

AV PREFAB JOINT <UNION>

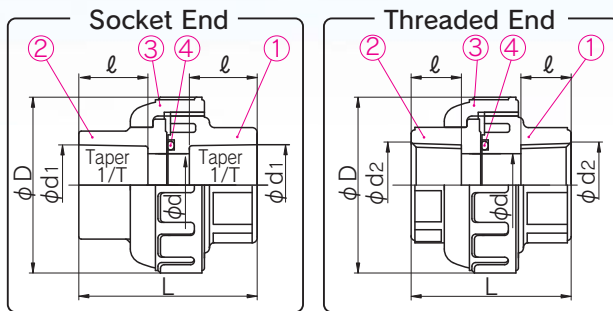


SPECIFICATIONS

Material	Working temperature	Working pressure MPa{kgf/cm ² }	Nominal Size (mm)	Connection
Unplasticized Polyvinyl Chloride (U-PVC)	0°C~50°C	1.0{10.2}	13~100	Socket End
			13~50	Threaded End
Chlorinated Polyvinyl Chloride (C-PVC)	0°C~90°C	1.0{10.2}	13~100	Socket End

(Note)

For pressure limits by working temperature ranges and materials, see "WORKING PRESSURE VS. TEMPERATURE" in this catalog.



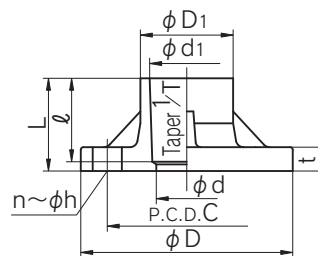
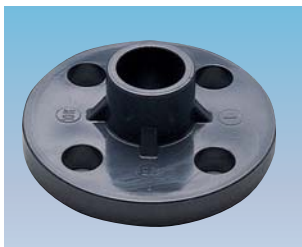
PARTS & MATERIALS

No.	DESCRIPTION	Pcs.	MATERIAL
①	BODY	1	U-PVC, C-PVC
②	END CONNECTOR	1	U-PVC, C-PVC
③	UNION NUT	1	U-PVC, C-PVC
④	O-RING	1	EPDM, FKM, others

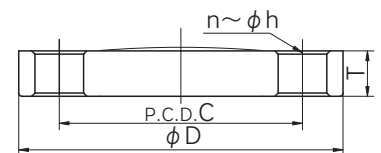
Unit:mm										
Nominal Size		d	Socket End				Threaded End			
			U-PVC, C-PVC				U-PVC			
mm	inch		d ₁	ℓ	1/T	L	d ₁	ℓ	L	D
13	3/8	13	18.13	18	1/34	46.0	RC3/8	15	43	48
16	1/2	15	22.11	20	1/34	46.0	Rc1/2	15	43	48
20	3/4	20	26.13	24	1/34	61.0	RC3/4	17	57	60
25	1	25	32.16	27	1/34	70.0	Rc1	20	63	70
30	1 1/4	31	38.19	30	1/34	77.0	Rc1 1/4	22	71	82
40	1 1/2	40	48.21	37	1/37	95.0	Rc1 1/2	25	82	100
50	2	51	60.25	42	1/37	107.0	Rc2	28	96	106
65	2 1/2	65	76.60	61	1/48	164.0	—	—	—	133
75	3	77	89.60	64	1/49	189.5	—	—	—	152
100	4	100	114.70	84	1/56	245.0	—	—	—	210

AV FLANGE <HP-PVC>

AV TS FLANGE(JIS 10K 13mm - 300mm)



AV Q FLANGE(JIS 10K 15mm - 150mm)



※The figure described by broken (dashed) line shows shape of Q-flange applied for dead end service of piping.

Unit:mm													
Nominal Size		d	JIS 10K				d _i	Taper 1/T	D ₁	t	T	ℓ ^{+4.0} _{-0.5}	L
mm	inch		D	C	n	h							
13	3/8	15	90	65	4	15	18.40±0.20	1/30	25.5	14	—	26	30.0
15	1/2	18	95	70	4	15	22.40±0.20	1/34	31.0	14	12	30	35.0
20	3/4	22	100	75	4	15	26.45±0.20	1/34	35.0	15	14	35	40.0
25	1	25	125	90	4	19	32.55±0.25	1/34	42.5	15	14	40	46.0
32	1 1/4	30	135	100	4	19	38.60±0.25	1/34	48.5	16	16	44	50.5
40	1 1/2	41	140	105	4	19	48.70±0.30	1/37	60.5	16	16	55	61.5
50	2	52	155	120	4	19	60.80±0.30	1/37	73.0	20	16	63	71.0
65	2 1/2	67	175	140	4	19	76.60±0.30	1/48	90.0	22	18	61	70.0
80(75)	3	78	185	150	8	19	89.60±0.30	1/49	105.0	22	18	64	73.0
100	4	100	210	175	8	19	114.70±0.30	1/56	131.0	22	18	84	93.0
125	5	125	250	210	8	23	140.85±0.35	1/58	158.0	24	20	104	114.0
150	6	146	280	240	8	23	166.00±0.40	1/63	185.0	26	22	132	142.0
200	8	196	330	290	12	23	217.00±1.00	1/50	238.0	28	—	145	156.0
250	10	247	400	355	12	25	268.00±1.50	1/55	300.0	30	—	155	167.0
300	12	298	445	400	16	25	318.70±1.80	1/55	341.0	30	—	155	167.0

(Note)

1. For details of AV Flanges, refer to the individual catalogs of appropriate AV Flanges.
2. Products compliant with the clean water standard or ANSI standard are also available.

MULTI-JOINT



FEATURES

High Safety Factor By A Molding

(Multi-Joint Type "L" with Female connection 40mm - 150mm) They are produced by "Injection molding" which provides customers with complete reliability and durability.

Specifications

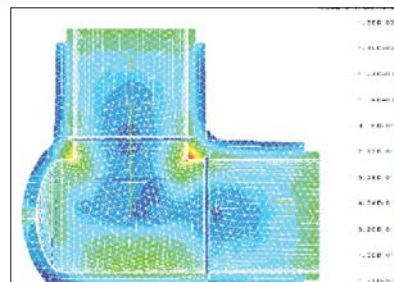
Types : Type "L", Type "T"

Sizes : 20mm - 200mm (JIS standard)

Connection: Both types are classified by female and socket connection respectively, which enable users to have multiple selections in connection with sensors, sampling valves, etc.

Designed By CAE Analysis

Multi-Joint is designed in a way to optimize many factors relating to piping stress by "CAE Hydromechanical Analysis".



High Performance

Such unique design as above gives customers not only high pressure resistance in short term but also resistance against periodic pressure change in long term.

And the Multi-Joint made by machining are all passed through tough tests in our factory and then delivered to our customers.

Chemical Resistance & High Purity

Since the material is "High Purity PVC", the "Joint" has excellent chemical resistance and extremely low leaching performance. And almost all the processes are controlled in our clean room to keep their performance as perfect as possible.



THREADED TYPE L



THREADED TYPE T



SOCKET TYPE L



SOCKET TYPE T

THREADED Type L

Nominal Size (mm)	Rc				NPT			
	1/4	3/8	1/2	3/4	1/4	3/8	1/2	3/4
20 × 20	○	○	—	—	○	○	—	—
25 × 25	○	○	—	—	○	○	—	—
30 × 30	○	○	—	—	○	○	—	—
40 × 40	○	○	○	○	○	○	○	○
50 × 50	○	○	○	○	○	○	○	○
65 × 65	○	○	○	○	○	○	○	○
75 × 75	○	○	○	○	○	○	○	○
100 × 100	○	○	○	○	○	○	○	○
125 × 125	○	○	○	○	○	○	○	○
150 × 150	○	○	○	○	○	○	○	○
200 × 200	○	○	○	○	○	○	○	○

THREADED Type T

Nominal Size (mm)	Rc				NPT			
	1/4	3/8	1/2	3/4	1/4	3/8	1/2	3/4
20 × 20	○	○	—	—	○	○	—	—
25 × 25	○	○	—	—	○	○	—	—
30 × 30	○	○	—	—	○	○	—	—
40 × 40	○	○	○	○	○	○	○	○
50 × 40	○	○	○	○	○	○	○	○
65 × 40	○	○	○	○	○	○	○	○
75 × 40	○	○	○	○	○	○	○	○
100 × 75	○	○	○	○	○	○	○	○
125 × 75	○	○	○	○	○	○	○	○
150 × 75	○	○	○	○	○	○	○	○
200 × 75	○	○	○	○	○	○	○	○

SPECIFICATIONS

Body material	High purity polyvinyl chloride
End Connectors	Threaded, Socket
Nominal Size	20mm - 200mm
Working Temperature	50°C
Max. Working Pressure	1.0MPa

SOCKET Type L · T

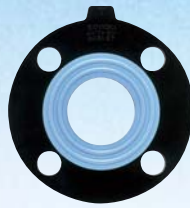
Nominal Size (mm)	Type	16	20	25	40	50	65	75	100	125
40	L	○	○	○						
	T	○	●	●						
50	L	○	○	○						
	T	●	●	●						
65	L	○	○	○	○					
	T	○	○	○	●					
75	L	○	○	○	○	○				
	T	○	○	●	●	●				
100	L	○	○	○	○	○	○			
	T	○	○	○	○	●	○			
125	L	○	○	○	○	○	○	○		
	T	○	○	○	○	○	○	●		
150	L	○	○	○	○	○	○	○	○	
	T	○	○	○	○	○	○	●	●	
200	L	○	○	○	○	○	○	○	○	○
	T	○	○	○	○	○	○	●	●	○

※ ● This product can correspond with ASAHI AV TS FITTINGS.

AV GASKET



Full face Type
Rubber Gasket



PTFE coated



PVDF coated

● MATERIAL : EPDM, PTFE, PVDF, CSM, FKM, IIR, Viton F, C

FEATURES

- AV GASKETS offer Similar sealing performance with $\frac{1}{3}$ bolt tightening torque, compared to flat or envelope style gaskets.
- Uniform dimension, fine surface, suitable hardness.
- Long service life.
- Unique Convex Design.

SPECIFICATIONS

Material	Working Temperature	SIZE AVAILABILITY BY STANDARD		
		JIS	ANSI	DIN
EPDM	-40°C - 90°C (-40°F - 195°F)	15mm - 350mm	$\frac{1}{2}$ inch - 14inch	15mm - 350mm
PTFE	-40°C - 120°C (-40°F - 250°F)	15mm - 300mm	$\frac{1}{2}$ inch - 12inch	15mm - 300mm
PVDF	-40°C - 120°C (-40°F - 250°F)	15mm - 300mm	$\frac{1}{2}$ inch - 10inch *1	15mm - 300mm
VIFLON	-5°C - 150°C (-5°F - 280°F)	15mm - 200mm	—	—

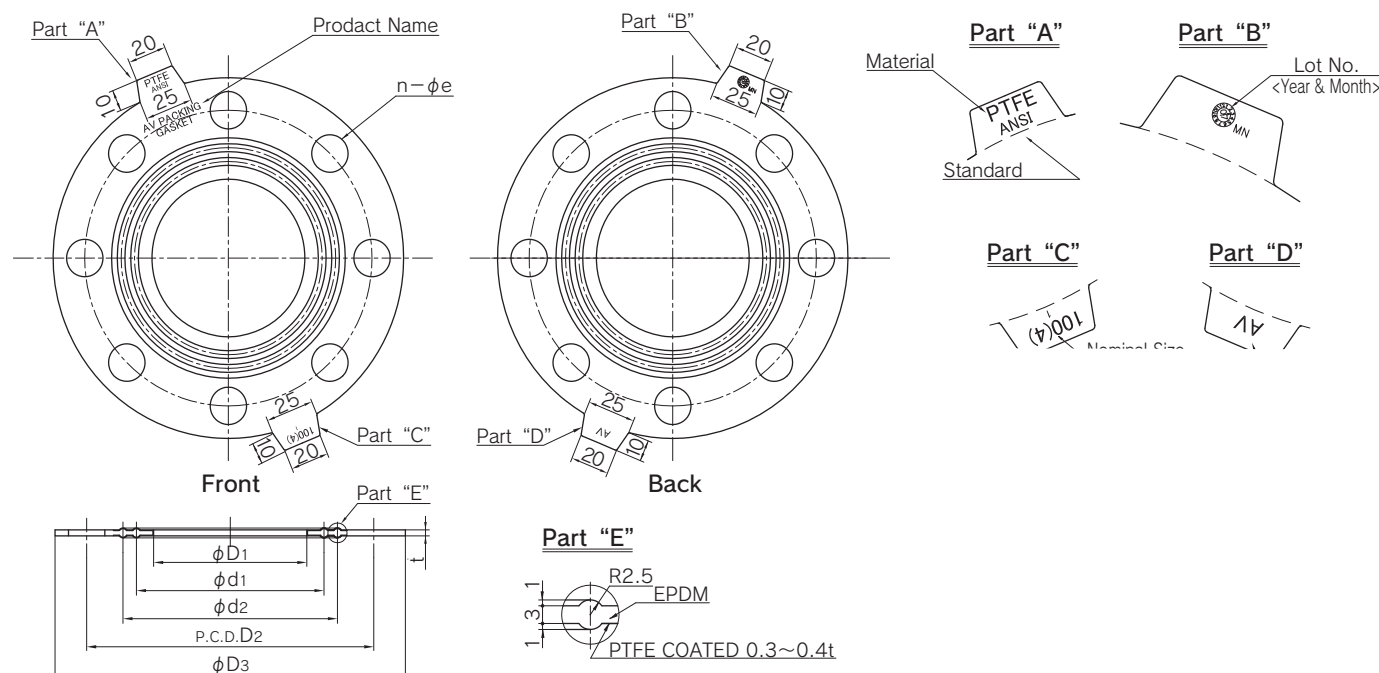
Working temperature is different depending on type of fluid.

* 1 Except for $\frac{1}{4}$ inch and $2\frac{1}{2}$ inch

Voflon-F has superior resistance to inorganic acids such as HNO_3 , HF and HCl.

Voflon-C has superior resistance to chlorine containing media such as Chlorine Water, NaCl and ClO_2 .

DIMENSIONS



Type	Nominal Size	Thickness
PTFE	15mm($\frac{1}{2}$ inch) to 300mm(12inch)	0.3-0.4mm(0.012-0.016inch)
PVDF	15mm($\frac{1}{2}$ inch) to 65mm($2\frac{1}{2}$ inch) 80mm(3inch) to 300mm(12inch)	0.4-0.5mm(0.016-0.020inch)

DIMENSIONS TABLE

Full-Face Type (JIS 10K)								
								Unit:mm
Nominal Size		D ₁	D ₂	D ₃	n	e	d ₁	d ₂
mm	inch							
13	3/8	15	65	88	4	15	22	37
15	1/2	18	70	93	4	15	26	41
20	3/4	22	75	98	4	15	32	47
25	1	30	90	123	4	19	38	53
32	1 1/4	37	100	133	4	19	50	65
40	1 1/2	43	105	138	4	19	54	69
50	2	54	120	153	4	19	68	83
65	2 1/2	69	140	173	4	19	86	101
80(75)	3	80	150	183	8	19	98	112
100	4	102	175	208	8	19	120	138
125	5	127	210	248	8	23	145	166
150	6	150	240	278	8	23	168	190
200	8	198	290	328	12	23	216	247
250	10	249	355	398	12	25	270	306
300	12	300	400	443	16	25	324	352
350	14	350	445	488	16	25	370	390

RECOMMENDED TIGHTENING TORQUE with Flat Face Flange and regular sus Bolt (ALL MATERIALS / FULL FACE TYPE)

mm(inch)	N·m	FT-LB	mm(inch)	N·m	FT-LB	mm(inch)	N·m	FT-LB
15 (1/2)	17.5	13	65 (2 1/2)	22.5	16	200 (8)	55	40
20 (3/4)	17.5	13	80 (3)	30	22	250(10)	55	40
25 (1)	20	14	100(4)	30	22	300(12)	60	43
40 (1 1/2)	20	14	125(5)	40	29	350(14)	60	43
50 (2)	22.5	16	150(6)	45	32	400(16)	80	58