

Designer and manufacturer for industry and healthcare application

2

LUBRICATED TECHNOLOGY

Rotary vane vacuum pumps EVISA

EVISA presentation	4
EVISA E25.2 H.V	6
EVISA E25.R	10
EVISA E40.2 H.V	14
EVISA E40.R	18
EVISA E65.R	22
EVISA E100.R	26
EVISA E150.R	30
EVISA E200.R	34
EVISA E300.R	38
EVISA E350.R	42
EVISA E400.R	46
EVISA E500.R	50
EVISA E600.R	54

Rotary vane vacuum pumps EVISA ATEX

EVISA ATEX presentation	58
EVISA E65.R ATEX	60
EVISA E100.R ATEX	62
EVISA E200.R ATEX	64
EVISA E300.R ATEX	66

Rotary vane vacuum pumps ROTOMIL'S

ROTOMIL'S K	68
-------------	----

OIL-LESS TECHNOLOGY

Claw vacuum pumps SIRELLA

SIRELLA presentation	72
SIRELLA SL100.R	74
SIRELLA SL150.R	78
SIRELLA SL300.R	82
SIRELLA RS	86

ACCESSORIES FOR VACUUM PUMPS

Liquid traps	88
Vacuum sealed suction filters	90
Silent suction filters, dust separator & liquid cyclonic separator	92
"SPIRACIER" special hoses, vacuum switches & vacuum gauges	93
Vacuum solenoid valves	94
Vertical vacuum receivers	95

MIL'S : Services

General conditions of sales and guarantee - Sales contact	96
---	----



La FRENCH FAB

Specifications are subject to be changed without notice.



PACKAGING

- Evacuation
- Filling and closing machines
- Labelling, vacuum packaging
- Pneumatic conveying



ENVIRONMENTAL ENGINEERING

- Automotive fluid pumping
- Filtering
- Sewage pumping
- Solvent recovery
- Vacuum priming



FOOD AND BEVERAGE INDUSTRY

- Cutter, filling or tumbler machines
- Freeze drying
- Lyophilisation
- Poultry processing
- Vacuum packaging, mixing



CHEMICAL AND PHARMACEUTICAL INDUSTRIES

- Degasing
- Distillation
- Drying and freeze drying
- Packaging



WOOD INDUSTRY

- Coating, bonding
- Holding and lifting
- Impregnation

MIL'S : made in

MIL'S is designing, developing and producing vacuum pumps and blowers.

Our vacuum systems have already been installed in hundreds of sites all over the world for industrial applications as well as in the Healthcare sector.

Our technologies (lubricated rotary vane pumps, oilless vacuum pumps, blowers, roots) allow us to answer to any requirement of vacuum solutions for Industry or Healthcare.

50 Hz	Evisa 25.2	Evisa 25.R	Evisa 40.2	Evisa 40.R	Evisa 65.R
Nominal air flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	30 - 17.7	28 - 16.4	47.7 - 28.1	44 - 25.9	68 - 40
End vacuum $\frac{\text{mbar}}{\text{torr}}$	$\leq 5 \times 10^{-1}$ ≤ 0.38	$\leq 6 \times 10^{-2}$ 4.5×10^{-2}	$\leq 5 \times 10^{-1}$ ≤ 0.38	$\leq 6 \times 10^{-2}$ 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ 4.5×10^{-2}
Motor power 1-ph	0.75 kW	0.75 kW	1.10 kW	1.10 kW	N.A
Motor power 3-ph	0.75 kW	0.75 kW	1.10 kW	1.10 kW	1.5 kW
Special version ATEX	N.A	N.A	N.A	N.A	ATEX
Special version OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN
60 Hz	Evisa 25.2	Evisa 25.R	Evisa 40.2	Evisa 40.R	Evisa 65.R
Nominal air flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	35.3 - 20.8	33 - 19.4	57.2 - 33.7	53 - 31.2	81.6 - 48
End vacuum $\frac{\text{mbar}}{\text{torr}}$	$\leq 5 \times 10^{-1}$ ≤ 0.38	$\leq 8 \times 10^{-2}$ 6×10^{-2}	$\leq 5 \times 10^{-1}$ ≤ 0.38	$\leq 6 \times 10^{-2}$ 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ 4.5×10^{-2}
Motor power 1-ph	0.9 kW	0.9 kW	1.30 kW	N.A	N.A
Motor power 3-ph	0.9 kW	0.9 kW	1.30 kW	1.32 kW	1.8 kW
Special version ATEX	N.A	N.A	N.A	N.A	ATEX
Special version OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN

Specifications are subject to be changed without notice.

France since 1926.

100 persons are employed on two production sites in the region of LYON and in a sales office in the region of Paris. MIL'S operates over 15000 sq.m of manufacturing floor space.

MIL'S is ISO 9001, ISO 14001 and ISO 13485 certified and answers to all quality criterias of a modern producer.

PLASTIC AND COMPOSITE INDUSTRIES

- Degasing
- Pneumatic conveying
- Resin transfer
- Vacuum bagging

GLASS INDUSTRY

- Coating
- Forming

SOLAR AND ENERGY INDUSTRIES

- Coating
- Handling
- Lamination
- Oil degasing
- Power engineering

HEALTHCARE

- Surgery
- Obstetrics
- Anesthesia, resuscitation

GENERAL PURPOSE

- Central vacuum supply
- Leak detection
- Packaging
- Picking and handling
- Pneumatic conveying



Selection tool EVISA

Evisa 100.R	Evisa 150.R	Evisa 200.R	Evisa 300.R	Evisa 350.R	Evisa 400.R	Evisa 500.R	Evisa 600.R
100 - 58.8	132 - 77.7	200 - 117.7	300 - 176.5	360 - 211.9	426 - 250.7	513 - 302	635 - 373.7
$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 8 \times 10^{-2}$ - 6×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}
N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A
2.2 kW	3 kW	4 kW	5.5 kW	7.5 kW	9 kW	11 kW	13 kW
ATEX	N.A	ATEX	ATEX	N.A	N.A	N.A	N.A
OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN
Evisa 100.R	Evisa 150.R	Evisa 200.R	Evisa 300.R	Evisa 350.R	Evisa 400.R	Evisa 500.R	Evisa 600.R
120 - 70.6	156 - 91.8	240 - 141.3	360 - 211.8	432 - 254.3	511 - 300.8	616 - 362.6	769 - 452.8
$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 8 \times 10^{-2}$ - 6×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}
N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A
2.64 kW	3.6 kW	4.8 kW	6.6 kW	9 kW	10.8 kW	13.2 kW	15.6 kW
ATEX	N.A	ATEX	ATEX	N.A	N.A	N.A	N.A
OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN	OXYGEN

Specifications are subject to be changed without notice.

High performance oil-flooded vacuum pumps



New generation of vacuum pumps with fast pumping speed due to 6×10^{-2} mbar absolute end vacuum

High flow rate at 1 mbar

Internal design providing a low noise level for an easy integration into industrial machines

Installation near operators



Delivery with MV99S 100% synthetic oil for long life time and heavy duty operating conditions

Lubricated rotary vane vacuum pumps



Oil filter standard on each size of vacuum pump with dual recycling oil circuit

Accessible & adjustable gas ballast following customer process with high capacities of water pumping



Possible customisation of the protection cover

Options:

- Oil level switch
- PT100 temperature sensor
- Many other options available





EVISA E25.2 HV



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : $5 \cdot 10^{-1}$ mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust

Technical characteristics

		50 Hz	60 Hz
E25.2 HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	30 - 17.7	35.3 - 20.8
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	28 - 16.5	33.6 - 19.8
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	9.8 - 5.8	11.7 - 6.9
	Without gas ballast End vacuum mbar - <i>torr</i>	$\leq 5 \times 10^{-1}$ - ≤ 0.38	$\leq 5 \times 10^{-1}$ - ≤ 0.38
	Fully opened gas ballast	End vacuum mbar - <i>torr</i>	≤ 2 - 1.5
		Water vapor permitted maximum pressure mbar - <i>torr</i>	16.9 - 12
		Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	0.27
	100 % synthetic oil	MV99S	MV99S
	Oil capacity l - <i>qt</i>	1.5 - 1.58	1.5 - 1.58
	Noise level dB(A)	60	62

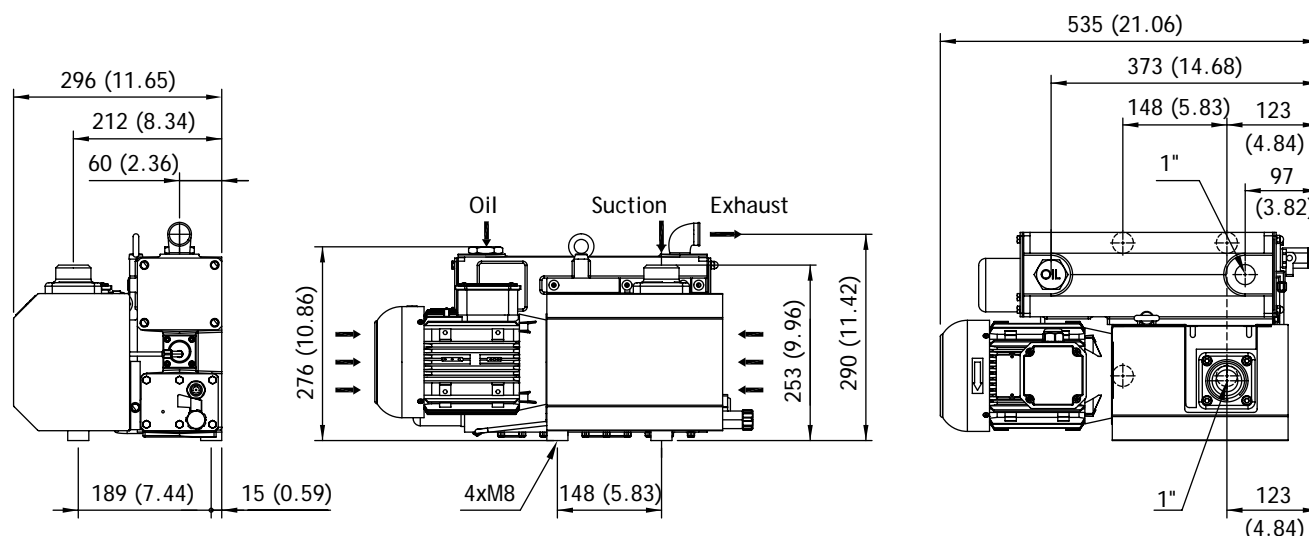
⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

GEOGRAPHIC ZONE		EUROPE		ASIA MIDDLE-EAST	SOUTH AMERICA	USA
Electrical motor	Number of phases	1	3	3	3	3
	Voltage V	230	230 / 400	220/380	190 / 380	208-230/460
	Period Hz	50	50	60	50	60
	Motor power	0.75 kW	0.75 kW	0.9 kW	0.75 kW	1.50 HP
	Rotation speed min^{-1}	1500	1500	1800	1500	1800
Inlet connection		1" BSP	1" BSP	1" BSP	1" NPT	1" NPT
Outlet connection		1" BSP	1" BSP	1" BSP	1" NPT	1" NPT
Weight with oil kg - <i>lb</i>		39 - 86	39 - 86	44 - 97	44 - 97	44 - 97

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E25.2 HV	
	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 1ph, 230V-50Hz	821148 + 770800	821148
EUROPE 3ph, 230/400V-50Hz	821151 + 770800	821151
ASIA / MIDDLE EAST 3ph, 220/380V-60Hz	823858 + 770800	823858
SOUTH AMERICA / USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824055 + 770800	824055



Maintenance kits

3 000 hour usual maintenance
with silicone o'ring for oil mist filter

720341

3 000 hour usual maintenance
with viton o'ring for oil mist filter

718374

12 000 hour preventive maintenance

615484



3 000 hour usual
maintenance



12 000 hour
preventive
maintenance

Specifications are subject to be changed without notice.



EVISA E25.2 HV

Accessories and Options

1	Oil Level Safety (OLS) with float	616111
	Timer box for oil level safety (base mounting)	670810
	Oil level safety and temperature indicator with bimetal thermostat NC opening at 120°C - Max 24V	623315
	Oil Level Safety and PT100 temperature sensor	623975
	PT100 temperature sensor	623980
2	3/4" BSP suction filter Type 76	715347
	Paper cartridge	715348
	Polyester cartridge	715349
	Carbon cartridge	715349
	Vacuum gauge fitted on filter cover	617536
	3/4" BSP paper/paper double filtration 76PA + 76PA	670613
	3/4" BSP polyester/carbon double filtration 76PO + 76CH	670616
3	Liquid trap 100 48 m ³ .h ⁻¹ 1" BSP	724793
	Aluminium head / plexiglass cylinder / without mechanical float	724794
	Aluminium head / plexiglass cylinder / with mechanical float	724807
	Aluminium head / Pyrex cylinder / without mechanical float	724808
	Aluminium head / Pyrex cylinder / with mechanical float	724795
	Stainless steel head / Pyrex cylinder / without mechanical float	724796
	Stainless steel head / Pyrex cylinder / with mechanical float	615441
	Pyrex bottle 250 ml under trap assembly	615442
	Pyrex bottle 500 ml under trap assembly	615443
	Pyrex bottle 1000 ml under trap assembly	816002
	Electro-pneumatic automatic drain with control board	816003
	Electrical automatic drain with control board	713840
	Adjusting valve fitted on T-square	606086
	Vacuum hose (0,6 m) FF 3/4" BSP	604422
	Vacuum hose (1 m) FF 3/4" BSP	618264
	Vacuum hose (1,5 m) FF 3/4" BSP	616085
	Vacuum hose (2 m) FF 3/4" BSP	670010
	Vacuum hose (3 m) FF 3/4" BSP	618131
	Vacuum hose (4 m) FF 3/4" BSP	770151
	Suction hose with non-return valve (1 m)	624163
	Exhaust double elbow mounting	670804
	Base frame assembly height 150 mm	617610
4	Elevated base frame (H=525 mm)	619543
	For 1 pump	619546
	For 2 pumps	770495
	For 3 pumps	770496
Direct starter (wall mounting)	Without regulation contact 3-ph 400V + E	770503
	Without regulation contact 3-ph 230V + E	710422
	Without regulation contact 1-ph 230V + E	710430
	With regulation contact LG7 3-ph 400V	710428
	With regulation contact LG7 3-ph 230V	
	With regulation contact LG7 1-ph 230V	
	Control board with FLEXO solenoid valve 3-ph, 400V+ N for warm up and degasing cycle	770811
	Control board with FLEXO solenoid valve 3-ph, 400V + N for degasing cycle	770818
	Electrical cable (3m) with ON/OFF switch -1-ph 230V + E	363052



1 Oil level safety



2 suction filter
type 76



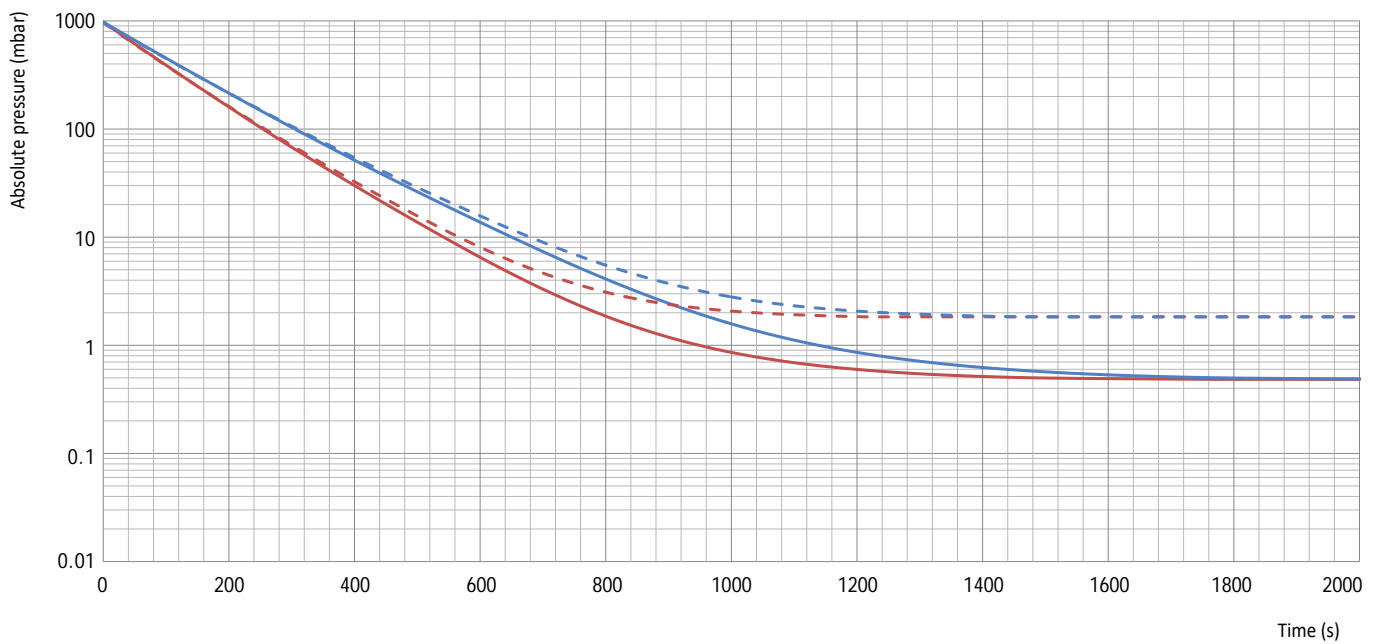
3 Liquid trap 100
with mechanical
stop and
optional bottle



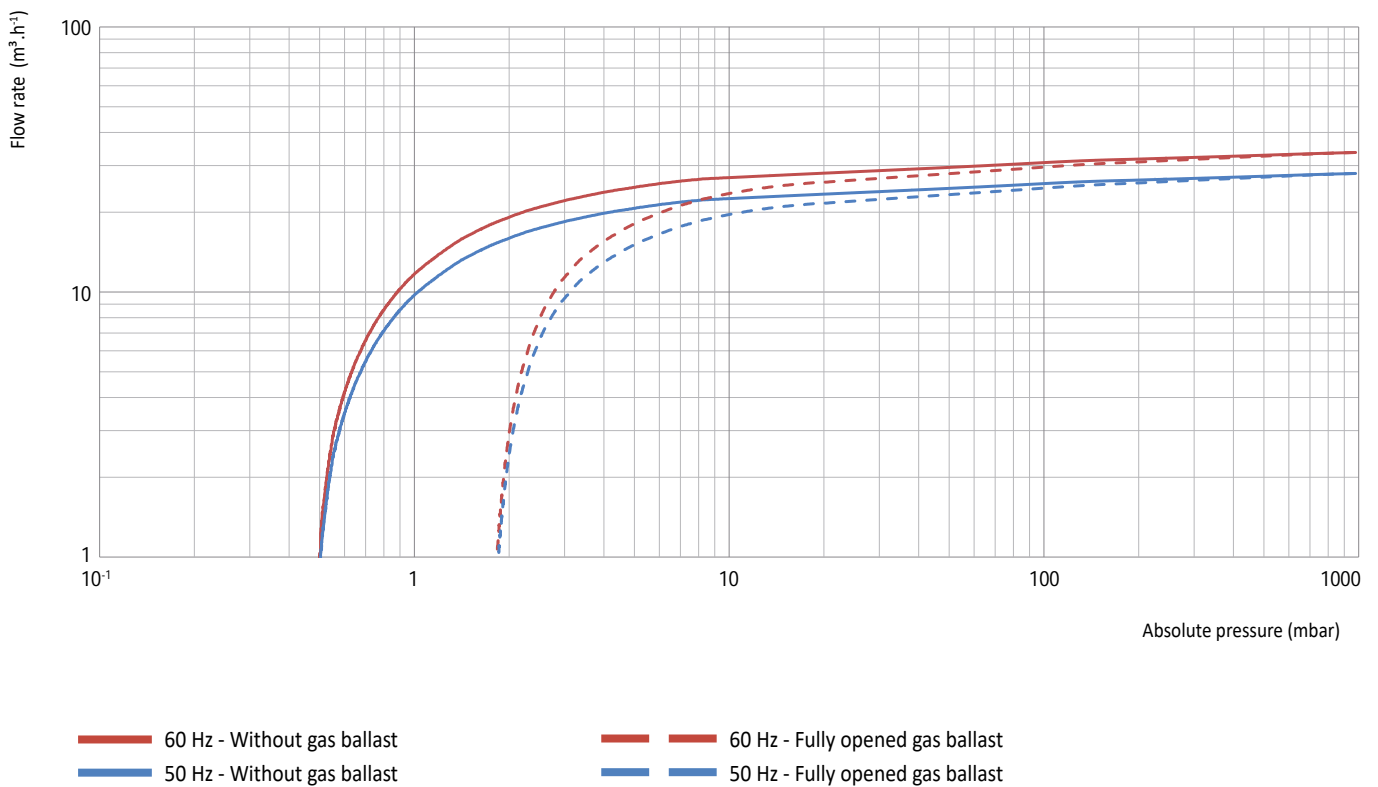
4 Elevated base frame
for 2 pumps

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves





EVISA E25.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump with the end vacuum of $6 \cdot 10^{-2}$ mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- Designed for light onsite maintenance without piping disconnection
- Integrated oil mist filter on the exhaust

Technical characteristics

		50 Hz	60 Hz
E25.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	28 - 16.4	33 - 19.4
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	26 - 15.3	31 - 18.2
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	18.6 - 10.9	20.8 - 12.2
	Without gas ballast End vacuum mbar - <i>torr</i>	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 8 \times 10^{-2}$ - 6×10^{-2}
	Opened gas ballast End vacuum mbar - <i>torr</i>	$\leq 6 \times 10^{-1}$ - 4.5×10^{-1}	$\leq 6 \times 10^{-1}$ - 4.5×10^{-1}
	1,5 rotation Water vapor permitted maximum pressure mbar - <i>torr</i>	7.3 - 5.5	13.0 - 9.8
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	0.11	0.24
	Fully opened gas ballast End vacuum mbar - <i>torr</i>	≤ 6.0 - 4.5	≤ 6.0 - 4.5
	Water vapor permitted maximum pressure mbar - <i>torr</i>	130 - 97	180 - 135
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	2.1	3.6
E25.R	Without gas ballast End vacuum mbar - <i>torr</i>	≤ 2.0 - 1.5	≤ 2.0 - 1.5
	Fully opened gas ballast End vacuum mbar - <i>torr</i>	≤ 3.0 - 2.2	≤ 3.0 - 2.2
	Water vapor permitted maximum pressure mbar - <i>torr</i>	88 - 66	114 - 85
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	1.4	2.2
100 % synthetic oil		MV99S	MV99S
Oil capacity l - <i>qt</i>		1.0 - 1.1	1.0 - 1.1
Noise level dB(A)		59	63

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	1	3	3	3	3
	Voltage V	230	230 / 400	220 / 380	190 / 380	200 / 380
	Period Hz	50	50	50 / 60	50	50 / 60
	Motor power	0.75 kW	0.75 kW	0.75 / 0.90 kW	0.75 kW	1.50 HP
	Rotation speed min^{-1}	1500	1500	1500/1800	1500	1800
Inlet connection ⁽²⁾		1" BSP	1" BSP	1" BSP	1" NPT	1" BSP
Outlet connection ⁽³⁾		1" BSP	1" BSP	1" BSP	1" NPT	1" BSP
Weight with oil kg - <i>lb</i>		31.3 - 69.0	30.0 - 66.2	30.0 - 66.2	30.8 - 67.9	30.8 - 67.9

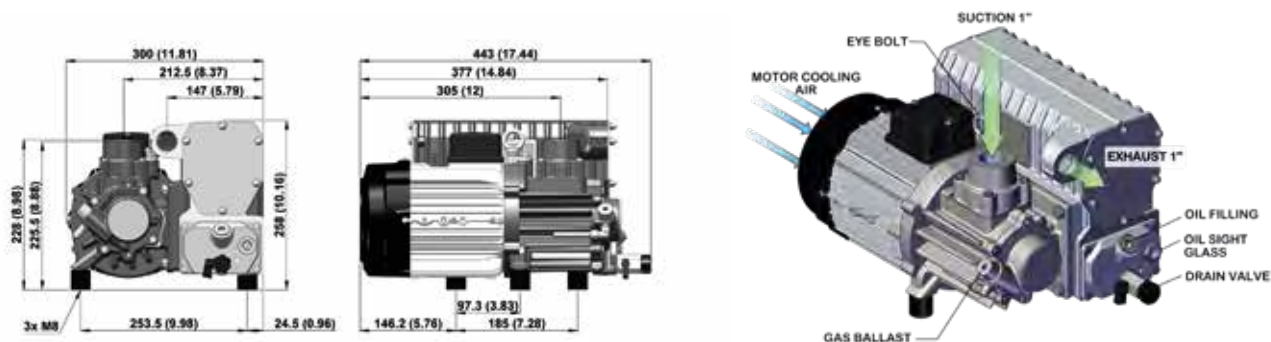
⁽²⁾ DN 25 ISO-KF adaptation flange can be supplied, see accessories

⁽³⁾ DN 25 ISO-KF connector can be supplied, see accessories

Specifications are subject to be changed without notice.

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E25.R HV		E25.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 1ph, 230V-50Hz	824179	824181	824183	824185
EUROPE / ASIA 3ph, 230/400V-50Hz, 220/380V-50/60Hz	824091	824187	824090	824189
SOUTH AMERICA / USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824094	824191	824193	824195
JAPAN 3ph, 200/380V-50/60Hz	824096	824197	824199	824201

Oxygen version available - Contact us

HV accessories - KF connection



1 Suction filter DN25KF -Type 100

Suction flange DN25KF	625029
1 Suction filter DN25KF - Type 100	Paper cartridge
	Polyester cartridge
	Carbon cartridge
Aluminium clamping ring DN25KF	361638
Stainless steel / Viton DN25KF centering ring	361641
Stainless steel DN25KF hose - 0,5 m	361644
Stainless steel DN25KF hose - 1 m	361645
Elbow DN25KF	333827
Equal T-square DN25KF	333828
Manual ball valve DN25KF	333829
Solenoid valve DN25KF	333830
Exhaust adapter 1" BSP - DN25KF	625019

Maintenance kits

3 000 hour usual maintenance
with silicone o'ring for oil mist filter **724572**

3 000 hour usual maintenance
with viton o'ring for oil mist filter **724573**

12 000 hour preventive maintenance **724583**

Oxygen version maintenance available - Contact us



3 000 hour usual
maintenance



12 000 hour
preventive
maintenance

Specifications are subject to be changed without notice.



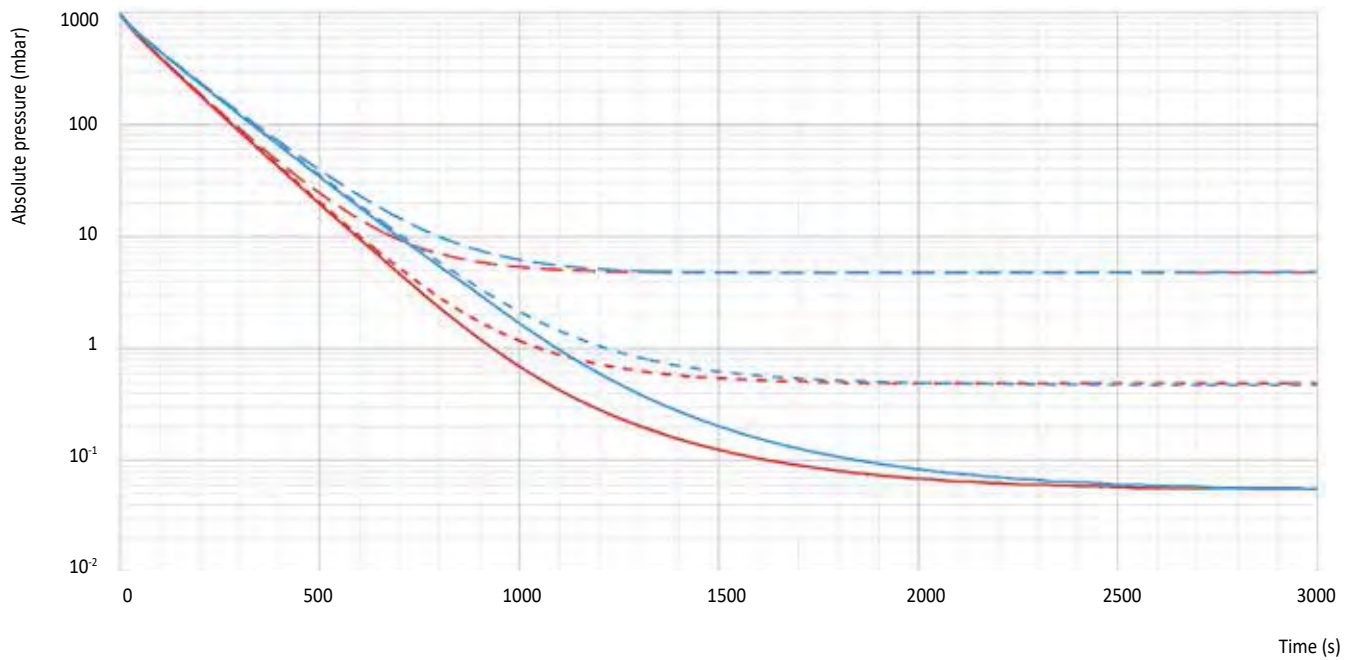
Accessories and Options

Additional rubber foot		625169	
1	Oil Level Safety (OLS) with float	625020	
PT100 temperature sensor		625021	
NC bimetal temperature safety - opening at 120°C - Max 24V		625022	
2	1" BSP suction filter	Paper cartridge	714975
	Type 100	Polyester cartridge	714976
		Carbon cartridge	714977
Ø63 vacuum gauge fitted on filter		617536	
1" BSP polyester/carbon double filtration 100PO + 100CH		625023	
Adjusting valve fitted on T-square MF 1" BSP		714979	
3	Liquid trap 100 48 m³.h⁻¹ 1" BSP	Aluminium head / plexiglass cylinder / without mechanical float	724793
		Aluminium head / plexiglass cylinder / with mechanical float	724794
		Aluminium head / Pyrex cylinder / without mechanical float	724807
		Aluminium head / Pyrex cylinder / with mechanical float	724808
		Stainless steel head / Pyrex cylinder / without mechanical float	724795
		Stainless steel head / Pyrex cylinder / with mechanical float	724796
		Pyrex bottle 250 ml under trap assembly	615441
		Pyrex bottle 500 ml under trap assembly	615442
		Pyrex bottle 1000 ml under trap assembly	615443
Electro-pneumatic automatic drain with control board		816002	
Electrical automatic drain with control board		816003	
Vacuum hose (0,6 m) MF 1" BSP		618265	
Vacuum hose (1 m) MF 1" BSP		617372	
Vacuum hose (1,5 m) MF 1" BSP		618266	
Vacuum hose (2 m) MF 1" BSP		616179	
Suction hose (1m) MM 1"		714980	
No return valve MF 1" BSP		618457	
Base frame assembly (H=150 mm)		625012	
4	Elevated base frame (H=525 mm)	For 1 pump	625013
		For 2 pumps	625014
		For 3 pumps	625015
Direct starter (wall mounting)	Without regulation contact 3-ph 400V + E		770495
	Without regulation contact 1-ph 230V + E		770503
	With regulation contact LG7 3-ph 400V + N + E		710422
	With regulation contact LG7 1-ph 230V + E		710428
	With regulation contact LG7 + Timer 3-ph 400V + N + E		724576
	With regulation contact LG7 + Timer 1-ph 230V + E		724577
Direct starter with regulation contact LG7 and Flexo valve for warm up and degasing system - 3-ph 400V + N + E		724578	
Direct starter with regulation contact LG7 and Flexo valve for warm up and degasing system - 1-ph 230V + E		724579	
Electrical cable (3m) with ON/OFF switch -1-ph 230V + E		625016	
Direct starter support for base fixation		625017	

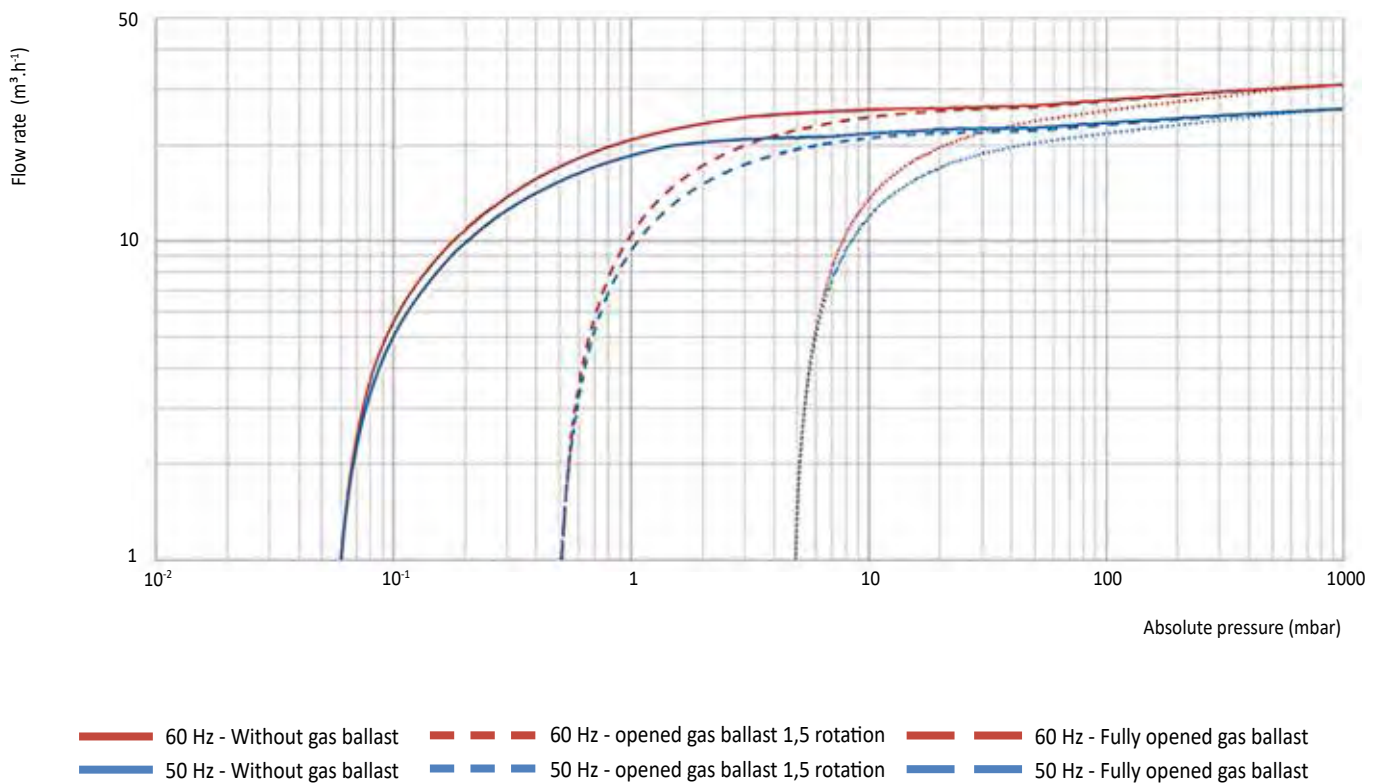


Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves





EVISA E40.2 HV



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : $5 \cdot 10^{-1}$ mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust

Technical characteristics

		50 Hz	60 Hz
E40.2 HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	47.7 - 28.1	57.2 - 33.7
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	41.5 - 24.4	49.8 - 29.3
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	14.4 - 8.47	11.7 - 6.9
	Without gas ballast End vacuum mbar - <i>torr</i>	$\leq 5 \times 10^{-1}$ - ≤ 0.38	$\leq 5 \times 10^{-1}$ - ≤ 0.38
	Fully opened gas ballast End vacuum mbar - <i>torr</i>	≤ 1.5 - 1.13	≤ 1.5 - 1.13
	Water vapor permitted maximum pressure mbar - <i>torr</i>	14.8 - 10.5	16.6 - 12
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	0.37	0.49
	100 % synthetic oil	MV99S	MV99S
Oil capacity l - <i>qt</i>		1.5 - 1.58	1.5 - 1.58
Noise level dB(A)		62	64

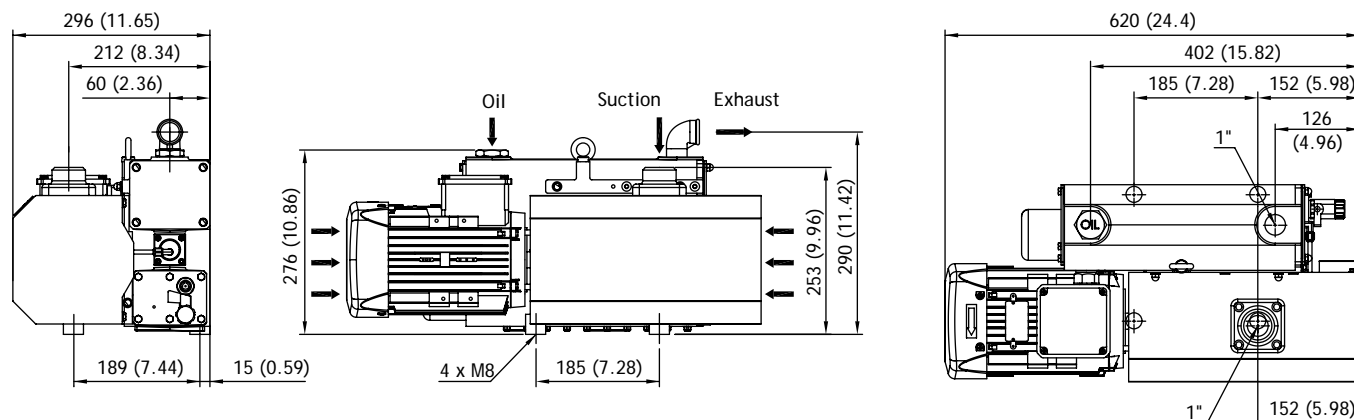
⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

GEOGRAPHIC ZONE		EUROPE	EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA
Electrical motor	Number of phases	1	3	3	3	3
	Voltage V	230	230 / 400	265/460	190 / 380	208-230/460
	Period Hz	50	50	60	50	60
	Motor power	1.1 kW	1.1 kW	1.3 kW	1.10 kW	2.0 HP
	Rotation speed min^{-1}	1500	1500	1800	1500	1800
Inlet connection		1" BSP	1" BSP	1" BSP	1" NPT	1" NPT
Outlet connection		1" BSP	1" BSP	1" BSP	1" NPT	1" NPT
Weight with oil kg - <i>lb</i>		52 - 115	52 - 115	52 - 115	35.0 - 77.2	35.0 - 77.2

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E40.2 HV	
	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 1ph, 230V-50Hz	821149 + 770826	821149
EUROPE 3ph, 230/400V-50Hz	821152 + 770826	821152
ASIA / MIDDLE EAST 3ph, 220/380V-60Hz	823859 + 770826	823859
SOUTH AMERICA / USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824056 + 770826	824056



Maintenance kits

3 000 hour usual maintenance
with silicone o'ring for oil mist filter

720341

3 000 hour usual maintenance
with viton o'ring for oil mist filter

718374

12 000 hour preventive maintenance

615485



3 000 hour usual
maintenance



12 000 hour
preventive
maintenance



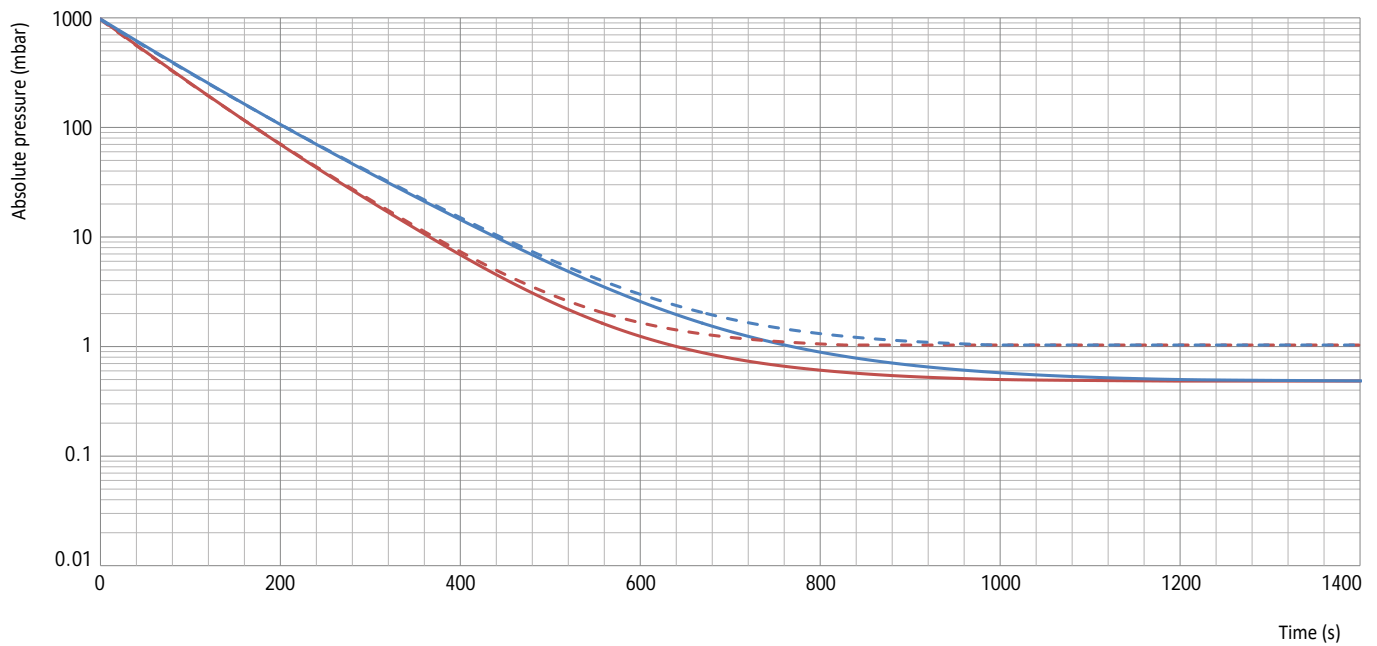
Accessories and Options

1	Oil Level Safety (OLS) with float	616111
	Timer box for oil level safety (base mounting)	670810
	Oil level safety and temperature indicator with bimetal thermostat NC opening at 120°C - Max 24V	623315
	Oil Level Safety and PT100 temperature sensor	623975
	PT100 temperature sensor	623980
2	1" BSP suction filter	Paper cartridge 714975
	Type 100	Polyester cartridge 714976
		Carbon cartridge 714977
	Vacuum gauge fitted on filter	617536
	1" BSP polyester/polyester double filtration 100PO + 100PO	622167
	Aluminium head / plexiglass cylinder / without mechanical float	724793
	Aluminium head / plexiglass cylinder / with mechanical float	724794
	Aluminium head / Pyrex cylinder / without mechanical float	724807
3	Liquid trap 100	Aluminium head / Pyrex cylinder / with mechanical float 724808
	48 m ³ .h ⁻¹	Stainless steel head / Pyrex cylinder / without mechanical float 724795
	1" BSP	Stainless steel head / Pyrex cylinder / with mechanical float 724796
		Pyrex bottle 250 ml under trap assembly 615441
		Pyrex bottle 500 ml under trap assembly 615442
		Pyrex bottle 1000 ml under trap assembly 615443
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Adjusting valve fitted on T-square	714979
	Vacuum hose (0,6 m) FF 1" BSP	618265
	Vacuum hose (1 m) FF 1" BSP	617372
	Vacuum hose (1,5 m) FF 1" BSP	618266
	ALU adapter M1" / DN25 KF	117133
	ALU clamping collar DN25 KF	361638
	Centering ring INOX/VITON	361641
	Stainless steel hose (0,5 m) DN25 KF	361644
	Stainless steel hose (1 m) DN25 KF	361645
	Base frame assembly height 150 mm	617610
4	Elevated base frame	For 1 pump 619543
	(H=525 mm)	For 2 pumps 619546
		For 3 pumps 619546
	Without regulation contact 3-ph 400V + E	770496
	Without regulation contact 3-ph 230V + E	770497
	Without regulation contact 1-ph 230V + E	770504
Direct starter	With regulation contact LG7 3-ph 400V	710423
(wall mounting)	With regulation contact LG7 3-ph 230V	710431
	With regulation contact LG7 1-ph 230V	710435
	Control board with FLEXO solenoid valve 3-ph, 400V+ N for warm up and degasing cycle	770812
	Control board with FLEXO solenoid valve 3-ph, 400V + N for degasing cycle	770819
	Electrical cable (3m) with ON/OFF switch -1-ph 230V + E	363052

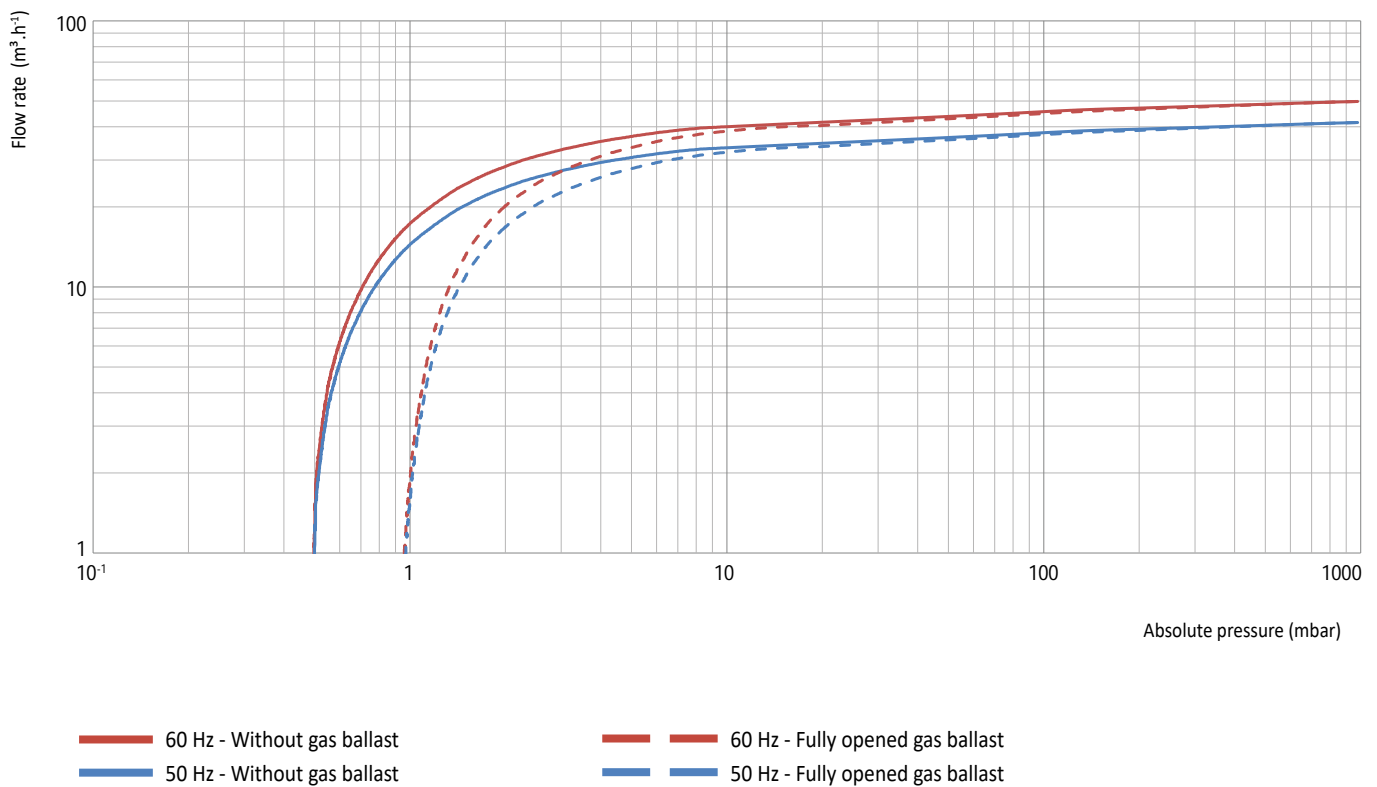


Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves





EVISA E40.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump with the end vacuum of $6 \cdot 10^{-2}$ mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- Designed for light onsite maintenance without piping disconnection
- Integrated oil mist filter on the exhaust

Technical characteristics

			50 Hz	60 Hz
Nominal flow rate m ³ .h ⁻¹ - cfm			44 - 25.9	53 - 31.2
PNEUROP pumping speed ⁽¹⁾ m ³ .h ⁻¹ - cfm			42 - 24.7	50 - 29.4
Pumping speed at 1 mbar inlet pressure ⁽¹⁾ m ³ .h ⁻¹ - cfm			30 - 17.6	34 - 20.0
E40.R HV	Without gas ballast	End vacuum mbar - torr	≤ 6 x10 ⁻² - 4.5 x10 ⁻²	≤ 6 x10 ⁻² - 4.5 x10 ⁻²
	Opened gas ballast 1,5 rotation	End vacuum mbar - torr	≤ 6 x10 ⁻¹ - 4.5 x10 ⁻¹	≤ 6 x10 ⁻¹ - 4.5 x10 ⁻¹
		Water vapor permitted maximum pressure mbar - torr	13.6 - 10.2	18.4 - 13.8
		Water vapor capacity kg.h ⁻¹	0.34	0.53
	Fully opened gas ballast	End vacuum mbar - torr	≤ 6.0 - 4.5	≤ 6.0 - 4.5
		Water vapor permitted maximum pressure mbar - torr	143 - 107	326 - 244
Water vapor capacity kg.h ⁻¹		3.7	10.6	
E40.R	Without gas ballast	End vacuum mbar - torr	≤ 2.0 - 1.5	≤ 2.0 - 1.5
	Fully opened gas ballast	End vacuum mbar - torr	≤ 3.0 - 2.2	≤ 3.0 - 2.2
		Water vapor permitted maximum pressure mbar - torr	107 - 80	233 - 174
		Water vapor capacity kg.h ⁻¹	2.7	7.5
100 % synthetic oil			MV99S	MV99S
Oil capacity l - qt			1.0 - 1.1	1.0 - 1.1
Noise level dB(A)			58	60

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

GEOGRAPHIC		EUROPE		ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	1	3	3	3	3	3
	Voltage V	230	230 / 400	220 / 380	190 / 380	208-230/460	200 / 380
	Period Hz	50	50	50 / 60	50	60	50/ 60
	Motor power	1.10 kW	1.10 kW	1.10 / 1.32 kW	1.10 kW	2.0 HP	1.10 / 1.32 kW
	Rotation speed min^{-1}	1500	1500	1500/1800	1500	1800	1500/1800
Inlet connection ⁽²⁾		1" BSP	1" BSP	1" BSP	1" NPT	1" NPT	1" BSP
Outlet connection ⁽³⁾		1" BSP	1" BSP	1" BSP	1" NPT	1" NPT	1" BSP
Weight with oil kg - lb		35.5 - 78.3	34.3 - 75.6	34.3 - 75.6	35.0 - 77.2	35.0 - 77.2	35.0 - 77.2

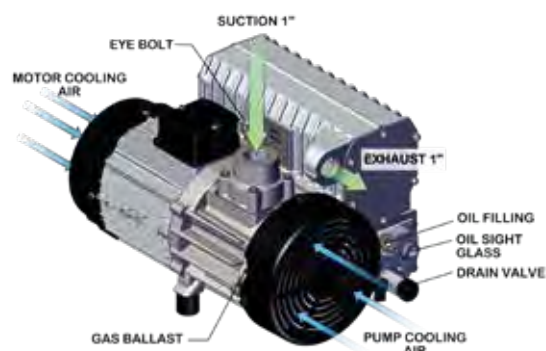
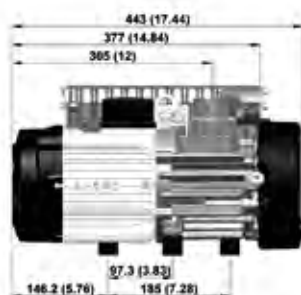
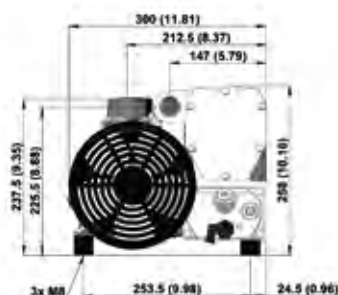
⁽²⁾ DN 40 ISO-KF adaptation flange can be supplied, see accessories

⁽³⁾ DN 25 ISO-KF connector can be supplied, see accessories

Specifications are subject to be changed without notice.

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E40.R HV		E40.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 1ph, 230V-50Hz	824180	824182	824184	824186
EUROPE / ASIA 3ph, 230/400V-50Hz, 220/380V-50/60Hz	824093	824188	824092	824190
SOUTH AMERICA / USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824095	824192	824194	824196
JAPAN 3ph, 200/380V-50/60Hz	824097	824198	824200	824202

Oxygen version available - Contact us

HV Accessories - KF connection



1 Suction filter DN40KF -Type 100

Suction flange DN40KF	625018
1 Suction filter DN40KF - Type 100	Paper cartridge
	Polyester cartridge
	Carbon cartridge
Aluminium clamping ring DN40KF	361639
Stainless steel / Viton DN40KF centering ring	361642
Stainless steel DN40KF hose - 0,5 m	361646
Stainless steel DN40KF hose - 1 m	361647
Elbow DN40KF	333818
Equal T-square DN40KF	333819
Manual ball valve DN40KF	333820
Solenoid valve DN40KF	333821
Exhaust adapter 1" BSP - DN25KF	625019

Maintenance kits

3 000 hour usual maintenance
with silicone o'ring for oil mist filter **724572**

3 000 hour usual maintenance
with viton o'ring for oil mist filter **724573**

12 000 hour preventive maintenance **724574**



3 000 hour usual maintenance



12 000 hour preventive maintenance

Oxygen version maintenance available - Contact us

Specifications are subject to be changed without notice.



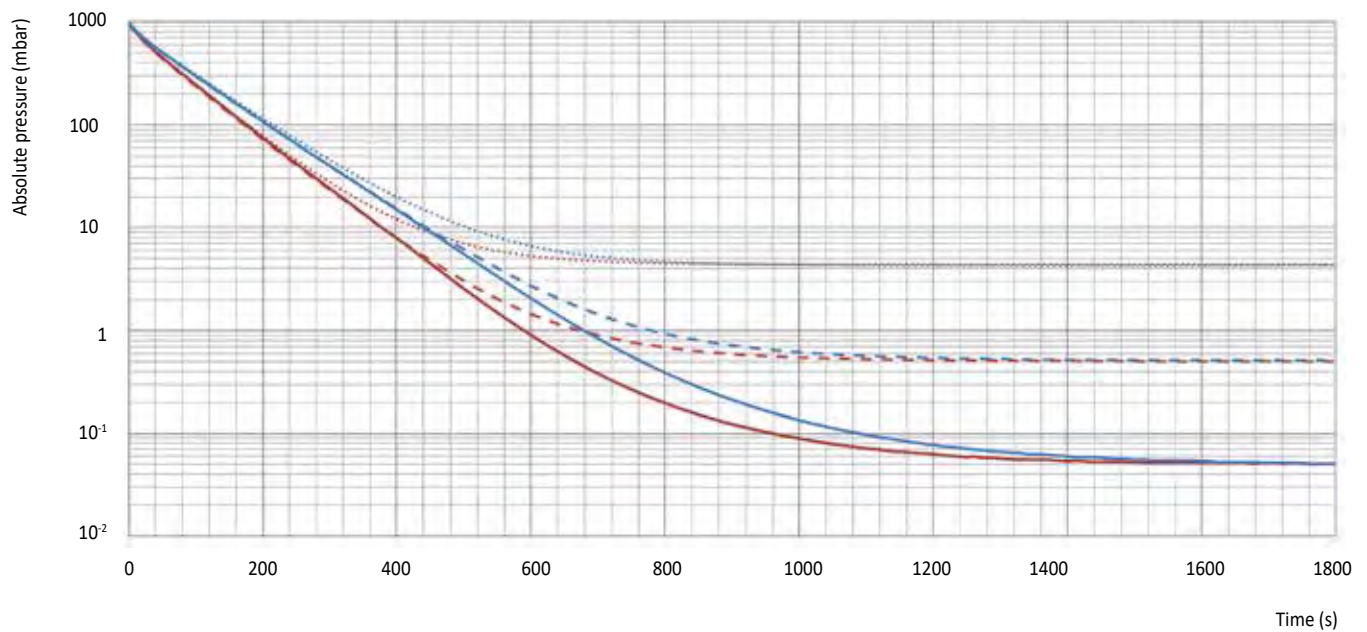
Accessories and Options

Additional rubber foot		625169	
1	Oil Level Safety (OLS) with float	625020	
PT100 temperature sensor		625021	
NC bimetal temperature safety - opening at 120°C - Max 24V		625022	
2	1" BSP suction filter	Paper cartridge	714975
	Type 100	Polyester cartridge	714976
		Carbon cartridge	714977
Ø63 vacuum gauge fitted on filter		617536	
1" BSP polyester/carbon double filtration 100PO + 100CH		625023	
Adjusting valve fitted on T-square MF 1" BSP		714979	
3	Liquid trap 100 48 m³.h ⁻¹ 1"BSP	Aluminium head / plexiglass cylinder / without mechanical float	724793
		Aluminium head / plexiglass cylinder / with mechanical float	724794
		Aluminium head / Pyrex cylinder / without mechanical float	724807
		Aluminium head / Pyrex cylinder / with mechanical float	724808
		Stainless steel head / Pyrex cylinder / without mechanical float	724795
		Stainless steel head / Pyrex cylinder / with mechanical float	724796
		Pyrex bottle 250 ml under trap assembly	615441
		Pyrex bottle 500 ml under trap assembly	615442
		Pyrex bottle 1000 ml under trap assembly	615443
Electro-pneumatic automatic drain with control board		816002	
Electrical automatic drain with control board		816003	
Vacuum hose (0,6 m) MF 1" BSP		618265	
Vacuum hose (1 m) MF 1" BSP		617372	
Vacuum hose (1,5 m) MF 1" BSP		618266	
Vacuum hose (2 m) MF 1" BSP		616179	
Suction hose (1m) MM 1"		714980	
No return valve MF 1" BSP		618457	
Base frame assembly height 150 mm		625012	
4	Elevated base frame (H=525 mm)	For 1 pump	625013
		For 2 pumps	625014
		For 3 pumps	625015
Direct starter (wall mounting)	Without regulation contact 3-ph 400V + E	770496	
	Without regulation contact 1-ph 230V + E	770504	
	With regulation contact LG7 3-ph 400V + N + E	710423	
	With regulation contact LG7 1-ph 230V + E	710435	
	With regulation contact LG7 + Timer 3-ph 400V + N + E	724570	
	With regulation contact LG7 + Timer 1-ph 230V + E	724571	
Direct starter with regulation contact LG7 and Flexo valve for warm up and degasing system - 3-ph 400V + N + E		724580	
Direct starter with regulation contact LG7 and Flexo valve for warm up and degasing system - 1-ph 230V + E		724581	
Electrical cable (3m) with ON/OFF switch -1-ph 230V + E		625016	
Direct starter support for base fixation		625017	

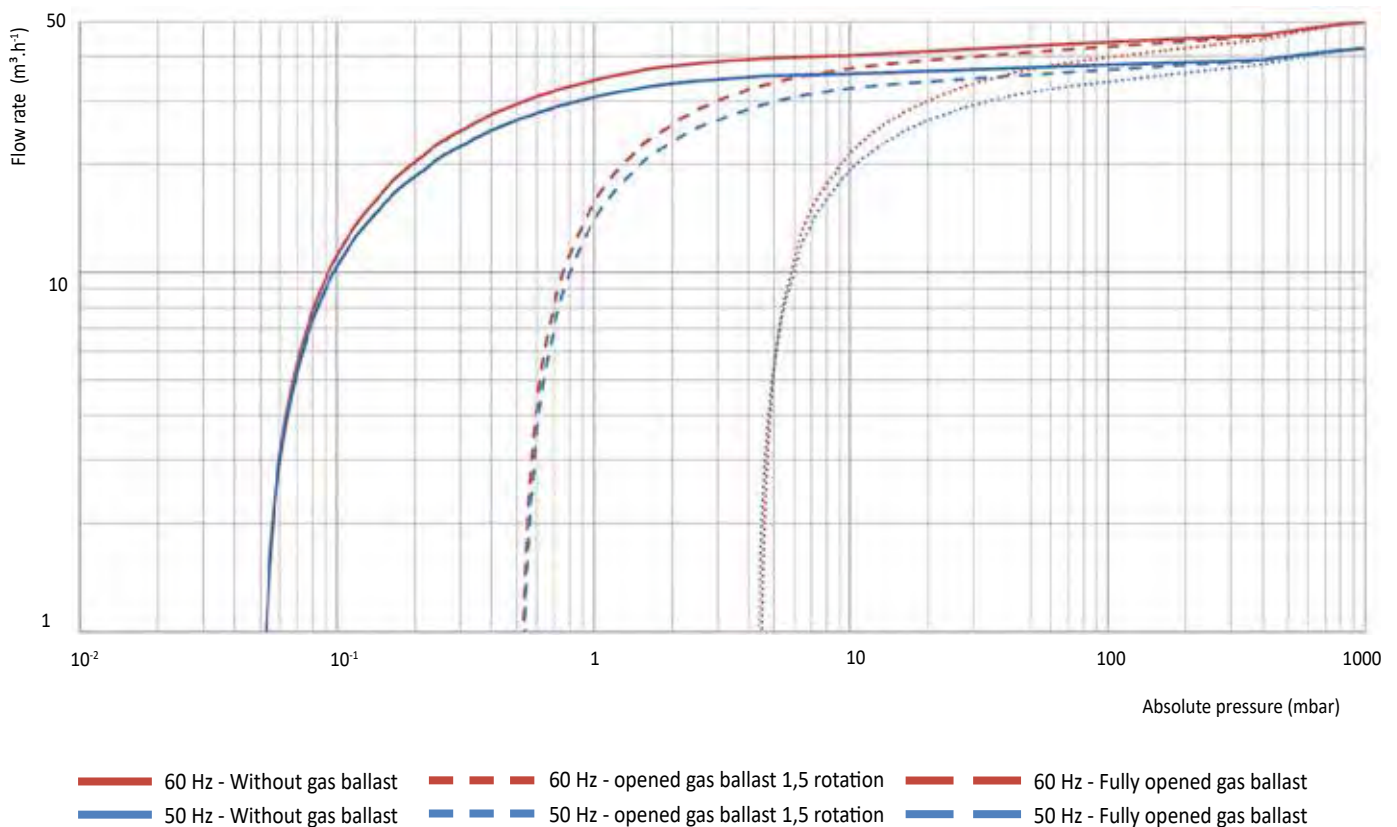


Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves





EVISA E65.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump with the end vacuum of $6 \cdot 10^{-2}$ mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- Designed for light onsite maintenance without piping disconnection
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

			50 Hz	60 Hz
E65.R HV	Nominal flow rate m ³ .h ⁻¹ - cfm		68 - 40	81.6 - 48
	PNEUROP pumping speed ⁽¹⁾ m ³ .h ⁻¹ - cfm		65 - 38.2	78 - 45.9
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ m ³ .h ⁻¹ - cfm		40 - 23.5	48 - 28.2
	Without gas ballast	End vacuum mbar - torr	≤ 6 x10 ⁻² - 4.5 x10 ⁻²	≤ 6 x10 ⁻² - 4.5 x10 ⁻²
		End vacuum mbar - torr	≤ 5 x10 ⁻¹ - 3.8 x10 ⁻¹	≤ 5 x10 ⁻¹ - 3.8 x10 ⁻¹
	Opened gas ballast 3 rotations	Water vapor permitted maximum pressure mbar - torr	50 - 37.5	42 - 31.5
		Water vapor capacity kg.h ⁻¹	2	1.9
	Fully opened gas ballast	End vacuum mbar - torr	≤ 3.0 - 2.3	≤ 3.0 - 2.3
		Water vapor permitted maximum pressure mbar - torr	80 - 60	67 - 50
		Water vapor capacity kg.h ⁻¹	3	3
E65.R	Without gas ballast	End vacuum mbar - torr	≤ 3.0 - 2.3	≤ 3.0 - 2.3
		End vacuum mbar - torr	≤ 5.0 - 3.8	≤ 5.0 - 3.8
	Fully opened gas ballast	Water vapor permitted maximum pressure mbar - torr	49 - 36.7	43 - 32.2
		Water vapor capacity kg.h ⁻¹	1.7	1.7
100 % synthetic oil			MV99S	MV99S
Oil capacity l - qt			3 - 3.2	3 - 3.2
Noise level dB(A)			67	72

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	3	3	3	3	3
	Voltage V	230 / 400	220 / 380	190 / 380	208-230 / 460	200 / 380
	Period Hz	50	60	50	60	50/ 60
	Motor power	1.50 kW	1.80 kW	1.50 kW	3 HP	1.50 / 1.80 kW
	Rotation speed min^{-1}	1500	1800	1500	1800	1500/1800
Inlet connection ⁽²⁾		1"1/4 BSP	1"1/4 BSP	1"1/4 NPT	1"1/4 NPT	1"1/4 BSP
Outlet connection ⁽³⁾		1" 1/4 BSP	1" 1/4 BSP	1" 1/4 NPT	1" 1/4 NPT	1"1/4 BSP
Weight with oil kg - lb		63.4 - 139.8	71.6 - 157.9	78.5 - 173.1	78.5 - 173.1	63.4 - 139.8

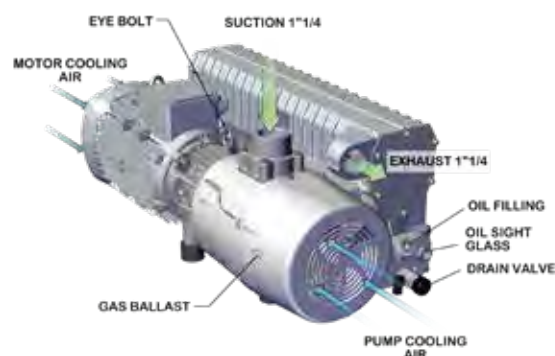
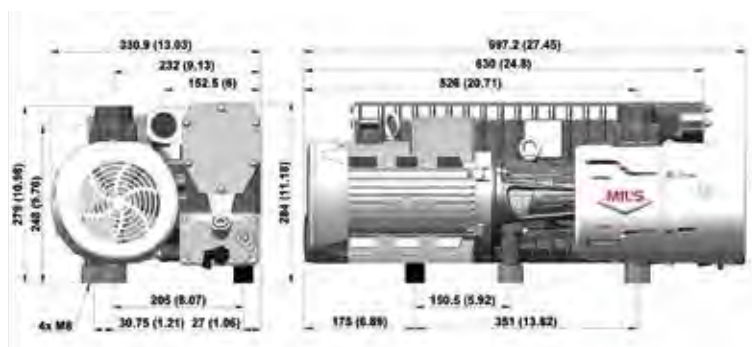
⁽²⁾ DN 40 ISO-KF adaptation flange can be supplied, see accessories

⁽³⁾ DN 40 ISO-KF connector can be supplied, see accessories

Specifications are subject to be changed without notice.

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E65.R HV		E65.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 230/400V-50Hz	824247	824248	824245	824246
SOUTH AMERICA/ USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824255	824256	824253	824254
ASIA / MIDDLE-EAST 3ph, 220/380V-60Hz	824263	824264	824261	824262

JAPAN version - Contact us

Oxygen version available - Contact us

HV Accessories - KF connection



1 Suction filter
DN40KF -Type 100

Suction flange DN40KF		625018
1 Suction filter DN40KF - Type 100	Paper cartridge	625009
	Polyester cartridge	625010
	Carbon cartridge	625011
Aluminium clamping ring DN40KF		361639
Stainless steel / Viton DN40KF centering ring		361642
Stainless steel DN40KF hose - 0,5 m		361646
Stainless steel DN40KF hose - 1 m		361647
Elbow DN40KF		333818
Equal T-square DN40KF		333819
Manual ball valve DN40KF		333820
Solenoid valve DN40KF		333821
Exhaust adapter 1"1/4 BSP - DN40KF		625109

Maintenance kits

3 000 hour usual maintenance
with silicone o'ring for oil mist filter

724601

3 000 hour usual maintenance
with viton o'ring for oil mist filter

724602

12 000 hour preventive maintenance

724603

Oxygen version maintenance available - Contact us



3 000 hour usual
maintenance



12 000 hour
preventive
maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float	625369
	PT100 temperature sensor	625021
	NC bimetal temperature safety - opening at 120°C - Max 24V	625022
2	1"1/4 BSP suction filter	706192
	Paper cartridge	709398
	Polyester cartridge	710521
	Carbon cartridge	617536
	Ø126 vacuum gauge fitted on filter	670617
	1"1/4 BSP polyester/carbon double filtration 126PO + 126CH	713841
	Adjusting valve fitted on T-square	724797
	Aluminium head / plexiglass cylinder / without mechanical float	724798
	Aluminium head / plexiglass cylinder / with mechanical float	724811
	Aluminium head / Pyrex cylinder / without mechanical float	724812
3	Liquid trap 125	724799
	120 m ³ .h ⁻¹	724800
	1"1/4 BSP	615441
	Pyrex bottle 250 ml under trap assembly	615442
	Pyrex bottle 500 ml under trap assembly	615443
	Pyrex bottle 1000 ml under trap assembly	816002
	Electro-pneumatic automatic drain with control board	816003
	Electrical automatic drain with control board	670650
	Vacuum hose (0,6 m) MF 1"1/4 BSP	607058
	Vacuum hose (1 m) MF 1"1/4 BSP	610457
	Vacuum hose (1,5 m) MF 1"1/4 BSP	770152
	Suction hose (1m) MM 1"1/4	625480
	Exhaust double elbow mounting	625209
	Base frame assembly height 150 mm	625210
4	Elevated base frame	625211
	(H=525 mm)	625212
	For 1 pump	770496
	For 2 pumps	770498
	For 3 pumps	710423
	Without regulation contact 3-ph 400V	710432
Direct starter	Without regulation contact 3-ph 230V	
(wall mounting)	With regulation contact LG7 3-ph 400V	
	With regulation contact LG7 3-ph 230V	
	Control board with FLEXO solenoid valve 3-ph ,400V + N	770813
	for warm up and degasing cycle	
	Control board with FLEXO solenoid valve 3-ph ,400V + N	770820
	for degasing cycle	



1 Oil Level Safety



2 suction filter type 126



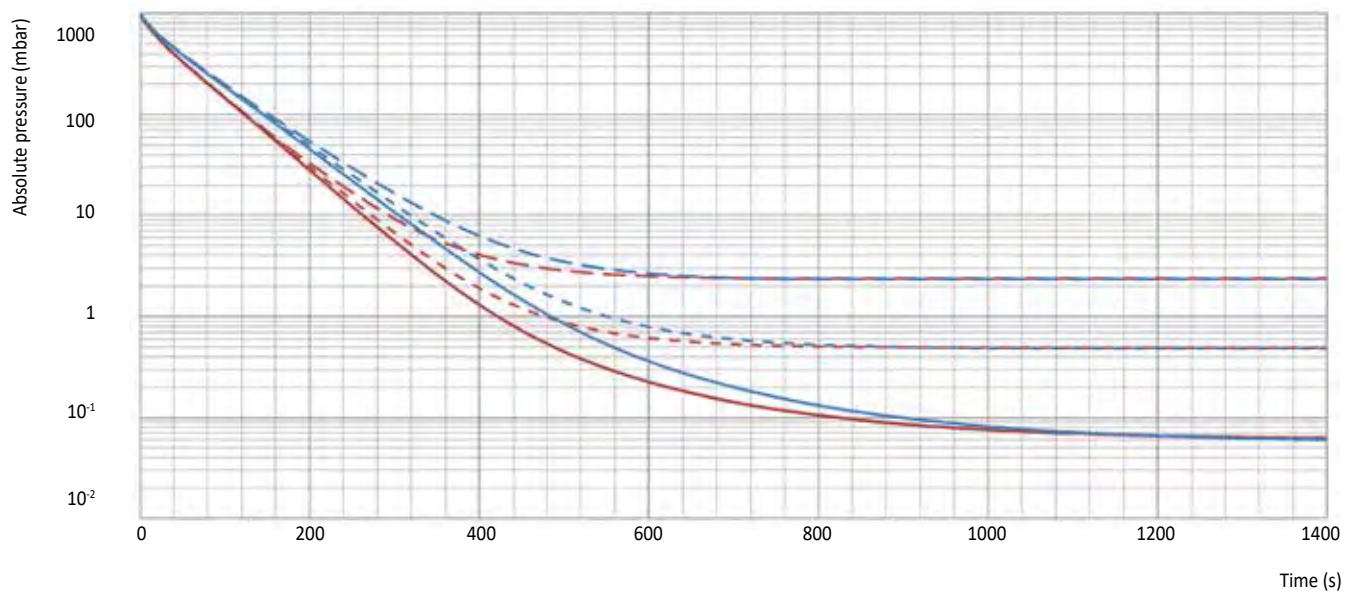
3 Liquid trap 125 with mechanical stop and optional bottle



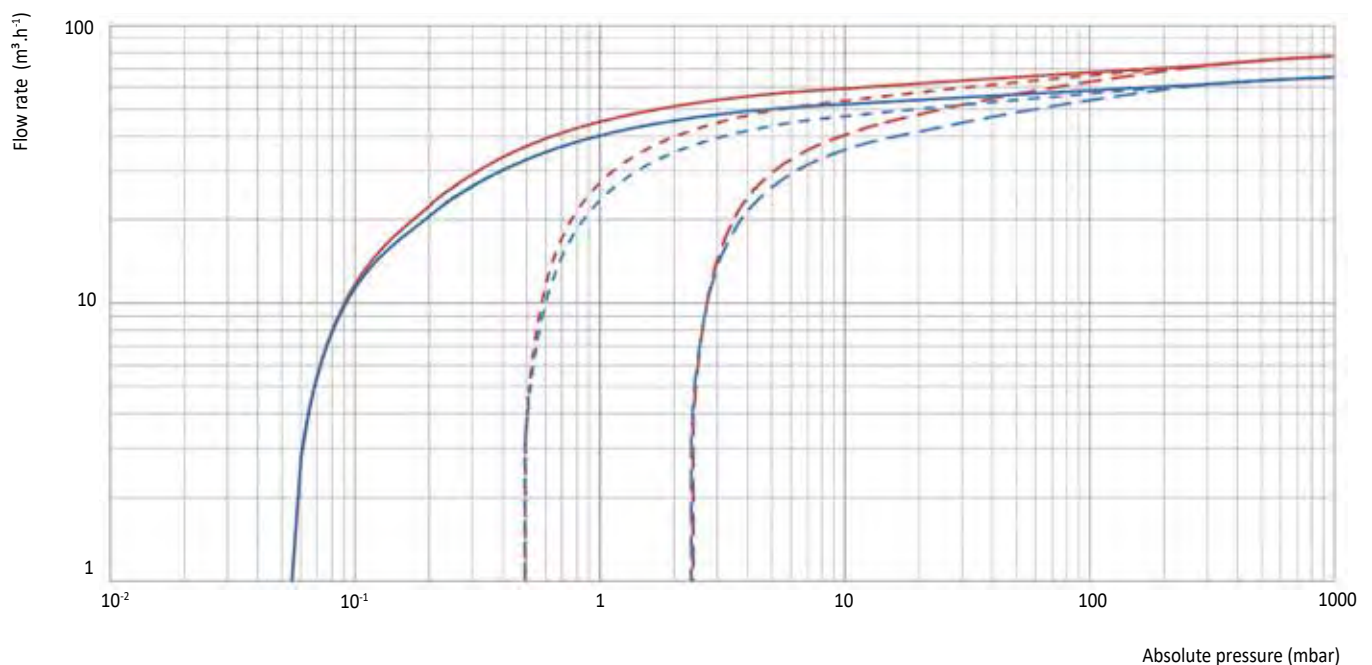
4 Elevated base frame for 2 pumps

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



— 60 Hz - Without gas ballast - - 60 Hz - opened gas ballast 1,5 rotation - - 60 Hz - Fully opened gas ballast
— 50 Hz - Without gas ballast - - 50 Hz - opened gas ballast 1,5 rotation - - 50 Hz - Fully opened gas ballast



EVISA E100.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump with the end vacuum of $6 \cdot 10^{-2}$ mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- Designed for light onsite maintenance without piping disconnection
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz
E100.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	100 - 58.8	120 - 70.6
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	96 - 56.5	115 - 67.7
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	52 - 30.6	62 - 36.5
	Without gas ballast End vacuum mbar - <i>torr</i>	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}
	Opened gas ballast End vacuum mbar - <i>torr</i>	$\leq 5 \times 10^{-1}$ - 3.8×10^{-1}	$\leq 5 \times 10^{-1}$ - 3.8×10^{-1}
	3 rotations Water vapor permitted maximum pressure mbar - <i>torr</i>	59 - 44.2	49 - 36.7
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	3.4	3.2
	Fully opened gas ballast End vacuum mbar - <i>torr</i>	≤ 2.0 - 1.5	≤ 2.0 - 1.5
	Water vapor permitted maximum pressure mbar - <i>torr</i>	95 - 71.2	79 - 59.2
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	5.5	5.2
E100.R	Without gas ballast End vacuum mbar - <i>torr</i>	≤ 3.0 - 2.3	≤ 3.0 - 2.3
	End vacuum mbar - <i>torr</i>	≤ 5.0 - 3.8	≤ 5.0 - 3.8
	Fully opened gas ballast Water vapor permitted maximum pressure mbar - <i>torr</i>	69 - 51.7	60 - 45.0
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	3.8	3.8
100 % synthetic oil		MV99S	MV99S
Oil capacity l - <i>qt</i>		3 - 3.2	3 - 3.2
Noise level dB(A)		67	69

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	3	3	3	3	3
	Voltage V	230 / 400	220 / 380	190 / 380	208-230 / 460	200 / 380
	Period Hz	50	60	50	60	50 / 60
	Motor power	2.20 kW	2.64 kW	2.20 kW	5 HP	2.20 / 2.64 kW
	Rotation speed min^{-1}	1500	1800	1500	1800	1500/1800
Inlet connection ⁽²⁾		1"1/4 BSP	1"1/4 BSP	1"1/4 NPT	1"1/4 NPT	1"1/4 BSP
Outlet connection ⁽³⁾		1" 1/4 BSP	1" 1/4 BSP	1" 1/4 NPT	1" 1/4 NPT	1"1/4 BSP
Weight with oil kg - <i>lb</i>		67.2 - 148.2	67.2 - 148.2	85.5 - 188.5	85.5 - 188.5	67.2 - 148.2

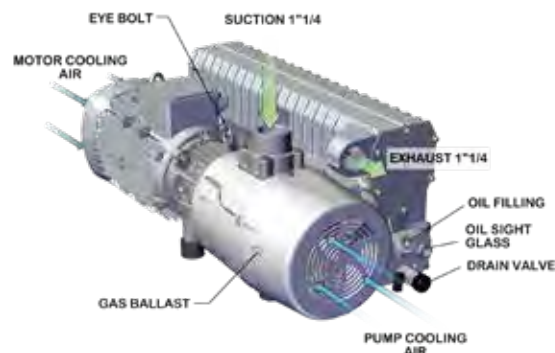
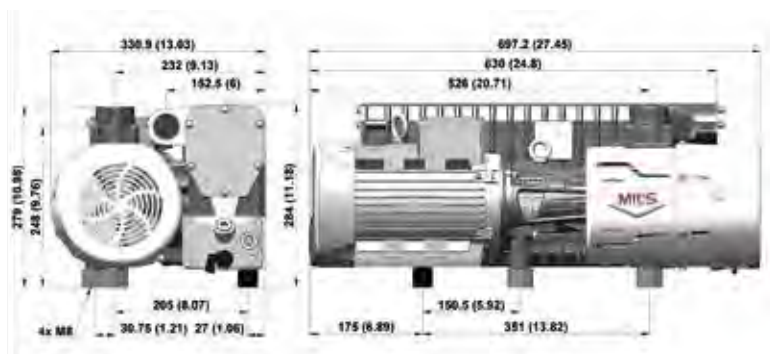
⁽²⁾ DN 40 ISO-KF adaptation flange can be supplied, see accessories

⁽³⁾ DN 40 ISO-KF connector can be supplied, see accessories

Specifications are subject to be changed without notice.

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E100.R HV		E100.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 230/400V-50Hz	824251	824252	824249	824250
SOUTH AMERICA/ USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824259	824260	824257	824258
ASIA / MIDDLE-EAST 3ph, 220/380V-60Hz	824267	824268	824265	824266

JAPAN version - Contact us

Oxygen version available - Contact us

HV Accessories - KF connection



1 Suction filter DN40KF - Type 100

Suction flange DN40KF	625018
1 Suction filter DN40KF - Type 100	Paper cartridge
	Polyester cartridge
	Carbon cartridge
Aluminium clamping ring DN40KF	361639
Stainless steel / Viton DN40KF centering ring	361642
Stainless steel DN40KF hose - 0,5 m	361646
Stainless steel DN40KF hose - 1 m	361647
Elbow DN40KF	333818
Equal T-square DN40KF	333819
Manual ball valve DN40KF	333820
Solenoid valve DN40KF	333821
Exhaust adapter 1"1/4 BSP - DN40KF	625109

Maintenance kits

3 000 hour usual maintenance
with silicone o'ring for oil mist filter

724601

3 000 hour usual maintenance
with viton o'ring for oil mist filter

724602

12 000 hour preventive maintenance

724604

Oxygen version maintenance available - Contact us



3 000 hour usual
maintenance



12 000 hour
preventive
maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float		625369
	PT100 temperature sensor		625021
	NC bimetal temperature safety - opening at 120°C - Max 24V		625022
2	1"1/4 BSP suction filter Type 126	Paper cartridge	706192
		Polyester cartridge	709398
		Carbon cartridge	710521
	Ø126 vacuum gauge fitted on filter		617536
	1"1/4 BSP polyester/carbon double filtration 126PO + 126CH		670617
	Adjusting valve fitted on T-square		713841
3	Liquid trap 125 120 m³.h⁻¹ 1"1/4 BSP	Aluminium head / plexiglass cylinder / without mechanical float	724797
		Aluminium head / plexiglass cylinder / with mechanical float	724798
		Aluminium head / Pyrex cylinder / without mechanical float	724811
		Aluminium head / Pyrex cylinder / with mechanical float	724812
		Stainless steel head / Pyrex cylinder / without mechanical float	724799
		Stainless steel head / Pyrex cylinder / with mechanical float	724800
		Pyrex bottle 250 ml under trap assembly	615441
		Pyrex bottle 500 ml under trap assembly	615442
	Pyrex bottle 1000 ml under trap assembly		615443
	Electro-pneumatic automatic drain with control board		816002
	Electrical automatic drain with control board		816003
	Vacuum hose (0,6 m) MF 1"1/4 BSP		670650
	Vacuum hose (1 m) MF 1"1/4 BSP		607058
	Vacuum hose (1,5 m) MF 1"1/4 BSP		610457
	Suction hose (1m) MM 1"1/4		770152
	Exhaust double elbow mounting		625480
	Base frame assembly height 150 mm		625209
4	Elevated base frame (H=525 mm)	For 1 pump	625210
		For 2 pumps	625211
		For 3 pumps	625212
Direct starter (wall mounting)	Without regulation contact 3-ph 400V		770497
	Without regulation contact 3-ph 230V		770498
	With regulation contact LG7 3-ph 400V		710424
	With regulation contact LG7 3-ph 230V		710432
	Control board with FLEXO solenoid valve 3-ph, 400V + N for warm up and degasing cycle		770814
	Control board with FLEXO solenoid valve 3-ph, 400V + N for degasing cycle		770821



1 Oil Level Safety



2 suction filter
type 126



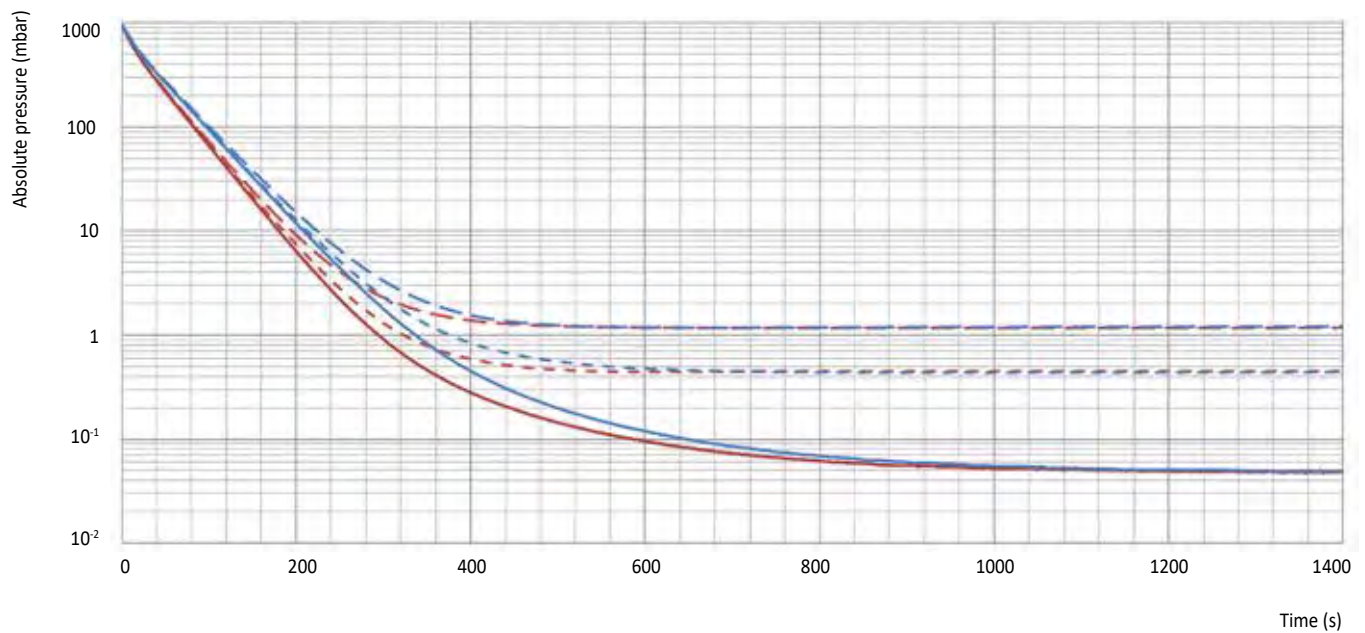
3 Liquid trap 125
with mechanical
stop and
optional bottle



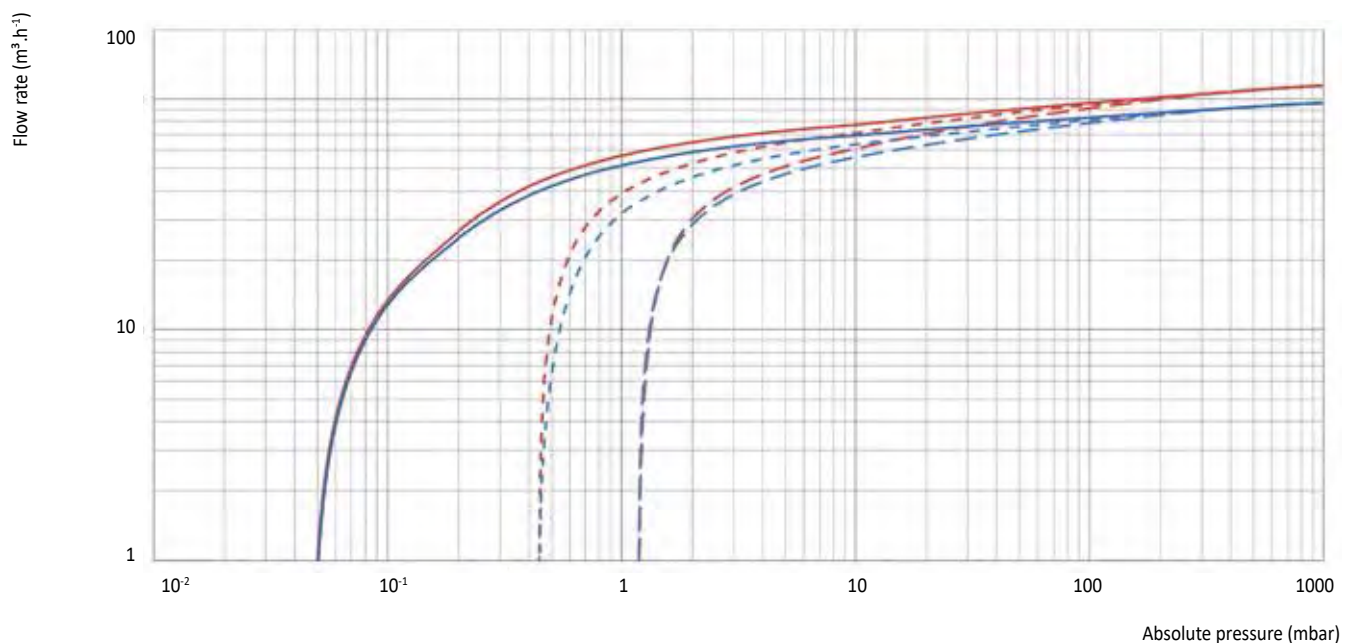
4 Elevated base frame
for 2 pumps

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



- | | | |
|-------------------------------|---|------------------------------------|
| — 60 Hz - Without gas ballast | - - - 60 Hz - opened gas ballast 1,5 rotation | — 60 Hz - Fully opened gas ballast |
| — 50 Hz - Without gas ballast | - - - 50 Hz - opened gas ballast 1,5 rotation | — 50 Hz - Fully opened gas ballast |



EVISA E150.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : $8 \cdot 10^{-2}$ mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz ⁽²⁾
E150.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	132 - 77.7	156 - 91.8
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	125 - 73.6	150 - 88.3
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	95 - 55.9	114 - 67.1
	Without gas ballast End vacuum mbar - torr	$\leq 8 \times 10^{-2} - 6 \times 10^{-2}$	$\leq 8 \times 10^{-2} - 6 \times 10^{-2}$
	Fully opened gas ballast		
	End vacuum mbar - torr	$\leq 2 - 1.5$	$\leq 2 - 1.5$
E150.R	Water vapor permitted maximum pressure mbar - torr	58.8 - 44.1	70.3 - 52.8
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	4.2	6.2
	Without gas ballast End vacuum mbar - torr	$\leq 3 - 2.3$	$\leq 3 - 2.3$
	Fully opened gas ballast		
	End vacuum mbar - torr	$\leq 5 - 3.8$	$\leq 5 - 3.8$
	Water vapor permitted maximum pressure mbar - torr	41 - 30.7	49 - 36.7
Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$		2.9	4.3
100 % synthetic oil		MV99S	MV99S
Oil capacity l - qt		5.0 - 5.3	5.0 - 5.3
Noise level dB(A)		69	72

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

⁽²⁾ 260/460V 60 Hz only

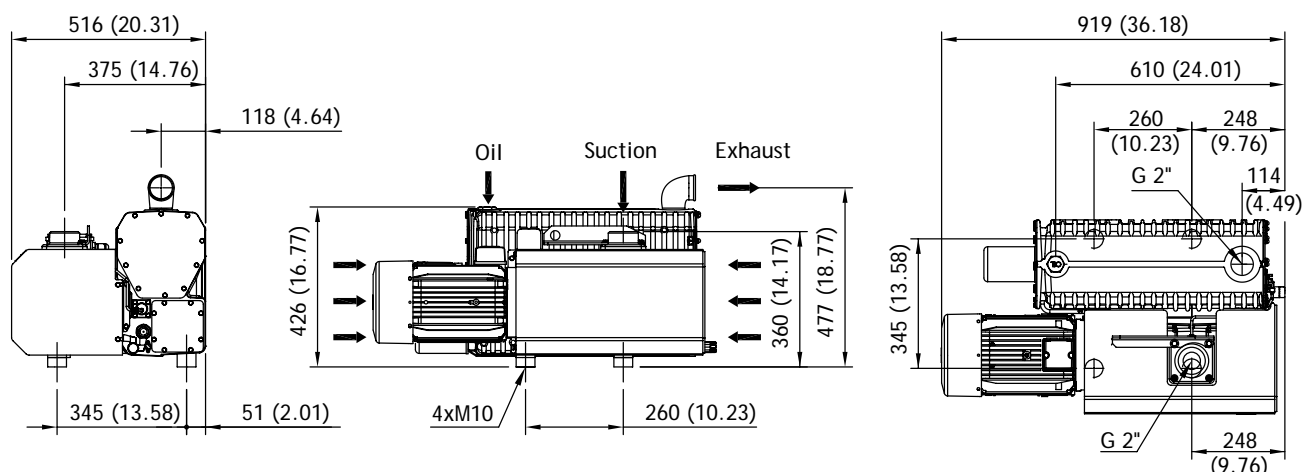
Versions

GEOGRAPHIC ZONE		EUROPE	SOUTH AMERICA	USA
Electrical motor	Number of phases	3	3	3
	Voltage V	230 / 400	190 / 380	208-230 / 460
	Period Hz	50	50	60
	Motor power	3 kW	3 kW	5 HP
	Rotation speed min^{-1}	1000	1000	1200
Inlet connection ⁽²⁾		2" BSP	2" NPT	2" NPT
Outlet connection ⁽²⁾		2" BSP	2" NPT	2" NPT
Weight with oil kg - lb		154 - 340	174 - 384	174 - 384

⁽²⁾ DN 50 ISO-KF connector can be supplied, see accessories

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E150.R HV		E150.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 230/400V-50Hz	823857 + 624229	823857	823856 + 624229	823856
SOUTH AMERICA / USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824059 + 624229	824059	Contact us	Contact us
For booster direct mounting : contact us				

Special versions

	E150.R HV		E150.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
OXYGEN with Fomblin oil 3ph, 230/400V-50Hz	823871 + 624229	823871	823870 + 624229	823870
EVISA H₂O 3ph, 230/400V-50Hz	Contact us	Contact us	823869 + 624229	823869

Maintenance kits

3 000 hour usual maintenance with silicone o'ring for oil mist filter	724054
3 000 hour usual maintenance with viton o'ring for oil mist filter	724055
12 000 hour preventive maintenance	724052
Gasket set	624230
3 000 hour usual maintenance for OXYGEN version	724089
12 000 hour preventive maintenance for OXYGEN version	724087



3 000 hour usual maintenance



12 000 hour preventive maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float	624245
	Timer box for oil level safety (base mounting)	670810
	NC bimetal temperature safety - opening at 120°C + SNH - Max 24V	624246
	Oil Level Safety and PT100 temperature sensor	624247
	PT100 temperature sensor	624248
2	2" BSP suction filter	715350
	Paper cartridge	
	Polyester cartridge	715351
	Carbon cartridge	715352
	Vacuum gauge fitted on filter	617536
	2" BSP paper/paper double filtration 201PA + 201PA	670615
	2" BSP polyester/carbon double filtration 201PO + 201CH	670618
3	Liquid trap 200	720801
	340 m ³ .h ⁻¹	
	2" BSP	
	Aluminium head / polycarbonate cylinder / without float	720802
	Aluminium head / polycarbonate cylinder / with float	720803
	Stainless steel head / Pyrex cylinder / without float	720804
	Stainless steel head / Pyrex cylinder / with float	615441
	Pyrex bottle 250 ml under trap assembly	615442
	Pyrex bottle 500 ml under trap assembly	615443
	Pyrex bottle 1000 ml under trap assembly	619907
	Bracket for wall fixing	
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Adjusting valve fitted on T-square	713842
	Vacuum hose (0,6 m) FF 2" BSP	618149
	Vacuum hose (1 m) FF 2" BSP	606099
	Vacuum hose (1,5 m) FF 2" BSP	607592
	Suction hose with non-return valve (1 m)	770154
	Exhaust double elbow mounting	622788
	Base frame assembly height 150 mm	670806
4	Elevated base frame	617612
	(H=525 mm)	
	For 1 pump	619545
	For 2 pumps	
	Without regulation contact 3-ph 400V	770499
Direct starter	Without regulation contact 3-ph 230V	770500
(wall mounting)	With regulation contact LG7 3-ph 400V	710426
	With regulation contact LG7 3-ph 230V	710434
	Control board with FLEXO solenoid valve 3-ph, 400V + N for warm up and degasing cycle	770815
	Control board with FLEXO solenoid valve 3-ph, 400V + N for degasing cycle	770822
	Aluminium adapter M2" / DN50 KF	117132
	Aluminium clamping collar DN50 KF	361640
	Centering ring stainless steel / VITON	361643
	Stainless steel hose (0,5 m) DN50 KF	361648
	Stainless steel hose (1 m) DN50 KF	361649



1 Oil Level Safety



2 suction filter type 201



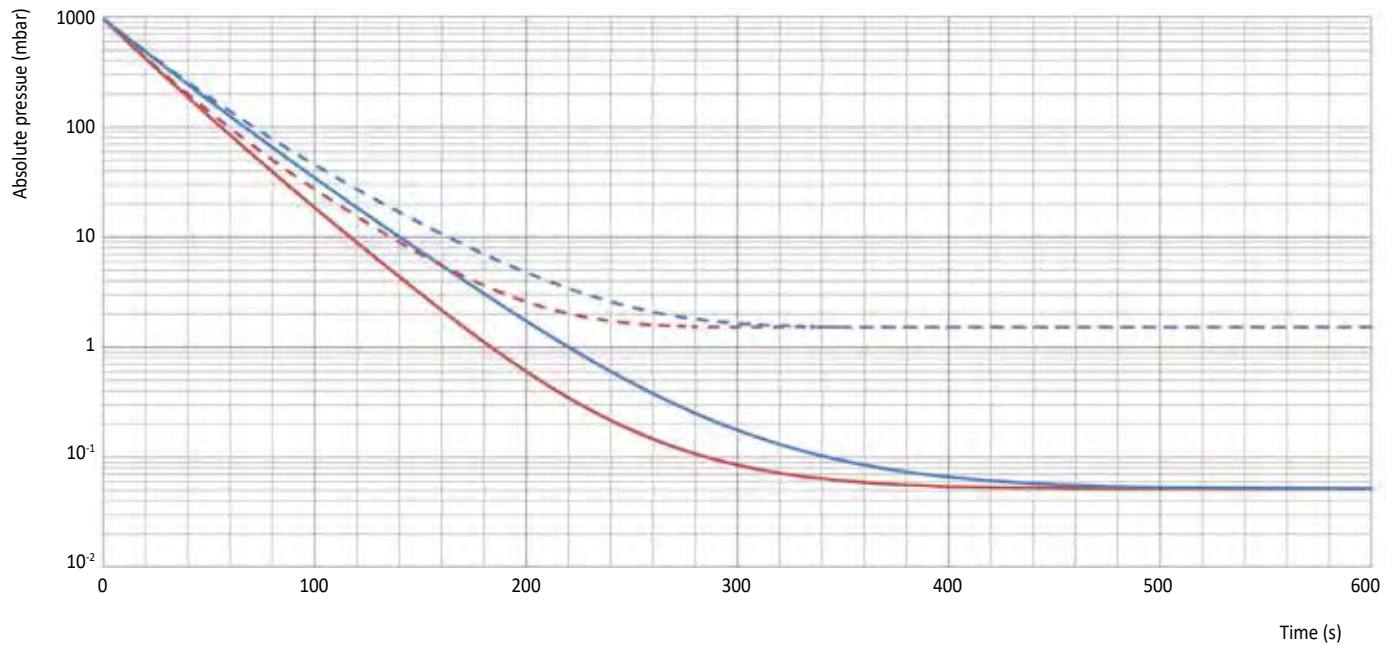
3 Liquid trap 200 with mechanical stop and optional bottle



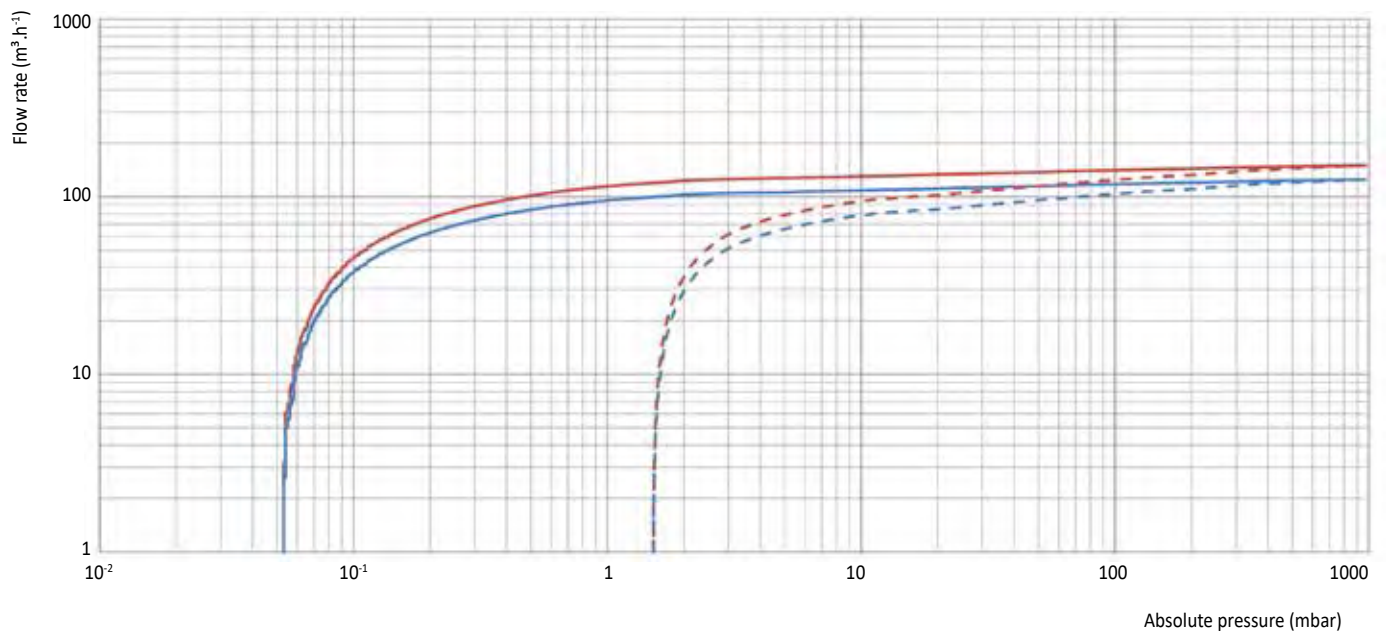
4 Elevated base frame for 2 pumps

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



— 60 Hz - without gas ballast
— 50 Hz - without gas ballast

- - 60 Hz - with opened gas ballast
- - 50 Hz - with opened gas ballast



EVISA E200.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : $6 \cdot 10^{-2}$ mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz	
E200.R HV	Nominal flow rate m ³ .h ⁻¹ - cfm		200 - 117.7	240 - 141.3
	PNEUROP pumping speed ⁽¹⁾ m ³ .h ⁻¹ - cfm		190 - 111.8	228 - 134.2
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ m ³ .h ⁻¹ - cfm		134 - 78.9	161 - 94.8
	Without gas ballast End vacuum mbar - torr		≤ 6 x10 ⁻² - 4.5 x10 ⁻²	≤ 6 x10 ⁻² - 4.5 x10 ⁻²
	Fully opened gas ballast	End vacuum mbar - torr	≤ 1 - 0.75	≤ 1 - 0.75
Water vapor permitted maximum pressure mbar - torr		20.2 - 15.1	21.3 - 15.9	
Water vapor capacity kg.h ⁻¹		2.2	2.8	
E200.R	Without gas ballast End vacuum mbar - torr		≤ 3 - 2.3	≤ 3 - 2.3
	Fully opened gas ballast	End vacuum mbar - torr	≤ 5 - 3.8	≤ 5 - 3.8
		Water vapor permitted maximum pressure mbar - torr	14 - 10.5	15 - 11.2
		Water vapor capacity kg.h ⁻¹	1.5	2
	100 % synthetic oil		MV99S	MV99S
	Oil capacity l - qt		5.0 - 5.3	5.0 - 5.3
	Noise level dB(A)		71	77

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

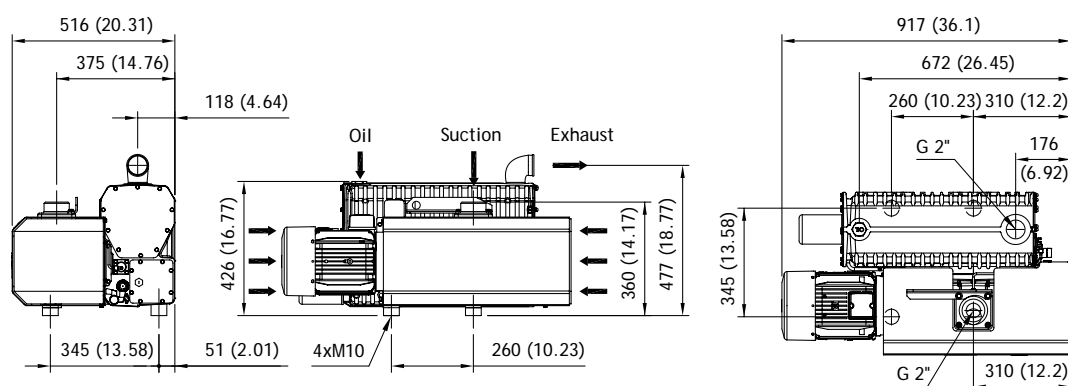
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	3	3	3	3	3
	Voltage V	230 / 400	220 / 380	190 / 380	208-230 / 460	220 / 380
	Period Hz	50	60	50	60	50 / 60
	Motor power	4 kW	4.8 kW	4 kW	7.5 HP	4 / 4.8 kW
	Rotation speed min^{-1}	1500	1800	1500	1800	1500 / 1800
Inlet connection ⁽²⁾		2" BSP	2" BSP	2" NPT	2" NPT	2" BSP
Outlet connection ⁽²⁾		2" BSP	2" BSP	2" NPT	2" NPT	2" BSP
Weight with oil $\text{kg} - \text{lb}$		143 - 316	158 - 349	174 - 384	174 - 384	160 - 353

⁽²⁾ DN 50 ISO-KF connector can be supplied, see accessories

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E200.R HV		E200.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 230/400V-50Hz	823766 + 624229	823766	823830 + 624229	823830
SOUTH AMERICA / USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824060 + 624229	824060	Contact us	Contact us
ASIA / MIDDLE - EAST 3ph, 220/380V-50/60Hz	823835 + 624229	823835	823833 + 624229	823833
JAPAN Version : contact us				

Special versions

	E200.R HV		E200.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
CONDENSABLE VAPOUR PUMPING (small propeller) 3ph, 230/400V-50Hz	823864 + 624229	823864	823837 + 624229	823837
OXYGEN with Fomblin oil 3ph, 230/400V-50Hz	823873 + 624229	823873	823872 + 624229	823872
EVISA H₂O 3ph, 230/400V-50Hz	Contact us	Contact us	823845 + 624229	823845

For booster direct mounting : contact us

Maintenance kits

3 000 hour usual maintenance with silicone o'ring for oil mist filter	724054
3 000 hour usual maintenance with viton o'ring for oil mist filter	724055
12 000 hour preventive maintenance	724052
Gasket set	624230
3 000 hour usual maintenance for OXYGEN version	724089
12 000 hour preventive maintenance for OXYGEN version	724087



3 000 hour usual maintenance



12 000 hour preventive maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float	624245
	Timer box for oil level safety (base mounting)	670810
	NC bimetal temperature safety - opening at 120°C + SNH - Max 24V	624246
	Oil Level Safety and PT100 temperature sensor	624247
	PT100 temperature sensor	624248
2	2" BSP suction filter	715350
	Type 201 Paper cartridge	715351
	Polyester cartridge	715352
	Carbon cartridge	715352
	Vacuum gauge fitted on filter	617536
	2" BSP paper/paper double filtration 201PA + 201PA	670615
	2" BSP polyester/carbon double filtration 201PO + 201CH	670618
3	Liquid trap 200	720801
	340 m ³ .h ⁻¹ Aluminium head / polycarbonate cylinder / without float	720802
	2" BSP Stainless steel head / polycarbonate cylinder / with float	720803
	Pyrex cylinder / without float	720804
	Stainless steel head / Pyrex cylinder / with float	615441
	Pyrex bottle 250 ml under trap assembly	615442
	Pyrex bottle 500 ml under trap assembly	615443
	Pyrex bottle 1000 ml under trap assembly	619907
	Bracket for wall fixing	619907
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Adjusting valve fitted on T-square	713842
	Vacuum hose (0,6 m) FF 2" BSP	618149
	Vacuum hose (1 m) FF 2" BSP	606099
	Vacuum hose (1,5 m) FF 2" BSP	607592
	Suction hose with non-return valve (1 m)	770154
	Exhaust double elbow mounting	622788
	Base frame assembly height 150 mm	670806
4	Elevated base frame	617612
	(H=525 mm) For 1 pump	619545
	For 2 pumps	619545
	Without regulation contact 3-ph 400V	770499
Direct starter	Without regulation contact 3-ph 230V	770500
(wall mounting)	With regulation contact LG7 3-ph 400V	710426
	With regulation contact LG7 3-ph 230V	710434
	Control board with FLEXO solenoid valve 3-ph, 400V + N for warm up and degasing cycle	770815
	Control board with FLEXO solenoid valve 3-ph, 400V + N for degasing cycle	770822
	Aluminium adapter M2" / DN50 KF	117132
	Aluminium clamping collar DN50 KF	361640
	Centering ring stainless steel / VITON	361643
	Stainless steel hose (0,5 m) DN50 KF	361648
	Stainless steel hose (1 m) DN50 KF	361649



1 Oil Level Safety



2 suction filter type 201



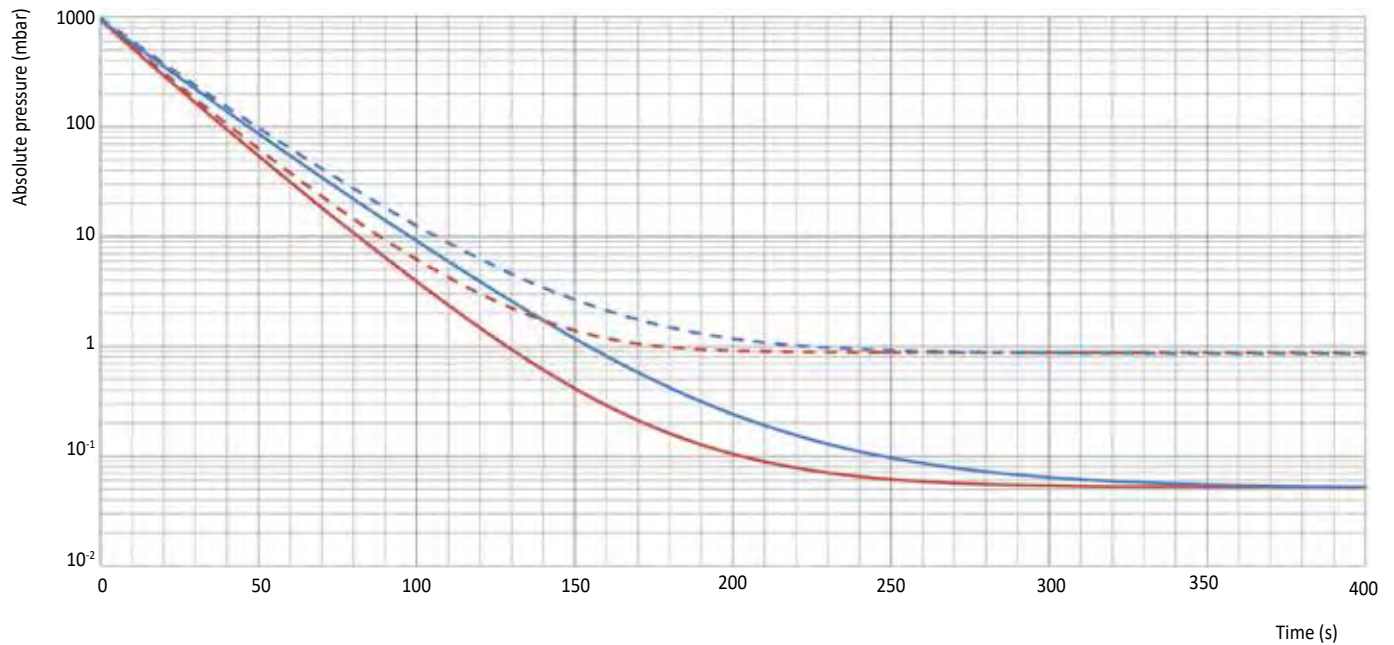
3 Liquid trap 200 with mechanical stop and optional bottle



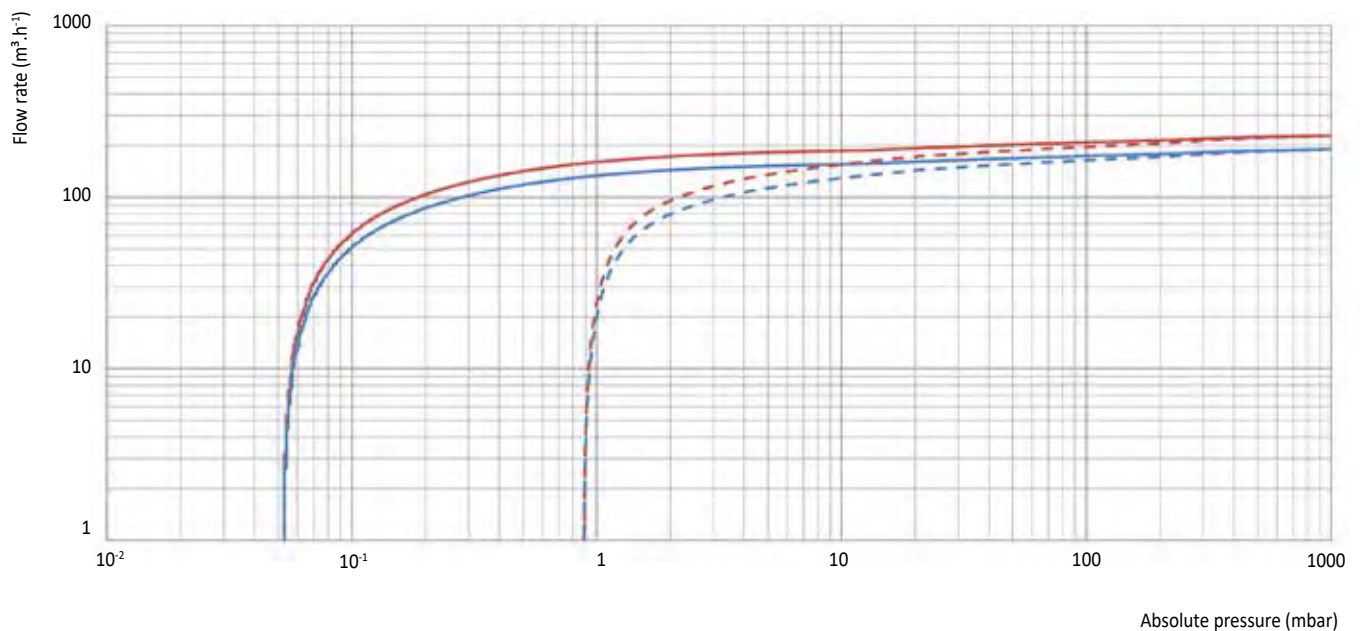
4 Elevated base frame for 2 pumps

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



— 60 Hz - without gas ballast
— 50 Hz - without gas ballast

- - 60 Hz - with opened gas ballast
- - 50 Hz - with opened gas ballast



EVISA E300.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : $6 \cdot 10^{-2}$ mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz
E300.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	300 - 176.5	360 - 211.8
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	280 - 165	336 - 198
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	171 - 101	205 - 121
	Without gas ballast End vacuum mbar - torr	$\leq 6 \times 10^{-2} - 4.5 \times 10^{-2}$	$\leq 6 \times 10^{-2} - 4.5 \times 10^{-2}$
	Fully opened gas ballast		
E300.R	End vacuum mbar - torr	$\leq 2 - 1.5$	$\leq 2 - 1.5$
	Water vapor permitted maximum pressure mbar - torr	18.6 - 13.9	20 - 15
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	2.3	3
	Without gas ballast End vacuum mbar - torr	$\leq 3 - 2.3$	$\leq 3 - 2.3$
	Fully opened gas ballast		
	End vacuum mbar - torr	$\leq 5 - 3.8$	$\leq 5 - 3.8$
	Water vapor permitted maximum pressure mbar - torr	13 - 9.7	14 - 10.5
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	1.6	2
100 % synthetic oil		MV99S	MV99S
Oil capacity $\text{l} - \text{qt}$		5.0 - 5.3	5.0 - 5.3
Noise level dB(A)		72	76

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

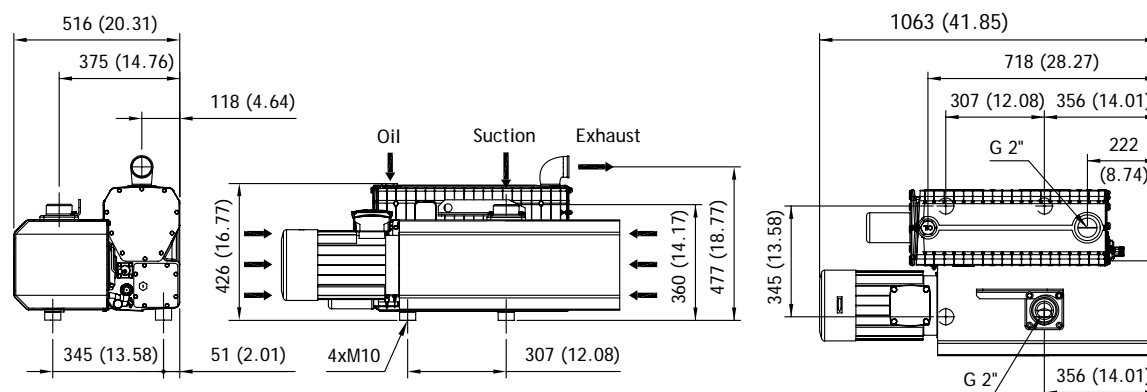
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	3	3	3	3	3
	Voltage V	230 / 400	220 / 380	190 / 380	208-230 / 460	220 / 380
	Period Hz	50	60	50	60	50 / 60
	Motor power	5.5 kW	6.6 kW	5.5 kW	10 HP	5.5 / 6.6 kW
	Rotation speed min^{-1}	1500	1800	1500	1800	1500 / 1800
Inlet connection ⁽²⁾		2" BSP	2" BSP	2" NPT	2" NPT	2" BSP
Outlet connection ⁽²⁾		2" BSP	2" BSP	2" NPT	2" NPT	2" BSP
Weight with oil $\text{kg} - \text{lb}$		172 - 380	182 - 402	198 - 437	198 - 437	179 - 395

⁽²⁾ DN 50 ISO-KF connector can be supplied, see accessories

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E300.R HV		E300.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 230/400V-50Hz	823767 + 624229	823767	823831 + 624229	823831
SOUTH AMERICA / USA 3ph, 190/380V-50Hz, 208-230/460V-60Hz	824061 + 624229	824061	Contact us	Contact us
ASIA / MIDDLE-EAST 3ph, 220/380V-60Hz	823836 + 624229	823836	823834 + 624229	823834
JAPAN version : contact us				

Special versions

	E300.R HV		E300.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
CONDENSABLE VAPOUR PUMPING (small propeller) 3ph, 230/400V-50Hz	824287 + 624229	824287	823838 + 624229	823838
OXYGEN with Fomblin oil 3ph, 230/400V-50Hz	823875 + 624229	823875	823874 + 624229	823874
EVISA H₂O 3ph, 230/400V-50Hz	Contact us	Contact us	823846 + 624229	823846

For booster direct mounting : contact us

Maintenance kits

3 000 hour usual maintenance with silicone o'ring for oil mist filter	724079
3 000 hour usual maintenance with viton o'ring for oil mist filter	724080
12 000 hour preventive maintenance	724053
Gasket set	624231
3 000 hour usual maintenance for OXYGEN version	724090
12 000 hour preventive maintenance for OXYGEN version	724088



3 000 hour usual maintenance



12 000 hour preventive maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float	624245
	Timer box for oil level safety (base mounting)	670810
	NC bimetal temperature safety - opening at 120°C + SNH - Max 24V	624246
	Oil Level Safety and PT100 temperature sensor	624247
	PT100 temperature sensor	624248
2	2" BSP suction filter	
	Type 201	
	Paper cartridge	715350
	Polyester cartridge	715351
	Carbon cartridge	715352
	Vacuum gauge fitted on filter	617536
	2" BSP paper/paper double filtration 201PA + 201PA	670615
	2" BSP polyester/carbon double filtration 201PO + 201CH	670618
3	Liquid trap 200	
	340 m ³ .h ⁻¹	
	2" BSP	
	Aluminium head / polycarbonate cylinder / without float	720801
	Aluminium head / polycarbonate cylinder / with float	720802
	Stainless steel head/ Pyrex cylinder / without float	720803
	Stainless steel head / Pyrex cylinder / with float	720804
	Pyrex bottle 250 ml under trap assembly	615441
	Pyrex bottle 500 ml under trap assembly	615442
	Pyrex bottle 1000 ml under trap assembly	615443
	Bracket for wall fixing	619907
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Adjusting valve fitted on T-square	713842
	Vacuum hose (0,6 m) FF 2" BSP	618149
	Vacuum hose (1 m) FF 2" BSP	606099
	Vacuum hose (1,5 m) FF 2" BSP	607592
	Suction hose with non-return valve (1 m)	770154
	Exhaust double elbow mounting	622788
	Base frame assembly height 150 mm	670806
4	Elevated base frame	
	(H=525 mm)	
	For 1 pump	617612
	For 2 pumps	619545
	Without regulation contact 3-ph 400V	770499
Direct starter	Without regulation contact 3-ph 230V	770500
(wall mounting)	With regulation contact LG7 3-ph 400V	710426
	With regulation contact LG7 3-ph 230V	710434
	Control board with FLEXO solenoid valve 3-ph, 400 + N for warm up and degasing cycle	770815
	Control board with FLEXO solenoid valve 3-ph, 400 + N for degasing cycle	770822
	Aluminium adapter M2" / DN50 KF	117132
	Aluminium clamping collar DN50 KF	361640
	Centering ring stainless steel / VITON	361643
	Stainless steel hose (0,5 m) DN50 KF	361648
	Stainless steel hose (1 m) DN50 KF	361649



1 Oil Level Safety



2 suction filter
type 201



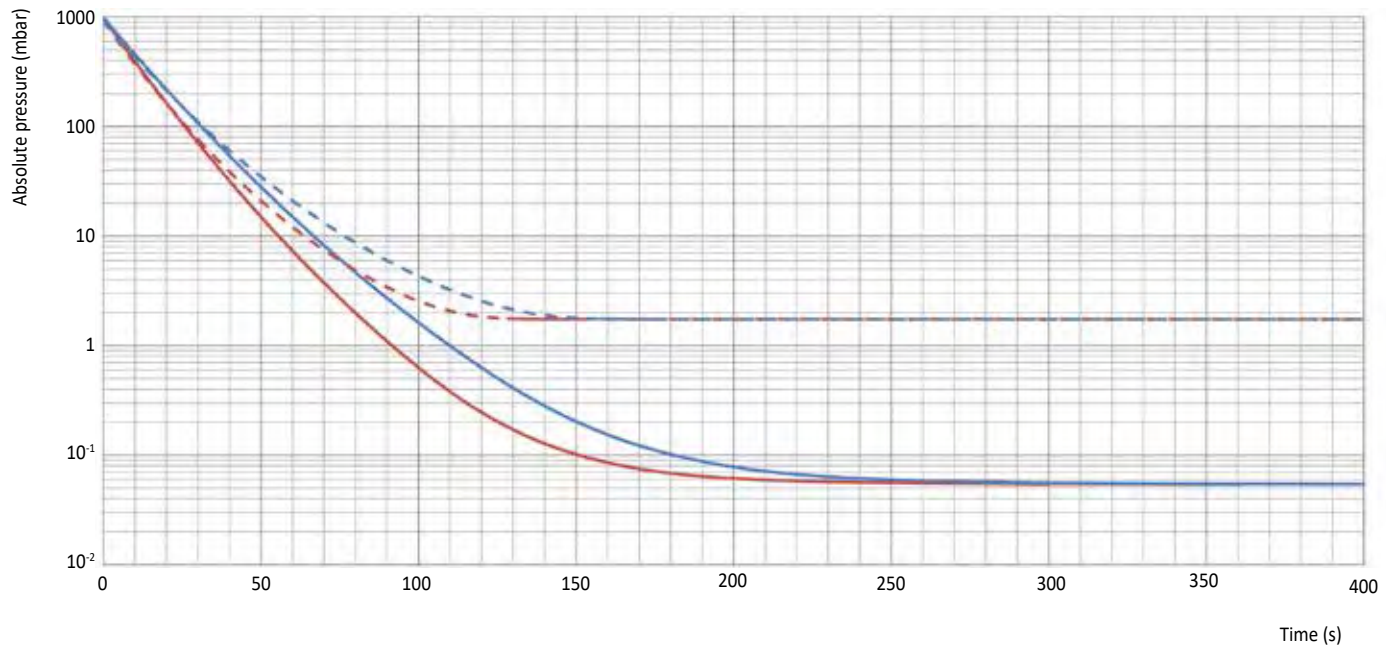
3 Liquid trap 200
with mechanical
stop and
optional bottle



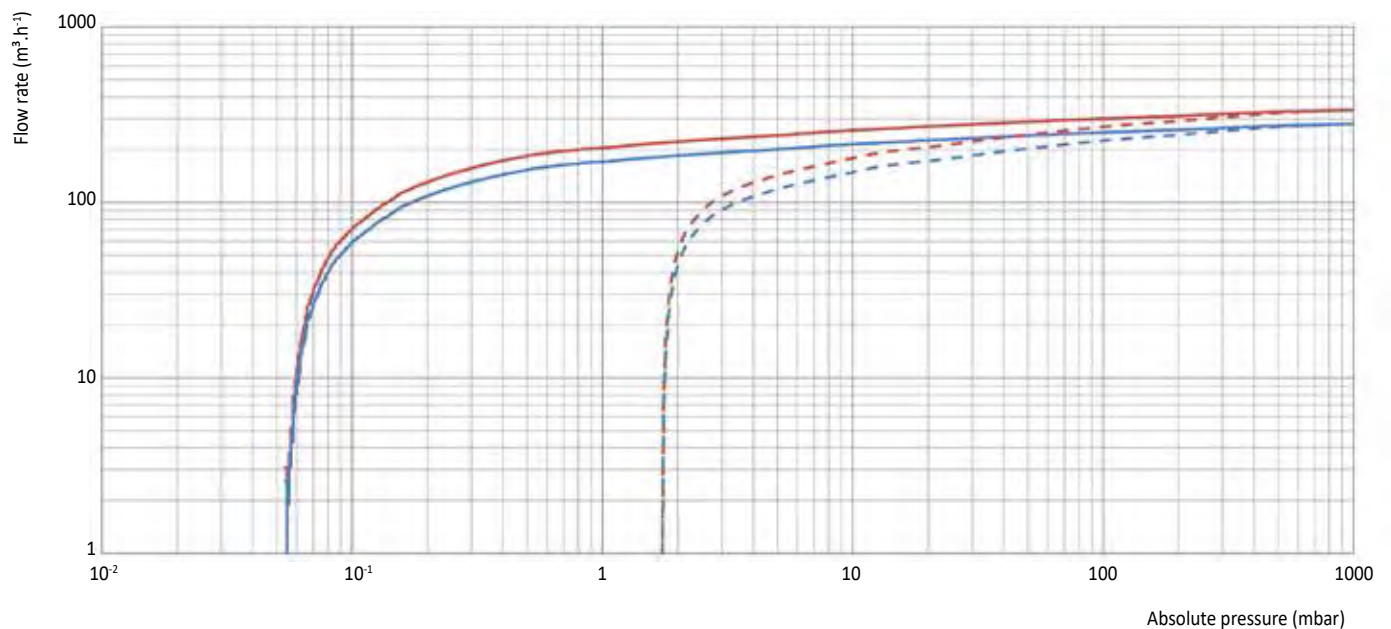
4 Elevated base frame
for 2 pumps

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



— 60 Hz - without gas ballast
— 50 Hz - without gas ballast

- - 60 Hz - with opened gas ballast
- - 50 Hz - with opened gas ballast



EVISA E350.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : $1 \cdot 10^{-1}$ mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz ⁽²⁾
E350.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	360 - 211.9	432 - 254.3
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	341 - 200.7	409 - 240.7
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	179 - 105.3	215 - 126.5
	Without gas ballast End vacuum mbar - <i>torr</i>	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}
	Fully opened gas ballast		
	End vacuum mbar - <i>torr</i>	≤ 1 - 0.75	≤ 1 - 0.75
E350.R	Water vapor permitted maximum pressure mbar - <i>torr</i>	12.5 - 9.9	13.5 - 10.1
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	2	2.6
	Without gas ballast End vacuum mbar - <i>torr</i>	≤ 3 - 2.3	≤ 3 - 2.3
	Fully opened gas ballast		
	End vacuum mbar - <i>torr</i>	≤ 5 - 3.8	≤ 5 - 3.8
	Water vapor permitted maximum pressure mbar - <i>torr</i>	8.7 - 6.5	9.4 - 7
100 % synthetic oil		MV99S	MV99S
Oil capacity l - <i>qt</i>		14 - 14.8	14 - 14.8
Noise level dB(A)		72	76

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

⁽²⁾ 460V - 60 Hz 3-ph only

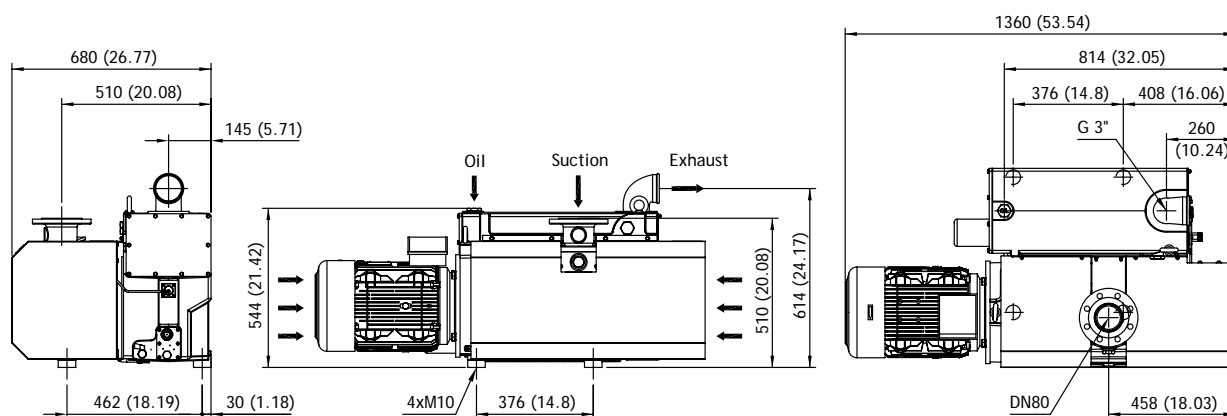
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST
Electrical motor	Number of phases	3	3
	Voltage V	400 / 690	380
	Period Hz	50	60
	Motor power	7.5 kW	9 kW
	Rotation speed min^{-1}	1000	1200
Inlet connection ⁽²⁾		DN80 / 3" BSP	DN80 / 3" BSP
Outlet connection ⁽²⁾		3" BSP	3" BSP
Weight with oil kg - <i>lb</i>		363 - 801	788 - 834

⁽²⁾ DN 80 ISO-K connector can be supplied, see accessories

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E350.R HV		E350.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 400/690V-50Hz	823923 + 724214	823923	823922 + 724214	823922
ASIA / MIDDLE-EAST 3ph, 380V-60Hz	contact us	contact us	contact us	contact us

EVISA H₂O version : contact us

Maintenance kits

3 000 hour usual maintenance with viton o'rings for oil mist filters	724184
12 000 hour preventive maintenance	724200
Gasket set	624486



3 000 hour usual maintenance



12 000 hour preventive maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float	624398
	Additional filter for gas ballast	617710
	Timer box for oil level safety (base mounting)	670810
	NC bimetal temperature safety - opening at 120°C - Max 24V	624389
	Oil Level Safety and PT100 temperature sensor	624405
	PT100 temperature sensor	624388
2	3" BSP suction filter	
	Type 301	
	Paper cartridge	717369
	Polyester cartridge	717370
	Carbon cartridge	717371
	Vacuum gauge fitted on filter	617536
	Vacuum-tight suction filter	
	ST301 straight-through	
	Paper cartridge	361627
	Polyester cartridge	620166
	Deflector for filters CT 301 and ST 301	215696
	Bracket for mural fixing for filters CT, ST	617512
	Flanges DN 80 for filters CT, ST	617513
3	Liquid trap 300	
	696 m ³ .h ⁻¹	
	3" BSP	
	Aluminium head/ polycarbonate cylinder / without float	724809
	Aluminium head / polycarbonate cylinder / with float	720810
	Bracket for wall fixing	617512
	Flanges DN80	617513
	Pyrex bottle 250 ml under trap assembly	615441
	Pyrex bottle 500 ml under trap assembly	615442
	Pyrex bottle 1000 ml under trap assembly	615443
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Vacuum hose (0,6 m) DN80	618269
	Vacuum hose (1 m) DN80	617833
	Vacuum hose (1,5 m) MM 3" BSP	719925
	Vacuum hose (4 m) M 3" BSP - DN80	618573
	Base frame assembly height 200 mm	618251
4	Elevated base frame	
	(H=525 mm)	
	For 1 pump	617613
	Direct starter	
	(wall mounting)	
	Without regulation contact 3-ph 400V	770500
	With regulation contact LG7 3-ph 400V	713746
	Star / Delta starter 400V + N + E (without pressure valve)	718389
	- Electrical unloading valve (230V-50Hz)	617496
	- Pneumatic unloading valve (6 bar)	618257
	Exhaust double elbow mounting	623534
	Double acting electric butterfly cast iron valve DN80	
	with electric actuator 5/2 NF 230V-50Hz	617522
	Double acting pneumatic butterfly cast iron valve DN80	
	with electric actuator 5/2 NF 230V-50Hz	617523
	Aluminium adapter M3" / DN80 ISO K	117130
	Aluminium adapter DN80 ISO K	117129
	Aluminium clamping collar DN63/250 ISO K	4 X 361653
	Centering ring Aluminium / PERBUNAN	361650
	Stainless steel hose (0,5 m) DN80 ISO K	361651
	Stainless steel hose (1 m) DN80 ISO K	361652



1 Oil Level Safety



2 suction filter type 301



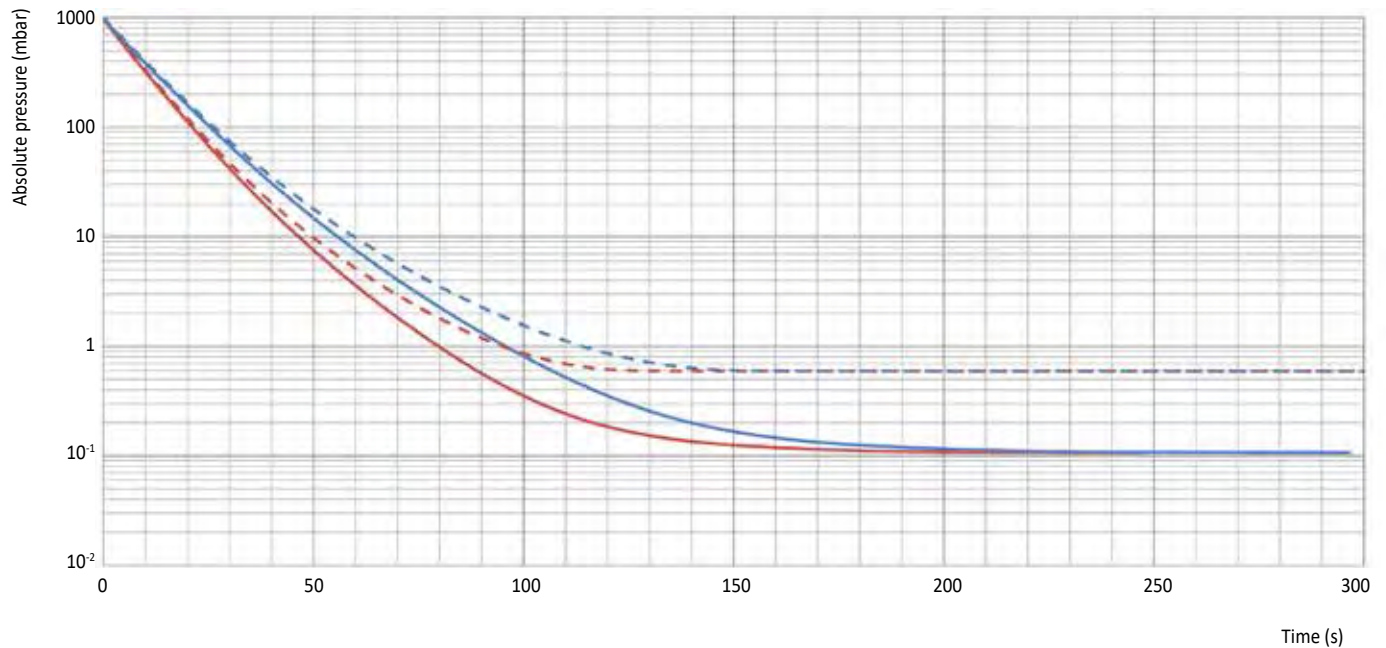
3 Liquid trap 300 with mechanical stop and optional bottle



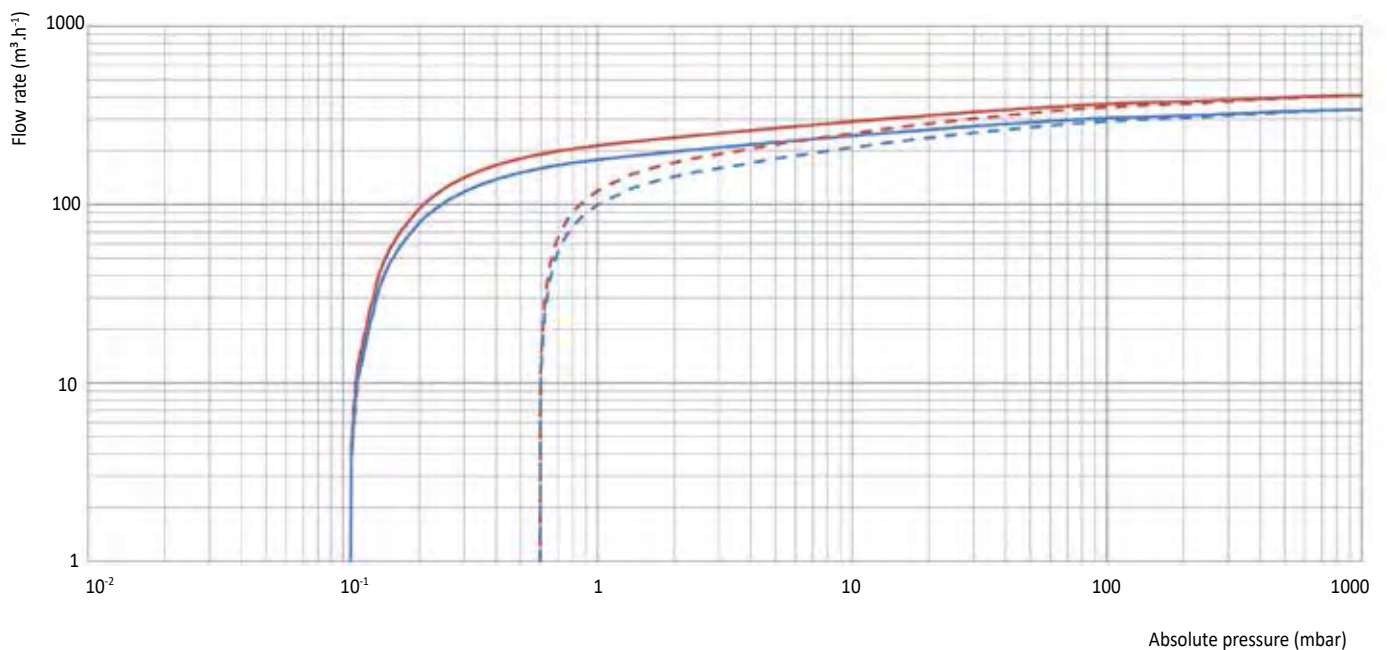
4 Elevated base frame for 1 pump

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



— 60 Hz - without gas ballast
— 50 Hz - without gas ballast

- - 60 Hz - with opened gas ballast
- - 50 Hz - with opened gas ballast



EVISA E400.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : 1.10^{-1} mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz
E400.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	426 - 250.7	511 - 300.8
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	410 - 241.3	492 - 289.6
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	215 - 126.5	258 - 151.8
	Without gas ballast End vacuum mbar - <i>torr</i>	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}
	Fully opened gas ballast		
	End vacuum mbar - <i>torr</i>	≤ 1 - 0.75	≤ 1 - 0.75
E400.R	Water vapor permitted maximum pressure mbar - <i>torr</i>	11.9 - 8.9	12.9 - 9.6
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	2.3	3
	Without gas ballast End vacuum mbar - <i>torr</i>	≤ 3 - 2.3	≤ 3 - 2.3
	Fully opened gas ballast		
	End vacuum mbar - <i>torr</i>	≤ 5 - 3.8	≤ 5 - 3.8
	Water vapor permitted maximum pressure mbar - <i>torr</i>	8.3 - 6.2	9 - 6.7
Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$		1.6	2
100 % synthetic oil		MV99S	MV99S
Oil capacity l - <i>qt</i>		14 - 14.8	14 - 14.8
Noise level dB(A)		72	76

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

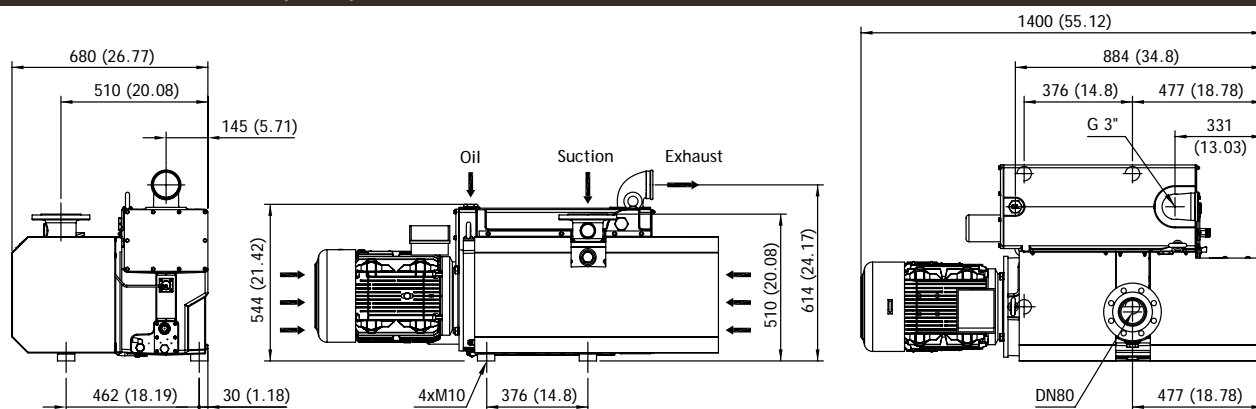
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST
Electrical motor	Number of phases	3	3
	Voltage V	400 / 690	380
	Period Hz	50	60
	Motor power	9 kW	10.8 kW
	Rotation speed min^{-1}	1000	1200
Inlet connection ⁽²⁾		DN80 / 3" BSP	DN80 / 3" BSP
Outlet connection ⁽²⁾		3" BSP	3" BSP
Weight with oil kg - <i>lb</i>		408 - 900	433 - 955

⁽²⁾ DN 80 ISO-K connector can be supplied, see accessories

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E400.R HV		E400.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 400/690V-50Hz	823919 + 724214	823919	823918 + 724214	823918
ASIA / MIDDLE-EAST 3ph, 380V-60Hz	Contact us	Contact us	Contact us	Contact us

EVISA H₂O version : contact us

Maintenance kits

3 000 hour usual maintenance with viton o'rings for oil mist filters	724184
12 000 hour preventive maintenance	724195
Gasket set	624479



3 000 hour usual maintenance



12 000 hour preventive maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float	624398
	Additional filter for gas ballast	617710
	Timer box for oil level safety (base mounting)	670810
	NC bimetal temperature safety - opening at 120°C - Max 24V	624389
	Oil Level Safety and PT100 temperature sensor	624405
	PT100 temperature sensor	624388
2	3" BSP suction filter	717369
	Type 301 Paper cartridge	
	Polyester cartridge	717370
	Carbon cartridge	717371
	Vacuum gauge fitted on filter	617536
	Vacuum-tight suction filter	361627
	ST301 straight-through Polyester cartridge	620166
	Deflector for filters CT 301 and ST 301	215696
	Bracket for mural fixing for filters CT, ST	617512
	Flanges DN 80 for filters CT, ST	617513
	Aluminium head/ polycarbonate cylinder / without float	724809
	Aluminium head / polycarbonate cylinder / with float	720810
3	Liquid trap 300	617512
	696 m ³ .h ⁻¹	
	3" BSP	617513
	Bracket for wall fixing	
	Flanges DN80	617513
	Pyrex bottle 250 ml under trap assembly	615441
	Pyrex bottle 500 ml under trap assembly	615442
	Pyrex bottle 1000 ml under trap assembly	615443
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Vacuum hose (0,6 m) DN80	618269
	Vacuum hose (1 m) DN80	617833
	Vacuum hose (1,5 m) MM 3" BSP	719925
	Vacuum hose (4 m) M 3" BSP - DN80	618573
	Base frame assembly height 200 mm	618251
4	Elevated base frame	617613
	(H=525 mm) For 1 pump	
	Direct starter	770500
	(wall mounting) Without regulation contact 3-ph 400V	
	With regulation contact LG7 3-ph 400V	713746
	Star / Delta starter 400V + N + E (without pressure valve)	718389
	- Electrical unloading valve (230V-50Hz)	617496
	- Pneumatic unloading valve (6 bar)	618257
	Exhaust double elbow mounting	623534
	Double acting electric butterfly cast iron valve DN80	617522
	with electric actuator 5/2 NF 230V-50Hz	
	Double acting pneumatic butterfly cast iron valve DN80	617523
	with electric actuator 5/2 NF 230V-50Hz	
	Aluminium adapter M3" / DN80 ISO K	117130
	Aluminium adapter DN80 ISO K	117129
	Aluminium clamping collar DN63/250 ISO K	4 X 361653
	Centering ring Aluminium / PERBUNAN	361650
	Stainless steel hose (0,5 m) DN80 ISO K	361651
	Stainless steel hose (1 m) DN80 ISO K	361652



1 Oil Level Safety



2 suction filter type 301



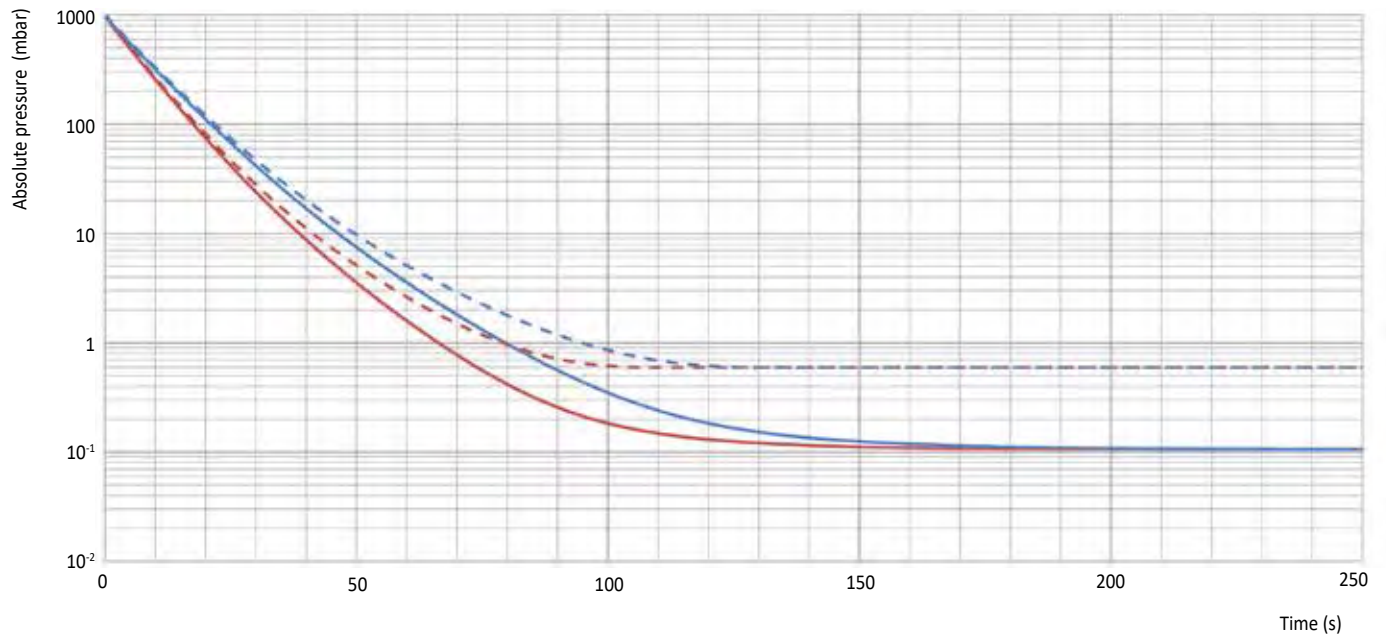
3 Liquid trap 300 with mechanical stop and optional bottle



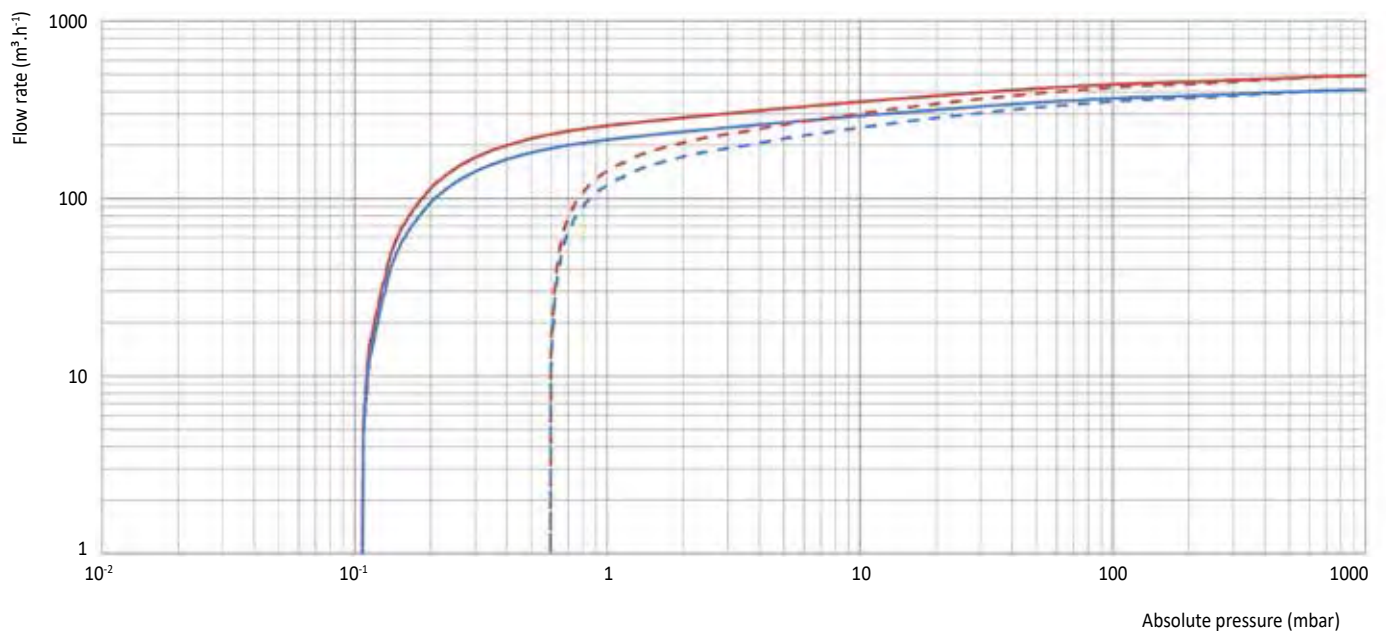
4 Elevated base frame for 1 pump

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



— 60 Hz - without gas ballast
— 50 Hz - without gas ballast

- - 60 Hz - with opened gas ballast
- - 50 Hz - with opened gas ballast



EVISA E500.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : 1.10^{-1} mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz
E500.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	513 - 302	616 - 362.6
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	496 - 291.6	595 - 350.2
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1} - \text{cfm}$	266 - 156.6	320 - 188.3
	Without gas ballast End vacuum mbar - torr	$\leq 1 \times 10^{-1} - 8 \times 10^{-2}$	$\leq 1 \times 10^{-1} - 8 \times 10^{-2}$
	Fully opened gas ballast		
E500.R	End vacuum mbar - torr	$\leq 1 - 0.75$	$\leq 1 - 0.75$
	Water vapor permitted maximum pressure mbar - torr	11.3 - 8.4	12.2 - 9.1
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	2.7	3.5
	Without gas ballast End vacuum mbar - torr	$\leq 3 - 2.3$	$\leq 3 - 2.3$
	Fully opened gas ballast		
		End vacuum mbar - torr	$\leq 5 - 3.8$
		Water vapor permitted maximum pressure mbar - torr	7.9 - 5.9
		Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	1.9
		2.4	
100 % synthetic oil		MV99S	MV99S
Oil capacity l - qt		14 - 14.8	14 - 14.8
Noise level dB(A)		73	77

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

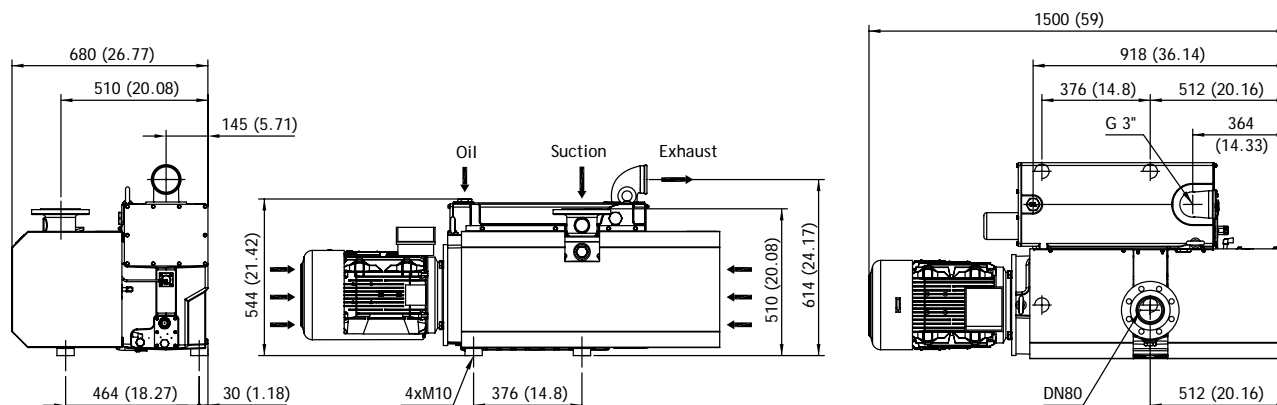
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST
Electrical motor	Number of phases	3	3
	Voltage V	400 / 690	380
	Period Hz	50	60
	Motor power	11 kW	13.2 kW
	Rotation speed min^{-1}	1000	1200
Inlet connection ⁽²⁾		DN80 / 3" BSP	DN80 / 3" BSP
Outlet connection ⁽²⁾		3" BSP	3" BSP
Weight with oil kg - lb		462 - 1019	497 - 1096

⁽²⁾ DN 80 ISO-K connector can be supplied, see accessories

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E500.R HV		E500.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 400/690V-50Hz	823913 + 723973	823913	823912 + 723973	823912
ASIA / MIDDLE-EAST 3ph, 380V-60Hz	Contact us	Contact us	Contact us	Contact us
EVISA H ₂ O version : contact us				

Maintenance kits

3 000 hour usual maintenance with viton o'rings for oil mist filters	724184
12 000 hour preventive maintenance	724191
Gasket set	624479



3 000 hour usual maintenance



12 000 hour preventive maintenance



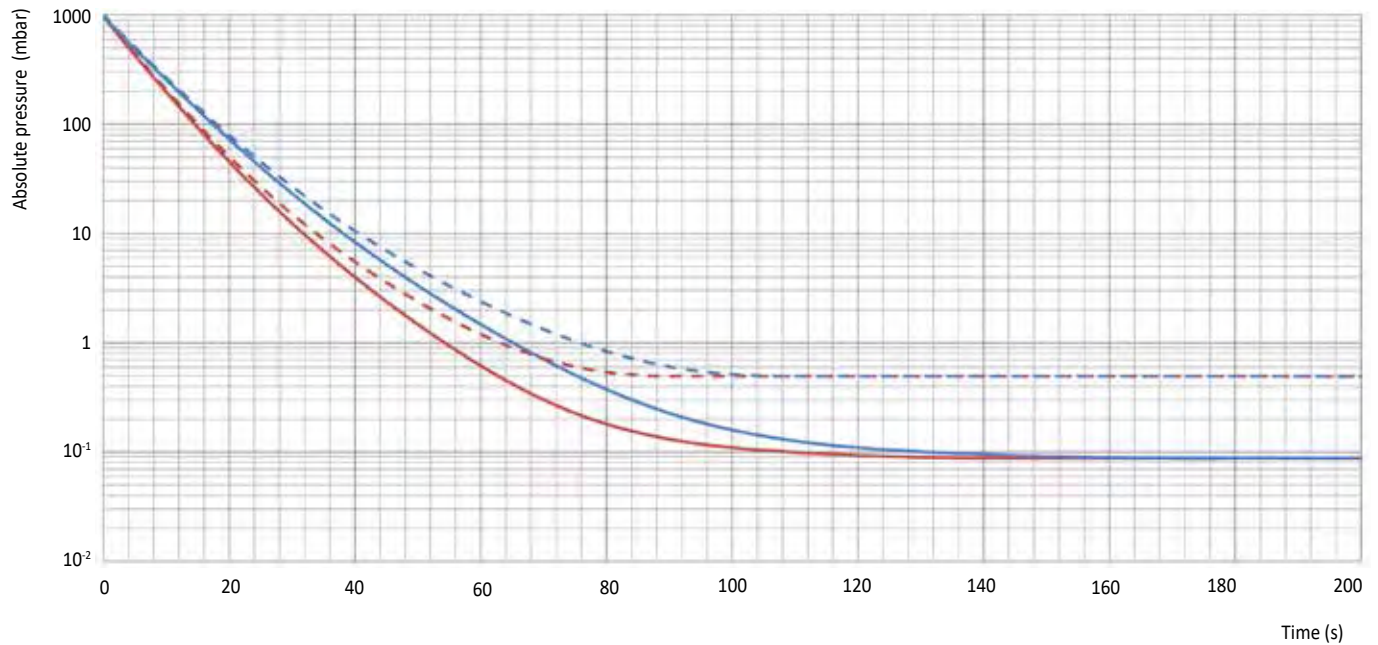
Accessories and Options

1	Oil Level Safety (OLS) with float	624398
	Additional filter for gas ballast	617710
	Timer box for oil level safety (base mounting)	670810
	NC bimetal temperature safety - opening at 120°C - Max 24V	624389
	Oil Level Safety and PT100 temperature sensor	624405
	PT100 temperature sensor	624388
2	3" BSP suction filter Type 301	
	Paper cartridge	717369
	Polyester cartridge	717370
	Carbon cartridge	717371
	Vacuum gauge fitted on filter	617536
	Vacuum-tight suction filter ST301 straight-through	
	Paper cartridge	361627
	Polyester cartridge	620166
	Deflector for filters CT 301 and ST 301	215696
	Bracket for mural fixing for filters CT, ST	617512
	Flanges DN 80 for filters CT, ST	617513
3	Liquid trap 300	
	696 m ³ .h ⁻¹	
	3" BSP	
	Aluminium head/ polycarbonate cylinder / without float	724809
	Aluminium head / polycarbonate cylinder / with float	720810
	Bracket for wall fixing	617512
	Flanges DN80	617513
	Pyrex bottle 250 ml under trap assembly	615441
	Pyrex bottle 500 ml under trap assembly	615442
	Pyrex bottle 1000 ml under trap assembly	615443
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Vacuum hose (0,6 m) DN80	618269
	Vacuum hose (1 m) DN80	617833
	Vacuum hose (1,5 m) MM 3" BSP	719925
	Vacuum hose (4 m) M 3" BSP - DN80	618573
	Base frame assembly height 200 mm	624328
4	Elevated base frame (H=525 mm)	624329
	For 1 pump	
	Direct starter (wall mounting)	
	Without regulation contact 3-ph 400V	719238
	With regulation contact LG7 3-ph 400V	719239
	Star / Delta starter 400V + N + E (without pressure valve)	718392
	- Electrical unloading valve (230V-50Hz)	617496
	- Pneumatic unloading valve (6 bar)	618257
	Exhaust double elbow mounting	623534
	Double acting electric butterfly cast iron valve DN80 with electric actuator 5/2 NF 230V-50Hz	617522
	Double acting pneumatic butterfly cast iron valve DN80 with electric actuator 5/2 NF 230V-50Hz	617523
	Aluminium adapter M3" / DN80 ISO K	117130
	Aluminium adapter DN80 ISO K	117129
	Aluminium clamping collar DN63/250 ISO K	4 X 361653
	Centering ring Aluminium / PERBUNAN	361650
	Stainless steel hose (0,5 m) DN80 ISO K	361651
	Stainless steel hose (1 m) DN80 ISO K	361652

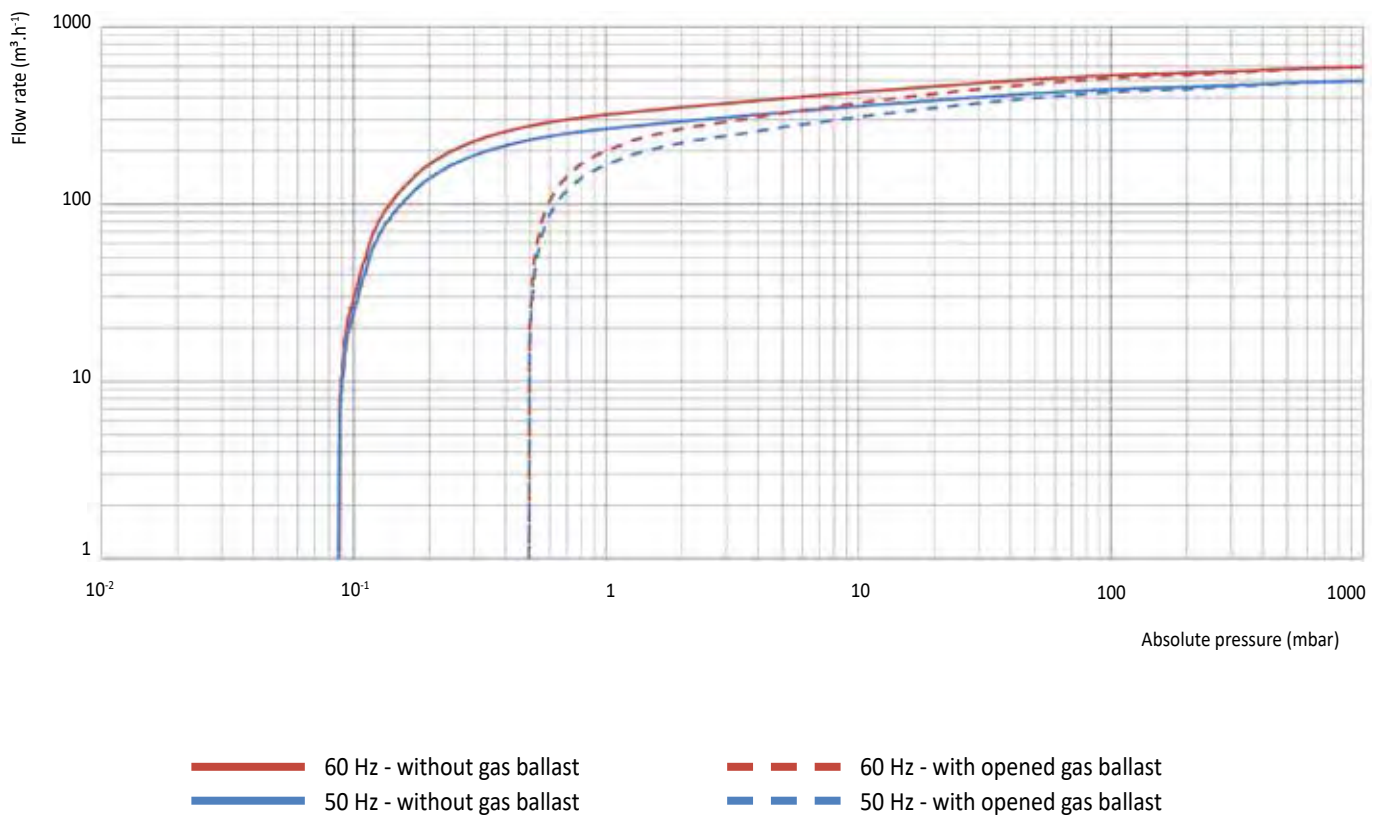


Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves





EVISA E600.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum : 1.10^{-1} mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

Technical characteristics

		50 Hz	60 Hz
E600.R HV	Nominal flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	634.9 - 373.7	769.2 - 452.8
	PNEUROP pumping speed ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	581 - 342	696 - 409.7
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	308 - 181.3	370 - 217.8
	Without gas ballast End vacuum mbar - <i>torr</i>	$\leq 1 \times 10^{-1}$ - 8×10^{-2}	$\leq 1 \times 10^{-1}$ - 8×10^{-2}
	Fully opened gas ballast		
	End vacuum mbar - <i>torr</i>	≤ 1 - 0.75	≤ 1 - 0.75
E600.R	Water vapor permitted maximum pressure mbar - <i>torr</i>	18.8 - 14.1	22 - 16.5
	Water vapor capacity $\text{kg} \cdot \text{h}^{-1}$	5.6	8.1
	Without gas ballast End vacuum mbar - <i>torr</i>	≤ 3 - 2.3	≤ 3 - 2.3
	Fully opened gas ballast		
	End vacuum mbar - <i>torr</i>	≤ 5 - 3.8	≤ 5 - 3.8
	Water vapor permitted maximum pressure mbar - <i>torr</i>	13.1 - 9.8	15.4 - 11.5
100 % synthetic oil		MV99S	MV99S
Oil capacity l - <i>qt</i>		14 - 14.8	14 - 14.8
Noise level dB(A)		74	78

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

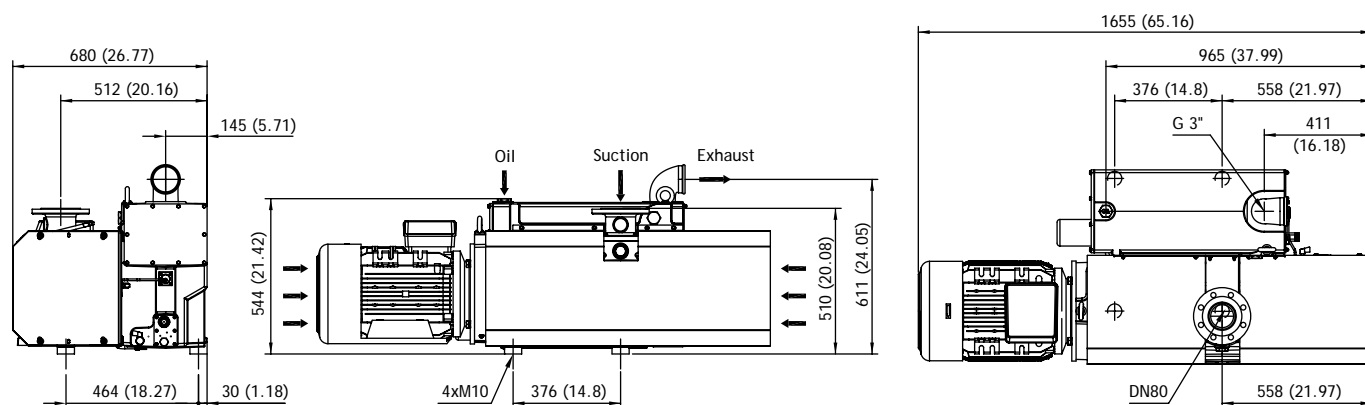
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST
Electrical motor	Number of phases	3	3
	Voltage V	400 / 690	380
	Period Hz	50	60
	Motor power	13 kW	15.6 kW
	Rotation speed min^{-1}	1000	1200
Inlet connection ⁽²⁾		DN80 / 3" BSP	DN80 / 3" BSP
Outlet connection ⁽²⁾		3" BSP	3" BSP
Weight with oil kg - <i>lb</i>		531 - 1171	531 - 1171

⁽²⁾ DN 80 ISO-K connector can be supplied, see accessories

Lubricated rotary vane vacuum pumps

Dimensions mm (inch)



References

	E600.R HV		E600.R	
	WITH GAS BALLAST	WITHOUT GAS BALLAST	WITH GAS BALLAST	WITHOUT GAS BALLAST
EUROPE 3ph, 400/690V-50Hz	823880 + 723956	823880	823885 + 723956	823885
ASIA / MIDDLE-EAST 3ph, 380V-60Hz	Contact us	Contact us	Contact us	Contact us

EVISA H₂O version : contact us

Maintenance kits

3 000 hour usual maintenance with viton o'rings for oil mist filters	724139
12 000 hour preventive maintenance HV pump	624394
12 000 hour preventive maintenance	624393
Gasket set	624395



3 000 hour usual maintenance



12 000 hour preventive maintenance

Specifications are subject to be changed without notice.



Accessories and Options

1	Oil Level Safety (OLS) with float	624398
	Additional filter for gas ballast	617710
	Timer box for oil level safety (base mounting)	670810
	NC bimetal temperature safety - opening at 120°C - Max 24V	624389
	Oil Level Safety and PT100 temperature sensor	624405
	PT100 temperature sensor	624388
2	3" BSP / DN80 suction filter	
	Type 301	
	Paper cartridge	717369
	Polyester cartridge	717370
	Carbon cartridge	717371
	Vacuum gauge fitted on filter	617536
	Vacuum-tight suction filter	361627
	ST301 straight-through	620166
	Deflector for filters CT 301 and ST 301	215696
	Bracket for mural fixing for filters CT, ST	617512
	Flanges DN 80 for filters CT, ST	617513
3	Liquid trap 300	
	696 m ³ .h ⁻¹	
	3" BSP	
	Aluminium head/ polycarbonate cylinder / without float	724809
	Aluminium head / polycarbonate cylinder / with float	720810
	Bracket for wall fixing	617512
	Flanges DN80	617513
	Pyrex bottle 250 ml under trap assembly	615441
	Pyrex bottle 500 ml under trap assembly	615442
	Pyrex bottle 1000 ml under trap assembly	615443
	Electro-pneumatic automatic drain with control board	816002
	Electrical automatic drain with control board	816003
	Vacuum hose (0,6 m) DN80	618269
	Vacuum hose (1 m) DN80	617833
	Vacuum hose (1,5 m) MM 3" BSP	719925
	Vacuum hose (4 m) M 3" BSP - DN80	618573
	Base frame assembly height 200 mm	618251
4	Elevated base frame	
	(H=525 mm)	
	For 1 pump	617613
	Direct starter	
	(wall mounting)	
	Without regulation contact 3-ph 400V	719237
	With regulation contact LG7 3-ph 400V	719239
	Star / Delta starter 400V + N + E (without pressure valve)	718391
	- Electrical unloading valve (230V-50Hz)	617496
	- Pneumatic unloading valve (6 bar)	618257
	Exhaust double elbow mounting	623534
	Double acting electric butterfly cast iron valve DN80	
	with electric actuator 5/2 NF 230V-50Hz	617522
	Double acting pneumatic butterfly cast iron valve DN80	
	with electric actuator 5/2 NF 230V-50Hz	617523
	Aluminium adapter M3" / DN80 ISO K	117130
	Aluminium adapter DN80 ISO K	117129
	Aluminium clamping collar DN63/250 ISO K	4 X 361653
	Centering ring Aluminium / PERBUNAN	361650
	Stainless steel hose (0,5 m) DN80 ISO K	361651
	Stainless steel hose (1 m) DN80 ISO K	361652



1 Oil Level Safety



2 suction filter type 301



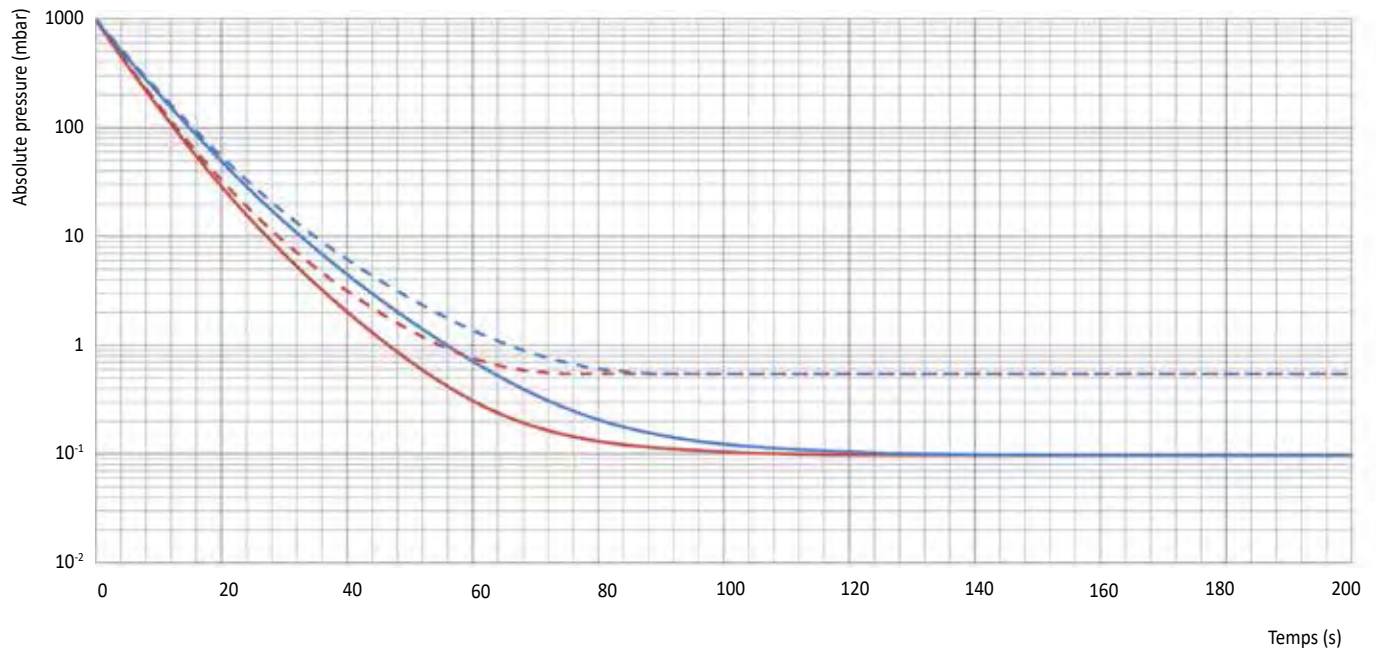
3 Liquid trap 300 with mechanical stop and optional bottle



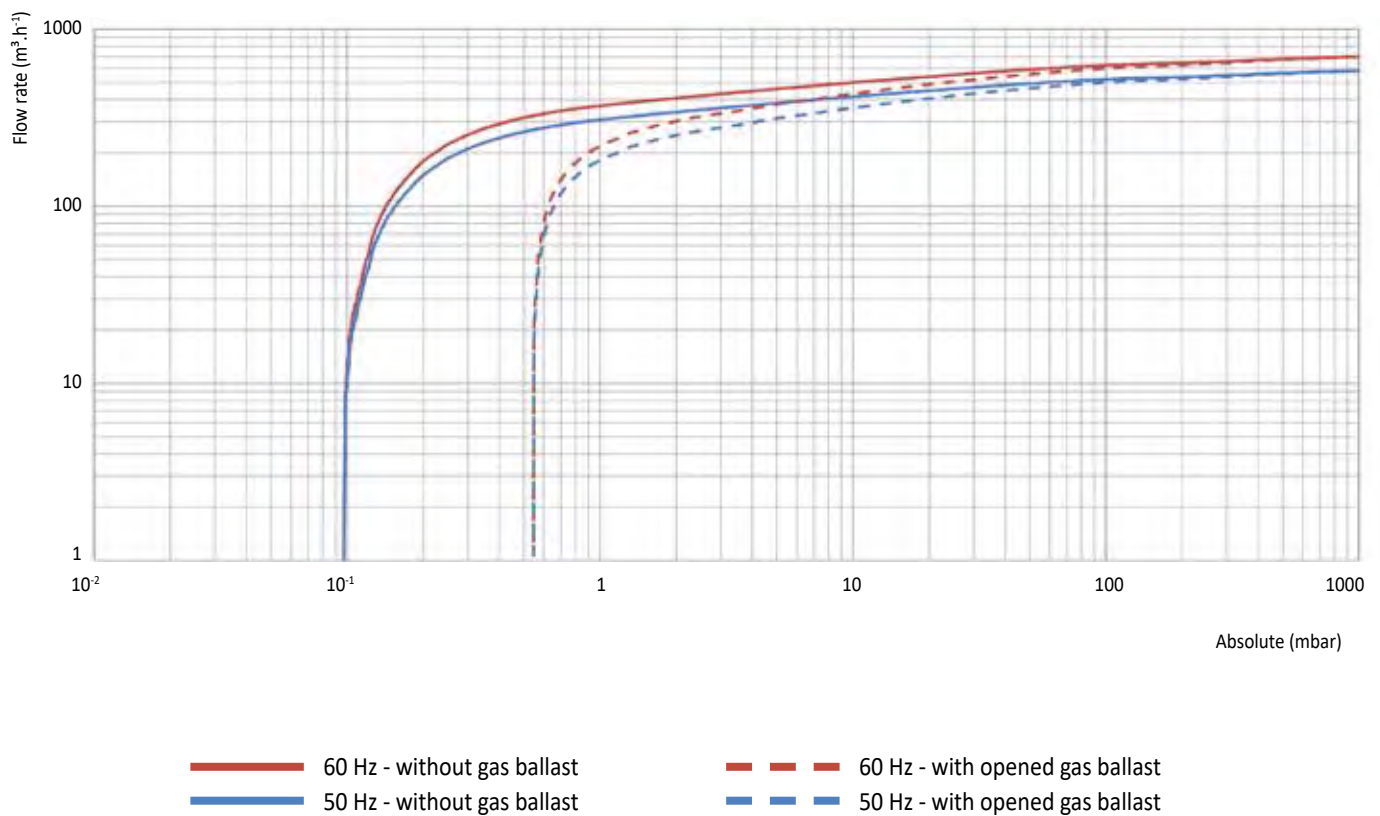
4 Elevated base frame for 1 pump

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves

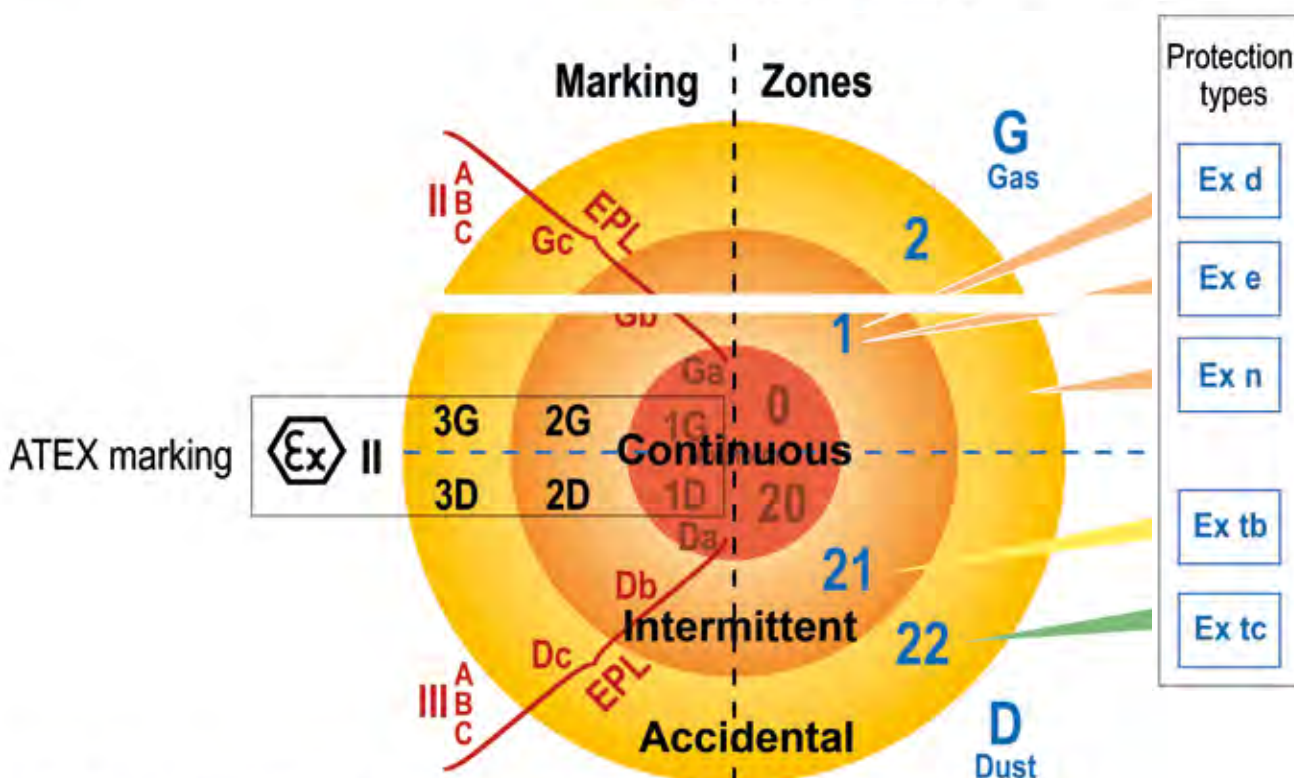




Directive 94/9/EC Classification of equipment					IEC 60079-0 Classification of equipment Equipment Protection Level (EPL)					Zones
Use	ATEX group	Category	Level of protection	If ATEX present	Use	Equipment group	EPL	Level of protection	If ATEX present	60079-10
Gas-prone mines	I	M1 Maximum mine gas content	Very high	Powered up	Gas-prone mines	I	Ma Maximum mine gas content	Very high	Powered up	
		M2 Outside a certain value	High	Powered down			Mb Outside a certain value	High	Powered down	
Surface industries	II	1G	Very high	Powered up	Explosive gas atmospheres	II A B C	Ga	Very high	Powered up	0
		2G	High				Gb	High		1
		3G	Normal				Gc	Reinforced		2
		1D	Very high		Explosive dust atmospheres	III A B C	Da	Very high		20 IP6X
		2D	High				Dh	High		21 IP6X
		3D	Normal				Dc	Reinforced		22 IP5X

EPL : Equipment protection level

I: Methane
IIA: Propane
IIB: Ethylene
IIC: Hydrogen, Acetylene
IIIA: combustible particles in suspension
IIIB: non-conductive dust (electrical resistivity >10⁹Ω.m)
IIIC: conductive dust



The zoning and field of application of equipment (its protection type) is determined by the site manager where the equipment is installed.

Temperature class	T1	T2	T3	T4	T5	T6
Ignition temperature	> 450°C	> 300°C	> 200°C	> 135°C	> 100°C	> 85°C
Max. permissible surface temperature for the equipment	450°C	300°C	200°C	135°C	100°C	85°C

High performance ATEX oil-flooded vacuum pumps



Gas & dust certified electrical motor

PT100 temperature sensor as standard equipment
Optional oil level sensor
Fixation on reinforced metallic flange



Oil mist filters designed for ATEX areas

50 Hz	Evisa 65.R HV Atex	Evisa 100.R HV Atex	Evisa 200.R HV Atex	Evisa 300.R HV Atex
Nominal air flow rate $\text{m}^3 \cdot \text{h}^{-1}$ - <i>cfm</i>	68 - 40	100 - 58.8	200 - 117.7	300 - 176.5
End vacuum mbar - <i>torr</i> - <i>Gast ballast closed</i>	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}	$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}
End vacuum mbar - <i>torr</i> - <i>Gast ballast opened</i>	$\leq 5 \times 10^{-1}$ - 3.8×10^{-1}	$\leq 5 \times 10^{-1}$ - 3.8×10^{-1}	≤ 1 - 0.75	≤ 2 - 1.5
Motor power	1.5 kW	2.2 kW	4 kW	5.5 kW



II 2/2 G c,k,b IIB T4 Gb/Gb



II 2/2 D c,k,b IIIC T135°C Db/Db

EVISA E65.R ATEX



N° INERIS-EQEN : 033438/17

EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. Depending on the model, they can be installed in gas or dust zone.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

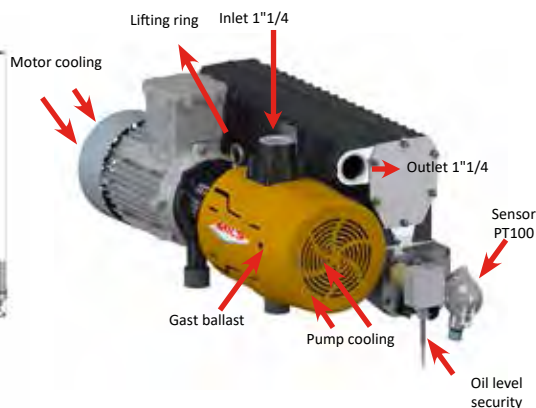
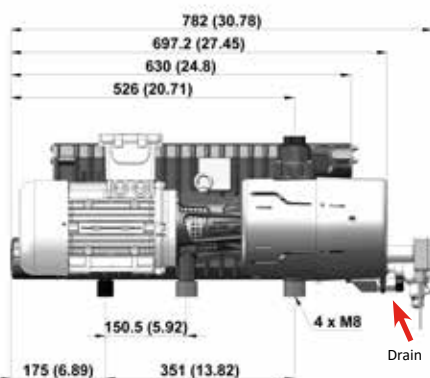
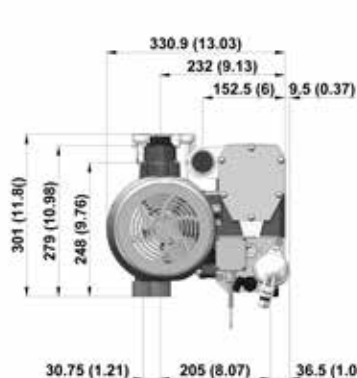
- Single stage vacuum pump with an end vacuum of 6.10^{-2} mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

Technical characteristics

		50 Hz
E65.R ATEX HV	Nominal flow rate $m^3.h^{-1}$ - <i>cfm</i>	68 - 40
	PNEUROP pumping speed ⁽¹⁾ $m^3.h^{-1}$ - <i>cfm</i>	65 - 38.2
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $m^3.h^{-1}$ - <i>cfm</i>	40 - 23.5
	Closed gas ballast	End vacuum mbar - torr
		$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}
	Opened gas ballast	End vacuum mbar - torr
	3 rotations	$\leq 5 \times 10^{-1}$ - 3.8×10^{-1}
		Water vapor permitted maximum pressure mbar - torr
		50 - 37.5
		Water vapor capacity $kg.h^{-1}$
		2
	Fully opened gas ballast	End vacuum mbar - torr
		≤ 3.0 - 2.3
		Water vapor permitted maximum pressure mbar - torr
		80 - 60
		Water vapor capacity $kg.h^{-1}$
		3
	100 % synthetic oil	MV99S
	Oil capacity l - qt	3 - 3.2
	Noise level dB(A)	67
	Electrical motor	Voltage
		3ph - 230 / 400 V 50 Hz
		Motor power
		1.50 kW
		Rotation speed min^{-1}
		1500
	Inlet connection	1"1/4 BSP
	Outlet connection	1"1/4 BSP
	Weight with oil kg - lb	63.4 - 139.8

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Dimensions mm (inch)



Lubricated rotary vane vacuum pumps

References

E65.R ATEX HV	WITH GAS BALLAST
DUST ZONE II2D c,k,b IIIC T135°C Db/Db	824384
GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb	824388
DUST AND GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb - II2D c,k,b IIIC T135°C Db/Db	824392

Accessories and options

Oil level security	333172
Suction filter	Paper cartridge 126PA 625470
Zone ATEX ZONE IIGD c IIIC T4 X	Carbon cartridge 126CH 625471
	Polyester cartridge 126PO 619884
Stainless steel inlet or outlet hose - 0,5 m KF	619886
Elevated base frame H = 150 mm	670805
Flame arrester DN50	625417
PT100 intrinsically safe power supply (assembly out of atex zone) - Output 0-10V	362640

Maintenance kits

3 000 hours usual maintenance

724608

12 000 hours preventive maintenance

724609

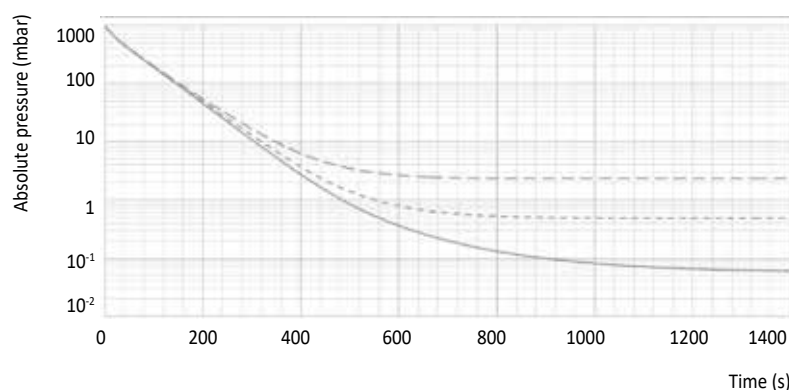


**3 000 hours
usual
maintenance**



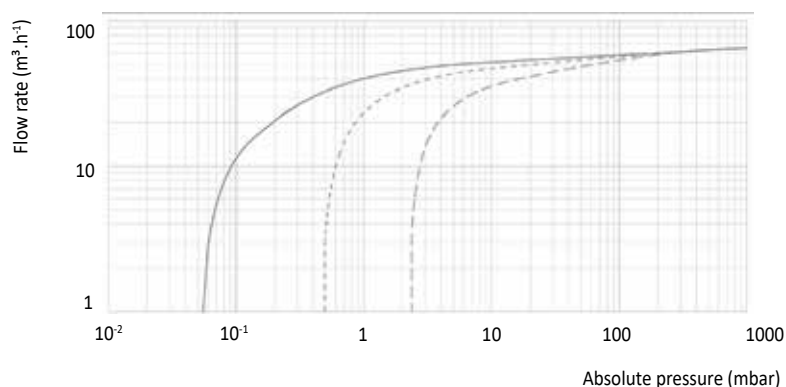
**12 000 hours
preventive
maintenance**

Pumping speed on 1000 l vessel



- 50 Hz - Closed gas ballast
- - - 50 Hz - Opened gas ballast
3 rotations
- ... 50 Hz - Fully opened gas ballast

Performance curves - 50 Hz



- 50 Hz - Closed gas ballast
- - - 50 Hz - Opened gas ballast
3 rotations
- ... 50 Hz - Fully opened gas ballast

Specifications are subject to be changed without notice.



II 2/2 G c,k,b IIB T4 Gb/Gb

EVISA E100.R ATEX



II 2/2 D c,k,b IIIC T135°C Db/Db



N° INERIS-EQEN : 033438/17

EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. Depending on the model, they can be installed in gas or dust zone.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

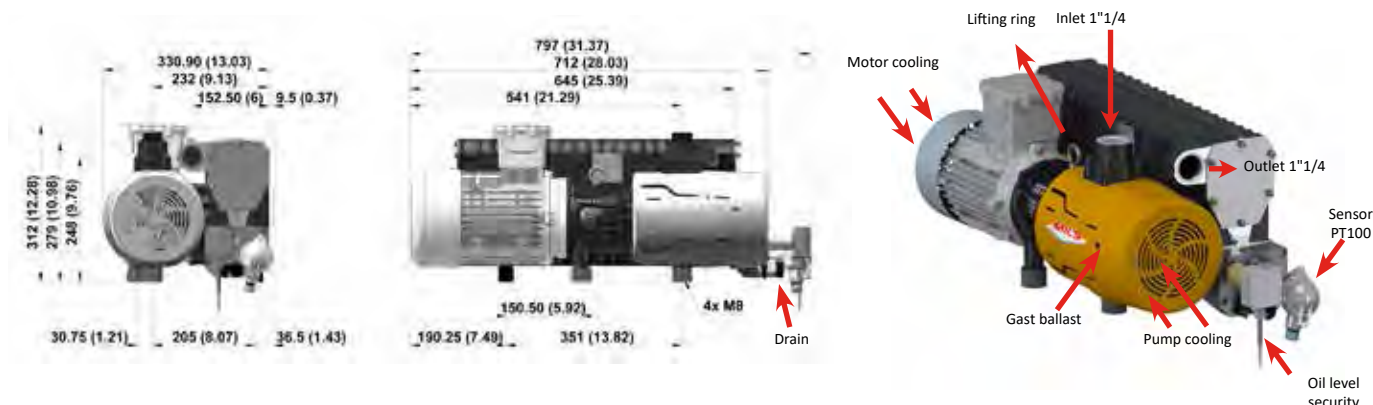
- Single stage vacuum pump with an end vacuum of 6.10^{-2} mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

Technical characteristics

		50 Hz
E100.R ATEX HV	Nominal flow rate $m^3.h^{-1} - cfm$	100 - 58.8
	PNEUROP pumping speed ⁽¹⁾ $m^3.h^{-1} - cfm$	96 - 56.5
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $m^3.h^{-1} - cfm$	52 - 30.6
	Closed gas ballast	End vacuum mbar - torr
		$\leq 6 \times 10^{-2} - 4.5 \times 10^{-2}$
	Opened gas ballast	End vacuum mbar - torr
	3 rotations	$\leq 5 \times 10^{-1} - 3.8 \times 10^{-1}$
		Water vapor permitted maximum pressure mbar - torr
		59 - 44.2
		Water vapor capacity $kg.h^{-1}$
		3.4
	Fully opened gas ballast	End vacuum mbar - torr
		$\leq 2.0 - 1.5$
		Water vapor permitted maximum pressure mbar - torr
		95 - 71.2
		Water vapor capacity $kg.h^{-1}$
		5.5
	100 % synthetic oil	MV99S
	Oil capacity l - qt	3 - 3.2
	Noise level dB(A)	67
	Electrical motor	Voltage
		230 / 400 V
		50 Hz - 3ph
		Motor power
		2.20 kW
		Rotation speed min^{-1}
		1500
	Inlet connection	1"1/4 BSP
	Outlet connection	1"1/4 BSP
	Weight with oil kg - lb	67.2 - 148.2

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Dimensions mm (inch)



Lubricated rotary vane vacuum pumps

References

E100.R ATEX HV	WITH GAS BALLAST
DUST ZONE II2D c,k,b IIIC T135°C Db/Db	824385
GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb	824389
DUST AND GAS ZONE II2/2G c,k,b IIB T4 Gb/GB - II2D c,k,b IIIC T135°C Db/Db	824393

Accessories and options

Oil level security	333172
Suction filter	Paper cartridge 126PA 625470
Zone ATEX ZONE II2D c IIIC T4 X	Carbon cartridge 126CH 625471
	Polyester cartridge 126PO 619884
Stainless steel inlet or outlet hose - 0,5 m KF	619886
Elevated base frame H = 150 mm	670805
Flame arrester DN50	625417
PT100 intrinsically safe power supply (assembly out of atex zone) - Output 0-10V	362640

Maintenance kits

3 000 hours usual maintenance

724608

12 000 hours preventive maintenance

724610

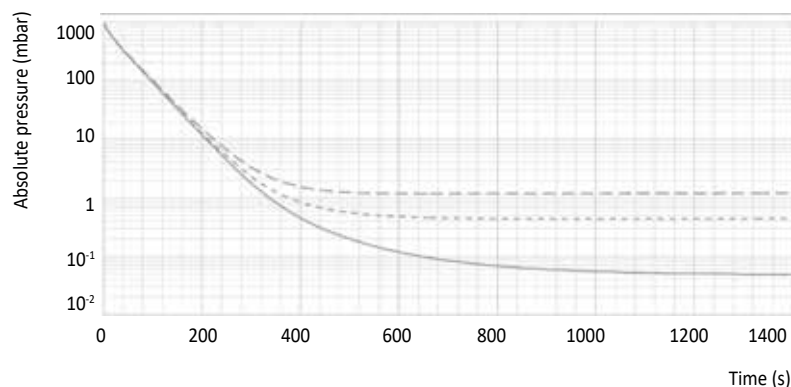


3 000 hours usual
maintenance



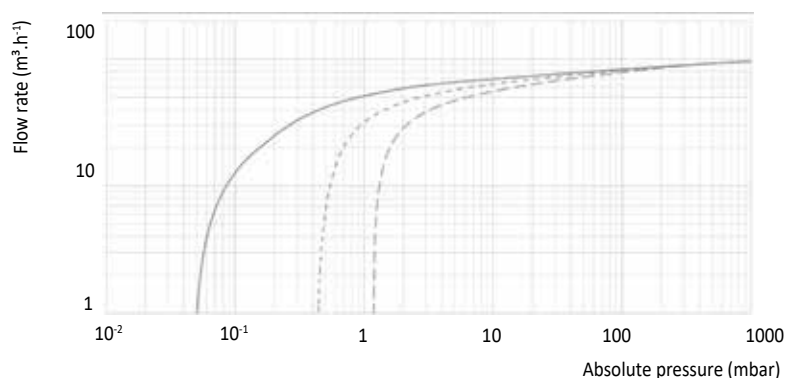
12 000 hours
preventive
maintenance

Pumping speed on 1000 l vessel



- 50 Hz - Closed gas ballast
- - - 50 Hz - Opened gas ballast
3 rotations
- ... 50 Hz - Fully opened gas ballast

Performance curves - 50 Hz



- 50 Hz - Closed gas ballast
- - - 50 Hz - Opened gas ballast
3 rotations
- ... 50 Hz - Fully opened gas ballast

Specifications are subject to be changed without notice.



II 2/2 G c,k,b IIB T4 Gb/Gb

II 2/2 D c,k,b IIIC T135°C Db/Db

EVISA E200.R ATEX



EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. Depending on the model, they can be installed in gas or dust zone. They can run continuously from atmospheric pressure to ultimate vacuum. They are very silent and extremely robust.

- Single stage vacuum pump with an end vacuum of 6.10^{-2} mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

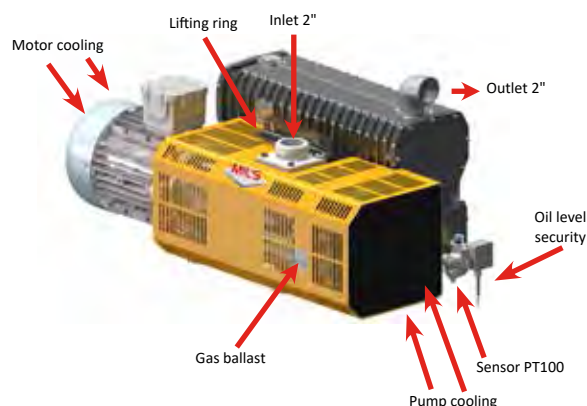
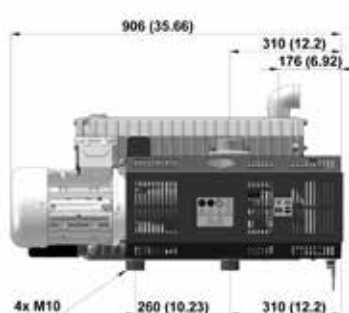
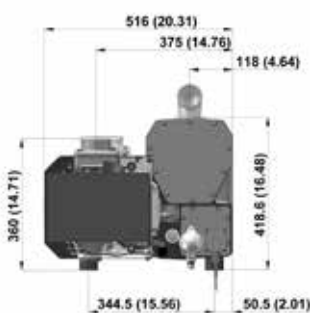
N° INERIS-EQEN : 033438/17

Technical characteristics

		50 Hz
E200.R ATEX HV	Nominal flow rate $m^3.h^{-1}$ - <i>cfm</i>	200 - 117.7
	PNEUROP pumping speed ⁽¹⁾ $m^3.h^{-1}$ - <i>cfm</i>	190 - 111.8
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $m^3.h^{-1}$ - <i>cfm</i>	134 - 78.9
	Closed gas ballast	End vacuum mbar - <i>torr</i>
		$\leq 6 \times 10^{-2}$ - 4.5×10^{-2}
	Fully opened gas ballast	End vacuum mbar - <i>torr</i>
		≤ 1 - 0.75
		Water vapor permitted maximum pressure mbar - <i>torr</i>
		20.2 - 15.1
		Water vapor capacity $kg.h^{-1}$
		2.2
	100 % synthetic oil	MV99S
Electrical motor	Voltage	3ph - 230 / 400 V 50 Hz
	Motor power	4 kW
	Rotation speed min^{-1}	1500
Inlet connection		2" BSP
Outlet connection		2" BSP
Weight with oil <i>kg - lb</i>		143 - 316

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Dimensions mm (inch)



Lubricated rotary vane vacuum pumps

References

E200.R ATEX HV	WITH GAS BALLAST
DUST ZONE II2D c,k,b IIIC T135°C Db/Db	824386
GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb	824390
DUST AND GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb - II2D c,k,b IIIC T135°C Db/Db	824394

Accessories and options

Oil level security		333172
Suction filter Zone ATEX ZONE IIGD c IIIC T4 X	Paper cartridge 201PA	625472
	Carbon cartridge 201CH	625473
	Polyester cartridge 201PO	619885
Stainless steel inlet or outlet hose - 0,5 m KF		619887
Elevated base frame H = 150 mm		670806
Flame arrester DN80		625422
PT100 intrinsically safe power supply (assembly out of atex zone) - Output 0-10V		362640

Maintenance kits

3 000 hours usual maintenance

724885

12 000 hours preventive maintenance

724887

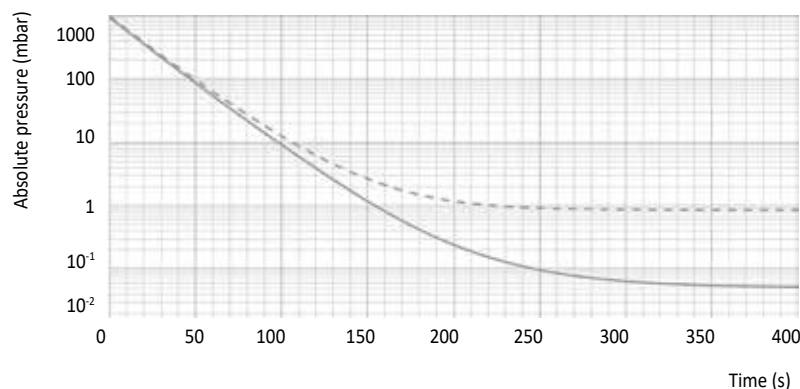


**3 000 hours
usual
maintenance**



**12 000 hours
preventive
maintenance**

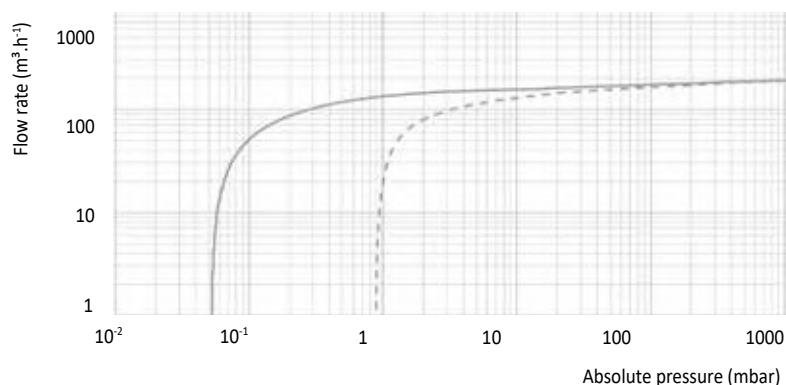
Pumping speed on 1000 l vessel



— 50 Hz - Closed gas ballast

- - - 50 Hz - With opened gas ballast

Performance curves - 50 Hz



— 50 Hz - Closed gas ballast

- - - 50 Hz - With opened gas ballast

Specifications are subject to be changed without notice.



II 2/2 G c,k,b IIB T4 Gb/Gb

II 2/2 D c,k,b IIIC T135°C Db/Db

EVISA E300.R ATEX



EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. Depending on the model, they can be installed in gas or dust zone. They can run continuously from atmospheric pressure to ultimate vacuum. They are silent and extremely robust.

- Single stage vacuum pump with an end vacuum of 6.10^{-2} mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

N° INERIS-EQEN : 033438/17

Technical characteristics

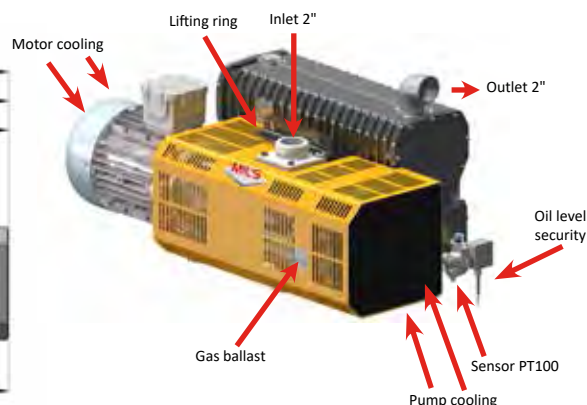
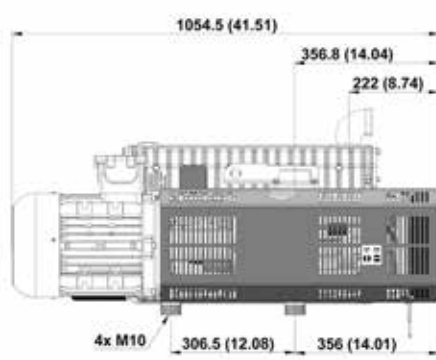
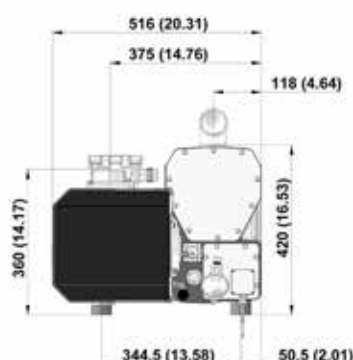
		50 Hz
E300.R ATEX HV	Nominal flow rate $m^3.h^{-1} - cfm$	300 - 176.5
	PNEUROP pumping speed ⁽¹⁾ $m^3.h^{-1} - cfm$	280 - 165
	Pumping speed at 1 mbar inlet pressure ⁽¹⁾ $m^3.h^{-1} - cfm$	171 - 101
	Without gas ballast	End vacuum mbar - torr
		$\leq 6 \times 10^{-2} - 4.5 \times 10^{-2}$
	Fully opened gas ballast	End vacuum mbar - torr
		$\leq 2 - 1.5$
		Water vapor permitted maximum pressure mbar - torr
		18.6 - 13.9
		Water vapor capacity $kg.h^{-1}$
		2.3
	100 % synthetic oil	MV99S
	Oil capacity l - qt	5 - 5.3
	Noise level dB(A)	72
	Electrical motor	Voltage
		3ph - 230 / 400 V ⁽²⁾ ou 3ph - 400/690V ⁽³⁾
		50 Hz
		Motor power
		5.5 kW
		Rotation speed min^{-1}
		1500
	Inlet connection	2" BSP
	Outlet connection	2" BSP
	Weight with oil kg - lb	172 - 380

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

⁽²⁾ Dust or gas zone model

⁽³⁾ Dust and gas zone model

Dimensions mm (inch)



Lubricated rotary vane vacuum pumps

References

E300.R ATEX HV	WITH GAS BALLAST
DUST ZONE II2D c,k,b IIIC T135°C Db/DBb	824387
GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb	824391
DUST AND GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb - II2D c,k,b IIIC T135°C Db/Db	824395

Accessories and options

Oil level security		333172
Suction filter Zone ATEX ZONE IIGD c IIIC T4 X	Paper cartridge 201PA	625472
	Carbon cartridge 201CH	625473
	Polyester cartridge 201PO	619885
Stainless steel inlet or outlet hose - 0,5 m KF		619887
Elevated base frame H = 150 mm		670806
Flame arrester DN80		625422
PT100 intrinsically safe power supply (assembly out of atex zone) - Output 0-10V		362640

Maintenance kits

3 000 hours usual maintenance

724886

12 000 hours preventive maintenance

724888

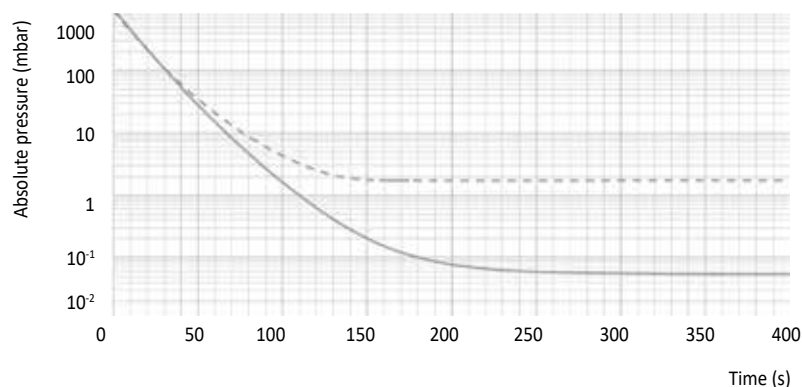


3 000 hours
usual
maintenance



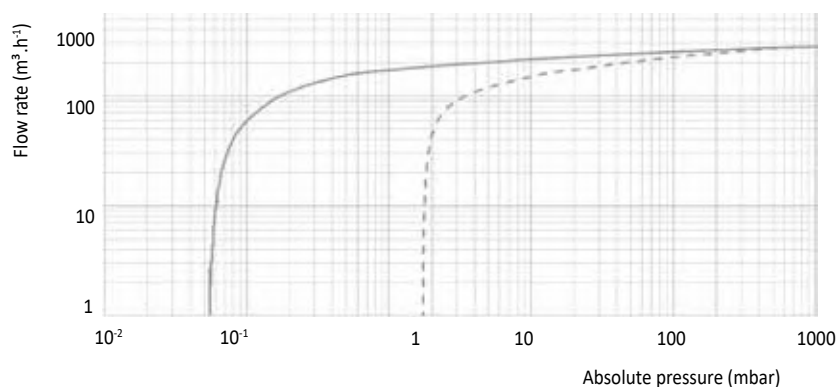
12 000 hours
preventive
maintenance

Pumping speed on 1000 l vessel



— 50 Hz - Without gas ballast
- - - 50 Hz - With opened gas ballast

Performance curves - 50 Hz



— 50 Hz - Without gas ballast
- - - 50 Hz - With opened gas ballast

Specifications are subject to be changed without notice.

ROTOMIL'S K



Single stage oil sealed rotary vane pump with an end vacuum of 2 mbar and high and stable pumping speed.

- Compactness and noise level optimized for an easy integration in machines
- Available with 1-ph and 3-ph motor
- Standard built-in oil mist filter and gas ballast
- Delivered with 100% synthetic oil for heavy duty applications and long term operation
- Designed for light onsite maintenance



Technical characteristics

		K04		K08		K12	
		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Nominal flow rate m ³ .h ⁻¹		4	4.8	8	9	12	14
With gas ballast	End vacuum mbar	2		2		2	
	Water vapor permitted maximum pressure mbar	N.A		N.A		35	
	Water vapor capacity kg.h ⁻¹	N.A		N.A		0.3	
100 % synthetic oil		MV99S		MV99S		MV99S	
Oil capacity l - qt		0,065		0,2		0,4	
Noise level dB(A)		48	52	58	60	62	64

* Measurements according to PNEUROP 6002 specifications - 20 °C

* Measurements according to EN ISO 2151 - K specifications - 20 °C

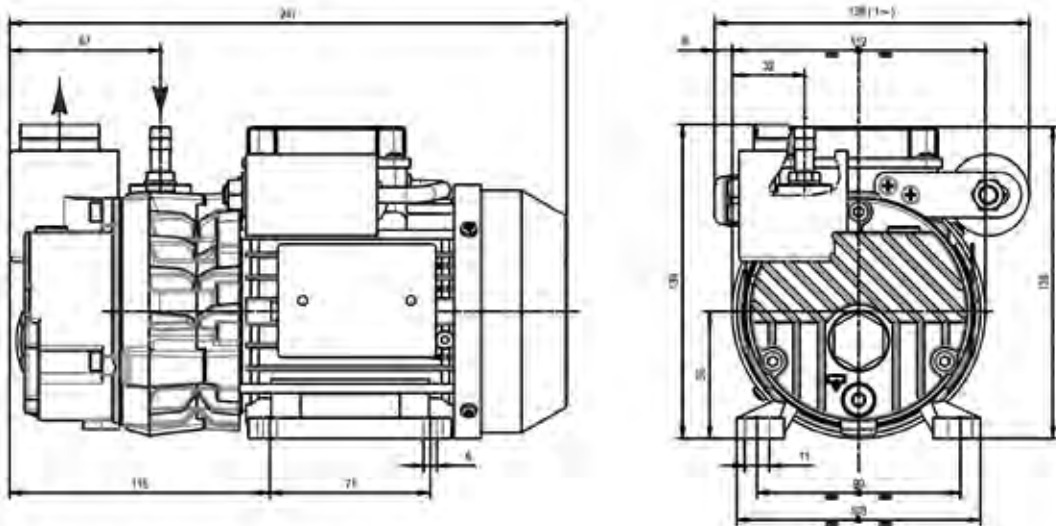
Versions

ROTOMIL'S		K04		K08		K12	
Electrical motor	Number of phases	1	3	1	3	1	3
	Voltage V	230	230 / 400	230	230 / 400	230	230 / 400
	Period Hz	50 (60)	50 (60)	50 (60)	50 (60)	50 (60)	50 (60)
	Motor power kW	0.12 (0.15)	0.12 (0.15)	0.25 (0.3)	0.25 (0.3)	0.45 (0.55)	0.37 (0.45)
	Rotation speed min ⁻¹	2800	3300	2800	3300	2800	3300
Inlet connection		1/8" G	1/8" G	3/8" G	3/8" G	1/2" G	1/2" G
Outlet connection		1/8" G	1/8" G	3/8" G	3/8" G	1/2" G	1/2" G
Weight with oil kg		5,4	5,4	10	9	14	12,5

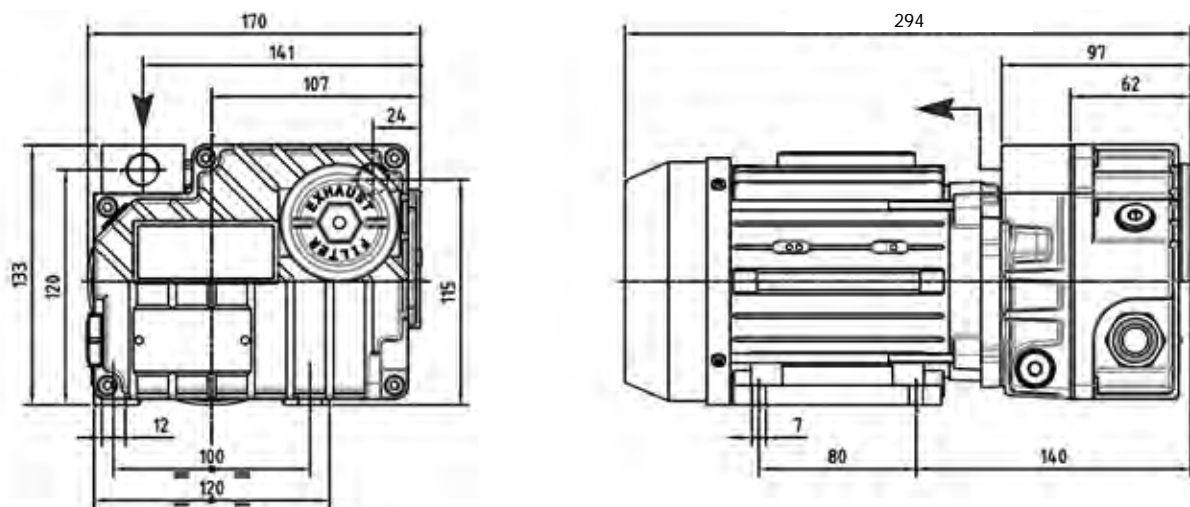
Lubricated rotary vane vacuum pumps

Dimensions mm (inch)

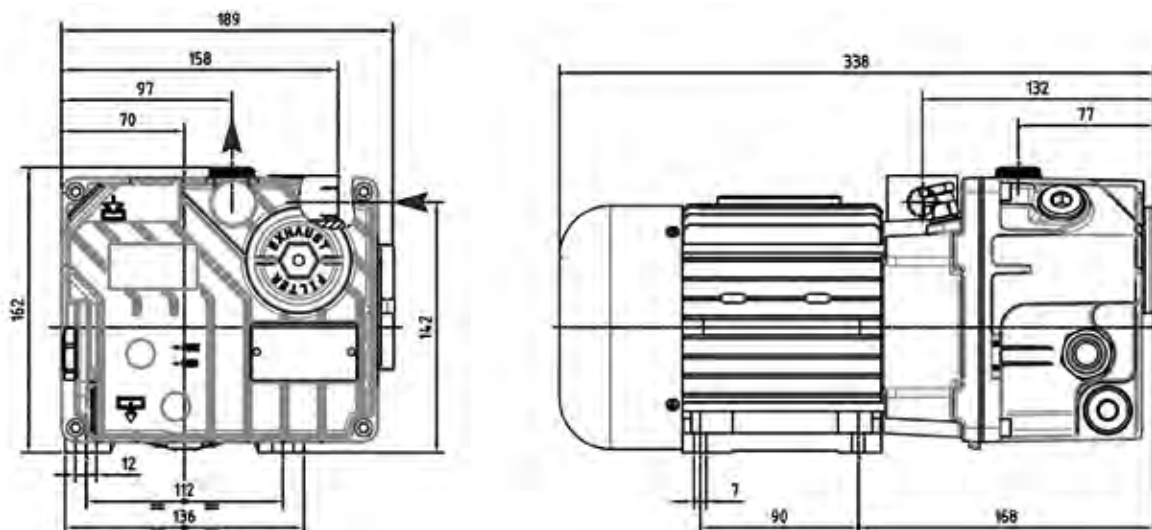
K04



K08



K12



Specifications are subject to be changed without notice.



References

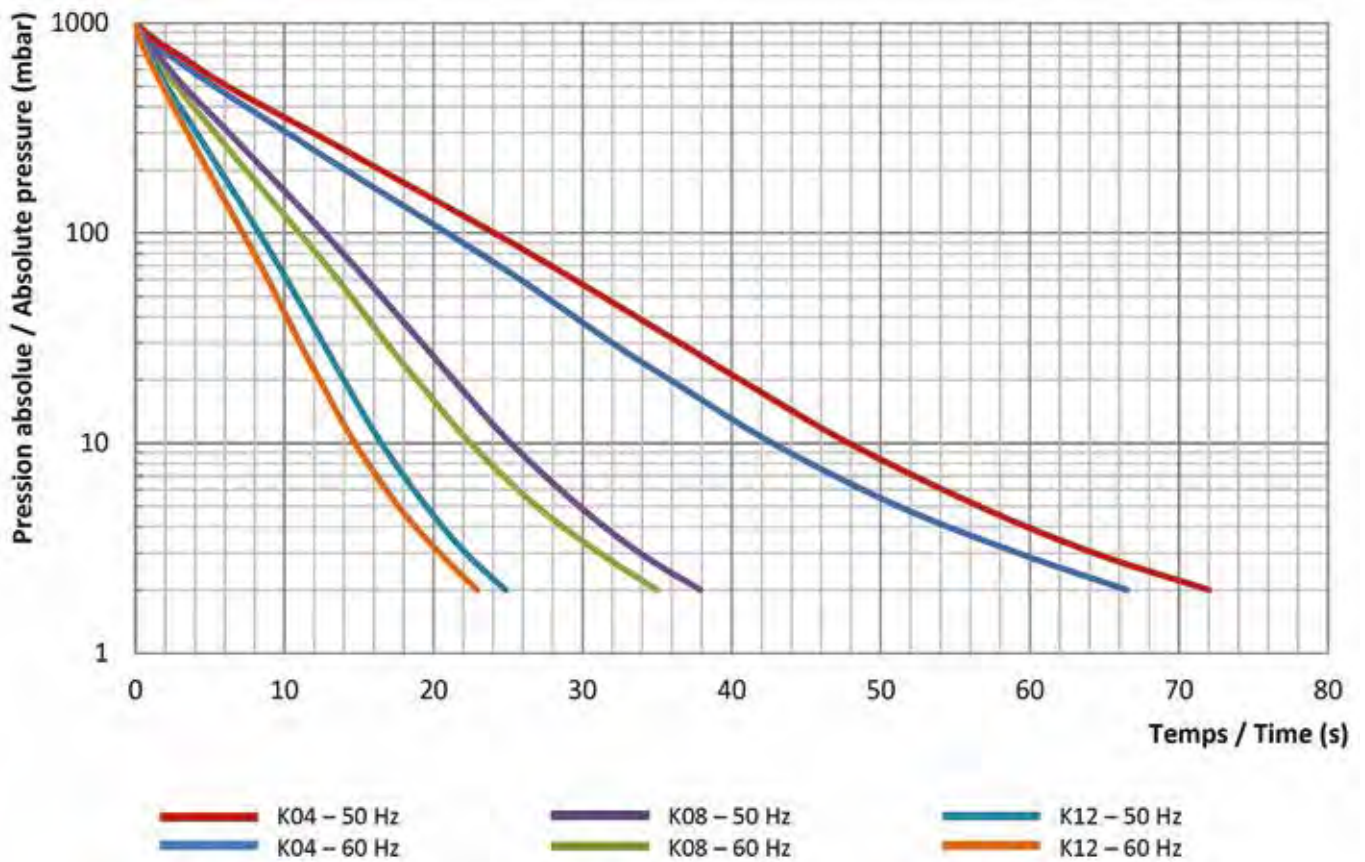
		K04	K08	K12
1-ph - 230V	50/60 Hz	824224	824226	824288
3-ph - 230 / 400V	50/60 Hz	824225	824227	824289

Accessories

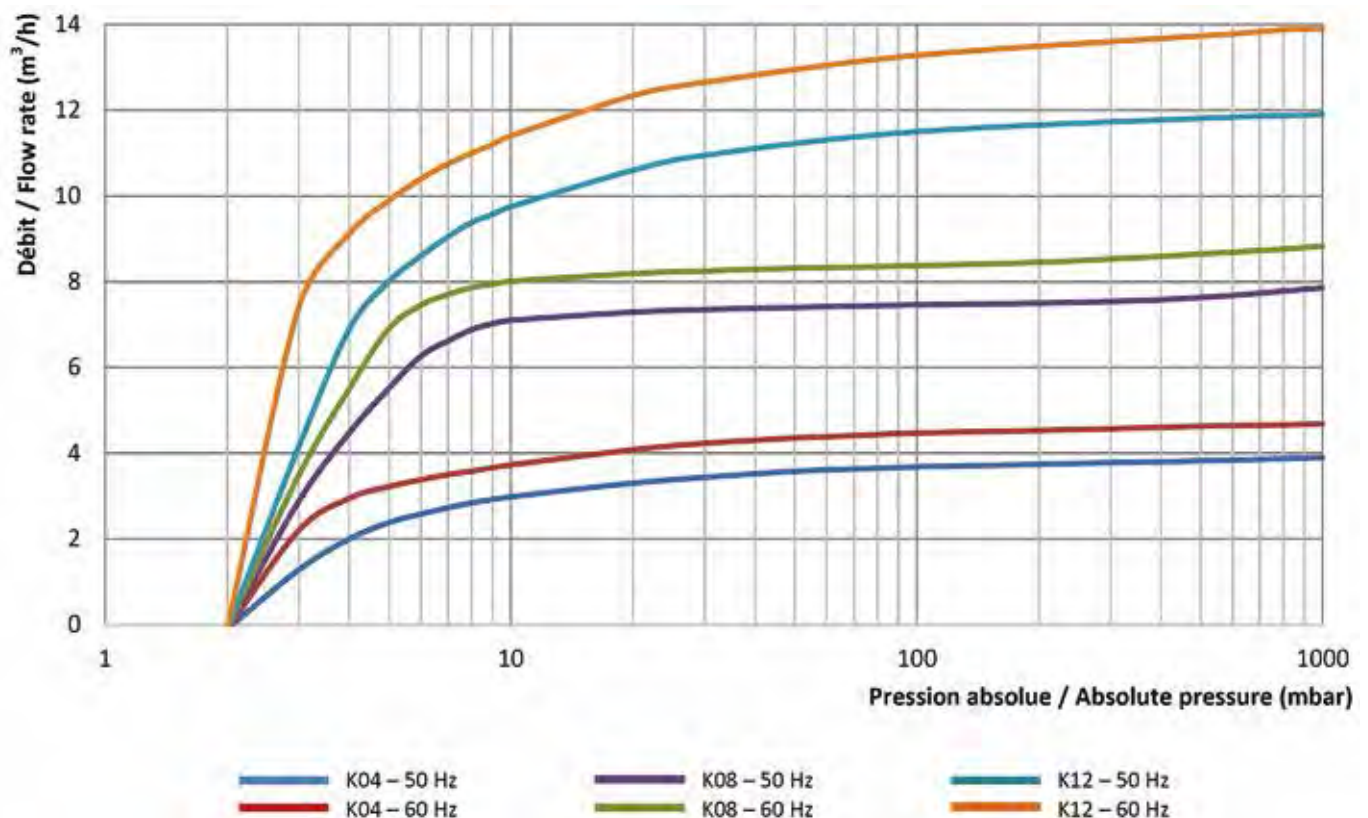
			K04	K08	K12
Inlet filter not mounted (Paper cartridge)		39PA - G3/8"	333512	333512	333512
Inlet hose MF 1/4" (l.1000 mm)			670177	670177	670177
Inlet hose MF 1/2" (l.1000 mm)			712931	712931	712931
Inlet hose MF 3/8" (l.1000 mm)			618981	618981	618981
Direct starter	without regulation	1-ph, 230V	770502	770502	770503
		3-ph, 400V	770573	770573	770573
	with regulation contact LG7	1-ph, 230V	710427	710427	710428
		3-ph, 400V	710421	710421	710421
Safety valve + vacuum gauge mounted			670069	670069	670069
Base frame assembly			670019	670019	670019
Electrical cable (3m) with plug - 1ph - 230V			363052	363052	363052

Lubricated rotary vane vacuum pumps

Pumping speed on 1000 l vessel



Performance curves



Specifications are subject to be changed without notice.

High performance oil-less vacuum pumps



INNOVATION 1

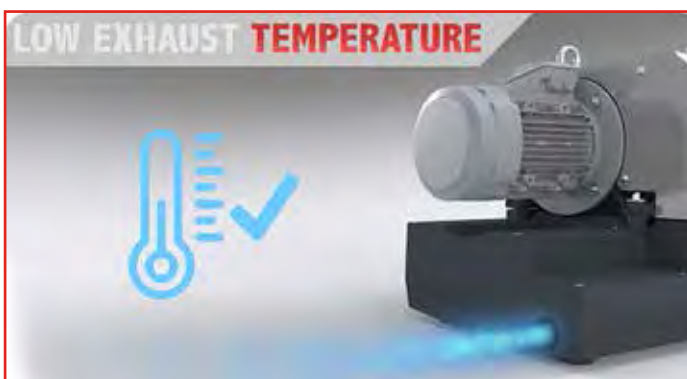
SIRELLA.R oil less claw vacuum pump is a contactless technology designed to insure a very low noise level.

Corrosion resistant claws and chamber



INNOVATION 2

The **SIRELLA.R** has the best efficiency in the market which brings energy cost saving for the end users



INNOVATION 3

The exhaust temperature is lower than other similar pumps

INNOVATION 4

Access to the claws is easy in order to clean them in case of pollution



INNOVATION 5

The SIRELLA.R has been studied to simplify the pump replacement due to its compact dimensions



SIRELLA.RS

Compatible with VFC variable frequency converter for electricity cost saving

Operation from 25 Hz to 70 Hz

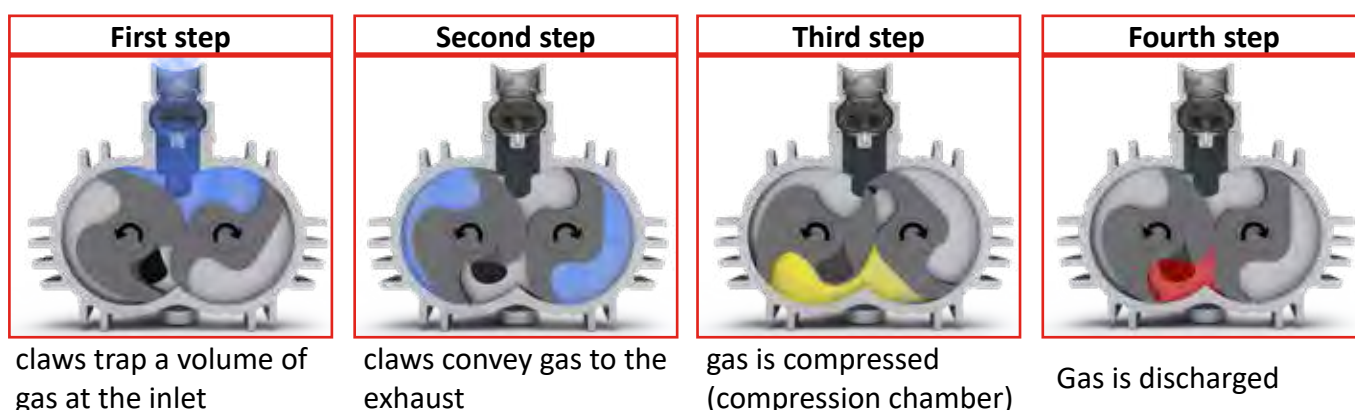
Built-in or separate VFC into electrical board for central vacuum systems

SIRELLA SL100.R



- Contactless technology
- Low noise level
- High efficiency
- Low exhaust temperature
- Easy access and low maintenance
- Compact size
- PT100 temperature sensor included

Working principle



Technical characteristics

Sirella SL100.R	50 Hz	60 Hz
Pneurop pumping speed ⁽¹⁾ m ³ .h ⁻¹ - cfm	90 - 53	108 - 63.6
End vacuum mbar - torr	60 - 45	60 - 45
Continuous end vacuum mbar - torr	60 - 45	60 - 45
Gear box oil capacity MB150S 100 % synthetic l - qt	0.7 - 0.74	0.7 - 0.74
Noise level dB(A)	69	71

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

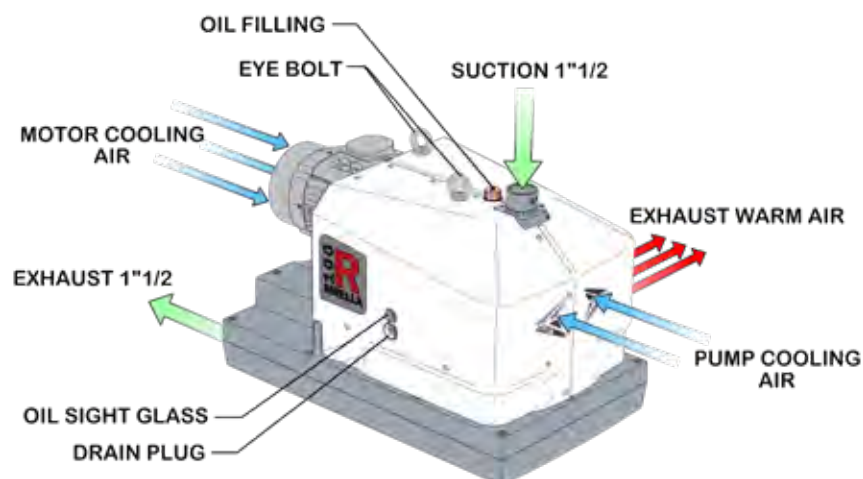
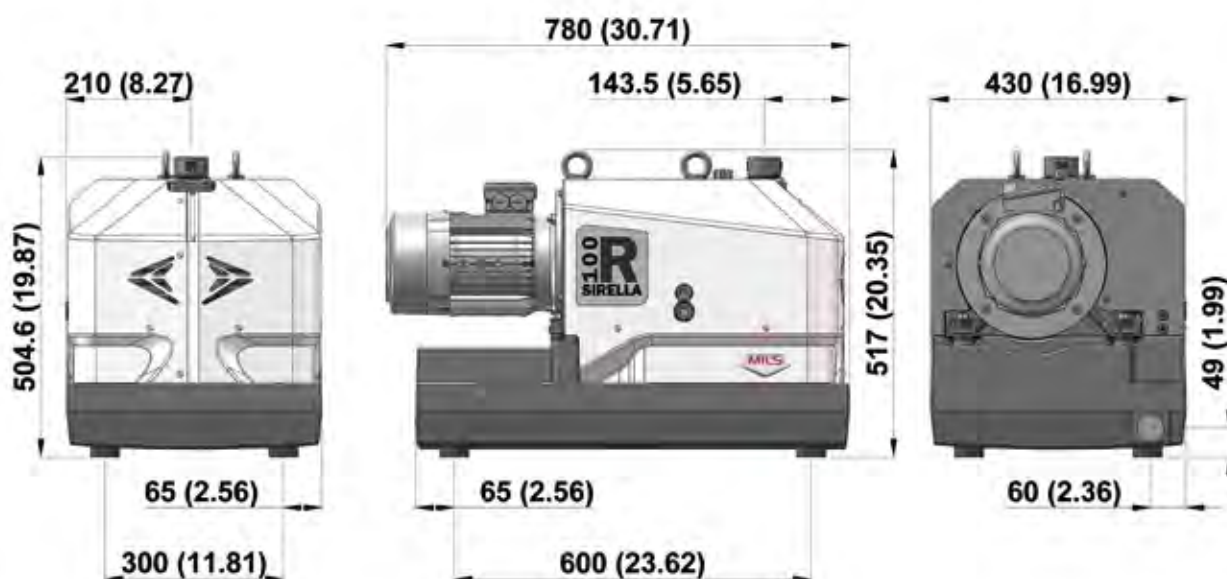
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	3	3	3	3	3
	Voltage V	230 / 400	220 / 380	190 / 380	208-230 / 460	200 / 380
	Period Hz	50	60	50	60	50 / 60
	Motor power	2.20 kW	2.64 kW	2.20 kW	3.5 HP	2.20 / 2.64 kW
	Rotation speed min ⁻¹	3000	3600	3000	3600	3000/3600
Inlet connection ⁽²⁾		1"1/2 BSP	1"1/2 BSP	1"1/2 NPT	1"1/2 NPT	1"1/2 BSP
Outlet connection ⁽²⁾		1" 1/2 BSP	1"1/2 BSP	1"1/2 NPT	1"1/2 NPT	1"1/2 BSP
Weight with oil kg - lb		170 - 375	174 - 384	174 - 384	174 - 384	174 - 384

Specifications are subject to be changed without notice.

Oil-less claw vacuum pumps

Dimensions mm (inch)



References

	Sirella SL100.R
EUROPE 3ph, 230/400V-50Hz	824410
ASIA / MIDDLE EAST 3ph, 220/380V-60Hz	824418
SOUTH AMERICA / USA 3ph, 208-230/460V-60Hz	824427



Maintenance kits

Gear box oil MB150S

1 liter can
619626

Accessories and Options

			SL100.R
Constant vacuum solenoid valve - electronic control of the end vacuum			625547
1	Adjusting valve fitted on T-square (without filter)		723341
2	Fitted suction filter type 126	Paper cartridge	625570
		Polyester cartridge	625571
		Carbon cartridge	625572
Vacuum gauge fitted on filter			617536
Suction hose (l : 1500 mm)			625573
Direct starter (wall mounting)	Without regulation contact	3ph, 400V- 50HZ	770497
		3ph, 230V- 50HZ	770498
	With regulation contact LG7	3ph, 400V- 50HZ	710424
		3ph, 230V- 50HZ	710432

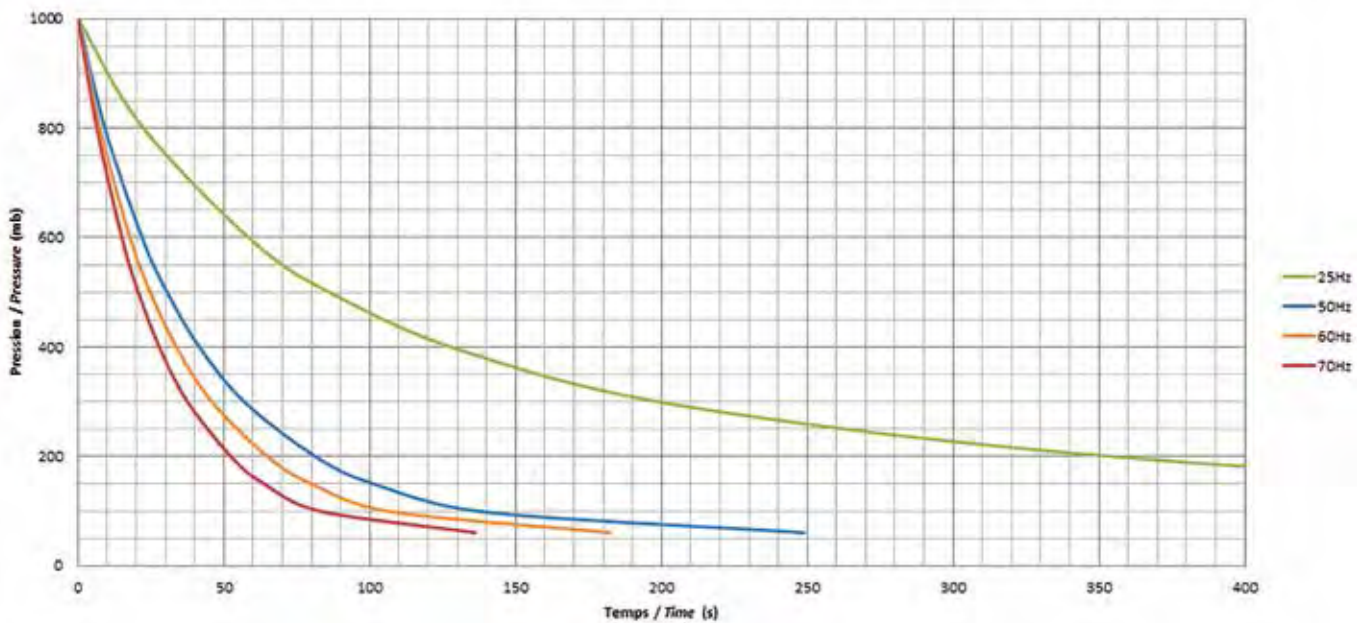


1 Adjusting valve fitted on T-square

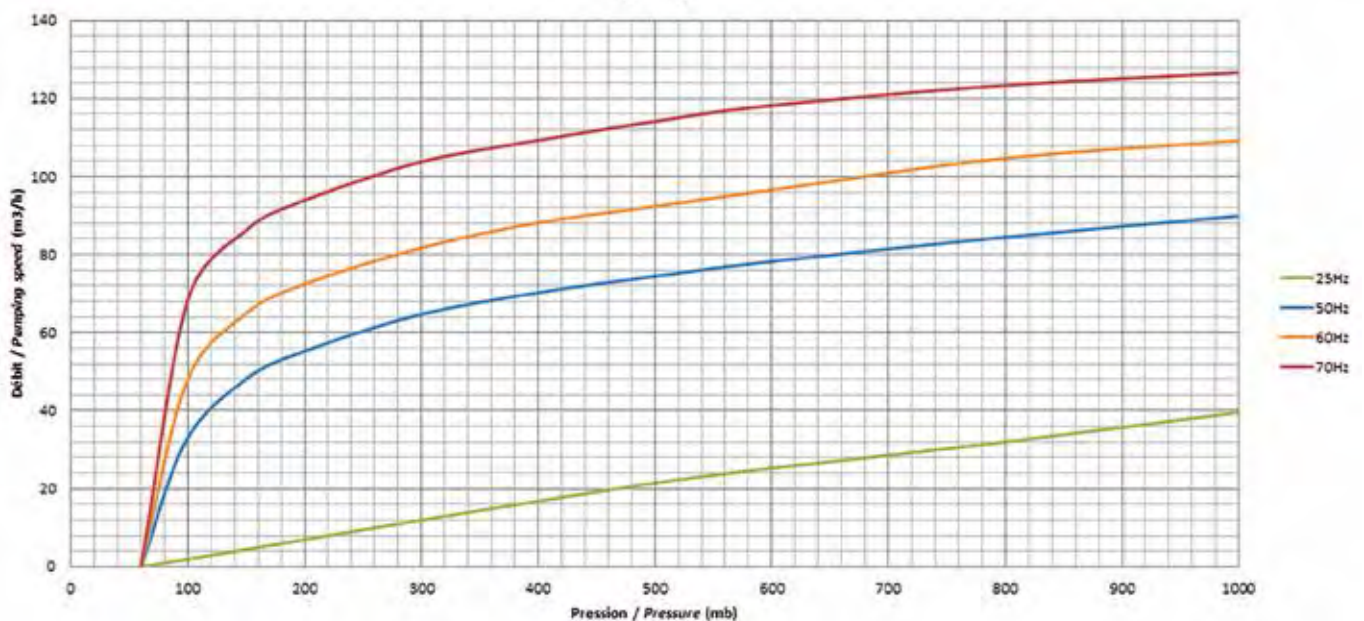


2 suction filter type 126

Pumping speed on 1000 l vessel



Performance curves

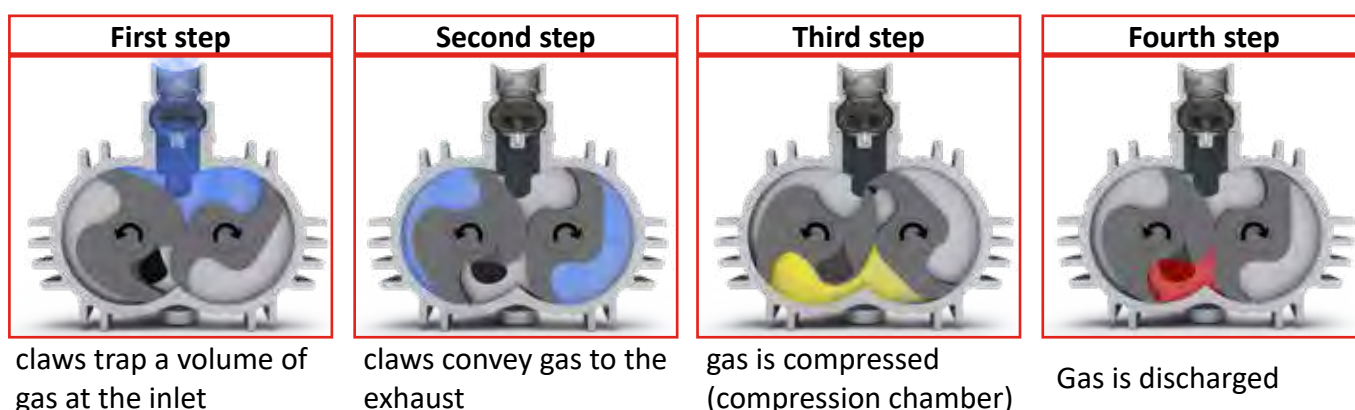


SIRELLA SL150.R



- Contactless technology
- Low noise level
- High efficiency
- Low exhaust temperature
- Easy access and low maintenance
- Compact size
- PT100 temperature sensor included

Working principle



Technical characteristics

Sirella SL150.R	50 Hz	60 Hz
Pneurop pumping speed ⁽¹⁾ m ³ .h ⁻¹ - cfm	140 - 82.4	164 - 96.5
End vacuum mbar - torr	50 - 37.5	50 - 37.5
Continuous end vacuum mbar - torr	150 - 112.5	150 - 112.5
Gear box oil capacity MB150S 100 % synthetic I - qt	0.7 - 0.74	0.7 - 0.74
Noise level dB(A)	69	71

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

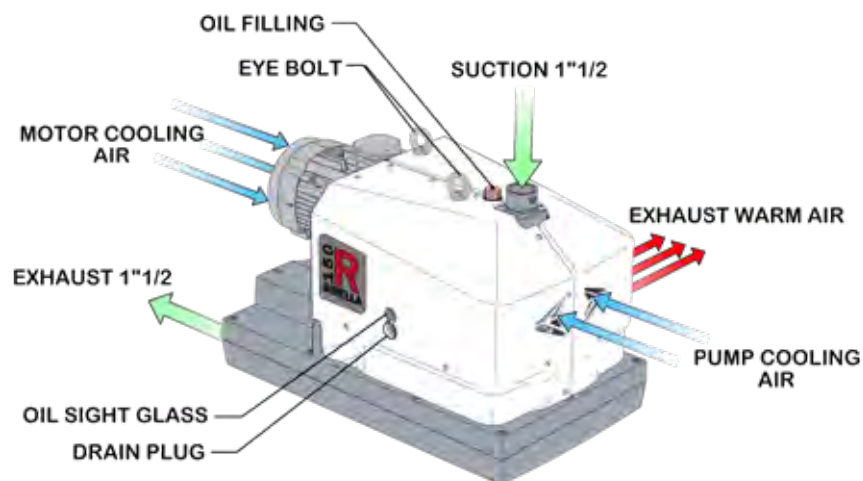
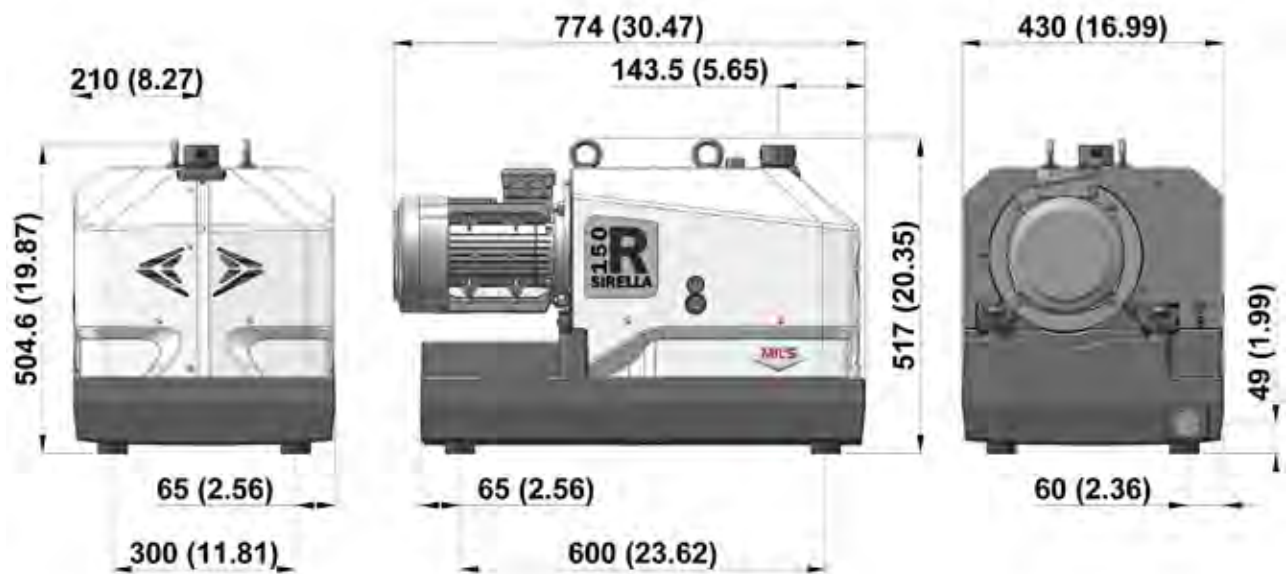
Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	3	3	3	3	3
	Voltage V	230 / 400	220 / 380	190 / 380	208-230 / 460	200 / 380
	Period Hz	50	60	50	60	50 / 60
	Motor power	3 kW	3.60 kW	3 kW	5 HP	3 / 3.60 kW
	Rotation speed min ⁻¹	3000	3600	3000	3600	3000/3600
Inlet connection		1"1/2 BSP	1"1/2 BSP	1"1/2 NPT	1"1/2 NPT	1"1/2 BSP
Outlet connection		1" 1/2 BSP	1"1/2 BSP	1"1/2 NPT	1"1/2 NPT	1"1/2 BSP
Weight with oil kg - lb		180 - 397	190 - 419	190 - 419	190 - 419	190 - 419

Specifications are subject to be changed without notice.

Oil-less claw vacuum pumps

Dimensions mm (inch)



References

	Sirella SL150.R
EUROPE 3ph, 230/400V-50Hz	824411
ASIA / MIDDLE EAST 3ph, 220/380V-60Hz	824419
SOUTH AMERICA / USA 3ph, 208-230/460V-60Hz	824428



Maintenance kits

Gear box oil MB150S

1 liter can
619626

Accessories and Options

			SL150.R
Constant vacuum solenoid valve - electronic control of the end vacuum			625547
1	Adjusting valve fitted on T-square (without filter)		723341
2	Fitted suction filter type 201	Paper cartridge	619891
		Polyester cartridge	619892
		Carbon cartridge	619893
Vacuum gauge fitted on filter			617536
Suction hose (l : 1500 mm)			625574
Direct starter (wall mounting)	Without regulation contact	3ph, 400V- 50HZ	770498
		3ph, 230V- 50HZ	770499
	With regulation contact LG7	3ph, 400V- 50HZ	710425
		3ph, 230V- 50HZ	710433

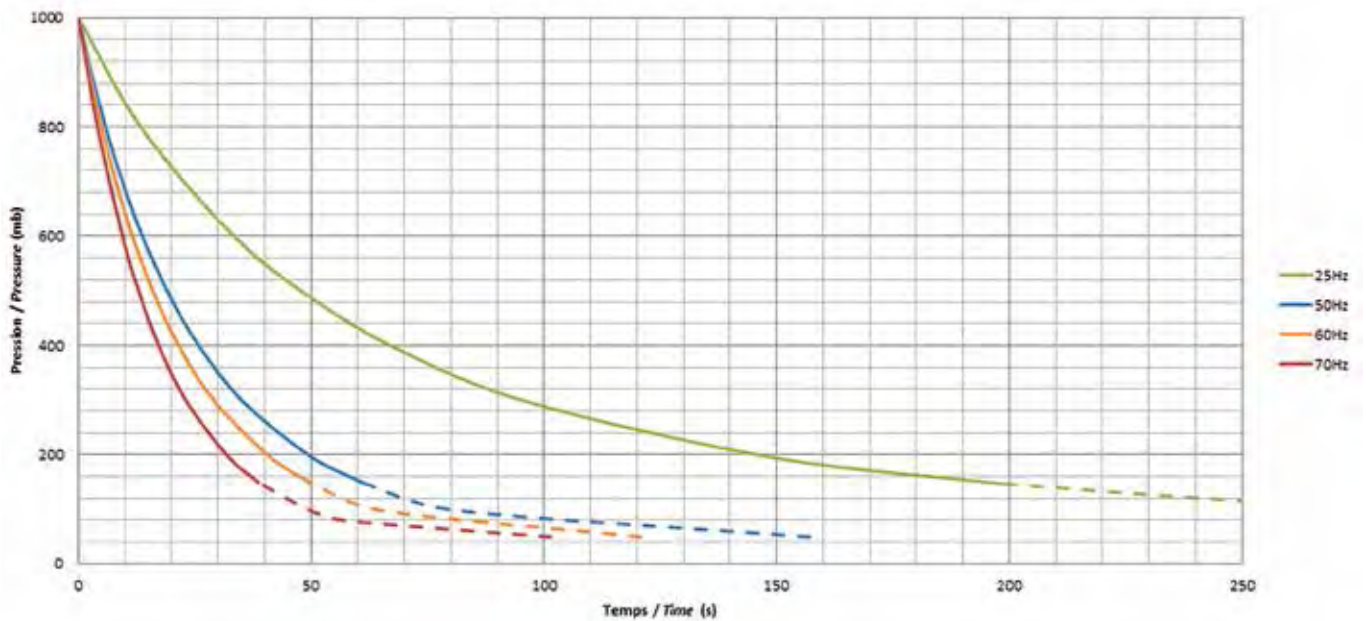


1 Adjusting valve fitted on T-square

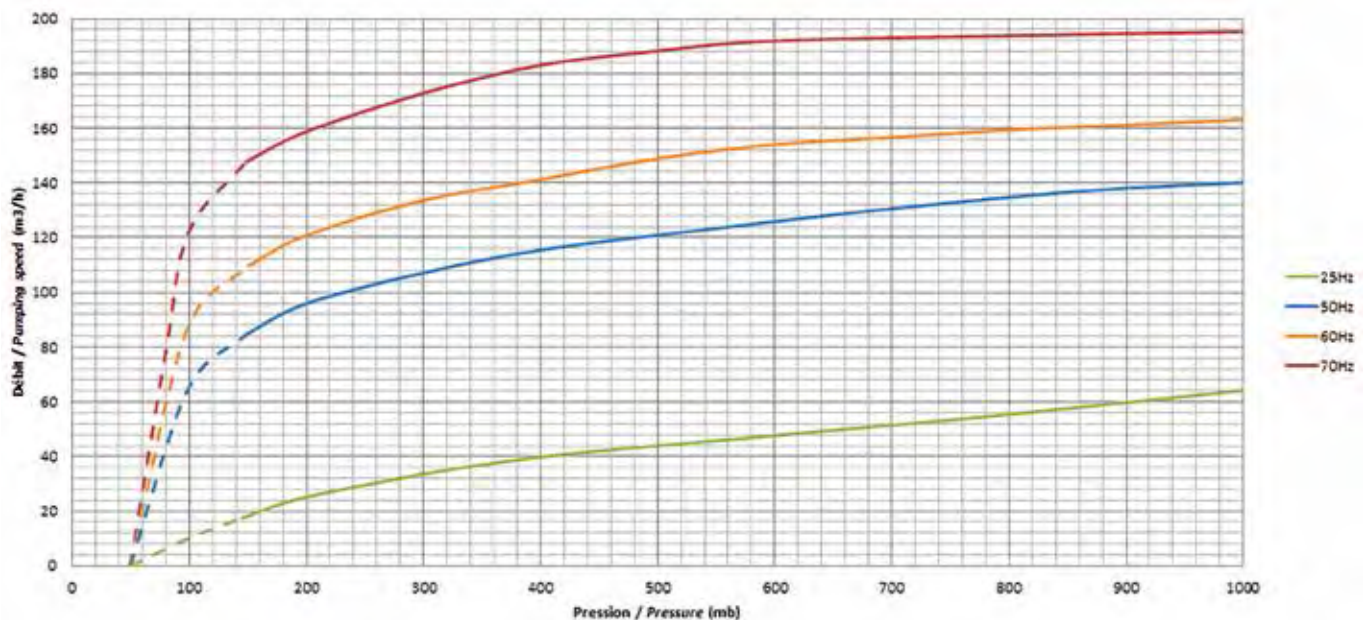


2 suction filter type 201

Pumping speed on 1000 l vessel



Performance curves

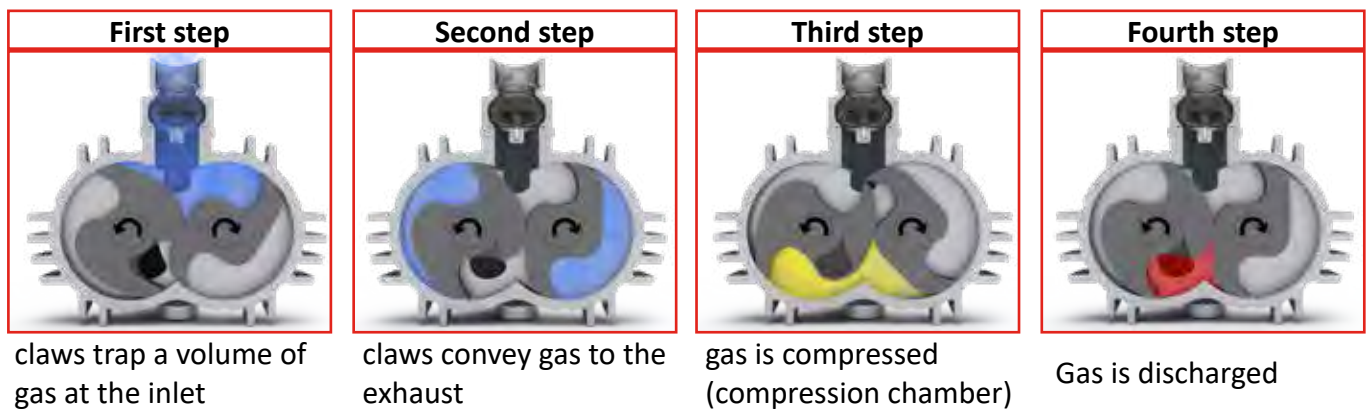


SIRELLA SL300.R



- Contactless technology
- Low noise level
- High efficiency
- Low exhaust temperature
- Easy access and low maintenance
- Compact size
- PT100 temperature sensor included

Working principle



Technical characteristics

Sirella SL300.R	50 Hz	60 Hz
Pneurop pumping speed ⁽¹⁾ m ³ .h ⁻¹ - cfm	260 - 153	312 - 183.6
End vacuum mbar - torr	50 - 37.5	50 - 37.5
Continuous end vacuum mbar - torr	150 - 112.5	150 - 112.5
Gear box oil capacity MB150S 100 % synthetic l - qt	1 - 1.06	1 - 1.06
Noise level dB(A)	70	72

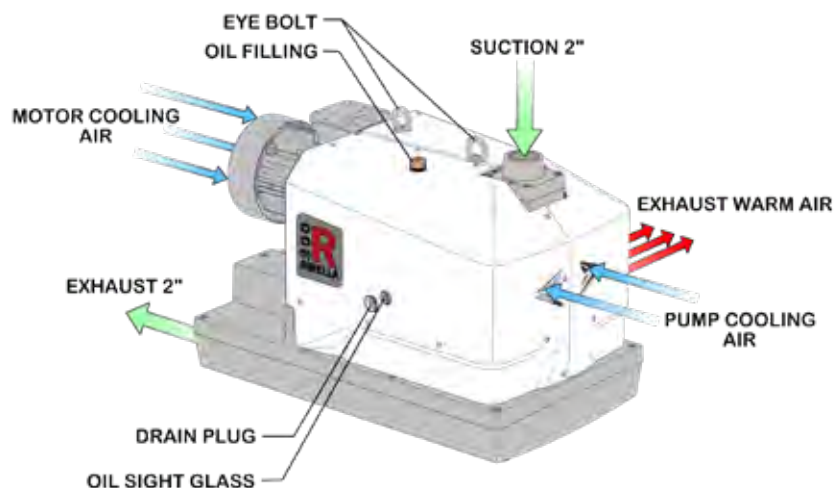
⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

GEOGRAPHIC ZONE		EUROPE	ASIA MIDDLE-EAST	SOUTH AMERICA	USA	JAPAN
Electrical motor	Number of phases	3	3	3	3	3
	Voltage V	230 / 400	220 / 380	190 / 380	208-230 / 460	200 / 380
	Period Hz	50	60	50	60	50 / 60
	Motor power	5.5 kW	6.6 kW	5.5 kW	9 HP	5.5 / 6.6 kW
	Rotation speed min ⁻¹	3000	3600	3000	3600	3000/3600
Inlet connection		2" BSP	2" BSP	2" NPT	2" NPT	2" BSP
Outlet connection		2" BSP	2" BSP	2" NPT	2" NPT	2" BSP
Weight with oil kg - lb		300 - 662	315 - 695	315 - 695	315 - 695	315 - 695

Oil-less claw vacuum pumps

Dimensions mm (inch)



References

	Sirella SL300.R
EUROPE 3ph, 230/400V-50Hz	824412
ASIA / MIDDLE EAST 3ph, 220/380V-60Hz	824420
SOUTH AMERICA / USA 3ph, 208-230/460V-60Hz	824429



Maintenance kits

Gear box oil MB150S

1 liter can
619626

Accessories and Options

			SL300.R
Constant vacuum solenoid valve - electronic control of the end vacuum			625548
1	Adjusting valve fitted on T-square (without filter)		713842
2	Fitted suction filter type 201	Paper cartridge	715350
		Polyester cartridge	715351
		Carbon cartridge	715352
Vacuum gauge fitted on filter			617536
Suction hose (l : 1500 mm)			625575
Direct starter (wall mounting)	Without regulation contact	3ph, 400V- 50HZ	770499
		3ph, 230V- 50HZ	770500
	With regulation contact LG7	3ph, 400V- 50HZ	710426
		3ph, 230V- 50HZ	710434

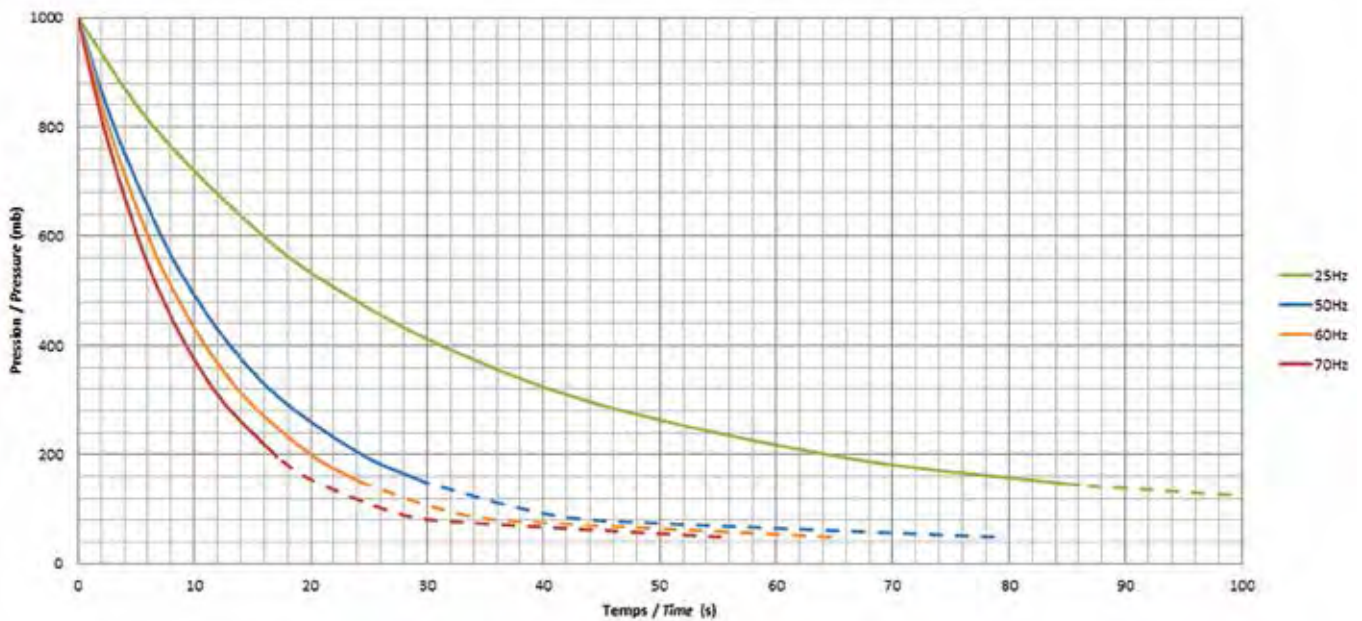


1 Adjusting valve fitted on T-square

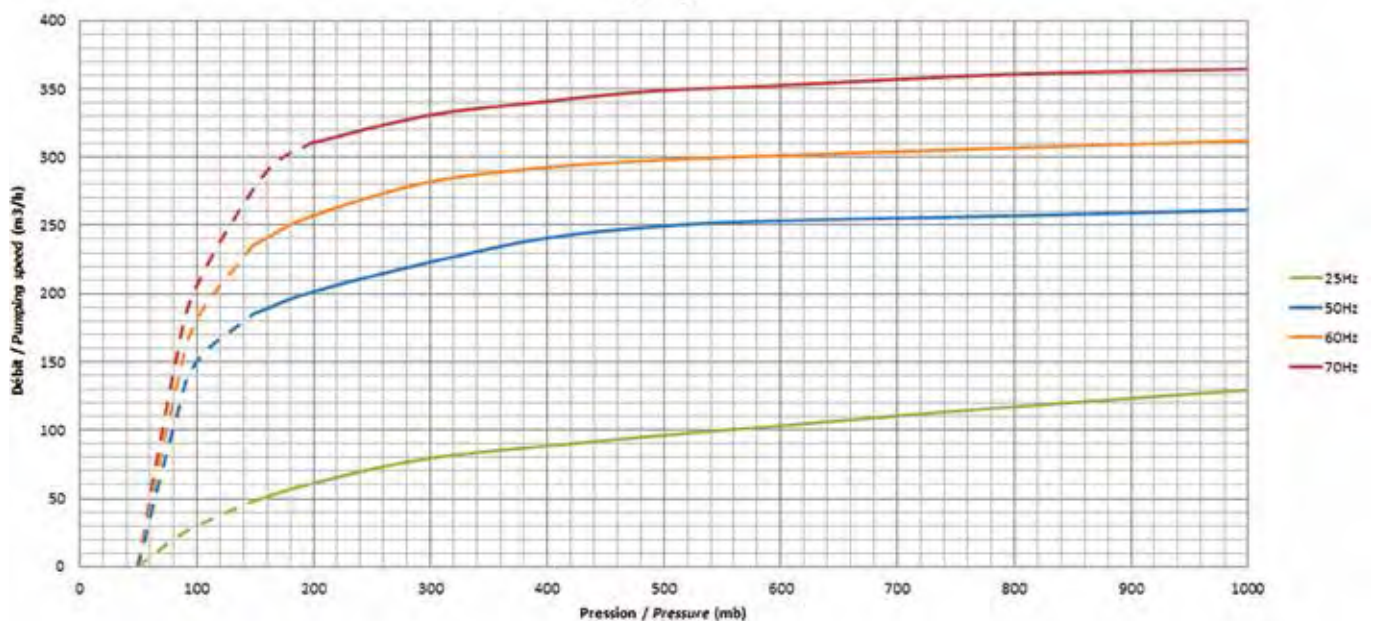


2 suction filter type 201

Pumping speed on 1000 l vessel



Performance curves





Compatible with VFC variable frequency converter for electricity cost saving
Operation from 25 Hz to 70 Hz
Built-in or separate VFC into electrical board for central vacuum systems

- Contactless technology
- Low noise level, compact size and high efficiency
- Low exhaust temperature
- Easy access and low maintenance
- PT100 temperature sensor



Technical characteristics

Sirella RS	SL100.RS	SL150.RS	SL300.RS
Pneurop pumping speed ⁽¹⁾ m ³ .h ⁻¹ - cfm	40 to 126 - 23 to 74	64 to 195 - 37 to 115	129 to 312 - 76 to 184
End vacuum mbar - torr	60 - 45	50 - 37.5	50 - 37.5
Continuous end vacuum mbar - torr	150 - 112.5	150 - 112.5	150 - 112.5
Gear oil capacity MB150S 100 % synthetic l - qt	0.7 - 0.74	0.7 - 0.74	0.7 - 0.74
Noise level dB(A)	72	72	72

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Versions

SIRELLA	SL100.RS	SL150.RS	SL300.RS
Number of phases	3	3	3
Voltage V	380 to 480	380 to 480	380 to 480
Period Hz (*)	45 to 66	45 to 66	45 to 66
Max motor power	3.5 kW	4.5 kW	6.6 kW
Rotation speed min ⁻¹	1500 to 4200	1500 to 4200	1500 to 3600
Inlet connection	1"1/2 BSP or NPT	1"1/2 BSP or NPT	2" BSP or NPT
Outlet connection	1"1/2 BSP or NPT	1"1/2 BSP or NPT	2" BSP or NPT
Weight with oil kg - lb	177 - 390	200 - 441	316 - 697

(*) Admissible frequency for power supply of the VFC

Specifications are subject to be changed without notice.

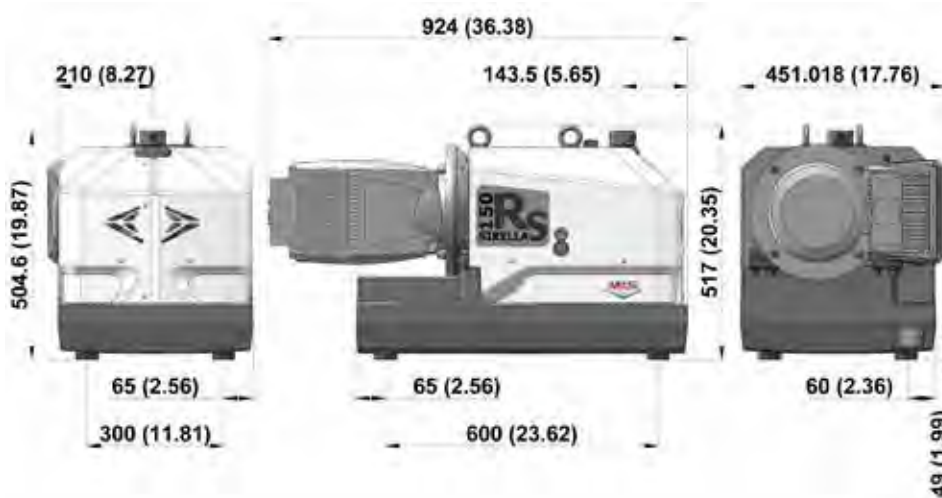
Oil-less claw vacuum pumps

Dimensions mm (inch)

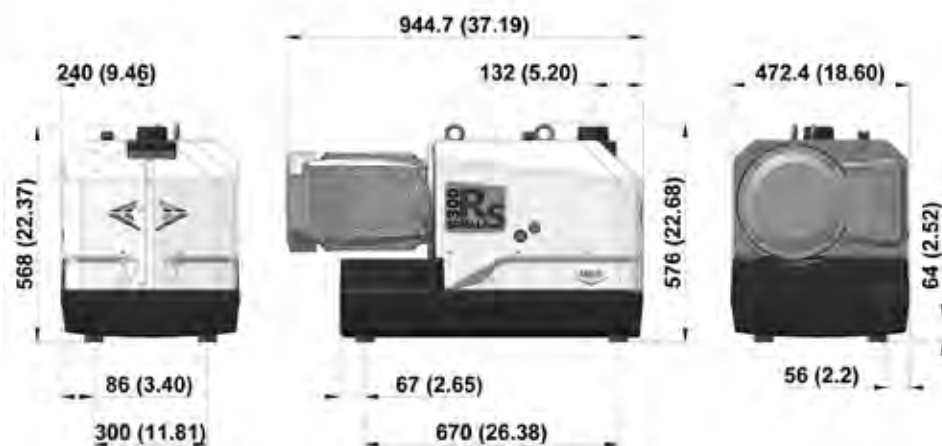
SL100.RS



SL150.RS



SL300.RS



References

	SL100.RS	SL150.RS	SL300.RS
BSP CONNECTIONS	824413	824414	824415
NPT CONNECTIONS	824430	824431	824432

Liquid traps

- Optimized protection of vacuum pumps
- High efficiency to drain liquids in vacuum pipeline
- Model with stainless steel mechanical float (cutting the flow in the event of excessively large liquid overflow) to protect the pumping group
- Plexiglas, polycarbonate or PYREX bowls
- 316L stainless steel version available for liquid traps type 100 / 125 / 200
- Wall fixation or head fitting on machine frame

Options

- Glass (pyrex) bottle fixed under the trap to drain condensates
- Fitting of an automatic liquid drain under the trap : allows to drain the system without stopping the process

Dimensions (mm)

	A	B	C	Tank
Liquid trap type 100	125	415	137	2 L
Liquid trap type 125	125	415	137	2 L
Liquid trap type 200	230	495	220	7 L
Liquid trap type 250	230	495	220	7 L
Liquid trap type 300	345	647	290	16 L
Liquid trap type 400	345	647	290	16 L

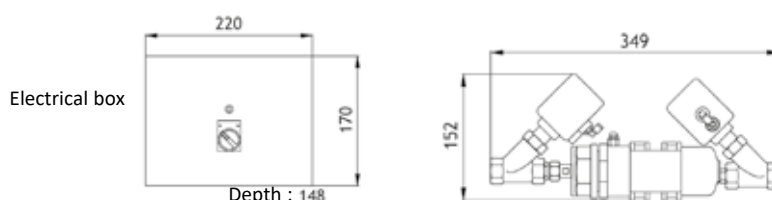
100 - 125 type drain trap



200 - 250 - 300 - 400 type drain trap



Automatic drain



Accessories for vacuum pumps

References and characteristics

Aluminium head Plexiglas cylinder	100	125	Aluminium head Pyrex cylinder	100	125
Flow rate m ³ /h	48	120	Flow rate m ³ /h	48	120
Inlet / Outlet BSPP	1"	1" 1/4	Inlet / Outlet BSPP	1"	1" 1/4
Drain valve outlet	G 1/2"	G1/2"	Drain valve outlet	G1/2"	G1/2"
Without mechanical float	724793	724797	Without mechanical float	724807	724811
With mechanical float	724794	724798	With mechanical float	724808	724812

Aluminium head Polycarbonate cylinder	200	250	300	400
Flow rate m ³ /h	340	408	696	835
Inlet / Outlet BSPP	2"	2" 1/2	3"	4"
Drain valve outlet	G1/2"	G1/2"	G1/2"	G1/2"
Without mechanical float	724801	724805	724809	724813
With mechanical float	724802	724806	724810	724814

316L stainless steel head Pyrex cylinder	100	125	200
Flow rate m ³ /h	48	120	340
Inlet / Outlet BSPP	1"	1" 1/4	2"
Drain valve outlet	G1/2"	G1/2"	G1/2"
Without mechanical float	724795	724799	724803
With mechanical float	724796	724800	724804

Options	100	125	200	250	300	400
250 ml PYREX bottle	615441					
500 ml PYREX bottle	615442					
1000 ml PYREX bottle	615443					
Bracket for wall fixing	Included		619907		617512	
Flanges DN80					617513	
Flanges DN100					617514	
Automatic drain	Electro-pneumatic with control board					816002
	Electro-pneumatic with control board (2l)					821664
	Electrical with control board					816003

Specifications are subject to be changed without notice.

Vacuum sealed suction filters



The suction filters prevent the entry of solid particles into the pump, ensuring its longevity

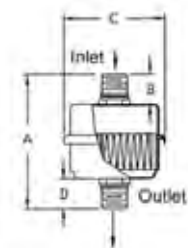
- One or two 1/4" differential taps for gauges (depending on model)
- Vacuum level : $1,3 \times 10^{-3}$ mbar (except filters 25 / 38 / 51)
- Running temperature (continuous) : -15 °C to +100 °C
- Low pressure drop

Different configurations are available with 3 types of cartridges :

- Polyester : for all uses, resists humidity (efficiency : 99% at 5 μ)
- Paper : for dry gases (efficiency : 99% at 2 μ)
- Carbon : to eliminate odors and absorb some contaminants (efficiency : 99% at 10 μ)

Characteristics and dimensions (mm)

25/38/51 filters



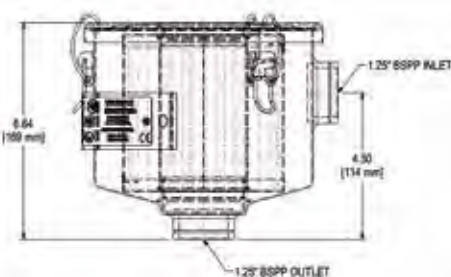
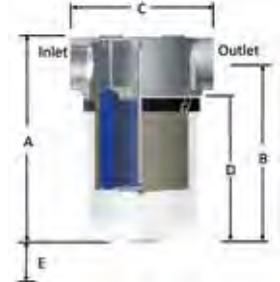
39 to 251 filters



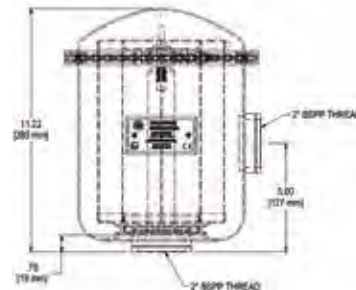
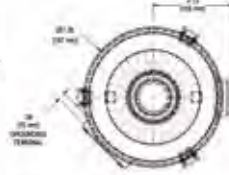
CT201 to CT601
straight-through filters



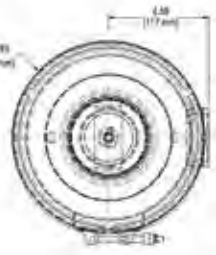
ST201 to ST401
straight-through filters



126 Atex filter



201 Atex filter



Right-angle filters	Inlet - Outlet	Dimensions (mm)					Filter flow $\text{m}^3 \cdot \text{h}^{-1}$	Filter element flow $\text{m}^3 \cdot \text{h}^{-1}$	Weight kg
		A	B	C	D	E			
39 PA / PO / CH	3/8" - BSPP	85	54	54	46	76	31	43	0,4
76 PA / PO / CH	3/4" - BSPP	103	76	76	64	83	43	94	1,4
100 PA / PO / CH	1" - BSPP	111	83	83	67	83	60	94	1,4
126 PA / PO / CH	1" 1/4 - BSPP	105	105	105	114	133	102	196	2,3
201 PA / PO / CH	2" - BSPP	260	114	114	127	235	298	493	6,8
251 PA / PO / CH	2" 1/2 - BSPP	271	130	130	140	235	357	493	6,8

DN40KF - 100 PA / PO / CH	DN40 - KF	183	117	187	127	-	136	195	2
---------------------------	-----------	-----	-----	-----	-----	---	-----	-----	---

ATEX filters	Inlet - Outlet	Dimensions (mm)					Filter flow $\text{m}^3 \cdot \text{h}^{-1}$	Filter element flow $\text{m}^3 \cdot \text{h}^{-1}$	Weight kg
		A	B	C	D	E			
126 PA / PO / CH ATEX ZONE IIGD c IIIC T4 X	1"1/4 - BSPP	169	114	122	-	-	102	196	2,3
201 PA / PO / CH ATEX ZONE IIGD c IIIC T4 X	2" - BSPP	285	127	222	-	-	298	493	6,8

Specifications are subject to be changed without notice.

Accessories for vacuum pumps

Straight-through filters	Inlet - Outlet	Dimensions (mm)					Filter flow m³.h⁻¹	Filter element flow m³.h⁻¹	Weight kg
		A	B	C	D	E			
25 PA / PO	1/4"	86	16	64	16	-	7	14	0,23
38 PA / PO	3/8"	86	16	64	16	-	10	14	0,23
51 PA / PO	1/2"	98	22	64	22	-	10	14	0,23
CT201 PA / PO	2" - BSPP	325	275	229	229	228	298	495	7,2
CT251 PA / PO	2"1/2 - BSPP	325	275	229	229	228	357	495	6,8
CT301 PA / PO	3" - BSPP	473	404	343	328	228	510	969	14
CT401 PA / PO	4" - BSPP	473	404	343	328	228	884	969	12
CT601 PA / PO	6" - BSPP	483	363	483	249	254	1870	1870	20
ST201 PA / PO	2"1 - BSPP	413	362	229	315	228	298	495	7,2
ST251 PA / PO	2"1/2 - BSPP	413	362	229	315	228	357	495	6,8
ST301 PA / PO	3" - BSPP	502	432	343	356	228	510	969	13
ST401 PA / PO	4" - BSPP	502	432	343	356	228	884	969	11

References

Right-angle filters		76...	100...	126...	201...	251...
Right-angle filter	Paper cartridge	76PA 357893	100PA 360595	126PA 357894	201PA 357895	251PA 357896
	Polyester cartridge	76PO 357910	100PO 362235	126PO 362236	201PO 362237	251PO 362238
	Carbon cartridge	76CH 610515	100CH 616194	126CH 610516	201CH 610517	251CH 610518



Straight-through filters with steel cylinder		25...	38...	51...	CT201...	CT251...	CT301...	CT401...	CT601...
Straight-through filter	Paper cartridge	25PA 358225	38PA 362243	51PA 357947	CT201PA 362015	CT251PA 362016	CT301PA 357897	CT401PA 361106	CT601PA 361310
	Polyester cartridge	25PO 362241	38PO 362244	51PO 357948	CT201PO 362231	CT251PO 362232	CT301PO 362233	CT401PO 362234	CT601PO 361392

Straight-through filters with polycarbonate cylinder		ST201...	ST251...	ST301...	ST401...
Straight-through filter	Paper cartridge	ST201PA 362245	ST251PA 362246	ST301PA 361627	ST401PA 362277
	Polyester cartridge	--	ST251PO 332895	ST301PO 620166	ST401PO 362710

Accessories for CT & ST straight-through filters		201...	251...	301...	401...
Bracket for mural fixing		619907		617512	
Polycarbonate cylinder kit		362248		362250	
Flanges				617513	617514
Vacuum gauge fitted on filter		617536			

ATEX filters		126...	201...
ATEX filter ZONE IIGD c IIIC T4 X	Paper cartridge	126PA 625470	201PA 625472
	Polyester cartridge	126PO 625471	201PO 625473
	Carbon cartridge	126CH 619884	201CH 619885



Specifications are subject to be changed without notice.

Accessories for vacuum pumps

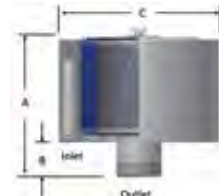
Silent suction filters

Silent filter	Outlet	Dimensions (mm)			Filter flow m ³ .h ⁻¹	Weight kg	Complete filter with paper cartridge reference	Paper cartridge designation & reference	
		A	B	C					
FS25	1/4"	70	17	64	7	0,11	358226	04	358227
FS50	1/2"	95	95	83	20	0,23	360390	06	357950
FS75	3/4"	96	32	155	43	0,9	357920	14	357924
FS100	1"	96	33	155	60	0,9	362638	18P	357925
FS125	1"1/4	171	41	156	119	1,5	357921	18P	357925
FS200	2"	304	60	260	230	6,3	357922	230P	357926
FS250	2"1/2	314	67	260	332	6,5	357923	230P	357926

FS25 TO FS50
Silent filter



FS75 TO FS250
Silent filter

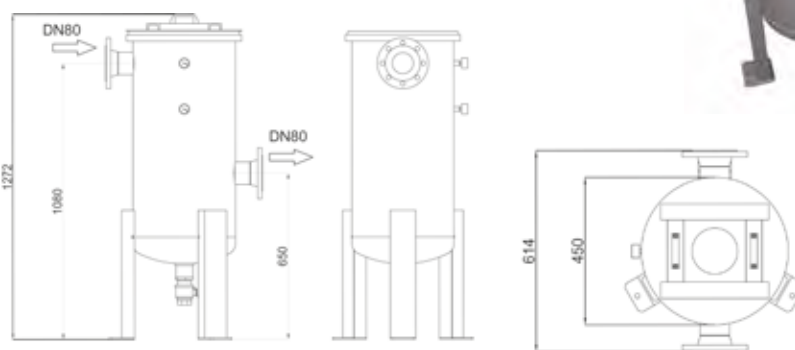


Dust separator with removable bag

- High steel painted filter
- Movable polyamid bag, 80 µ mesh, capacity : 55 l
- Quick easy fixing of the bag
- Movable cover with observation window
- Highly efficient protection for pumps running in very dusty environment



Dimensions (mm)



Dust separator

Separator	718548
Replacement bag	361714

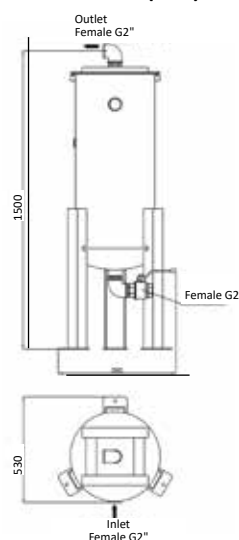
Liquid cyclonic separator

- High steel painted tank or stainless steel tank with take-down upper part
- Up and down sight glasses
- Evacuation by manual ball valve

Liquid cyclonic separator

Carbon steel separator	718548
Stainless-steel separator	361714

Dimensions (mm)



Accessories for vacuum pumps

"SPIRACIER" special hoses, vacuum switches & vacuum gauges



Flexible transparent PVC hose with galvanized steel spiral

Special vacuum "SPIRACIER" hoses with 2 rotating nuts

Crimped hose	1/2 " Ø 14	3/4 " Ø 20	1 " Ø 25	1 " 1/4 Ø 30	1 " 1/2 Ø 35	2 " Ø 45	2 " 1/2 Ø 64	DN80	DN100
600 mm	670633	606086	618265	670650	618267	618149	618956	618269	618270
1 000 mm	612919	604422	617372	607058	606455	606099	618957	617833	617834
1 500 mm	616362	618264	618266	610457	618268	607592	618661	-	-

Special vacuum "SPIRACIER" hoses with 2 rotating nuts

Crimped hose	1/2 " Ø 14	3/4 " Ø 20	1 " Ø 25	1 " 1/4 Ø 30	1 " 1/2 Ø 35	2 " Ø 45	2 " 1/2 Ø 64	DN80	DN100
Hose by the meter	059656	056350	063088	056351	056352	056353	061707	063091	061412
Fitting set *	618271	618082	618083	618084	618085	618086	618958	618272	618273

* 2 bushings + clamps and 2 FF rotating nuts + gaskets

BRASS straight unions

Straight unions	1/4 "	3/8 "	1/2 "	3/4 "	1 "	1 " 1/4	1 " 1/2	2 "
MM equal	352610	350470	350473	350476	350477	350480	350482	350484
	3/8 - 1/4"	1/4" - 1/2"	1/2" - 3/4"	3/4" - 1"	1" - 1" 1/4	1" 1/4 - 1" 1/2	1" 1/2 - 2"	
MM	350468	350469	350474	353551	350478	350481	350483	

Check valve

Check valve	3/8 "	1/2 "	3/4 "	1 "	1 " 1/4	1 " 1/2
Brass check valve	654225	654226	654227	654903	654904	654905

Mechanical vacuum switches

- Adjustable threshold
- Adjustable hysteresis

Mechanical vacuum switches

Vacuum switch	Hysteresis mini 130 mbar	352997
Vacuum switch	Hysteresis mini 30 mbar	357549

Vacuum gauges

- Working pressure :
-1/0 bar

Vacuum gauges

Ø50 vertical connection 1/4"	363032
Ø63 vertical connection 1/4"	357037

Specifications are subject to be changed without notice.

Accessories for vacuum pumps

Vacuum solenoid valves

References

	Size	G1/2 "	G3/4 "	G1 "	G1 " 1/4	G1 "1/2	G2 "
1 Vacuum solenoid valve	Reference	AD-15 360023	AD-20 360024	AD-25 360606	AD-35 360025	AD-40 360026	AD-50 360027
	Time	-	11 s.	11 s.	12 s.	26 s.	26 s.
2 Ball valve with electric actuator 230V - 50 Hz supply	ER Plus Brass	-	360761	361302	361337	361335	361547
	Time	-	12 s.	12 s.	26 s.	26 s.	12 s.
	ER Plus Stainless steel	-	361164	361250	361165	361338	361350
3 2-ways ball valve with pneumatic actuator immediate opening	Reference	360873	360874	360875	359528	360876	360877
	Pilot	electric actuator 5/2 - 230V - 50Hz				359959	
	Flow reducer	flow reducer (optening / closing speed)				2 x 360758	

	Size	DN65 (2"1/2)	DN80 (3")	DN100 (4")	DN125 (5")	DN150 (6")
4 Double acting butterfly valve with pneumatic actuator immediate opening	Reference	360873	360874	360875	359528	360876
	Pilot	electric actuator 5/2 - 230V - 50Hz				359959
	Flow reducer	flow reducer (optening / closing speed)				2 x 360758
5 Butterfly valve with electric actuator 230V - 50 Hz supply	Time	-	12 s.	12 s.	-	-
	ER Plus	-	334154	361613	-	-

	Size	G3/8 "	G1/2 "	G3/4 "	G1 "	G1 " 1/4	G1 "1/2	G2 "
6 Angle-seat valve, pneumatic control, immediate opening	NO	359322	359390	359391	359354	359798	359392	358800
	NC	359321	359352	359387	359388	358799	359389	359927
	Pilot	Banjo solenoid valve 3/2 NF - 230V - 50 Hz 1/8"				Banjo solenoid valve 3/2 NF - 230V - 50 Hz 1/4"		
		334154				359929		

	Size	G3/8 "	G1/2 "	G3/4 "	G1 "	G1 " 1/4	G1 "1/2	G2 "
7 Manual ball valve		350945	350946	350947	350948	350949	350950	350951

	Size	DN50	DN80	DN100	DN125	DN150
8 Manual butterfly valve		361304	360467	361351	361347	361348



Specifications are subject to be changed without notice.

Home made vertical vacuum receivers

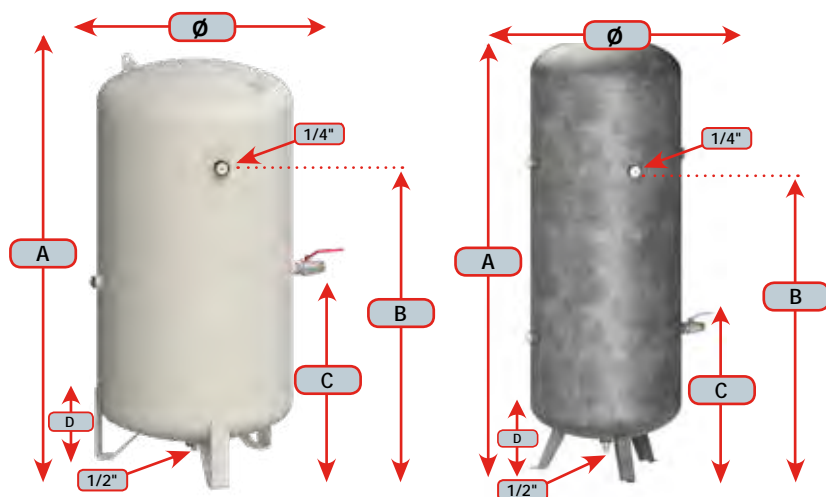


**1 inlet and 1 outlet for painted version, or
2 inlets and 2 outlets in galvanized version.**

Equipment included :

- 1 vacuum gauge 0 - 1013 mbar
- 1 manual drain valve
- 1 manual network valve

Dimensions (mm) and references



Vertical vacuum receiver	Network valve	Dimensions (mm)					Weight kg
		A	B	C	D	Ø	
Painted receiver - 500 l	1"1/4	1815	1455	872	200	650	120
Painted receiver - 1000 l	1"1/2	1800	1450	850	170	850	210
Painted receiver - 2000 l	2"	2100	1600	850	170	1200	340
Galvanized receiver - 500 l	1"1/4	2055	1665	785	155	600	125
Galvanized receiver - 1000 l	1"1/2	2350	1520	770	145	800	220
Galvanized receiver - 2000 l	2"	2490	1755	770	200	1100	400

Receiver with equipment		500 l	1000 l	2000 l
Steel painted receiver		710486	710488	722341
Galvanized receiver		710613	710615	710617
Automatic drain	Electropneumatic	816002		
See page 88 for dimensions	Pneumatic	816003		

Specifications are subject to be changed without notice.

General conditions of sale and guarantee

Sales contract

GENERAL POINTS

The orders noted and the commitments taken by the Representatives or Agents, are only binding on Company MIL'S after WRITTEN ACCEPTANCE.

The orders only become final after forwarding of an acknowledgment of receipt. They imply the acceptance of the present general conditions of sale notwithstanding any contrary clauses of our customers that have not been expressly accepted in writing.

The role of our company consists in manufacturing the equipment. It is not for it to appreciate the appropriateness of the choice of any equipment as regards its final destination or the use to which it is allocated.

Any information that we may be led to provide is only given in the framework of our productions and for information, and does not consist of indications regarding the choice of the equipment or the final use for which it is destined. In no case can our liability be incurred if there is no sale of equipment.

Our activity consists in manufacturing products ordered by our customers and it is not for us to appreciate the appropriateness of an order for the use to which it is destined by the purchaser.

The present general conditions and the special conditions insofar as the latter are not contrary to the present general conditions and still comply with general contract law and competition law can be completed by Company MIL'S general conditions of purchase expressly accepted by the Supplier. It is the responsibility of the Customer to ensure compliance with local regulatory requirements.

Any derogation to the present general conditions is subject to our express and written acceptance.

TRANSFER OF OWNERSHIP – RESERVATION OF OWNERSHIP TRANSFER OF RISK

The merchandise shall remain our property up until the full payment of its price in principal and interest. Failing the payment of the price on the agreed due date, we shall be able to take back the merchandise, the sale being declared void if this seems proper to us, and the deposits already paid shall remain acquired by us in return for the enjoyment of the merchandise from which the Customer will have benefited.

The Customer becomes responsible for the merchandise as soon as it is collected from our factory, the transfer of possession leading to the transfer of risks. The Purchaser undertakes, consequently, to take out, as at present, an insurance contract covering the risks of loss, theft or destruction of the merchandise.

INTELLECTUAL PROPERTY AND KNOW-HOW FOR DOCUMENTS AND PRODUCTS

All intellectual property rights as well as know-how incorporated into forwarded documents, delivered products and provided services shall remain the exclusive property of Company Mil's.

STUDIES AND PROJECTS

The studies and documents of any nature passed on or sent remain entirely our property. They cannot lead to communication or to execution by a third party.

CANCELLATION OF A CONFIRMED ORDER

The cancellation or termination of an order, instigated by the customer, in the course of execution for a cause outside our control, including force majeure, shall render the customer the debtor in respect to Company Mil's of compensation that, in no case, shall be less than 20% of the amount of the order and also less than the amounts of purchases and time already spent and this, whatever be the state of play, and furthermore any deposit already paid shall be kept as cover.

RETURNS

No merchandise can be returned to Company Mil's without the agreement of the latter.

DELIVERY AND PRICE

THE DELIVERY IS DEEMED MADE IN OUR FACTORIES OR STORES. It is made by the direct handing-over to the Customer, by simple notice of availability, or by handing-over to a shipper or to a carrier appointed by the Customer or, failing such appointment, chosen by us.

In accordance with agreement between the Parties at the time order.

The delivery times are given for information and are not guaranteed. Delivery delays do not give the Customer the right to cancel the sale or to refuse the merchandise. They cannot give rise to retention, compensation, penalty or damages.

THE PRICES ARE UNDERSTOOD TO EXCLUDE TAX FOR THE EQUIPMENT NOT PACKED TAKEN IN OUR FACTORIES OR STORES, THOSE PRICES ARE IN EUROS.

CONDITIONS OF USE

All equipment is delivered accompanied by technical instructions that we recommend should be followed. If these instructions are not attached, they will be immediately forwarded on simple request.

Company MIL'S may on no account be held responsible in case of installation by third party, improper or not compliant with Company MIL'S recommendations in the technical notice, neither in case of improper use of the material regarding instruction given in this technical notice.

Company MIL'S reserves the right to modify technical specifications at any time and without notice of its manufactured materials.

PAYMENT CONDITION

In case of no negotiation before ordering, the payment term is by swift transfer, within eight days, at reception of invoice, with minimum of 60 € net. (Payments are made in euros unless otherwise stipulated in the agreement).

It is expressly agreed and failing timely request for postponement and granted by us, the failure to pay our invoices after the deadline indicated on the said invoices, shall lead to:

1. the immediate payability on the amounts remaining due,
2. the interests calculated at a rate equal to 15% per year and any legal costs.
3. in accordance to the law n° 2012-387 dated 22/03/2012 and to the modification of L 441-3 article of Commerce Code: "for any payment effected after the deadline, a penalty charge will be legally due, for recovery costs, to the creditor. The amount of this charge is stated at 40 € by the Decree dated 02/10/2012."

We do not grant discount for early payment, unless it has been negotiated at the time of the order.

Notification of the Customer situation:

In case the deterioration of the Customer situation is noticed by any means and/or certified by a significant delay in payment or when the financial situation is appreciably different from the available data, the delivery will be made only in compensation for an immediate payment.

TRANSPORT

All transport operations, insurance, customs, handling carried out ARE PAYABLE BY AND AT THE RISKS OF THE CUSTOMER who is responsible for checking the shipments on arrival and for taking action, if appropriate, against the carriers.

In the case of dispatch ensured by us, this shall be made carriage due, full responsibility resting with the Customer.

GUARANTEE OF THE EQUIPMENT

Except the cases of legal guarantee that one cannot be interfered with, OUR MERCHANDISE IS GUARANTEED ONE YEAR, as from the date IT IS MADE AVAILABLE, against any construction defect or any fault in the material.

In all cases, if the equipment is used by several teams, the period of the guarantee is necessarily reduced by half. For the components that are not of our manufacture, we are not substituted in the conditions of guarantee of the supplier constructor.

The guarantee does not apply to replacements or to repairs that could result from normal wear of the instruments, deterioration or accidents due to a defect in surveillance or installation and improper use. Likewise are excluded from the field of application of the guarantee, deteriorations resulting from damage during transport, falls, or violent shocks.

The guarantee is limited to the free replacement, in our workshops, of the machine pieces or parts recognised as defective due to material fault or manufacturing defect, with the exclusion of labour.

The transport costs, the outward as the return journey, are to be paid by the Customer.

The guarantee ceases if the instruments are modified or repaired outside our workshops. The passage through our workshops does not lead to the extension of the period of initial guarantee of the machine. Replacement parts or remade pieces are guaranteed 6 months, as from the delivery date after our intervention. The guarantee shall not apply in the event of non-payment by the Customer and he cannot take advantage of it or postpone his payments.

LOAN OF EQUIPMENT

Company MIL'S may have to lend some material for a determined duration under conditions defined in a loan contract. At the end of the agreed period, the Customer shall notify if the material on loan will be returned or ordered.

In the absence of any notification within this period, the sale shall be deemed to be effective, as the Customer will be presumed to have accepted the delivered product.

ELIMINATION OF WASTE

"In accordance with article 18 of the decree N° 2005-829 of July 20th, 2005 relating to the composition of the electrical and electronic equipment, the Customer will be responsible for the financing and organisation of the elimination of waste from this equipment under the conditions defined in articles 21 and 22 of the said decree. In case of control, Company MIL'S may ask his Customer to send him the documents establishing he fulfils, as regard this equipment, all the obligations transferred with the sales contract.

If the Customer fails to forward these documents, he will be presumed to be liable for non-fulfilment of the obligations he is responsible for and Company MIL'S reserves the right to ask him compensation for any damage that she could suffer thereby".

INSURANCE COVERING OUR LIABILITY

Our company has taken out an insurance policy covering the pecuniary consequences of our legal liability and this in the following way:

Civil Liability for Operations: € 10,000,000 per claim, all physical injury, and tangible and intangible losses inclusive, with:

€ 2,500,000 for "inexcusable conduct" per claim and per year of insurance.

€ 500,000 for physical injury and for tangible and intangible losses resulting from pollution, per claim and per year of insurance.

€ 5,000,000 for tangible and intangible losses other than from pollution, per claim and with the following sub-limits:

- € 300,000 for non-consecutive intangible losses per claim.
- € 100,000 for tangible losses pertaining to property of others and consequential intangible losses, per claim.
- € 30,000 for theft by a servant or agent per claim.

Civil Liability for Delivered Products/ Product recalls:

€ 3,000,000, all physical injury, tangible and intangible losses inclusive, per claim and per year of insurance, with:

€500,000 for non-consecutive intangible losses including removal/reinstallation expenses engaged by third parties, per claim and per year of insurance.

€ 300,000 for recall costs engaged by third parties and by the policy holder, per claim and per year of insurance.

Company MIL'S responsibility will not be engaged for amounts exceeding the guaranteed amounts, which is expressly agreed by the Customer. Company MIL'S may (if applicable) be lead to subscribe complementary guarantee, on Customer's specific request and Customer's sole expense: he will exclusively assume the costs.

DISPUTES

In the case of disagreement relating to a delivery or its payment, the Lyon Commercial Court is the sole competent, whatever may be the sales conditions and the method of payment chosen, even in the case of proceedings against the guarantor or more than one defendant. The applicable law, regarding the seller and the buyer respective obligations, is the French law.

SPECIAL CONDITIONS

The special conditions and those that may be indicated in the documentations, quotes or prices forwarded only modify the sales conditions on the precise points to which they relate.

VIGILANCE system

The Customer must put forward, without any delay, to the vigilance system correspondent complete information about any incident, real or potential (further to decree 96/32 definition), involving a medical device provided by Company MIL'S. The Customer, if necessary, will have to cooperate in the implementation of all warning measures.

TRACEABILITY

The Customer must ensure the maintenance of traceability of all the medical devices delivered by MIL'S, including devices by their own customers and dealers, in order that the information concerning the product can be obtained, at any time on Company MIL'S or any competent authorities' requirement. In accordance with 93/42/CEE directive, the records referring to traceability have to be kept, at least during the device life and anyway during five years.

MODIFICATION OF GENERAL CONDITIONS OF SALES AND GUARANTEE

The seller reserves the right to modify, at any time, the herein general conditions of sales and guarantee and, in such case, the modified conditions will apply to any order set after the modification date, this, even for complementary or supplementary orders referring to previous operations.