

Solenoid Valve (with M Connector)
Conforming to ISO 15407-1

Series *EVS1-01*, *1-02*

(Size 01) (Size 02)



Large capacity

	Flow rate	Cylinder driving size
EVS1-01 (Size: 01)	1000L/min (ANR)	ø100
EVS1-02 (Size: 02)	400L/min (ANR)	ø80

Light weight

Size 01 (3-position): 0.26kg
Size 02 (3-position): 0.18kg

ISO 15407-1 Interface

Size 01 (**EVS1-01**) and Size 02 (**EVS1-02**)
Interface conforms to ISO 15407-1

Accommodates enclosure IP65

Dust/Splashproof type

Series EVS1-01/1-02

How to Order

Valve **EVS1-01-FG-S-3- - - - - M0**

Size

01	Size 01
02	Size 02

Passage symbol

FG	
FHG	
FJG	
FIG	

Thread type

Nil	Rc
F	G
T	NPTF

Port size

Symbol	Piping specifications	Size 01	Size 02
Nil	Without sub-plate	○	○
A01	Side-ported 1/8	○	○
A02	Side-ported 1/4	○	—

Number of solenoids

S	Single
D	Double

Rated coil voltage

3	24VDC
4	12VDC
9	Voltage other than above (50VDC or less)

Sealing type

Nil	Metal seal
R	Rubber seal

Option

Nil	None
Z	Indicator light with surge voltage suppressor

Sub-plate **VS1-01-A02- -**

Size

01	Size 01
02	Size 02

Thread type

Nil	Rc
F	G
T	NPTF

Port size

Symbol	Piping specifications	Size 01	Size 02
A01	Side-ported 1/8	○	○
A02	Side-ported 1/4	○	—

Specifications

Model	Piping specifications			Weight (kg)
	Piping direction	Port size for 1(P), 2(B), 4(A)	Port size for 3(R2), 5(R1)	
VS1-01-A01	Horizontal	1/8		0.14
VS1-01-A02		1/4		
VS1-02-A01	Horizontal	1/8		0.07

Models

Series EVS1-01



Positions			Flow rate characteristics					
			1→4, 2 (P→A, B)			4, 2→5, 3 (A, B→EA, EB)		
			C	b	Cv	C	b	Cv
2-position	Single	Metal seal	3.10	0.10	0.60	3.40	0.10	0.70
		Rubber seal	3.60	0.28	0.90	4.20	0.20	1.00
	Double	Metal seal	3.10	0.10	0.60	3.40	0.10	0.70
		Rubber seal	3.60	0.28	0.90	4.20	0.20	1.00
3-position	Closed center	Metal seal	3.10	0.10	0.60	3.20	0.10	0.60
		Rubber seal	3.20	0.34	0.80	4.20	0.30	1.00
	Exhaust center	Metal seal	2.70	0.10	0.60	3.30	0.10	0.70
		Rubber seal	3.10	0.26	0.80	4.00	0.25	1.10
	Pressure center	Metal seal	3.20	0.10	0.70	3.20	0.10	0.60
		Rubber seal	4.40	0.25	1.00	3.60	0.25	1.00

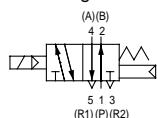
Series EVS1-02



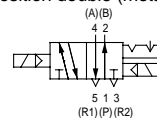
Positions			Flow rate characteristics					
			1→4, 2 (P→A, B)			4, 2→5, 3 (A, B→EA, EB)		
			C	b	Cv	C	b	Cv
2-position	Single	Metal seal	1.50	0.10	0.30	1.70	0.10	0.30
		Rubber seal	2.20	0.20	0.50	2.20	0.10	0.50
	Double	Metal seal	1.50	0.10	0.30	1.70	0.10	0.30
		Rubber seal	2.20	0.20	0.50	2.20	0.10	0.50
3-position	Closed center	Metal seal	1.50	0.10	0.30	1.60	0.10	0.30
		Rubber seal	2.10	0.20	0.50	2.10	0.10	0.40
	Exhaust center	Metal seal	1.30	0.10	0.20	1.60	0.10	0.20
		Rubber seal	2.00	0.16	0.50	2.10	0.10	0.40
	Pressure center	Metal seal	1.60	0.10	0.20	1.50	0.10	0.20
		Rubber seal	2.20	0.20	0.50	2.10	0.10	0.40

Symbol

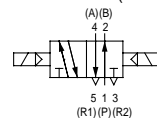
2-position single



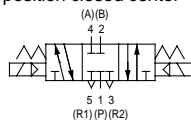
2-position double (metal)



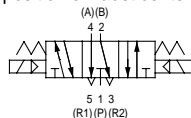
2-position double (rubber)



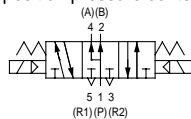
3-position closed center



3-position exhaust center



3-position pressure center



Standard Specifications

Valve specifications	Valve type	Metal seal	Rubber seal	
	Fluid	Air, Inert gas		
	Maximum operating pressure	1.0MPa		
	Minimum operating pressure	Single	0.1MPa	0.15MPa
		Double	0.1MPa	0.1MPa
		3-position	0.15MPa	0.2MPa
	Ambient and fluid temperature	-10° to 60°C Note 1)	-5° to 60°C Note 1)	
	Lubrication	Not required (non-lube type)		
	Manual override	Push type (tool required)		
	Impact resistance/Vibration resistance	150, 30m/s ² Note 2)		
Enclosure	IP65 (Dust/Splashproof type)			
Electric specifications	Rated coil voltage	12VDC, 24VDC		
	Allowable voltage fluctuation	±10% of rated voltage		
	Type of coil insulation	Equivalent to class B		
	Power consumption (Current)	24VDC	1W DC (42mA)	
		12VDC	1W DC (83mA)	

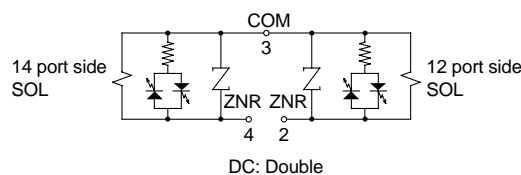
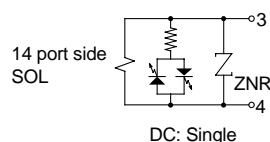
Note 1) Use dry air to prevent condensation at low temperatures.

Note 2) **Impact resistance:** No malfunction resulted during an impact test using a drop impact tester. The test was performed one time each in the axial and right angle directions of the main valve and armature for both energized and de-energized conditions.

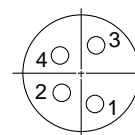
Vibration resistance: No malfunction resulted during a one-sweep test between 8.3 and 2000Hz. The test was performed in the axial and right angle directions of the main valve and armature for both energized and de-energized conditions.

Specific Product Precautions

⚠ Caution Internal Wiring Specifications

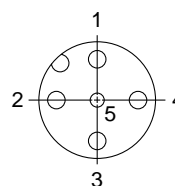


M8 Connector: Wiring specifications (EVS1-02)



- Pin no.
 1: Open
 2: 12 port side SOL (+)
 3: COM (-)
 4: 14 port side SOL (+)

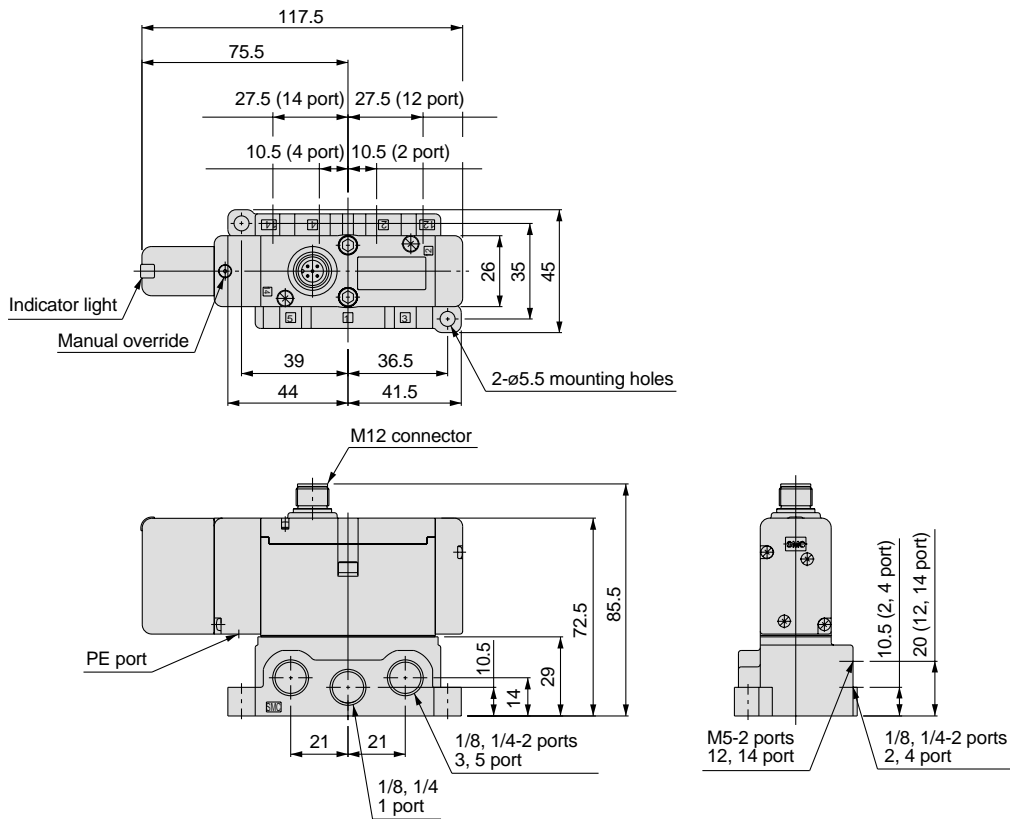
M12 Connector: Wiring specifications (EVS1-01)



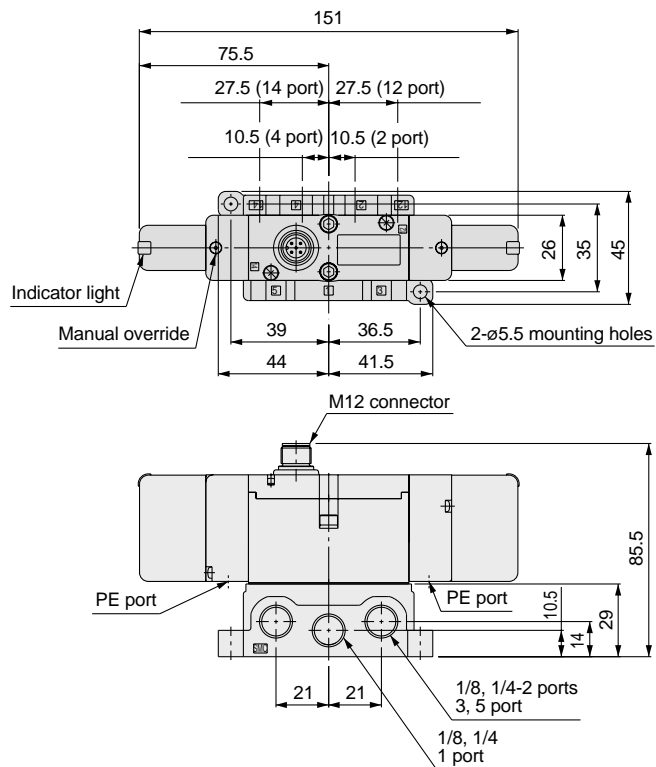
- Pin no.
 1: Open
 2: 12 port side SOL (+)
 3: COM (-)
 4: 14 port side SOL (+)
 5: Ground

Dimensions

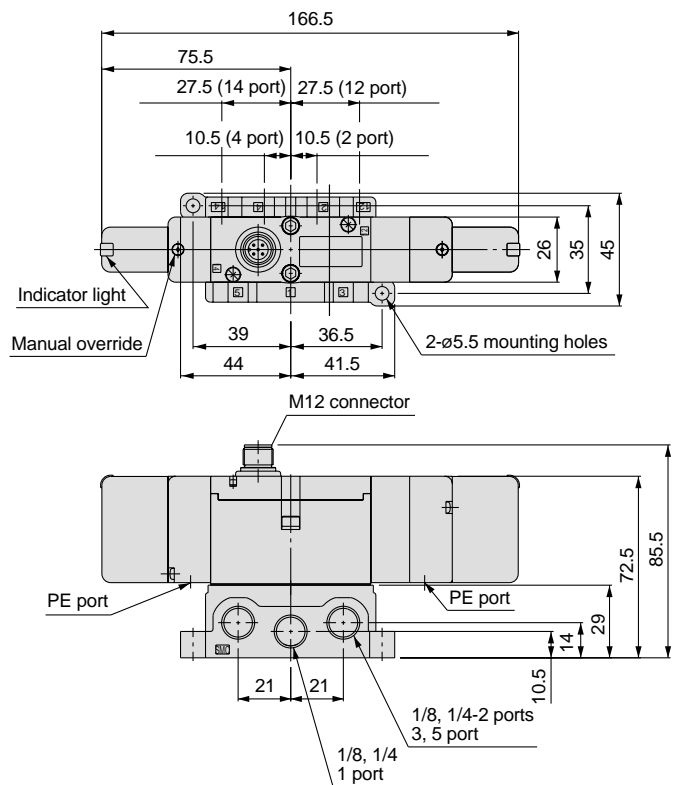
EVS1-01-FG-S-□□M0



EVS1-01-FG-D-□□M0



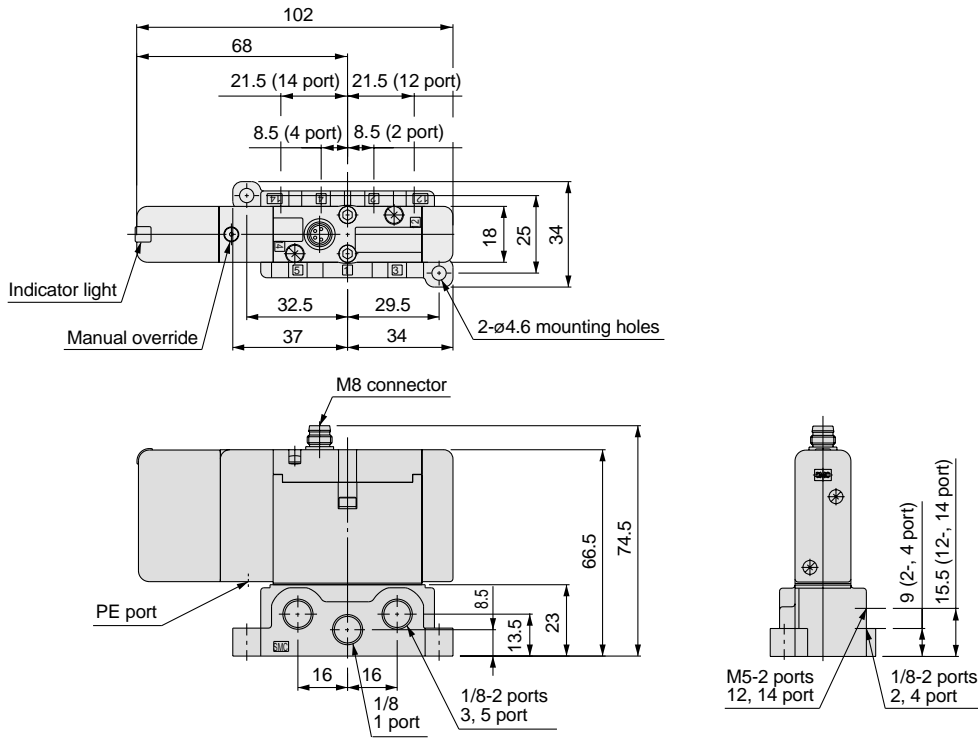
EVS1-01-F^H_JG-D-□□M0



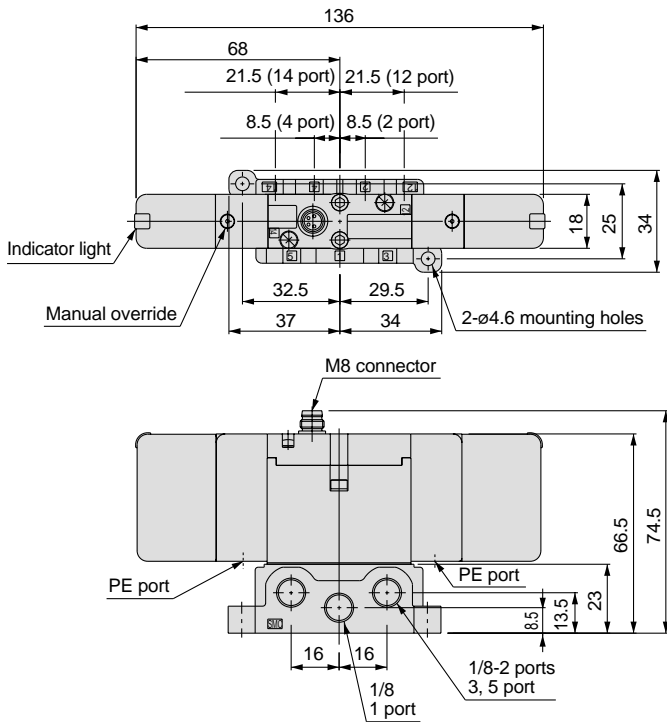
Series EVS1-01/1-02

Dimensions

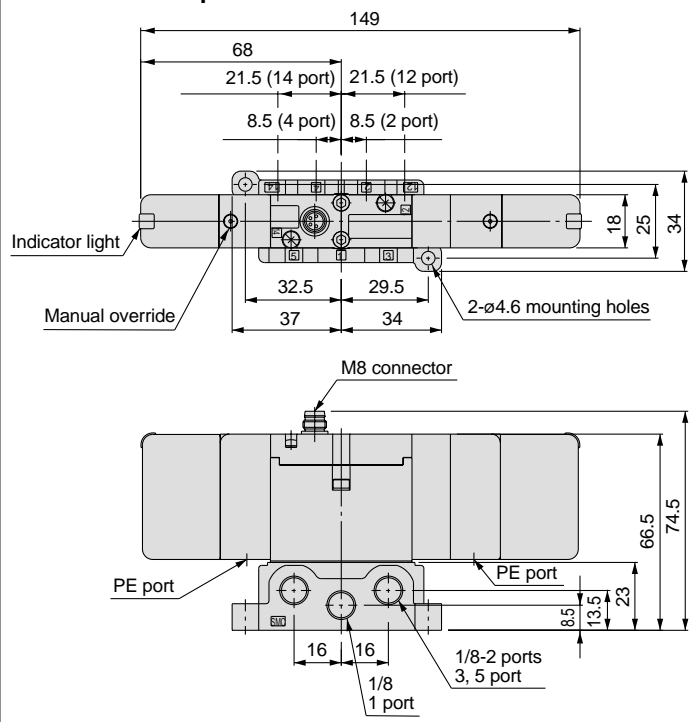
EVS1-02-FG-S-□□M0



EVS1-02-FG-D-□□M0

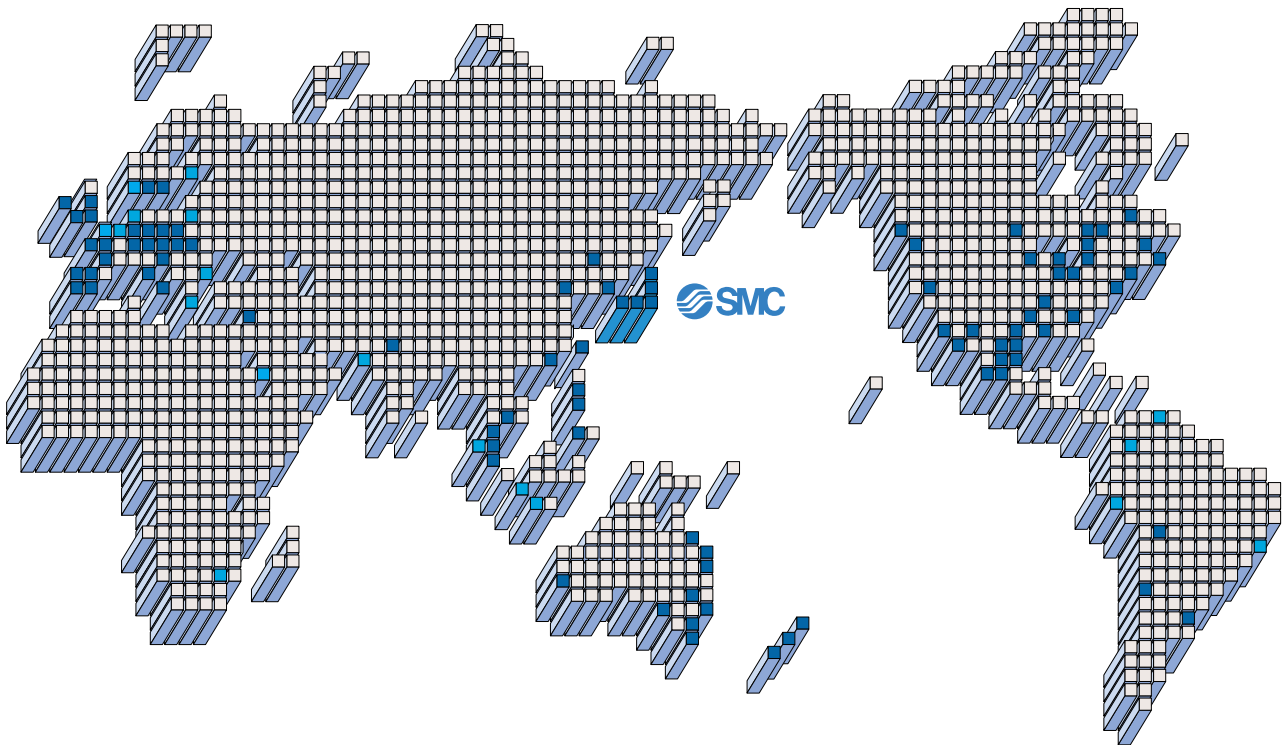


EVS1-02-F^H_JG-D-□□M0





SMC'S GLOBAL MANUFACTURING, DISTRIBUTION AND SERVICE NETWORK



EUROPE

AUSTRIA

SMC Pneumatik GmbH

CZECH

SMC Industrial Automation CZ s.r.o.

DENMARK

SMC Pneumatik A/S

FINLAND

SMC Pneumatics Finland Oy

FRANCE

SMC Pneumatique SA

GERMANY

SMC Pneumatik GmbH

HUNGARY

SMC Ipari Automatizálási Kft.

IRELAND

SMC Pneumatics (Ireland) Ltd.

ITALY

SMC Italia S.p.A.

NETHERLANDS

SMC Pneumatics BV.

NORWAY

SMC Pneumatics Norway A/S

POLAND

SMC Industrial Automation Polska Sp.z.o.o.

ROMANIA

SMC Romania s.r.l.

RUSSIA

SMC Pneumatik LLC.

SLOVAKIA

SMC Priemyselná Automatizácia, s.r.o.

EUROPE

SLOVENIA

SMC Industrijska Avtomatika d.o.o.

SPAIN/PORTUGAL

SMC España, S.A.

SWEDEN

SMC Pneumatics Sweden AB

SWITZERLAND

SMC Pneumatik AG.

UK

SMC Pneumatics (U.K.) Ltd.

ASIA

CHINA

SMC (China) Co., Ltd.

HONG KONG

SMC Pneumatics (Hong Kong) Ltd.

INDIA

SMC Pneumatics (India) Pvt. Ltd.

MALAYSIA

SMC Malaysia (S.E.A.) Sdn. Bhd.

PHILIPPINES

SMC Pneumatics (Philippines), Inc.

SINGAPORE

SMC Pneumatics (S.E.A.) Pte. Ltd.

SOUTH KOREA

SMC Pneumatics Korea Co., Ltd.

TAIWAN

SMC Pneumatics (Taiwan) Co., Ltd.

THAILAND

SMC Thailand Ltd.

NORTH AMERICA

CANADA

SMC Pneumatics (Canada) Ltd.

MEXICO

SMC Corporation (Mexico) S.A. de C.V.

USA

SMC Corporation of America

SOUTH AMERICA

ARGENTINA

SMC Argentina S.A.

BOLIVIA

SMC Pneumatics Bolivia S.R.L.

BRAZIL

SMC Pneumaticos Do Brazil Ltda.

CHILE

SMC Pneumatics (Chile) S.A.

VENEZUELA

SMC Neumatica Venezuela S.A.

OCEANIA

AUSTRALIA

SMC Pneumatics (Australia) Pty. Ltd.

NEW ZEALAND

SMC Pneumatics (N.Z.) Ltd.

SMC CORPORATION

1-16-4 Shimbashi, Minato-ku, Tokyo 105-0004, JAPAN

Tel: 03-3502-2740 Fax: 03-3508-2480

URL <http://www.smcworld.com>

© 2001 SMC CORPORATION All Rights Reserved

1st printing October, 2001 D-SMC.L.A. P-80 (D)

This catalog is printed on recycled paper with concern for the global environment.

All specifications in this catalog are subject to change without notice.

Printed in Japan.