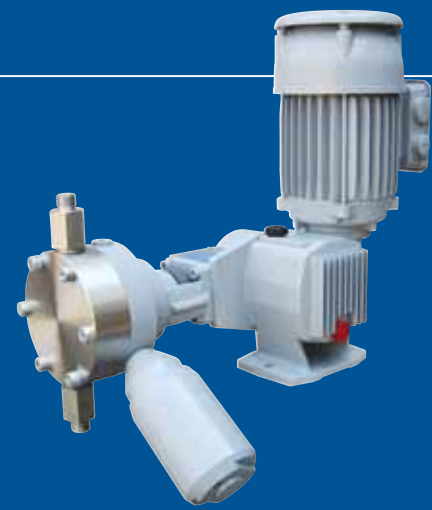


## Special Solutions

### OM

#### OM Pumps - Magnesium oxide slurry dosing

These are designed for dosing diluted **MAGNESIUM OXIDE** slurry into diesel. Working with the manufacturers of the magnesium oxide slurry, since 1980 the **OM** pump has been specifically designed with special wetted materials for this application. It is available with both spring and positive return mechanism (flow rates up to 68 litres per hour, 18 GPH and operating pressures up to 50 bar g, 725 PSI g).



Pump type **RB 16 MA 36 OM**

5 l/h @ 40 bar g  
spring return mechanism.

### MHN

#### MHBN/MHCN Pumps - Filter aid (kieselgur) dosing

OBL is a world leader in the manufacture of metering pumps for **FILTER AIDS**, used for wine, beer and fruit juice filtration. These are diatomaceous earths known as Kieselgur. A range of pumps is available including lip seal plunger pump, mechanical diaphragm and hydraulically actuated diaphragm. These meet the general requirements for flow rates and pressure (100 litres per hour, 26,5 GPH at 10 bar g, 145 PSI g).



Pump type **MHBN100 PP**

The type of pump that best meets both the technical and economic requirements is the **MHBN/MHCN** versions.

These are specially designed with **PP** heads, **FDA** silicone seals and an **AISI 316L** seats and balls coupled with the **OBL** unique **PTFE** mechanical diaphragm.

### HV

#### HV Pumps - High viscosity dosing

Specifically designed to handle high **VISCOSITY PRODUCTS** the HV pumps are available in packed plunger version only with either spring or positive return mechanisms. These pumps are capable of handling products with a viscosity up to 55,000 cP with each head capable of achieving flow rates of up to 150 l/h (40 GPH).



Pump type **RCC 16 HV 50 DV**

6 l/h 10 bar g.  
Spring return mechanism.

### CN

#### CN Pumps - Microdosing

These pumps are designed to handle **EXTREMELY LOW FLOW RATES** where continuous dosing is required. These packed plunger pumps are able to control down to addition levels of 15 ml/h (0.04 GPH) at a maximum pressure of 40 bar g (600 PSI g) due to the unique **OBL** packed plunger design and the use of exotic materials for valves components.



Pump type **RCN 6A 70 TL**

500 ml/h max capacity  
40 bar g max pressure  
1% step dial STD manual adjustment.



**OBL**

**OBL s.r.l.**

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## Metering Pumps

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## The Metering Evolution

**OBL**

## Electric Actuator

### ELECTRIC ACTUATOR

All **OBL** pumps, can be equipped with **Z** type electrical actuator, with following characteristics:

- IP 66 STD (standard)
- Manual emergency override
- Anticondensation heater (on demand)
- Non standard voltages and frequencies
- External automatic/manual selector

Flow rate is adjusted according to following input signals:

- 4-20 mA, 0-20 mA, 20-4 mA e 0-10 V
- Pulses (0-2 Hz - 0-30 Hz)
- RS 485 protocol
- Profibus DP - V Ø



**Z** type actuator vertically fitted on **XL** pump (hydraulic diaphragm to API 675 STD).



**Z** type actuator vertically fitted on **LX9** pump (hydraulic diaphragm to API 675 STD).



**Z** type actuator horizontally fitted on **XRN** pump (hydraulic diaphragm).



Detail of Analogical reading (1% steps).



# Metering Pumps

## Plunger

**RBA-RBB** **BLACKLine**



**RCC** **BLACKPlus**



**R**



**L** **API 675**



**MECHANISM**

Spring Return

Spring Return

Spring Return

Positive Return

**FLOW RATE**

Type	RBA	RBB
L/h	300	300

Type	RCC
L/h	300

Type	RH
L/h	620

Type	LY	LK	LN	LP
L/h	400	1300	3800	5500

**DESCRIPTION**

- Black anodizing Aluminium casing;
- Simple and robust spring return plunger pump;
- Low cost, due to reduced number of components;
- Ideal for metering of mild or non-aggressive fluids.
- Single and multiple arrangement.

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- Simple and robust spring return plunger pump;
- Low cost, due to reduced number of components;
- Ideal for metering of mild or non-aggressive fluids;
- ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).
- Single and multiple arrangement.

- Simple and robust spring return plunger pump;
- Low cost, due to reduced number of components;
- Ideal for metering of mild or non-aggressive fluids;
- ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).

- API 675 positive return plunger pump;
- Heavy-duty construction designed for continuous (24 hour) industrial operation;
- Suitable for high pressure applications where accuracy and reliability are essential;
- ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).
- Multiple pumps arrangement with different sizes, materials and strokes/1'.

**CHARACTERISTICS**

RBA	L/h	7	15	20	38	55	90	150	200	300
bar max	10	10	10	10	10	10	10	9	5	

RCC	L/h	4	11	20	30	55	90	120	160	200	250	300
bar max	40	40	40	26	12	10	9	8	6	5		

RH	L/h	44	64	86	150	176	240	300	410	500	620
bar max	40	35	32	23	12	10	8	7	5	4	3,5

LY	L/h	15	4,5	6,5	15	20	45	110	175	300	400
bar max	150	100	100	100	70	40	18	11	8	6,5	

## Hydraulic Diaphragm

**XRN** **BLACKPlus**



**XL-XLB** **API 675**



**XLC** **API 675**



**X9** **API 675**



Spring Return

Positive Return

Positive Return

Positive Return

Type	XRN
L/h	105

Type	XL	XLB
L/h	480	430

Type	XLC
L/h	1300

Type	LY X9	LK X9	LN X9	LP X9
L/h	270	1050	2600	3700

- Black anodizing Aluminium casing;
- Technically advanced hydraulic diaphragm spring return pump;
- Combines the simplicity and economics of the spring return with the advantages of the hydraulic diaphragm using an innovative mechanically actuated oil replenishing system;
- Built-in relief valve on the oil circuit to protect the pump against over pressure;
- Can be used in both process and service applications;
- Minimum maintenance required;
- ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).

- Technically advanced hydraulic diaphragm positive return pump (API 675);
- Low cost, due to reduced number of components;
- Built-in relief valve on the oil circuit to protect the pump against over pressure;
- Can be used in both process and service applications;
- Minimum maintenance required;
- ATEX STD compliance (94/9/CE), group II category 3 (zone 2/22).
- Multiple pumps arrangement with different sizes, materials and strokes/1'

- Technically advanced hydraulic diaphragm positive return pump (API 675);
- Low cost, due to reduced number of components;
- Extreme reliability and durability due to positive return and double hydraulic diaphragm with mechanically actuated replenishing (smart diaphragm);
- Built-in relief valve on the oil circuit to protect the pump against over pressure;
- Can be used in both process and service applications;
- Minimum maintenance required;
- ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).
- Multiple pumps arrangement with different sizes, materials and strokes/1'

- Double diaphragm process metering pump (API 675);
- Extreme reliability and durability due to positive return and double hydraulic diaphragm with mechanically actuated replenishing (smart diaphragm);
- Seamless ceramic plunger guarantees low NPSHr and minimum maintenance;
- Extreme safety due to built-in relief valve and innovative double diaphragm design;
- SS 316L sandwich diaphragm for operating pressures above 250 barg;
- ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).

XRN	L/h	18	2	4,5	6	10	13	20	33	42	50
bar max	20	35	35	35	35	20	15	15	10		

XL	L/h	63	105	155	215	260	320	370	430	480
bar max	15	15	15	15	15	14	13	10		

XLC	L/h	350	550	750	920	1150	1300	-	-	-
bar max	20	20	17	15	12	-	-	-	-	-

LY X9	L/h	0,5	1,5	3	10	33	15	25	100	170	270
bar max	125	125	125	90	60	40	30	22	14		

## Mechanical Diaphragm

**MB-MC** **BLACKLine**



**MD** **BLACKPlus**



**ML**



Spring Return

Spring Return

Positive Return

Type	MB	MC
L/h	155	420

Type	MD
L/h	520

Type	MLK	MLN
L/h	1100	2000

- Black anodizing Aluminium casing;
- Simple and robust spring return mechanical diaphragm pump;
- Low cost, due to reduced number of components;
- Uses mechanically actuated diaphragm to combine the characteristics of a plunger pump (linear flow rate) with the sealing advantages of a diaphragm pump;
- Suitable for batching operation;
- Minimum maintenance required.
- Single and multiple arrangement.

- Black anodizing Aluminium casing;
- Simple and robust spring return mechanical diaphragm pump;
- Uses mechanically actuated diaphragm to combine the characteristics of a plunger pump (linear flow rate) with the sealing advantages of a diaphragm pump;
- Suitable for batching operation;
- Minimum maintenance required;
- ATEX STD compliance (94/9/CE), group II category 3 (zone 2/22).
- Single and multiple arrangement.

- Positive return mechanical diaphragm pump;
- Combines the construction and reliability of the "L" series (positive return) with the sealing advantages of a diaphragm pump;
- Suitable for duties with flow rates over 520 l/h;
- Minimum maintenance required;
- ATEX STD compliance (94/9/CE), group II category 3 (zone 2/22).
- Single and multiple arrangement.

MB	L/h	11	16	23	31	50	75	101	120	155
bar max	12	12	10	10	8	8	7	7		

MD	L/h	1,5	7	11	31	75	101	132	260	320	420	520
bar max	12	12	10	10	10	8	7	6	6	5		

MLK	L/h	360	420	500	600	750	900	1100	-	-	-
bar max	7	7	4	4	3	3	-	-	-	-	-

# Metering Pumps

**MECHANISM**

**FLOW RATE**

**DESCRIPTION**

**CHARACTERISTICS**