## Power Amplifiers For Directional and Flow Control Valves

These power amplifiers are used to drive the proportional electro-hydraulic directional and flow control valves.

Model Number Designation

| SK1091 | -D24 | -10 |
| :---: | :---: | :---: |
| Series Number | Power Supply | Design Number |
| SK1091 | D24: 24 V DC | $\mathbf{1 0}$ |

Applicable to Valve

| Name of Valve | Model Numbers |
| :---: | :---: |
| Directional and | 03 |
| Flow Control Valve | EDFHG-04 |
|  | 06 |



Specifications

| Model No. | SK1091-D24-10 |
| :--- | :---: |
| Description | $1 \mathrm{~A}(10 \Omega$ Solenoid $)$ |
| Max. Output Current | -10 V DC for SOL a <br> +10 V DC for SOL b |
| Max. Input Voltage | $10 \mathrm{k} \Omega$ |
| Input Impedance | $1 \mathrm{~A} / \pm 5 \mathrm{~V}$ |
| Max. Gain | Variable |
| Dither | $0.15-3 \mathrm{~s}$ |
| Delay Time Adjustment <br> Range | $0.2 \mathrm{~mA} /{ }^{\circ} \mathrm{C}$ |
| Temperature Drift (Max.) | 24 V DC $(21-28 \mathrm{~V} \mathrm{Included} \mathrm{Ripple)})$ |
| Power Supply | 1.5 A or more |
| Required Current | 25 W |
| Power Input (Max.) | $0-50^{\circ} \mathrm{C}\left(32-122^{\circ} \mathrm{F}\right)$ |
| Ambient Temperature | $90 \% \mathrm{RH}$ or less |
| Ambient Humidity | $2 \mathrm{k} \Omega$ |
| External Setting Resistance | $1.0 \mathrm{~kg}(2.2$ lbs.) |
| Approx. Mass |  |

## Instructions

## - Power Supply for the Setting Adjuster

Power supply for the setting adjuster can be provided from this power amplifier, but for only one. However, please use the variable resistor or potentiometre of which impedance is $2 \mathrm{k} \Omega$ for the setting adjuster.

## Power Switch

The power amplifier has no power supply switch. As soon as it is connected to a power supply, it comes to be alive.
Provide a power switch externally.
[Example Diagram]


- Detail of Terminal Board

| Terminal <br> Number | Name |  |  |  |
| :---: | :--- | ---: | :---: | :---: |
| 1 | Input Signal | $\mathrm{IN}^{\star}$ |  |  |
| 2 | Input Signal | COM |  |  |
| 3 | Input Signal | $\mathrm{IN}^{\star}$ |  |  |
| 4 | Power Supply for Setting Adjuster | +12 V |  |  |
| 5 | Power Supply for Setting Adjuster | COM |  |  |
| 6 | Power Supply for Setting Adjuster | -12 V |  |  |
| 7 |  |  |  |  |
| 8 | Output to Valve Solenoid |  |  | SOL a |
| 9 |  | SOL b |  |  |
| 10 | Output to Valve Solenoid | 24 V |  |  |
| 11 |  | 0 V |  |  |
| 12 | Power Supply | FG |  |  |
| 13 | Frame Ground |  |  |  |
| 14 |  |  |  |  |

* Three (3) usages are available as shown (1) to (3) of "Delay Function" at right hand side for Input signal terminal (IN).

(1) In case " 1 " and " 2 " Input signal terminals are used.

(2) In case " 3 " and " 2 " Input signal terminals are used.

(3) In case " 1 ", " 2 " and " 3 " Input signal terminals are used.


