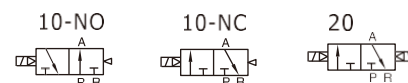


Solenoid valve(3/2 way)

6TV Series



Ordering code

6TV 1 10 06 NC B 050 T

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Model	6TV : Solenoid valve (3/2 way)					
②Code	05 : 0500 Series	1 : 100 Series		2 : 200 Series		3 : 300 Series
③Valve type	10 : Single solenoid 3/2 way			20 : Double solenoid 3/2 way		
④Port size	M5: M5	M5: M5	06 : 1/8"	06 : 1/8"	08 : 1/4"	10 : 3/8"
⑤Acting type	NC : Normally closed		NO : Normally opened	[Note: Double solenoid don't acting type]		
⑥Voltage	A: AC220V		B: DC24V	C: AC110V	F: DC12V	
⑦Wire length			050: 0.5m	200: 2.0m		
⑧Thread type	-		T: NPT			

Specification

Model	6TV0510	6TV0520	6TV110	6TV120
Port size [Note1]	In=Out=Exh=M5		In=Out=Exh=M5(or=1/8")	
Orifice size(Cv) [Note4]	M5:3.4mm ² (0.2)		06:8.9mm ² (0.52)	
Weight (g)	28	43	52	67
Model	6TV210	6TV220	6TV310	6TV320
Port size [Note1]	06:In=Out=Exh=1/8"		In=Out=3/8" Exh=1/4"	
	08:In=Out=1/4" Exh=1/8"			
Orifice size(Cv) [Note4]	08 : 15.4mm ² (0.91)		10:38.4mm ² (2.26)	
Weight (g)	90	105	180	215
Fluid	Air(to be filtered by 40μm filter element)			
Acting	Internal pilot			
Operating pressure	21~114psi(0.15~0.8MPa)			
Proof pressure	175psi(1.2MPa)			
Temperature	-20~70℃			
Material of body	Aluminum alloy			
Lubrication [Note2]	Not required			
Exhaust type of pilot valve	Main valve and pilot valve concentrated exhaust			
Max.frequency [Note3]	5 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(3/2 way)

6TV Series

Coil specification

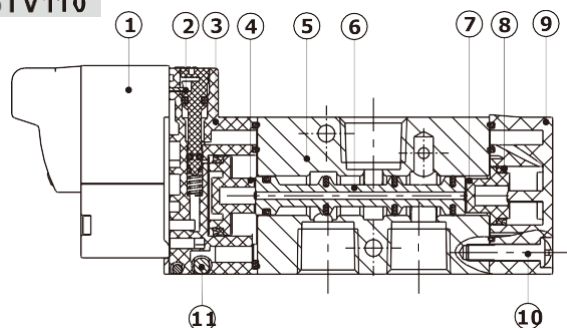
Item	Specification			
Standard voltage	AC220V	AC110V	DC24V	DC12V
Scope of voltage	AC : +15% ~-10%		DC : ±10%	
Power consumption	1.1VA		0.9W	
Protection	Dustproof			
Temperature classification	F Class			
Electrical entry	Terminal			
Activating time	0.05 sec and below			

Product feature

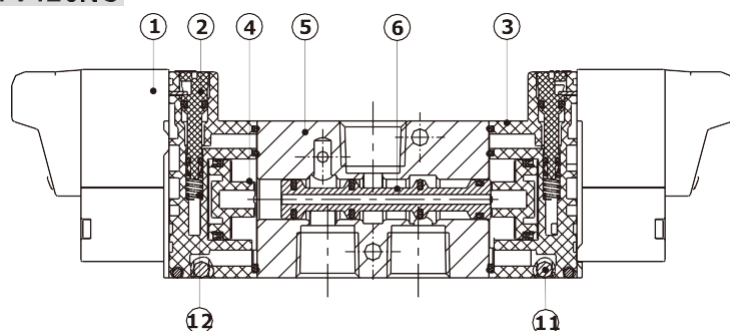
1. Electrical entry is terminal, horizontal and vertical insertion can freely switch.
2. Inner exhaust structure to collect pilot airflow, and then exhaust intensively from R port.
3. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service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

Inner structure

6TV110

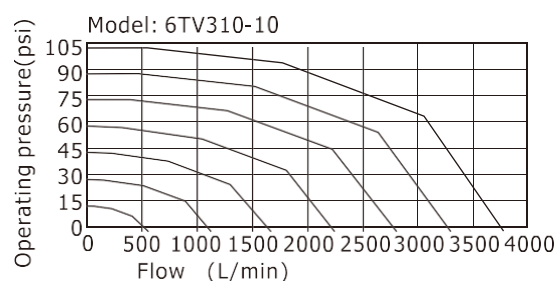
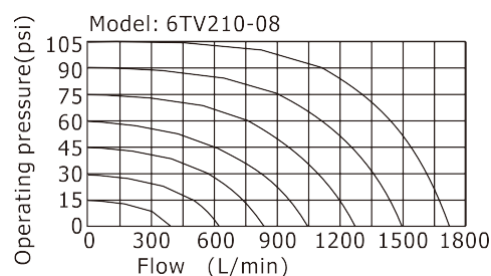
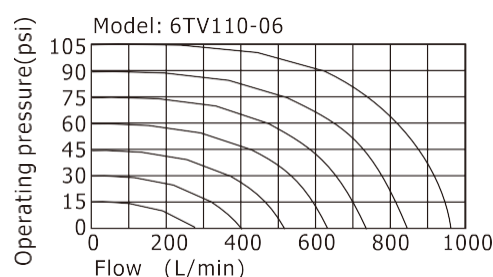
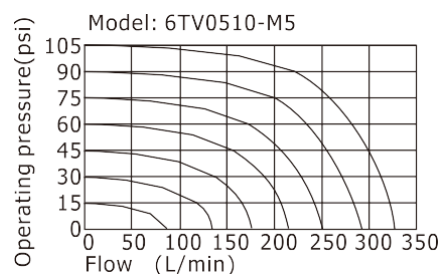


6TV120NC



No.	Item	No.	Item
1	Pilot valve	7	Small piston
2	Manual override	8	Gasket
3	Pilot kit	9	Bottom cover
4	Big piston	10	Bolt
5	Body	11	Steel ball
6	Spool	12	Spring

Flow chart



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

Solenoid valve(3/2 way)

6TV Series

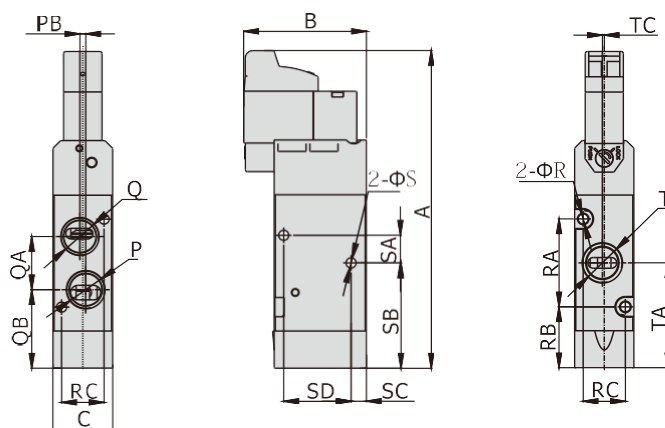
Dimensions

6TV0510

6TV110

6TV210

6TV310



Port size

[Unit: inch]

Model\Item	P	Q	T
6TV0510M5	M5X0.8	M5X0.8	M5X0.8
6TV110M5	M5X0.8	M5X0.8	M5X0.8
6TV11006	1/8"	1/8"	1/8"
6TV21006	1/8"	1/8"	1/8"
6TV21008	1/4"	1/8"	1/4"
6TV31010	3/8"	1/4"	3/8"

[Unit: mm]

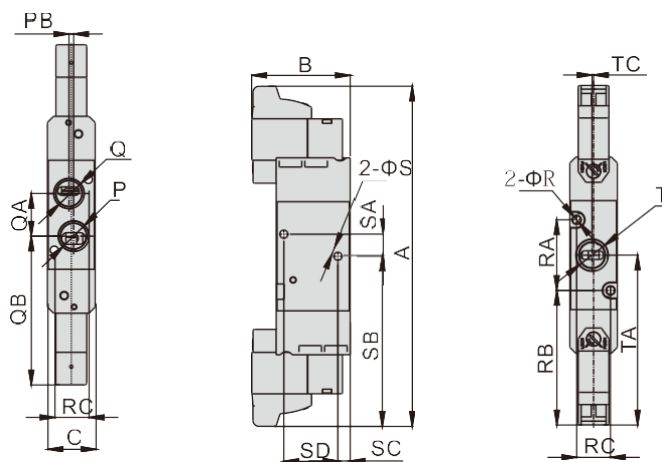
Model\Item	A	B	C	PB	QA	QB	R	RA	RB	RC	S	SA	SB	SC	SD	TA	TC
6TV0510M5	64.5	30.5	10.6	1	9.5	13.5	2.1	14	11.5	7.5	-	-	-	-	-	18.5	0.5
6TV110M5	83	32	15.5	-	14	20.5	2.6	23	16	11	Φ2.6	7.2	27.5	4	17.5	27.5	-
6TV11006	83	32	15.5	1.5	14	20.5	2.6	23	16	11	Φ2.6	7.2	27.5	4	17.5	27.5	0.5
6TV21006	97	33.5	18.5	-	18	25.5	3.2	33	18	13.5	Φ3.2	12	34.5	7	21	34.5	-
6TV21008	97	33.5	18.5	-	18	25.5	3.2	33	18	13.5	Φ3.2	12	34.5	7	21	34.5	1
6TV31010	116.5	46	23.5	-	28	29.5	3.2	43	22	18.4	Φ4.3	15	58.5	8	31	43.5	-

6TV0520

6TV120

6TV220

6TV320



Port size

[Unit: inch]

Model\Item	P	Q	T
6TV0520M5	M5X0.8	M5X0.8	M5X0.8
6TV120M5	M5X0.8	M5X0.8	M5X0.8
6TV12006	1/8"	1/8"	1/8"
6TV22006	1/8"	1/8"	1/8"
6TV22008	1/4"	1/8"	1/4"
6TV32010	3/8"	1/4"	3/8"

[Unit: mm]

Model\Item	A	B	C	PB	QA	QB	R	RA	RB	RC	S	SA	SB	SC	SD	TA	TC
6TV0520M5	93	30.5	10.6	1	9.5	41.5	2.1	14	39.5	7.5	-	-	-	-	-	18.5	0.5
6TV120M5	110.5	32	15.5	-	14	48.5	2.6	23	44	11	Φ2.6	7.2	55.5	4	17.5	27.5	-
6TV12006	110.5	32	15.5	1.5	14	48.5	2.6	23	44	11	Φ2.6	7.2	55.5	4	17.5	27.5	0.5
6TV22006	125	33.5	18.5	-	18	53.5	3.2	33	46	13.5	Φ3.2	12	62.5	7	21	34.5	-
6TV22008	125	33.5	18.5	-	18	53.5	3.2	33	46	13.5	Φ3.2	12	62.5	7	21	34.5	1
6TV32010	146	46	23.5	-	28	59	3.2	43	51.5	18.4	Φ4.3	15	73	8	31	43.5	-

[Note]: 6TV0510 type no through hole "S" on the side.

VAL TECHNOLOGY & ENGINEERING SDN. BHD.

No. 1, Lorong Teras Jaya 3, Taman Perindustrian Teras Jaya,
13400 Butterworth, Penang, Malaysia.

Tel: +604-333 4119 (Hunting) Fax: +604-333 4120

Email: sales@valtech.com.my

URL: www.valtech.com.my

Solenoid valve(3/2 way)

6TV Series
