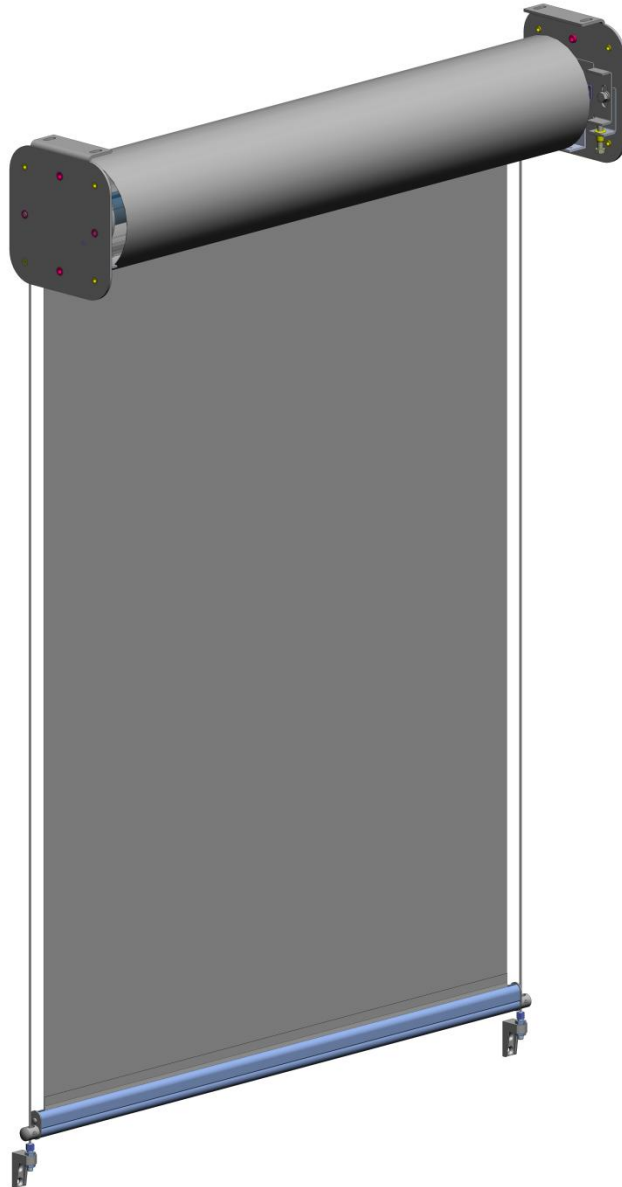


TESS™ 312

Installation Manual



Please read these instructions in full prior to starting your installation.

Guthrie Douglas

Contents

1. Important information about TESS Systems	3
2. Tess 312 System.....	4
3. System Preparation – Fabric Fitting if not Pre-fitted	5
4. End Plate Assembly - Motor Side.....	6
5. End Plate Assembly - Bobbin Side.....	7
6. Installation	8
7. Hirschmann Fitting.....	13
8. Manual Motor Limits Setting	14
9. Radio Motor Limits Setting	15
10. Maintenance	17

1. Important information about TESS Systems

Guthrie Douglas TESS Systems are technical products that require installation, servicing and maintenance by professionals with the appropriate skills. If in doubt, please contact us for further advice and training.

All products are designed, tested, and manufactured in line with relevant EU regulations. General certificates of conformity and declarations of performance are available on our website www.guthriedouglas.com.

Alternatively please contact us for any special local testing requirements.

As the product installer, you are responsible for ensuring that the installed product conforms with relevant standards and legislation.

TESS Systems are designed to operate at temperatures between 0 and 55 °C,

Guthrie Douglas Group Limited

12 Heathcote way,

Heathcote Industrial Estate,

Warwick,

UK,

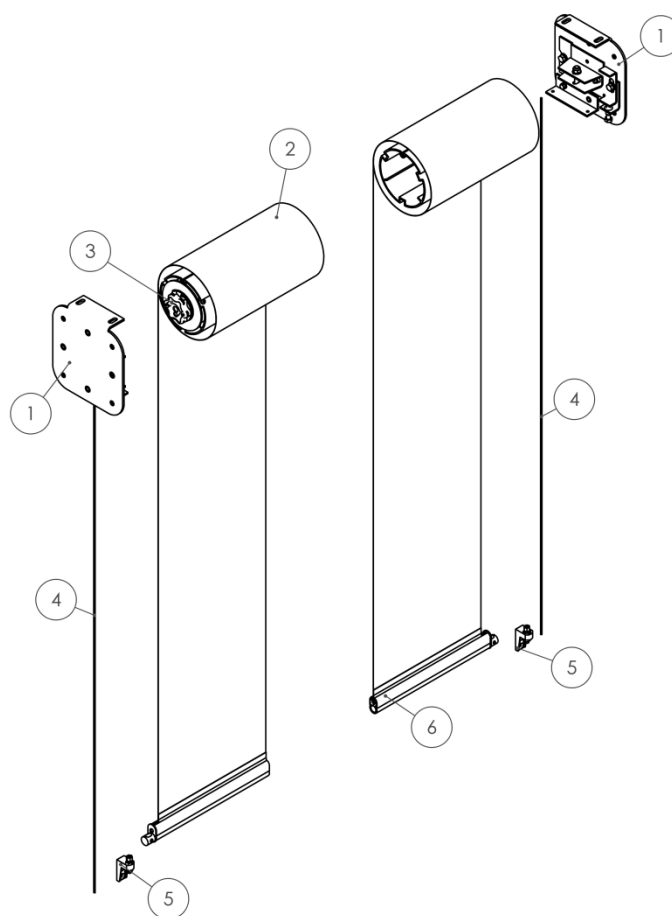
CV34 6TE

E-mail: solar@guthriedouglas.com

Tel: +44 (0) 1926 310850

2. Tess 312 System

Standard components and assemblies supplied



Description

1. End Plate Sub Assemblies (Top fix shown, face fix also available)
2. Barrel Assembly 127 mm Diameter (including fabric if supplied)
3. Motor Assembly
4. Wire Guides
5. Cable Anchor Brackets (including tension screw)
6. Hem bar sub assy

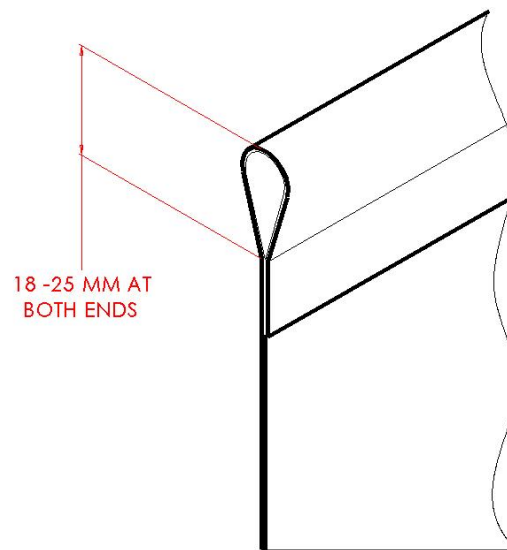
Fitting Kit to include :

- 2mm Diameter Aluminium Ferrule
- Installation Manual

Qty

2
1
1
Roll length
2
1
1
2
1

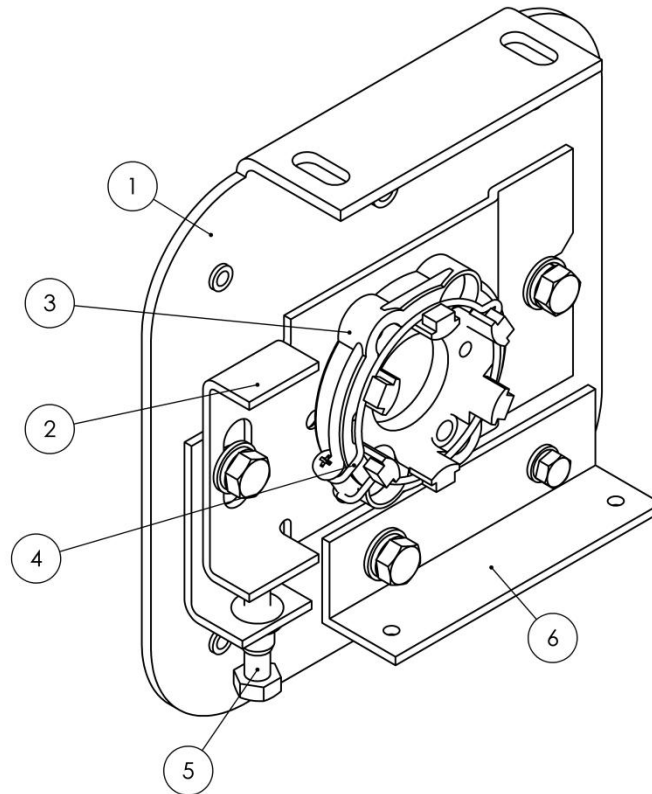
3. System Preparation – Fabric fitting if not pre-fitted



3.1

- The fabric to be fitted is to have been manufactured in line with Guthrie Douglas specifications. The fabric must have pockets as shown at each end. Fabric drawing is available on request.
- A fabric retaining rod will be supplied already fitted into the aluminium barrel tube, remove this and insert into the fabric pocket and slide the fabric onto the barrel assembly.
- Wind the fabric onto the barrel.
- Remove the fabric rod from the hem bar, insert into the fabric pocket and slide the hem bar into place.

4. End Plate Assembly – Motor Side

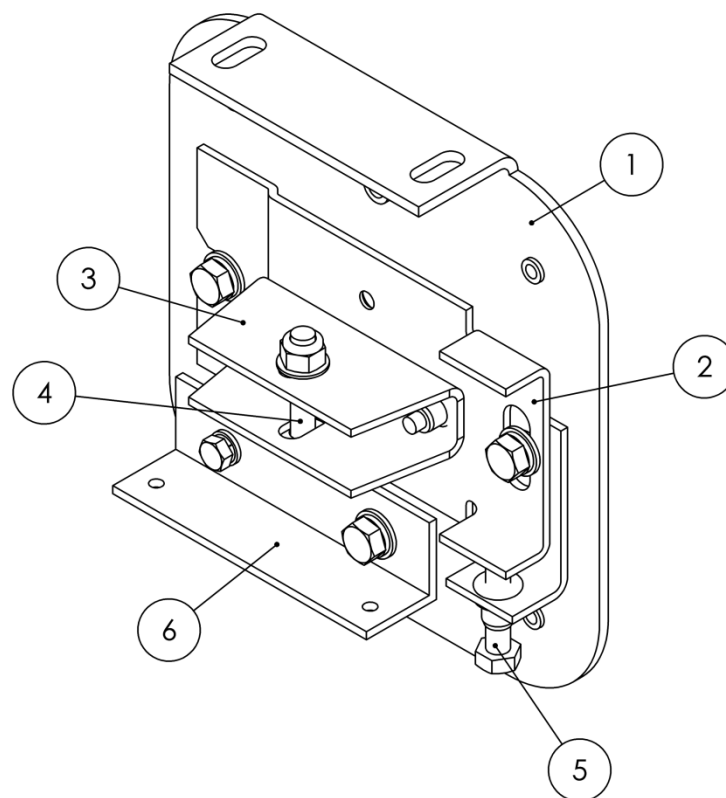


4.1

The motor side end plate will be supplied fully assembled as per the image above, it comprises of :

1. End Plate Sub Assy.
2. Tracking Plate.
3. Motor mounting bracket.
4. Motor Spring Retaining clip and fixing screw.
5. Fabric Tracking Adjustment Screw
6. Wire Guide Retention Bracket

5. End Plate Assembly – Bobbin Side

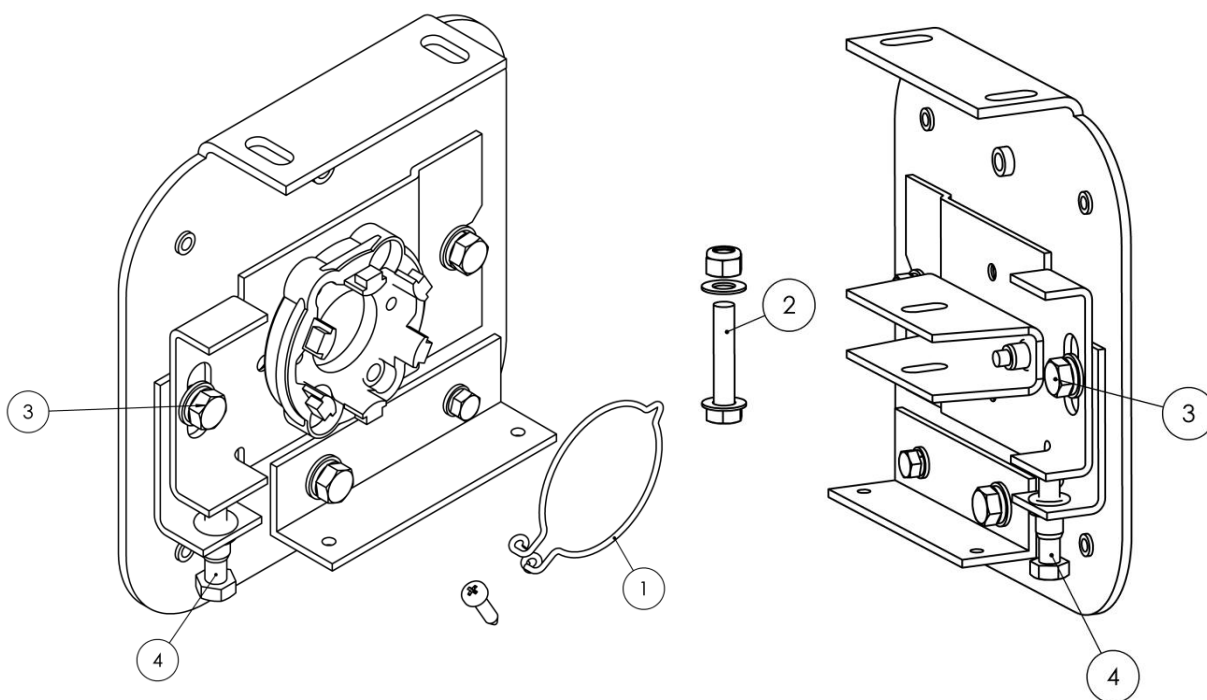


5.1

The bobbin side end plate will be supplied fully assembled as per the image above, it comprises of :

1. End Plate Sub Assy.
2. Tracking Plate.
3. Bobbin mounting bracket.
4. Bobbin Fixing Bolt.
5. Fabric Tracking Adjustment Screw
6. Wire Guide Retention Bracket

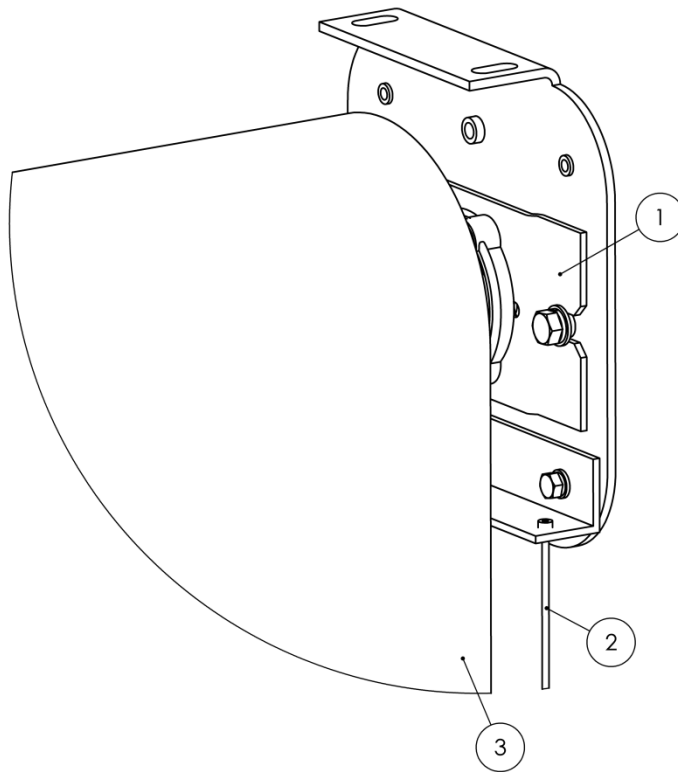
6. Installation



6.1

- Install the supplied Motor and Bobbin End Plate assemblies.
- Adjust the spacing on the mounting brackets so the distance between them is as ordered system width.
- Install the barrel assembly
 - Remove the motor mounting bracket spring clip and retaining screw (1).
 - Remove the end plate bobbin fixing bolt (2).
 - Install the barrel assembly. Motor End first and refit the motor retaining clip and screw, secure the bobbin end in place with the fixing bolt.
 - Once the barrel assembly is securely fixed in place, using a spirit level check that the barrel is level. If adjustment is necessary, slacken the tracking plate fixing screw (3) and adjust the tracking adjustment screw as required (4). Re tightened tracking plate fixing screw.
 - It is very important to ensure that the items (1) and (2) are correctly refitted to ensure the barrel assembly remains securely in place.
 - Ref to installation drawing GDP24593 .

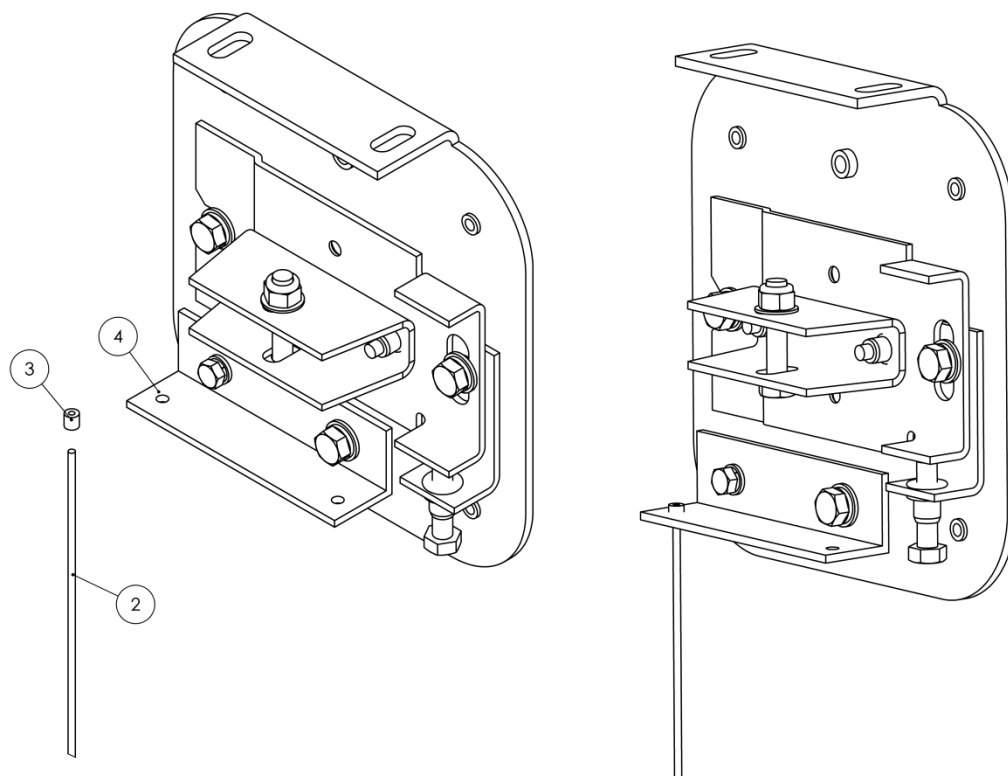
6. Installation



6.2

- Note the front face of fabric roll off direction (3), in relation to the position of the tracking plate (1) and the cable guide wire (2).

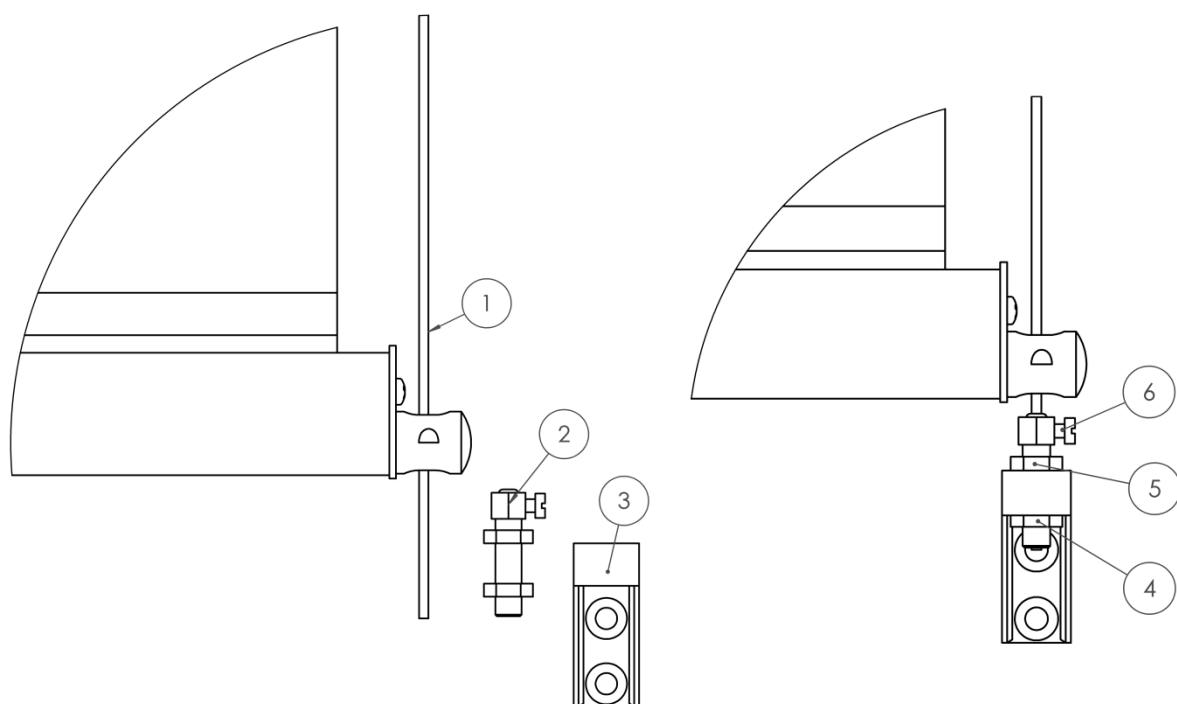
6. Installation



6.3

- Fit the wire guides (2). Supplied in the fitting kit are two aluminium ferrules (3)
- Using a suitable crimping tool crimp the ferrule (3) to the end of the cable (2) removing the cable coating where the ferrule is to be crimped
- Ensure the ferrules are securely fixed.
- Wire guides are required to be fitted on both end plate assemblies.
- Insert the cable into the cable retaining bracket (4). Ascertain the approximate length required and cut the cable taking care not to cut too short.

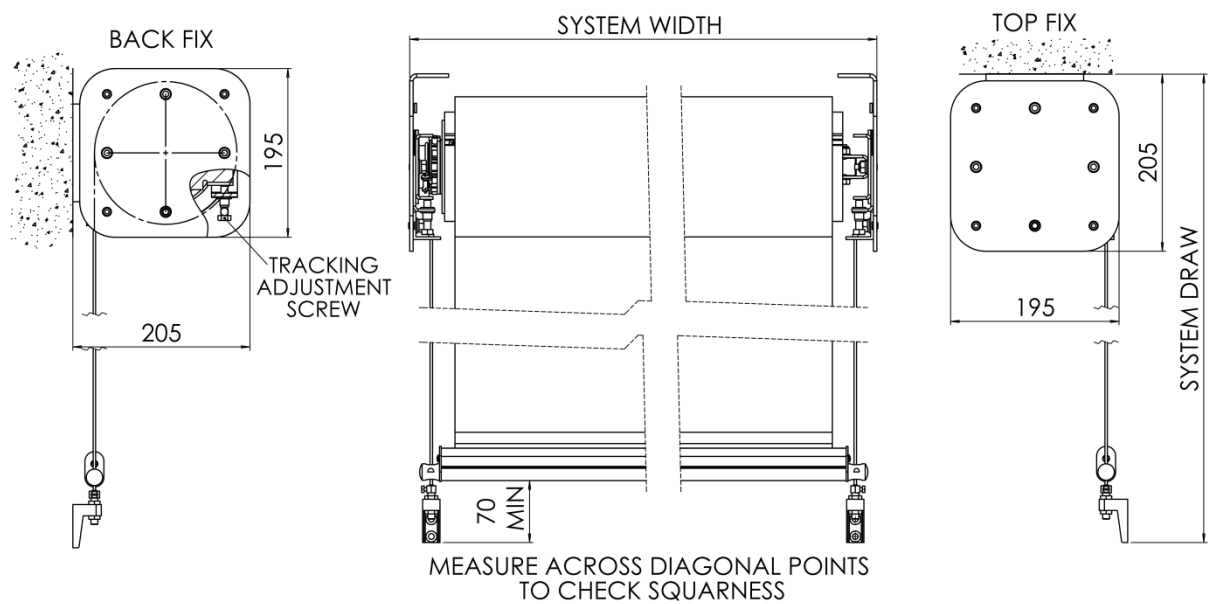
6. Installation



6.4

- Fit Cable Anchor Bracket (3), ensure the guide wire (1) is perpendicular to the barrel assembly.
- Fit the Cable Tensioning screw (2) to the Anchor Bracket (3) and feed the guide wire through.
- Secure the guide wire in place using the fixing screw (6). Tension the guide wire using a 11mm and 13mm spanner. 11mm spanner to hold the tension screw in place (2) and the 13mm spanner to tighten the nut (4). Once the guide wire is tight, tighten the lock nut (5) to secure.
- Cut off any excess guide wire.

6. Installation

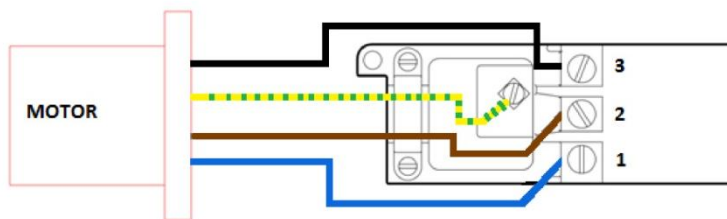


6.5

- Check System Width
- Check System Draw
- Check across diagonals to ensure system squareness.

7. Hirschmann Fitting

**HIRSCHMANN
STAS3**



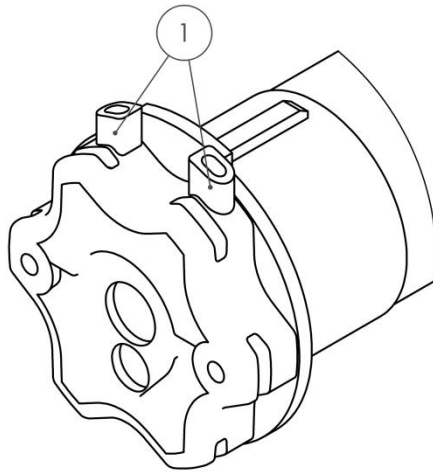
3. BLACK
2. BROWN
1. BLUE
GROUND. YELLOW/GREEN

7.1

Hirschmann Plug

- The diagram above shows the Hirschmann plug wiring as per Guthrie Douglas (GDE50360).

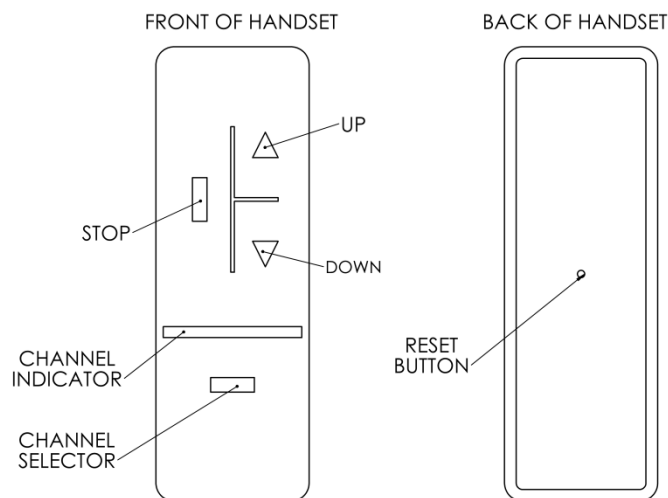
8. Manual Motor Limits Setting



- Using a suitable test lead to power the system.
- Remove the protective motor limit cap from the head of the motor.
- Limit positions are set when the limit switch buttons are in the released position. To alter the limit position the limit switch buttons are to be pressed in.
- Fully depress both limit switch push buttons (1). They will automatically lock in the down position.
- Operate the test lead and confirm both directions are powered.
- Move the hem bar to the mid draw position.
- Identify the limit switch directions.
Release one limit switch button (1) – if the hem bar can deploy then the upper limit is activated (set). Deploy the hembar to the required position and press the switch to release the switch button into the raised position, the limit position is now set.
- Press in the other limit switch button and retract the hembar to the position required, depress the limit button to release the switch and set the position.
- Replace the protective limit button cap taking care not to depress the limit push buttons.

Note : The motors have a built in thermal cut off. If after several minutes of use the motor will not run in either direction, allow the motor to cool down for approximately 20 minutes.

9. Radio Motor Limits Setting



Important

- Only power up one motor at a time.
- Have the transmitter within 3m of the motor during setting process.
- Motors acknowledge by running briefly in both directions (shuffle).
- Motor will only run in deadman (impulse) mode until a transmitter is added to the memory.

Setting motor limits

1. Connect the mains supply to the motor. This should be via an isolator switch in case programming has to be wiped.
2. Press the up and down button at the same time to initiate programming, the motor will acknowledge. The motor operation will be impulse only at this stage.

Checking the motor direction

1. Press the up button on the transmitter. The blind should retract. If the motor direction is incorrect then press the middle stop button for approximately 3 seconds. The motor will acknowledge.

Setting the end limits

1. Press and hold the down button and the motor will deploy. Continue this until the required deployed position is reached, use the up/down buttons to achieve the correct position. To memorise the fully deployed position press the stop and up button simultaneously. The motor will then run automatically in the retract direction.
2. When the motor arrives at the desired retract position press the stop button. Should it be necessary to adjust the final position use the up/down buttons.
3. To memorise the limit position press the stop and down buttons simultaneously. The motor will now run in the deploy direction automatically. To validate the settings press and hold the stop button for 2 seconds. The motor will acknowledge.

Confirming the master transmitter

1. To operate the motor in stable mode press the programming button for approximately 1 second, the motor will again acknowledge. This is now the master transmitter and can be used to programme additional transmitters.

9. Radio Motor Limits Setting

Programming additional transmitters

1. To program additional transmitters do the following: Select correct channel and press the master transmitter programming key for approximately 3 seconds, the motor will acknowledge. Take the new transmitter and select the required channel. Press the programming key for 1 second, the motor will again acknowledge and is now programmed.

Re-adjustment of end limits

1. The end limits can be altered as follows: go to the required limit position
2. Press simultaneously the up/down buttons for approximately 5 seconds, the motor will acknowledge.
3. Adjust the motor to the new position with the up/down buttons.
4. Validate the new position by pressing the stop button for 2 seconds; the motor will acknowledge.
5. Please note: the motor must be on the limit to be adjusted. If the limit cannot be reached then the programming will have to be cancelled and the re-started.

Cancelling the Programming & Settings

1. In order to undertake this successfully a mains power switch is essential and the timings are given to the minimum. If the timing is too quick then the programming will not be cancelled and will have to be repeated.
2. As a safety precaution, use the up/down button to deploy/retract the system to a central position away from either pre existing limits.
3. Turn off the power supply to all other motors that you do not want cancelled out of the programming. Failure to do so will cancel all programmed motors.
4. With the mains switch turn OFF the power supply for 4 seconds
5. Switch ON the power supply for 8 seconds
6. Switch OFF the power supply for 4 seconds
7. Switch the power supply back ON and the motor will run in a random direction for 5 seconds
8. Validate the programming by pressing and holding the “programming key” for more than 7 seconds. Maintain pressure on the programming key, the motor will acknowledge twice. If this does not happen then the cancellation of the programming is not complete and it will have to be repeated from the beginning.
9. Re-program the motor as described.

Faulty programming

1. If during the programming process the mains supply is turned off then back on then a situation could be encountered where the motor will do nothing. This is because the programming mode is still active.
2. Complete the operation by pressing the programming key. This will take the motor out of programming and it can then have the programming cancelled to restore it to “factory default” the programming process can then be repeated.

10. Maintenance

Maintenance must be considered with local conditions in mind but it is expected the installed system will be checked every year.

Every 12 Months

- Check tracking and fabric condition (creases)
- Check that tracking is correct
- Make adjustments where required.
- Check limit positions
- Check fabric edges for small rips / cuts / damage
- Check fixing screws
- Tighten any loose screws
- Clean and remove any debris from the system

Every 10 Years (additional checks)

- Check motor operation
- Depending motor usage and working conditions and consider replacement



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