

1800 PCS Performance

Flow (gpm) m <sup>3</sup> /h (l/m)	PCS-020 (Brown) 0.2 0.05 (60)		PCS-025 (Pink) 0.25 0.06 (72)		PCS-030 (Silver) 0.3 0.07 (84)		PCS-040 (Orange) 0.4 0.09 (108)		PCS-060 (Black) 0.6 0.14 (144)	
	feet	meters	feet	meters	feet	meters	feet	meters	feet	meters
Distance										
U-Series										
U-8Q	<b>6</b>	<b>(1.8)</b>	<b>7</b>	<b>(2.1)</b>						
U-8H	<b>4</b>	<b>(1.2)</b>	<b>5</b>	<b>(1.5)</b>						
U-8F					1	(0.3)	3	(0.9)	<b>7</b>	<b>(2.1)</b>
U-10Q	<b>5</b>	<b>(1.5)</b>	<b>6</b>	<b>(1.8)</b>	<b>10'</b>	<b>(3.1)</b>				
U-10H					<b>5</b>	<b>(1.5)</b>	<b>6</b>	<b>(1.8)</b>	<b>8</b>	<b>(2.4)</b>
U-10F									4	(1.2)
U-12Q					<b>7'</b>	<b>(2.1)</b>	<b>12'</b>	<b>(3.7)</b>		
U-12H	2'	(0.6)	4	(1.2)	3'	(0.9)	4'	(1.2)	<b>7'</b>	<b>(2.1)</b>
U-12F							3'	(0.9)	<b>6'</b>	<b>(1.8)</b>
U-15Q					6'	(1.8)	<b>11'</b>	<b>(3.4)</b>	<b>15'</b>	<b>(4.6)</b>
U-15H			3'	(0.9)	2'	(0.6)	3'	(0.9)	5'	(1.5)
U-15F									4'	(1.2)
VAN										
4 (90°)	1'	(0.3)			<b>3'</b>	<b>(0.9)</b>	<b>4'</b>	<b>(1.2)</b>		
4 (180°)			1'	(0.3)	<b>2'</b>	<b>(0.6)</b>	<b>3'</b>	<b>(0.9)</b>	<b>4'</b>	<b>(1.2)</b>
4 (270°)					1'	(0.3)	<b>2'</b>	<b>(0.6)</b>	<b>4'</b>	<b>(1.2)</b>
4 (330°)					1'	(0.3)	<b>2'</b>	<b>(0.6)</b>	<b>4'</b>	<b>(1.2)</b>
6 (90°)			2'	(0.6)	<b>3'</b>	<b>(0.9)</b>	<b>6'</b>	<b>(1.8)</b>		
6 (180°)					2'	(0.6)	<b>4'</b>	<b>(1.2)</b>	<b>6'</b>	<b>(1.8)</b>
6 (270°)					0.5'	(0.2)	1'	(0.3)	<b>3'</b>	<b>(0.9)</b>
6 (330°)					0.5'	(0.2)	1'	(0.3)	<b>3'</b>	<b>(0.9)</b>
8 (90°)					1'	(0.3)	3'	(0.9)	<b>8'</b>	<b>(2.4)</b>
8 (180°)					0.5'	(0.2)	2'	(0.6)	<b>4'</b>	<b>(1.2)</b>
8 (270°)							0.5'	(0.2)	3'	(0.9)
8 (330°)							0.5'	(0.2)	3'	(0.9)
10 (90°)					3'	(0.9)	<b>5'</b>	<b>(1.5)</b>	<b>10'</b>	<b>(3.1)</b>
10 (180°)							1'	(0.3)	<b>5'</b>	<b>(1.5)</b>
10 (270°)							1'	(0.3)	<b>4'</b>	<b>(1.2)</b>
10 (360°)					0.5'	(0.2)	1'	(0.3)	4'	(1.2)
12 (90°)	3'	(0.9)			<b>8'</b>	<b>(2.4)</b>	<b>10'</b>	<b>(3.1)</b>	<b>12'</b>	<b>(3.7)</b>
12 (180°)					1'	(0.3)	2'	(0.6)	5'	(1.5)
12 (270°)					0.5'	(0.2)	1'	(0.3)	3'	(0.9)
12 (360°)							1'	(0.3)	3'	(0.9)
15 (90°)					2'	(0.6)	5'	(1.5)	<b>11'</b>	<b>(3.4)</b>
15 (180°)					1'	(0.3)	3'	(0.9)	6'	(1.8)
15 (270°)										
15 (360°)										
18 (90°)					0.5'	(0.2)	2'	(0.6)	6'	(1.8)
18 (180°)							1'	(0.3)	3'	(0.9)
18 (270°)							0.5'	(0.2)	1'	(0.3)
18 (330°)							0.5'	(0.2)	1'	(0.3)
MPR										
5Q										
5T										
5H	<b>5'</b>	<b>(1.5)</b>	<b>6'</b>	<b>(1.8)</b>						
5F					<b>5'</b>	<b>(1.5)</b>				
8Q	<b>8'</b>	<b>(2.4)</b>	<b>10'</b>	<b>(3.1)</b>						
8T	<b>6'</b>	<b>(1.8)</b>	<b>6.5'</b>	<b>(2.0)</b>	<b>7'</b>	<b>(2.1)</b>	<b>8'</b>	<b>(2.4)</b>		
8H	<b>5'</b>	<b>(1.5)</b>	<b>6'</b>	<b>(1.8)</b>	<b>7'</b>	<b>(2.1)</b>	<b>8'</b>	<b>(2.4)</b>		
8F					2'	(0.6)	3'	(0.9)	<b>8'</b>	<b>(2.4)</b>
10Q	<b>6'</b>	<b>(1.8)</b>	<b>8'</b>	<b>(2.4)</b>	<b>8'</b>	<b>(2.4)</b>	<b>10'</b>	<b>(3.1)</b>		
10T	4'	(1.2)	<b>5'</b>	<b>(1.5)</b>	<b>9'</b>	<b>(2.7)</b>	<b>10'</b>	<b>(3.1)</b>		
10H	3'	(0.9)	4'	(1.2)	<b>6'</b>	<b>(1.8)</b>	<b>8'</b>	<b>(2.4)</b>	<b>10'</b>	<b>(3.1)</b>
10F							1'	(0.3)	4'	(1.2)
12Q	3'	(0.9)	<b>7'</b>	<b>(2.1)</b>	<b>8'</b>	<b>(2.4)</b>	<b>11'</b>	<b>(3.4)</b>	<b>12'</b>	<b>(3.7)</b>
12T	2'	(0.6)	4'	(1.2)	<b>6'</b>	<b>(1.8)</b>	<b>10'</b>	<b>(3.1)</b>	<b>11'</b>	<b>(3.4)</b>
12H					4'	(1.2)	<b>6'</b>	<b>(1.8)</b>	<b>10'</b>	<b>(3.1)</b>
12TT					2'	(0.6)	4'	(1.2)	<b>6'</b>	<b>(1.8)</b>
12TQ					2'	(0.6)	3'	(0.9)	<b>6'</b>	<b>(1.8)</b>
12F							2'	(0.6)	5'	(1.5)
15Q	3'	(0.9)	4'	(1.2)	5'	(1.5)	<b>9'</b>	<b>(2.7)</b>	<b>12'</b>	<b>(3.7)</b>
15T			2'	(0.6)	5'	(1.5)	7'	(2.1)	<b>12'</b>	<b>(3.7)</b>
15H					3'	(0.9)	4'	(1.2)	7'	(2.1)
15TT					1'	(0.3)	2'	(0.6)	4'	(1.2)
15TQ										
15F										
Bubbler										
5Q-B	2'	(0.6)	<b>3</b>	<b>(0.9)</b>	<b>4'</b>	<b>(1.2)</b>	<b>5'</b>	<b>(1.5)</b>		
5H-B					1'	(0.3)	2'	(0.6)	<b>5'</b>	<b>(1.5)</b>
5F-B							1'	(0.3)	2'	(0.6)
5CST-B	1'	(0.3)	2	(0.6)	<b>3'</b>	<b>(0.9)</b>	<b>5'</b>	<b>(1.5)</b>		
9SST										
15CST							<b>4' x 12'</b>	<b>(1.2 x 3.7)</b>	<b>4' x 24'</b>	<b>(1.2 x 7.3)</b>
15SST							<b>2' x 10'</b>	<b>(0.6 x 3.1)</b>	<b>3' x 20'</b>	<b>(0.9 x 6.1)</b>
15EST							<b>4' x 15'</b>	<b>(1.2 x 4.6)</b>		
15LCS	1' x 5'	(0.3 x 1.5)	1' x 7'	(0.3 x 2.1)	<b>1' x 12'</b>	<b>(0.3 x 3.7)</b>				
15RCS	1' x 5'	(0.3 x 1.5)	1' x 7'	(0.3 x 2.1)	<b>1' x 12'</b>	<b>(0.3 x 3.7)</b>				





**Bold green type indicates recommended nozzle/screen combination to achieve catalog performance at 30 psi (2.1 bar)**





**Bold blue type indicates satisfactory nozzle/screen combination**





Black type indicates a nozzle/screen combination that provides a throw reduction of more than 50%. With these nozzle/screen combinations a uniform spray pattern is not assured and a bubbler effect may result.





**Note:** Screens were tested at 50 psi (3.5 bar) for 10 minutes prior to taking distance measurements. Distances may vary slightly with higher pressures and longer run-times

**Note:** Refer to catalog notation for proper nozzle selection

8 Series HE-VAN					
24° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
	15	5	0.83	3.19	3.68
	20	6	0.96	2.56	2.95
	25	7	1.07	2.10	2.42
	30	8	1.17	1.76	2.03
	15	5	0.62	3.19	3.68
	20	6	0.72	2.56	2.95
	25	7	0.80	2.10	2.42
	30	8	0.88	1.76	2.03
	15	5	0.41	3.19	3.68
	20	6	0.48	2.56	2.95
	25	7	0.53	2.10	2.42
	30	8	0.59	1.76	2.03
	15	5	0.21	3.19	3.68
	20	6	0.24	2.56	2.95
	25	7	0.27	2.10	2.42
	30	8	0.29	1.76	2.03

8 Series HE-VAN						METRIC	
24° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h	
	1.03	1.52	0.19	3.14	82	95	
	1.38	1.83	0.22	3.62	66	76	
	1.72	2.13	0.25	4.05	54	62	
	2.07	2.44	0.27	4.43	45	52	
	1.03	1.52	0.14	2.35	82	95	
	1.38	1.83	0.16	2.72	66	76	
	1.72	2.13	0.18	3.04	54	62	
	2.07	2.44	0.20	3.33	45	52	
	1.03	1.52	0.10	1.57	82	95	
	1.38	1.83	0.11	1.81	66	76	
	1.72	2.13	0.12	2.02	54	62	
	2.07	2.44	0.13	2.22	45	52	
	1.03	1.52	0.05	0.78	82	95	
	1.38	1.83	0.05	0.91	66	76	
	1.72	2.13	0.06	1.01	54	62	
	2.07	2.44	0.07	1.11	45	52	

10 Series HE-VAN					
27° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
	15	7	1.26	2.48	2.86
	20	8	1.46	2.19	2.53
	25	9	1.63	1.94	2.24
	30	10	1.78	1.72	1.98
	15	7	0.95	2.48	2.86
	20	8	1.09	2.19	2.53
	25	9	1.22	1.94	2.24
	30	10	1.34	1.72	1.98
	15	7	0.63	2.48	2.86
	20	8	0.73	2.19	2.53
	25	9	0.81	1.94	2.24
	30	10	0.89	1.72	1.98
	15	7	0.32	2.48	2.86
	20	8	0.36	2.19	2.53
	25	9	0.41	1.94	2.24
	30	10	0.45	1.72	1.98





10 Series HE-VAN						METRIC	
27° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h	
	1.03	2.13	0.29	4.78	64	74	
	1.38	2.44	0.34	5.52	56	65	
	1.72	2.74	0.37	6.17	50	57	
	2.07	3.05	0.41	6.76	44	51	
	1.03	2.13	0.22	3.59	64	74	
	1.38	2.44	0.25	4.14	56	65	
	1.72	2.74	0.28	4.63	50	57	
	2.07	3.05	0.31	5.07	44	51	
	1.03	2.13	0.15	2.39	64	74	
	1.38	2.44	0.17	2.76	56	65	
	1.72	2.74	0.19	3.09	50	57	
	2.07	3.05	0.21	3.38	44	51	
	1.03	2.13	0.07	1.20	64	74	
	1.38	2.44	0.08	1.38	56	65	
	1.72	2.74	0.09	1.54	50	57	
	2.07	3.05	0.10	1.69	44	51	





**Note:** Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc

■ Square spacing based on 50% diameter of throw

▲ Triangular spacing based on 50% diameter of throw

Performance data taken in zero wind conditions

12 Series HE-VAN					
23° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
<b>360° Arc</b> 	15	9	1.67	1.99	2.30
	20	10	1.93	1.86	2.15
	25	11	2.16	1.72	1.99
	30	12	2.37	1.58	1.83
<b>270° Arc</b> 	15	9	1.25	1.99	2.30
	20	10	1.45	1.86	2.15
	25	11	1.62	1.72	1.99
	30	12	1.77	1.58	1.83
<b>180° Arc</b> 	15	9	0.84	1.99	2.30
	20	10	0.97	1.86	2.15
	25	11	1.08	1.72	1.99
	30	12	1.18	1.58	1.83
<b>90° Arc</b> 	15	9	0.42	1.99	2.30
	20	10	0.48	1.86	2.15
	25	11	0.54	1.72	1.99
	30	12	0.59	1.58	1.83

12 Series HE-VAN					METRIC	
23° Trajectory						
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
<b>360° Arc</b> 	1.0	2.7	0.38	6.33	50.5	58.3
	1.4	3.0	0.44	7.31	47.3	54.6
	1.7	3.4	0.49	8.18	43.7	50.4
	2.1	3.7	0.54	8.96	40.2	46.4
<b>270° Arc</b> 	1.0	2.7	0.28	4.75	50.5	58.3
	1.4	3.0	0.33	5.48	47.3	54.6
	1.7	3.4	0.37	6.16	43.7	50.4
	2.1	3.7	0.40	6.72	40.2	46.4
<b>180° Arc</b> 	1.0	2.7	0.19	3.17	50.5	58.3
	1.4	3.0	0.22	3.66	47.3	54.6
	1.7	3.4	0.25	4.09	43.7	50.4
	2.1	3.7	0.27	4.48	40.2	46.4
<b>90° Arc</b> 	1.0	2.7	0.09	1.58	50.5	58.3
	1.4	3.0	0.11	1.83	47.3	54.6
	1.7	3.4	0.12	2.04	43.7	50.4
	2.1	3.7	0.13	2.24	40.2	46.4

**Note:** Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc

■ Square spacing based on 50% diameter of throw

▲ Triangular spacing based on 50% diameter of throw





Performance data taken in zero wind conditions







**2011 IRRIGATION SHOW AWARD WINNER**

"Best New Product for Turf / Landscape"



15 Series HE-VAN						
25° Trajectory						
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h	
<b>360° Arc</b> 	15	11	2.62	2.08	2.40	
	20	12	3.02	2.02	2.33	
	25	14	3.38	1.66	1.92	
	30	15	3.70	1.58	1.83	
<b>270° Arc</b> 	15	11	1.96	2.08	2.40	
	20	12	2.27	2.02	2.33	
	25	14	2.53	1.66	1.92	
	30	15	2.78	1.58	1.83	
<b>180° Arc</b> 	15	11	1.31	2.08	2.40	
	20	12	1.51	2.02	2.33	
	25	14	1.69	1.66	1.92	
	30	15	1.85	1.58	1.83	
<b>90° Arc</b> 	15	11	0.65	2.08	2.40	
	20	12	0.76	2.02	2.33	
	25	14	0.84	1.66	1.92	
	30	15	0.93	1.58	1.83	

15 Series HE-VAN							METRIC
25° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h	
<b>360° Arc</b> 	1.0	3.4	0.59	9.91	52.9	61.1	
	1.4	3.7	0.69	11.44	51.3	59.3	
	1.7	4.3	0.77	12.79	42.2	48.7	
	2.1	4.6	0.84	14.01	40.2	46.5	
<b>270° Arc</b> 	1.0	3.4	0.45	7.43	52.9	61.1	
	1.4	3.7	0.51	8.58	51.3	59.3	
	1.7	4.3	0.58	9.59	42.2	48.7	
	2.1	4.6	0.63	10.51	40.2	46.5	
<b>180° Arc</b> 	1.0	3.4	0.30	4.95	52.9	61.1	
	1.4	3.7	0.34	5.72	51.3	59.3	
	1.7	4.3	0.38	6.39	42.2	48.7	
	2.1	4.6	0.42	7.00	40.2	46.5	
<b>90° Arc</b> 	1.0	3.4	0.15	2.48	52.9	61.1	
	1.4	3.7	0.17	2.86	51.3	59.3	
	1.7	4.3	0.19	3.20	42.2	48.7	
	2.1	4.6	0.21	3.50	40.2	46.5	




**Note:** Turning the radius reduction screw may be required to achieve catalog radius and flow when the arc is set at less than maximum arc




■ Square spacing based on 50% diameter of throw




▲ Triangular spacing based on 50% diameter of throw




Performance data taken in zero wind conditions



U8 Series					
10° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
U-8F 	15	5	0.74	2.85	3.29
	20	6	0.86	2.30	2.66
	25	7	0.96	1.89	2.18
	30	8	1.05	1.58	1.83
U8H 	15	5	0.37	2.85	3.29
	20	6	0.42	2.25	2.59
	25	7	0.47	1.85	2.13
	30	8	0.52	1.58	1.83
U8Q 	15	5	0.18	2.77	3.20
	20	6	0.21	2.25	2.59
	25	7	0.24	1.89	2.18
	30	8	0.26	1.58	1.83




U8 Series						METRIC	
10° Trajectory						■	▲
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h	
U-8F 	1.0	1.7	0.16	2.8	72	84	
	1.5	2.1	0.20	3.4	58	68	
	2.0	2.4	0.23	3.9	48	55	
	2.1	2.4	0.24	4.0	40	46	
U-8H 	1.0	1.7	0.08	1.4	72	84	
	1.5	2.1	0.10	1.7	57	66	
	2.0	2.4	0.12	1.9	47	54	
	2.1	2.4	0.12	2.0	40	46	
U-8Q 	1.0	1.7	0.04	0.7	70	81	
	1.5	2.1	0.05	0.8	57	66	
	2.0	2.4	0.06	1.0	48	55	
	2.1	2.4	0.06	1.0	40	46	




U10 Series					
12° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
U-10F 	15	7	1.16	2.07	2.39
	20	8	1.34	2.01	2.32
	25	9	1.50	1.62	1.87
	30	10	1.64	1.58	1.83
U-10H 	15	7	0.58	2.07	2.39
	20	8	0.67	2.01	2.32
	25	9	0.75	1.62	1.87
	30	10	0.82	1.58	1.83
U-10Q 	15	7	0.29	2.07	2.39
	20	8	0.33	2.01	2.32
	25	9	0.37	1.62	1.87
	30	10	0.41	1.58	1.83




U10 Series						METRIC	
12° Trajectory						■	▲
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	Precip mm/h	Precip mm/h	
U-10F 	1.0	2.1	0.26	4.4	52	60	
	1.5	2.6	0.30	5.3	47	55	
	2.0	3.0	0.34	6.1	41	48	
	2.1	3.1	0.37	6.2	40	46	
U-10H 	1.0	2.1	0.13	2.2	52	60	
	1.5	2.6	0.15	2.6	47	55	
	2.0	3.0	0.17	3.1	41	48	
	2.1	3.1	0.19	3.1	40	46	
U-10Q 	1.0	2.1	0.07	1.1	52	60	
	1.5	2.6	0.08	1.3	47	55	
	2.0	3.0	0.08	1.5	41	48	
	2.1	3.1	0.09	1.6	40	46	




**Note:** All U-Series nozzles tested on 4" (10.2 cm) pop-ups  
 ■ Square spacing based on 50% diameter of throw  
 ▲ Triangular spacing based on 50% diameter of throw

Performance data taken in zero wind conditions  
 Radius refers to recommended product spacing. Actual radii along arc may vary

U12 Series					
23° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
 U-12F	15	9	1.80	2.14	2.47
	20	10	2.10	2.02	2.34
	25	11	2.40	1.91	2.21
	30	12	2.60	1.74	2.01
 U-12H	15	9	0.90	2.14	2.47
	20	10	1.05	2.02	2.34
	25	11	1.20	1.91	2.21
	30	12	1.30	1.74	2.01
 U-12Q	15	9	0.45	2.14	2.47
	20	10	0.53	2.02	2.34
	25	11	0.60	1.91	2.21
	30	12	0.65	1.74	2.01

U12 Series						METRIC	
23° Trajectory						■	▲
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h	
 U-12F	1.0	2.7	0.40	6.8	55	63	
	1.5	3.2	0.48	8.3	47	54	
	2.0	3.6	0.59	9.7	46	53	
	2.1	3.7	0.60	9.8	44	51	
 U-12H	1.0	2.7	0.20	3.4	55	63	
	1.5	3.2	0.24	4.2	47	54	
	2.0	3.6	0.30	4.8	46	53	
	2.1	3.7	0.30	4.9	44	51	
 U-12Q	1.0	2.7	0.10	1.7	55	63	
	1.5	3.2	0.12	2.1	47	54	
	2.0	3.6	0.15	2.4	46	53	
	2.1	3.7	0.15	2.5	44	51	

U15 Series					
23° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
 U-15F	15	11	2.60	2.07	2.39
	20	12	3.00	2.01	2.32
	25	14	3.30	1.62	1.87
	30	15	3.70	1.58	1.83
 U-15H	15	11	1.30	2.07	2.39
	20	12	1.50	2.01	2.32
	25	14	1.65	1.62	1.87
	30	15	1.85	1.58	1.83
 U-15Q	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.82	1.62	1.87
	30	15	0.92	1.58	1.83

U15 Series						METRIC	
23° Trajectory						■	▲
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h	
 U-15F	1.0	3.4	0.60	9.8	52	60	
	1.5	3.9	0.72	11.8	47	55	
	2.0	4.5	0.84	13.7	41	48	
	2.1	4.6	0.84	14.0	40	46	
 U-15H	1.0	3.4	0.30	4.9	52	60	
	1.5	3.9	0.36	5.9	47	55	
	2.0	4.5	0.42	6.9	41	48	
	2.1	4.6	0.42	7.0	40	46	
 U-15Q	1.0	3.4	0.15	2.5	52	60	
	1.5	3.9	0.18	2.9	47	55	
	2.0	4.5	0.21	3.4	41	48	
	2.1	4.6	0.21	3.5	40	46	

Note: All U-Series nozzles tested on 4" (10.2 cm) pop-ups

■ Square spacing based on 50% diameter of throw

▲ Triangular spacing based on 50% diameter of throw

Performance data taken in zero wind conditions

Radius refers to recommended product spacing. Actual radii along arc may vary

## VAN Series Nozzles

Variable Arc Nozzles

### Features

- A simple twist of the center collar with no special tools increases or decreases the arc setting making it ideal for watering odd shaped areas
- Quickly identify radius with Top Color-coded™ nozzles even when system is not operating
- 12, 15, and 18-VAN have matched precipitation rates with Rain Bird MPR Nozzles
- Three year trade warranty

### Operating Range

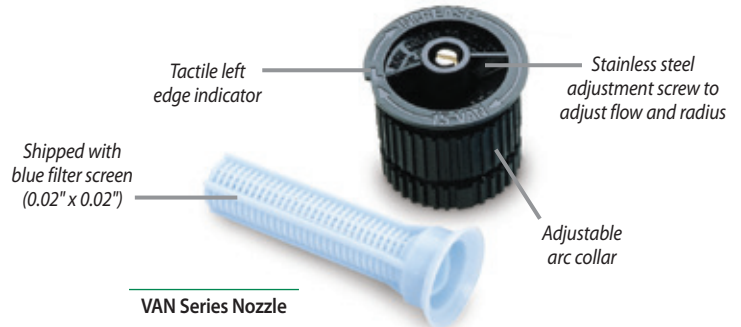
- Spacing: 3 to 18 feet (0.9 m to 5.5 m)<sup>1</sup>
- Pressure: 15 to 30 psi (1.0 to 2.1 bar)
- Optimum pressure: 30 psi (2.1 bar)<sup>2</sup>

### Models

- 4-VAN Series: 3 to 4 feet (0.9 to 1.2 m)
- 6-VAN Series: 4 to 6 feet (1.2 to 1.8 m)
- 8-VAN Series: 6 to 8 feet (1.8 to 2.4 m)
- 10-VAN Series: 7 to 10 feet (2.1 to 3.1 m)
- 12-VAN Series: 9 to 12 feet (2.7 to 3.7 m)
- 15-VAN Series: 11 to 15 feet (3.4 to 4.6 m)
- 18-VAN Series: 14 to 18 feet (4.3 to 5.5 m)

<sup>1</sup> These ranges are based on proper pressure at nozzle.

<sup>2</sup> Rain Bird recommends using 1800 PRS Spray Bodies to maintain optimum nozzle performance in higher pressure situations.



VAN Series Nozzle



For Optimum Performance,  
Use Rain Bird 1800-SAM-PRS  
30 PSI Regulated or  
RD1800-SAM-PRS 30 PSI  
Regulated Spray Bodies



### How to Specify





#### 8 VAN

##### Radius Range

- 4: 3-4 feet (0.9-1.2 m)
- 6: 4-6 feet (1.2-1.8 m)
- 8: 6-8 feet (1.8-2.4 m)
- 10: 7-10 feet (2.1-3.0 m)
- 12: 9-12 feet (2.7-3.7 m)
- 15: 11-15 feet (3.4-4.6 m)
- 18: 14-18 feet (4.3-5.5 m)

##### Nozzle Type





VAN: Variable Arc Nozzle

4 Series VAN					
0° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	Precip In/h	Precip In/h
	15	3	0.62	7.23	8.35
	20	3	0.70	8.17	9.43
	25	4	0.80	5.25	6.06
	30	4	0.88	5.78	6.67
	15	3	0.52	7.42	8.57
	20	3	0.58	8.27	9.55
	25	4	0.66	5.29	6.11
	30	4	0.73	5.86	6.77
	15	3	0.32	6.84	7.90
	20	3	0.37	7.91	9.13
	25	4	0.41	4.93	5.69
	30	4	0.45	5.41	6.25
	15	3	0.21	8.98	10.37
	20	3	0.24	10.27	11.86
	25	4	0.26	6.26	7.23
	30	4	0.29	6.98	8.06

Note: All VAN nozzles tested on 4" (10.2 cm) pop-ups

■ Square spacing based on 50% diameter of throw

▲ Triangular spacing based on 50% diameter of throw





4 Series VAN						METRIC	
0° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h	
	1.0	0.9	0.14	2.3	189	218	
	1.5	1.0	0.17	2.8	183	215	
	2.0	1.2	0.20	3.3	152	176	
	2.1	1.2	0.20	3.3	152	176	
	1.0	0.9	0.12	2.0	198	229	
	1.5	1.0	0.14	2.3	187	216	
	2.0	1.2	0.16	2.7	148	171	
	2.1	1.2	0.17	2.8	157	181	
	1.0	0.9	0.07	1.2	173	200	
	1.5	1.0	0.09	1.5	180	208	
	2.0	1.2	0.10	1.7	139	161	
	2.1	1.2	0.10	1.7	139	161	
	1.0	0.9	0.05	0.8	247	285	
	1.5	1.0	0.06	0.9	240	277	
	2.0	1.2	0.06	1.1	167	193	
	2.1	1.2	0.07	1.1	194	224	

Performance data taken in zero wind conditions

Note: Radius reduction over 25% of the normal throw of the nozzle is not recommended

## 6 Series VAN





### 0° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
	15	4	0.85	5.58	6.44
	20	5	0.96	4.03	4.65
	25	5	1.09	4.58	5.29
	30	6	1.20	3.50	4.04
	15	4	0.79	6.34	7.32
	20	5	0.88	4.52	5.22
	25	5	1.00	5.13	5.92
	30	6	1.10	3.92	4.53
	15	4	0.42	5.05	5.83
	20	5	0.49	3.77	4.35
	25	5	0.55	4.24	4.90
	30	6	0.60	3.21	3.71
	15	4	0.26	6.26	7.23
	20	5	0.30	4.62	5.33
	25	5	0.34	5.24	6.05
	30	6	0.37	3.96	4.57

## 6 Series VAN





### METRIC

### 0° Trajectory

Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
	1.0	1.2	0.19	3.2	144	166
	1.5	1.5	0.23	3.8	112	129
	2.0	1.8	0.27	4.5	91	105
	2.1	1.8	0.27	4.5	91	105
	1.0	1.2	0.18	3.0	167	193
	1.5	1.5	0.21	3.5	124	143
	2.0	1.8	0.24	4.1	99	114
	2.1	1.8	0.25	4.2	103	119
	1.0	1.2	0.10	1.6	139	161
	1.5	1.5	0.11	1.9	98	113
	2.0	1.8	0.13	2.2	80	92
	2.1	1.8	0.14	2.3	86	99
	1.0	1.2	0.06	1.0	167	193
	1.5	1.5	0.07	1.2	124	143
	2.0	1.8	0.08	1.4	99	114
	2.1	1.8	0.08	1.4	99	114

## 8 Series VAN





### 5° Trajectory

Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
	15	6	1.21	3.53	4.07
	20	7	1.36	2.91	3.36
	25	7	1.55	3.32	3.83
	30	8	1.70	2.79	3.22
	15	6	1.11	3.95	4.55
	20	7	1.24	3.24	3.74
	25	7	1.41	3.69	4.25
	30	8	1.55	3.10	3.58
	15	6	0.84	4.49	5.18
	20	7	0.97	3.81	4.40
	25	7	1.09	4.28	4.94
	30	8	1.19	3.58	4.13
	15	6	0.51	5.46	6.29
	20	7	0.59	4.64	5.35
	25	7	0.66	5.19	5.98
	30	8	0.72	4.33	5.00

## 8 Series VAN

### METRIC

### 5° Trajectory

Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
	1.0	1.8	0.27	4.6	91	105
	1.5	2.1	0.32	5.4	79	91
	2.0	2.3	0.38	6.3	78	90
	2.1	2.4	0.39	6.4	74	86
	1.0	1.8	0.25	4.2	103	119
	1.5	2.1	0.30	4.9	91	105
	2.0	2.3	0.34	5.8	86	99
	2.1	2.4	0.35	5.9	81	94
	1.0	1.8	0.19	3.2	117	135
	1.5	2.1	0.23	3.8	104	120
	2.0	2.3	0.26	4.4	98	113
	2.1	2.4	0.27	4.5	94	109
	1.0	1.8	0.12	1.9	148	171
	1.5	2.1	0.14	2.3	127	147
	2.0	2.3	0.16	2.7	121	140
	2.1	2.4	0.16	2.7	111	128

**Note:** All VAN nozzles tested on 4" (10.2 cm) pop-ups  
 ■ Square spacing based on 50% diameter of throw  
 ▲ Triangular spacing based on 50% diameter of throw

Performance data taken in zero wind conditions  
**Note:** Radius reduction over 25% of the normal throw of the nozzle is not recommended





## Did you know?





**You can use HE-VAN nozzles to have better coverage and save water vs. VAN nozzles.**





- Stronger streams and larger water droplets for increased wind resistance.
- Superior close-in watering and edges provide better coverage.
- Shortened run times saves up to 35% in water









10 Series VAN					
10° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc 	15	7	1.93	3.80	4.39
	20	8	2.32	3.50	4.04
	25	9	2.52	3.00	3.46
	30	10	2.60	2.50	2.89
270° Arc 	15	7	1.45	3.80	4.39
	20	8	1.75	3.50	4.04
	25	9	1.89	3.00	3.46
	30	10	2.10	2.70	3.12
180° Arc 	15	7	0.97	3.80	4.39
	20	8	1.20	3.50	4.04
	25	9	1.26	3.00	3.46
	30	10	1.45	2.80	3.23
90° Arc 	15	7	0.48	3.80	4.39
	20	8	0.58	3.50	4.04
	25	9	0.63	3.00	3.46
	30	10	0.75	2.90	3.35

10 Series VAN						METRIC	
10° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h	
360° Arc 	1.0	2.1	0.44	7.3	96	111	
	1.5	2.4	0.53	9.0	89	103	
	2.0	2.7	0.57	9.8	76	88	
	2.1	3.1	0.59	9.8	63	73	
	2.1	3.1	0.59	9.8	63	73	
270° Arc 	1.0	2.1	0.33	5.5	96	111	
	1.5	2.4	0.4	6.8	89	103	
	2.0	2.7	0.43	7.8	76	88	
	2.1	3.1	0.48	7.9	68	79	
	2.1	3.1	0.48	7.9	68	79	
180° Arc 	1.0	2.1	0.22	3.7	96	111	
	1.5	2.4	0.27	4.6	89	103	
	2.0	2.7	0.29	5.3	76	88	
	2.1	3.1	0.33	5.5	71	82	
	2.1	3.1	0.33	5.5	71	82	
90° Arc 	1.0	2.1	0.11	1.8	96	111	
	1.5	2.4	0.13	2.3	89	103	
	2.0	2.7	0.14	2.7	76	88	
	2.1	3.1	0.17	2.8	73	85	
	2.1	3.1	0.17	2.8	73	85	

12 Series VAN					
15° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
360° Arc 	15	9	1.56	1.86	2.14
	20	10	1.86	1.79	2.06
	25	11	2.12	1.68	1.95
	30	12	2.36	1.58	1.82
270° Arc 	15	9	1.17	1.86	2.14
	20	10	1.39	1.79	2.06
	25	11	1.59	1.68	1.94
	30	12	1.77	1.58	1.82
180° Arc 	15	9	0.78	1.86	2.14
	20	10	0.93	1.79	2.06
	25	11	1.06	1.68	1.95
	30	12	1.18	1.58	1.82
90° Arc 	15	9	0.39	1.86	2.14
	20	10	0.46	1.79	2.06
	25	11	0.53	1.68	1.95
	30	12	0.59	1.58	1.82

12 Series VAN						METRIC	
15° Trajectory							
Nozzle	Pressure bar	Radius m	Flow m³/h	Flow l/m	■ Precip mm/h	▲ Precip mm/h	
360° Arc 	1.0	2.7	0.35	5.80	48	55	
	1.5	3.2	0.44	7.37	43	50	
	2.0	3.6	0.52	8.75	41	47	
	2.1	3.7	0.54	9.02	40	46	
	2.1	3.7	0.54	9.02	40	46	
270° Arc 	1.0	2.7	0.26	4.35	48	55	
	1.5	3.2	0.33	5.53	43	50	
	2.0	3.6	0.39	6.56	41	47	
	2.1	3.7	0.41	6.76	40	46	
	2.1	3.7	0.41	6.76	40	46	
180° Arc 	1.0	2.7	0.17	2.90	48	55	
	1.5	3.2	0.22	3.69	43	50	
	2.0	3.6	0.26	4.37	41	47	
	2.1	3.7	0.27	4.51	40	46	
	2.1	3.7	0.27	4.51	40	46	
90° Arc 	1.0	2.7	0.09	1.45	48	55	
	1.5	3.2	0.11	1.84	43	50	
	2.0	3.6	0.13	2.19	41	47	
	2.1	3.7	0.14	2.25	40	46	
	2.1	3.7	0.14	2.25	40	46	

Note: All VAN nozzles tested on 4" (10.2 cm) pop-ups  
 ■ Square spacing based on 50% diameter of throw  
 ▲ Triangular spacing based on 50% diameter of throw





Performance data taken in zero wind conditions  
 Note: Radius reduction over 25% of the normal throw of the nozzle is not recommended





## Did you know?





You can use HE-VAN nozzles to have better coverage and save water vs. VAN nozzles.





- Stronger streams and larger water droplets for increased wind resistance.
- Superior close-in watering and edges provide better coverage.
- Shortened run times saves up to 35% in water



15 Series VAN					
23° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
 360° Arc	15	11	2.60	2.07	2.39
	20	12	3.00	2.01	2.32
	25	14	3.30	1.62	1.87
	30	15	3.70	1.58	1.83
 270° Arc	15	11	1.95	2.07	2.39
	20	12	2.25	2.01	2.32
	25	14	2.48	1.62	1.87
	30	15	2.78	1.58	1.83
 180° Arc	15	11	1.30	2.07	2.39
	20	12	1.50	2.01	2.32
	25	14	1.65	1.62	1.87
	30	15	1.85	1.58	1.83
 90° Arc	15	11	0.65	2.07	2.39
	20	12	0.75	2.01	2.32
	25	14	0.82	1.62	1.87
	30	15	0.92	1.58	1.83

15 Series VAN						METRIC	
23° Trajectory						■	▲
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h	
 360° Arc	1.0	3.4	0.60	9.8	52	60	
	1.5	3.9	0.72	11.8	47	55	
	2.0	4.5	0.84	13.7	41	48	
	2.1	4.6	0.84	14.0	40	46	
 270° Arc	1.0	3.4	0.45	7.4	52	60	
	1.5	3.9	0.54	8.8	47	55	
	2.0	4.5	0.63	10.3	41	48	
	2.1	4.6	0.63	10.5	40	46	
 180° Arc	1.0	3.4	0.30	4.9	52	60	
	1.5	3.9	0.36	5.9	47	55	
	2.0	4.5	0.42	6.9	41	48	
	2.1	4.6	0.42	7.0	40	46	
 90° Arc	1.0	3.4	0.15	2.5	52	60	
	1.5	3.9	0.18	2.9	47	55	
	2.0	4.5	0.21	3.4	41	48	
	2.1	4.6	0.21	3.5	40	46	

18 Series VAN					
26° Trajectory					
Nozzle	Pressure psi	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
 360° Arc	15	14	4.21	2.07	2.39
	20	15	4.70	2.01	2.32
	25	17	4.86	1.62	1.87
	30	18	5.32	1.58	1.83
 270° Arc	15	14	3.16	2.07	2.39
	20	15	3.52	2.01	2.32
	25	17	3.65	1.62	1.87
	30	18	3.99	1.58	1.83
 180° Arc	15	14	2.11	2.07	2.39
	20	15	2.35	2.01	2.32
	25	17	2.43	1.62	1.87
	30	18	2.66	1.58	1.83
 90° Arc	15	14	1.05	2.07	2.39
	20	15	1.17	2.01	2.32
	25	17	1.22	1.62	1.87
	30	18	1.33	1.58	1.83

18 Series VAN						METRIC	
26° Trajectory						■	▲
Nozzle	Pressure bar	Radius m	Flow m <sup>3</sup> /h	Flow l/m	Precip mm/h	Precip mm/h	
 360° Arc	1.0	4.3	0.96	15.9	52	60	
	1.5	4.8	1.07	18.0	47	55	
	2.0	5.4	1.20	19.8	41	48	
	2.1	5.5	1.21	20.1	40	46	
 270° Arc	1.0	4.3	0.72	12.0	52	60	
	1.5	4.8	0.80	13.5	47	55	
	2.0	5.4	0.90	14.8	41	48	
	2.1	5.5	0.91	15.1	40	46	
 180° Arc	1.0	4.3	0.48	8.0	52	60	
	1.5	4.8	0.54	9.0	47	55	
	2.0	5.4	0.60	9.9	41	48	
	2.1	5.5	0.61	10.1	40	46	
 90° Arc	1.0	4.3	0.24	4.0	52	60	
	1.5	4.8	0.27	4.5	47	55	
	2.0	5.4	0.30	5.0	41	48	
	2.1	5.5	0.30	5.0	40	46	

**Note:** All VAN nozzles tested on 4" (10.2 cm) pop-ups  
 ■ Square spacing based on 50% diameter of throw  
 ▲ Triangular spacing based on 50% diameter of throw

Performance data taken in zero wind conditions  
**Note:** Radius reduction over 25% of the normal throw of the nozzle is not recommended

### Did you know?

**You can use HE-VAN nozzles to have better coverage and save water vs. VAN nozzles.**

- Stronger streams and larger water droplets for increased wind resistance.
- Superior close-in watering and edges provide better coverage.
- Shortened run times saves up to 35% in water

