



Designed and manufactured according to the most advanced criteria

46 lt/min
110 lt/min
180 lt/min
250 lt/min



A2L - R32
Atex - A3 R290
NH3 - R717

**DOUBLE STAGE
HIGH VACUUM PUMPS**

MADE IN ITALY



VACUUM - CHARGE



DOUBLE STAGE HIGH VACUUM PUMPS



- Designed and produced according to the most advanced criteria.
- High reliability.
- High performance.
- Lightweight.
- Protection index IP54.
- Incombustibility (R32-R1234yf).

Their incombustibility, in order to be able to use them with R32 and R1234yf, is guaranteed by the particular manufacturing of the stator/rotor components, which prevent reaching ignition temperatures, even in the worst working conditions or in case of failure.

- With carrying handle and gas ballast valve to evacuate condensable gases (gas ballast).
- Single packaging with one bottle of mineral oil.
- E/V models are equipped with Ø80 vacuum gauge, solenoid valve to prevent air/oil from flushing back when the pump is turned off, connection 1/4" SAE M and 2 adapters 1/4"SAE F x 3/8"SAE M e 1/4"SAE F x 5/16"SAE M.
- RS3D-EX and RS3DE/V-EX are ATEX certified and are specifically designed to work with hydrocarbons (HC) such as R290 and R600a.

SPARE PARTS AND ACCESSORIES PAG. 49

SUGGESTED R32



267 x 150 x 250 mm - 6,4 kg

SUGGESTED R32



267 x 150 x 250 mm - 6,9 kg

DISCOVER THE ATEX RANGE FROM PAG. 102



HC R600a - R290 R1270



390 x 230 x 350 mm - 10,5 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
A	02002044	RS3D	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4" NPT-F	-
B	02099024	RS3DE/V	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4"-5/16"-3/8"	EV
C	02002052	RS3D-EX	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4" NPT-F - 1/4" SAE	-
C	02099036	RS3DE/V-EX	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.

SPARE PARTS AND ACCESSORIES PAG. 49

SUGGESTED R32



350x150x280 mm - 11,5 kg

SUGGESTED R32



350x150x280 mm - 12 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
A	02002065	RS7D	110 lt/min	1x10 ⁻² mbar	220-240/1/50-60	250 W	IP54	450 cc	1/4" NPT-F	-
B	02099040	RS7DE/V	110 lt/min	1x10 ⁻² mbar	220-240/1/50-60	250 W	IP54	450 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.



- Designed and produced according to the most advanced criteria
- High reliability.
- High performance.
- Lightweight.
- Protection index IP54.
- Incombustibility (R32-R1234yf).
- Their incombustibility, in order to be able to use them with R32 and R1234yf, is guaranteed by the particular manufacturing of the stator/rotor components, which prevent reaching ignition temperatures, even in the worst working conditions or in case of failure.
- With carrying handle and gas ballast valve to evacuate condensable gases (gas ballast).

- Single packaging with one bottle of mineral oil.
- Model RS9DE/V is equipped with a ø80 vacuum gauge, a solenoid valve on the suction to prevent oil/air from flowing back when the pump is turned off, a connection 1/4" SAE M and 2 adapters 1/4"SAE F x 3/8"SAE M and 1/4"SAE F x 5/16"SAE M.
- Model RS9DE/V-EX is specifically designed for R290 and R600a, is equipped with a vacuum gauge and a solenoid valve and complies with the ATEX directive.
- Model RS9DE-NH3 is specifically designed for ammonia systems and is equipped with dual connection with shut-off valve.
- Model RS15DE is equipped with a solenoid valve on the suction to prevent oil/air from flowing back when the pump is turned off, a dual connection 3/8 SAE m and 1/4"SAE M with caps and 2 adapters 1/4"SAE F 3/8"SAE M and 1/4"SAE F x 5/16"SAE M.

SPARE PARTS AND ACCESSORIES PAG. 49

SUGGESTED R32



DISCOVER THE ATEX RANGE FROM PAG. 102

HC R600a - R290 R1270

DISCOVER THE NH₃ RANGE FROM PAG. 118

NH₃ R717



A

350 x 150 x 280 mm - 12 kg



B

350 x 150 x 280 mm - 12,5 kg



C

350 x 150 x 280 mm - 12,5 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
A	02002029	RS9D	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4" NPT-F	-
B	02099020	RS9DE/V	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4"-5/16"-3/8"	EV
B	02099038	RS9DE/V-EX	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4"-5/16"-3/8"	EV
C	02099039	RS9DE-NH3	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	2x1/4"	E

**Other voltages and frequencies, on demand.

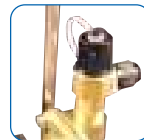
SPARE PARTS AND ACCESSORIES PAG. 49

SUGGESTED R32



A

Packaging: 350 x 180 x 280 mm - 16 kg



SUGGESTED R32



B

Packaging: 350 x 180 x 280 mm - 17 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
A	02002036	RS15D	250 lt/min	1x10 ⁻² mbar	220-240/1/50-60	550 W	IP54	400 cc	3/8" NPT F	-
B	02002037	RS15DE*	250 lt/min	1x10 ⁻² mbar	220-240/1/50-60	550 W	IP54	400 cc	1/4"-5/16"-3/8"	E

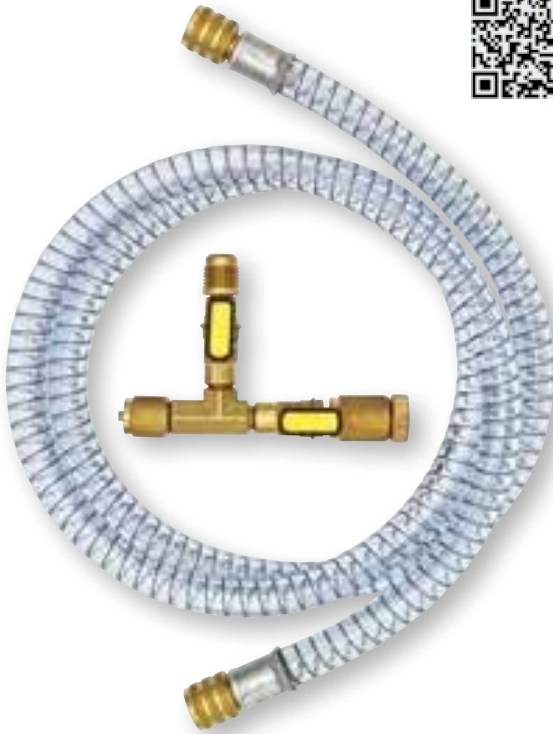
* Pump with dual connections 3/8" and 1/4".

**Other voltages and frequencies, on demand.

IPERVAC KIT



See brochure:



IPERVAC KIT - HIGH-SPEED VACUUM KIT

The IPERVAC kit reduces the time you need for evacuation by over 50%

The IperVAC kits, for 1/4" or 5/16" service ports, optimize the connection of the vacuum pump to the air conditioning / refrigeration unit, and consists of:

- The new EW4900 core removal access solution with double connections and valves for IperVac hose and Vacuum gauge.

EW4900 enables to remove the valve core, and then open the way to its two integrated SAE M 3/8" and 1/4" (or 5/16") connections equipped with valves. 3/8" port designed for coupling with the IperVAC hose and 1/4" port for vacuum gauge, charging hose or manifold.

- The 1500mm new IperVAC hose, with internal diameter 10mm and 3/8" connections.

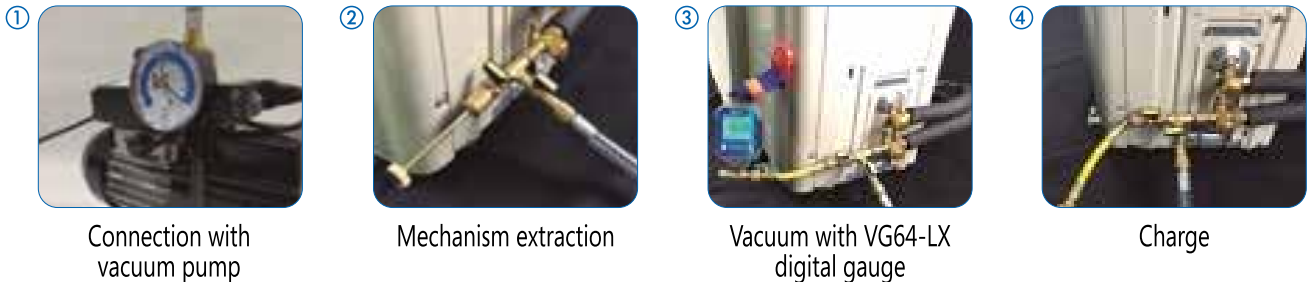
The IperVAC hose, specifically designed for vacuum, pulls a vacuum much faster compared to standard 1/4" hoses. The IperVAC hose is optimal in directly connecting the vacuum pump with the EW4900 or the vacuum pump with the VAC port of the 4-way manifold.

Code	Model	Description
02090009	IPERVAC-4	Vacuum kit for 1/4" service port
02090010	IPERVAC-5	Vacuum kit for 5/16" service port

Female connection	Male connections	Hose Length	Dimensions (mm)	Weight (kg)
1/4" SAE	3/8" SAE + 1/4" SAE	1500 mm	240 x 220 x 70	0,6
5/16" SAE	3/8" SAE + 1/4" SAE	1500 mm	240 x 220 x 70	0,6



Application examples



Spare parts and accessories

Code	Model	Description	Female connection	Male connections	Dimensions (mm)	Weight (kg)
08008060002	EW 4900	1/4" core removal solution with double connections	1/4" SAE	3/8" SAE + 1/4" SAE	100 x 175 x 30	0,25
08008060003	EW 4900/5	5/16" core removal solution with double connections	5/16" SAE	3/8" SAE + 1/4" SAE	100 x 175 x 30	0,25
06140002	IVSS/6-6/60	IperVAC hose 1500 mm	2 x 3/8" SAE	-	240 x 220 x 70	0,30
06140001	IVSS/6-6/36	IperVAC hose 900 mm	2 x 3/8" SAE	-	240 x 220 x 70	0,25
05053012001	MG4-4/WIG	Swivel coupling for vacuum connection	2 x 1/4" SAE	-	-	-
06071013003	GYSS/4-4/6/Y	Flexible tube 150 mm for gauge connection	2 x 1/4" SAE	-	-	-
14020097	G-LV/T-WIG	Gaskets kit 5pcs for EW4900	-	-	-	-
08008059	LOCK-VALVE-CARE	Gaskets replacement tool for Lock valve, EW and hoses	-	-	-	-
14020015001	G19030	Gaskets kit(10pcs) for 3/8" SAE hoses	-	-	-	-
05108043001	M1/4"-R134A/V-RK	Kit 10 pcs Internal core for HFC (R134a-R410A, R32...)	-	-	-	-
05108152001	EV-KIT/K	Vacuum pump adapter kit	1/4" SAE	3/8" SAE + 5/16" SAE	-	-

WHV20/M

High performance vacuum pump

- High reliability
- Excellent performance
- Up to 4 ways connections thanks to CLT4/6-4 accessory.

Professional dual stage high vacuum pumps with solenoid valve to prevent air from flushing back when the pump is turned off.

Equipped with a forced oil circulation system.

It is recommended to use the pump with the oil filter **A** and the 4 ways suction collector **B** equipped with up to IPERVAC tubes **C** and connection devices such as EW4900 **D** or 121RG **E**.



Code	Model	Dimensions	Weight
02002058	WHV20/M	750 x 250 x 420 mm	41 kg

Technical features

Swept volume	330 lt/min
Ultimate vacuum	1x10 ⁻³ mbar
Power supply	230V/1/50-60Hz
Nominal power	750 W
Protection degree	IP44
Oil charge	900 - 1500 cc
Connections	KF25

Spare parts and accessories



Ref	Code	Model	Description	Female connection	Male connections	Dimensions (mm)	Weight (kg)
A	14015035	WVF-20	Oil separator for WHV20/M and RV-25B	-	-	150 x 140 x 160	0,8
B	04003004	CLT4/6-4	4-ways 3/8"SAE collector with and 1/4" SAE revolving attachment for vacuum gauge	1/4" SAE	4x3/8" SAE	-	-
C	06140002	IVSS/6-6/60	IperVAC hose 1500 mm	2 x 3/8" SAE	-	-	-
C	06140001	IVSS/6-6/36	IperVAC hose 900 mm	2 x 3/8" SAE	-	-	-
D	08008060002	EW 4900	1/4" core removal solution with double connections	1/4" SAE	3/8" SAE + 1/4" SAE	100 x 175 x 30	0,25
D	08008060003	EW 4900/5	1/4" core removal solution with double connections	5/16" SAE	3/8" SAE + 1/4"SAE	100 x 175 x 30	0,25
E	05001007001	121RG4-6	121RG valve with depressor	1/4" SAE	3/8" SAE	140 x 100 x 20	0,1
E	05001041001	121RG5-6	121RG valve with depressor	5/16" SAE	3/8" SAE	140 x 100 x 20	0,1
	05108152001	EV-KIT/K	Vacuum pump adapter kit	1/4" SAE	3/8" SAE + 5/16"SAE	-	-
	53001032	WRK-20	WHV20/M repair kit	-	-	-	-

Application examples

Connection of the CLT4/6-4 collector, W-VAC-SMART vacuum gauge and IPERVAC hose.



DOUBLE STAGE HIGH VACUUM PUMPS

Double stage high vacuum pumps

- High performance.
- Lightweight.
- Single packaging with one bottle of mineral oil.

- WP3DE/V e WP8DE/V models are equipped with Ø80 vacuum gauge, solenoid valve to prevent air/oil from flushing back when the pump is turned off, connection 1/4" SAE M and 2 adapters 1/4"SAE F x 3/8"SAE M and 1/4"SAE F x 5/16"SAE M.
- WP14DE model is equipped with solenoid valve to prevent air/oil from flushing back when the pump is turned off, double connections 3/8"SAE M and 1/4" SAE M with caps and 2 adapters for 1/4"SAE F x 3/8"SAE M and 1/4"SAE F x 5/16"SAE M.



Packaging: 255 x 105 x 202 mm - 6,3 kg

Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
02099033	WP3DE/V	42 lt/min	2x10 ⁻² mbar	220-240/1/50-60	150 W	150 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.



Packaging: 338 x 138 x 244 mm - 12,4 kg

Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
02099034	WP8DE/V	128 lt/min	2x10 ⁻² mbar	220-240/1/50-60	368 W	325 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.



Packaging: 470 x 240 x 390 mm - 18 kg

Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
02099035	WP14DE*	230 lt/min	2x10 ⁻² mbar	230V 50/60Hz	750 W	560 cc	1/4"-5/16"3/8"	E

* Pump with dual connections 3/8" and 1/4".

**Other voltages and frequencies, on demand.



Spare parts and accessories



VACUUM PUMP OIL

Code	Model	Viscosity	Capacity	Type	Min. Qty	Dimensions	Weight
12002003	K1L	46	1000 cc	Mineral	12	110 x 160 x 250 mm	1 kg
12002017	W68	68	1000 cc	Ester	9	50 x 50 x 70 mm	1 kg

To keep the pump performances unaltered, we suggest to replace the oil every 3 months.

COMPRESSOR OIL

Code	Model	Viscosity	Capacity	Type	Min. Qty	Dimensions	Weight
12002006	SW32	32	1000 cc	Ester	-	80 x 80 x 230 mm	1 kg
12002017	W68	68	1000 cc	Ester	9	50 x 50 x 70 mm	1 kg

RACCORDI PER POMPE PER VUOTO PER DIP-RS

Rif	CodE	Model	Description	
	05108152001	EV-KIT/K	Kit of adapters for vacuum pumps with solenid valve E + F	
	05108153001	RDR-KIT/K	Kit of fittings for DIP-RS3-RS9 A + E + F	
	05108154001	RRS15-KIT/K	Kit of fittings for RS15D C + E + F	
A	05052011	48 F4	1/4"SAE x 1/4"NPT	100
B	05052012	48 F6	3/8"SAE x 1/4"NPT	50
D	05060001	PG 1/4"NPT	Hose adapter Ø 10 x 1/4"NPT	-
E	05055100	W404/6	1/4" SAE F x 3/8" SAE M	100
E	05108069001	404/6K	1/4" SAE F x 3/8" SAE M	2
F	05055099	W404/5	1/4" SAE F x 5/16" SAE M	100
F	05108022001	404/5K	1/4" SAE F x 5/16" SAE M	2
G	05055008	46F	1/4" SAE M x 1/8" NPT F	100
G	0510814001	46F/K	1/4" SAE M x 1/8" NPT F	10
	14020124001	G/W404	Kit 10 gaskets for W404/6 and W404/5	10



VACUUM PUMPS PLASTIC CASE

Plastic case with internal space for vacuum pump, manifold, electronic scale and flexible hoses.

Code	Model	Description	Dimensions	Weight
14029019	BP/PD	DIP and RS3 plastic case	520 x 290 x 340 mm	1,85 kg
14029020	BP/MV	RS9 plastic case	520 x 290 x 340 mm	1,85 kg



VACUUM GAUGES



VACUUM GAUGES

- Different type of gauges are available, such as vacuum gauge, 1-way or 3-way manifold vacuum gauges.
- With calibration screw, red pointer and are "Pulse-Free".
- Scale 0 ÷ 1.000 mbar (0 ÷ 1.00 kPa).
- Dial size Ø 80 mm.



Ref	Code	Model	Description	Connections	Dimensions	Weight
A	07041003	PF80/VR1	Radial connection vacuum gauge	1/8"NPT	110 x 90 x 40 mm	0,20 kg
B	04001003	W1VPF80/4	1-way manifold vacuum gauge, with safety valve and hook	1/4"SAE M	240 x 150 x 55 mm	0,40 kg
C	04003001	W3VPF80	3-way manifold vacuum gauge, with ball valve	1/4"SAE M x 3/8"SAE F x 3/8"SAE M	240 x 150 x 55 mm	0,40 kg
D	07041005	PF80/VC1	Rear connection vacuum gauge	1/8"NPT	90 x 90 x 60 mm	0,20 kg
E	07131011	BL80/VR1/K1	"Blondelle" vacuum gauge, oil filled, radial connection	1/8"NPT	125 x 95 x 40 mm	030 kg



Calibration

Code	Description
09053032	Calibration report ref. Accredia for analogical vacuum gauge

COMPLETE KIT WITH SOLENOID VALVE, VACUUM GAUGE AND WIRING



Code	Model	Connections	Description	Suitable for	Dimensions	Weight
02090001	K-EVC	1/4"-3/8"-5/16"SAE M	Complete kit with vacuum gauge	RS3-RS7-RS9-WP3-WP8	130 x 240 x 70 mm	0,35 kg
02090004	K-EC15	1/4"-3/8"-5/16"SAE M	Kit with 1 solenoid valve without vacuum gauge	RS15	230 x 140 x 80 mm	1,10 kg
07041005	PF80/VC1	1/8"NPT	Vacuum gauge	RS3-RS7-RS9-WP3-WP8	90 x 90 x 60 mm	0,20 kg

VG64-LX

Digital vacuum gauge

Code	Model	Dimensions	Weight
09003020	VG64-LX	240 x 120 x 50 mm	0,26 kg

Technical features

Displayed units	Microns, Pascal, millibar, Torr, milliTorr
Vacuum range	0 – 19.000 microns (2530 Pa, 25,30 mBar, 19 mmHg)
Accuracy vacuum	±10% (50-2000 Microns)
Vacuum resolution	0,5 Micron (0-140 microns)
Maximum overpressure	800 PSI, 5,5 MPa (55 bar)
Power supply	3x Alkaline batteries AA
Operating temperature	-17°C ÷ 65°C
Connections	2 x 1/4"SAE M

Calibration

Code	Model	Description
09053027	-	Calibration report ref. Accredia
09003020001	VG64-LX/RT	Vacuum gauge complete with calibration reports


W-VAC-SMART

Digital vacuum gauge

Ref	Code	Model	Description
A	09003018	W-VAC-SMART	Digital vacuum gauge
B	05001047	121RG4-T4	In-line connection / exclusion system
C	05053012001	MG4-4/WIG	Swivel coupling
D	05053013001	MG4-6/WIG	Swivel coupling

Ref	Code	Male connection	Female connection	Dimensions	Weight
A	09003018	1/4" SAE	-	110 x 33 x 25 mm	0,10 kg
B	05001047	2 x 1/4" SAE	1/4" SAE	-	-
C	05053012001	-	2 x 1/4" SAE	-	-
D	05053013001	-	3/8" SAE x 1/4" SAE	-	-

Technical features

Displayed units	Microns (milliTorr), Pascal, millibar, mmHG
Vacuum range	0 – 25.000 Microns (3330 Pa, 33.3 mBar, 25 mmHg)
Accuracy vacuum	±5% of Reading ± 5 Microns
Vacuum resolution	1 Micron and less than 1000 Microns-10 Microns between 1,000 and 10,000 Microns-100 Microns between 10,000 and 25,000 Microns
Maximum overpressure	500 PSI, 3,5 MPa (35 bar)
Warm-Up time	instant
Response time	instant
Power supply	2 x Alkaline batteries AAA
Battery life	Up to 100 hours
Operating temperature	-12°C ÷ 50°C
Connection	1/4"SAE M

Calibration

Code	Model
09053027	Calibration report ref. Accredia
09003018001	W-VAC-SMART/RT

