D_WD_GB_0217

blackline

an OBL brand

WATER DIVISION

M

ME

R

RH

XRN

GENERAL CATALOGUE

OBL

METERING PUMPS

IDEX

Motor UNEL-MEC:
Motor UNEL-MEC standard 3 phase, 50/60Hz. Single phase and ATEX options available.
Permits standardization and quick std motor availability on site.

Aluminum anodized casing:
Improved corrosion resistance against aggressive fumes.
Extends pump life and lowers life-cycle cost.

3pcs threaded connector (PP models), Metric or Inch standard:
BSP or NPT thread allows easy and simple connection to pipeline.
Reduces cost and time of installation and maintenance.

Spring return mechanism with oversized bearing.
Extends pump life and lowers life-cycle cost.

Large number of pumphead locking screw (12 pcs in large models).
Reliable and effective sealing during operations.

Models with flowrate up to 50 l/h double valve standard, optional on request untill 155 l/h (Ø108mm):
Increased accuracy when operating at low flow.
Enhance application flexibility.

STURDIER

NEW DESIGN

ATEX

ALL models comply to ATEX (2014/34/CE) Group II, Category 3 (zone 2/22).

Injection molded PVDF pumphead:

PVDF pumphead:
Combination of PVDF pumphead, PTFE seats and PYREX check valves provides broad chemical compatibility.
Permits standardization on single pump for multiple liquids and applications.

Individual gearbox reducer for each pumphead:
Now you can have pumpheads with different S.P.M.
Enhances application flexibility.

Multiple unit:
All possible combination until 10 pumpheads

Individual adjustment for each pumphead:
Manual adjustment standard via graduate knob or electric actuator as optional available.
Enhances application flexibility.

Multi headed option (limit according pump size):
- different materials (metallic and Non metallic)
- different duty points (max flow rates and pressure)
Enhances application flexibility.

NEW DESIGN

ENHANCED FLEXIBILITY

PTFE coated cast iron diaphragm chamber (large models):
Increased resistance in case of liquid spillage to reduce maintenance cost.
Extends pump life and lowers life-cycle cost.

Duplex unit with manifolds:
To have flowrate up to 1.042 l/h

ATEX

ALL models comply to ATEX (2014/34/CE) Group II, Category 3 (zone 2/22).

Sectional view

THREADED CONNECTIONS

PP PP

A AISI-316L

FLANGED CONNECTIONS

PP PP

A AISI-316L

FEATURE & BENEFITS

Valve & Seat material options: Ceramic, Stainless Steel, Incoloy-825, Hastelloy C-276.

Increased performance when handling high density and viscous as well highly abrasive and aggressive fluids while minimizing cost impact.

Extends pump life and lowers life-cycle cost.

Diaphragm Structure

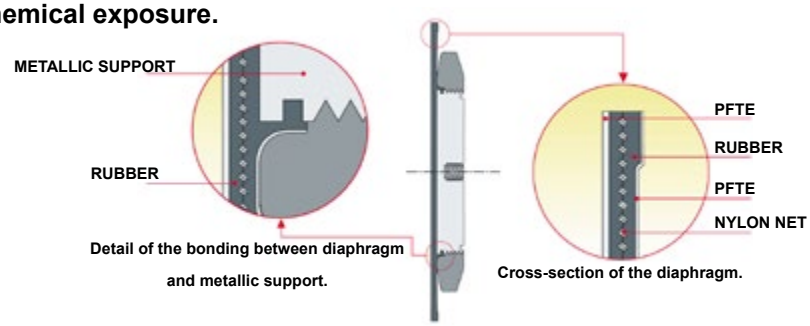
The mechanical diaphragm works giving the swept volume, acting basically as plunger, and as a separator between casing and pumped fluid. The OBL's unique mechanical diaphragm design allows controlled volumetric displacement and ensures linear proportionality between flow rate and percentage of stroke.

FEATURE & BENEFITS

PP diaphragm back-support ring:

Protection against discharge overpressure.

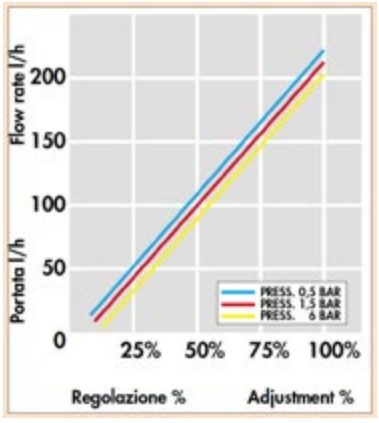
Reduces downtime and cleanup, minimizes chemical exposure.



Flowrate linearity

The OBL mechanical diaphragm pump functioning reflect the same linearity of flowrate as a plunger pump.

This peculiarity is highlighted in the flow chart on the side. By the trend of the flow lines is clear the linear proportionality between flowrate and adjustment.



FEATURE & BENEFITS

Multiple layer PTFE diaphragm:

Flowrate is virtually unaffected by the working pressure variations (1% less every additional bar above 1,5 bar).

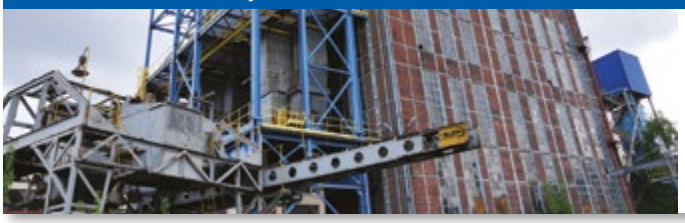
- Protection against corrosive fume entering diaphragm chamber.
- Reduced friction against back-support ring.
- Leak-free pump, due to OBL's stress-proof diaphragm.

Extends pump life and lowers life-cycle cost.

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 Additivation

- 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

Ø DIAPH./ STROKE	50 Hz			60 Hz			MAX PRESS. bar	
	TYPE	STROKES / 1	MAX FLOW RATE l/h	TYPE	STROKES / 1	MAX FLOW RATE l/h	3ph	1ph
2 94	**M 7** **M 11** **M 16** **M 23**	25 36 50 70	7 11 16 23	**M 9** **M 14** **M 19**	30 43 60	9 14 19	12	12
	M 31 **M 37** **M 50**	95 115 155	31 37 50	**M 28** **M 36** **M 45**	84 114 138	28 36 45	10	10
4 108	**M 35** **M 49** **M 75** **M 101**	36 50 70 95	35 49 75 101	**M 42** **M 58** **M 90**	43 60 84	42 58 90	10	10
	M 120 **M 155**	115 155	120 155	**M 118** **M 145**	114 138	118 145	10	10
6 138	**M 102** **M 131**	36 50	100 132	**M 119**	43	120	8	8
	M 201 **M 261**	70 95	197 260	**M 158** **M 236**	60 84	158 236	7	7
	M 321 **M 421**	115 155	320 420	**M 312** **M 384**	114 138	312 384	6	6
6 165	**M 150** **M 190** **M 301**	36 50 70	150 200 300	**M 180** **M 228** **M 360**	43 60 84	165 228 350	5	5
	M 431 **M 521**	95 115	435 520	**M 519**	114	515		4

Material of construction

COMPONENTS	A	PP	PP11	PP32	S562
PUMP HEAD	AISI-316L	PP	PP	PP	PVDF
DIAPHRAGM	PTFE	PTFE	PTFE	PTFE	PTFE
VALVE GUIDE	PP	PP	PP	PP	PVDF
VALVE SEAT	AISI-316L	PVC	AISI-316L	INCOLOY-825	PTFE
VALVE (BALL)	AISI-316L	PYREX	AISI-316L	HASTELLOY C-276	PYREX
VALVE HOUSING	AISI-316L	PP	PP	PP	PVDF
VALVE SEAL	FPM	FPM	FPM	FPM	PTFE
FLANGE	AISI-316L	PVC	PVC	PVC	PVDF

CONNECTIONS						MOTOR kW	
THREADED			FLANGED				
A	PP	S562	A	PP	S562	3ph	1ph
3/8" BSP f	3/8" BSP f	/	DN 15 1/2" ANSI	DN 15 1/2" ANSI	/	0,25 KW	0,25 KW
	1/2" BSP f	1/2" BSP f	DN 15 1/2" ANSI	DN 15 1/2" ANSI	DN 15 1/2" ANSI		
3/4" BSP f	3/4" BSP f	3/4" BSP f	DN 20 3/4" ANSI	DN 20 3/4" ANSI	DN 20 3/4" ANSI	0,37 KW	0,37 KW
1" BSP f	1" BSP f	1" BSP f	DN 25 1" ANSI	DN 25 1" ANSI	DN 25 1" ANSI		

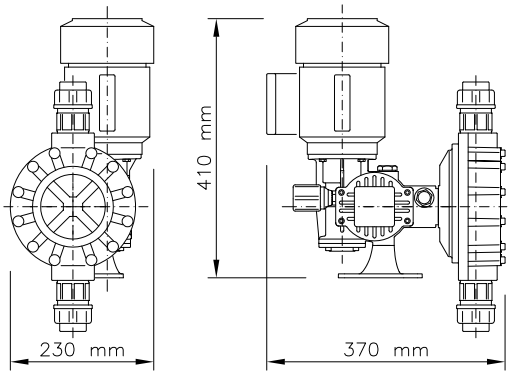
Identification code

M 236 PP DV FA ZC

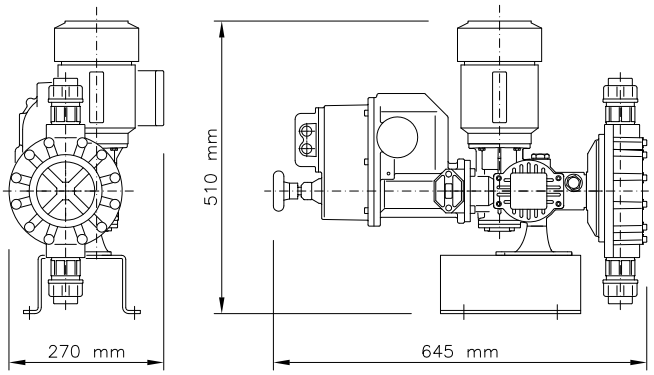
M	PUMP TYPE	
236	MAX FLOWRATE l/h	
PP	PUMPHEAD EXECUTION	
	...A...	AISI-316L
	...PP...	POLIPROPILENE (PP)
	...PP11...	PP + AISI-316L VALVES & SEATS
	...PP32...	PP + INCOLOY-825 VALVES & HASTELLOY C-276 SEATS
	...S562...	PP + PTFE VALVES & PYREX SEATS
DV	VALVES EXECUTION	
	...SV...	SINGLE VALVE
	...DV...	DOUBLE VALVE
FA	CONNECTIONS	
	...B...	THREADED BSP f
	...N...	THREADED NPT f
	...F...	FLANGED UNI-DIN
	...FA...	FLANGED ANSI
ZC	ADJUSTMENT	
	"..."	GRADUATE KNOB AND VERNIER
	...W...	PNEUMATIC ACTUATOR
	...Z...	ELECTRIC ACTUATOR

Overall dimensions

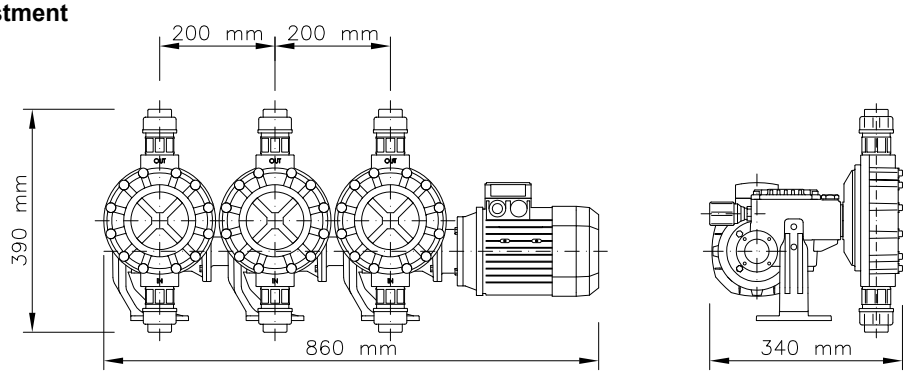
SINGLE PUMP - Manual Adjustment



SINGLE PUMP - Electric Actuator Adjustment



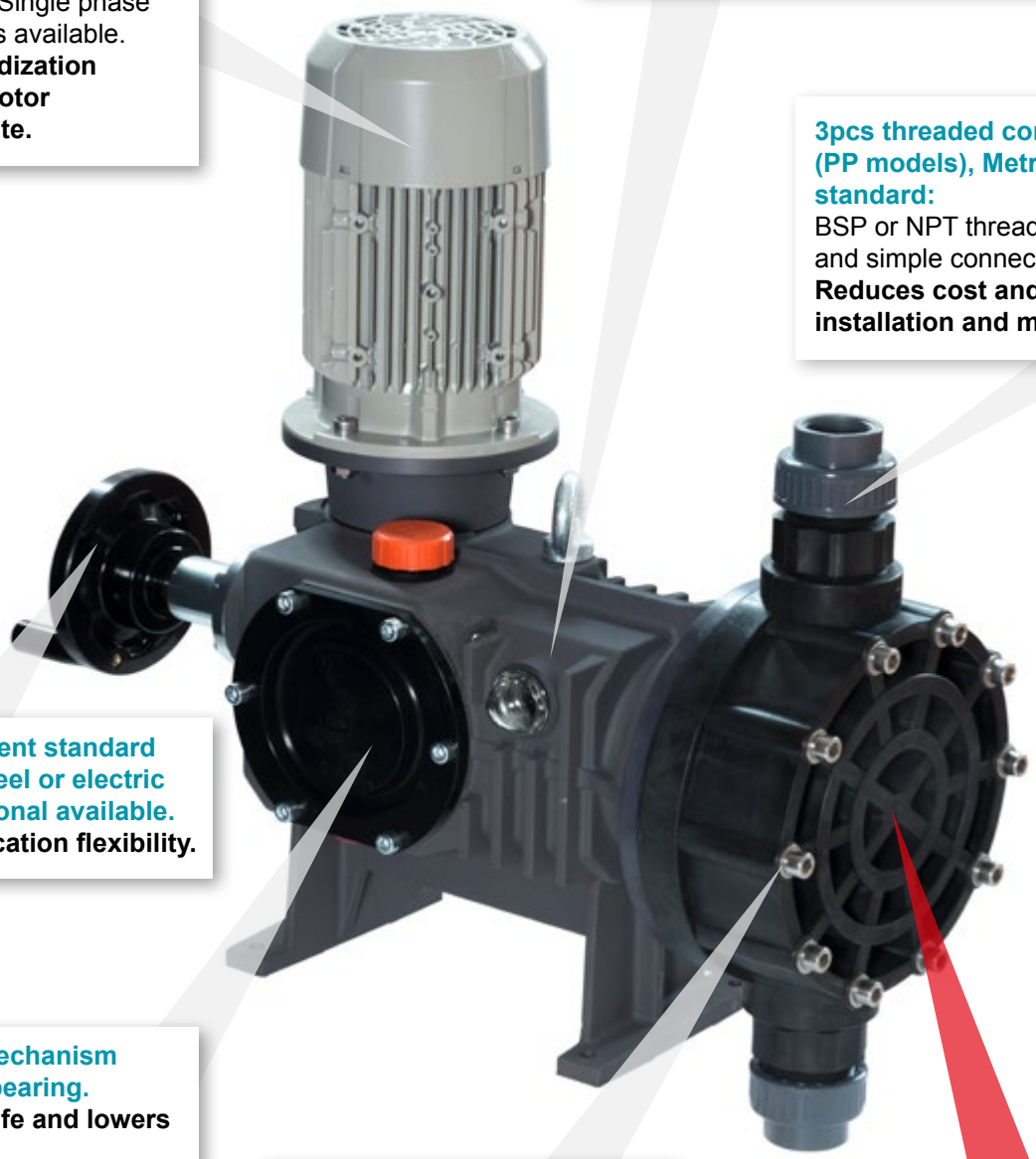
MULTIPLE PUMP - Manual Adjustment



Aluminum anodized casing:
Improved corrosion resistance against aggressive fumes.
Extends pump life and lowers life-cycle cost.

Motor UNEL-MEC:
Motor UNEL-MEC standard 3 phase, 50/60Hz. Single phase and ATEX options available.
Permits standardization and quick std motor availability on site.

3pcs threaded connector (PP models), Metric or Inch standard:
BSP or NPT thread allows easy and simple connection to pipeline.
Reduces cost and time of installation and maintenance.



Manual adjustment standard via dial handwheel or electric actuator as optional available.
Enhances application flexibility.

Spring return mechanism with oversized bearing.
Extends pump life and lowers life-cycle cost.

Large number of pumphead locking screw (12 pcs).
Reliable and effective sealing during operations.

1 size diaphragm fit all, same valve & seats for all models:
Less number of parts to procure and keep on stock.
Better parts availability and lower cost of ownership.

ATEX

All models comply to ATEX (2014/34/CE) Group II, Category 3 (zone 2/22).

Technical data

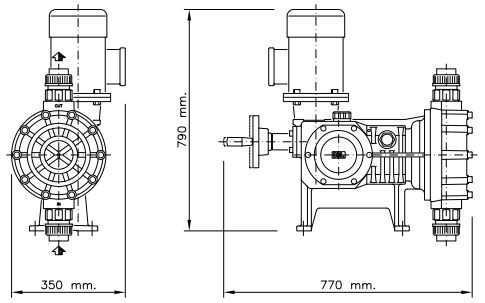
Ø DIAPH./ STROKE	50 Hz			60 Hz			MAX PRESS. bar				CONNECTIONS					
	TYPE	STROKES / 1	MAX FLOW RATE l/h	TYPE	STROKES / 1	MAX FLOW RATE l/h	1,5 kW		2,2 kW		THREADED			FLANGED		
							WORK.	MAX	WORK.	MAX	A	P	PP	A	P	PP
10 239	ME 750	60	750	ME 600	48	600	5	6	6	7	/	/	1-1/2" BSP f	DN 40 1-1/2" ANSI	DN 40 2" ANSI	DN 40 2" ANSI
	ME 1000	82	1000	ME 880	72	880	5	6	6	7						
	ME 1250	100	1250	ME 1200	96	1200	4	5	5	6						
	ME 1500	123	1500	ME 1475	121	1475	3	4	4	5						

Material of construction

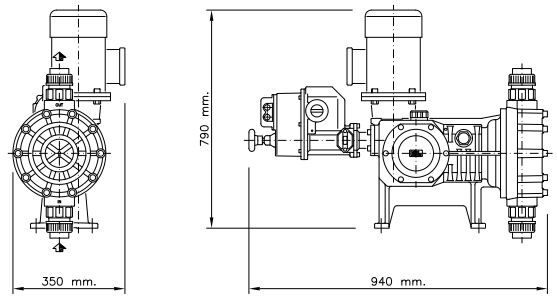
COMPONENTS	A	P	PP
PUMP HEAD	AISI-316L	PVC	PP
DIAPHRAGM	PTFE	PTFE	PTFE
VALVE GUIDE	AISI-316L	PP	PP
VALVE SEAT	AISI-316L	PVC	PVC
VALVE (BALL)	AISI-316L	PYREX	PYREX
VALVE HOUSING	-	PVC	PP
VALVE SEAL	FPM	FPM	FPM
FLANGE	AISI-316L	PVC	PVC

Overall dimensions

SINGLE PUMP - Manual Adjustment



SINGLE PUMP - Electric Actuator Adjustment



Sectional view

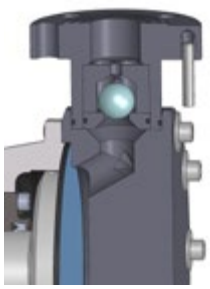
THREADED CONNECTIONS

PP **PP**

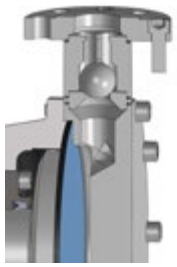
FLANGED CONNECTIONS

PP **PP**

P **PVC**



A **AISI-316L**



Motor UNEL-MEC:
Motor UNEL-MEC standard 3 phase, 50/60Hz.
Single phase and ATEX options available.
Permits standardization and quick std motor availability on site.

Aluminum anodized casing:
Improved corrosion resistance against aggressive fumes.
Extends pump life and lowers life-cycle cost.

Transparent covers and protection comply to EC directive.

Spring return mechanism with oversized bearing.
Extends pump life and lowers life-cycle cost.

STURDIER

NEW DESIGN

Models with flowrate up to 18 l/h double valve standard, optional on request untill 150 l/h (Ø43mm):
Increased accuracy when operating at low flow.
Enhance application flexibility.

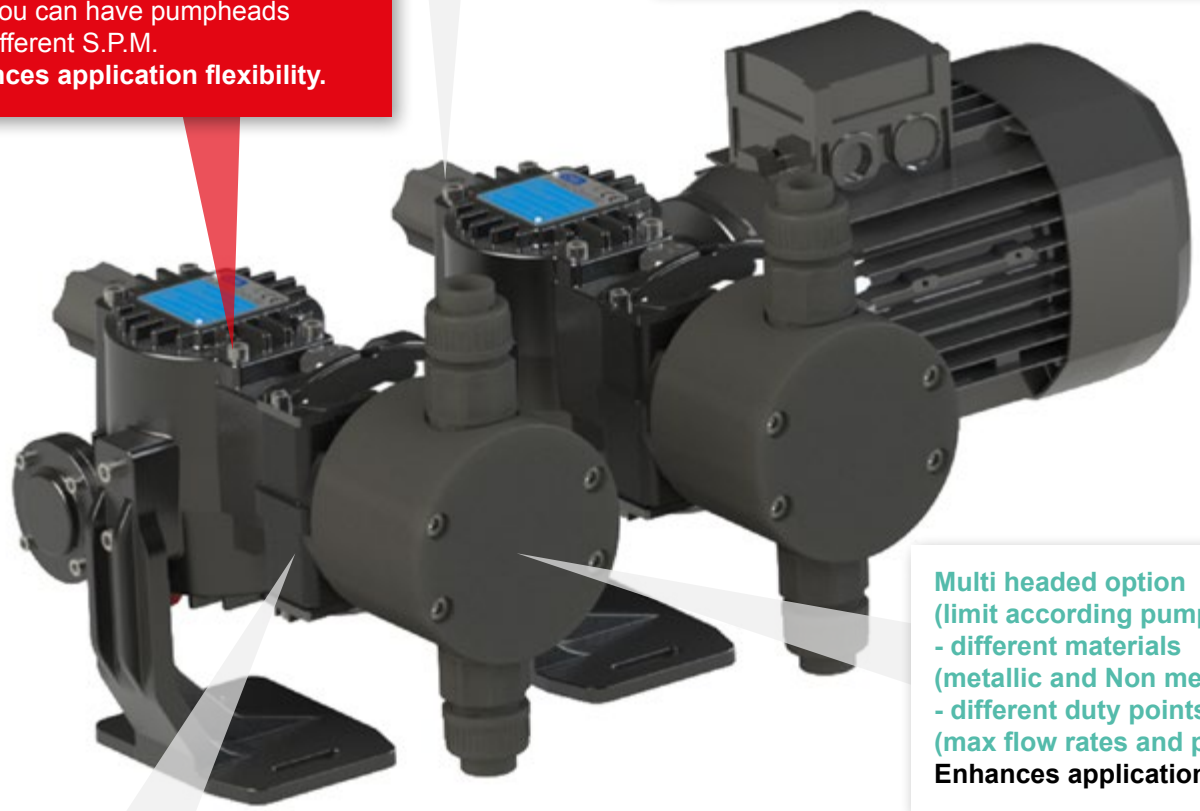
ATEX

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

Individual adjustment for each pumphead:
Manual adjustment standard via graduate knob or electric actuator as optional available.
Enhances application flexibility.

Multiple unit:
All possible combination until 10 pumpheads

Individual gearbox reducer for each pumphead:
Now you can have pumpheads with different S.P.M.
Enhances application flexibility.



Multi headed option (limit according pump size):
- different materials (metallic and Non metallic)
- different duty points (max flow rates and pressure)

Enhances application flexibility.

PTFE coated cast iron yoke:
Increased resistance in case of liquid spillage to reduce maintenance cost.
Extends pump life and lowers life-cycle cost.

NEW DESIGN

ENHANCED FLEXIBILITY

Duplex unit with manifolds:
To to have flowrate up to 600 l/h

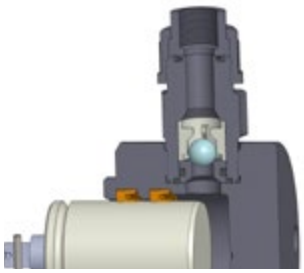
ATEX

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

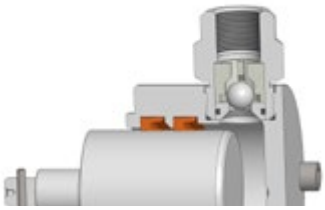
Sectional view

THREADED CONNECTIONS

P PVC

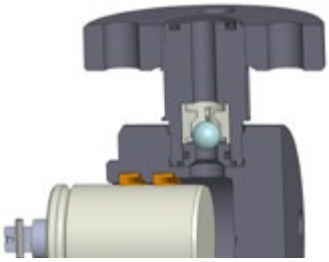


A AISI-316L

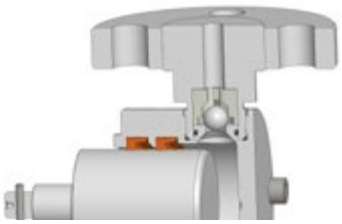


FLANGED CONNECTIONS

P PVC



A AISI-316L



FEATURE & BENEFITS

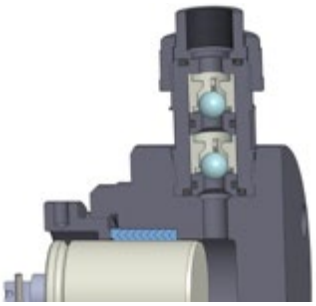
Single valves only available.
Very cost-effective solution and operating economy.
Plunger lip seal (OBL design) available in three different material to meet all dosing requirements.
Guarantees absence of leakage even in the dosage of solids in suspension.

Suitable for fluid dosing in temperature: +40°C for all types of seals.
Plunger lip seal (OBL design) not adjustable.
Suitable for working pressure up to 10 bar.

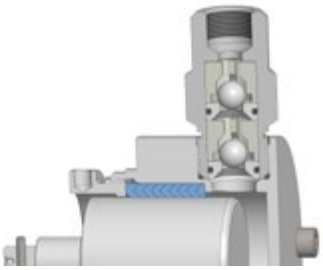
Sectional view

THREADED CONNECTIONS

P PVC

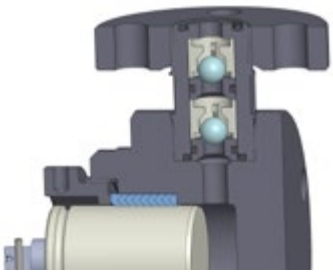


A AISI-316L

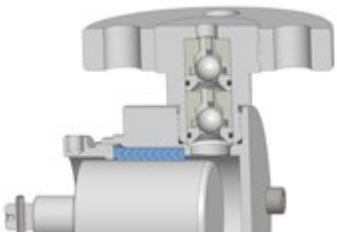


FLANGED CONNECTIONS

P PVC



A AISI-316L



FEATURE & BENEFITS

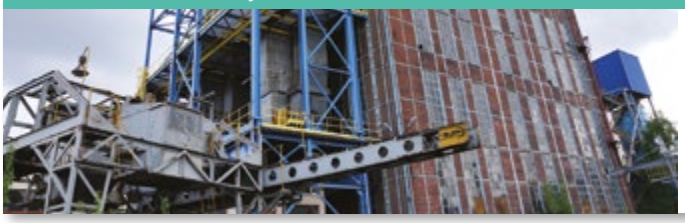
Double valves available.
High dosing accuracy.
Plunger pumphead with gland nut.
Adjustable plunger packing.
Adjustable plunger packing.
Longer working cycle and shorter down time for maintenance.

PTFE plunger packing rings with “V” profile (Chevron type).
Suitable for dosing high temperature fluid:
- AISI-316L pumphead: +90°C;
PVC pumphead: +40°C
Extra length pumphead with extended KEVLAR reinforced PTFE braid.
Suitable for working pressure up to max 100 bar.

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 Additivation

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

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

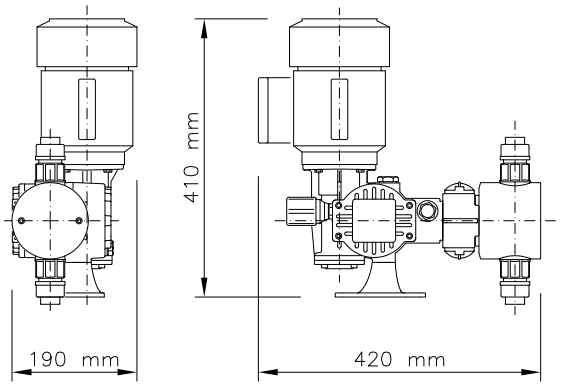
Identification code

R 16 A 70 DV TL FA ZC

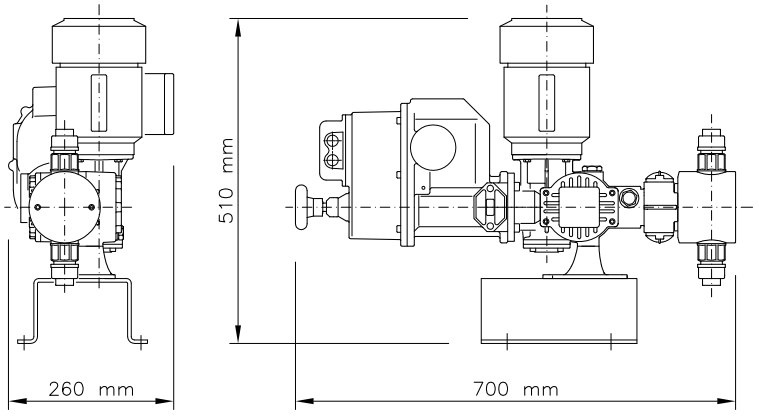
R	PUMP TYPE	
16	PLUNGER DIAMETER	
A	PUMPHEAD EXECUTION	
	...A...	AISI-316L
	...P...	PVC
70	PLUNGER STROKER PER MINUTE	
DV	VALVES EXECUTION	
	...SV...	SINGLE VALVE
	...DV...	DOUBLE VALVE
TL	PUMPHEAD VERSION	
	"..."	WORKING PRESSURE UP TO 10 bar
	...TL...	WORKING PRESSURE UP TO 10÷40 bar
	...TS...	WORKING PRESSURE UP TO 40÷100 bar
	...RF...	FRONTAL HEATING JACKET
FA	CONNECTIONS	
	...B...	THREADED BSP f
	...N...	THREADED NPT f
	...F...	FLANGED UNI-DIN
	...FA...	FLANGED ANSI
ZC	ADJUSTMENT	
	"..."	GRADUATE KNOB AND VERNIER
	...W...	PNEUMATIC ACTUATOR
	...Z...	ELECTRIC ACTUATOR

Overall dimensions

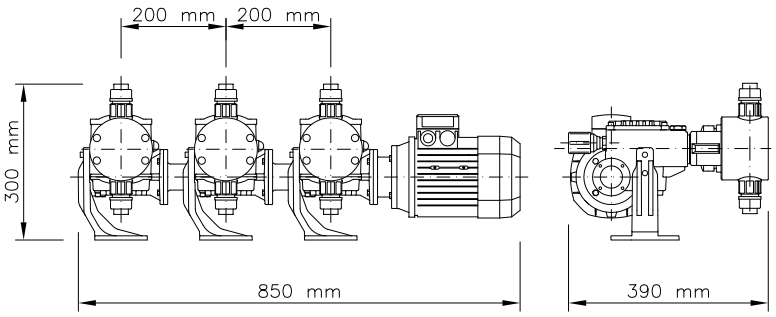
SINGLE PUMP - Manual Adjustment



SINGLE PUMP - Electric Actuator Adjustment



MULTIPLE PUMP - Manual Adjustment



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 50	2 3	30 43	1,6 2,6	10	1/2" BSP f	0,25 kW	0,25 kW
R 16	36 50	4 6	30 43	3,3 5,2				
R 25	36 50	12 16	30 43	10 14				
R 30	36 50	18 25	30 43	15 22				
R 43	36 50	42 50	30 43	35 44		3/4" BSP f	0,37 kW	0,37 kW
R 50	36 50	58 80	30 43	48 70				
R 62	36 50	90 120	30 43	75 105				

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

HV VERSION (HIGH VISCOSITY DOSING):

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

- Connections normally threaded with single valves, double on demand.
- Plunger pumphead with gland nut and adjustable packing.
- PTFE adjustable plunger packing rings with “V” profile (Chevron type) to contain the pumped fluid leakages.
- Suitable to dose products with viscosities up to 55,000 cP.
- Use for working pressure up to 10 bar.

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 50 70 95 115	2 2,8 4 5 6	43 60 84 114	2,4 3,4 4,8 6	100	3/8" NPT f	1/2" ANSI 600 RF
R 16 A TS	50 70 95 115	7 10 15 18	43 60 84 114	6 8,5 13 18	100 100 85 60		

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

TS VERSION (HIGH PRESSURE DOSING):

Tipical application: High pressure injection Chemicals.

- Double valves with lapped seats.
- Connections normally threaded, flanged on demand.
- Plunger pumphead with gland nut and adjustable packing.
- Extended PTFE braid type adjustable plunger packing reinforced with KEVLAR and with intermediate ring.
- Self-centering plunger.
- Use for working pressure up to max 100 bar.

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 36 50	4 6 8,5	30 43 60	4,8 7,2 10,2	60	70	3/8" BSP m
R 25 MA OM	25 36 50	10 14 20	30 43 60	12 16,8 24	35 35	45 40	
R 30 MA OM	36 50	20 30	43 60	24 36	30 25	35 30	

HYDRAULIC DIAPHRAGM

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

OM VERSION (MAGNESIUM OXIDE DOSING):

Tipical application: Increase Combustion in Thermal Power.

Version designed for dosing diluted MAGNESIUM OXIDE into diesel. The OM version has been specifically designed for this application since 1980, working with the manufacturers of the magnesium oxide, wetted components are made in special materials. Use for flowrates up to 30 liters per hour and working pressure up to 70 bar.

H/MH DIATOMACEOUS EARTH DOSING

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 95	90 115	60 84	75 100	10	1/2" BSP f	3/4" BSP m
H 50	70 95	120 160	60 84	100 140			

PLUNGER

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

Ø DIAPH./STROKE	50 Hz			60 Hz			MAX PRESS. bar	THREADED CONNECTIONS	
	TYPE	STROKES / 1	MAX FLOW RATE l/h	TYPE	STROKES / 1	MAX FLOW RATE l/h		PP	A
4 108	MH 73	70	73	MH 58	60	58	10	3/4" BSP m	3/4" BSP f
	MH 100	95	100	MH 90	84	90			

MECHANICAL DIAPHRAGM

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

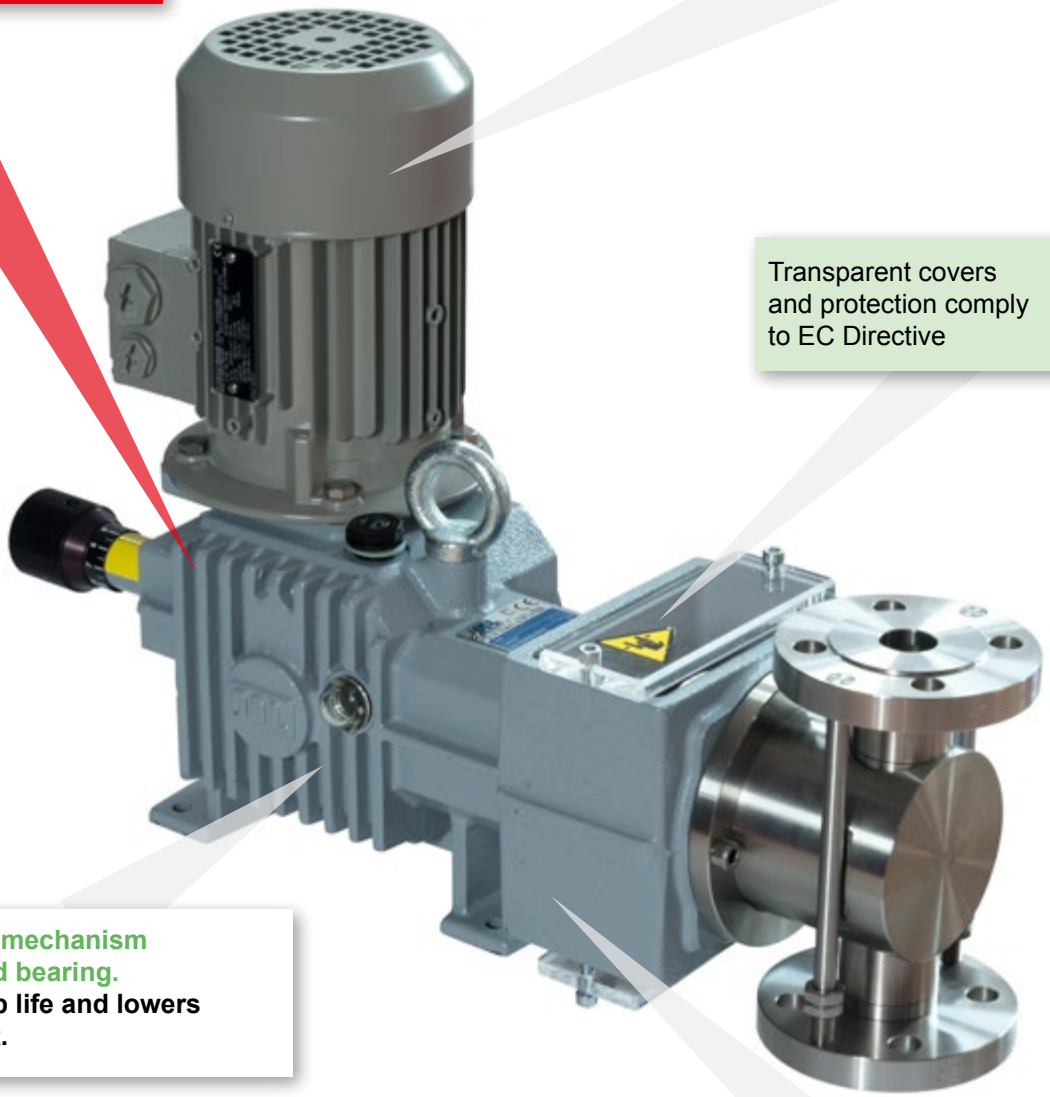
H/MH PUMPS (DIATOMACEOUS EARTH DOSING):

Tipical application: Oenological Filtration.

OBL is a leader in the manufacture of metering 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.

Painted cast iron casing:
Improved corrosion resistance against aggressive fumes.
Extends pump life and lowers life-cycle cost.

Motor UNEL-MEC:
Motor UNEL-MEC standard 3 phase, 50/60Hz. Single phase and ATEX options available.
Permits standardization and quick std motor availability on site.



Transparent covers and protection comply to EC Directive

Spring return mechanism with oversized bearing.
Extends pump life and lowers life-cycle cost.

Painted cast iron yoke:
Increased resistance in case of liquid spillage to reduce maintenance cost.
Extends pump life and lowers life-cycle cost.

UP TO 620 l/h

ATEX

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

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				THR.	FLANGED	
					A	A-TL	P	BSP f	UNI	ANSI
RH 20	63 86 104	28 38 47	50 75 98	22 33 44	10	40	/	3/8”	DN 15	1/2”
RH 25	63 86 104	44 60 75	50 75 98	34 52 70	10	40 35 30	10			
RH 30	63 86 104	64 86 110	50 75 98	50 75 103	10	32 23 20	10			
RH 40	63 86 104	110 150 200	50 75 98	85 130 185	10	17 12 /	10	1/2”		
RH 50	63 86 104	176 240 300	50 75 98	135 205 280	10 8 7	/	10 8 7	/	DN 20	3/4”
RH 65	63 86 104	300 410 500	50 75 98	235 355 470	6 5 4	/	6 5 4		DN 25	1”
RH 80 ●	63 86	420 620	50 75	330 540	4 3,5	/	/			

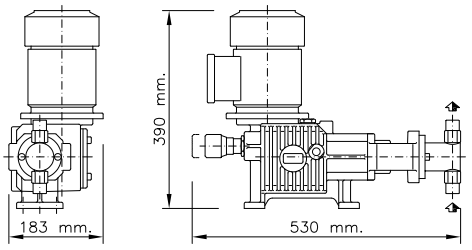
● 0,55kW

Material of construction

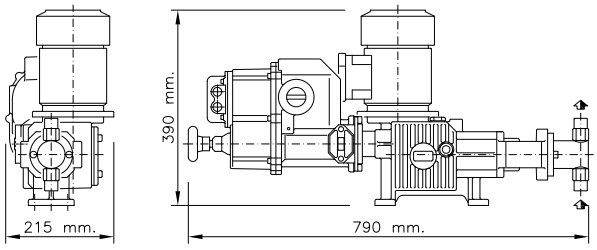
COMPONENTS	A	A-TL	AC	ACV	P
PUMP HEAD	AISI-316L	AISI-316L	AISI-316L	AISI-316L	PVC
PLUNGER	AISI-316L	AISI-316L	CERAMIC	CERAMIC	CERAMIC
PLUNGER PACKING	PTFE	PTFE	PTFE	VULKOLLAN	PTFE
VALVE GUIDE	AISI-316L	AISI-316L	AISI-316L	AISI-316L	PVC
VALVE SEAT	AISI-316L	AISI-316L	AISI-316L	AISI-316L	PVC
VALVE (BALL)	AISI-316L	AISI-316L	AISI-316L	AISI-316L	PYREX
VALVE SEAL	FPM	FPM	FPM	FPM	FPM

Overall dimensions

SINGLE PUMP - Manual Adjustment



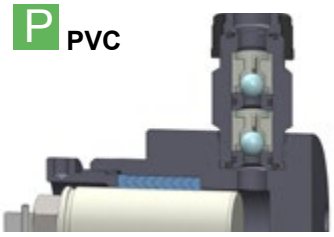
SINGLE PUMP - Electric Actuator Adjustment



Sectional view

THREADED CONNECTIONS

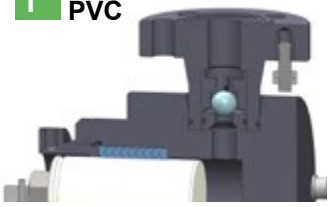
P **PVC**



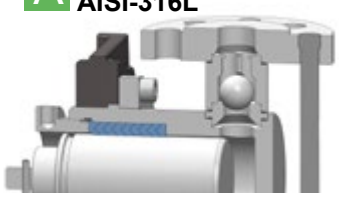
A **AISI-316L**

FLANGED CONNECTIONS

P **PVC**

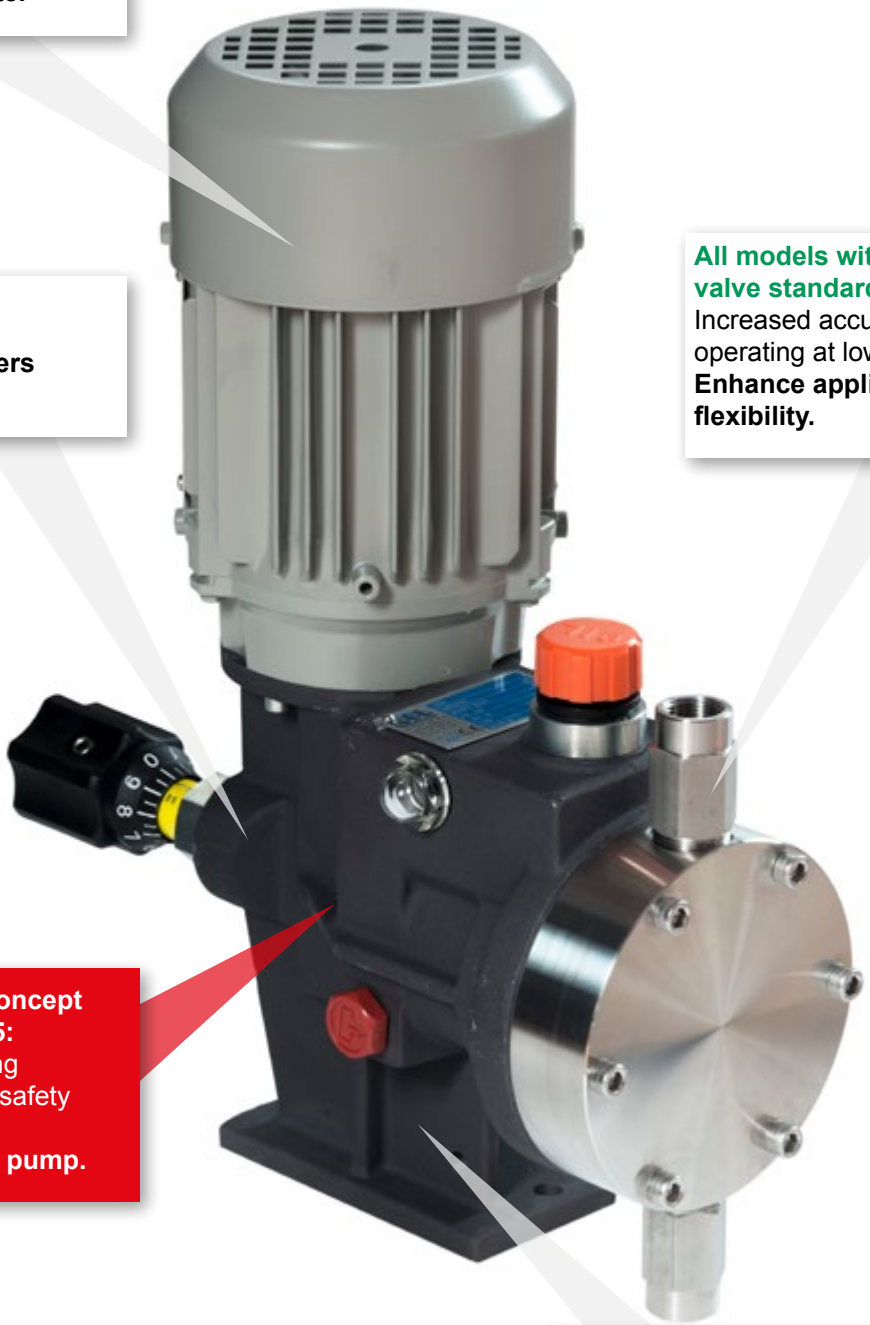


A **AISI-316L**



Motor UNEL-MEC:
Motor UNEL-MEC standard 3 phase, 50/60Hz. Single phase and ATEX options available.
Permits standardization and quick std motor availability on site.

Spring return mechanism with oversized bearing.
Extends pump life and lowers life-cycle cost.



All models with double valve standard:
Increased accuracy when operating at low flow.
Enhance application flexibility.

Hydraulic system of the concept of process pumps API-675:
With mechanical replenishing (smart diaphragm), internal safety valve and air bleed valve.
More safe and performing pump.

Single block aluminum anodized casing:
Improved corrosion resistance against aggressive fumes.
Extends pump life and lowers life-cycle cost.

ATEX

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

Hydraulic system of the concept of process pumps API-675:
With mechanical replenishing (smart With mechanical replenishing (smart diaphragm), internal safety valve and air bleed valve.
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Motor UNEL-MEC standard 3 phase, 50/60Hz. Single phase and ATEX options available.
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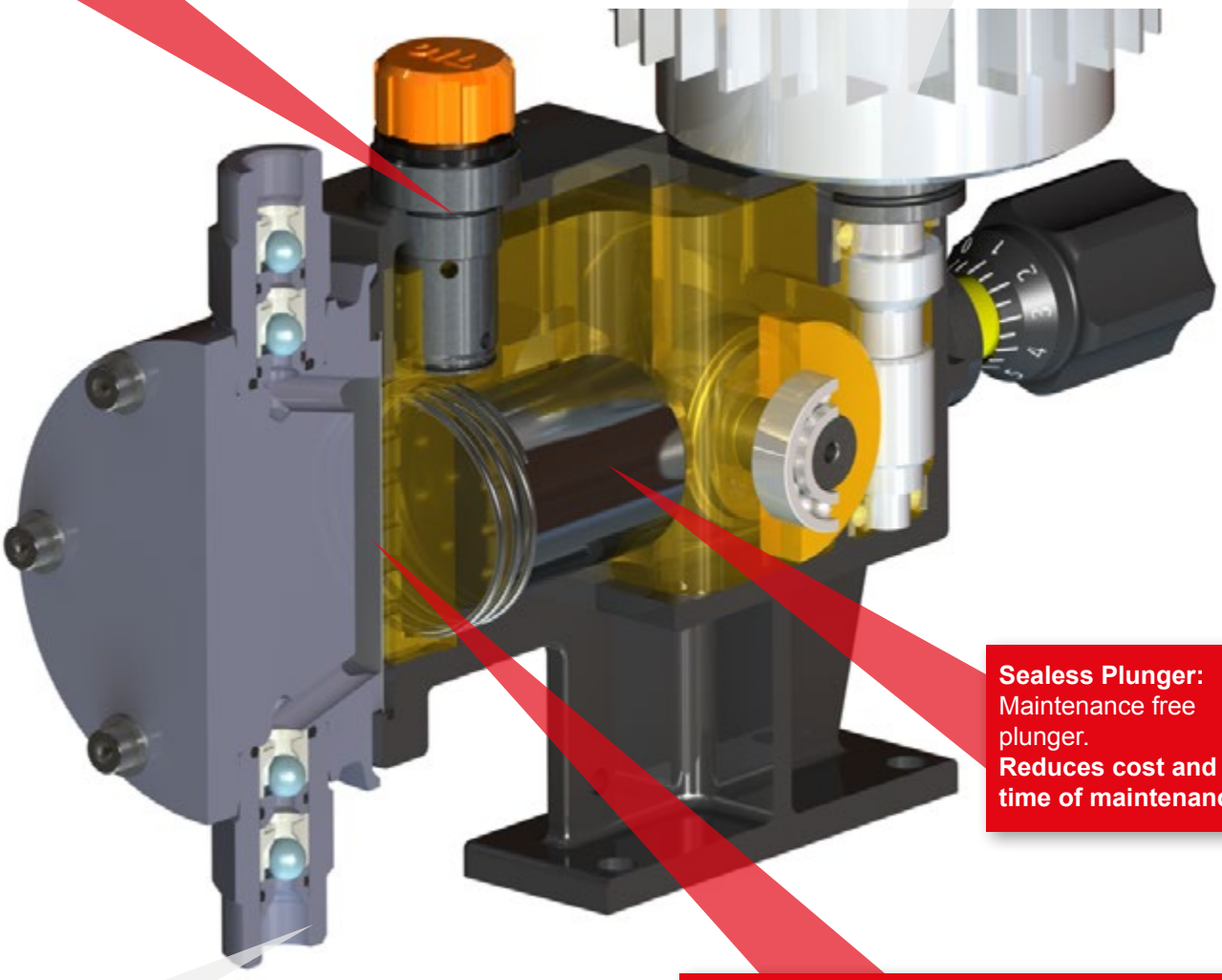


Sealess Plunger:
Maintenance free plunger.
Reduces cost and time of maintenance.

All models with double valve standard:
Increased accuracy when operating at low flow.
Enhance application flexibility.

Smart Hydraulic Diaphragm:
Diaphragm fastening system is hermetic and independent from pumphead body fastening. Allows to check diaphragm condition by removing the pumphead, but does not cause oil leakage from the hydraulic system.
Reduces cost and time of maintenance.

ATEX

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

Technical data

TYPE	50 Hz		60 Hz		MAX PRESS. bar ①		CONNECTIONS		
							THR.	FLANGED	
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h	A	P - S	BSP f	UNI	ANSI
XRN 2.15	55 72 85 111 145	0,6 0,9 1,2 1,5 2	67 87 103 133	0,8 1 1,2 1,6	20	13	1/4”	DN 15	1/2”
XRN 2.30	28 36 55 72 85 111 145	1,8 2,5 3,8 5 5,8 7,5 11	33 43 67 87 103 133	2,1 2,8 4,5 6 7 10	20	13			
XRN 6.20	28 36 55 72 85 111 145	2 2,8 4,5 6 7,3 10 13	33 43 67 87 103 133	2,5 3,5 5,5 7,2 9 12	40	/			
XRN 6.30	55 72 85 111 145	10 14 20 23 30	67 87 103 133	14 20 24 30	20	13	3/8”		
XRN 6.38	72 85 111 145 170	26 32 42 54 65	67 87 103 133 174	24 33 40 50 68	15	13			
XRN 6.48	72 85 111 145 170	42 50 66 87 105	67 87 103 133 174	38 50 62 80 105	10 10 8 8 8	10 10 8 8 8			

BUILT-IN RELIEF VALVE SET PRESS. (PSV) bar ①	
PSV SET PRESS. bar	MAX WORK. PRESS. bar
5	4
7	5,5
8	6,5
10	8,5
13	10
15	13
17	14,5
20	17
23	20
30	25
35	30

Identification code

XRN 2 . 30 A 85 FA ZC

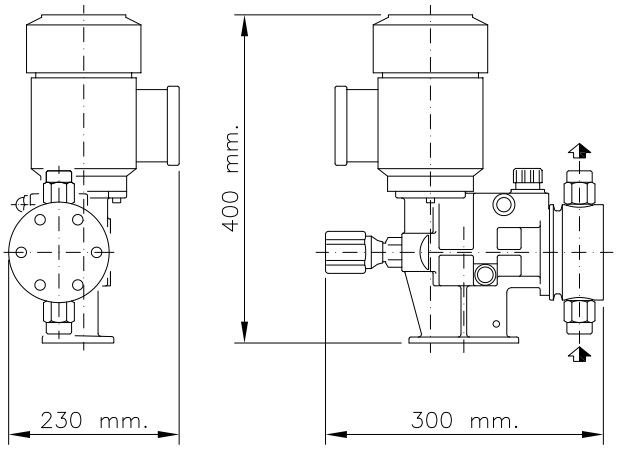
XRN	PUMP TYPE
2	PLUNGER STROKE
30	PLUNGER DIAMETER
A	PUMPHEAD EXECUTION
	...A... AISI-316L
	...P... PVC
	...S... PDVF
85	PLUNGER STROKER PER MINUTE
FA	CONNECTIONS
	“...“ THREADED BSP f
	...F... FLANGED UNI-DIN
	...FA... FLANGED ANSI
ZC	ADJUSTMENT
	“...“ GRADUATE KNOB AND VERNIER
	...W... PNEUMATIC ACTUATOR
	...Z... ELECTRIC ACTUATOR

Material of construction

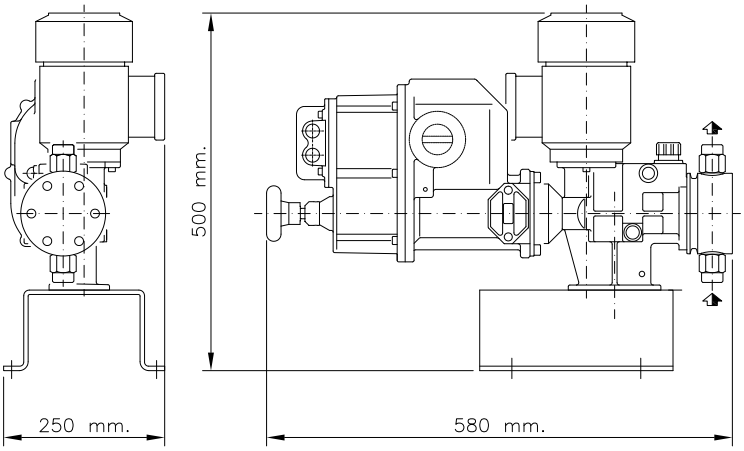
COMPONENTS	A	A32	P	P11	S
PUMP HEAD	AISI-316L	AISI-316L	PVC	PVC	PVC
DIAPHRAGM	PTFE	PTFE	PTFE	PTFE	PTFE
VALVE GUIDE	PP	PP	PP	PP	PTFE
VALVE SEAT	AISI-316L	INCOLOY-825	PVC	AISI-316L	PVC
VALVE (BALL)	AISI-316L	HASTELLOY C-276	PYREX	AISI-316L	PVC
VALVE HOUSING	AISI-316L	AISI-316L	PVC	PVC	PYREX
VALVE SEAL	FPM	FPM	FPM	FPM	FPM

Overall dimensions

SINGLE PUMP - Manual Adjustment



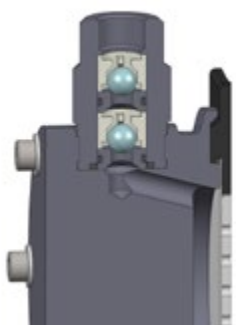
SINGLE PUMP - Electric Actuator Adjustment



Sectional view

THREADED CONNECTIONS

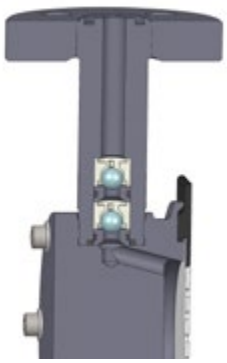
P PVC



A AISI-316L

FLANGED CONNECTIONS

P PVC



A AISI-316L

Safe area

On all pumps M, ME, R, XRN it is possible to automate the control system by installing the OBL's electric actuator Z type (ZC or ZP).

ELECTRIC ACTUATOR CHARACTERISTICS

- IP 66 standard
- 115/230V – 1 – 50/60 Hz
- 4-20 mA feedback signal
- Manual emergency override
- Anticondensation heather (on demand)
- External automatic/manual selector (on demand)
- Flow-rate limiter (Q.max trimmer) allows to reduce the pump maximum flow-rate (corresponding to 20 mA command signal) up to 50% of the nameplate rated capacity.

The flowrate is adjusted according to following input signals:

- 4-20 mA, 0-20 mA, 20-4 mA and 0-10 V
- Pulses (0÷2 Hz - 0÷30 Hz)
- RS 485 communication protocol
- Profibus DP-V0

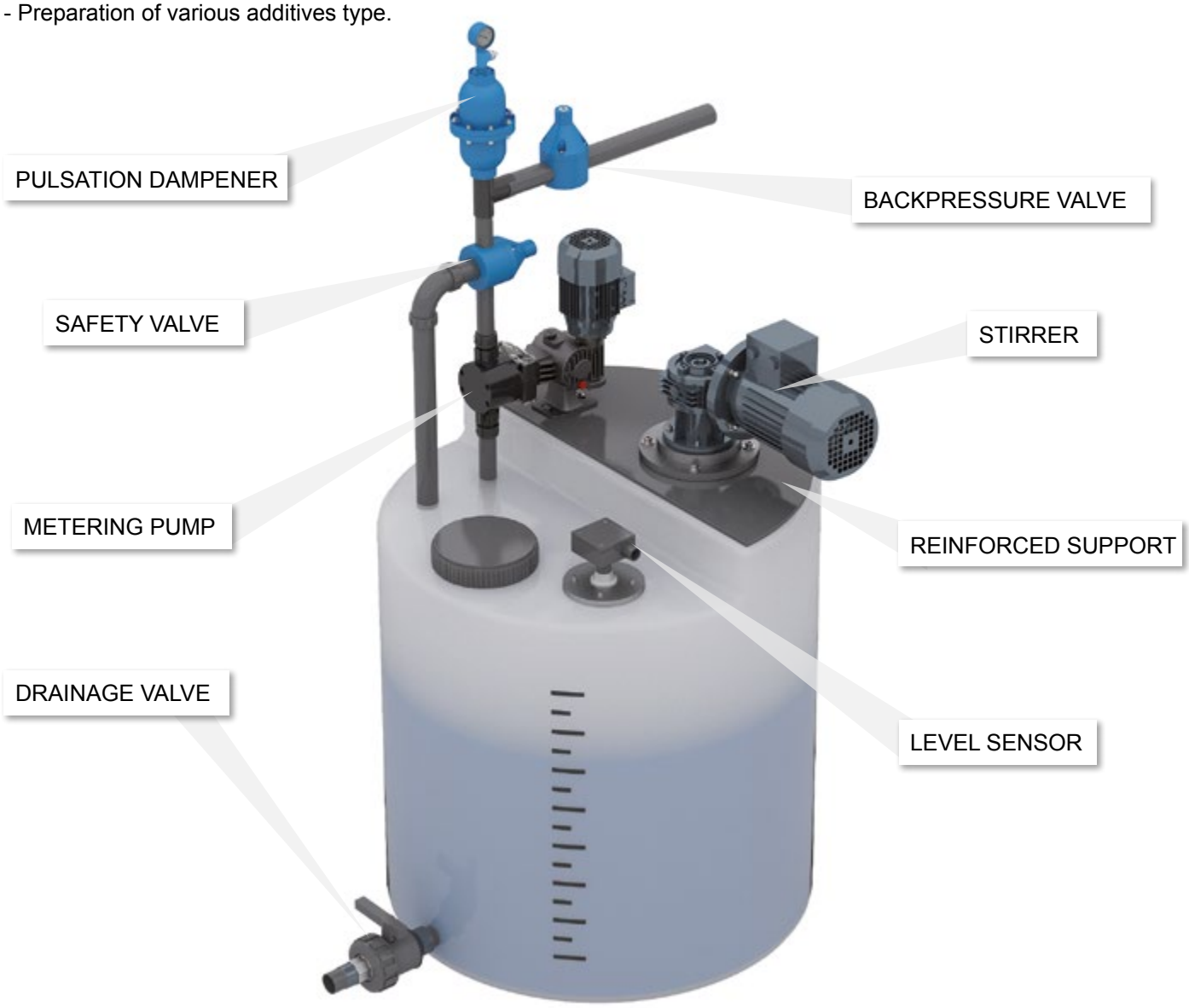
OBL DESIGN

MAIN TECHNICAL FEATURES:
PE HD tanks with high resistance to chemical attack, graduated level scale printed on the tank, drainage discharge, inlet nozzles for product or water, possibility of brackets for fixing to the ground.
Upper support reinforced for metering pump and/or stirrer installation.
Suitability for mounting pumps type: M - R - RH - XRN.

AVAILABLE VOLUMES:
120 – 250 – 300 – 500 – 1000 – 1600 liters.

OPTIONS:
- Stirrer.
- Level switches (high or low).
- Possibility of installing up to two (2) pumps type M - R - XRN.

MAIN APPLICATIONS:
- Preparation and injection of products for the treatment and conditioning of water (note: batch preparations, not continuous).
- Injection of detergents for CIP washing or another.
- Preparation fertilizers.
- Preparation of various additives type.



OBL has a solution whether your pump needs quick, urgent maintenance or a full service repair.

REPAIR IT ONCE, REPAIR IT RIGHT !

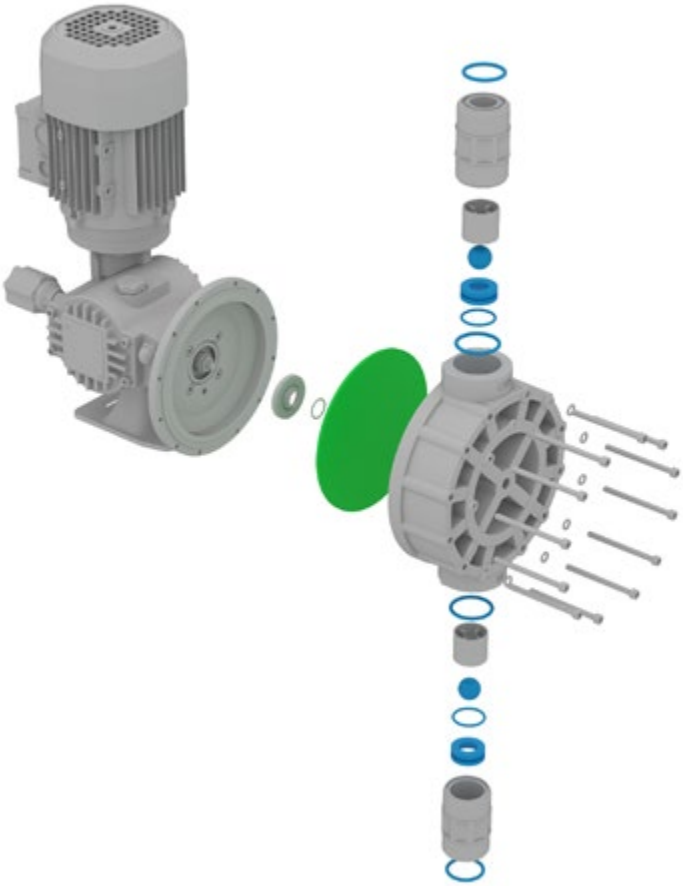
Everithing in One Place !
All of the parts you need to get running again.

Increase Uptime !
Maximize your productivity with fewer repairs.

Reduce Frequency of Repairs !
Reliable replacement parts are guaranteed to last.

Save Time and Money !
Ordering and Repairs made easy.

M PUMPS



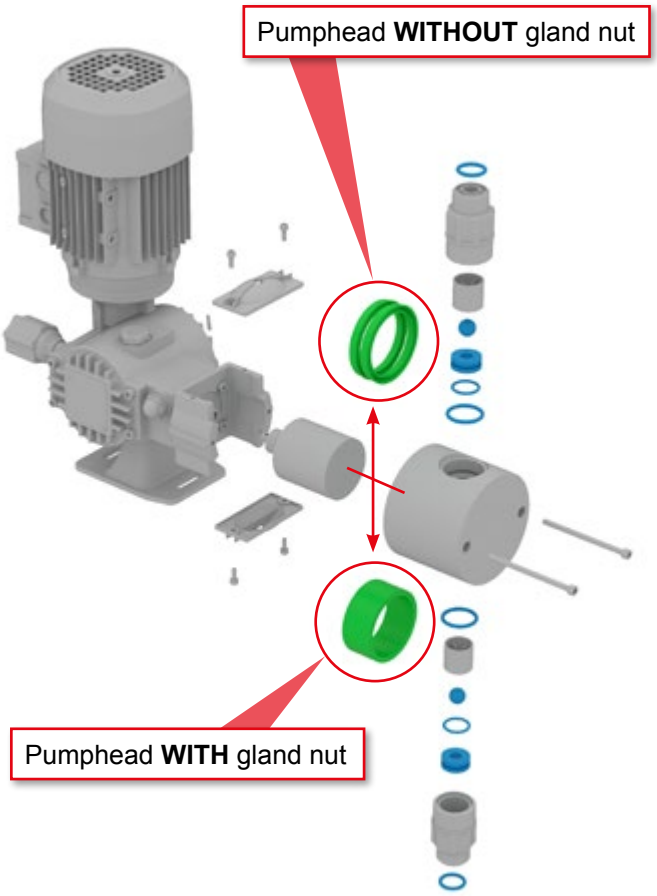
KOPKIT LIGHTS

- O-RINGS
- VALVE SEAT
- CHECK VALVE (BALL)

KOPKIT FULL

- KOPKIT LIGHTS
- DIAPHRAGM

R PUMPS



KOPKIT LIGHTS

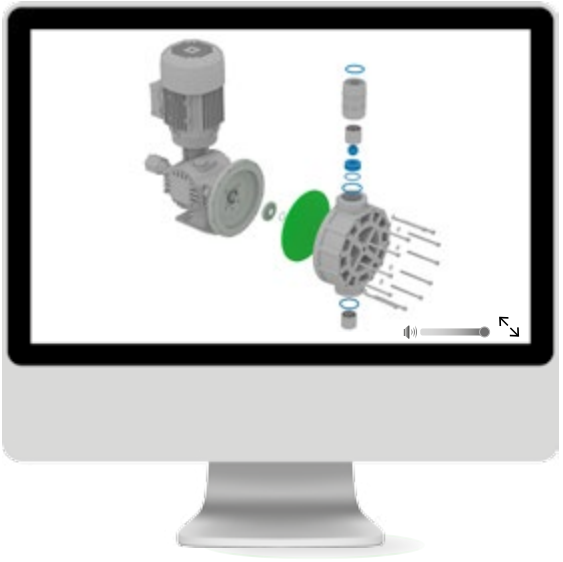
- O-RINGS
- VALVE SEAT
- CHECK VALVE (BALL)

KOPKIT FULL

- KOPKIT LIGHTS
- PLUNGER PACKING

We make it easy for you to repair your pump with detailed service videos that teach you how to maintain your OBL pump right.
Follow the advice of our experienced team.

LEARN MORE AT WWW.OBLPUMPS.IT



ORDERING PARTS KITS SAVES YOU MONEY

Ordering Parts Kits Over Individual Components:
- Reduces frequency of repairs
- Reduced downtime
- Reduces cost
- Increases uptime
- Improves parts availability
- Extends service life

OBL Genuine Parts keep your pump running at optimal levels.

OBL has built a reputation for superior reliability by supplying high-quality products carefully-designed.
However, even the best equipment requires a minimal amount of preventative maintenance.
OBL offers KOPkits (Keep On Pumping kits) designed to guard against unnecessary downtime and assure you the highest level of efficient and uninterrupted service from your OBL pumps.
Many pumps model you purchase has a unique KOPkit of spare parts.
It contains all the parts needed to assure reliable operation.
There may be different levels of kits based on your pump model.
A KOPkit is a troubleshooter's best friend.
In the event of a breakdown, it will put you back in business fast!
Preventative maintenance will insure continuous high performance of your pump.
OBL assure the ready availability of all the spare parts of the pumps.

Installation kit and KOP kits

Installation kit composed by following components:
- PP ball injection valve
- PP foot filter valve
- 2m 4x6mm PVC Crystal for suction pipeline
- 2m 4x6mm PE tube for delivery pipeline

All of the items you need to complete your system

OBL, thanks to its experience, tries to provide to the customers a range of products that can include the nearly totally of all possible applications.
This page shows some examples designed to meet different customer needs.

Enhanced Pump Performance and Productivity

Extended MTBF (Mean Time Between Failure)

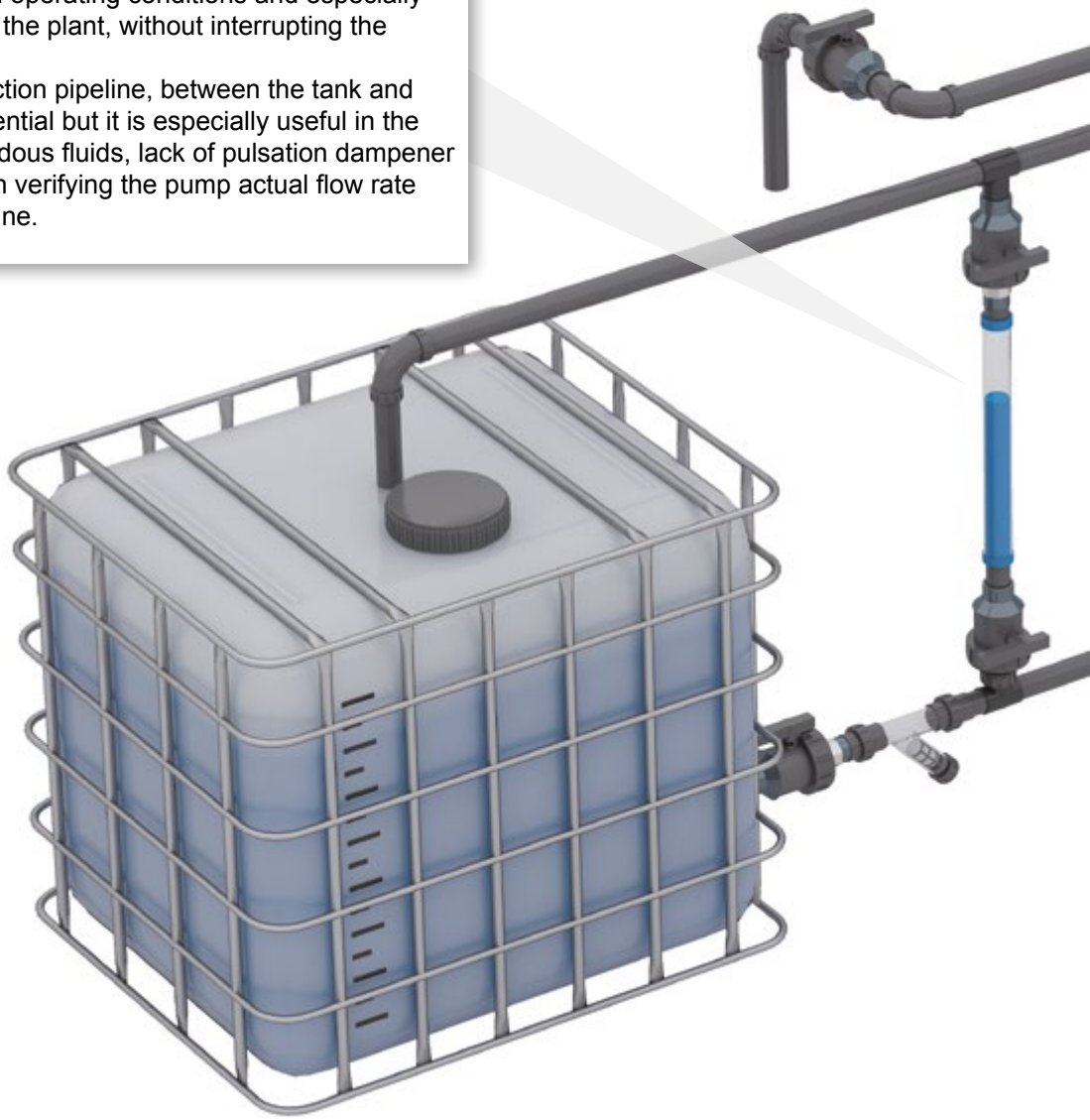
Protect Ancillary Equipment in Fluid Flow Path

Enhance Safety and Environmental Responsibility

Precision Pump Control and Dosage Efficiency

CALIBRATION POT

Allows to evaluate the conditions of the valves and check the actual flow rate of the pump in its real operating conditions and especially during the normal operation of the plant, without interrupting the dosing process.
Have to be installed on the suction pipeline, between the tank and the metering pump. Is not essential but it is especially useful in the following cases: dose of hazardous fluids, lack of pulsation dampener on delivery pipeline, difficulty in verifying the pump actual flow rate operating on the delivery pipeline.



PULSATION DAMPENER

The pulsation dampener is particularly important to improve the pump operation and the dosing process. There are various benefits obtained with its installation:

- protects the pump from high pressure peaks (fluid hammer) increasing lifespan of pump.
- flow rate becomes continuous with a linear flow, increasing the reliability of the dosing process.
- significant reduction of vibrations transmitted along the discharge pipeline.
- help in reducing noise emitted by the pump.

METERING PUMP

SAFETY VALVE

The safety valve is mounted in order to protect the integrity of the pump and the system in case of overpressure on pump discharge pipeline higher than the value of the maximum allowable working pressure.
Important note: The safety valves must be installed in proximity of metering pump on the discharge pipeline system.

BACKPRESSURE VALVE

The backpressure valve is installed to improve the functioning of the pump and the dosing process. Prevents the triggering of siphoning phenomenon in case of that the pressure on the pump discharge pipeline is lower than the pressure on the pump suction pipeline.

SOLENOIDS PUMPS

MS.e METERING DOSING PUMPS

Constant flow rate regulation.
PVDF pump head with FPM seals

- LCD 2.1/2 digit display
- Flow rate digital adjustment 0-100% by keys
- PVDF pump head as standard
- Power on led
- Led Alarm
- Solenoid pulse Led
- Chemical dosing alarm level on demand
- ON/OFF switch
- Start/Stop key
- Polypropylene Plastic box with 30% fiber glass
- IP65 protection degree

MS.k METERING DOSING PUMPS

Constant flow rate regulation.
PVDF pump head with FPM seals

- LCD 2.1/2 digit display
- Flow rate digital adjustment 0-100% by keys
- PVDF pump head as standard
- Power on led
- Led Alarm
- Solenoid pulse Led
- Chemical dosing alarm level as standard
- Start/Stop key
- Plastic box IP65 protection degree
- Percentage by UP/DOWN arrow keys
- Start/pause dosing

MS.plus METERING DOSING PUMPS

Proportional dosing to an external facing pulses from a water meter or to an industry standard 4-20 mA control signal.
PVDF pump head with FPM seals

- Backlighted graphic display
- Proportional to an internal pacing pulses (water pulse sender): ppm mode and n:m mode
- Proportional to an external signal 4-20 or 20-4 mA, (both ranges selectable: mA and dosing frequency range)
- Constant flow rate mode
- Automatic regulation of frequency dosing (the pump automatically follows the flow variation)
- Automatic managing of excessive external pulses, self-regulation of dosing frequency
- Chemical dosing alarm levels as Standard
- IP65 protection degree
- PVDF pump head standard

MS.i METERING DOSING PUMPS

Built-in instruments for pH, Redox, free chlorine and conductivity control and regulation. PVDF pump head with FPM seals.

- Backlighted graphic display
- Very easy to use: programming way easily programmable thanks to user-friendly intuitive and softeam
- Proportional dosing to the set-point value or On/Off mode
- Constant flow rate mode
- Level probe input
- Plastic box IP65 protection degree
- PVDF pump head standard
- Chemical dosing alarm level as standard
- Version pH/Redox(mV) selectable from the user
- Start/Stop key
- Measure ranges:
  - pH: 0-14,00 pH; BNC input from pH probe
  - Redox(mV): 0-1999 mV; BNC input from Redox(mV) probe
  - Free Chlorine: 0-10,00 ppm; Input probe SCLO series
  - Conductivity: 0-10.00 mS with probe SCD K1; other ranges available 1000mS, 100 mS, 10 mS, with probe SCD K5

CONTROLLERS

C05.s CONTROLLER

Single measure

The C05 controllers represent the excellence of OBL technology. The instruments of the C05 family allow easy settings with 4 frontal keypad and 2 more contextual menu keys. The wide display always shows the real time measurement. The C05 controllers come in single and double measurement. The double measurement C05 are always provided with pH priority functionality. All C05 controllers can be remotely operated via PC or GSM modem, they can also accommodate an SD card for data storage and downloading.

C05.d CONTROLLER

Double measure

The C05 controllers represent the excellence of OBL technology. The instruments of the C05 family allow easy settings with 4 frontal keypad and 2 more contextual menu keys. The wide display always shows the real time measurement. The C05 controllers come in single and double measurement. The double measurement C05 are always provided with pH priority functionality. All C05 controllers can be remotely operated via PC or GSM modem, they can also accommodate an SD card for data storage and downloading.

C05.ct CONTROLLER

Cooling tower

The C05 CT is specifically designed for Cooling Tower applications. The instrument controls the drain, the pump inhibitor and two pumps for Biocide. The contoller integrates a clock-calendar which allows the Biocide dosing programming in daily, weekly or monthly way. Versions with conductivity measure or redox and conductivity measure are both available.

C10 CONTROLLER

C10 instruments series are high quality solution for applications that require simultaneous measurement of up to 4 parameters over the temperature. These controllers are designed for water treatment to meet technical requirements in accordance with local regulations. The C10 has inherited all the features of the C05 series, it can be controlled remotely via PC or GSM modem, it can store information on SD cards on request.

PROBES AND ACCESSORIES

OBL offers a wide range of probes and accessories for dosing systems and instruments.
All the accessories you will find on our catalogue are designed to suit perfectly and maximize the performance of our products.
Tanks, mixers, lances are all available to be assembled ready to use mixing stations.
Also filters, probe holders, valves and water meters are available.

pH	BODY MATERIAL	RANGE	CONNECTION	CABLE LENGHT	PRESSURE	TEMPERATURE
PHS.5	EPOXY	0-14 ph	BNC	5 mt.	MAX 6 bar	MAX 60
PHS.11	GLASS	0-14 ph	S7	-	MAX 6 bar	MAX 60
PHS.7	EPOXY	0-14 ph	S7	-	MAX 6 bar	MAX 60
PHS.hp	GLASS	0-14 ph	S7	-	MAX 6 bar	MAX 130

* Buffer solution for probe calibration available on list price.

REDOX	BODY MATERIAL	RANGE	CONNECTION	CABLE LENGHT	PRESSURE	TEMPERATURE
MVS.5	EPOXY	+ -2000mV	BNC	5 mt.	MAX 6 bar	MAX 60
MVS.11	GLASS	+ -1000mV	S7	-	MAX 6 bar	MAX 60
MVS.7	EPOXY	+ -2000mV	S7	-	MAX 6 bar	MAX 60
MVS.hp	GLASS	+ -1000mV	S7	-	MAX 16 bar	MAX 130

* Buffer solution for probe calibration available on list price.

Cables

BNC-S7 (pH/mV)	AKL-CL1	AKL-CL2	AKL-CL3
Cable length 1 mt.	Cable for membrane sensors (L=1mt.)	Cable for membrane sensors (L=2mt.)	Cable for membrane sensors (L=3mt.)
Cable length 5 mt.			
Cable length 10 mt.			

Chlorine

SCLO - 1

AMPEROMETRIC CELL.
Platinum/copper electrodes. Measure range: 0-10 mg/Cl2. Cable 2 wire, I = 200 cm.
Max pressure 8 bar. Suggested flow 40 l/h.

SCLO - 11

AMPEROMETRIC CELL.
Platinum/copper electrodes. Measure range 0-10 mg/Cl2. Cable 2 wire, I=200 cm.
Max pressure 8 bar. Flow regulator. Temperature sensor placement.
SP1 proximity sensor placement. Suggested flow 40 l/h.

SCLO - 2

AMPEROMETRIC CELL.
Platinum/copper electrodes. Measure range 0-10 mg/Cl2. Cable 2 wire, I=200 cm.
Max pressure 8 bar. Flow regulation. Placement for pH and ORP electrodes, temperature sensor.
Prepared for SP1 proximity sensor.

Membrane sensors

TYPE	RANGE	DIMENSION (mm)	PRESSURE	FLOW RATE	ph RANGE	SUITABLE FOR
CL410s	0-10ppm	D=25/L=175	max 1 bar	max 30-40 lt/h	5.5-8.5	Inorganic chlorine
CL4.1 N	0-20ppm	D=25/L=175	max 1 bar	max 30-40 lt/h	4-11	Inorganic chlorine
CS2.3 N	0-20ppm	D=25/L=175	max 1 bar	max 30-40 lt/h	4-8	Inorganic chlorine
CC1	0-20ppm	D=25/L=175	max 1 bar	max 30-40 lt/h	4-11	Organic chlorine
CP2.1 N	0-20ppm	D=25/L=175	max 1 bar	max 30-40 lt/h	4-11	Total chlorine
CLD410S	0-10ppm	D=25/L=175	max 1 bar	max 45-135 lt/h	5.5-8.5	Chlorine dioxide

Conductivity

TYPE	BODY MATERIAL	CONSTANT	ELECTROD MATERIAL	CABLE LENGHT	CONNECTION	TEMP. COMP.	TEMPERATURE
SCDK1	PVC	K1	SS316	3 mt.	1/2" gas	NO	max 50
SCDTK1	PVC	K1	SS316	3 mt.	1/2" gas	YES	max 50
SCDLK1	PVC	K1	SS316	3 mt.	1/2" gas	NO	max 50
SCDK5	PVC	K5	SS316	3 mt.	1/2" gas	NO	max 50
SCDTK5	PVC	K5	SS316	3 mt.	1/2" gas	YES	max 50
SCDK1T	PTFE	K1	SS316	3 mt.	1/2" gas	NO	max 130
SCDTK1T	PTFE	K1	SS316	3 mt.	1/2" gas	YES	max 130
SCDK5T	PTFE	K5	SS316	3 mt.	1/2" gas	NO	max 130
SCDTK5T	PTFE	K5	SS316	3 mt.	1/2" gas	YES	max 130
SCD graphite	PTFE	K0,8	GRAPHITE	3 mt.	1/2" gas	NO	max 130
SCDT graphite	PTFE	K0,8	GRAPHITE	3 mt.	1/2" gas	YES	max 130
SCD3 K1	PVC +amplifier	K1	SS316	3 mt.	1/2" gas	NO	max 50
SCD3t K1	PTFE +amplifier	K1	SS316	3 mt.	1/2" gas	YES	max 130
SCD3 K5	PVC +amplifier	K5	SS316	3 mt.	1/2" gas	NO	max 50

Oxygen

TYPE	RANGE	DIMENSION (mm)	CABLE LENGHT	CONNECTION	FLOW RATE
OXY 1	0-20mg/1	D=12mm	5m	PG: 15,5 mm	0,03 m/s min

Temperature

TYPE	RANGE	BODY MATERIAL	ELECTROD MATERIAL	CABLE LENGHT	CONNECTION
STE 1	0-100	PTFE	SS316	3mt.	1/2" gas
STE 2	0-50	PVC/PTFE	SS316	3mt.	1/2" gas
STE 2N	0-50	PVC	SS316	3mt.	1/2" gas

Turbidity

TYPE	MEASURE RANGE	BODY	FLOW RATE
STB1	0-40 NTU	PVC	15 lt/h suggested
STB1	0-200 NTU	PVC	15 lt/h suggested
STB1	0-1000 NTU	PVC	15 lt/h suggested

Proximity sensor

FOR SCLO2, SCLO -11 AND PROBE -HOLDER PS4

Probe holder

PS 100

PVC body, in line probe holder for pH/Redox electrode diam ø 12mm. Connection 1⁄2" gas

PS 300 Immersion pro-beholder

PVC body diam. ø 12mm, lenght 70 cm.

PS 200

Plexyglass material, with housing for two ph/redox electrodes or conductivity probe.

PS 201

Plexyglass material, with housing for two ph/redox electrodes. Flow switch sold separately.

PS 01

Plexyglass material, with housing for an amperometric sensor and one ph/redox electrode.Flow switch sold separately.

PS 4

Plexyglass material, with housing for an amperometric sensor and two ph/redox electrodes and temperature probe. Flow switch sold separately.

Technical data are subject to modifications without prior notice

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