

AVSDV-T

トグル式手動弁 Toggle Type Manual valve

Specialty Valves and Control Products **Dymatrix™**



Excellent durability

AVSDV-T has excellent durability and reliability.

Abundant line-up

We designed the AVSDV-T with wide variation sizes, Handle types can be selected to meet various customers situations. Panel Mount is possible as a standard.

Specifications

項目	Items	Unit	Size							
			□30			□40		□50	□60	
			3×2 ^{※1}	6×4	10×8 ^{※2}	10×8	12×10	19×16	25×22	
			3.18×1.6	6.35×4.35	9.53×6.35	9.53×6.35	12.70×9.53	19.05×15.88	25.40×22.20	
作動	Actuation	—	Manual Toggle Type							
流体温度	Medium Temperature	℃	5 ~ 90 ※ Please consult manufacturer for temp ranges of (5 ~ 140℃) MT or (10 ~ 200℃) HT							
構造耐圧	Proof Pressure	MPa	1.0 145psi							
使用圧力範囲 ^{※3}	Working Pressure range	MPa	0 ~ 0.5 0 ~ 72.5psi						0 ~ 0.4 0 ~ 58psi	
弁座漏れ量	Leakage Rate	cm ³ /min	0 (at hydraulic pressure 23℃)							
背圧 ^{※3}	Back Pressure	MPa	0 ~ 0.25 0 ~ 36.25psi		0 ~ 0.3 0 ~ 43.5psi		0 ~ 0.25 0 ~ 36.25psi		0 ~ 0.2 0 ~ 29psi	
周囲温度	Ambient Temperature	℃	5 ~ 60							
取付姿勢	Installation direction	—	Any direction							
接続	Connection	—	Flowell 20 series Flowell 60 series Super Type Pillar Fitting Super 300 Type Pillar Fitting Flare Type Tube Rc, FNPT							
	^{※5} Orifice diameter	mm	φ 4		φ 6	φ 8	φ 10	φ 16	φ 22	
Cv	^{※4} ^{※5} Cv value	A Type	0.08	0.26	—	1.16	1.8	4.4	7.4	
		B Type	0.08	0.3	0.8	1.2	2.1	5.3	8.1	

※1. Specifications only for the PTFE Body.

※2. Specifications only for the PFA Body(Super 300 Type Pillar Fitting, Flare Type).

※3. For the details, please refer to the characteristic graph of "Working pressure-Back pressure".

※4. "Cv value" is different by "Connection". Please refer to a list shown below.

※5. It is typical value.

Type	Connection
A type	Flowell 60 series
	Flare Type
B type	Flowell 20 series
	Super Type Pillar Fitting
	Super 300 Type Pillar Fitting
	Tube Rc, FNPT

Ordering Code

AVSDV - T ① ② ③ ④ ⑤ ⑥ ⑦

Actuation

T Toggle

Body materials ※1

A PFA

T PTFE

② Connection

2 Flowell 20 series

6 Flowell 60 series

S Super Type Pillar Fitting

3 Super 300 Type Pillar Fitting

F ※4 Flare Type

T ※3 Tube

R ※4 Rc

N ※4 FNPT

④ Mounting

1 Baseplate
Direction 1

2 ※5 Baseplate
Direction 2

⑤ Handle type ※5

0 90°
90° Lock Type

1 Non-Lock Type

2 180°
180° Lock Type

⑥ Chemical-resistant ※6

	O-ring ※7	Metal Coating
V 0	FKM	×
V 1	FKM	○
E 0	EPDM	×
E 1	EPDM	○
F 0	テフロン®F ※8 Viflon®F	×
F 1	テフロン®F ※8 Viflon®F	○
K 0	Kalrez®6190	×
K 1	Kalrez®6190	○

⑦ Connection tubing size

03 ※2	3×2	3.18×1.6		□30
06	6×4	6.35×4.35		□30
10A ※9	10×8	9.53×6.35		□40
10	10×8	9.53×6.35		□40
12	12×10	12.70×9.53		□40
19	19×16	19.05×15.88		□50
25	25×22	25.40×22.20		□60

Ordering code example
AVSDV-TAFI20V006
AVSDV-TTSM12E119

● Body Materials · Connection combination

Connection	□30 □40 □50 □60							
	03	06	10A	10	12	19	25	
2 Flowell 20 series	PTFE	PTFE	—	PTFE	PTFE	PTFE	PTFE	PTFE
6 Flowell 60 series	PTFE	PTFE	—	PTFE	PTFE	PTFE	PTFE	PTFE
S Super Type Pillar Fitting	PTFE	PTFE	—	PTFE	PTFE	PTFE	PTFE	PTFE
3 Super 300 Type Pillar Fitting	PTFE	PFA	PFA	PFA	PFA	PFA	PFA	PFA
F Flare Type	—	PFA	PFA	PFA	PFA	PFA	PFA	PFA
T Tube	—	PTFE	—	PTFE	PTFE	PTFE	PTFE	PTFE
R Rc	—	PTFE	—	PTFE	PTFE	PTFE	PTFE	PTFE
N FNPT	—	PTFE	—	PTFE	PTFE	PTFE	PTFE	PTFE

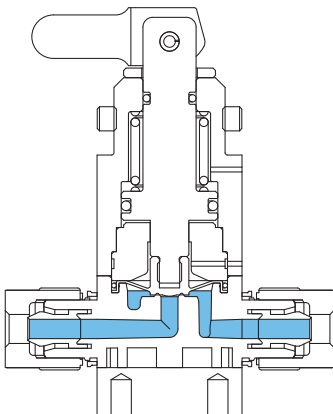
- ※1: In the case of the connection is "3", "F", remove tubing size "03", only "A" can be selected for the "Body Material". In the case of the other connection, only "T" can be selected for the "Body Material".
- ※2: In the case the tube diameter is "03", F, T, R and N connection is not available.
- ※3: Please refer to page 105 for diameter of "Tube".
- ※4: In the case of the connection is "F", "R" or "N", only "I (Inch)" can be selected for the "Tubing Standard".
- ※5: In the case of Mounting "2" there is some possibility of that the mounting holes are hidden by some connection from top side, and hard to be mounted.
- ※6: Please consult us for the specification if the medium is a strong chemical, strong acid etc.
- ※7: O-rings are not wetted.
- ※8: "Viflon" is the Terpolymerization Fluorocarbon Elastomers.
- ※9: Connection suitable only for "3" and "F"

Weight List (Reference)

(Unit) : kg

	Size							
	□30		□40		□50		□60	
	3×2	6×4	10×8	10×8	12×10	19×16	25×22	
	3.18×1.6	6.35×4.35	9.53×6.35	9.53×6.35	12.70×9.53	19.05×15.88	25.40×22.20	
PFA	—	—	0.1	—	0.3	0.4	0.8	
PTFE	—	0.1	—	—	0.3	0.5	0.9	

Parts & Materials



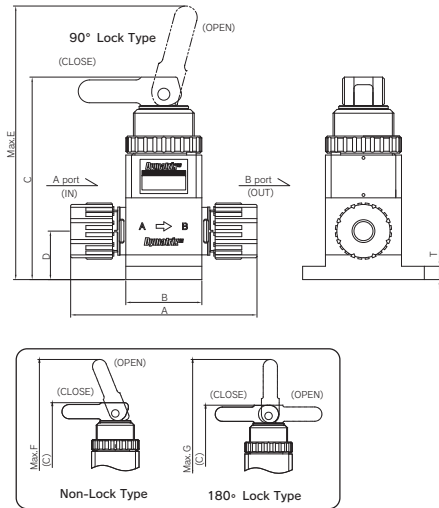
Parts	Chemical-resistant		Wetted parts
	0	1	
Body	PFA or PTFE		○
Diaphragm	PTFE		○
Actuator	PP / PVDF		
O-ring	FKM / EPDM / テフロン®F Viflon®F / Kalrez®6190		
Metal parts	SUS304	SUS304 PTFE Coating	

- AVPV3
- AVPVM
- AVPVL
- AVSDV
- AVSDVM
- AVSDVT
- AVSAS
- AVMPV
- AVDIV
- AVWM
- AVHRL
- AVHRL-M
- AVHPRS
- AVBPR
- AVCFV
- HDV12R
- HDVM
- AVQDV
- AVBVX
- AVPJX
- AVSIV
- AVFCS2
- AVFCN
- OTHER

Dimensions

Manual Toggle Type

(Unit) : mm

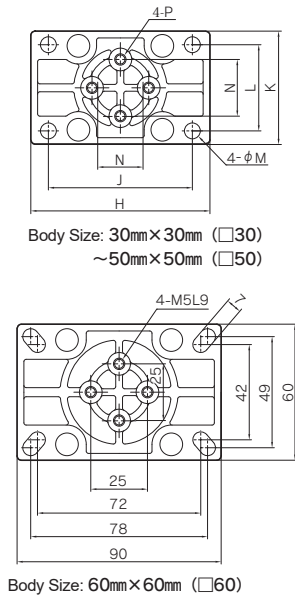


		Size							
		□30			□40		□50	□60	
		3×2 ※1	6×4	10×8 ※2	10×8	12×10	19×16	25×22	
A	Standard	3.18×1.6	6.35×4.35	9.53×6.35	9.53×6.35	12.70×9.53	19.05×15.88	25.40×22.20	
	Flowell 20 series	inch/mm	— / 66	— / 64	— / 85	93	112	144	
	Flowell 60 series	inch/mm	65 / 48	92 / 64	— / 82	118 / 90	138 / 112	162 / 144	
	Super Type Pillar Fitting	inch/mm	60 / 60	69 / 69	— / 93	100 / 100	129 / 129	150 / 150	
	Super 300 Type Pillar Fitting	inch/mm	60 / 60	68 (PFA) / 68	80 (PFA) / 80	90 (PFA) / 90	98 (PFA) / 98	122 (PFA) / 122	146 (PFA) / 146
	Flare Type	inch/mm	— / 86	92 (PFA) / 92	102 / 102	106 / 106	126 / 126	154 / 154	
	Tube	inch/mm	— / 90	— / 90	100 / 100	100 / 100	130 / 130	140 / 140	
	Rc, FNPT	inch/mm	— / 50	— / 50	72 / 72	72 / 72	90 / 90	110 / 110	
	B		□30			□40	□50	□60	
	C		84.5	89.5	106.5	129.5	158.5		
D		18	22	25.5	34	39			
E		107	112	144	174	227.5			
F		106	111	143	173.5	227			
G		107	112	145	175	228.5			
T		5			7				

- ※1. Specifications only for the PTFE Body.
- ※2. Specifications only for the PFA Body(Super 300 Type Pillar Fitting, Flare Type).
- ※3. Reference value.

Base Plate(PP/PVDF)

(Unit) : mm



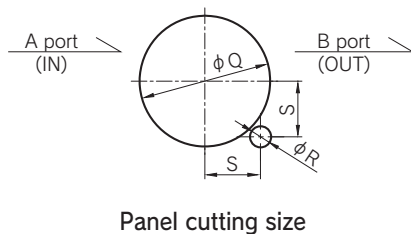
Body Size: 30mm×30mm (□30)
~50mm×50mm (□50)

Body Size: 60mm×60mm (□60)

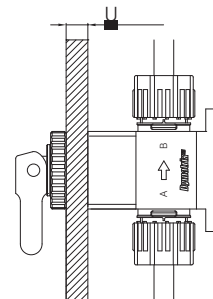
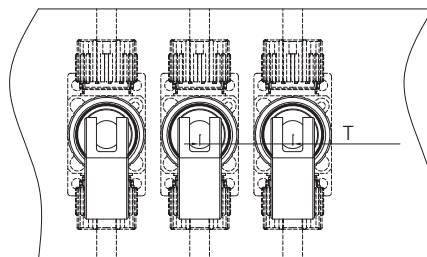
	Size						
	□30			□40		□50	□60
	3×2 ※1	6×4	10×8 ※2	10×8	12×10	19×16	25×22
	3.18×1.6	6.35×4.35	9.53×6.35	9.53×6.35	12.70×9.53	19.05×15.88	25.40×22.20
H	50			64		79	—
J	42			52		63.5	—
K	30			40		50	—
L	22			30		38	—
M	φ 4			φ 5.5		φ 7	—
N	20					25	—
P	M5L7.5						—
Q	24			34		42	52
R	5.5						
S	10.8			14.5		18.5	23
T	40			50		60	70
U	11			16		14	10

- ※1. Specifications only for the PTFE Body.
- ※2. Specifications only for the PFA Body(Super 300 Type Pillar Fitting, Flare Type).
- ※3. Reference value.

Panel Mounting

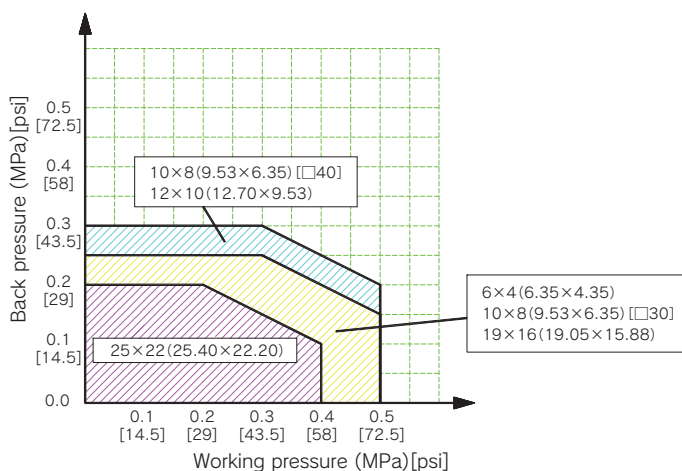


Panel cutting size



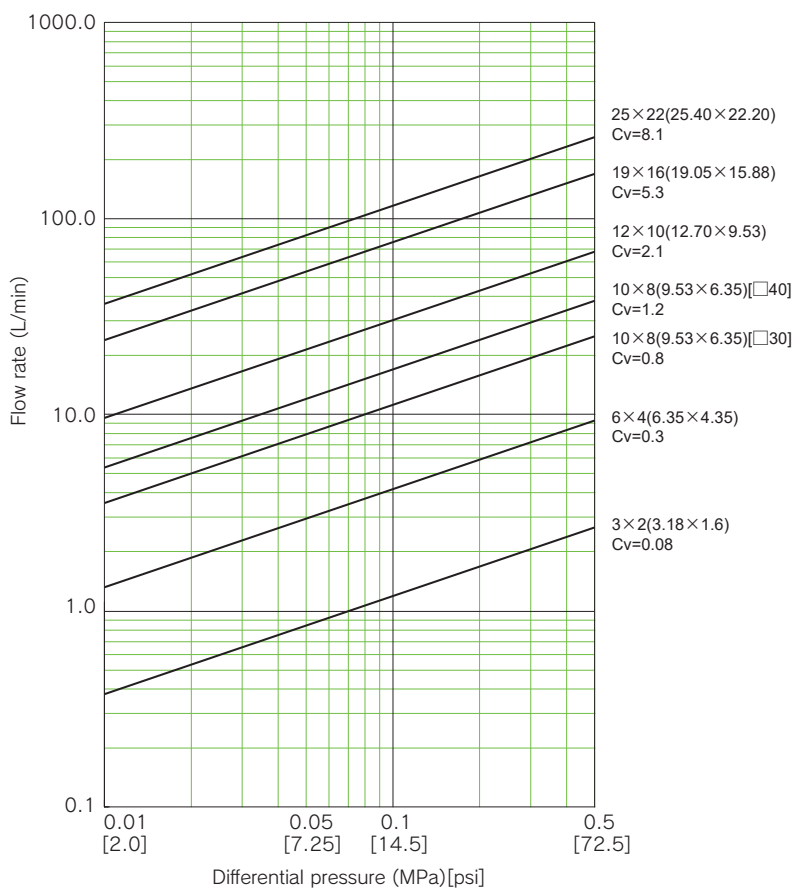
Technical Data

Working pressure - Back pressure



Technical Data (Common data of SDV series)

Differential Pressure - Flow rate



※1. The date of "B type Cv value".
※2. The data shown here is the experimental values and the reference values.

- AVPV3
- AVPVM
- AVPVS
- AVSDV
- AVSDVM
- AVSDVT
- AVSAS
- AVMPV
- AVDIV
- AVVM
- AVHRL
- AVHRL-M
- AVHPRS
- AVBPR
- AVCFV
- HDV12R
- HDVM
- AVQDV
- AVBVX
- AVPJX
- AVSIV
- AVFCS2
- AVFCN
- OTHER