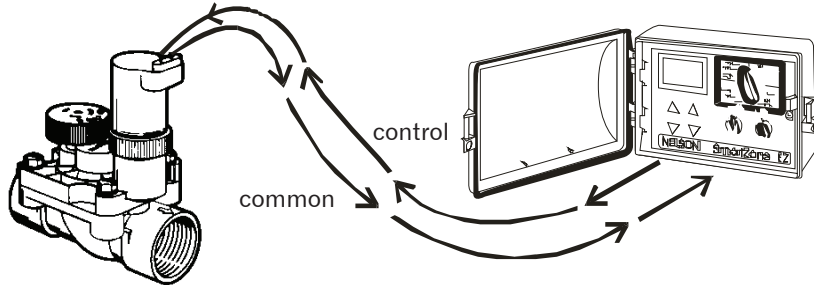




# Irrigation Control Wire Sizing

The correct selection of irrigation control wire is necessary to ensure trouble free operation of your Nelson solenoid valves. Use the table to ensure that the maximum distance between the controller and the valve is not greater than that listed for the control and common wire sizes being used. The distance shown takes into account the acceptable voltage drop and power requirements during solenoid operation.



PPI's single-strand and multistrand control wire has a cross sectional area of 0.5mm<sup>2</sup>.

## Maximum Distance of the Valve from Controller (m)

### Common Wire Size (mm<sup>2</sup>)

		8.4	5.3	3.3	2.1	1.5	1.3	1.0	0.8	0.5
Control Wire Size (mm <sup>2</sup> )	8.4	1407	1108	816	577	428	380	304	260	170
	5.3	1109	914	706	520	394	354	286	247	165
	3.3	816	706	575	445	349	318	262	229	157
	2.1	577	520	445	363	295	274	230	205	145
	1.5	428	394	349	295	248	233	200	181	132
	1.3	380	354	318	274	233	220	190	173	128
	1.0	304	286	262	230	200	190	167	154	117
	0.8	260	247	229	205	181	173	154	143	111
	0.5	170	165	157	145	132	128	117	111	91

## Wire Size Conversion

Gauge	8	9	10	11	12	13	14	15	-	16	17	18	19	20
Diameter (mm)	3.2	2.9	2.5	2.3	2.0	1.8	1.6	1.4	1.3	1.2	1.1	1.0	0.9	0.8
Cross Section Area (mm <sup>2</sup> )	8.4	6.6	5.2	4.1	3.3	2.6	2.0	1.7	1.5	1.3	1.0	0.8	0.7	0.5

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