## **Special Solutions**

# ОМ

# 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).



#### 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).



#### **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).



## 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 RB 16 MA 36 OM

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



#### Pump type MHBN100 PP

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



Pump type RCC 16 HV 50 DV

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



Pump type RCN 6A 70 TL

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



Quality System ISO 9001 Certified

### OBL s.r.l.

20090 Segrate - MILANO Via Kennedy, 12 Tel. +39-02.269191 Fax +39-02.2133893 www.oblitalia.com obl.info@idexcorp.com







### **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 heather (on demand)
- Non standard voltages and frequencies
- External automatic/manual selector

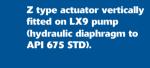
Flow rate is adjusted according to following input signals:

- 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 horizontally fitted on XRN pump (hydraulic diaphragm).



Detail of Analogical reading (1% steps).









Spring Return

pump;

L/h 5,5 | 11 | 30 | 55 | 90 | 150 | 200 | 250 | 300 | RCC | L/h | 2 | 2,8 | 4 | 5 | 6 | 7 | 10 | 15 | 18 | -











1300

Technically advanced hydraulic diaphragm

positive return pump (API 675);

Low cost, due to reduced number of

Extreme reliability and durability due to

diaphragm with mechanically actuated

positive return and double hydraulic

Built-in relief valve on the oil circuit to

protect the pump against over pressure;

replenishing (smart diaphragm);

Minimum maintenance required;

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

category 3 (zone 2/22).

category 2 (zone 1/21) and group II



Positive Return





**Positive Return** 

L/h

MECHANISM	Spring Return					
FLOW RATE	Туре	RBA	RBB			
	L/h	300	300			
DESCRIPTION	Black anodizing Aluminium casing;     Simple and robust spring return plunger.					

- mple and robust spring return plunger
- Low cost, due to reduced number of

	Ideal for metering of mild or fluids.	non-aggressive
--	---------------------------------------	----------------

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

bar max 40 40 30 23 12 10 7 5 4

Single and multiple arrangement.

	<ul> <li>Low cost, due to reduced number of components;</li> </ul>
/e	<ul> <li>Ideal for metering of mild or non-ag fluids;</li> </ul>

Single and multiple arrangement.

- ATEX STD compliance (94/9/CE), group II
- category 2 (zone 1/21) and group II
- category 3 (zone 2/22).

TS bar max 100 100 100 100 100 100 100 80 60 -

<ul> <li>Black anodizing Aluminium casing;</li> </ul>	Simple and robust spring return plun
	pump;
<ul> <li>Simple and robust spring return plunger</li> </ul>	

L/h

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

mple and robust spring return plunger	<ul> <li>API 67</li> </ul>

620

lunger	<ul> <li>API 675 positive return plunger pump;</li> </ul>

 Heavy-duty construction designed for continuous (24 hour) industrial operation;

where accuracy and reliability are essential;

ATEX STD compliance (94/9/CE), group II

Multiple pumps arrangement with different

L/h 1,5 4,5 6,5 15 20 45 110 175 300 400

bar max 150 100 100 100 70 40 18 11 8 6,5

bar max 100 90 80 70 35 25 12 7 6 4

L/h 150 230 420 650 900 1500 2150 2700 3200 3800 bar max 90 50 50 20 16 8 6 5 4 3,5 L/h 230 | 340 | 540 | 750 | 1100 | 1800 | 2500 | 3200 | 4500 | 5500 bar max 90 80 55 40 27 15 10 9 6 5

L/h 30 | 48 | 62 | 90 | 165 | 250 | 550 | 850 | 1000 | 1300

LY L/h 2 3 4 5,5 6,5 10 13 - - - TS bar max 300 300 300 300 160 150 140 - - -

LK L/h 3,5 5 7 10 15 20 25 30 42 TS bar max 400 400 400 350 230 220 160 140 120 -

L/h 14 20 21 26 34 40 48 58 75 105 bar max 400 | 400 | 375 | 350 | 260 | 250 | 230 | 200 | 150 | 110 LP L/h 48 58 70 75 90 105 135 165 195 TS bar max 400 370 350 250 230 220 165 160 150 -

Suitable for high pressure applications

category 2 (zone 1/21) and group II

category 3 (zone 2/22).

sizes, materials and strokes/1'.

L/h 400 1300 3800 5500

Combines the simplicity and economics of the spring return with the advantages of the hydraulic diaphragm using an innovative mechanically actuated oil replenishing

spring return pump;

105

Technically advanced hydraulic diaphragm

Black anodizing Aluminium casing;

L/h

- 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:

EX STD compliance (94/9/CE), group II	
egory 2 (zone 1/21) and group II	
egory 3 (zone 2/22).	

L/h 1,8 2 4,5 6 10 13 20 33 42 50

bar max 20 35 35 35 35 20 15 15 10

bar max 8 8 8 - - - - - - - -

Technically advanced hydraulic diaphragm			
positive return pump (API 675);			

430

 Low cost, due to reduced number of components;

480

- 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 • Can be used in both process and service applications; applications;

Hydraulic Diaphragm

Positive Return

components;

- Minimum maintenance required;
- ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).

 L/h
 63
 105
 155
 215
 260
 320
 370
 430
 480

 bar max
 15
 15
 15
 15
 15
 15
 14
 13
 10

L/h 63 105 155 215 260 320 370 430

bar max 30 30 30 30 30 25 20

Multiple pumps arrangement with different Multiple pumps arrangement with different sizes, materials and strokes/1' sizes, materials and strokes/1'

 LY X9	L/h	0,5	1,5	3	10	33	15	25	100	170
 LI AY	bar max	125	125	125	125	90	60	40	30	22
LK X9	L/h	49	143	87	211	137	330	230	560	520
LKAS	bar max	70	43	40	28	25	18	15	11	10
LN X9	L/h	60	160	230	415	648	500	1050	900	166
LINAS	bar max	100	80	60	32	25	22	16	15	8
LP X9	L/h	90	235	415	295	650	1095	1450	2590	209
LI AS	bar max	100	100	80	60	48	30	15	11	12
LY X9	L/h	2,5	4	6	7	-	-	-	-	-
TS	bar max	250	250	250	200	-	-	-	-	-
LK X9	L/h	3	5	7	9	11	18	22	-	-
			_		,					
TS	bar max	300	300	300	300	270	_	235	-	-
TS LN X9	bar max L/h		300	300	-	_	_		120	150
		30			300	270	250	235		150
LN X9	L/h	30 220	35	43	300 54	270 63	250 80	235 100	120	
LN X9 TS	L/h bar max	30 220 30	35 220	43 220	300 54 200 52	270 63 200	250 80 180 76	235 100 160	120	100

Spring Return

МВ	MC	Туре	MD
155	420	L/h	520

Spring Return

12 12 12 10 10 8 8 7 7

7 7 7 7 5 5 -

- diaphragm pump; Low cost, due to reduced number of components;
- NPSHr and minimum maintenance; Extreme safety due to built-in relief valve and advantages of a diaphragm pump;
- innovative double diaphragm design;

L/h 270 1050 2600 3700

Double diaphragm process metering pump

Extreme reliability and durability due to

diaphragm with mechanically actuated

Sealess ceramic plunger guarantees low

positive return and double hydraulic

replenishing (smart diaphragm);

- SS 316L sandwich diaphragm available on demand;
- ATEX STD compliance (94/9/CE), group II ATEX STD compliance (94/9/CE), group II category 2 (zone 1/21) and group II category 3 (zone 2/22).

Y X9	L/h	0,5	1,5	3	10	33	15	25	100	170	270
LI AJ	bar max	125	125	125	125	90	60	40	30	22	14
.K X9	L/h	49	143	87	211	137	330	230	560	520	1050
-N A7	bar max	70	43	40	28	25	18	15	11	10	5,5
N X9	L/h	60	160	230	415	648	500	1050	900	1660	2600
IN VA	bar max	100	80	60	32	25	22	16	15	8	5
D VO	L/h	90	235	415	295	650	1095	1450	2590	2090	3700
P X9	bar max	100	100	80	60	48	30	15	11	12	8
Y X9	L/h	2,5	4	6	7	-	-	-	-	-	-
TS	bar max	250	250	250	200	-	-	-	-	-	-
K X9	L/h	3	5	7	9	11	18	22	-	-	-
TS	bar max	300	300	300	300	270	250	235	-	-	-
NIVA	1.0	20	25	42		(2		400	420	450	

anodizing	Aluminium	casing;	

- Simple and robust spring return mechanical
   Simple and robust spring return mechanical
- Uses mechanically actuated diaphragm to combine the characteristics of a plunger pump (linear flow rate) with the sealing
- Minimum maintenance required.
- Single and multiple arrangement.

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;

11 16 23 31 50 75 101 120 155 L/h 1,5 7 11 31 75 101 132 260 320 420 520

- Minimum maintenance required;
- ATEX STD compliance (94/9/CE), group II category 3 (zone 2/22).
- Single and multiple arrangement.

bar max 12 12 12 10 10 10 8 7 6 6 5

2000	

MECHANISM

FLOW RATE

DESCRIPTION

520 l/h; Minimum maintenance required;

1100

ATEX STD compliance (94/9/CE), group II category 3 (zone 2/22).

L/h 360 420 500 600 750 900 1100 -

bar max 7 7 7 4 4 3 3 -

bar max 4 4 4 - - - - - - - -

L/h 1340 1600 2000 -

• Positive return mechanical diaphragm pump;

Combines the construction and reliability of

sealing advantages of a diaphragm pump;

the "L" series (positive return) with the

• Suitable for duties with flow rates over

Single and multiple arrangement.

CHARACTERISTICS

CHARACTERISTICS