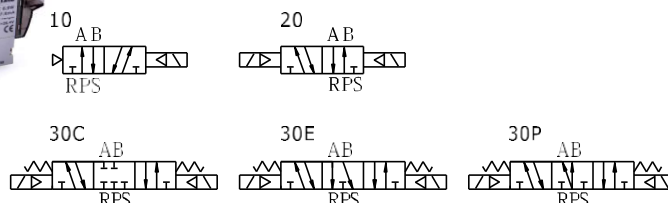


VTE® Solenoid valve(5/2 way,5/3 way) 6V Series



Ordering code

6V 2 10 J 5/16 B 050 T

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Model		6V : Solenoid valve (5/2, 5/3 way)					
②Code		05 : 0500 Series	1 : 100 Series		2 : 200 Series		3 : 300 Series
③Valve type		10 : Single solenoid 5/2 way 20 : Double solenoid 5/2 way 30C : Double solenoid 5/3 way closed center 30E : Double solenoid 5/3 way exhaust center 30P : Double solenoid 5/3 way pressure center					
④Port type		Blank : Thread type J : Tube type					
⑤Port size	Thread	M5: M ⁵	M5:M5	06 : 1/8"	06 : 1/8"	08 : 1/4"	10 : 3/8"
	Tube	5/32 : Φ5/32	1/4:Φ1/4; 5/16:Φ5/16	5/16:Φ5/16; 3/8: Φ3/8		-	
⑥Voltage		A: AC220V B: DC24V C: AC110V F: DC12V					
⑦Wire length		050 : 0.5m 200 : 2.0m					
⑧Thread type		-		T: NPT			

[Note]: The tube type solenoid valve is only used with the manifold.

Specification

Model		6V0510	6V0520	6V0530	6V110	6V120	6V130
Port size [Note1]	Thread type	In=Out=Exh=M5			In=Out=Exh=M5(or=1/8")		
	Tube type	A port=B port=Φ5/32			A port=B port=Φ5/32 (or=Φ1/4) (or=Φ5/16)		
Orifice size(Cv)[Note4]		M5:3.4mm ² (0.2)		6V0530CM5: 2.2mm ² (0.13)	06:8.9mm ² (0.52)		6V130C06: 8.0mm ² (0.47)
Weight		35g	50g	65g	60g	75g	90g
Model		6V210	6V220	6V230	6V310	6V320	6V330
Port size [Note1]	Thread type	In=Out=1/8"(or=1/4")Exh=1/8"			In=Out=3/8" Exh=1/4"		
	Tube type	A port=B port=Φ1/4(or=Φ5/16) (or=Φ3/8)			-		
Orifice size(Cv)[Note4]		08:15.4mm ² (0.91)		6V230C08: 14.2mm ² (0.84)	10:38.4mm ² (2.26)		6V330C10: 30.5mm ² (1.8)
Weight		100g	115g	130g	230g	265g	305g
Fluid		Air(to be filtered by 40μm filter element)					
Acting		Internal pilot					
Operating pressure	5/3 way	29~114psi(0.2~0.8MPa)					
	5/2 way	21~114psi(0.15~0.8MPa)					
Proof pressure		1.2MPa(175psi)					
Temperature		-10~50°C					
Material of body		Aluminum alloy					
Lubrication [Note3]		Not required					
Pilot valve's Exhaust type		Centralized exhaust type					
Max.frequency [Note2]		5 cycle/sec		3 cycle/sec	5 cycle/sec		3 cycle/sec

[Note1] NPT thread is available.

[Note2] Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.

[Note3] The maximum actuation frequency is in the no-load state.

[Note4] Equivalent orifice S and Cv are all calculated from the flow rate data.

Solenoid valve(5/2 way,5/3 way)

6V Series

Coil specification

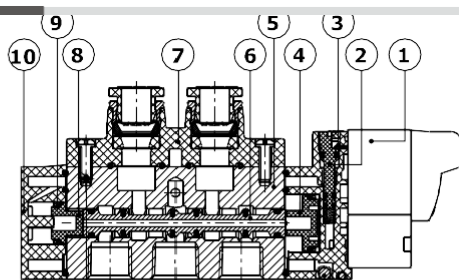
Item	Specification			
Standard voltage	AC220V	AC110V	DC24V	DC12V
Scope of voltage	AC : +15% ~-10%		DC : ±10%	
Power consumption	1.1VA		0.7W	
Protection	Dustproof			
Temperature classification	F Class			
Electrical entry	Terminal			
Activating time	0.05 sec and below			

Product feature

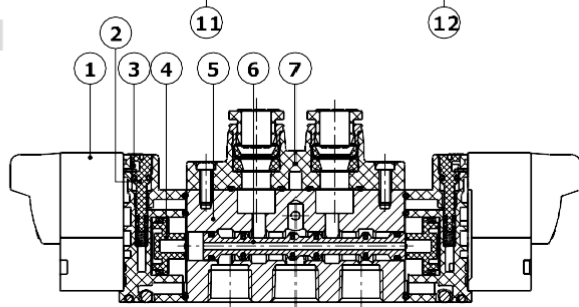
1. Electrical entry is terminal, horizontal and vertical insertion can freely switch.
2. Inner exhaust structure to collect pilot airflow, and then exhaust intensively from R, S port.
3. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
4. Threaded type and quick connector type are optional, and can integrate manifold to form valve group to save space.

Inner structure

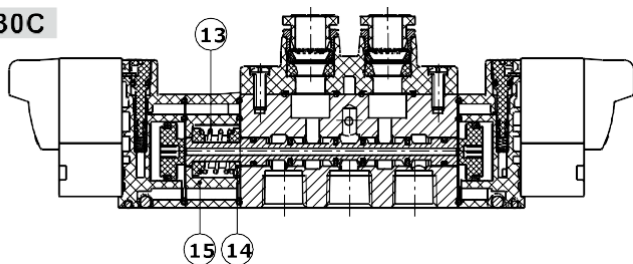
6V110



6V120

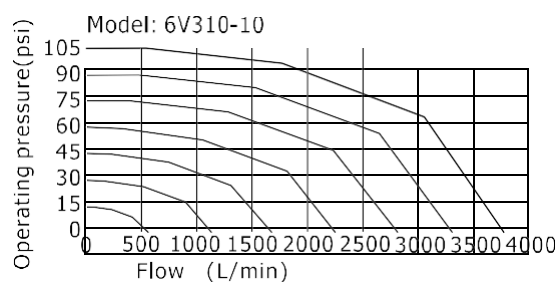
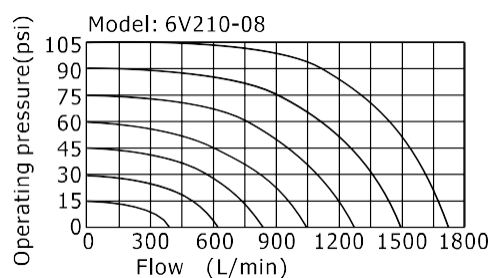
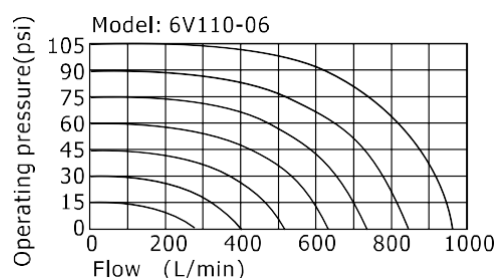
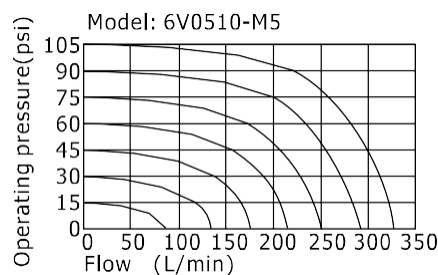


6V130C



No.	Item	No.	Item	No.	Item
1	Pilot valve	6	Spool	11	Bolt
2	Manual override	7	Connecting block	12	Steel ball
3	Pilot kit	8	Little piston	13	Spring
4	Big piston	9	Gasket	14	Return holder
5	Body	10	Bottom cover	15	Side cover

Flow chart



The data in flow rate chart are obtained from AirTAC lab.

Solenoid valve(5/2 way,5/3 way)

6V Series

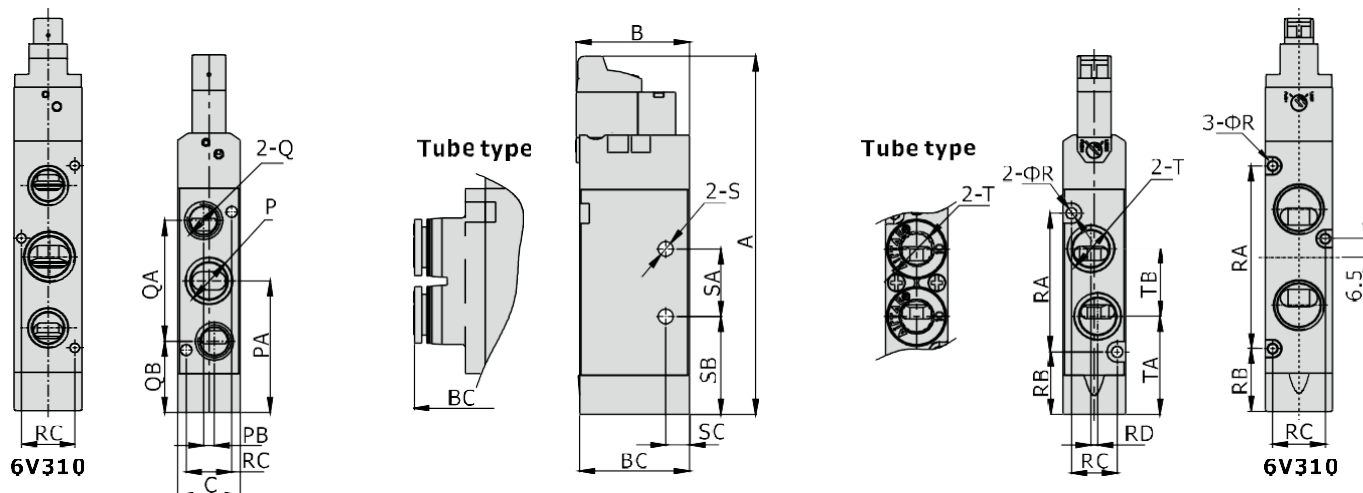
Dimensions

6V0510

6V110

6V210

6V310



Port size

[Unit: inch]

Model\Item	P	Q	T
6V0510M5	M5X0.8	M5X0.8	M5X0.8
6V0510J5/32			Φ5/32(tube)
6V110M5	M5X0.8	M5X0.8	M5X0.8
6V11006			1/8"
6V110J5/32	1/8"	1/8"	Φ5/32(tube)
6V110J1/4			Φ1/4(Tube)
6V110J5/16			Φ5/16(Tube)
6V21006	1/8"		1/8"
6V21008			1/4"
6V210J1/4	1/4"	1/8"	Φ1/4(Tube)
6V210J5/16			Φ5/16(Tube)
6V210J3/8			Φ3/8(Tube)
6V31010	3/8"	1/4"	3/8"

[Unit: mm]

Model\Item	A	B	BC	C	PA	PB	QA	QB	TA	TB	R	RA	RB	RC	RD	S	SA	SB	SC	
6V0510M5	73	31	21	10.6	22.5	1	19	13	17.5	10	2.1	22.5	11	7.5	0	Φ2.6	10	17.5	4	
6V0510J5/32			32.5													-	-	-	-	
6V110M5	93.5	32	24	15.5	33	-	29.8	18	25.2	15.4	2.6	34	16	11	0	-	Φ3.2	14	26	4
6V11006			2.6			28	19	24.5	16.5	0						-	-	-	-	
6V110J5/32																				
6V110J1/4																				
6V110J5/16																				
6V21006	106	33,5	32.5	18,5	39	3.2	36	21	30	18	3.2	41	18,5	13,5	2	-	Φ4.3	20	29	7
6V21008			50.6						29	20						2	-	-	-	-
6V210J1/4																				
6V210J5/16																				
6V210J3/8																				
6V31010	137.5	46	46	23.5	54	0.5	50	29	37	33.5	3.2	64	22	18.4	0	Φ4,3	25	41.5	8	

[Note]: The tube type solenoid valve is only used with the manifold. No through hole "S" on the side.

Solenoid valve(5/2 way,5/3 way)

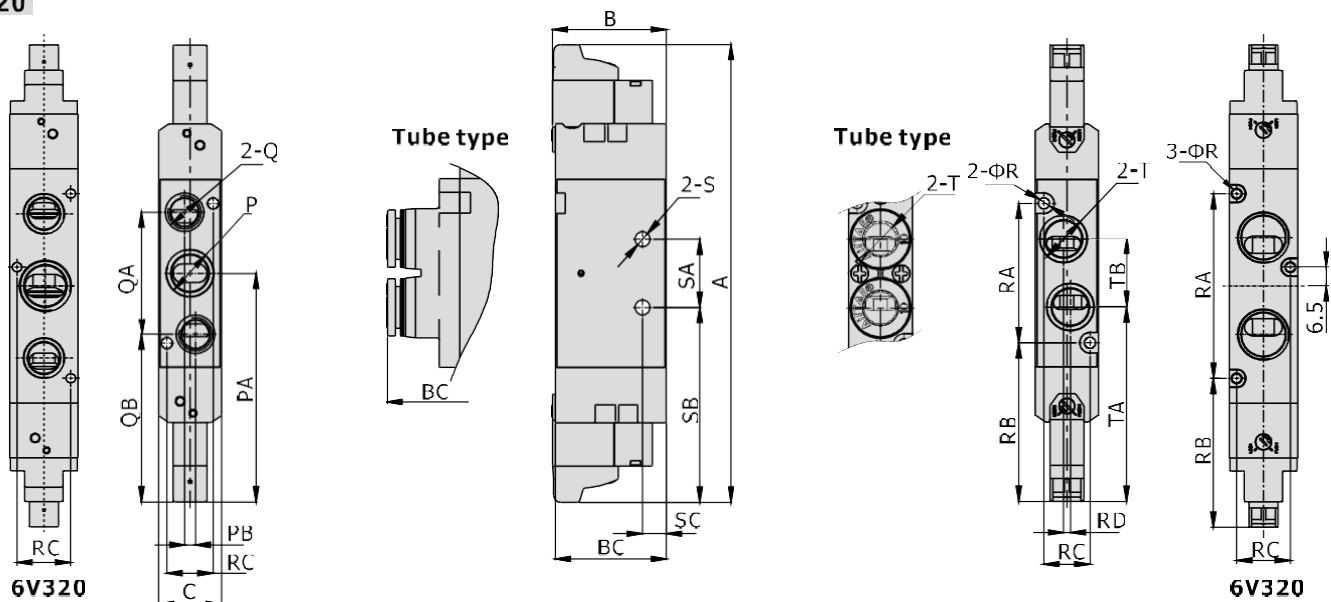
6V Series

6V0520

6V120

6V220

6V320



Port size

[Unit: inch]

Model\Item	P	Q	T
6V0520M5	M5X0.8	M5X0.8	M5X0.8
6V0520J5/32			Φ5/32(Tube)
6V120M5	M5X0.8	M5X0.8	M5X0.8
6V12006			1/8"
6V120J5/32			Φ5/32(Tube)
6V120J1/4			Φ1/4(Tube)
6V120J5/16			Φ5/16(Tube)
6V22006	1/8"		1/8"
6V22008			1/4"
6V220J1/4			Φ1/4(Tube)
6V220J5/16			Φ5/16(Tube)
6V220J3/8			Φ3/8(Tube)
6V32010	3/8"	1/4"	3/8"

[Unit: mm]

Model\Item	A	B	BC	C	PA	PB	QA	QB	TA	TB	R	RA	RB	RC	RD	S	SA	SB	SC
6V0520M5			21													Φ2.6	10	45.5	4
6V0520J5/32	101.5	31	32.5	10.6	51	1	19	41	45.5	10	2.1	22.5	39.5	7.5	0	-	-	-	-
6V120M5			24			-	29.8	46	53.7	15.4					-	Φ3.2	14	54	4
6V12006			39.5	15.5	61														
6V120J5/32	121.5	32	41			2.6	28	47	52.5	16.5	2.6	34	44	11	0	-	-	-	-
6V120J1/4			42.5																
6V120J5/16																			
6V22006			32.5						58	18					-	Φ4.3	20	57	7
6V22008			50.6	18.5	67	3.2	36	49	57	20	3.2	41	46.5	13.5	2	-	-	-	-
6V220J1/4	134	33.5																	
6V220J5/16			53.5																
6V220J3/8																			
6V32010	167	46	46	23.5	83.5	0.5	50	58.5	67	33.5	3.2	64	51.5	18.4	0	Φ4.3	25	71	8

[Note]: The tube type solenoid valve is only used with the manifold. No through hole "S" on the side.

Solenoid valve(5/2 way,5/3 way)

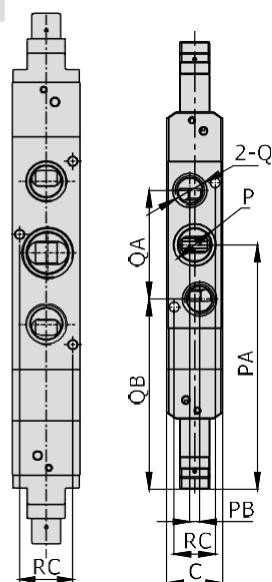
6V Series

6V0530

6V130

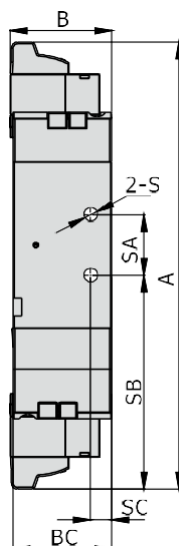
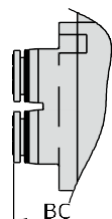
6V230

6V330

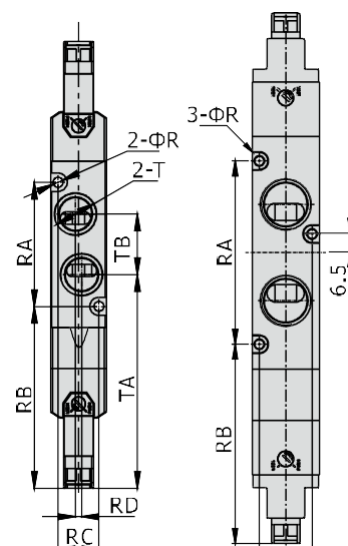
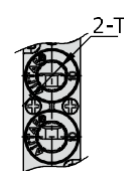


6V330

Tube type



Tube type



6V330

Port size

[Unit: inch]

Model\Item	P	Q	T
6V0530M5	M5X0.8	M5X0.8	M5X0.8
6V0530J5/32			Φ5/32(Tube)
6V130M5	M5X0.8	M5X0.8	M5X0.8
6V13006			1/8"
6V130J5/32			Φ5/32(Tube)
6V130J1/4			Φ1/4(Tube)
6V130J5/16			Φ5/16(Tube)
6V23006	1/8"		1/8"
6V23008			1/4"
6V230J1/4			Φ1/4(Tube)
6V230J5/16			Φ5/16(Tube)
6V230J3/8			Φ3/8(Tube)
6V33010	3/8"	1/4"	3/8"

[Unit: mm]

Model\Item	A	B	BC	C	PA	PB	QA	QB	TA	TB	R	RA	RB	RC	RD	S	SA	SB	SC
6V0530M5	110	31	21	10.6	59	1	19	50	54	10	2.1	22.5	48	7.5	0	Φ2.6	10	54	4
6V0530J5/32			32.5													-	-	-	-
6V130M5			24			-	29.8	58	64.7	15.4					-	Φ3.2	14	65.5	4
6V13006																			
6V130J5/32	133	32	39.5	15.5	72.5	2.6	28	59	64	16.5	2.6	34	55.5	11	0	-	-	-	-
6V130J1/4			41													-	-	-	-
6V130J5/16			42.5													-	-	-	-
6V23006			32.5						72	18					-	Φ4.3	20	70.7	7
6V23008																			
6V230J1/4	148	33.5	50.6	18.5	81	3.2	36	63	71	20	3.2	41	60.2	13.5	2	-	-	-	-
6V230J5/16																-	-	-	-
6V230J3/8			53.5																
6V33010	185	46	46	23.5	101.5	0.5	50	76.5	85	33.5	3.2	64	69.5	18.4	0	Φ4.3	25	89	8

[Note]: The tube type solenoid valve is only used with the manifold. No through hole "S" on the side.

Solenoid valve(Accessories)

Manifold for 6V series



Ordering code

Ordering code for manifold

6V100M 5F T

①

②

③

① Model	6V0500M: 6V0500 Series manifold	6V100M: 6V100 Series manifold	6V200M: 6V200 Series manifold	6V300M: 6V300 Series manifold
② Number of stations	1F: 1 Station 2F: 2 Station 3F: 3 Station 20F: 20 Station			
③ Thread type	T: NPT			

Ordering code for blank plate

P-6V100M-R2

①

②

① Model	6V0500M: 6V0500 Series manifold	6V100M: 6V100 Series manifold	6V200M: 6V200 Series manifold	6V300M: 6V300 Series manifold
② Code	R2: Blank plate for manifold			

[Note] 1. Manifold kits contains manifold, seal and screw; 2. Blank plate kits contains blank plate and screw.

Specification

Item \ Manifold Model	6V0500M	6V100M	6V200M	6V300M
Fluid	Air(to be filtered by 40μm filter element)			
Temperature	-10~50°C			
Adaptable valve's series	6V0500 Series	6V100 Series	6V200 Series	6V300 Series

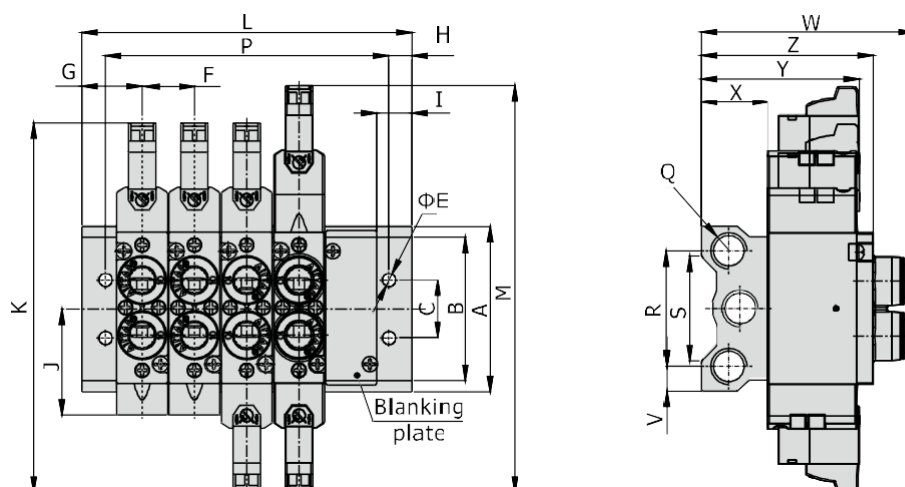
Product feature

1. It is available to integrate the direction control valves of the same series to form valve group to save space and cost.
2. It is easy to examine when there are faults owing to the unified air intake and exhaust and unified wiring.
3. Flexible combination and strong expansion capability can make any combination or expansion of the numbers of direction control valves that are connected.

Solenoid valve(Accessories)

Manifold for 6V series

Dimensions



[Unit: mm]

Model\Item	A	B	C	E	F	G	H	I	J	K	M	Q	R
6V0500M	46	32	16	4.5	11	15	5	9.5	22.5	102	110	1/8"	32
6V100M	57.5	43	20	4.5	16	17	5	9.5	33	121.5	133.5	1/4"	40
6V200M	60	52	21	4.5	19	18.5	5	9.5	38.5	134.5	148	1/4"	42
6V300M	85	75	26	4.5	23.5	24	5	12	54	167	185	3/8"	57

Model\Item	S	V	W			X	Y	Z	
6V0500M	26	7	36.2(M5)	50.5(15/32)			17	35.5	47.5
6V100M	36	9	55(M5/06)	62.5(J5/32)/64(J1/4)	65.5(J5/16)	22	46	54	
6V200M	38	9	58.5(06/08)	75.2(J1/4)/76.5(J5/16)	78.5(J3/8)	24	57.5	62.5	
6V300M	58	14	-	-	-	27	74	-	

Model\Item	L																			
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
6V0500M	30	41	52	63	74	85	96	107	118	129	140	151	162	173	184	195	206	217	228	239
6V100M	34	50	66	82	98	114	130	146	162	178	194	210	226	242	258	274	290	306	322	338
6V200M	37	56	75	94	113	132	151	170	189	208	227	246	265	284	303	322	341	360	379	398
6V300M	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	408	432	456	480	504

Model\Item	P																			
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
6V0500M	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207	218	229
6V100M	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	312	328
6V200M	27	46	65	84	103	122	141	160	179	198	217	236	255	274	293	312	331	350	369	388
6V300M	38	62	86	110	134	158	182	206	230	254	278	302	326	350	374	398	422	446	470	494

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