

Dry Vacuum Pump CR Series

CR series is an air-cooled roots type dry vacuum pump. Stable operation and extended lifetime are possible because there is no oil inside of the pump head and no contact between rotor and cylinder.



Features

- Air cooled for low running costs
- No requirement for cooling water and nitrogen gas
- Low power consumption, air tight and light weight are featured in this pump
- Possible to pump down water vapor by use of gas ballast
- Integrated silencer results in a compact design

Applications

- Clean gas vacuum pumping such as air, inert gas
- Water vapor pumping for vacuum dryer equipment (gas ballast is required)
- Vacuum equipment such as sputtering, evaporator, etc.

Specifications

Model		CR16A	CR30A	CR60A	CR300A
Max. pumping speed	m ³ /h	16	30	55	300
	L/min	280	500	920	5000
	CFM	9.8	17.6	32.4	176
Ultimate pressure *1	Pa	≤ 3			≤ 0.5
	Torr	≤ 2 × 10 ⁻²			≤ 4 × 10 ⁻³
	mbar	≤ 3 × 10 ⁻²			≤ 5 × 10 ⁻³
Maximum inlet pressure		Atmospheric pressure			
Maximum outlet pressure		Atmospheric pressure			
Power *2	(Phase) Voltage	(1) 100V	(1) 200V (3) 200V	(1) 200V (3) 200V	(1) 200V (3) 200V
	Motor rating	kW		0.72	1.5
Inlet		NW25		NW40	NW50
Outlet		NW25		NW40	
Weight		kg		35	48
Cooling method		Air cooling			
Gas ballast mechanism *3		Equipped			
Maximum water vapor tolerance *4		g/h		< 300	< 500
Standard accessory		Air filter			

- *1 Ultimate pressure is a value without gas ballast gas.
- *2 Please specify phase and voltage when ordering.
- *3 The valve for gas ballasts is an option.
- *4 Maximum water vapor tolerance is a value when gas ballast is used. Make sure to use a gas ballast mechanism.

Option for Gas Ballast

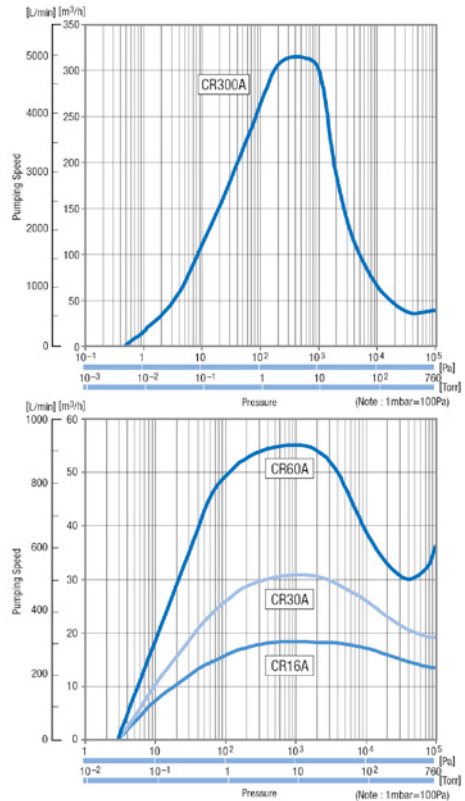
Model	Accessories
GH	Air lter, needle valve
GA	Air lter, needle valve, solenoid valve

Option for Silencer

	Applicable model	Clamp	Centering and outer rings	Connecting pipe	Stay
RS-01(Silencer only)	CR16A, CR30A *1	-	-	-	-
RS-01 Kit A	CR16A, CR30A, CR60A *1	2	2	1	1
RS-01 Kit C	CR300A	2	2	1	1
Open type Silencer EFS-11-NW25/2 *2	CR16A, CR30A	1	1	-	-
Open type Silencer EFS-19-NW40/1 *2	CR60A, CR300A	1	1	-	-

- *1 Adapter flange is required for the CR16A and CR30A because the exhaust port size of them is NW25.
- *2 It is impossible to connect it to ductwork in the facility. This is only for safe gases which can be discharged indoors without connecting to ductwork. Element inside needs to be replaced in periodical maintenance.

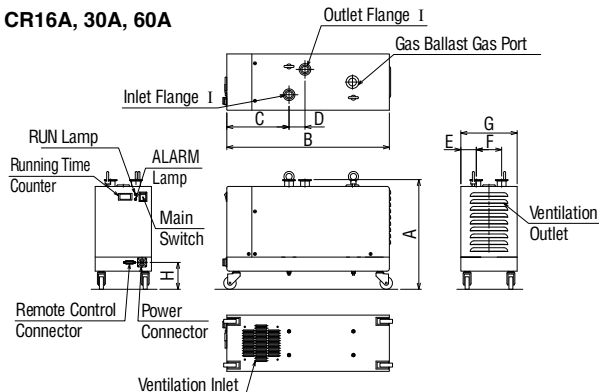
Pumping Speed Curves



Dimensions

(unit: mm)

CR16A, 30A, 60A



	A	B	C	D	E	F	G	H	I
CR16A	350	520	200	51	50	81	180	86	25
CR30A	350	520	200	51	50	81	180	86	25
CR60A	430	550	200	59	59	98	210	116	40

CR300A

