



WATER DIVISION



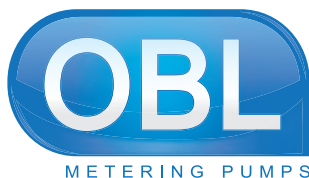
GENERAL CATALOGUE

R

RBA

RBB

RCC



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.



NEW DESIGN

ENHANCED FLEXIBILITY

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

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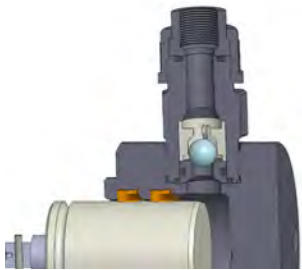
Duplex unit with manifolds:
for flowrates up to 600 l/h



Sectional view

THREADED CONNECTIONS

P PVC

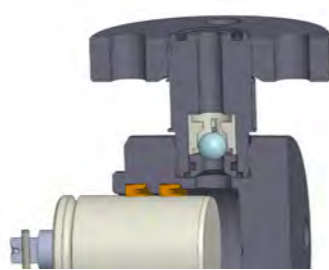


A AISI-316L



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.

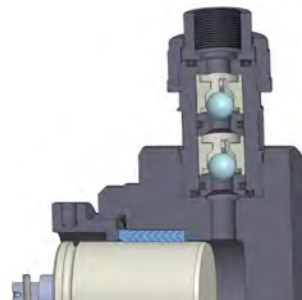
Plunger lip seals (OBL desing) are non adjustable.

Maximum working pressure up to 10 barg.

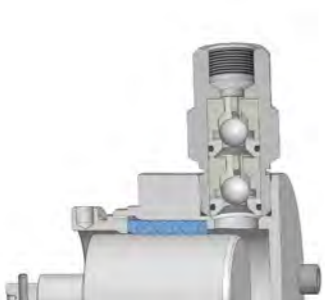
Sectional view

THREADED CONNECTIONS

P PVC

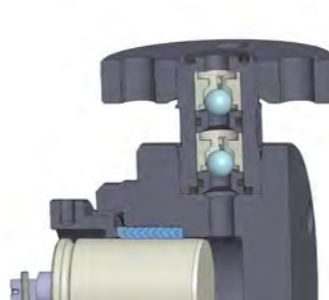


A AISI-316L

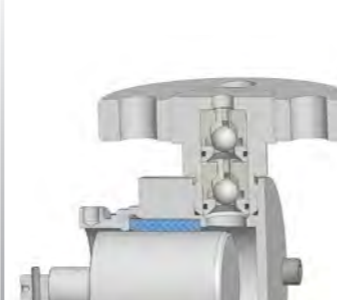


FLANGED CONNECTIONS

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

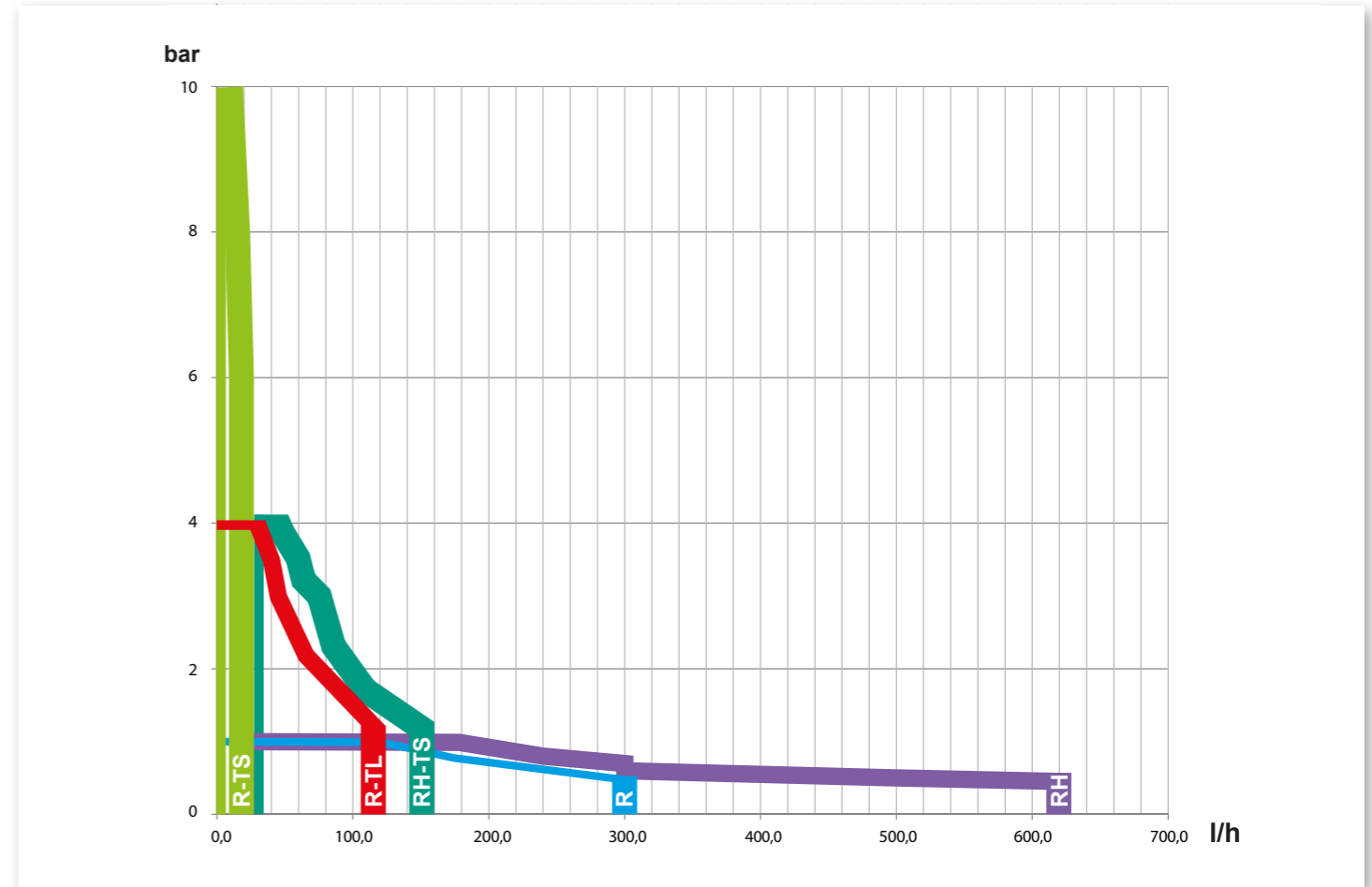


- Whitening and Bleaching process (Hydrogen Peroxide, Hypochlorite, Chlorine).
- Sizing (fillers, e.g. starch, polymers), Strengthening (Urea based chemicals, etc.), Pigmentation (dyes, pigments, etc).
- De-inking chemicals in recycling paper process (Sodium silicates, Sodium Hydroxide, Lime, Calcium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

Technical data

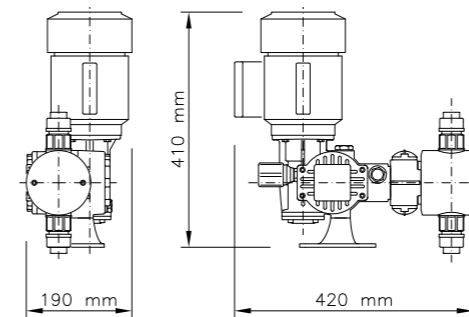
TYPE	50 Hz		60 Hz		PUMPHEAD WITH GLAND NUT				PUMPHEAD WITHOUT GLAND NUT				MOTOR kW				
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h	MAX PRESS. bar		CONNECTIONS		MAX PRESS. bar		THREADED CONNECTIONS						
					A	A-TL	P	A/A-TL	P	A/A-TL	P	A			P	A	P
R 6	50	0,8	43	0,7	/	40	10	1/4" BSP f 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	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	55	60	78													
	70	90	84	100													
	95	115	114	150													
R 50	36	58	43	70	10	10	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

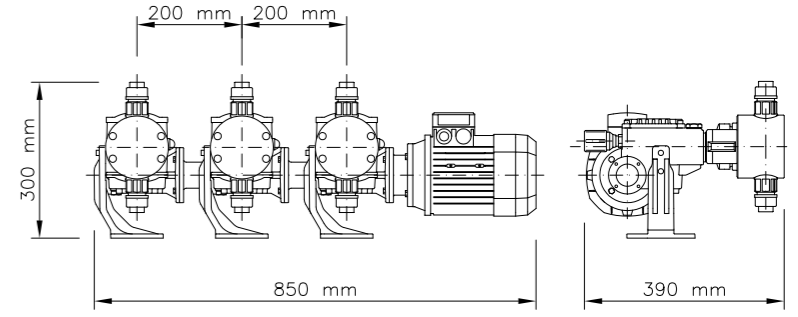


Overall dimensions

SINGLE PUMP - Manual Adjustment



MULTIPLE PUMP - Manual Adjustment



Material of construction

COMPONENTS	PUMPHEAD WITH GLAND NUT				
	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

COMPONENTS	PUMPHEAD WITHOUT GLAND NUT							
	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	3/4" BSP m 3/4" BSP f
		95	100				
	MH 100	95	100	MH 90	84	90	

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





TECHNICAL DATA

50 Hz

TYPE	STROKES /1	MAX FLOW RATE l/h	MAX PRESSURE BAR		MOTOR kW		THREADED CONNECTIONS	
			MOTOR		3PH	1PH	A	P
			3PH	1PH				
RBA16	36	5	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	50	7	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	70	11	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	95	15	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	115	18	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	50	20	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	70	30	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	95	38	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	115	45	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	50	30	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	70	40	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	95	55	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	115	65	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA43	50	55	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA43	70	90	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA43	95	115	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA43	115	150	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA50	50	80	10	10	0.30	0.24	1/2" g.f. - BSPF	
RBA50	70	120	10	8	0.30	0.24	1/2" g.f. - BSPF	
RBA50	95	160	10	7	0.30	0.24	1/2" g.f. - BSPF	
RBA50	115	200	9	6	0.30	0.24	1/2" g.f. - BSPF	
RBA62	50	125	10	5	0.30	0.24	1/2" g.f. - BSPF	
RBA62	70	175	7	4	0.30	0.24	1/2" g.f. - BSPF	
RBA62	95	250	6	3.5	0.30	0.24	1/2" g.f. - BSPF	
RBA62	115	300	5	3	0.30	0.24	1/2" g.f. - BSPF	

60 Hz

RBA16	30	4.5	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	43	6.5	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	60	9	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	84	13	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA16	118	18	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	40	16	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	60	24	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	84	33	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA25	118	45	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	43	24	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	60	34	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	84	48	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA30	118	65	10	10	0.20	0.24	3/8" g.f. - BSPF	
RBA43	43	50	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA43	60	78	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA43	84	100	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA43	118	150	10	10	0.30	0.24	3/8" g.f. - BSPF	
RBA50	43	70	10	10	0.30	0.24	1/2" g.f. - BSPF	
RBA50	60	102	10	8	0.30	0.24	1/2" g.f. - BSPF	
RBA50	84	140	10	7	0.30	0.24	1/2" g.f. - BSPF	
RBA50	118	200	9	6	0.30	0.24	1/2" g.f. - BSPF	
RBA62	43	105	10	5	0.30	0.24	1/2" g.f. - BSPF	
RBA62	60	152	7	4	0.30	0.24	1/2" g.f. - BSPF	
RBA62	84	205	6	3.5	0.30	0.24	1/2" g.f. - BSPF	
RBA62	118	300	5	3	0.30	0.24	1/2" g.f. - BSPF	

Plunger Metering Pump Spring Return



● RBA series plunger metering pump with **AISI 316L** pump head.

● Plunger lip seals packing, **300 l/h** max flow rate.

Flow rates: ● Max flow rate **300 L/h.**

Motors: ● Threephase special
- 0.20 / 0.30 kW -
4 Poles - IP55 - I.C.L.F - S1 - IEC 34-1

Δ - 230 V - **50 Hz**
λ - 400 V - **50 Hz**
Δ - 220÷290 V - **60 Hz**
λ - 380÷500 V - **60 Hz**

● Singlephase special
- 0.24 kW - 4 Poles
- IP55 - I.C.L.F - S1 - IEC 34-1

220÷240 V - **50 Hz**
110÷115 V - **50 Hz**
220÷230 V - **60 Hz**
110÷115 V - **60 Hz**

Pump: ● Single unit

Adjustment: ● 0-10 scale micrometer knob

Material: ● Aluminium casing
● PTFE coated cast iron lantern ring

Stroke: ● **15 mm.**

Weight: ● **15÷30 Kgs**



MODEL NUMBER

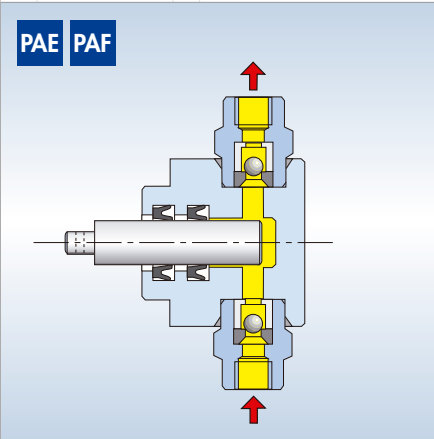
KEY TO SYMBOLS

PUMP MODEL	
Ø	PLUNGER
A	AISI-316L VERSION
P	PVC VERSION
STROKES PER MINUTE	
Z	OBL 4±20 mA ELECTRIC ACTUATOR
W	3±15 PSI PNEUMATIC ACTUATOR
F	UNI-DIN FLANGED CONNECTIONS

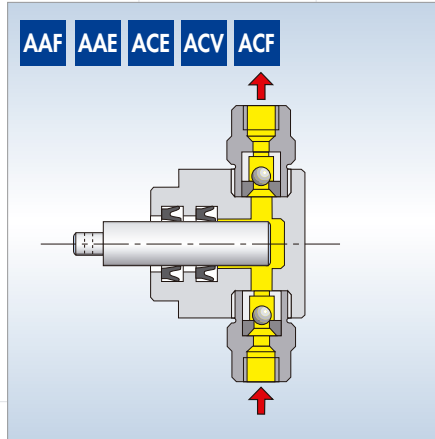
RBA 30 A 95

PUMP HEADS MATERIALS OF CONSTRUCTION

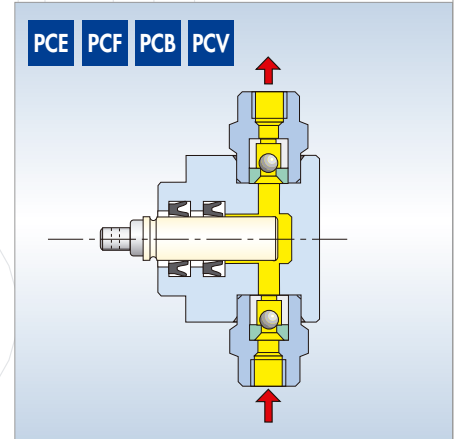
PARTS	PAE	PAF	PCE	PCF	PCB	PCV	AAF	AAE	ACE	ACV	ACF
LIQUID END	PVC	PVC	PVC	PVC	PVC	PVC	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
PLUNGER	AISI-316L	AISI-316L	CERAMIC	CERAMIC	CERAMIC	CERAMIC	AISI-316L	AISI-316L	CERAMIC	CERAMIC	CERAMIC
VALVE SEAT	AISI-316L	AISI-316L	PVC	PVC	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
VALVE GUIDE	PP	PP	PP	PP	PP	PP	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
VALVE	AISI-316L	AISI-316L	PIREX	PIREX	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
VALVE CONTAINER	PVC	PVC	PVC	PVC	PVC	PVC	AISI-316L	AISI-316L	AISI-316L	AISI-316L	AISI-316L
PLUNGER PACK.	EPDM	FPM	EPDM	FPM	EPDM	VULKOL.	FPM	EPDM	EPDM	VULKOL.	FPM



PVC head, stainless steel plunger and valves. "PA" execution. Threaded connections.



Stainless steel head and inox steel plunger. "A" execution. Threaded connections.

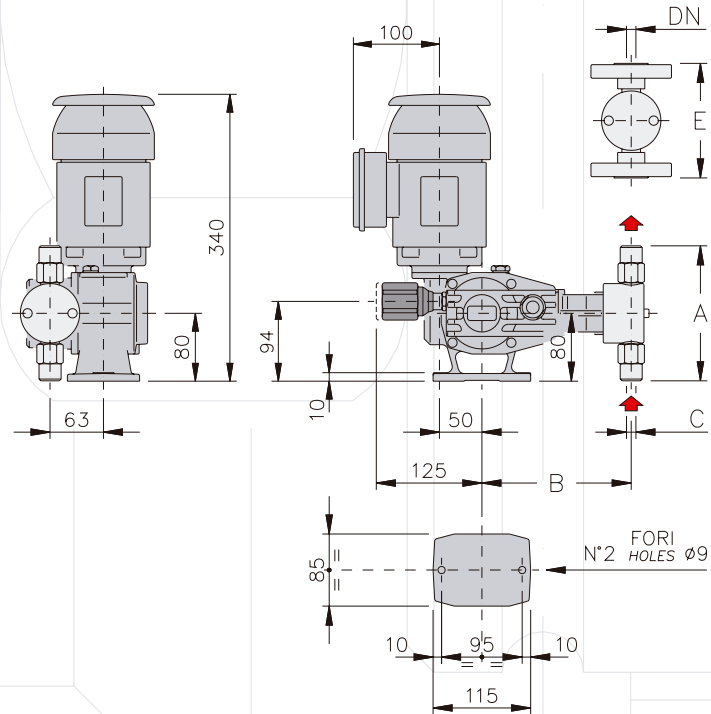


PVC head, ceramic plunger. "PC" execution. Threaded connections.

OVERALL DIMENSIONS

CONSTRUCTION CHARACTERISTICS

- **Mechanism:**
Mechanism and reduction gear are enclosed in an oil-bath lubricated aluminium casing. PTFE coated cast iron lantern ring.
- Smooth flowrate adjustment by control knob, both with pump running and at rest.
- 1.5 metres max suction lift.



TYPE	AISI 316 L					PVC				DN UNI		DN ANSI		
	50Hz	60Hz	A	B	C g.f.	E	A	B	C g.f.	E	AISI	PVC	AISI	PVC
RBA 16			121	180	3/8" g.f. BSPF	135	182	174	3/8" g.f. BSPF	146	15	15	1/2"	1/2
RBA 25			121	180	3/8" g.f. BSPF	135	182	174	3/8" g.f. BSPF	146	15	15	1/2"	1/2
RBA 30			121	180	3/8" g.f. BSPF	135	182	174	3/8" g.f. BSPF	146	15	15	1/2"	1/2
RBA 43			126.5	180	3/8" g.f. BSPF	140.5	194	177	3/8" g.f. BSPF	158	15	15	1/2"	1/2
RBA 50			157	193	1/2" g.f. BSPF	157	214	183	1/2" g.f. BSPF	176	15	15	1/2"	1/2
RBA 62			155	198	1/2" g.f. BSPF	159	240	195	1/2" g.f. BSPF	202	15	15	1/2"	1/2

SECTIONAL VIEW

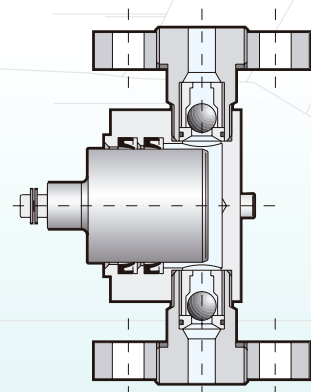
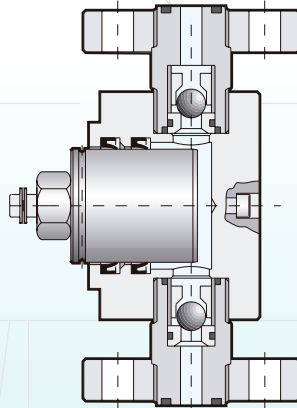
PUMP HEADS

- Execution with single ball valves only.
- Plunger lip seals, three materials: FPM - EPDM - VULKOLLAN.
- Suction and discharge connections normally threaded; on demand, flanged.
- The construction materials are listed at page 4.
- Max. temperature for all lip seal types: 40 °C.

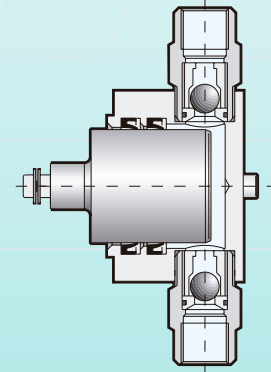
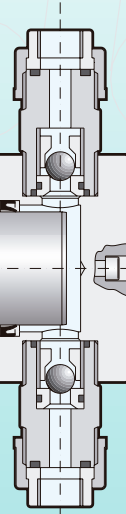
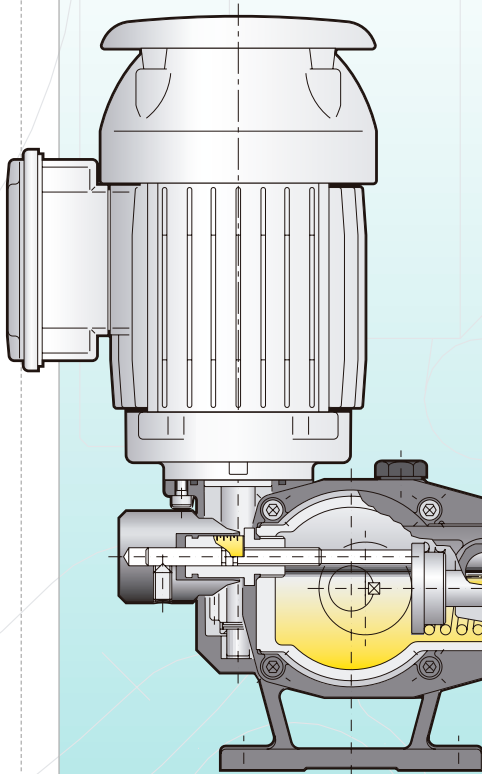
PVC

AISI 316L

FLANGED EXECUTIONS



THREADED EXECUTIONS



ADJUSTMENT SYSTEMS

- **Manual:** With 0-10 scale micrometer knob.
- **Electric:** Via **OBL** designed **Z** electrical actuator.
- **Pneumatic:** Via a 3÷15 PSI. **W** pneumatic actuator.

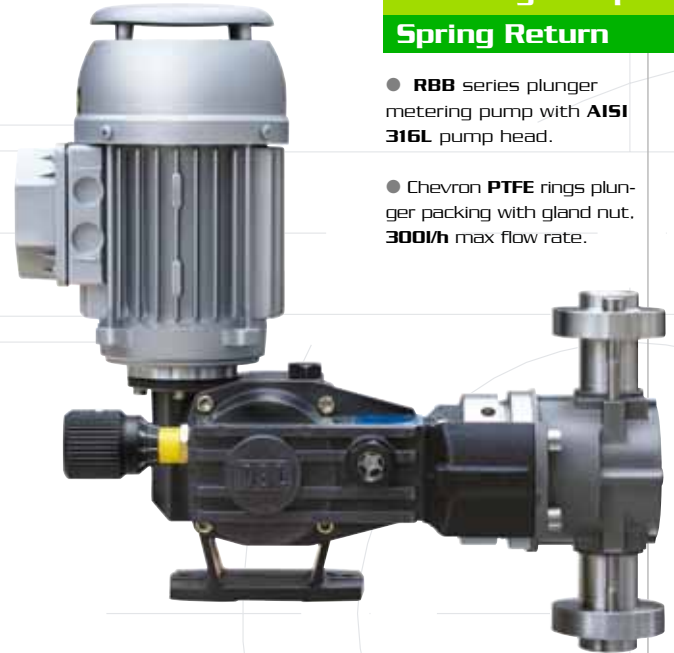
STANDARD MANUAL ADJUSTMENT

- Adjustment via 0-10 scale micrometer knob.



TECHNICAL DATA

Plunger Metering Pump Spring Return



- RBB series plunger metering pump with **AISI 316L** pump head.
- Chevron **PTFE** rings plunger packing with gland nut. **300l/h** max flow rate.

- Flow rates:** ● Max flow rate **300 L/h.**
- Motors:**
- Threephase special
- 0,20 / 0,30 kW -
4 Poles - IP55 - I.C.L.F - S1 - IEC 34-1
- | |
|-----------------------|
| Δ - 230 V - 50 Hz |
| λ - 400 V - 50 Hz |
| Δ - 220±290 V - 60 Hz |
| λ - 380±500 V - 60 Hz |
- Singlephase special
- 0,24 kW - 4 Poles
- IP55 - I.C.L.F - S1 - IEC 34-1
- | |
|-------------------|
| 220÷240 V - 50 Hz |
| 110÷115 V - 50 Hz |
| 220÷230 V - 60 Hz |
| 110÷115 V - 60 Hz |
- Pump:** ● Single unit
- Adjustment:** ● 0-10 scale micrometer knob
- Material:**
- Aluminium casing
 - PTFE coated cast iron lantern ring
- Stroke:** ● 15 mm.
- Weight:** ● 15±30 Kgs

50 Hz

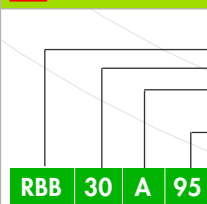
TYPE	STROKES /	MAX FLOW RATE l/h	MAX PRESSURE BAR			MOTOR kW		THREADED CONNECTIONS	
			A	ATL	P	3PH	1PH	A-ATL	P
RBB6	50	0,8	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB6	70	1,2	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB6	95	1,8	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB6	115	2,2	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB10	36	2	10	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB10	50	3	10	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB10	70	4	10	40	10	0,20	0,24	3/8" g.f. BSPF	1/4" g.f. BSPF
RBB10	95	5,5	10	40	10	0,20	0,24	3/8" g.f. BSPF	1/4" g.f. BSPF
RBB10	115	7	10	40	10	0,20	0,24	3/8" g.f. BSPF	1/4" g.f. BSPF
RBB16	36	5	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB16	50	7	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB16	70	11	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB16	95	15	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB16	115	18	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	36	15	10	30	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	50	20	10	30	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	70	30	10	30	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	95	38	10	25	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	115	45	10	20	10	0,20	0,24	3/8" g.f. BSPF	
RBB30	36	20	10	30	10	0,30	0,24	3/8" g.f. BSPF	
RBB30	50	30	10	30	10	0,30	0,24	3/8" g.f. BSPF	
RBB30	70	40	10	28	10	0,30	0,24	3/8" g.f. BSPF	
RBB30	95	55	10	23	10	0,30	0,24	3/8" g.f. BSPF	
RBB30	115	65	10	20	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	36	40	10	12	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	50	55	10	12	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	70	90	10	12	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	95	115	10	12	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	115	150	10	10	10	0,30	0,24	1/2" g.f. BSPF	
RBB50	36	58	10	-	10	0,30	0,24	1/2" g.f. BSPF	
RBB50	50	80	10	-	10	0,30	0,24	1/2" g.f. BSPF	
RBB50	70	120	10	-	10	0,30	0,24	1/2" g.f. BSPF	
RBB50	95	160	9	-	9	0,30	0,24	1/2" g.f. BSPF	
RBB50	115	200	7	-	7	0,30	0,24	1/2" g.f. BSPF	
RBB62	36	90	7	-	7	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF
RBB62	50	125	7	-	7	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF
RBB62	70	175	6	-	6	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF
RBB62	95	250	5	-	5	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF
RBB62	115	300	4	-	4	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF

60 Hz

RBB6	43	0,7	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB6	60	1	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB6	84	1,5	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB6	118	2,2	-	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB10	30	1,6	10	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB10	43	2,5	10	40	10	0,20	0,24	1/4" g.f. BSPF	
RBB10	60	3,4	10	40	10	0,20	0,24	3/8" g.f. BSPF	1/4" g.f. BSPF
RBB10	84	4,8	10	40	10	0,20	0,24	3/8" g.f. BSPF	1/4" g.f. BSPF
RBB10	118	7	10	40	10	0,20	0,24	3/8" g.f. BSPF	1/4" g.f. BSPF
RBB16	43	6	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB16	60	9,5	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB16	84	13	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB16	118	18	10	40	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	43	16	10	30	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	60	24	10	30	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	84	33	10	27	10	0,20	0,24	3/8" g.f. BSPF	
RBB25	118	45	10	20	10	0,20	0,24	3/8" g.f. BSPF	
RBB30	43	24	10	30	10	0,30	0,24	3/8" g.f. BSPF	
RBB30	60	34	10	30	10	0,30	0,24	3/8" g.f. BSPF	
RBB30	84	48	10	25	10	0,30	0,24	3/8" g.f. BSPF	
RBB30	118	65	10	20	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	43	50	10	12	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	60	78	10	12	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	84	100	10	12	10	0,30	0,24	3/8" g.f. BSPF	
RBB43	118	150	10	-	10	0,30	0,24	1/2" g.f. BSPF	
RBB50	43	70	10	-	10	0,30	0,24	1/2" g.f. BSPF	
RBB50	60	102	10	-	10	0,30	0,24	1/2" g.f. BSPF	
RBB50	84	140	9	-	9	0,30	0,24	1/2" g.f. BSPF	
RBB50	118	200	7	-	7	0,30	0,24	1/2" g.f. BSPF	
RBB62	43	105	7	-	7	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF
RBB62	60	152	6	-	6	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF
RBB62	84	205	5	-	5	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF
RBB62	118	300	4	-	4	0,30	-	3/4" g.f. BSPF	1/2" g.f. BSPF

* Pressure with singlephase motor decreases by 25% for sizes: RBB25-30-43ATL - RBB50 A/P.

MODEL NUMBER

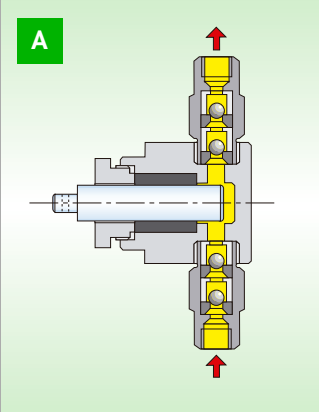


KEY TO SYMBOLS

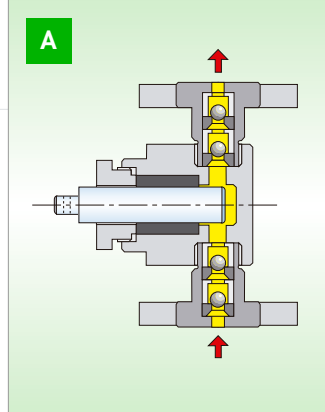
PUMP MODEL	
☑	PULLINGER
A	AISI-316L VERSION
P	PVC VERSION
STROKES PER MINUTE	
Z	OBL 4±20 mA ELECTRIC ACTUATOR
W	3±15 PSI PNEUMATIC ACTUATOR
F LINI-DIN FLANGED CONNECTIONS	
...	= 0 ÷ 10 BAR VERSION (NO NEED OF MODEL NO.)
TL	= 10 ÷ 40 BAR

PUMP HEADS MATERIALS OF CONSTRUCTION

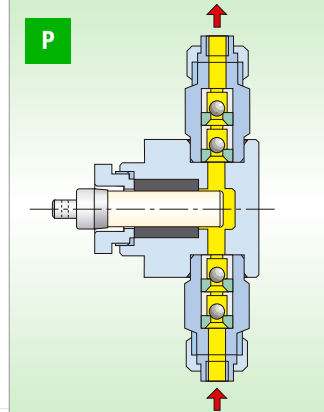
PARTICOLARI	A	P	P11	ATL	AC	AC TL
LIQUID END	AISI-316L	PVC	PVC	AISI-316L	AISI-316L	AISI-316L
PLUNGER	AISI-316L	CERAMIC	CERAMIC	AISI-316L	CERAMIC	CERAMIC
PLUNGER PACK.	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE.
VALVE SEAT	AISI-316L	PVC	AISI-316L	AISI-316L	AISI-316L	AISI-316L
VALVE AISI-316L	PIREX	AISI-316L	AISI-316L	AISI-316L	AISI-316L	
VALVE SEAL	FPM	FPM	FPM	FPM	FPM	FPM



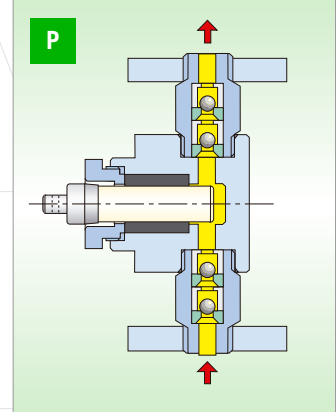
Stainless steel head. "A" execution. Threaded connections.



Stainless steel head. "A" execution. Flanged connections.



PVC head. "P" execution. Threaded connections.



PVC head. "P" execution. Flanged connections.

OVERALL DIMENSIONS

CONSTRUCTION CHARACTERISTICS

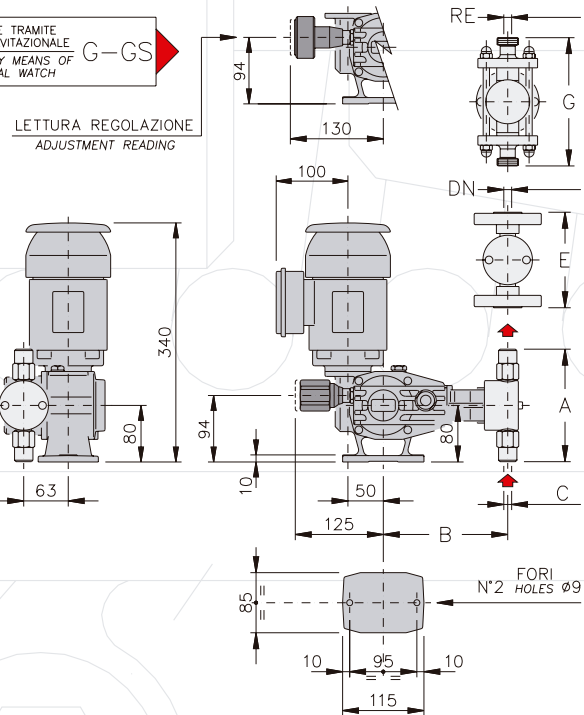
● **Mechanism:**

Mechanism and reduction gear are enclosed in an oil-bath lubricated aluminium casing. PTFE coated cast iron lantern ring.

● Smooth flowrate adjustment by control knob, both with pump running and at rest.

● 1.5 metres max suction lift.

REGOLAZIONE TRAMITE OROLOGIO GRAVITAZIONALE
ADJUSTMENT BY MEANS OF GRAVITATIONAL WATCH



TYPE	AISI 316 L										PVC					PVDF					DN ^{UNI}		DN ^{ANSI}						
	A	A ^{OV}	A ^{OVVL}	B	B ^{VL}	C g.f.	E	E ^{OV}	E ^{OVVL}	G	G ^{OV}	RE ^{DN}	A	A ^{OV}	B	C g.f.	E	E ^{OV}	A	A ^{OV}	B	C g.f.	E	E ^{OV}	AISI	PVC PVDF	AISI	PVC PVDF	
RBB 6	-	-	124	-	198	1/4" g.f. BSPF	-	-	100	200	246	10	-	140	197	1/4" g.f. BSPF	-	140	-	140	197	1/4" g.f. BSPF	-	140	15	15	1/2"	1/2"	
RBB 10	-	159	133	174	197	(0)	-	135	109	-	-	-	-	140	199	1/4" g.f. BSPF	-	140	-	140	199	1/4" g.f. BSPF	-	140	15	15	1/2"	1/2"	
RBB 16	-	159	150	173	195	3/8" g.f. BSPF	-	135	126	200	246	10	-	214	174	3/8" g.f. BSPF	-	160	-	181	191	3/8" g.f. BSPF	-	181	15	15	1/2"	1/2"	
RBB 25	121	159	150	173	195	3/8" g.f. BSPF	135	135	126	210	266	15	-	214	174	3/8" g.f. BSPF	160	160	-	186	191	3/8" g.f. BSPF	-	186	15	15	1/2"	1/2"	
RBB 30	121	159	150	176	195	3/8" g.f. BSPF	135	135	126	-	-	-	-	214	174	3/8" g.f. BSPF	160	160	-	186	191	3/8" g.f. BSPF	-	186	15	15	1/2"	1/2"	
RBB 43x	136	-	198	176	198	3/8" g.f. BSPF	150	-	-	252	308	20	-	246	177	3/8" g.f. BSPF	192	192	-	196	191	3/8" g.f. BSPF	-	196	15	15	1/2"	1/2"	
RBB 43z	156	-	198	176	198	1/2" g.f. BSPF	156	-	-	252	308	20	-	246	177	3/8" g.f. BSPF	192	192	-	196	191	3/8" g.f. BSPF	-	196	15	15	1/2"	1/2"	
RBB 50	156	-	-	180	-	1/2" g.f. BSPF	160	-	-	-	-	-	-	244	-	183	1/2" g.f. BSPF	204	-	194	-	183	1/2" g.f. BSPF	204	-	15	15	1/2"	1/2"
RBB 62	202	-	-	195	-	3/4" g.f. BSPF	187	-	-	280	-	20	250	-	205	1/2" g.f. BSPF	210	-	200	-	205	1/2" g.f. BSPF	210	-	20	15	3/4"	1/2"	

SECTIONAL VIEW

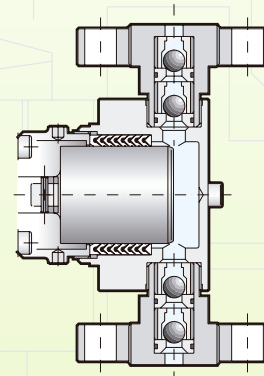
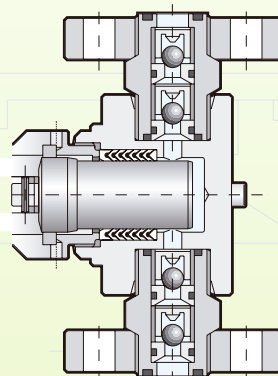
PUMP HEADS

- Execution with single ball and double check valves.
- Chevron reinforced PTFE plunger packing, adjustable via packing gland tightening.
- Suction and discharge connections normally threaded; on demand, flanged.
- The standard materials are listed at pag. 8.
- Executions in special materials can be supplied on demand.
- Max. temperature of metered liquid:
 - with stainless steel heads: 90°C.
 - with stainless steel heads and ceramic piston: 90°C.
 - with PVC heads: 40°C - with PVDF heads: 70°C.

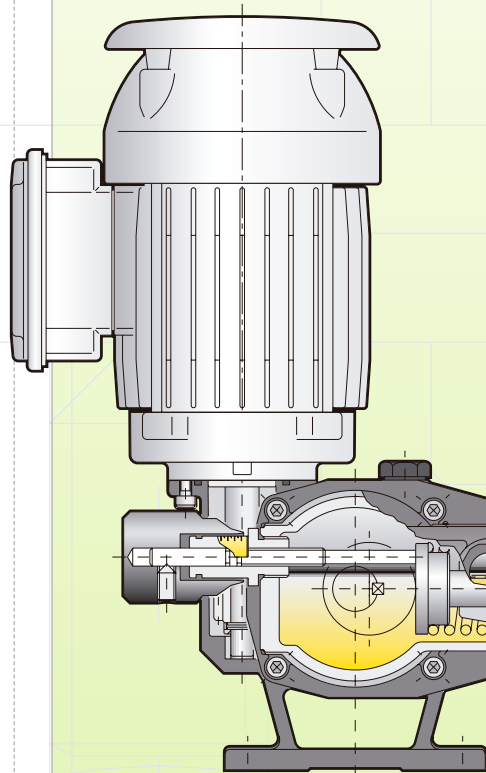
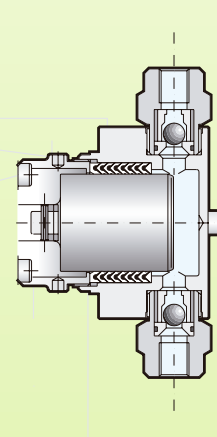
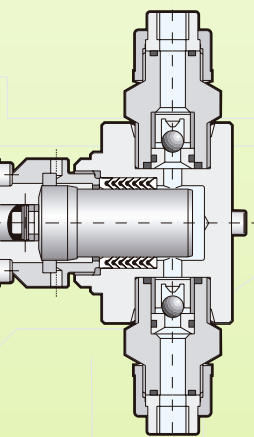
PVC

AISI 316L

FLANGED EXECUTIONS



THREADED EXECUTIONS



ADJUSTMENT SYSTEMS

- **Manual:** With 0-10 scale micrometer knob.
- **Electric:** Via **OBL** designed **Z** electrical actuator.
- **Pneumatic:** Via a 3÷15 PSI. **W** pneumatic actuator.

STANDARD MANUAL ADJUSTMENT

- Adjustment via 0-10 scale micrometer knob.



