

Control Valve Wiring – Single Core

Application

For use in automatic irrigation systems to connect solenoid valves to controller. Extra low voltage systems only (as defined by AS3000). Suitable for direct burial. Not suitable for connection to Mains Power Supply

Specification

Conductor: Multi-strand plain copper wire
 Insulation: UV stabilised polypropylene to AS3808
 Colours: Black, Blue, Brown, Green, Red, White, Yellow
 Coil Lengths: 100 and 500 metres
 Sizes: 0.5, 1.0, 1.5, 2.5, 4.0, 6.0mm²

Wiring Installation Hints

- It is important to know the current draw of the electrical components so that the correct wire size is used.
- When installing control wire, ensure wire is looped at valve location to allow for expansion/contraction and soil movement.
- All valves to be installed in well drained gravel based valve box enclosures.
- A common wire links one wire on all solenoid valves to the controller and is usually black in colour.
- Ensure all wire connections are accessible for later servicing and fault finding.
- Ensure wire is not taut in the trench, i.e. allow for movement by providing extra slack in all installations.

- An active wire is defined as the wire that connects a valve to a specific station. They can be various colours.
- All wire connections must be waterproof, i.e. use wire connectors and sealant gel to ensure a waterproof connection.



Typical Properties

Nominal Area (mm ²)	Nearest AWG No.	Conductor No/ Diam (mm)	Amp rating (Amps)	Insulation Thickness (mm)	Electrical Resistance @ 20°C ohms/1000m	Nominal OD (mm)	Weight (kg/100m)
0.5	20	7/0.30	3	0.3	38.4	1.6	0.7
1.0	17	7/0.43	10	0.6	21.2	2.5	1.2
1.5	16	7/0.50	16	0.6	13.6	2.8	1.6
2.5	13 ½	7/0.67	23	0.6	7.4	3.3	2.7
4.0	11	7/0.85	30	0.6	4.6	3.8	4.1
6.0	9 ½	7/1.04	39	0.7	3.1	4.55	6.16

Ordering Information

Code	Description
SC05100XXX	Single Core 0.5mm ² x 100m coil Multi-strand 7/0.30 Available in Black (BLK), Blue (BLU), Brown (BRN), Green (GRN), Red (RED), White (WHI), Yellow (YEL). (To order quote for example) SC05100BLK
SC10100XXX	Single Core 1.0mm ² x 100m coil Multi-strand 7/0.43 Available in seven standard colours as above
SC10500XXX	Single Core 1.0mm ² x 500m coil Multi-strand 7/0.43 Available in seven standard colours as above
SC15100XXX	Single Core 1.5mm ² x 100m coil Multi-strand 7/0.50 Available in seven standard colours as above
SC15500XXX	Single Core 1.5mm ² x 500m coil Multi-strand 7/0.50 Available in seven standard colours as above
SC25500XXX	Single Core 2.5mm ² x 500m coil Multi-strand 7/0.67 Available in seven standard colours as above
SC40500XXX	Single Core 4.0mm ² x 500m coil Multi-strand 7/0.85 Available in seven standard colours as above
SC60500XXX	Single Core 6.0mm ² x 500m coil Multi-strand 7/1.04 Available in seven standard colours as above