

Power Amplifiers For 10Ω Series Control Valves

These Power amplifiers are used to drive the 10Ω series proportional electro-hydraulic pressure or flow control valves.



Specifications

Model No. Description	AME-D-10-※-20	SK1022-A-※-11	SK1022-B-※-11	SK1015-11
Type of Function	DC Input Type	DC Input Feedback Type	DC Input Feedback Type	DC Input Type
Max. Output Current	1 A (10 Ω solenoid)	1 A (10 Ω solenoid)	1 A (10 Ω solenoid)	0.9 A (10 Ω solenoid)
Max. input Voltage	+ 10 V DC	+ 10 V DC	+ 10 V DC	+10 V DC
Feedback Voltage	---	0 to -10 V	0 to + 10 V	---
Input Impedance	10 kΩ	50 kΩ	50 kΩ	50 kΩ
Max. Gain	1A / 5V	1A / 0.5V	1A / 0.5V	0.9A / 5V
Dither	Variable	Fix	Fix	Fix
Temperature Drift (Max.)	0.2 mA/°C	0.2 mA/°C	0.2 mA/°C	1 mA/°C
Power Supply	100 V AC, 200 V AC *	100 V AC, 200/220 V AC ± 10%	100 V AC, 200/220 V AC ± 10%	22-30 V DC
Power Input (Max.)	55 VA	45 VA	45 VA	25 VA
Ambient Temperature	0-50 °C	0-50 °C	0-50 °C	0-50 °C
External Setting Resistance	1 kΩ	1 kΩ	1 kΩ	10 kΩ
Mass	2.1 Kg.	4.5 Kg.	4.5 Kg.	0.4 Kg.

* Serviceable Range; 100 V AC can be used from 90 to 132 V AC, 200 V AC can be used from 180 to 264 V AC.

Model Number Designation

AME	-D	-10	-100	-20
Series Number	Type of function	Coil Resistance Of Valve	Power Supply	Design Number
AME	D: DC Input Type	10:10Ω	100: 100 V AC 200: 200 V AC	20

SK1022	-A	-100	-11
Series Number	Type of function	Power Supply	Design Number
SK1022: DC Input –Feedback Type	A: Polarity of Feedback Voltage ... (-) B: Polarity of Feedback Voltage ... (+)	100: 100 V AC 200: 200/220 V AC	11
SK 1015: DC Input Type for DC Power Supply	_____	_____*	11

* Use with 24 V DC since this is for a battery power supply.

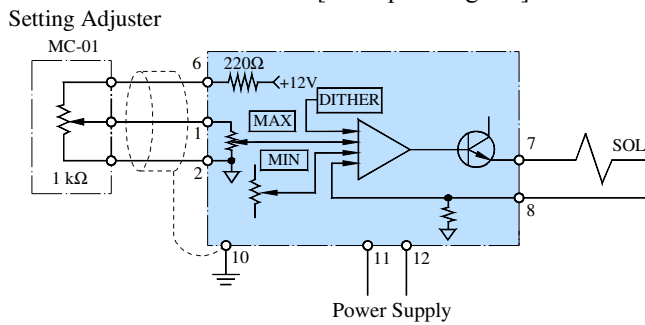
Instructions

Power supply for the setting adjuster can be provided from this power amplifier, but for only one. However, please use the variable resistor or potentiometer of which impedance is 1kΩ (in case of model SK1015, use 10kΩ) for setting adjuster.

Note: Consult YUKEN for dimensional and other details.

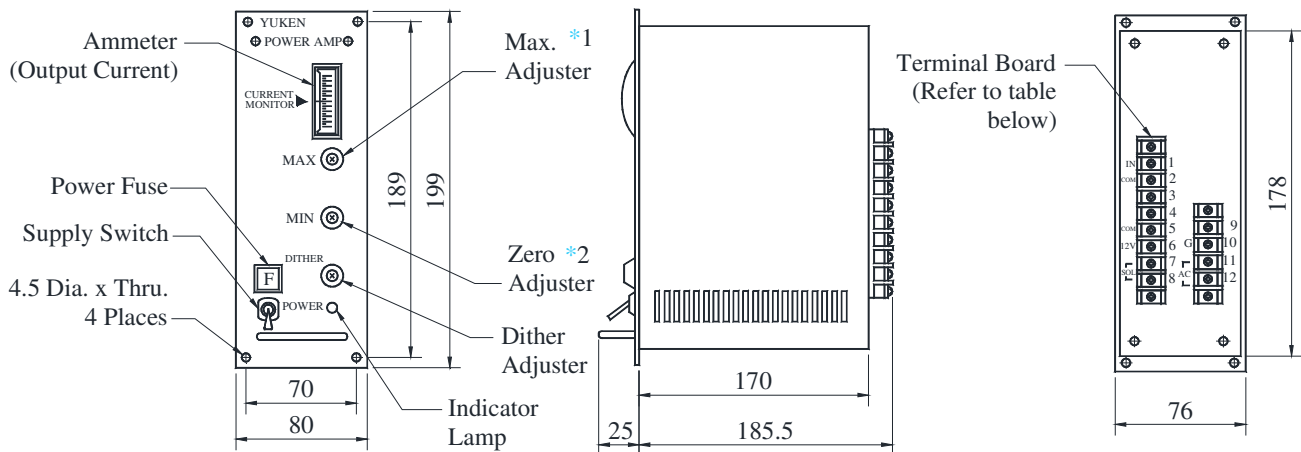
● AME-D-10-※-20

[Example Diagram]



● Detail of Terminal Board

Terminal Number	Name
1	Input Signal IN
2	Input Signal COM
3	—
4	—
5	Input Signal COM
6	Internal Power Supply +12 V
7	Output to Valve Solenoid SOL
8	Solenoid SOL
9	—
10	Ground G
11	Power Supply
12	100/200 V AC

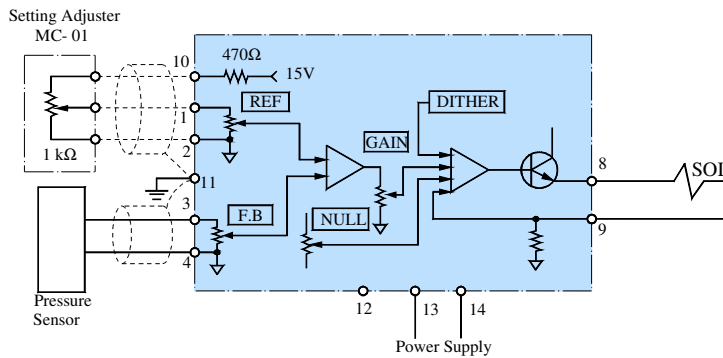


- *1 Adjustment of upper limit of usable range
- *2 Adjustment of lower limit of usable range

DIMENSIONS IN MILLIMETRES

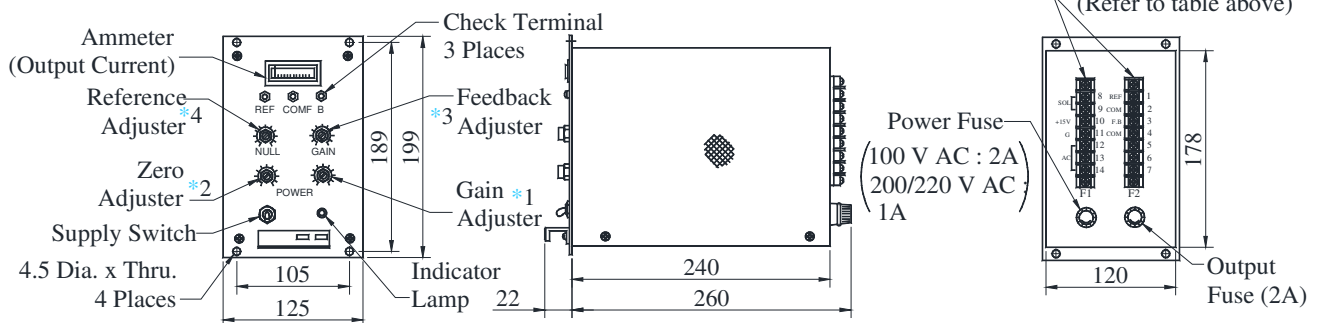
● SK1022- $\frac{A}{B}$ -※-11

[Example Diagram]



● Detail of Terminal Board

Terminal Number	Name
1	Input Signal REF
2	Input Signal COM
3	Feedback Signal F.B.
4	Feedback Signal COM
5	—
6	—
7	—
8	Output to Valve Solenoid SOL
9	—
10	Power Supply for Setting Adjuster (10 V at 1 KΩ)
11	Ground G
12	Power Supply 100 V AC, 200 V AC : 13 , 14 220 V AC : 12 , 14

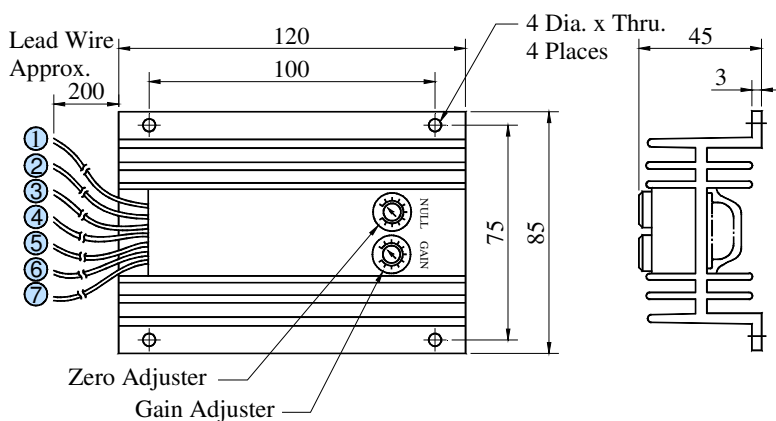
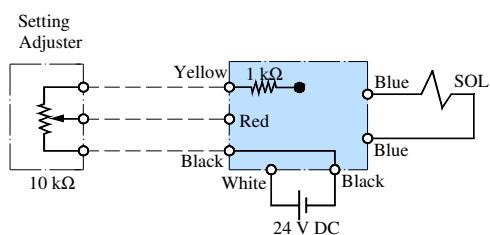


- *1 Adjustment of upper limit of usable range
- *2 Adjustment of lower limit of usable range
- *3 Adjustment of feedback voltage ratio
- *4 Adjustment of input voltage ratio

DIMENSIONS IN
MILLIMETRES

● SK1015-11

[Example Diagram]



● Lead Wire Detail

- ① White Plus of 24 V DC
- ② Black Zero of 24 V DC
- ③ Blue } Output To Valve Solenoid
- ④ Blue }
- ⑤ Yellow 15 V Power Supply for setting Adjuster (10 V at 10 KΩ)
- ⑥ Red Input Signal
- ⑦ Black Zero of Input Signal

DIMENSIONS IN
MILLIMETRES

■ Instructions

● Supply 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.

Compact Power Amplifiers For 10 Ω Series Control Valves

Compact power amplifiers for 10 Ω proportional solenoids. The power supply is 24 V DC. It uses a new circuitry to be slow to heat.

Specifications

Model No.	AMN-D-10
Description	
Type of Function	DC Input Type
Max. Output Current	1 A (10 Ω solenoid)
Power Input (Max.)	+ 10 V DC
Input Impedance	10 k Ω
Max. Gain	1A / 5V
Dither	Variable
Temperature Drift (Max.)	0.2 mA/ $^{\circ}$ C
Power Supply	24 V DC (20-30 V DC)
Max. Power Input	25 W
Ambient Temperature	0-50 $^{\circ}$ C
External Setting Resistance	1 k Ω
Approx. Mass	0.2 Kg

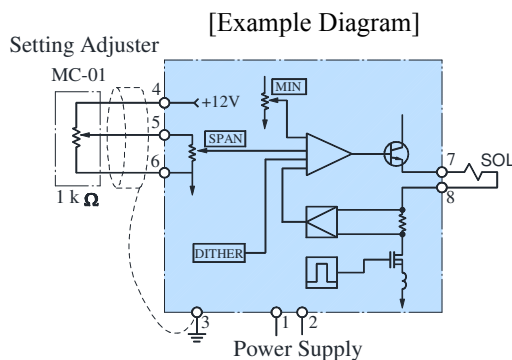


Model Number Designation

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

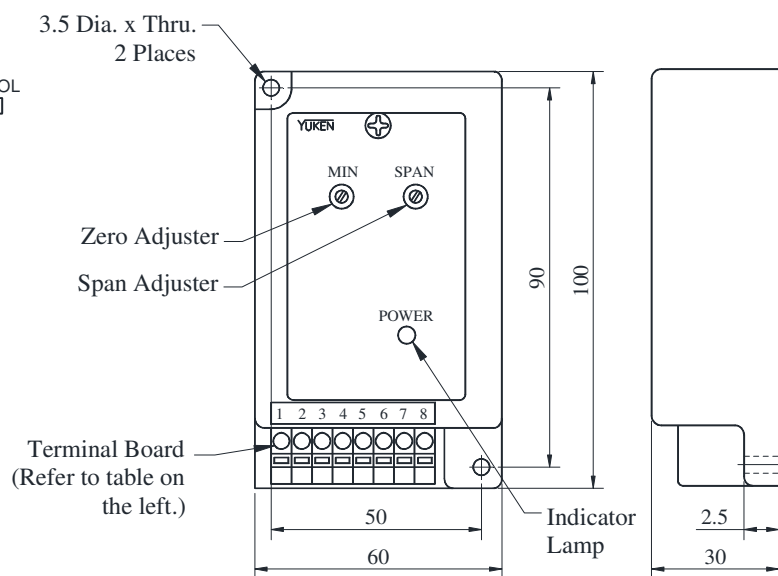
AMN-D-10

DIMENSIONS IN MILLIMETRES



Detail of Terminal Board

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



■ Power Amplifiers For 40Ω Series Flow Control Valves

These power amplifiers are used to drive the 40Ω series proportional electro-hydraulic flow control valves.



■ Specifications

Model No.	AME-D-40-※-40	AME-DF-S-※-22	AME-T-S-※-22
Description			
Type of Function	DC Input Type	DC Input Feedback Type	Slow Up Down Type
Max. Output Current	0.8 A (40 Ω Solenoid)	0.8 A (40 Ω Solenoid)	0.8 A (40 Ω Solenoid)
Max. Input Voltage	+ 10 V DC	+ 10 V DC	---
Feedback Voltage	---	0-10 V	---
Input Impedance	10 kΩ	50 kΩ	
Slow Up Down Range	---	---	0.05-1 s/100mA
Max. Gain	0.8A / 5V	0.8A / 5V	---
Dither	Fix	Fix	Fix
Temperature Drift (Max.)	0.2 mA/°C	0.2 mA/°C	0.2 mA/°C
Power Supply	100 V AC, 200/220 V AC ±10%		
Power Input (Max.)	70 VA	90 VA	90 VA
Ambient Temperature	0-50 °C	0-50 °C	0-50 °C
External Setting Resistance	1 kΩ	1 kΩ	---
Approx. Mass	2.8 Kg	4.5 Kg	4.5 Kg

■ Model Number Designation

AME	-D	-40	-100	-40
Series Number	Type of function	Coil Resistance of Valve	Power Supply	Design Number
AME	D: DC Input Type	40: 40Ω	100: 100 V AC 200: 200 V AC	40

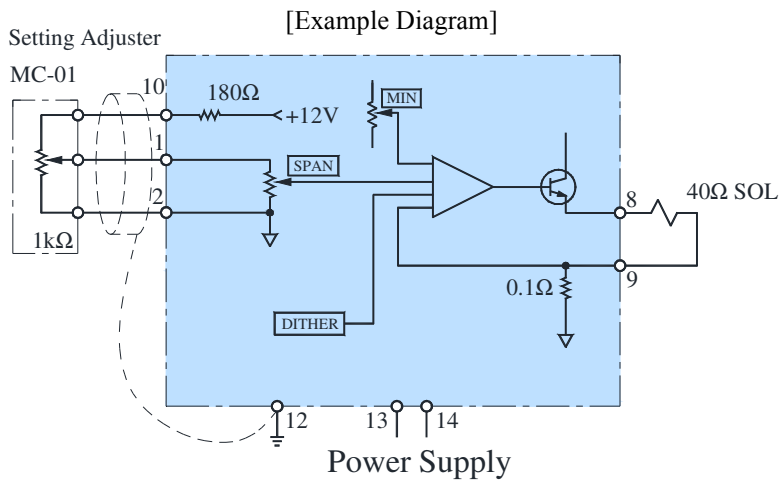
AME	-DF	-S	-100	-22
Series Number	Type of function	Type of Mounting	Power Supply	Design Number
AME	DF: DC Input Feedback Type	S: Panel Mounting Type	100: 100 V AC	22
	T: Slow Up Down Type		200: 200 V AC	22

■ Instructions

● Power supply for the outside setting adjuster

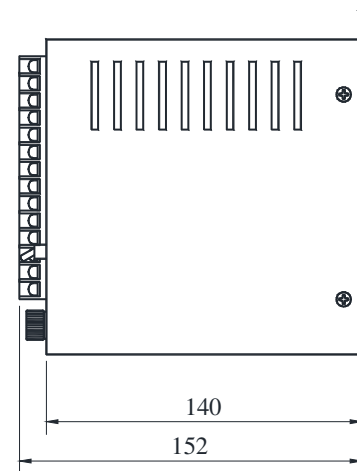
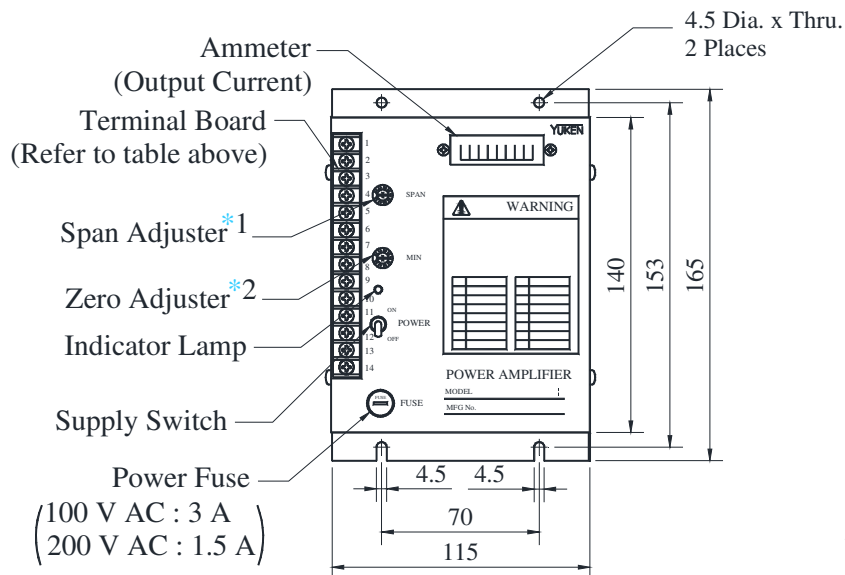
When DC input type (AME-D-40) or DC input-feedback type (AME-DF-S) power amplifier is used, power supply for the setting adjuster can be provided from this power amplifier, but for only one. However, please use the variable resistor or potentiometer of which impedance is 1 kΩ for the setting adjuster.

● AME-D-40-※-40



● Detail of Terminal Board

Terminal Number	Name
1	Input Signal IN
2	Input Signal COM
3	—
4	—
5	Internal Power Supply -5 V
6	Feedback Signal MFB
7	COM
8	Output to Valve
9	Solenoid SOL
10	Internal Power Supply +12 V
11	—
12	Frame Ground FG
13	Power Supply VAC
14	VAC

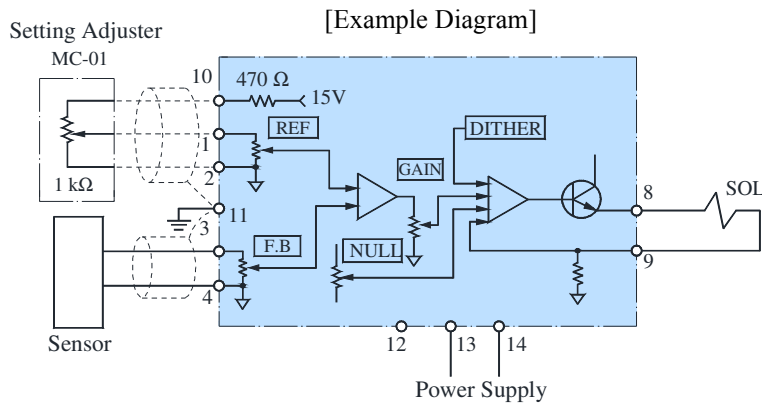


*1 Adjustment of upper limit of usable range

*2 Adjustment of lower limit of usable range

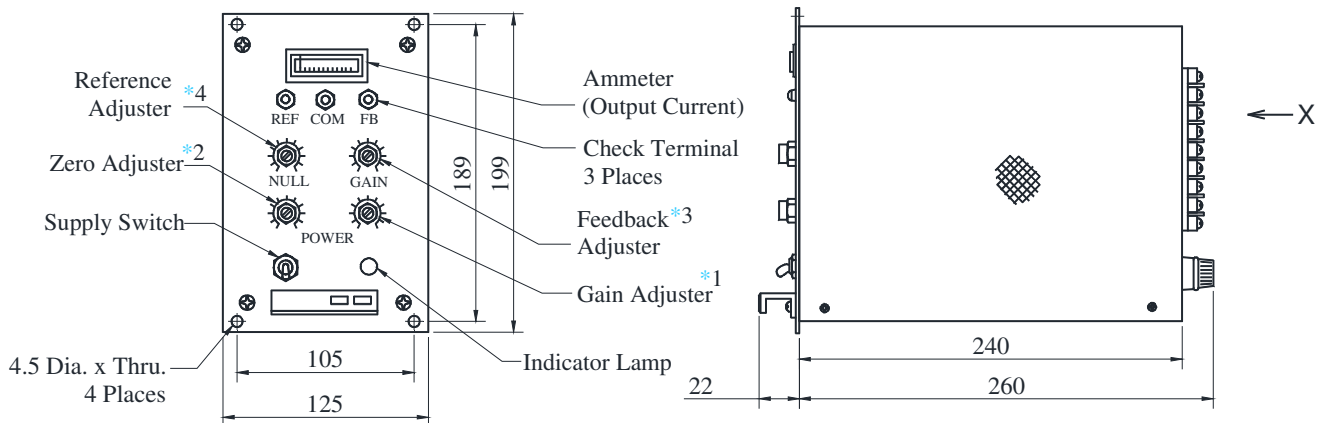
DIMENSIONS IN
MILLIMETRES

● AME-DF-S-※-22



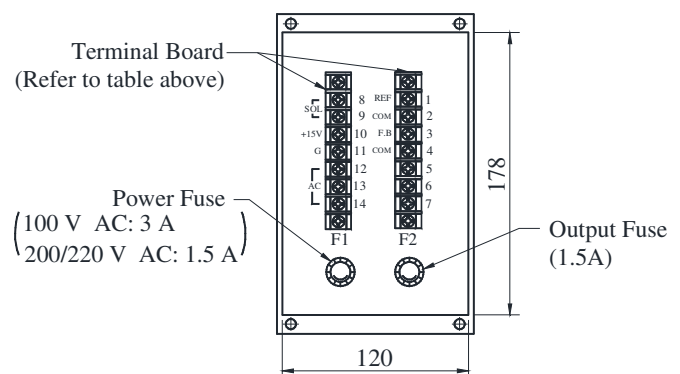
● Detail of Terminal Board

Terminal Number	Name
1	Input Signal REF
2	Input Signal COM
3	Feedback Signal F.B.
4	Feedback Signal COM
5	—
6	—
7	—
8	Output to Valve Solenoid
9	SOL
10	Power Supply for Setting Adjuster (+15 V) (10 V at 1 KΩ)
11	Ground G
12	Power Supply 100 V AC, 200 V AC : 13 , 14 220 V AC : 12 , 14
13	
14	



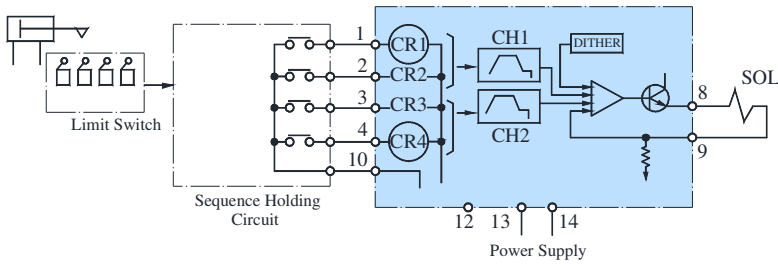
- *1 Adjustment of upper limit of usable range
- *2 Adjustment of lower limit of usable range
- *3 Adjustment of feedback voltage ratio
- *4 Adjustment of input voltage ratio

DIMENSIONS IN
MILLIMETRES



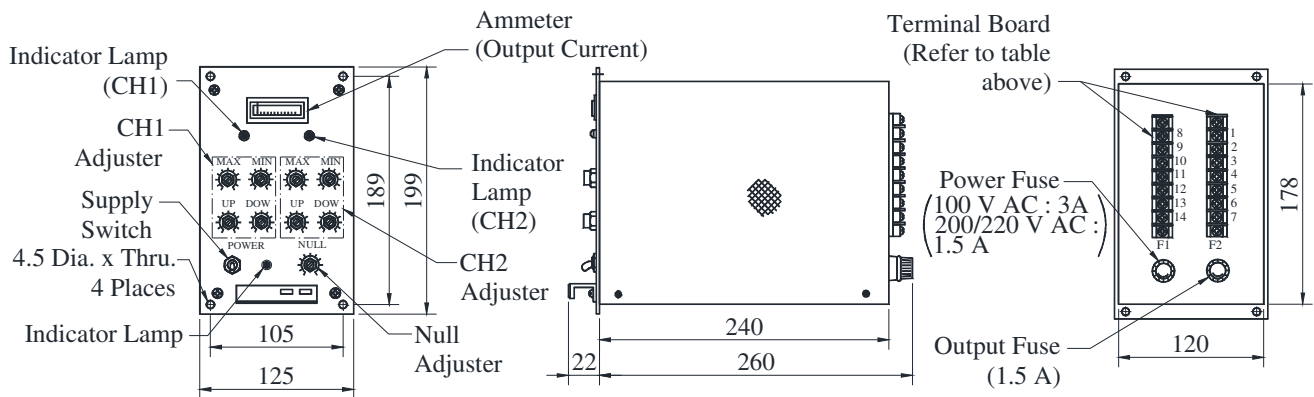
● AME-T-S-※-22

[Example Diagram]

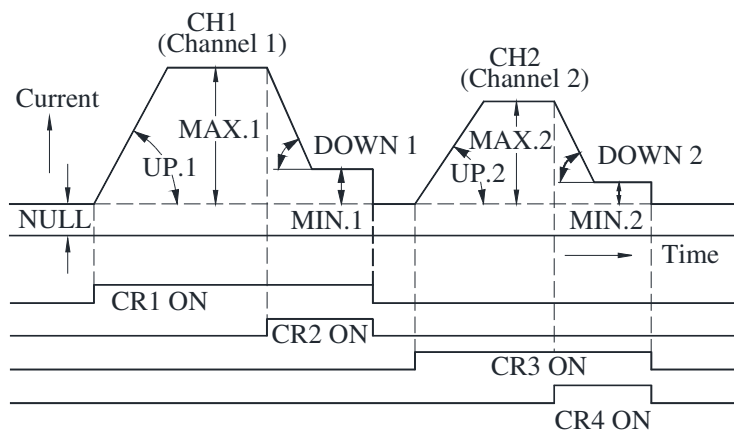


● Detail of Terminal Board

Terminal Number	Name
1	Input Command CR1
2	Input Command CR2
3	Input Command CR3
4	Input Command CR4
5	—
6	—
7	—
8	Output to Valve Solenoid SOL
9	—
10	Input Command CR.COM
11	Ground G
12	Power Supply 100 V AC, 200 V AC : 13 , 14 220 V AC : 12 , 14
13	
14	



[Output Current Pattern]

DIMENSIONS IN
MILLIMETRES

Terminal
1 & 10 in Short-Circuit
2 & 10 in Short-Circuit
3 & 10 in Short-Circuit
4 & 10 in Short-Circuit

- Note : 1. CR1 to CR4 : Relays in the power amplifier.
The output patterns CH1 and CH2 can not be obtained simultaneously nor can they can be transmitted halfway to another pattern.
2. The words such as MAX, MIN, UP and DOWN show the volume adjustment of the power amplifier.

■ How to Calculate Accelerating and Decelerating Time (Example)

Question : Wish to accelerate and decelerate the actuator in between 5 L/min. and 25 L/min. in the use of proportional flow control valve model EFG-02-30-31※.

In such case, what are the maximum and minimum time adjustable for the acceleration and deceleration?

Answer : The input current for EFG-02-30-31※ at the flow rate of 5 L/min. and 25 L/min. can be obtained respectively from the chart below. The chart shows :

Input current at 5 L/min. 300mA

Input current at 25 L/min. 520mA

Then, the difference between the above two can be obtained with the following formula :

$$520 \text{ mA} - 300 \text{ mA} = 220 \text{ mA}$$

While, the specification for the model AME-T-S shows the amplifier's gradient for acceleration or deceleration as being between 0.05 s/100 mA and 1.0 s/100 mA (which means that the minimum time is 0.05 seconds and the maximum time is 1.0 second for every 100 mA variation).

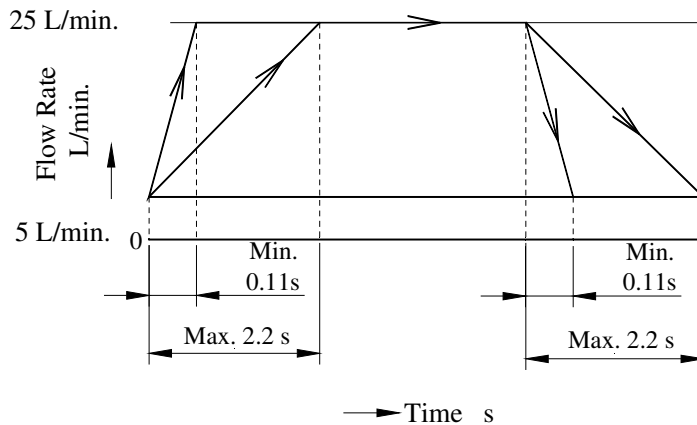
Therefore, the minimum and maximum adjustable time can be obtained as follows :

$$\frac{220 \text{ mA}}{100 \text{ mA}} \times 0.05 \text{ seconds} = 0.11 \text{ (Minimum)}$$

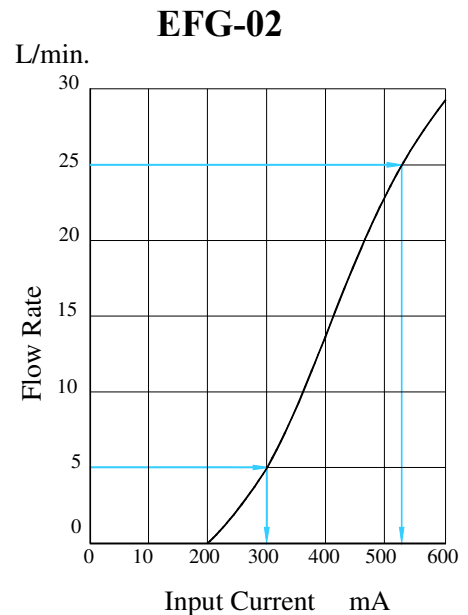
$$\frac{220 \text{ mA}}{100 \text{ mA}} \times 1.0 \text{ seconds} = 2.2 \text{ second (Maximum)}$$

The result above are as illustrated on the below :

[Flow Pattern]



[Input Current vs. Flow]



■ Interchangeability in Installation Current and New Design

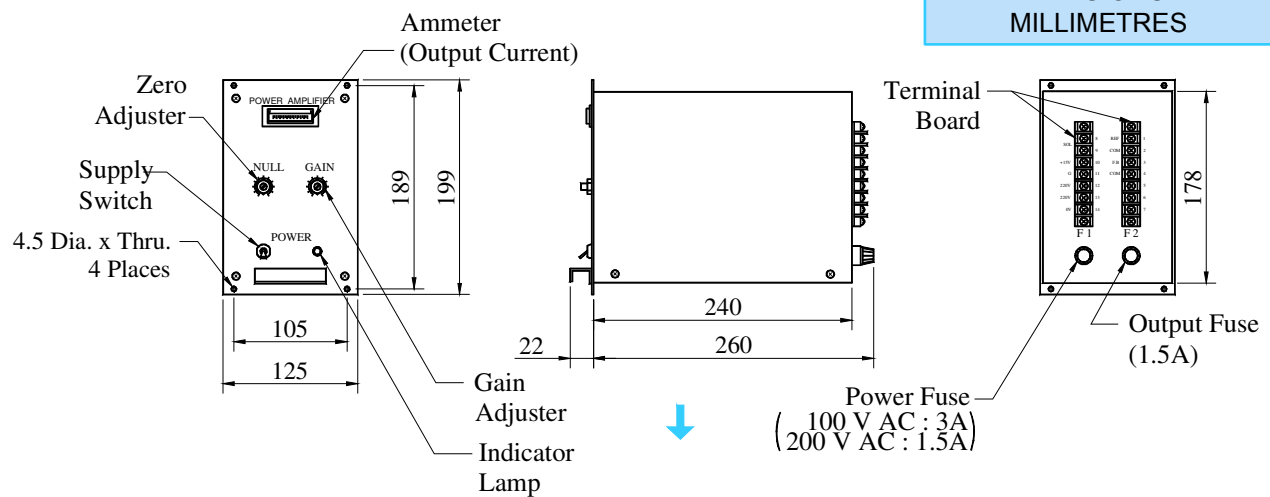
● Specification

Electricity consumption is different by Current and New design.
The other specifications remain unchanged.

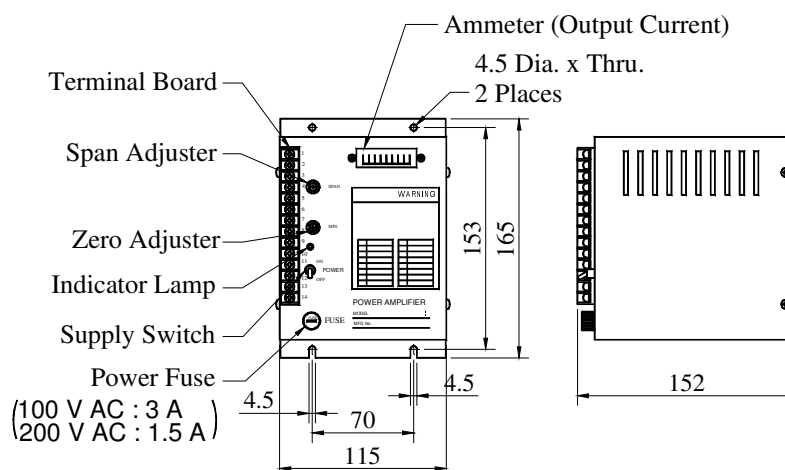
Electricity Consumption	
Current : 32 Design	New : 40 Design
90 VA	70 VA

● Installation Interchangeability : None

AME-D-S-※-32



AME-D-40-※-40



■ Power Amplifiers

For Shockless Type Directional and Flow Control Valves

These power amplifiers are used to drive the shockless type directional and flow control valves.



■ Specifications

Model No.	AMN-W-10
Description	
Max. Output Current	1.3A (10Ω Solenoid)
Max. Input Voltage	- 10 V DC: SOL a + 10 V DC: SOL b
Input Impedance	10 kΩ
Maximum Gain	1.3 A/-5 V: SOL a 1.3 A/+5 V: SOL b
Dither	Variable (Internal)
Delay Time Adjustment Range	0.1-3 s
Temperature Drift (Max.)	0.2 mA/°C
Power Supply	24 V DC (Power Supply Range : 20-30 V)
Power Input	25 W
Ambient Temperature	0-50 °C
Ambient Humidity	90% RH or less
Approx. Mass	0.2 Kg

■ Model Number Designation

AMN	-W	-10
Series Number	Type of function	Design Number
AMN	W: DC Input Type	10

■ Instructions

● Power supply for the outside setting adjuster

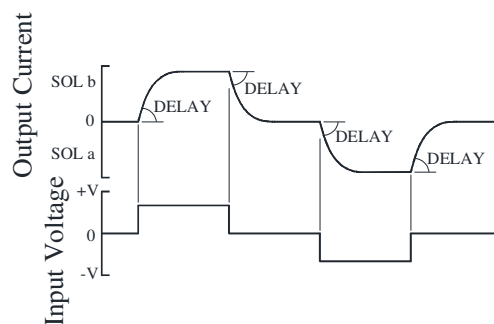
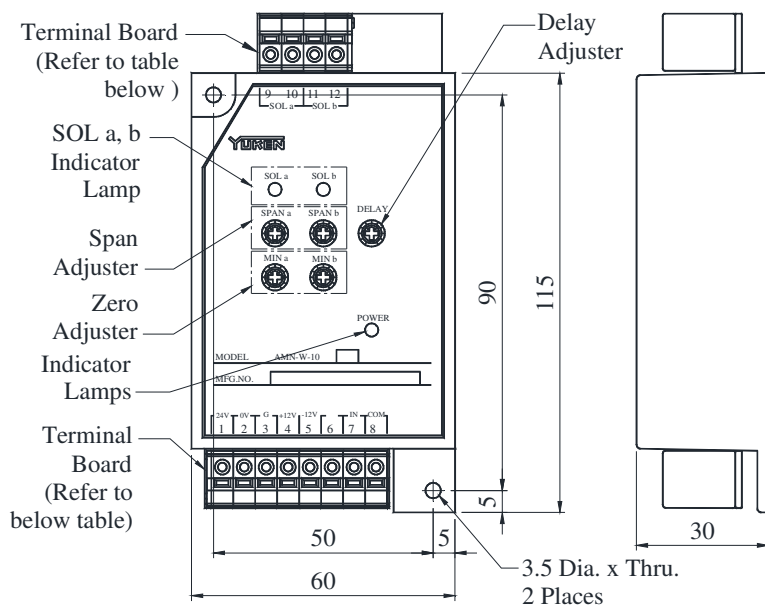
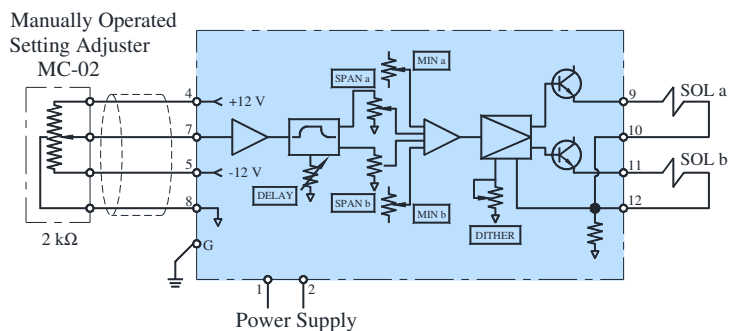
When DC input type (AMN-W) power amplifier is used, power supply for the setting adjuster can be provided from this power amplifier, but for only one. However, please use the variable resistor or potentiometer of which impedance is 1 kΩ for the setting adjuster.

● Supply 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.

● AMN-W-10

[Example Diagram]



DIMENSIONS IN MILLIMETRES

● Detail of Terminal Board

Terminal Number	Name	Terminal Number	Name
1	Power Supply +24 V	7	Input Signal IN
2	Power Supply 0 V	8	Input Signal COM
3	Ground G	9	Output to Valve Solenoid SOL a
4	Internal Power Supply +12 V	10	Output to Valve Solenoid SOL b
5	Internal Power Supply -12 V	11	
6	—	12	

■ Power Amplifiers For 10Ω - 10Ω Series Control Valves

These power amplifiers can drive two solenoid of 10Ω load simultaneously or separately, and the control can be done in the same way even though the object is separated by pressure system and flow rate system. Although the display of control unit on the front panel is **PRESS** and **FLOW**, they are exactly the same circuit, so there is no direction between the two system when used.

■ Specifications

Model No.	AME-D2-1010-11
Description	
Type of Function	DC Input Type
Max. Output Current	1 A (10 Ω solenoid)
Power Input (Max.)	+ 10 V DC
Input Impedance	10 kΩ
Max. Gain	1A / 5V
Dither	Variable 100-300 mA
Temperature Drift (Max.)	0.2 mA/°C
Power Supply	85 – 264 V AC
Power Input (Max.)	120 VA
Ambient Temperature	0-50 °C
External Setting Resistance	1 kΩ
Approx. Mass	4.3 Kg



■ Model Number Designation

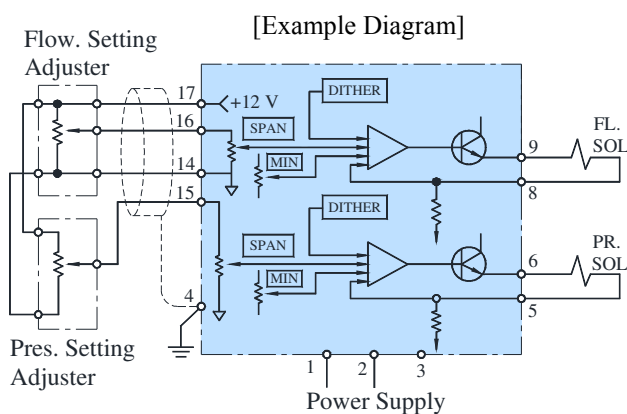
AME	-D2	-1010	-11
Series Number	Type of function	Coil Resistance of Valve	Design Number
AME	D2: DC Input Type	1010: 10Ω x 2	11

■ Instructions

Power supply for the setting adjuster can be provided from this power amplifier.

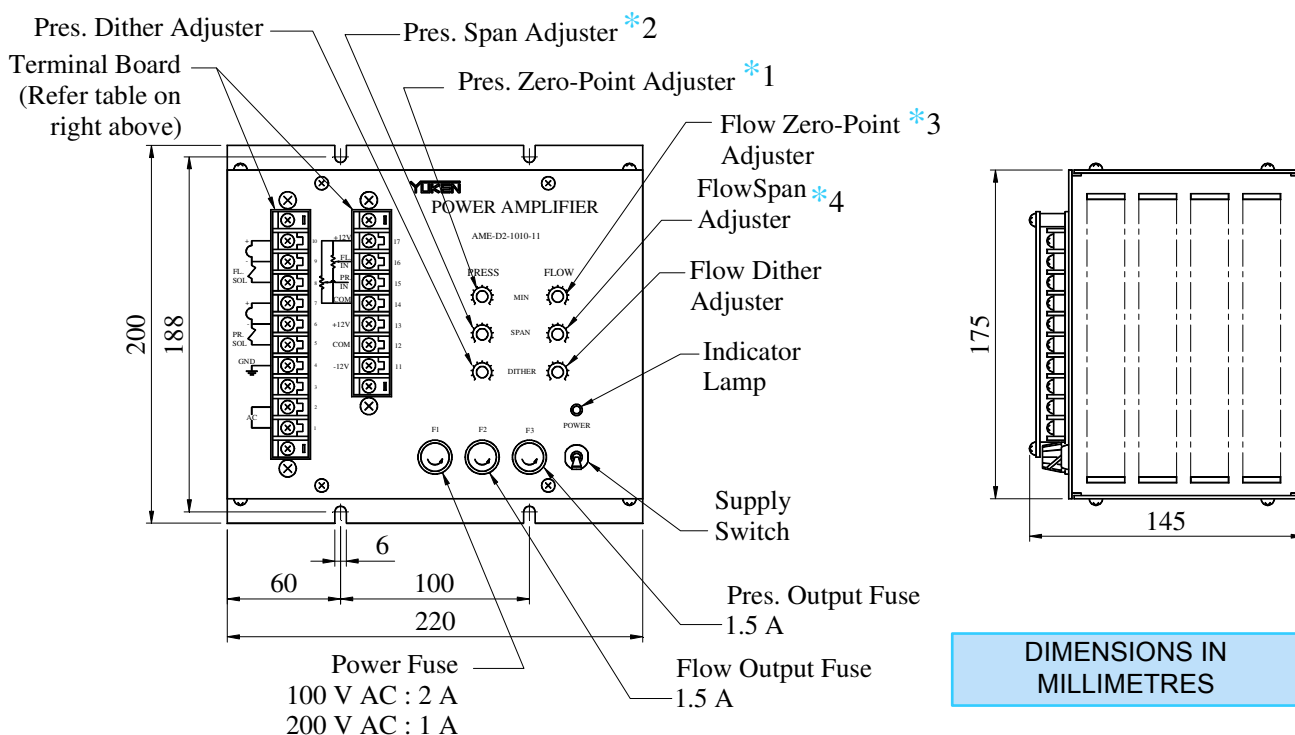
However, please use the variable resistor or potentiometer of which impedance is 1kΩ for setting adjuster.

● AME-D2-1010-11



● Detail of Terminal Board

Terminal Number	Name
1	Power Supply 85-264 V AC
2	
3	—
4	Ground G
5	Output to Pressure Control Valve Solenoid PR.SOL
6	
7	Ammeter
8	Output to Flow Control Valve Solenoid FL.SOL
9	
10	Ammeter
11	-12 V OUT -12 V
12	Common COM
13	+12 V OUT +12 V
14	Common COM
15	Input Signal for PRES. PR.IN
16	Input Signal for FLOW FL.IN
17	+12 V OUT +12 V



- *1 Minimum pressure setting.
- *2 Variable pressure range setting.
- *3 Minimum flow setting.
- *4 Variable flow range setting.

Power Amplifiers

For High Response Type Directional Flow Control Valves

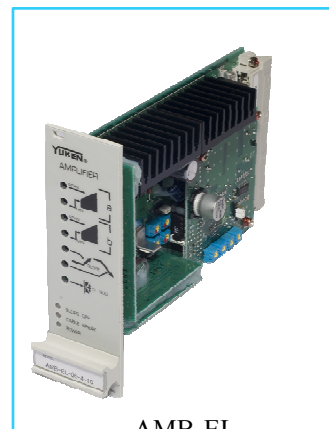
The power amplifiers are used to drive the high response type proportional electro-hydraulic directional and flow control valves.

A compact AMN-L model and a euro card type AMB-EL model are available.

The single height [3U: 100x160 mm] is employed for the euro card size of the AMB-EL model.



AMN-L



AMB-EL

Specifications

Model No. Description	AMN-L-01-1	AMN-L-01-3-2P	AMB-EL-01	AMB-EL-03	AMB-EL-04	AMB-EL-06
Max. Output Current	2.5 A (3.9 Ω Solenoid)		2.5 A (3.9 Ω Solenoid)	2.5 A (3.9 Ω Solenoid)	2.5 A (3.9 Ω Solenoid)	
Max. Input Voltage	+ 10 V DC: P → B → A → T - 10 V DC: P → B → A → T		± 10 V / ± 5 V			
Input Impedance	10 kΩ or more		100 kΩ (50 kΩ in single-end mode)			
Slope-off input	Terminal Number 13-14 Short	---	4 – 28 V			
Slope Adjust Time	0.03 – 5 s	---	0.05–5 s (Slope Adjustment function is not available with “AMB-EL-※-2P”)			
Monitor Voltage	± 1.5 V / ± 3 mm st.		± 10 V / rated st.			
Alarm	Open Collector (30 V DC, 10 mA Max.)		Open Collector (30 V DC, 10 mA Max.)			
Supply Voltage Range	24 V DC (20 – 30 V DC)		24 V DC (21 – 28 V DC)			
Power Input (Max.)	75 W		30 W	40 W	30 W	
Ambient Temperature	0 – 50 °C		0 – 50 °C			
Ambient Humidity	90 % RH or less		85 % RH or less			
Connector	---		DIN 41612 – F32			
Approx. Mass	0.3 Kg.		0.28 Kg.			0.34 Kg.

Model Number Designation

• AMN-L

AMN	-L	-01	-3	-2P	-10
Series Number	Type of function	Size of Applicable Valve	Compensation	Applicable Spool Type	Design Number
AMN	L: DC Input Type Directional and Flow Control with Miner Feedback	01: 01 Size	1: Type 1	None: 3C2, 3C40	10
			3: Type 3	2P: 3C2P	

• AMB-EL

AMB	-EL	-03	-2P	-1	-10
Series Number	Type of function	Size of Applicable Valve	Applicable Spool Type	Compensation	Design Number
AMB	EL: DC Input Type Directional and Flow Control with Miner Feedback	01: 01 Size	None: 3C2, 3C40	*1	20
		03: 03 Size		1: For flow rate 40/80 L/min.	
		04: 04 Size	2P: 3C2P	2: For flow rate 280 L/min.	
		06: 06 Size		3: For flow rate 350 L/min. 4: For flow rate 500 L/min.	

* 1. Consult YUKEN.

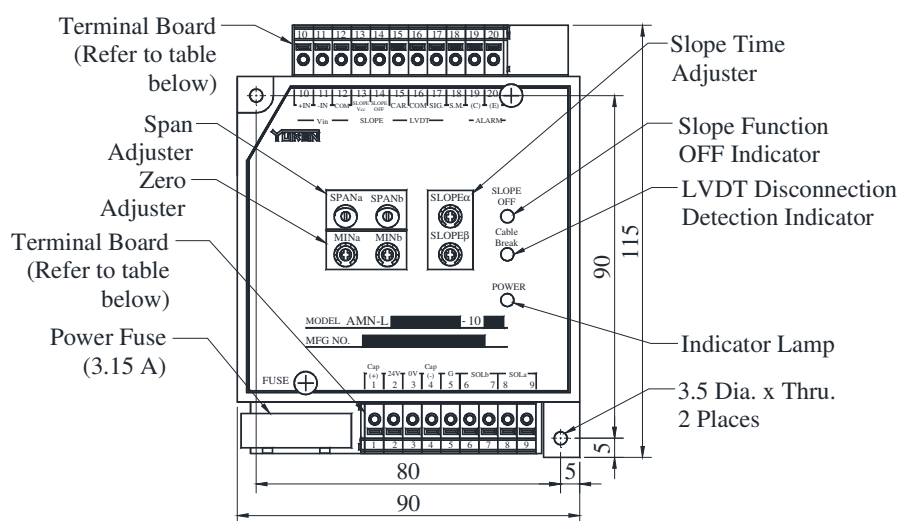
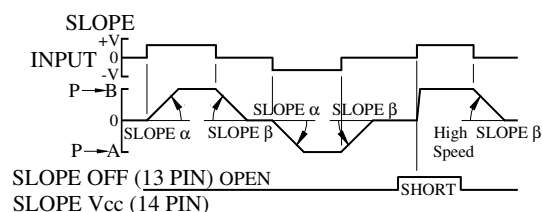
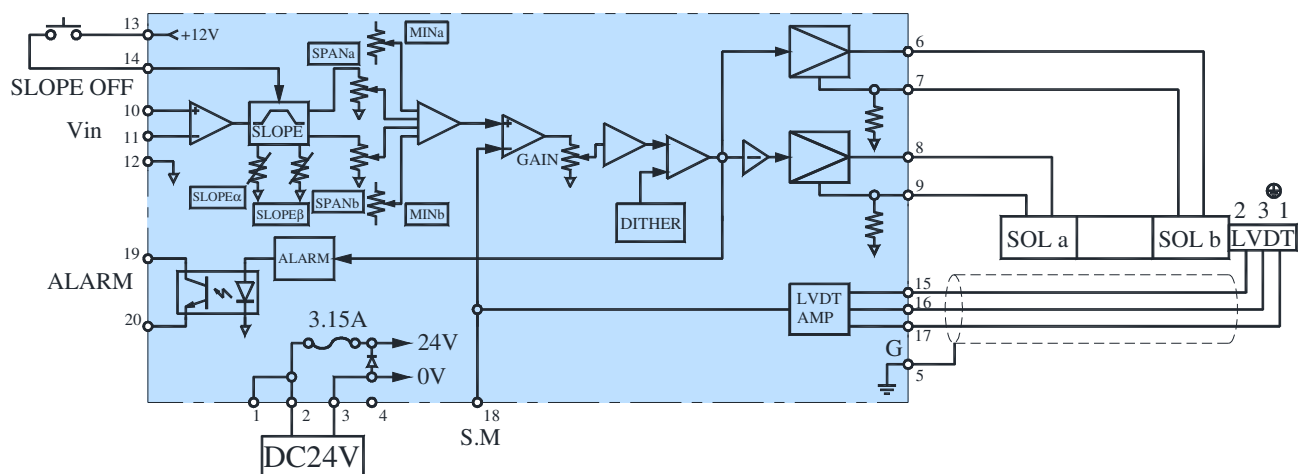
Instructions

• 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.

● AMN-L-01-1-10

[Example Diagram]



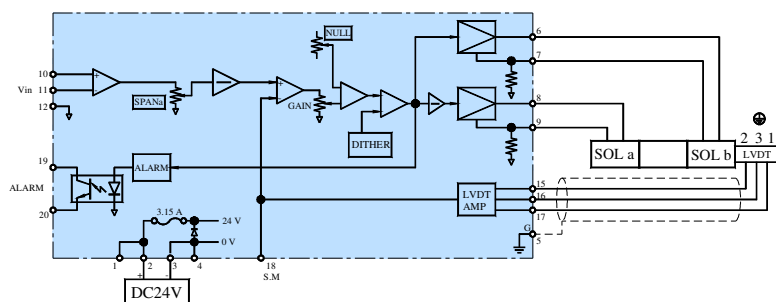
DIMENSIONS IN
MILLIMETRES

● Detail of Terminal Board

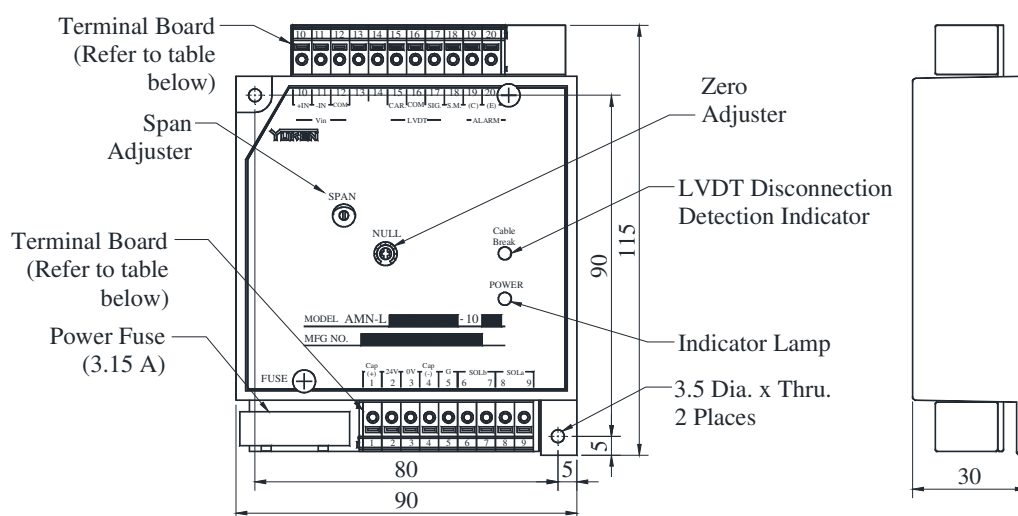
Terminal Number	Name	Terminal Number	Name
1	Power Supply CAPACITOR (+)	11	Input Signal -IN
2	Power Supply +24 V	12	Input Signal COM
3	Power Supply 0 V	13	Slope Control ON/OFF Terminal SLOPE Vcc
4	Power Supply CAPACITOR (-)	14	Slope Control ON/OFF Terminal SLOPE OFF
5	Frame Ground G	15	LVDT Terminal CAR.
6	Output to Valve SOL b	16	LVDT Terminal COM
7	Solenoid SOL b	17	LVDT Terminal SIG.
8	Output to Valve SOL a	18	Senior Monitor Output S.M
9	Solenoid SOL a	19	Alarm Output ALM(C)
10	Input Signal +IN	20	Alarm Output ALM(E)

● AMN-L-01-3-2P-10

[Example Diagram]



DIMENSIONS IN
MILLIMETRES



● Detail of Terminal Board

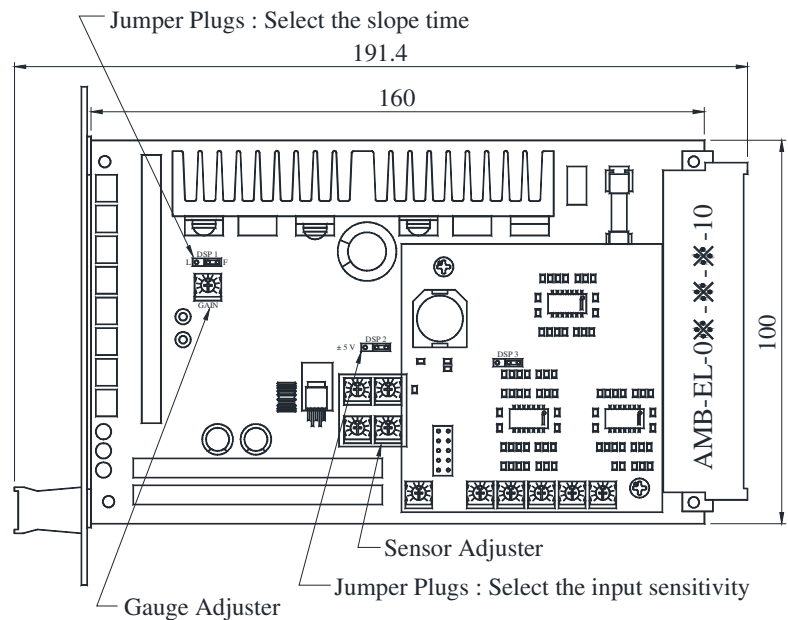
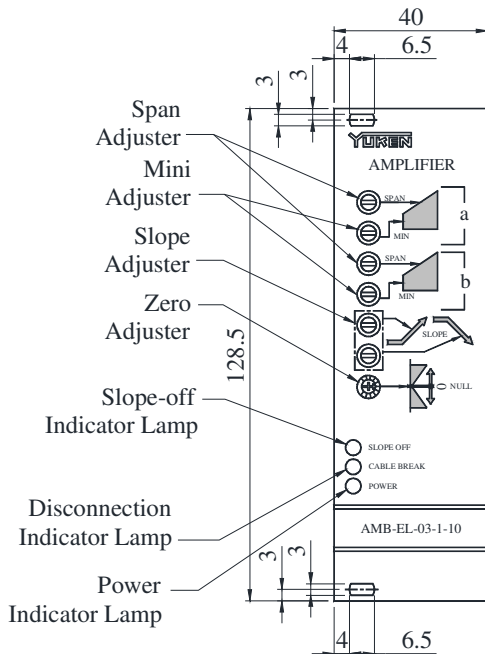
Terminal Number	Name	Terminal Number	Name
1	Power Supply CAPACITOR (+)	11	Input Signal -IN
2	Power Supply +24 V	12	Input Signal COM
3	Power Supply 0 V	13	—
4	Power Supply CAPACITOR (-)	14	—
5	Frame Ground G	15	LVDT Terminal CAR.
6	Output to Valve Solenoid SOL b	16	LVDT Terminal COM
7	Output to Valve Solenoid SOL a	17	LVDT Terminal SIG.
8	Output to Valve Solenoid SOL a	18	Senior Monitor Output S.M
9	Output to Valve Solenoid SOL a	19	Alarm Output ALM(C)
10	Input Signal +IN	20	Alarm Output ALM(E)

● AMB-EL-※-※-※-10

● Detail of Terminal Board

Pin Number	Name	Pin Number	Name
b02	Power Supply 0 V	z02	Sol a (+)
b04	Power Supply 0 V	z04	Sol a (-)
b06	Sol b (+)	z06	—
b08	Sol b (-)	z08	—
b10	—	z10	Command Input (+)
b12	—	z12	Command Input (-)
b14	COM	z14	—
b16	Power Supply +24 V	z16	COM (No. 2)
b18	Power Supply +24 V	z18	Carrier (No. 3)
b20	Slope Off	z20	Signal (No. 1)
b22	COM (No. 3)	z22	—
b24	Signal (No. 1)	z24	Alarm Output (-)
b26	Carrier (No. 2)	z26	Alarm Output (+)
b28	Output 24 V	z28	Stroke Monitor Signal (P)
b30	Output 24 V	z30	Stroke Monitor Signal (S)
b32	FG	z32	—

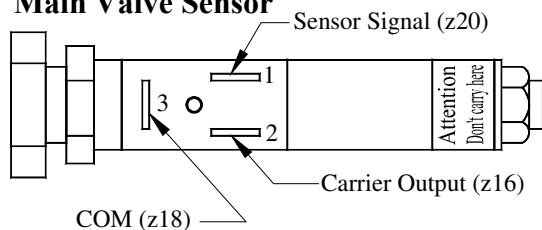
This power amplifier requires connector cards for connection. A connector card attached model is also available. Please ask for details if interested.



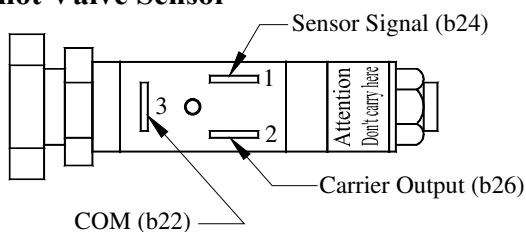
DIMENSIONS IN MILLIMETRES

■ Sensor Connection

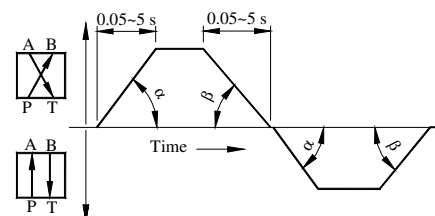
● Main Valve Sensor



● Pilot Valve Sensor

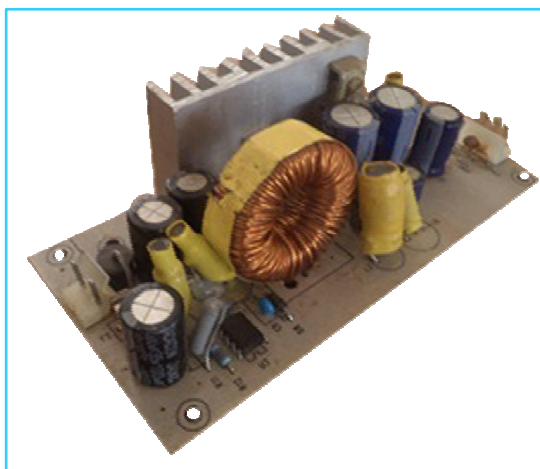


■ Lamp Pattern

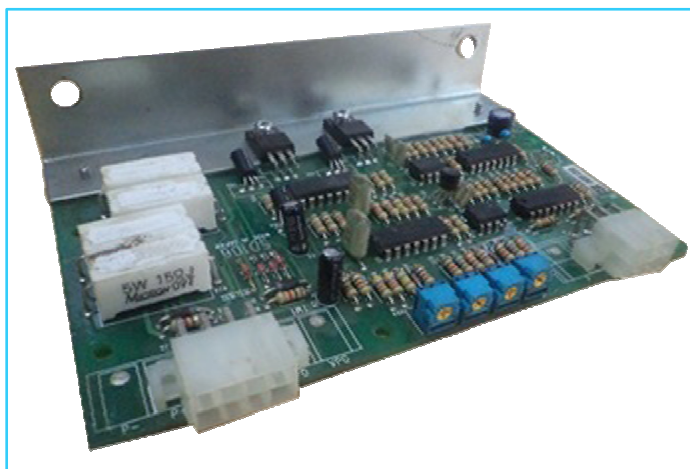


Power Amplifiers For Proportional Pressure and Flow Control Valves

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



Power Card



Amplifier Card

Specifications

Model No.	PW100-H11	PW100-W-H11
Description		
No. of Channels	2	2
Max. Output Current	1 A	1 A
Min. Input Voltage	0.05 A	0.05 A
Input Impedance	10 K	10 K
Dither	160 Hz	160 Hz
Power Supply	DC 24 V	DC 12 V, DC 48V

Model Number Designation

● PW100-※-H11

PW100	-W	-H11
Series Number	Power Supply	Design Number*
PW100	None : With Power Supply W : Without Power Supply	H11

* Design numbers subject to change from H10 to H19, but installation dimensions remain as shown.

Note:

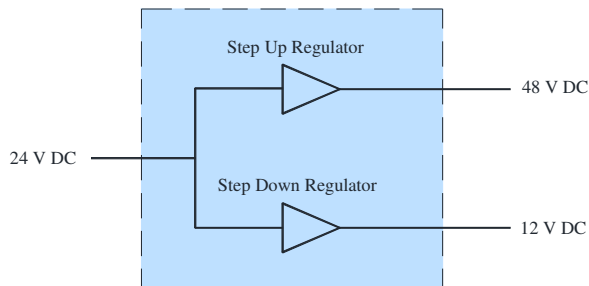
The power amplifier PW100-H11 is with Amplifier Card, Power Supply Card, 6-Pin and 8-Pin cables with connector.

The power amplifier PW100-W-H11 is with Amplifier Card and 6-Pin and 8-Pin cables with connector.

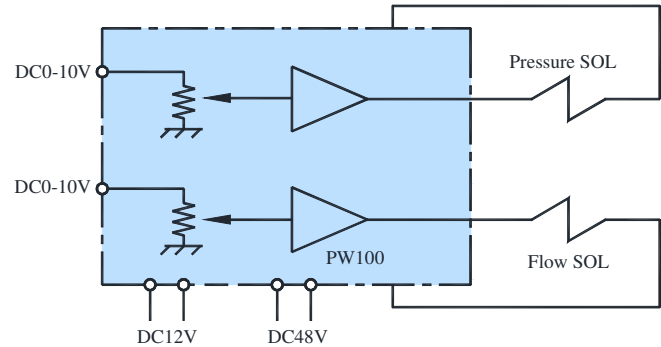
● PW100-※-H11

[Example Diagram]

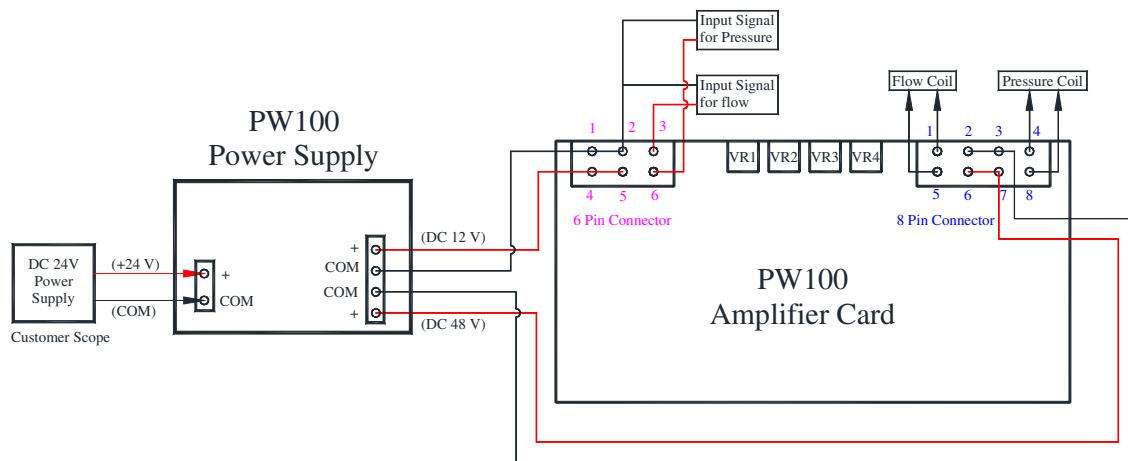
Power Card Block Diagram



Amplifier Card Block Diagram



● Wiring Details



● Details of Terminal Board

Trimmers	
VR1	Pressure Max.
VR2	Pressure Min.
VR3	Flow Max.
VR4	Flow Min.

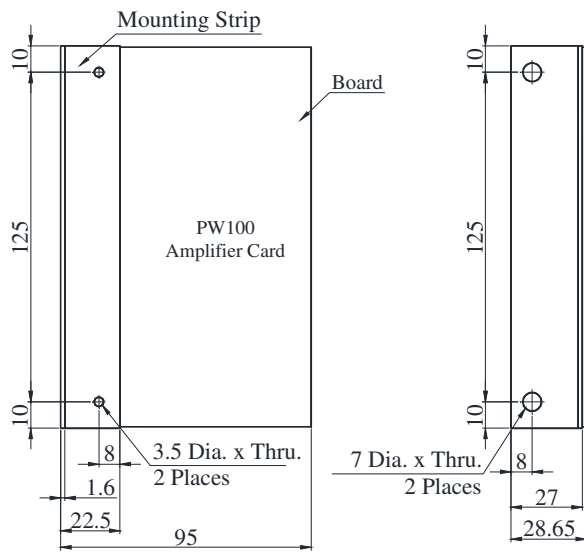
Input	
+24V	Red
COM	Black

6-Pin Connector		
Pin No.	Details	Cable Colour
1	Gnd	Black
2	Gnd	Black
3	Flow Input	Violet
4	DC 12V	Red
5	DC 12V	Red
6	Pressure Input	Green

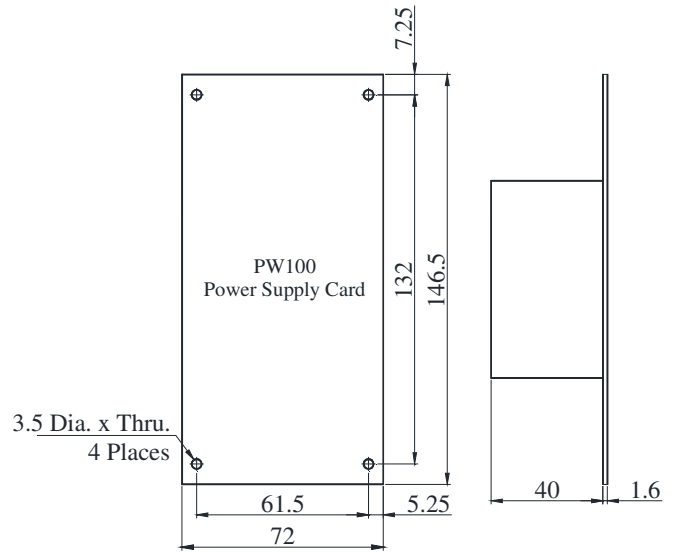
8-Pin Connector		
Pin No.	Details	Cable Colour
1	Flow Coil	Yellow
2	Gnd	Black
3	Gnd	Black
4	Pressure Coil	Blue
5	Flow Coil	Yellow
6	DC 48V	Red
7	DC 48V	Red
8	Pressure Coil	Blue

■ Mounting Details

● Amplifier Card



● Power Supply Card



■ Spare Parts List

Individual components can be ordered separately.

Name of Part	Part Number		Qty.
Cable Set	6 Pin	Cable Set	1
	8 Pin		1
Power Supply Card	PW100-H11 Power Supply		1
Amplifier Card	PW100-※-H11 Amplifier		1