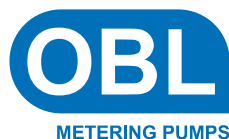




PLUNGER AND DIAPHRAGM METERING PUMPS

GENERAL CATALOGUE



Motor UNEL-MEC:

Motor UNEL-MEC standard 3 phase, 50/60Hz.
Single phase and ATEX options available.
Promotes standardization and enables immediate motor availability on site.

Anodized aluminum casing:

Improved corrosion resistance against aggressive fumes.
Extends pump life and lowers life-cycle cost.

Spring return mechanism with oversized bearing.

Extends pump life and lowers life-cycle cost.

Transparent protection covers for EC directive safety compliance.

Double check valves standard on models with flowrates up to 18 l/h, optional on flows upto 150 l/h.
Increased accuracy when operating at low flow.
Wider range of applications.

ATEX


ALL models comply with ATEX (2014/34/CE) Group II, Category 2 (zone 1/21) and Group II, Category 3 (zone 2/22).

Individual capacity adjustment for each pumphead:

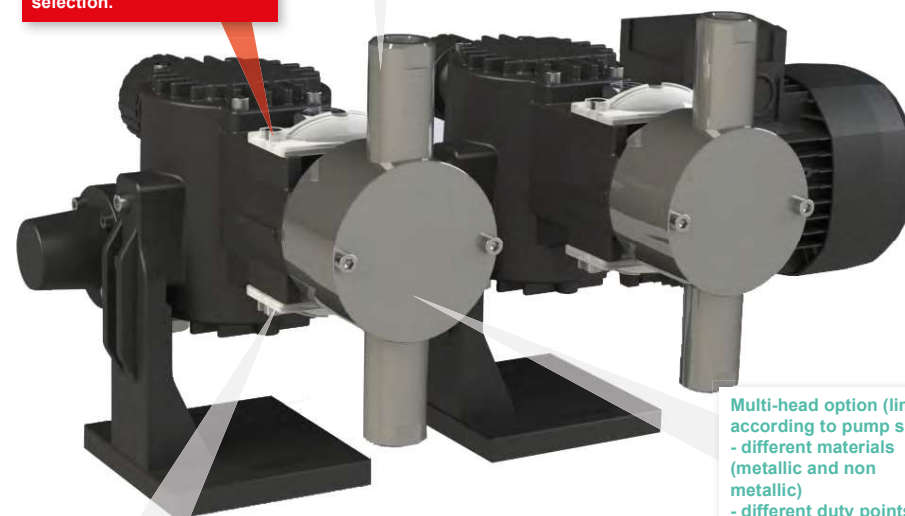
standard manual adjustment via graduated knob, or optional electric stroke actuator.

Greater flexibility of applications

Individual gearbox for each pumphead:

Now you can have multiple pumps with different strokes per minute.
Greater flexibility in pump selection.

All possible combinations up to 10 pumpheads.


PTFE coated cast iron yoke:

Improved chemical resistance in case of liquid spillage to reduce maintenance cost.
Extends pump life and lowers life-cycle cost.

Multi-head option (limit according to pump size):
- different materials (metallic and non metallic)
- different duty points (various flow rates and pressures)

Greater flexibility in pump selection.

ATEX


ALL models comply with ATEX (2014/34/CE) Group II, Category 2 (zone 1/21) and Group II, Category 3 (zone 2/22).

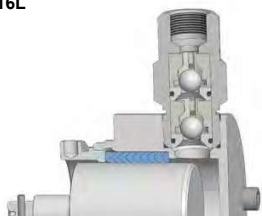
Duplex unit with manifolds:
for flowrates up to 600 l/h



Sectional view

THREADED CONNECTIONS

A AISI-316L



FLANGED CONNECTIONS

A AISI-316L



FEATURES & BENEFITS

Double check valves available.

High dosing accuracy.

Plunger pumphead with gland nut and adjustable plunger packing.

Longer working cycles and shorter downtime for maintenance.

PTFE plunger packing rings with "V" profile (Chevron type)

Suitable for dosing high temperature fluids:

AISI 316L pumphead +90°C

Extra length pumphead with KEVLAR reinforced PTFE braid packing. Suitable for working pressures up to 100 barg.

Markets & Applications

OBL pumps are designed to cover the needs of your system and other applications listed below:

BOILERS Water Quality Control



- Corrosion Inhibitors (Oxygen scavengers, etc) Anti-scaling reagents.
- Conductivity control (chemistry adjustment) pH control (acids and caustics).
- ORP (Oxidation-Reduction Potential) Anti-fouling and biological growth control (Biocides).

CHEMICAL



- Various Additive and Reactors (Chemical Reaction Process).
- Drum / Tote.
- Injection, Mixing and much more.

MINING



- Ore Separation: Leaching process (cyanides, sulphuric acid, solvents, etc.).
- Flotation collectors (polymers, etc). Defoamers emulsifiers. Depressants and Dispersant chemicals (Iron sulfide).
- Dust control (Dosing of wetting chemicals).

COOLING TOWERS Water Quality Control



- Corrosion Inhibitors, Anti-scaling reagents, pH control (acids and caustics).
- ORP (Oxidation-Reduction Potential) Anti-fouling and biological growth control (Biocides).

WATER TREATMENT Chemical Addition



- Odors Control (Hydrogen peroxide, Potassium permanganate, Activated carbon).
- Ph control (dosing of acids and caustics).
- Flotation and Clarification (Aluminium Sulfate, PAC, Ferric Chloride).
- Disinfection (Chlorine, Sodium Hypochlorite).

PULP AND PAPER



- Whitening and Bleaching process (Hydrogen Peroxide, Hypochlorite, Chlorine).
- Sizing (fillers, e.g. starch, polymers), Strengthening (Urea based chemicals, etc.), Pigmentation (dyes, pigments, etc).
- De-inking chemicals in recycling paper process (Sodium silicates, Sodium Hydroxide, Lime, Calcium Chloride, etc.).

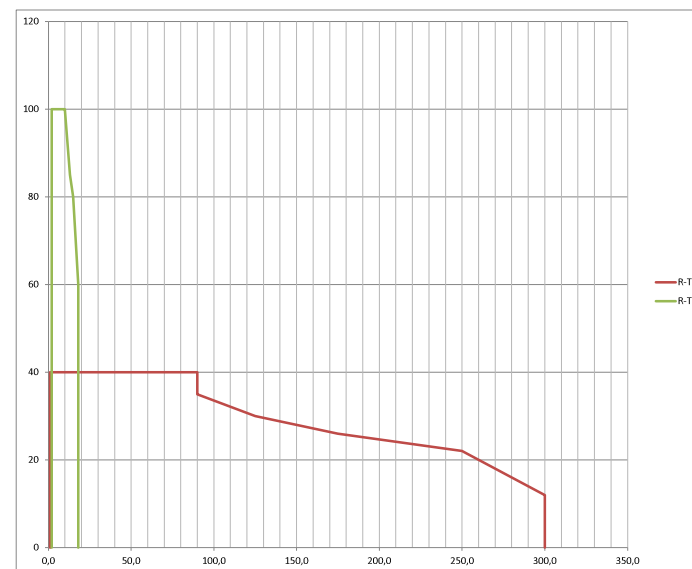
Technical data

TYPE	50 Hz		60 Hz		MAX PRESS. bar	CONNECTIONS		MOTOR kW		
	STROKES / l	MAX FLOW RATE l/h	STROKES / l	MAX FLOW RATE l/h		THREADED	FLANGED			
	A	A	A	3ph	1ph					
R 6	50	0,8	43	0,7	40	1/4" BSP f	DN 15 - 1/2" ANSI	0,25 kW	0,25 kW	
	70	1,2	60	1						
	95	1,8	84	1,5						
	115	2,2	114	2,2						
R 10	36	2	30	1,6	40					
	50	3	43	2,5						
	70	4	60	3,4						40
	95	5,5	84	4,8						
115	7	114	7							
R 16	36	5	43	6	40					
	50	7	60	9,5						
	70	11	84	13						
	95	15	114	18						
R 25	36	15	43	16	40	3/8" BSP f				
	50	20	60	24	40					
	70	30	84	33	40					
	95	38	114	45	35					
R 30	115	45			30					
	36	20	43	24	40					
	50	30	60	34	40					
	70	40	84	48	35					
R 43	95	55	114	65	26					
	115	65			22					
	36	40	43	50	12					
	50	55	60	78	12					
R 50	70	90	84	100	12					
	95	115	114	150	12					
	115	150			/					
	36	58	43	70	/	1/2" BSP f				
50	80	60	102							
70	120	84	140							
95	160	114	200							
R 62	36	90	43	105	/	3/4" BSP f	DN 20 - 3/4" ANSI	0,37 kW	0,37 kW	
	50	125	60	152						
	70	175	84	205						
	95	250	114	300						
115	300									

Material of construction

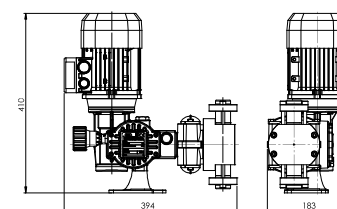
COMPONENTS	PUMPHEAD		
	A	AN	AN
PUMP HEAD	AISI-316L	AISI-316L	AISI-316L
PLUNGER	AISI-316L	AISI-316L	CERAMIC
PLUNGER PACKING	PTFE	PTFE	PTFE
VALVE GUIDE ♦	PP/AISI-316L ♦	AISI-316L	AISI-316L
VALVE SEAT	AISI-316L	AISI-316L	AISI-316L
VALVE (BALL)	AISI-316L	AISI-316L	AISI-316L
VALVE SEAL	FPM	FPM	FPM

Performance

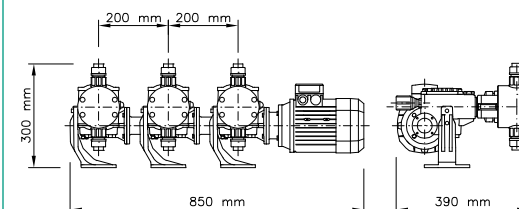


Overall dimensions

SINGLE PUMP - Manual Adjustment



MULTIPLE PUMP - Manual Adjustment



R-HV HIGH VISCOSITY DOSING

► Technical data

TYPE	50 Hz		60 Hz		MAX PRESS. bar	CONNECTIONS	MOTOR kW	
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h			3ph	1ph
R 10	36	2	30	1,6	10	1/2" BSP f	0,25 kW	0,25 kW
	50	3	43	2,6				
R 16	36	4	30	3,3				
	50	6	43	5,2				
R 25	36	12	30	10				
	50	16	43	14				
R 30	36	18	30	15		3/4" BSP f	0,37 kW	0,37 kW
	50	25	43	22				
R 43	36	42	30	35				
	50	50	43	44				
R 50	36	58	30	48				
	50	80	43	70				
R 62	36	90	30	75				
	50	120	43	105				

HV VERSION (HIGH VISCOSITY DOSING):

Typical application: Viscous liquids and concentrated polymer (Emulsion).

- Normally threaded connections with single valves, double check valves on demand.
- plunger pumphead with gland nut and adjustable packing.
- PTFE adjustable plunger packing rings with "V" profile (Chevron type) to prevent chemical leakages.
- Suitable for fluids with viscosity up to 55000 cps.
- Max. working pressure up to 10 bar

► Material of construction

COMPONENTS	HV
PUMP HEAD	AISI-316L
PLUNGER	AISI-316L
PLUNGER PACKING	PTFE
VALVE GUIDE	AISI-316L
VALVE SEAT	AISI-316L
VALVE (BALL)	AISI-316L
VALVE SEAL	FPM



R-TS HIGH PRESSURE DOSING

► Technical data

TYPE	50 Hz		60 Hz		MAX PRESS. bar	CONNECTIONS	
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h		THREADED	FLANGED
R 10 A TS	36	2	43	2,4	100	3/8" NPT f	1/2" ANSI 600 RF
	50	2,8	60	3,4			
	70	4	84	4,8			
	95	5	114	6			
	115	6					
R 16 A TS	50	7	43	6	100	3/8" NPT f	1/2" ANSI 600 RF
	70	10	60	8,5	100		
	95	15	84	13	85		
	115	18	114	18	60		

TS VERSION (HIGH PRESSURE DOSING):

Typical application: high pressure injection of chemicals

- Double check valves with lapped seats.
- Normally threaded connections, flanged on demand
- Plunger pumphead with gland nut and adjustable plunger packing.
- Extended PTFE braid type packing reinforced with KEVLAR and intermediate ring
- Self-centring plunger
- Working pressures up to 100 barg

► Material of construction

COMPONENTS	TS
PUMP HEAD	AISI-316L
PLUNGER	SAF-2205
PLUNGER PACKING	PTFE+KEVLAR
VALVE GUIDE	AISI-316L
VALVE SEAT	AISI-316L
VALVE (BALL)	AISI-316L
VALVE SEAL	FPM



oblpumps.it/Blackline

OBL c/o Alfa Valvole S.r.l.
Viale Del Lavoro, 19
20003 Casorezzo (MI) - Italy
Tel. +39.02.90296206
oblinfo@alfavalvole.com
oblpumps.it

