

Hercules Encoders

Programmable

Incremental Encoders

Select PPR's
Choice of 5 PPR's

Select Pulse Width
10µSecs, 30µSecs or Square Wave

Select Channels
•Single or quadrature channels
•Count with up/down direction
•Up count channel and down count channel

Function Selection Switches

SW1

SW2

SW3

SW4

SW5 on bottom

One Encoder Can Provide Over 20 Model Variations...



Simply remove the bottom panel and set the switches for the functions desired.



EPW.com.cn

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Hercules



6000 Series



4000 Series

Series 4000 and 6000 Programmable Encoders

Standard Features

- 4000 Series - Space-Saving Enclosure, 1-1/2"D x 3"H x 3"W, 25 to 4096 PPR.
- 6000 Series - Internal Space for 3 Separate Encoders, 25 to 4096 PPR.
- Built-In Anti-Jitter Circuitry.
- Operating Voltage Flexibility - 8 to 28Vdc, 5Vdc with TTL Outputs and Line Drivers, etc.
- Low Supply Current Requirements - Only 50 Milliamperes per Encoder
- Extra Heavy Duty 1/2"D Shafts - Optional

For the latest specifications visit our website
www.herculesencoders.com

Hercules Encoders "Value Added" Programmable Encoder

P **4 or 6** **X** **X** **X** — **A** **X** **0 6 0 0**

Shaft Diameter

Order Choice

- 1=1/4" diameter
- 2=5/16" diameter
- 3=3/8" diameter
- 4=1/2" diameter

Shaft Extension

Order Choice

- 1=Single extension
- 2=Double extension

Mounting Type

Order Choice

- 1=2.0" B.H.C.
- 2=Flanged base (mounting type can be changed by substituting bottom plate when programming)

Channel Outputs

Order Choice

- A=NPN w/pullup res.
- B=NPN open collector
- F=5V NPN w/pullup res.
- G=5V NPN open collector
- H=PNP outputs
- K=5V line driver
- L=8-15V line driver

Channel Types Are:

- Q=Quadrature outputs*
- P=Separate UP & DOWN output channels
- U=Pulse train output with UP/DN direction output
- S=Single output channel

Channel Types Programming

| Type | SW3 | SW4 |
|--------|-----|-----|
| Q S | | |
| P | | |
| U S | | |

Encoders to be shipped with the PPR as ordered & quadrature channel type with 50/50 duty cycle pulse.

**Quadrature available for 1st three SW 1 & 2 columns (below).*

| Order PPR's Model | PPR's Available With This Model | Switch Positions | | | | | | | | | |
|-------------------|---------------------------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | SW1 | SW2 | SW1 | SW2 | SW1 | SW2 | SW1 | SW2 | SW1 | SW2 |
| 120 | 30, 60, 120, 240, 480 | 30PPR | 60PPR | 120PPR | 240PPR | 480PPR | | | | | |
| 192 | 48, 96, 192, 384, 768 | 48PPR | 96PPR | 192PPR | 384PPR | 768PPR | | | | | |
| 300 | 75, 150, 300, 600, 1200 | 75PPR | 150PPR | 300PPR | 600PPR | 1200PPR | | | | | |
| 360 | 90, 180, 360, 720, 1440 | 90PPR | 180PPR | 360PPR | 720PPR | 1440PPR | | | | | |
| 400 | 100, 200, 400, 800, 1600 | 100PPR | 200PPR | 400PPR | 800PPR | 1600PPR | | | | | |
| 480 | 120, 240, 480, 960, 1920 | 120PPR | 240PPR | 480PPR | 960PPR | 1920PPR | | | | | |
| 500 | 125, 250, 500, 1000, 2000 | 125PPR | 250PPR | 500PPR | 1000PPR | 2000PPR | | | | | |
| 512 | 128, 256, 512, 1024, 2048 | 128PPR | 256PPR | 512PPR | 1024PPR | 2048PPR | | | | | |
| 540 | 135, 270, 540, 1080, 2160 | 135PPR | 270PPR | 540PPR | 1080PPR | 2160PPR | | | | | |
| 600 | 150, 300, 600, 1200, 2400 | 150PPR | 300PPR | 600PPR | 1200PPR | 2400PPR | | | | | |
| 720 | 180, 360, 720, 1440, 2880 | 180PPR | 360PPR | 720PPR | 1440PPR | 2880PPR | | | | | |
| 960 | 240, 480, 960, 1920, 3840 | 240PPR | 480PPR | 960PPR | 1920PPR | 3840PPR | | | | | |
| 1000 | 250, 500, 1000, 2000, 4000 | 250PPR | 500PPR | 1000PPR | 2000PPR | 4000PPR | | | | | |
| 1024 | 256, 512, 1024, 2048, 4096 | 256PPR | 512PPR | 1024PPR | 2048PPR | 4096PPR | | | | | |

Programming of Switches: \CCW=set to left; | Cntr=set center; /CW=set to right

Note: for SW5 (right hand column PPR x 4) Time Settings: CW=other columns; Cntr=5-10µsec; CCW=25-35µsec