Materials

ACCESSORIES



ARIAMAT AUTOMATIC AIR FEEDER



Components

upper elbow

valve

Housing

Ball valve

Conical fittings

Pipe

ARIAMAT AR 300E AR 1000E AR 2000E Complete with connections and 1 m polyethylene pipe

Materials

Brass

Brass

Polycarbonate

Rubber

Brass

polyethylene

Construction

The automatic air feeder ARIAMAT controls the air cushion in the pressure vessel by replacing the air dissolved in the water at every pump start.

This device limits the number of pump starts and stops, allows a better use of the water reserve and improves the overall performance of the automatic pressure system.

Functioning mode

ARIAMAT operation is explained in pictures 1-2-3-4.At the end of every cycle, ARIAMAT AR 300E, AR 1000E and AR 2000E let in the vessel 300, 1000 and 2000 cm3 of air respectively.If the pumps work under positive suction head and water falls to the suction inlet, there will not be enough suction pressure in the suction pipe to allow a correct operation of ARIAMAT; in this case, it is necessary to create an artificial loss in the suction pipe, by closing gradually the gate valve when the pump is running until the water level in the ARIAMAT starts dropping. When a sufficient suction pressure to grant a safe ARIAMAT operation cannot be achieved, it is recommended to feed the vessel with a compressed air system and level probes.

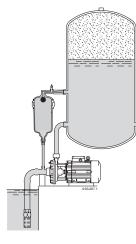
Description of the supply

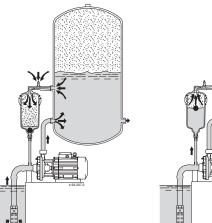
The ARIAMAT is normally fitted on our automatic water systems. The supply of ARIAMAT, as a spare part to be installed by the customer, includes:

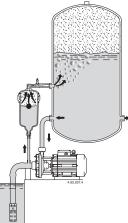
ARIAMAT assembled with upper elbow and air valve;

Polyethylene tube with ring nut and fitting for connection to the pump suction side.

Pressure	Pressure vessel capacity in litres										
in m	100	200	300	400	500	750	1000	2000	3000	4000	5000
14/28	AR 300E					AR 1000E			AR 2000E		
20/30	AR 300E				AR 1000E			AR 2000E			
30/40	AR 300E				AR 1000E			AR 2000E			
35/55	AR 300E				AR 1000E			AR 2000E			
55/70	AR 300E AR 1				1000E			AR 2000E			
75/95	AR 300E AR 1000E			The use of an air compressor is recommended.							







1) When the pump is stopped, ARIAMAT is full of water.

When starting, the pumps creates a suction pressure which also takes the water from ARIAMAT, allowing some more water to come from the vessel. The water through the ARIAMAT venturi sucks air from the upper valve.

The water level in the ARIAMAT drops until the ball valve moves to the bottom of the ARIAMAT closing the hole of the pipe connected to the pump. ARIAMAT is now full of water.

When stopping, there is a back-flow of water from the vessel through the pump, to the ARIAMAT. Air is pushed inside the vessel.

ACCESSORIES



VALVES



VNR 1
VNR 1 1/4
VNR 1 1/2
VNR 2
Foot valve:
VDF 1
VDF 1 1/4
VDF 1 1/2

VDF 2

Type:

RA5 H 92

RA5 H 105

connection G 1

check valve

PRESSURE GAUGES



axial connection type MA 0-6 MA 0-6 ABS

radial connection type MR 0-10 MR 0-12 MR 0-16

LEVEL PROBES



Type: SL 2 electrodes SLA Assembled level probes (cable length on request)

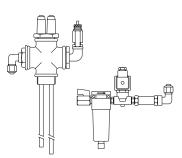
example: SLA 30 SLA Assembled level probes 30 = cable length 30 m

FLOAT SWITCH

CONNECTOR



Type: INTGALL (cable 3m, 5m, 10m)



SYSTEM FOR AIR INTAKE

Level probe assembly with solenoid valve



Type: INTGALL M (5m, 10m, 20m cable)



Type: INTGALL A (5m, 10m cable)

SYSTEM FOR AIR INTAKE

Kit of level probes with compressor

FLEXIBLE HOSE

d x length
G 1 x 630
G 1 x 680

ACCESSORIES



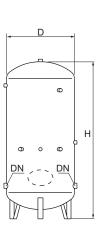
SPHERICAL VESSEL



Type: SS 24: G1 connection, 24I capacity BUTYL rubber diaphragm.

Hot galvanized vessels

CE 97/23 PED APPROVED PRESSURE VESSELS (Air tanks)



Duran turan	Dimensions		weigth	
Pump type	D x H mm	DN	Kg	
100- 5	400 x 1020	G 1	32	
200- 5	450 x 1440	G 1	48	
300- 8	550 x 1500	G 1 1/2	65	
500-8	650 x 1820	G 2	105	
800-8	800 x 1900	G 2	145	
1000-8	800 x 2150	G 2 1/4	160	
1000-12 (1)	800 x 2300	G 2 1/4	203	
1500-8 (1)	950 x 2500	G 2	255	
2000-8 (1)	1100 x 2570	G 2 1/4	330	
2000-12 (1)	1000 x 2780	G 2 1/4	387	
3000-8 (1)	1250 x 2930	G 3	470	
3000-12 (1)	1200 x 2930	G 3	596	
4000-8 (1)	1450 x 3090	G 3	620	
4000-12 (1)	1450 x 3090	G 3	880	
5000-8 (1)	1450 x 3590	G 4	715	
5000-12 (1)	1450 x 3590	G 4	1020	

The vessels are suitable for water up to 50 °C

The vessels are all approved at manufacturer's premises and are supplied complete with safety valve, tested pressure gauge and fittings.

(1) Tanks subject to annual inspection by authorised bodies, by the customer.(Pressure x Volume P x V > 8000; or nominal pressure >11.76 bar).

CYLINDRICAL TANK WITH BASE AND FEET



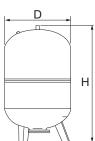
Type: SC 20 BP: G1 connection, 20l capacity BUTYL rubber diaphragm.

VERTICAL STAINLESS STEEL CYLINDRICAL TANK



Type: SCX 20: G1 connection, 20I capacity BUTYL rubber diaphragm.

CE 97/23 PED APPROVED MEMBRANE VESSELS (Membrane vessels)



	Dump tupo	PRESSURE	Dimensions	DN	weigth
_	Pump type	bar	D x H mm	DN	Kg
4	SM 60 V	10	382 x 845	G 1	-
	SM 80 V	10	450 x 850	G 1	-
	SM 100 V	10	450 x 950	G 1	-
	SM 200 V	10	550 x 1255	G 1 1/2	-
	SM 300 V	10	630 x 1405	G 1 1/2	-
	SM 500 V	10	780 x 1550	G 1 1/2	-
	SM 750 V	10	780 x 1940	G 1 1/2	-
+	SM 1000 V	10	780 x 1940	G 2	-

STAINLESS STEEL CYLINDRICAL TANK WITH BASE AND FEET



Type: SCX 20 BP: G1 connection, 20l capacity BUTYL rubber diaphragm.

EPDM diaphragm Temperature -10 \div +100 $^\circ\text{C}$ With safety valve and pressure gauge 0÷10 bar