

AVBVX

チューブ接続用ボールバルブ Ball valve for PFA fitting

Specialty Valves and Control Products **Dymatrix™**



Efficient Plumbing

The plumbing from the hard piping to PFA connection was facilitated without the screw connection, and the leakage from the part of screwing in was lost. Moreover, the time of screwing in can be saved.

Abundant line-up

Abundant connection line-up are collected. Out to say nothing of the combination with the hard piping and both sides PFA connection putting is also possible.

Specifications

項目 Items	Unit	Nominal size				
		15mm 1/2inch			20mm 3/4inch	25mm 1inch
		Size				
		6 × 4	10 × 8	12 × 10	19 × 16	25 × 22
		6.35 × 4.35	9.53 × 6.35	12.70 × 9.53	19.05 × 15.88	25.40 × 22.20
作動 Actuation	—	Manual				
流体温度* Medium Temperature	℃	U-PVC 0 ~ 50 / C-PVC 0 ~ 90 PP 0 ~ 80 / PVDF 0 ~ 100				
使用圧力範囲* Working Pressure range	MPa	0 ~ 0.5 0 ~ 72.5psi				
弁座漏れ量 Leakage Rate	cm ³ /min	0 (at hydraulic pressure 23℃)				
背圧* Back Pressure	MPa	0 ~ 0.5 0 ~ 72.5psi				
周囲温度 Ambient Temperature	℃	5 ~ 50				
取付姿勢 Installation direction	—	Any direction				
接続 Connection	—	Socket				
		Threaded				
		Flanged Flowell 20 series Flowell 60 series				
		Super Type Pillar fitting				
		Super 300 Type Pillar fitting				
		Flare Type				
		Hose nipple				
Orifice diameter	mm	φ 15			φ 20	φ 25

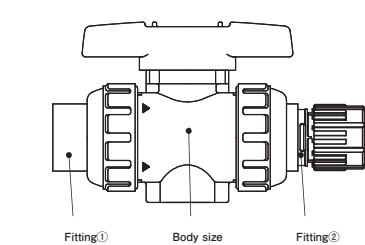
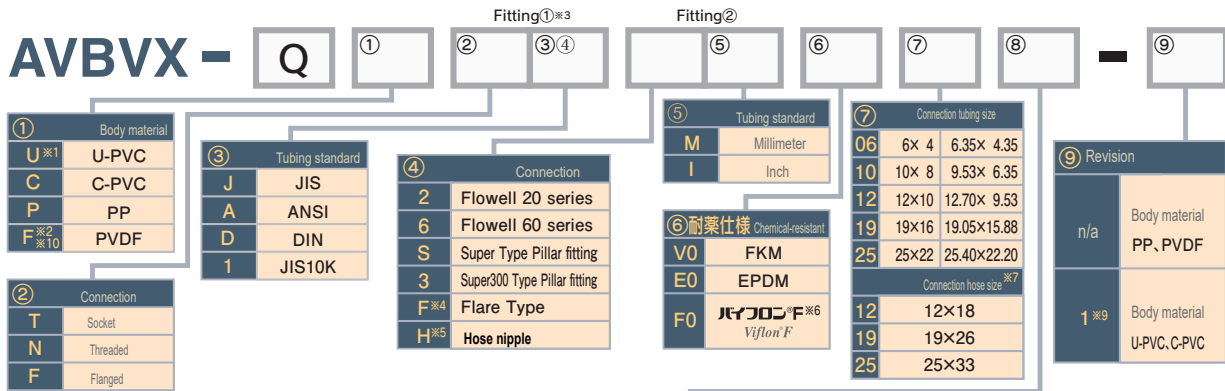
※ About relations of "Medium Temperature" and "Working pressure range" is different by fitting, please refer to specifications of a fitting maker.

※ Do not use the valve in conditions where the fluid contains slurry. (The valve may not work properly.)

There are some liquids which prone to be vaporized (Off-Gassing) in piping, such as H₂O₂, NaClO and so on. It could be cause of a dangerous condition due to irregular pressure increases. Therefore, be sure to take the necessary safety precautions.

Ordering Code

Upstream : Piping / Downstream : Tube or Hose nipple



Body size ※8	Connection	2, 6, F				S, 3				H					
		Tubing size	06	10	12	19	25	06	10	12	19	25	12	19	25
D (15mm)	(15mm)			NA		○	×		NA		×	×	NA	○	○
E (20mm)	(20mm)	○	○	○	NA	○	○	○	○	○	NA	×	○	NA	○
F (25mm)	(25mm)	○	○	○	○	○	○	○	○	○	○	○	NA	○	NA

※cannot choose the X.

- ※1: In the case of the connection is "H", only "U" can be selected for the "Body Material".
- ※2: In the case of Body material "F", It becomes the applicable article of the Export Trade Control Order.
- ※3: Port size of Fitting① are the same size as port size of body.
- ※4: In the case of the connection is "F", only "1 (Inch)" can be selected for the "Tubing Standard".
- ※5: In the case of the connection is "H", only "M (Millimeter)" can be selected for the "Tubing Standard".
- ※6: "Viflon" is the Terpolymerization Fluorocarbon Elastomers.
- ※7: In the case of the connection is "H", it can be selected.
- ※8: In the case of "Connection" and "Tubing size" of the combination of "無記入 (n/a)", "Body size" is blank.
- ※9: In the case of the revision is "-1", Ball valve is 21a type.
- ※10: In the case of the Body material is "F", only "A", "D" can be selected for the Tubing standard.

Ordering code example
AVBVX-QUTJ3MV019F-1

Body material U-PVC, Connection① socket JIS.

Connection② Super300 Type Pillar fitting, FKM, Connection tubing size 19X16mm, Body size 25mm.

AVBVX-QCNJ2IF012

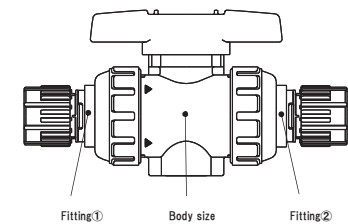
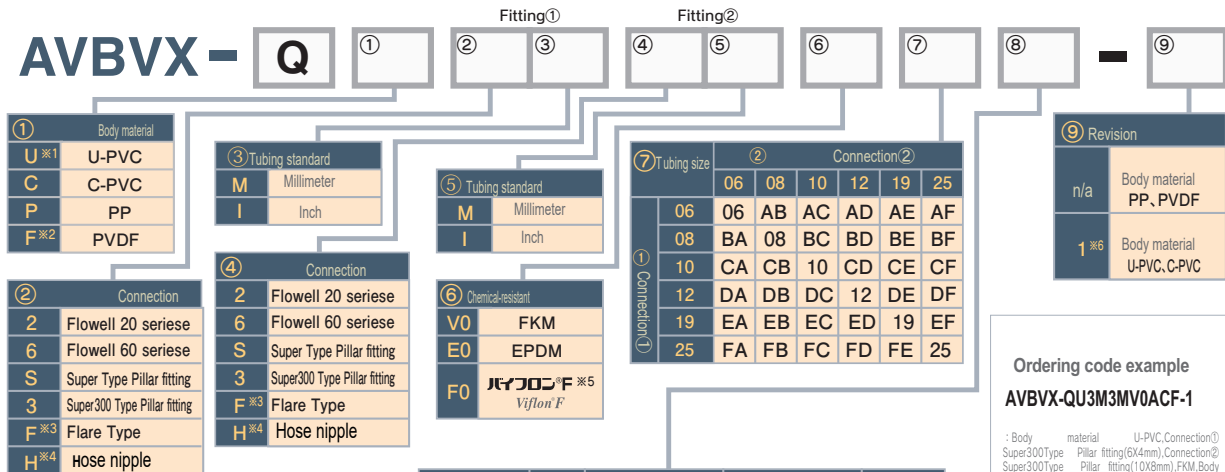
Body material C-PVC, Connection① Threaded, Connection② Flowell 20 series (inch), Viflon F, Connection tubing size 12.7X9.53mm, Body size 15mm.

AVBVX-QUTJHME019D-1

Body material U-PVC, Connection① socket JIS.

Connection② Super300 Type Pillar fitting, FKM, Connection tubing size 19X16mm, Body size 25mm.

Both upstream and downstream fitting in case of tube / hose nipple.



Body size ⑧	Connection	2, 6, F				S, 3				H					
		Tubing size	06	10	12	19	25	06	10	12	19	25	12	19	25
D (15mm)	(15mm)	○	○	○	○	×	○	○	○	○	×	×	○	○	○
E (20mm)	(20mm)	○	○	○	○	○	○	○	○	○	○	×	○	○	○
F (25mm)	(25mm)	○	○	○	○	○	○	○	○	○	○	○	○	○	○

※cannot choose the X.

- ※1: In the case of the connection is "H", only "U" can be selected for the "Body Material".
- ※2: In the case of Body material "F", It becomes the applicable article of the Export Trade Control Order.
- ※3: In the case of the connection is "F", only "1 (Inch)" can be selected for the "Tubing Standard".
- ※4: In the case of the connection is "H", only "M (Millimeter)" can be selected for the "Tubing Standard".
- ※5: "Viflon" is the Terpolymerization Fluorocarbon Elastomers.
- ※6: In the case of the revision is "-1", Ball valve is 21a type.

Ordering code example
AVBVX-QU3M3MV0ACF-1

Body material U-PVC, Connection① Super300 Type Pillar fitting (6X4mm), Connection② Super300 Type Pillar fitting (10X8mm), FKM Body size 25mm.

AVBVX-QP3M2IF010E

Body material PP, Connection① Super300 Type Pillar fitting (10X8mm), Connection② Flowell 20 series (9.53X6.35mm), Viflon F, Body size 20mm.

AVBVX-QUHMHME0E0DD-1

Body material U-PVC, Connection① Hose nipple (19mm), Connection② Hose nipple (12mm), EPDM, Body size 15mm.

AVBVX-QF3I3IV012E

Body material PVDF, Connection① Super300 Type Pillar fitting (12.7X9.53mm), Connection② Super300 Type Pillar fitting (12.7X9.53mm), FKM, Body size 20mm.

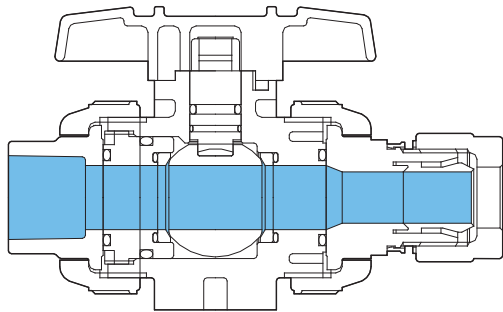
- AVPV3
- AVPVM
- AVPVS
- AVSDV
- AVSDVM
- AVSDVT
- AVSAS
- AVMPV
- AVDIV
- AVVM
- AVHRL
- AVHRLM
- AVHPRS
- AVHPR
- AVBPR
- AVCFV
- AVD12R
- HDVW
- AVQDV
- AVBVX
- AVPJX
- AVSIV
- AVS2
- AVFCS
- AVFCN
- OTHER

Weight List (Reference)

(Unit) : kg

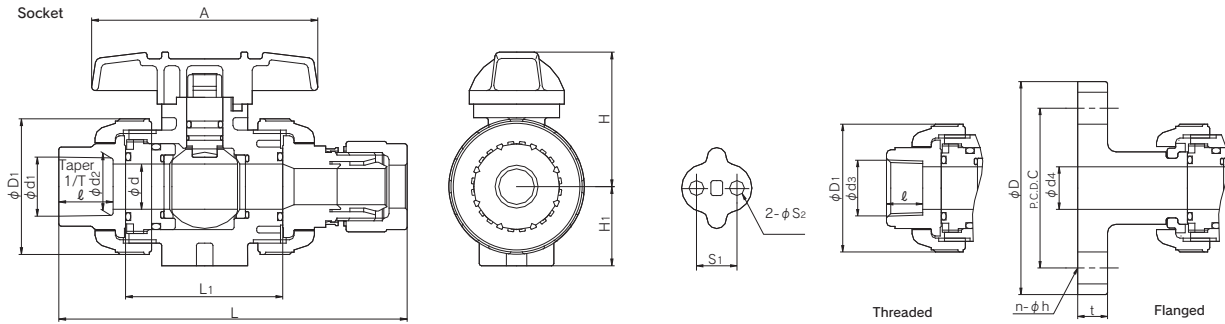
		Body material			
		U-PVC	C-PVC	PP	PVDF
Nominal size	Connection	Socket			
	15mm 1/2"	0.2	0.2	0.2	0.2
	20mm 3/4"	0.3	0.3	0.3	0.3
	25mm 1"	0.4	0.5	0.4	0.5
	Connection	Threaded			
	15mm 1/2"	0.2	0.2	0.2	0.2
	20mm 3/4"	0.3	0.3	0.3	0.3
	25mm 1"	0.4	0.5	0.4	0.5
	Connection	Flanged			
	15mm 1/2"	0.4	0.4	0.3	0.5
	20mm 3/4"	0.6	0.7	0.5	0.7
	25mm 1"	0.8	0.9	0.7	1.0

Parts & Materials



Parts	Material	Wetted parts
Body	U-PVC	
Ball	C-PVC	
Union	PP	○
End Connector	PVDF	
End Connector	PTFE, U-PVC (Hose nipple)	○
Union nut	U-PVC, C-PVC	
Stem	PP, PVDF	
Seat	PTFE	○
O-ring	FKM EPDM パライオン® F Viflon® F	○
Handle	ABS	
Nut	PFA	

Dimensions



(Unit) : mm

Size			Socket																							
			JIS (U-PVC, C-PVC)																							
			L			Flowell 20 series		Flowell 60 series		Super Type Pillar fitting		Super 300 Type Pillar fitting		Flare Type		Hose nipple										
Connection size	tubing	Connection hose size	d	D1	H	H1	A	S1	S2	S3	L1	d1	l	1/T	inch	mm	inch	mm	inch/mm	inch/mm	inch	mm	inch	mm		
6 × 4	6.35 × 4.35	—	15	48	51.5	29	92	19.0	7.3	11	64	22.11	20	1/34	121	120	134	133	122.5	122	131	—	—	—	—	
10 × 8	9.53 × 6.35	—													125.5	124	142	140	129.5	128	134	—	—	—	—	
12 × 10	12.70 × 9.53	12 × 18	20	60	59.5	35	100	19.0	7.3	11	69	26.13	24	1/34	129.5	128	142	140	133	132	136	155	—	—	—	—
19 × 16	19.05 × 15.88	19 × 26													148.5	148.5	161.5	161.5	157	153.5	155.5	181.5	—	—	—	—
25 × 22	25.40 × 22.20	25 × 33	25	70	68	39	110	19.0	7.3	11	76	32.16	27	1/34	172.5	172.5	181.5	180	175.5	173.5	177.5	205.5	—	—	—	—

※ Reference values.

(Unit) : mm

Size			Socket																								
			DIN (PP)									DIN (PVDF)															
			L			Flowell 20 series		Flowell 60 series		Super Type Pillar fitting		Super 300 Type Pillar fitting		Flare Type		L			Flowell 20 series		Flowell 60 series		Super Type Pillar fitting		Super 300 Type Pillar fitting		Flare Type
Connection size	tubing	Connection hose size	d1	d2	l	inch	mm	inch	mm	inch/mm	inch/mm	inch	mm	d1	d2	l	inch	mm	inch	mm	inch/mm	inch/mm	inch	mm	inch	mm	
6 × 4	6.35 × 4.35	—	19.5	19.3	14.5	116.5	115.5	115.5	129.5	118	117.5	126.5	19.5	19.3	14.5	116.5	115.5	129.5	128.5	118	117.5	126.5	—	—	—	—	—
10 × 8	9.53 × 6.35	—				121	119.5	119.5	137.5	125	123.5	129.5				121	119.5	137.5	135.5	125	123.5	129.5	—	—	—	—	—
12 × 10	12.70 × 9.53	12 × 18	24.5	24.3	16	125	123.5	123.5	137.5	128.5	127.5	131.5	24.5	24.3	16	125	123.5	137.5	135.5	128.5	127.5	131.5	—	—	—	—	—
19 × 16	19.05 × 15.88	19 × 26				141	141	141	154	149.5	146	148				141	141	154	154	149.5	146	148	—	—	—	—	—
25 × 22	25.40 × 22.20	25 × 33	31.5	31.3	18	161.5	161.5	161.5	170.5	164.5	162.5	166.5	31.5	31.3	18	161.5	161.5	170.5	169	164.5	162.5	166.5	—	—	—	—	—

※ Reference value.

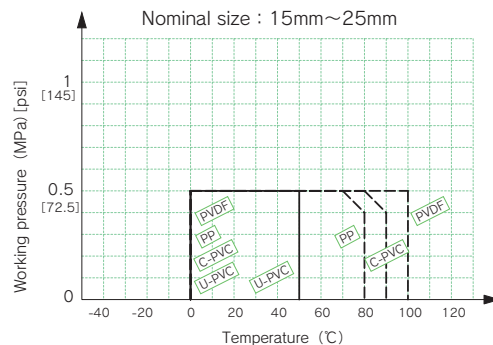
(Unit) : mm

Size			Threaded										Flange																					
			JIS										JIS10K																					
			L			Flowell 20 series		Flowell 60 series		Super Type Pillar fitting		Super 300 Type Pillar fitting		Flare Type		Hose nipple		d4	D	C	n	h	Flowell 20 series		Flowell 60 series		Super Type Pillar fitting		Super 300 Type Pillar fitting		Flare Type		Hose nipple	
Connection size	tubing	Connection hose size	d3	l	inch	mm	inch	mm	inch/mm	inch/mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	t			
6 × 4	6.35 × 4.35	—	RC1/2	15	118	117	131	130	119.5	119	128	—	15	95	70	4	15	138.5	137.5	151.5	150.5	140	139.5	148.5	—	12	—	—	—	—	—	—		
10 × 8	9.53 × 6.35	—			122.5	121	139	137	126.5	125	131	—						143	141.5	159.5	157.5	147	145.5	151.5	—		—	—	—	—	—	—	—	—
12 × 10	12.70 × 9.53	12 × 18	RC3/4	17	126.5	125	139	137	130	129	133	152.0	20	100	75	4	19	147	145.5	159.5	157.5	150.5	149.5	153.5	172.5	14	170.5	170.5	183.5	183.5	179	175.5	177.5	203.5
19 × 16	19.05 × 15.88	19 × 26			144.5	144.5	157.5	157.5	153	149.5	151.5	177.5						154	154	177.5	154	154	177.5	154	154		177.5	154	154	177.5	154	154	177.5	154
25 × 22	25.40 × 22.20	25 × 33	RC1	20	165.5	165.5	174.5	173	168.5	166.5	170.5	198.5	25	125	90	19	193.5	193.5	202.5	201	196.5	194.5	198.5	226.5	14	—	—	—	—	—	—	—		

※ Reference values.

Technical Data

Medium temperature - Working pressure



※About relations of "Medium Temperature" and "Working pressure range" is different by fitting, please refer to specifications of a fitting maker.