



General Purpose Valves  
Catalog No. CB-03-1SA

Diaphragm cylinder valve

# LAD Series

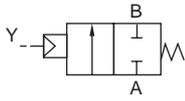
- NC (Normally Closed), NO (Normally Open), double acting
- Port size: Rc3/8, Rc1/2, Rc3/4, Rc1
- Working fluids: Pure water, water, air, N<sub>2</sub>Gas



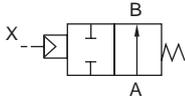
Pneumatic actuator  
 Pneumatic valves  
 Vacuum components  
 Pneumatic auxiliary components  
 Fluid control components  
 Electric actuator

### JIS symbol

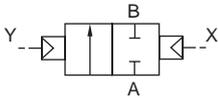
- NC (Normally Closed)



- NO (Normally Open)



- Double acting



### Common specifications (PTFE diaphragm)

Item	LAD1	LAD2	LAD3
Actuation	NC (Normally Closed)	NO (Normally Open)	Double acting
Working fluid	Water, pure water, air, N <sub>2</sub> gas, non-corrosive/non-absorbable fluid (*1)		
Fluid temperature °C	5 to 90 (*2)		
Proof pressure (water pressure) MPa	0.9		
Working pressure (A→B) MPa	0 to 0.3		
Valve seat leakage cm <sup>3</sup> /min	0 (water pressure), 1 or less (pneumatic pressure)		
Back pressure MPa	0 to 0.1		
Ambient temperature °C	0 to 60		
Mounting orientation	Unrestricted		
Operating section	Pilot fluid	Air	
	Pilot pressure MPa	0.3 to 0.5	0.3 to 0.4
	Pilot port size	Rc1/8 (*3)	

\*1: Check the compatibility of product structural materials, working fluids and atmosphere. Strong acids and highly absorbable fluids cannot be used.

\*2: 5 to 100°C for stainless steel body (SCS13).

\*3: With stainless steel reinforcing ring.

### Individual specifications (PTFE diaphragm)

Item Model No.	Port size	Orifice size mm	Cv	Frequency cycles/min.	Weight kg	
					PPS body	SCS13 body
LAD*-10A	Rc3/8	8	1.7	30 or less	0.15	0.3
LAD*-15A	Rc1/2	12	3.3	20 or less	0.28	0.6
LAD*-20A	Rc3/4	20	8.5	20 or less	0.55	1.1
LAD*-25A	Rc1	20	8.5	20 or less	0.60	1.2

### Common specifications (EPDM diaphragm)

Item	LAD1	LAD2	LAD3
Actuation	NC (Normally Closed)	NO (Normally Open)	Double acting
Working fluid	Water, air, N <sub>2</sub> Gas, non-corrosive/non-absorbable fluid (*1)		
Fluid temperature °C	0 to 60 (no freezing)		
Proof pressure (water pressure) MPa	1.5 (refer to proof pressure in individual specifications.)		
Working pressure (A→B) MPa	0 to 0.5 (refer to working pressure range in individual specifications.)		
Valve seat leakage cm <sup>3</sup> /min	0 (water pressure), 0.12 or less (pneumatic pressure)		
Back pressure MPa	0 to 0.1		
Ambient temperature °C	0 to 60		
Mounting orientation	Unrestricted		
Operating section	Pilot fluid	Air	
	Pilot pressure MPa	0.3 to 0.5	0.3 to 0.4
	Pilot port size	Rc1/8 (*2)	

\*1: Check the compatibility of product structural materials, working fluids and atmosphere. Strong acids and highly absorbable fluids cannot be used.

\*2: With stainless steel reinforcing ring.

### Individual specifications (EPDM diaphragm)

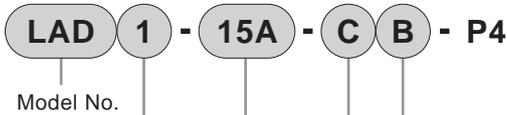
Item Model No.	Port size	Proof pressure (water pressure) MPa	Working pressure (A→B) MPa	Orifice size mm	Cv	Frequency cycles/min.	Weight kg	
							PPS body	SCS13 body
LAD*-10A	Rc3/8	1.5	0.5	8	1.7	30 or less	0.15	0.3
LAD*-15A	Rc1/2	1.5	0.5	12	3.3	20 or less	0.28	0.6
LAD*-20A	Rc3/4	1.2	0.4	20	8.5	20 or less	0.55	1.1
LAD*-25A	Rc1	1.2	0.4	20	8.5	20 or less	0.60	1.2

## Compatibility table by variation

	LAD
Port size	Rc3/8, 1/2, 3/4, 1
P4	●

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. □: Not applicable

## How to order



**A** Actuation

**B** Port size

**C** Material combination

**D** Other options

Code	Description	
<b>A Actuation</b>		
1	NC (Normally Closed)	
2	NO (Normally Open)	
3	Double acting	
<b>B Port size</b>		
10A	Rc3/8	
15A	Rc1/2	
20A	Rc3/4	
25A	Rc1	
<b>C Material combination</b>		
	Body	Diaphragm
P	PPS	EPDM
C	PPS	PTFE
R	SCS13	EPDM
F	SCS13	PTFE
<b>D Other options</b>		
Blank	No option	
B	Mounting plate	

Note: Contact CKD for the "indicator" type.

**P4**  
Series

Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components  
Pneumatic valves

Clean air components  
Speed controller  
Fitting  
Auxiliary valve  
Silencer  
Tube

Pneumatic auxiliary components  
Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications