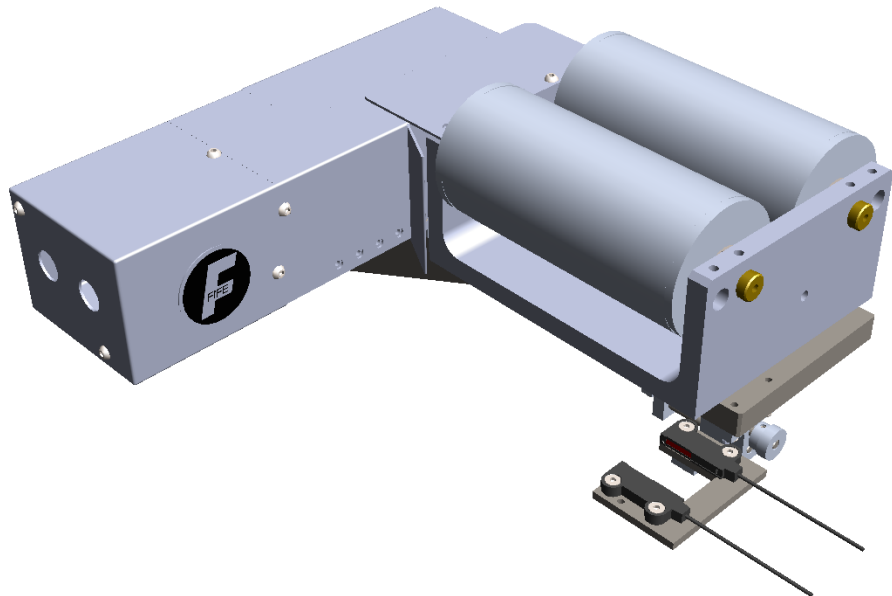




FIFE-200 Web Guiding System with Servo Center Sensors

Supplement Installation and Service Manual



CONTENTS

INTRODUCTION	1-1
About these operating instructions	1-1
CE marking	1-1
Product overview	1-2
SAFETY INSTRUCTIONS	2-1
Instructions for use	2-1
Safety symbols	2-1
Symbols used	2-2
Basic safety information	2-3
INSTALLATION	2-5
Installing the web guide	3-1
Electrical installation	3-2
Installing cables	3-2
Controller connection diagrams	3-5
Controller assembly mounting	3-7
CALIBRATION	4-1
SERVICE AND REPLACEMENT PARTS	5-1

About these operating instructions

All of the information herein is the exclusive proprietary property of Maxcess International, and is disclosed with the understanding that it will be retained in confidence and will neither be duplicated nor copied in whole or in part nor be used for any purpose other than for which disclosed.

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Periodically there will be updates to this manual. The latest version is available on our website or by calling the number on the back page of this publication.

These web guiding systems must not be installed or used in a machine or system which does not comply with the machinery directive 2006/42/EC.

These web guiding systems were designed and manufactured to be installed as Partly Completed Machinery into a machine or partly completed machine.

The instructions must be read and used by all persons who have the responsibility of installing and maintaining these web guiding systems.

These instructions must be retained and incorporated in the technical documentation for the machine or partly completed machinery into which the web guiding system is installed.

Language

These are the original instructions, written in English.

CE marking

The FIFE-200 Web Guiding System complies with the 2006/42/EC Machinery directive and the 2004/108/EC Electromagnetic Compatibility directive.

Conventions used

All dimensions and specifications are shown in the format mm [inches] unless otherwise specified.

Product overview

This supplement manual describes the installation and calibration of the special FIFE-200 with servo center sensors. This controller will only control two guides instead of the four guides that the standard FIFE-200 will control. For each guide the edge sensor is sensor 1 and the servo center sensor is sensor 2.

Instructions for use

To ensure safe and problem free installation of the FIFE-200 Web Guiding System, it must be properly transported and stored, professionally installed, and placed in operation. Proper operation and maintenance will ensure a long service life of the device. Only persons who are acquainted with the installation, commissioning, operation, and maintenance of the system and who possess the necessary qualifications for their activities may work on the FIFE-200 Web Guiding System.

Note: The safety information may not be comprehensive.

Please note the following:



- The content of these operating instructions
- Any safety instructions on the device
- The machine manufacturer's specifications
- All national, state, and local requirements for installation, accident prevention and environmental protection

Safety symbols

Information about safety instructions

The safety instructions and symbols described in this section are used in these operating instructions. They are used to avoid possible dangers for users and to prevent material damage.



SIGNAL WORD

Source of danger and its results
Avoiding dangers

The signal word **DANGER** refers to the danger of death or serious bodily injuries.

The signal word **WARNING** refers to the danger of moderate to severe bodily injuries.

The signal word **CAUTION** refers to the danger of slight to moderate bodily injuries or material damage.

The signal word **NOTICE** refers to the possibility of damage to equipment.

Symbols used

The following safety identification symbols are used in these operating instructions.



WARNING/CAUTION – General danger or important note
Reference to general hazards that may result in bodily injuries or damage to device or material.



WARNING/CAUTION – Danger due to crushing
Reference to danger of injury caused by crushing.



WARNING/CAUTION – Danger due to cutting
Reference to danger of injury caused by cutting.



WARNING/CAUTION – Danger due to voltage, electric shock
Reference to danger of injury caused by electric shock due to voltage.



WARNING/CAUTION – Danger due to hot surfaces
Reference to risk of injury caused by burning.

Basic safety information

Proper use

The FIFE-200 Web Guiding System is intended to be used on machines or systems to guide a web of material.

Indoor operation: see environmental specifications

Improper use

Operation outside the technical specifications

Operation in an Ex-area or intrinsically safe area

Operation as a safety component. The FIFE-200 Web Guiding System does not hold the web position if power fails.

Outdoor operation

Any other use than the proper use shall be deemed inappropriate.

Installation and commissioning

Any FIFE-200 Web Guiding System which is damaged must not be installed or put into operation.

Only perform installation, maintenance or repair tasks on the FIFE-200 Web Guiding System when the machine has been stopped and is secured from being turned on.

Only perform installation, maintenance or repair tasks on the FIFE-200 Web Guiding System when there is no electrical power in the system.

The FIFE-200 Web Guiding System must be securely mounted before being placed in operation.

Only replacement parts obtained from Fife may be used.

No modifications may be made to the FIFE-200 Web Guiding System.

Do not place electrical cables under mechanical strain.

continued



WARNING – Death or injury can result from static electric shocks. Moving webs of material can produce large static voltage potentials. Protect against electric shocks by installing a conductive connection between the power cable GREEN wire and the PE circuit of the building or machine.



WARNING – The FIFE-200 Web Guiding System contains rotating and moving parts which could cause injury due to crushing. Appropriate protective guards must be installed by the user according to his use of this product.



WARNING – Death or injury can result from unexpected movement. Protect against unexpected movement by removing electrical power from the FIFE-200 Web Guiding System and the machine into which it is being installed.

Operation



WARNING – The FIFE-200 Web Guiding System contains rotating and moving parts which could cause injury due to crushing. Do not touch anything on or in the vicinity of the moving or rotating parts. Appropriate protective guards must be installed by the user according to his use of this product.

Maintenance and repair



WARNING – Death or injury can result from unexpected movement. Protect against unexpected movement by removing electrical power from the FIFE-200 Web Guiding System and the machine into which it is installed.



WARNING – Danger of injury from crushing. Maintenance and repair tasks on the FIFE-200 Web Guiding System must be performed only when the machine has been stopped and has been secured from being turned on again.

Decommissioning

The FIFE-200 Web Guiding System must be disposed of in accordance with all the applicable national, state and local regulations.

Electrical and mechanical installation



CAUTION – Never place electrical cables under mechanical strain. Always provide mechanical support of wiring with either clamps or flexible or rigid conduit.



WARNING – Death or injury can result from unexpected movement.

Protect against unexpected movement by removing electrical power from the FIFE-200 Web Guiding System and the machine into which the FIFE-200 Web Guiding System is installed.



WARNING – Danger of injury from crushing.

Maintenance and repair tasks on the FIFE-200 Web Guiding System must be performed only when the machine has been stopped and has been secured from being turned on again.



WARNING – The FIFE-200 Web Guiding System contains rotating and moving parts which could cause injury due to crushing. Appropriate protective guards must be installed by the user according to his use of this product.

Installing the web guide

This supplement manual only shows how to connect motors, edge sensors and servo center sensors to the the controller and to calibrate the edge sensor and servo center sensors. For all other installation, operation, maintenance, and specifications refer to manual 1-918 (FIFE-200 Web Guiding System Installation and Service Manual).

Controller installation

Installing cables in the controller housing

(OI, motor, edge sensor, servo center sensor and parallel I/O cables)

Figure 1 shows the system connection overview for sensor types SE-47, SE-11, SE-22, SE-44R, and SE-31. The SE-26A line sensor is not supported.

- Sensor input 1 must be the edge sensor sensing the web on Guide 1.
- Sensor input 2 must be the servo center sensor on Guide 1.
- Sensor input 3 must be the edge sensor on Guide 2.
- Sensor input 4 must be the servo center sensor on Guide 2.
- The controller can control two guides.

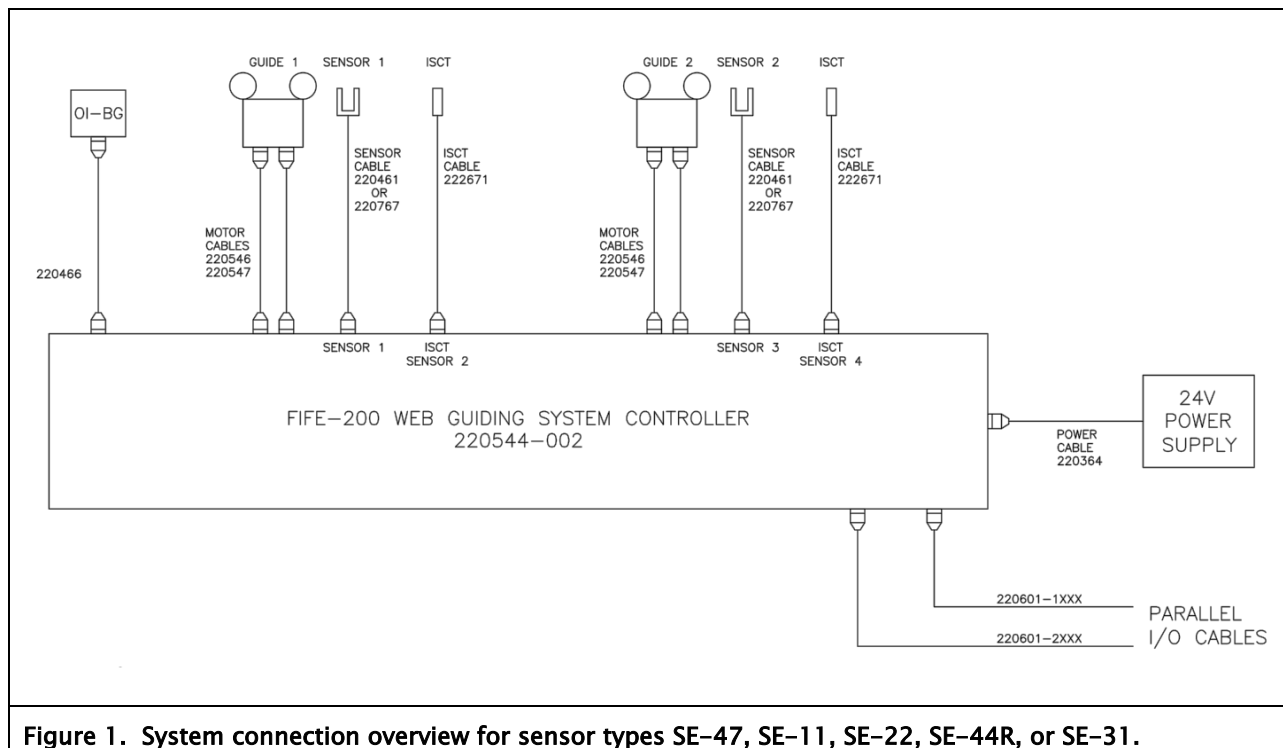
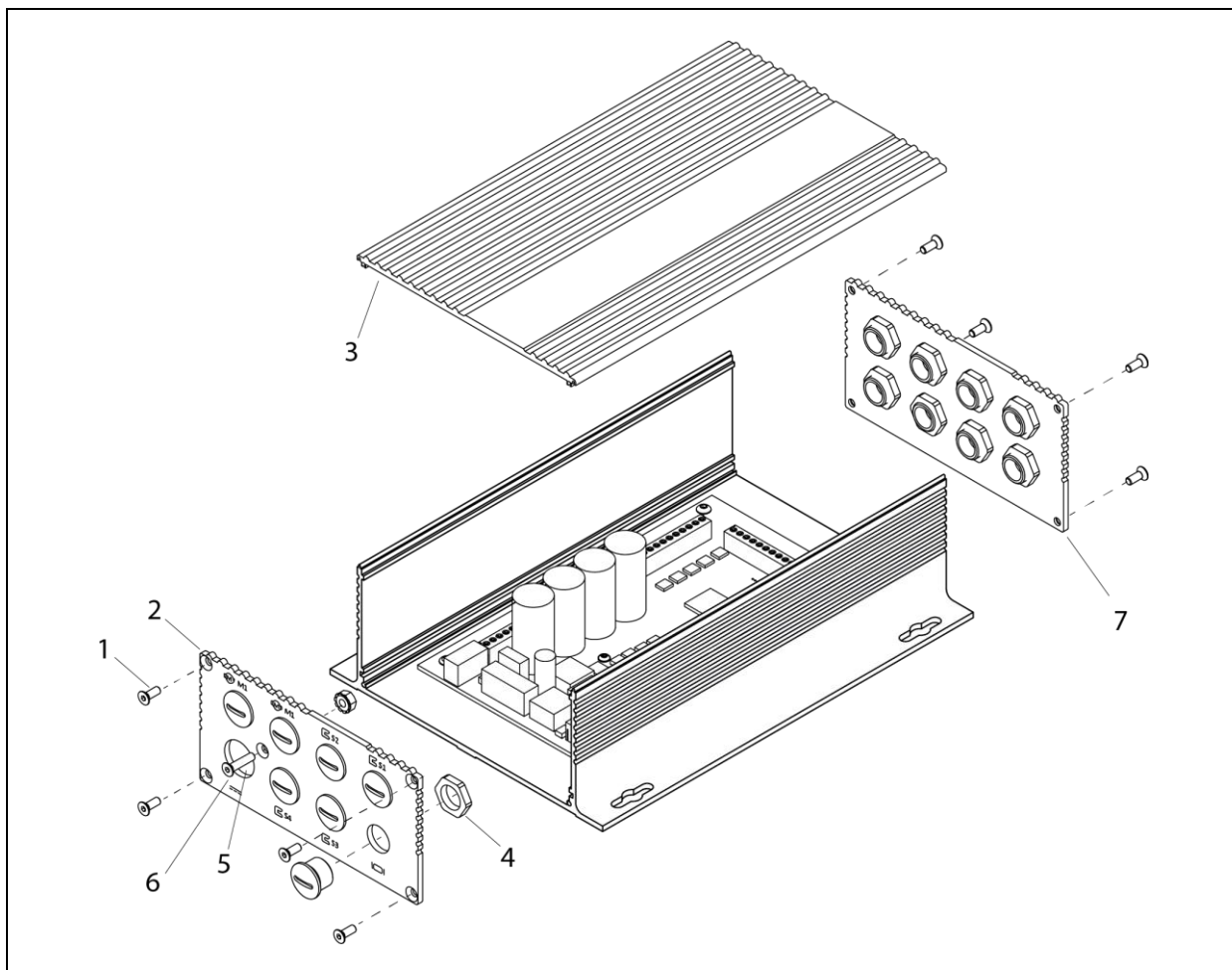


Figure 1. System connection overview for sensor types SE-47, SE-11, SE-22, SE-44R, or SE-31.

Installing cables

(continued)

1. Remove the eight screws that secure the controller end plates.
2. Remove the controller cover by pulling up on one side.



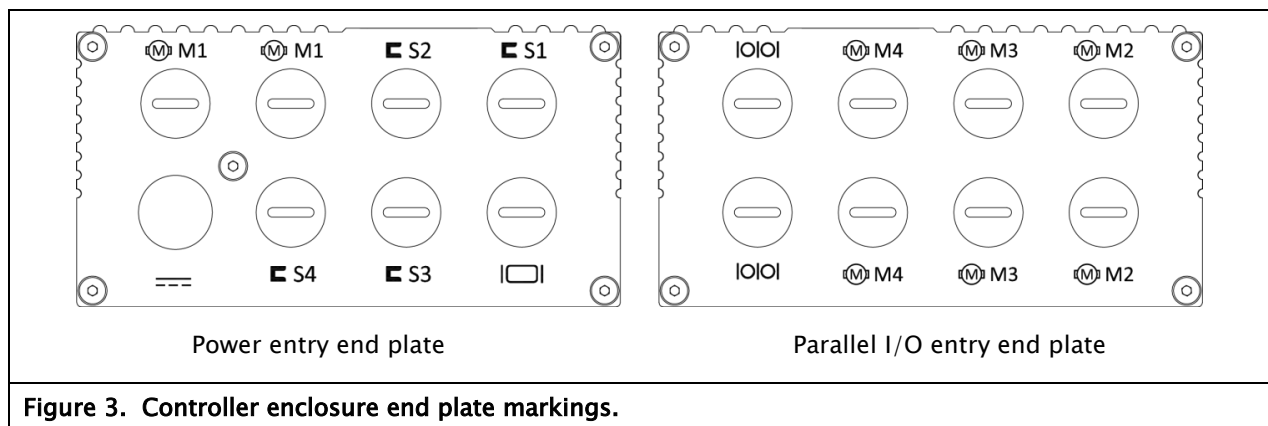
- | | |
|---|--|
| 1 | M3 flat head screw (8 ea) |
| 2 | End plate, power entry |
| 3 | Controller cover |
| 4 | Lock nut for sensor cable bushing |
| 5 | Power supply cable opening |
| 6 | Flat head screw and nut for ground wire connection |
| 7 | End plate, parallel I/O entry |

Figure 2. Controller cable installation components.

Installing cables

(continued)

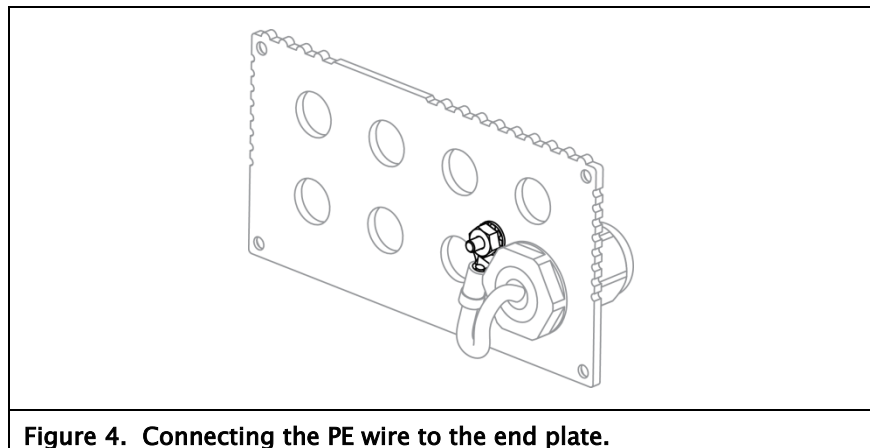
3. You will need to remove hole plugs from the end plates to connect the cables. Use the controller connection diagrams and the markings on the end plates to determine which hole plugs to remove.
4. Re-use the lock nuts to install the bushings from the cables in the appropriately marked holes in each of the end plates. The lock nut for the power cable bushing is on the bushing.



Connecting earth ground (PE)

The green wire with the ring terminal from the power cable is the protective earth connection and is labeled "PE".

It must be connected to the inside of the power entry end plate and secured with the supplied flat head screw and nut.



Controller connection diagrams



WARNING – Death or injury can result from static electric shocks.

Moving webs of material can produce large static voltage potentials. Protect against electric shocks by ensuring a conductive connection between the power cable GREEN wire and the inside of the enclosure end plate.

- Connect the wires from each cable to the appropriate terminal block pins as shown in the connection diagram in Figure 5 on the following pages.
- The power, motor, and OI cable wires are marked with the terminal block pin numbers.
- The sensor cable wires are not marked with the terminal block pin numbers.
- Each cable is marked with a part number and the cable part number is shown in Figure 5.
- Figure 5 shows the connections for the motor and the sensors SE-47, SE-11, SE-22, SE-44R, and SE-31. The SE-26A line sensor is not supported.
- Refer to drawing 220712 for a complete list of cables.

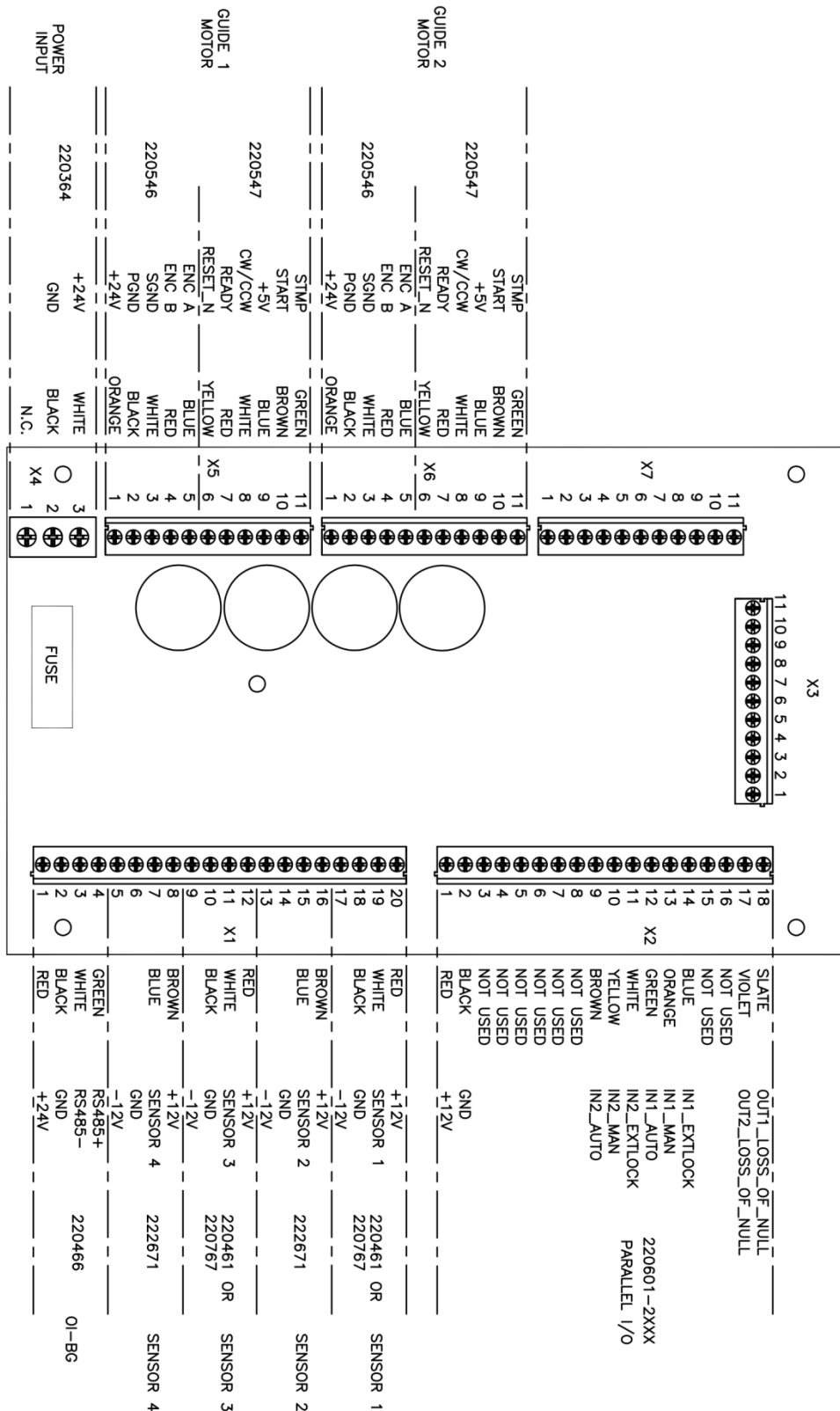
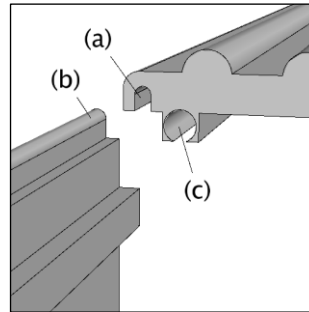


Figure 5. Controller connections for guides and sensor types SE-47, SE-11, SE-22, SE-44R, or SE-31.

Controller assembly mounting

Reassemble the controller enclosure

1. Re-install the controller housing cover by sliding it onto the controller housing base. Make sure that the outside groove (a) on the housing cover aligns with the top edge of the base (b). The threaded opening (c) is for the screws that secure the end plates to the assembly.



2. Attach the end plates to the controller housing base and secure with the eight M3 flat head screws.
3. Mount the assembled controller to a rigid frame with four M6 bolts in the controller mounting holes shown in Figure 6.

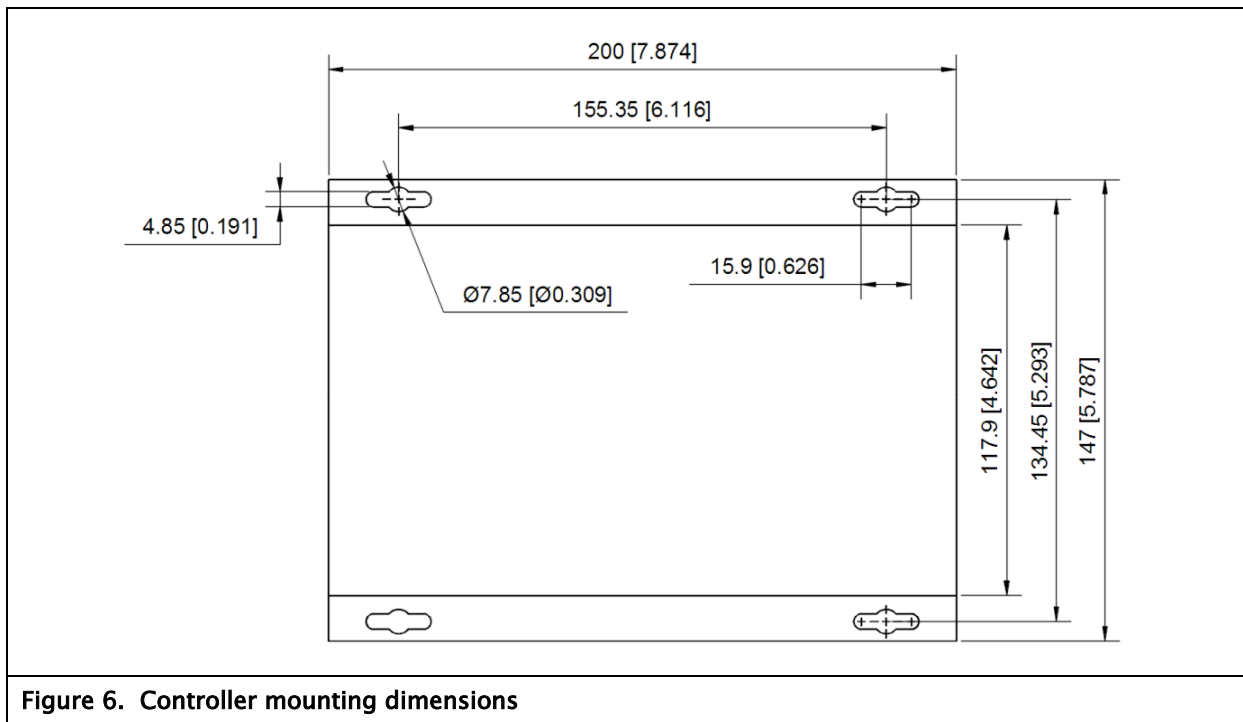
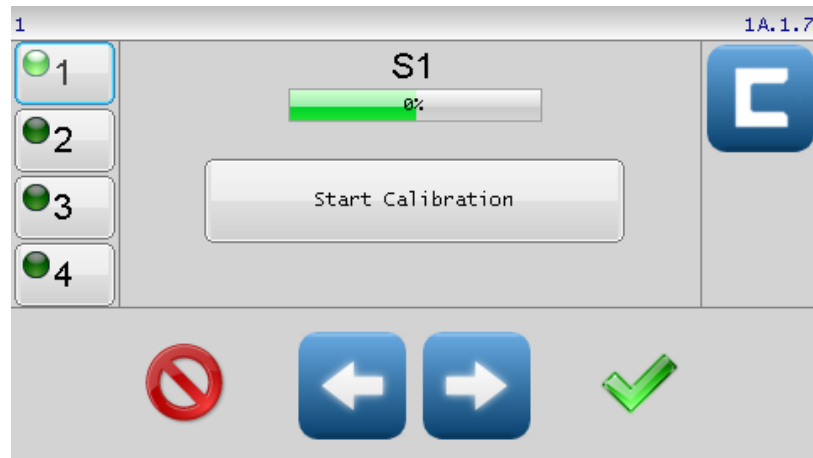


Figure 6. Controller mounting dimensions

Sensor calibration

For each guide the edge sensor is sensor S1 and the servo center sensor is S2 as shown on the sensor calibration screens.



Edge Sensor Calibration

Select S1 to calibrate the edge sensor and press the **Start Calibration** button.

✓ Press ACCEPT to save the results of the last sensor calibration and return to the previous screen. This button is also required to save the results of selecting a different calibration set.

Servo Center Calibration

Select sensor S2 to calibrate the servo center sensor and press the **Start Calibration** button.

✓ Press ACCEPT to save the results of the last sensor calibration and return to the previous screen.

Service requests and replacement parts

To request service or to get replacement parts, contact one of the following addresses:

Maxcess Oklahoma

222 West Memorial Rd.

Oklahoma City, OK, 73114, USA

Tel +1.405.755.1600

Fax +1.405.755.8425

www.maxcessintl.com

Maxcess Europe

Max-Planck-Strasse 8

65779 Kelkheim

Deutschland

Tel +49.6195.7002.0

Fax +49.6195.7002.933

www.maxcess.eu

Maxcess (Zhuhai) Industrial Automation Equipment Co., Ltd.

#7 Warehousing Factory

Hengli Industrial Park

#5 Land of Zhuhai

Free Trade Zone

Guangdong PR 519030

China

Tel +86.756.881.9398



When ordering replacement parts, please indicate, where possible, part number, drawing number and model description.

If it is necessary to return the FIFE-200 Web Guiding System for service, care must be taken to properly package the unit to prevent damage during shipment. If possible, use the original shipping containers.



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