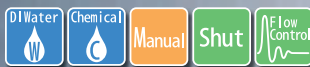


# AVSDV-M

マルチターン式手動弁 Multi turn Type Manual valve

Specialty Valves and Control Products **Dymatrix™**



## Excellent durability

AVSDV-M has excellent durability and reliability.

## Abundant line-up

We designed the AVSDV-M with wide variation sizes. Panel Mount is possible as a standard.

## Specifications

項目 Items	Unit	□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 Multi-turn 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						
弁座漏れ量 Leakage Rate	cm <sup>3</sup> /min	0 (at hydraulic pressure 23℃ )						
背圧 ※3 Back Pressure	MPa	0 ~ 0.5 0 ~ 72.5psi						
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 値 ※4 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 of " Working pressure-Back pressure".

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

※5. 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- P** ① ② ③ ④ ⑤ ⑥ ⑦

**Actuation**

**P** Manual (Push-lock)

**Body materials<sup>※1</sup>**

**A** PFA

**T** PTFE

**Connection**

**2** Flowell 20 series

**6** Flowell 60 series

**S** Super Type Pillar Fitting

**3** Super 300 Type Pillar Fitting

**F<sup>※3</sup>** Flare Type

**T<sup>※4</sup>** Tube

**R<sup>※3</sup>** Rc

**N<sup>※3</sup>** FNPT

**Tubing standard**

**M** Millimeter

**I** Inch

**Mounting**

**1** Baseplate

Direction 1

**2<sup>※5</sup>** Baseplate

Direction 2

**Mountnut**

**0** Off

**1** On

**Chemical-resistant<sup>※6</sup>**

**O-ring<sup>※7</sup>**

<b>V</b>	<b>0</b>	<b>FKM</b>	<b>X</b>
<b>V</b>	<b>1</b>		<b>○</b>
<b>E</b>	<b>0</b>	<b>EPDM</b>	<b>X</b>
<b>E</b>	<b>1</b>		<b>○</b>
<b>F</b>	<b>0</b>	<b>テフロン<sup>※8</sup></b>	<b>X</b>
<b>F</b>	<b>1</b>	<b>Vijlon F<sup>※8</sup></b>	<b>○</b>
<b>K</b>	<b>0</b>	<b>Kalrez<sup>®</sup> 6190</b>	<b>X</b>
<b>K</b>	<b>1</b>		<b>○</b>

**Connection tubing size**

<b>3X 2</b>	<b>3.18× 1.6</b>	<input type="checkbox"/>	<b>30</b>
<b>06</b>	<b>6× 4</b>	<input type="checkbox"/>	<b>30</b>
<b>10A<sup>※9</sup></b>	<b>10× 8</b>	<input type="checkbox"/>	<b>30</b>
<b>10</b>	<b>10× 8</b>	<input type="checkbox"/>	<b>40</b>
<b>12</b>	<b>12×10</b>	<input type="checkbox"/>	<b>40</b>
<b>19</b>	<b>19×16</b>	<input type="checkbox"/>	<b>50</b>
<b>25</b>	<b>25×22</b>	<input type="checkbox"/>	<b>60</b>

Ordering code example

AVSDV-PAF11E119

AVSDV-PTTM20K125

Body Materials · Connection combination

Connection	□30		□40			□50	□60
	03	06	10A	10	12	19	25
<b>2</b> Flowell 20 series	PTFE	PTFE	—	PTFE	PTFE	PTFE	PTFE
<b>6</b> Flowell 60 series	PTFE	PTFE	—	PTFE	PTFE	PTFE	PTFE
<b>S</b> Super Type Pillar Fitting	PTFE	PTFE	—	PTFE	PTFE	PTFE	PTFE
<b>3</b> Super 300 Type Pillar Fitting	PTFE	PFA	PFA	PFA	PFA	PFA	PFA
<b>F</b> Flare Type	—	PFA	PFA	PFA	PFA	PFA	PFA
<b>T</b> Tube	—	PTFE	—	PTFE	PTFE	PTFE	PTFE
<b>R</b> Rc	—	PTFE	—	PTFE	PTFE	PTFE	PTFE
<b>N</b> FNPT	—	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 case the tube diameter is "03", F,T,R and N connection is not available.
- ※3 : In the case of the connection is "F","R" or "N", only "I (Inch)" can be selected for the "Tubing Standard"
- ※4 : Please refer to page 105 for diameter of "Tube".
- ※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 for only "3"and"F"

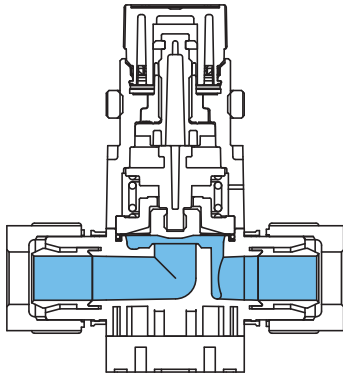
- AVPV3
- AVPVM
- AVPVL
- AVSDV
- AVSDVM
- AVSDVT
- AVSAS
- AVMPV
- AVDIV
- AVVM
- AVHRL
- AVHRLM
- AVHPRS
- AVBPR
- AVCFV
- HDV12R
- HDVM
- AVQDV
- AVBVX
- AVPJX
- AVSIV
- AVFCS2
- AVFCN
- OTHER

## 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 × 3.95	9.53 × 6.35	9.53 × 6.35	12.70 × 9.53	19.05 × 15.88	25.40 × 22.20
PFA	—	0.15	—	0.25	0.3	0.5	0.8
PTFE	—	0.15	—	0.25	0.3	0.6	0.9

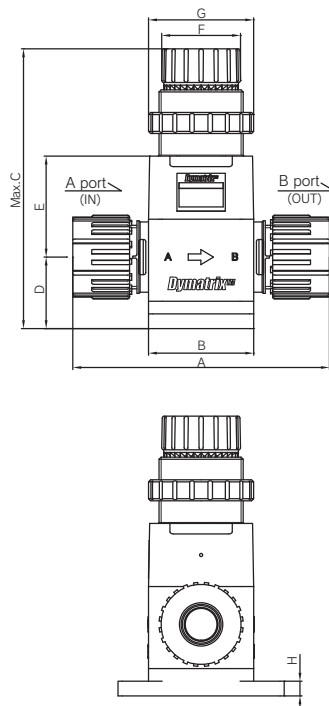
## Parts & Materials



Parts	Chemical-resistant		Wetted parts
	0	1	
Body	PFA or PTFE		○
Diaphragm	PTFE		○
Actuator	PVDF		
O-ring	FKM / EPDM / <b>HYDRO-F</b> Viton® F / Kalrez® 6190		
Metal parts	SUS304	SUS304 PTFE Coating	

## Dimensions

(Unit) : mm



	Standard	Size							
		□ 30			□ 40		□ 50	□ 60	
		3 × 2*1	6 × 4	10 × 8*2	10 × 8	12 × 10	19 × 16	25 × 22	
		3.18 × 1.60	6.35 × 4.35	9.53 × 6.35	9.53 × 6.35	12.70 × 9.53	19.05 × 15.88	25.40 × 22.20	
A	Flowell 20 series	inch	—	66	—	85	93	112	144
		mm	48	64	—	82	90	112	144
	Flowell 60 series	inch	65	92	—	118	118	138	162
		mm	65	90	—	114	114	138	159
	Super Type Pillar Fitting	inch/mm	60	69	—	93	100	129	150
	Super 300 Type Pillar Fitting	inch/mm	60	68 (PFA)	80 (PFA)	90 (PFA)	98 (PFA)	122 (PFA)	146 (PFA)
	Flare Type	inch	—	86 (PFA)	92 (PFA)	102 (PFA)	106 (PFA)	126 (PFA)	154 (PFA)
Tube	inch/mm	—	90	—	100	100	130	140	
Rc.FNPT	inch	—	50	—	72	72	90	110	
B		□ 30			□ 40		□ 50	□ 60	
C		102.5	107.5	—	111.5	—	133	165	
D		18	22	—	25.5	—	34	39	
E		29	30	—	32.5	—	48	63	
F		22			38				
G		30			40		50	60	
H		5			7				

※ 1. Specifications only for the PTFE Body.

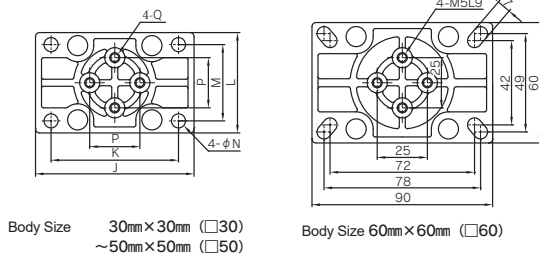
※ 2. Specifications only for the PFA Body (Super 300 Type Pillar Fitting, Flare Type).

※ 3. Reference value.

Dimensions

● Base Plate

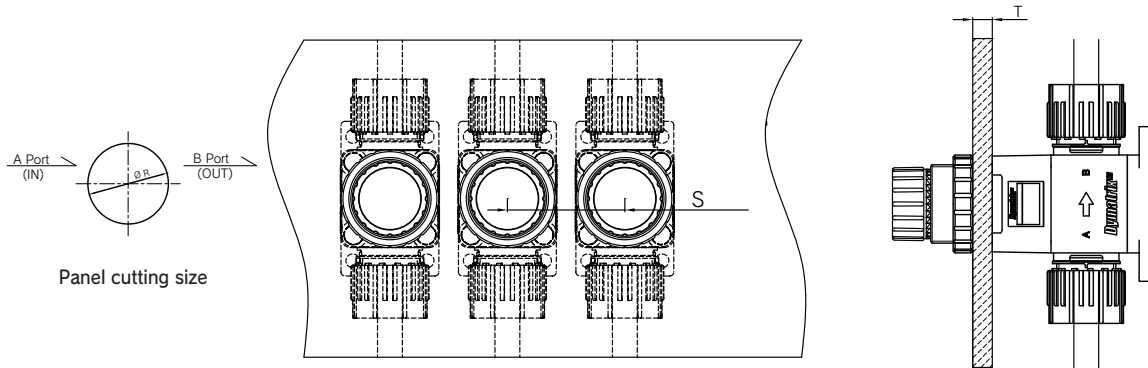
(Unit) : mm



	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
J	50		64		79	—	
K	42		52		63.5	—	
L	30		40		50	—	
M	22		30		38	—	
N	4.2		5.5		7	—	
P			20		25	—	
Q	M5L10		M5L13		M5L7.5	—	
R	24		34		42	52	
S	40		50		60	70	
T			1.5 ~ 10		1.5 ~ 21.5	1.5 ~ 15	

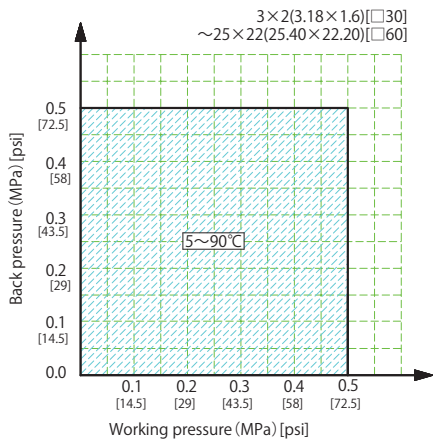
- ※ 1. Specifications only for the PTFE Body.
- ※ 2. Specifications only for the PFA Body (Super 300 Type Pillar Fitting, Flare Type).
- ※ 3. Reference value.

● Panel Mounting

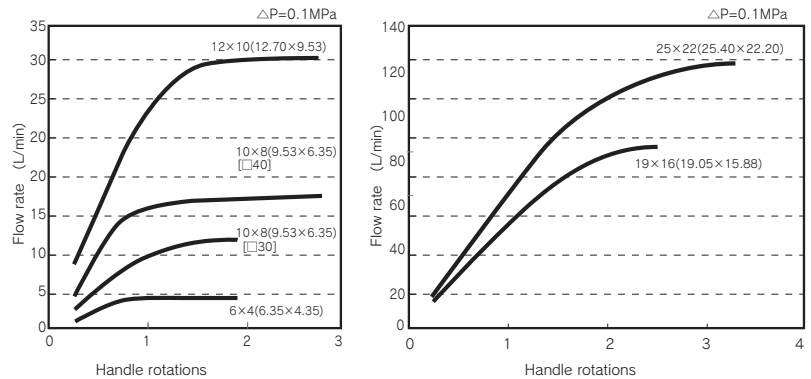


Technical Data

Working pressure - Back pressure



Handle rotations - Flow rate



- ※ 1. In the case of a micro opening degree of the use, there would be the cavitation or the fluctuation of flow depending on a condition. Please review the fluid pressure and piping design.
- ※ 2. The data shown here is the experimental values and the reference values.

- AVPV3
- AVPVM
- AVPSL
- AVSDV
- AVSDVM
- AVSDVT
- AVSAS
- AVMPV
- AVDIV
- AVVM
- AVHRL
- AVHRLM
- AVHPRS
- AVBPR
- AVCFV
- AVF2R
- HDVM
- AVQDV
- AVBVX
- AVPJX
- AVSIV
- AVFCS2
- AVFCN
- OTHER