## **SEWON** Hydraulics

## ■Power Amplifiers For Proportional Electro-Hydraulic Control Valves

These are power amplifiers to be used exclusively to operate the electro-hydraulic proportional valves. Various type and models on available for a variety applications.

Туре	Model Number	Applicable to Control Valve	Function
DC Input For DC Power 24 V DC	AMN-D-10	Pressure or Flow Control (For 10Ω Sol.)	An amplifier which is operated by a battery power supply(24 V). By giving the command of DC voltage to the amplifier, current in proportion to that voltage will flow in the solenoid of the control valve in order to control pressure or flow rate. An external setting unit which makes the command voltage and a DC power supply(or a function generator) are necessary, but if a variable resistor for external setting is only one, the internal power supply for amplifier can be used.  Variable Resistor amplifier Valve

#### Instructions

- The power amplifiers should be kept away from hot and humid conditions which may deteriorate some components of the power amplifiers. They also should be installed in the clean and dry place where the vibration is minmal.
- Please avoid to install the power amplifiers in the complete enclosure or get them enclosed totally as they need to radiate the heat from semiconductors or ICs inside.
- Please use shielded wires for input signal transmission to prevent the amplifiers from any interference such as noise from outside.

## Compact Power Amplifiers For 10Ω Series Control Valve

**Power Amplifiers** For  $10\Omega$  Series Control Valves

Compact Power Amplifiers For 100 proportional solenoids. The power supply is 24 V DC. It uses a new circuitry to be slow to heat.



#### Ratings

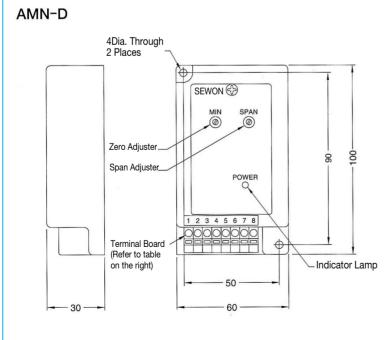
Model No. Description	AMN-D-10
Type of Function	DC Input Type
Max. Output Current	1A(10Ω Solenoid)
Power Input(Max.)	DC+10V
Input Impedance	10 kΩ
Max. Gain	1A/5V
Dither	Vairable
Temperature Drift(Max.)	0.2mA/℃
Power Supply	DC24V(DC20~30V)
Max. Input Power	25W
Ambient Temperature	0°~50°C
External Setting Resistance	1kΩ
Approc. Mass	0.2 kg

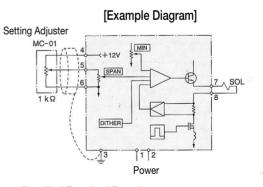
#### Model Number Designation

AMN	-D	-10	
Series Number	Type of Function	Design Number	
AMN	D : DC Input Type	10	

#### Applicable to Valve

Name of Valve	Model Numbers	
Pilot Relief Valves	EDG-01 **	
Relief Valves	EBG-03 EBG-06	
10Ω -10Ω Series High Flow Series Flow Control and Relief Valves	EFBG-03 EFBG-06	





#### Detail of Terminal Board

Terminal Number	Name	
1	Power Supply	+24V
2	Power Supply	0V
3	Ground	G
4	Internal Power Supply	+12V
5	Input Signal	IN
6	Input Signal	COM
7 8	Out to Valve Solenoid	SOL

# **SEWON** Hydraulics

## 2 Channel Digital Amplifier

SDV-100 Series

Two independent operable amplifier (A, B Channels)
Parametering by serial Interface RS-232C
Two Up/Down ramp functions

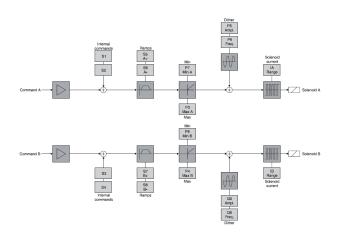
The digital design of the circuit results in good accuracy and optimal adaption for proportional pressure / flow control valves by a comfortable interface program



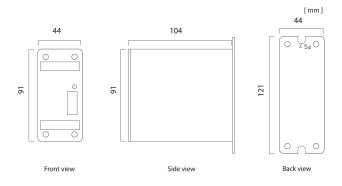
#### Ratings

Title	Spec.
* General	
Model	SDV-100
Category temperature range	-20℃ ~ 60℃
Weight	280g
Material	AL Case (Aluminum)
* Electrical	·
Supply Voltage	18 ~ 30 [VDC]
Command Signal	0V ~ 10V
Input Signal Resolution	0.1%
Enable Signal	5V ~ 30V
* Adjustment Ranges	
Min	0%~50%
Max	50%~100%
Ramp	0sec ~ 32,5sec
Current	0.8A/1.3A/1.8A/2.7A/3.5A
* Interface	
Communication	RS-232C DSUB 9P

#### Signal Flow Diagram



#### Dimension



#### Connection Diagram

