



# Performance Chart

## Tracker U.S. Pressures, Flow, and Capacities

Nozzle		Pressures Required				Speed		Water Applied		Area Watered Each Pass						
Nozzle #	Flow gpm	Hydrant Pressure psi	Hose Pressure Loss / 100 ft psi	Machine Pressure Loss psi	Sprinkler Nozzle Pressure psi	Travel Speed / hr ft	Running Time Required Per Pass hours	Water Applied Each Pass Gallons	Precipitation Applied Each Pass Inches	Hose Length ft	Distance Between Lanes ft	Area Watered Each Pass Sq Ft	Area Watered Each Pass Acres	Area Watered In 2 Days Acres	Area If Run 24 Hrs Daily Acres	Area If Run 8 Hrs Daily Acres
Notes:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6	9	57	3	10	35	22	16.0	8,640	0.50	400	70	28,000	0.6	1.3	1.9	0.6
6	10	62	3	10	40	23	15.7	9,391	0.50	400	75	30,000	0.7	1.4	2.1	0.7
6	11	71	4	10	45	24	15.0	9,900	0.50	400	80	32,000	0.7	1.5	2.4	0.8
7	12	65	5	10	35	28	12.9	9,257	0.50	400	75	30,000	0.7	1.4	2.6	0.9
7	13	69	6	10	35	28	12.9	10,029	0.50	400	80	32,000	0.7	1.5	2.7	0.9
7	14	78	7	10	40	30	12.6	10,584	0.50	400	85	34,000	0.8	1.6	3.0	1.0
7	15	83	7	10	45	35	11.7	10,530	0.50	400	85	34,000	0.8	1.6	3.2	1.1

- Notes**
- 1 Flow from sprinkler nozzle at stated pressure
  - 2 Pressure required at water source hydrant
  - 3 Pressure drop per 100 ft (31m) of hose
  - 4 Pressure drop as required to run Tracker
  - 5 Pressure at the sprinkler nozzle (requires "pitot tube and gauge to measure & equals pressure at machine connection less 10 psi (0,7 bar).
  - 6 Speed is adjustable from 20 Ft/hr to 70 ft/hr; faster speeds apply proportionally less water per pass.
  - 7 Assumes applying .50"(13mm) per pass and watering every-other day to supplement rainfall
  - 7 Grass needs total of about .35" (9mm) daily at peak seasonal temperature derived from soil moisture storage, rainfall, and supplemental watering
  - 8 Total water applied per pass at the speed setting and distance traveled
  - 9 Supplemental precipitation applied per pass at the speed setting
  - 10 Hose length excluding feed hose from hydrant to field
  - 11 Distance between Tracker travel lanes
  - 12 Area watered each pass; Assumes 360 ft (110m) travel runs & 400 ft 122m) watered times the lane spacing
  - 13 Area watered each pass; Assumes 360 ft (110m) travel runs & 400 ft 122m) watered times the lane spacing
  - 14 Area watered if machine is run at double-speed every-other day to average .25"/day (6mm) applied to supplemental rainfall.
  - 15 Theoretical, maximum area covered if machine could be run 24 hrs daily for supplemental watering with no downtime for moving & repairs
  - 16 Area watered each pass
  - 16 Area covered if machine could be run only 8 hrs daily

# Tracker Metric Pressures, Flows, and Capacities

Nozzle		Pressures Required				Speed		Water Applied		Area Watered Each Pass							
Nozzle #	Flow l/min	Hydrant Pressure Bar	Hose Pressure		Machine Pressure Loss Bar	Sprinkler Nozzle Pressure Bar	Travel Speed / hr m	Running Time Required Per Pass hours	Water Applied Each Pass m3/hr	Precipitation Applied Each Pass mm	Hose Length m	Distance Between Lanes m	Area Watered Each Pass m2	Area Watered Each Pass Ha	Area Watered In 2 Days Ha	Area If Run 24 Hrs Daily Ha	Area If Run 8 Hrs Daily Ha
			Loss m Bar	30 m Bar													
Notes:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
6	34	3.9	0.2	0.7	2.4	6.7	16.0	33	13	122	21	2,601	0.27	0.53	0.80	0.27	
6	38	4.3	0.2	0.7	2.8	7.0	51.4	36	13	122	23	2,787	0.29	0.57	0.88	0.29	
6	42	4.9	0.3	0.7	3.1	7.3	49.2	37	13	122	24	2,973	0.30	0.61	0.98	0.33	
7	45	4.5	0.3	0.7	2.4	8.5	42.2	35	13	122	23	2,787	0.29	0.57	1.07	0.36	
7	49	4.8	0.4	0.7	2.4	8.5	42.2	38	13	122	24	2,973	0.30	0.61	1.14	0.38	
7	53	5.4	0.5	0.7	2.8	9.1	12.6	40	13	122	26	3,159	0.32	0.65	1.23	0.41	
7	57	5.7	0.5	0.7	3.1	10.7	11.7	40	13	122	26	3,159	0.32	0.65	1.33	0.44	

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