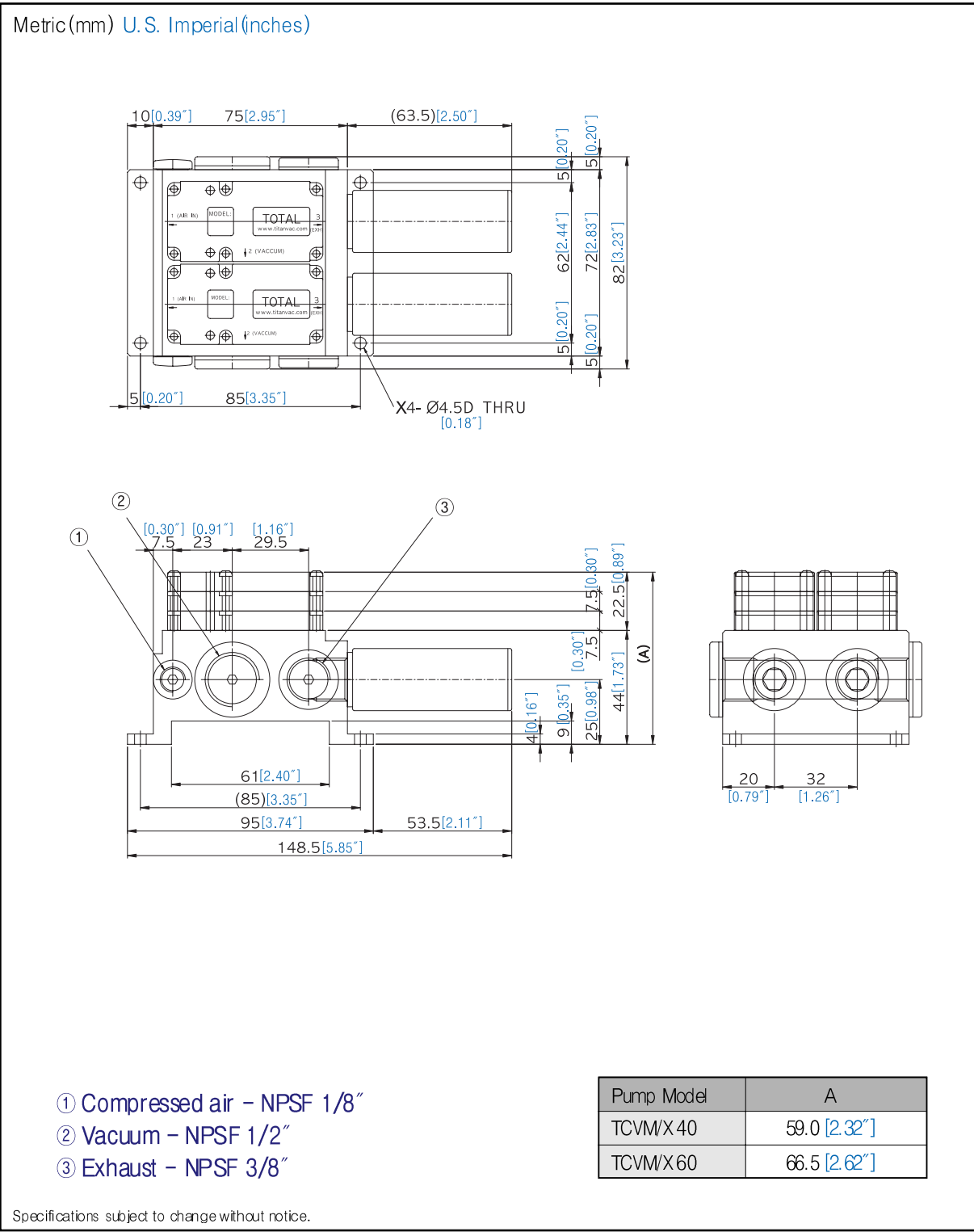
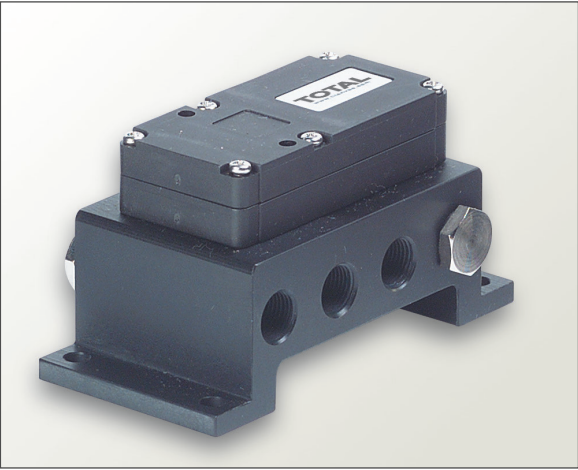


TCVM-D2 / TCVX-D2
Dimension



4) TCVM/X-CB: Mini Base Block Type



Mini chip type of pumps in the aluminum connection plate for multiple connections to maximize workability and reliability.

Performance and Specifications Outline

Max. Vacuum Level	Max. 645.16 ~ 712.68 (mmHg.G) Max. -86 ~ -95 (kPa) Max. -25.40 ~ -28.06 (inHg)
Max. Vacuum Flow	Max. 216 (N l/min) Max. 7.627 (scfm)
Supply Air Condition	Compressed Air
Compressed Air Pressure	4~6.2 bar 58.01~89.92 psi
Working Temperature	-20℃~+80℃ -4°F~+176°F
Noise Level	57~65 dBA

Ordering Information

TCVM TCVX	-CB	5, 10, 20, 30	N	Option
M: Medium Vacuum (-86 kPa) X: Extra Vacuum (-95 kPa) TOTAL Chip Type Vacuum Pump Chip Base Block Type	Chip Base BlockType	Pump's Size	Seal Material (Check V/V – basic installed) N: Nitrile V: Viton E: EPDM	Vacuum SW
		5		-None: Standard
		10		-S/W: With Switch
		20		-CXC: With External Check V/V
		30		

TCVM/X-CB Series Chip Base Block Type

Characteristics / Medium Vacuum & Extra Vacuum

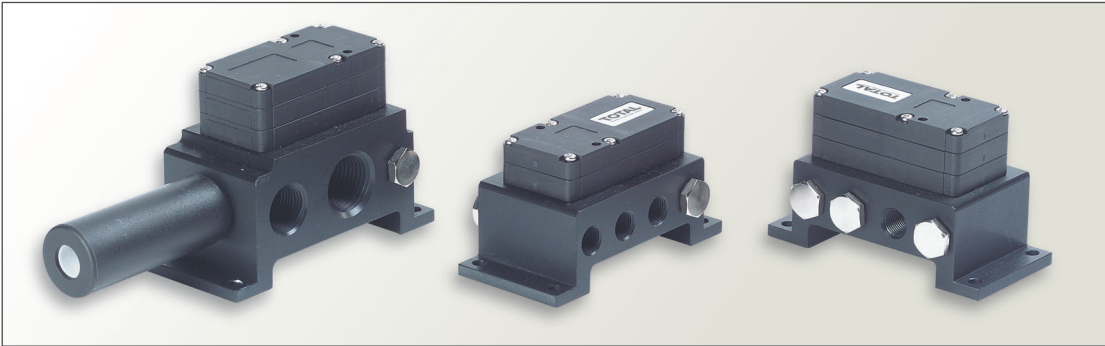
Pump Model	Max. Vacuum (mmHg · G) (-inHg) (-kPa)	Max. Vacuum Flow (N ℓ /min) (scfm)	Air Consumption (N ℓ /min) (scfm)	Noise Level (dBA)	Net Weight (g) (oz)	Pipe Arrangement (Ø)		
						Compressed Air (mm) (inches)	Vacuum (mm) (inches)	Exhaust (mm) (inches)
TCVM-CB5	645 25.39 86	36 1.271	15~21 0.530~0.742	57~63	178 6.278	>2 0.08"	>5 0.20"	1/8"
TCVM-CB10		72 2.542	30~42 1.059~1.483	58~65	178 6.278	>2 0.08"	>8 0.32"	1/8"
TCVM-CB20		144 5.085	60~84 2.119~2.966	58~65	278 9.805	>4 0.16"	>10 0.39"	3/8"
TCVM-CB30		216 7.627	90~125 3.178~4.414	58~65	289 10.193	>4 0.16"	>12 0.47"	3/8"
TCVX-CB5	712.5 28.05 95	31.4 1.109	21.6 0.763	57~63	178 6.278	>2 0.08"	>5 0.20"	1/8"
TCVX-CB10		62 2.189	43.2 1.525	60~68	178 6.278	>2 0.08"	>8 0.32"	1/8"
TCVX-CB20		123 4.343	86.5 3.054	60~68	278 9.805	>4 0.16"	>10 0.39"	3/8"
TCVX-CB30		188 6.638	129 4.555	60~68	289 10.193	>4 0.16"	>12 0.47"	3/8"

Vacuum flow in (N ℓ /min) (scfm) at different vacuum levels (mmHg · G) (-inHg) (-kPa)

Pump Model	Vacuum Level	Vacuum Flow (N ℓ /min) (scfm)									
		0 0 0	75 2.95 10	150 5.91 20	225 8.86 30	300 11.81 40	375 14.76 50	450 17.72 60	525 20.67 70	600 23.62 80	675 26.57 90
TCVM-CB5		36 1.271	26.2 0.925	16.5 0.583	14 0.494	11.2 0.395	8 0.282	5.8 0.205	2.5 0.088	0.65 0.023	—
TCVM-CB10		72 2.542	49 1.730	31.4 1.109	26.5 0.936	19.8 0.699	15.7 0.554	10.9 0.385	4.8 0.169	1.33 0.047	—
TCVM-CB20		144 5.085	97 3.425	61.3 2.165	53 1.871	39.2 1.384	31.2 1.102	21 0.742	10.1 0.357	2.6 0.092	—
TCVM-CB30		216 7.627	161 5.685	98 3.460	86.3 3.047	62.8 2.218	49 1.730	38.4 1.356	15 0.530	4.4 0.155	—
TCVX-CB5		31.4 1.109	18 0.636	9.3 0.328	8 0.282	7.2 0.254	5 0.177	4 0.141	2.6 0.092	1.2 0.042	0.46 0.016
TCVX-CB10		62 2.189	36 1.271	17.4 0.614	16 0.565	13.4 0.473	11.5 0.406	8.2 0.290	5.3 0.187	2.3 0.081	0.9 0.032
TCVX-CB20		123 4.343	71 2.507	35 1.236	30.8 1.088	25.8 0.911	21.7 0.766	16.8 0.593	11.3 0.399	4.9 0.173	1.8 0.064
TCVX-CB30		188 6.638	109 3.849	52 1.836	46 1.624	40 1.412	32.4 1.144	25 0.883	16.1 0.569	7.1 0.251	2.7 0.095

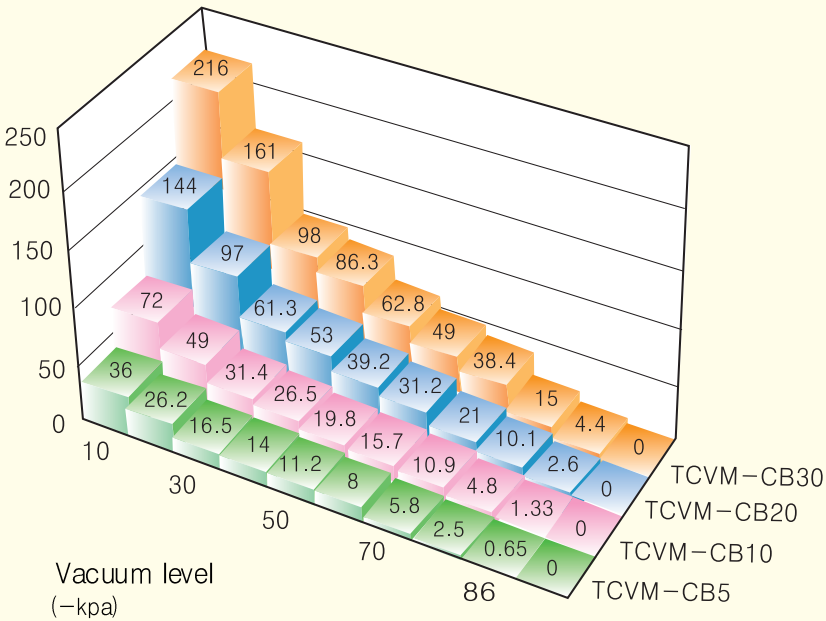
Time to evacuate a volume (sec/ℓ) (sec/cf) at different vacuum levels (mmHg · G) (-inHg) (-kPa)

Pump Model	Vacuum Level	Evacuation Time (sec/ ℓ) (sec/cf)									
		0 0 0	75 2.95 10	150 5.91 20	225 8.86 30	300 11.81 40	375 14.76 50	450 17.72 60	525 20.67 70	600 23.62 80	675 26.57 90
TCVM-CB5	0	0	0.020 5.660	0.560 15.932	1.050 29.400	1.610 45.402	2.400 67.680	3.480 96.744	5.440 150.144	11.200 315.840	—
TCVM-CB10	0	0	0.010 2.830	0.280 7.966	0.540 15.120	0.800 22.560	1.190 33.558	1.800 50.040	2.750 75.900	5.950 167.790	—
TCVM-CB20	0	0	0.050 1.415	0.140 3.983	0.260 7.280	0.420 11.844	0.620 17.484	0.920 25.576	1.420 39.192	2.830 79.806	—
TCVM-CB30	0	0	0.040 1.132	0.110 3.130	0.170 4.760	0.310 8.742	0.430 12.126	0.650 18.076	1.030 28.428	2.040 57.578	—
TCVX-CB5	0	0	0.270 7.641	0.810 23.045	1.540 43.120	2.400 67.680	3.660 103.212	4.950 137.610	7.030 194.028	10.400 293.280	19.400 549.99
TCVX-CB10	0	0	0.130 3.679	0.420 11.949	0.790 22.120	1.190 33.558	1.870 52.734	2.500 69.500	3.480 96.048	5.800 163.560	9.900 280.665
TCVX-CB20	0	0	0.070 1.981	0.220 6.259	0.390 10.920	0.640 18.048	0.920 25.944	1.290 35.862	1.750 48.300	2.580 72.756	4.900 138.915
TCVX-CB30	0	0	0.050 1.415	0.080 2.276	0.110 3.080	0.250 7.050	0.370 10.434	0.590 16.402	0.980 27.048	1.640 46.248	3.380 95.823

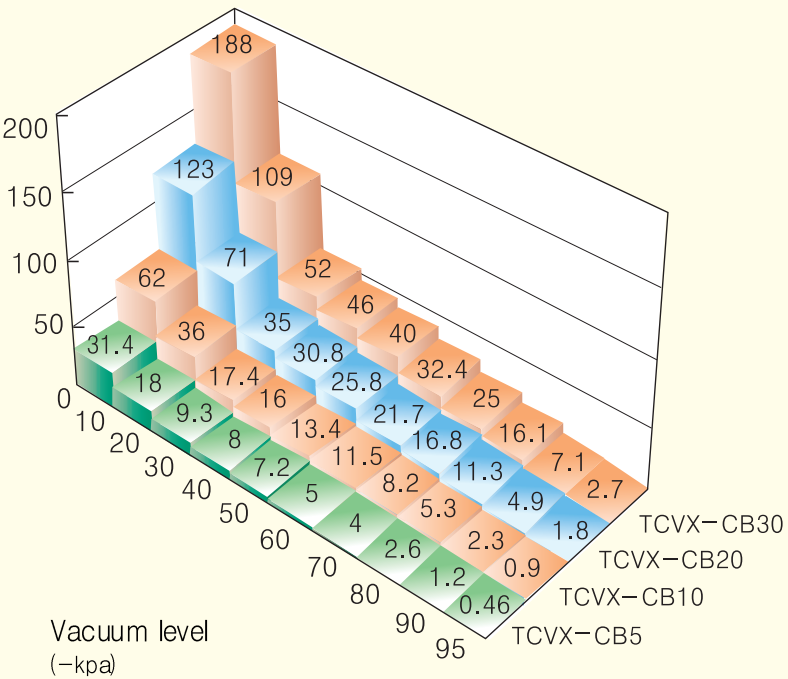


Experimental Performance Curve

Vacuum flow
(N.ℓ/min)



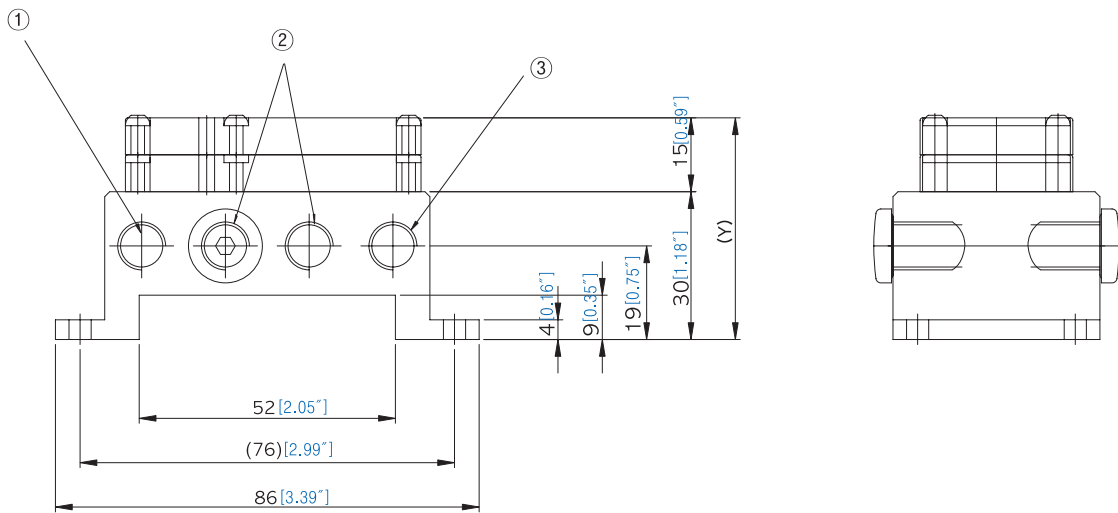
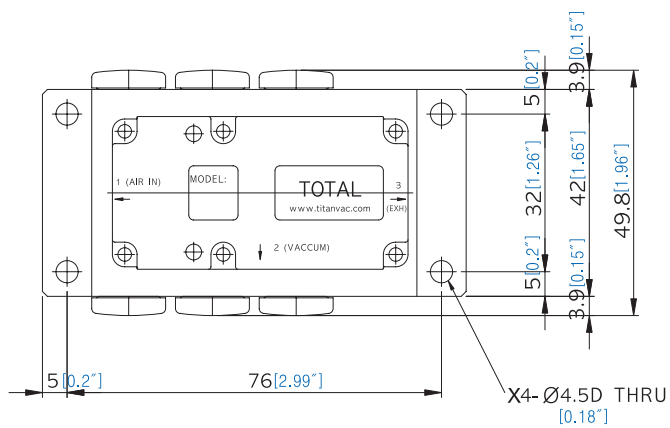
Vacuum flow
(N.ℓ/min)



TCVM-CB / TCVX-CB

Dimension

Metric(mm) U.S. Imperial(inches)



- ① Compressed air - NPSF 1/8"
- ② Vacuum - NPSF 1/8"
- ③ Exhaust - NPSF 1/8"

Pump Model	(Y)
TCV/MX-CB 5~10	37.5 [1.48"]
TCV/MX-CB 20	45 [1.77"]
TCV/MX-CB 30	52.5 [2.07"]

Specifications subject to change without notice.