COMBO-JET® Fertilizer Orifice and Nozzle Cap Selector

Before selecting a fertilizer orifice please note:

* The orifice, not the cap, determines the fertilizer application rate.
* *COMBO-JET*® fertilizer components fit on *COMBO-JET*® and *COMBO-RATE*® nozzle bodies. Adapters are available to mount *COMBO-JET*® caps on conventional nozzle bodies.
* The *Orifice Selector Chart* (page 2) is based on water. *Fertilizer is more viscous than water so a larger orifice is required for a given flow rate of fertilizer, compared to water.* To determine the conversion factor for a given fertilizer, obtain the weight for one gallon or the specific gravity of the fertilizer and select the applicable conversion factor from from the adjacent table.

Conversion Factor Chart		
Weight /US Gal	Specific Gravity	Conversion Factor
10.0	1.20	**1.10**
10.5	1.26	**1.12**
11.0	1.32	**1.15**
11.5	1.38	**1.17**
12.0	1.44	**1.20**
12.5	1.50	**1.22**
13.0	1.56	**1.25**
13.5	1.62	**1.27**
14.0	1.68	**1.30**

To select fertilizer application components follow the steps below:

Step 1 - Determine Flow Rate Required

Calculate the flow rate required per nozzle or opener using the following formula:

Flow Rate = Application Rate x Speed x Spacing x Nozzles or Openers x Conversion Factor / 5940

Where:
- *Flow Rate* (US Gallons per minute)
- *Application Rate* (US Gallons per acre)
- *Speed* of applicator (mph)
- *Spacing* of nozzles or openers (inches)
- *Nozzles or Openers* supplied by each orifice (#)
- *Conversion Factor* (#)

Step 2 - Select Orifice

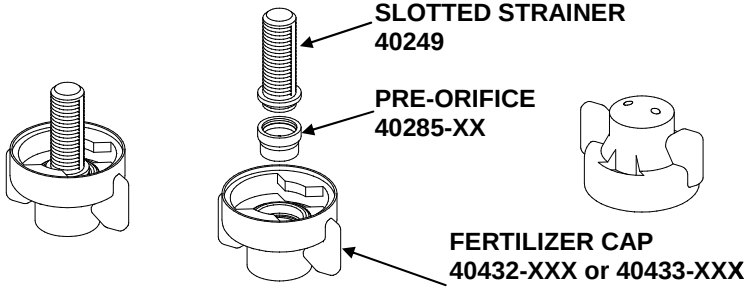
On the *Orifice Selector Chart* (page 2) locate the orifices and pressures that match the required flow rate. Select an orifice with a pressure in the middle of its operating range.

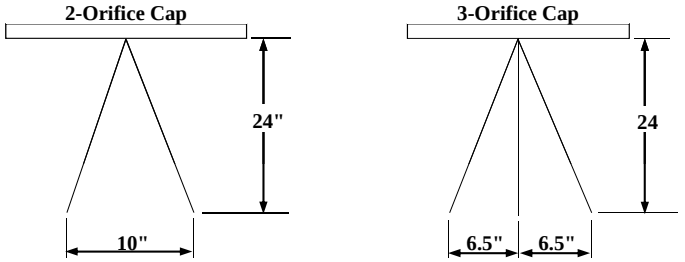
Step 3 - Select Fertilizer Nozzle or Hose Barb Cap & Strainer

Choose a cap from the colored area of the *Caps* section of the chart below that is compatible with the orifice part number (white areas are not compatible).

Choose a strainer from the colored area of the *Strainers* section of the chart below that is compatible with the orifice part number (white areas are not compatible).

	COMBO-JET® Caps											*COMBO-JET*® Strainers				
	2 Hole			3 Hole				Hose Barb								
Pre-orifices	40432-047	40432-086	40432-104	40433-047	40433-067	40433-086	40433-104	40420-00	40422-00	40424-00	40426-00	40251-00	40249-00	40248-00	40247-00	Part No.
	0.047	0.086	0.104	0.047	0.067	0.086	0.104	1/8"	1/4"	3/8"	1/2"	100	50	25	16	
40285-007	■							■	■	■	■	■				■
40285-01	■							■	■	■	■	■				■
40285-015	■	■						■	■	■	■	■				■
40285-02	■	■		■	■			■	■	■	■		■			■
40285-025	■	■		■	■			■	■	■	■		■			■
40285-03	■	■		■	■			■	■	■	■		■			■
40285-04	■	■		■	■			■	■	■	■		■			■
40285-05	■	■			■			■	■	■	■		■	■		■
40285-06		■			■			■	■	■	■		■	■	■	■
40285-08		■			■			■	■	■	■					■
40285-10		■	■		■	■	■		■	■	■					■
40285-125			■			■	■			■	■					■
40285-15							■			■	■					■
40285-20							■			■	■					■
40285-25										■	■					■





COMBO-JET® Orifice Selector Chart

0.03 to 0.49 USGPM

Flow Rate	40285-007	40285-01	40285-015	40285-02	40285-025	40285-03	40285-04	40285-05	40285-06	40285-08
	0.07	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.8
0.03	8									
0.04	14									
0.05	22	10								
0.06	32	14	Applicator Operating Pressure - P.S.I.							
0.07	44	20								
0.08	57	26	11							
0.09		32	14							
0.10		40	18	10						
0.11		48	22	12						
0.12		58	26	14						
0.13			30	17	11					
0.14			35	20	13					
0.15			40	23	14	10				
0.16			46	26	16	11				
0.17			51	29	18	13				
0.18			58	32	21	14				
0.19				36	23	16				
0.20				40	26	18	10			
0.21				44	28	20	11			
0.22				48	31	22	12			
0.23				53	34	24	13			
0.24				58	37	26	14			
0.25					40	28	16	10		
0.26					43	30	17	11		
0.27					47	32	18	12		
0.28					50	35	20	13		
0.29					54	37	21	13		
0.30					58	40	23	14	10	
0.31						43	24	15	11	
0.32						46	26	16	11	
0.33						48	27	17	12	
0.34						51	29	18	13	
0.35						54	31	20	14	
0.36						58	32	21	14	
0.37							34	22	15	
0.38							36	23	16	
0.39							38	24	17	
0.40							40	26	18	10
0.41							42	27	19	11
0.42							44	28	20	11
0.43							46	30	21	12
0.44			Operating Pressure - PSI				48	31	22	12
0.45							51	32	23	13
0.46							53	34	24	13
0.47							55	35	25	14
0.48							58	37	26	14
0.49							60	38	27	15

0.50 to 0.99 USGPM

Flow Rate	40285-05	40285-06	40285-08	40285-10	40285-125	40285-15
	0.5	0.6	0.8	1.0	1.3	1.5
0.50	40	28	16			
0.51	42	29	16			
0.52	43	30	17			
0.53	45	31	18			
0.54	47	32	18			
0.55	48	34	19			
0.56	50	35	20			
0.57	52	36	20			
0.58	54	37	21			
0.59	56	39	22			
0.60	58	40	23			
0.61	60	41	23	15		
0.62		43	24	15		
0.63		44	25	16	10	
0.64		46	26	16	10	
0.65		47	26	17	11	
0.66		48	27	17	11	
0.67		50	28	18	11	
0.68		51	29	18	12	
0.69		53	30	19	12	
0.70		54	31	20	13	
0.71		56	32	20	13	
0.72		58	32	21	13	
0.73		59	33	21	14	
0.74			34	22	14	
0.75			35	23	14	10
0.76			36	23	15	10
0.77			37	24	15	11
0.78			38	24	16	11
0.79			39	25	16	11
0.80			40	26	16	11
0.81			41	26	17	12
0.82			42	27	17	12
0.83			43	28	18	12
0.84			44	28	18	13
0.85			45	29	18	13
0.86			46	30	19	13
0.87			47	30	19	13
0.88			48	31	20	14
0.89			50	32	20	14
0.90			51	32	21	14
0.91			52	33	21	15
0.92			53	34	22	15
0.93			54	35	22	15
0.94			55	35	23	16
0.95			56	36	23	16
0.96			58	37	24	16
0.97			59	38	24	17
0.98			60	38	25	17
0.99				39	25	17

0.99 to 3.00 USGPM

Flow Rate	40285-10	40285-125	40285-15	40285-20	40285-25	Part No.
	1.0	1.3	1.5	2.0	2.5	
1.00	40	26	18	10		
1.05	44	28	20	11		
1.10	48	31	22	12		
1.15	53	34	24	13		
1.20	58	37	26	14		
1.25		40	28	16	10	
1.30		43	30	17	11	
1.35		47	32	18	12	
1.40		50	35	20	13	
1.45		54	37	21	13	
1.50		58	40	23	14	
1.55			43	24	15	
1.60			46	26	16	
1.65			48	27	17	
1.70			51	29	18	
1.75			54	31	20	
1.80			58	32	21	
1.85				34	22	
1.90				36	23	
1.95				38	24	
2.00				40	26	
2.05				42	27	
2.10				44	28	
2.15				46	30	
2.20				48	31	
2.25				51	32	
2.30				53	34	
2.35				55	35	
2.40				58	37	
2.45				60	38	
2.50					40	
2.55					42	
2.60					43	
2.65					45	
2.70					47	
2.75					48	
2.80					50	
2.85					52	
2.90					54	
2.95					56	
3.00					58	