

# Electromagnetic Flow Meters

## M2000-to-M2000 Interchangeability Procedure

### SCOPE

This document defines the process for updating an M2000 amplifier.

### LIMITATIONS

For M2000-to-M2000 replacement, all detector sizes are allowed for exchange.

### M2000-TO-M2000 ACCURACY STATEMENT

The M2000 amplifier will be within  $\pm 0.10\%$  of Full Scale.

### M2000-TO-M2000 UPDATE PROCEDURE

- Record the amplifier pipe diameter: \_\_\_\_\_
- Record the amplifier detector factor: \_\_\_\_\_
- Record the amplifier detector offset: \_\_\_\_\_
- Record all applicable setup parameters in the tables provided in this document.
- Disconnect power to the amplifier before removing connections.
- Remove all wiring connections from the amplifier.
- Remove amplifier PCB/enclosure and replace with new PCB/enclosure.
- Reconnect Coil/Electrode connections. Reconnect all other pluggable inputs and outputs.
- Apply power to the amplifier.
- Configure Pipe Diameter with original value recorded in step 1.
- Configure Detector Factor with original value recorded in step 2.
- Configure Detector Offset with original value recorded in step 3.
- Configure M2000 to remaining parameters recorded in step 4.

### RECORD SETUP PARAMETERS

#### Main Menu

METER SETUP				
Scale Factor				
Empty Pipe				
Power Line Freq				
Excitation Freq				
Pipe Diameter				
Amplifier Factor				
Detector Factor				
Detector Current				
Detector Offset				
MEASUREMENTS				
Flow Unit				
Totalizer Unit				
Full Scale Flow				
Low Flow Cut Off				
Flow Direction				
Damping Factor				
INPUTS/OUTPUTS				
Analog Output				
Digital Input				
Digital Outputs	#1	#2	#3	#4
Pulses/Unit			N/A	N/A
Pulse Width			N/A	N/A
Full Scale Freq	N/A	N/A		N/A
Preset Amount				
Set Point Min				
Set Point Max				
Output Type				
Select Function				

**NOTE:** Tables continue on the next page.

### Communications Menu

Port A Settings	
Interface	
Modbus RTU (def)	
Remote Menu	
Disable Port	
Port Address	
Baud Rate	
Parity	
Data Bits	
Stop Bits	

### Advanced Menu

Unit Multiplier	
Backlight Control	
Analog Output	
Software Filter	
Activation	
Filter Delay	
Acceleration	
Constant Flow	
Peak Detect	
Empty Pipe Cal	
Cal Empty Pipe	
Cal Full Pipe	
Security	
Set Admin Pin	
Set Service Pin	
Set User Pin	
Language Select	

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