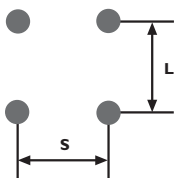


The following information has been compiled to assist in the correct selection of both sprinklers and jets.

Recommended Spacings: Rectangular.

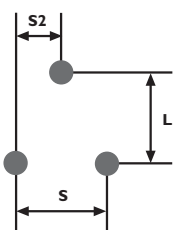
- No wind: 55% of diameter of throw.
- 0-6 km/hr: 50% of diameter of throw.
- 6-12 km/hr: 45% of diameter of throw.

Triangular.



- No wind: 55% of diameter of throw.
- 0-6 km/hr: 50% of diameter of throw.
- 6-12 km/hr: 45% of diameter of throw.

Calculating



Precipitation Rate.

PR = Precipitation Rate (mm/h).
 Q = Flow of full circle sprinkler (L/m).
 L = Row spacing (m).
 S = Sprinkler Spacing (m).
 Precipitation = $\frac{Q \times 60}{L \times S}$

Please Note: 'No Wind' conditions should only be used for indoor systems.

Metric Conversion Tables

Measure	Metric	Imperial	U.S.
Pressure	1.0 kPa	0.145 psi	0.145 psi
	6.895 kPa	1.0 psi	1.0 psi
	101.37 kPa	1 Atmosphere	1 Atmosphere
	3.387 kPa	1 inch (hg)	1 inch (hg)
Volume	1.0 litre	0.22 Gallon	0.264 Gallon
	4.546 litres	1.0 Gallon	1.2 Gallons
	3.787 litres	0.833 Gallon	1.0 Gallon
	1.0 m ³	35.31 feet ³	35.31 feet ³
	1.0 m ³	220.2 Gallons	264.24 Gallons
	1.0 litre	61.03 inch ³	61.03 inch ³
	28.32 litres	1.0 foot ³	1.0 foot ³
Area	102.5 m ³	1.0 acre / inch	1.0 acre / inch
	1 cm ²	0.155 inch ²	0.155 inch ²
	1 m ²	10.764 feet ²	10.764 feet ²
	1 ha	2.471 acre	2.471 acre
	259 ha	1.0 mile ²	1.0 mile ²
Length	1 kilometre ²	247.1 acres	247.1 acres
	1 cm	0.394 inch	0.394 inch
	25.4 mm	1.0 inch	1.0 inch
	1 metre	3.281 feet	3.281 feet
	1 metre	1.094 yards	1.094 yards
	1 kilometre	0.621 miles	0.621 miles
	1.61 kilometres	1.0 mile	1.0 mile
Velocity	20.0 metres (approx.)	1.0 chain	66 feet
	1.0 m / second	196.9 ft / min	196.9 ft / min
	1.0 km / hour	0.621 mph	0.621 mph
Power	1.0 kilowatt	1.341 horsepower	1.341 horsepower
	1.0 Metric hp	0.986 hp	0.986 hp
Mass	11.0 kilogram	2.2 pounds	2.2 pounds
	1.0 tonne	0.984 ton	0.984 ton
Force	1.0 Newton	0.225 lbs (Force)	0.225 lbs (Force)
Temperature	°C = 5/9 (°F - 32)	(9 x °C) / 5 + 32 = °F	(9 x °C) / 5 + 32 = °F

Data is approximate for every day use. 1.0 m³ = 1000 litres.

Sprinkler Jet Conversions.

A number of sprinkler jets are stated in 64th of an inch.

- To convert from 64th of an inch to mm:
 $A \times 0.397 = \text{mm}$.
 A = 64th of an inch,
 e.g. 9/64 = 9.
- To convert from mm to 64th of an inch:
 $B \times 2.52 = \text{64th of an inch}$.
 B = mm.

Estimating the Supply Capacity Requirements for an Area.

The following factors need to be determined.

1. Area = A (m²)
2. The application amount required for the worst possible situation = P (mm/week)
3. The irrigation time period per week for the worst possible situation = T (hours)
4. The irrigation efficiency = E (%)

Flow Rate (Litres per minute)

$$= \frac{A \times P \times 100}{60 \times T \times E}$$