

Signal **S300 SERIES**

www.signal-pumps.co.uk



S300 RBA/RBB series spring return plunger metering pump

Operating capacities
from 5 to 300 litres/hour
from 40 to 4 bar

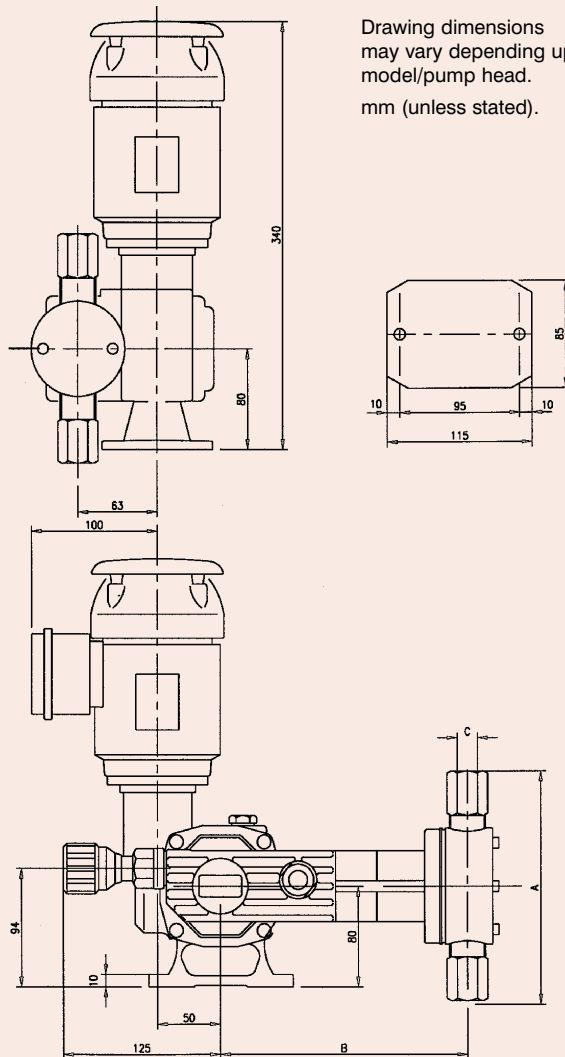
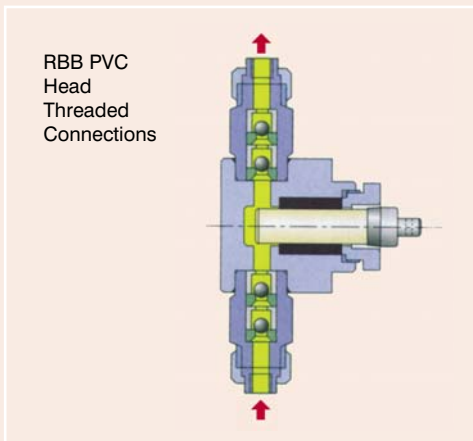
- Anodised aluminium gearbox pumps with choice of either PVC or stainless steel pump head.
- Simple and robust but fully-proved low-cost design – thanks to the reduce number of components.
- Easy adjustment via 0-10 scale micrometer knob with optional pneumatic or electric servo control.
- The ideal system for economic metering non-aggressive fluids.
- For high pressure applications up to 40 bar.



Signal
METERING PUMPS

A division of GEE & Co

EXTERNAL DIMENSIONS



Pumps

S300 RBA Model

- Single valve ball.
- Plunger lip seals in choice of Viton, EPDM or Vulkollan.
- Suction and discharge connections threaded as standard (flanged optional).
- Stroke 15mm.
- Max. temperature for all lip seal types 40°C.
- Pump weight 10 to 30kg.

S300 RBB Model

- Single and double ball valves.
- Chevron-reinforced PP plunger packing – adjustable.
- Suction and discharge connections threaded as standard (flanged optional).
- Stroke 15mm.
- Max. temperatures of metering liquids:
 - with stainless heads 90°C.
 - with stainless head and ceramic piston 90°C.
 - with PVC heads 40°C.
 - with PVDF heads 70°C.
- Pump weight 10 to 30 kg.

Motors

S300 RBA/RBB

- Three phase 0.20 – 0.30 kW
4 poles 230/400v 50Hz
IP55 I. CL.F – 51 IEC 34-1
- Single phase 0.24kW 4 poles
220/240v 50Hz
IP55 I. CL.F – 51 IEC 34-1

Stroke adjustment

- Standard manual adjustment via 0-10 scale micrometer knob.
- Optional servo giving automatic remote adjustment of flow rate (for details - see separate Signal specification sheet on S300 servo controls).

TECHNICAL DATA

S300 RBA

Type	Max. Flow Rate l/h	Strokes (spm)	Max. Back pressure (bar)		Motor kw		Threaded Connections	
			3PH	1PH	3PH	1PH	A	P
RBA16	5	36	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA16	7	50	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA16	11	70	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA16	15	95	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA16	18	115	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA25	20	50	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA25	30	70	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA25	38	95	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA25	45	115	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA30	30	50	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA30	40	70	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA30	55	95	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA30	65	115	10	10	0.20	0.24	3/8" g.f.-BSPF	
RBA43	55	50	10	10	0.30	0.24	3/8" g.f.-BSPF	
RBA43	90	70	10	10	0.30	0.24	3/8" g.f.-BSPF	
RBA43	115	95	10	10	0.30	0.24	3/8" g.f.-BSPF	
RBA43	150	115	10	10	0.30	0.24	3/8" g.f.-BSPF	
RBA50	80	50	10	10	0.30	0.24	1/2" g.f.-BSPF	
RBA50	120	70	10	8	0.30	0.24	1/2" g.f.-BSPF	
RBA50	160	95	10	7	0.30	0.24	1/2" g.f.-BSPF	
RBA50	200	115	9	6	0.30	0.24	1/2" g.f.-BSPF	
RBA62	125	50	10	5	0.30	0.24	1/2" g.f.-BSPF	
RBA62	175	70	7	4	0.30	0.24	1/2" g.f.-BSPF	
RBA62	250	95	6	3.5	0.30	0.24	1/2" g.f.-BSPF	
RBA62	300	115	5	3	0.30	0.24	1/2" g.f.-BSPF	

TECHNICAL DATA

S300 RBB

TYPE			A	ATL	P	3PH	1PH	A-ATL	P
RBB6	0.8	50	-	40	10	0.20	0.24	1/4" g.f.-BSPF	
RBB6	1.2	70	-	40	10	0.20	0.24	1/4" g.f.-BSPF	
RBB6	1.8	95	-	40	10	0.20	0.24	1/4" g.f.-BSPF	
RBB6	2.2	115	-	40	10	0.20	0.24	1/4" g.f.-BSPF	
RBB10	2	36	10	40	10	0.20	0.24	1/4" g.f.-BSPF	
RBB10	3	50	10	40	10	0.20	0.24	1/4" g.f.-BSPF	
RBB10	4	70	10	40	10	0.20	0.24	3/8" g.f.-BSPF	1/4" g.f.-BSPF
RBB10	5.5	95	10	40	10	0.20	0.24	3/8" g.f.-BSPF	1/4" g.f.-BSPF
RBB10	7	115	10	40	10	0.20	0.24	3/8" g.f.-BSPF	1/4" g.f.-BSPF
RBB16	5	36	10	40	10	0.20	0.24	3/8" g.f.-BSPF	
RBB16	7	50	10	40	10	0.20	0.24	3/8" g.f.-BSPF	
RBB16	11	70	10	40	10	0.20	0.24	3/8" g.f.-BSPF	
RBB16	15	95	10	40	10	0.20	0.24	3/8" g.f.-BSPF	
RBB16	18	115	10	40	10	0.20	0.24	3/8" g.f.-BSPF	
RBB25	15	36	10	30	10	0.20	0.24	3/8" g.f.-BSPF	
RBB25	20	50	10	30	10	0.20	0.24	3/8" g.f.-BSPF	
RBB25	30	70	10	30	10	0.20	0.24	3/8" g.f.-BSPF	
RBB25	38	95	10	25	10	0.20	0.24	3/8" g.f.-BSPF	
RBB25	45	115	10	20	10	0.20	0.24	3/8" g.f.-BSPF	
RBB30	20	36	10	30	10	0.30	0.24	3/8" g.f.-BSPF	
RBB30	30	50	10	30	10	0.30	0.24	3/8" g.f.-BSPF	
RBB30	40	70	10	28	10	0.30	0.24	3/8" g.f.-BSPF	
RBB30	55	95	10	23	10	0.30	0.24	3/8" g.f.-BSPF	
RBB30	65	115	10	20	10	0.30	0.24	3/8" g.f.-BSPF	
RBB43	40	36	10	12	10	0.30	0.24	3/8" g.f.-BSPF	
RBB43	55	50	10	12	10	0.30	0.24	3/8" g.f.-BSPF	
RBB43	90	70	10	12	10	0.30	0.24	3/8" g.f.-BSPF	
RBB43	115	95	10	12	10	0.30	0.24	3/8" g.f.-BSPF	
RBB43	150	115	10	10	10	0.30	0.24	1/2" g.f.-BSPF	
RBB50	58	36	10	-	10	0.30	0.24	1/2" g.f.-BSPF	
RBB50	80	50	10	-	10	0.30	0.24	1/2" g.f.-BSPF	
RBB50	120	70	10	-	10	0.30	0.24	1/2" g.f.-BSPF	
RBB50	160	95	9	-	9	0.30	0.24	1/2" g.f.-BSPF	
RBB50	200	115	7	-	7	0.30	0.24	1/2" g.f.-BSPF	
RBB62	90	36	7	-	7	0.30		3/4" g.f.-BSPF	1/2" g.f.-BSPF
RBB62	125	50	7	-	7	0.30		3/4" g.f.-BSPF	1/2" g.f.-BSPF
RBB62	175	70	6	-	6	0.30		3/4" g.f.-BSPF	1/2" g.f.-BSPF
RBB62	250	95	5	-	5	0.30		3/4" g.f.-BSPF	1/2" g.f.-BSPF
RBB62	300	115	4	-	4	0.30		3/4" g.f.-BSPF	1/2" g.f.-BSPF

The Signal team of fully qualified sales engineers are on hand to assist you in any aspect of metering pump technology. Whether you need advice on general application needs, metering, pump performance, health and safety, product

selection, accessory choice, ongoing operation or maintenance issues, please call a member of our

**Technical Team on
0121 326 1700**

We are here to support you before your purchase – and right through the long service life of your Signal pumps.



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S300 RBA/RBB Series Accessory Range

Optional equipment for enhancing the control and performance of the S300 RBA/RBB pump series.

Foot valve and strainer

Assists in maintaining the prime of the pump under suction lift conditions and prevents large solids from entering the pump.

Suction lance

Combining a foot valve and strainer, the suction lance is inserted into the suction vessel, where it ensures maximum draw-down. It allows low level switching to stop the pump and can provide low-level cut-out. A further option of low-level warning may be incorporated.

Injection fitting

This maintains back pressure on the pump, even when the pump is disconnected. It generally assists with the control of flow and also injects material into the centre of the flow. Additionally, it serves as an anti-syphon device and non-return valve.

Pressure loading valve

On systems operating below 1 bar, the pressure loading valve maintains back pressure on the pump and ensures that accurate flow control is sustained. It also serves as an anti-syphon device.

Pressure relief valve

A safety device that protects the pump and system from damage if over pressure occurs.

Multifunction valve

Combines the function of pressure loading and pressure relief valve into a single unit that saves in installation cost and provides anti-syphon protection and drain facility.

Flow switch

Provides a positive indication that the pump is operating and the fluid is flowing.

Electronic controller

A complete control system that provides a loop back to the pump

to maintain the required chemical dose. It can make the system more efficient and more economical and it can also be integrated with redox. or pH control.

Pulsation damper

Fitted to the suction or discharge side of the pump, it reduces pressure surges on arduous applications such as long dosing lines.

Tubing

Available in a wide range of diameters and materials, including PVDF, PFA, PE, nylon-reinforced PVC and others on request.

Servo motor

Provides motorised control of stroke length, and hence, flow - usually from a 4-20mA signal, which allows for remote control of the pump. A scaling facility is available which allows a reduction of the maximum flow rate anywhere in the region of 60-100% of the pump rated capacity.

VSD motor

A three-phase motor suitable for operation from a variable frequency inverter supply.

Hazardous areas

Hazardous area motors available with ATEX certification.

Tank and pump sets

A stand-alone and single-sourced chemical delivery system that can be bonded if required and can incorporate stirrers. Pre-engineered and tested, they are delivered to site ready to install and are available in a range of tank capacities up to 4,500 litres, although larger sets can also be engineered.

Stroke Counter

For batching operations.