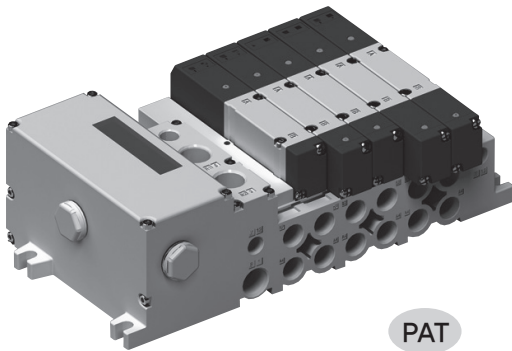


Series RS 4000

Plug-In Type Solenoid Valve



PAT

- COMPACT EXTERNAL DESIGN
- PRECISE COIL MOTION IN ACCORDANCE WITH ADOPTION OF HIGHLY BRIGHT LED
- POSSIBLE FOR 18-CONNECTION FOR SINGLE AND 9-CONNECTION FOR DOUBLE CASE
- POSSIBLE TO RESPONSE SI UNIT AND TERMINAL BOARD
- NON-POLAR TYPE, RESPONDING TO (+) AND (-) COMMON
- POSSIBLE TO DEMONSTRATE SINGLE, DOUBLE AND 3-POSITION
- CONNECTION BY TIE ROD

- DW
- DR100
- DR200
- RS1000, 2000
- RS4000**
- SI UNIT
- DV1000, DV3000, DV4000
- DS300
- DS3000
- DS5000
- DS2000
- DS6000
- DX1,DX2
- DX1(2)R
- DH
- DP300, DP3000, DP5000
- DM
- DT220

How to Order

RS 4 1 40 - 5 -

Pilot Specifications

Blank Internal Pilot

Configuration

1	2 Position Single	
2	2 Position Double	
3	3 Position Closed Center	
4	3 Position Exhaust Center	
5	3 Position Pressure Center	

Voltage

5	DC 24V
6	DC12V

Manifold Option

Blank	Without Manifold
WM	With Manifold

Series RS 4000

How to Order Manifold

R S M 4 - T - 06 B - 03

Connector Type

T	Terminal Block
---	----------------

Valve Connection Number


02	2 Station	Double Wiring Specification
08	8 Station	
02	2 Station	Arrangement Assigned (Note 1)
18	18 Station	

Note1) Please present the specification in accordance with arrangement assignment.
 Note2) Since 2-station valve is mounted at 1 block, please order in even connection number.

Pilot Specification

Blank	Internal Pilot
-------	----------------

P, E Port Extracting Location

B Side (2~18 Station)	
-----------------------	--

A, B Port Connection Diameter (mm)

Symbol	A, B Port	P, EPort
02	Rc(PT) 1/4	PT 1/2
03	Rc(PT) 3/8	

A, BPort Connection Diameter (Inch)

Symbol	A, B Port	P, EPort
02U	NPT 1/4	NPT 1/2
03U	NPT 3/8	

How to Order Manifold Side Cover

R S M 4 A - T - B - 04

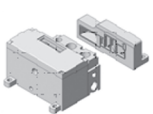
Connector Type

T	Terminal Block(24pin)
---	-----------------------

Pilot Specification

Blank	Internal Pilot
-------	----------------

P, E Port Extracting Location

B Side (2~16 Station)	
-----------------------	---

Port Connection Diameter (mm)

Symbol	P, E Port
04	Rc(PT) 1/2

Port Connection Diameter (Inch)

Symbol	P, E Port
04U	NPT 1/2

How to Order Base

R S M 4 - B - 03 -

Port Connection Diameter (mm)

Symbol	A, B Port
02	Rc(PT) 1/4
03	Rc(PT) 3/8

Port Connection Diameter (Inch)

Symbol	A, BPort
02U	NPT 1/4
03U	NPT 3/8

PCB Wire Specification

D	Double Wire Specification
S	Single Wire Specification

Series RS 4000

How to Order Tie Rod

R S M 4 T - B 6

- ※ Valve combination connection number: 1~18-station
- ※ Be cautious that 2-connection valve is mounted on 1 block.

Solenoid Valve Specifications

Applied Fluid		Air	
Operating Pressure Range (kgf/cm ²)	Internal Pilot	2 Position Single	0.15~0.7
		2 Position Double	0.10~0.7
		3 Position	0.20~0.7
Ambient Temperature and Applied Fluid Temperature (°C) Manual Override		-5 ~ 50	
		Non Lock Push Type	
Pilot Exhaust Method	Internal Pilot	Main Valve, Pilot Valve Integrated Exhaust Type	
Lubrication		Non-Lube	
Mounting		Free	
Impact-Resistance/Vibration-Resistance %		150/30 (8.3~2000Hz)	
Maximum Operation Frequency (Hz)		2 Position	5
		3 Position	3
Protection Structure		IP65	
Rated Voltage (V)		DC 24 (DC 12V)	
Allowable Voltage Fluctuation		-10 ~ + 10 of Rated Voltage	
Polarity		Non-Polar Base	
Power Consumption (W)		0.85 (Lamp and Surge Protection Circuit Attached)	

Valve Flow Characteristics

Type	Switching Method	Pipe Contact Diameter	Effective Sectional Area m ² (Cv Value)
BASE Pipe Type	RS4140	Single solenoid	Rc(PT) 3/8 32.4 (1.8)
	RS4240	Double solenoid	Rc(PT) 3/8 32.4 (1.8)
	RS4340	Closed center	Rc(PT) 3/8 32.4 (1.8)
	RS4440	Exhaust center	Rc(PT) 3/8 32.4 (1.8)
	RS4540	Pressure center	Rc(PT) 3/8 37.4 (2.0)

Manifold Specification

Index		RS4000
Connection Method Between Blocks		Tie Rod
Sup/Exh Method		Integrated Sub/Exh
Maximum Valve Stations		18
Number of Output		18
Port Size	P, R	Rc(PT) 1/2, NPT 1/2
	A, B	Rc(PT) 1/4, Rc(PT) 3/8 NPT 1/4, NPT 3/8

Solenoid Valve Response Time

Type	Responding Time (ms)
2 Position Single	ON: less than 30, OFF: less than 40
2 Position Double	Less than 30
3 Position	Less than 50

Weight sheet

(Unit : g)

Item		RS4000	Remark
VALVE	SINGLE	210	
	DOUBLE	238	
	3-POSITION	260	
MANIFOLD SIDE COVER ASSY		2,032	RS4000 G-connection Set Tie Rod Included
Base Single Product		550	

DW

DR100

DR200

RS1000,
2000

RS4000

SI UNIT

DV1000
DV3000
DV4000

DS300

DS3000

DS5000

DS2000

DS6000

DX1,DX2

DX1(2)R

DH

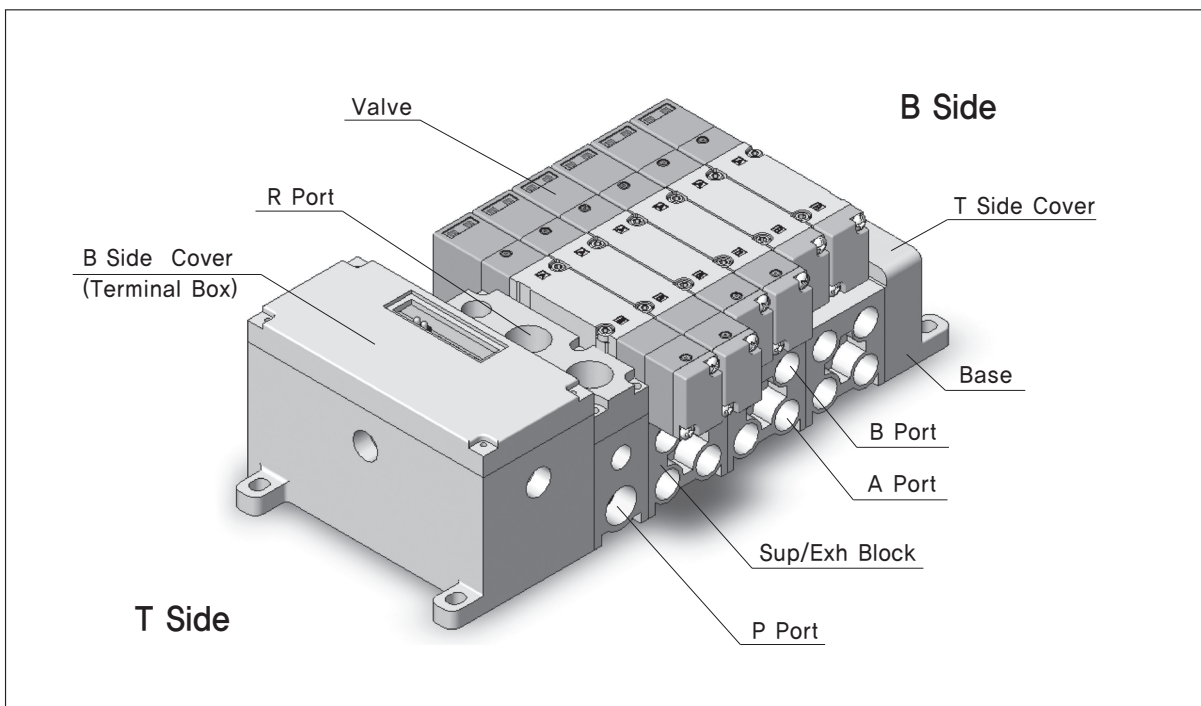
DP300
DP3000
DP5000

DM

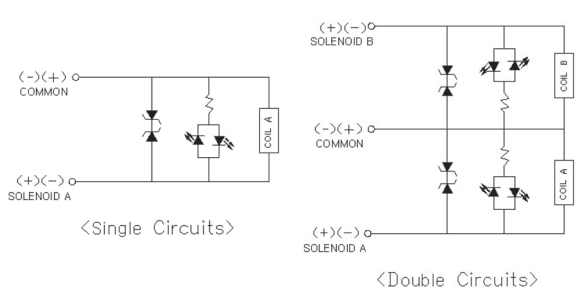
DT220

Series RS 4000

External Design

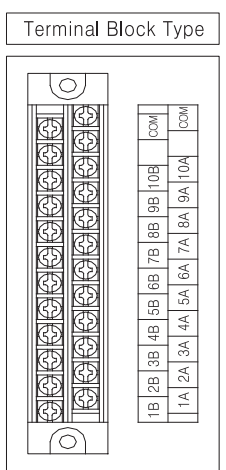


Valve Circuit Diagram



- ▶ Solenoid is non-polar type with red for sol A and green lamp for sol B.
- ▶ Owing to surge protection circuit equipped, it is safe with surge voltage.

Manifold Electric Wiring



Common(+, -)	
9B (Sol B)	} 9th station
9A (Sol A)	
8B (Sol B)	} 8th station
8A (Sol A)	
7B (Sol B)	} 7th station
7A (Sol A)	
6B (Sol B)	} 6th station
6A (Sol A)	
5B (Sol B)	} 5th station
5A (Sol A)	
4B (Sol B)	} 4th station
4A (Sol A)	
3B (Sol B)	} 3rd station
3A (Sol A)	
2B (Sol B)	} 2nd station
2A (Sol A)	
1B (Sol B)	} 1st station
1A (Sol A)	

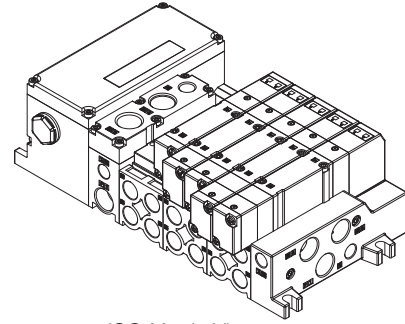
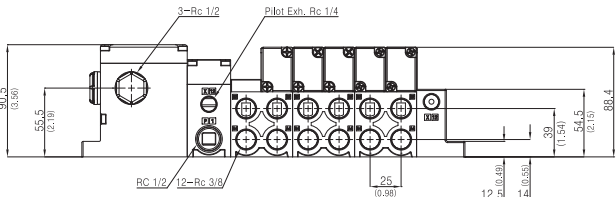
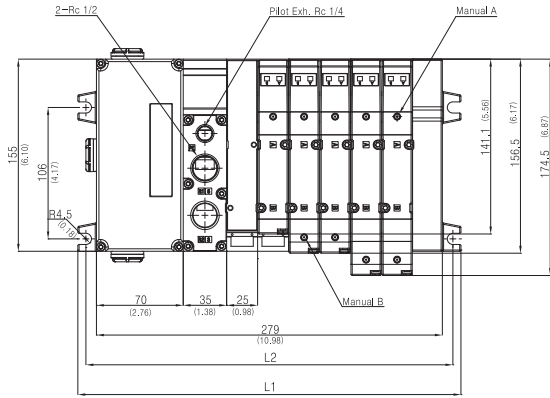
- ▶ Since solenoid valve is non-polar type, it is available for utilization of either (+) or (-) Common.
- ▶ Wiring above is basic form for Double 9-connection, and Single is connected to Sol A, while Double is connected to 1A → 1B → 2A → 2B in sequence without omission. In case of connecting with combination of Single and Double, please separately inquire since it is different to wiring sequence above.



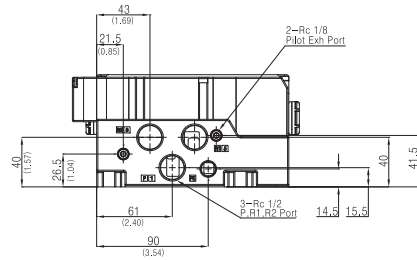
Series RS 4000

Exterior Dimension Drawings

Terminal Block Type



ISO Metric View



Dimension Table

(Unit : mm)

L	n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L1		209	234	259	284	309	334	359	384	409	434	459	484	509	534	559	584	609
L2		196	241	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596

Note1) Formula L1=25n+159

Note2) Formula L2=25n+146

- DW
- DR100
- DR200
- RS1000, 2000
- RS4000**
- SI UNIT
- DV1000
- DV3000
- DV4000
- DS300
- DS3000
- DS5000
- DS2000
- DS6000
- DX1,DX2
- DX1(2)R
- DH
- DP300
- DP3000
- DP5000
- DM
- DT220

Sandwich Regulator for Plug-in Valve **RS4000 Series**

How to order



1 Series

RS4U : RS4000 valve
 + sandwich regulator
 + manifold combinations

2 Number of stations

04 : 4 stations
 06 : 6 stations
 08 : 8 stations
 10 : 10stations
 12 : 12stations

3 Valve arrangement order

Q'ty	Symbol	Figure	Part no.	Mark
	S		RS4140-5	Single
6	D		RS4240-5	Double
2	H		RS4340-5	Closed Center
	J		RS4440-5	Exhaust Center
	I		RS4540-5	Pressure Center
2	B		RSM4-B	Blank Plate
Sandwich regulator	P		RS4R-P	P pressure reducing type
	A		RS4R-A	A pressure reducing type
	B		RS4R-B	B pressure reducing type

4 Connector type

T : Terminal Block
 DV : D-Sub Connector (Vertical)
 DH : D-Sub Connector (Horizontal)
 FV : Flat Cable Connector (Vertical)
 FH : Flat Cable Connector (Horizontal)

5 A, B Port size (mm)

Symbol	A, B port	P, R, PE, X port
02	Rc(PT) 1/4	P, R : Rc(PT) 1/2
03	Rc(PT) 3/8	PE, X : Rc(PT) 1/4

Note) If in inch, 'U' is added after numbers.

6 Terminal box port size (mm)

Symbol	A, B port
04	Rc(PT) 1/2
06	Rc(PT) 3/4

7 Terminal box port sealing (mm)

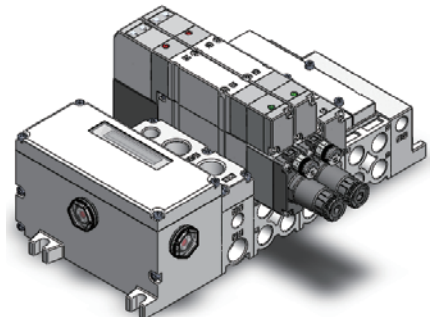
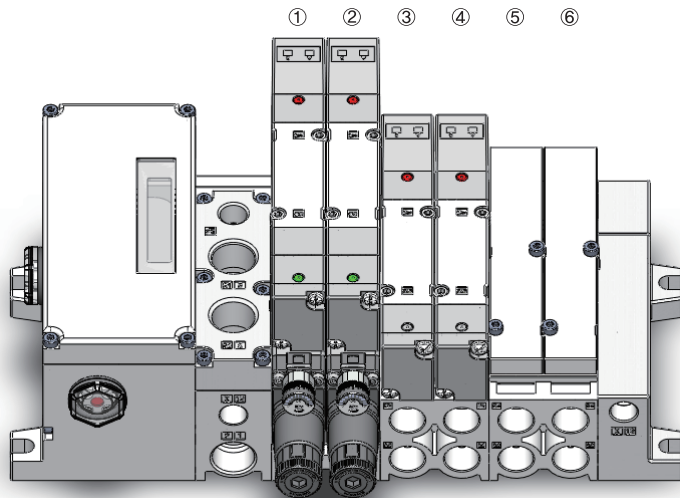
Blank	Port plug (Set screw)
N	Rubber stopper

Note) Only apply to Terminal block.

Order Example (Excluding Manifold)

▶ Part no. : RS4U - 06 - 2A2D2B

→ 6 Stations, Sandwich regulator 2ea with Pressure center valve 2ea, Double valve 2ea, Blank plate 2ea



TV2

TV2WFI

TV2WC

FSW

DR100
DR200

RS1000
RS2000

RS4000
RS4R

SI UNIT

RDV100
RDV300
RDV400

DVC1000

DV1000
DV3000
DV4000

DVUM1000
DVUM3000
DVUM4000

DVP1000
DVP3000
DVP4000

RDS300
RDS3000
RDS5000

RDSN3000

DS2000
DS6000

DX1
DX2

DX1R
DX2R

TVH

TFVM

DP300
DP3000
DP5000

DM

DT220

DQE

DCV

TX350