



## Introduktion i traditionel design og installering af vandingsanlæg

**Hunter®**

Begynd med at tegne en skitse over hus og have med angivelse af terrasser, plæner, træer og bede. Dernæst skal vandingsarealet opdeles i områder, rektangulære eller kvadratiske og så store som muligt.

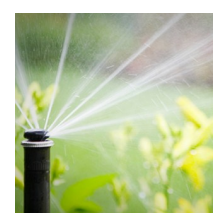
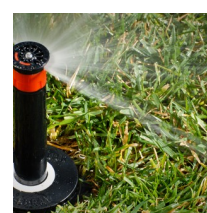
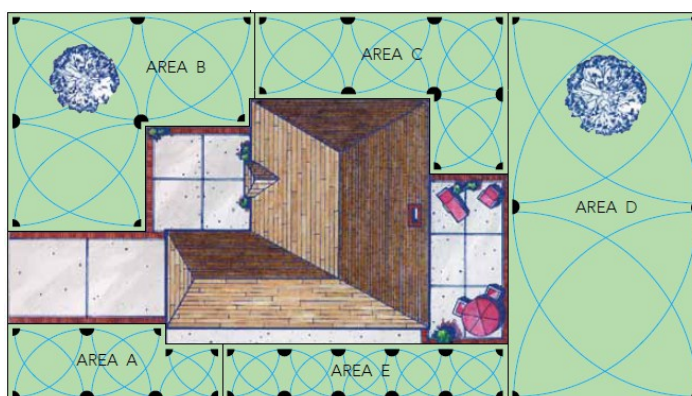
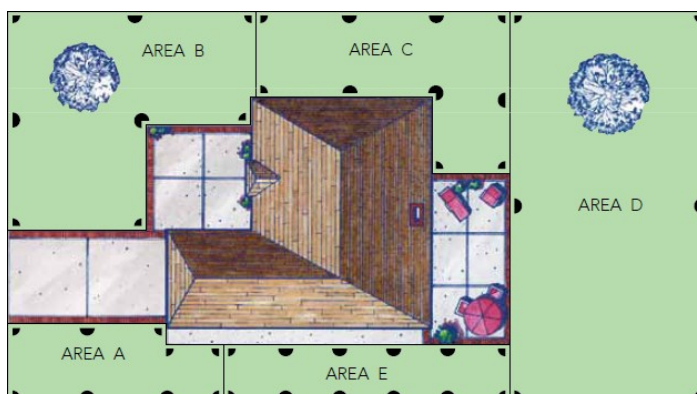
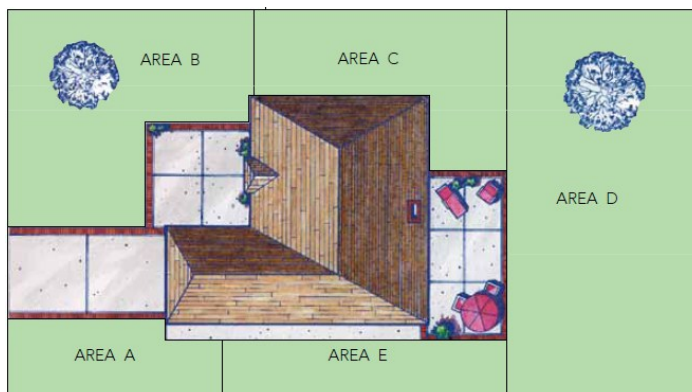
For at designe vandingsanlægget er det nødvendigt at finde ud af, hvor meget vand der er til rådighed og ved hvilket tryk. ( l/min. ved x bar).

Der er 3 grundtyper af sprinklere til brug for havevanding. Rotorsprinklere til større arealer, roterende strålesprinklere og spraysprinklere til små arealer.

De 3 forskellige typer må ikke installeres i samme zone pga. forskellige krav til tryk og vandmængde. Derfor skal havearealet opdeles i forskellige zoner. Det er vigtigt at vandmængde, tryk og sprinkler passer sammen. Hvis det ikke er tilfældet går det ud over sprinklerens ydeevne, dvs. den kaster ikke vandet så langt, som den skal og vandfordelingen bliver ujævn, så vandingen bliver uens med risiko for tørre pletter.

Der skal også tages højde for at f.eks. halvcirkel og fuldcirkel sprinklere bruger forskellig vandmængde og derfor skal have forskellige vandingstider. Det stiller krav til hvordan rørene lægges og opdelingen i zoner.

Medmindre haven er meget lille er der sandsynligvis ikke nok vandkapacitet til at vande hele haven på én gang. Også derfor skal de arealer, der skal vandes, deles op i zoner, så man kan vande så meget som der er vand til. Med en styreboks vandes automatisk de valgte zoner efter hinanden.





## Introduktion i design og installering af vandingsanlæg med MP rotator dyser.

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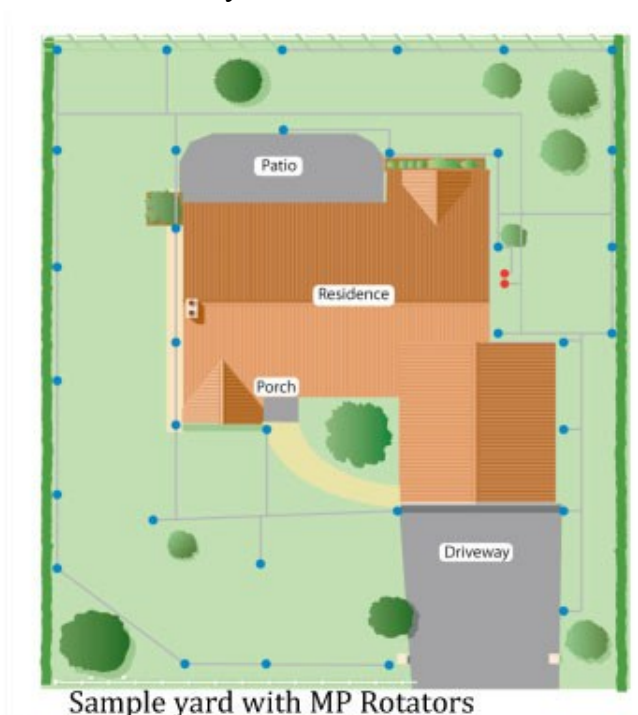
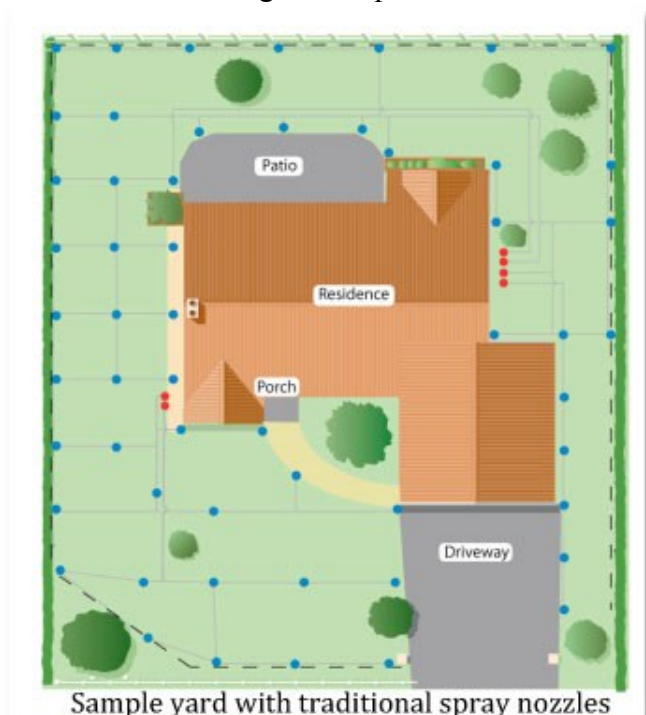
En væsentlig enklere og billigere måde at få et vandingsanlæg til haven er ved at anvende MP rotator dyser. En MP rotator dyse er designet således at nedbørsmængden (10 mm/t) er den samme uanset om dysen vander fuldcirkel, halvcirkel eller som hjørne. Det betyder færre zoner, færre magnetventiler og mindre rør, dvs. et billigere vandingsanlæg.

MP rotator dysen arbejder ved et lavere tryk og har et lavere vandforbrug pr. min. end sædvanlige sprinklere. Begrænsningen ligger i dysens radius, som skal ligge mellem 2,5 og 9,1 m fordelt på 3 dyser.



Eksempel på havevanding med traditionelt design med sprinklere

Eksempel på havevanding med MP rotator dyser








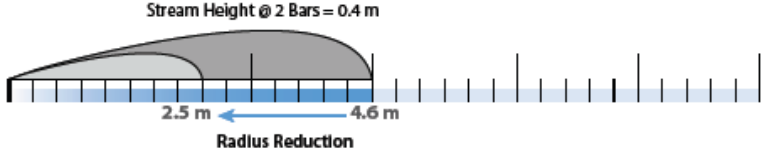



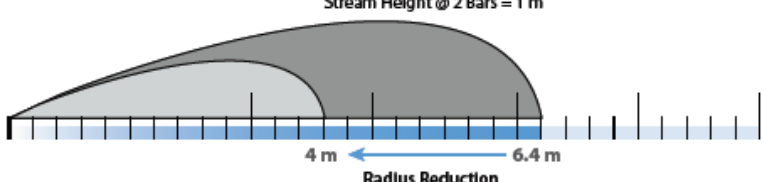



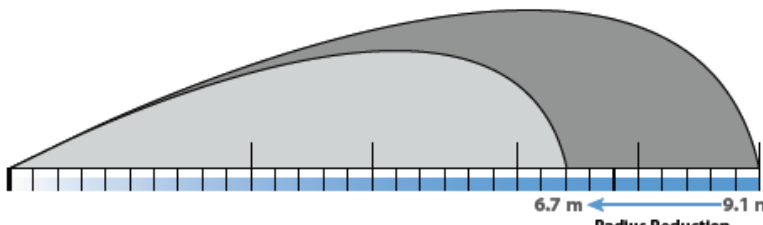



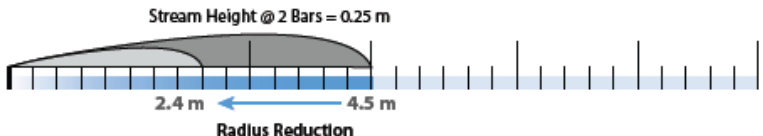

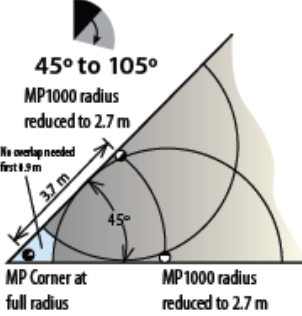
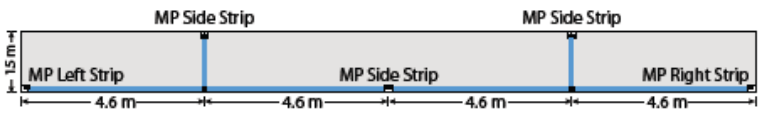



MP Rotator Performance Data – Metric																			
		MP1000 Radius: 2.5 to 4.6 m Adjustable Arc and Full Circle Color Code: Maroon or Olive						MP2000 Radius: 4 to 6.4 m Adjustable Arc and Full Circle Color Code: Black, Green, or Red						MP3000 Radius: 6.7 to 9.1 m Adjustable Arc and Full Circle Color Code: Blue, Yellow, or Gray					
Arc	Pressure Bars kPa	Cobr	Radius m	Flow LPH LPM	Precip mm/hr		Cobr	Radius m	Flow LPH LPM	Precip mm/hr		Cobr	Radius m	Flow LPH LPM	Precip mm/hr				
	1.75	175	---	---	---	---	---	5.2	71	1.18	11	12	7.6	158	2.63	11	13		
	2.00	200	3.7	36	0.61	11	12	5.5	74	1.23	10	11	8.2	166	2.77	10	11		
	2.25	225	3.8	38	0.63	10	12	5.6	80	1.33	10	12	8.4	175	2.92	10	12		
	2.50	250	4.0	41	0.68	10	12	5.8	86	1.43	10	12	8.5	185	3.08	10	12		
	2.75	275	4.1	42	0.70	10	11	6.1	91	1.52	10	11	9.1	195	3.25	9	11		
	3.00	300	4.3	44	0.73	10	11	6.4	94	1.57	9	11	9.1	203	3.38	10	11		
	3.25	325	4.3	45	0.75	10	11	6.6	97	1.62	9	10	9.1	212	3.53	10	12		
	1.75	175	---	---	---	---	---	4.9	133	2.22	11	12	7.6	329	5.48	11	13		
	2.00	200	3.7	72	1.20	11	12	5.2	141	2.35	11	13	8.2	353	5.88	10	12		
	2.25	225	3.8	76	1.27	10	12	5.3	150	2.50	11	13	8.4	373	6.22	11	12		
	2.50	250	4.0	81	1.35	10	12	5.5	160	2.67	11	12	8.5	393	6.55	11	12		
	2.75	275	4.1	84	1.40	10	11	5.8	168	2.80	10	12	9.1	413	6.88	10	11		
	3.00	300	4.3	88	1.46	10	11	6.1	174	2.90	10	11	9.1	431	7.18	10	12		
	3.25	325	4.3	91	1.51	10	11	6.2	182	3.03	9	11	9.1	449	7.48	11	12		
	1.75	175	---	---	---	---	---	4.9	155	2.58	11	12	7.6	384	6.40	11	13		
	2.00	200	3.7	85	1.41	11	13	5.2	165	2.75	11	13	8.2	411	6.85	10	12		
	2.25	225	3.8	89	1.48	10	12	5.3	175	2.92	11	13	8.4	436	7.27	11	12		
	2.50	250	4.0	95	1.58	10	12	5.5	185	3.08	10	12	8.5	459	7.65	11	12		
	2.75	275	4.1	98	1.63	10	11	5.8	195	3.25	10	12	9.1	481	8.02	10	11		
	3.00	300	4.3	102	1.71	10	11	6.1	205	3.42	10	11	9.1	502	8.37	10	12		
	3.25	325	4.3	106	1.76	10	11	6.2	214	3.57	9	11	9.1	523	8.72	11	12		
	1.75	175	---	---	---	---	---	4.9	199	3.32	11	12	7.6	501	8.35	12	13		
	2.00	200	3.7	108	1.80	11	13	5.2	212	3.53	11	13	8.2	530	8.83	10	12		
	2.25	225	3.8	114	1.90	10	12	5.3	225	3.75	11	13	8.4	560	9.33	11	12		
	2.50	250	4.0	123	2.05	10	12	5.5	238	3.97	10	12	8.5	589	9.82	11	12		
	2.75	275	4.1	126	2.10	10	11	5.8	249	4.15	10	12	9.1	619	10.32	10	11		
	3.00	300	4.3	132	2.20	10	11	6.1	261	4.35	10	11	9.1	646	10.77	10	12		
	3.25	325	4.3	135	2.25	10	11	6.2	272	4.53	9	11	9.1	673	11.22	11	12		
	1.75	175	---	---	---	---	---	4.9	282	4.70	9	10	7.6	701	11.68	11	13		
	2.00	200	3.5	144	2.40	12	14	5.2	283	4.72	11	13	8.2	703	11.72	10	12		
	2.25	225	3.8	153	2.55	11	13	5.3	300	5.00	11	13	8.4	745	12.42	11	12		
	2.50	250	4.0	161	2.69	10	12	5.5	317	5.28	10	12	8.5	786	13.10	11	12		
	2.75	275	4.1	169	2.81	10	12	5.8	333	5.55	10	12	9.1	825	13.75	10	11		
	3.00	300	4.3	177	2.94	10	11	6.1	348	5.80	10	11	9.1	862	14.37	10	12		
	3.25	325	4.3	183	3.05	10	11	6.2	362	6.03	9	11	9.1	897	14.95	11	12		

MP Rotator Performance Data – Metric					
		MP Corner Radius: 2.4 to 4.6 m Adjustable Arc Color Code: Turquoise			
Arc	Pressure Bars kPa	Cobr	Radius m	Flow LPH LPM	
	1.75	175	---	---	---
	2.00	200	3.5	36	0.61
	2.25	225	3.8	38	0.63
	2.50	250	4.0	41	0.68
	2.75	275	4.1	42	0.70
	3.00	300	4.3	44	0.73
	3.25	325	4.3	45	0.75
	1.75	175	3.2	69	1.15
	2.00	200	3.5	76	1.27
	2.25	225	3.8	79	1.31
	2.50	250	4.0	84	1.40
	2.75	275	4.1	86	1.44
	3.00	300	4.3	94	1.57
	3.25	325	4.3	98	1.63
	1.75	175	3.2	80	1.34
	2.00	200	3.5	89	1.48
	2.25	225	3.8	92	1.53
	2.50	250	4.0	98	1.63
	2.75	275	4.1	102	1.70
	3.00	300	4.3	110	1.83
	3.25	325	4.3	113	1.88

MP Rotator Performance Data – Metric						
		MPLCS515 MPCRS515 MPSS530				
Nozzle Model	Pressure Bars kPa	Color	Unadjusted Radius LPH	Reduced Radius LPH	Precip Rate mm/hr	
	2.00	200	---	---	---	
	2.25	225	Ivory	43	30	12
	2.50	250		45	33	12
	2.75	275		48	35	12
	3.00	300		50	36	12
	3.25	325		52	38	12
	3.50	350		54	40	12
3.75	375	56		41	12	
	2.00	200	Copper	43	30	12
	2.25	225		45	33	12
	2.50	250		48	35	12
	2.75	275		50	36	12
	3.00	300		52	38	12
	3.25	325		54	40	12
	3.50	350		56	41	12
	2.00	200	Brown	85	60	12
	2.25	225		90	66	12
	2.50	250		95	69	12
	2.75	275		100	73	12
	3.00	300		104	76	12
	3.25	325		108	79	12
	3.50	350		113	83	12



## Maintain Matched Precipitation – Any Model, Any Arc, Any Radius

Adjustable Radius	Adjustable Arc		
<p>All models of the MP Rotator allow for easy radius adjustment of up to 25% while maintaining automatic matched precipitation.</p>	 90° to 210°	 210° to 270°	 360°
<p><b>MP1000</b></p>  <p>Stream Height @ 2 Bars = 0.4 m</p> <p>Radius Reduction: 2.5 m ← 4.6 m</p>	<p>MP1000-90-210</p>  Maroon	<p>MP1000-210-270</p>  Light Blue	<p>MP1000-360</p>  Olive
<p><b>MP2000</b></p>  <p>Stream Height @ 2 Bars = 1 m</p> <p>Radius Reduction: 4 m ← 6.4 m</p>	<p>MP2000-90-210</p>  Black	<p>MP2000-210-270</p>  Green	<p>MP2000-360</p>  Red
<p><b>MP3000</b></p>  <p>Stream Height @ 2.8 Bars = 2 m</p> <p>Radius Reduction: 6.7 m ← 9.1 m</p>	<p>MP3000-90-210</p>  Blue	<p>MP3000-210-270</p>  Yellow	<p>MP3000-360</p>  Gray
<p><b>MP Corner</b></p>  <p>Stream Height @ 2 Bars = 0.25 m</p> <p>Radius Reduction: 2.4 m ← 4.5 m</p> <p>The MP Corner is designed for tight corners that are difficult to irrigate properly with conventional sprinklers. It has an adjustable arc from 45° to 105°, maintains MPR at any arc, any radius and can be placed on the same zone with any other MP Rotator model.</p>	<p>MPCorner</p>  Turquoise	 <p>45° to 105°            MP1000 radius reduced to 2.7 m            No overlap needed first 1.9 m            3.7 m            4.5°            MP Corner at full radius      MP1000 radius reduced to 2.7 m</p>	
<p><b>MP Strip</b></p> <p>Example with triangular spacing.</p>  <p>The three MP Strip models of the MP Rotator family offer an exciting alternative to irrigate strip areas. Strip models offer improved uniformity and excellent wind-fighting ability. The reduced flow rate compared to conventional sprays makes longer runs and/or fewer zones possible.</p>	<p>MPLCS-515 (Left Strip)</p>  Ivory	<p>MPSS-530 (Side Strip)</p>  Brown	<p>MPRCS-515 (Right Strip)</p>  Copper



## Hunter®



## PGJ rotor sprinkler

den lille havesprinkler, kort radius, lavt tryk

PGJ rotoren er Hunters mindste rotorsprinkler - ikke i størrelse, men i krav til radius og tryk.

PGJ er sektor- og fuldcirkel sprinkler i én. Let at indstille vandingsvinklen fra 40°-360°.

Integreret gummidæksel med membran, der holder snavs ude.

Gennemprøvet, holdbart, vandsmurt gear-motor.

Stort filter som forhindrer at dysen tilstopper.

Kontraventil til udligning af niveauforskelle op til 2,1 m kan monteres.

PGJ Nozzle Performance Data – Metric							
Nozzle	Pressure		Radius m	Flow		Precip mm/hr	
	Bar	kPa		m <sup>3</sup> /hr	l/min	■	▲
<b>.75</b>	1.7	170	4.3	0.13	2.2	14	17
	2.0	200	4.6	0.14	2.4	14	16
	<b>2.5</b>	<b>250</b>	<b>4.9</b>	<b>0.16</b>	<b>2.7</b>	<b>13</b>	<b>15</b>
	3.0	300	5.2	0.18	3.0	13	15
	3.5	350	5.2	0.19	3.2	14	17
	3.8	380	5.5	0.20	3.4	13	15
<b>1.0</b>	1.7	170	5.2	0.18	3.0	13	15
	2.0	200	5.5	0.19	3.2	13	15
	<b>2.5</b>	<b>250</b>	<b>5.5</b>	<b>0.21</b>	<b>3.5</b>	<b>14</b>	<b>16</b>
	3.0	300	5.8	0.23	3.8	14	16
	3.5	350	5.8	0.24	4.1	15	17
	3.8	380	6.1	0.25	4.2	14	16
<b>1.5</b>	1.7	170	6.1	0.27	4.5	15	17
	2.0	200	6.4	0.29	4.8	14	16
	<b>2.5</b>	<b>250</b>	<b>6.4</b>	<b>0.32</b>	<b>5.4</b>	<b>16</b>	<b>18</b>
	3.0	300	6.7	0.36	6.0	16	18
	3.5	350	6.7	0.39	6.4	17	20
	3.8	380	7.0	0.40	6.7	16	19
<b>2.0</b>	1.7	170	7.0	0.34	5.6	14	16
	2.0	200	7.3	0.37	6.2	14	16
	<b>2.5</b>	<b>250</b>	<b>7.3</b>	<b>0.42</b>	<b>7.1</b>	<b>16</b>	<b>18</b>
	3.0	300	7.6	0.48	8.0	17	19
	3.5	350	7.6	0.53	8.8	18	21
	3.8	380	7.9	0.56	9.3	18	20
<b>2.5</b>	1.7	170	7.9	0.46	7.6	15	17
	2.0	200	8.2	0.49	8.1	14	17
	<b>2.5</b>	<b>250</b>	<b>8.2</b>	<b>0.54</b>	<b>9.0</b>	<b>16</b>	<b>18</b>
	3.0	300	8.5	0.59	9.8	16	19
	3.5	350	8.5	0.63	10.5	17	20
	3.8	380	8.8	0.65	10.9	17	19
<b>3.0</b>	1.7	170	8.8	0.51	8.5	13	15
	2.0	200	9.1	0.56	9.3	13	15
	<b>2.5</b>	<b>250</b>	<b>9.1</b>	<b>0.64</b>	<b>10.6</b>	<b>15</b>	<b>18</b>
	3.0	300	9.4	0.72	12.0	16	19
	3.5	350	9.4	0.78	13.1	18	20
	3.8	380	9.8	0.82	13.7	17	20
<b>4.0</b>	1.7	170	9.8	0.80	13.3	17	19
	2.0	200	10.1	0.83	13.8	16	19
	<b>2.5</b>	<b>250</b>	<b>10.1</b>	<b>0.89</b>	<b>14.8</b>	<b>18</b>	<b>20</b>
	3.0	300	10.4	0.94	15.7	17	20
	3.5	350	10.4	0.98	16.3	18	21
	3.8	380	10.7	1.00	16.7	18	20
<b>5.0</b>	1.7	170	10.7	1.02	17.0	18	21
	2.0	200	11.0	1.06	17.6	18	20
	<b>2.5</b>	<b>250</b>	<b>11.0</b>	<b>1.11</b>	<b>18.5</b>	<b>18</b>	<b>21</b>
	3.0	300	11.3	1.17	19.4	18	21
	3.5	350	11.3	1.21	20.1	19	22
	3.8	380	11.6	1.23	20.5	18	21

**Note:** All precipitation rates calculated for 180 degree operation. For the precipitation rate for a 360 degree sprinkler, divide by 2. Optimum nozzle performance shown in bold.



### FAKTABOKS

Model:	PGJ-04 pop up (10 cm)
Model:	PGJ-06 pop up (15 cm)
Model:	PGJ-12 pop up (30 cm)
Ydelse:	0,13 - 1,23 m <sup>3</sup> /t
Radius:	4,3 - 11,6 m
Tryk:	1,7 –3,8 bar
Dysevinkel:	14%
Indgang:	1/2" irg.
Byggemål:	18/23/41 cm



## Hunter®



## PGP Ultra rotor sprinkler

havesprinkleren over dem alle

PGP rotoren er Hunters oprindelige sprinkler som blev lanceret for mere end 25 år siden og den er stadig nr. 1. Den er løbende blevet videreudviklet og patenteret. Med de præcisionsproducerede dyser opnås en fantastisk jævn fordeling af vandet.

PGP er sektor- og fuldcirkel sprinkler i én. Let at indstille vandingsvinklen fra 50°-360°.

Integreret gummidæksel med membran, der holder snavs ude.

Hurtig indstilling og tjek af vinkelindstilling.

Nye blå dyser som effektivt udnytter vandet. God fordeling af vandet på hele kastelængden.

Gennemprøvet, holdbart, vandsmurt patenteret gear-motor.

Stort filter som forhindrer at dysen tilstopper.

Kontraventil til udligning af niveauforskelle op til 2,1 m kan monteres.

**PGP Ultra Blue Standard Nozzle**  
Performance Data – Metric (P/N 782900)

Nozzle	Pressure Bar	Pressure kPa	Radius m	Flow m <sup>3</sup> /hr	Flow l/min	Precip mm/hr	
<b>1.5</b>	2.0	200	9.1	0.29	4.8	7	8
	2.5	250	9.4	0.32	5.4	7	8
	3.0	300	9.8	0.35	5.9	7	9
	<b>3.5</b>	<b>350</b>	<b>9.8</b>	<b>0.38</b>	<b>6.4</b>	<b>8</b>	<b>9</b>
	4.0	400	9.8	0.41	6.8	9	10
	4.5	450	9.4	0.43	7.2	10	11
<b>2.0</b>	2.0	200	10.1	0.35	5.8	7	8
	2.5	250	10.1	0.39	6.5	8	9
	3.0	300	10.4	0.43	7.2	8	9
	<b>3.5</b>	<b>350</b>	<b>10.4</b>	<b>0.47</b>	<b>7.8</b>	<b>9</b>	<b>10</b>
	4.0	400	10.4	0.50	8.3	9	11
	4.5	450	10.4	0.53	8.8	10	11
<b>2.5</b>	2.0	200	10.4	0.43	7.1	8	9
	2.5	250	10.7	0.48	8.0	8	10
	3.0	300	10.7	0.54	8.9	9	11
	<b>3.5</b>	<b>350</b>	<b>10.7</b>	<b>0.58</b>	<b>9.7</b>	<b>10</b>	<b>12</b>
	4.0	400	10.7	0.62	10.4	11	13
	4.5	450	10.7	0.66	11.1	12	13
<b>3.0</b>	2.0	200	10.7	0.54	9.1	10	11
	2.5	250	11.0	0.61	10.2	10	12
	3.0	300	11.6	0.68	11.4	10	12
	<b>3.5</b>	<b>350</b>	<b>11.9</b>	<b>0.74</b>	<b>12.3</b>	<b>10</b>	<b>12</b>
	4.0	400	11.9	0.79	13.2	11	13
	4.5	450	11.9	0.84	14.0	12	14
<b>4.0</b>	2.0	200	11.6	0.73	12.2	11	13
	2.5	250	11.9	0.81	13.6	12	13
	3.0	300	12.2	0.90	15.0	12	14
	<b>3.5</b>	<b>350</b>	<b>12.2</b>	<b>0.97</b>	<b>16.2</b>	<b>13</b>	<b>15</b>
	4.0	400	12.5	1.04	17.3	13	15
	4.5	450	12.5	1.10	18.3	14	16
<b>5.0</b>	2.0	200	11.6	0.91	15.2	14	16
	2.5	250	11.9	1.02	17.1	15	17
	3.0	300	12.8	1.14	19.0	14	16
	<b>3.5</b>	<b>350</b>	<b>12.8</b>	<b>1.24</b>	<b>20.6</b>	<b>15</b>	<b>17</b>
	4.0	400	12.8	1.32	22.1	16	19
	4.5	450	12.8	1.41	23.4	17	20
<b>6.0</b>	2.0	200	11.9	1.09	18.2	15	18
	2.5	250	12.2	1.22	20.4	16	19
	3.0	300	13.1	1.36	22.7	16	18
	<b>3.5</b>	<b>350</b>	<b>13.1</b>	<b>1.47</b>	<b>24.5</b>	<b>17</b>	<b>20</b>
	4.0	400	13.4	1.57	26.2	18	20
	4.5	450	13.4	1.67	27.9	19	21
<b>8.0</b>	2.0	200	11.9	1.46	24.3	21	24
	2.5	250	12.5	1.63	27.2	21	24
	3.0	300	13.4	1.81	30.2	20	23
	<b>3.5</b>	<b>350</b>	<b>13.7</b>	<b>1.95</b>	<b>32.6</b>	<b>21</b>	<b>24</b>
	4.0	400	14.0	2.09	34.8	21	25
	4.5	450	14.0	2.22	36.9	23	26



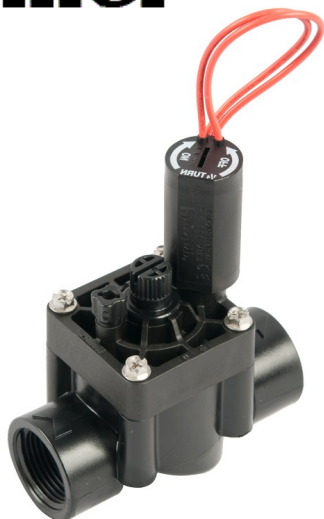
### FAKTABOKS

Model:	PGP-00 Scrub
Model:	PGP-04 pop up (10 cm)
Model:	PGP-12 pop up (30 cm)
Ydelse:	0,07 - 3,23 m <sup>3</sup> /t
Radius:	4,9 -14 m
Tryk:	1,7- 4,5 bar
Dysevinkel:	25°/13°
Indgang:	3/4" irg.
Byggemål:	19/19/43 cm





**Hunter®**



## PGV 101 magnetventil

PGV er velegnet til mindre anlæg og til drypvandingsanlæg med lavt flow

Kan aktiveres manuelt direkte på magnetventilen.

Indkapslet 24VAC spole.

Dobbeltsidet membran.

Udskiftes spolen til DC impulsspole kan magnetventilen anvendes sammen med Hunters batteridrevne styreskabe.

PGV  
tryktab i bar

m <sup>3</sup> /hr	25 mm Globe
0.25	0.10
1	0.10
2.50	0.12
3.50	0.16
4.50	0.22
7	0.44
9	



### FAKTABOKS

Model:	1" (25 mm)
Ydelse:	0,05 - 7 m <sup>3</sup> /t
Tryk:	1,5 - 10 bar





## PRO dyser justerbare

PRO ADJUSTABLE NOZZLES PERFORMANCE DATA																	
Arc	Pressure		● Nozzle 4A Lt. Green 1.2 m radius Adjustable from 0° to 360° Trajectory: 0°					● Nozzle 6A Lt. Blue 1.8 m radius Adjustable from 0° to 360° Trajectory: 0°					● Nozzle 8A Brown 2.4 m radius Adjustable from 0° to 360° Trajectory: 0°				
	Bar	kPa	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr ■ ▲	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr ■ ▲	Radius m	Flow m³/hr	Flow l/min	Precip mm/hr ■ ▲			
45° ▶	1.0	100	0.9	0.02	0.27	162	187	1.5	0.02	0.37	79	91	1.7	0.02	0.37	62	72
	1.5	150	0.9	0.02	0.34	202	234	1.5	0.03	0.46	98	113	2.1	0.03	0.47	51	59
	<b>2.0</b>	<b>200</b>	<b>1.2</b>	<b>0.02</b>	<b>0.40</b>	<b>133</b>	<b>154</b>	<b>1.8</b>	<b>0.03</b>	<b>0.54</b>	<b>80</b>	<b>92</b>	<b>2.4</b>	<b>0.03</b>	<b>0.55</b>	<b>46</b>	<b>53</b>
	2.1	210	1.2	0.02	0.41	137	158	1.8	0.03	0.55	82	95	2.7	0.03	0.56	37	43
	2.5	250	1.2	0.03	0.45	151	174	1.8	0.04	0.61	90	104	2.8	0.04	0.62	38	44
90° ◑	1.0	100	0.9	0.03	0.55	162	187	1.5	0.04	0.74	79	91	1.7	0.04	0.75	62	72
	1.5	150	0.9	0.04	0.68	202	234	1.5	0.06	0.92	98	113	2.1	0.06	0.93	51	59
	<b>2.0</b>	<b>200</b>	<b>1.2</b>	<b>0.05</b>	<b>0.80</b>	<b>133</b>	<b>154</b>	<b>1.8</b>	<b>0.06</b>	<b>1.08</b>	<b>80</b>	<b>92</b>	<b>2.4</b>	<b>0.07</b>	<b>1.09</b>	<b>46</b>	<b>53</b>
	2.1	210	1.2	0.05	0.82	137	158	1.8	0.07	1.11	82	95	2.7	0.07	1.12	37	43
	2.5	250	1.2	0.05	0.9	151	174	1.8	0.07	1.22	90	104	2.8	0.07	1.24	38	44
120° ◐	1.0	100	0.9	0.04	0.73	162	187	1.5	0.06	0.98	79	91	1.7	0.06	1.00	62	72
	1.5	150	0.9	0.05	0.91	202	234	1.5	0.07	1.23	98	113	2.1	0.07	1.24	51	59
	<b>2.0</b>	<b>200</b>	<b>1.2</b>	<b>0.06</b>	<b>1.07</b>	<b>133</b>	<b>154</b>	<b>1.8</b>	<b>0.09</b>	<b>1.44</b>	<b>80</b>	<b>92</b>	<b>2.4</b>	<b>0.09</b>	<b>1.46</b>	<b>46</b>	<b>53</b>
	2.1	210	1.2	0.07	1.10	137	158	1.8	0.09	1.48	82	95	2.7	0.09	1.50	37	43
	2.5	250	1.2	0.07	1.21	151	174	1.8	0.10	1.62	90	104	2.8	0.10	1.65	38	44
180° ◐	1.0	100	0.9	0.07	1.09	162	187	1.5	0.09	1.47	79	91	1.7	0.09	1.49	62	72
	1.5	150	0.9	0.08	1.37	202	234	1.5	0.11	1.84	98	113	2.1	0.11	1.87	51	59
	<b>2.0</b>	<b>200</b>	<b>1.2</b>	<b>0.10</b>	<b>1.60</b>	<b>133</b>	<b>154</b>	<b>1.8</b>	<b>0.13</b>	<b>2.16</b>	<b>80</b>	<b>92</b>	<b>2.4</b>	<b>0.13</b>	<b>2.19</b>	<b>46</b>	<b>53</b>
	2.1	210	1.2	0.10	1.64	137	158	1.8	0.13	2.21	82	95	2.7	0.13	2.25	37	43
	2.5	250	1.2	0.11	1.81	151	174	1.8	0.15	2.44	90	104	2.8	0.15	2.47	38	44
240° ◑	1.0	100	0.9	0.09	1.46	162	187	1.5	0.12	1.96	79	91	1.7	0.12	1.99	62	72
	1.5	150	0.9	0.11	1.82	202	234	1.5	0.15	2.45	98	113	2.1	0.15	2.49	51	59
	<b>2.0</b>	<b>200</b>	<b>1.2</b>	<b>0.13</b>	<b>2.13</b>	<b>133</b>	<b>154</b>	<b>1.8</b>	<b>0.17</b>	<b>2.87</b>	<b>80</b>	<b>92</b>	<b>2.4</b>	<b>0.17</b>	<b>2.92</b>	<b>46</b>	<b>53</b>
	2.1	210	1.2	0.13	2.19	137	158	1.8	0.18	2.95	82	95	2.7	0.18	2.99	37	43
	2.5	250	1.2	0.14	2.41	151	174	1.8	0.19	3.25	90	104	2.8	0.20	3.30	38	44
270° ◑	1.0	100	0.9	0.10	1.64	162	187	1.2	0.13	2.21	123	142	1.7	0.13	2.24	62	72
	1.5	150	0.9	0.12	2.05	202	234	1.5	0.17	2.76	98	113	2.1	0.17	2.8	51	59
	<b>2.0</b>	<b>200</b>	<b>1.2</b>	<b>0.14</b>	<b>2.40</b>	<b>133</b>	<b>154</b>	<b>1.8</b>	<b>0.19</b>	<b>3.23</b>	<b>80</b>	<b>92</b>	<b>2.4</b>	<b>0.20</b>	<b>3.28</b>	<b>46</b>	<b>53</b>
	2.1	210	1.2	0.15	2.47	137	158	1.8	0.2	3.32	82	95	2.7	0.20	3.37	37	43
	2.5	250	1.2	0.16	2.71	151	174	1.8	0.22	3.66	90	104	2.8	0.22	3.71	38	44
360° ●	1.0	100	0.9	0.13	2.19	162	187	1.2	0.18	2.94	123	142	1.7	0.18	2.99	62	72
	1.5	150	0.9	0.16	2.73	202	234	1.5	0.22	3.68	98	113	2.1	0.22	3.73	51	59
	<b>2.0</b>	<b>200</b>	<b>1.2</b>	<b>0.19</b>	<b>3.20</b>	<b>133</b>	<b>154</b>	<b>1.8</b>	<b>0.26</b>	<b>4.31</b>	<b>80</b>	<b>92</b>	<b>2.4</b>	<b>0.26</b>	<b>4.37</b>	<b>46</b>	<b>53</b>
	2.1	210	1.2	0.20	3.29	137	158	1.8	0.27	4.43	82	95	2.7	0.27	4.49	37	43
	2.5	250	1.2	0.22	3.62	151	174	1.8	0.29	4.87	90	104	2.8	0.30	4.94	38	44

**Bold** = Recommended pressure





## PRO dyser justerbare

### PRO ADJUSTABLE NOZZLES PERFORMANCE DATA

● **Nozzle 10A Red**  
3.0 m radius  
Adjustable from 0° to 360°  
Trajectory: 15°

● **Nozzle 12A Green**  
3.7 m radius  
Adjustable from 0° to 360°  
Trajectory: 28°

● **Nozzle 15A Black**  
4.6 m radius  
Adjustable from 0° to 360°  
Trajectory: 28°

Arc	Pressure		Radius		Flow		Precip mm/hr		Radius		Flow		Precip mm/hr		Radius		Flow		Precip mm/hr																																																																					
	Bar	kPa	m	m	m <sup>3</sup> /hr	l/min	■	▲	m	m	m <sup>3</sup> /hr	l/min	■	▲	m	m	m <sup>3</sup> /hr	l/min	■	▲																																																																				
45° ▶	1.0	100	2.1	0.04	0.63	68	79	2.7	0.05	0.81	53	61	3.4	0.07	1.19	50	57	1.5	150	2.4	0.05	0.79	66	76	3.2	0.06	1.01	47	55	3.9	0.09	1.49	47	54	2.0	200	<b>3.0</b>	<b>0.06</b>	<b>0.92</b>	<b>49</b>	<b>57</b>	<b>3.7</b>	<b>0.07</b>	<b>1.18</b>	<b>42</b>	<b>48</b>	<b>4.6</b>	<b>0.10</b>	<b>1.75</b>	<b>40</b>	<b>46</b>	2.1	210	3.3	0.06	0.95	42	48	4.0	0.07	1.22	36	42	4.9	0.11	1.80	36	41	2.5	250	3.5	0.06	1.04	41	47	4.2	0.08	1.34	36	42	5.2	0.12	1.98	35	40			
	90° ◑	1.0	100	2.1	0.08	1.26	68	79	2.7	0.10	1.62	53	61	3.4	0.14	2.39	50	57	1.5	150	2.4	0.09	1.57	66	76	3.2	0.12	2.02	47	55	3.9	0.18	2.98	47	54	2.0	200	<b>3.0</b>	<b>0.11</b>	<b>1.84</b>	<b>49</b>	<b>57</b>	<b>3.7</b>	<b>0.14</b>	<b>2.37</b>	<b>42</b>	<b>48</b>	<b>4.6</b>	<b>0.21</b>	<b>3.50</b>	<b>40</b>	<b>46</b>	2.1	210	3.3	0.11	1.89	42	48	4.0	0.15	2.43	36	42	4.9	0.22	3.59	36	41	2.5	250	3.5	0.12	2.08	41	47	4.2	0.16	2.68	36	42	5.2	0.24	3.95	35	40		
		120° ◐	1.0	100	2.1	0.10	1.68	68	79	2.7	0.13	2.16	53	61	3.4	0.19	3.18	50	57	1.5	150	2.4	0.13	2.10	66	76	3.2	0.16	2.70	47	55	3.9	0.24	3.98	47	54	2.0	200	<b>3.0</b>	<b>0.15</b>	<b>2.46</b>	<b>49</b>	<b>57</b>	<b>3.7</b>	<b>0.19</b>	<b>3.16</b>	<b>42</b>	<b>48</b>	<b>4.6</b>	<b>0.28</b>	<b>4.66</b>	<b>40</b>	<b>46</b>	2.1	210	3.3	0.15	2.52	42	48	4.0	0.19	3.24	36	42	4.9	0.29	4.79	36	41	2.5	250	3.5	0.17	2.78	41	47	4.2	0.21	3.57	36	42	5.2	0.32	5.27	35	40	
			180° ◕	1.0	100	2.1	0.15	2.52	68	79	2.7	0.19	3.23	53	61	3.4	0.29	4.77	50	57	1.5	150	2.4	0.19	3.14	66	76	3.2	0.24	4.04	47	55	3.9	0.36	5.97	47	54	2.0	200	<b>3.0</b>	<b>0.22</b>	<b>3.68</b>	<b>49</b>	<b>57</b>	<b>3.7</b>	<b>0.28</b>	<b>4.74</b>	<b>42</b>	<b>48</b>	<b>4.6</b>	<b>0.42</b>	<b>6.99</b>	<b>40</b>	<b>46</b>	2.1	210	3.3	0.23	3.78	42	48	4.0	0.29	4.86	36	42	4.9	0.43	7.18	36	41	2.5	250	3.5	0.25	4.16	41	47	4.2	0.32	5.35	36	42	5.2	0.47	7.90	35	40
				240° ◔	1.0	100	2.1	0.20	3.35	68	79	2.7	0.26	4.31	53	61	3.4	0.38	6.37	50	57	1.5	150	2.4	0.25	4.19	66	76	3.2	0.32	5.39	47	55	3.9	0.48	7.96	47	54	2.0	200	<b>3.0</b>	<b>0.29</b>	<b>4.91</b>	<b>49</b>	<b>57</b>	<b>3.7</b>	<b>0.38</b>	<b>6.31</b>	<b>42</b>	<b>48</b>	<b>4.6</b>	<b>0.56</b>	<b>9.32</b>	<b>40</b>	<b>46</b>	2.1	210	3.3	0.30	5.04	42	48	4.0	0.39	6.49	36	42	4.9	0.57	9.57	36	41	2.5	250	3.5	0.33	5.55	41	47	4.2	0.43	7.14	36	42	5.2	0.63	10.54	35
270° ◓					1.0	100	2.1	0.23	3.77	68	79	2.7	0.29	4.85	53	61	3.4	0.43	7.16	50	57	1.5	150	2.4	0.28	4.72	66	76	3.2	0.36	6.06	47	55	3.9	0.54	8.95	47	54	2.0	200	<b>3.0</b>	<b>0.33</b>	<b>5.52</b>	<b>49</b>	<b>57</b>	<b>3.7</b>	<b>0.43</b>	<b>7.10</b>	<b>42</b>	<b>48</b>	<b>4.6</b>	<b>0.63</b>	<b>10.49</b>	<b>40</b>	<b>46</b>	2.1	210	3.3	0.34	5.68	42	48	4.0	0.44	7.30	36	42	4.9	0.65	10.77	36	41	2.5	250	3.5	0.37	6.25	41	47	4.2	0.48	8.03	36	42	5.2	0.71	11.86	35
	360° ●				1.0	100	2.1	0.30	5.03	68	79	2.7	0.39	6.47	53	61	3.4	0.57	9.55	50	57	1.5	150	2.4	0.38	6.29	66	76	3.2	0.49	8.09	47	55	3.9	0.72	11.94	47	54	2.0	200	<b>3.0</b>	<b>0.44</b>	<b>7.37</b>	<b>49</b>	<b>57</b>	<b>3.7</b>	<b>0.57</b>	<b>9.47</b>	<b>42</b>	<b>48</b>	<b>4.6</b>	<b>0.84</b>	<b>13.98</b>	<b>40</b>	<b>46</b>	2.1	210	3.3	0.45	7.57	42	48	4.0	0.58	9.73	36	42	4.9	0.86	14.36	36	41	2.5	250	3.5	0.50	8.33	41	47	4.2	0.64	10.71	36	42	5.2	0.95	15.81	35

**Bold** = Recommended pressure





## PRO dyser justerbare

### PRO ADJUSTABLE NOZZLES PERFORMANCE DATA

● Nozzle 17A Grey  
5.2 m radius  
Adjustable from 0° to 360°  
Trajectory: 28°

Arc	Pressure		Radius m	Flow		Precip mm/hr	
	Bar	kPa		m <sup>3</sup> /hr	l/min	■	▲
45° ▶	1.0	100	4.7	0.09	1.54	33	39
	1.5	150	4.9	0.12	1.93	38	44
	<b>2.0</b>	<b>200</b>	<b>5.2</b>	<b>0.14</b>	<b>2.26</b>	<b>40</b>	<b>46</b>
	2.1	210	5.5	0.14	2.32	37	42
	2.5	250	5.7	0.15	2.55	38	43
90° ◐	1.0	100	4.7	0.18	3.08	33	39
	1.5	150	4.9	0.23	3.85	38	44
	<b>2.0</b>	<b>200</b>	<b>5.2</b>	<b>0.27</b>	<b>4.51</b>	<b>40</b>	<b>46</b>
	2.1	210	5.5	0.28	4.63	37	42
	2.5	250	5.7	0.31	5.10	38	43
120° ◑	1.0	100	4.7	0.25	4.11	33	39
	1.5	150	4.9	0.31	5.13	38	44
	<b>2.0</b>	<b>200</b>	<b>5.2</b>	<b>0.36</b>	<b>6.01</b>	<b>40</b>	<b>46</b>
	2.1	210	5.5	0.37	6.18	37	42
	2.5	250	5.7	0.41	6.80	38	43
180° ◒	1.0	100	4.7	0.37	6.16	33	39
	1.5	150	4.9	0.46	7.70	38	44
	<b>2.0</b>	<b>200</b>	<b>5.2</b>	<b>0.54</b>	<b>9.02</b>	<b>40</b>	<b>46</b>
	2.1	210	5.5	0.56	9.27	37	42
	2.5	250	5.7	0.61	10.20	38	43
240° ◓	1.0	100	4.7	0.49	8.21	33	39
	1.5	150	4.9	0.62	10.27	38	44
	<b>2.0</b>	<b>200</b>	<b>5.2</b>	<b>0.72</b>	<b>12.03</b>	<b>40</b>	<b>46</b>
	2.1	210	5.5	0.74	12.35	37	42
	2.5	250	5.7	0.82	13.6	38	43
270° ◔	1.0	100	4.7	0.55	9.24	33	39
	1.5	150	4.9	0.69	11.55	38	44
	<b>2.0</b>	<b>200</b>	<b>5.2</b>	<b>0.81</b>	<b>13.53</b>	<b>40</b>	<b>46</b>
	2.1	210	5.5	0.83	13.90	37	42
	2.5	250	5.7	0.92	15.30	38	43
360° ●	1.0	100	4.7	0.74	12.32	33	39
	1.5	150	4.9	0.92	15.40	38	44
	<b>2.0</b>	<b>200</b>	<b>5.2</b>	<b>1.08</b>	<b>18.04</b>	<b>40</b>	<b>46</b>
	2.1	210	5.5	1.11	18.53	37	42
	2.5	250	5.7	1.22	20.4	38	43

**Bold** = Recommended pressure



**4A Nozzle**  
Radius: 1.2 m



**6A Nozzle**  
Radius: 1.8 m



**8A Nozzle**  
Radius: 2.4 m



**10A Nozzle**  
Radius: 3 m



**12A Nozzle**  
Radius: 3.6 m



**15A Nozzle**  
Radius: 4.5 m



**17A Nozzle**  
Radius: 5.2 m









## PRO dyser kort radius

### SHORT RADIUS NOZZLES PERFORMANCE DATA



● Nozzle Lt. Brown

Arc	Pressure		Position	Radius m	Flow		Precip mm/hr	
	Bar	kPa			m <sup>3</sup> /hr	l/min	■	▲
90° 	1.0	100	2Q	0.6	0.01	0.23	153	177
	1.5	150		0.6	0.02	0.28	188	217
	2.0	200		0.6	0.02	0.33	217	250
	2.1	210		0.6	0.02	0.33	222	257
	2.5	250		0.6	0.02	0.36	242	280
180° 	1.0	100	2H	0.6	0.03	0.46	153	177
	1.5	150		0.6	0.03	0.56	188	217
	2.0	200		0.6	0.04	0.65	217	250
	2.1	210		0.6	0.04	0.67	222	257
	2.5	250		0.6	0.04	0.73	242	280

● Nozzle Lt. Green

Arc	Pressure		Position	Radius m	Flow		Precip mm/hr	
	Bar	kPa			m <sup>3</sup> /hr	l/min	■	▲
90° 	1.0	100	4Q	1.2	0.04	0.69	115	133
	1.5	150		1.2	0.05	0.77	128	147
	2.0	200		1.2	0.05	0.82	137	158
	2.1	210		1.2	0.05	0.84	139	160
	2.5	250		1.2	0.05	0.87	145	168
180° 	1.0	100	4H	1.2	0.08	1.39	115	133
	1.5	150		1.2	0.09	1.54	128	147
	2.0	200		1.2	0.10	1.65	137	158
	2.1	210		1.2	0.10	1.67	139	160
	2.5	250		1.2	0.10	1.74	145	168

● Nozzle Lt. Blue

Arc	Pressure		Position	Radius m	Flow		Precip mm/hr	
	Bar	kPa			m <sup>3</sup> /hr	l/min	■	▲
90° 	1.0	100	6Q	1.8	0.11	1.84	136	157
	1.5	150		1.8	0.11	1.93	143	165
	2.0	200		1.8	0.12	2.00	148	171
	2.1	210		1.8	0.12	2.01	149	172
	2.5	250		1.8	0.22	2.06	152	176
180° 	1.0	100	6H	1.8	0.22	3.67	136	157
	1.5	150		1.8	0.22	3.86	143	165
	2.0	200		1.8	0.22	4.00	148	171
	2.1	210		1.8	0.22	4.03	149	172
	2.5	250		1.8	0.23	4.12	152	176



2Q



2H



4Q



4H









6Q



6H



## PRO dyser smalle striber

STRIP PATTERN NOZZLE PERFORMANCE DATA						
Arc	Pressure		Width x Length m	Flow		
	Bar	kPa		m <sup>3</sup> /hr	l/min	
LCS-515 	1.0	100	1.2 x 4.2	0.10	1.7	
	1.5	150	1.2 x 4.3	0.13	2.1	
	<b>2.0</b>	<b>200</b>	<b>1.5 x 4.5</b>	<b>0.15</b>	<b>2.4</b>	
	2.1	210	1.5 x 4.5	0.15	2.5	
	2.5	250	1.5 x 4.5	0.16	2.7	
RCS-515 	1.0	100	1.2 x 4.2	0.10	1.7	
	1.5	150	1.2 x 4.3	0.13	2.1	
	<b>2.0</b>	<b>200</b>	<b>1.5 x 4.5</b>	<b>0.15</b>	<b>2.4</b>	
	2.1	210	1.5 x 4.5	0.15	2.5	
	2.5	250	1.5 x 4.5	0.16	2.7	
SS-530 	1.0	100	2.2 x 8.5	0.21	3.5	
	1.5	150	2.4 x 8.5	0.25	4.2	
	<b>2.0</b>	<b>200</b>	<b>2.4 x 8.5</b>	<b>0.29</b>	<b>4.9</b>	
	2.1	210	1.5 x 9.0	0.30	5	
	2.5	250	1.5 x 9.0	0.33	5.5	
ES-515 	1.0	100	1.1 x 4.2	0.10	1.7	
	1.5	150	1.2 x 4.3	0.13	2.1	
	<b>2.0</b>	<b>200</b>	<b>1.5 x 4.5</b>	<b>0.15</b>	<b>2.4</b>	
	2.1	210	1.5 x 4.5	0.15	2.5	
	2.5	250	1.5 x 4.5	0.16	2.7	
CS-530 	1.0	100	2.2 x 8.5	0.21	3.5	
	1.5	150	2.4 x 8.5	0.25	4.2	
	<b>2.0</b>	<b>200</b>	<b>1.5 x 9.0</b>	<b>0.29</b>	<b>4.9</b>	
	2.1	210	1.5 x 9.0	0.30	5	
	2.5	250	1.5 x 9.0	0.33	5.5	
SS-918 	1.0	100	2.4 x 5.2	0.27	4.5	
	1.5	150	2.7 x 5.5	0.33	5.5	
	<b>2.0</b>	<b>200</b>	<b>2.7 x 5.5</b>	<b>0.38</b>	<b>6.4</b>	
	2.1	210	2.7 x 5.5	0.39	6.5	
	2.5	250	2.7 x 5.5	0.43	7.1	

**Bold** = Recommended pressure



**Left Corner Strip**  
Rectangle: 1.5 m x 4.5 m



**Right Corner Strip**  
Rectangle: 1.5 m x 4.5 m



**Side Strip**  
Rectangle: 1.5 m x 9.0 m



**Side Strip**  
Rectangle: 2.7 m x 5.5 m



**Center Strip**  
Rectangle: 1.5 m x 9.0 m



**End Strip**  
Rectangle: 1.5 m x 4.5 m





**Hunter**<sup>®</sup>

## PRO-SPRAY

professionel spraysprinkler med mange forskellige dyse-muligheder



Den bedste i sin klasse. Stærk spray der udnytter vandet bedst muligt. Kraftigt plastichus.

Kraftig fjeder der sikrer nedfald af pop up riser under alle forhold.

Mulighed for montering af kontraventil, der udligner niveauforskelle i terræn.

Dyser til alle formål, indstillelige dyser, faste dyser, stream-dyser, dyser til "firkantvanding", dyser til super kort radius, dyser til dryp.



Ret til ændringer forbeholdes.

### FAKTABOKS

Model:	PROS-00 Scrub
Model:	PROS-04 pop up (10 cm)
Model:	PROS-06 pop up (15 cm)
Model:	PROS-12 pop up (30 cm)
Ydelse:	se dysetabeller
Radius:	se dysetabeller
Tryk:	1 - 5 bar
Dysevinkel:	se dysetabeller
Indgang:	1/2" irg.
Byggemål:	4/12,5/15,5/22,5/41 cm



**Hunter**<sup>®</sup>



## PRS-40 MP ROTATOR

trykreguleret (2,8 bar) pop up sprinkler  
til MP rotator dyser

MP rotator er en ny måde at vande på i flere henseender. MP rotator fordeler vandet i stråler i forskellige længder, mens den roterer. Denne multi-stream teknologi gør vandfordelingen mindre vindfølsom.

Dyserne giver samme nedbør uanset om der vandes i fuld cirkel eller f.eks. 90 gr. fra et hjørne.

Lavt vandforbrug.

Fås som shrub-model (uden pop up) og i 3 forskellige pop up højder.



### FAKTABOKS

Model:	PROS-00-PRS40
Model:	PROS-04-PRS40-CV (10 cm)
Model:	PROS-06-PRS40-CV (15 cm)
Model:	PROS-12-PRS40-CV (30 cm)
Ydelse:	10-12 mm/t
Radius:	2.5 - 9,1 m
Tryk:	1,75- 3,75 bar
Dysevinkel:	se dysetabeller
Indgang:	1/2" irg.
Byggemål:	11/15,5/22,5/41 cm



**Hunter®**



## ROAM FJERNBETJENING

til kortere afstande op til 300 m

Ideel til halvlegs-vanding på stadion

Start vandingsanlægget eller enkelte stationer uden at skulle tilbage til styreboksen. Med få tryk på håndsenderen sættes vandingsanlægget i gang. Vandingstiden kan sættes til 2 min., 5 min. og derefter i spring af 5 min.

Bruger 4 stk. AAA batterier, der holder til en sæson.

Let at installere og billig i anskaffelse.



FAKTABOKS

Model: ROAM kit