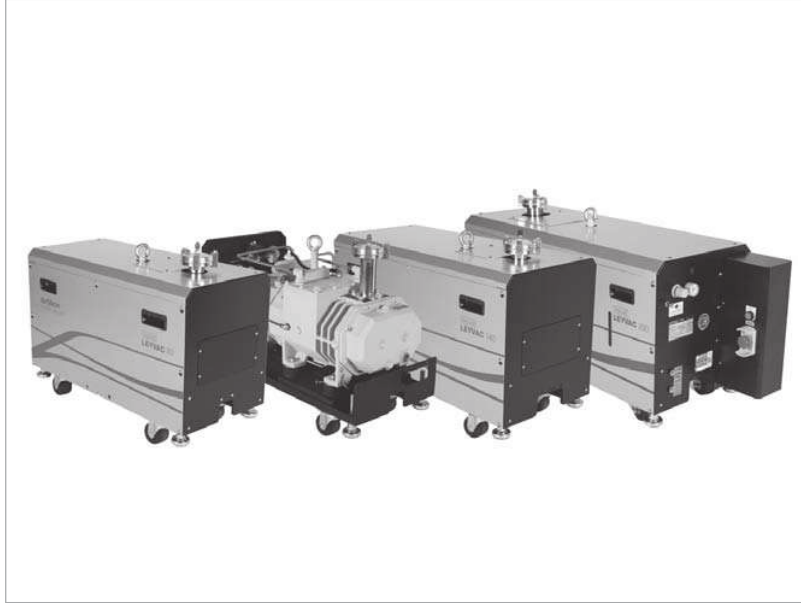


Products

LEYVAC

Excellent efficiency in every respect



LEYVAC LV 80, 140 and 250

Our LEYVAC dry vacuum pumps provide power combined with high performance.

This product line covers the pumping speed ranges from 80 to 300 m³/h and is especially suited to meet the special requirements of industrial processes and coating applications.

LEYVAC pumps and system combinations are rugged, reliable and durable, ready to cope with harsh process requirements.

The LEYVAC product line comprises the models LEYVAC LV 80, LV 140, LV 250 and their C or CC versions.

The new LEYVAC 250 significantly expands the performance spectrum of this product range with excellent energy efficiency characteristics.

The CC versions include an overtemperature safety shutdown facility.

Advantages to the User

- Dry pump technology
- No contact of the process gases with oil
- Shortest pumpdown times through high pumping speed for air already starting at atmospheric pressure
- Hermetically tight
 - No shaft seals
 - No oil leakage
 - Safe pumping of toxic gases
- High reliability
 - Long service intervals (up to 5 years)
 - High uptime
 - Robust and durable design
- One motor solution
 - Multi-voltage, dual frequency motor operable at 200 V - 460 V and 50/60 Hz
- Easy and modular
 - Direct coupling of roots booster pumps without frames for models RUVAC WH 700 and WA(U)/WS(U) 251-1001

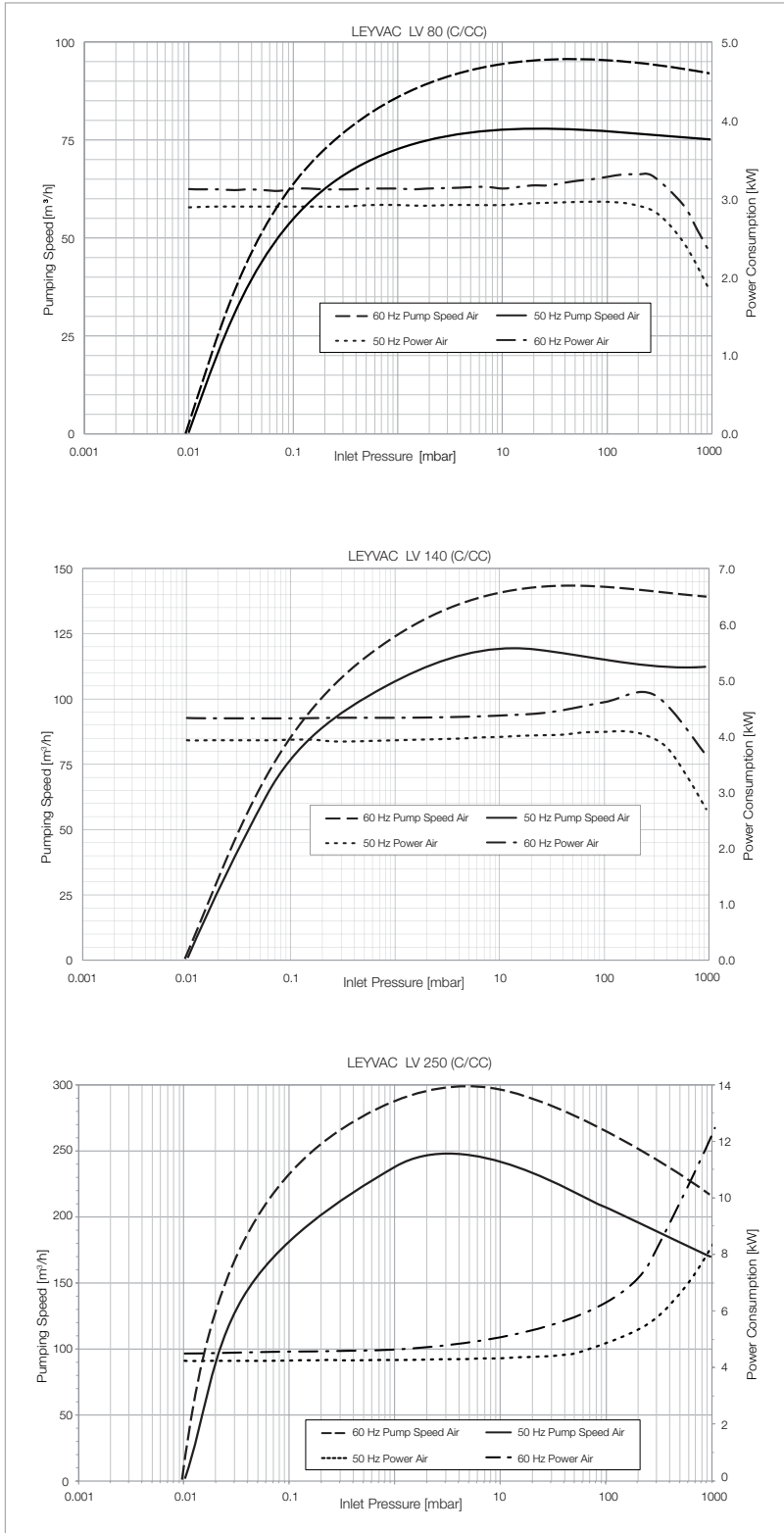
Typical Application

- Process industry
 - Industrial furnaces
 - Degassing
 - Charging
 - Casting
 - Drying processes
 - Freeze drying
 - Electron beam welding
 - Packaging
- Coating
 - PVD/CVD coating
 - Wear resistant coating
 - Optical coating
 - Web coating
 - Load locks/transfer chambers
- Solar
 - CVD/PECVD
 - Crystal pulling and casting
- Support functions
 - Regeneration of cryo pumps
 - Forevacuum pumps for turbomolecular pumps

Performance Details at a Glance

LEYVAC dry vacuum pumps provide **optimized**

- System uptime
 - Robust design based on the proven RUVAC and DRYVAC technology
 - Most effective cooling system
 - Thermal protection on board (for CC versions)
 - Tolerant to pressure shocks
 - Long intervals for bearing exchange
- Process safety
 - designed for harsh applications
- Performance data
 - High pumping speed already at high intake pressures
 - Good pumping speed also for lighter gases (with purge)
- Environmental properties
 - Low noise and low heat emission
- Price-to-performance ratio
 - Low investment costs
 - Small, price optimized pumping systems



Pumping speed curves of the LEYVAC LV 80 (C/CC), LEYVAC LV 140 (C/CC) and LEYVAC LV 250 (C/CC)

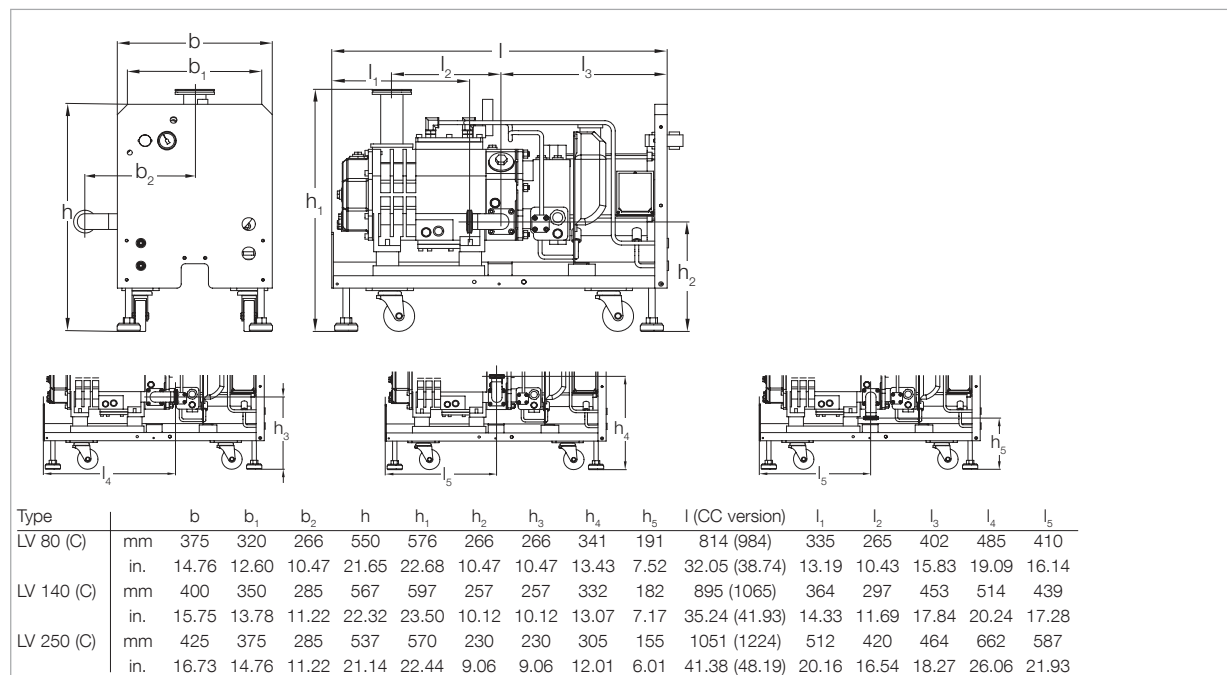
Technical Data

LEYVAC

		LV 80 (C/CC)	LV 140 (C/CC)	LV 250 (C/CC)
Nominal pumping speed without gas ballast at 50/60 Hz	$m^3 \times h^{-1}$ (cfm)	80/96 (47.1/56.5)	125/145 (73.6/85.3)	250/300 (147.1/176.6)
Ultimate pressure with seal and rotor purge	mbar (Torr)	1×10^{-2} (0.75 x 10 ⁻²)	1×10^{-2} (0.75 x 10 ⁻²)	1×10^{-2} (0.75 x 10 ⁻²)
Power consumption at ultimate pressure and 50/60 Hz operation	kW (hp)	2.9/3.2 (3.9/4.3)	3.9/4.3 (5.2/5.8)	4.2/4.7 (5.6/6.3)
Weight, approx.				
LV ...	kg (lbs)	280 (617)	300 (661)	330 (728)
LV ... C/CC	kg (lbs)	300 (661)	320 (705)	350 (772)
Noise level ¹⁾	dB(A)	< 65	< 65	< 72
Connection flange				
Intake	DN	63 ISO-K	63 ISO-K	63 ISO-K
Discharge	DN	40 ISO-KF	40 ISO-KF	40 ISO-KF
Mains voltage ($\pm 10\%$)				
LV ...	V	200 - 460	200 - 460	200 - 460
LV ... C (with housing)	V	200 - 460	200 - 460	200 - 460
LV ... CC (with housing and Temperature monitoring)	V	380 - 460	380 - 460	380 - 460
Nominal power at 50/60 Hz	kW (hp)	4.1 (5.5)	5.5 (7.4)	8.0 (10.7)
Nominal current consumption 50/60 Hz at 400 V	A	6	8	16
Cooling		water/glycol	water/glycol	water/glycol
Cooling water temperature	$^{\circ}C$ ($^{\circ}F$)	+15 to +30 (+59 to +86)	+15 to +30 (+59 to +86)	+15 to +30 (+59 to +86)
Min. cooling water throughput	l/min	3	3	3
Water vapor tolerance (with gas ballast)				
80 slm 50/60 Hz	mbar (Torr)	20/30	125/160	-/-
150 slm 50/60 Hz ²⁾	mbar (Torr)	-/-	-/-	30/37
Water vapor capacity (with gas ballast)				
80 slm 50/60 Hz	kg/h	1.24/2.3	11.5/18.0	-/-
150 slm 50/60 Hz ²⁾	kg/h	-/-	-/-	6.3/6.5
Permissible ambient temperature	$^{\circ}C$ ($^{\circ}F$)	+5 to +45 (+41 to +113)	+5 to +45 (+41 to +113)	+5 to +45 (+41 to +113)
Protection class EN 60529	IP	54	54	54
Dimensions (W x H x D)				
LV ... and LV ... C	mm (in.)	814 x 375 x 550 (32.05 x 14.76 x 21.65)	895 x 400 x 567 (35.24 x 15.75 x 22.32)	1051 x 425 x 537 (41.38 x 16.73 x 21.14)
LV ... CC	mm (in.)	984 x 375 x 550 (38.74 x 14.76 x 21.65)	1065 x 400 x 567 (41.93 x 15.75 x 22.32)	1224 x 425 x 537 (48.19 x 16.73 x 21.14)

¹⁾ At ultimate pressure and with rigid exhaust line DIN EN ISO 2151

²⁾ 2nd case: with 24 V gas ballast kit 115005A13 fitted to port 2, standard purge also opened



Dimensional drawing for the LEYVAC LV 80/C and LV 140/C; below for exhaust connection

Ordering Information

	LEYVAC		
	LV 80 (C/CC)	LV 140 (C/CC)	LV 250 (C/CC)
	Part No.	Part No.	Part No.
Dry compressing vacuum pump LEYVAC including LEYBONOL LVO 410 lubricant, base plate, castors, temperature switch, shaft seal and rotor purge	115080V15	115140V15	115250V15
additionally with casing (C version)	115080V30	115140V30	115250V30
additionally with casing and temperature monitoring (CC version)	115080V35	115140V35	115250V35
Accessories			
Non-return ball valve	115005A01	115005A01	115005A01
Non-return valve, spring-loaded	115005A02	115005A02	115005A02
Roots pump adapter for RUVAC WS/WSU 251/501 and WH 700	115005A03	115005A03	115005A05
Adapter ring for RUVAC WA(U)/WS(U)1001	—	115005A04 and 115005A03	115005A06 and 115005A05
Exhaust pressure sensor			
LV 80	115005A10	—	—
LV 140	—	115005A11	—
LV 250	—	—	115005A09
Gas ballast kit			
manually operated	115005A12	115005A12	115005A12
24 V	115005A13	115005A13	115005A13
Silencer			
standard			
(with integrated non-return valve)	115005A20	115005A20	115005A20
serviceable	115005A22	115005A22	115005A22
emptyable	115005A23	115005A23	115005A23
High-performance silencer	115005A21	115005A21	115005A21
Elbow for silencer, emptyable	115005A26	115005A26	115005A26
Inlet screen	115005A28	115005A28	115005A28
External frequency converter (including mains filter) for			
LEYVAC LV 80 (400 V)	115005A30	—	—
LEYVAC LV 140 (400 V)	—	115005A35	—
LEYVAC LV 250 (400 V)	—	—	115005A40
Profibus module ¹⁾	155212V	155212V	155212V
Relais module (digital output) ¹⁾	112005A01	112005A01	112005A01
Ethernet interface module ¹⁾	112005A02	112005A02	112005A02
ProfiNet module ¹⁾	112005A35	112005A35	112005A35
EtherCAT module ¹⁾	112005A36	112005A36	112005A36

¹⁾ For optional, external frequency converter