

LIQUID RING VACUUM PUMP Model AVA 606-806



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.
- [fil TR CU 010/2011 certification.
- [H[TR CU 012/2011 certification.
- Flexibility in motor selection for special and hazardous applications (ATEX).

TÜV IT 19 ATEX 049 AR



NOTES:

The given data are referred to dry air at the temperature of 20° 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.

450 600 550 500 450 500 450 250 - 25

200

INLET PRESSURE

Model AVA 806

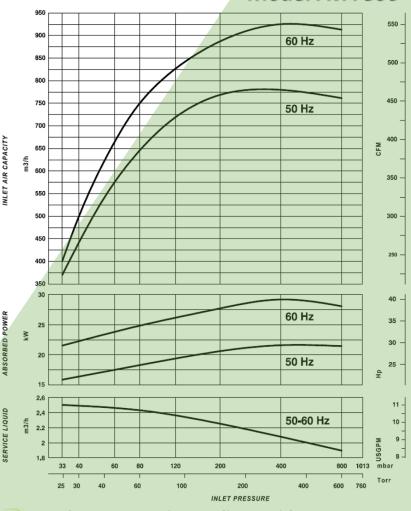
1013

60 Hz

50 Hz

400

Model AVA 606



Performance test in compliance with PNEUROP 6612

LIQUID RING VACUUM PUMP

Model AVA 606-806



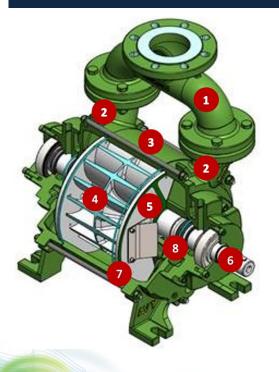
APPLICATIONS

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

FEATURES

AVA 606-806 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 606-806 the reference operating speed is the 4pole 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. Two standard executions are available: CN; CS. AVA 600-800 made in SS are also available. 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



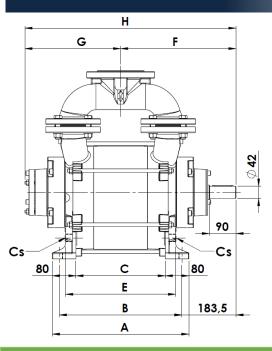
#	Part	CN	CS
1	Top manifolds	Cast iron (EN-GJL-250)	Cast iron (EN-GJL-250)
2	Suction- discharge casings	Cast iron (EN-GJL-250)	Cast iron (EN-GJL-250)
3	Impeller housing	Carbon steel	Carbon steel
4	Impeller	Cast iron (EN-GJS-400-18)	SS 316 (ASTM A351-CF8M)
5	Port plates	SS AISI 316	SS AISI 316
6	Shaft	SS AISI 420	SS AISI 420
7	Gaskets/O- Rings	Aramid fiber & VITON	Aramid fiber & VITON
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)

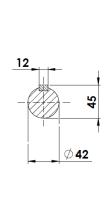


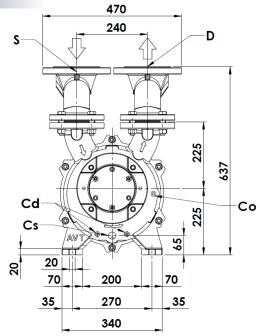
Model AVA 606-806

LIQUID RING VACUUM PUMP

2D DRAWING







CONNECTIONS					
S	Gas inlet	ND 100/4"	EN 1092-1 PN10/ANSI 150#		
D	Gas outlet	ND 100/4"	EN 1092-1 PN10/ANSI 150#		
Cs	Service liquid inlet	G 3/4"			
Cd	Pump drain	G 3/8"			
Со	Overflow	G 3/8"			

PUMP	Α	В	С	E	F	G	н	Weight [Kg]
AVA 606	462	415	302	372	391	324	715	215
AVA 806	566	519	406	476	443	376	819	250

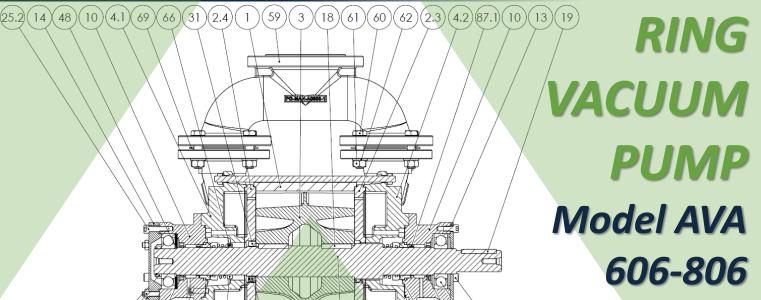
TECHNICAL SPECIFICATIONS

	AVA 606	AVA 806
Max inlet air capacity	540 m³/h @50Hz 640 m³/h @60Hz	790 m ³ /h @50Hz 900 m ³ /h @60Hz
Max suction pressure	33 mbara	33 mbara
Dry weight	215 kg	250 kg
Max gas temperature	100°C	100°C
Test pressure	3 barg	3 barg
Design pressure	5 barg	5 barg

	AVA 606	AVA 806
Noise level @80mbara	$75\pm3~\text{dB(A)}$	76 ± 3 dB(A)
Motor power	15 kW @50Hz 18,5 kW @60Hz	22 kW @50Hz 30 kW @60Hz
Standard speed	1450 rpm @50Hz 1750 rpm @60Hz	1450 rpm @50Hz 1750 rpm @60Hz
Min/max motor speed	1150 rpm @40Hz 2040 rpm @60Hz	1150 rpm @40Hz 2040 rpm @60Hz
Vibrations	< 4 mm/s	< 4 mm/s
Max service liquid flow	2 m³/h @50Hz 2,2 m³/h @60Hz	2,5 m ³ /h @50Hz 2,5 m ³ /h @60Hz

SPARE PARTS AVAILABLE

LIQUID



22 (78) (79) (68) (24) (5.2) (26) (65) (6.1) (6.2) (70) (75) (11) (87) (77) (76) (102) (5.1) (67) (12) (25.1)

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 5 4.2 Casing, non drive end 6 5.1 Mechanical seal, drive end 7 5.2 Mechanical seal, non drive end 1 6.1 Suc./dis. Casing-port plate gasket 2 6.2 Plate-casing gasket 2 10 Bearing housing 2 11 Shaft 1 12 Bearing 2 13 Bearing cover, drive end 1 14 Bearing cover, non drive end 1	Pos	Description	Q.ty
2.4 Port plate, non drive end 1 3 Impeller 1 4.1 Suction/discharge casing, drive end 5 4.2 Casing, non drive end 6 5.1 Mechanical seal, drive end 7 5.2 Mechanical seal, non drive end 1 6.1 Suc./dis. Casing-port plate gasket 2 10 Bearing housing 2 11 Shaft 1 12 Bearing 2 14 Bearing cover, drive end 1 Bearing cover, non 1	1	Intermediate casing	1
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4.1 Suction/discharge casing, drive end Suction/discharge 4.2 casing, non drive end 5.1 Mechanical seal, drive end 5.2 Mechanical seal, non drive end 6.1 Suc./dis. Casing-port plate gasket 6.2 Plate-casing gasket 1 Shaft 1 Bearing cover, drive end 1 Bearing cover, non 1 Bearing cover, non	2.4		1
Suction/discharge 4.2 casing, non drive end 5.1 Mechanical seal, drive end 5.2 Mechanical seal, non drive end 6.1 Suc./dis. Casing-port plate gasket 6.2 Plate-casing gasket 10 Bearing housing 21 Shaft 12 Bearing 2 Bearing cover, drive end 1 Bearing cover, non 2 Bearing cover, non	3	Impeller	1
4.2 casing, non drive end 5.1 Mechanical seal, drive end 5.2 Mechanical seal, non drive end 6.1 Suc./dis. Casing-port plate gasket 6.2 Plate-casing gasket 2 Plate-casing gasket 1 Shaft 1 Bearing cover, drive end 1 Bearing cover, non 1 Bearing cover, non	4.1	_	1
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plate gasket 6.2 Plate-casing gasket 2 10 Bearing housing 11 Shaft 12 Bearing Bearing cover, drive end Bearing cover, non 1	5.2 ®		1
10 Bearing housing 2 11 Shaft 1 12 Bearing 2 13 Bearing cover, drive end 1 Bearing cover, non 1	6.1 ®		2
11 Shaft 1 12 Bearing 2 13 Bearing cover, drive end 14 Bearing cover, non 1	6.2 ®	Plate-casing gasket	2
12 Bearing 2 13 Bearing cover, drive end 1 Bearing cover, non 1	10	Bearing housing	2
Bearing cover, drive 1 end 1 Bearing cover, non 1	11	Shaft	1
end Bearing cover, non 1	12	Bearing	2
14	13		1
	14		1

Pos	Description	Q.ty
18	Key	2
19	Key	1
22 ®	Bearing nut	1
24	Screw	8
25.2	Screw	3
25.1	Screw	3
31 ®	Impeller nut	1
32 ®	Washer	4
48 ®	Spacer ring	1
59	Top manifold	2
60	Screw	16
61	Nut	16
62	Washer	16
64/26/27.1	Screw-plug	7
65	Mechanical seal spacer	1

Pos	Description	Q.ty
66	Screw	2
67 ®	Radial lip seal	2
68	Compensatin g ring	4
69 ®	Flange gasket	4
70	Screw	3
75	Tie rod	6
76	Nut	12
77	Washer	12
78	Screw	3
79	Nut	3
87	Locating pin	2
102 ®	O-Ring	2

Repair kit
part





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