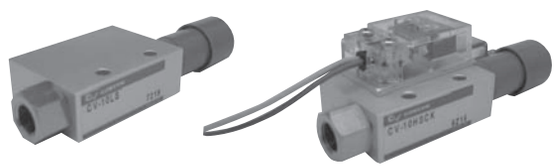
Standard vacuum ejector
CV CONVUM



● Long life circle

No moving parts, simple construction

● Several sizes

Several nozzle sizes, from low to high vacuum flow

How to order

CV – ① 05 ② H ③ S ④ CK ⑤ G

① Nozzle diameter	
05	ϕ0.5
10	ϕ1.0
15	ϕ1.5
20	ϕ2.0
25	ϕ2.5
30A	ϕ3.0

② Max. vacuum pressure	
H	– 87 kPa
L	– 53 kPa

⑤ Port thread	
N	N (NPS)
G	G (BSPP)
Blank	Rc (BSPP)

④ Vacuum switch	
CK	piston micro–switch
Blank	without switch

Note: Vacuum switch is not mountable with nozzle diameter 2.5 and 3.0

③ Nominal pressure	
S	0.5MPa
R	0.35MPa

Note : ①②③④ applicable models

①	②	③ S	③ R	④
05	H	○	×	○
	L	○	×	○
10	H	○	○	○
	L	○	×	○
15	H	○	○	○
	L	○	×	○
20	H	○	○	○
	L	○	×	○
25	H	○	×	×
	L	○	×	×
30A	H	○	×	×
	L	○	×	×

Maitenance parts

● Silencer

MSS–01	CV–05, CV–10
MSM–01	CV–15
MSL–02	CV–20
MS6–01	CV–25,CV–30A

Note) Consult P412 for details

● Pressure switch: CV–CK

Note) Consult P76 for details

Specifications

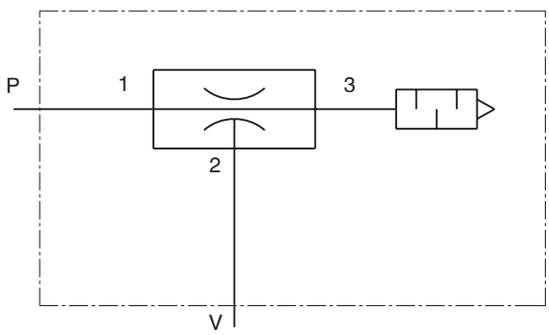
Description		Unit	CV–05		CV–10			CV–15			CV–20			CV–25		CV–30A	
			HS	LS	HS	LS	HR	HS	LS	HR	HS	LS	HR	HS	LS	HS	LS
Fluid			Non–lubricated air / non–corrosive gas														
Ambient temperature		℃	0 ~ 60 without freezing														
Operating pressure range		MPa	0.1 ~ 0.6														
Nozzle size		ϕmm	0.5		1.0			1.5			2.0			2.5		3.0	
Nominal pressure		MPa	0.5		0.5		0.35	0.5		0.35	0.5		0.35	0.5		0.5	
Vacuum (air) flow		ℓ /min(ANR)	6	9	27	36	25	63	95	54	110	165	88	160	250	225	350
Max. vacuum pressure		kPa	–87	–57	–92	–57	–91	–92	–57	–91	–92	–57	–91	–92	–57	–92	–57
Air consumption		ℓ /min(ANR)	13		44			100			180			265		385	
Mass	without switch	g	80		80			140			350			730		870	
	with switch	g	120		120			190			460			–		–	

Pressure switch

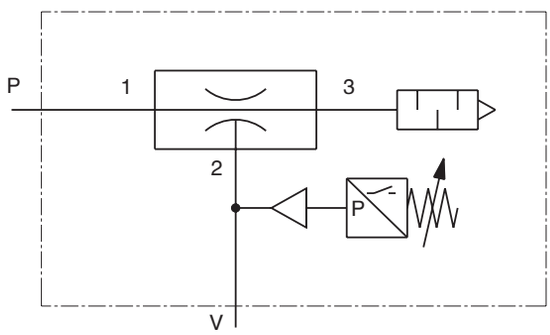
Item	Unit	CK	
Fluid		Non–lubricated air / Non–corrosive gas	
Pressure range	kPa	–20 ~ –53	
Ambient temperature	℃	0 ~ 60(without freezing)	
Accuracy	kPa	± 5.3	
Hysteresis	kPa	4.0 ~ 13.3	
Operating voltage	V	less than AC250V	less than DC250V
Load current	A	3	0.2

Symbol

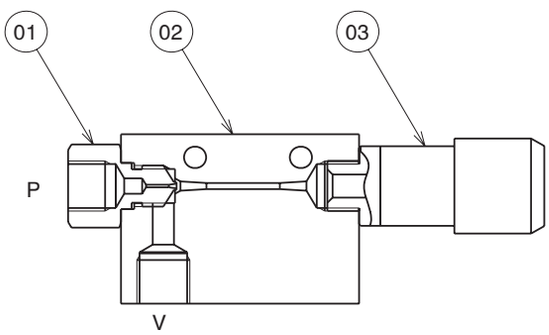
CV (standard)



CV – ※※CK (with pressure switch)



Construction

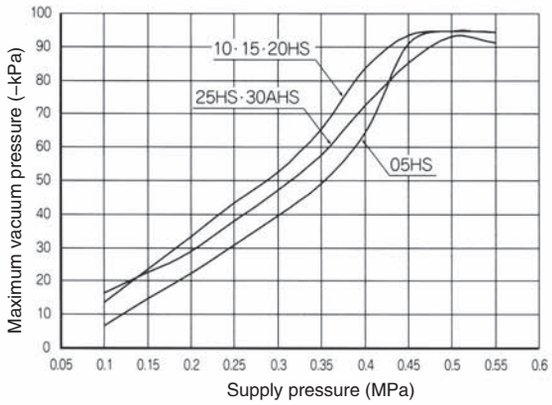


Parts	Part name	Material
1	Supply port	Brass
2	Body	Aluminium
3	Silencer	POM, Felt

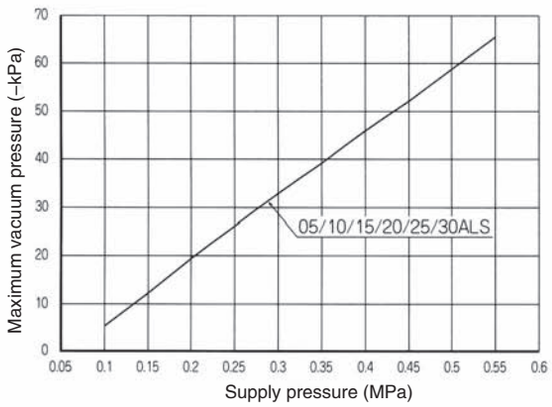
Performance charts

— Maximum vacuum pressure characteristic —

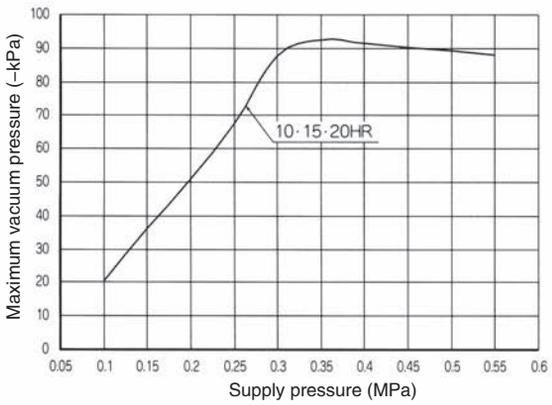
● CV–□□HS



● CV–□□LS

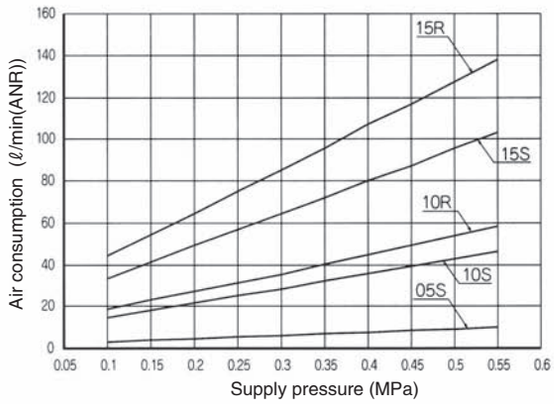


● CV–□□HR

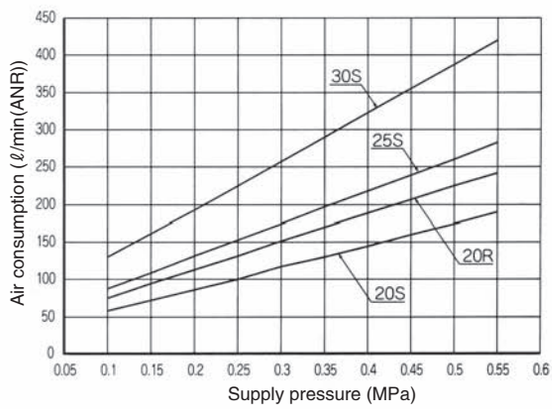


—— Air consumption characteristics ——

● CV–05, 10, 15

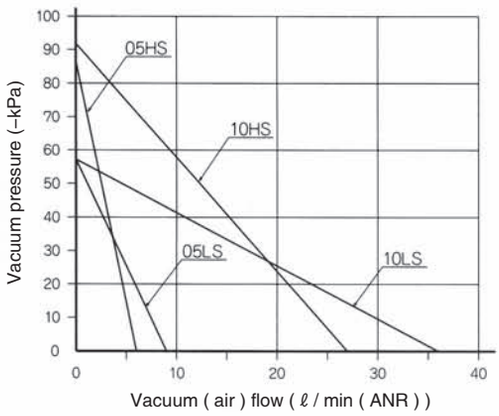


● CV–20, 25, 30A

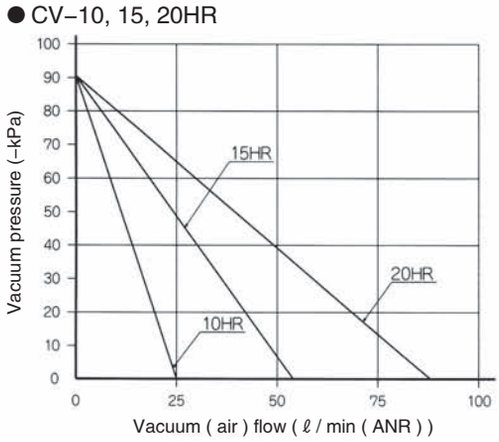


— Vacuum (air) flow – vacuum pressure characteristic —

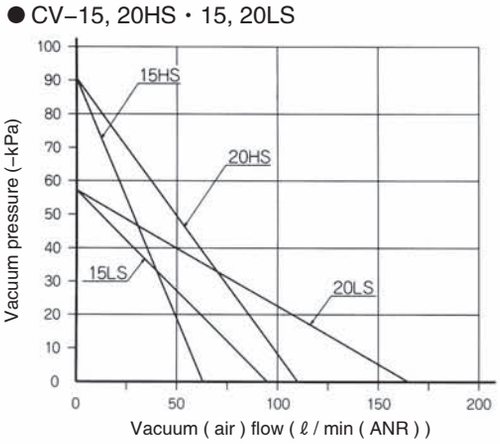
● CV–05, 10HS・05, 10LS



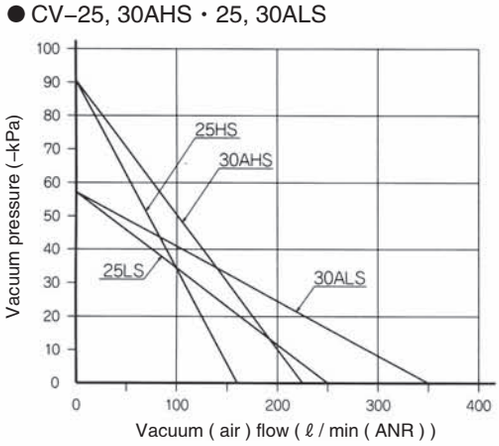
● CV–10, 15, 20HR



● CV–15, 20HS・15, 20LS

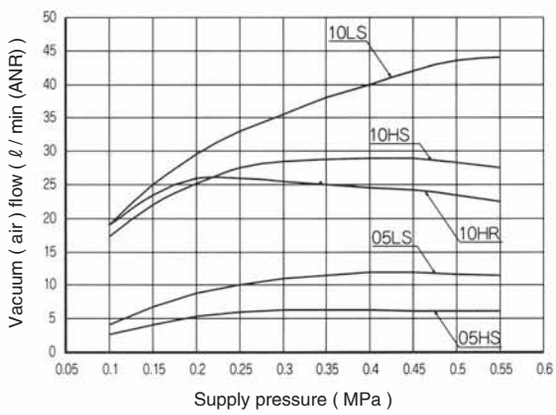


● CV–25, 30AHS・25, 30ALS

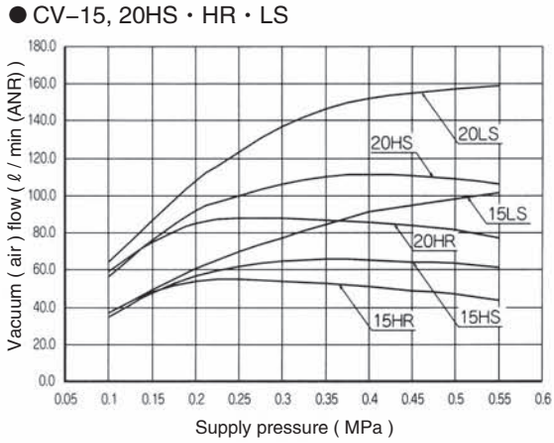


— Maximum vacuum (air) flow characteristic —

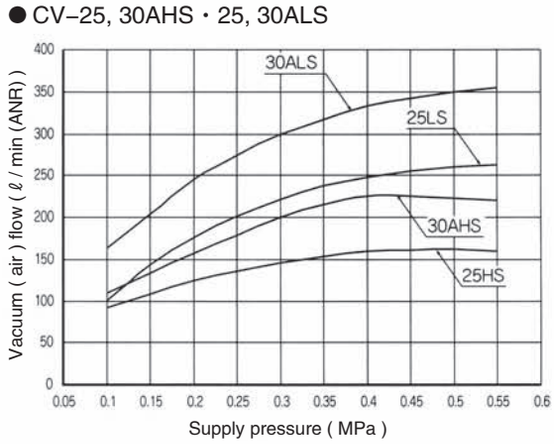
● CV–05HS・LS, CV–10HS・HR・LS



● CV–15, 20HS・HR・LS



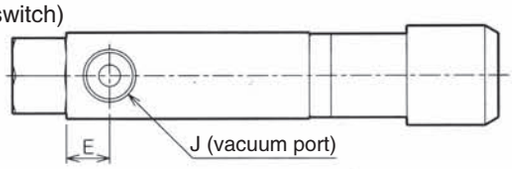
● CV–25, 30AHS・25, 30ALS

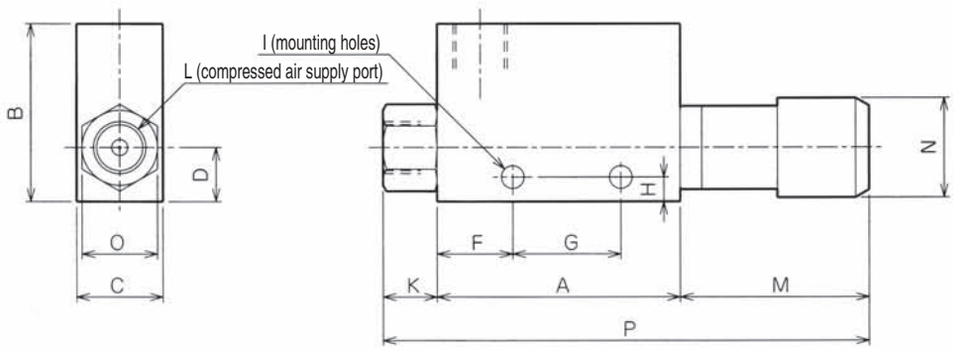


Dimensions

Unit : mm <inch>

CV–□□ Standard (without pressure switch)

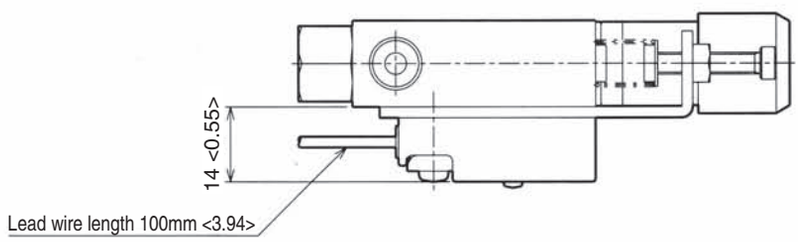


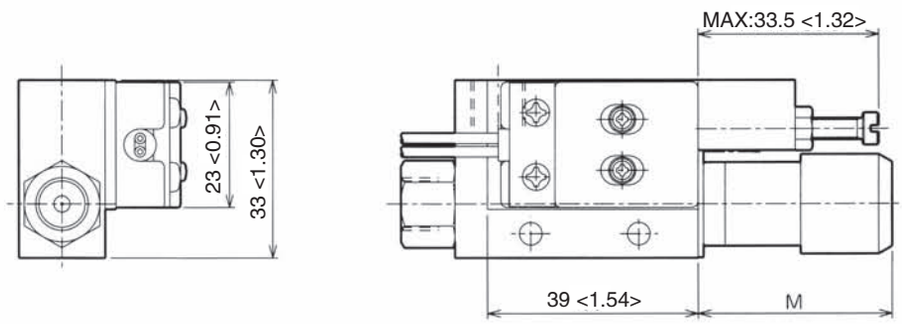


mm <inch>

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Silencer port thread
CV–05	45 <1.77>	33 <1.3>	16 <.63>	10 <.39>	8 <.31>	14 <.55>	20 <.79>	4.5 <.18>	2– ϕ 4.2 <0.17>	Rp1/8	10 <.39>	Rp1/8	35 <1.38>	ϕ 18.5 <0.73>	14 <.55>	90 <3.54>	Rp1/8
CV–10	45 <1.77>	33 <1.3>	16 <.63>	10 <.39>	8 <.31>	14 <.55>	20 <.79>	4.5 <.18>	2– ϕ 4.2 <0.17>	Rp1/8	10 <.39>	Rp1/8	35 <1.38>	ϕ 18.5 <0.73>	14 <.55>	90 <3.54>	Rp1/8
CV–15	63 <2.48>	35 <1.38>	20 <.79>	11 <.43>	10 <.39>	20 <.79>	25 <.98>	5 <.2>	2– ϕ 4.5 <0.18>	Rp1/4	15 <.59>	Rp1/4	45.5 <1.79>	ϕ 20 <0.79>	17 <.67>	123.5 <4.86>	Rp1/4
CV–20	85 <3.35>	40 <1.57>	30 <1.18>	15 <.59>	13 <.51>	28 <1.1>	32 <1.26>	7 <.28>	2– ϕ 6 <0.24>	Rp3/8	20 <.79>	Rp1/4	60.5 <2.38>	ϕ 30 <1.18>	24 <.94>	165.5 <6.52>	Rp1/2
CV–25	100 <3.94>	60 <2.36>	40 <1.57>	20 <.79>	16 <.63>	20 <.79>	50 <1.97>	5.5 <.22>	2– ϕ 6 <0.24>	Rc1/2	17 <.67>	Rc3/8	96 <3.78>	ϕ 40 <1.57>	28 <1.1>	213 <8.39>	Rp3/4
CV–30A	118 <4.65>	60 <2.36>	40 <1.57>	20 <.79>	20 <.79>	33 <1.3>	50 <1.97>	5.5 <.22>	2– ϕ 6 <0.24>	Rc3/4	20 <.79>	Rc1/2	96 <3.78>	ϕ 40 <1.57>	30 <1.18>	234 <9.21>	Rp3/4

CV–□□ Standard (with pressure switch)





mm <inch>

	CV–05	CV–10	CV–15	CV–20
M	36 <1.42>	36 <1.42>	46.5 <1.83>	60.5 <2.38>