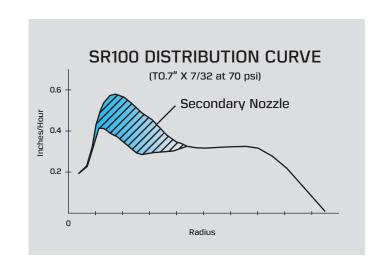
# APPLICATION AND SELECTION

Secondary nozzles can be fitted to Nelson Big Gun® sprinklers to improve uniformity in solid set applications. They provide more water close to the sprinkler, which provides better coverage when the sprinklers are spaced further apart than head-to-head.

They are generally not desirable in mechanized irrigation applications, such as center pivot end guns or hose-reel travelers. They are also not commonly used in industrial applications where plugging of a small nozzle is likely.



#### Secondary Nozzle Type and Size

MODEL	NOZZLE TYPE	TYPICAL SIZE*
F75/SR75/F100	3RN	7/32"
SR100	3RN (Kit #9724)	7/32"
F150/F200/SR200	7RN	5/16"
SR150	7RN (Kit #12686)	5/16"

<sup>\*</sup>The secondary nozzle should typically be sized at 10% of the flow rate of the primary nozzle. It is not recommended to use a nozzle larger than 5/16" on the SR100.

#### SR100/SR150 Secondary Nozzle Kit Parts

PART #	DESCRIPTION	SR100 KIT 9724 (QTY)	SR150 KIT 12686 (QTY)
6059	Screw, .25-20 x 1.25"	2	2
8497	Elbow, 3RN	1	-
8898-219	Nozzle, 3RN 7/32"	1	-
7110	Nozzle, 7RN 5/16"	-	1
7240	Vane	_	1
8511	Gasket	1	1
11442	0-ring (18 x 2mm)	1	1
12569	Elbow, 7RN	-	1

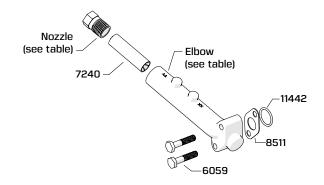
#### Secondary Nozzle Installation



F75 / SR75 / F100 / F150 / F200



SR100 / SR150 / SR200



WARRANTY AND DISCLAIMER: Nelson Big Gun® Sprinklers and accessories are warranted for one year from date of original sale to be free of defective materials and workmanship when used within the working specifications for which the products were designed and under normal use and service. The manufacturer assumes no responsibility for installation, removal or unauthorized repair of defective parts. The manufacturer's liability under this warranty is limited solely to replacement or repair of defective parts and the manufacturer will not be liable for any crop or other consequential damages resulting from defects or breach of warranty. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES AND OF ALL OTHER OBLIGATIONS OR LIABILITIES OF MANUFACTURER. No agent, employee or representative of the manufacturer has authority to waive, alter or add to the provisions of this warranty, nor to make any representations or warranty not contained herein. Products in this brochure may be covered by one or more U.S. Patents and other U.S. Patents pending or corresponding issued or pending foreign patents. See www.nicpat.com for details.

# **PERFORMANCE (IMPERIAL)**

## 3RN Nozzle - Flow (gpm)

Pressure	7/32"	15/64"	1/4"	17/64"	9/32"	19/64"	5/16"
PSI	5.6 mm	6.0 mm	6.4 mm	6.7 mm	7.1 mm	7.5 mm	7.9 mm
40	8.5	9.7	10.8	12.0	13.4	14.6	16.0
50	9.5	10.8	12.1	13.4	14.9	16.3	17.9
60	10.4	11.9	13.3	14.7	16.3	17.9	19.6
70	11.3	12.8	14.3	15.9	17.6	19.3	21.2
80	12.1	13.7	15.3	17.0	18.9	20.7	22.6
90	12.8	14.5	16.2	18.0	20.0	21.9	24.0
100	13.5	15.3	17.1	19.0	21.1	23.1	25.3
110	14.1	16.0	17.9	19.9	22.1	24.2	26.5

#### 7RN Nozzle - Flow (gpm)

Pressure	7/32"	1/4"	9/32"	19/64"	5/16"	21/64"	11/32"	23/64"	3/8"
PSI	5.6 mm	6.4 mm	7.1 mm	7.5 mm	7.9 mm	8.3 mm	8.7 mm	9.1 mm	9.5 mm
50	9.8	12.8	16.0	17.6	19.7	21.3	23.2	25.1	27.0
60	10.8	14.1	17.6	19.4	21.6	23.3	25.5	27.5	29.5
70	11.7	15.3	19.0	20.9	23.3	25.2	27.5	29.7	31.8
80	12.5	16.3	20.3	22.4	24.9	27.0	29.5	31.7	34.0
90	13.3	17.3	21.5	23.8	26.5	28.6	31.3	33.5	36.0
100	14.0	18.3	22.7	25.1	27.9	30.2	33.0	35.3	37.9
110	14.7	19.2	23.8	26.3	29.2	31.6	34.6	37.0	39.7
120	15.4	20.1	24.9	27.5	30.5	33.1	36.2	38.6	41.5
130	16.0	20.9	25.9	28.6	31.8	34.4	37.7	40.2	43.1

# **PERFORMANCE (METRIC)**

## 3RN Nozzle - Flow (m3/hr)

Pressure	7/32"	15/64"	1/4"	17/64"	9/32"	19/64"	5/16"
BAR	5.6 mm	6.0 mm	6.4 mm	6.7 mm	7.1 mm	7.5 mm	7.9 mm
2.75	1.9	2.2	2.4	2.7	3.0	3.3	3.6
3	2.0	2.3	2.6	2.8	3.2	3.5	3.8
3.5	2.2	2.5	2.8	3.1	3.4	3.7	4.1
4	2.3	2.6	3.0	3.3	3.6	4.0	4.4
4.5	2.5	2.8	3.1	3.5	3.9	4.2	4.6
5	2.6	3.0	3.3	3.7	4.1	4.5	4.9
5.5	2.7	3.1	3.5	3.8	4.3	4.7	5.1
6	2.9	3.2	3.6	4.0	4.5	4.9	5.3
6.5	3.0	3.4	3.8	4.2	4.6	5.1	5.6
7	3.1	3.5	3.9	4.3	4.8	5.3	5.8
7.5	3.2	3.6	4.0	4.5	5.0	5.5	6.0

### 7RN Nozzle - Flow (m³/hr)

Pressure	7/32"	1/4"	9/32"	19/64"	5/16"	21/64"	11/32"	23/64"	3/8"
BAR	5.6 mm	6.4 mm	7.1 mm	7.5 mm	7.9 mm	8.3 mm	8.7 mm	9.1 mm	9.5 mm
3.5	2.2	2.9	3.7	4.0	4.5	4.9	5.3	5.7	6.2
4	2.4	3.1	3.9	4.3	4.8	5.2	5.7	6.1	6.6
4.5	2.6	3.3	4.2	4.6	5.1	5.5	6.0	6.5	7.0
5	2.7	3.5	4.4	4.8	5.4	5.8	6.4	6.8	7.3
5.5	2.8	3.7	4.6	5.1	5.6	6.1	6.7	7.2	7.7
6	3.0	3.9	4.8	5.3	5.9	6.4	7.0	7.5	8.0
6.5	3.1	4.0	5.0	5.5	6.1	6.6	7.3	7.8	8.4
7	3.2	4.2	5.2	5.7	6.4	6.9	7.5	8.1	8.7
7.5	3.3	4.3	5.4	5.9	6.6	7.1	7.8	8.3	9.0
8	3.4	4.5	5.6	6.1	6.8	7.4	8.1	8.6	9.3
8.5	3.5	4.6	5.7	6.3	7.0	7.6	8.3	8.9	9.5
9	3.6	4.8	5.9	6.5	7.2	7.8	8.6	9.1	9.8

Data from file P014 revised 1/7/2025. Flow was measured without optional stream straightening vane.