NEW

WELCH | Formerly ILMVAC

by Gardner Denver

C/RVpro

Your Robust Vacuum Pump

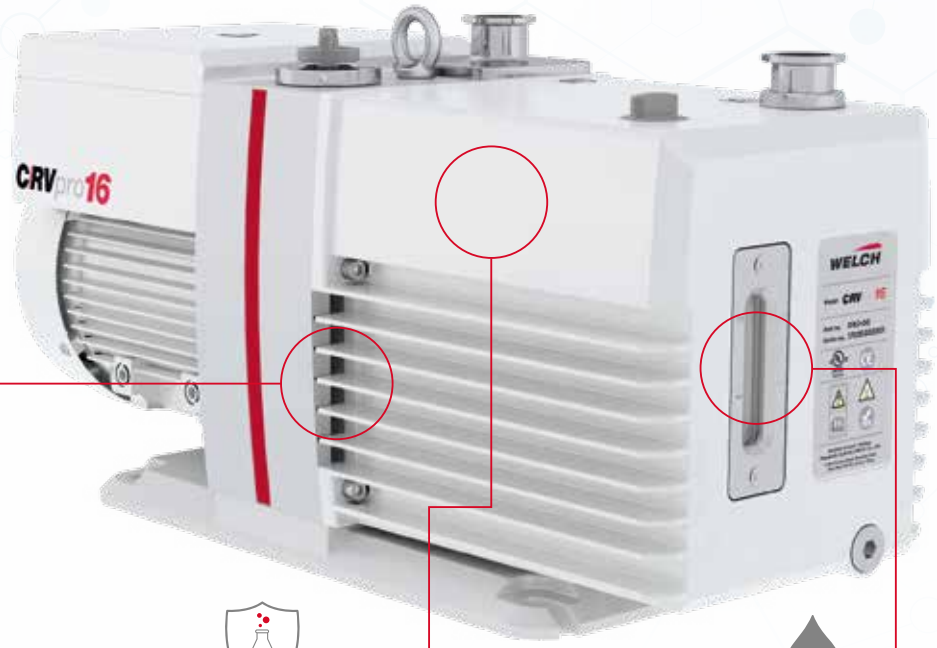
C/RVpro 4,6,8,16,24,30

APPLIED VACUUM TECHNOLOGY. ASK THE EXPERTS!

CRVpro

Your Robust Vacuum Pump

Discover the evolution of two-stage rotary vane vacuum pumps. Built to last. Born to perform. And designed to simplify your work. Meet the robust vacuum pump series – CRVpro.



COOL RUNNING

Enhanced air flow allows the pump to run 10°C cooler than standard rotary vane pumps. The lower temperature leads to reduced chemical activity within the pump and slows down rates of oil consumption.

INTERNAL SURFACE PROTECTION

Inside surface of the oil case has a PTFE coating and the outer surface of the pumping module has a black oxide coating. Both coatings act to slow metal corrosion and, when coupled with foreline traps, extend service interval.

LARGE OIL CAPACITY

Chemical vapors that sublime from the foreline cold trap into the pump oil are more diluted due to the larger oil capacity. This minimizes the rates of oil breakdown and reduce chemical attacks within the pump.

HIGHEST RELIABILITY | **LONG PRODUCT LIFESPAN** | **LESS MAINTENANCE**

EXTENDS SERVICE INTERVAL

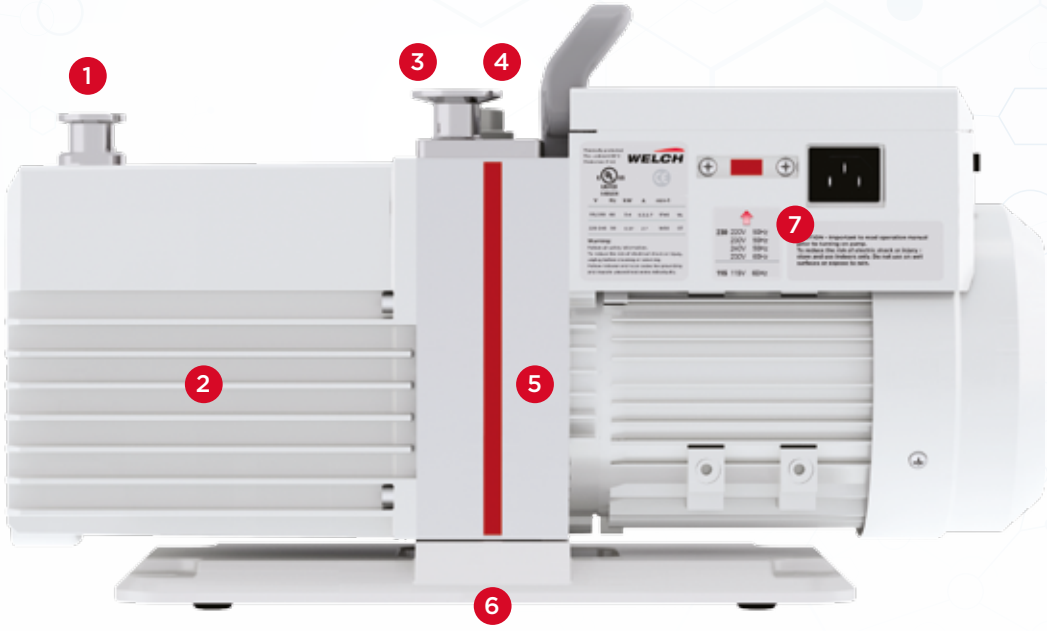
YOUR BENEFITS

Highest reliability for stable operation and long product lifespan

- Reduced risk of chemical attacks and oil breakdown by diluting chemical vapors with a larger oil chamber
- Slowing down corrosion by cool running operation
- Provides a measure of protection from sublimed chemical vapors with coating on pump module and oil case

Extended oil change intervals for less maintenance costs

- Less oil consumption by cool running operation
- Extended usability of oil due to high dilution effect by a larger oil chamber



1 LOW NOISE LEVEL
Exceptionally quiet for undisturbed work.

2 FORCED OIL LUBRICATION
Ensures moving parts are bathed in fresh oil. Equilibrates temperature, minimizes oil breakdown, and prolongs mechanical life.

3 ANTI-SUCK BACK VALVE
Prevents oil from being sucked into application in the event of a power failure.

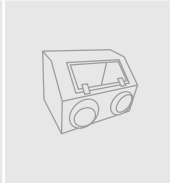
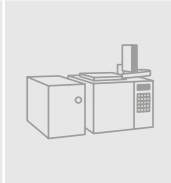
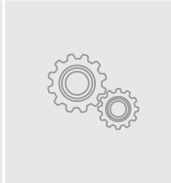
4 GAS BALLAST WITH INERT GAS OPTION
Minimizes entrained chemicals in pump oil. Protects pump from condensable liquids from application such as water, acetyl nitrile, etc.

5 cUL AND CE CERTIFICATION
Compliance with local regulations and safety directives for safety operation.

6 SIZED TO FIT YOUR APPLICATION
Modern and compact design to fit different applications and performance requirements.

7 DUAL VOLTAGE MOTOR
Dual voltage motors meet IP44 standard. Motors of CRVpro 4,6,8 are switchable from 115V to 240V for global use excluding 100V and 200V pump versions. Each pump includes power cord suitable for country use.

APPLICATIONS

SCHLENK LINE	FREEZE DRYER	VACUUM CONCENTRATOR	HVAC	VACUUM OVEN	GLOVE BOX	MASS SPECTROMETER	INDUSTRIAL APPLICATIONS
							
CRVpro 4/6	CRVpro 4/6/8	CRVpro 6	CRVpro 8	CRVpro 8	CRVpro 8/16/24/30	CRVpro 16/24/30	CRVpro 4/6/8/16/24/30

TECHNICAL DATA

PARAMETER	UNIT	CRVpro 4	CRVpro 6	CRVpro 8	CRVpro 16	CRVpro 24	CRVpro 30
Free air displacement							
– @ 50 Hz	m^3/h (L/min)	4 (67)	6 (100)	8 (133)	18,3 (305)	26,2 (436)	33,1 (551)
– @ 60 Hz	CFM (L/min)	2,8 (78)	4,2 (118)	5,6 (158)	12,8 (363)	18,3 (519)	22,1 (627)
Pumping speed							
– @ 50 Hz	m^3/h (L/min)	3,8 (63)	5,1 (85)	7,3 (122)	16,8 (280)	24 (400)	29 (483)
– @ 60Hz	CFM (L/min)	2,7 (77)	3,7 (105)	5,1 (143)	11,9 (336)	17 (480)	20,5 (580)
Ultimate pressure							
– Without gas ballast partial	mbar (Torr)	$5x10^{-4}$ ($4x10^{-4}$)			$3x10^{-4}$ ($2x10^{-4}$)		
– Without gas ballast total	mbar (Torr)	$2x10^{-3}$ ($1.5x10^{-3}$)			$3x10^{-3}$ ($2x10^{-3}$)		
– With gas ballast total	mbar (Torr)	$7x10^{-2}$ ($5x10^{-2}$)			$6x10^{-3}$ ($5x10^{-3}$)		
Connection flanges	DN	16 KF			25 KF		
Ambient temperature	°C	10–40					
Noise level (50 Hz)	dB (A)	50			55		
Oil capacity	ml	1150		1000	2400	2200	2100
Motor speed	rpm 50/60 Hz	1450/1740			1450/1750		
Motor power	kW 50/60Hz	0,37/0,4			0,7/0,85		
Weight	kg	21	22	22,5	37	38,5	39,5
Dimensions, L x W x H	mm	463/157/230*			569/206/289		

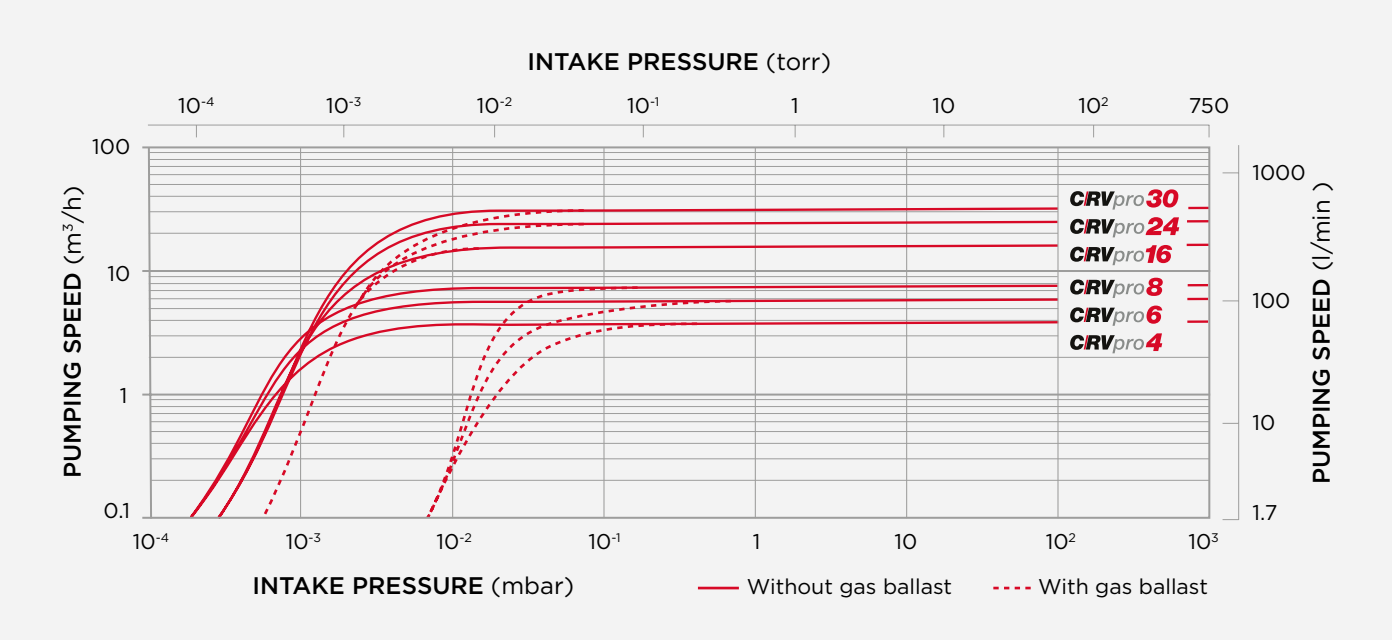
* Without handle

ORDERING INFORMATION

DESCRIPTION	CRVpro 4	CRVpro 6	CRVpro 8	CRVpro 16	CRVpro 24	CRVpro 30
220-240 V / 50 Hz; 230 V / 60 Hz, 1 phase motor with line cord EU-plug (CEE 7/4), line cord UK-plug (BS1363), line cord US-plug (Nema-5)	3042-00	3062-00	3082-00	3162-00	3242-00	3302-00
Service kit	S3077-99	S3078-99	S3079-99	S3193-99	S3194-99	S3195-99
Seal kit	S3080-99			S3192-99		

Every pump is supplied complete with Directorr™ Premium vacuum pump oil, centering rings, clamping rings and motor overload protection. Ready for use after oil filling. Motor versions (e.g. explosion proof, 3-phase) upon request.

PERFORMANCE



COMPLETE PACKAGES & ACCESSORIES

PACKAGES (PUMP + ACCESSORIES)	DESCRIPTION	CRVpro 4	CRVpro 6	CRVpro 8
CRVpro basic package	CRVpro with oil mist separator AKD 16, 2-way ball valve, hose connector DN 16KF-10/8 mm, vacuum hose (1,5 m), oil change set	330071	330072	330073
CRVpro measurement package	CRVpro with digital vacuum gauge PIZA 111 cr-gold, oil mist separator AKD 16, 2-way ball valve, T-piece, hose connector DN16KF-10/8 mm, vacuum hose (2,5 m), oil change set	330074	330075	–

ACCESSORIES	DESCRIPTION	ORDER NO.	
		CRVpro 4,6,8	**CRVpro 16,24,30**
Vacuum pump oil	Directorr™ premium vacuum oil, 1 liter	800995-01	
	Directorr™ premium vacuum oil, 5 liter	800995-05	
On inlet	Inlet condenser	(AKS 16) 320016	(AKS 25) 320018
	Nitrogen (dry ice) cold trap DN10	1420H-14	–
On outlet	Oil mist separator AKD with large glass jar for easy capture and horizontal arrangement alongside the pump	(AKD 16) 320015	(AKD 25) 320017 **CRVpro 16 only**
	Economic oil mist filter OME with exchangeable cartridge (plastic)	(10/16) 700010	(25/30) 700012
	Standard exhaust filter with good capture of oil mist (metal)	1417P-8	1417P-11
	Professional exhaust filter with excellent capture of oil mist and pump noise reduction (metal)	1417C	1417D
Vacuum hose	Hose adaptor kit with hose connector, red rubber vacuum hose 1,5 m and clamps	330060	
	Stainless steel vacuum hose, 1,5 m	(DN16) 710755	(DN25) 710756
Oil change set	Oil drain valve, funnel	340011	
Application and vacuum control kit	Freeze dryer adapter kit, with oil mist separator AKD, 2-way ball valve, PVC vacuum hose (1,5 m) and hose connector DN 16KF / DN 25KF, hinge clamp ring and centering ring	(DN16) 330031	(DN25) 330032
	Vacuum control kit, digital vacuum gauge MRV 100 with PIZA 111 cr-gold, T-piece, solenoid valve, hinge clamp ring and centering ring	(DN16) 330053	(DN25) 330054

Wolf Laboratories Limited

www.wolflabs.co.uk

Wolflabs

Tel: 01759 301142 Fax:01759 301143 sales@wolflabs.co.uk

Use the above details to contact us if this literature doesn't answer all your questions.

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.