

ISOMAG™

The friendly magmeter

FAST SAMPLING CONVERTER

ML4-F1



**HIGH SAMPLING RATE CONVERTER
(UP TO 400 SAMPLES/SECOND)**

Official Isoil dealer for The Netherlands:



ISOIL INDUSTRIA
The solutions that count

INDEX

TECHNICAL DATA.....	3
OVERALL FEATURES	3
STANDARD FEATURES	3
OPTIONAL FEATURES.....	4
ACCURACY	4
OVERALL DIMENSIONS.....	5
VISUALIZATION PAGES	6
ELECTRICAL CONNECTIONS	7
FUNCTIONS	9
ACCURACY TABLE	11
HOW TO ORDER	12

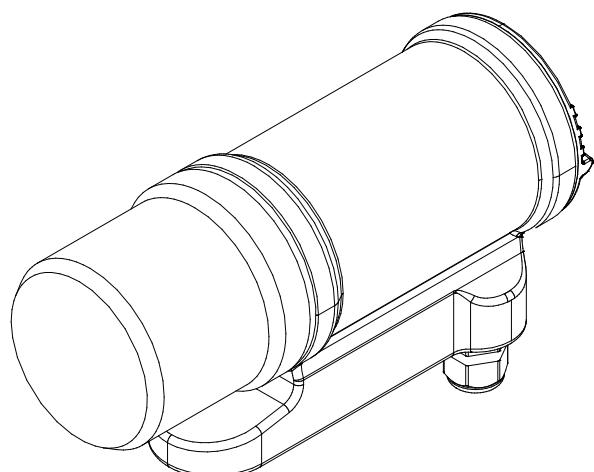
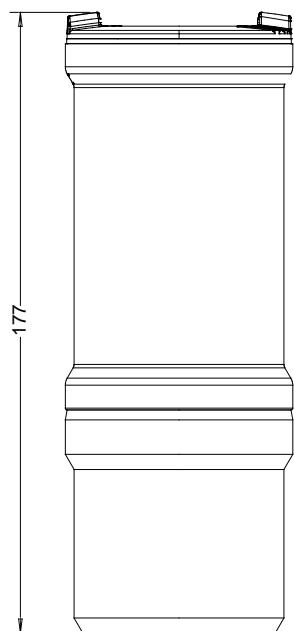
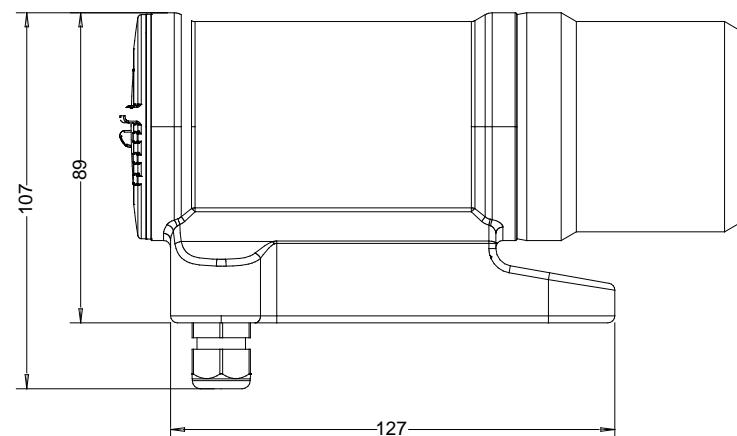
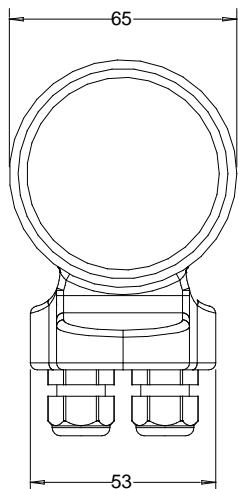
TECHNICAL DATA

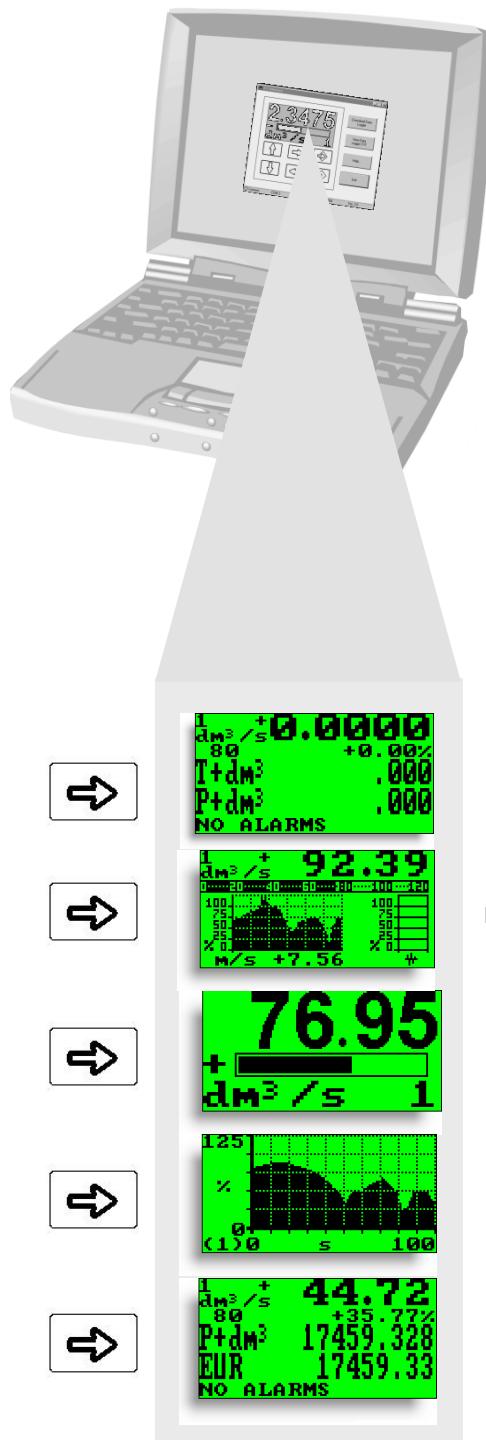
OVERALL FEATURES	
Suitable For	<input type="checkbox"/> All the ISOMAG sensors
Minimum conductivity	<input type="checkbox"/> 5 µS/cm
Altitude	<input type="checkbox"/> -200 m up to 2000 m
Ambient Temperature	<input type="checkbox"/> -20... +60°C / -4... +140 °F (max 40°C 104°F with liquid > 60 °C 140°F)
Liquid temperature	<input type="checkbox"/> Max 100°C 212°F (130°C 266°F for 30 min ; no time limits if converter off)
Humidity Range	<input type="checkbox"/> 0÷100% (IP 67)

STANDARD FEATURES	
Housing materials	<input type="checkbox"/> Stainless steel AISI 304
Protection Rate	<input type="checkbox"/> IP 67
Power Supply	<input type="checkbox"/> 18-30 V ---
Cable Gland	<input type="checkbox"/> N° 2 CABLE GLAND PG 9
Full scale value	<input type="checkbox"/> 0,4...10m/s
Protocols	<input type="checkbox"/> ETP
Galvanic Isolation	<input type="checkbox"/> All the inputs/outputs are galvanically isolated from power supply
Programming Plug In	<input type="checkbox"/> Protected plug in for connection to PC
Data Storage	<input type="checkbox"/> Eeprom stored measuring values on power failure
Bi-Directional	<input type="checkbox"/> Yes
Diagnostic Funct.	<input type="checkbox"/> Yes
Empty Pipe Detect.	<input type="checkbox"/> Yes
Batch Function	<input type="checkbox"/> Yes, also with auto-preset
CE Certification	<input type="checkbox"/> Yes

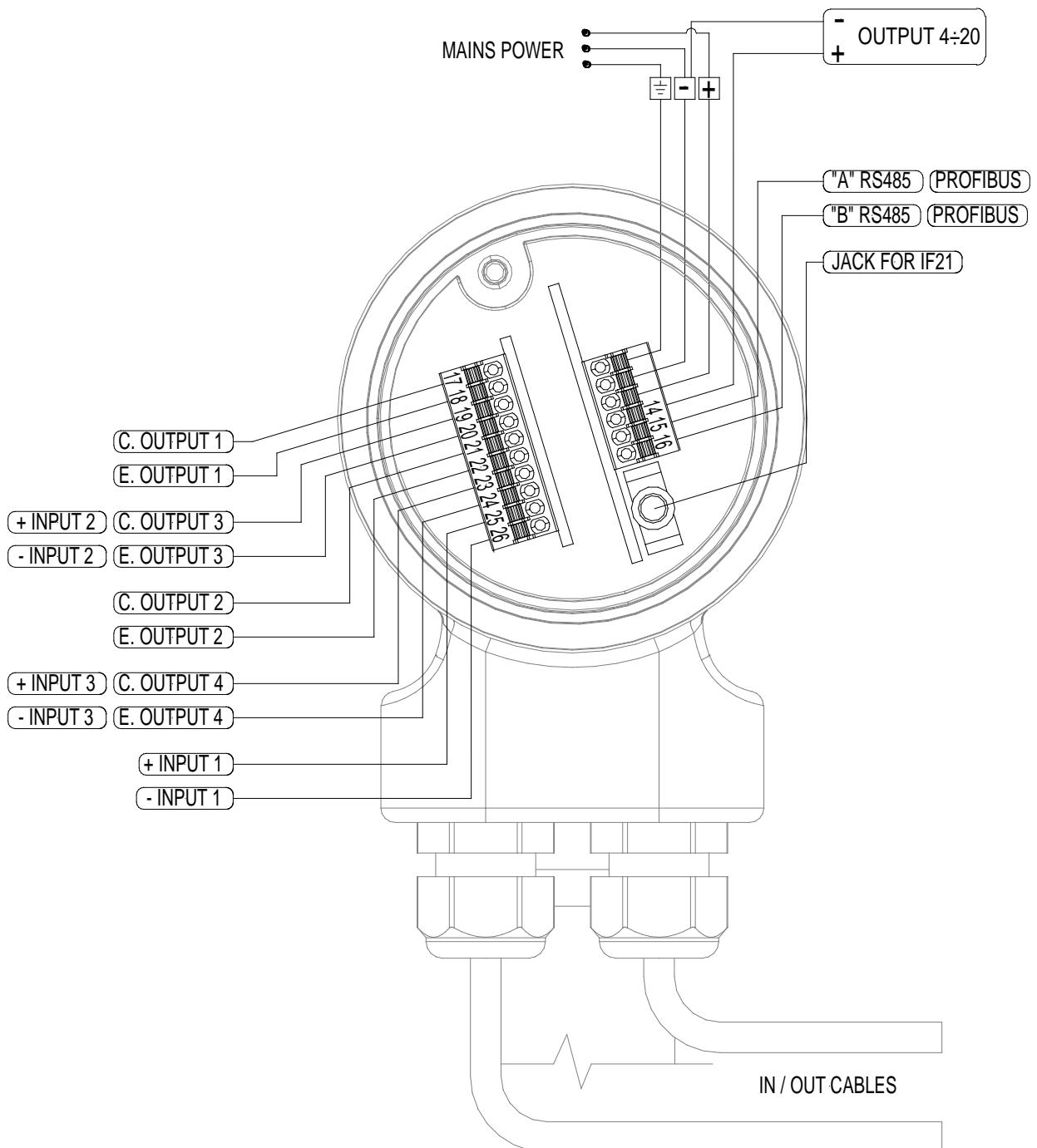
OPTIONAL FEATURES <i>(CHECK HOW TO ORDER, AT LAST PAGE, FOR MORE DETAILS)</i>	
Power Supply	<input type="checkbox"/> 20-30 V --- with 4/20 mA
Pulses/ Alarm Outputs	<input type="checkbox"/> N°2 , 1250 Hz, 100mA, 40 V ---
Digital Input/Outputs	<input type="checkbox"/> N° 5 O.C. freely Programmable function (as input or output, see pag. 5 for details)
Current Output	<input type="checkbox"/> (OPTIONAL) 4...20mA – RL 500Ω passive (p.s. 20-30 VDC)
Communication interface	<input type="checkbox"/> RS485/PROFIBUS DP
Protocols	<input type="checkbox"/> ETP/Profibus DP

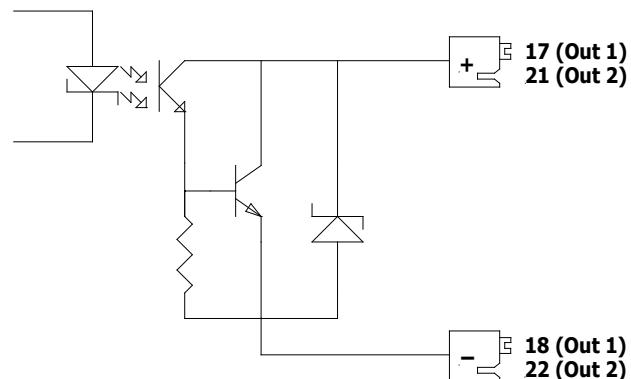
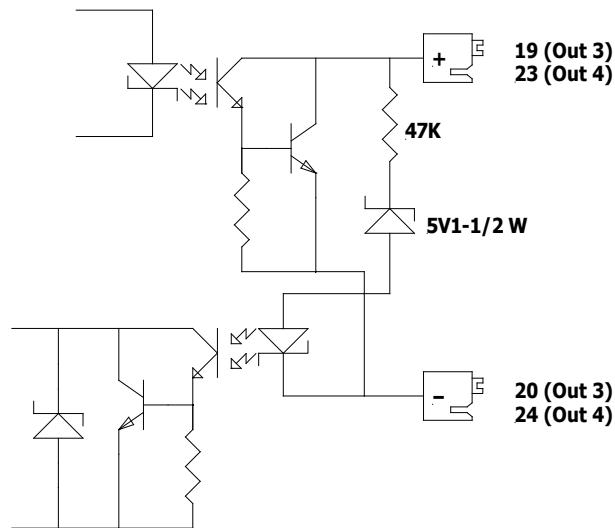
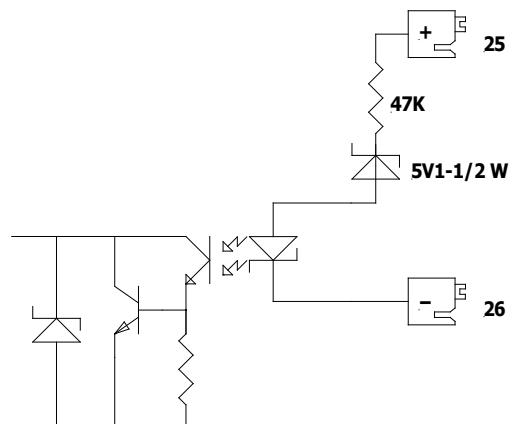
ACCURACY	
Measurement Tolerance	<input type="checkbox"/> Flow rate (volume) = ±0,05% r.v. <input type="checkbox"/> Out 4/20 mA = ± 0,5 % r.v. <input type="checkbox"/> Frequency Out = ± 0,08% r.v.
Repeatability	<input type="checkbox"/> Better than 0,01%
Accuracy (whole system converter+sensor)	<input type="checkbox"/> See table below

OVERALL DIMENSIONS

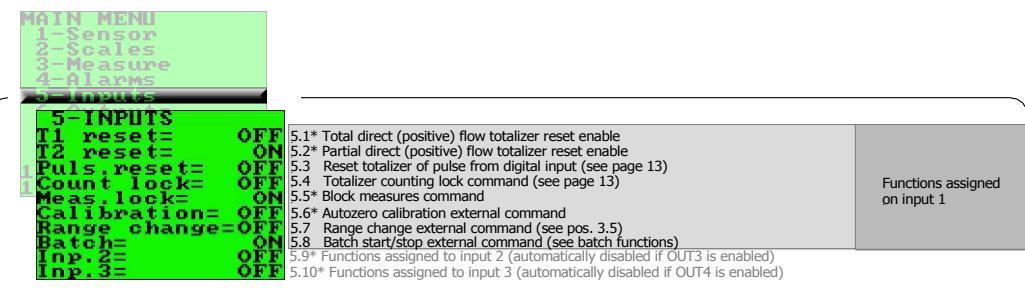
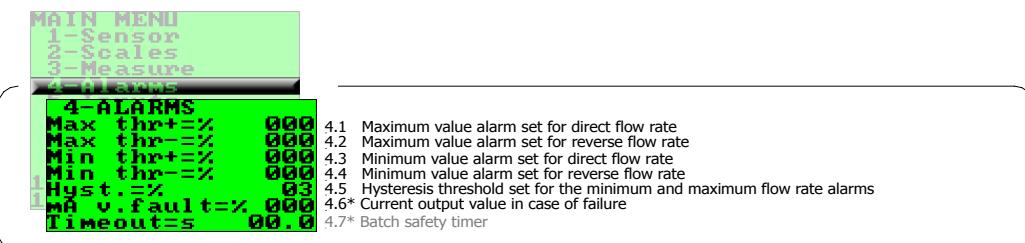
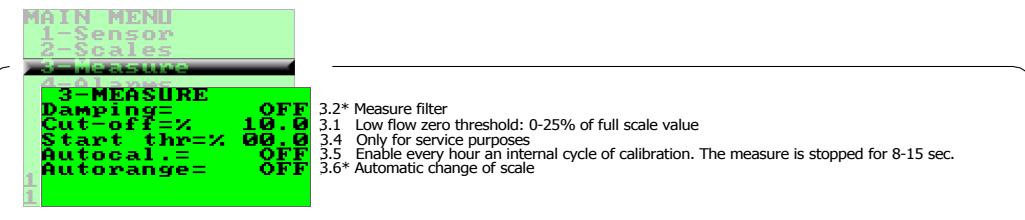
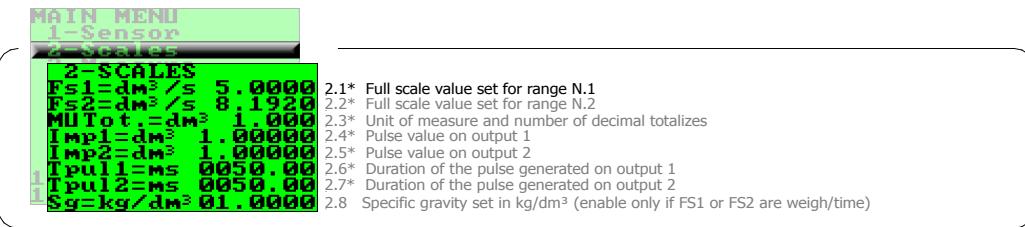
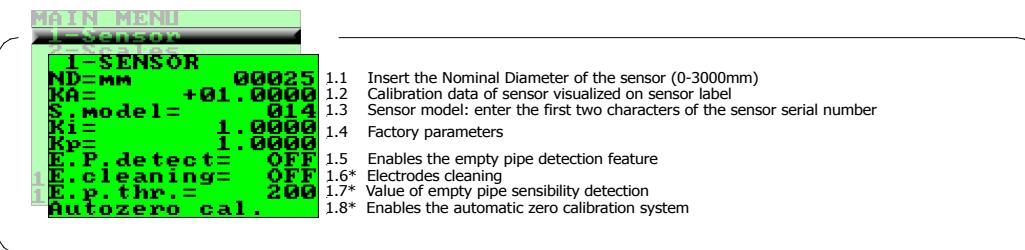
VISUALIZATION PAGES

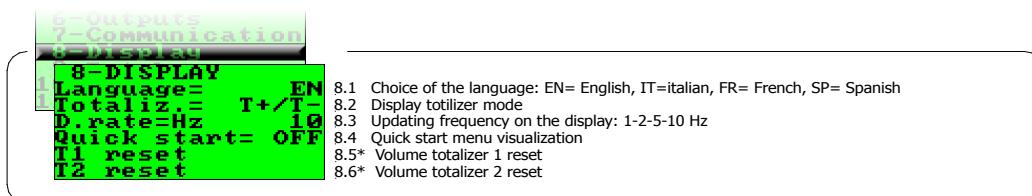
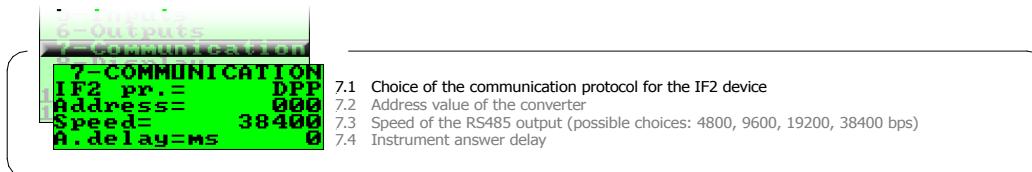
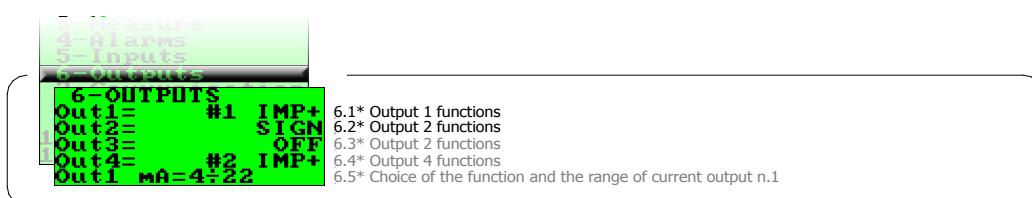
Different visualisation possibilities with the simple press of a key

ELECTRICAL CONNECTIONS

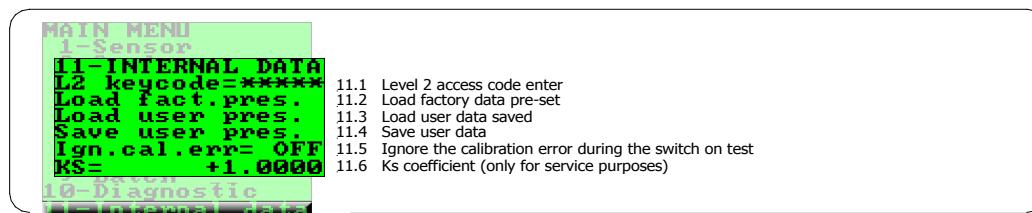
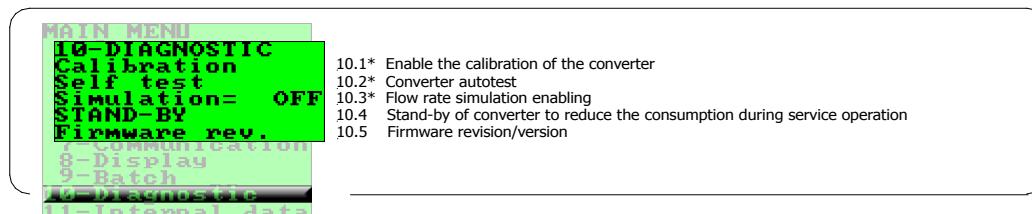
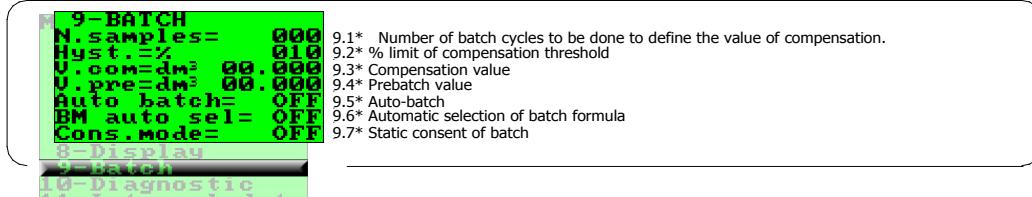
OUTPUT 1/2**PROGRAMMABLE INPUT/OUTPUT****INPUT**

FUNCTIONS



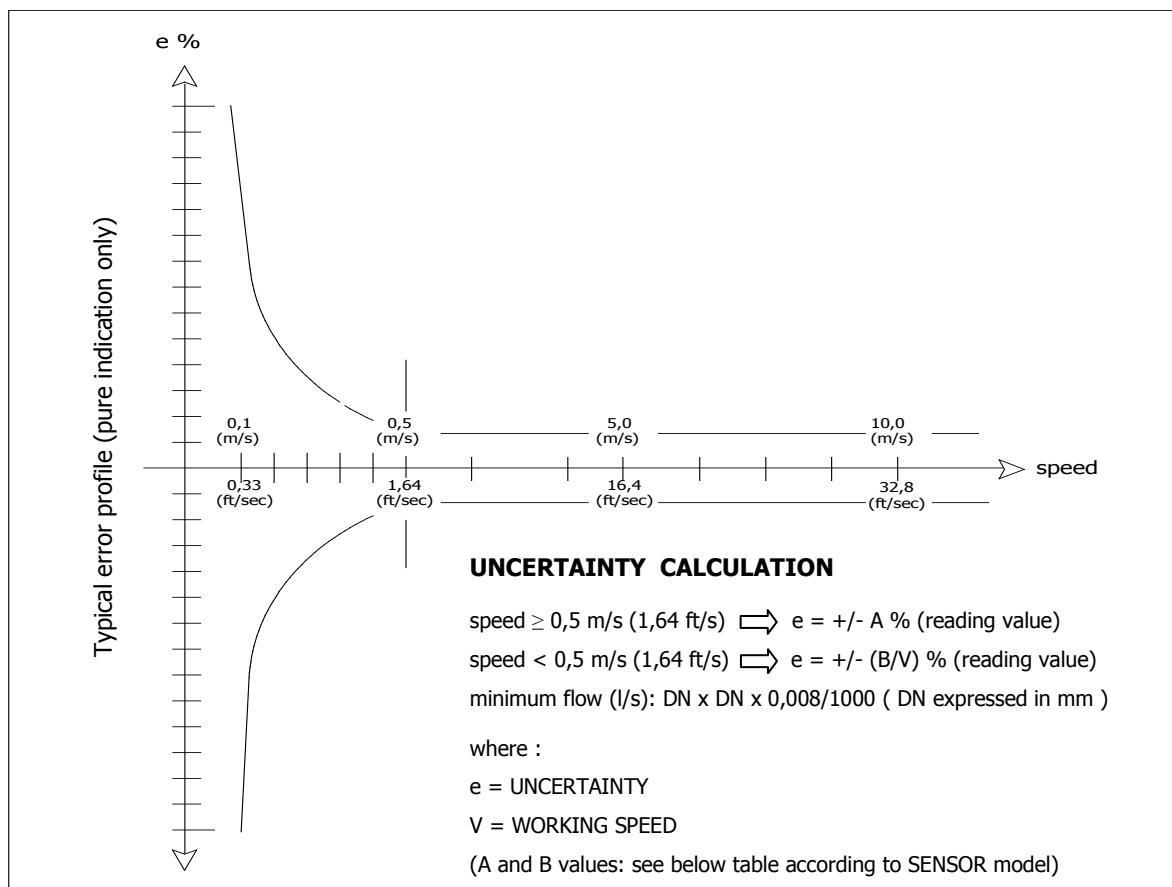


Menu 9 visualized only IF batch is active



Note : all page number references are to the operating manual

ACCURACY TABLE



FULL BORE SENSORS

MS501/MS1000/MS2410/MS2500			MS 600			MS5000		
A	B(m/s)	B(ft/s)	A	B(m/s)	B(ft/s)	A	B(m/s)	B(ft/s)
0,2	0,1	0,33	0,4	0,2	0,66	2	1	3,28

INSERTION SENSORS

See MS 3770 / MS 3800 DATA SHEET

Reference conditions :

- Constant flow rate during the test
- Pressure: >30 Kpa
- Flow condition : fully developed flow profile
- Zero stability +/- 0,005 %

HOW TO ORDER

Display	
A	A Blind execution (without display and programming keys)
Housing material / Protection rate	
1	1 AISI304 Stainless Steel housing, protection rate IP67
Version	
A	A Compact version with sensor MS.... Max LIQUID T=100°C - 212°F (130°C - 266°F for 30 min ; no time limits if converter off)
Analogue output	
0	0 Without Analogue output
1	1 Analogue output 4...20/22 mA (passive)
Additional module	
A	A Without additional module
	B ME35 : Profibus DP
	C ME36 : RS485 serial interface module
	D ME35 : Profibus DP , complete with 2 connectors : 1 for Profibus connection and 1 for Power Supply + IN/OUT conn
	E M12 Male connector for Power Supply and output
	F ME36: RS 485 , complete with 2 connectors: n° 1 for RS 485 connection and 1 for Power Supply + IN/OUT conn
	G ME35 : Profibus DP , complete with 3 connectors : n° 2 for Profibus connection (Male+Female) and n° 1 for Power Supply + IN/OUT conn



ML4-F1-A1A0A (Complete code example for order)

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The solutions that count

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