

# LIQUID RING VACUUM PUMP Model AVA 1206-1806



#### PERFORMANCE FEATURES

- Vary port valve design for optimum efficiency across all inlet pressures.
- Near-isothermal compression to safety handle any thermally sensitive and explosive gas.
- Right choice for any wet process.
- [H[ TR CU 010/2011 certification.
- EHI TR CU 012/2011 certification.
- Flexibility in motor selection for special and hazardous applications (ATEX).



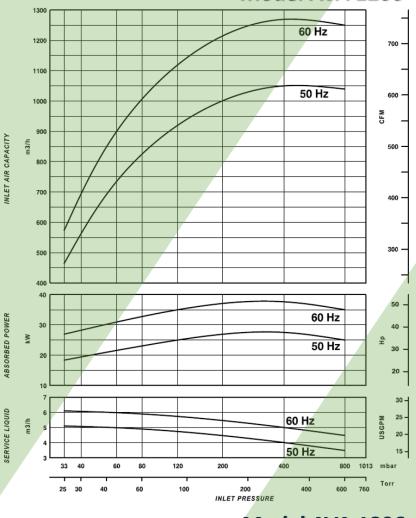


#### NOTES:

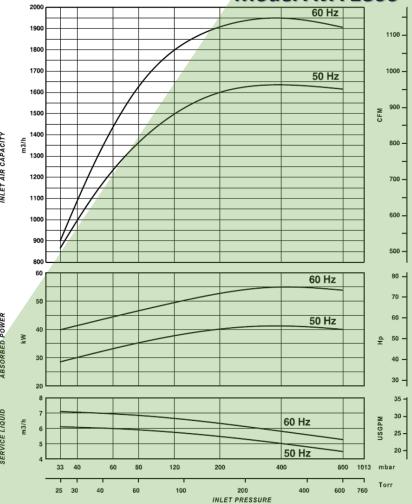
The given data are referred to dry air at the temperature of  $20^{\circ}$ C, at the atmospheric discharge pressure (1013 mbar), and of supply of service water at 15°C temperature. Performances tolerance  $\pm 10\%$ .

Product specifications and data are subject to change without notice.

#### **Model AVA 1206**



#### Model AVA 1806



Performance test in compliance with PNEUROP 6612

# LIQUID RING VACUUM PUMP

#### Model AVA 1206-1806



#### **APPLICATIONS**

- Vacuum industrial processing
- Sterilization
- Extrusion
- Degassing
- Evaporation and distillation
- Priming
- Vacuum sewage
- Bottling
- Depoultry
- Fish farming

## FEATURES

AVA 1206-1806 are single stage liquid ring vacuum pumps, suitable to achieve deep vacuum (down to 33 mbar abs). All AVA models are characterized by being bare shaft pumps, so that the drive is secured by a flexible coupling that makes the pump shaft integral with the motor shaft. For AVA 1206-1806 the reference operating speed is the 6-pole motor speed. The pumps are characterized by the presence of two big manifolds, that allow distributing/collecting the gas to/from the end casing located on both impeller ends. Three standard executions are available: WW; WS; SS. The shaft seal is made by means of a simple acting mechanical seal according to DIN24960, one each pump end. Shaft sealing devices other than the standard require a technical assessment that can be carried out on request. ATEX version is also available, on request.

### MATERIALS OF CONSTRUCTION

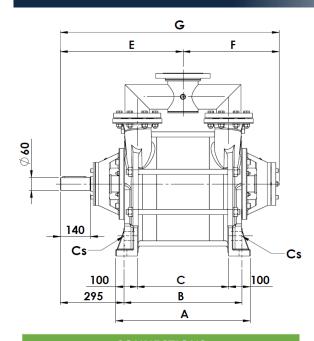
#	Part	ww	ws	SS
1	Top manifolds	Carbon steel	Carbon steel	SS 316
2	Suction- discharge casing	WCB (ASTM A216)	WCB (ASTM A216)	SS 316 (ASTM A351-CF8M)
3	Impeller housing	Carbon steel	Carbon steel	SS AISI 316
4	Impeller	WCB (ASTM A216)	SS 316 (ASTM A351-CF8M)	SS 316 (ASTM A351-CF8M)
5	Port plates	SS AISI 316	SS AISI 316	SS AISI 316
6	Shaft	SS AISI 420	SS AISI 420	SS AISI 316
7	Gaskets/O- Rings	Aramid fiber/VITON	Aramid fiber/FKM	Aramid fiber/FEP
8	Mechanical seal	DIN 24960 - carbon/silicon carbide/FKM (metallic parts in AISI 316)	DIN 24960 - carbon/silicon carbide/FKM (metallic parts in AISI 316)	DIN 24960 - carbon/silicon carbide/FEP (metallic parts in AISI 316)

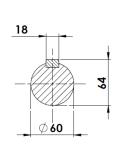


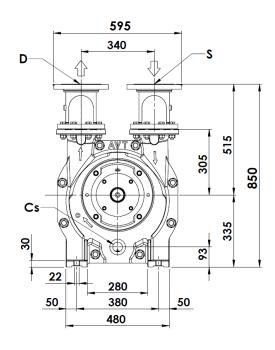
#### Model AVA 1206-1806

# LIQUID RING VACUUM PUMP

# 2D DRAWING







CONNECTIONS				
S	Gas inlet ND 125/5" EN 1092-1 PN10/ANSI 150#			
D	Gas outlet ND 125/5" EN 1092-1 PN10/ANSI 150#			
Cs	Service G 1"1/2			

PUMP	Α	В	С	Е	F	G	Weight [Kg]
AVA 1206	625	550	425	570	447	1017	570
AVA 1806	765	690	565	640	517	1157	670

# TECHNICAL SPECIFICATIONS

	AVA 1206	AVA 1806
Max inlet air capacity	1050 m³/h @50Hz 1280 m³/h @60Hz	1650 m <sup>3</sup> /h @50Hz 1950 m <sup>3</sup> /h @60Hz
Max suction pressure	33 mbara	33 mbara
Dry weight	570 kg	670 kg
Design temperature	100°C	100°C
Test pressure	3 barg	3 barg
Design pressure	5 barg	5 barg

	AVA 1206	AVA 1806	
Noise level @80mbara	78 ± 3 dB(A)	79 ± 3 dB(A)	
Motor power	30 kW @50Hz 37 kW @60Hz	45 kW @50Hz 55 kW @60Hz	
Standard motor speed	980 rpm @50Hz 1170 rpm @60Hz	980 rpm @50Hz 1170 rpm @60Hz	
Min/max motor speed	785 rpm @40Hz 1170 rpm @60Hz	785 rpm @40Hz 1170 rpm @60Hz	
Vibrations	< 4 mm/s	< 4 mm/s	
Max service liquid flow	5 m³/h @50Hz 6 m³/h @60Hz	6 m³/h @50Hz 7,2 m³/h @60Hz	

# SPARE PARTS AVAILABLE

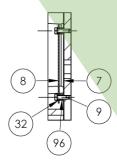
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# LIQUID RING VACUUM

# PUMP

# Model AVA 1206-1806



ZONE X

11 (2	5.1 (13) (99) (100) (102) (5.1) (65) (2.3)	23
Pos	Description	Q.ty
1	Intermediate casing	1
2.3	Port plate, drive end	1
2.4	Port plate, non drive end	1
3	Impeller	1
4.1	Suction/discharge casing, drive end	1
4.2	Suction/discharge casing, non drive end	1
5.1 ®	Mechanical seal, drive end	1
5.2 ®	Mechanical seal, non drive end	1
6.1 ®	Casing-plate gasket	2
7 ®	Variport valve	2
8 ®	Valve plate	2
9 ®	Screw	6
10	Bearing housing	2
11	Shaft	1
12.1	Roller bearing	1
12.2	Ball bearing	1
13	Bearing cover, drive end	1

Pos	Description	Q.ty
14	Bearing cover, non drive end	1
18	Key	2
19	Key	1
22 ®	Bearing locking nut	1
23	Screw	4
24	Screw	8
25.1	Screw	4
25.2	Screw	4
26	Plug	2
27.1	Plug	1
31 ®	Impeller locking nut	1
32 ®	Washer	6
47	Greaser	2
48 ®	Spacer ring	1
63	O-Ring	2
64	Plug	2
65	Mechanical seal spacer	2

(70)(6.1)(4.2)(5.2)(27.1)(26)(48)(12.2)(22)

Pos	Description	Q.ty
66	Headless screw	4
67 ®	Lip seal ring	2
68	Compensating ring	4
69 ®	Flange gasket	4
70	Headless screw	3
75	Tie rod	8
76	Nut	16
77	Washer	16
78	Screw	2
79	Nut	2
80	Plug	2
96	Valve plate spacer	6
99	Stud	8
100	Nut	8
102 ®	O-Ring	2
®	Repair kit part	

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