RDS3000 Sub-Base Mounting Type





Blanking Plate **DSB 3** — **00 (Including Gasket & Bolt)**

RDC Series

 RDC Series Coil Voltage AC110V, 50/60HZ AC220V, 50/60HZ AC120V, 50/60HZ AC120V, 50/60HZ AC240V, 50/60HZ 	5: DC24V 6: DC12V 8: AC24V, 50 9: DC100V	O/60HZ HOW TO ORDER Image: Application of the system of the sy					
DIN TERMINAL BO	X Order form	Specification	S				
200			Fluid	Air			
	67	Operating	2 Position Single. 3 Position	0.15 ~ 1.0 MPa [0.2~1.0kgf/m²]			
		pressure Range	2 Position Double	0.1 ~ 1.0MPa			
		Ambient and	d Fluid Temperature	5~50°C (Without freezing)			
		Response	2 Position Single. Double	30ms or less			
TVF3130-61-2005 - Additional Symbol		time(ms)	3 Position	40ms or less			
		Max operating	2 Position Single. Double	5 c/s			
		frequency	3 Position	3 c/s			
		La	amp(LED)	Standard			
	1 vonage	Manu	ual operation	PUSH & LOCK (Normal)			
AC220	NV 50/60Hz	Elec	ctrical Entry	Grommet(G), DIN Connector(DZ)			
B AC120)V 50/60HZ	L	ubrication	Not Required			
4 AC240	V. 50/60HZ	Voltage(V)	AC(50/60)Hz	110V, 220V, 120V, 240V, 24V			
6	Image: Second		DC	24V, 12V, 100V			
6			Apparent Electric power	5.0VA(50Hz), 4.0VA(60Hz)			
8 AC24	V, 50/60HZ	consumption	Apparent Electric power	3.0 / 3.2W(LAMP Attached)			
9 DC100V			2 positions single	16(0.9)			
		Effective	2 positions double	16(0.9)			
■ Notice		Orifice	3positions(Closed Center)	12.5(0.7)			
Please fully understand	the safety notice	(m²)	3position(Exhaust Center)	16(0.9)			
before operating this item	1.		3position(Pressure Center)	21(1.2)			







Dimension/Manifold Block



Stations(n)	1	2	3	4	5	6	7	8	9	10
L1	45	74	103	132	161	190	219	248	277	306
L2	35	64	93	122	151	180	229	238	267	296

Dimension/Manifold Ass'y







■ L:Dimension Sheet

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(n: Station Number)

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L1	45	74	103	132	161	190	219	248	277	306
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(mm)

(mm)

Notices for Handling

Notice

Please fully understand the safety notice before operating this item.





(Note1) No lamp attaching type for Grommet (G) type

(Note2) ZNR is called as Varistor. which is surge voltage protection circuit.

In Case of Using 3–Port Valve (in case of 5–port)

With closing one direction of cylinder port (A and B), it is applied as 3-port valve of normal closed (N.C) or Normal Open (N.O). It is covenient if 3-port valve is necessary. But, do not apply for special purposes such as Non Leak Valve. Moreover, please use with opened condition for exhaust port.

Pli	ug	BPort	APort		
Loca	ation	(CYL.1Port)	(CYL.2Port)		
Swite Met	tching N.C		N.O		
		(X)Plug	(X)Plug		
Number	Single				
Solenoid	Double	(X)Plug BA IZI R2P R1	(X)Plug BA ZZD (T) (T) (X) R2P RI		

For the Quality of Fluid Applied

(1) 5μ m fillter resolution is sufficient.

- ② Large amount of drain may cause operation failure of pneumatic equipment which firstly uses valve and environmental contamination, so that special management is required. Moreover, if management of drain exhaust is difficult, it is recommended to use automatic exhaust attaching filter.
- ③ If large quantity of carbon powder is generated from compressor, it may cause operation failure owing to attaching on valve inside. It is recommended to use less carbon powder generating compressor or install coalescing filter.

For Piping

- Fully remove chip, cutting oil or dust in a pipe with air blow (flushing) or washing prior to piping.
- ② When connecting fittings or piping, be careful to prevent chips or particles from getting inside. Do not wind seal tape on whole threads. Leave 1.5~2 threads unwound.
- ③ Check if silencer is attached to PE port of Manifold valve.
- ④ Connecting torque for piping.

Contact screw	Proper Tightening Torque kgf · cm(N · m)	Material of Tightening Part		
M3	3.1~3.9(0.31~0.39)	Resin		
IWI O	4.7~5.9(0.47~0.59)	Aluminum		
MA	7.5~9.5(0.75~0.95)	Resin		
1014	11.5~14.5(1.15~1.45)	Aluminum		
M5	15~20(1.5~2)	Resin		
PT 1/8	70~90(7~9)	A		
PT 1/4	120~140(12~14)	Aluminum		

For Leakage Voltage

- ① In case of power OFF, restrain residual leakage voltage in both ends of AC coil under 20% of rated voltage, and under 3% for DC coil. (Please measure AC coil with manually pressing metal pin.)
- ② In case of using C-R circuit for contact point protection, be cautious that leakage voltage possibly increases owing to leakage current through C-R circuit.



Be cautious that some of non-contact point relays have protection circuit built-in

Operating Environment

- ① Do not attach around the place affected by corrosive gas, chemical liquid, sea water splash, rainwater and steam.
- ② Make a measure such as protection cover, etc, for attaching in the place affected by water drops, oil and splatter during welding process.
- ③ Prevent inflow of dust into valve with attaching silencer at exhaust port of valve.

For Using in Low Temperature

It is available to use by -10° C, however, full caution is needed for condensation of drain and moist. It is recommended to install drier for the case above.

For Sequential Power Supply

In case of sequential power supply, apply more than 0.1 second for power supply and 0.05 second for power OFF.

In Case of Long Term Power Supply

In case of using for a long period with power supply, please ask for consultation to manufacturer.

How to Find the Flow Rate

① In case of P_2 +1.033 $\leq P_1$ +1.033 $\leq 1.89(P_2$ +1.033)

$$Q=22.2S\sqrt{\frac{\triangle P(P_2+1.033)}{G}} \cdot \sqrt{\frac{273}{273+\theta}}$$

① In case of 1.89(P₂+1.033)<P₁+1.033

Q=11.1S(P₁+1.033)
$$\frac{1}{\sqrt{G}} \cdot \sqrt{\frac{273}{273+\theta}}$$

- Q : Flux in Conventional Condition (N l /min)
- P₁ : 1st Side Pressure (Gauge Pressure) (kgf/cm²)
- P₂ : 2st Side Pressure (Gauge Pressure) (kgf/cm²)
- $\triangle P$: Pressure Differential (P₁-P₂) (kgf/cm²)
- S : Effective Orifice(mm²)
- G : Specific Gravity(Air=1)
- θ : Temperature of Air Applied(°C)

Lubrication

- ① Initially lubricated, possible to use with non-Lube.
- ② Please use turbine oil class 1(ISO VG32)
 - Moreover, if refueling is stopped, it may cause operation failure owing to loss of initial lubricant, so that refueling should be continued.

Please contact for turbine oil class 1 (ISO VG32)

Port Indicating Symbol Sheet

