



# EUROMAG INTERNATIONAL

*Measure > Sense > Innovate*

## MUT1100J MC406

Electromagnetic  
Flowmeter



*The Wafer flowmeter  
designed for agricultural market*



DS403-0-EN



# Applications

- Agricultural industry
- Irrigation
- Agricultural automation
- Green House
- Landscape
- Well usage
- Buildings
- Heat measurement systems
- Installation in small places with lightweight equipment
- Leak detection and monitoring
- Simple water applications such as potable, salt water, heated or cooled water

## Key advantages

- No moving parts
- Low cost
- Zero maintenance
- Neglectable pressure drop
- No filtration needed
- Light weight and compact design
- Extremely robust
- Wider range of measurement
- Easy set up
- Inbuilt datalogging

## Product's benefit

### **High performance for low cost**

Economic investment and low maintenance costs for a very accurate measurement

### **Highly-resistant**

Flow tube made in PA6 reinforced with Fiber glass, resistant to aggressive liquids and fertilizers

### **Long-lasting**

Up to 10 years battery life

### **Lightweight**

Very light and compact dimensions

### **Empty pipe electrode**

Supplied as standard ( $\geq$  DN50). Empty pipe detection on measurement electrodes standard for all sizes

### **No data lost**

Data automatically stored in the internal EEPROM memory

### **Information always available**

Add-on communication module GSM/GPRS automatically sends the information via SMS, e-mail or on a website portal [www.euromagdata.com](http://www.euromagdata.com) with personal ID and password. Accessible also from smart phones and tablets. Configurable FTP communication.

### **Flow - pressure - temperature: all at the same time**

Add-on modules of temperature and pressure reading make the MC406 one of the most complete electronic converter for electromagnetic flowmeters available

### **Easy management, easy programming**

A software is supplied with the unit to allow users to communicate with the MC406 via IRCOM port to any pc, lap top or windows tablet

### **Always verified**

The Euromag FIELD VERIFICATOR is available for full on-site verification, without interruption of the process

# Features



# Features



IrCOM communication

LCD display

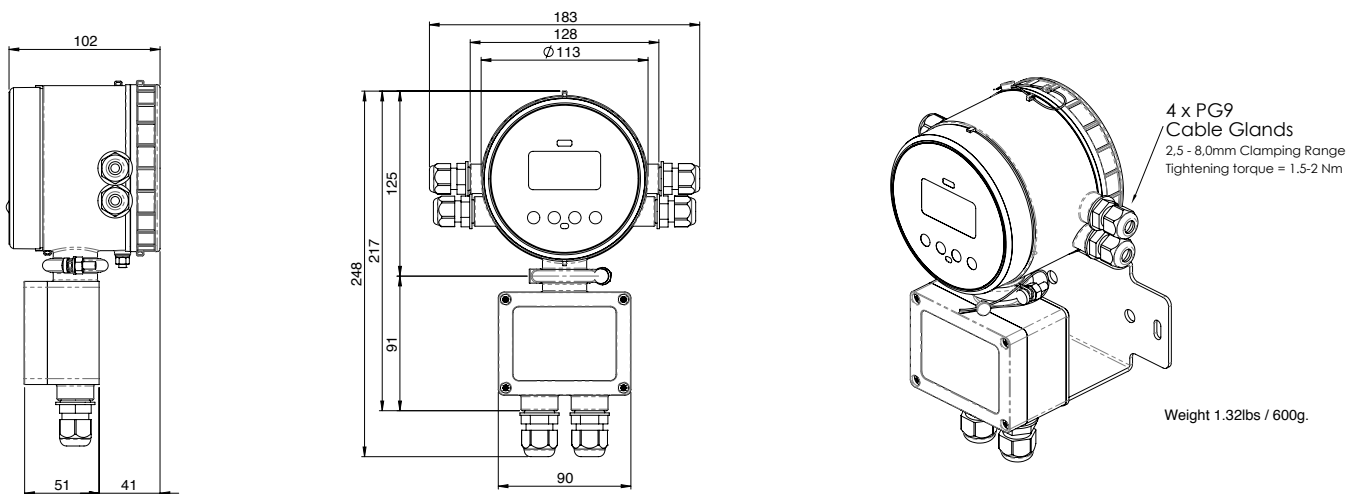
- Live flowrate
- Battery powered
- Bidirectional flow reading
- Advanced self-diagnostic
- Excellent data security
- Temperature module (*optional*)
- Pressure module (*optional*)
- GSM/GPRS Euromag (*optional*)
- Compact or separate

4 Push buttons

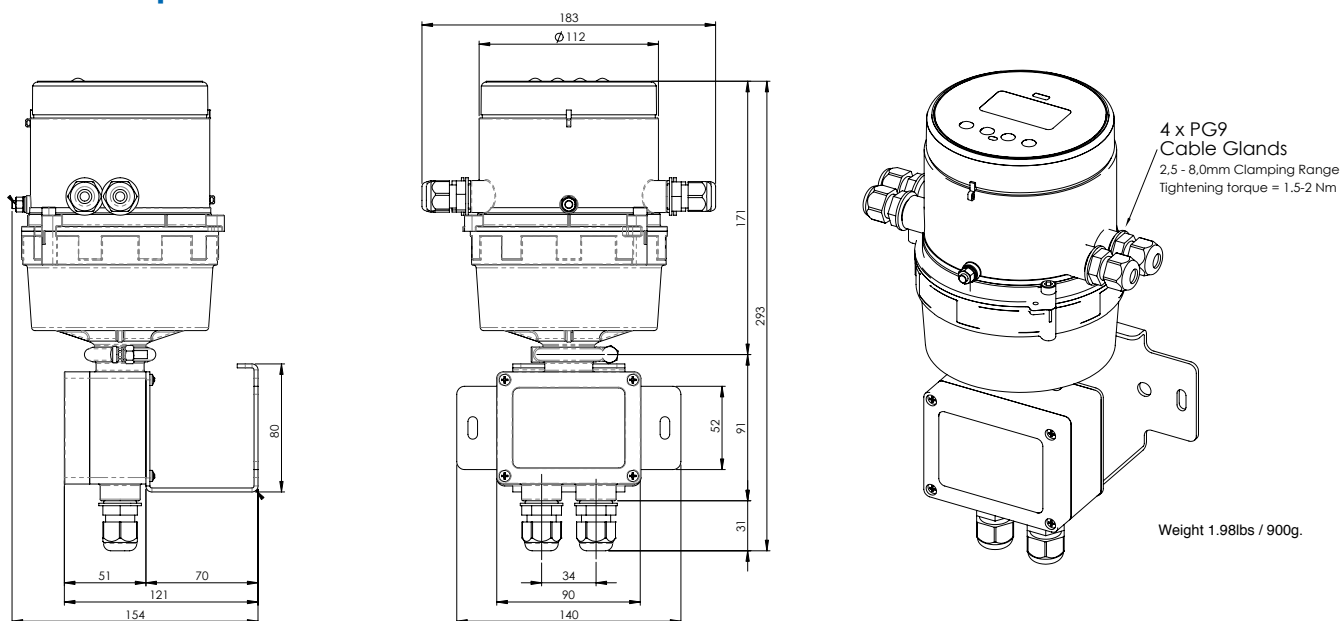


# Overview Separate Converter

## MC406 Standard Separate



## MC406 Separate with GSM/GPRS

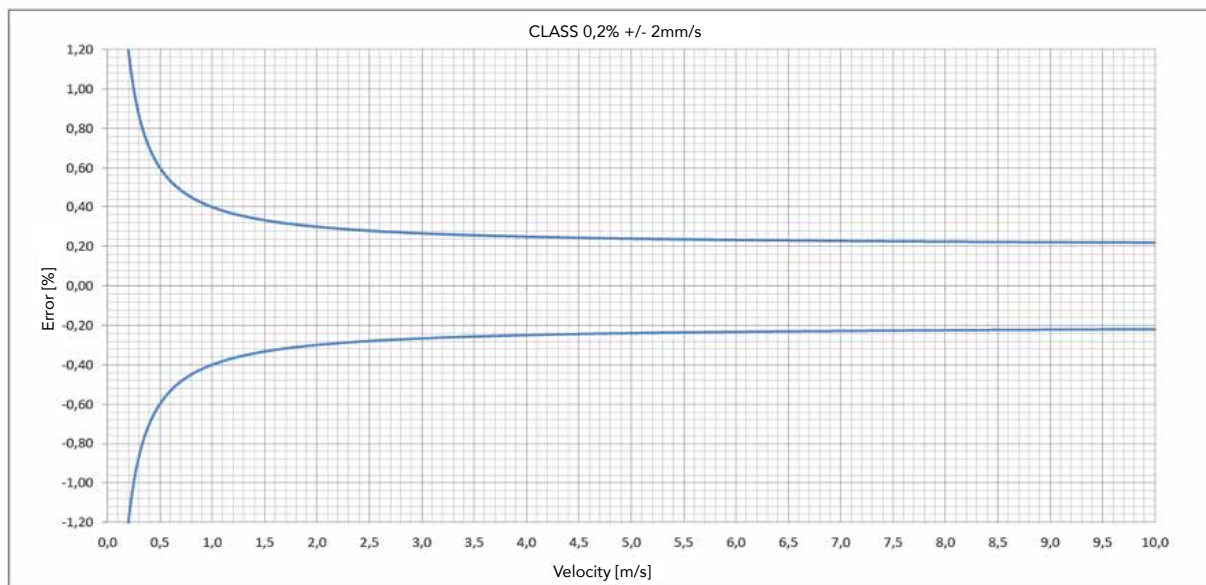


# Specifications

<b>Pipe sizes - millimeters (mm)</b>	40, 50, 65, 80, 100, 150
<b>Pipe sizes - inches (")</b>	1.1/2", 2", 2.1/2", 3", 4", 6"
<b>Process Connection</b>	Wafer
<b>Pressure</b>	Max 16 bar (232 psi)
<b>Temperature</b>	Max 60°C (140°F)
<b>Accuracy</b>	0,2% +/- 2mm/s - Class 2 equivalent
<b>Material</b>	PA6 and fiber glass flow tube
<b>Sensor Protection Degree</b>	IP67 (IP68 Optional)
<b>Connection</b>	Compact or separate (cable lenght 30mt max)
<b>Digital filters</b>	Damping - cut-off (0,05 m/s default) - bypass - peak cut
<b>Display and keys</b>	LCD display - Index, menu, and symbols icons for dedicated information 4 Push buttons to access all functions Totalizer informations can be displayed with 5 decimal digits
<b>Conformity</b>	2014/35/EU - EN 61010-1:2013 (LVD) - 2014/30/EU - EN 61326-1:2013 (EMC)
<b>Flow Units</b>	m3, l, ML, ft3, GAL, BBL, Aft, Ain
<b>Outputs</b>	2 pulses passive outputs (1 programmable as alarm), individual galvanically isolated - clean contact Maximum load +/- 35V DC, 100 mA short circuit protected. 4...20mA loop powered optional
<b>Communication</b>	Integrated Euromag IrCOM interface
<b>Datalogging</b>	100,000 lines of data with a frequency of log between 1 minute and 120 minutes (default 15 minutes)
<b>Power supply</b>	Battery powered - 2 x D Cell 3,6 V * - 12/24Vdc optional
<b>Battery life</b>	Lithium battery pack up to 10 years / GSM battery life up to 10 years
<b>Add on modules</b>	GSM/GPRS Euromag Module Pressure (1 input) and temperature (2 inputs) Energy metering ready
<b>Totalizers</b>	5 (2 positive, 2 negative and 1 net)
<b>Date and time</b>	Yes
<b>Data protection</b>	Password available, automatic firmware check and recover during the update
<b>Alarms and status</b>	Status icon displayed and alarm logged in the datalogger
<b>Self diagnostic</b>	Alarms available: <ul style="list-style-type: none"> <li>• excitation failure</li> <li>• high temperature</li> <li>• pulse overlapped</li> <li>• empty pipe on the measuring electrodes</li> <li>• empty pipe on the 4th electrode</li> <li>• high voltage supply</li> <li>• wet electronic board</li> <li>• low battery</li> </ul>
<b>External verification</b>	Field vericator available for calibration verification and electronic status
<b>Software for communication and programming</b>	Commissioning (equal settings of meters) - Data print for documentation - Data export (CSV file) - Firmware update - Read instant flowrate - Read and write all non volatile parameters - Download internal datalogger - View instrument event logger

\* Lithium batteries are subject to special transportation regulations according to United Nations "Regulation of Dangerous Good", UN 3090 and UN 3091. Special transport documentation is required to observe these regulations. This may influence both transport time and cost

## Measuring accuracy



## Flow rates

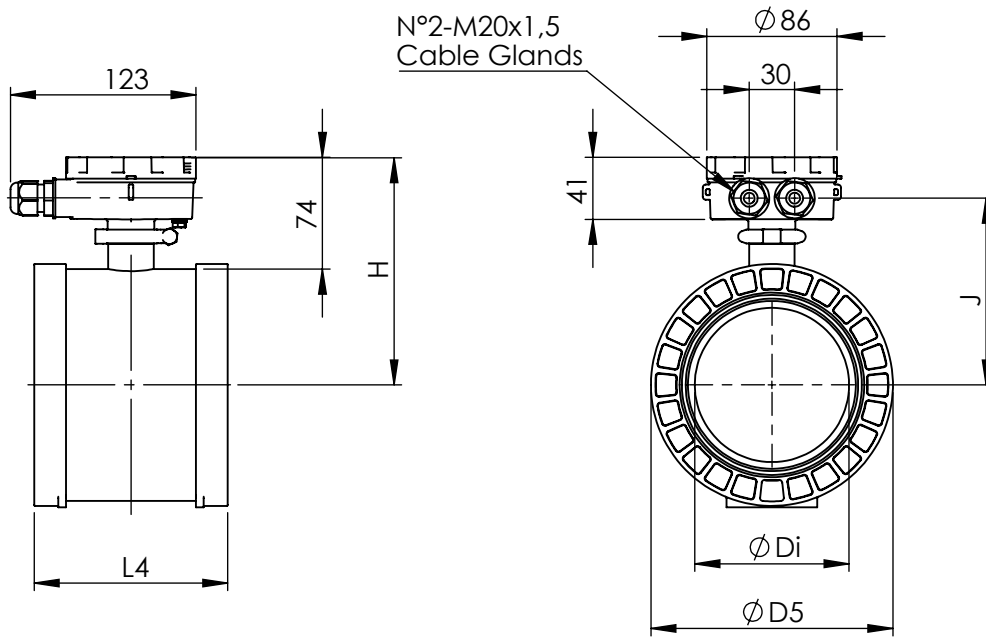
Pipe size	1" 1/2 / 40mm	2" / 50mm	2" 1/2 / 65mm	3" / 80mm	4" / 100mm	6" / 150mm
<b>Max flow rate</b> (gallons/minute)	199	310	525	796	1243	2800
<b>min Flow Rate</b> (gallons/minute)	0,9	1,5	2,6	3,9	6,2	13,9
<b>Max Flow Rate</b> (Liters/Second)	12,5	19,5	33,12	50,21	78,42	176,65
<b>min Flow Rate</b> (Liters/Second)	0,05	0,09	0,16	0,24	0,39	0,87

\*NOTE: The indicated low flowrate is at factory settings. Lower flowrates can be achieved modifying the cut off filter

## Weight (Sensor only)

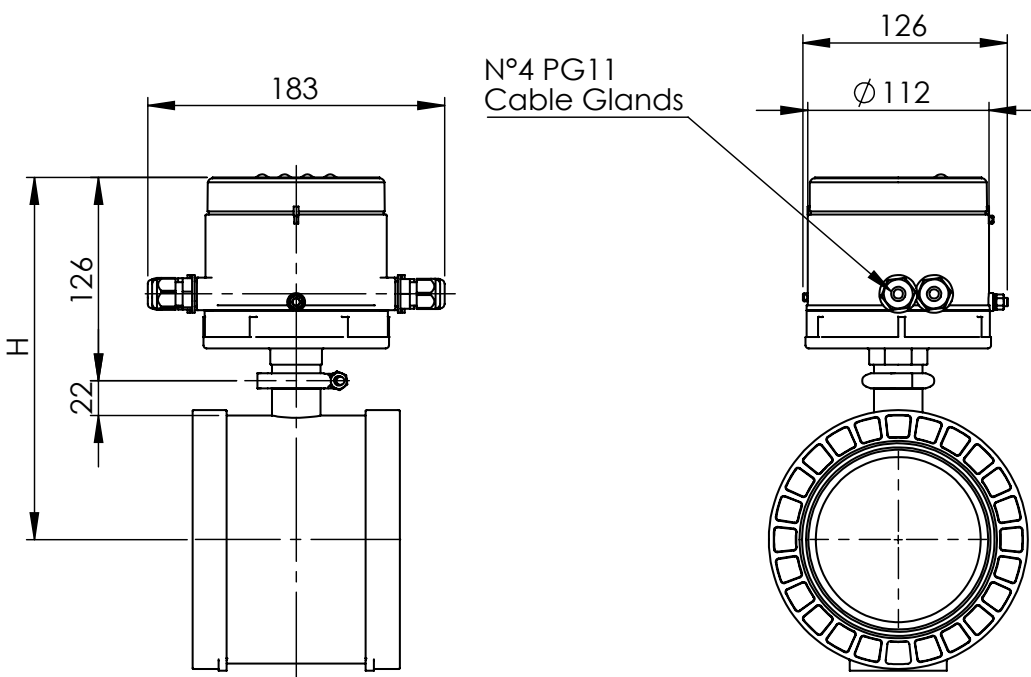
<b>DN</b>	<b>[mm]</b>	40	50	65	80	100	150
<b>DN</b>	<b>[ " ]</b>	1" 1/2	2"	2" 1/2	3"	4"	6"
<b>WEIGHT</b>	<b>[kg]</b>	1,5	1,8	2,5	3	4	6,5

### MUT1100J - SEPARATE



DN	L4	Di	D5	H	J
40	96	37,6	86	113	87
50	86	45,9	103,2	122	95
65	104	62,5	122	131	105
80	112	78,0	134	137	111
100	128	102,0	160	150	124
150	196	147,0	220	180	154

### MUT1100J - MC406 COMPACT

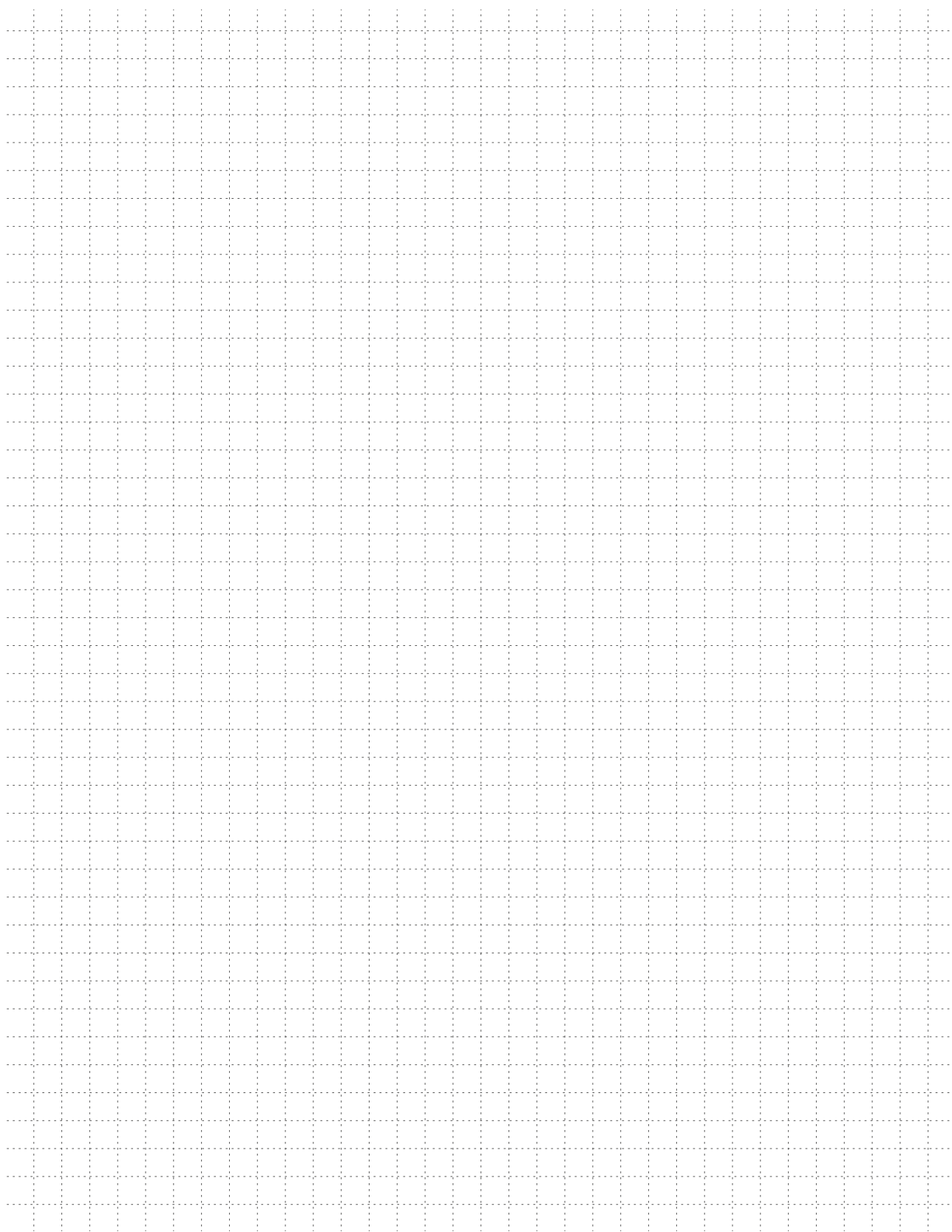


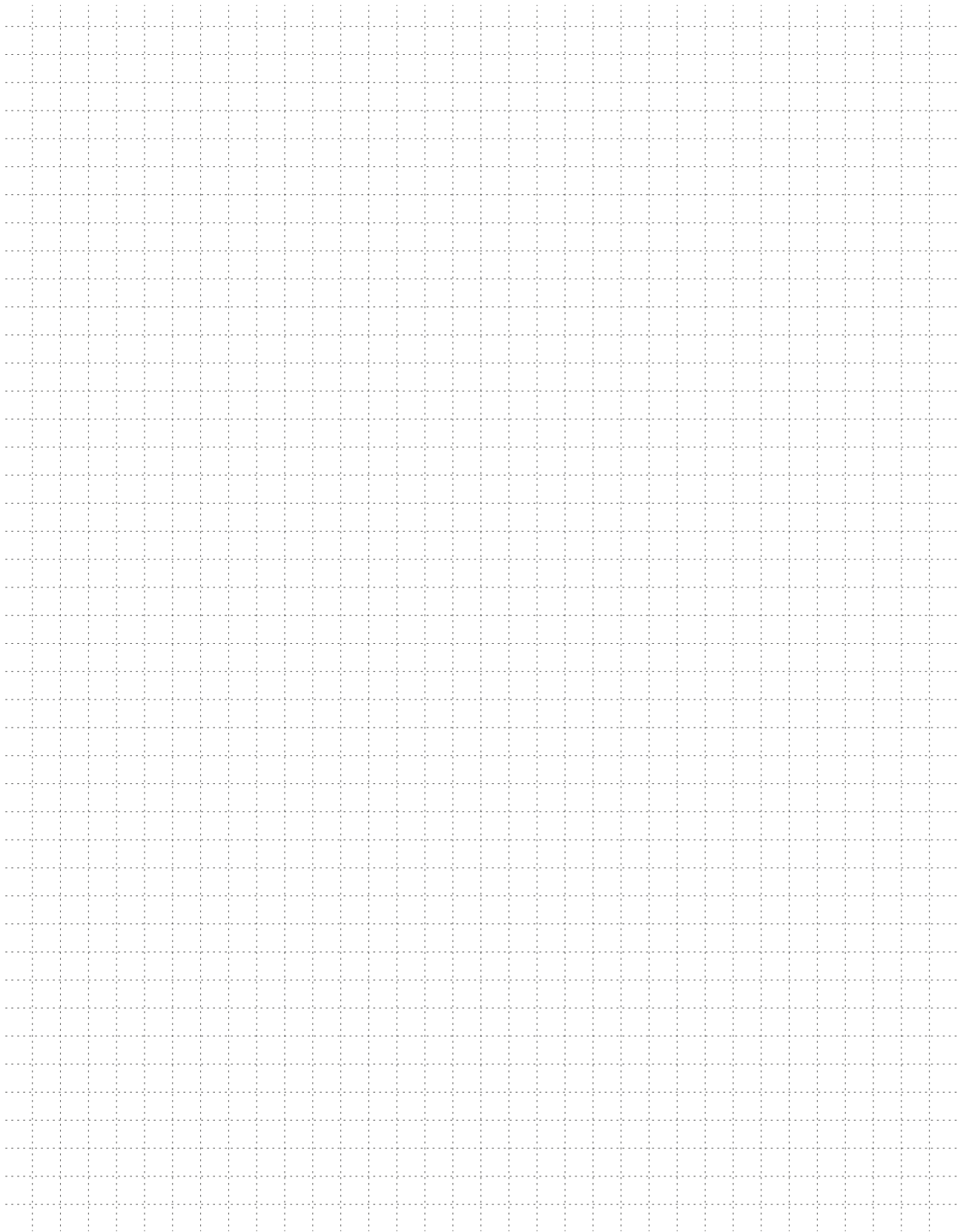
DN	H
40	187
50	196
65	205
80	211
100	224
150	254





# Notes







*Measure > Sense > Innovate*



**EUROMAG**  
INTERNATIONAL

*Measure > Sense > Innovate*



**EUROMAG INTERNATIONAL Srl**

Via della Tecnica, 20 - 35035 Mestrino (Padova) Italia  
Tel. +39 049.9005064 - Fax +39 049.9007764

[www.euromag.com](http://www.euromag.com) - [www.euromagdata.com](http://www.euromagdata.com)  
[euromag@euromag.com](mailto:euromag@euromag.com)



**TORMENE**  
GROUP