

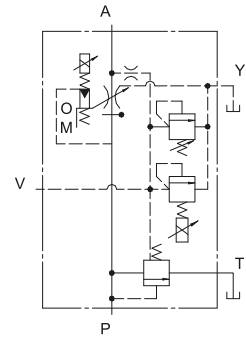
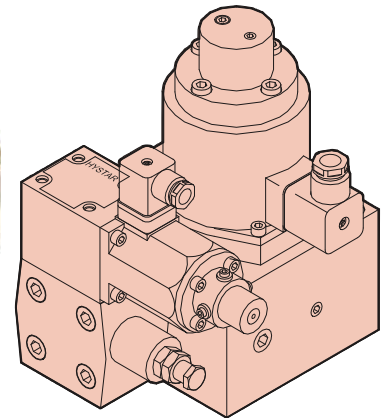


# Proportional Electro-Hydraulic Relief And Flow Control Valves (40Ω -10Ω Series)

## ORDERING CODE:

**E**FBG - **03** - **125** - **C** - **20** - **\***

\* DATE OF MANUFACTURED  
 DESIGN NO.  
 20 :WITH DIN 912 BOLTS  
 2090:WITH UNC(NORTH AMERICAN) BOLTS  
 C:137bar(1950PSI)  
 H:206bar(2930PSI)  
 MAX. FLOW PASSED  
 VALVE SIZE  
 PROPORTIONAL ELECTRO-HYDRAULIC RELIEF  
 AND FLOW CONTROL VALVE G TYPE



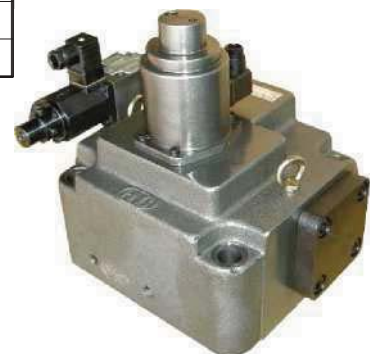
Graphic Symbols

## RATINGS

Description		Model Number	EFBG-03-125	EFBG-06-250	EFBG-10-500
Max. Operating Pres.	bar(PSI)		206(2987)	206(2987)	206(2987)
Max. Flow	lpm(USgpm)		125(33)	250(66)	500(132)
Metred Flow Adjustment Range	lpm(USgpm)		1-125 (.26-33)	2-250 (.52-66)	5-500 (1.32-132)
Flow Controls	Rated Current	mA	750		
	Coil Resistance	Ω	40		
	Valve Internal Resistance (A → B)	bar(PSI)	5(72.5)		
	Hysteresis	%	< 7		
	Repeatability	%	< 1		
Pressure Controls	Pres. Adj. Range	bar(PSI)	C: 8~140(116~2030) H:10~206(145~3000)		
	Rated Current	mA	C:700 H:750		
	Coil Resistance	Ω	10		
	Hysteresis	%	< 3		
	Repeatability	%	< 1		
Weight	kg(lbs.)		18(39.6)	33(72.7)	58(127.8)

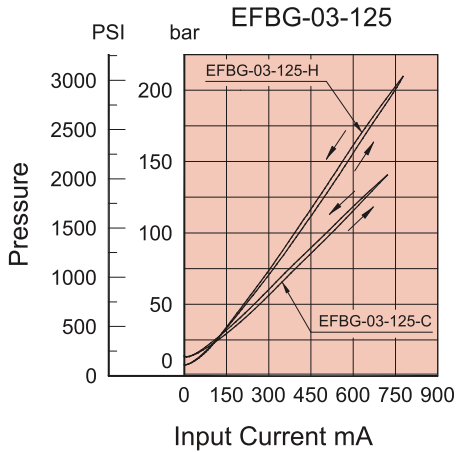
## NOTE:

- 1.Pipe the return direct back to tank on its own below the oil level for minimum back pressure.
- 2.The specification chart above relates to performance achievable using the HystAR standard electronic controller type HNC-4075 ,HNC-1085 and a pump flow of 125 lpm.(Efbg-03);250 lpm. (Efbg-06);500 lpm.(Efbg-10); at oil temperature 45°C /113°F and viscosity 45 cSt.

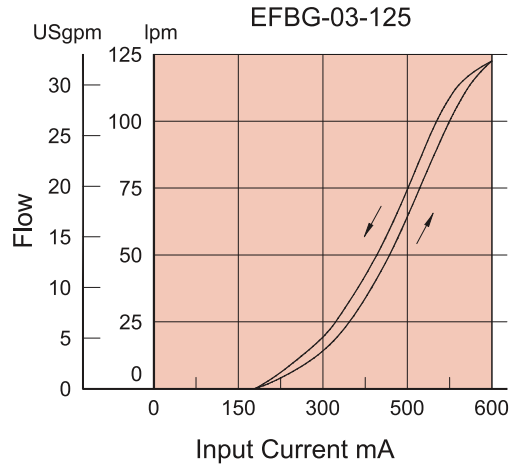


### (40Ω-10Ω Series)

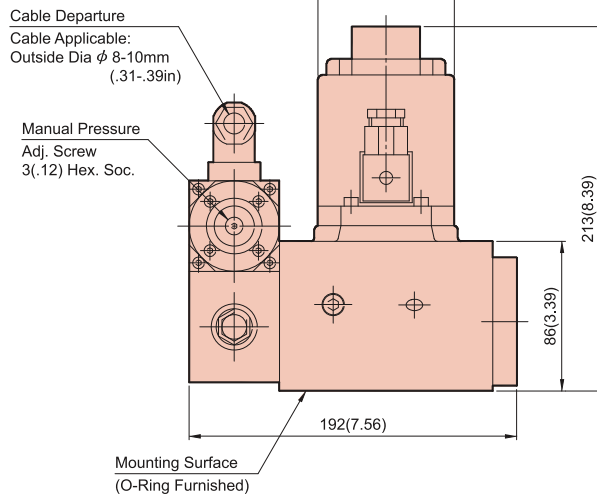
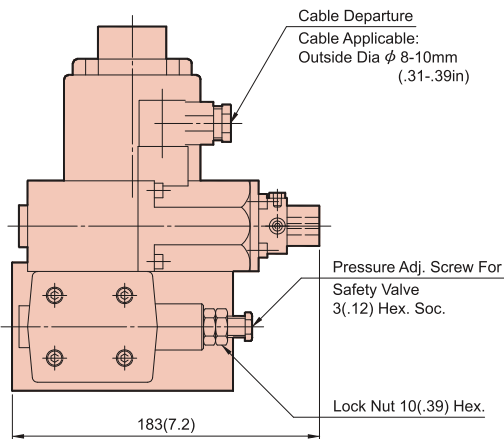
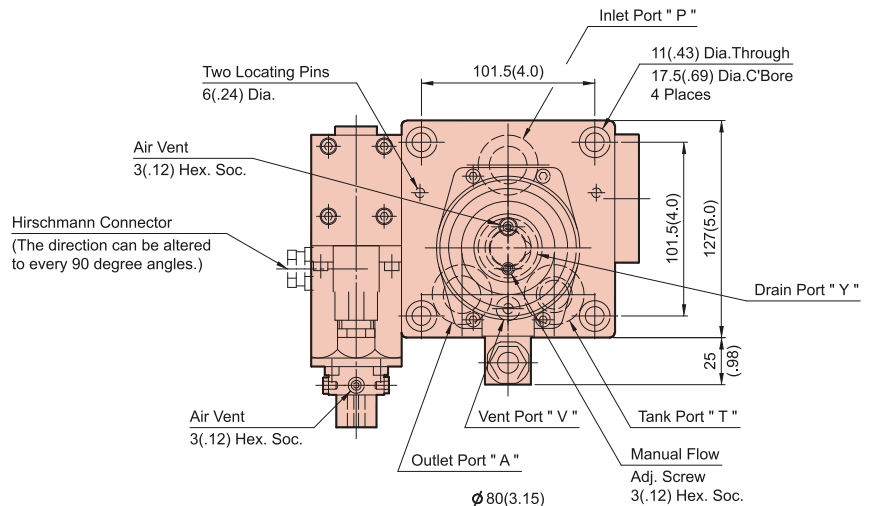
#### Input Current vs. Pressure



#### Input Current vs. Flow



### EFBG-03-125- \* -20

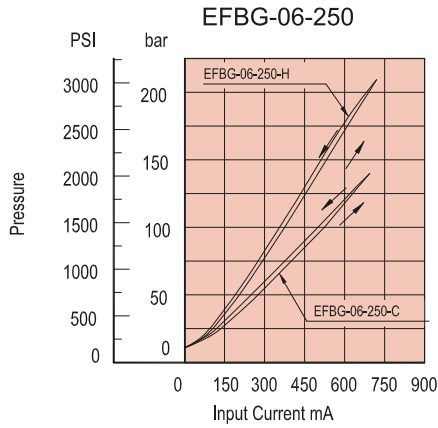


Name	Description	Tightening Torque	Code
Attachment Soc.Hd.Cap Screw:	M10X100LgX4pcs	58-72 Nm	20
Attachment Soc.Hd.Cap Screw:	No.3/8-16UNCX4"LgX4pcs	504-625 in.lbs	2090

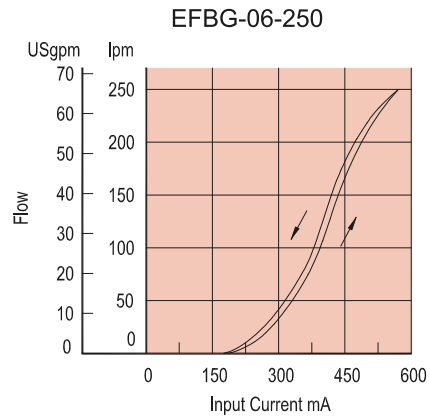


(40 Ω - 10 Ω Series)

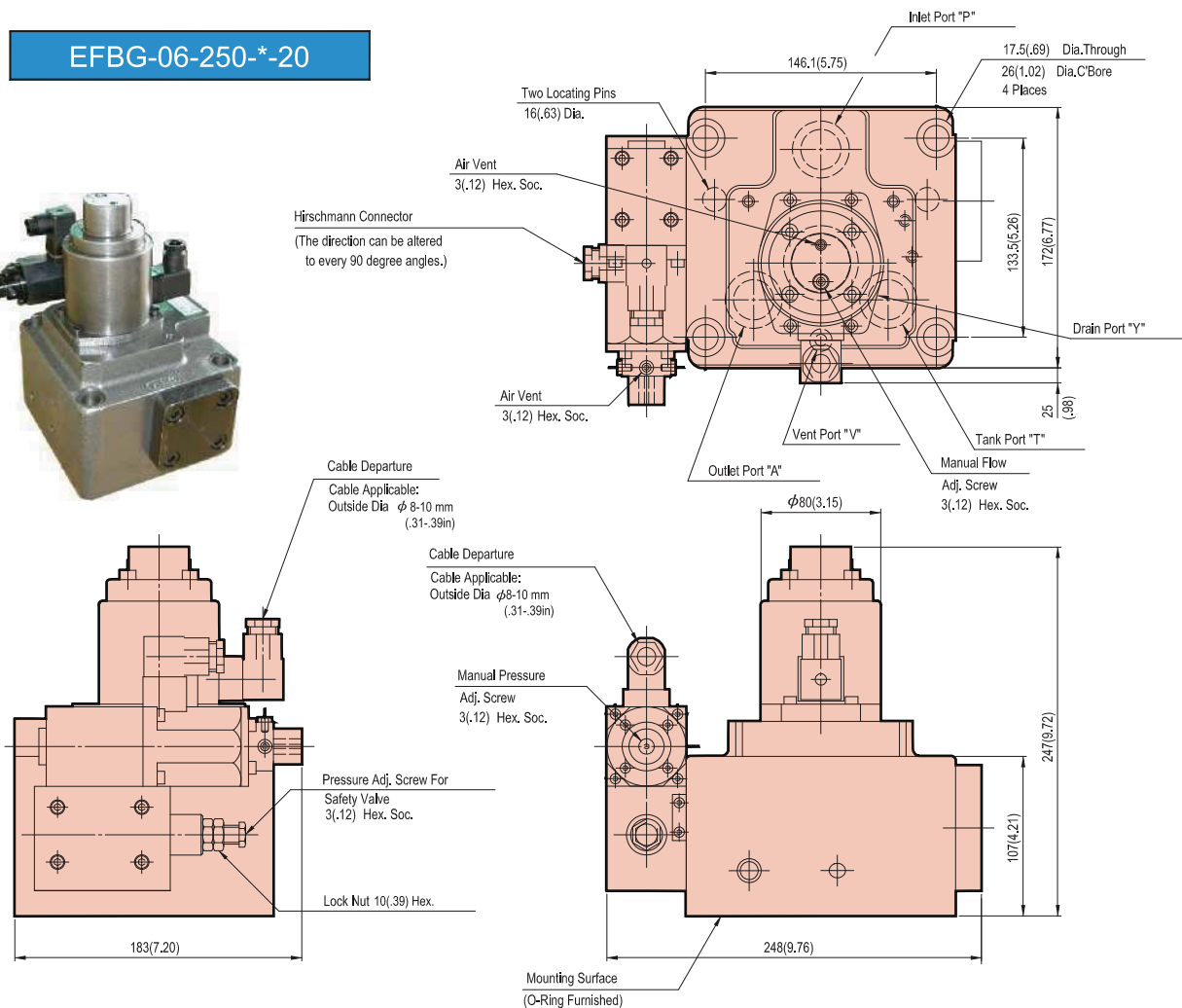
Input Current vs. Pressure



Input Current vs. Flow



EFBG-06-250-\* -20



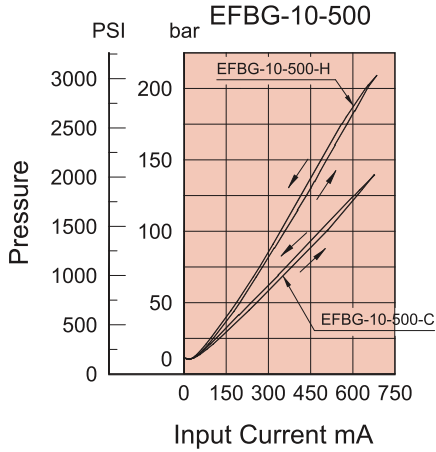
Name	Description	Tightening Torque	Code
Attachment Soc.Hd.Cap Screw:	M16X130Lg X4pcs	286-354 Nm	20
Attachment Soc.Hd.Cap Screw:	No.5/8-11UNCX5LgX4pcs	2482-3073 in.lbs	2090

## DIMENSIONS

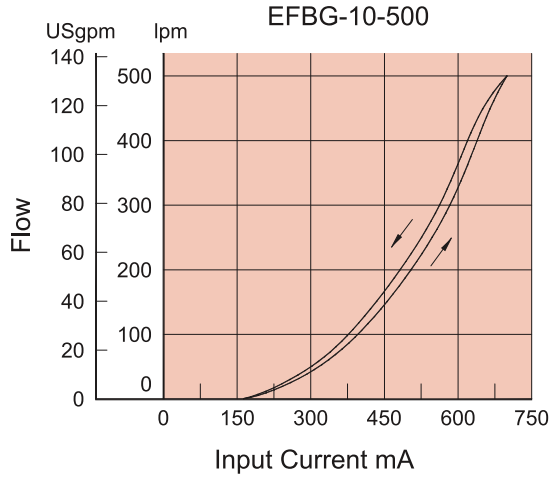
MILLIMETERS(INCHES)

### (40Ω-10Ω Series)

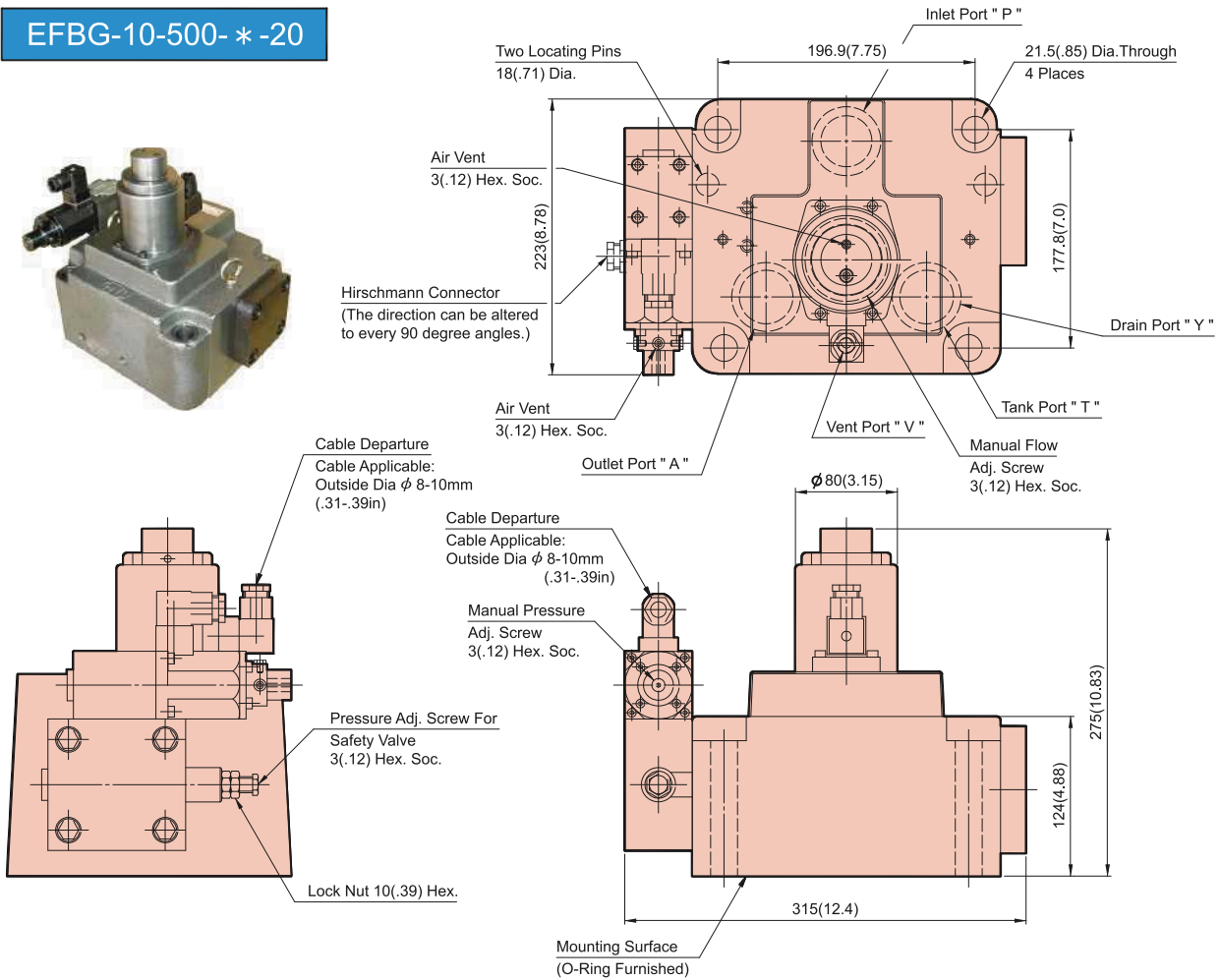
Input Current vs. Pressure



Input Current vs. Flow



### EFBG-10-500- \* -20



Name	Description	Tightening Torque	Code
Attachment Soc.Hd.Cap Screw:	M20X130LgX4pcs	473-585 Nm	20
Attachment Soc.Hd.Cap Screw:	No.3/4-10UNCX5"LgX4pcs	4106-5078 in.lbs	2090



## Electronic Amplifier P-C Board

### General Information

1. Electronic amplifier type HNC-1085 is used for proportional pressure control valve. Load coil resistance  $10\Omega$
2. Electronic amplifier type HNC-4075 is used for proportional flow control valve. Load coil resistance  $40\Omega$

### ORDERING CODE:

**HNC - 1085**

1085: FOR PRESSURE CONTROL VALVES  
 4075: FOR FLOW CONTROL VALVES  
 DA2: DIGITAL SETTING ADJUSTER

MARK

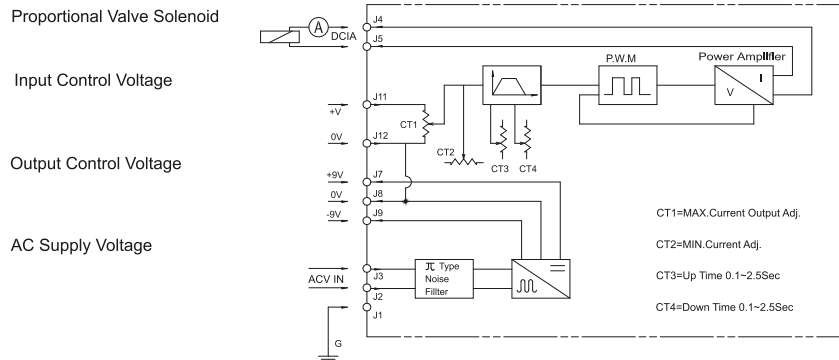
### RATINGS

Model Number	HNC-1085	HNC-4075
Description		
Power Supply	AC 28V $\pm$ 20%	AC 40V $\pm$ 20%
Fuse	2A	2A
Load Coil Resistance	10 $\Omega$ /20 $^{\circ}$ C (68 $^{\circ}$ F )	40 $\Omega$ /20 $^{\circ}$ C (68 $^{\circ}$ F )
Input Control Voltage	0V~+9V	0V~+9V
Max. Current Output Range	0~850mA	0~750mA
Pilot Current Adj. Range	0~150mA	0~150mA
Up Ramp Time	0.1~2.5sec	0.1~2.5sec
Down Ramp Time	0.1~2.5sec	0.1~2.5sec
Temperature Drift	0.1mA/ $^{\circ}$ C	0.2mA/ $^{\circ}$ C
Ambient Temperature(Max.)	0~50 $^{\circ}$ C (32~122 $^{\circ}$ F )	0~50 $^{\circ}$ C (32~122 $^{\circ}$ F )
Max. Power Requirement	15VA	40VA



## Electronic Amplifier Terminal Connections

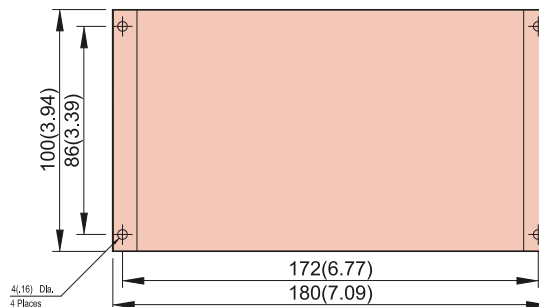
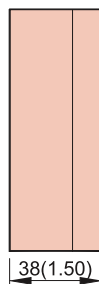
**HNC-1085 HNC-4075**



### DIMENSIONS

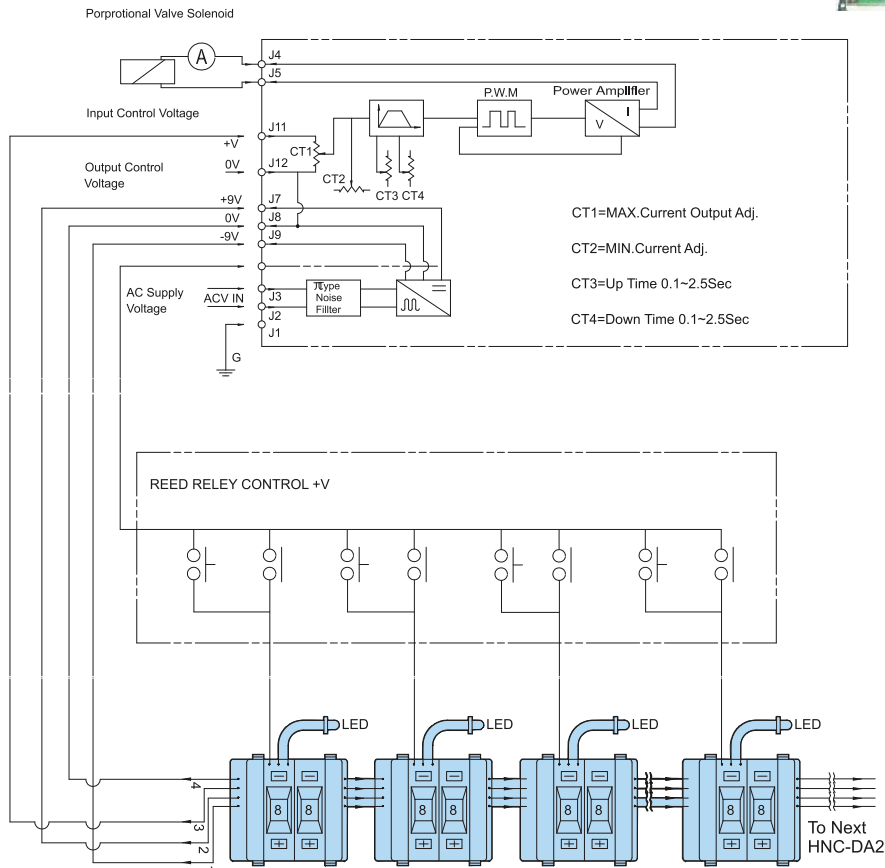
MILLIMETERS(INCHES)

#### P-C Board Dimensions



## Electronic Amplifier Terminal Connections

HNC-1085 HNC-4075



## Digital Setting Adjuster

HNC-DA2

