



# **METERING PUMPS RB SERIES GROUP 64**

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UNI EN ISO 9001:2008 - Cert. n° 0302

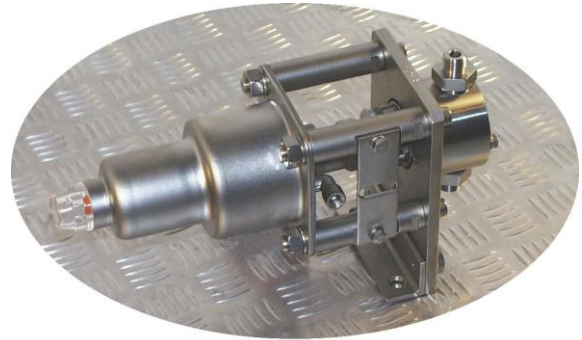




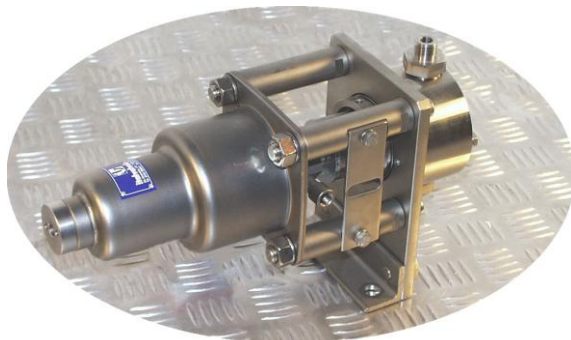
## FOREWORD

Pumps of the RB series are fixed displacement metering pumps. They are available in a wide range of types so as to satisfy the different metering requirements.

The metering accuracy and the material quality of materials make our pumps safe and reliable.



Pompa RB a semplice effetto



Pompa RB a doppio effetto

RB pumps are made of stainless steel, whereas all parts that are in contact with the fluids are made of AISI 316, VITON, Teflon/Graphite (materials that make the product suitable for the use with chemical agents).

As RB pumps operate with plunger, the use of fluids without suspended ma-

terials is advisable (otherwise a filter must be used), whenever possible leaks through the stuffing box do not give raise to dangerous situations.

RB pumps are pneumatically operated. The servo control can be single or double-acting.

The delivery is carried out once a cycle.

## USE FIELDS

Our RB metering pumps can be used in all those fields, where a constant and precise metering is required (chemical industry, dyeing industry, and so on).

## TECHNICAL CHARACTERISTICS

- 5 RB pump types are currently available: RB 25 – RB 30 – RB 43 – RB 50 – RB 62.



# RB PUMP USE AND MAINTENANCE HANDBOOK

**italvalvole<sup>®</sup> s.a.s.**  
di SPADON OSCAR & C.

Page 2

- The connections towards the system are "GAS" threaded

TYPE	RB 25	RB 30	RB 43	RB 50	RB 62
GAS FITTING	3/8" MALE	3/8" MALE	3/8" MALE	1/2" FEMALE	3/4" FEMALE

- Basic versions : – single-acting S.A. – double-acting D.A.
- RB pumps can be used with all fluids that are compatible with the following materials: AISI 316 , VITON , Teflon/Graphite.
- The operating temperature range of RB pumps is 0 to 145°C (when using PVC filter standing valves, the maximum temperature shall not exceed 50 °C ).

### TABLES OF CONSUMPTION AND THRUSTS OF RB PUMPS

Air consumption in NI for each cycle – S.A.

Pressure bar	NI Consumption	Soft thrust – starting – Kg	Soft thrust – final – Kg	Suction final thrust Kg
6	0.717	190	120	110

Air consumption in NI for each cycle – D.A.

Pressure – bar	Suction	Delivery	Total
3	0.392	0.597	0.777
4	0.498	0.492	0.99
5	0.604	0.597	1.201
6	0.709	0.701	1.41

$$Q_t = Q * n \quad \text{S.A.}$$

$$Q_t = ( Q_a + Q_m ) * n \quad \text{D.A.}$$

Qt = Total consumption

Q = S.A. consumption

Qa = Suction consumption

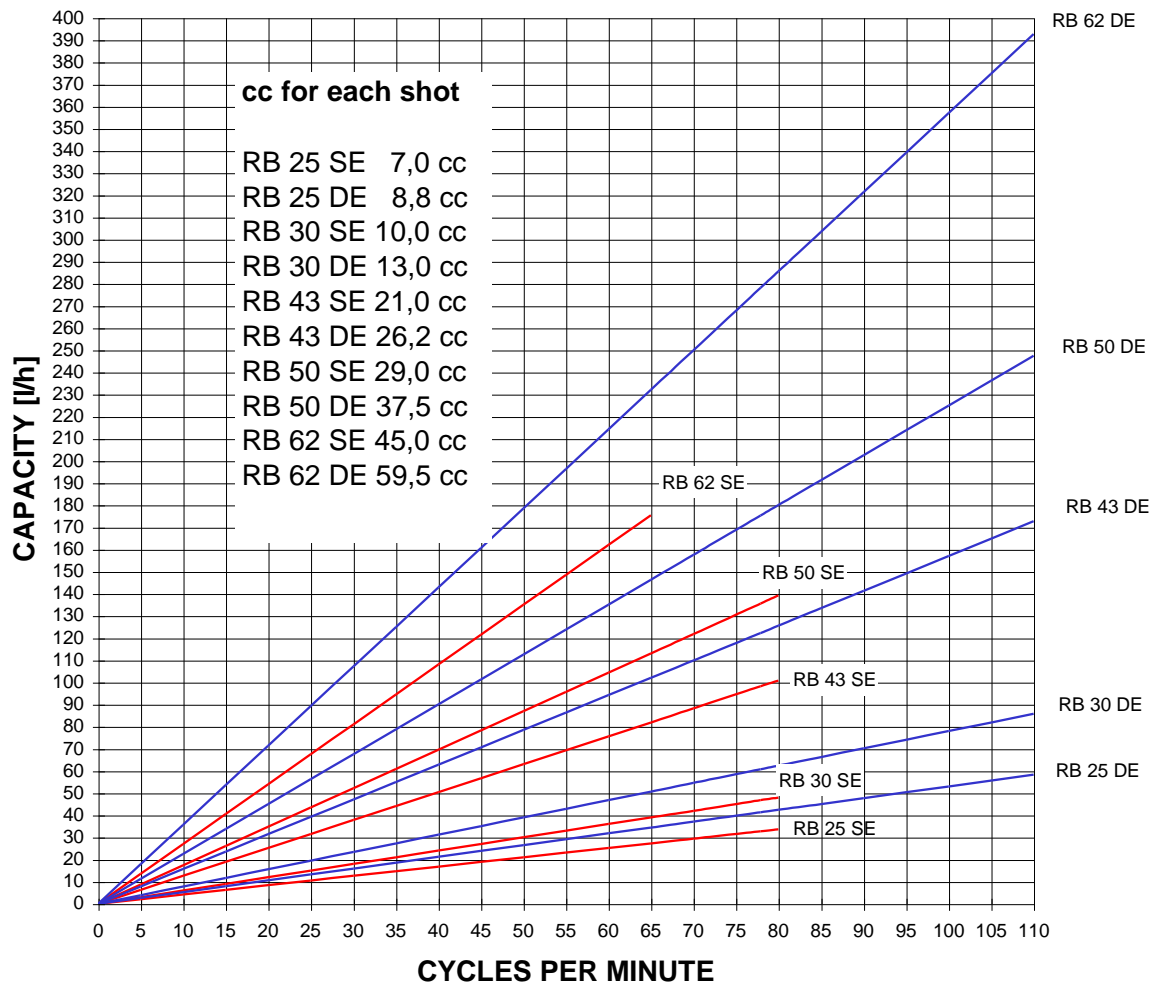
Qm = Delivery consumption

n = Number of operations



## GRAPHIC OF S.A. – D.A. RB PUMP CAPACITIES

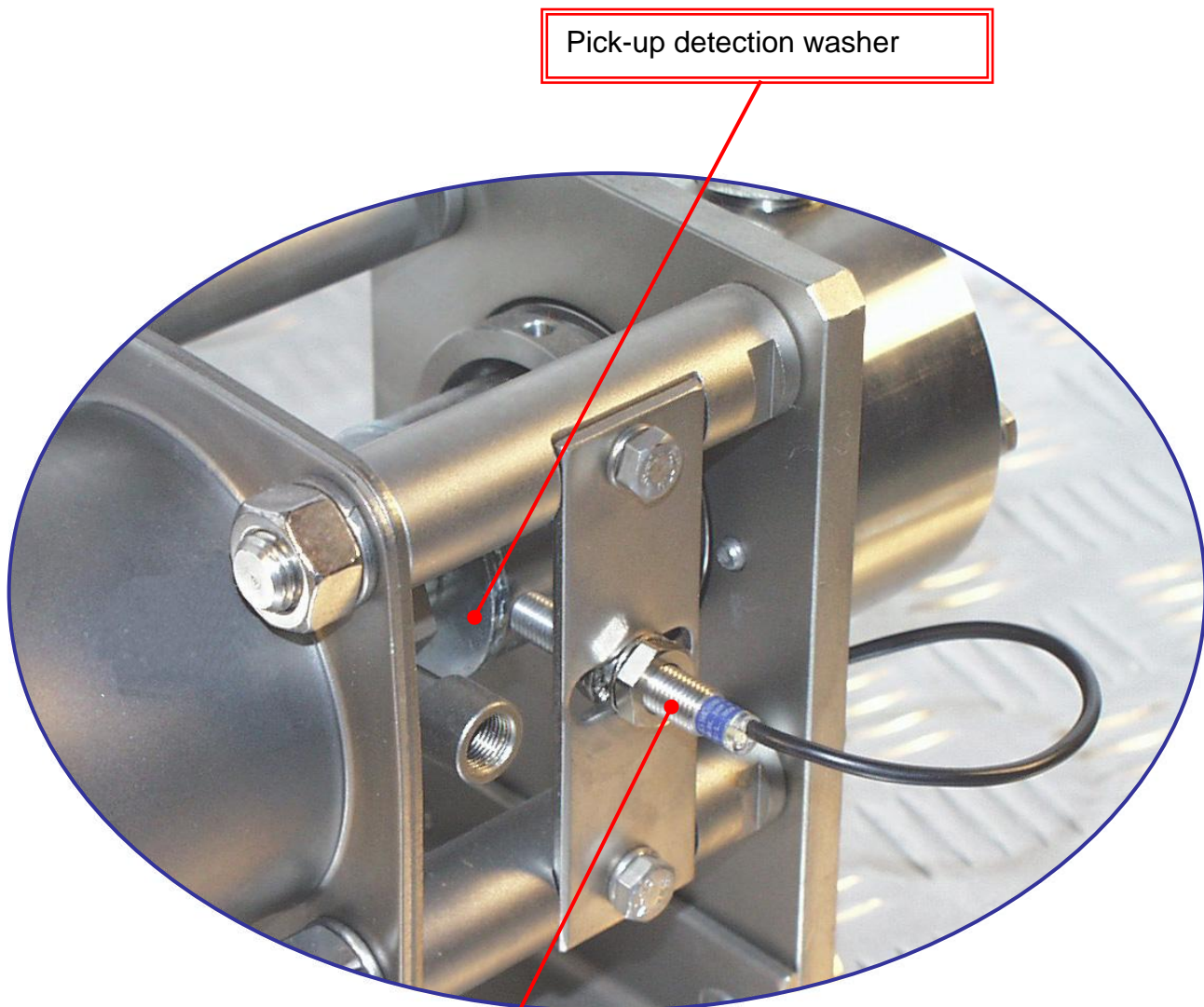
### SE - DE RB PUMP CAPACITY





## FITTINGS

As shown in the following picture pumps of the RB series can be fitted with an inductive proximity pickup, which indicates if the pump has completed the suction and delivery phases and, in general, allows to count the shots that have been carried out by the pump.



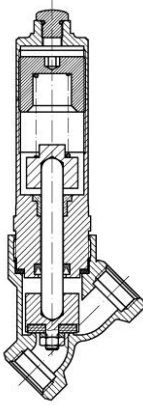
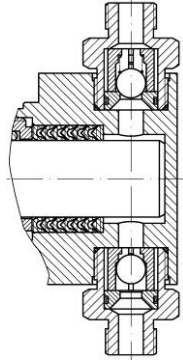
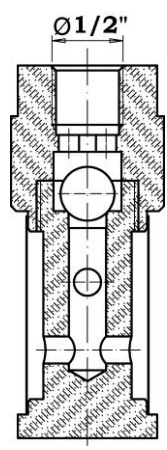
Pick-up detection washer

24....240 V AC/DC inductive proximity  
pick-up normally on

**GROUP 809**



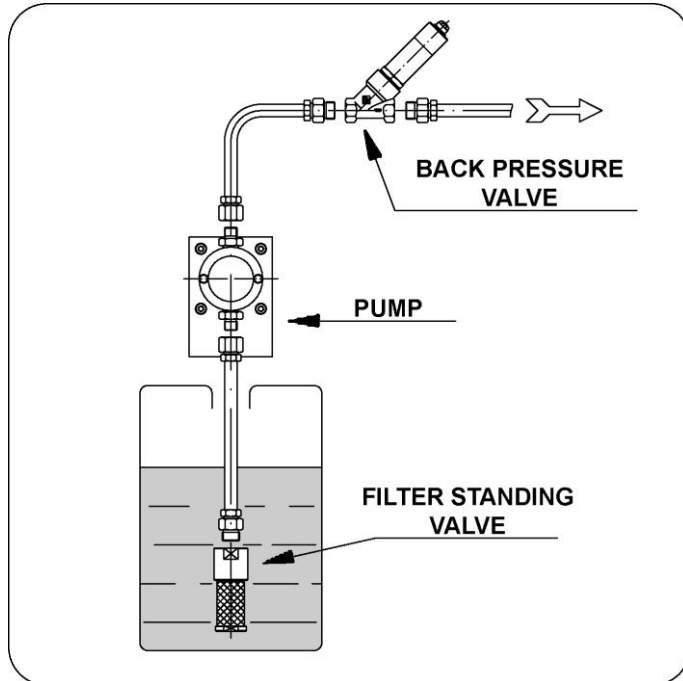
## FITTINGS

<p><b><u>Back pressure valve</u></b> <b><u>Group 17</u></b></p> 	BACK PRESSURE FITTING	OGIVAL FITTINGS 3/8" 8/10 PIPE			OGIVAL FITTINGS 1/2" 10/12 PIPE	
	PIPE	8/10 PIPE			10/12 PIPE	
	DELIVERY FITTING	FEMALE OGIVAL FITTINGS 3/8" 8/10 PIPE			OGIVAL FITTINGS 1/2" 10/12 PIPE	OGIVAL FITTINGS 3/4" 10/12 PIPE
<p><b><u>Check valves embodied in the pump</u></b></p> 	DELIVERY UNION	3/8" MALE	3/8" MALE	3/8" MALE	1/2" FEMALE	3/4" FEMALE
	PUMP	25	30	43	50	62
	SUCTION UNION	3/8" MALE	3/8" MALE	3/8" MALE	1/2" FEMALE	3/4" FEMALE
<p><b><u>Filter standing valve</u></b> <b><u>Group 50</u></b></p> 	SUCTION FITTING	FEMALE OGIVAL FITTINGS 3/8" 8/10 PIPE			OGIVAL FITTINGS 1/2" 10/12 PIPE	OGIVAL FITTINGS 3/4" 10/12 PIPE
	PIPE	8/10 PIPE			10/12 PIPE	
	FILTER FITTING	OGIVAL FITTINGS 1/2" 8/10 PIPE			OGIVAL FITTINGS 1/2" 10/12 PIPE	





## TYPES OF ASSEMBLY FOR RB PUMPS

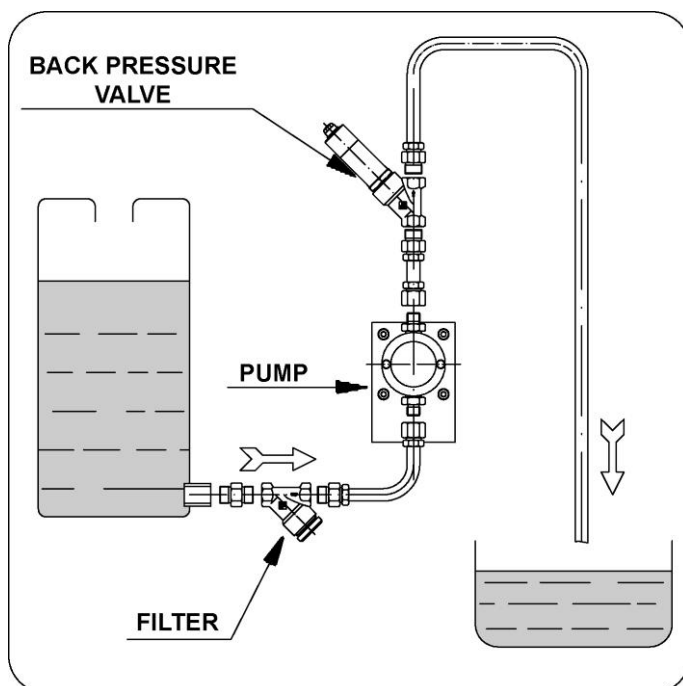


In the types of assembly shown herewith, a filter standing valve has been fitted on the suction pipe, carrying out two main functions:

- it guarantees that solid matters present in the tank are not sucked
- while the pump is not running, it does not allow the suction pipe to be emptied (in this case, the filter standing valve must be vertical).

The delivery back pressure valve does not allow the pumped liquid to come back into the pump and guarantees that it reaches the user with the minimum pressure defined by the calibration of the valve itself.

In the RB 62 types, a 1/2" back pressure valve is assembled so as to guarantee that the fluid reaches the user.



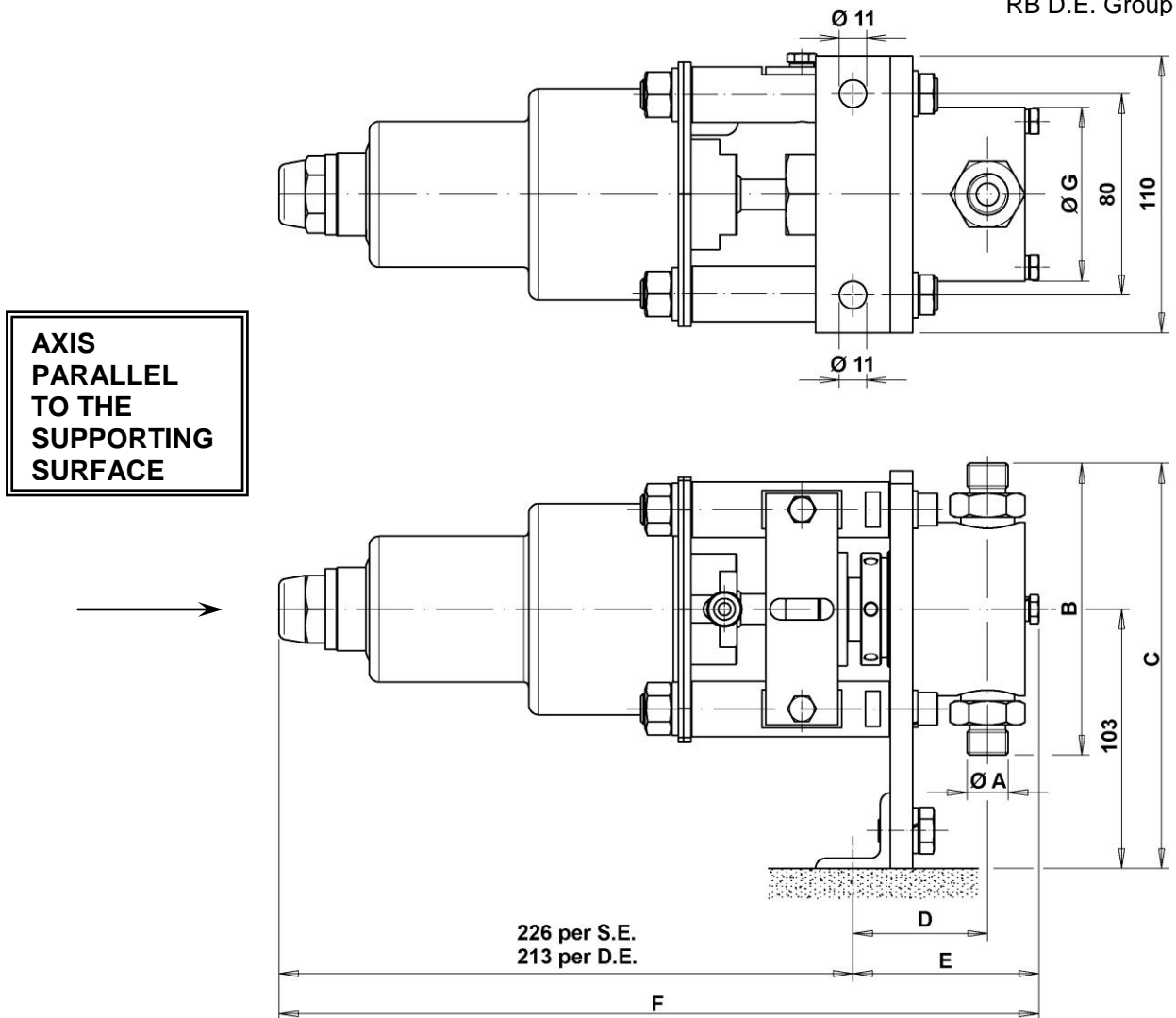
In this type of assembly, a filter has been fitted on the suction pipe.

If the pump is located underneath the suction tank head, one filter only needs to be assembled. Otherwise, a check valve shall be assembled after the filter.



## RB PUMP OVERALL DIMENSIONS

RB S.E. Group 64  
RB D.E. Group 64



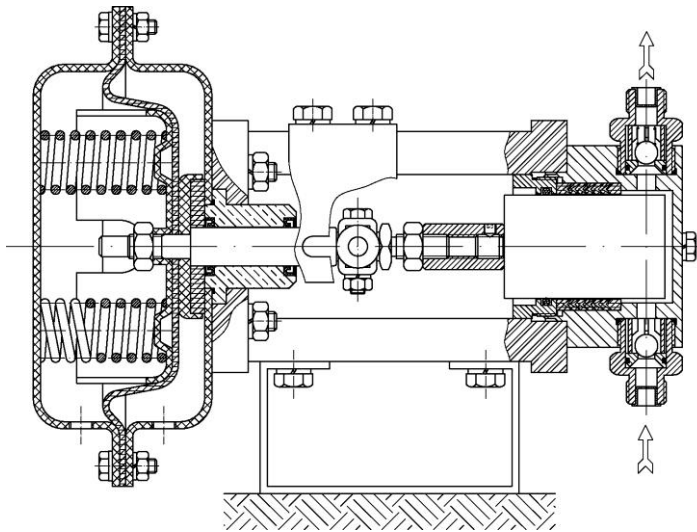
PUMP TYPE	Ø A	B	C	D	E	F		G
						S.A.	D.A.	
<b>RB 25</b>	3/8 " MALE	115	161	55	76	302	289	69
<b>RB 30</b>	3/8 " MALE	115	161	58	80	306	293	69
<b>RB 43</b>	3/8 " MALE	130	168	58	80	306	293	84
<b>RB 50</b>	1/2 " FEMALE	157	182	62	88	314	301	94
<b>RB 62</b>	3/4 " FEMALE	192	199	70	96	322	309	118

DWG. Nr. 940980





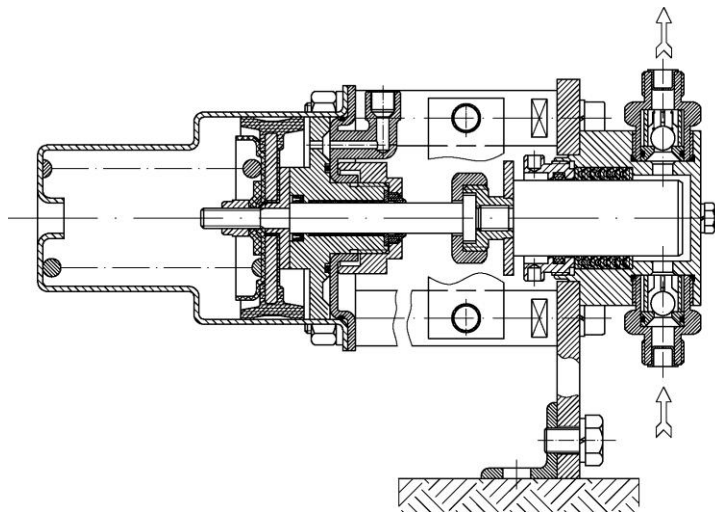
## TYPES OF RB PUMPS MANUFACTURED SINCE 1987



### **Position 1**

RB Pumps manufactured from 1987 to 1991

The RB pumps that have been manufactured up to 1991 were fitted with a servo control derived from the servo control of the SBS valves. RB 25-30-43-50 pumps were fitted with a 200 dia. servo control, whereas the RB 62 type was fitted with a 275 dia. servo control. Both simple and double-acting versions were available.

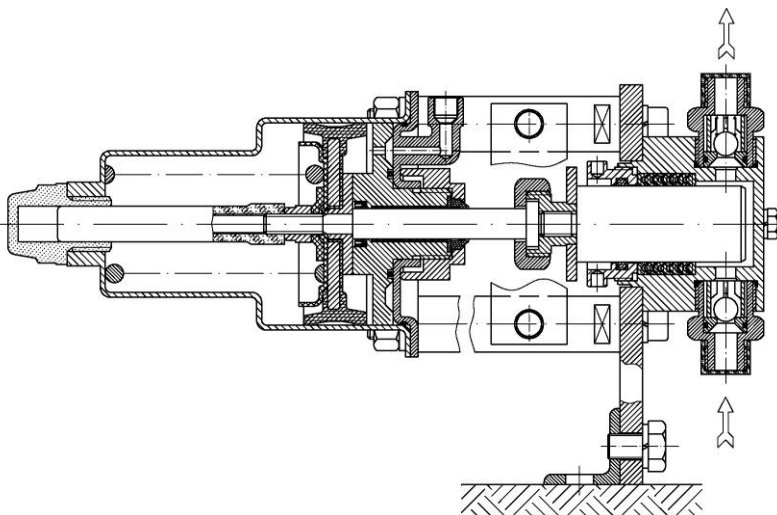


### **Position 2**

RB pumps manufactured from 1991 to 1993

RB pumps that have been manufactured from 1991 to 1993 were fitted with a servo control derived from the servo control of the stainless steel valves. Both simple and double-acting versions were available.

The spare parts of these pumps are the same as those of pumps currently on stream.



### **Position 3**

RB pumps manufactured since 1993

The pumps that have been manufacturing since 1993 are fitted with a servo control derived from the servo control of stainless steel valves. Unlike pumps under pos. 2, the simple-acting version is fitted with a visual device indicating the position of the pump piston. Both simple and double-acting versions are available.



## **ASSEMBLY**

- Air intake pipe diameter = 6 to 8 mm.
- Incoming air pressure = 6 bar for S.A. - from 3 to 6 bar for D.A.
- Assemble the back pressure valve in the delivery position .
- The pump shall be assembled horizontally, keeping the suction and delivery pumps on a vertical position.
- Assemble the filter in the suction position, in particular if the products to be metered contain suspended solid matters.
- A proper maintenance and frequent washings are necessary whenever products that might crystallize are to be used.

## **START-UP**

Though being the RB pumps of the self-priming type, when assembling the back pressure valve on the delivery position, start-up troubles might arise. Should this be the case, it is advisable to screw out the delivery valve and pour clean water on the head upper hole up to the overflow. Then, start-up the pump again.

## **FAILURES**

In case of operation anomalies, the following operations shall be carried out:

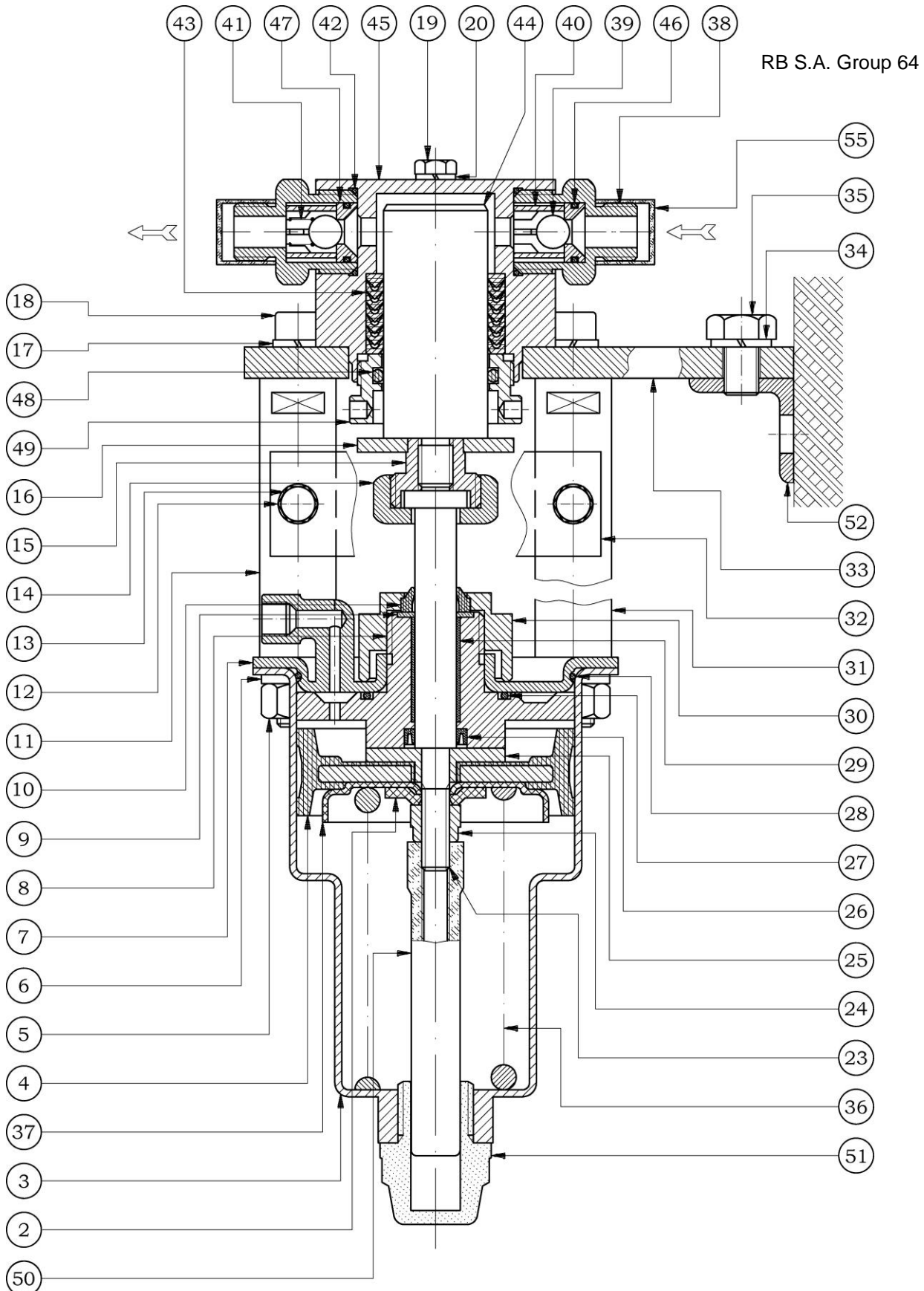
- Screw out and check the suction and delivery valves, one at a time, carefully re-assembling all the components after cleaning them. Replace the seat, whenever necessary.
- Check the suction filter, if any, and all the connection seals of the suction pipes.

## **TRANSPORT AND STORAGE**

- Throughout the transport and the storage period the protection plugs present on the head connections shall not be removed, in order to prevent foreign matters from entering the pump, thus damaging it.
- The pump shall not be subject to crashes that might endanger the proper operation.



## S.A. 25-62 RB PUMPS - SECTION PLANE



DWG. nr. 940984

Drawn up by : LF

Issue : 03

Approved by : LR

Date: Jan 25<sup>th</sup>, 2013



## MAINTENANCE OF S.A. RB PUMPS ( page10 )

Numbers in brackets refer to the number of the detail as indicated in the pump cutaway view.

### **DISASSEMBLY – AIR SIDE**

- Screw out the shaft stop nut (14).
- **CAUTION** : as the spring assembled inside the pump servo control is compressed, before screwing out the nuts (5) prearrange the locking of the servo control under press so as to keep the parts (3) and (7) steadily fastened one another.
- Remove washers (6)
- Remove the spring piston (3). This operation shall be easier if screws (18) and (12) are unloosen [to unloose screws (18) in the RB 62 types, the whole head shall be separated from the fastening hanger, unloosening the screws (19).]
- Remove the spring (36).
- Separate the air side from the liquid side.
- Screw out the stroke indicator (50).
- Screw out the self-braking nut (24).
- Withdraw the piston washer (2).
- Withdraw the piston lock support (37).
- Withdraw the piston with TDUOP gasket (4) and the TDUOP support (25).
- Withdraw the drive shaft (23).
- Screw out the connection block (30).
- Withdraw and replace the AS gasket (10).
- Separate the pump intermediate body (7) from the pump bush (8).
- Remove and replace the O-ring (28) from the pump intermediate body (7).
- Remove RULON washer lock (9).
- Remove and replace the piston skirt (29), the O-ring (27) and the NI gasket (26) from the pump bush (8).

### **MAINTENANCE AND ASSEMBLY – AIR SIDE**

- Connect the pump intermediate body (7) with the pump bush (8).
- Insert RULON washer lock (9).
- Screw down the connection block (30).
- Insert the drive shaft (23) making sure that the shaft stop nut (14) has been previously assembled on the shaft.
- Insert the TDUOP support (25).
- Insert the piston with TDUOP gasket (4).

- Insert piston lock support (37).
- Insert the piston support washer (2).
- Screw down the self-braking nut (24).
- Screw down the stroke indicator (50).
- Connect the air side to the liquid side.
- Tighten screws (12).
- Insert the spring (36) in the proper seat.
- Insert the spring piston (3) and block it under a press.
- Insert washers (6) and screw down nuts (5).
- Screw down the shaft stop nut (14).
- Tighten the screws (18) [In the case of the RB 62 type, after tightening the screws (18), the whole head shall be connected to the fastening hanger (33) by means of screws (19).

### **DISASSEMBLY - LIQUID SIDE**

- Screw out the shaft stop nut (14).
- Screw out the screws (19).
- Separate the pump whole head from the fastening hanger (33).
- Withdraw the pump piston from the head (44).
- Screw out the stuffing nut (49).
- Remove and replace the O-ring (48) of the stuffing nut.
- Remove and replace the stuffing box (43).
- Screw out the check valve heads (38), both suction and delivery.
- Withdraw the check valve spring seats (40).

### **MAINTENANCE AND ASSEMBLY – LIQUID SIDE**

- Carefully clean all components.
- Reassemble the check valves on the pump carefully paying attention to assemble the components in the same original sequence and position. The spring (41) shall be assembled in the delivery check valve.
- Fit the stuffing nut (49).
- Insert the pump piston (44) in the pump head (45), then tighten the stuffing nut (49).
- Fasten the whole head to the fastening hanger (33) by means of the screws (19)
- Screw down the shaft stop nut (14).





## MAINTENANCE OF D.A. RB PUMPS ( page13 )

Numbers in brackets refer to the number of the detail as indicated in the pump cutaway view.

### **DISASSEMBLY – AIR SIDE**

- Screw out the shaft stop nut (14).
- Screw out the nuts (5).
- Remove washers (6).
- Remove the spring piston (3). This operation shall be easier if screws (18) and screws (12) are unloosen [to unloose screws (18) in the RB 62 types, the whole head shall be separated from the fastening hanger, unloosening the screws (19).]
- Screw out the self-braking nut (53).
- Withdraw the economizer fastening screw (1) from the spring piston (3).
- Remove and replace the O-ring (21).
- Insert the economizer fastening screw (1) in the spring piston (3).
- Insert the stroke limiting device (22) and the plain washer (54) in the economizer fastening screw (1) and screw down the self-braking nut (53).
- Separate the air side from the liquid side.
- Screw out the self-braking nut (24).
- Withdraw the piston washer (2).
- Withdraw the piston with TDUOP gasket (4) and the TDUOP support (25).
- Withdraw the drive shaft (23).
- Screw out the connection block (30).
- Withdraw and replace the AS gasket (10).
- Separate the pump intermediate body (7) from the pump bush (8).
- Remove and replace the O-ring (28) from the pump intermediate body (7).
- Remove RULON washer lock (9).
- Remove and replace the piston skirt (29), the O-ring (27) and the NI gasket (26) from the pump bush (8).

### **MAINTENANCE AND ASSEMBLY – AIR SIDE**

- Connect the pump intermediate body (7) with the pump bush (8).
- Insert the RULON washer lock (9).
- Screw down the connection block (30).
- Insert the drive shaft (23) making sure that the shaft stop nut (14) has been previously assembled on the shaft.

- Insert the support for the TDUOP (25).
- Insert the piston with TDUOP gasket (4).
- Insert the piston washer (2).
- Screw down the self-braking nut (24).
- Connect again the air side to the liquid side.
- Tighten screws (12).
- Insert the spring piston (3).
- Insert washers (6) and screw down nuts (5).
- Screw down the shaft stop nut (14).
- Tighten screws (18) [In the case of the RB 62 type, after tightening the screws (18), the whole head shall be connected to the fastening hanger (33) by means of screws (19).

### **DISASSEMBLY - LIQUID SIDE**

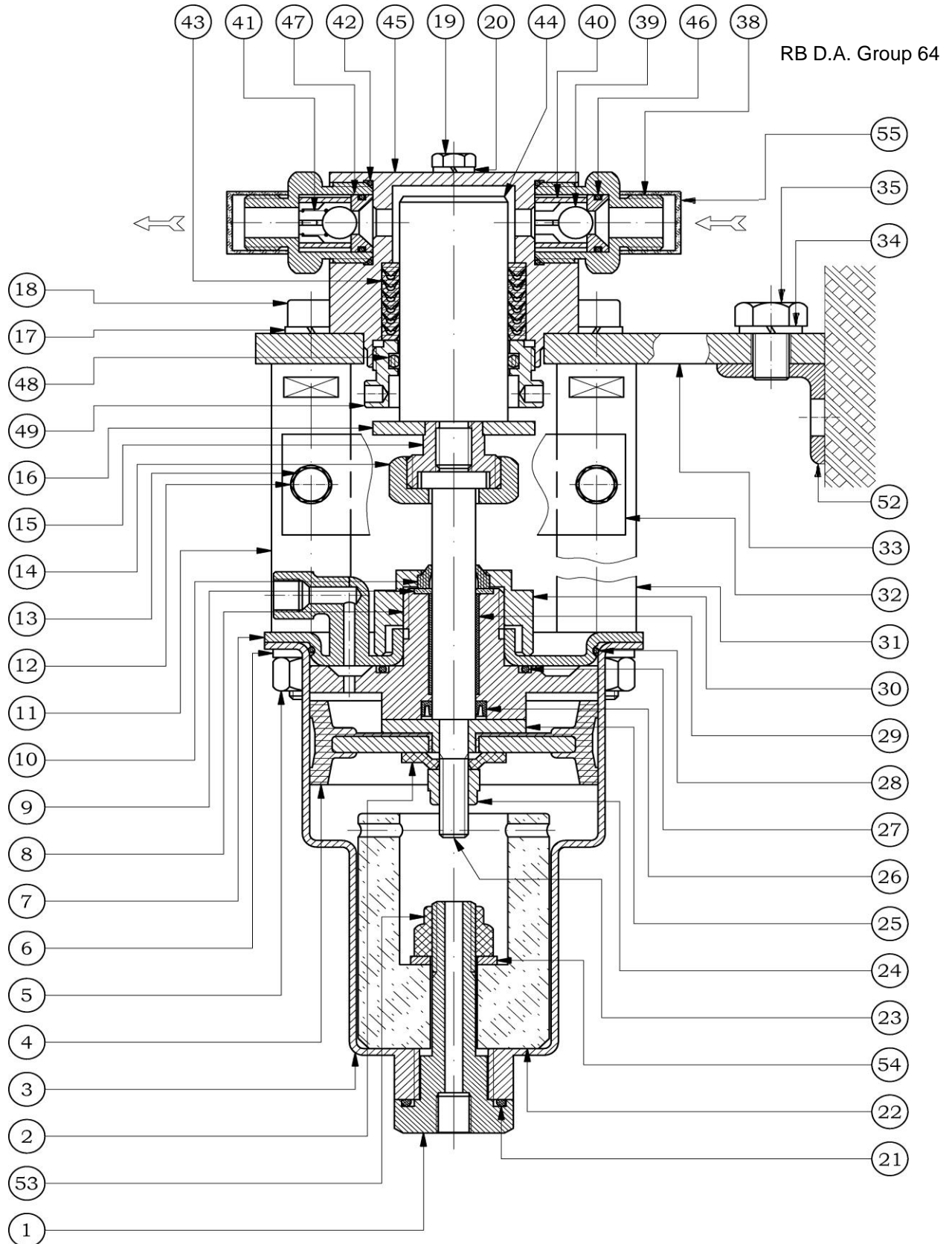
- Screw out the shaft stop nut (14).
- Screw out the screws (19).
- Separate the pump whole head from the fastening hanger (33).
- Withdraw the pump piston from the head (44).
- Screw out the stuffing nut (49).
- Remove and replace the O-ring (48) of the stuffing nut.
- Remove and replace the stuffing box (43).
- Screw out the check valve heads (38), both suction and delivery.
- Withdraw the check valve spring seats (40).

### **MAINTENANCE AND ASSEMBLY – LIQUID SIDE**

- Carefully clean all components.
- Reassemble the check valves on the pump carefully paying attention to assemble the components in the same original sequence and position. The spring (41) shall be assembled in the delivery check valve.
- Fit the stuffing nut (49).
- Insert the pump piston (44) in the pump head (45), then tighten the stuffing nut (49).
- Fasten the whole head to the fastening hanger (33) by means of the screws (19)
- Screw down the shaft stop nut (14).



## D.A. 25-62 RB PUMPS - SECTION PLANE



DWG. nr. 940984

Drawn up by : LF

Issue : 03

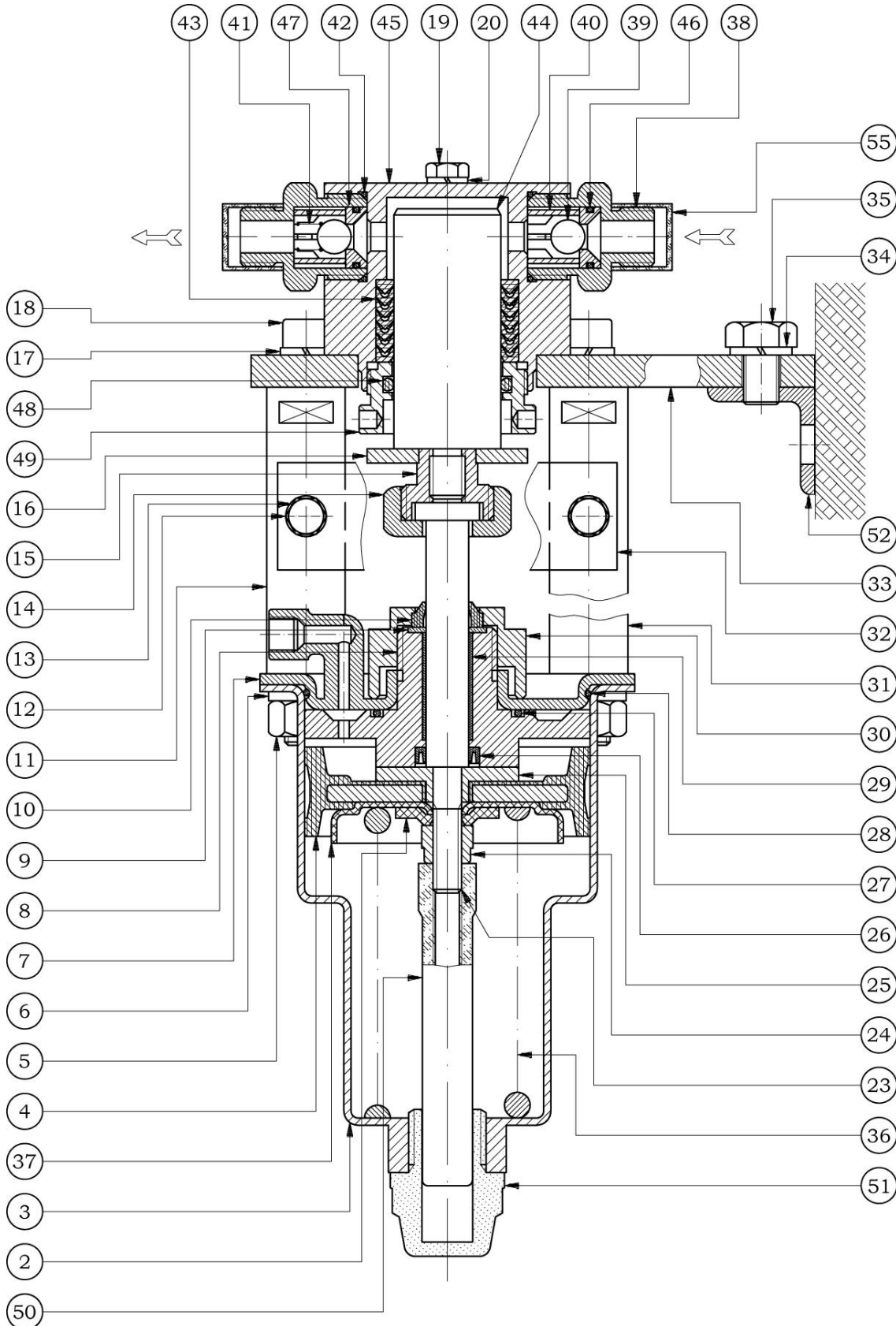
Approved by : LR

Date: Jan 25<sup>th</sup>, 2013





## S.A. 25-62 RB PUMPS - SECTION PLANE



DWG. nr. 940984

Drawn up by : LF

Issue : 03

Approved by : LR

Date: Jan 25<sup>th</sup>, 2013



# RB PUMP USE AND MAINTENANCE HANDBOOK

DETAIL Nr.	Q.ty	DESCRIPTION	MATERIAL	GROUP	RB 25	RB 30	RB 43	RB 50	RB 62
2	1	Piston washer	Fe 360	671			RAD087234		
3	1	Spring piston	AISI 304	651			NPMD88035		
4	1	Piston with TDUOP gasket	NBR STEEL	566			TDUOP8073		
5	4	Nut	AISI 304	501			D12055884		
6	4	Washer	AISI 304	503			RE1200304		
7	1	Pump intermediate body	AISI 304	797			PSED931089		
8	1	Pump bush	ASTM-A105	784			RB2591418		
9	1	RULON washer lock	BRASS	703			RDD092802		
10	1	AS gasket	GACO	511			GDAS00124		
11	2	Distance ring	AISI 316	522			NDID91421		
12	2	Screw	AISI 304	500			VTE062004		
13	2	Washer	AISI 304	503			RE0600304		
14	1	Shaft stop nut	AISI 316	734			PDED91416		
15	1	Connection block	AISI 304	777			RB2591415		
16	1	Sensor detection washer	Fe 360	703			RDD091417		
17	4	Washer	AISI 304	503		RE0800304			-
18	4	Screw	AISI 304	551		TCCE08254			VTP080204
19	2	Screw	AISI 304	500	VTE0605514	VTE066004	VTE066504		VTE088004
20	2	Washer	AISI 304	503		RE0600304			RE0800304
23	1	Drive shaft	AISI 304	787			RB2591420		
24	1	Self-braking nut	Fe 360	576			D08AUTOFE		
25	1	Support for TDUOP	ASTM-A105	545			AFD092610		
26	1	NI gasket	GACO	511			GD00NI184		
27	1	O-Ring gasket	GACO	548			OR03143GA		
28	1	O-Ring gasket	GACO	548			OR03300GA		
29	1	Piston skirt	RULON	732			PDED92803		
30	1	Connection block	AISI 304	777			RB2591419		
31	2	Distance ring	AISI 316	522			NDID91428		
32	1	Sensor hanger	AISI 304	775			RB2591429		
33	1	Hanger	AISI 304	623	RB2591424		RB4391427	RB5091432	RB6291435
34	2	Washer	AISI 304	503			RE1000304		
35	2	Screw	AISI 304	500			VTE101604		
36	1	Spring	STEEL FOR SPRINGS	552			MTD088167		
37	1	Piston lock support	Fe 360	545			AFD087240		
38	2	Check valve head	AISI 316	740		VRTD91387		VRCD91392	VRCD91398
39	2	Globe	AISI 316	588		S00003806		S00005806	S00003406
40	2	Check valve spring holder	AISI 316	819		M316092485		M316960363	M316960364
41	1	Spring	AISI 316	552		MTD091410		MTD091396	MTD091402
42	2	O-Ring	VITON	548		OR02081VI		OR03112VI	OR03131VI
43	1	Stuffing box	TEF/GRAF	587	2731	2732	2733	2734	2735
44	1	Pump piston	AISI 316	731	PDED931056	PDED931059	PDED931062	PDED931065	PDED931068
45	1	Pump head	AISI 316	785	RB25931058	RB30931061	RB43931064	RB50931067	RB62931070
46	2	O-Ring	VITON	548		OR02056VI		OR02087VI	OR03093VI
47	2	Check valve housing	AISI 316	720		VRSD91388		VRSD91394	VRSD91400
48	1	O-Ring	VITON	548	OR04100VI	OR04118VI	OR00147VI	OR00153VI	OR00165VI
49	1	Stuffing box screw	AISI 316	559	VVD0931057	VVD0931060	VVD0931063	VVD0931066	VVD0931069
50	1	Stroke indicator	RED PVC	840			ICD091256		
51	1	Transparent cap	PLASTIC	840			ICD091467		
52	1	Hanger	AISI 304	623			RB2592363		
55	2	Pipe outside protection	POLYETH.	505		T013PT0012		T01ST00190	T01ST00250

## COMPONENTS AND SPARE PARTS FOR S.A. RB PUMPS

S.A. RB Group 64

THE COMPONENTS THAT ARE LISTED IN THIS PAGE REFER TO DWG. nr. 940984 OF PAGE 14

### GROUP 106

SPARE PARTS COMPLETE SET FOR S.A. RB PUMPS MANUFACTURED SINCE 1991  
POSITION 2-3

#### SPARE PARTS COMPLETE SET – AIR SIDE

SPARE PARTS CODE		4002					4831
COMP.	Q.TY	RB 25	RB 30	RB 43	RB 50	RB 62	RB 80
4	1			TDUOP8073			TDUOP1254
10	1			GDAS00124			GDASOB164
26	1			GD00NI184			BA0V16305
27	1			OR03143GA			OR02056VI
28	1			OR03300GA			OR03475GA
29	1			PDED92803			-

#### SPARE PARTS COMPLETE SET – LIQUID SIDE

SPARE PARTS CODE		2739	2740	2741	2742	2743	4830
COMP.	Q.TY	RB 25	RB 30	RB 43	RB 50	RB 62	RB 80
41	1			MTD091410	MTD091396	MTD091402	MTD087148
42	*			OR02081VI	OR03112VI	OR03131VI	OR03156VI
43	1	2731	2732	2733	2734	2735	PPST950218
46	21			OR02056VI	OR02087VI	OR03093VI	OR02137VI
48	1	OR04100VI	OR04118VI	OR00147VI	OR00153VI	OR00165VI	-

\* N° 2 PER LE POMPE RB DA 25 A 62 – N° 4 PER LA POMPA RB 80



DETAIL Nr.	Q.ty	DESCRIPTION	MATERIAL	GROUP	RB 25	RB 30	RB 43	RB 50	RB 62
1	1	Economizer fastening screw	AISI 420	779			RB2592606		
2	1	Piston washer	Fe 360	671			RAD087234		
3	1	Spring piston	AISI 304	651			NPMD88035		
4	1	Piston with TDUOP gasket	STEEL NBR	566			TDUOP8073		
5	4	Nut	AISI 304	501			D12055884		
6	4	Washer	AISI 304	503			RE1200304		
7	1	Pump intermediate body	AISI 304	797			PSD931089		
8	1	Pump bush	ASTM-A105	784			RB2591418		
9	1	RULON washer lock	BRASS	703			RDD092802		
10	1	AS gasket	GACO	511			GDAS00124		
11	2	Distance ring	AISI 316	522			NDID91421		
12	2	Screw	AISI 304	500			VTE062004		
13	2	Washer	AISI 304	503			RE0600304		
14	1	Shaft stop nut	AISI 316	734			PDED91416		
15	1	Connection block	AISI 304	777			RB2591415		
16	1	Sensor detection washer	Fe 360	703			RDD091417		
17	4	Washer	AISI 304	503		RE0800304			-
18	4	Screw	AISI 304	551		TCCE08254			VTP080204
19	2	Screw	AISI 304	500	VTE0605514	VTE066004	VTE066504		VTE088004
20	2	Washer	AISI 304	503		RE0600304			RE0800304
21	1	O-Ring	GACO	548		533			
22	1	Stroke limiting device	PVC	781			RB2592608		
23	1	Drive shaft	AISI 304	787			RB2591420		
24	1	Self-braking nut	Fe 360	576			D08AUTOFE		
25	1	Support for TDUOP	ASTM-A105	545			AFD092610		
26	1	NI gasket	GACO	511			GD00NI184		
27	1	O-Ring gasket	GACO	548			OR03143GA		
28	1	O-Ring gasket	GACO	548			OR03300GA		
29	1	Piston skirt	RULON	732			PDED92803		
30	1	Connection block	AISI 304	777			RB2591419		
31	2	Distance ring	AISI 316	522			NDID91428		
32	1	Sensor hanger	AISI 304	775			RB2591429		
33	1	Hanger	AISI 304	623	RB2591424		RB4391427	RB5091432	RB6291435
34	2	Washer	AISI 304	503			RE1000304		
35	2	Screw	AISI 304	500			VTE101604		
38	2	Check valve head	AISI 316	740		VRTD91387		VRCD91392	VRCD91398
39	2	Globe	AISI 316	588		S00003806		S00005806	S00003406
40	2	Check valve spring holder	AISI 316	819		M316092485		M316960363	M316960364
41	1	Spring	AISI 316	552		MTD091410		MTD091396	MTD091402
42	2	O-Ring	VITON	548		OR02081VI		OR03112VI	OR03131VI
43	1	Stuffing box	TEF/GRAF	587	2731	2732	2733	2734	2735
44	1	Pump piston	AISI 316	731	PDED931056	PDED931059	PDED931062	PDED931065	PDED931068
45	1	Pump head	AISI 316	785	RB25931058	RB30931061	RB43931064	RB50931067	RB62931070
46	2	O-Ring	VITON	548		OR02056VI		OR02087VI	OR03093VI
47	2	Check valve housing	AISI 316	720		VRSD91388		VRSD91394	VRSD91400
48	1	O-Ring	VITON	548	OR04100VI	OR04118VI	OR00147VI	OR00153VI	OR00165VI
49	1	Stuffing box screw	AISI 316	559	VVD0931057	VVD0931060	VVD0931063	VVD0931066	VVD0931069
52	1	Hanger	AISI 304	623			RB2592363		
53	1	Self-braking nut	Fe 360	576			D12AUTOFE		
54	1	Washer	AISI 304	502			RP1200304		
55	2	Pipe outside protection	POLYETH.	505		T013PT0012		T01ST00190	T01ST00250

## COMPONENTS AND SPARE PARTS FOR D.A. RB PUMPS

D.A. RB Group 64

THE COMPONENTS THAT  
ARE LISTED IN THIS PAGE  
REFER TO DWG. nr. 940985  
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### GROUP 106

SPARE PARTS COMPLETE SET FOR S.A. RB PUMPS MANUFACTURED SINCE 1991  
POSITION 2-3

#### SPARE PARTS COMPLETE SET – AIR SIDE

SPARE PARTS CODE		4003					4832
COMP.	Q.ty	RB 25	RB 30	RB 43	RB 50	RB 62	RB 80
4	1			TDUOP8073			TDUOP1254
10	1			GDAS00124			GDASOB164
21	1			533			OR03112VI
26	1			GD00NI184			BA0V16305
27	1			OR03143GA			OR02056VI
28	1			OR03300GA			OR03475GA
29	1			PDED92803			-

#### SPARE PARTS COMPLETE SET – LIQUID SIDE

SPARE PARTS CODE		2739	2740	2741	2742	2743	4830
COMP.	Q.ty	RB 25	RB 30	RB 43	RB 50	RB 62	RB 80
41	1			MTD091410	MTD091396	MTD091402	MTD087148
42	*			OR02081VI	OR03112VI	OR03131VI	OR03156VI
43	1	2731	2732	2733	2734	2735	PPST950218
46	21			OR02056VI	OR02087VI	OR03093VI	OR02137VI
48	1	OR04100VI	OR04118VI	OR00147VI	OR00153VI	OR00165VI	-

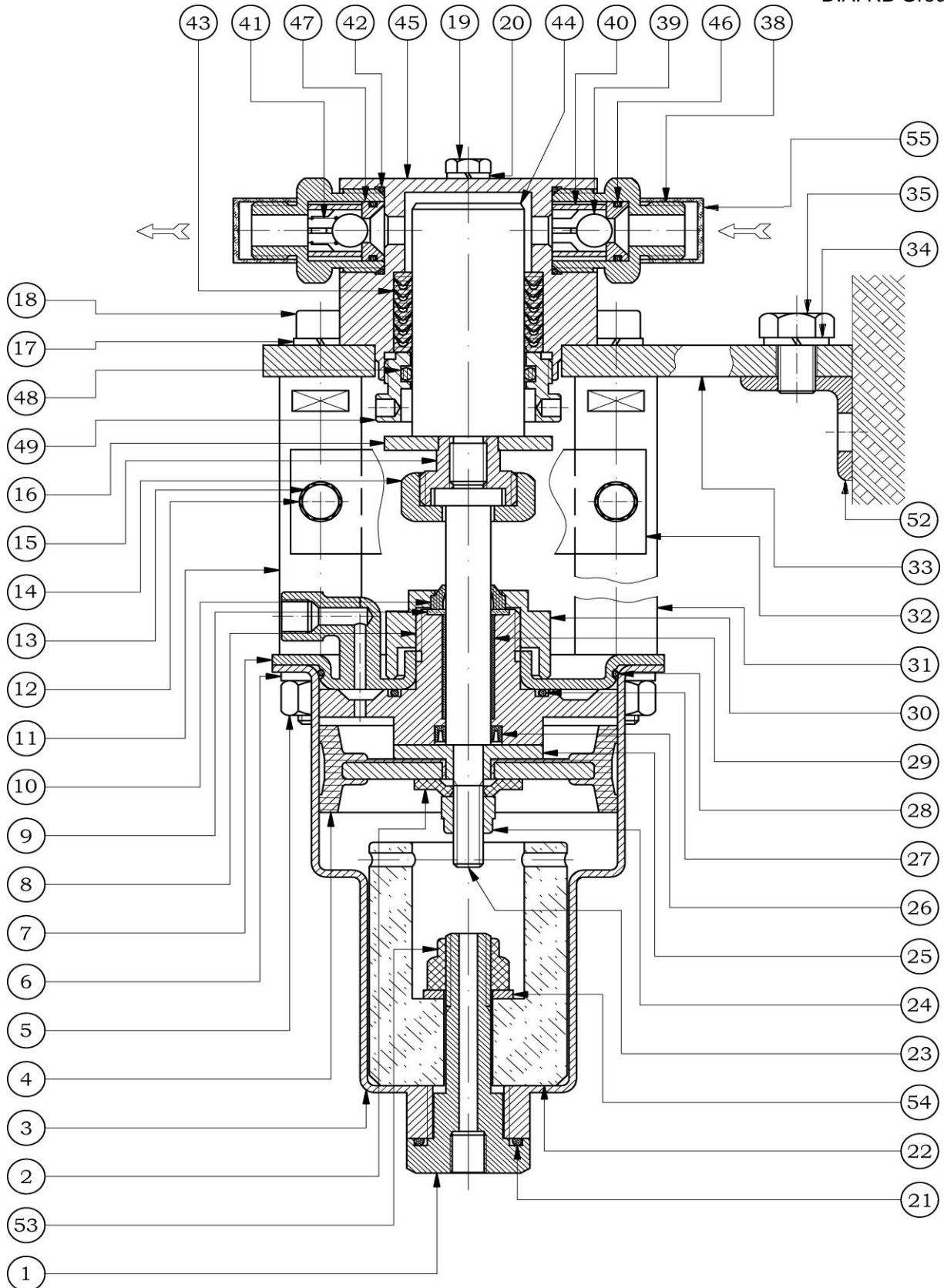
\* Nr. 2 FOR 25 TO 62 RB PUMPS – Nr.° 4 FOR RB 80 PUMP





## D.A. RB PUMPS - SECTION PLANE

D.A. RB Group 64



DWG. Nr. 940985

Drawn up by : LF

Issue : 03

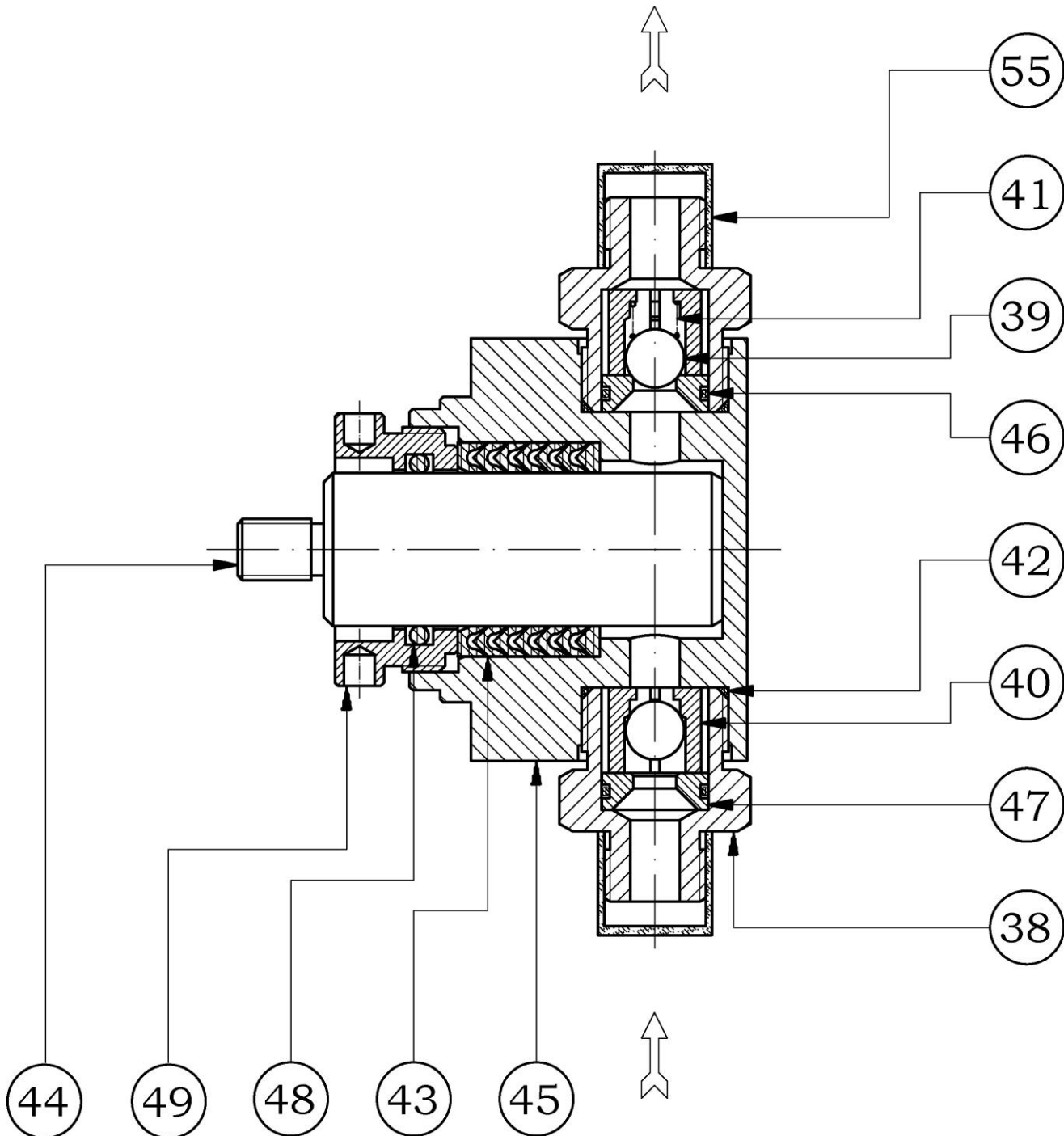
Approved by : LR

Date: Jan 25<sup>th</sup>, 2013



## RB PUMP WHOLE HEADS - SECTION PLANE

RB PUMP SPARE PARTS  
Group 106





## DETAILS OF RB PUMPS WHOLE HEADS

THE COMPONENTS LISTED  
IN THIS PAGE REFER TO  
DRAWING NR. 940986 OF  
PAGE 18

### Group 106

#### RB 25 – 62 PUMP WHOLE HEADS

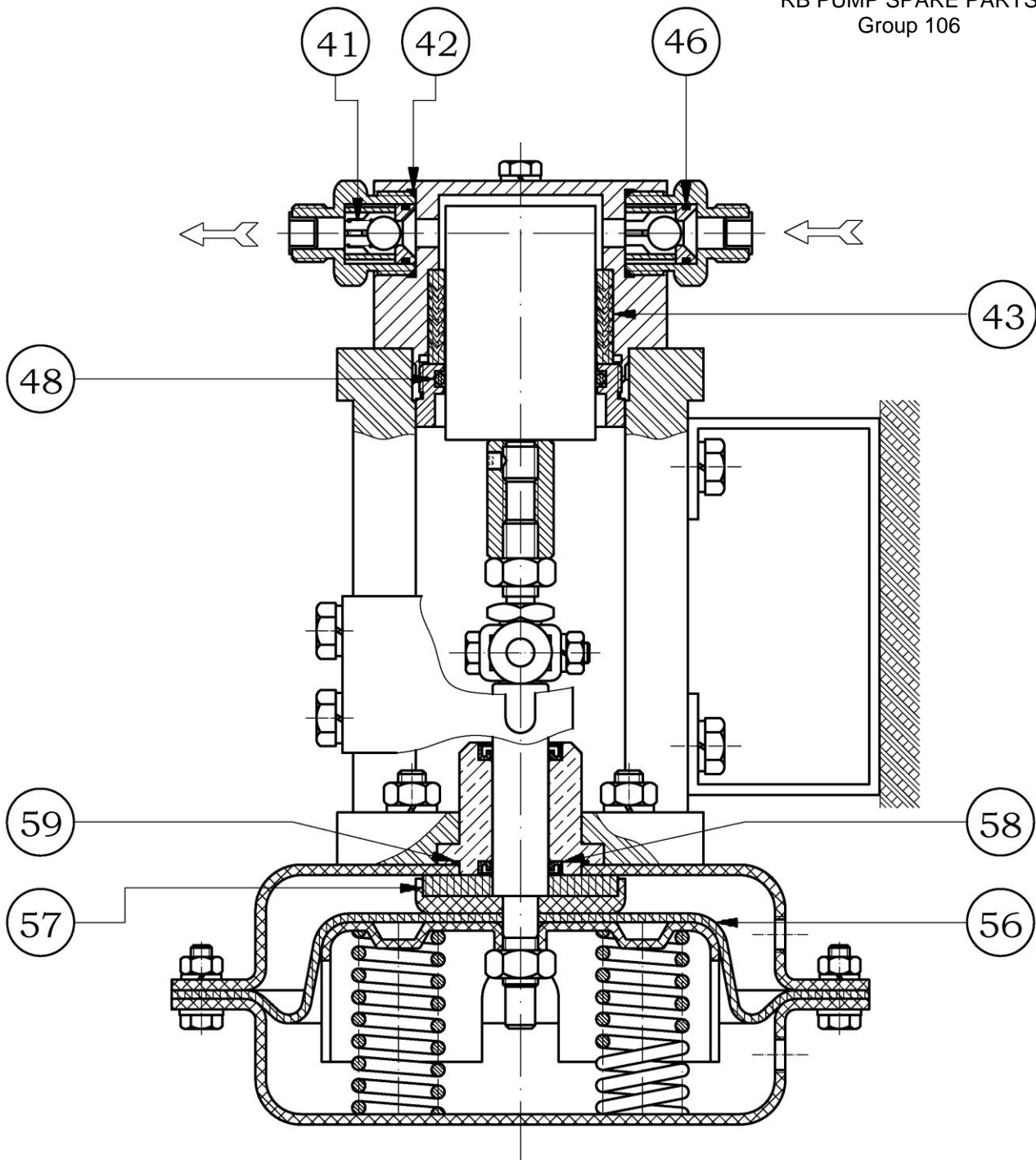
WHOLE HEAD CODES		5362	5363	6093	6094	6095
COMP	Q.ty	RB 25	RB 30	RB 43	RB 50	RB 62
38	2	VRTD91387			VRCD91392	VRCD91398
39	2	S00003806			S00005806	S00003406
40	2	M316092485			M316960363	M316960364
41	1	MTD091410			MTD091396	MTD091402
42	2	OR02081VI			OR03112VI	OR03131VI
43	1	2731	2732	2733	2734	2735
44	1	PDED931056	PDED931059	PDED931062	PDED931065	PDED931068
45	1	RB25931058	RB30931061	RB43931064	RB50931067	RB62931070
46	2	OR02056VI			OR02087VI	OR03093VI
47	2	VRSD91388			VRSD91394	VRSD91400
48	1	OR04100VI	OR04118VI	OR00147VI	OR00153VI	OR00165VI
49	1	VVD0931057	VVD0931060	VVD0931063	VVD0931066	VVD0931069
55	2	T013PT0012			T01ST00190	T01ST00250





## RB PUMPS MANUFACTURED FROM 1987 TO 1991 - SECTION PLANE

RB PUMP SPARE PARTS  
Group 106





## RB PUMPS MANUFACTURED FROM 1987 TO 1991- SPARE PARTS

THE COMPONENTS LISTED  
IN THIS PAGE REFER TO  
DWG. NR. 940972 OF PAGE  
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### GROUP 106

SPARE PARTS COMPLETE SET FOR RB PUMPS MANUFACTURED FROM 1987 TO 1991  
POSITION 1

#### SPARE PARTS COMPLETE SET – AIR SIDE

SPARE PARTS CODE		6096				6097	
COMP.	Q.ty	RB 25	RB 30	RB 43	RB 50	RB 62	MATERIAL
56	1	1425				1426	NBR
57	1	RB2587002					RUBBER
58	2	BA0016244					GACO
59	1	OR02137GA					GACO

#### SPARE PARTS COMPLETE SET – LIQUID SIDE

SPARE PARTS CODE		2739	2740	2741	2742	2743	
COMP.	Q.ty	RB 25	RB 30	RB 43	RB 50	RB 62	MATERIAL
41	1	MTD091410			MTD091396	MTD091402	AISI 316
42	2	OR02081VI			OR03112VI	OR03131VI	VITON
43	1	2731	2732	2733	2734	2735	TEF/GRAF
46	2	OR02056VI			OR02087VI	OR03093VI	VITON
48	1	OR04100VI	OR04118VI	OR00147VI	OR00153VI	OR00165VI	VITON

SHOULD A SPARE PART OF THE AIR SIDE  
BE REQUIRED FOR A S.A. RB PUMP OF THE  
OLD TYPE WITH MECHANIC STOP, A  
GASKET **COD. OR04112GA** SHALL BE  
REQUIRED BESIDES THE COMPONENTS  
INCLUDED IN THE A.M. CODE



# RB PUMP USE AND MAINTENANCE HANDBOOK

**italvalvole**® s.a.s.  
di SPADON OSCAR & C.

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