

**blackline**  
an OBL brand

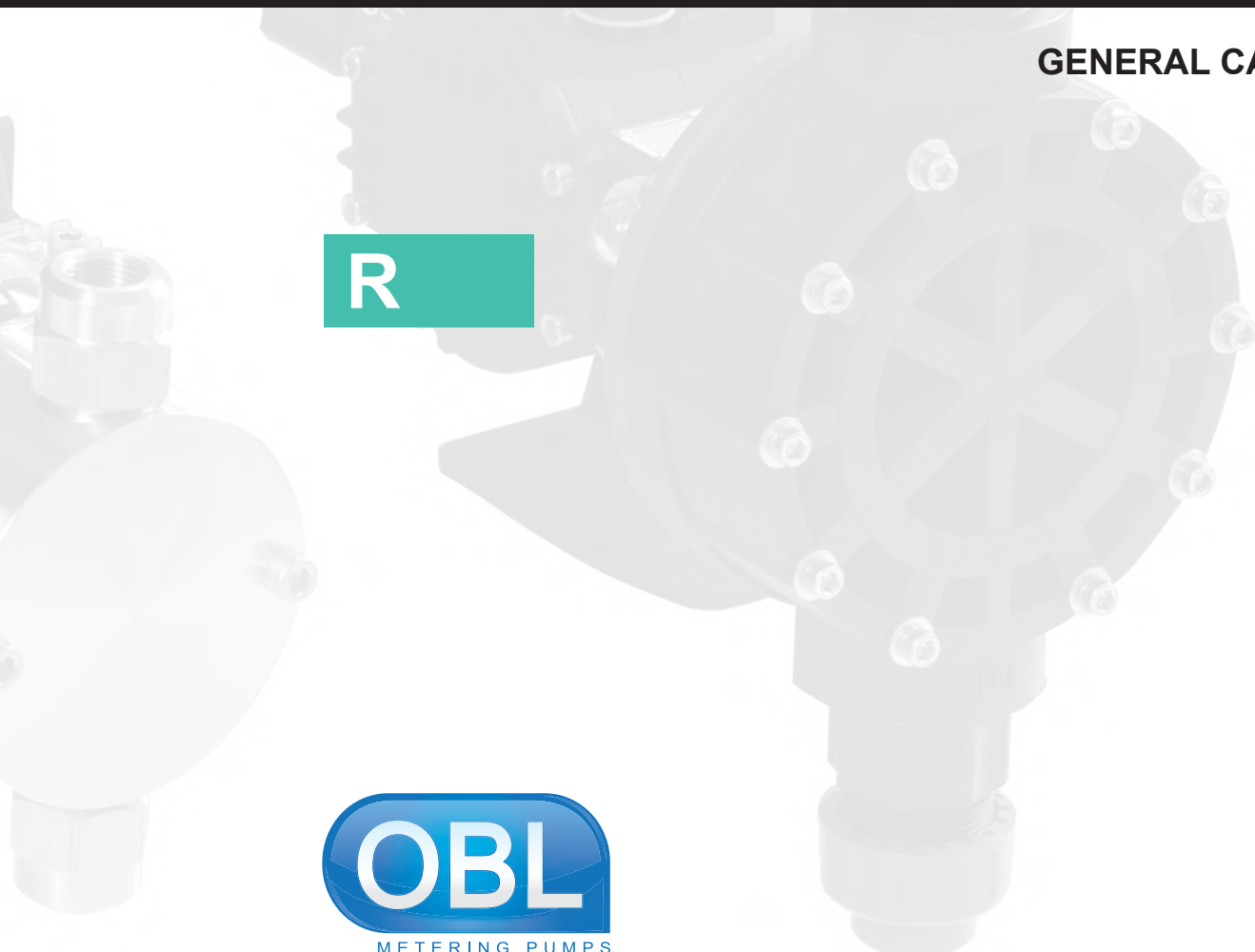


# WATER DIVISION



GENERAL CATALOGUE

R



**OBL**  
METERING PUMPS

**IBEX**

**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 up to 150 l/h.**  
Increased accuracy when operating at low flow.  
**Wider range of applications.**

**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.**

**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.**

All possible combinations up to 10 pumpheads.



**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.**

**STURDIER**

**NEW DESIGN**

**ATEX**

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

**ATEX**

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

**NEW DESIGN**

**ENHANCED FLEXIBILITY**

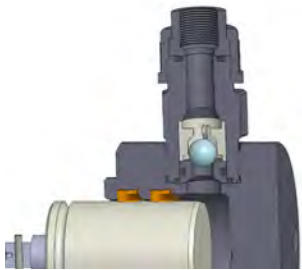
Duplex unit with manifolds: for flowrates up to 600 l/h



### Sectional view

#### THREADED CONNECTIONS

**P** PVC

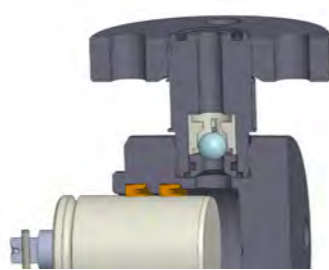


**A** AISI-316L



#### FLANGED CONNECTIONS

**P** PVC



**A** AISI-316L



#### FEATURES & BENEFITS

Single valve configuration only.

**Very cost effective solution and economical operation.**

Plunger lip seals (OBL design) available in three different materials to meet all dosing requirements.

**Avoid leakages even when dosing liquids with particles in suspension.**

**Suitable for fluid temperatures up to +40°C for all seal types.**

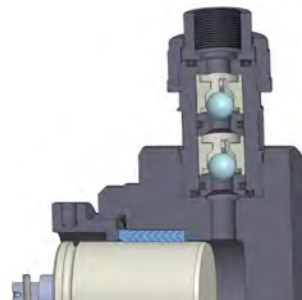
Plunger lip seals (OBL desing) are non adjustable.

**Maximum working pressure up to 10 barg.**

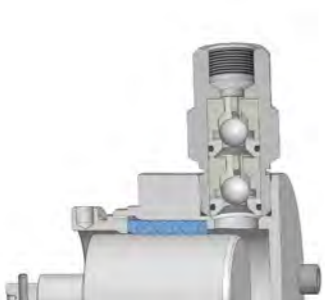
### Sectional view

#### THREADED CONNECTIONS

**P** PVC

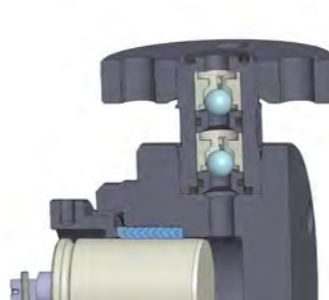


**A** AISI-316L

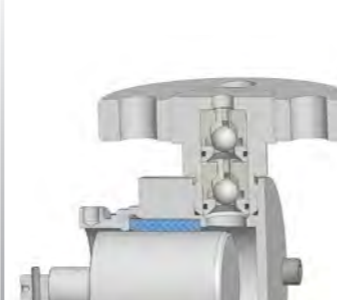


#### FLANGED CONNECTIONS

**P** PVC



**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 ; PVC pumphead +40°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

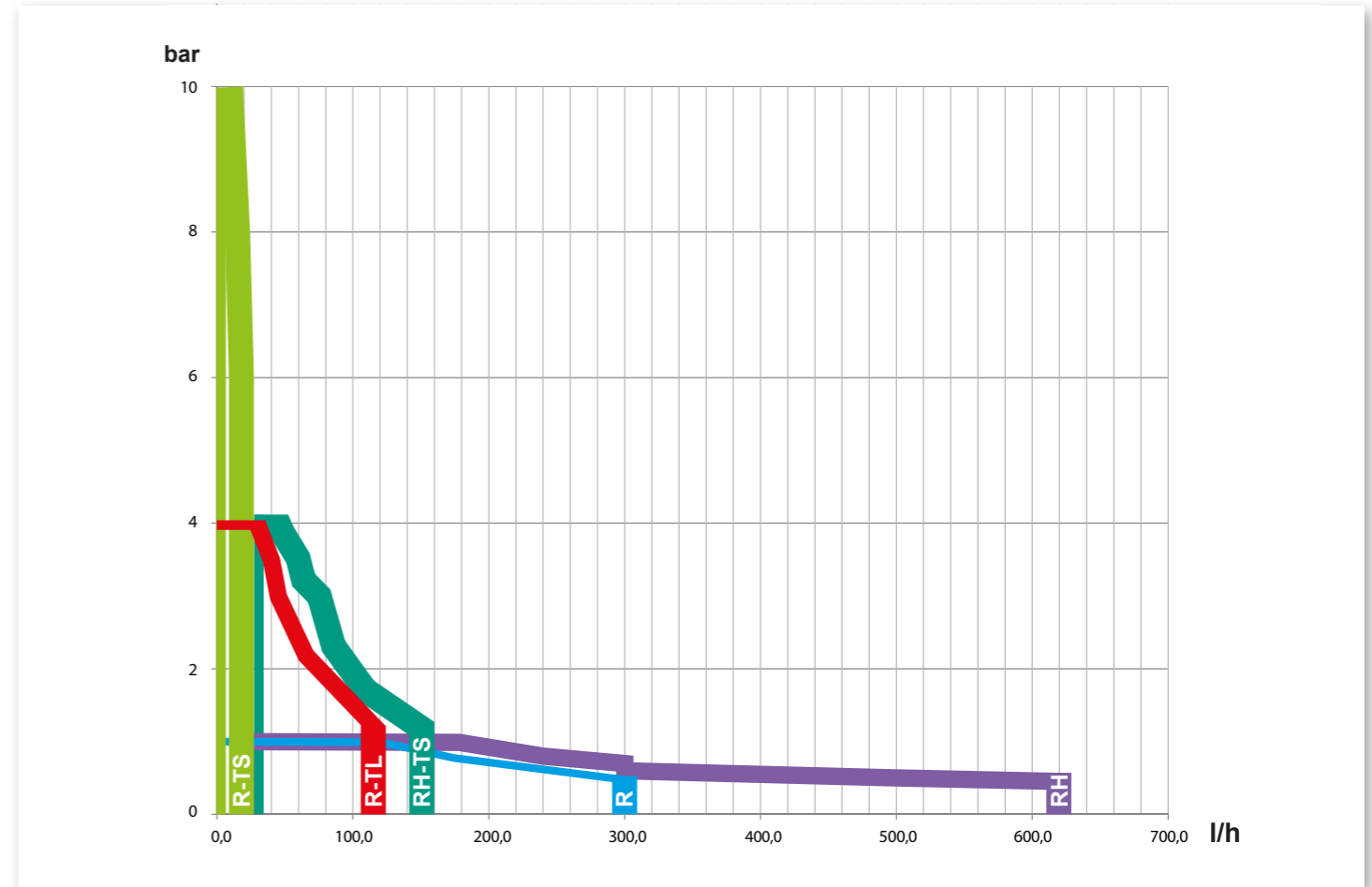


- Whitening and Bleaching process (Hydrogen Peroxide, Hypochlorite, Chlorine).
- Sizing (fillers, e.g. starch, polymers), Strengthening (Urea based chemicals, etc.), Pigmentation (dyes, pigments, etc).
- De-inking chemicals in recycling paper process (Sodium silicates, Sodium Hydroxide, Lime, Calcium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

### Technical data

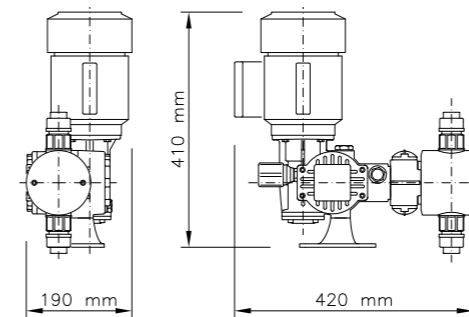
TYPE	50 Hz		60 Hz		PUMPHEAD WITH GLAND NUT				PUMPHEAD WITHOUT GLAND NUT				MOTOR kW				
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h	MAX PRESS. bar		CONNECTIONS		MAX PRESS. bar		THREADED CONNECTIONS						
					A	A-TL	P	A/A-TL	P	A/A-TL	P	A			P	A	P
R 6	50	0,8	43	0,7	/	40	10	1/4" BSP f 1/4" BSP f DIRECT CONNECT. (NO RING NUT)	DN 15 - 1/2" ANSI	DN 15 - 1/2" ANSI	/	/	/	/	0,25 kW NO TL	0,25 kW NO TL	
	70	1,2	60	1							/	/	/	/			
	95	1,8	84	1,5													
	115	2,2	114	2,2													
R 10	36	2	30	1,6	10	40	10	3/8" BSP f	DN 15 - 1/2" ANSI	DN 15 - 1/2" ANSI	/	/	/	/	0,25 kW NO TL	0,25 kW NO TL	
	50	3	43	2,5							/	/	/	/			
	70	4	60	3,4													
R 16	36	5	43	6	10	40	10	3/8" BSP f	DN 15 - 1/2" ANSI	DN 15 - 1/2" ANSI	10	10	3/8" BSP f	3/8" BSP f	0,25 kW NO TL	0,25 kW NO TL	
	50	7	60	9,5													
	70	11	84	13													
	95	15	114	18													
R 25	36	15	43	16	10	40	10	3/8" BSP f	DN 15 - 1/2" ANSI	DN 15 - 1/2" ANSI	10	10	3/8" BSP f	3/8" BSP f	0,25 kW NO TL	0,25 kW NO TL	
	50	20	60	24													
	70	30	84	33													
	95	38	114	45													
R 30	36	20	43	24	10	40	10	3/8" BSP f	DN 15 - 1/2" ANSI	DN 15 - 1/2" ANSI	10	10	3/8" BSP f	3/8" BSP f	0,25 kW NO TL	0,25 kW NO TL	
	50	30	60	34													
	70	40	84	48													
	95	55	114	65													
R 43	36	40	43	50	10	12	10	3/8" BSP f	DN 15 - 1/2" ANSI	DN 15 - 1/2" ANSI	10	10	3/8" BSP f	3/8" BSP f	0,25 kW NO TL	0,25 kW NO TL	
	50	55	60	78													
	70	90	84	100													
	95	115	114	150													
R 50	36	58	43	70	10	12	10	1/2" BSP f	DN 20 - 3/4" ANSI	DN 20 - 3/4" ANSI	10	10	1/2" BSP f	1/2" BSP f	0,37 kW	0,37 kW	
	50	80	60	102													
	70	120	84	140													
	95	160	114	200													
R 62	36	90	43	105	10	10	10	3/4" BSP f	DN 20 - 3/4" ANSI	DN 20 - 3/4" ANSI	8	8	3/4" BSP f	3/4" BSP f	0,37 kW	0,37 kW	
	50	125	60	152													
	70	175	84	205													
	95	250	114	300													

### Performance

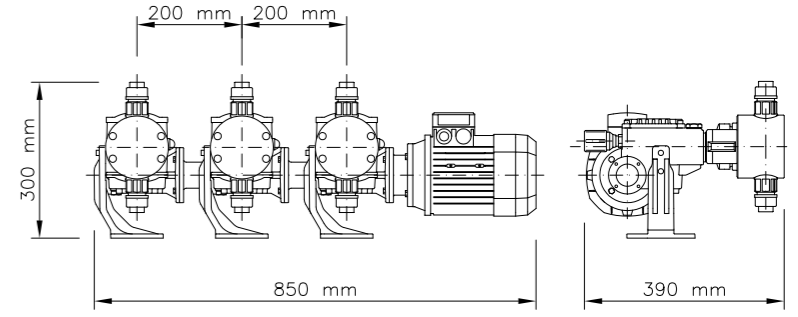


### Overall dimensions

SINGLE PUMP - Manual Adjustment



MULTIPLE PUMP - Manual Adjustment



### Material of construction

PUMPHEAD WITH GLAND NUT					
COMPONENTS	A	A-TL	P	P11	AC
PUMP HEAD	AISI-316L	AISI-316L	PVC	PVC	AISI-316L
PLUNGER	AISI-316L	AISI-316L	CERAMIC	CERAMIC	CERAMIC
PLUNGER PACKING	PTFE	PTFE	PTFE	PTFE	PTFE
VALVE GUIDE	PP/AISI-316L	AISI-316L	PP	PP	AISI-316L
VALVE SEAT	AISI-316L	AISI-316L	● CERAMIC/PVC	AISI-316L	AISI-316L
VALVE (BALL)	AISI-316L	AISI-316L	● CERAMIC/PVC	AISI-316L	AISI-316L
VALVE SEAL	FPM	FPM	FPM	FPM	FPM

PUMPHEAD WITHOUT GLAND NUT								
COMPONENTS	PAE	PCF	PCV	AAF	AAE	ACE	ACV	ACF
PUMP HEAD	PVC	PVC	PVC	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
PLUNGER	AISI-316L	CERAMIC	CERAMIC	AISI-316L	AISI-316L	CERAMIC	CERAMIC	CERAMIC
PLUNGER PACKING	EPDM	FPM	VULKOL.	FPM	EPDM	EPDM	VULKOL.	FPM
VALVE GUIDE	PP	PP	PP	PP	PP	PP	PP	PP
VALVE SEAT	AISI-316L	PVC	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
VALVE (BALL)	AISI-316L	PYREX	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
VALVE SEAL	FPM	FPM	FPM	FPM	FPM	FPM	FPM	FPM

## 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				
	50	25	43	22				
R 43	36	42	30	35				
	50	50	43	44				
R 50	36	58	30	48		3/4" BSP f	0,37 kW	0,37 kW
	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-OM MAGNESIUM OXIDE DOSING

### Technical data

TYPE	50 Hz		60 Hz		MAX WORK. PRESS. bar	MAX BUILT-IN RELIEF VALVE SET PRESS. bar	CONNECTIONS
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h			
R 16 MA OM	25	4	30	4,8	60	70	3/8" BSP m
	36	6	43	7,2			
	50	8,5	60	10,2			
R 25 MA OM	25	10	30	12	35	45	
	36	14	43	16,8			
	50	20	60	24			
R 30 MA OM	36	20	43	24	30	35	
	50	30	60	36			

### OM VERSION (MAGNESIUM OXIDE DOSING):

Combustion enhancing in thermal power plant.

Designed for injecting diluted magnesium oxide in combustion fuel.

The OM version was specifically engineered in 1980 by co-operating with the manufacturers of the magnesium oxide. Wetted components are made of special resistant materials.

Flow rates up to 30 l/h and working pressures of 70 barg.

### Material of construction

COMPONENTS	OM
PUMP HEAD	AISI-316L
PLUNGER	CERAMIC
PLUNGER PACKING	PTFE
DIAPHRAGM	PTFE
VALVE GUIDE	AISI-316L
VALVE SEAT	TUNGSTEN CARBIDE
VALVE (BALL)	HARDENED STEEL
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
						1/2" ANSI 600 RF	
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			
	95	15	84	13			
	115	18	114	18			

### 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



### Technical data

TYPE	50 Hz		60 Hz		MAX PRESS. bar	THREADED CONNECTIONS	
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h		ACC	PPCC
H 43	70	90	60	75	10	1/2" BSP f	3/4" BSP m
	95	115	84	100			
H 50	70	120	60	100	10	1/2" BSP f	3/4" BSP m
	95	160	84	140			

Ø DIAPH./STROKE	50 Hz		60 Hz		MAX PRESS. bar	THREADED CONNECTIONS	
	TYPE	STROKES / 1	TYPE	STROKES / 1		PP	A
4 108	MH 73	70	73	MH 58	60	58	10
		95	100				
	MH 100	95	100	MH 90	84	90	10
		115	120				

### H/MH PUMPS (DIATOMACEOUS EARTH DOSING):

Typical application: Oenological Filtration.

OBL is a leader in manufacturing metring pumps for filter pumps for FILTER AID WITH DIATOMACEOUS EARTH; used for wine, beer and fruit juice filtration. The range includes plunger pumps with lip seals and mechanical diaphragm pumps.

Use for flowrates up to 160 liters per hour and working pressure up to 10 bar.

### Material of construction

COMPONENTS	ACC	PPCC
PUMP HEAD	AISI-316L	PP
PLUNGER	CERAMIC	CERAMIC
PLUNGER PACKING	VULKOLLAN	VULKOLLAN
VALVE GUIDE	PP	PP
VALVE SEAT	AISI-316L	AISI-316L
VALVE (BALL)	AISI-316L	AISI-316L
VALVE SEAL	FPM	SILICON



COMPONENTS	PP	A
PUMP HEAD	PP	AISI-316L
DIAPHRAGM	PTFE	PTFE
VALVE GUIDE	PP	PP
VALVE SEAT	AISI-316L	AISI-316L
VALVE (BALL)	AISI-316L	AISI-316L
VALVE HOUSING	PP	AISI-316L
VALVE SEAL	SILICON	FPM

