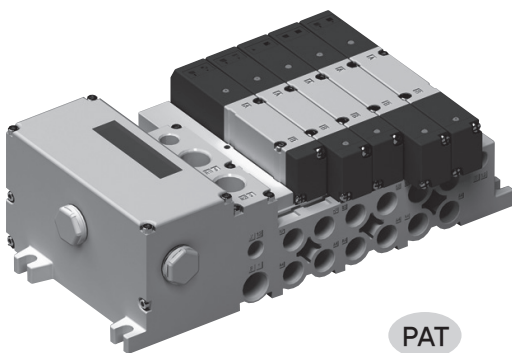


# Series **RS 4000**

## Plug-In Type Solenoid Valve



- 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

### 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

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

### 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	Arrangement Assigned (Note 1)
02	2 Station	
↓	↓	
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
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#### P, E Port Extracting Location

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

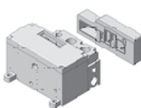
#### Connector Type

T	Terminal Block(24pin)
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#### Pilot Specification

Blank	Internal Pilot
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#### P, E Port Extracting Location

B Side (2~16 Station)	
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#### 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/cm²)	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 <sup>2</sup> (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

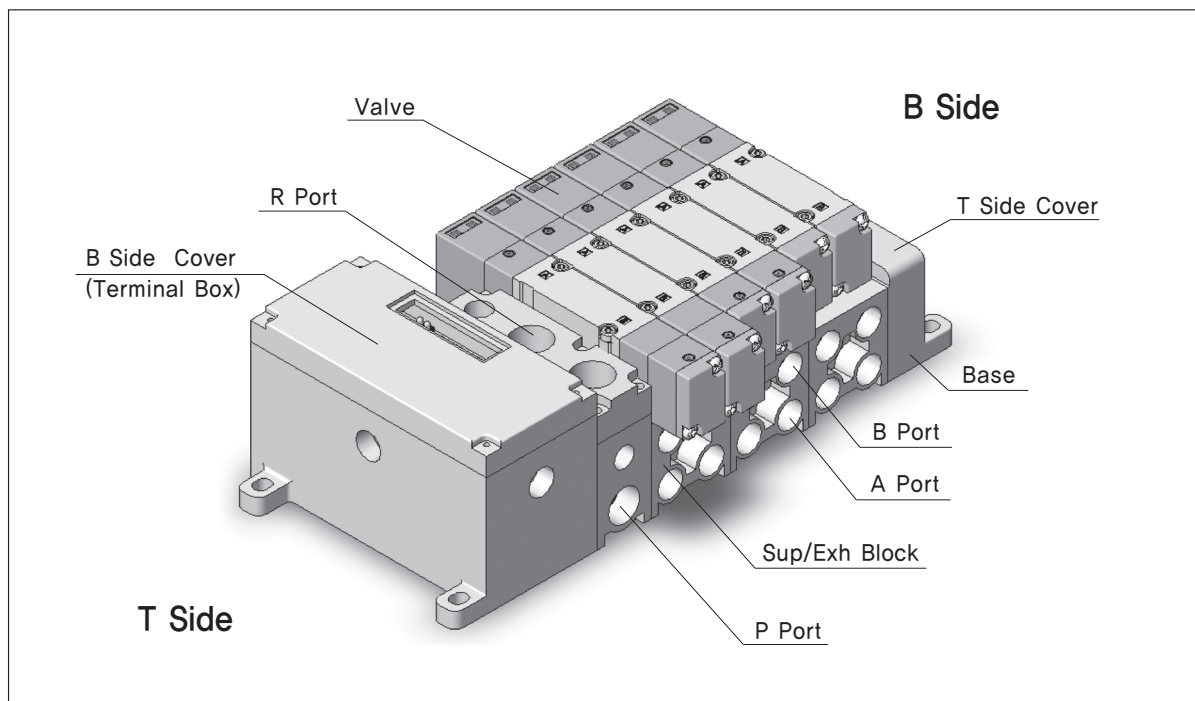
DP300  
DP3000  
DP5000

DM

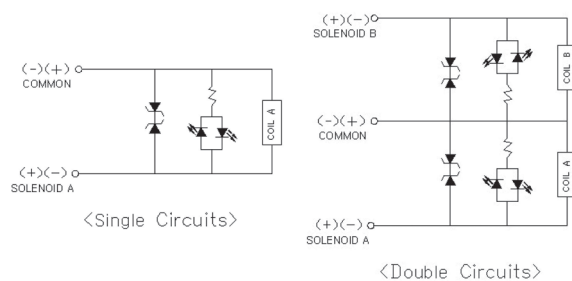
DT220

## Series RS 4000

### External Design



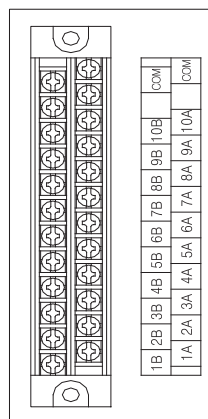
### Valve Circuit Diagram



- ▶ 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

Terminal Block Type



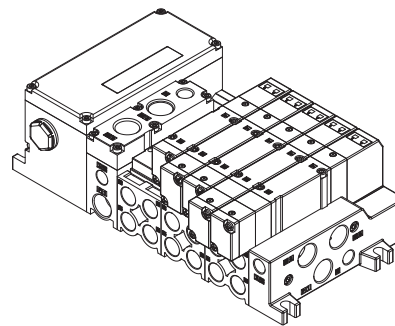
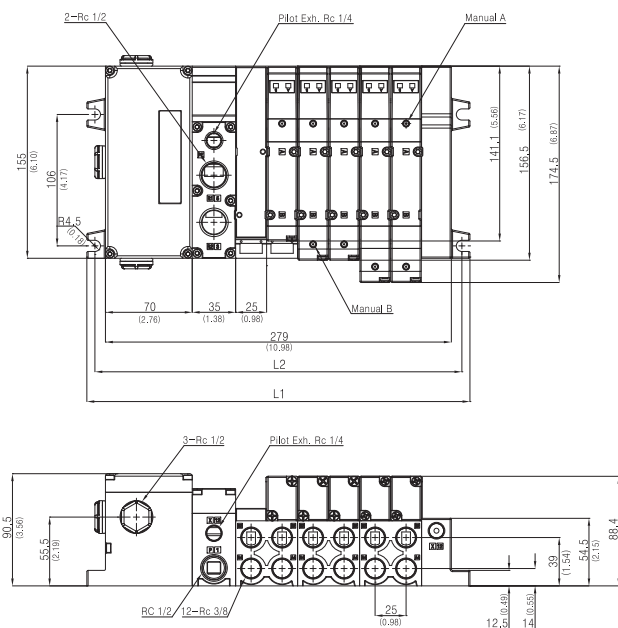
Common(+, -)	
9B (Sol B)	9th station
9A (Sol A)	
8B (Sol B)	8th station
8A (Sol A)	
7B (Sol B)	7th station
7A (Sol A)	
6B (Sol B)	6th station
6A (Sol A)	
5B (Sol B)	5th station
5A (Sol A)	
4B (Sol B)	4th station
4A (Sol A)	
3B (Sol B)	3rd station
3A (Sol A)	
2B (Sol B)	2nd station
2A (Sol A)	
1B (Sol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

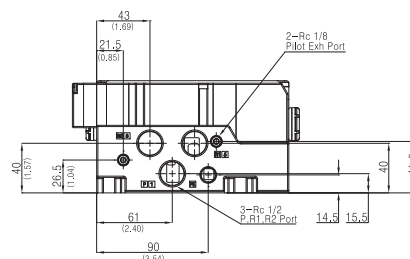
# Series RS 4000

## 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

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RS4000

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DX1(2)R

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DT220