

Electronic device developed for the metering of fluids, particularly in applications where an immediate control of the supplied fluid is required.

The function is based upon the oval gears measuring system combined with a probe that is measuring electromagnetic pulses monitored by an electronic component which indicates the quantity of each individual fluid dispense (single operation), the quantity of a sum of dispenses (partial totalizer) and the total of all dispenses ever made (absolute totalizer).

The Flexbimec flow meters are high quality measuring devices for the quantity control of lubricant dispenses. In all model series, "Oil Gate", "Oil Bit Plus" and "Oil HFlow" it is possible to display 3 different totals which show the quantities of the carried out fluid dispenses in the desired mode. In the series "Oil DT" simultaneously 2 different totals (single operation and absolute total) are visible on the display.

Quantity of each individual operation (single operation):

The lubricant is supplied directly from the storage container and passes through the flow meter where the dispensed quantity is displayed as soon as the trigger of the control gun is manually released.

Quantity of a sum of dispenses (partial totalizer):

This mode accumulates a number of individual operations and can be reset to zero periodically. It enables the user to display a daily, weekly or monthly quantity of dispenses.

Quantity of all dispenses ever made (absolute totalizer):

In this mode all dispenses made since the first use of the flow meter are displayed as an inventory value that cannot be reset to zero and so show a balancing of the fluid consumption.

Preset of the quantity:

In the flow meter models with preset function a small, but effective element of automation is added which permits the user to predetermine the desired dispensing quantity and to stop the flow automatically once the preset quantity has been reached.

The flow meters are factory calibrated with hydraulic oil ISO 32. Anyway, they can easily be re-calibrated by the user according to the lubricant type used.

Also it is possible to change the measuring unit from liters quickly into gallons, pints or quarts using the push buttons of the display.

The new series "MID MI-005" is a product line of flow meters for the supply of oils which are **approved for fiscal transactions** according to the European Directive 2004/22/EC, better known as **Measurement Instrument Directive (MID) MI-005**.



## Oil DT



Art. no. **2626**  
Oil

Art. no. **2630**  
Antifreeze

### Art. no. 2626

Electronic oval gears flow meter for oil, series "Oil DT", with control gun, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). The new series "Oil DT" features the following advantages compared to the previous series:

- Control gun (art. no. 2180) includes a trigger guard, allows an easier maintenance, offers the possibility of a gradual oil supply through the trigger, and permits to open the valve with a minimum effort;
- Flow meter with enlarged display, with simultaneous visibility of 2 different totals (single operation and absolute total);
- possibility of changing the measuring unit (liters, quarts, pints, gallons);
- Improved accuracy and repeatability of the measurement;
- Pressure drop.

### Art. no. 2630

Electronic oval gears flow meter for antifreeze, series "Oil DT", with control gun, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

Technical data	
Art. no.	<b>2626 - 2629 - 2630 - 2633</b>
Connections	1/2" BSP (M)
Flow range (l/min)	1 - 30
Operating temperature range	+ 10°C / + 50°C
Max working pressure (bar)	70
Accuracy	+/- 0,5%
Total max resettable	9999 l
Total max non- resettable	9999 l
Weight	1,4 Kg

Not approved for fiscal transactions



Art. no. **2629**

### Art. no. 2629

Electronic oval gears flow meter for oil, series "Oil DT", suitable for inline applications, connections 1/2" BSP.



Art. no. **2633**

### Art. no. 2633

Electronic oval gears flow meter for oil, series "Oil DT", with control gun, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).



Art. no. **2826**

Electronic oval gears flow meter for oil, series "Oil Bit Plus", with control gun, rubber protection guard, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

The flow meters of the "Oil Bit Plus" series offer the following additional advantages compared to those of the "Oil DT" series:

- Rubber protection guard for the meter included,
- Higher measurement accuracy due to three decimal digits.

Technical data	
Art. nos.	<b>2826 – 2829 – 2830 – 2831</b>
Connections	1/2" BSP (M)
Flow range (l/min)	1 - 30
Operating temperature range	+ 10°C / + 50°C
Max working pressure (bar)	70
Accuracy	+/- 0,5%
Total max resettable	9999 l
Total max non - resettable	9999 l
Weight	1,5 Kg

Not approved for fiscal transactions



Art. no. **2829**

Electronic oval gears flow meter for oil, series "Oil Bit Plus", suitable for inline applications, connections 1/2" BSP.



Art. no. **2831**

Electronic oval gears flow meter for oil, series "Oil Bit Plus", with control gun, rubber protection guard, trigger guard, straight flexible rubber outlet, Ø 1/2", with manual anti-drip nozzle with screw regulation and inlet swivel 1/2" BSP (M).

## Oil Gate



Art. no. **2937**  
Oil

Art. no. **2942**  
Antifreeze

Art. no. **2937**

Electronic oval gears preset flow meter for oil, series "Oil Gate", with control gun, rubber protection guard, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

The preset function is adding a small, but effective element of automation which permits the user to predetermine the desired dispensing quantity and to stop the flow automatically once the preset quantity has been reached.

Re-calibration by the user is possible.

Art. no. **2942**

Electronic oval gears preset flow meter for antifreeze, series "Oil Gate", with control gun, rubber protection guard, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

Technical data	
Art. nos.	<b>2836 - 2937 - 2942</b>
Connections	1/2" BSP (F)
Flow range (l/min)	1 - 30
Operating temperature range	+ 10°C / + 50°C
Max. working pressure (bar)	70
Accuracy	+/- 0,5%
Total max. resettable	9999 l
Total max. non- resettable	9999 l
Weight	1,6 Kg

Not approved for fiscal transactions



Art. no. **2836**

Art. no. **2836**

Electronic oval gears preset flow meter for oil, series "Oil Gate", with control gun, rubber protection guard, trigger guard, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).



## Oil Hflow



Art. no. **2854**

Art. no. **2854**

Electronic oval gears high delivery flow meter for oil, series "Oil HFlow", with control gun 1" BSP, trigger guard, rigid outlet Ø 20 mm, automatic anti-drip nozzle and 1" BSP (M) inlet swivel.

This high volume series allows to accelerate the oil supplies by the use of a flow meter that guarantees high accuracy measurement even at high flow rates.



Technical data			
Art. nos.	<b>2851</b>	<b>2854</b>	<b>2855</b>
Connections	1" BSP		
Flow range (l/min)	20 - 70		
Operating temperature range	+ 10°C / + 50°C		
Max working pressure (bar)	70		
Accuracy	+/- 0,5%		
Total max resettable	9999 l		
Total max non- resettable	9999 l		
Weight	1,6 Kg	3,9 Kg	3,9 Kg



Art. no. **2851**

Art. no. **2851**

Electronic oval gears high delivery flow meter for oil, series "Oil HFlow", suitable for inline applications, connections 1" BSP (F).



Art. no. **2855**

Art. no. **2855**

Electronic oval gears high delivery flow meter for oil, series "Oil HFlow", with control gun 1" BSP, trigger guard, flexible rubber outlet Ø 3/4", automatic anti-drip nozzle and 1" BSP (M) inlet swivel.

The **European Directive 2004/22/EC**, better known as Directive MID (Measuring Instruments Directive), is a community norm responding to reasons of public interest, safety and order, protection of the environment and the consumer, of levying taxes and duties and of fair trading, which directly and indirectly affect the daily life of citizens in many ways, may require the use of legally controlled measuring instruments.

The **MID - MI005** involves measuring systems for continuous and dynamic measurement of quantities of liquids other than water, particularly lubricant oils.

The **Flexbimec oil flow meter series "MID - MI005"** meets all metrological standards and requirements concerning accuracy defined in the Directive and can be used therefore as approved meters also in fiscal transactions.



Art. no. **2545**

Electronic oval gears flow meter for oil, **approved for fiscal transactions according to MID MI-005, directive 2004/22/CE**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

The flow meter entirely meets the requirements of the **OIML R117-1** (Dynamic measuring systems for liquids other than water – Part 1: Metrological and technical requirements, edition 2007) and **Welmec 7.2** software guide, May 2011.

For the conformance with the specifications of the Directive it is necessary to use the approved flow meter always in combination with a pump that is equipped with an approved air separator unit which can assure the required working conditions (see also pages 44 and 52!).

In order to facilitate the choice of suitable, MID – approved components, in this catalogue can be found also a variety of complete MID – approved kits for the supply of lubricants.

On demand the flow meters of series "MID – MI005" can be equipped with a data transmission system that allows to store the data of all single operations on a suitable electronic device (PC, tablet etc.).

Operating conditions for the use	
Viscosity range of lubricants	94 – 185 mPa*s
Flow range	0,5 – 5 l/min
Min. measurable quantity	0,5 l
Accuracy class	0,5 (MID-MI005 – OIML R117-1)
Operating temperature range	+ 5°C / + 40°C
Working pressure range	1 – 20 bar
Display resolution degree	0,005 l
Mechanical environment category	M1
Electromagnetic environment category	E2
Checksum code	cksum E57E
Protection category	IP 64
Underlying CE directives	2004/108/CE 2006/95/CE
Underlying CE norms	CEI EN 61000-4-2 CEI EN 61000-4-2 A1 CEI EN 61000-4-2 A2 CEI EN 61000-4-3
Quantity of storable single operations data	2000
Composition of storable single operations data	<ul style="list-style-type: none"> <li>Serial number of single dispense;</li> <li>Year of dispense;</li> <li>Month and day of dispense;</li> <li>Time of dispense;</li> <li>Dispensed quantity of single operation;</li> <li>Absolute total of dispensed quantities.</li> </ul>

CE test certificate no.: MID B\_16\_2  
MID certificate no.: CE M14 0476



Art. no. **2710**

Mechanical oval gears flow meter, with body in aluminium, for oil and antifreeze, with two totalizers.



Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
<b>2710</b>	1/2" BSP (F)	15	+10°C / +50°C	50	+ / - 0,5%	999,9 l	999999 l	0,68 Kg

Art. no. **2712**

Mechanical oval gears flow meter, for oil and antifreeze, with control gun, rigid outlet, Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). Composed of art. nos. 2710 and 2105.



Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
<b>2712</b>	1/2" BSP (F)	15	+10°C / +50°C	50	+ / - 0,5%	999,9 l	999999 l	1,1 Kg

Art. no. **2703**

Mechanical, analogical flow meter for oil and antifreeze, with two totalizers, suitable for inline applications.



Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
<b>2703</b>	1/2" BSP (F)	15	+10°C / +50°C	70	+ / - 0,5%	0-10 l	9999 l	0,86 Kg

Art. no. **2608**

Mechanical, analogical flow meter for oil and antifreeze, with control gun, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). Composed of art. nos. 2703 and 2105.



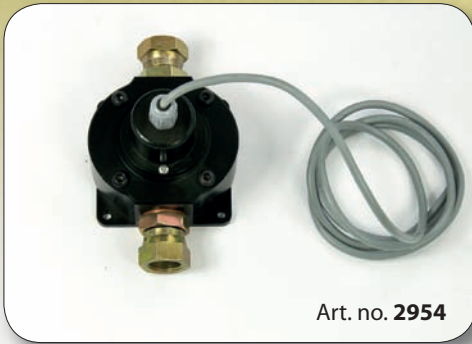
Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
<b>2608</b>	1/2" BSP (F)	15	+10°C / +50°C	70	+ / - 0,5%	0-10 l	9999 l	1,6 Kg

Art. no. **2508**

Mechanical, analogical preset flow meter for oil, with integrated control gun, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). Preset values 0 – 60 l. This model with integrated control gun, but without preset function is available on demand as well (art. no. 2507).



Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
<b>2508</b>	1/2" BSP (F)	15	+10°C / +50°C	70	+ / - 0,5%	0-16 l 0-60 l	9999 l	1,6 Kg

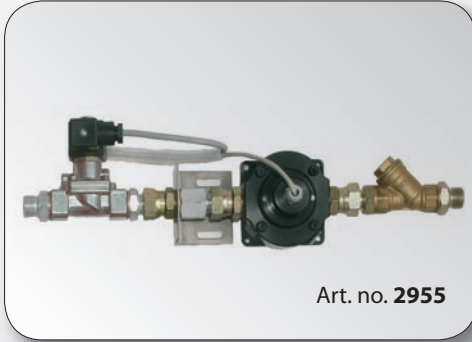


Art. no. 2954

Art. no. 2954

Electronic oval gears flow meter with pulse transmitter, suitable for oil and antifreeze. Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
2954	1/2" BSP (F)	20	+10°C / +50°C	70	+ / - 0,5%	78/l	0,6 Kg



Art. no. 2955

Art. no. 2955

Electronic oval gears flow meter with pulse transmitter, suitable for oil and antifreeze, including a solenoid valve, an inline filter and a wall bracket. Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
2955	1/2" BSP (F)	20	+10°C / +50°C	70	+ / - 0,5%	78/l	1,2 Kg

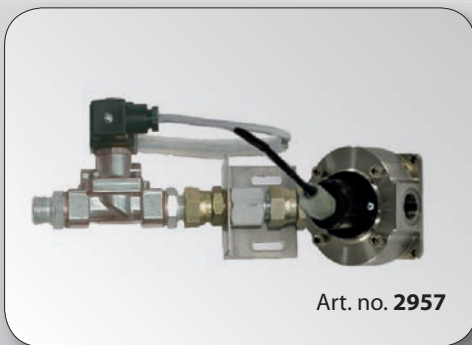


Art. no. 2959

Art. no. 2959

Electronic oval gears flow meter with pulse transmitter, body in stainless steel AISI 303. Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
2959	1/2" BSP (F)	20	+10°C / +50°C	70	+ / - 0,5%	78/l	1,3 Kg



Art. no. 2957

Art. no. 2957

Electronic oval gears flow meter with pulse transmitter, body in stainless steel AISI 303, including a stainless steel solenoid valve and a wall bracket; suitable for the use with water-based fluids and AdBlue® (DEF). Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
2957	1/2" BSP (F)	20	+10°C / +50°C	70	+ / - 0,5%	78/l	1,2 Kg



Art. no. 2853

Art. no. 2853

Electronic oval gears high delivery flow meter with pulse transmitter, suitable for oil, diesel and antifreeze. Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
2853	1/2" BSP (F)	70	+10°C / +50°C	50	+ / - 0,5%	39/l	1,6 Kg