mjk

ELECTROMAGNETIC FLOWMETERS
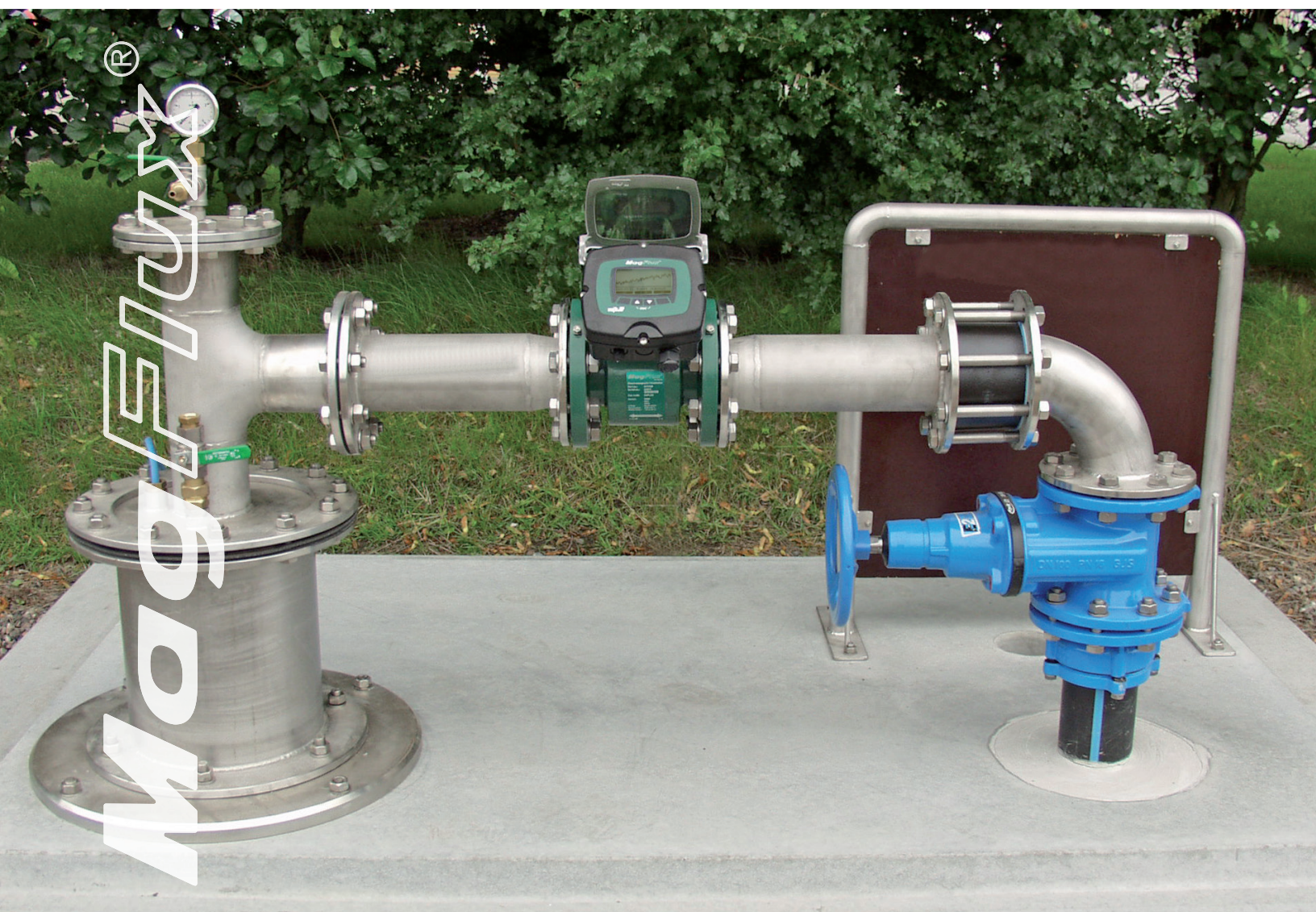
MJK MagFlux® flow meters combine high accuracy, stability and low maintenance.

Without moving parts, straight through flow sensor and self-cleaning electrodes there is virtually never any need for maintenance, there is no influence on the flow rate, and no pressure drop caused by the flow sensor.
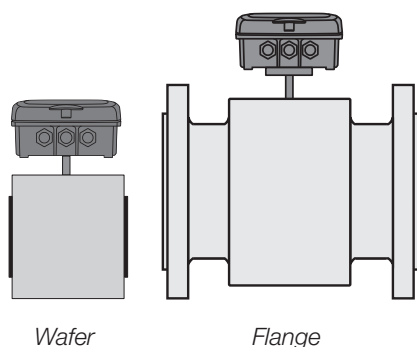
MagFlux® flow meters use a tested and approved sensing technology giving linear readings over a large range in closed, pressurized pipe systems.

2
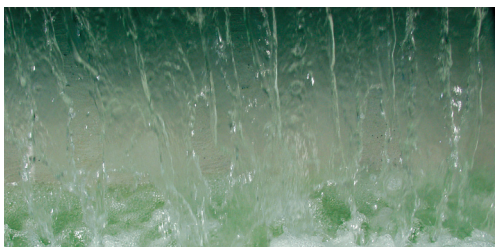
LARGE SELECTION OF SIZES AND MATERIALS

Wafer *Flange*

MagFlux® is available in sizes from 1/8" to 80" with standard lay lengths and standard EN, ANSI, AWWA, AS and JIS pipe connections.

Model	7100	7200	7300	7400
Mounting	Flange	Flange	Wafer	Wafer
Liner	PTFE	Hard rubber	PTFE	Hard rubber
⅛"			●	
¼"			●	
⁵⁄₁₆"			●	
³⁄₈"			●	
½"	●	●	●	●
¾"	●	●	●	●
1"	●	●	●	●
1¼"	●	●	●	●
1½"	●	●	●	●
2"	●	●	●	●
2½"	●	●	●	●
3"	●	●	●	●
4"	●	●	●	●
5"	●	●	●	●
6"	●	●	●	●
8"	●	●	●	●
10"	●	●		
12"	●	●		
14"	●	●		
16"	●	●		
18"	●	●		
20"	●	●		
24"	●	●		
28"	●	●		
32"	●	●		
36"		●		
40"		●		
48"		●		

A BREAKTHROUGH IN SENSOR SET-UP SIMPLICITY

MJK's unique registration code for each sensor feeds all the necessary data into the meters electronics. In a matter of seconds the registration is completed, and the sensor characteristics and meter electronics are fully matched and ready to perform flow measurements.

It is safer than other systems that require memory chips that get lost or damaged, or complicated procedures requiring external equipment that have potential for mistakes.

MagFlux® sensor direction is also configured in the electronics, so there is no way to install a sensor backwards.

4

66NQ10

REGISRATION CODE

MagFlux®

MagFlux

Flow   18.0 GPM

FTot   863 cu ft

Select   Set up

mjk///   esc

COMPREHENSIVE FLOW AND BATCH CONTROL FUNCTIONS

The MagFlux® Converter has one 4 - 20 mA output, two relays for control and alarms, one digital input for batch or alarm reset, keypad start and stop of batch counters and reset of counters, totalizers and alarms.

Pop-up windows alert the user about operational and alarm functions which are automatically logged and easily reset.

Batching, batch counters, forward, reverse and net totalizers and non-resettable totalizers are all on-board and easy to configure.

With its cell-phone like navigation, finding and managing these features is simple, but you can also password protect your settings.
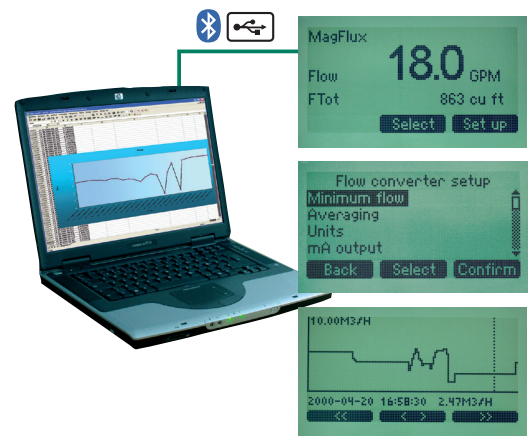
BEST-IN-CLASS DATA LOGGING AND NETWORKING

MagFlux® is the first to bring you an on-board electronic chart recorder that graphs flow rates, and shows the date, time and flow rate for each data point. Behind the scene is a data logger that you can set with the data logging interval. To capture data for your permanent records, simply use the USB connection in the MagFlux® Display and the MJK Field Link freeware. It delivers not only the graphed data, but also a CSV data file (up to 160,000 data points) that you can open with MS Excel on your PC.

For SCADA users MJK provides RS-485 communication with Modbus protocol along with registers, so that several MJK MagFlux® flow meters can be seamlessly operated from a control room.

MagFlux® never gets out of date. The USB port also allows up loading new software, features and several languages from a PC.

MagFlux
Flow   18.0 GPM
FTot   863 cu ft
          Select   Set up

Flow converter setup
Minimum flow
Averaging
Units
mA output
    Back   Select   Confirm

10.00M3/H

2000-04-20 16:58:30 2.47M3/H
    <<   < >   >>

Main Menu

Specify Main Screen
Factory Settings
Data logger
Password
Set Sensor Name
Converter Setup
Display Setup

Back
          Select
                    OK

PROFI BUS®

Modbus

SUSIX®
TURBIDITY AND
SUSPENDED SOLIDS

OXIX®
DISSOLVED OXYGEN

MAGFLUX®
FLOW

MAGFLUX®
FOUR INPUTS ON
ONE DISPLAY
W/MAGFLUX
CONVERTER AND
SENSOR

LOCATE AND CONFIGURE MAGFLUX YOUR WAY

MagFlux® Converter and Display can stay locally with the flow sensor or be installed remotely.

A single Display can be used for set-up, viewing and data logging for one, two, three, or four Converters and Sensors in their own network to save space and cost.

The Display can be up to 3000 ft from a Converter allowing the Converter to be where the electrical and control connections are, while the Display can be where the operators are.

The Converter can be separated from the sensor, too! This allows even more flexibility to locate the Converter where electrical connections are needed and out danger of submersion, burial or other hazards.

Wall mounting or panel mounting is possible for all MagFlux® electronic units.

COMPACT MOUNTED

PANEL MOUNTING

WALL MOUNTING

1 Converter and Display mounted directly on the flow sensor (Compact Mounted).

2 Display is mounted remotely from the Converter and Flow Sensor.

Max. 3.000 ft

3 Both the Display and Converter are together and mounted remotely from the Flow Sensorthe Flow Sensor.

Max. 150 ft

4 The Converter is mounted remote from the Sensor and the Display is Mounted remote from the Converter.

Max. 150 ft   Max. 3.000 ft

5 One remote mounted Display operates two Converters and flow sensors that are mounted together.

Max. 3.000 ft   Max. 3.000 ft

MagFlux® Sensor

Mounting	Flange or wafer
Materials	Housing: Painted carbon or stainless steel Liner: Hard rubber, soft rubber or PTFE Electrodes: Stainless steel 1.4571 (AISI 316). On order Hastelloy, titanium or platinum
Built-in grounding electrode	≥ DN 50
Accuracy	Better than ± 0,25%
Temperature	Liquid: 0 to + 300° F, depending of type. Surroundings: 15 to +140° F (converter mounted on sensor) 0 to +200° F (converter remote mounted)
Enclosure	IP 67 (with gel potting IP 68) / NEMA 4X (with gel potting NEMA 6P)

MagFlux® Converter

Accuracy	± 0,1% of measurement (system accuracy better than ± 0,25 %)
Input	From MagFlux® sensor
Analog output	One active 4 - 20 mA, galvanic isolated (max. 800 Ω)
Digital output	One voltage-free, electromechanical relay (max. 50 V DC / 1 A) One optically isolated (max. 50 V AC / V DC / 120 mA)
Digital input	One digital input. Max. 30 V DC
Communication	Modbus® RTU, 9600 Baud, 2-wire RS-485, slave-mode
Datalogger	Display 160,000 logs with date, time, value and daily totals
Interface	RS 485 for connection to Display Unit or PLC.
Power supply	24 V AC / DC, 50 / 60 Hz ± 10 % or 10 - 30 V DC or 230 / 115 V AC, 50 / 60 Hz ± 10 %
Power consumption	Max. 10 W
Cabinet materials	Polycarbonate, glass reinforced
Enclosure rating	IP 67 / NEMA 4X