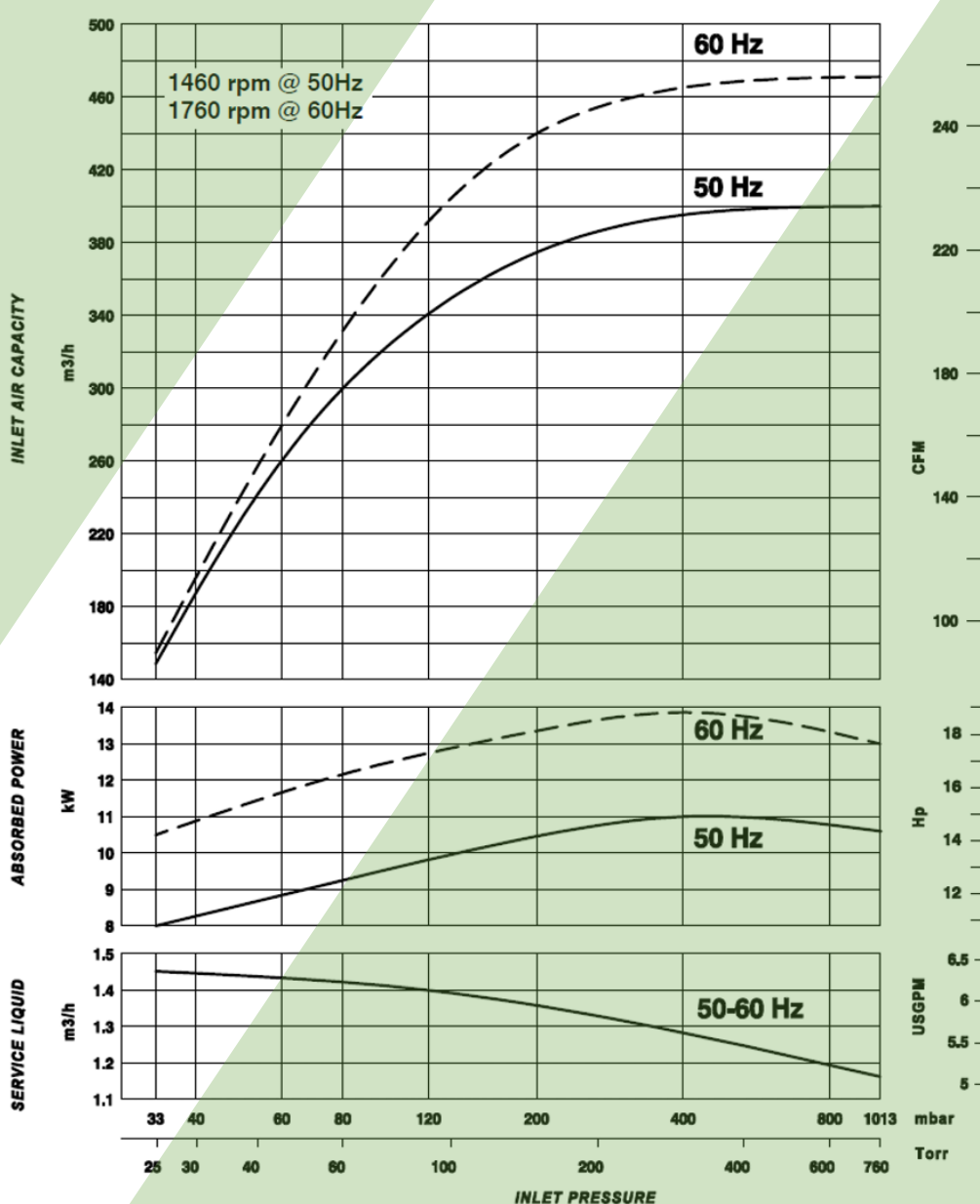


**Vacuum Technologies**  
A Unit of ASCO POMPE

# LIQUID RING VACUUM PUMP Model AVM 456

## PERFORMANCE FEATURES

- Vary port valve design for optimum efficiency across all inlet pressures.
- Near-isothermal compression to safely handle any thermally sensitive gas.
- Right choice for any wet process.
- High efficiency IE3 motor for EU market
- [A] TR CU 010/2011 certification.
- Motor option for US & Canada market (NEMA-CSA).



### 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.

Performance test in compliance with PNEUROP 6612

# LIQUID RING VACUUM PUMP

## Model AVM 456



## APPLICATIONS

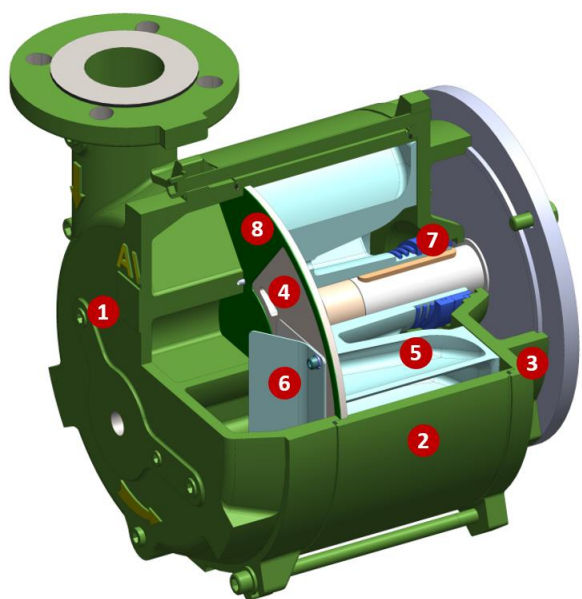
- Vacuum industrial processing
- Sterilization
- Extrusion
- Degassing
- Evaporation and distillation
- Priming
- Vacuum sewage
- Bottling
- Depoultry
- Fish farming

## FEATURES

AVM 456 is a simple, compact and reliable liquid ring pump capable to handle almost any gas mixture including vapors in vacuum or overpressure. The operating principle combined to its accurate design allow for severe duty with high tolerance of liquid carry over. The wide range of suction pressure (down to 33 mbar abs) makes the AVM series versatile and suitable for many industrial applications and more. The stainless-steel port plate and impeller are designed and manufactured with accurate process to reach outstanding and steady performance.

The low operating speed associated with the robust and simplified construction grant long service life with minimal maintenance. AVM 456 is available in standard version or full stainless-steel AISI 316 (wetted parts). Other material options, on request.

## MATERIALS OF CONSTRUCTION



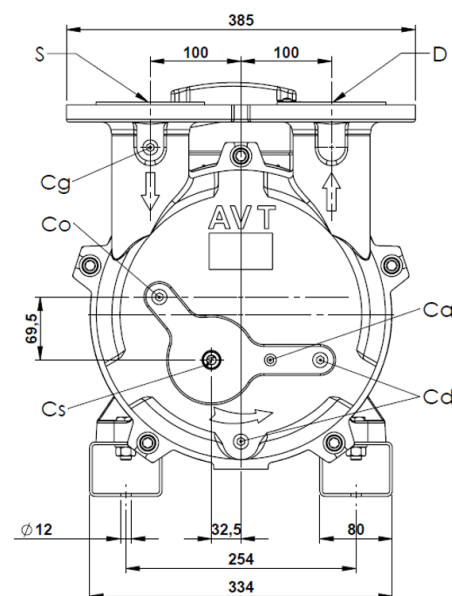
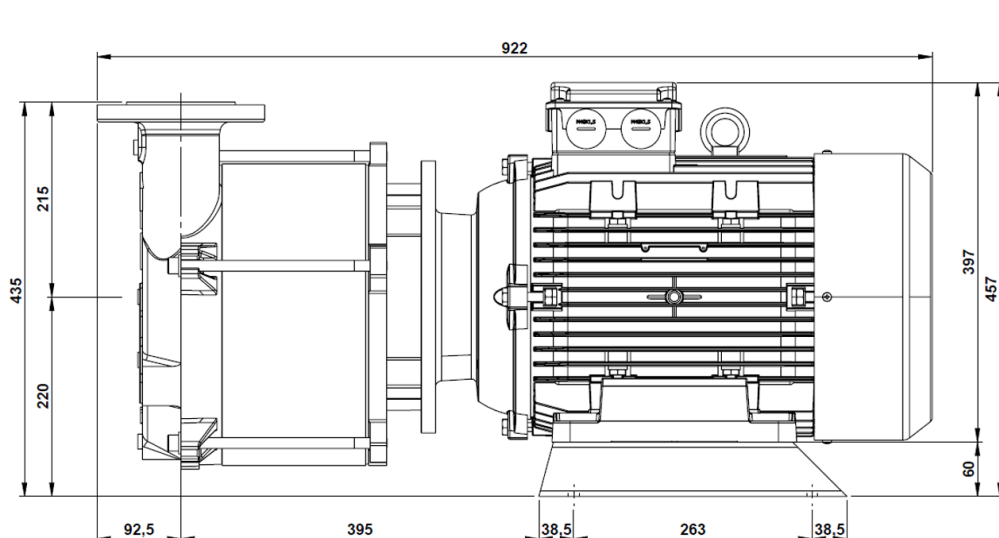
#	PART	CS	SS
1	Suction and discharge casing	CAST IRON (ASTM A278 CL.250)	SS 316 (ASTM A351-CF8M)
2	Housing (part A)	CAST IRON (ASTM S355)	SS 316 (ASTM A240)
3	Housing (part B)	CAST IRON (ASTM A278 CL.250)	SS 316 (ASTM A351-CF8M)
4	Port plate	SS 316 (ASTM A240)	SS 316 (ASTM A240)
5	Impeller	SS 316 (ASTM A351-CF8M)	SS 316 (ASTM A351-CF8M)
6	Vary port valve	PTFE	PTFE
7	Mechanical seal	CARBON/SIC/VITON/SS316	CARBON/SIC/FEP/SS316
8	Gasket	ARAMIDIC FIBER	ARAMIDIC FIBER



## Model AVM 456

# LIQUID RING VACUUM PUMP

## 2D DRAWING



### CONNECTIONS

S	DN65-2"1/2	Suction
D	DN65-2"1/2	Discharge
Cs	G 1/2"	Service liquid
Cd	G 3/8"	Pump drain
Co	G 3/8"	Overflow
Ca	G 1/4"	Anti-cavitation
Cg	G 3/8"	Vacuum gauge

PUMP	kW	Hz	IEC	RPM	Weight [Kg]
AVM 456-50	11	50	160M	1475	195
AVM 456-60	15	60	160M	1770	210

## TECHNICAL SPECIFICATIONS

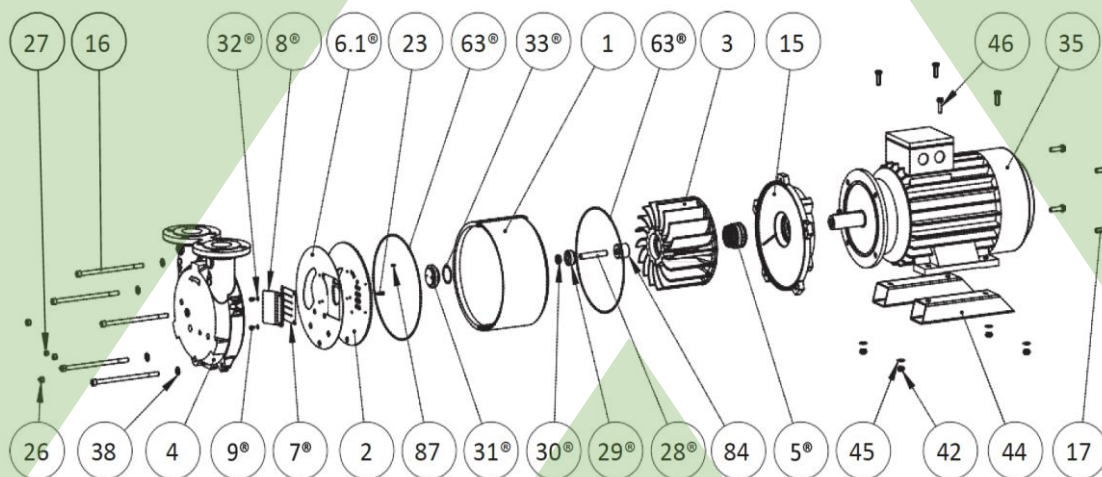
	AVM 456-50	AVM 456-60
Nominal capacity	400 m <sup>3</sup> /h	470 m <sup>3</sup> /h
Ultimate pressure	33 mbara	33 mbara
Dry weight	195 kg	210 kg
Max gas temperature	120°C	120°C
Max liquid temperature	50°C	50°C
Casing design pressure	3 barg	3 barg

	AVM 456-50	AVM 456-60
Noise level	72 dBA	72 dBA
Motor power	11 kW	15 kW
Motor speed	1475 rpm	1770 rpm
Motor type	TEFC	TEFC
Motor efficiency	IE3	IE3
Volt./Ph/Frequency	230-400V/ 3/50Hz	277-480V/ 3/60Hz



# SPARE PARTS AVAILABLE

# LIQUID RING VACUUM PUMP Model AVM 456

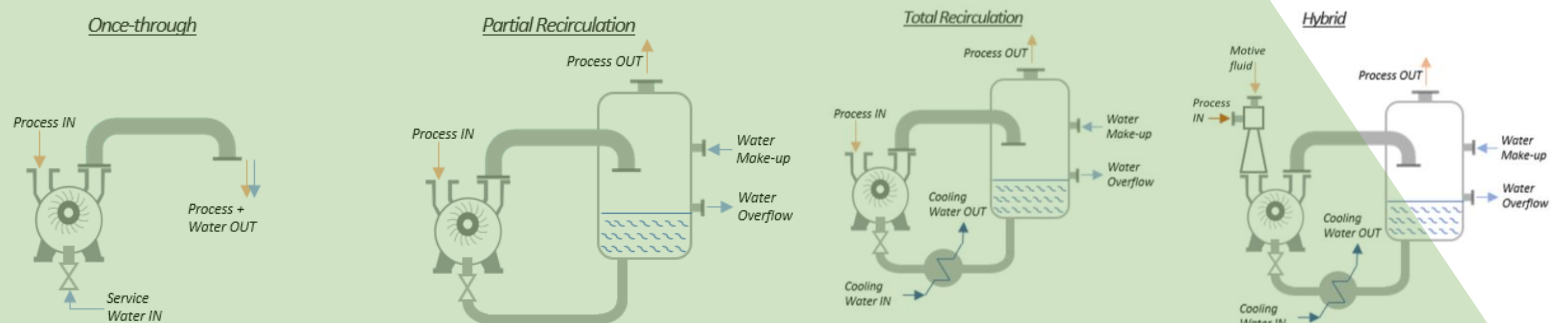


Pos.	Description	Q.ty
1	Casing	1
2	Port plate	1
3	Impeller	1
4	Suction/discharge casing	1
5 <sup>®</sup>	Mechanical seal	1
6.1 <sup>®</sup>	Suction/discharge casing-port plate gasket	1
7 <sup>®</sup>	Vari-port valve	1
8 <sup>®</sup>	Valve plate	1
9 <sup>®</sup>	Screw	2
15	Seal-motor flange	1
16	Screw	5
17	Screw	4
23	Screw	1
26	Plug	3
27	Plug	1
28 <sup>®</sup>	Stud	1

Pos.	Description	Q.ty
29 <sup>®</sup>	Adjusting nut	1
30 <sup>®</sup>	Nut	1
31 <sup>®</sup>	Impeller nut	1
32 <sup>®</sup>	Washer	2
33 <sup>®</sup>	O-Ring	1
35	Electric motor	1
38	Washer	5
42	Nut	4
44	Motor foot	2
45	Washer	4
46	Screw	4
63 <sup>®</sup>	O-Ring	2
87	Locating pin	1

<sup>®</sup> Repair kit part

## OPERATION MODES



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