

Talon™ Rotors

Talon = outstanding results.

Rain Bird's Talon rotor features a strong closed-case design for reliable operation even in the harshest conditions. Rain Bird's vast experience in nozzle engineering ensures uniform water application. The single snap ring design makes the Talon rotor easy to service.

Features

- Stainless-steel riser helps deter vandalism on public turf areas.
- Three-year warranty.
- Easy, wet or dry arc adjustment (part-circle model): 30° to 345°.
- Full- and part-circle models.
- Water-lubricated gear drive for reliable, durable rotation.
- Standard rubber cover (black) for added safety.
- Seal-A-Matic™ (SAM) check device prevents puddling and erosion caused by low-head drainage.
- Seven color-coded, interchangeable nozzles for design flexibility.
- Dual-Spreader™ nozzles feature an innovative 5-port design for enhanced distribution uniformity **NEW!**
- Opposing nozzle option for full-circle units with a 2-week lead time. (*See nozzle performance chart for performance specifications) **NEW!**
- Optional diffuser screw kit can be field-installed for radius reduction up to 25% without changing nozzles.
- Stator for consistent rotation speed.
- Single snap ring is removable from the top of the rotor for easy maintenance.

Operating Range

- Precipitation Rate: 0.88 to 1.28 inches per hour (22 to 32 mm/h)
- Radius: 45 to 83 feet (13,7 to 25,3 m)
- Pressure: 40 to 100 psi (2,8 to 6,9 bar)
- Flow: 9.3 to 38.1 GPM (2,11 to 8,64 m³/h; 0,59 to 2,40 l/s)

Dimensions

- Pop-up height: 2 7/8" (7,3 cm)
- Overall height (popped down): 10" (29,2 cm)
- Exposed surface diameter: 4 3/4" (12,1 cm)

Specifications

- 1" (26/34) NPT or BSP threaded inlet
- SAM check device holds up to 10 feet (3,1 m) of head
- Nozzle outlet trajectory is 25°
- Nozzles: 12-red; 28-white; 32-blue; 36-yellow; 40-orange; 44-green; 48-black

Models

- TA-80-FC: Full-circle*
- TA-85-PC: Part-circle*
- TA-FC-ON: Full-circle*

* Available in BSP model.



How to Specify

TA-80-FC-18

Model	Rotation	Nozzle Size
TA-80	FC: Full-circle	12 40
TA-85	PC: Part-circle	28 44
TA-FC-ON	ON: Opposing Nozzle Full Circle	32 48
		36



Talon™ Dual-Spreader™ Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow GPM	■	▲	
				Precip In/h	Precip In/h	
40	12	45	9.3	0.88	1.02	
	50	12	47	10.3	0.90	1.04
		28	55	13.4	0.85	0.99
		32	57	15.0	0.89	1.03
		36	61	16.9	0.87	1.01
60	40	63	19.7	0.96	1.10	
	12	49	11.2	0.90	1.04	
	28	57	15.0	0.89	1.03	
	32	59	16.9	0.94	1.08	
	36	63	18.8	0.91	1.05	
	40	67	21.8	0.94	1.08	
70	44	69	24.0	0.97	1.12	
	12	49	12.0	0.96	1.11	
	28	59	16.7	0.92	1.07	
	32	61	18.3	0.95	1.09	
	36	65	20.4	0.93	1.07	
	40	69	23.7	0.96	1.11	
80	44	73	27.9	1.01	1.16	
	48	77	31.2	1.01	1.17	
	12	49	12.8	1.03	1.19	
	28	61	17.8	0.92	1.06	
	32	63	20.0	0.97	1.12	
	36	67	21.8	0.94	1.08	
90	40	71	26.5	1.01	1.17	
	44	75	30.1	1.03	1.19	
	48	79	33.6	1.04	1.20	
	28	61	19.3	1.00	1.15	
	32	65	21.1	0.96	1.11	
	36	67	23.5	1.01	1.16	
100	40	73	28.4	1.03	1.19	
	44	77	32.2	1.05	1.21	
	48	81	35.9	1.05	1.22	
	28	61	20.2	1.05	1.21	
	32	65	22.5	1.03	1.18	
	36	67	24.9	1.07	1.23	
100	40	75	30.1	1.03	1.19	
	44	77	34.0	1.10	1.28	
	48	83	38.1	1.07	1.23	

Precipitation Rates based on half-circle operation.

■ Square spacing based on 50% diameter of throw.

▲ Triangular spacing based on 50% diameter of throw.

Performance data collected in zero wind conditions.



New Talon Dual-Spreader Nozzle

METRIC

Pressure bar	Nozzle	Radius m	Flow m ³ /h	Flow l/s	■	▲
					Precip mm/h	Precip mm/h
2,8	12	13,7	2,11	0,59	22	26
	3,0	12	14,1	2,20	0,61	22
3,5	12	14,3	2,34	0,65	23	26
	28	16,8	3,04	0,85	22	25
	32	17,4	3,41	0,95	23	26
	36	18,6	3,84	1,07	22	26
	40	19,2	4,47	1,24	24	28
	4,0	12	14,5	2,48	0,69	24
4,0	28	17,3	3,33	0,93	22	26
	32	17,9	3,75	1,04	23	27
	36	19,1	4,18	1,16	23	26
	40	20,2	4,86	1,35	24	28
	44	20,8	5,33	1,48	25	28
	4,5	12	14,7	2,63	0,73	24
28		17,7	3,61	1,00	23	27
32		18,3	4,01	1,11	24	28
36		19,5	4,46	1,24	23	27
40		20,7	5,18	1,44	24	28
44		21,7	5,92	1,64	25	29
5,0	48	22,6	6,82	1,89	27	31
	12	14,9	2,77	0,77	25	29
	28	18,1	3,86	1,07	24	27
	32	18,7	4,25	1,18	24	28
	36	20,0	4,71	1,31	24	27
	40	21,2	5,54	1,54	25	28
5,5	44	22,4	6,46	1,80	26	30
	48	23,6	7,23	2,01	26	30
	12	14,9	2,91	0,81	26	30
	28	18,6	4,05	1,12	23	27
	32	19,2	4,53	1,26	25	28
	36	20,4	4,94	1,37	24	27
6,0	40	21,6	6,00	1,67	26	30
	44	22,8	6,82	1,90	26	30
	48	24,1	7,61	2,12	26	30
	28	18,6	4,28	1,19	25	29
	32	19,6	4,72	1,31	25	28
	36	20,4	5,22	1,45	25	29
6,0	40	22,1	6,32	1,84	26	30
	44	23,3	7,17	1,99	26	31
	48	24,5	8,00	2,22	27	31
	28	18,6	4,46	1,24	26	30
	32	19,8	4,93	1,37	25	29
	36	20,4	5,47	1,52	26	30
6,5	40	22,5	6,62	1,84	26	30
	44	23,5	7,49	2,08	27	31
	48	24,9	8,37	2,32	27	31
	28	18,6	4,59	1,27	27	31
	32	19,8	5,11	1,42	26	30
	36	20,4	5,66	1,57	27	31
6,9	40	22,9	6,84	1,90	26	30
	44	23,5	7,72	2,15	28	32
	48	25,3	8,64	2,40	27	31



Talon™ FC Opposing Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow GPM	■	▲
				Precip In/h	Precip In/h
50	28	55	16.8	1.07	1.24
	32	58	19.6	1.12	1.30
	36	60	22.7	1.21	1.40
	40	64	25.1	1.18	1.36
60	28	56	18.7	1.15	1.33
	32	62	21.9	1.10	1.27
	36	62	24.9	1.25	1.44
	40	66	27.3	1.21	1.39
	44	68	29.6	1.23	1.42
70	28	56	19.5	1.20	1.38
	32	63	22.6	1.10	1.27
	36	64	26.4	1.24	1.43
	40	66	28.6	1.26	1.46
	44	68	31.6	1.32	1.52
	48	70	36.0	1.42	1.63
80	28	59	20.9	1.16	1.34
	32	64	24.9	1.17	1.35
	36	66	28.3	1.25	1.44
	40	68	30.8	1.28	1.48
	44	68	33.9	1.41	1.63
	48	72	38.7	1.44	1.66
90	28	60	23.2	1.24	1.43
	32	64	27.2	1.28	1.48
	36	66	31.0	1.37	1.58
	40	68	33.9	1.41	1.63
	44	74	36.8	1.29	1.49
	48	78	41.6	1.32	1.52
100	28	60	24.5	1.31	1.51
	32	66	28.5	1.26	1.46
	36	68	32.7	1.36	1.57
	40	70	35.8	1.41	1.62
	44	76	38.8	1.29	1.49
	48	80	44.1	1.33	1.53

Precipitation Rates based on half-circle operation.

■ Square spacing based on 50% diameter of throw.

▲ Triangular spacing based on 50% diameter of throw.

Performance data collected in zero wind conditions.

METRIC

Pressure bar	Nozzle	Radius m	Flow m ³ /h	Flow l/s	■	▲	
					Precip mm/h	Precip mm/h	
3,5	28	16,8	3,82	1,06	27	31	
	32	17,7	4,45	1,24	28	33	
	36	18,3	5,16	1,43	31	36	
	40	19,5	5,70	1,58	30	35	
4,0	28	17,0	4,16	1,16	29	33	
	32	18,7	4,87	1,35	28	32	
	36	18,8	5,56	1,54	31	36	
	40	20,0	6,10	1,69	30	35	
	44	20,5	6,61	1,84	31	36	
4,5	28	17,1	4,34	1,21	30	34	
	32	19,1	5,06	1,40	28	32	
	36	19,2	5,83	1,62	32	37	
	40	20,1	6,36	1,77	31	36	
	44	20,7	6,96	1,93	32	38	
	48	20,8	7,91	2,20	37	42	
5,0	28	17,3	4,51	1,25	30	35	
	32	19,3	5,26	1,46	28	33	
	36	19,7	6,10	1,70	31	36	
	40	20,3	6,62	1,84	32	37	
	44	20,7	7,31	2,03	34	39	
	48	21,5	8,33	2,31	36	42	
5,5	28	18,0	4,74	1,32	29	34	
	32	19,5	5,64	1,57	30	34	
	36	20,1	6,42	1,78	32	37	
	40	20,7	6,98	1,94	33	38	
	44	20,7	7,69	2,14	36	41	
	48	21,9	8,78	2,44	37	42	
	6,0	28	18,2	5,11	1,42	31	36
		32	19,5	6,02	1,67	32	37
36		20,1	6,86	1,91	34	39	
40		20,7	7,49	2,08	35	40	
44		22,0	8,16	2,27	34	39	
48		23,2	9,25	2,57	34	40	
6,5		28	18,3	5,40	1,50	32	37
		32	19,8	6,30	1,75	32	37
	36	20,4	7,21	2,00	35	40	
	40	21,0	7,88	2,19	36	41	
	44	22,8	8,55	2,38	33	38	
	48	24,0	9,69	2,69	34	39	
6,9	28	18,3	5,56	1,55	33	38	
	32	20,1	6,47	1,80	32	37	
	36	20,7	7,43	2,06	35	40	
	40	21,3	8,13	2,26	36	41	
	44	23,2	8,81	2,45	33	38	
	48	24,4	10,02	2,78	34	39	



Specifications

The full- or part-circle sprinkler shall be a water-lubricated gear drive rotor capable of covering a _____ (units) radius at a base pressure of _____ (units) and a discharge rate of _____ (units). The rotor shall be installed with a number _____ nozzle that shall be color-coded for ease of identification.

The part-circle sprinkler shall have adjustable arc coverage of 30° to 345°. Arc adjustment can be performed with or without the rotor in operation and shall require only a flatblade screwdriver. The part-circle rotor shall rotate through a 180° arc in two minutes or less. Rotation through 360° shall be four minutes or less for the full-circle sprinkler.

The sprinkler shall be fully serviceable from the top without requiring special tools. The internal assembly shall be retained in the case by a plastic snap ring. The rotor shall have a bearing guide that allows water to flush around the riser stem as it pops up and seals against the riser when it is fully raised. The pop-up height shall be 278" (7,3 cm). The retract spring shall be of stainless steel and of sufficient force for positive pop-down.

The nozzle housing cover of the rotor shall indicate the model, identify the installed nozzle and have an arrow to indicate the position of the nozzle, and shall provide a positive seal against debris when the rotor is not in operation. The housing shall be installed with one of seven color-coded nozzles.

The rotor shall have a stainless-steel riser and nozzle housing covering over the rotor body. The rotor body shall be molded of engineering grade plastic and shall have a female (NPT or BSP) bottom inlet.

The sprinkler shall have a standard spring-loaded Seal-A-Matic™ (SAM) device capable of holding up to 10 feet (3,1 m) of head.

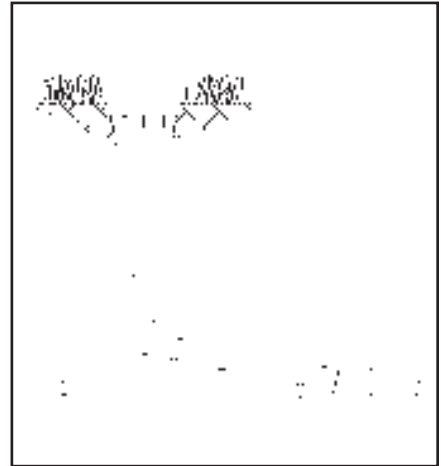
The rotor case shall have a top diameter of 43/4" (12,1 cm) and an overall height of 10" (25,4 cm). The case shall have a 1" (2,5 cm) NPT or BSP threaded inlet.

The sprinkler shall have a three-part rubber cover. The rubber nozzle housing cover shall indicate the model, identify the installed nozzle and have an arrow to indicate the position of the nozzle, and shall provide a positive seal against debris when the rotor is not in operation. The rubber cover shall include a rubber snap ring cover and a rubber outer ring.

Full-Circle Opposing Nozzle Option

The full-circle sprinkler shall have the option of opposing nozzles for enhanced uniformity and close-in watering.

The sprinkler shall be as manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, California.



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