

# AVDIV

## 3方切替弁 Diverting valve

Specialty Valves and Control Products **Dymatrix™**



### For various applications

6 flow patterns of 3 ports are available for various applications.

### Excellent Cv value performance

AVDIV is equivalent in Cv value performance to AVSDV.

## Specifications

項目	Items	Unit	Size		
			□40	□50	
			6×4	10×8	12×10
			6.35×4.35	9.53×6.35	12.70×9.53
流体温度	Medium Temperature	°C	5 ~ 90		
構造耐圧	Proof Pressure	MPa	1.0 145psi		
使用圧力範囲	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°C)		
背圧	Back Pressure	MPa	0 ~ 0.25 0 ~ 36.25psi		
周囲温度※1	Ambient Temperature	°C	5 ~ 60		
開閉頻度	Frequency of opening and closing	times/min	< 20		
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		
オリフィス※4	Orifice diameter	mm	φ 7	φ 12	
Cv値※4	Cv value	A Type※2	0.28	1.4	1.8
		B Type※2	0.27	1.2	1.8
重量	Weight	kg	0.25	0.51	0.54
Pilot	Pilot pressure	MPa	0.4 ~ 0.5 58 ~ 72.5psi	0.35 ~ 0.5 50.8 ~ 72.5psi	
	Pilot air consumption※3	L/times (ANR)	0.08	0.28	
	Pilot port		Rc1/8", FNPT1/8"		

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

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

※3. The pilot air consumption is the value at 0.4MPa.

※4. Typical values.

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

Ordering Code

**AVDIV** — **3** **T** ① ② ③ ④ ⑤ ⑥ ⑦

**Actuation**

**3** Diverting valve

**Body materials**

**T** PTFE

**① Connection**

<b>2</b>	Flowell 20 series
<b>6</b>	Flowell 60 series
<b>S</b>	Super Type Pillar Fitting
<b>3</b>	Super 300 Type Pillar Fitting
<b>F</b> ※1	Flare Type
<b>T</b> ※2	Tube

**② Tubing standard**

<b>M</b>	Millimeter
<b>I</b>	Inch

**③ Mounting**

<b>1</b>	Baseplate (Direction1)	
<b>2</b>	Baseplate (Direction2)	

**④ Flow direction**

	<b>1</b>	<b>2</b>
<b>A</b>		
<b>B</b>		
<b>C</b>		

**⑤ Pilot port**

<b>R</b>	Rc 1/8"
<b>N</b>	FNPT 1/8"

**⑥ Chemical-resistant** ※3

	O-ring	Metal Coating
<b>V</b> 0	FKM	×
<b>1</b>	FKM	○
<b>E</b> 0	EPDM	×
<b>1</b>	EPDM	○
<b>F</b> 0	テフロン®F ※5 Viflon®F	×
<b>1</b>	テフロン®F ※5 Viflon®F	○
<b>K</b> 0	Kalrez®6190	×
<b>1</b>	Kalrez®6190	○

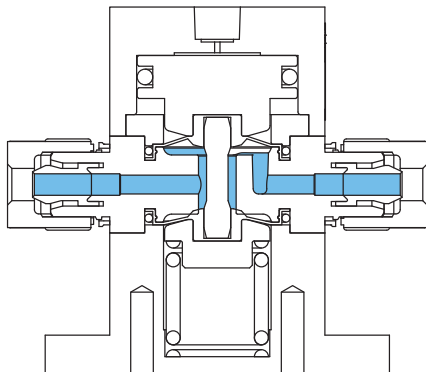
**Connection tubing size**

<b>06</b>	6× 4	6.35× 4.35	<input type="checkbox"/> 40
<b>10</b>	10× 8	9.53× 6.35	<input type="checkbox"/> 50
<b>12</b>	12×10	12.70× 9.53	<input type="checkbox"/> 50

Ordering code example  
**AVDIV-3T3I1A1RV006**  
**AVDIV-3TFI2C1NV106**

※1 : In the case of the connection is "F", only "I (Inch)" can be selected for the "Tubing Standard".  
 ※2 : Please refer to page 105 for diameter of "Tube".  
 ※3 : Please consult us for the specification if the medium is a strong chemical, strong acid etc.  
 ※4 : O-rings are not wetted.  
 ※5 : "Viflon" is the Terpolymerization Fluorocarbon Elastomers.

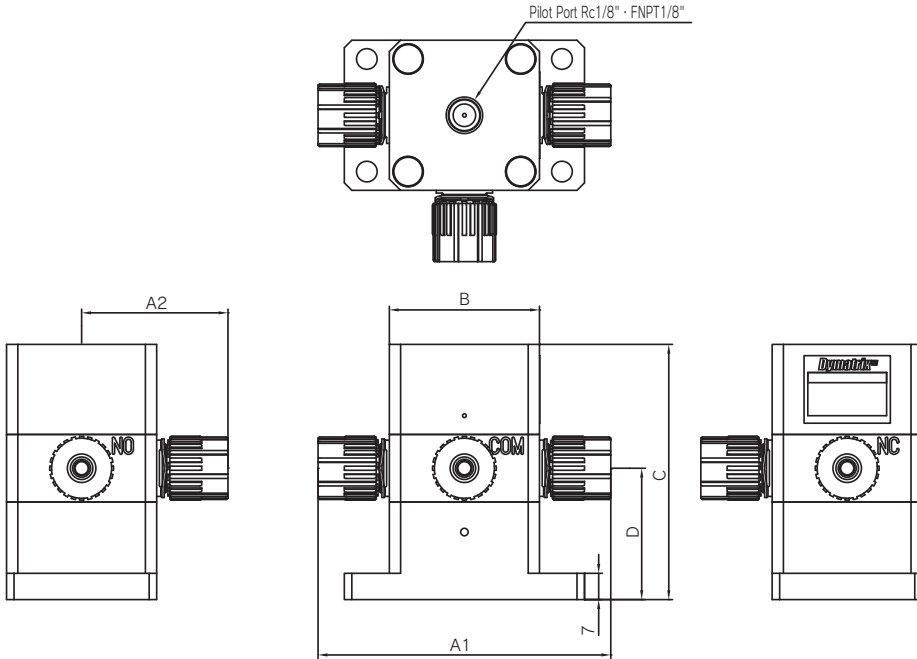
Parts & Materials



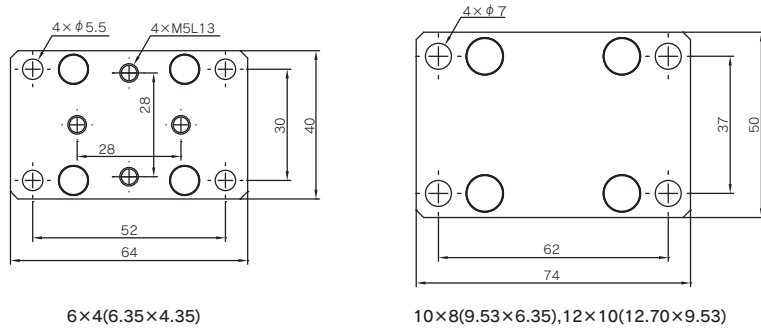
Parts	Chemical-resistant		Wetted parts
	0	1	
Body	PTFE		○
Diaphragm	PTFE / PCTFE		○
Actuator	PVDF		
O-ring	FKM / EPDM / テフロン®F Viflon®F / Kalrez®6190		
Metal parts	SUS304	SUS304 PTFE Coating	

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

## Dimensions



### ● Base Plate



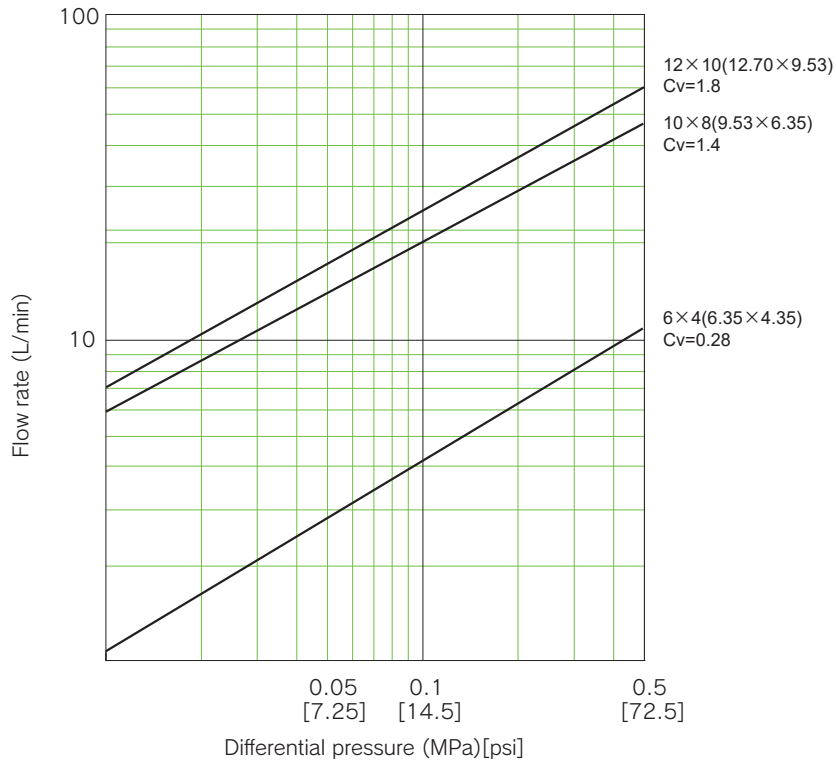
Unit) : mm

		Standard	Size		
			6 × 4 6.35 × 4.35	10 × 8 9.53 × 6.35	12 × 10 12.70 × 9.53
A1	Flowell 20 series	inch	76	95	103
		mm	74	92	100
	Flowell 60 series	inch	102	128	128
		mm	100	124	124
	Super Type Pillar fitting	inch/mm	79	103	110
	Super 300 Type Pillar fitting	inch/mm	78	100	108
Flare Type	inch	96	112	116	
	Tube	inch/mm	100	110	110
A2	Flowell 20 series	inch	38	47.5	51.5
		mm	37	46	50
	Flowell 60 series	inch	51	64	64
		mm	50	62	62
	Super Type Pillar fitting	inch/mm	39.5	51.5	55
	Super 300 Type Pillar fitting	inch/mm	39	50	54
Flare Type	inch	48	56	58	
	Tube	inch/mm	50	55	55
B			□ 40	□ 50	
C			68	95	
D			35	50	

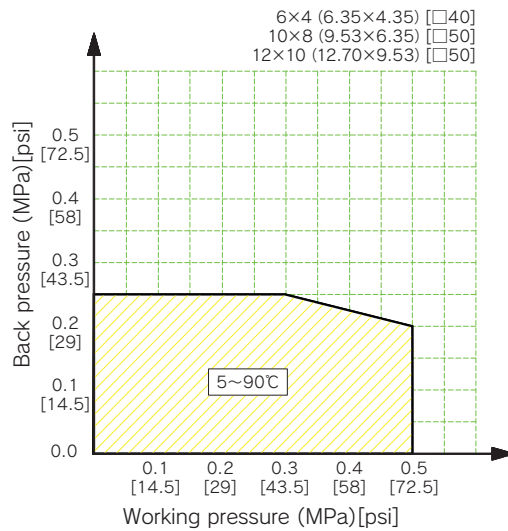
※ Reference values

Technical Data

Differential pressure - Flow rate



Working pressure - Back pressure



※ The data shown here is the experimental values and the reference values.

- AVPV3
- AVPVM
- AVPVS
- AVSDV
- AVSDVM
- AVSDVT
- AVSAS
- AVMPV
- AVDIV
- AVNVM
- AVHPR
- AVHPRLM
- AVHPRSL
- AVHPRS
- AVBPR
- AVCFV
- HDV12R
- HDVW
- AVQDV
- AVBVX
- AVPJX
- AVSIV
- AVFCS2
- AVFCN
- OTHER