

# PISTOLAS CON CUENTALITROS CERTIFICADO MID



GESTIÓN INTEGRAL DE EQUIPAMIENTOS INDUSTRIALES  
INTEGRAL MANAGEMENT FOR INDUSTRIAL EQUIPMENTS

**ADVANCED FLUID  
MANAGEMENT SOLUTIONS**



*Welcome to the  
world of* **MID**





**ADVANCED FLUID  
MANAGEMENT SOLUTIONS**



DESIGN IS AN

*Art*







founded in 1975





*the human side  
of Quality*



# Certification MID MI-005

Compliant with European Directive 2014/32/EU



## What's this



**The new RAASM MID-certified digital meter** is the mandatory tool **required for commercial transactions** involving direct sale of lubricants for public use.

In compliance with the Measuring Instruments Directive 2014/32/EU, MID MI-005 certification focuses on the continuous, dynamic quantity measurement for liquids other than water. RAASM offers solutions for the supply of oil and similar products suitable for every need, ensuring a **high protection rating (IP65)** and save data for 2000 dispensing operations.







## FEATURES REGULATIONS

STANDARDS, GUIDELINES AND OTHER REGULATIONS	OIML R 117-1- Wemec 7.2
MID IMPLEMENTATION DECREE	DECREE 19 May 2016, no. 84
METROLOGICAL MARKING OF DIGITAL METER LABEL	CE MXX 0476
EC TEST CERTIFICATE	MID 94-B-1
CHECKSUM CODE (unique digital meter software identifier)	C3.00

## How does it work?



All **RAASM** digital meters are calibrated

**100%**

Calibration is performed using only sophisticated equipment designed in-house by our R&D department. The units are sealed by applying a stainless steel wire on the screws closing the meter body.

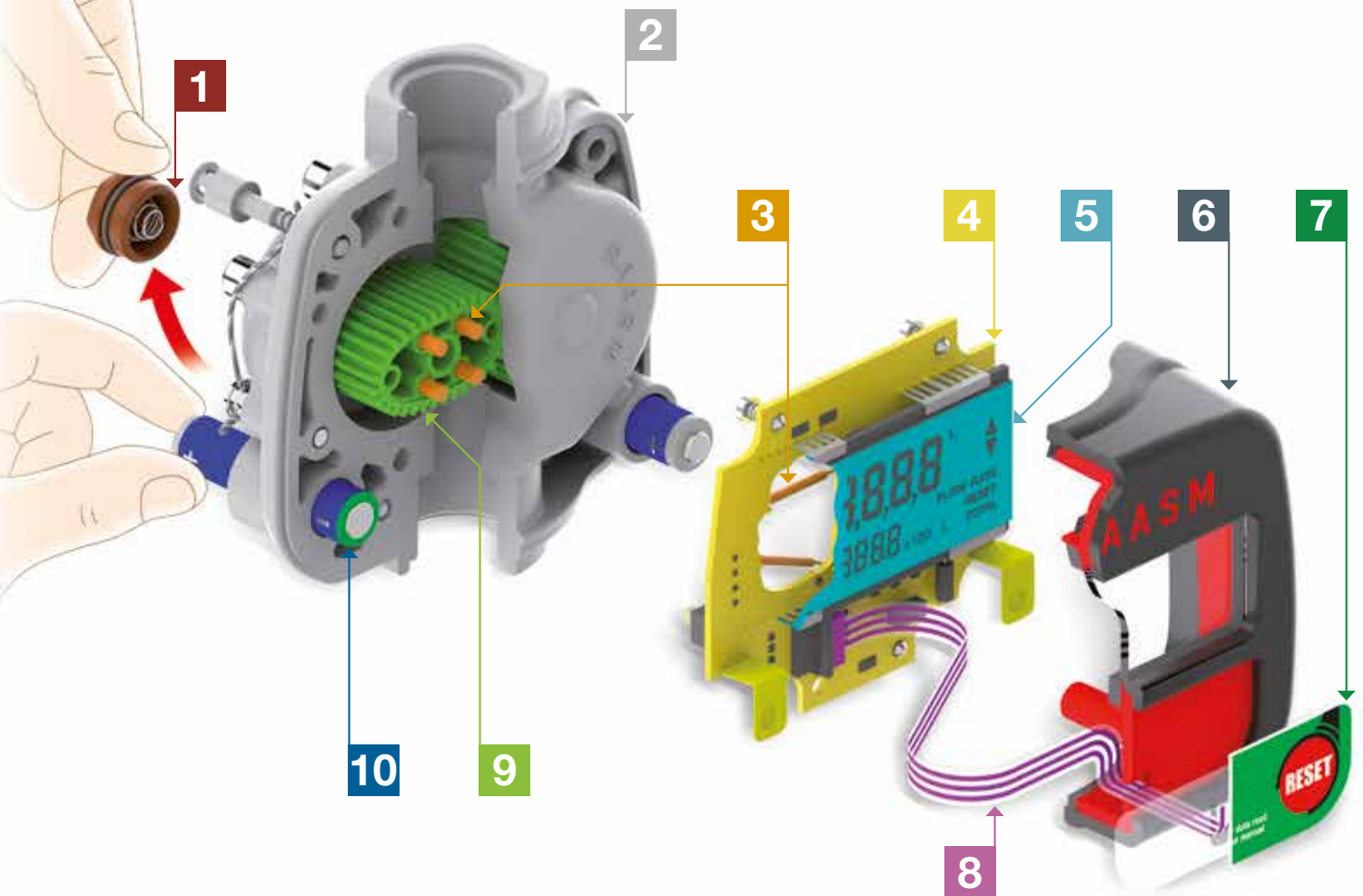
The certified minimum that can be dispensed is half a litre of oil; the total dispensed cannot be reset, however partial dispensing - up to 2000 entries can be saved with date and time - are overwritten so that the last 2000 recordings are always available. When the digital meter is delivered, alone or mounted on a gun, we provide a detailed report containing the data for all calibration tests performed, **plus the original RAASM certification.**

⚠ To use the guns with the MID-certified digital meter in RAASM dispensing kits, they must be fitted with a degasser.



# MID Digital meter

## TECHNICAL features



**1 SEALED BATTERY**  
compartment assures continuous electronic contact in rugged working conditions.

**2 ALUMINIUM BODY**  
designed with a compact, shock-resistant structure.

**3 THE USE OF 4 MAGNETS**  
provides superior control and precision measurement.

**4 ELECTRONIC CARD ASSEMBLED**  
with protective cover fitted with large LCD screen.

**5 THE DISPLAY**  
is welded permanently on the electronic card.

**6 DOUBLE LAYER PROTECTIVE COVER**  
provides an air tight seal with the aluminium body.

**7 RAISED BUTTONS ON THE MEMBRANE**  
produce an improved operational feel.

**8 A RIBBON WIRE CONNECTION BETWEEN THE BUTTONS**  
and the electronic board provide superior connectivity.

**9 OVAL GEARS MADE OF POM**  
suitable for dispensing oils and similar products.

**10 2 ALKALINE BATTERIES**  
standard 1.5 V AAA

# DISPLAY specifications



The display provides simple, user-friendly indications to make use easier.

Battery low level indicator.  
When it goes on, replace  
the batteries immediately.

5 digit  
resettable totalizer.

Records total, instantaneous  
flow rate and number of  
dispensing operations  
saved (6-digit).

Total may be multiplied  
by x10 - x100.



Unit of measure for partial  
registration (litres).

Displays instantaneous  
"FLOW RATE".

Indicates the "TOTAL" or  
"RESET TOTAL".

Unit of measure for partial  
registration (litres).

## TECHNICAL PERFORMANCE

MPE (maximum permissible error)

Max. value between: 0,01 l (minimum error)  
0,3% (supply > 2 l)

Repeatability 0,2%

Pressure loss < 0,5 bars at max flow rate

Temperature  $\Delta T$  +5 °C ÷ +40 °C (+41 °F ÷ +104 °F)

## strength points



- **2000 permanent operations can be saved to memory** and viewed on the instrument at any time.
- MPE (maximum permissible error) 0,01 l or the 0.3% when dispensing more than **2 litres**, also thanks to a double pair of magnets which improves measurement precision.

## SEALED closing



- **Lead sealed** to guarantee that the instrument cannot be tampered with.



- Comes standard with a device **able to maintain the date and time** while the battery is being changed.
- For each meter, a **detailed calibration certificate** is provided containing the data from the tests performed.





# MID Digital meter For oil and allied products



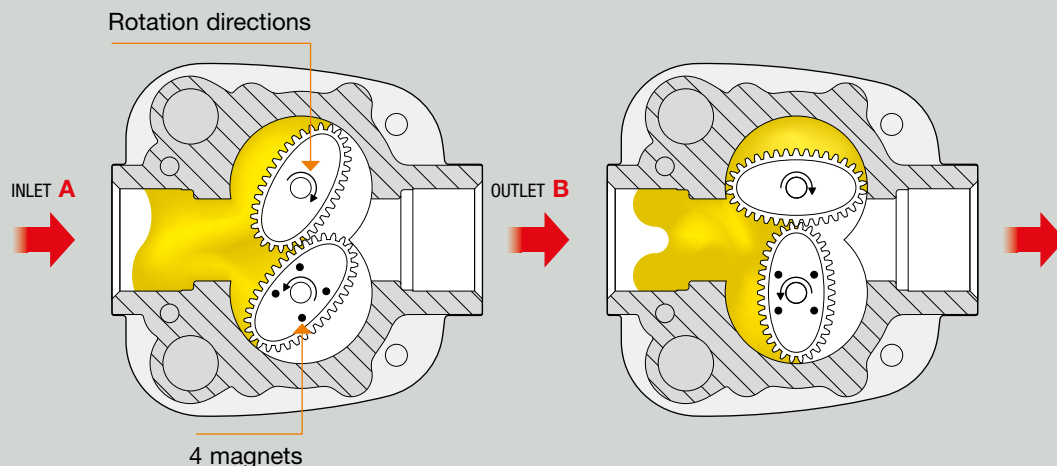
**RAASM MID-certified digital meter is designed to measure oil and similar products in compliance with current European legislation.** It let you view the total amount supplied - which cannot be reset - while the partial supplies can be displayed and saved. The instantaneous flow rate can be consulted on the display, as well as the number of dispensing operations saved to memory. It can also be mounted on guns already in use, provided the transparent display p/n 38119 and automatic nozzle p/n 38116 are also used.



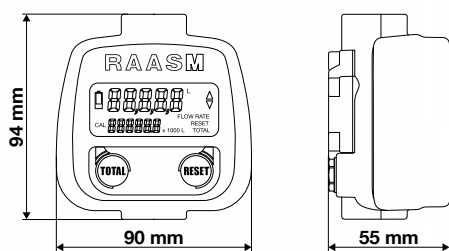
Article	4259
Compatible fluids	Oil and allied products
Viscosity	90 ÷ 200 mPas
Body's material	Aluminum
Gear's material	POM
Inlet/Outlet	G 1/2" (f) / G 1/2" (f)
Delivery	1 ÷ 10 l/min
Minimum measurable quantity	0,5 l
Max operating pressure	1 : 20 bar
Burst pressure	200 bar
Precision class	0,5
MPE (maximum permissible error)	Max. value between: 0,01 l (minimum error) - 0,3% (supply > 2 l)
Working temperature	+5 °C ÷ +40 °C
Mechanical environment class	M2
Electromagnetic environment class	E2
Protection degree	IP65

## Measuring principle

When the fluid enter in the oval gear chamber through the **inlet "A"**, the gears start to rotate. The gears start to rotate because of the pressure of the fluid which comes out from the **outlet "B"**. Each rotation corresponds to a determinate quantity of fluid.



## OVERALL DIMENSIONS



📦 N° 1 packing 0,0015 m<sup>3</sup> 📦 Net weight 0,535 kg

## strenght points



- **MID-MI005** Certification.
- Reference Directive **2014/32/UE**.
- **Sealed** with stainless steel wire applied on screws after in-house calibration.

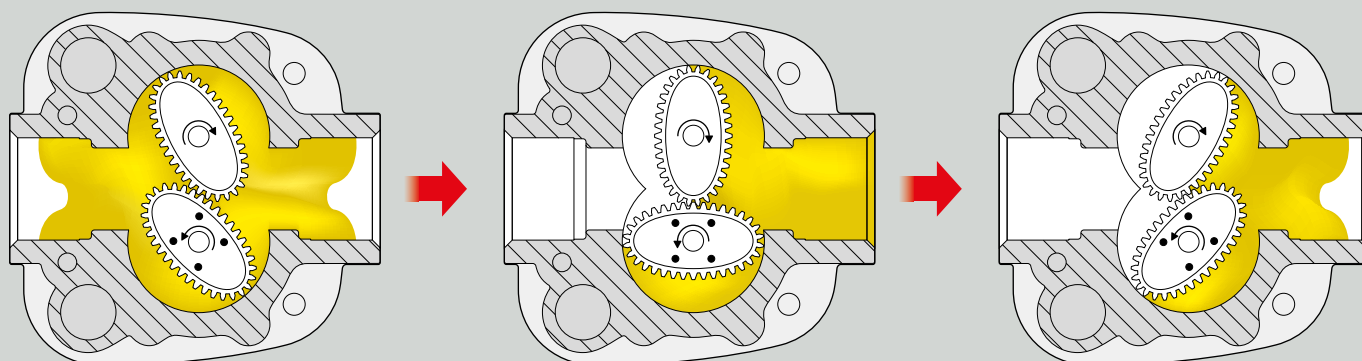


Guarantee and quality of the components are our priority!



Correct dimensional tolerances between gears and chamber grant the reliability and the accuracy of the meter.

**4 magnets**, placed on one of the two gear, give the pulses to the microprocessor during every rotation.







# Dispensing guns



## inlet filter



- supplied on the entire protect range, guaranteeing cleaning of dispensed liquid while maintaining gun performance.

Coloured caps supplied for all the range.



## PERFORMANCE

Series	1/2" 30 TP
Flow rate	10 l/min
Max pressure	60 bar
Inlet union	G 1/2" (f)
Seals	NBR

- 1 DRIP-CATCHER NOZZLE**  
Only ø 16 mm automatic drip-catcher nozzles are installed to guarantee maximum precision dispensing.

- 2 TERMINAL**  
Versions with flexible or rigid terminal are available.

- 3 TRANSPARENT SIGHT GLASS**  
Each gun has a transparent sight glass to check that there are no air bubbles during oil throughflow.

- 4 GRIP**  
Grip in aluminium alloy or technopolymer.

- 5 LEVER LOCKING BUTTON**  
Depending on your needs, models are available both with and without the lever locking button.

- 6 HOOK**  
All guns come standard with a hook so they can be stored quickly and easily.

# TECHNICAL FEATURES

RAASM MID-certified guns are designed to measure oil and similar products in compliance with current European legislation. They accommodate the 37780M meter and confirm all technical characteristics. The range of guns available can meet every need and includes flexible or rigid terminals, handles in aluminium or technopolymer, lever locking buttons and automatic drip-catcher nozzles.



## TECHNICAL

1/2" 40 AL	1/2" 40 AP
10 l/min	10 l/min
70 bar	70 bar
G 1/2" (f)	G 1/2" (f)
Viton®	Viton®

### strength points



- All accessory components required by law are available for implementation on the gun you already have so it can be used for MID-MI005 certified delivery.
- Precision, ergonomic design featuring compact, light-weight structure that ensures an easy, manoeuvrable grip.
- IP65 protection rating so the meter can be used in environments that are extremely dusty and subject to jets of water.





# Dispensing guns with **flexible terminal** Oil and allied products



Series 1/2" 30 TP  
P/N 4401  
with digital meter p/n 4259

<b>Grip:</b> technopolymer	<b>Terminal:</b> flexible black synthetic rubber
<b>Drip-catcher nozzle:</b> automatic ø 16 mm	Transparent sight glass to check the oil throughflow
Hook for storing the gun	Inlet swivel joint G 1/2" (f)



Series 1/2" 40 AL  
P/N 4407  
with digital meter p/n 4259

<b>Grip:</b> in aluminum alloy	<b>Terminal:</b> flexible black synthetic rubber
<b>Drip-catcher nozzle:</b> automatic ø 16 mm	Transparent sight glass to check the oil throughflow
Hook for storing the gun	Inlet swivel joint G 1/2" (f)
Coloured caps supplied for all the range	



Series 1/2" 40 AP  
P/N 4412  
with digital meter p/n 4259

<b>Grip:</b> in aluminum alloy	<b>Terminal:</b> flexible black synthetic rubber
<b>Drip-catcher nozzle:</b> automatic ø 16 mm	Transparent sight glass to check the oil throughflow
Hook for storing the gun	Inlet swivel joint G 1/2" (f)
Coloured caps supplied for all the range	Lever locking button



# Dispensing guns with **rigid terminal** Oil and allied products



Series 1/2" 30 TP  
P/N 4403  
with digital meter p/n 4259

<b>Grip:</b> technopolymer	<b>Terminal:</b> rigid terminal in aluminum alloy
<b>Drip-catcher nozzle:</b> automatic ø 16 mm	Transparent sight glass to check the oil throughflow
Hook for storing the gun	Inlet swivel joint G 1/2" (f)



Series 1/2" 40 AL  
P/N 4409  
with digital meter p/n 4259

<b>Grip:</b> in aluminum alloy	<b>Terminal:</b> rigid terminal in aluminum alloy
<b>Drip-catcher nozzle:</b> automatic ø 16 mm	Transparent sight glass to check the oil throughflow
Hook for storing the gun	Inlet swivel joint G 1/2" (f)
Coloured caps supplied for all the range	



Series 1/2" 40 AP  
P/N 4413  
with digital meter p/n 4259

<b>Grip:</b> in aluminum alloy	<b>Terminal:</b> rigid terminal in aluminum alloy
<b>Drip-catcher nozzle:</b> automatic ø 16 mm	Transparent sight glass to check the oil throughflow
Hook for storing the gun	Inlet swivel joint G 1/2" (f)
Coloured caps supplied for all the range	Lever locking button



# Customise your gun



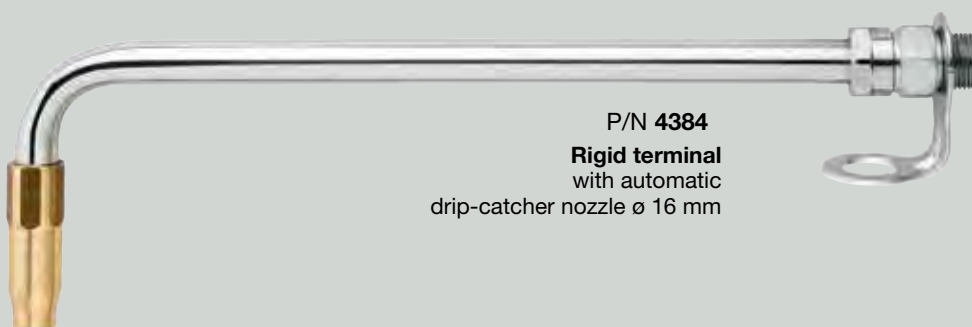
P/N 4387  
Automatic  
drip-catcher nozzle  
ø 16 mm



P/N 4383  
Flexible terminal  
with automatic  
drip-catcher nozzle ø 16 mm



P/N 6179  
Transparent sight glass  
assembly kit  
to check that there  
are no air bubbles  
during oil throughflow



P/N 4384  
Rigid terminal  
with automatic  
drip-catcher nozzle ø 16 mm

All components of the new RAASM MID digital meter and guns can be purchased separately. These units can be used to take a standard gun, already in use and turn it into a gun certified for commercial transactions for public use. The parts indispensable for this purpose are the **4259** digital meter, the automatic drip-catcher nozzle **4387** and the oil sight glass **6179**. See the exploded drawing below to find the necessary item.

*welcome to the  
world of*



P/N 4259  
**MID Digital meter**  
for oil, inlet/outlet  
G 1/2" (f)



P/N 4357  
**Nipple**  
G 1/2" (m) x G 3/8" (m)

P/N 4316  
**Grip**  
in technopolymer with  
inlet swivel joint G 1/2" (f)



P/N 4313  
**Grip**  
in aluminum alloy with  
inlet swivel joint G 1/2" (f)



P/N 0793  
**Grip**  
in aluminum alloy with  
inlet swivel joint G 1/2" (f)  
and lever locking button







## TECNOLOGÍA

La investigación y el desarrollo de nuevas soluciones que acabarán convirtiéndose en productos de vanguardia de la más alta calidad totalmente fabricados en Italia, es el principal punto de partida de todo el ciclo de producción



## CALIDAD

Desde siempre, la calidad es una preocupación básica en la creación de productos **RAASM**. Para obtenerla es indispensable la ejecución de un sinfín de pruebas altamente exigentes y rigurosas



## FUNCIONABILIDAD

**RAASM** dispone de la más completa gama de productos para lubricación y distribución de fluidos. El objetivo es el de dar siempre una respuesta satisfactoria a las demandas de nuestros clientes y cubrir sus exigencias



Company with an  
ISO 9001:2015  
certified quality  
management system

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