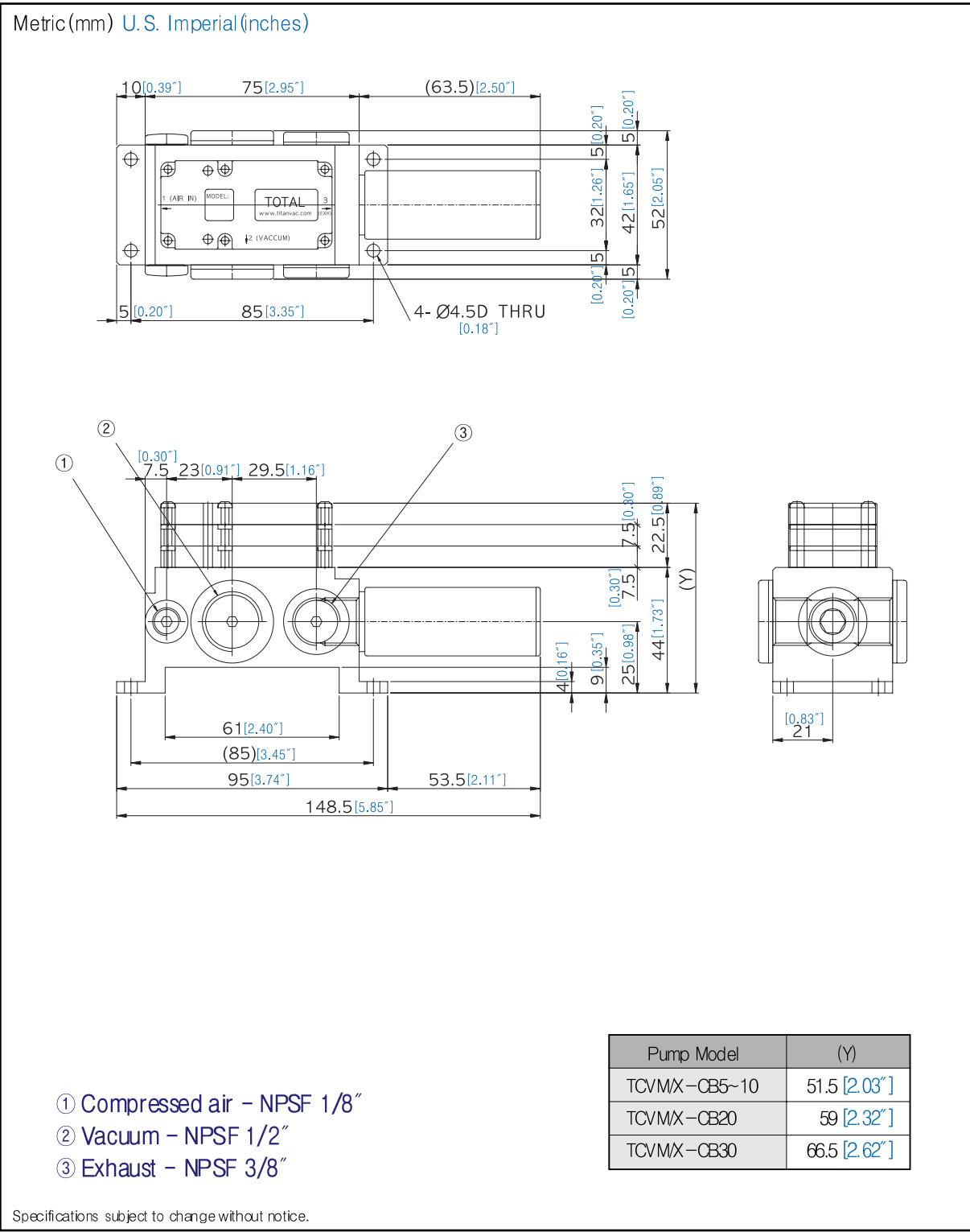
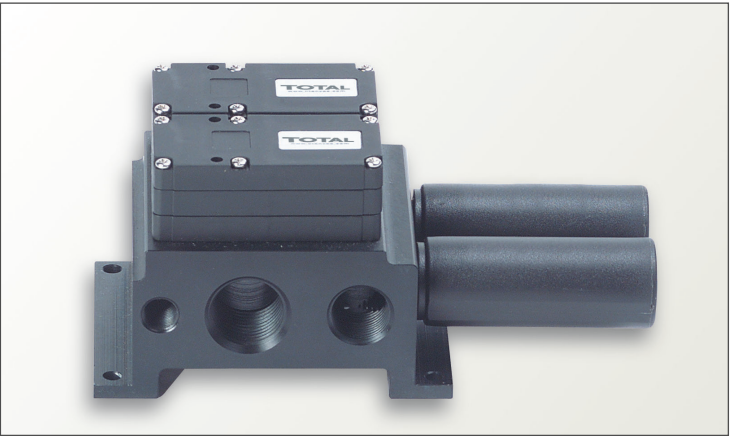


TCVM/X-D1
Dimension



3) TCVM/X-2: Mini Duplex Type



Mini chip type of pumps with multi-stage nozzle in the aluminum connection plate that has vacuum port and exhaust port together to make it easy to be laid out and maximize the vacuum flow.

Performance and Specifications Outline

Max. Vacuum Level	Max. 645.16 ~ 712.68 (mmHg.G) Max. -86 ~ -95 (kPa) Max. -25.40 ~ -28.06 (rHg)
Max. Vacuum Flow	Max. 403 (N l/min) Max. 14.230 (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	-D2	-20, 30, 40, 60	N	Options
M: Medium Vacuum (-86 kPa) X: Extra Vacuum (-95 kPa) TOTAL Chip Type Vacuum Pump	Duplex Type	Pump's Size	Seal Material (Check V/V - basic installed) N: Nitrile V: Viton E: EPDM	Vacuum SW -None: Standard -S/W: With Switch -CXC: With External Check V/V
		20		
		30		
		40		
		60		

TCVM-D2 / TCVX-D2 Series Standard Type

Characteristics / Medium Vacuum & Extra Vacuum

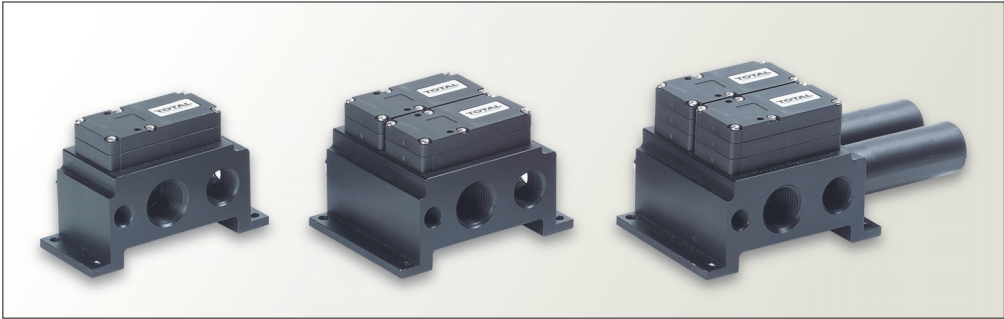
Pump Model	Max. Vacuum (mmHg · G) (-inHg) (-kPa)	Max. Vacuum Flow (N ℓ /min) (scfm)	Air Consumption (N ℓ /min) (scfm)	Noise Level (dBA)	Net Weight (g) (oz)	Pipe Arrangement (∅)		
						Compressed Air (mm) (inches)	Vacuum (mm) (inches)	Exhaust (mm) (inches)
TCVM-D2-20	645 25.39 86	151 5.332	60~84 2.119~2.966	57~60	279 9.840	>4 0.16"	>10 0.39"	3/8"
TCVM-D2-30		226 7.980	90~128 3.178~4.520	58~60	301 10.616	>6 0.24"	>10 0.39"	3/8"
TCVM-D2-40		301 10.629	122~170 4.308~6.003	58~63	323 11.392	>6 0.24"	>12 0.47"	3/8"
TCVM-D2-60		403 14.230	184~258 6.497~9.110	60~66	345 12.168	>6 0.24"	>12 0.47"	3/8"
TCVX-D2-20	712.5 28.05 95	123 4.343	91~96 3.213~3.390	57~60	279 9.840	>4 0.16"	>10 0.39"	3/8"
TCVX-D2-30		184 6.497	132~144 4.661~5.085	58~60	301 10.616	>6 0.24"	>10 0.39"	3/8"
TCVX-D2-40		246 8.686	177~192 6.250~6.780	58~63	323 11.392	>6 0.24"	>12 0.47"	3/8"
TCVX-D2-60		334 11.794	268~288 9.463~10.169	60~66	345 12.168	>6 0.24"	>12 0.47"	3/8"

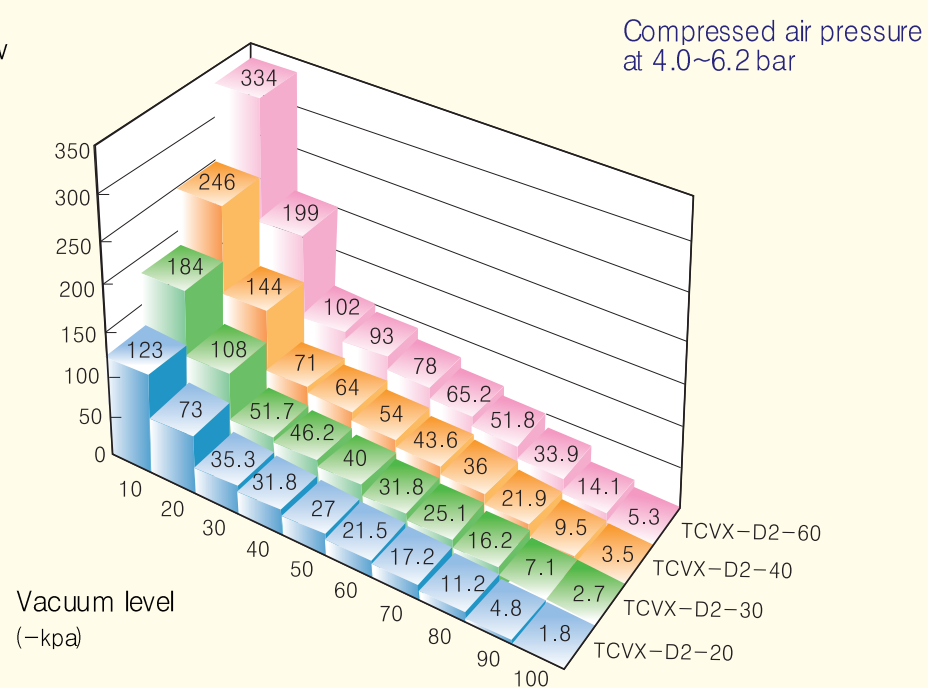
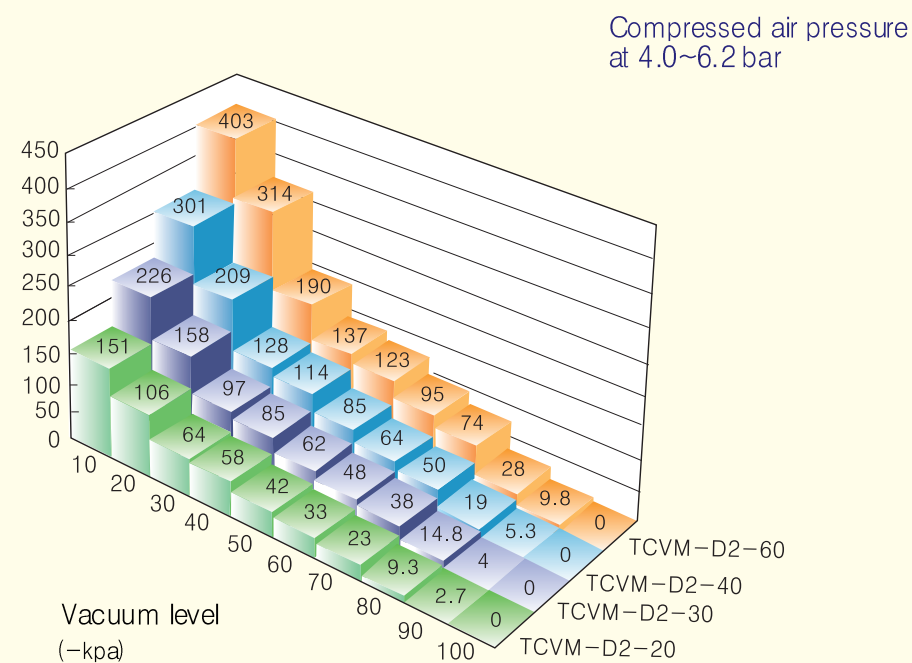
Vacuum flow in (N ℓ /min) (scfm) at different vacuum levels (mmHg · G) (-inHg) (-kPa)

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-D2-20		151 5.332	106 3.743	64 2.260	58 2.048	42 1.483	33 1.165	23 0.812	9.3 0.328	2.7 0.095	—
TCVM-D2-30		226 7.980	158 5.579	97 3.425	85 3.001	62 2.189	48 1.695	38 1.342	14.8 0.523	4 0.141	—
TCVM-D2-40		301 10.629	209 7.380	128 4.520	114 4.025	85 3.001	64 2.260	50 1.766	19.0 0.671	5.3 0.187	—
TCVM-D2-60		403 14.230	314 11.088	190 6.709	137 4.838	123 4.343	95 3.355	74 2.613	28 0.989	9.8 0.346	—
TCVX-D2-20		123 4.343	73 2.578	35.3 1.246	31.8 1.123	27 0.953	21.5 0.759	17.2 0.607	11.2 0.395	4.8 0.169	1.8 0.064
TCVX-D2-30		184 6.497	108 3.814	51.7 1.826	46.2 1.631	40 1.412	31.8 1.123	25.1 0.886	16.2 0.572	7.1 0.251	2.7 0.095
TCVX-D2-40		246 8.686	144 5.085	71 2.507	64 2.260	54 1.907	43.6 1.540	36 1.271	21.9 0.773	9.5 0.335	3.5 0.124
TCVX-D2-60		334 11.794	199 7.027	102 3.602	93 3.284	78 2.754	65.2 2.302	51.8 1.829	33.9 1.197	14.1 0.498	5.3 0.187

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-D2-20	0	0.061 1.726	0.160 4.552	0.280 7.840	0.400 11.280	0.600 16.920	0.880 24.464	1.340 36.984	2.590 73.038	—	—
TCVM-D2-30	0	0.044 1.245	0.110 3.130	0.190 5.320	0.300 8.460	0.480 13.536	0.650 18.070	1.000 27.600	1.960 55.272	—	—
TCVM-D2-40	0	0.028 0.792	0.028 0.800	0.126 3.528	0.200 5.640	0.300 8.460	0.450 12.510	0.700 19.320	1.300 36.660	—	—
TCVM-D2-60	0	0.020 0.566	0.020 0.569	0.086 2.408	0.130 3.666	0.200 5.640	0.290 8.062	0.450 12.420	0.880 24.816	—	—
TCVX-D2-20	0	0.066 1.868	0.066 1.878	0.390 10.920	0.620 17.484	0.940 26.508	1.300 36.140	1.780 49.128	2.600 73.320	4.960 140.616	—
TCVX-D2-30	0	0.050 1.415	0.050 1.423	0.290 8.120	0.460 12.972	0.700 19.740	0.950 26.220	1.300 35.880	1.940 54.708	3.630 102.911	—
TCVX-D2-40	0	0.034 0.962	0.034 0.967	0.200 5.600	0.300 8.460	0.450 12.690	0.620 17.112	0.880 24.288	1.300 36.660	2.500 70.875	—
TCVX-D2-60	0	0.022 0.623	0.022 0.626	0.130 3.640	0.240 6.768	0.350 9.870	0.420 11.592	0.590 16.284	0.880 24.816	1.700 48.195	—

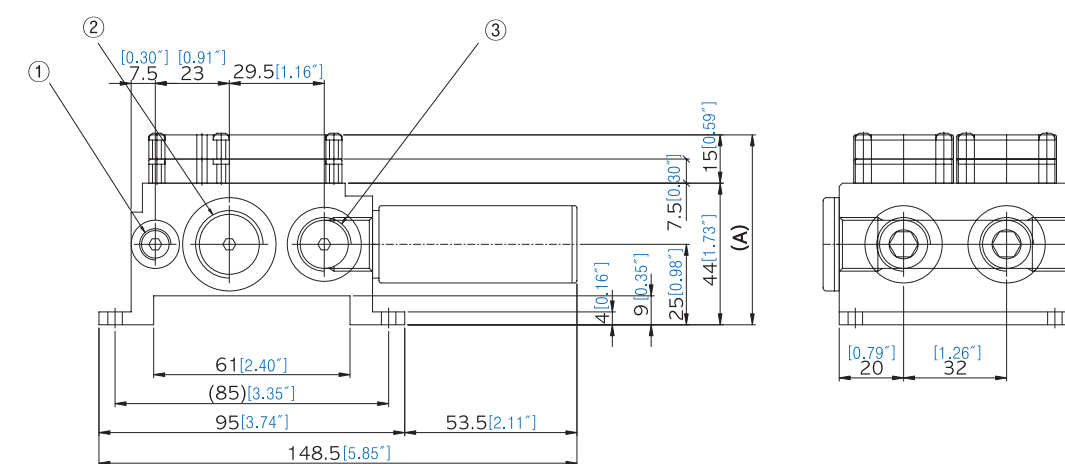
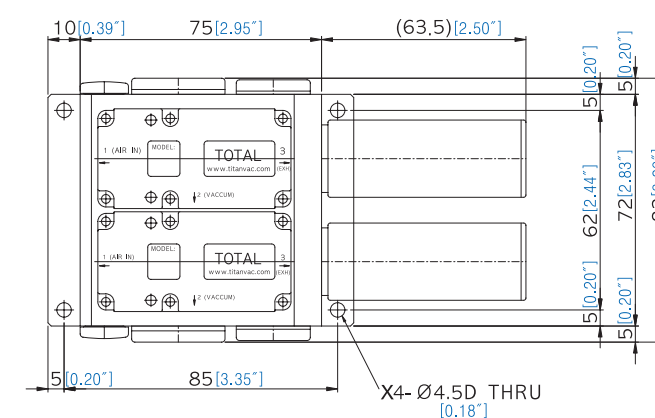




TCVM-D2 / TCVX-D2

Dimension

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

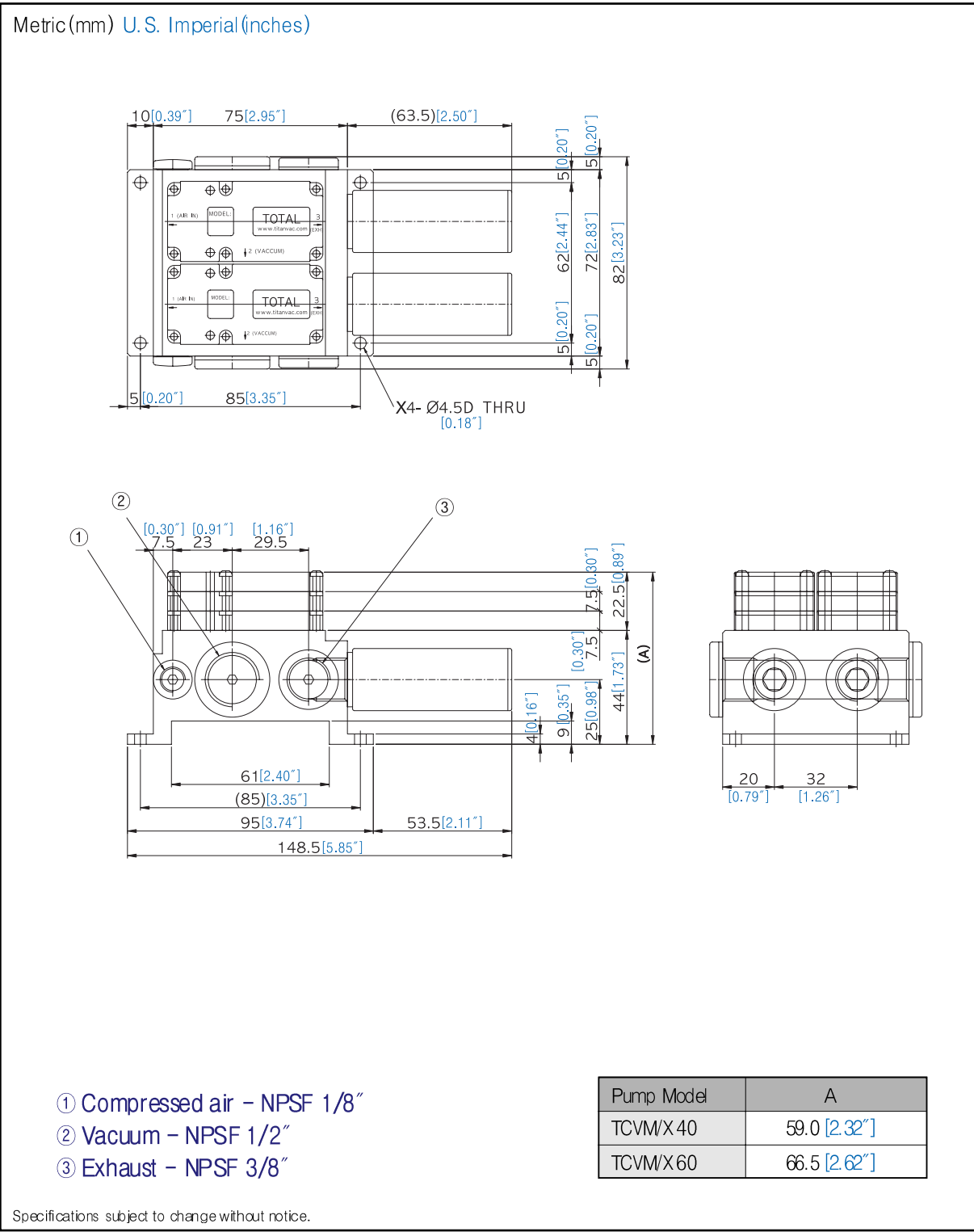


- ① Compressed air – NPSF 1/8"
- ② Vacuum – NPSF 1/2"
- ③ Exhaust – NPSF 3/8"

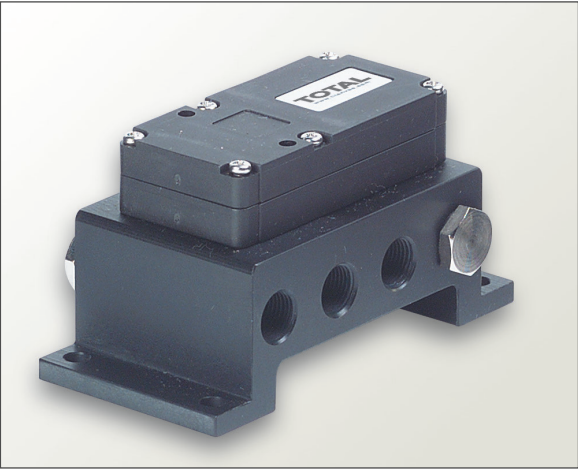
Pump Model	A
TCVM / X 20	51.5 [2.03"]
TCVM / X 30	59 [2.32"]

Specifications subject to change without notice.

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		