

AVNVM

ニードル弁 Needle valve

Specialty Valves and Control Products **Dymatrix™**



Easy Operation

AVNVM provides easy & precise flow control by the dual threaded stem structure, which gives liner flow characteristic and fine-tuning of flow.

Diaphragm Structure

Diaphragm isolates moving part from wetted part and it restrains the generation of particles.
All fluororesin made for wetted part.

Specifications

項目	Items	単位 Unit	Size		
			6×4 6.35×4.35	10×8 9.53×6.35	12×10 12.70×9.53
作動	Actuation	—	Manual Multi-turn Type		
流体温度	Medium Temperature	℃	5 ~ 90 ※ Please consult manufacturer for temp ranges of (10 ~ 200℃) HT		
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		
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		
重量	Weight	PFA Body	0.12	0.17	0.19
		PTFE Body	0.17	0.23	0.25

Ordering Code

AVNVM ① — ② — **P** ③ ④ ⑤ ⑥ **S** ⑦ ⑧

① Actuator Size※1

30	<input type="checkbox"/> 30
35	<input type="checkbox"/> 35

② Maximum flow rate※1

010	100 mL/min
050	500 mL/min
120	1200 mL/min
180	1800 mL/min
300	3000 mL/min
380	3800 mL/min
900	9000 mL/min
10L	10 L/min

③ Body material※1

A	PFA
T	PTFE

④ Connection※1

2	Flowell 20 series
6	Flowell 60 series
S	Super Type Pillar Fitting
3	Super 300 Type Pillar Fitting
F	Flare Type
T	Tube
R	Rc

⑤ Tubing Standard

M	Millimeter
I	Inch

⑥ Mounting

1 Baseplate

2*4 Baseplate

⑦ Chemical-resistant※5

	O-ring	Metal Coating
V	FKM	×
E	EPDM	×
F	バイフロン®F	×
K	Kalrez® 6190	○

⑧ Connection tubing size※1

06	6×4	6.35×4.35	<input type="checkbox"/> 30
10	10×8	9.53×6.35	<input type="checkbox"/> 35
12	12×10	12.70×9.53	<input type="checkbox"/> 35

Actuation

P	Manual (Push-lock)
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Flow direction※1

S	Straight
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Ordering code example

AVNVM30-010-PT311SV006

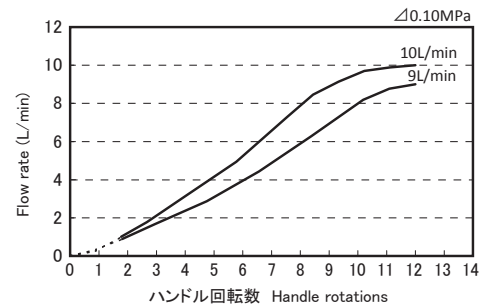
AVNVM30-180-PA312SV006

AVNVM35-10L-PT611SV012

- ※1: Please refer to the body size combination for body size material selection.
- In the case of Body material "A", only "3" can be selected for the "Connection".
- ※2: In the case of the connection is "F", "R", only "I (Inch)" can be selected for the "Tubing Standard".
- ※3: Please refer to page 105 for diameter of "Tube".
- ※4: In the case of Connection tubing size "10" or "12" specifications of Mounting "2" cannot chosen.
- ※5: Please consult us for the specification if the medium is a strong chemical, strong acid etc.
- ※6: O-rings are not wetted.
- ※7: "Viflon" is the Terpolymerization Fluorocarbon Elastomers.

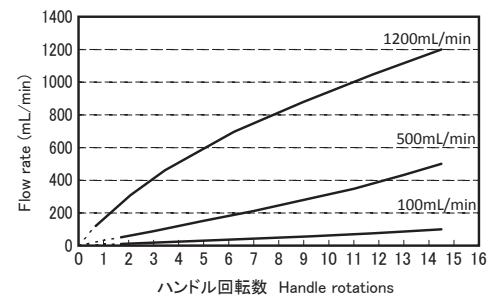
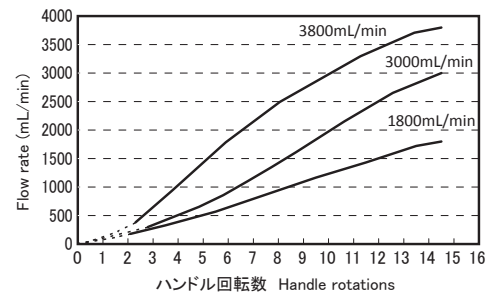
●Straight : Super 300 Type Pillar Fitting

Max. flow rate mL/min	100	500	1200	1800	3000	3800	9000	10000
	010	050	120	180	300	380	900	10L
Cv value	0.007	0.035	0.083	0.125	0.210	0.265	0.63	0.7
Orifice size	φ2	φ2	φ2	φ3.5	φ4	φ6	φ6	φ7
Body material	PTFE			PFA				
<input type="checkbox"/> 30	06	○	○	○	○	○	○	
<input type="checkbox"/> 35	10						○	
	12							○



●Straight : Other Connection

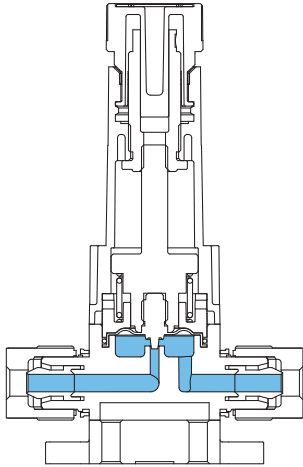
Max. flow rate mL/min	100	500	1200	1800	3000	3800	9000	10000
	010	050	120	180	300	380	900	10L
Cv value	0.007	0.035	0.083	0.125	0.210	0.26	0.63	0.7
Orifice size	φ2	φ2	φ2	φ3.5	φ4	φ6	φ6	φ7
Body material	PTFE							
<input type="checkbox"/> 30	06	○	○	○	○	○	○	
<input type="checkbox"/> 35	10						○	
	12							○



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

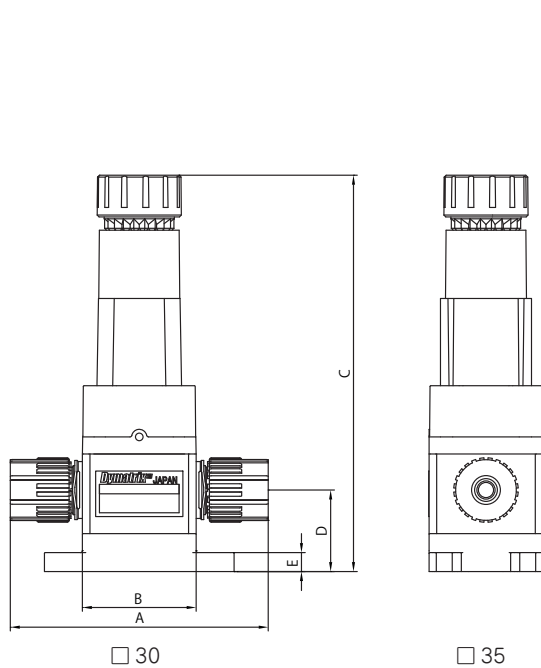
- AVPV3
- AVPVM
- AVPVL
- AVPVL
- AVSDV
- AVSDVM
- AVSDVT
- AVSAS
- AVMPV
- AVDIV
- AVNVM
- AVHRL
- AVHRL-M
- AVHPRS
- AVBPR
- AVCFV
- HDV12R
- HDVW
- AVQDV
- AVBVX
- AVPJX
- AVSIV
- AVFCS2
- AVFCN
- OTHER

Parts & Materials



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

Dimensions

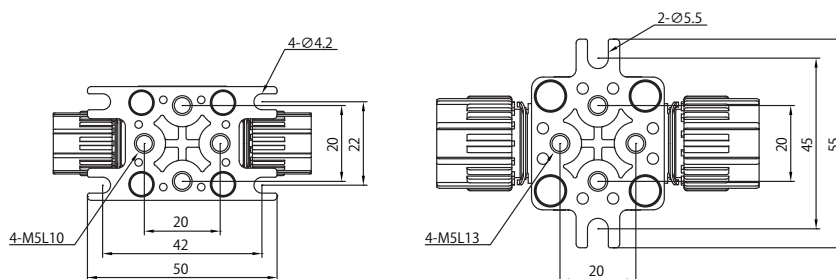


Unit) : mm

Standard	Size				
	6×4	10×8	12×10		
	6.35×4.35	9.53×6.35	12.70×9.53		
A	Flowell 20 series	inch	66	80	88
		mm	64	77	85
A	Flowell 60 series	inch	92	113	113
		mm	90	109	109
	Super Type Pillar Fitting	inch/mm	69	88	95
	Super 300 Type Pillar Fitting	inch/mm	68	85	93
	Flare Type	inch	86	97	101
	Tube	inch/mm	90	95	95
	B		□ 30	□ 35	
	C		Max. 104.5	Max. 111.5	
	D		21.5	26	
	E		5	7	

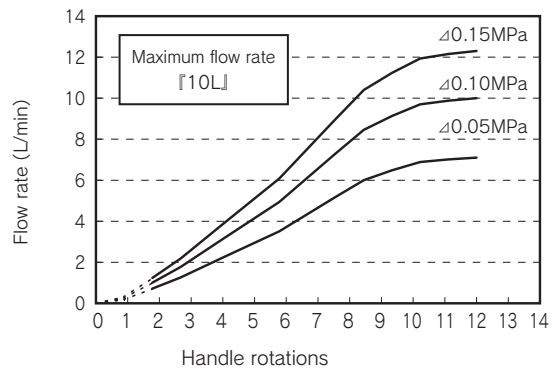
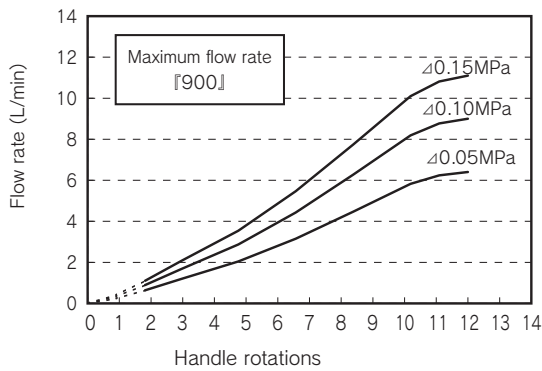
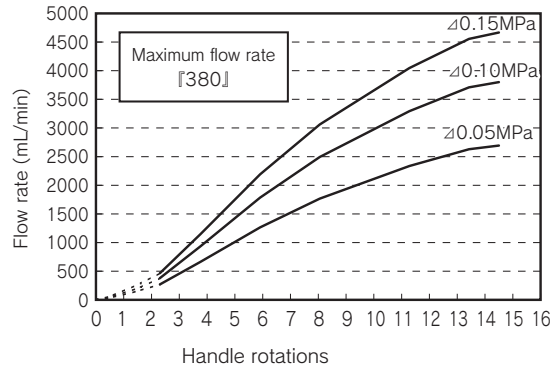
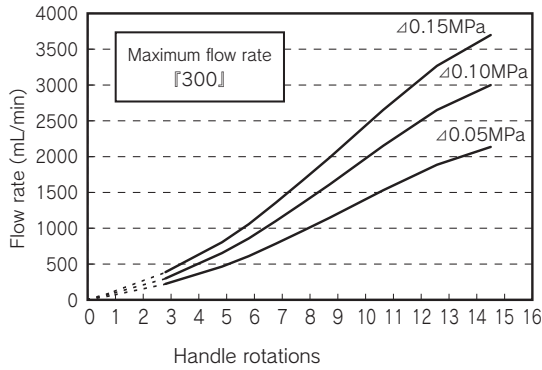
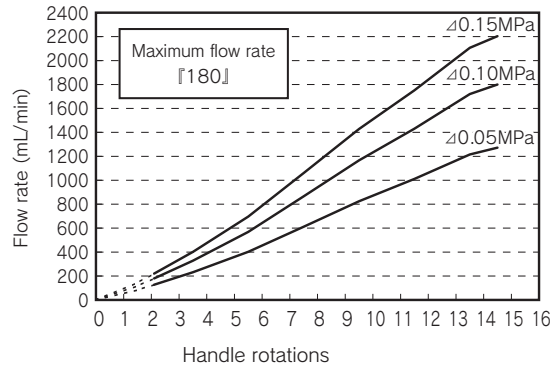
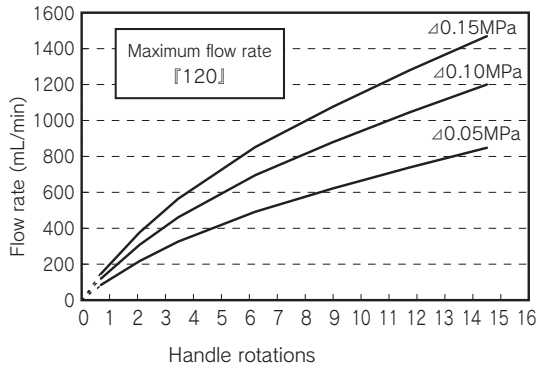
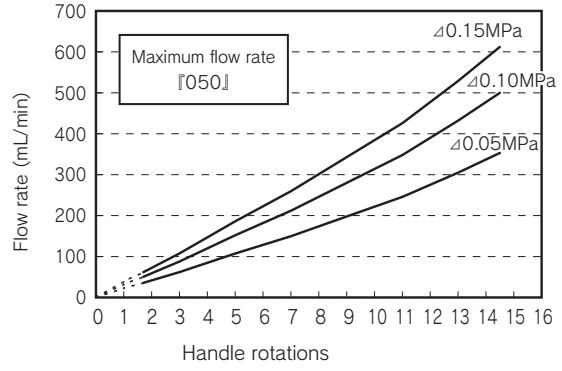
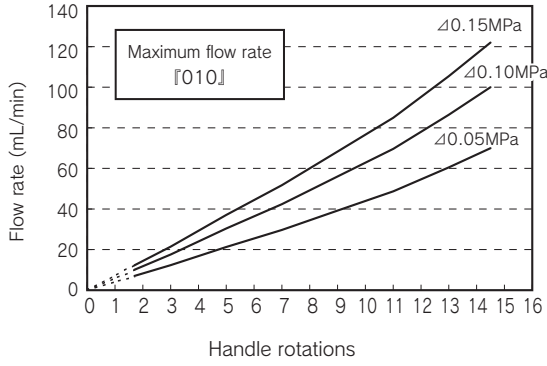
Standard	Size				
	6×4	10×8	12×10		
	6.35×4.35	9.53×6.35	12.70×9.53		
A	Rc	inch	44	51	60
	B		□ 30	□ 35	
	C		Max. 110.5	Max. 115.5	
	D		24	29	
	E		5	7	

※ Reference values



Technical Data

Handle rotations – Flow



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

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