

AWG Gauge Chart (24V)

Use an appropriate stranded wire gauge to avoid voltage drop for more than 5% .

To do so, in the chart below, identify the total power of your luminaire (X axis) and the distance between the luminaire and the power supply (Y axis).

See the table to the right for more details on AWG gauge dimentions.

AWG Gauge	Wire Size	ϕ , in	ϕ , mm
10AWG		0.102	2.59
12AWG		0.081	2.05
14AWG		0.064	1.63
16AWG		0.051	1.29
18AWG		0.040	1.02
20AWG		0.032	0.81
22AWG		0.025	0.65

POWER, Watt (W) (total power of the luminaire)

	5	10	15	20	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
100	22AWG	20AWG	20AWG	18AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG	10AWG	10AWG
95	22AWG	20AWG	20AWG	18AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG	10AWG
90	22AWG	22AWG	20AWG	18AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG
85	22AWG	22AWG	20AWG	18AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG
80	22AWG	22AWG	20AWG	18AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG	12AWG	12AWG	12AWG
75	22AWG	22AWG	20AWG	18AWG	18AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG	12AWG	12AWG
70	22AWG	22AWG	20AWG	20AWG	18AWG	16AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG	12AWG
65	22AWG	22AWG	20AWG	20AWG	18AWG	16AWG	16AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG	12AWG	12AWG
60	22AWG	22AWG	22AWG	20AWG	18AWG	18AWG	16AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	12AWG
55	22AWG	22AWG	22AWG	20AWG	18AWG	18AWG	18AWG	16AWG	16AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG
50	22AWG	22AWG	22AWG	20AWG	18AWG	18AWG	18AWG	18AWG	16AWG	16AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG	14AWG
45	22AWG	22AWG	22AWG	22AWG	20AWG	18AWG	18AWG	18AWG	18AWG	16AWG	16AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG	14AWG	14AWG
40	22AWG	22AWG	22AWG	22AWG	20AWG	20AWG	18AWG	18AWG	18AWG	18AWG	16AWG	16AWG	16AWG	16AWG	16AWG	16AWG	14AWG	14AWG	14AWG
35	22AWG	22AWG	22AWG	22AWG	20AWG	20AWG	20AWG	18AWG	18AWG	18AWG	18AWG	16AWG	16AWG	16AWG	16AWG	16AWG	16AWG	16AWG	16AWG
30	22AWG	22AWG	22AWG	22AWG	20AWG	20AWG	20AWG	20AWG	18AWG	18AWG	18AWG	18AWG	18AWG	18AWG	16AWG	16AWG	16AWG	16AWG	16AWG
25	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	20AWG	20AWG	20AWG	20AWG	18AWG	18AWG	18AWG	18AWG	18AWG	18AWG	18AWG	16AWG	16AWG
20	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	20AWG	20AWG	20AWG	20AWG	20AWG	20AWG	18AWG	18AWG	18AWG	18AWG	18AWG	18AWG
15	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	20AWG	20AWG	20AWG	20AWG	20AWG	20AWG	20AWG	18AWG	18AWG
10	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	20AWG	20AWG	20AWG
5	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG

WIRING LENGTH, Feet (ft)
(distance between luminaire and driver)

