

DRYVAC Champion / Sprinter 5000 RS-i, 650 S-i and 650 S



DRYVAC series

All models from the DRYVAC platform have been designed and adapted to the special needs of processes in the PV production chain and to the process industry in general. DRYVAC pumps and system combinations are rugged, reliable and durable, ready to fulfill stringent process requirements.

The DRYVAC range comprises the following models

- DRYVAC 650 S
- DRYVAC 650 S-i
- DRYVAC 5000 RS-i

plus multiple system combinations with roots blowers from the RUVAC series.

DRYVAC Models and favorite Applications:

DRYVAC Sprinter and **Enduro** versions have optimized pumping speeds at pressures >10 mbar. Therefore, they are ideal to provide fast pump down times. These models are specially suited for short cycle operation, e.g. load lock applications.

Furthermore, **DRYVAC Enduro** pumps cover all features needed for process industry applications.

Models from the **DRYVAC Champion** range have been designed to provide highest reliability in harsh process duties. DRYVAC Champion pumps are optimized for handling typical gases from the production in the PV and FPD industry. They excel through their robust design and meet industrial safety requirements.

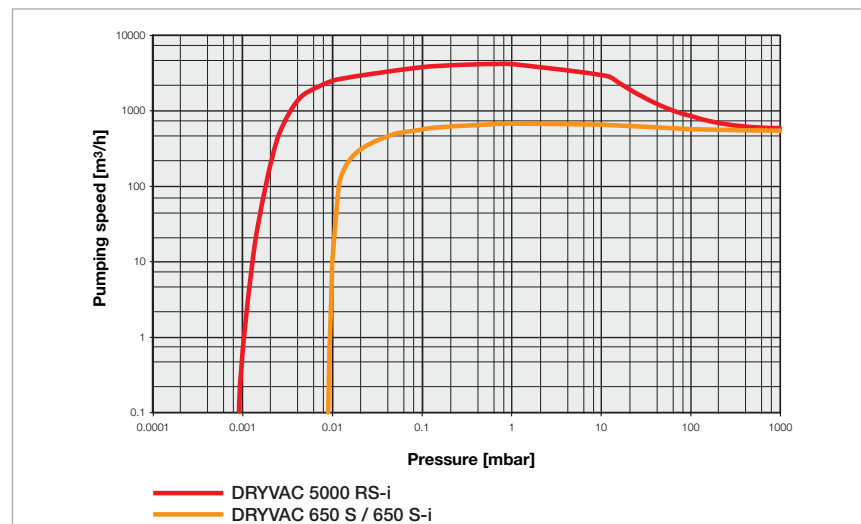
DRYVAC pump systems and -i versions include housing, castors, frequency converter, PLC and touch screen display as standard. Control and monitoring via intuitive menu navigation software and field bus.

Technical Details

- Fully water cooled
- Low power consumption: 7 kW below 20 mbar for DRYVAC 650 S
- Hermetically sealed screw and roots pumps but no shaft seals and no canned motor
- Wide voltage and wide frequency drive due to integrated inverter(s): 380-460 V, 50/60 Hz
- No need to provide motor protection switch due to integrated inverter(s)
- UL listed materials
- RoHS conform

Advantages to the User

- Most compact dry pump, with the smallest footprint for pump systems
- Optimized Cost of Ownership including the lowest power consumption available on the market today
- Utmost package flexibility
- Low noise level
- Highest reliability
- Integrated self-monitoring and control
- No unscheduled down times, minor maintenance demands



Pumping speed characteristics of the DRYVAC pumps

Technical Data

DRYVAC Champion / Sprinter

		5000 RS-i	650 RS-i	650 S
Nominal pumping speed	m ₃ /h (cfm)	5000 (2943)	650 (383)	650 (383)
Max. effective pumping speed	m ₃ /h (cfm)	4100 (2413)	630 (371)	630 (371)
Ultimate pressure	mbar (Torr)	≤ 1 x 10 ⁻³ (≤ 7.5 x 10 ⁻⁴)	≤ 1 x 10 ⁻² (≤ 7.5 x 10 ⁻³)	≤ 1 x 10 ⁻² (≤ 7.5 x 10 ⁻³)
Weight	kg (lbs)	1200 (2646)	550 (1213)	530 (1168)
Noise level ¹⁾	dB(A)	≤ 70	≤ 67	≤ 67
Intake connection	DN	250 ISO-K	100 ISO-K	100 ISO-K
Exhaust side connection	DN	63 ISO-K	63 ISO-K	63 ISO-K
Electrical connection		400 V, 50/60 Hz	400 V, 50/60 Hz	400 V, 50/60 Hz
Electrical power rating	kVA	30	17	17
Operating current under load	A	55	31	31
Min. cooling water consumption	l/min (US gallon/min)	12 (3.2)	8 (2.1)	8 (2.1)
Max. cooling water temperature	°C (°F)	25 (77)	35 (95)	35 (95)
Cooling water connection, Quick couplings for hose Threads, female		1/2" G 1/2"	1/2" G 1/2" + 10 mm tube fitting	- G 1/4"
Purge gas consumption (± 10%)	slm	0 to 100	0 to 100	0 to 100
Purge gas connection pressure	bar	4 to 8	4 to 8	4 to 8
Purge gas connection		G 1/4"	G 1/4"	G 1/4"
Permissible ambient temperature	°C (°F)	+10 to +40 (+50 to +104)	+10 to +40 (+50 to +104)	+10 to +40 (+50 to +104)
Protection class EN 60529	IP	22	22	54

¹⁾ at ultimate pressure, with silencer or rigid exhaust line

Ordering Information

DRYVAC Champion / Sprinter

	5000 RS-i	650 RS-i	650 S
	upon request	upon request	upon request