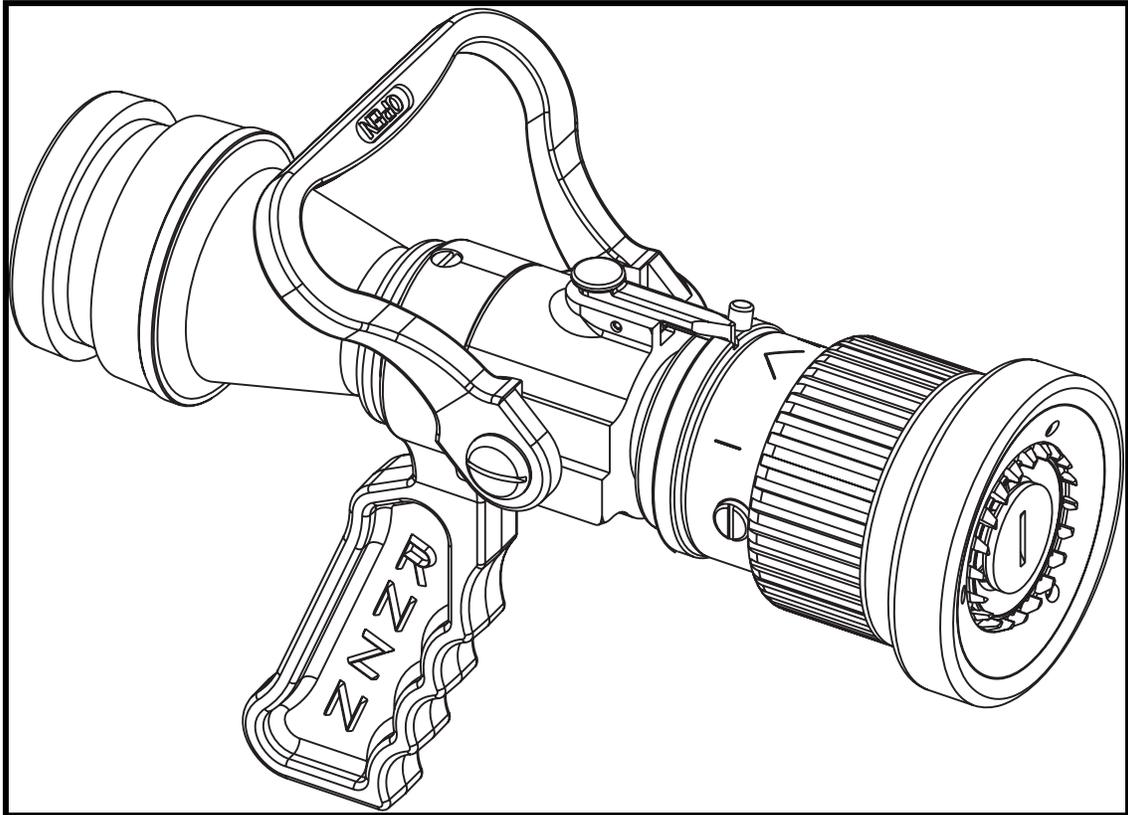




**ELKHART BRASS MFG. CO., INC.**

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## **Operating and Maintenance Instructions**



**SFL-BG (RNZN)**  
Combination Type Nozzle  
With Detent At Narrow Fog

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## Product Safety



### **Important:**

**Before installing and operating this equipment, read & study this manual thoroughly. Proper installation is essential to safe operation. In addition, the following points should be adhered to in order to ensure the safety of equipment and personnel:**

- All personnel who may be expected to use this equipment must be thoroughly trained in its safe and proper use.
- Before flowing water from this device, check that all personnel are out of the stream path. Also, check to make sure stream direction will not cause avoidable property damage.
- Become thoroughly familiar with the hydraulic characteristics of this equipment, and the pumping system used to supply it. To produce effective fire streams operating personnel must be properly trained.
- Care should be taken when opening and closing any ball shutoff. Rapid closure and/or opening may cause “water hammer” or pressure surge which could cause injury or damage to equipment.

# Nozzle Operation

## Flow Capabilities

This nozzle has been designed to exhibit the following flow characteristics:

- Maximum Working Flow 95 GPM (360 LPM) at a Maximum Working Pressure of 100 PSI (6.9 BAR)

## Ball Shutoff

This nozzle has been equipped with a ball shutoff. The nozzle can be shut off by pushing the horseshoe handle forward, away from the user. In order to open the shutoff, the handle should be pulled back toward the user. These positions are indicated by CLOSED and OPEN lettering on the horseshoe handle. **It is very important to open and close the shutoff slowly to avoid a water hammer effect.**

## Pattern Adjustment

The total tip rotation of this nozzle is 306 degrees and can be adjusted by the following steps:

- A fog pattern can be achieved by rotating the nozzle tip to the left or counter-clockwise. If the nozzle tip is rotated into this position the locking lever will be pointed to the  marking on the nozzle tip.
- A straight stream or jet pattern can be achieved by rotating the nozzle tip to the right or clockwise. If the nozzle tip is rotated into this position the locking lever will be pointed at the  marking on the nozzle tip.
- A narrow fog pattern can be achieved by stopping the rotation of the nozzle tip at the detent in between the wide fog and straight stream positions. The locking lever will be pointed at the  marking on the nozzle tip as a visual indication of this position. This position is characterized by a 45 degree fog pattern.

## Flushing The Nozzle

This nozzle has been equipped with a flush position for removing small debris from the water supply that may become trapped in the nozzle. This debris may cause poor stream quality and reduced water flow capabilities. If this occurs the nozzle needs to be flushed. The nozzle can be flushed by following these steps:

- Press the locking lever down until the front end rises out of the gallonage slot. Rotate the center barrel to the left or counter-clockwise until the locking lever is pointed toward the FLUSH indication.
- After flushing the nozzle, be sure to rotate the center barrel back to the right or clockwise until the locking lever is returned to the gallonage slot.

The nozzle should be flushed after each use to ensure that debris does not built up inside the nozzle. This flushing method should also be used after flowing foam through the nozzle. If the debris is too large to pass using this method, it may be necessary to shut down the hose line and remove the nozzle. Large debris can then be removed from the base of the nozzle or from around the stem head.

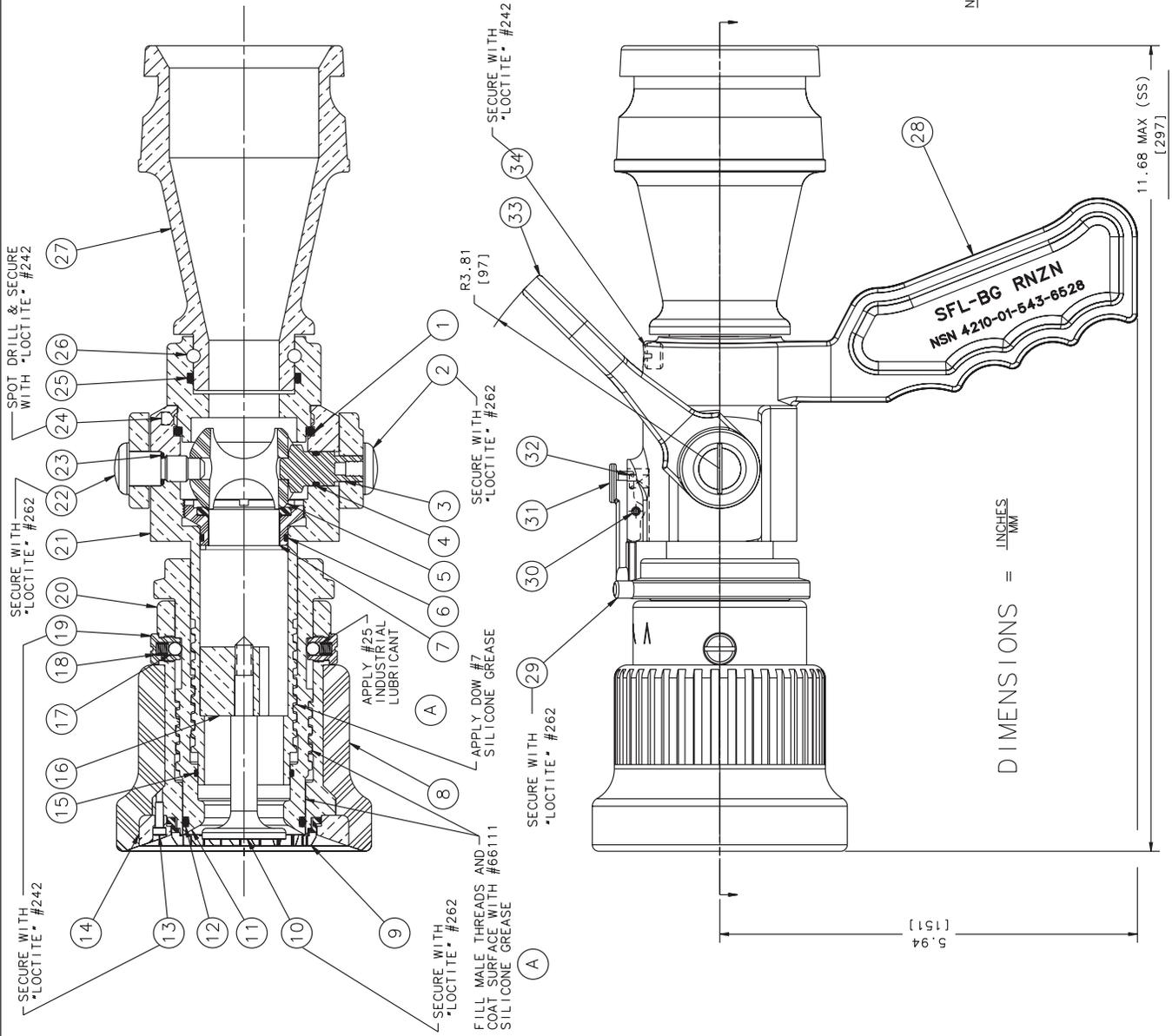
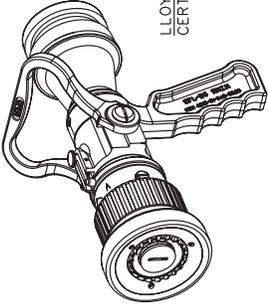
## **Maintenance**

Weekly visual inspections and monthly operational inspections should be exercised in order to ensure reliable operation. These inspections may be done on a daily basis depending on the needs of the user. All nozzles should be flow tested before entering any hazardous area to ensure equipment is operating properly.

If the nozzle tip is not functioning correctly, it may need to be re-greased. This can be done by removing the detent screws (19), then removing the tip (20) from the nozzle. These parts can be seen in the following assembly drawing. Clean the acme threads with a rag then generously apply silicone grease (Climax #66111) to the acme threads. Reassemble the nozzle tip to the center barrel and clean excess grease from the nozzle.

If the shut-off handle begins to operate too easily, the adjustable seat (7) may need to be tightened. This can be done without disassembling the entire nozzle. Remove the set screw (24) from the nozzle body. After this is done the pistol grip (28) can be removed from the nozzle assembly. These parts can be seen in the following assembly drawing. Use an Elkhart Brass Seat Wrench (P/N 71251000) to adjust the seat until the desired tightness is achieved. Reassemble the nozzle. Be sure to apply thread locker (Loctite #242 or equivalent) to the set screw before reassembling.

LLOYD'S REGISTER APPROVAL  
CERTIFICATE # SAS F070006



BRASS ROD CA ALLOY #360	34	61248000	SCREW-SET (BRASS) 0.375-24 X 0.250-LG. SLT. HD.	1
ALUM.-BRONZE CA 95300	33	36085000	HANDLE-HORSHU (DOUBLE STOP)	1
STAINLESS STEEL CA 95300	32	61762000	SPRING-COIL	1
BRASS FORGING	31	44064101	LEVER-LOCKING	1
ALLOY C37700 BEL COPPER	30	51253000	PIN-ROLL (BRONZE) 0.125-ID X 0.562-LG X 0.028-THK.	1
STAINLESS STEEL TYPE #316	29	52110001	PIN-SOLID	1
CAST BRASS ALLOY #81-3-7-9	28	33827001	PISTOL GRIP (SB)	1
CAST BRASS ALLOY #81-3-7-9	27	17396001	BASE-F/S 2.5 (65MM) B. I.	1
BRASS ROD CA ALLOY #360	26	15016000	BALLS 0.187 DIA BR.	23
BUNA 'N' RUBBER TYPE #302	25	57336000	RING-O (#AS-568-127)	1
STAINLESS STEEL TYPE #302	24	63685000	SCREW-SET CONE PIN S/S	1
BUNA 'N' RUBBER TYPE #316	23	57348000	RING-O (#AS-568-010) 0.239-ID X 0.070-C/S	1
STAINLESS STEEL TYPE #303	22	63708000	SCREW-PIVOT	1
CAST BRASS ALLOY #81-3-7-9	21	17116002	BODY-NOZZLE (SB)	1
CONTINUOUS CAST STAINLESS STEEL TYPE #316	20	66416001	TIP-NOZZLE	1
STAINLESS STEEL TYPE #316	19	65058000	SCREW - DETENT (SS) 0.375 - 24 THDS	2
STAINLESS STEEL TYPE #302	18	65703000	SPRING - COIL (SS) 0.180 O.D. X 0.310 LG	2
STAINLESS STEEL TYPE #316	17	15018000	BALLS 0.187 DIA SS	2
BRASS EXTRUSION CDA 3851.67-3-40	16	63408001	BASE (WEB) STEM	1
BUNA 'N' RUBBER TYPE #316	15	57392000	RING-O (#AS-568-027) 1.391-ID X 0.070-C/S	1
CONTINUOUS CAST STAINLESS STEEL TYPE #316	14	57627004	RING - RETAINER	1
ALLOY #85-5-5-5	13	63780000	SCREW-CAP (#316 S/S) #4-40 X 0.375-LG. SOG HD	3
STAINLESS STEEL TYPE #316	12	57398000	RING-O (#AS-568-012) 0.364-ID X 0.070-C/S	1
60-70 DURO CAST BRASS	11	18110001	BARREL-CENTER(95 GPM)	1
ALLOY #81-3-7-9	10	62084001	STEM-NOZZLE	1
BRASS ROD CA ALLOY #360	9	58870000	RING-TEETH(SPINNING)	1
MOLDED ACETAL PLASTIC	8	33643000	GRIP-HAND	1
EPDM RUBBER S/C GASKETS FILLED WITH SILICONE GREASE	7	61357000	SEAL-ADJUSTABLE	1
NYLON & EPDM RUB 60-70 DURO	6	57327000	RING-O (#AS-568-024) 1.114-ID X 0.070-C/S	1
60-70 DURO MOLDED ACETAL PLASTIC	5	15076000	BALL-VALVE	1
BUNA 'N' RUBBER TYPE #316	4	57298000	RING-O (#AS-568-012) 0.364-ID X 0.070-C/S	1
STAINLESS STEEL TYPE #303	3	63755000	SHAFT-ACTUATOR (SO)	1
STAINLESS STEEL TYPE #303	2	61286000	SCREW-SHAFT	1
BUNA 'N' RUBBER 60-70 DURO	1	57309000	RING-O (#AS-568-224) 1.734-ID X 0.139-C/S	1

NO.	PART NO.	PART NAME	REQ.
<p><b>ELKHART BRASS MFG. CO., INC.</b> ELKHART, INDIANA</p>			
<p>SFL-BG SELECT-O-FLOW NOZZLE, DETENT AT NARROW FOG, 95 GPM</p>			
SCALE	1:1	DATE	10/02/06
DRW BY	KAS	CHK BY	...
DATE	10/02/06	DRW. SIZE	C
<p><b>SDRC</b> REMOVE ALL BURS AND SHARP CORNERS 3 PLACE SIZE 1-10 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES - DECIMALS - 10-32-36</p>			