

NEW

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by Gardner Denver

C/RVpro

Your Robust Vacuum Pump

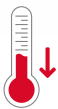


APPLIED VACUUM TECHNOLOGY. ASK THE EXPERTS!
www.welchvacuum.com/crvpro

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

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.

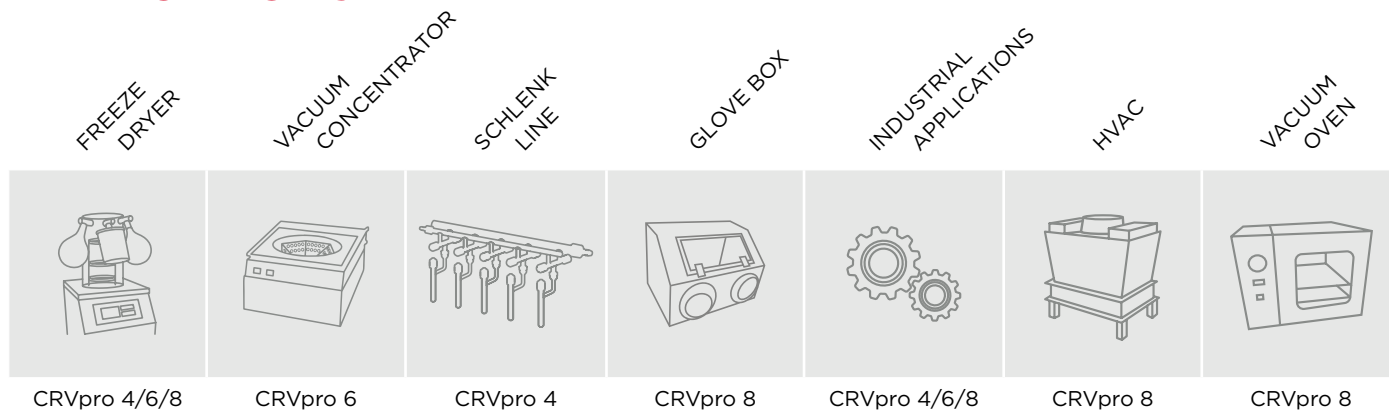
6 SIZED TO FIT YOUR APPLICATION

Modern and compact design to fit different applications and performance requirements.

7 DUAL VOLTAGE MOTOR

IP44 Motors are switchable from 115V to 240V for global use. Each pump includes power cord suitable for country of use.

APPLICATIONS



TECHNICAL DATA

PARAMETER	UNIT	CRVpro 4	CRVpro 6	CRVpro 8
Free air displacement				
- @ 50 Hz	m ³ /h (l/min)	4 (67)	6 (100)	8 (133)
- @ 60 Hz	CFM (l/min)	2.8 (78)	4.2 (118)	5.6 (158)
Pumping speed				
- @ 50 Hz	m ³ /h (l/min)	3.8 (63)	5.1 (85)	7.3 (122)
- @ 60 Hz	CFM (l/min)	2.7 (77)	3.7 (105)	5.1 (143)
Ultimate pressure				
- Without gas ballast partial	mbar (Torr)	5x10 ⁻⁴ (4x10 ⁻⁴)		
- Without gas ballast total	mbar (Torr)	2x10 ⁻³ (1.5x10 ⁻³)		
- With gas ballast total	mbar (Torr)	7x10 ⁻² (5x10 ⁻²)		
Connection flanges	DN	16 KF		
Hose connection, inlet	ID Tubing	5/8" - 3/4" (16-19 mm)		
Ambient temperature	°C	10-40		
Noise level (50 Hz)	dB (A)	50		
Oil capacity	mL	1150	1000	
Motor speed	rpm 50/60 Hz	1450/1740		
Motor power	kW 50/60 Hz	0.37/0.4		
Weight	kg (lbs.)	21 (46.3)	22 (48.5)	22.5 (49.6)
Dimensions, L x W x H	mm (inch)	463/157/230 (18.2/6.1/9.1)*		

* Without handle

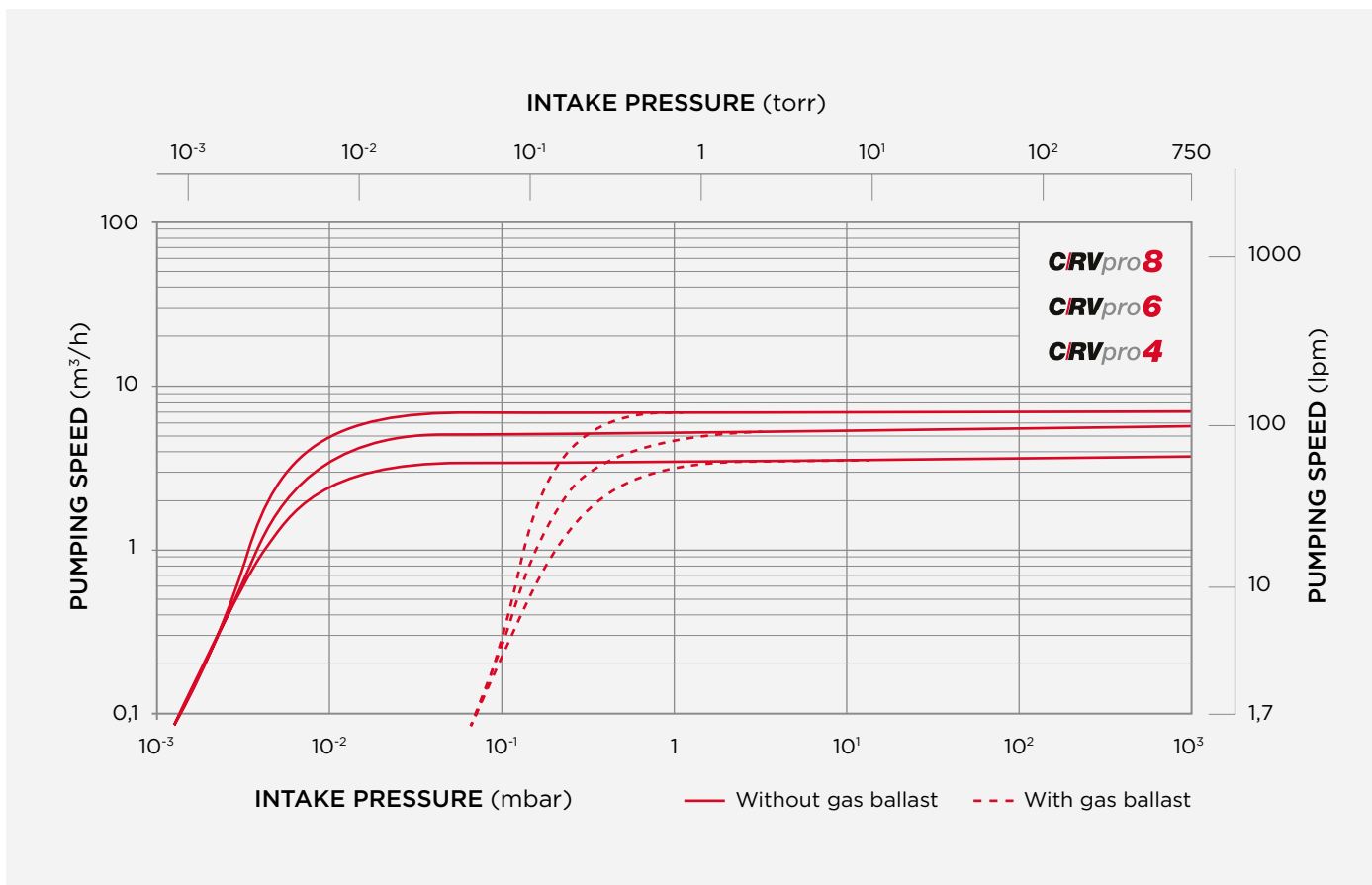
ORDERING INFORMATION



DESCRIPTION	CRVpro 4	CRVpro 6	CRVpro 8
220-240 V / 50 Hz; 230 V / 60 Hz; 1 phase motor with line cord EU-plug (CEE 7/4), line cord UK-plug (B1363), line cord US-plug (Nema-5)	3042-00	3062-00	3082-00
Service kit	S3077-99	S3078-99	S3079-99
Seal kit	S3080-99		

Every pump is supplied complete with vacuum pump oil, centering rings, clamping rings and motor overload protection. Ready for use after oil filling.

PERFORMANCE



COMPLETE PACKAGES & ACCESSORIES

PACKAGES (PUMP + ACCESSORIES)	DESCRIPTION	ORDER NO.
CRVpro 4 basic package		330071
CRVpro 6 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 drain kit	330072
CRVpro 8 basic package		330073
CRVpro 4 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 drain kit	330074
CRVpro 6 measurement package		330075

ACCESSORIES	DESCRIPTION	ORDER NO.
Vacuum pump oil	Directorr™ premium vacuum pump oil, 1 Liter	800995-01
	Directorr™ premium vacuum pump oil, 5 Liter	800995-05
Condenser, cold trap	Inlet condenser AKS 16	320016
	Nitrogen (dry ice) cold trap DN10	1420H-14
Separator, oil mist filter	Oil mist separator AKD 16	320015
	Oil mist filter OME 10/16	700010
Vacuum hose	Hose adaptor kit with hose connector, DN 10 and DN 20, red rubber vacuum hose 1.5 m and clamps	330060
	Stainless steel vacuum hose DN 16KF, 1500 mm	710755
Application and vacuum control kit	Freeze dryer adapter kit, DN 16KF with oil mist separator AKD 16, 2-way ball valve, PVC vacuum hose (1.5 m) and hose connector DN 16KF / DN 25KF, hinge clamp ring and centering ring	330031
	Vacuum control kit, DN 16KF, digital vacuum gauge MRV 100 with PIZA 111 cr-gold, T-piece, solenoid valve, hinge clamp ring and centering ring	330053

GLOBAL CONTACT



Contact us for
consultancy

EMEA

Gardner Denver Thomas GmbH
Am Vogelherd 20
98693 Ilmenau
Germany

Phone: +49 3677 604 0
Fax: +49 3677604131
Email: welch.emea@gardnerdenver.com

AMERICA

Gardner Denver Thomas Inc.
1601 Feehanville Drive
Suite 550
Mt. Prospect, IL 60056
USA

Phone: +1 847 676 8800
Fax: +1 847 6778606
Email: welch.na@gardnerdenver.com

ASIA PACIFIC

Gardner Denver Welch
Room 2206, Qiangsheng Mansion
No. 145 Pujian Road
200127 Shanghai
China

Phone: +86 21 51860238
Fax: +86 21 50396221
Email: welch.as@gardnerdenver.com

GLOBAL HEADQUARTERS

Gardner Denver Thomas GmbH
Livry-Gargan-Str. 10
82256 Fürstenfeldbruck
Germany

Phone: +49 8141 2280 1000
Fax: +49 8141 8892136
Email: welchvacuum@gardnerdenver.com

www.welchvacuum.com
www.welchvacuum.de

COMING SOON



CRVpro16

16m³/h

CRVpro24

24m³/h

CRVpro30

30m³/h

PARAMETER	CRVpro 16	CRVpro 24	CRVpro 30
Free air displacement (m ³ /h) @ 50 Hz	16	24	30
Free air displacement (cfm) @ 60 Hz	11.3	17	21
Ultimate pressure without gas ballast total (mbar)	4x10 ⁻⁴	4x10 ⁻⁴	4x10 ⁻⁴
Ultimate pressure without gas ballast total (torr)	3x10 ⁻⁴	3x10 ⁻⁴	3x10 ⁻⁴

Available in different voltage range versions. Specifications subject to change without notification.

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