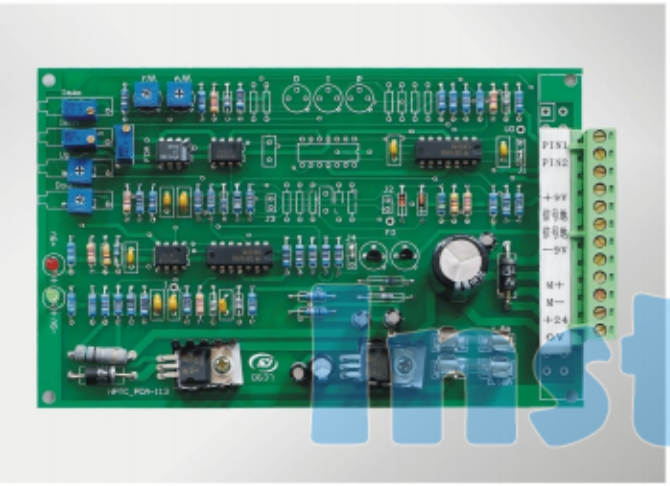
Proportional amplifier

H-AP-101-2.5 (Single)proportional amplifier



Technical specification

Supply voltage	(V)	24±10%
Power request	(VA)	30
Fuse	(A)	5
Control voltage (optional)	(V)	0~5
		0~10
Max output current	(mA)	2500
Max load resistance	(Ω)	2.5
Operating environment temperature	(°C)	0~70
Temperature drift	(mA/°C)	0.3
Dimension	(mm)	170x100
Weight	(g)	110

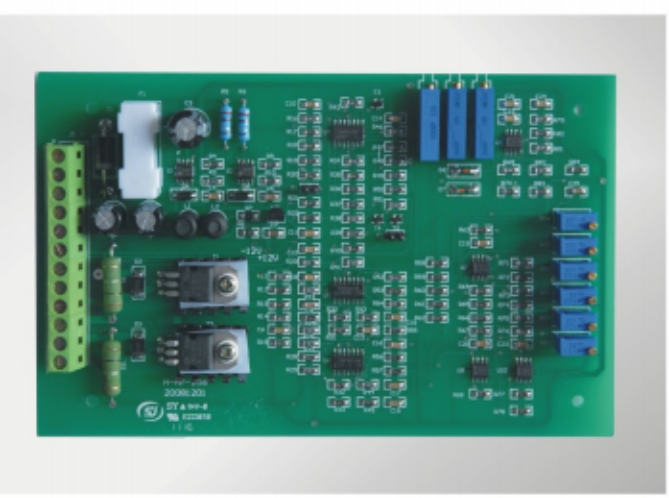
Supply voltage：24VDC，rated current amplitude：0~2500mA
Components：filter circuit, voltage regulator, one switch power amplifier, ramp regulator, differential input, gain regulator, zero regulator，high precision & low temperature drift amplifying circuit

Application range：

1.BFW 2-position 4-way Proportional directional valve
（Load Resistance：2.5）

H-AP-206-2.5-u (i) proportional directional valve special amplifier

Technical specification



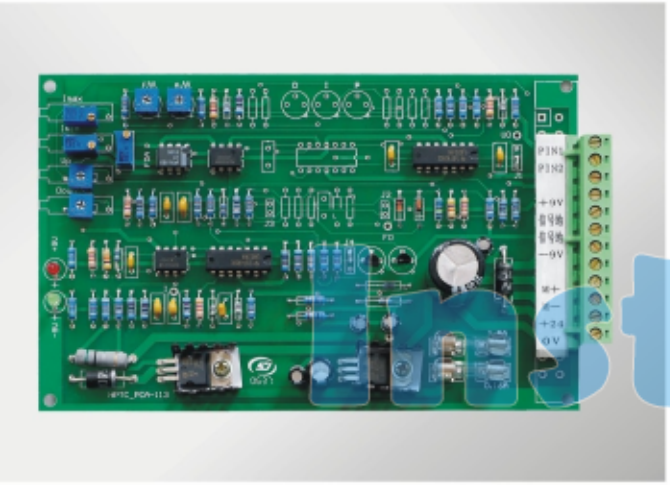
Supply voltage	(V)	24±10%
H-AP-206-2.5-U（Voltage Control）	(V)	±10
H-AP-206-2.5-I（Current Control）	(mA)	4-20
Load Resister	(20℃)	3
Control voltage (optional)	(mA)	2500
Operating environment temperature	(°C)	0~70
Temperature drift	(mA/°C)	0.3
Dimension	(mm)	170x100
Weight	(g)	120

Supply Voltage：24VDC，Rated Current Amplitude：0~2500mA
Components：Filter Circuit, Voltage Regulator, Two Switch Power Amplifiers, Ramp Regulator, Differential Input, Gain Regulator, Zero Regulator, High Precision & Low Temperature Drift Amplifying Circuit

Application range：
BFW 3-position 4-way Proportional directional valve
（Load Resistance：2.5

Proportional amplifier

H-AP-101-0.8 (Single)proportional amplifier



Technical specification

Supply voltage	(V)	24±10%
Power request	(VA)	30
Fuse	(A)	2
Control voltage (optional)	(V)	0~5 0~10
Max output current	(mA)	800
Max load resistance	(Ω)	20
Operating environment temperature	(°C)	0~70 (°C)
Temperature drift	(mA/°C)	0.3
Dimension	(mm)	170x100
Weight	(g)	110

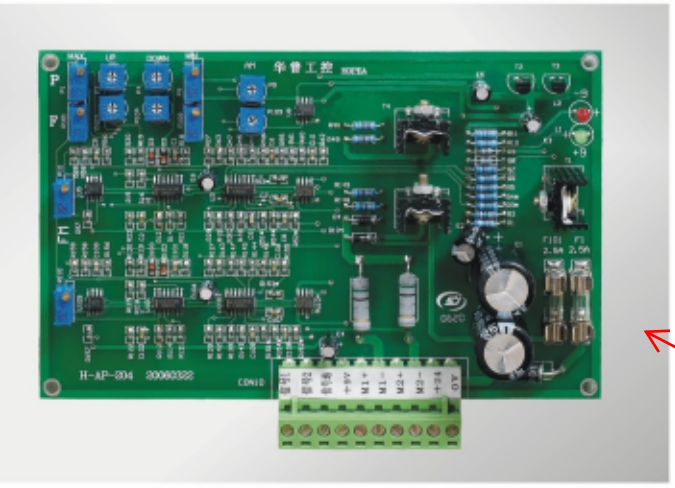
Supply voltage：24VDC，rated current amplitude：0~800mA
Components：filter circuit, voltage regulator, one switch power amplifier, ramp regulator, differential input, gain regulator, zero regulator，high precision & low temperature drift amplifying circuit

Application range：

1.BYZ Proportional directly operated pressure relief valve
（Load Resistance：10、19.5）
2.BY Proportional pilot-operated relief valve
（Load Resistance：10、19.5）
3.BFW 2-position 4-way Proportional directional valve
（Load Resistance：(02)19.5、（03）10（1500mA））

DBE 10-3X
DBE 20-3X

H-AP-204-0.8(Double)proportional amplifier



Technical specification

Supply voltage	(V)	24±10%
Power request	(VA)	60
Fuse	(A)	2
Voltage Control	(V)	0~10
Max output current	(mA)	800
Max load resistance	(Ω)	30
Operating environment temperature	(°C)	0~70
Temperature drift	(mA/°C)	0.3
Dimension	(mm)	160x110
Weight	(g)	115

4WRA & PQ

Supply voltage：24VDC，Rated Current Amplitude：0~800mA
Components： filter circuit, voltage regulator,two switch power amplifiers, ramp regulator, differential input, gain regulator, zero regulator，high precision & low temperature drift amplifying circuit

Application range：

1.BFW 3-position 4-way Proportional directional valve
（Load Resistance：（02）19.5、（03）10（1500mA））
2.BYLZ Proportional electro-hydraulic control P-Q valve
（Load Resistance：10、2

amplifier cards introduction

Basic characteristic

Power: 12VDC Maximal control current: 1500mA Control range: 0~5V

PIN1: First loop control signal input

PIN2: Second loop control signal input

+9V: +9V output power

M1+: Solenoid positive terminal of first loop

M1-: Solenoid negative terminal of first loop

M2+: Solenoid positive terminal of second loop

M2-: Solenoid negative terminal of second loop

+24V: +12VDC power input.

0V: +12VDC power ground

Note: When connecting the wires, signal ground can not connect with power ground.

Open loop and test

Minimum current adjustment: adjust the I min potentiometer to get the required minimum current. (Adjust clockwise and the current increases)

Maximal current adjustment: adjust the I min potentiometer to get the required minimum current.

(Adjust clockwise and the current increases)

Incline adjustment: adjust UP, adjust clockwise to increase the time of climbing incline

adjust DOWN, adjust clockwise to increase the time of declining incline

Using potentiometer F to adjust buffeting frequency of input current, when adjust clockwise, its value increases

Using potentiometer A to adjust buffeting amplitude of input current, when adjust clockwise, its value increases

初始检查：检查供电系统，确保 24V 电源电压在规定范围内。

开环调节：

最小电流（Imin）调整：调节电位器 MIN，得到所需的最小电流（顺时针调节最小值变大）。

最大电流（Imax）调整：调节电位器 MAX，得到所需的最大电流（顺时针调节最大值变大）。

斜坡调节：调节 UP，顺时针调节上升斜坡时间增加，

调节 DOWN，顺时针调节下降斜坡时间增加，

电位器 F 用来调节输入电流的颤振频率，顺时针调节时变大。

电位器 A 用来调节输入电流的颤振幅值，顺时针调节时变大。

注：以上调节电位器，上面的控制第一路电磁铁，下面的控制第二路电磁铁。

接线图：