



FIFE SE-46C and Web Guide Controllers Commissioning Manual



INTRODUCTION	1-1
About these commissioning instructions	1-1
COMMISSIONING OF D-MAX	2-1
D-MAX Web Guide Controller	2-1
1. Calibrating the analog signal inputs of the D-MAX controller	2-1
2. Setting the ASC (Automatic Sensor Control)	2-4
3. Setting the polarity and gain	2-5
Operation	2-6
COMMISSIONING OF DP-20 / DP-30	3-1
DP-20 / DP-30 Web Guide Controller	3-1
1. Calibrating the analog signal inputs of the DP-20 / DP-30	3-1
2. Setting the ASC (Automatic Sensor Control)	3-4
3. Setting the polarity and gain	3-5
Operation	3-5
COMMISSIONING OF FIFE-500	4-1
FIFE-500 Web Guide Controller	4-1
1. Calibrating the analog signal inputs of the FIFE-500 controller	4-1
2. Setting the ASC (Automatic Sensor Control)	4-4
3. Setting the polarity and gain	4-5
Operation	4-5
SERVICE	5-1

1 INTRODUCTION

About these commissioning instructions

These commissioning instructions describe how to calibrate the analog signal inputs of the web guide controller with the sensor SE-46C connected to it.

The commissioning instructions must be kept in a safe place and must always be available throughout the service life of the SE-46C digital line sensor.

**Note:**

For further information and safety instructions regarding the web guide controller and sensor SE-46C, please consult the relevant operating instructions in the system documentation.

Translation of the original Commissioning Manual:

This Commissioning Manual is a translation. The original Commissioning Manual was composed in German.

2 COMMISSIONING OF D-MAX

D-MAX Web Guide Controller



Note:

Detailed information about sensor calibration is available in the "D-MAX Operating Instructions". "Supplementary Operating Instructions" may also be available.

Precondition:

The SE-46C sensor is connected to the D-MAX controller as specified in the system diagram to X5 or X9.



The SE-46C must be operated from the OI-TS operator interface, not from the OI-N operator interface of the D-MAX system.

1. Calibrating the analog signal inputs of the D-MAX controller



Note:

Calibration for analog control signals must only be performed if the SE-46C sensor is **not** connected via an Ethernet cable with the D-MAX Controller.

1.1. Preparing the D-MAX controller for the calibration

D-MAX OI-N operator interface:



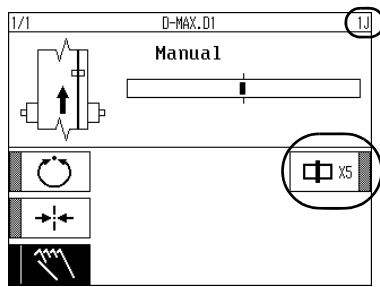
- Press the A key to select the D-MAX controller to which the SE-46C sensor is connected



- Press the F3 key to set "Manual" operating mode on the selected D-MAX controller



- Press the F4 key to
 - select the job with y = 'J' if the SE-46 sensor is connected to input X5 or
 - select the job with y = 'K' if the SE-46 sensor is connected to input X9.



The entry changes in the second place of the menu identification depending on the job selected.



Note:

If the job cannot be selected with $y = 'J'$ or $y = 'K'$, the software of the D-MAX controller has not been prepared for analog sensor signals. Please check the system documentation!

The calibration process cannot be continued.

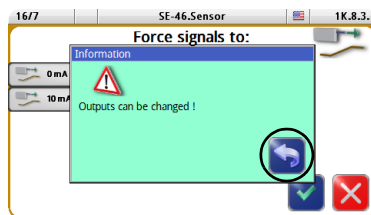
1.2. Call menu 1K.8.3

Simulate Analog Signals on the SE-46C

The analog signals required for the calibration are simulated by sensor SE-46C.

OI-TS operator interface:

- Select menu 1K.8.3 *Simulate Analog Signals*
(Press the 6 button and hold it for 2 sec. → Press the 8 button Startup → Press the 3 button Simulate Analog Signals)
- Press the RETURN button to confirm the information in the display



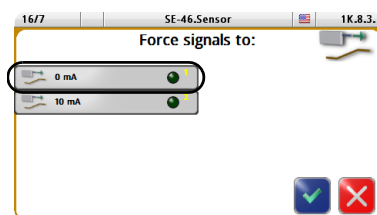
1.3. Calibrating the locking signal on the D-MAX controller

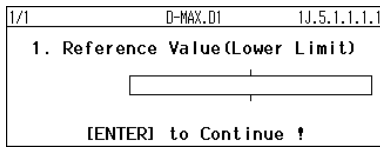
Depending on how the sensor is connected to the D-MAX controller, perform the calibration for:

- S 01 – Locking signal (menu 1y.5.1.1) if the SE-46C sensor is connected to input X5
or for
- S 03 – Locking signal (menu 1y.5.1.3) if the SE-46C sensor is connected to input X9.

OI-TS operator interface:

- Select signal assignment 0 mA

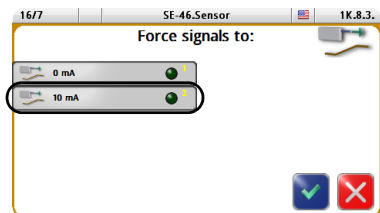




D-MAX OI-N operator interface:

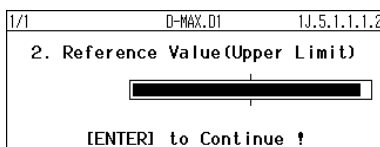
- Select menu 1y.5.1.1.1 for S 01 or 1y.5.1.3.1 for S 03 (Hardware IOs → Sensor Setup → S 01 (X5/1) or S 03 (X9/1) → Calibration → 1. Reference Value (Lower Limit))

- Press the ENTER key



OI-TS operator interface:

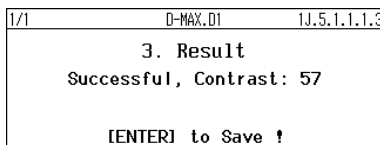
- Select signal assignment 10 mA



D-MAX OI-N operator interface:

- 2. Reference Value (Upper Limit))

- Press the ENTER key



- Press the ENTER key to save the calibration

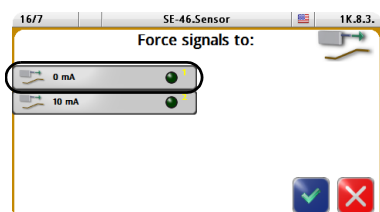
1.4. Calibrating the position signal on the D-MAX controller

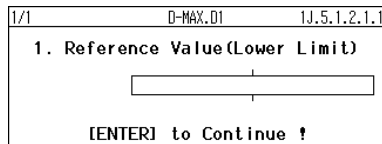
Depending on how the sensor is connected to the D-MAX Controller, perform the calibration for:

- S 02 – Position signal (menu 1y.5.1.2) if the SE-46 sensor is connected to input X5 or for
- S 04 – Position signal (menu 1y.5.1.4) if the SE-46 sensor is connected to input X9

OI-TS operator interface:

- Select signal assignment 0 mA



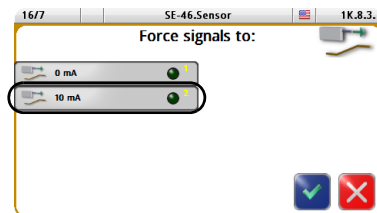
**D-MAX OI-N operator interface:**

- Select menu 1y.5.1.2.1 for S 02 or 1y.5.1.4.1 for S 04 (Hardware IOs → Sensor Setup → S 02 (X5/2) or S 04 (X9/2) → Calibration → 1. Reference Value (Lower Limit))

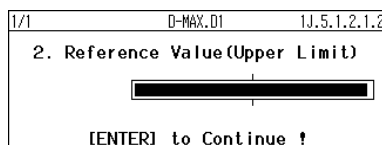
- Press the ENTER key

OI-TS operator interface:

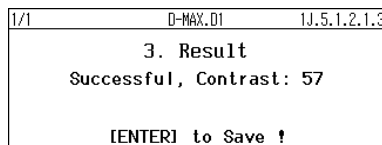
- Select signal assignment 10 mA

**D-MAX OI-N operator interface:**

- 2. Reference Value (Upper Limit)



- Press the ENTER key



- Press the ENTER key to save the calibration



- Press and hold the ESC key until you reach the user level of the D-MAX controller

1.5. Exit menu 1K.8.3

Simulate Analog Signals on the SE-46C

**OI-TS operator interface:**

- Press the CONFIRMATION button to exit menu 1K.8.3



- Press the RETURN button twice to return to the operator level

2. Setting the ASC (Automatic Sensor Control)



Note:

Connection to X5: job with y = 'J'

Connection to X9: job with y = 'K'

2.1. Setting ASC thresholds

1/1	D-MAX.01	1J.3.J6.2
ASC Threshold 1 (Pos)		
90.0 %		

1/1	D-MAX.01	1J.3.J6.3
ASC Threshold 2 (Neg)		
-90.0 %		

D-MAX OI-N operator interface:

- Select menu 1y.3.y6.2
(Job Settings → ASC → ASC Threshold 1 (Pos))
- Set *ASC threshold 1 (pos)* to **90.0%**
- Select menu 1y.3.y6.3
(Job Settings → ASC → ASC Threshold 2 (Neg))
- Set *ASC threshold 2 (neg)* to **-90.0%**

2.2. Switching on the ASC function

1/1	D-MAX.01	1J.3.J6.1
ASC State		
ON		

D-MAX OI-N operator interface:

- Select menu 1y.3.y6.1
(Job Settings → ASC → ASC State)
- Set the *ASC State* to **ON**

3. Setting the polarity and gain



Note:

Connection to X5: job with y = 'J'
Connection to X9: job with y = 'K'

3.1. Setting the polarity

The guiding direction (polarity) must be checked depending on the mechanical installation direction of the system and adjusted if necessary.

1/1	D-MAX.01	1J.3.J8
Polarity		
Negative		

D-MAX OI-N operator interface:

- Select menu 1.y.3.y8
(Job Settings → Polarity)
- Set the *polarity*

3.2. Setting the gain

The gain must be set optimally.

1/1	D-MAX.01	1J.3.J3
Gain		
110		

D-MAX OI-N operator interface:

- Select menu 1.y.3.y3
(Job Settings → Gain)
- Set the *gain*

Operation**Note:**

Depending on whether the sensor is connected to X5 or X9, operation on the D-MAX Controller in „Automatic” operating mode will proceed with job 'J' or 'K'.

3 COMMISSIONING OF DP-20 / DP-30

DP-20 / DP-30 Web Guide Controller



Note:

You can find detailed information about sensor calibration in the "DP-20 Operating Instructions" and in the "DP-30 Operating Instructions".

The DP-20 must be equipped with firmware version 1.05 or higher.

Precondition:

The SE-46C sensor is connected to the DP-20 web guide controller on input X4 or to the DP-30 web guide controller on input X5. The calibration described here only applies to this input.



The SE-46C is operated from the OI-TS operator interface.

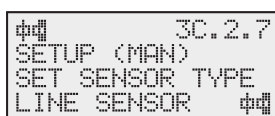
1. Calibrating the analog signal inputs of the DP-20 / DP-30

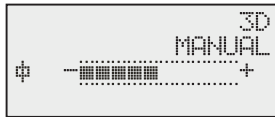
1.1. Preparing the DP-20 / DP-30 for calibration



DP-20 / DP-30 web guide controller:

- Press the Manual key to set „Manual“ operating mode
- Select menu 3x.2.7 *Set sensor type* (Manual → Special → Set sensor type)
- Set the *sensor type* to LINE SENSOR





- Continue pressing the Sensor key until sensor line centre – $\oplus$ is selected (menu 3D)

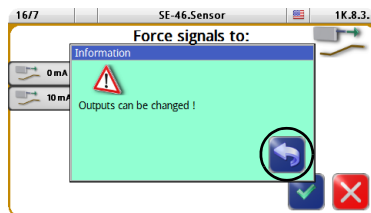
1.2. Call menu 1K.8.3

Simulate Analog Signals on the SE-46C

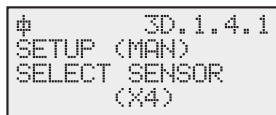
The analog signals required for the calibration are simulated by sensor SE-46C.

OI-TS operator interface:

- Select menu 1K.8.3 *Simulate Analog Signals*
(Press the 6 button and hold it for 2 sec. → Press the 8 button Startup → Press the 3 button Simulate Analog Signals)
- Press the Return button to confirm the information in the display



1.3. Calibrating the locking signal on the DP-20 / DP-30 web guide controller



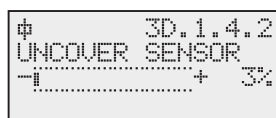
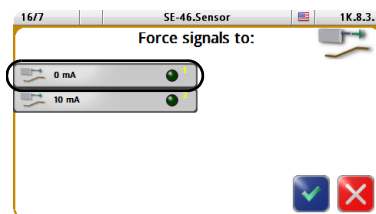
DP-20 / DP-30 web guide controller:

- Select menu 3D.1.4.1 *Select Sensor*
(Manual → Basic → Calibration → Select Sensor)
- DP-20 controller: select (X4)
DP-30 controller: select (X5)
(line sensor – line centre $\oplus$)
- Press the ENTER key



OI-TS operator interface:

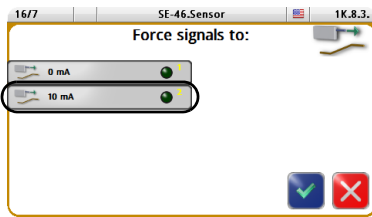
- Select signal assignment 0 mA



DP-20 / DP-30 web guide controller:

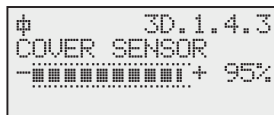
- Determine the first reference value
- Press the ENTER key





OI-TS operator interface:

- Select signal assignment 10 mA



DP-20 / DP-30 web guide controller:

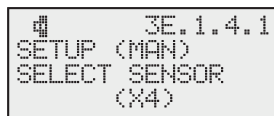
- Determine the second reference value



- Press the ENTER key

The DP-20 / DP-30 web guide controller returns to the user area if the calibration was successful.

1.4. Calibrating the locking signal on the DP-20 / DP-30



DP-20 / DP-30 web guide controller:

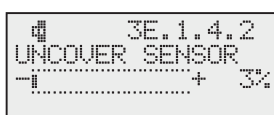
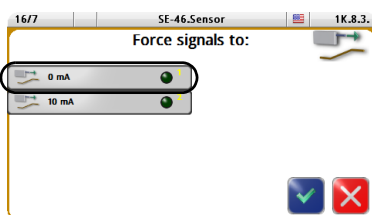
- Select menu 3E.1.4.1 *Select Sensor* (Manual → Basic → Calibration → Select Sensor)
- DP-20 controller: select (X4)
DP-30 controller: select (X5)
(line sensor – print or material edge )



- Press the ENTER key

OI-TS operator interface:

- Select signal assignment 0 mA

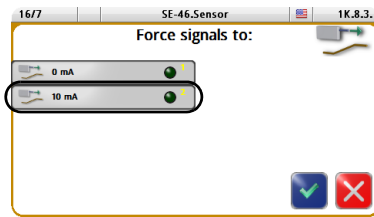


DP-20 / DP-30 web guide controller:

- Determine the first reference value



- Press the ENTER key

**OI-TS operator interface:**

- Select signal assignment 10 mA

**DP-20 / DP-30 web guide controller:**

- Determine the second reference value



- Press the ENTER key

The DP-20 / DP-30 web guide controller returns to the user area if the calibration was successful.

1.5. Exit menu 1K.8.3

Simulate Analog Signals on the SE-46C

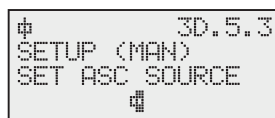
**OI-TS operator interface:**

- Press the CONFIRMATION button to exit menu 1K.8.3

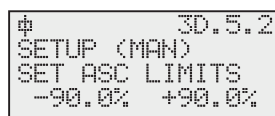


- Press the RETURN button twice to return to the operator level

2. Setting the ASC (Automatic Sensor Control)

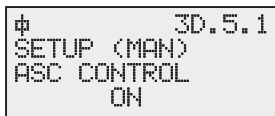
2.1. Selecting the ASC Source**DP-20 / DP-30 web guide controller:**

- DP-20 controller: select menu 3D.5.3
DP-30 controller: select menu 3D.5.4
(Manual → Custom → ASC Source)
- As *ASC source* select Line sensor – Line edge

2.2. Setting ASC limits**DP-20 / DP-30 web guide controller:**

- DP-20 controller: select menu 3D.5.2
DP-30 controller: select menu 3D.5.3
(Manual → Custom → ASC Limits)
- Set the values of the *ASC limits* to the range from -90% to +90%

2.3. Switching on ASC locking



```

# 3D.5.1
SETUP (MAN)
ASC CONTROL
ON
  
```

DP-20 / DP-30 web guide controller:

- DP-20 controller: select menu 3D.5.1
DP-30 controller: select menu 3D.5.2
(Manual → Custom → ASC Control)
- Set the status of *ASC locking* to ON

3. Setting the polarity and gain

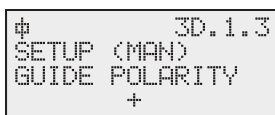


Note:

Settings must be made for sensor mode D – Line centre Φ .

3.1. Setting polarity

The guiding direction (polarity) must be checked depending on the mechanical installation direction of the system and adjusted if necessary.



```

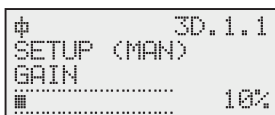
# 3D.1.3
SETUP (MAN)
GUIDE POLARITY
+
  
```

DP-20 / DP-30 web guide controller:

- Select menu 3D.1.3
(Manual → Basic → Polarity)
- Set the *polarity*

3.2. Setting gain

Gain must be set optimally.



```

# 3D.1.1
SETUP (MAN)
GAIN
..... 10%
#
  
```

DP-20 / DP-30 web guide controller:

- Select menu 3D.1.1
(Manual → Basic → Gain)
- Set the *gain*

Operation



Note:

The DP-20 / DP-30 web guide controller must be operated in „Automatic“ mode with sensor mode D – Line centre Φ .

4 COMMISSIONING OF FIFE-500

FIFE-500 Web Guide Controller


Note:

Detailed information about sensor calibration is available in the „FIFE-500 Operating Instructions“.

Precondition:

The SE-46C sensor must be connected to the FIFE-500 web guide controller according to the system diagram in the system documentation.

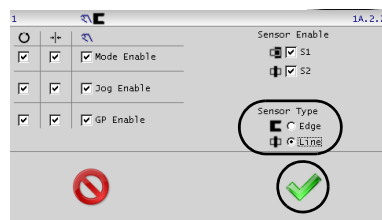


Figure 4.1: OI-TS Operating Interface

The SE-46C is operated from the OI-TS operator interface.

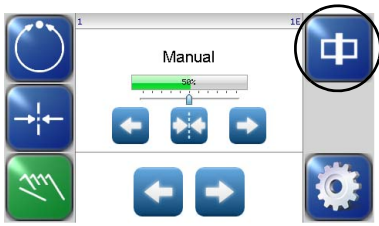
1. Calibrating the analog signal inputs of the FIFE-500 controller

1.1. Preparing the FIFE-500 controller for the calibration


FIFE-500 operator interface:

- Press the Manual button to set „Manual“ operating mode
- Select menu 1x.2.2 *Control Options*
(Press Setup button → Press Right Arrow button → Press Control Options button)
- Set the *sensor type* to **Line**
- Press the ENTER button
- Press the RETURN button to return to the operator level





- Press the SENSOR button until sensor line centre – $\oplus$ is selected (menu 1E)

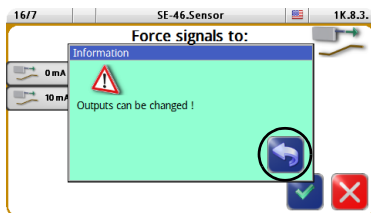
1.2. Call menu 1K.8.3

Simulate Analog Signals on the SE-46C

The analog signals required for the calibration are simulated by sensor SE-46C.

OI-TS operator interface:

- Select menu 1K.8.3 *Simulate Analog Signals*
(Press the 6 button and hold it for 2 sec. → Press the 8 button Startup → Press the 3 button Simulate Analog Signals)
- Press the RETURN button to confirm the information in the display



1.3. Calibrating the locking signal on the FIFE-500 web guide controller

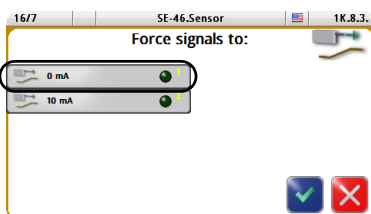


FIFE-500 operator interface:

- Select menu 1E.1.7 *Sensor Setup*
(Press Setup button → Press Sensor Setup button)
- Press the START CALIBRATION button

OI-TS operator interface:

- Select signal assignment 0 mA

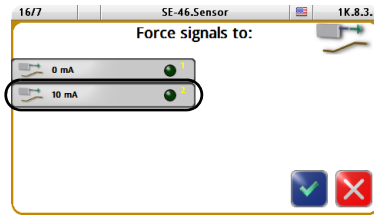


FIFE-500 operator interface:

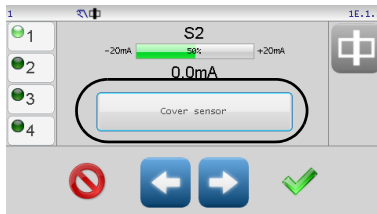
- Press the button to determine the first reference value

OI-TS operator interface:

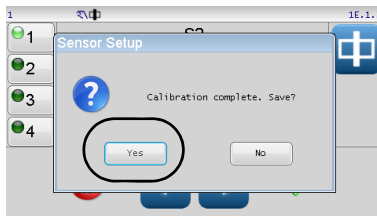
- Select signal assignment 10 mA

**FIFE-500 operator interface:**

- Press the button to determine the second reference value



- Press the YES button to save the calibration



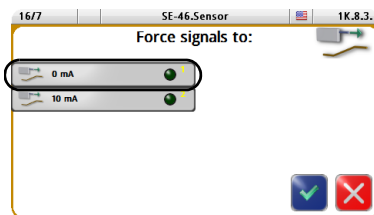
1.4. Calibrating the locking signal on the FIFE-500

FIFE-500 operator interface:

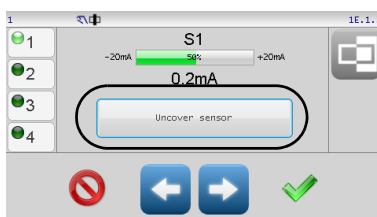
- Press the SENSOR button until sensor material or printing edge (S1) is selected
- Press the START CALIBRATION button

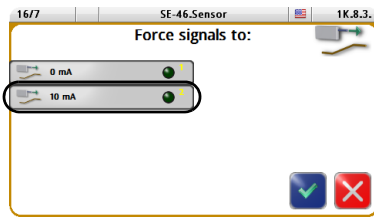
**OI-TS operator interface:**

- Select signal assignment 0 mA

**FIFE-500 operator interface:**

- Press the button to determine the first reference value





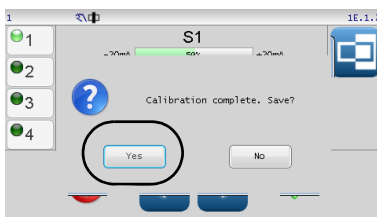
OI-TS operator interface:

- Select signal assignment 10 mA



FIFE-500 operator interface:

- Press the button to determine the second reference value



- Press the YES button to save the calibration



- Press the ACCEPT button to exit menu



- Press the RETURN button to return to the operator level

1.5. Exit menu 1K.8.3

Simulate Analog Signals on the SE-46C



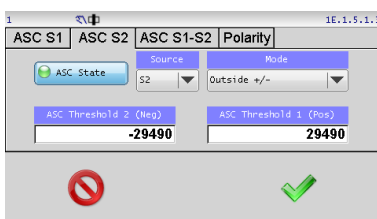
OI-TS operator interface:

- Press the CONFIRMATION button to exit menu 1K.8.3



- Press the RETURN button twice to return to the operator level

2. Setting the ASC (Automatic Sensor Control)



FIFE-500 operator interface:

- Select menu 1E.1.5.1.3
(Press Setup button → Press ASC button → Press ASC Settings button)
- Select the **ASC S2** tab
- Activate **ASC State** (LED green)
- Select **S1** source
- Select **Outside +/-** mode

- Set ASC Threshold 1 (Pos) to **29490**
- Set ASC Threshold 2 (Neg) to **-29490**
- Press the ACCEPT button to exit menu



- Press ASC ON button
- The "ASC ON" symbol appears in the menu header and in the operator level

3. Setting the polarity and gain

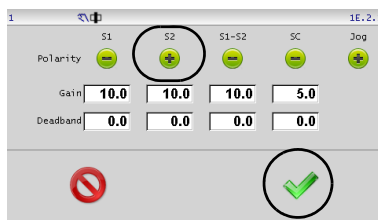


Note:

Settings must be made for sensor mode E – Line centre $\oplus$ (S2).

3.1. Setting the polarity

The guiding direction (polarity) must be checked depending on the mechanical installation direction of the system and adjusted if necessary.

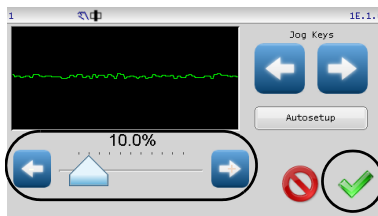


FIFE-500 operator interface:

- Select menu 1E.2.1
(Press Setup button → Press Right Arrow button → Press Guide Settings button)
- Set the *polarity* for S2
- Press the ACCEPT button to exit menu

3.2. Setting the gain

The gain must be set optimally.



FIFE-500 operator interface:

- Select menu 1E.1.6.
(Press Setup button → Press Gain button)
- Set the *gain*
- Press the ACCEPT button to exit menu

Operation



Note:

The FIFE-500 web guide controller must be operated in „Automatic“ mode with sensor mode E – Line centre $\oplus$ (S2).

5 SERVICE

Requests for Service

When requesting service, please have a copy of the order confirmation ready with the order number.

When ordering replacement parts, please indicate, (where possible) Part Number, Drawing Number and Model description.

Please be careful to keep all documents accompanying the product in a safe place. This will allow us to help you more quickly in the event that service is required.

Addresses

To request service, or if you need replacement parts, please contact one of the following addresses.

Fife-Tidland GmbH

Max-Planck-Straße 8 Siemensstraße 13-15
65779 Kelkheim 48683 Ahaus
Deutschland Deutschland
Telefon: +49 – 6195 – 7002 – 0
E-Mail: service@maxcess.eu
Web: www.maxcess.eu

Maxcess

222 West Memorial Road
Oklahoma City, OK 73114, USA
Telefon: +1 – 405 – 755 – 1600
E-Mail: service@maxcessintl.com
Web: www.maxcessintl.com



EUROPE, MIDDLE EAST AND AFRICA

Tel +49.6195.7002.0
sales@maxcess.eu
www.maxcess.eu

NORTH, CENTRAL AND SOUTH AMERICA

Tel +1.405.755.1600
sales@maxcessintl.com
www.maxcessintl.com

CHINA

Tel +86.756.881.9398
info@maxcessintl.com.cn
www.maxcessintl.com.cn

JAPAN

Tel +81.43.421.1622
japan@maxcessintl.com
www.maxcess.jp

INDIA

Tel +91.22.27602633
india@maxcessintl.com
www.maxcess.in

