Black



White



Gray



Purple

### Bent Overhaul Tip

**BOT-XD** Fits any ST-185-XD FDNY Stack Tip.

- Small and compact ideal for carrying in your turnout gear pocket
- Flows 50 gpm @ 50 psi
- Creates a powerful penetrating low flow stream ideal for overhaul operations



**BOT-XD**



**BOT-XD**  
on Stack  
Tip

# HANDLINE NOZZLES



CHIEF™

## Chief™

Fixed flow Chief™ nozzles efficiently deliver a constant gallonage from straight stream to full fog. The simple rugged design makes the Chief™ easy to use, train with and reliable in tough situations. Superior hydraulics due to a fully machined waterway result in excellent stream quality and reach. The Chief™ is also available in true low pressure versions with specifically engineered, calibrated and labeled stems down to 50 psi. With more than 300 available variations the Chief™ is easily customized to meet your specific needs.

HANDLINE NOZZLES

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British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.

# HANDLINE NOZZLES

CHIEF™

## HANDLINE NOZZLES

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BASE SIZE	PSI (BAR)	AVAILABLE STANDARD FLOW RATE GPM (LPM)														BASE TYPE			SHUT-OFF	HANDLE	TEETH			MODEL						
		15 (57)	30 (114)	45 (170)	60 (227)	75 (284)	95 (360)	125 (473)	150 (568)	175 (662)	185 (700)	200 (757)	250 (946)	275 (1041)	300 (1136)	325 (1230)	350 (1325)	Rigid	Swivel	Free Swivel	Twist	Ball	Tab		Horseshoe	Spinning Plastic	Molded Urethane	Cut Metal		
1"	100 (6.89)	•	•	•	•													s								s			4000-04	
	50 (3.45)																	o	s							s	o		4000-14	
	75 (5.17)																													
1.5"	100 (6.89)				•	•	•	•	•																					4000-19
	50 (3.45)																													4000-22
	75 (5.17)																													4000-24
	100 (6.89)																													4000-22
	50 (3.45)																													4000-24
	75 (5.17)																													4000-22
	100 (6.89)																													4000-24
	50 (3.45)																													4000-22
	75 (5.17)																													
2.5"	100 (6.89)																													4000-22
	50 (3.45)																													4000-24
	75 (5.17)																													4000-24



Chief Tips

BASE SIZE	PSI (BAR)	AVAILABLE STANDARD FLOW RATE GPM (LPM)														BASE TYPE			SHUT-OFF	HANDLE	TEETH			MODEL						
		15 (57)	30 (114)	45 (170)	60 (227)	75 (284)	95 (360)	125 (473)	150 (568)	175 (662)	185 (700)	200 (757)	250 (946)	275 (1041)	300 (1136)	325 (1230)	350 (1325)	Rigid	Swivel	Free Swivel	Twist	Ball	Tab		Horseshoe	Spinning Plastic	Molded Urethane	Cut Metal		
1"	100 (6.89)	•	•	•	•														s			•	s	o	s				4000-02	
1.5"	50 (3.45)																													4000-10
	75 (5.17)																													4000-12
	100 (6.89)																													4000-16
	50 (3.45)																													4000-20
	75 (5.17)																													4000-26
	100 (6.89)																													4000-26
	50 (3.45)																													4000-26
	75 (5.17)																													4000-26
	100 (6.89)																													



Chief Nozzles

Key: s = Standard o = Option  
 ✕ = Flow rates available on the Chief XD  
 • = Flow rates not available on the Chief XD



# HANDLINE NOZZLES



CHIEF™

HANDLINE NOZZLES

1-13

BASE SIZE	PSI (BAR)	AVAILABLE STANDARD FLOW RATE GPM (LPM)														BASE TYPE			SHUT-OFF		HANDLE			TEETH			MODEL		
		15 (57)	30 (114)	45 (170)	60 (227)	75 (284)	95 (360)	125 (473)	150 (568)	175 (662)	185 (700)	200 (757)	250 (946)	275 (1041)	300 (1136)	325 (1230)	350 (1325)	Rigid	Swivel	Free Swivel	Long	Short	Tab	Horseshoe	Spinning Plastic	Molded Urethane		Curt Metal	
1"	100 (6.89)	•	•	•	•														s			•	s	o	s				4000-03
1.5"	50 (3.45)																		s			•	o	s	s	o			4000-13
	75 (5.17)																		s			•	o	s	s	o			4000-17
	100 (6.89)			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
1.5"	50 (3.45)																		s			•	o	s	s	o			4000-23
	75 (5.17)																		s			•	o	s	s	o			4000-28
	100 (6.89)																		s	o		•	o	s	s	o			
2.5"	50 (3.45)																					•	o	s	s	o			4000-28
	75 (5.17)																					•	o	s	s	o			
	100 (6.89)																					•	o	s	s	o			







1"	15-20 GPM @ 1100-1500 PSI (57-76 LPM @ 76-103 BAR) Flow & Pressure are factory set and must be specified when ordering.	s - SS HEX NPT o - Free Swivel o - Quick Connect		•	o	s																							4000-03 UHP
----	---	--	--	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----------------



Key: s = Standard o = Option  
 X = Flow rates available on the Chief XD  
 • = Flow rates not available on the Chief XD

## OPTIONS

HANDLES	MOLDED URETHANE TEETH
<p>TAB</p>  <p>HORSESHOE</p> 	
THREADS	COLORS
<p>All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.</p>	 <p>Color options available for pistol grip, bumper, and handle. Glow available for bumper only. Retrofit kit available for Glow bumper. <b>White bumper not available.</b></p> <p>Chief™ nozzle comes standard with an orange bumper, chrome handle, and natural Elk-O-Lite® pistol grip.</p>

ADDITIONAL INFORMATION	
PART NAME	PAGE #
Thread Information	T-13
Nozzle Flow Data	T-2
Hose and Nozzle Accessories	2-1
Foam Expansion Tubes	2-2

## Select-O-Matic®

Pressure-regulating Select-O-Matic® nozzles automatically adjust to fluctuating water flow to maintain effective pressure and a consistent fire stream in all flow ranges. Our patented, completely unobstructed waterway allows more gpm at lower pressures than any competitive brand. All models flush easily without shutting down and provide constant flow on either fog or straight stream, making them ideal for the application of AFFF foam. Corrosion resistant; no lubrication required.



British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.

# HANDLINE NOZZLES



## SELECT-O-MATIC®

# HANDLINE NOZZLES

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Base Size	FLOW RANGES	PRESSURE	BASE			HANDLE		TEETH		MODEL	
	GPM (LPM)		PSI (BAR)	TYPE			Tab	Horseshoe	Spinning		Molded
				Rigid	Swivel	Free Swivel					
1"	10-75 (38-284)	100 (6.89)		s				s		TSM-3F	
	60-125 (227-475)		o	s				s	o	TSM-10F	
1.5"	60-200 (227-757)	75 (5.17)	o	s				s		TSM-20FLP	
		100 (6.89)	o	s				s	o	TSM-20F	
	75-325 (284-1230)	75 (5.17)	o	s				s	o	TSM-30FLP	
		100 (6.89)	o	s				s	o	TSM-30F	
2.5"	75-325 (284-1230)	100 (6.89)		s			s	o	DTSM-30F		

Select-O-Matic Tips



1"	10-75 (38-284)	100 (6.89)	o		s	s	o	s		SM-3F
	60-125 (227-475)		o	s	o	o	s	s	o	SM-10F
1.5"	60-200 (227-757)	75 (5.17)	o	s	o	o	s	s		SM-20FLP
		100 (6.89)	o	s	o	o	s	s	o	SM-20F
	75-325 (284-1230)	75 (5.17)	o	s	o	o	s	s	o	SM-30FLP
		100 (6.89)	o	s	o	o	s	s	o	SM-30F
2.5"	75-325 (284-1230)	75 (5.17)		s	o	o	s	s	o	DSM-30FLP
		100 (6.89)		s	o	o	s	s	o	DSM-30F

Select-O-Matic Nozzles



1"	10-75 (38-284)	100 (6.89)	o		s	s	o	s		SM-3FG
	60-125 (227-475)		o	s	o	o	s	s	o	SM-10FG
1.5"	60-200 (227-757)	75 (5.17)	o	o	s	o	s	s		SM-20FGLP
		100 (6.89)	o	o	s	o	s	s	o	SM-20FG
	75-325 (284-1230)	75 (5.17)	o	o	s	o	s	s	o	SM-30FGLP
		100 (6.89)	o	o	s	o	s	s	o	SM-30FG
2.5"	75-325 (284-1230)	75 (5.17)		o	s	o	s	s	o	DSM-30FGLP
		100 (6.89)		o	s	o	s	s	o	DSM-30FG




Key: s = standard o = option

Figures depict general product types only and are not intended to be inclusive of all product features.





## OPTIONS

HANDLES	MOLDED URETHANE TEETH
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>TAB</p>  </div> <div style="text-align: center;"> <p>HORSESHOE</p>  </div> </div>	
THREADS	COLORS
<p><i>All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.</i></p>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="background-color: black; color: white; padding: 5px;">Black</div> <div style="background-color: red; color: white; padding: 5px;">Red</div> <div style="background-color: orange; color: white; padding: 5px;">Orange</div> <div style="background-color: yellow; color: black; padding: 5px;">Yellow</div> <div style="background-color: #90EE90; color: black; padding: 5px;">Glow</div> <div style="background-color: green; color: white; padding: 5px;">Green</div> <div style="background-color: blue; color: white; padding: 5px;">Blue</div> </div> <p><i>Color options available for pistol grip, bumper, and handle. Glow available for bumper only. Retrofit kit available for Glow bumper. <b>White bumper not available.</b></i></p> <p><i>Select-O-Matic nozzle comes standard with a yellow bumper, chrome handle, and natural Elk-O-Lite® pistol grip.</i></p>

### ADDITIONAL INFORMATION

PART NAME	PAGE #
<i>Thread Information</i>	<i>T-13</i>
<i>Nozzle Flow Data</i>	<i>T-2</i>
<i>Hose and Nozzle Accessories</i>	<i>2-1</i>
<i>Foam Expansion Tubes</i>	<i>2-2</i>

# HANDLINE NOZZLES



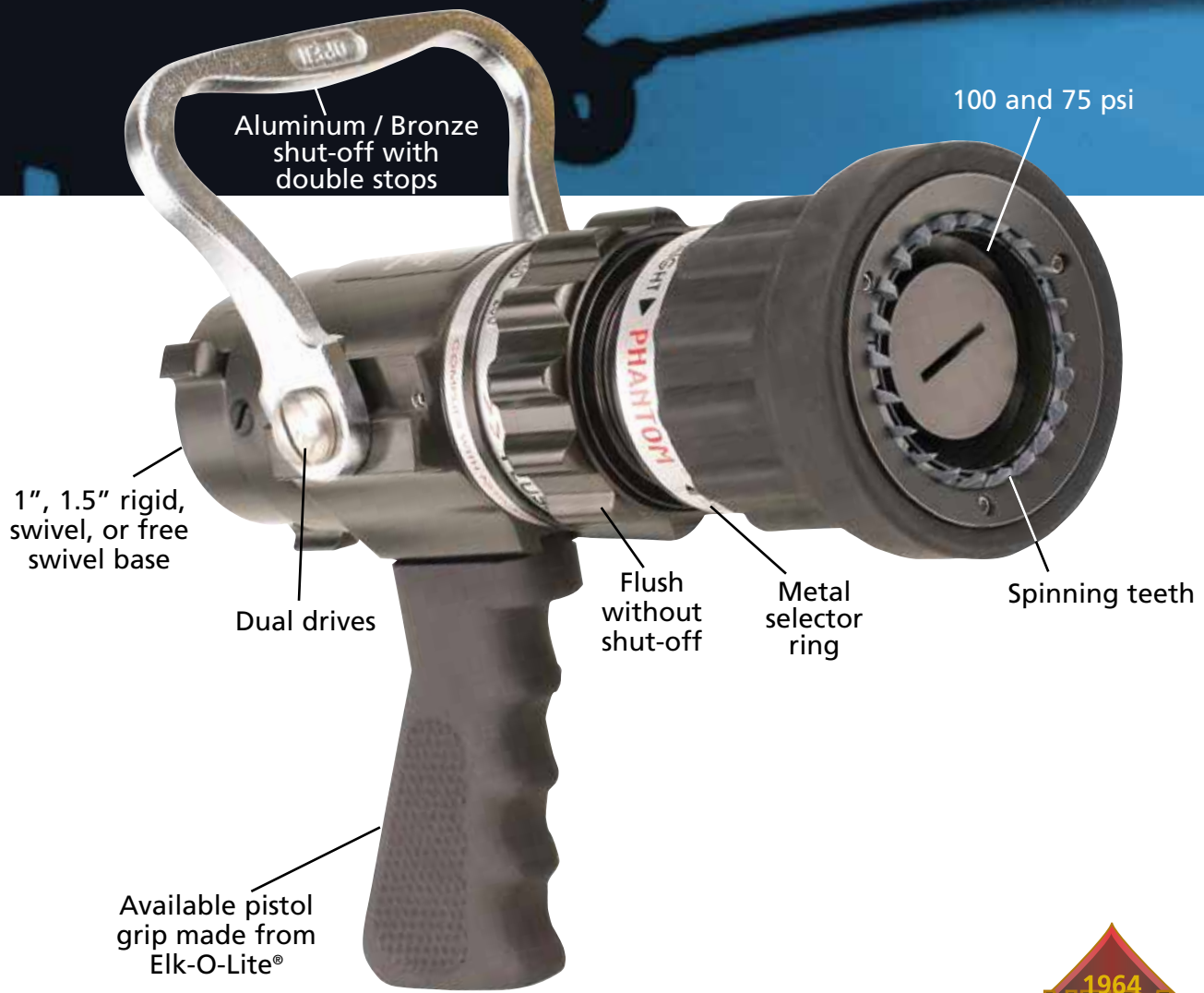
PHANTOM®

## Phantom®

The selectable gallonage Phantom® lets the firefighter select the appropriate flow. The wide selection range standard with the Phantom® makes it one nozzle for every use from brush to interior attack. The Phantom® is designed for reliable performance with rugged metal selector ring and dual drive metal ball shut-off. Available standard in 100 psi and true 75 psi models.

HANDLINE NOZZLES

1-17



British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.

# HANDLINE NOZZLES

PHANTOM®

HANDLINE NOZZLES

1-18




Base Size	FLOW RATE	PRESSURE	BASE			SHUT-OFF		HANDLE			TEETH	MODEL	
	GPM (LPM)	PSI (BAR)	Rigid	Swivel	Free Swivel	Twist	Ball	Tab	Horseshoe	Spinning			
1"	15/30/45/60 (57/114/170/227)	100 (6.89)	s								s	TPSFS-HP	
			s				•				s	TPSFS-HPT	
1.5"	30/60/95/125/150/200 (114/227/360/473/568/757)	100 (6.89)		s							s	TSFM-HP	
				s			•				s	TSFM-HPT	
		75 (5.17)		s								s	TSFM-LP
				s				•				s	TSFM-LPT
1"	15/30/45/60 (57/114/170/227)	100 (6.89)			s		•	s		s		PSFS-HP	
1.5"	30/60/95/125/150/200 (114/227/360/473/568/757)	100 (6.89)		s	o		•	o	s	s		SFM-HP	
		75 (5.17)		s	o		•	o	s	s		SFM-LP	
1"	15/30/45/60 (57/114/170/227)	100 (6.89)			s		•	s		s		PSFS-HPG	
1.5"	30/60/95/125/150/200 (114/227/360/473/568/757)	100 (6.89)			s		•	o	s	s		SFM-HPG	
		75 (5.17)			s		•	o	s	s		SFM-LPG	



Key: s = standard o = option

Figures depict general product types only and are not intended to be inclusive of all product features.

## OPTIONS

HANDLES	COLORS
<p>TAB</p>  <p>HORSESHOE</p> 	 <p>Color options available for pistol grip, bumper, and handle. Glow available for bumper only. Retrofit kit available for Glow bumper. <b>White bumper not available.</b></p> <p>Phantom® nozzle standards are a black bumper, rough chrome handle, and natural Elk-O-Lite® pistol grip.</p>
<p><b>THREADS</b></p> <p>All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.</p>	

# HANDLINE NOZZLES



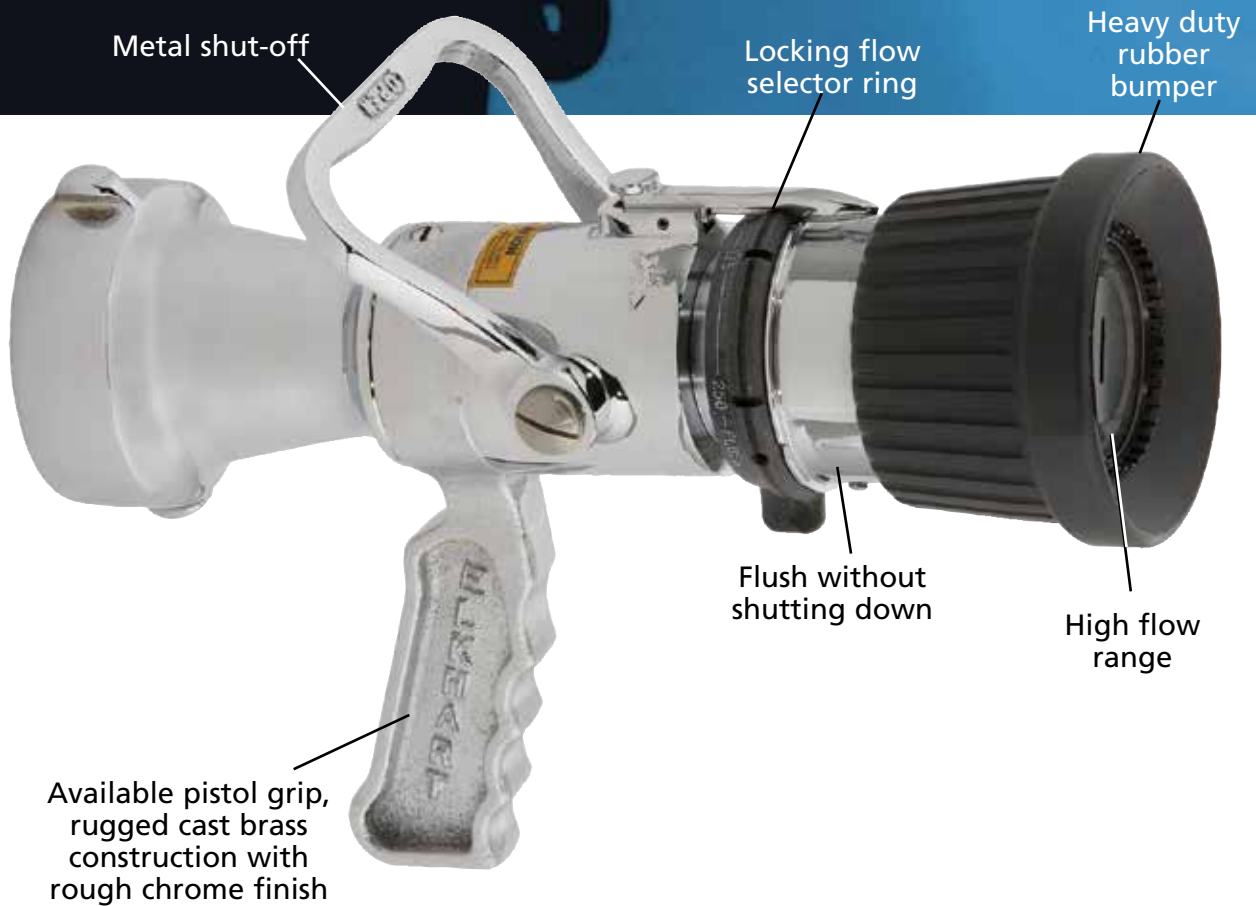
SELECT-O-FLOW®

## Select-O-Flow®

Select-O-Flow®, the original selectable gallonage nozzle, is similar in function to the Phantom® — allowing the firefighter to select the appropriate flow. The Select-O-Flow® range goes as high as 250 gpm.

HANDLINE NOZZLES

1-19



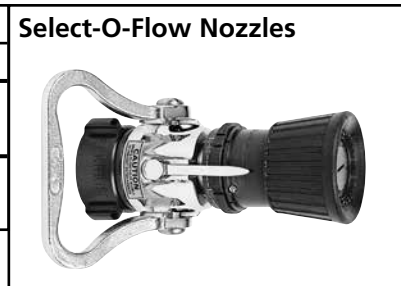
British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.

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Base Size	FLOW RATE	SHUT-OFF		HANDLE		BASE			TEETH			DIMENSIONS		MODEL
	GPM (LPM) PSI (BAR) 100 (6.89)	Twist	Ball	Tab	Horseshoe	Rigid	Swivel	Free Swivel	Molded Urethane	Spinning	Rigid Metal	Length (Inches)	Weight (Lbs.)	
1.5"	40/60/95/125 (151/227/360/473)	•					s				s	6.50	2.75	TSFL-O
	125/175/250 (473/662/946)	•					s				s	7.00	5.50	TSF
1.5"	40/60/95/125 (151/227/360/473)	•	o	s			s	o	o	s		7.625	7.75	SFL-B
	125/175/250 (473/662/946)	•		s	o	s	o			s		7.00	3.75	SFL-O
1.5"	125/175/250 (473/662/946)	•		s	o	s	o			s		8.00	8.00	SF
	125/175/250 (473/662/946)	•		s	o	s	o			s		10.75	10.00	DSF
1.5"	40/60/95/125 (151/227/360/473)	•	o	s			s	o	s		s	8.375	9.625	SFL-BG
	125/175/250 (473/662/946)	•		s	o	o	s			s		10.00	4.875	SFL-OG
1.5"	125/175/250 (473/662/946)	•		s	o	o	s			s		11.25	8.875	SF-G
	125/175/250 (473/662/946)	•		s	o	o	s			s		13.875	10.875	DSF-G

Key: s = standard o = option



Figures depict general product types only and are not intended to be inclusive of all product features.

## OPTIONS

### HANDLES

#### TAB



#### HORSESHOE



- SFL-B, SFL-BG, SFL-O, SFL-OG all feature aluminum/bronze shut-off handles
- DSF, G, SF, SF-G, STDSF, SF-800 all feature manganese/bronze shut-off handles

### MOLDED URETHANE TEETH



### THREADS

All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.

# HANDLINE NOZZLES



MYSTERY®

## Mystery®

The Mystery® Nozzle incorporates a twist-type shut-off, opening in straight stream and producing a flow from straight stream to wide fog. In combination with a ball shut-off, the Mystery® Nozzle promotes an extremely convenient method of advancing hoselines. Simply close the ball shut-off, remove the Mystery® tip, attach additional hose, and then reattach the tip at the end of the line. The tip's built-in shut-off allow for the line to be advanced rapidly without bringing in an additional nozzle.

HANDLINE NOZZLES

1-21



British Standard Parallel Pipe (BSPP) base options available.

Base Size	AVAILABLE STANDARD FLOW RATE GPM (LPM)						SHUT-OFF	BASE			TEETH	DIMENSIONS		MODEL			
	60 (227)	95 (360)	125 (473)	170 (644)	200 (757)	250 (946)		Twist	Ball	Rigid		Swivel	Free Swivel		Cut Metal	Length (Inches)	Weight (Lbs.)
	PSI (BAR)																
1.5"	•	•	•	•	•	•	•		s			s	4.625	1.375	L-205-BA		
	•	•	•	•	•	•	•		s	o		s	7.125	3.25	205-BA		
	•	•	•	•	•	•	•		s			s	7.50	3.50	D-205-BA		

MYSTERY TIPS



Key: s = standard o = option

Figures depict general product types only and are not intended to be inclusive of all product features.

## THREADS

*All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.*

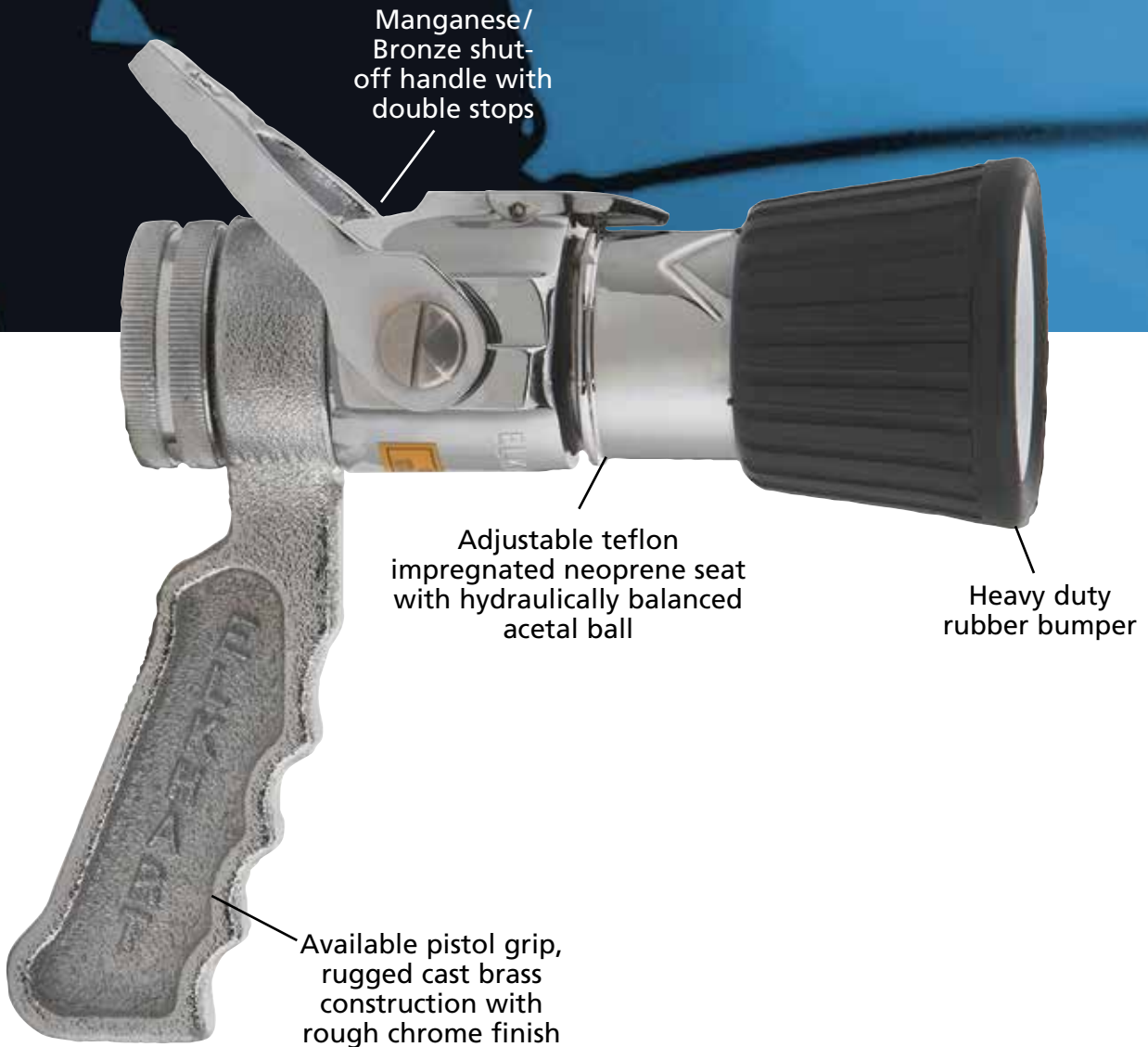
# HANDLINE NOZZLES



SELECT-O-STREAM®

## Select-O-Stream®

An industry standard for over 40 years, the Select-O-Stream® delivers constant gallonage at every pattern level, from straight stream to full fog. The rugged all brass construction with chrome finish has a proven record of standing up to corrosive conditions. The variety of available gpm options with the Select-O-Stream® allows for customized choices to match the needs of fire professionals.



HANDLINE NOZZLES

1-23

British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.

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# HANDLINE NOZZLES

SELECT-O-STREAM®

Base Size	AVAILABLE STANDARD FLOW RATES GPM (LPM)					GRIP	FINISH		HANDLE	BASE			TEETH	DIMENSIONS		MODEL
	60 (227)	95 (360)	125 (473)	170 (644)	250 (946)		Pistol Grip	Satin Brass		Chrome-Plated	Rigid	Swivel		Free Swivel	Cut Metal	
1.5"	•	•	•						s				o			s
	•	•	•			•	s	o	s			s	s	7.75	6.375	L-OG

Key: s = standard o = option

## THREADS

All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.

L-O & D



L-OG



Figures depict general product types only and are not intended to be inclusive of all product features.



INDUSTRIAL & ELECTRICAL FOG

HANDLINE NOZZLES

## Industrial & Electrical Fog

Our industrial fog nozzles were created to handle the rigors of industrial needs in refineries, chemical plants, office complexes and other on-site situations. Several different materials are available to suit every need, and most nozzles are U.L. listed and/or FM approved.

The fog nozzles with the electrical specification in the chart are designed to be used on class "C" hazards and utilize only fog capabilities in combating blazes at 10' or more from live electrical equipment and/or circuits with voltage up to 250,000. All other industrial fog nozzles can be used in either straight stream or fog combinations.

1-25



1575

205-B

L-205-B

L-200

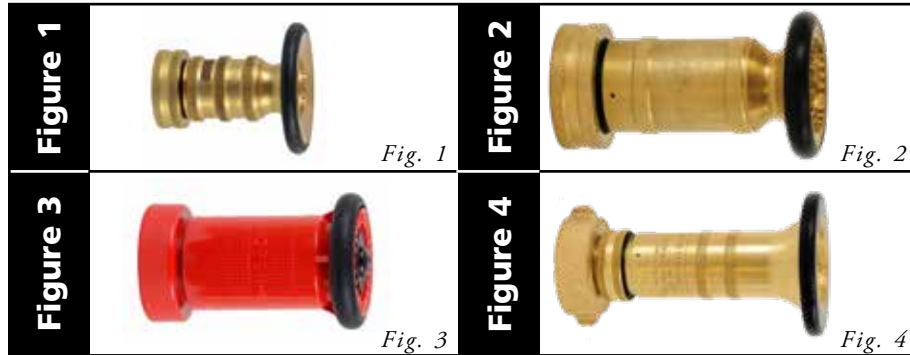


British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.

Base Size	AVAILABLE STANDARD FLOW RATES GPM (LPM)							FLOW TYPE	SHUT-OFF			CERT.	BASE	MATERIAL / FINISH			DIMENSIONS		MODEL	FIGURE								
	12 (45)	23 (87)	60 (227)	75 (284)	95 (360)	125 (473)	170 (644)		250 (946)	Fixed Flow	Variable Flow			Twist	Ball	Electrical	FM Approved	U.L. Listed			Rigid	Swivel	Free Swivel	Satin	Chrome	Polycarbonate	Length (Inches)	Weight (Lbs.)
	PSI (BAR) 100 (6.89)																											
1.5"								•		•					•	s			s	o		5.00	2.875	L-205-B	2			
			•		•	•		•		•					s				s	o		4.75	4.125	L-200	1			
				•				•		•					s						s	4.875	0.375	1575	3			
							•	•		•					s				s	o		7.063	5.625	205-B	4			
					•	•			•		•		•		s				s	o		5.00	2.875	L-205-EB*	2			
				•					•		•		•		s				s	o		3.00	1.50	L-206-T				
				•					•		•		•		s					s		4.875	0.375	1575-E	3			
2.5"							•	•		•				•	s			s	o		7.063	5.625	205-EB	2				
							•	•		•				•	s			s	o		8.313	7.375	D-205-B	4				
							•	•		•				•	s			s	o		11.563	8.75	D-200	1				
							•	•		•				•	s			s	o		8.313	7.375	D-205-EB	4				

Key: s = standard o = option  
 \*NOTE: 125 GPM Nozzle NOT UL Listed

### FOG NOZZLE CONFIGURATIONS



**OPTIONS**

**THREADS**

All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.

Figures depict general product types only and are not intended to be inclusive of all product features.

# HANDLINE NOZZLES



MARINE

HANDLINE NOZZLES

## Marine

These handline nozzles are specifically designed and manufactured for the unique firefighting challenges of a marine environment. They utilize military spec, corrosion resistant cast brass construction and are ideal for the application of AFFF. The constant flow technology, combined with their durable construction, make them optimal for use in the shipping industry, in refineries and for off-shore drilling or production rigs, as well as within chemical complexes.

Most models meet the stringent performance requirements of the U.S. Navy.

Manganese/Bronze  
horseshoe handle

Acetal ball with self-adjusting  
UHMWPE seat (most models)

Flush without  
shutting down

85-5-5-5 "Marine  
Brass" construction

Cut metal teeth

Available pistol grip  
is 85-5-5-5 brass



British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.



Base Size	AVAILABLE FLOW RATE GPM (LPM)			SHUT-OFF	BASE			TEETH	RATING			DIMENSIONS		MODEL		
	95 (360)	125 (473)	250 (946)		Ball	Rigid	Swivel		Free Swivel	Cut Metal	Complies with MIL*	Complies with USCG**	FM Approved		Length (Inches)	Weight (Lbs.)
	PSI (BAR)															
1.5"	•	•		•			s	s				7.375	6.50	SFL-N		
	•			•			s	s	•	•		8.06	6.92	SFL-CG-95		
1.5"	•			•			s	s	•			7.375	7.625	SFL-GN-95		
		•		•			s	s	•			7.375	7.625	SFL-GN-125		
	•			•			s	s		•		8.31	8.17	SFL-GN-95-SPL		
	•			•			s	s	•	•		8.31	8.25	SFL-GCG-95		
2.5"			•	•		s	s	•			12.5	13.5	DSF-N			

MARINE NOZZLES



MARINE NOZZLE with PISTOL GRIP



DSF-N



Figures depict general product types only and are not intended to be inclusive of all product features.

Key s = standard o = option  
 \* Complies with MIL-N-24408E Type 1  
 \*\* Complies with USCG Approval Number: 162.027/12/0-IAW CFR46 162.027

### OPTIONS

#### THREADS

All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.

#### HANDLES

- SFL-N feature manganese/bronze shut-off handles
- SFL-CG-95, SFL-GCG-95, SFL-GN series, and DSF-N feature silicon/bronze shut-off handles

# HANDLINE NOZZLES



BALL SHUT-OFFS & PLAYPIPES

## Ball Shut-offs & Playpipes

Elkhart Brass Ball Shut-offs and Playpipes are designed and constructed for rugged use and reliable performance as well as an excellent foundation for your break-apart nozzle needs using either smooth bore or fog nozzles. Elkhart Brass Ball Shut-offs and Playpipes are available with a variety of options, including built-in smooth bores which can be used with a fog nozzle tip for maximum versatility.

HANDLINE NOZZLES

1-29



British Standard Parallel Pipe (BSPP) and British Instantaneous (BS336) base options available.

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# HANDLINE NOZZLES

## BALL SHUT-OFFS & PLAYPIPES

### BALL SHUT-OFFS & PLAYPIPES

Inlet Size	Outlet Size	WATERWAY SIZE						AVAILABLE INTEGRAL SMOOTH BORE DISCHARGE SIZE						BALL TYPES		SEAT		DRIVE		GRIP			BASE			HANDLE		MATERIAL		MODEL	FIGURE	
		1"	1 3/8"	1 1/2"	1 3/4"	1/2"	7/8"	1 1/8"	1 1/4"	1 1/2"	1 3/4"	1 1/2"	1 3/4"	1 1/2"	1 3/4"	Double	Full Round	Single	Double	Double	Pistol Grip	Playpipe	Ladderhook	Rigid	Swivel	Free Swivel	Tab	Horseshoe	Brass			Elk-O-Lite®
1"	1"														S								S		O	S	O			SB-275	1	
															S									O		S	S	O			SB-275-A	1
															S									O		S	S	O			SB-275-AT	2
															S									O		S	S	O			SB-275-G	3
															S									O		S	S	O			SB-275-GA	3
															S									O		S	S	O			SB-275-GAT	4
1.5"	1.5"														S								O	S	O	O	S			LB-275	1	
															S									O	S	O	O	S			LB-275-A	1
															S									O	O	S	O	S			LB-275-GA	3
															S									O	S	O	O	S			B-275	1
															S									O	S	O	O	S			B-275-A	1
															S									O	O	S	O	S			B-275-GA	3
															O	S									S	O	O	S			B-375-A	1
															O	S									S	O	O	S			B-375-AT	2
															O	S									O	S	O	S			B-375-GA	3
															O	S									O	S	O	S			B-375-GAT	4
2.5"	1.5"														S								O	S	O	O	S			DB-275	1	
															S									O	S	O	O	S			DB-275-A	1
															S									O	O	S	O	S			DB-275-GA	3
															O	S									S	O	S			DB-375-A	1	
															O	S									S	O	S			DB-375-GA	3	
															S										S	O	S			DB-375-AT	2	
															S										S	O	S			DB-375-GAT	4	
															S										S	S					B-278	5
															S										S	S					B-278-AT	5
															S										S	S					B-278-L	5
2.5"	2.5"													S									S							279-L	6	
														S										S						279-LA	6	
														S										S		S				JB-275	1	
													S										S		S				JB-275-A	1		
													S										S		S				JB-275-GA	3		

Key: s = standard o = option  
 \*B-278 (without ladderhook) + ST-190-BA (Triple Stack Tip)

See section 1-6 for available XD Shutoffs and Playpipes

HANDLINE NOZZLES

1-30

# HANDLINE NOZZLES



## BALL SHUT-OFFS & PLAYPIPES

HANDLINE NOZZLES

1-31

### BALL SHUT-OFFS AND PLAYPIPES CONFIGURATIONS

<b>Figure 1</b> SHUT-OFF 	<b>Figure 2</b> SHUT-OFF with INTEGRAL SMOOTH BORE 
<b>Figure 3</b> SHUT-OFF with PISTOL GRIP 	<b>Figure 4</b> SHUT-OFF with PISTOL GRIP & INTEGRAL SMOOTH BORE 
<b>Figure 5</b> PLAYPIPE with SHUT-OFF 	<b>Figure 6</b> PLAYPIPE without SHUT-OFF 

Figures depict general product types only and are not intended to be inclusive of all product features.

#### DOUBLE CUT-AWAY

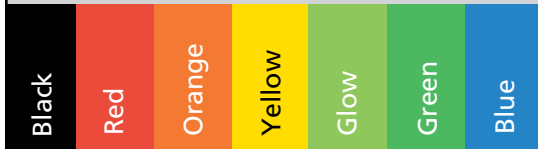
Ball is hydraulically balanced for a smooth transition from closed to open and open to closed.

#### FULL ROUND

Ball has a solid bore for optimal flow characteristics and stream quality — particularly for smooth bores and shut-offs with built-in smooth bores.

#### OPTIONS

##### COLORS



*Color options available for pistol grip and handle. Ball shut-offs standards are a rough chrome handle and natural Elk-O-Lite® pistol grip.*

##### HANDLES

TAB



HORSESHOE



##### THREADS

*All nozzles are NHT unless otherwise specified. See index T-13 for optional base threads, including British instantaneous.*



# Smooth Bore & Deluge Tips

For maximum reach, smooth bore tips create concentrated waterflow for use with either handlines or monitors while using lower pressures of 50 or 80 psi. Elkhart offers a wide variety of discharge sizes to suit any need. Additionally, Elkhart's stacked tips allow you to customize the smooth bore to meet your needs in the field.



# HANDLINE NOZZLES



SMOOTH BORE & DELUGE TIPS

HANDLINE NOZZLES

1-33

## SMOOTH BORE SINGLE TIP

Base Size	AVAILABLE DISCHARGE DIAMETER																				FINISH			DIMENSIONS		MODEL	FIGURE					
	GPM @ 50 PSI										GPM @ 80 PSI										Brass	Chrome	Elk-O-Lite®	Slug	w/bumper			Length (Inches)	Weight (Lbs.)			
	3/8"	1/4"	3/16"	1/8"	1/2"	3/8"	1/4"	3/16"	1/8"	1"	1 1/16"	1 1/8"	1 1/16"	1 1/4"	1 3/8"	1 1/2"	1 5/8"	1 3/4"	1 7/8"	2"										2 1/4"	2 1/2"	3"
1"	•	•	•	•	•																			s	o		•	4.50	1.0	S-185B		
1.5"					•																				s	o		•	4.75	1.0	185-A	2
						•																			s	o		•	4.50	1.50	185-B	3
							•																			s	•		2.625	0.75	186A	1
								•																		s			4.50	0.563	187A	4
									•																	s		•	7.00	0.875	188A	5
										•																s			10.00	0.68	187CAF	6
2.5"									•															s	o			9.0	3.625	181	7	
3.5"										•															s	o			9.0	1.625	181A	
																									s	o			9.0	7.125	181-3	
5"																									s	o			12.0	4.0	181-3A	8
																									s				17.06	6.3	181-5A	9

Key: s = standard o = option

## SMOOTH BORE STACKED TIP

Base Size	AVAILABLE 1ST DISCHARGE				AVAILABLE 2ND DISCHARGE				AVAILABLE 3RD DISCHARGE				AVAIL. 4TH DISCHARGE	FINISH			DIMENSIONS		Model	Figure										
	3/4"	1/2"	1"	1 1/2"	1/2"	3/4"	1"	1 1/2"	1/2"	3/4"	1"	1 1/2"	1 3/4"	Brass	Chrome	Elk-O-Lite®	Leader Threading*	Length (Inches)			Weight (Lbs.)									
	GPM 50 PSI		GPM 80 PSI		GPM 50 PSI		GPM 80 PSI		GPM 50 PSI		GPM 80 PSI		GPM 80 PSI																	
1.5"	•	•			•	•									s			6.625	0.688	ST-185A	10									
			•				•								s	•		7.625	0.875	ST-185A-IFD										
				•				•							s			9.0	4.375	ST-190B										
					•				•						s	•		9.0	1.125	ST-190BA										
2.5"															s	o		14.0	7.25	ST-191										
															s	o		10.75	4.0	ST-191-1										
															s			10.50	2.0	ST-191A										
															s			9.625	1.675	ST-197A	13									
3.5"																								s			12.875	2.125	ST-194	11
																									s			16.75	4.0	ST-195

\* 1.5 male for line extension

See section 1-8 for available XD Smooth Bore Tips

## OPTIONS

### THREADS

All base threads are NHT unless otherwise specified. See index T-13 for optional base threads.

### PRESSURE

All pressure specified for smooth bores at pitot pressure.

# HANDLINE NOZZLES

SMOOTH BORE & DELUGE TIPS







Figure 1	<b>SLUG</b>	
		<p><b>186-A</b></p> <ul style="list-style-type: none"> <li>• Leader threading</li> </ul> <p><i>Fig. 1</i></p>
Figure 2	<b>SINGLE SMOOTH BORE TIPS – HANDLINE</b>	
		<p><b>185-A</b></p> <ul style="list-style-type: none"> <li>• Leader threading</li> <li>• Bumper</li> </ul> <p><i>Fig. 2</i></p>
Figure 3	<b>SINGLE SMOOTH BORE TIPS – HANDLINE</b>	
		<p><b>185-B</b></p> <ul style="list-style-type: none"> <li>• Bumper</li> </ul> <p><i>Fig. 3</i></p>
Figure 4	<b>SINGLE SMOOTH BORE TIPS – HANDLINE</b>	
		<p><b>187-A</b></p> <ul style="list-style-type: none"> <li>• More compact than other tips</li> </ul> <p><i>Fig. 4</i></p>
Figure 5	<b>SINGLE SMOOTH BORE TIPS – HANDLINE</b>	
		<p><b>188-A</b></p> <ul style="list-style-type: none"> <li>• Longer tip for improved stream quality</li> <li>• Bumper</li> </ul> <p><i>Fig. 5</i></p>
Figure 6	<b>SINGLE SMOOTH BORE TIPS – HANDLINE/DELUGE</b>	
		<p><b>187-CAF</b></p> <ul style="list-style-type: none"> <li>• For applying CAF</li> </ul> <p><i>Fig. 6</i></p>

Figure 7	<b>SINGLE SMOOTH BORE TIPS – DELUGE</b>	
		<p><b>181</b></p> <ul style="list-style-type: none"> <li>• Classic deluge tip</li> </ul> <p><i>Fig. 7</i></p>
Figure 8	<b>SINGLE SMOOTH BORE TIPS – DELUGE</b>	
		<p><b>181-3A</b></p> <ul style="list-style-type: none"> <li>• Built-in stream shaper</li> </ul> <p><i>Fig. 8</i></p>
Figure 9	<b>SINGLE SMOOTH BORE TIPS – DELUGE</b>	
		<p><b>181-5A</b></p> <p><i>Fig. 9</i></p>
Figure 10	<b>STACKED SMOOTH BORE TIPS – HANDLINE</b>	
		<p><b>ST-185-A</b></p> <p><i>Fig. 10</i></p>
Figure 11	<b>STACKED SMOOTH BORE TIPS – MASTER STREAM</b>	
		<p><b>ST-194</b></p> <ul style="list-style-type: none"> <li>• Leader threading</li> </ul> <p><i>Fig. 11</i></p>
Figure 12	<b>STACKED SMOOTH BORE TIPS – MASTER STREAM</b>	
		<p><b>ST-195</b></p> <ul style="list-style-type: none"> <li>• Leader threading</li> </ul> <p><i>Fig. 12</i></p>
Figure 13	<b>STACKED SMOOTH BORE TIPS – MASTER STREAM</b>	
		<p><b>ST-197-A</b></p> <ul style="list-style-type: none"> <li>• Leader threading</li> </ul> <p><i>Fig. 13</i></p>

HANDLINE NOZZLES

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# HANDLINE NOZZLES



## STREAM SHAPERS

HANDLINE NOZZLES

# Stream Shapers

Used to remove turbulence from a water flow, Elkhart Brass has stream shapers available in a variety of sizes and several materials to suit a variety of situations. Our new mini stream shapers reduce bulk while still providing excellent stream. Most Elkhart stream shapers feature replaceable vanes for easy repair.



Choice of materials

British Standard Parallel Pipe (BSPP) base options available.

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## STREAM SHAPERS CONFIGURATIONS



	Inlet Size	Outlet Size	MATERIAL/FINISH			DIMENSIONS		MODEL	FIGURE
			BRASS		Elk-O-Lite®	Length (Inches)	Weight (Lbs.)		
			Satin	Chrome					
1.5"	1.5"			s	2.5	0.5	281A	1	
				s	1.5	0.2	281A-Mini	1	
2.5"	2.5"	s	o		4.5	3.3	282B	2	
				s	4.5	1.5	282A	2	
				s	2.3	0.5	282A-Mini	1	
3.5"	2.5"	s	o		5.8	3.5	283B	3	
				s	5.8	1.5	283A	3	
3.5"	3.5"	s	o		3.5	3.5	284B	4	
				s	3.5	1.5	284A	4	
5"	5"			s	5.1	1.7	284-5A	5	

Key s = standard o = option

### OPTIONS THREADS

*All shapers are NHT unless otherwise specified. See index T-13 for optional base threads.*

# Foam Expansion Tubes

When greater expansion rates of foam solution are needed, a foam aeration tube can be quickly attached to many of Elkhart Brass combination fog nozzles. All tubes are Elk-O-Lite® cast finish with a nylon cord wrap.



HANDLINE NOZZLES

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## TUBE CONFIGURATIONS

Compatible Nozzle Model	FOAM EXPANSION TUBE MODELS					
	246-S	247-S	246	247	XD Mid-Range	XD High-Range
SM-10F/G	•		•			
TSM-10F	•		•			
SM-20F/G	•		•			
TSM-20F	•		•			
4000-10 thru 4000-19	•		•			
4000-20 thru 4000-26		•		•		
SFL-B/G	•		•			
SFL-G/CGC/GN/N/O						
SFM/G	•		•			
TSFM	•		•			
DSM-30F/G		•		•		
SM-30F/G		•		•		
TSM-30F		•		•		
SFM-HP/G	•		•			
TSFM-HP/T	•		•			
SFM-LP/G	•		•			
TSFM-LP/T	•		•			
XD handline fog nozzle series					•	•
Foam Expansion Tube Details						
Length	15.87"	15.87"	30.25"	30.25"	16.09"	16.77"
Weight (Lbs.)	3.80	3.80	4.75	4.75	3.6	3.8
Built-In Hydroverter	•	•			•	•
Figure	1	1	2	2	3	3





# HANDLINE NOZZLES



CELLAR / DISTRIBUTOR

HANDLINE NOZZLES

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CELLAR NOZZLE

SPECIFICATIONS	MODELS	
	LR	R
Base	1.5" F	2.5" F
GPM @ 100 PSI (6.89 BAR)	160 GPM (606 LPM)	350 GPM (1325 LPM)
Spray Diameter (Fog pattern)	20 Feet	55 Feet
Materials/Finish	Brass with chrome finish	



BRESNAN  
DISTRIBUTOR  
NOZZLE 193-6

SPECIFICATIONS	MODELS		
	193-6	193-6	193-9
Base	1.5" F	2.5" F	2.5" F
GPM @ 100 PSI (6.89 BAR)	140 GPM (530 LPM)	395 GPM (1495 LPM)	495 GPM (1874 LPM)
Spray Diameter (Fog pattern)	20 Feet	45 Feet	36 Feet
Materials/Finish	Brass with chrome finish		



BRESNAN  
DISTRIBUTOR  
NOZZLE 193-9



1.5" APPLICATOR FOR  
CELLAR/BRESNAN  
NOZZLE

SPECIFICATIONS	MODELS	
	A-1.5	A-2.5
Inlet	1.5" Free Swivel	2.5" Free Swivel
Outlet	1.5"	2.5"
Shut-off	Yes	No
Materials/Finish	Brass with chrome-plated finish	Elk-O-Lite® with red urethane enamel and anodized trim



### S-205-BAF

- For forestry use
- 1.0" rigid base in NHT or NPSH; 0.75" GHT available
- Available in 12 or 23 gpm (45 or 87 lpm)
- Twist shut-off
- For use with pressure of up to 600 psi (41.37 bar)
- Straight stream to fog
- Elk-O-Lite® construction



### 222-1.5

- Wat-R-Wall
- 1.5" free swivel inlet, no outlet
- 100 gpm (380 lpm) @ 100 psi (6.89 bar)
- Brass construction with chrome plating
- Length: 8"
- Width: 10"
- Height: 7.25"
- Weight: 8 lbs.



### 222-2.5

- Wat-R-Wall
- 2.5" free swivel inlet, 2.5" outlet with cap and chain
- 100 gpm (380 lpm) @ 100 psi (6.89 bar)
- Brass construction with chrome plating
- Length: 8.25"
- Width: 10"
- Height: 8.25"
- Weight: 11.5 lbs.