



## **MOTOR SELECTION GUIDE**

By Simon Eales

This document is intended to help you choose the most appropriate motor for your application. It assumes you are an industry professional and are capable of selecting the correct torque, speed and accessories.

**Please use in conjunction with our catalogue and price list.**

This document was produced March 2013 and all information was correct at that time.

Features and specifications may change over time.

### **Select your application below and go to the specified page for your choices**

Internal Roller Blinds (remote control).....	<b>Page 1.</b>
Internal Roller Blinds (For Building Management System or wall switch).....	<b>Page 2.</b>
External Drop Blinds (remote control).....	<b>Page 3.</b>
External Drop Blinds (For Building Management System or wall switch).....	<b>Page 4.</b>
Folding Arms <u>Non-Cassette</u> (remote control).....	<b>Page 5.</b>
Folding Arms <u>Non-Cassette</u> (For Building Management System or wall switch).....	<b>Page 6.</b>
Cassette Type Folding Arms (remote control).....	<b>Page 7.</b>
Cassette Type Folding Arms (For Building Management System or wall switch).....	<b>Page 8.</b>
Roller Shutters (remote control).....	<b>Page 9.</b>
Roller Shutters (For Building Management System or wall switch).....	<b>Page 10.</b>
Accessories (general guide to assist selection).....	<b>Pages 11 and 12</b>
Motor lifting capacity chart.....	<b>Page 13.</b>



## **Internal Roller Blinds**

### **Remote control motors.**

**WSER40 5/28 Universal** (40mm, 5Nm, 28RPM) Perfect for all but the very largest (triple interlinked) internal blinds. Recommended for skin and bar weight up to 12kg on 43mm tube. Supplied ready to slide into Acmeda 43 – 49mm tube and also Blindware 45mm tube. Other crowns and drives to suit different tube are available on request for a small charge. (see pages 11and 12)

**WSER40 10/14 Universal** (40mm, 10Nm 14RPM) Twice the power and half the speed of the one above. Recommended for skin and bar weight up to 20kg on 50mm tube. Supplied ready to slide into Acmeda 43 – 49mm tube and also Blindware 45mm tube. Other crowns and drives to suit different tube are available on request for a small charge. (see pages 11and 12)

**WSER50 10/27 Universal** (50mm, 10Nm, 27RPM) Only used internally for very large blinds, usually with a very long drop (over 3 meters). Recommended for skin and bar weight up to 17kg on 63mm tube. Supplied ready to slide into 63mm Galvanised tube or Ziptrak 62mm tube. The smallest possible tubing for this motor is 50mm keyless. Supplied with an A3415 fastplug adaptor designed for external head-boxes. The recommended internal blind adaptor is the A3405-2 as it is more attractive. This and different crown and drives for different tubing are available for a small charge. (see pages 11and 12)



## **Internal Roller Blinds cont'd**

### **For Building Management Systems (C-Bus, Dynalite etc), or wall switches.**

These motors are NOT remote control and require a WSB01 limit setting tool to electronically set the limits. Control is via a building management system or by wall switches which are available separately. These motors may be parallel wired if desired. They are controlled by switching power between two active wires, one for up and one for down.

**WSEC40 5/28** (40mm, 5Nm, 28RPM) Perfect for all but the very largest (triple interlinked) internal blinds. Recommended for skin and bar weight up to 12kg on 43mm tube. Supplied ready to slide into Acmeda 43 – 49mm tube and also Blindware 45mm tube. Other crowns and drives to suit different tube are available on request for a small charge. (see pages 11 and 12)

**WSEC50 30/17 Universal** (50mm, 30Nm, 17RPM). Only used internally for very large blinds, usually with a very long drop (over 3 meters). Recommended for skin and bar weight up to 50kg on 63mm tube. Supplied ready to slide into Octagonal shutter tube and with A3415 fast plug end plate for head boxes. Different end plates and crown and drives for different tubing will be required for internal blind use and are available for a small charge. (see pages 11 and 12)



## **External Drop Blinds**

### **Drop Awnings, Ziptrak, Café Blinds and similar products**

#### **Remote control motors**

**WSER50 10/27 Universal** (50mm, 10Nm, 27RPM) Our biggest seller for all the listed external blind types above up to 17kg (bar and skin) on 63mm tube. Supplied ready to slide into 63mm Galvanised tube or Ziptrak 62mm tube. Supplied with an A3415 fastplug adaptor designed for external head-boxes. This motor is fast, quiet, and perfect for when you want to be able to lock in and tension the blind. Different crown and drives for different size tubing and a choice of end plates are available for a small charge. (see pages 11 and 12)

#### **WSER50 30/17 Universal** (50mm, 30Nm, 17RPM)

This motor is a slower but stronger version of the motor listed above including the tensioning features. Able to lift up to 50kg (bar and skin) on a 63mm tube, it can easily deal with the largest of drop blinds and is also worth considering for non-cassette folding arm awnings if you want to be able to set your own inner limit position. Comes supplied with A3415 fast plug adaptor for head-boxes and 63mm octagonal crown and drive for shutter tube which will need to be changed for a small cost if used with different tube. (see pages 11 and 12)



## **External Drop Blinds cont'd**

### **Drop Awnings, Ziptrak, Café Blinds and similar products**

#### **For Building Management Systems (C-Bus, Dynalite etc), or wall switches.**

These motors are NOT remote control and require a WSB01 limit setting tool to electronically set the limits. Control is via a building management system or by wall switches which are available separately. These motors may be parallel wired if desired. They are controlled by switching power between two active wires, one for up and one for down.

**WSEC50 30/17 Universal** (50mm, 30Nm, 17RPM). Recommended for skin and bar weight up to 50kg on 63mm tube. Supplied ready to slide into Octagonal shutter tube and with A3415 fast plug adaptor for head boxes. Different end plates and crown and drives for different tubing may be required for external blind use and are available for a small charge. (see pages 11 and 12)



## **Folding Arm Awnings (Non-Cassette type)**

### **Remote control motors.**

**WSER50 30/17 Cassette Awning motors (50mm, 30Nm, 17RPM)**

**WSER50 50/13 Cassette Awning motors (50mm, 50Nm, 13RPM)**

These motors will work well with either Cassette or Non-Cassette folding arm awnings. They can set their own inner limit by torque sensing, but you can also set the limit manually if you wish, the choice is yours. These motors have special protective properties that the universal motors do not have. If you have assigned either a Sun/Wind or Motion sensor to the motor, the motor will look for a pulse signal from that device every half hour. If it stops receiving the pulse the motor will close the awning as a protective measure after an hour. This is most commonly a signal that the motion sensor batteries need changing, but could be an indication of something more serious that has rendered the awning unprotected and it needs to be addressed. Universal motors do not have these same protective features so we always recommend the Cassette Awning Motors for all folding arms.

This motor comes with a A3415 fast plug adaptor but an A3005 block and pin style bracket is available if you wish to use it at a small extra cost. It also comes with A2409 78mm crown and drive, however different fittings to suit your tube are available at a small extra cost (see pages 53-54).



## **Folding Arm Awnings (Non-Cassette type) Cont'd**

### **For Building Management Systems (C-Bus, Dynalite etc), or wall switches.**

These motors are NOT remote control and require a WSB01 limit setting tool to electronically set the limits. Control is via a building management system or by wall switches which are available separately. These motors may be parallel wired if desired. They are controlled by switching power between two active wires, one for up and one for down.

#### **WSEC50 30/17 Universal (50mm, 30Nm, 17RPM).**

This motor is worth considering for non-cassette folding arm awnings if you want to be able to set your own inner limit position so that the bar is not pressed against the fabric when it stops. Supplied ready to slide into 63mm octagonal tube and with A3415 fast plug end plate for head boxes. An A3005 block and pin style adaptor is available if you wish to use it at a small extra cost. Order your crown and drives to suit your tube at a small extra cost. (see pages 11 and 12)

#### **WSEC50 30/17 Cassette Awning (50mm, 30Nm, 17RPM)**

This motor is specifically designed for cassette mechanisms and sets its own inner limits by torque sensing. After the first time it closes, it drops the amount of pressure required to stop at that position. If using this motor on a non-cassette folding arm, be aware that the end bar will be pulled into the roll and may crease the fabric over time. This motor will tension the material when it reaches the outer limit. This motor comes with a A3415 fast plug adaptor but an A3005 block and pin style bracket is available if you wish to use it at a small extra cost. Order your crown and drives to suit your tube at a small extra cost. (see pages 11 and 12)



## **Cassette style Folding Arm Awnings**

### **Remote control motors.**

#### **WSER50 30/17 Cassette Awning (50mm, 30Nm, 17RPM)**

This motor is specifically designed for cassette mechanisms and sets its own inner limit by torque sensing. After the first time it closes, it drops the amount of pressure required to stop at that position, however the amount of torque required to close the cassette properly is easily adjustable from the remote if necessary. This motor will also tension the material when it reaches the outer limit. This motor comes with a A3415 fast plug adaptor but an A3005 block and pin style adaptor is available if you wish to use it at a small extra cost. Order your crown and drives to suit your tube at a small extra cost. (see pages 11 and 12)

#### **WSER50 50/13 Cassette Awning (50mm, 50Nm, 13RPM)**

Same as above but with more power and a little slower.



## **Cassette style Folding Arm Awnings Cont'd**

### **For Building Management Systems (C-Bus, Dynalite etc), or wall switches.**

These motors are NOT remote control and require a WSB01 limit setting tool to electronically set the limits. Control is via a building management system or by wall switches which are available separately. These motors may be parallel wired if desired. They are controlled by switching power between two active wires, one for up and one for down.

#### **WSEC50 30/17 Cassette Awning (50mm, 30Nm, 17RPM)**

These motors are specifically designed for cassette mechanisms and set their own inner limits by torque sensing. After the first time it closes, it drops the amount of pressure required to stop at that position. This motor comes with a A3415 fast plug adaptor but an A3005 block and pin style adaptor is available if you wish to use it at a small extra cost. Order your crown and drives to suit your tube at a small extra cost. (see pages 11 and 12.)



## **Roller Shutters**

### **Remote control motors.**

#### **WSER50 30/17 Universal (50mm, 30Nm, 17RPM)**

Comes supplied with A3415 fast plug adaptor for head-boxes and 63mm octagonal crown and drive for shutter tube which will need to be changed for a small cost if used with different tube. (see pages 11 and 12.)

#### **WSER50 50/13 Universal (50mm, 50Nm, 13RPM)**

Same as above but with more power and a little slower.

### **Note on Obstacle Detection:**

Alpha Tubular Motors, like many other brands, thought obstacle detection was a good feature to have and introduced it into our shutter motors initially. Unfortunately differences in shutter materials and installation methods, as well as the size and geographic location of the shutters can all affect the reliability of this feature. Therefore, we have discontinued this feature in order to guarantee solid reliable performance and the motors that were once called "Shutter Motors" have now been renamed "Universal Motors" as they are now suitable for a wide variety of tasks.



## **Roller Shutters Cont'd**

### **For Building Management Systems (C-Bus, Dynalite etc), or wall switches.**

These motors are NOT remote control and WSEC series motors require a WSB01 limit setting tool to electronically set the limits. Control is via a building management system or by wall switches which are available separately. WSEC series motors may be parallel wired if desired, WSS series require a relay device to parallel wire them. They are controlled by switching power between two active wires, one for up and one for down.

#### **WSEC50 30/17 Universal (50mm, 30Nm, 17RPM)**

Comes supplied with A3415 fast plug adaptor for head-boxes and 63mm octagonal crown and drive for shutter tube, which will need to be changed for a small cost if used with different tube. (see pages 11 and 12)

#### **WSEC50 50/13 Universal (50mm, 50Nm, 13RPM)**

Same as above but with more power and a little slower.

#### **WSS50 30/17 (50mm, 30Nm, 17RPM)**

#### **WSS50 50/13 (50mm, 50Nm, 13RPM)**

These motors are a basic featureless mechanical limits motor that's still widely used in the Roller Shutter industry as an inexpensive reliable workhorse. A small plastic tool about the size of a screwdriver is used to manually set the limits on the head end of these motors. Comes supplied with A3415 fast plug adaptor for head-boxes and 63mm octagonal crown and drive for shutter tube, which will need to be changed for a small cost if used with different tube. (see pages 11 and 12)



## Accessories

### General guide to assist your selection

#### 50mm Motor adaptors



**A3415 Fast Plug Adaptor**

**Locks motor in place**



**A3005 Block and Pin Adaptor**

**Motor secured with pin**



**A3405-2 Adaptor**

**Motor unsecured**

#### Crown and Drive For 40mm motors

<u>Tube Type</u>	<u>Part to order</u>	<u>Fits Motor Size</u>
Jai 45mm + Mytec 42mm + BbB 45mm	WSA2305	for 40mm motor (35mm)
43 – 49mm Acmeda + Blindware 45mm	WSA2310	for 40mm motor (35mm)
48mm Uniline Platinum tube	WSA2313	for 40mm motor (35mm)
50mm Blindware tube	WSA2314	for 40mm motor (35mm)
49mm Hollands	WSA2315	for 40mm motor (35mm)
50mm straight guage shutter tube	WSA2301	for 40mm motor (35mm)
51mm Blindware	WSA2307	for 40mm motor (35mm)



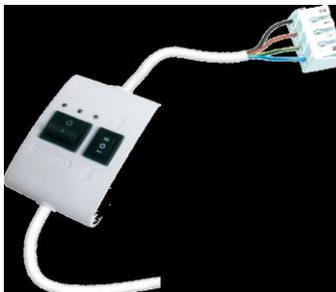
## Accessories Cont'd

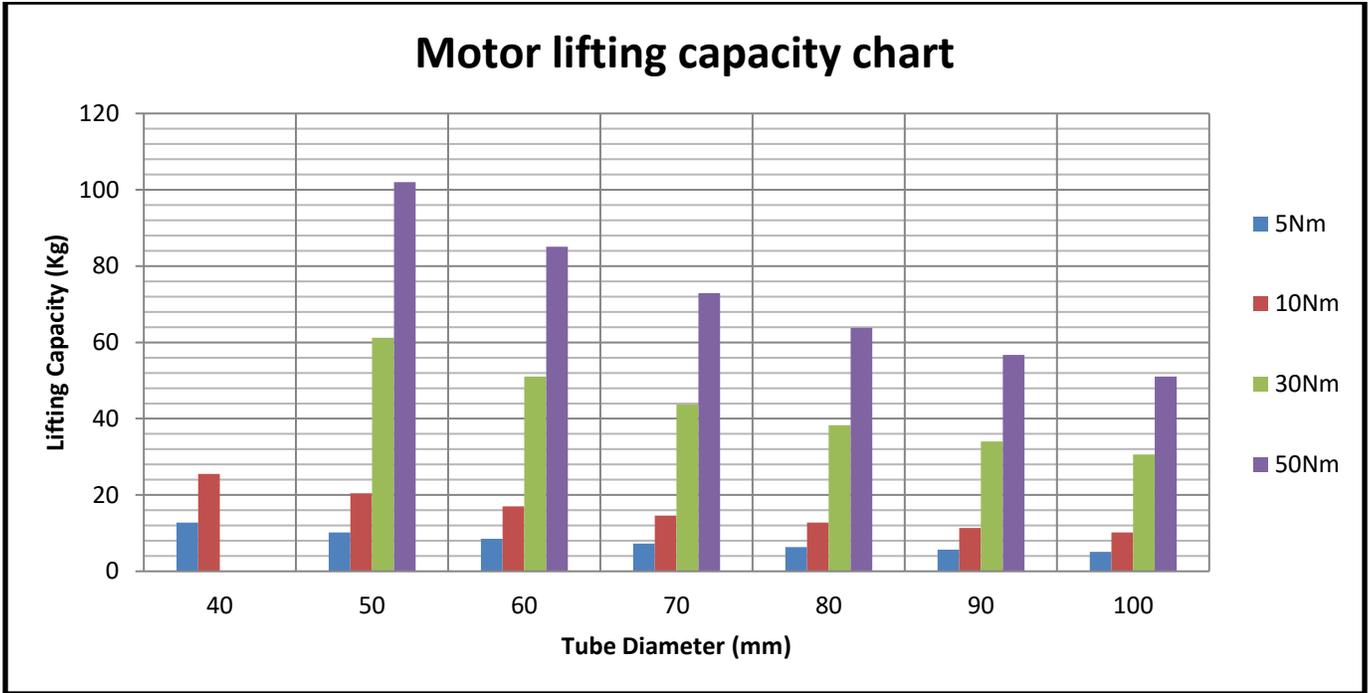
### Crown and Drive For 50mm motors

<u>Tube Type</u>	<u>Part to order</u>	<u>Fits Motor Size</u>
50mm straight guage shutter tube	WSA2401	for 50mm motor (45mm)
60mm straight guage	WSA2423	for 50mm motor (45mm)
60mm Acmeda + Zipscreen tube	WSA2415	for 50mm motor (45mm)
63mm Octagonal shutter tube	WSA2404	for 50mm motor (45mm)
63mm Gal + 62mm Ziptrak	WSA2424	for 50mm motor (45mm)
70mm Uniline Gal (eccentric)	WSA2408	for 50mm motor (45mm)
78mm Uniline Gal + Ziptrak 80mm	WSA2409	for 50mm motor (45mm)
85mm, requires minor filing for Uniline Gal	WSA2419	for 50mm motor (45mm)

### WSB01 Limit setting device

This item is required for setting the limits of any of the WSEC series motors prior to being connected to permanent power.





To use this chart, simply find your tube size at the bottom of the chart, find the color that matches the capacity of your motor and check against the weights on the left side.