



LD VALVE

Sch80 PVC & CPVC Piping Systems
Plastic Valves (PVC, CPVC, PP, PVDF)

LCys

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NSF

LD VALVE

LD VALVE는 유체제어분야의 열가소성 파이프시스템 제조업체로서 1974년에 설립하여 전세계 100여국에 수출하며 뛰어난 품질로 호평받고 해마다 발전하고 있습니다. "LD" 브랜드명은 동시에 높은수준의 품질기준과 고객만족, 경쟁력있는 가격으로 인정받고 있습니다. LD VALVE는 PVC SCH80, CPVC SCH80, 투명배관재와 다양한 종류의 플라스틱 밸브를 생산 공급하고 있으며 앞으로 40년이상 축적된 경험과 기술력으로 "완벽한 품질, 완벽한 고객만족, 완벽한 연구개발"을 목표로 최상의 제품과 서비스로 최선을 다하겠습니다.



LD-500 Sch80 PVC & CPVC Pipe

LD VALVE Sch80 is manufactured by the following Standard Specifications

TYPE	Material (Cell Classification)	Dimensions	Commercial Classification
PVC Schedule 80	ASTM D-1784 (12454)	ASTM D-1785	Type I ,Grade 1, PVC 1120
CPVC Schedule 80	ASTM D-1784 (23447)	ASTM F-441	Type IV ,Grade 1, CPVC 4120

Sch80 PVC and CPVC Pipe Dimensions and Weights, Max Operation Pressure

Nominal Pipe Size		Outside Diameter		Wall Thickness		Approx. Inside Diameter	Nominal Weight		Max. operating Pressure
inch	mm	mm		mm			PVC	CPVC	
						mm	kg/m	kg/m	MPa
1/2"	15	21.34	±0.10	3.73	+0.51	13.4	0.31	0.34	5.97
3/4"	20	26.67	±0.10	3.91	+0.51	18.3	0.41	0.46	4.85
1"	25	33.40	±0.13	4.55	+0.53	23.8	0.61	0.67	4.42
1-1/4"	32	42.16	±0.13	4.85	+0.58	31.9	0.84	0.93	3.65
1-1/2"	40	48.26	±0.15	5.08	+0.61	37.5	1.02	1.13	3.30
2"	50	60.32	±0.15	5.54	+0.66	48.6	1.42	1.56	2.81
2-1/2"	65	73.02	±0.18	7.01	+0.84	58.2	2.17	2.38	2.95
3"	80	88.90	±0.20	7.62	+0.91	72.8	2.91	3.18	2.60
4"	100	114.30	±0.23	8.56	+1.02	96.2	4.25	4.64	2.24
5"	125	141.30	±0.25	9.53	+1.14	121.1	5.91	6.46	2.03
6"	150	168.28	±0.28	10.97	+1.32	145.0	8.13	8.87	1.96
8"	200	219.08	±0.38	12.70	+1.52	192.2	12.36	13.49	1.75
10"	250	273.05	±0.38	15.06	+1.80	241.1	18.32	20.00	1.61
12"	300	323.85	±0.38	17.45	+2.08	286.9	25.21	27.52	1.61
14"	350	355.60	±0.38	19.05	+2.29	315.2	30.23	33.00	1.54
16"	400	406.40	±0.48	21.41	+2.57	361.0	38.87	42.43	1.54
18"	450	457.20	±0.48	23.80	+2.84	406.8	48.64	53.10	1.54
20"	500	508.00	±0.58	26.19	+3.15	452.5	59.53	64.98	1.54
24"	600	609.60	±0.79	30.94	+3.71	544.0	84.45	92.18	1.47

Physical Properties of PVC & CPVC PIPE

ITEM	inch-lb unit			Test Method
	PVC	CPVC	unit	
GENERAL				
Cell Classification	12454	23447	-	ASTM D1784
Maximum Usable Temp	60	94	°C	-
Specific Gravity @ 73°F(23°C)	1.42±0.02	1.55±0.02	g/cc	ASTM D792
Water Absorption % increase 24 hrs@73°F(23°C)	0.04	0.04	%	ASTM D570
Hardness Rockwell	110-120	115-125	-	ASTM D785
Poisson's Ratio @ 73°F(23°C)	0.38	0.36	-	ASTM D638
MECHANICAL				
Tensile Strength @ 73°F(23°C)	7,100	7,700	psi	ASTM D638
Tensile Strength @ 194°F(90°C)	-	3,200	psi	"
Tensile Modulus of Elasticity @ 73°F(23°C)	410,000	380,000	psi	"
Tensile Modulus of Elasticity @ 194°F(90°C)	-	220,000	psi	"
Flexural Strength 73°F(23°C)	14,000	13,000	psi	ASTM D790
Flexural Modulus of Elasticity @ 73°F(23°C)	400,000	390,000	psi	"
Compressive Strength @ 73°F(23°C) ε =10%	10,000	14,000	psi	ASTM D695
Compressive Modulus of Elasticity @ 73°F	110,000	145,000	psi	"
Izod Impact, notched @ 73°F(23°C)	1.5	3.0	ft-lb/in	ASTM D256
THERMAL				
Coefficient of Linear Expansion	2.5-3.5x10 ⁻⁵	3.0-4.0x10 ⁻⁵	in/in/°F	ASTM D696
Coefficient of Thermal Conductivity	1.2	0.9	But/in/hr/ft.2/°F	ASTM C177
Heat Deflection Temperature Under Load (264psi, annealed)	74	110	°C	ASTM D648
Specific Heat	0.27	0.26	Cal./°C/g	ASTM D2766
ELECTRICAL				
Volume Resistivity	>1.0 x 10 ¹⁵	>1.0 x 10 ¹⁵	ohm/cm	ASTM D257
Dielectric Strength	>1000	>1000	volt/mm	ASTM D149
Dielectric Constant	3	3	-	ASTM D150
Power Factor	0.01-0.02	0.01-0.02	-	"
Electrical Conductivity	Non Conductor	Non Conductor	-	-
FIRE PERFORMANCE				
Flammability Rating	_0	V-0, 5VB, 5VA	-	UL-94
Flame Spread Index	<10	<10	-	"
Average Time of Burning	<5	<5	sec	ASTM D635
Average Extent of Burning	<10	<10	mm	"
Burning Rate	Self Extinguishing	Self Extinguishing	mm/min	"
Limiting Oxygen Index (LOI)	45	60	LOI	ASTM D2863

Sch80 PVC & CPVC Fittings

LD Sch80 Fittings are manufactured by the following Standard Specifications

TYPE		MATERIAL STD.	DIMENSIONS	COMMERCIAL CLASSIFICATION
PVC	Socket-type	ASTM D1784	ASTM D2467 ASTM D2464	Type I, GRADE I, PVC 12454
	Thread-type			
CPVC	Socket-type	ASTM D1784	ASTM F439 ASTM F437	Type IV, GRADE I, CPVC 23447
	Thread-type			

Physical Properties of PVC & CPVC Fittings

ITEM	inch-lb unit			Test Method
	PVC	CPVC	unit	
GENERAL				
Cell Classification	12454	23447	-	ASTM D1784
Maximum Usable Temp	60	94	°C	-
Specific Gravity @ 73°F(23°C)	1.42±0.02	1.55±0.02	g/cc	ASTM D792
Water Absorption % increase 24 hrs@73°F(23°C)	0.04	0.04	%	ASTM D570
Hardness Rockwell	110-120	115-125	-	ASTM D785
Poisson's Ratio @ 73°F(23°C)	0.38	0.36	-	ASTM D638
MECHANICAL				
Tensile Strength @ 73°F(23°C)	7,700	7,700	psi	ASTM D638
Tensile Strength @ 194°F(90°C)	-	3,200	psi	"
Tensile Modulus of Elasticity @ 73°F(23°C)	420,000	380,000	psi	"
Tensile Modulus of Elasticity @ 194°F(90°C)	-	220,000	psi	"
Flexural Strength 73°F(23°C)	13,000	13,000	psi	ASTM D790
Flexural Modulus of Elasticity @ 73°F(23°C)	420,000	390,000	psi	"
Compressive Strength @ 73°F(23°C) ε =10%	10,000	14,000	psi	ASTM D695
Compressive Modulus of Elasticity @ 73°F	110,000	145,000	psi	"
Izod Impact, notched @ 73°F(23°C)	1.0	3.0	ft-lb/in	ASTM D256
THERMAL				
Coefficient of Linear Expansion	2.5-3.5x10 ⁻⁵	3.0-4.0x10 ⁻⁵	in/in/°F	ASTM D696
Coefficient of Thermal Conductivity	1.11	0.90	But/in/hr/ft.2/°F	ASTM C177
Heat Deflection Temperature Under Load (264psi, annealed)	77	110	°C	ASTM D648
Specific Heat	0.27	0.26	Cal./°C/g	ASTM D2766
ELECTRICAL				
Volume Resistivity	>1.0 x 10 ¹⁵	>1.0 x 10 ¹⁵	ohm/cm	ASTM D257
Dielectric Strength	>1000	>1000	volt/mm	ASTM D149
Dielectric Constant	3	3	-	ASTM D150
Power Factor	0.01-0.02	0.01-0.02	-	"
Electrical Conductivity	Non Conductor	Non Conductor	-	-
FIRE PERFORMANCE				
Flammability Rating	V-0	V-0, 5VB, 5VA	-	UL-94
Flame Spread Index	<10	<10	-	"
Average Time of Burning	<5	<5	sec	ASTM D635
Average Extent of Burning	<10	<10	mm	"
Burning Rate	Self Extinguishing	Self Extinguishing	mm/min	"
Limiting Oxygen Index (LOI)	45	60	LOI	ASTM D2863

Schedule 80 Pipe & Fittings

PVC SCH80 Pipe & Fittings (1/2" - 12")

SCH80 Pipe 	90° Elbow 	45° Elbow 	Tee 
Cross Tee 	Coupling 	Y-TEE 	Reducer Coupling 
Male Adapter 	Female Adapter 	Reducer Bushing 	CAP 

CPVC SCH80 Pipe & Fittings, Valves (1/2" - 12")

SCH80 Pipe 	90° Elbow 	Tee 	Ball Valve 
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LD VALVE

Material : PVC, CPVC, PP, PVDF

Double Union Ball Valve

Size : 1/2" - 4"



Double Union Ball Valve, Flanged End

Size : 1/2" - 4"



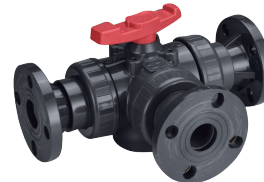
3-Way Horizontal Union Ball Valve

Size : 1/2" - 4"



3-Way Horizontal Union Ball Valve, Flanged End

Size : 1/2" - 4"



3-Way Vertical Union Ball Valve

Size : 1/2" - 4"



3-Way Vertical Union Ball Valve, Flanged End

Size : 1/2" - 4"



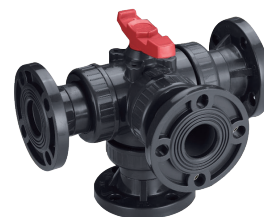
4-Way Union Ball Valve

Size : 1/2" - 4"



4-Way Union Ball Valve, Flanged End

Size : 1/2" - 4"



LD VALVE

Material : PVC, CPVC, PP, PVDF

Ball Valve Flanged End-Gear Type

Size : 8" - 10"



Labcock Ball Valve

Size : 1/8", 1/4", 3/8"



Single Union Ball Check Valve

Size : 1/2" - 4"



Single Union Ball Check Valve, Flanged End

Size : 1/2" - 4"



Swing Check Valve-Flanged End

Size : 2" - 6"



Heavy Duty Swing Check Valve, Flanged End

Size : 8" - 10"



Butterfly Valve, Lever Handle, Bare Stem (자동밸브용)

Size : 2" - 8"



Butterfly Valve-Gear Type

Size : 200A-500A (JIS) 8"-12" (ANSI)





Bailey®

PVC, CPVC, ABS 용해성 접착제



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Plastic Valves (PVC, CPVC, PP, PVDF)



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