RAY-MOTION
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# Neutron 14D/20D/30D

Digital Encoder

## Neutron Series

The combination of high-precision digital encoder and digital drive technology makes the Neutron series have higher resolution and higher linearity, lower jitter, lower zero and gain drift characteristics.It is especially suitable for applications where position accuracy is very demanding, such as high-precision welding, cutting, etching and other fields.

## 凌腾系列

高精度数字编码器与数字驱动技术相结合使凌腾系列具有更高的分辨率，更高的线性度，更低的抖动，更低的零点和增益漂移特性。特别适合应用在某些对位置精度要求非常苛刻的场合，例如高精度的焊接、切割、蚀刻等领域。


Kokyo 株式会社 光響

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# Neutron Specifications
## 凌腾 规格参数

所有角度均为光学角 /All angles are in optical degrees

| | Neutron14D | Neutron20D | Neutron30D |
|---|---|---|---|
| 输入光束孔径Aperture | 14mm | 20mm | 30mm |
| 光束偏移 Beam displacement | 18. 1mm | 25. 25mm | 36mm |
| 追踪时间 Tracking error time | 200us | 350us | 680us |
| 最大激光功率 Max laser power | 500W | 1000W | 2000W |

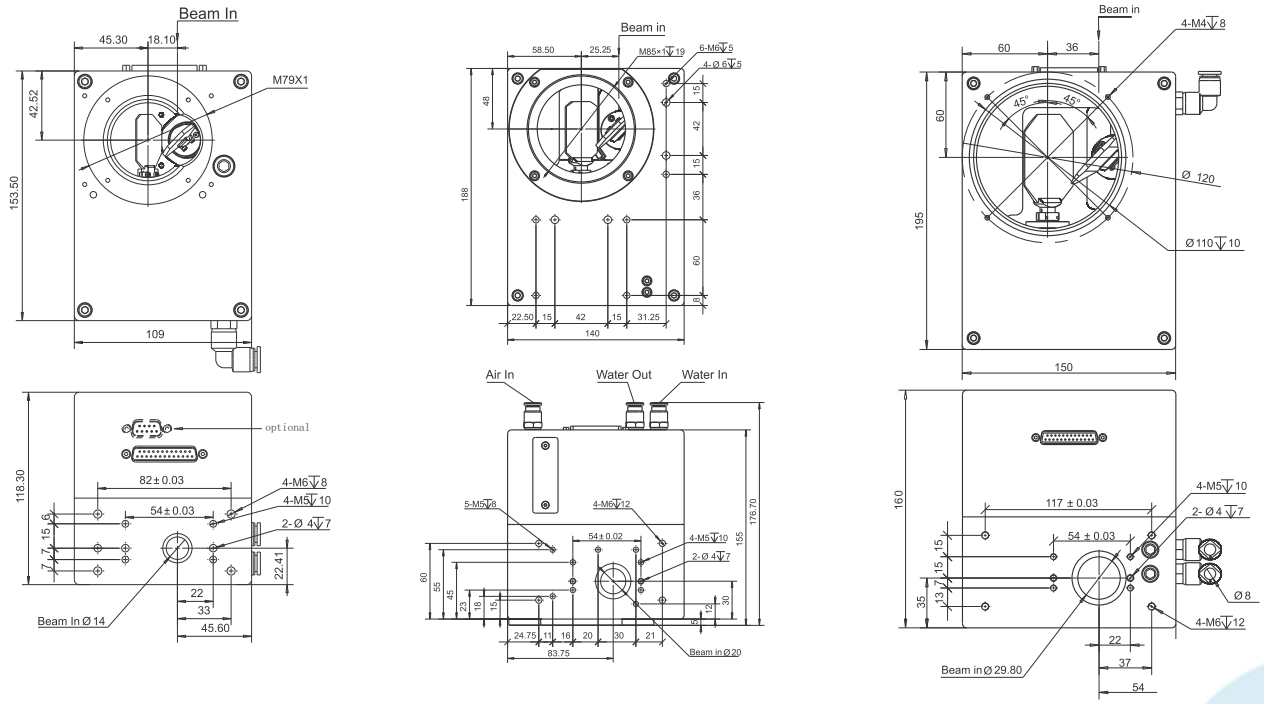
| | |
|---|---|
| 零点漂移 Offset drift | ＜15urad/K |
| 增益漂移 Gain drift | ＜8ppm/K |
| 可重复性 Repeatability | ＜2urad |
| 长期漂移 Long-term drift( After 60min warm-up) | |
| Offset drift | ＜50urad |
| Gain drift | ＜50ppm |
| 线性度 Linearity | 99. 9% |

| 阶跃响应时间 /Step response time | Neutron14D | Neutron20D | Neutron30D |
|---|---|---|---|
| 1% 全范围响应时间 1% of full scale | 0. 6ms | 0. 75ms | 0. 85ms |
| 10% 全范围响应时间 10% of full scale | 1. 1ms | 2ms | 6ms |
| 标记速度 Marking speed(1) | 2m/s | 1m/s | 0. 7m/s |
| 定位速度 Positioning speed | 12m/s | 12m/s | 6m/s |
| 书写速度 Writting speed(High quality)(2) | 350cps | 200cps | - |

| | |
|---|---|
| 标准扫描角度 Typical scan angle | 40 degrees |
| 接口协议 Interface (optional) | XY2-100/SL2-100 |
| 工作环境温度 Operating temperature | 25±10°C |
| 额定电源容量 Power requirements | ±15V DC, 150W . RMS max 3A |
| 驱动方式 Driver mode | Digital |
| 位置分辨率 Resolution(optional) | 16/18Bit |

1. with F-Theta objective,f=160mm
2. Single-stroke characters of 1mm height

上述资料如有更改，将不作另行通知 The above information is subject to change without notice 10/2022





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