

### PRE WIRED CABLE OPTIONS

SUPPORT DOCUMENT



### VARIOUS OPTIONS AVAILABLE FOR PRE WIRED ACTUATORS

- IP rated plug and play connectors with screw or weld (solder) connection
- Simple crimped cable ends for you to connect on site
- Panel mount connectors to directly connect into your control panel
- Cable length to suit your requirement, from 1m to 25m long cables
- Loose cable can also be supplied with client to install on site
- UL/CSA rated cable used with our actuators

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AVA actuator cable guide: includes cores, AWG, core diameter and if actuator is pre wired or not.					
Series	Core	Diameter	Core Square	Core Diameter	AWG
Basic 10	7 Core	5.5mm	0.3mm2	1.3mm	16 wire
Smart 10 without alarm	7 Core	5.5mm	0.3mm2	1.3mm	16 wire
Smart 10 with alarm	9 Core	6mm	0.25mm2	2mm	12 wire
Basic 20	7 Core	5.5mm	0.3mm2	1.3mm	16 wire
Smart 20 without alarm	7 Core	5.5mm	0.3mm2	1.3mm	16 wire
Smart 20 with alarm	9 Core	6mm	0.25mm2	2mm	12 wire
Basic 50	7 Core	7.5-7.8mm	0.5mm2	2mm	12 wire
Smart 50 without alarm	9 Core	8mm	0.5mm2	2mm	12 wire
Smart 50 with alarm	10 Core	8mm	0.5mm2	2mm	12 wire
Basic 80-110	7 Core	7.5-7.8mm	0.5mm2	2mm	12 wire
Smart 80-110 without alarm	7 Core	8mm	0.5mm2	2mm	12 wire
Smart 80-110 with alarm	10 Core	8mm	0.5mm2	2mm	12 wire
Basic 200-400	7 Core	7.5-7.8mm	0.5mm2	2mm	12 wire
Smart 200-400 without alarm	7 Core	8mm	0.5mm2	2mm	12 wire
Smart 200-400 with alarm	10 Core	8mm	0.5mm2	2mm	12 wire



If you have purchased one of your test boxes for testing our actuators prior to sending to your customer, you can requested that we leave our standard 'test plug' connected when shipping to you. You can then simply remove it prior to sending to your customer. This white 'test plug' is for AVA testing only and can be removed without invalidating your warranty.

Image to the right shows our standard test plug. Image to the left shows an actuator connected with WEIPU cable.









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# WEIPU IP RATED CABLE CONNECTORS

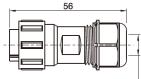
AVA have been working with Weipu since the beginning and now stock a wide range of options enabling us to supply the actuators pre wired to your requirement, from stock including weld and screw options for 5, 7, 9 and 10 pin options.

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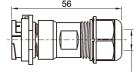
WEIPU: basic specification of our standard connectors						
Coupling Type:	Bayonet	Temp Range:	-40C to +85C			
Shell Material:	PC, Nylon66, fire resistant V-0	Contact Material:	Brass with gold plating			
Insert Material:	PPS, Max temperature +260C	Insulation Resistance:	2000 ΜΩ			
IP Rating:	IP67	O Rings:	Rubber			

SY WEIPU connector guide: includes screw type, weld type and panel mount nut type								
Number of Contacts:	5	7	9	10	7	9	10	7
Type of Connector:	Screw	Screw	Screw	Screw	Solder	Solder	Solder	Nut
Rated Voltage (AC V):	500	400	400	400	400	400	400	400
Rated Voltage (AC V) 1 min	1500	1200	1200	1200	1200	1200	1200	1200
Contact Resistance: (mΩ)	5	5	5	5	5	5	5	5
Wire Size (mm2/ AWG)	0.75*18	0.75/18	0.75/18	0.75/18	0.75/18	0.75/18	0.75/18	0.75/18

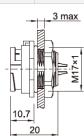












Cable out diameter range is 6-10mm. Other cable outer diameter customization is possible.

WEIPU: common part numbers for stocked product						
Code:	SY1711/S7-1C	SY1710/P7-1N	SY1712/P7-1C			
In Line Connector Type:	7 Pin Female Solder	7 Pin Male Solder	7 Pin Male Nut Solder			
Code:	SY1712/S7-1C	SY2111/S9I-1C	SY2110/P9I-1N			
In Line Connector Type:	7 Pin Female Nut	9 Pin Female Solder	9 Pin Male Solder			
Code:	SY2110/P5I-2N	SY2111/S5I-2C	SY2911/S7-2C			
In Line Connector Type:	5 Pin Female Screw	5 Pin Male Screw	7 Pin Female Screw			
Code:	SY2910/P7-2N	SY2911/S9-2C	SY2910/P9-2N			
In Line Connector Type:	7 Pin Male Screw	9 Pin Male Screw	9 Pin Female Screw			







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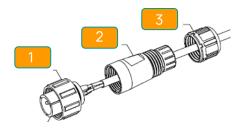


# WEIPU INLINE CONNECTOR INSTALLATION GUIDE

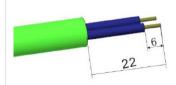
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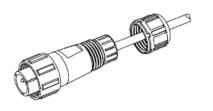
### WEIPU: Installation Guide for our standard In Line connector type



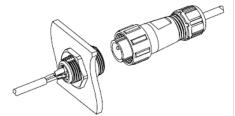
- 1. Connect cable through all parts as shown.
- 1.1 = Locking Nut 1.2 = Back Shell
- 1.3 = Compression Nut



1. To prepare the cable, strip the cable as shown to the left. These are our recommended length of stripped cable for good connectivity.



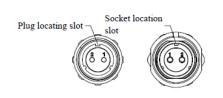
- 2. Tighten the back shell according to the torque. 0.9-1Nm. Tighten the compression nut according to the recommended torque rating of 0.9-1Nm
- 2. Put cable through all parts including locking nut, back shell as shown.



3. After mated the male plug and socket, tighten the locking nut to lock the plug and socket, 0.9-1Nm torque recommended.



3. For screw connector, screw into terminals. For weld/soldered version, solder wires into the numbered terminals in both male/female part.



4. See image showing the interface of the connector. In this case a 2 pin connector.



4. Once cable is secured, screw locking nut into back shell and final tighten the compression nut into the back shell.



#### WARNING!

If soldering the cable connectors on site / by yourself, this should always be done by someone who has been trained how to use a soldering iron to ensure this process is done safely.





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### PRE WIRED OPTIONS

Below are the main configurations that we can offer for pre wired actuators with either a cable supplied without connector or with WEIPU connector. It is important to think about the cable length options ahead of ordering. See warning at bottom of page relating to invalidating warranty on the product.

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### Options available on how to receive your actuators reference Pre Wired Cable:



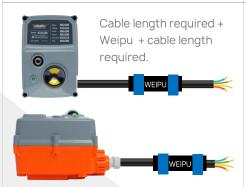
#### Standard Option: all actuators supplied this way as standard

Our standard option is to supply the actuator with 0.8m pre wired cable on Series 10, 20 and 50. These will as standard be supplied with the cable stripped and the individual cores crimped ready to terminate. The series 80, 110, 200 and 400 will be supplied with a wiring box as shown to the left. This is removed using an Allen key to present you with a terminal strip for wiring, as shown below. We can also supply the series 80-400 with a pre wired cable at additional cost, please discuss with your sales agent.



#### Option 1: Extend existing cable + Weipu connector

For Series 10-50, another option for Weipu connectors is that we use the existing pre wired connection length of 0.8m and terminate in the female connector. We then either pre wire the male connector with a pre determined cable length or supply the male connector loose for the customer to fit. This option is quicker and a lower cost than Option 2 due to us not needing to strip down and re build the actuator from our stock. For Series 80-400 we can also supply 0.8m from wiring box into connector.



### Option 2: New cable + Weipu connector

For Series 10-50 we can remove the standard 0.8m cable and install a new cable to the required length of cable needed. We would then terminate the cable in the female Weipu connector. We would then either supply the male connector pre connected to a cable length that you specify or supply loose for you to make the connection on site.

For Series 80-400 this is more easily achieved using the wiring box which, as standard, is not pre wired.



#### WARNINGI

To change the cable on the Series 10-50 requires the cover to be removed and the internals of the actuators to be removed before being re installed. This can only be done by AVA trained staff and removal of the cover will invalidate your warranty. See previous page for warning on use of soldering irons. Do not remove the cover of your AVA actuator at any time unless advise to do so by our trained engineers.

