

# Flow Control Sprinkler Nozzles by FCI™

## The Problem:



Sprinklers irrigating uneven terrain or flat ground, but with long laterals often times experience pressure variations of as much as 40 psi. This can result in flow rate variations of 30% or more. Such extremes in application rates will result in over irrigation of the high pressure areas and under irrigation of the lower pressure areas. The result is uneven crop growth and a waster of water and the energy to pump it.

## The Solution:

Flow Control Sprinkler nozzles by FCI™ are the answer to the wasteful and yield compromising problem of uneven water pressure in sprinkler laterals.



### Check out these features of our flow control nozzles:

- Maintain a nearly constant flow rate from 35 to 100 psi.
- The FCI™ flow control diaphragms are made of a special blend of oven cured synthetic rubber that has incredible flexibility, memory, and durability. More resistant to abrasion than brass.
- Water stream is as free of turbulence as a straight bore nozzle. No loss of radius-of-throw and no reduction in sprinkler drive.
- Sizes are color coded for easy size identification.
- Save water, energy, and maximize yields.

### Flow Control Nozzle Performance For 1/2" Base Sprinklers (3/8-24 NFT and 1/8-27 NPT)

Nozzle Size	1.80	2.10	2.50	3.20	4.00
Color	Violet	Grey	Orange	White	Brown
Drill Size Equivalent	3/32"	#39	7/64"	1/8"	9/64"
PSI	GPM				
30	1.7	1.9	2.25	2.95	3.7
40	1.75	2.0	2.45	3.1	3.8
50	1.8	2.1	2.5	3.15	3.9
60	1.8	2.1	2.5	3.2	4.0
70	1.8	2.1	2.5	3.2	4.0
80	1.8	2.1	2.5	3.2	4.0

### Flow Control Nozzle Performance For 3/4" Base Sprinklers (1/4 - 18 NPT)

Nozzle Size	3.25	4.25	5.00	6.00	7.00	8.00
Color	Yellow	Blue	Green	Red	Black	Grey
Fractional Equivalent	1/8"	9/64"	5/32"	11/64"	3/16"	13/64"
PSI	GPM					
30	2.85	3.40	4.90	5.85	6.65	7.65
40	3.10	3.90	5.05	6.00	6.80	7.95
50	3.20	4.20	5.10	6.05	7.10	8.00
60	3.25	4.30	5.15	6.10	7.20	8.10
70	3.25	4.30	5.15	6.10	7.20	8.15
80	3.25	4.30	5.15	6.10	7.20	8.20
90	3.25	4.30	5.15	6.10	7.20	8.20
100	3.25	4.30	5.15	6.10	7.20	8.20



"Delivering Full Coverage Irrigation since 1990."

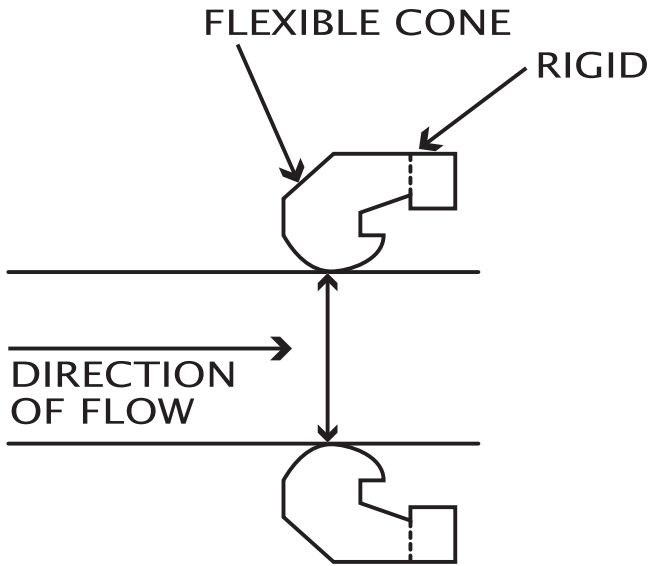
# FULL COVERAGE IRRIGATION

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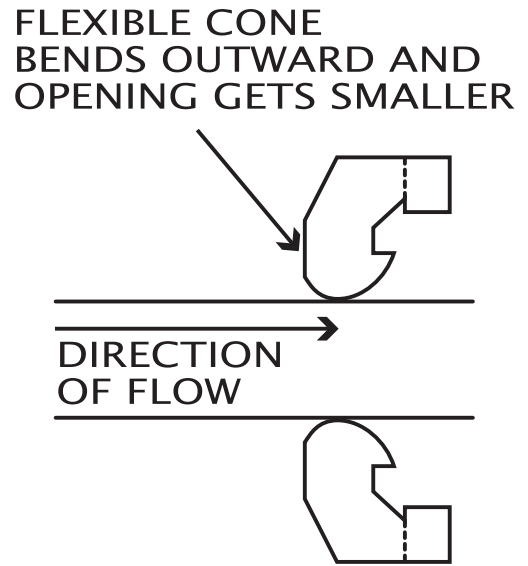
## How The FCI Flow Control Nozzle Works

### FIG. A



### DIAPHRAGM @ 10 PSI

### FIG. B



### DIAPHRAGM @ 70 PSI

#### FIG. A

Represents the polyurethane diaphragm when subjected to minimal or no pressure. The hole through the diaphragm is at its maximum diameter.

#### FIG. B

Displays that the conically shaped diaphragm bends outward when subjected to higher pressures and the hole through the diaphragm reduces in diameter. This is how the FCI flow control nozzle maintains a constant flow over a wide range of pressures.

#### Trade Warranty Policy

Full Coverage Irrigation, Inc. warrants to its customers that its products will be free from original defects in materials and workmanship for one year from the original sale. It will replace, free of charge, parts found to be defective under normal use within the warranty period. Full Coverage Irrigation, Inc.'s liability under this warranty is limited solely to replacement or repair of defective parts.