TIDLAND SLITTING SOLUTIONS

MAXCESS®

TIDLAND

Tidland Digital Measurement System

Installation, Operation and Maintenance

EN

For use with SIKO MA503 display

MI 659995 1 M

CONTENTS

CAUTION

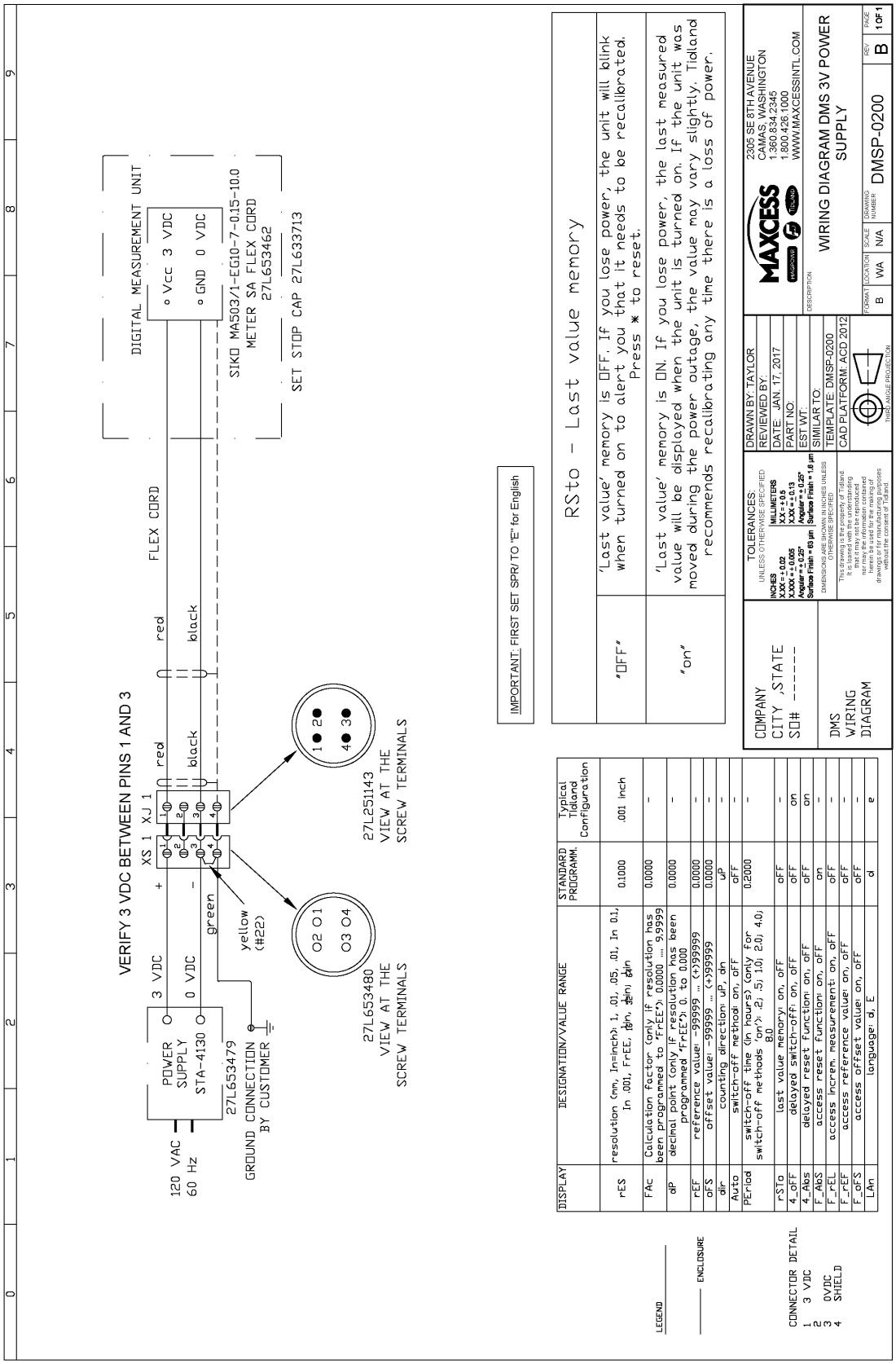
Wear eye protection when using tools or compressed air.

TIDLAND CUSTOMER SERVICE

800.426.1000
360.834.2345

www.maxcessintl.com

Wiring Diagram



Step One

1. Remove the Digital Measurement System (DMS) from the shipping package.
2. Remove the two small end cover plates located on the back side of the cable management to gain access to the mounting blocks.
3. Loosen—do not remove—the two button head screws that retain the mounting blocks to the backing plate.
4. Lift the DMS into place. (Note: The end stops may need to be removed to access the button head screws on the front of the unit.)

Step Two

1. Consult your customer drawing for mounting dimensions (Fig. 1).
2. Transfer punch two holes on your side frame for each end of the DMS block mount assembly (Fig 2).

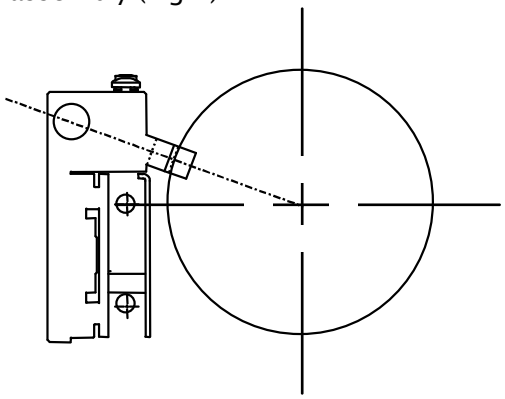


Fig. 1

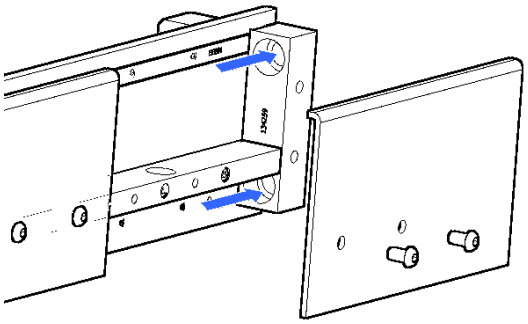


Fig. 2

2. Drill and tap the four holes 1/2-13 NC.
3. Install two 1/2-13 NC socket head cap screws through the mounting blocks at each end to secure the unit to your side frames.
4. Tighten the four button head cap screws to fully secure the end blocks to the backing plate.

Step Three

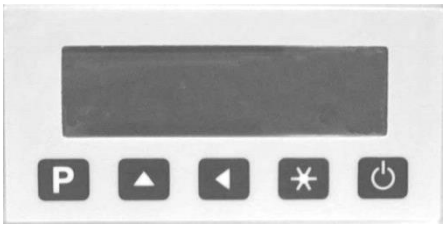
1. Plug transformer into 110V wall outlet.
2. Connect green ground wire to earth ground.

Step Four

1. The DMS requires clean, non-lubricated (instrument quality) air at approximately 5.5 bar [80 psi].
2. Connect hose assembly to mill air.

Note: 1/8 NPT connection is provided.

The Digital Display shows the position of the knifeholder in inches or in millimeters up to three places behind the decimal.



There are three controls located on the reader head of the DMS: The digital display, the brake release button, and the set stop shaft extension knob.

The reader head should be parked on the side of the system during slitting operation.

Positioning anvil rings using the DMS

1. At customer designated datum location push ✱ to reset the display to the reference value (normally zero).
2. Press and hold the brake release button on the reader head and move the reader head to the desired position. The digital display shows the relative location of the reader head.
3. Release the brake release button. The brake engages, locking the reader head in desired position.
4. Extend the set stop shaft with the set stop extension knob.
5. Move the anvil carriage so the anvil ring contacts the flat surface of the set stop shaft tip.

Note: Move the reader head away from the anvil ring before retracting set stop shaft.

6. Retract the set stop shaft with the set stop shaft extension knob.

Repeat for each anvil ring.

Bearing grease, dust, and debris can accumulate on the linear rails, preventing the reader head from moving smoothly on the rail.

Daily

Check reader head movement for smooth travel. Clean the linear rails as needed.
Check the cable management; keep it clear of debris and dust buildup.

	**Always wear eye protection and dust mask when using a vacuum system or compressed air.**
	Do not use solvents on the rails. Solvents will remove the protective lubrication and result in corrosion.

Cleaning the linear rails

1. Make sure that the slitter is OFF.

2. Turn OFF carriage air.

3. Using a vacuum system or compressed air, clean around the upper and lower bearings and rails while moving the carriage from one end of the linear rail to the other.

4. Wipe the linear rails using a clean, lint-free cloth.

Display Parameters

	Designation	Display	Factory Value Range	Tidland Settings
1	Resolution (mm, In=inch)	_rES_	1, 0.1, 0.05, 0.01, In 0.01, In 0.001 FrEE (factor), 1/16in, 1/32in, 1/64in	0.001 in
2	Factor (Res. =FrEE)	_FAc_	0.00000 to 0.99999	0.00000
3	Decimal Point	_dP_	0. to 0.000	0.00
4	Reference value	_rEF_	-99999 to 99999	00000.0
5	Offset value	_oFS_	-99999 to 99999	00000.0
6	Direction	_dir_	uP, dn (up, down)	uP
7	Type of reference switch	Auto	on, oFF	oFF
8	Switch-off time (in hours0 (only for switch-off methods 'on')	PEriod	0.2; 0.5; 1.0; 2.0; 4.0; 8.0	0.2
9	Storage	rSto	on, oFF	oFF
10	Delayed switch	4_oFF	on, oFF	on
11	Delayed reset function	4_Abs	on , oFF	oFF
12	Access: absolute reset	_F_AbS	on, oFF	on
13	Access: relative reset	_F_rEL	on, oFF	oFF
14	Access: reference value	_F_rEF	on, oFF	oFF
15	Access: offset value	_F_oFS	on, oFF	oFF
16	Language	_LAn_	d, E	E

Parameter Checking and Modification

To enter into programming mode:

Press [P] for approximately 5 seconds.

To switch on the parameters:

Press [P]

To change parameters:

Use [↑] [←]

To store parameters:

Press [*]

To leave programming mode:

It is automatic when no key is pressed in approximately 30 seconds OR

Press [P]

Parameter Descriptions

Display Selection	Designation / description	
Res	Resolution: Determines the resolution of the display. Parameter IfrEE" allows the programming of a calculating factor.	
Fac	Calculation factor (only available, if 'Resolution' has been programmed to "FrEE" before): Used to obtain for example an angle display. Basis is the maximal possible resolution of 1/100 mm. The calculation factor IFAc" which has to be programmed results from: Fac = meas. Range / total travel distance [1/100 mm] *Example:* Angle measurement on a circular disk with a display range of o ... 1800; display in 1/100; circumference of the circular disk 942,48 mm; hence total travel distance 471,24 mm; Fac = 1800 / 47124 = 0,3820	
Dp	Decimal point (only available if 'Resolution' has been programmed to 'FrEE' before): Determination of the decimal point according to the resolution.	
Ref	Reference value: Absolute reference point of the measuring system. This value is set by referencing the system according to chapter 4.	
Ofs	Offset: Can be any value; used to influence the value displayed eg: tool correction value.	
Dir	Counting direction of the measuring system: depends on the sensor's mounting position and can be changed subsequently.	
	"Up"	Upward
	"dn"	Downward
Auto	Switch-off method: State of the automatic switch-off:	
	"Off"	no switch-off.
	"on"	automatic switch-off
Period	Switch-off time: Time since last measurement / sensor move after which the display will switch-off.	
RSto	Last value memory:	
	"Off"	'Last value' memory is OFF. If you lose power, the unit will blink to alert you that it needs to be recalibrated. Press * to reset.
	"on"	'Last value' memory is ON. If you lose power, the last measured value will be displayed when the unit it turned on. If the unit is moved during the power outage, the value may vary slightly. Tidland recommends recalibrating any time there is a loss of power.

Parameter Descriptions

(continued)

4_oFF	Delayed switch-off:| ON/OFF key must be pressed for approx. 4s to switch off the display.	
4_Abs	Delayed reset function: Key ✱ must be pressed for approx. 4s to reset the display to reference value.	
4_Abs	Delayed reset function: Key ✱ must be pressed for approx. 4s to reset the display to reference value.	
F_AbS	Access reset function: resetting to reference value via key on ✱ front of the display.	
	"oFF"	Reset function off
	"on"	Reset function on
F_rEL	Access incremental measurement: to switch from absolute dimension and zero-setting to subsequent relative dimension	
	"oFF"	Increm. meas. function off
	"on"	Increm. meas. function on
F_rEF	Access reference value: to enter / change reference value	
	"oFF"	Reference value function off
	"on"	Reference value function on
F_oFS	Access offset value: to enter / change offset value	
	"oFF"	Offset value function off
	"on"	Offset value function on
LAn	Language: to choose the language in which the menu points are to be displayed Note: If display is in German, this parameter is "SPr". Set to "E" to display English.	
	"d"	German
	"E"	English

AMERICAS
Tel +1.405.755.1600
Fax +1.405.755.8425
sales@maxcessintl.com
www.maxcessintl.com

EUROPE, MIDDLE EAST AND AFRICA
Tel +49.6195.7002.0
Fax +49.6195.7002.933
sales@maxcess.eu
www.maxcess.eu

CHINA
Tel +86.756.881.9398
Fax +86.756.881.9393
info@maxcessintl.com.cn
www.maxcessintl.com.cn

INDIA
Tel +91.22.27602633
Fax +91.22.27602634
india@maxcessintl.com
www.maxcess.in

JAPAN
Tel +81.43.421.1622
Fax +81.43.421.2895
japan@maxcessintl.com
www.maxcess.jp

KOREA, TAIWAN, AND SE ASIA
asia@maxcessintl.com
www.maxcess.asia