

Retention Pipe Covers / Tapes for Pipe Covers

Heat / Cold

Retention Pipe Covers – Heat / Cold

HKCVP

Material: Heat Resistant Polyethylene Foam
Operating Temperature Range: -20~120°C

Part Number		L 1mm Increment	D	d	t
Type	No.				
HKCVP	6A	30-1500	26	10	8
	8A		29	13	8
	10A		38	18	10
	15A		42	22	10
	20A		48	28	10
	25A		55	35	10
	32A		63	43	10
	40A		69	49	10
	50A		81	61	10

Part Number Example
Part Number - L
HKCVP10A - 500

Application Example

Retention Pipe Covers – Heat / Cold Elbow

HKCVE for Elbow **HKCVT for Elbow**

Material: Heat Resistant Polyethylene Foam
Operating Temperature Range: -20~120°C

Part Number		D	d	t	L	A	B
Type	No.						
HKCVE HKCVT	6A	32	16	8	24	32	64
	8A	36	20	8	26	34	68
	10A	44	24	10	32	40	80
	15A	48	28	10	34	42	84
	20A	54	34	10	36	44	88
	25A	63	43	10	40	50	100

Part Number Example
Part Number
HKCVE10A

Tapes for Pipe Covers

HKTPE

Material: Polypropylene
Operating Temperature Range: -20~80°C

Part Number		L (m)	T (mm)
Type	W (mm)		
HKTPE	25	55	0.12
	50		

Part Number Example
Part Number
HKTPE25

PVC Pipes / Fittings

Overview

Operating Temperature and Pressure

Application	Main Pipe	Main Pipe Fittings		Tensile Yield Strength
For Tap Water	Unplasticized Poly (Vinyl Chloride) (PVC-U) Pipes VP for Tap Water	TS Fittings	Normal temperature (5-35°C)	0.75 MPa (Static Water)
For Force-Feed	Unplasticized Poly (Vinyl Chloride) (PVC-U) Pipes VP	TS Fittings		1.0 MPa (Static Water + Water Impact Resistance)
For Water Supply	Unplasticized Poly (Vinyl Chloride) (PVC-U) Pipes HI-VP for Tap Water Impact Resistance	HI Fittings		0.75 MPa (Static Water)

45 MPa or more (23°C)
40 MPa or More (23°C)

Performance Standards (TSJoints / HIJoints Common)

Item	Performance Standards
Turbidity	0.5 or Less
Color	1 or Less
Organic (TOC)	1 mg/L or Less
Lead	0.008 mg/L or Less
Zinc	0.5 mg/L or Less
Reduction of Residual Chlorine	0.7 mg/L or Less

(Note) 1. Operating temperature and pressure may vary depending on the type of joints and conjugation methods.
2. Note that the faster the flow within pipes, the higher the pressure of water is. Keep the flow rate under 2 m/s as a principle. 2 m/s or more
3. Pipes that exposure PVC should be treated for expansion and contraction due to elasticity of PVC pipes by temperature difference.

Characteristics	Item	Unit	VP Pipes / TS Fittings	HI-VP Pipes / HI Fittings	Testing Method
Physical Properties	Color	—	Gray	Blue Gray	—
	Specific Gravity	—	1.43	1.4	JIS K 7112 Density Gradient Centrifugation 20°C
	Hardness	Rockwell R	115	115	ASTM D 785 20°C
Mechanical Properties	Moisture Absorption Ratio	For a week in normal temperature mg/cm ²	0.15 or Lower	0.15 or Lower	—
	Tensile Strength	MPa (kgf/cm ²)	49-54 (500-550)	49-52 (500-530)	JIS K6742 23°C or Others
	Young's Modulus	MPa (kgf/cm ²)	2942 (3 x 10,000)	2942 (3 x 10,000)	JIS K7113 20
	Tensile Elongation at Breakage	%	50-150	50-150	JIS K6741 23°C
	Flexural Strength	MPa (kgf/cm ²)	78.5-98.1 (800-1,000)	78.5-98.1 (800-1,000)	JIS K 7203 20°C 65% RH
	Elastic Modulus	MPa (kgf/cm ²)	2746 (2.8 x 10,000)	2746 (2.8 x 10,000)	JIS K 7203 20°C 65% RH
	Compression Strength	MPa (kgf/cm ²)	69 (700)	64 (650)	JIS K 7208 20°C 65% RH
Thermal Characteristics	Poisson ratio	—	0.35-0.4	0.35-0.4	—
	Charpy Impact Strength	kJ/m ² (kgf-cm ²)	6.9-9.8 (7-10)	17.7 or More	—
	Vicat Softening Temperature	°C	76 or More	76 or More	JIS K6742
	Linear Thermal Expansion Coefficient	1/°C	6-8 x 10 ⁻⁵	6-8 x 10 ⁻⁵	—
	Specific Heat	J (kg.K) (cal/g.°C)	1.05 x 1,000 (0.25)	1.05 x 1,000 (0.25)	—
Electrical Characteristics	Heat Transfer Coefficient	W (mK) (kcal/m h °C)	0.15 (0.13)	0.15 (0.13)	DIN 8061
	Combustibility	—	Self-Extinguishing	Self-Extinguishing	—
	Withstanding Voltage	kV/mm	40 or More	40 or More	—
	Specific Volume Resistivity	Ωcm	5.3 x 10 ¹⁵	5.3 x 10 ¹⁵	30°C 65% RH
	Dielectric Constant 60 MHz	—	3.2	3.2	30°C 55% RH

Ⓛ Listed Values are for reference, not guaranteed.

Nominal	d ₁	Tolerance of d ₁	D / D ₁	Tolerance of D-D ₁	ℓ/T	L ₁	d (Min.)	t (Min.)
13	18.4	±0.2	24	-0.6	1/30	26	13	2.7
16	22.4	±0.2	29	-0.7	1/34	30	16	2.7
20	26.45	±0.2	33	-0.8	1/34	35	20	3.2
25	32.55	±0.25	40	-1.0	1/34	40	25	3.6
30	38.6	±0.25	46	-1.0	1/34	44	31	3.6

PVC Pipes

Type	Material	Standards	Color
PVCT	PVC	JIS K 6742	Gray
PVCH	Impact Resistance PVC		Blue Gray

Ⓛ Note that pipe outer diameter may have some scratches or small flaws on its surface.

Part Number		L 1 mm Increment	Outer Diameter		Thickness		Inner Diameter (Reference Value)
Type	No.		D	D Tolerance	t	t Tolerance	
PVCT PVCH	13	50-1500	18	±0.2	2.5	±0.2	13
	16		22	±0.2	3	±0.3	16
	20		26	±0.2	3	±0.3	20
	25		32	±0.2	3.5	±0.3	25
	30		38	±0.3	3.5	±0.3	31

Ⓛ The tolerance of L dimension will be +1-3 for 50-1000 / +2-5 for 1001-1500.

Part Number Example
Part Number - L
PVCT20 - 1000