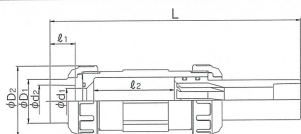


# EXPANSION JOINT 20mm - 100mm (3/4 inch - 4 inch)

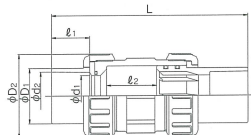
● PVC, C-PVC 20 - 100mm (3/4 inch - 4 inch)



20mm(3/4inch) ~ 50mm(2inch)



65mm(2 1/2inch) ~ 100mm(4inch)



## FEATURES

- Thermal stress of pipe line is to be absorbed due to its sufficient allowable axial movement on elongation and contraction.
- With union type end connection, it allows fast disassembly, loosening the union nut only.
- With simplified design, it requires minimum, systems space in the piping systems, and there is no need of expansion U-bend.
- Earthquake resistant design; Allowable axial movement-Elongation contraction.
- Internal stop design prevents the expansion portion from being removed.

## SPECIFICATIONS

Material	Working Temperature	Max. Working Pressure MPa{kgf/cm <sup>2</sup> }[PSI]	End Connectors
Unplasticized Polyvinyl Chloride (PVC)	0°C - 50°C (30°F - 120°F)	1.0{10.2}[150]	Socket End
Chlorinated Polyvinyl Chloride (C-PVC)	0°C - 90°C (30°F - 195°F)	1.0{10.2}[150]	Socket End

## EXPANSION JOINT

Unit:MPa{kgf/cm<sup>2</sup>}

Material		PVC		C-PVC			
Nominal Size	Temp. C (°F)						
	mm	inch					
20 - 100	3/4 - 4	1.0{10.2}	0.6{6.1}	1.0{10.2}	0.6{6.1}	0.4{4.1}	0.2{2.0}

## DIMENSIONS TABLE

**JIS** Unit:mm

Nominal Size	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	1/T	D <sub>1</sub>	D <sub>2</sub>	L		l <sub>2</sub>	
							Max	Min		
20	3/4	20	26.13	24	1/34	35	60	243	163	80
25	1	25	32.16	27	1/34	43	70	250	170	80
30	1 1/4	31	38.19	30	1/34	50	82	258	178	80
40	1 1/2	40	48.21	37	1/37	59	100	272	192	80
50	2	51	60.25	42	1/37	72	106	285	205	80
65	2 1/2	65	76.60	61	1/48	88	133	314	234	80
80	3	78	89.60	64	1/49	105	152	330	250	80
100	4	100	114.70	84	1/56	132	210	422	322	100

**DIN** Unit:mm

Nominal Size	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	D <sub>1</sub>	D <sub>2</sub>	L		l <sub>2</sub>	
						Max	Min		
20	3/4	20	25	19	35	60	237	157	80
25	1	25	32	22	43	70	244	164	80
30	1 1/4	—	—	—	—	—	—	—	—
40	1 1/2	40	50	31	59	100	262	182	80
50	2	51	63	38	72	106	271	191	80
65	2 1/2	—	—	—	—	—	—	—	—
80	3	78	90	51	105	152	313	233	80
100	4	100	110	61	132	210	388	308	100

☆ Volume of thermal expansion on C-PVC pipe and PVC pipe

A; Dimension of pipe line

B; Temperature

Unit:mm

B	A	5 m	10 m	20 m	30 m	40 m	50 m	60 m	70 m	80 m
		5 m	10 m	20 m	30 m	40 m	50 m	60 m	70 m	80 m
10°C	4	7	14	21	28	35	42	49	56	56
20°C	7	14	28	42	56	70	84	98	112	112
30°C	11	21	42	63	84	105	126	147	168	168
40°C	14	28	56	84	112	140	168	196	224	224
50°C	18	35	70	105	140	175	210	245	280	280
60°C	21	42	84	126	168	210	252	294	336	336
70°C	25	49	98	147	196	245	294	343	392	392
80°C	28	56	112	168	224	280	336	392	448	448

### Caution

First supports on both side of AV Expansion joint should be located within 0.5m from the middle of this joint.  
(Setting of first supports at the location beyond 0.5m could cause pipeline to bend by internal pressure and AV Expansion joints do not work properly.)

**ANSI** Unit:inch

Nominal Size	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	D <sub>1</sub>	D <sub>2</sub>	L		l <sub>2</sub>	
						Max	Min		
3/4	20	0.79	1.06	0.72	1.38	2.36	9.37	6.22	3.15
1	25	0.98	1.33	0.87	1.69	2.76	9.65	6.50	3.15
1 1/4	30	—	—	—	—	—	—	—	—
1 1/2	40	1.57	1.91	1.09	2.32	3.78	10.47	7.32	3.15
2	50	2.01	2.39	1.16	2.83	4.17	11.06	7.91	3.15
2 1/2	65	—	—	—	—	—	—	—	—
3	80	3.07	3.52	1.87	4.13	5.98	12.48	9.33	3.15
4	100	3.93	4.52	2.00	5.19	8.27	15.71	11.77	3.94

Note : l<sub>2</sub> is Expansion margin

