

## Magnetic Angle Measuring System

High reliability from proven non- contact sensing technology

- Industry standard digital and analogue output options
- Customer selectable resolution to 20 Bit
- Stick-on reference mark options
- Small reader design (<10g)
- Excellent dirt immunity
- High speed operation
- Integral set-up LED



### Magnetic Rings:

| Magnetic Rings | ID (mm) | OD (mm) | Thickness (mm) | Pole Length | Poles | DR     | Reader | Signal    |
|----------------|---------|---------|----------------|-------------|-------|--------|--------|-----------|
| MDR118-122     | 118mm   | 122mm   | 4              | 2mm         | 192   | Radial | MR20   | Increment |
| MDA50-70       | 50mm    | 70mm    | 1              | 2mm         | 100   | Axial  | MR20   | Increment |
| MDA 24-32      | 24mm    | 32mm    | 1.6            | 2mm         | 44    | Axial  | MR20   | Increment |
| MDR 77.2-81.5  | 77.2    | 81.5    | 4              | 2mm         | 128   | Radial | Module | Increment |
| MDR 136-140    | 136     | 140     | 10             | 2           | 220   | Radial | MR20   | Increment |
| MDR 159-163    | 159     | 163     | 4              | 2           | 256   | Radial | MR20   | Increment |
| MDA 20-34      | 20      | 34      | 4.5            | -           | -     | Axial  | Module | Absolute  |
| MDA 15-30      | 15      | 30      | 4.5            | -           | -     | Axial  | Module | Absolute  |

### Angle Encoder: MR20, Module

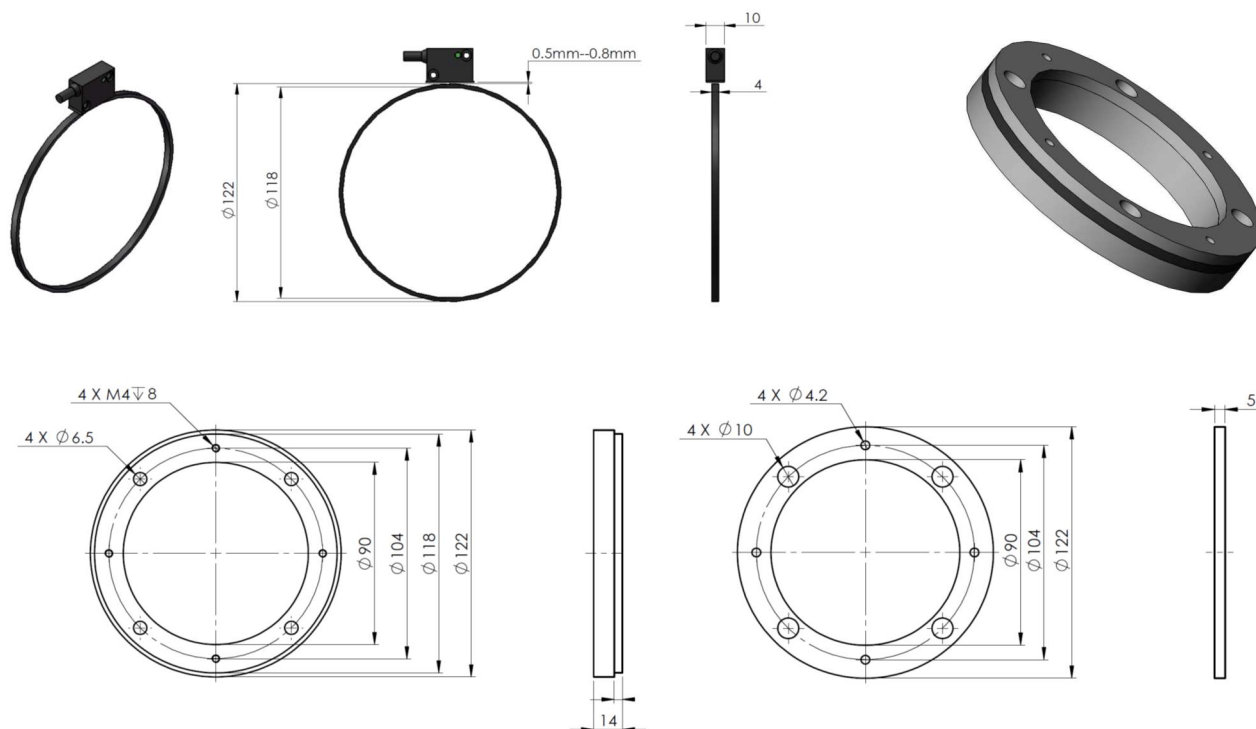
**Power supply:** 5V  $\pm$  5%  
**Power consumption:** <30mA (without any load)  
**Temperature:** -10-80 °C  
**Environmental sealing:** IP67  
**Vibrations:** 20G (55 Hz to 2000 Hz)

### Output definition:

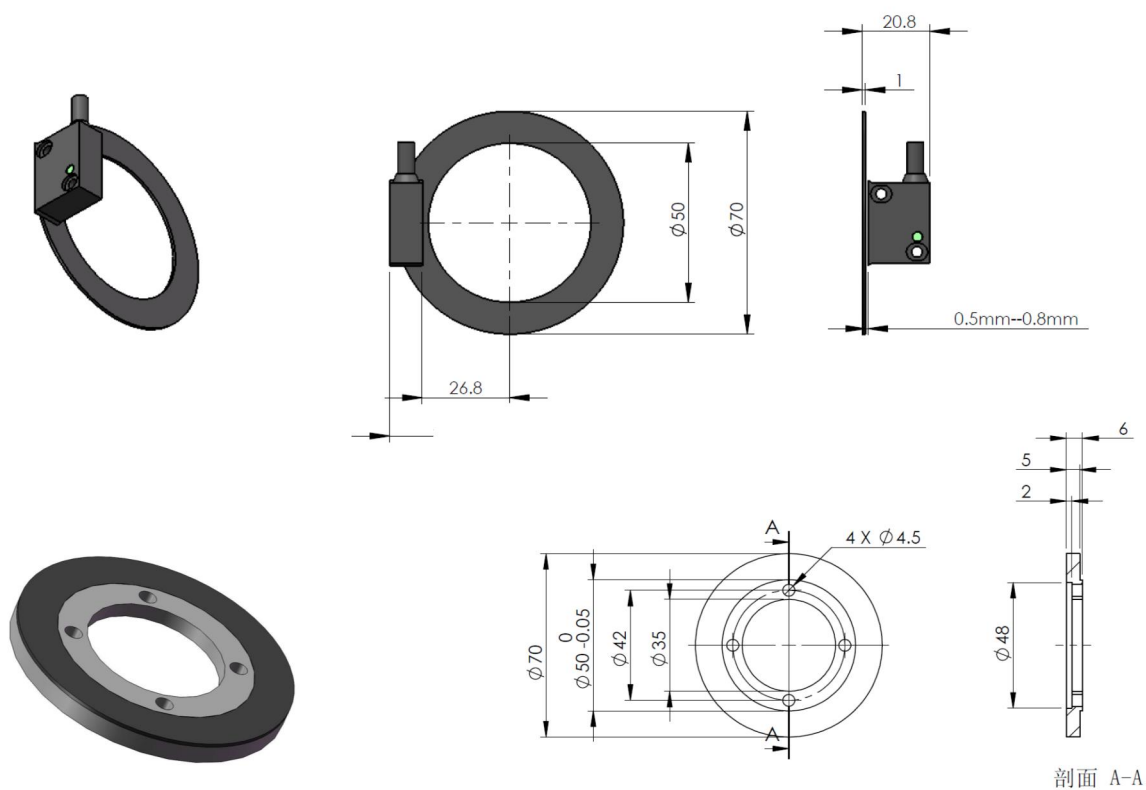
| Colour   | Red | Black | White | Grey | Blue | Purple | Brown | Green | Silver |
|----------|-----|-------|-------|------|------|--------|-------|-------|--------|
| Function | 5V  | GND   | A+    | A-   | B+   | B-     | Z+    | Z-    | Shell  |

# Magnetic Angle Measuring System

## Radial Magnetic Ring : MDR118-122

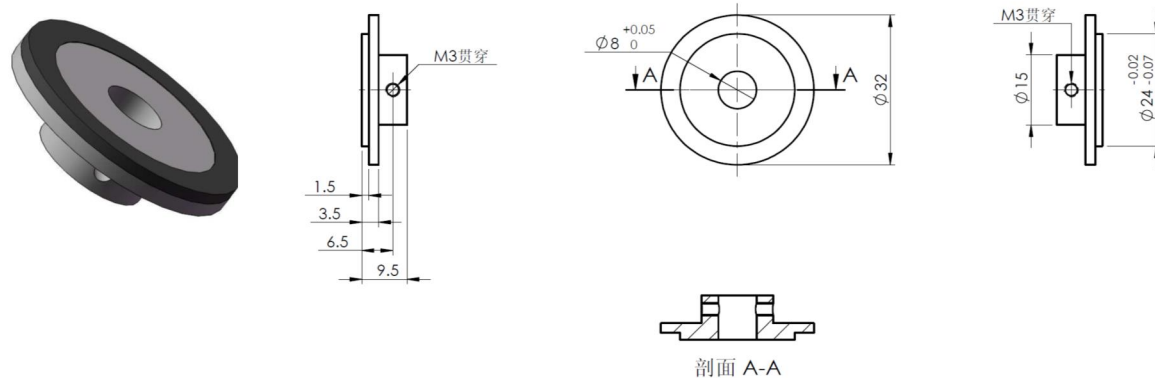
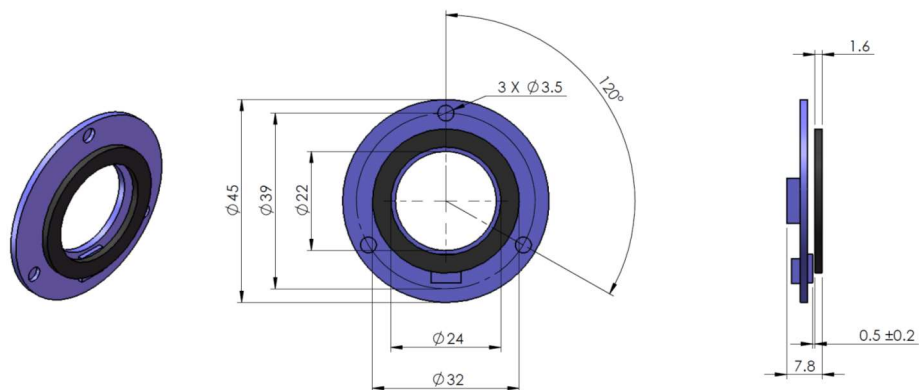


## Axial Magnetic Ring : MDA50-70

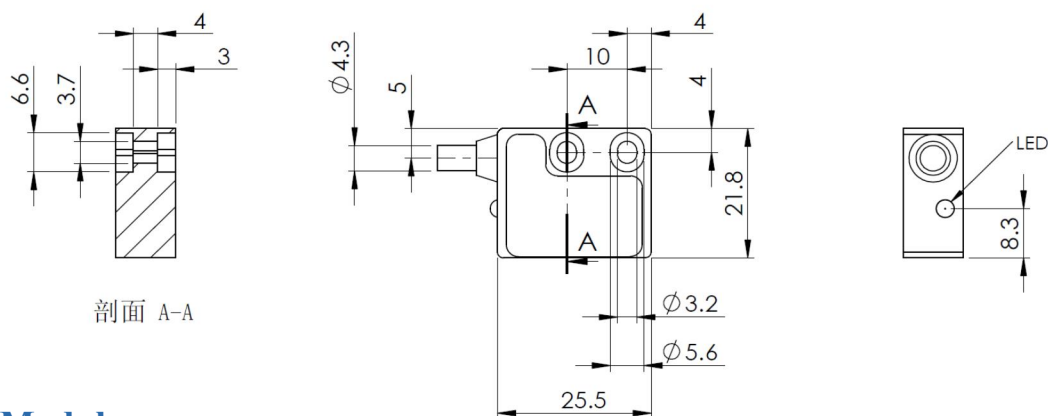


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## Radial Magnetic Ring : MR70C50A100



## Reader : MR20



## Reader : Module

