

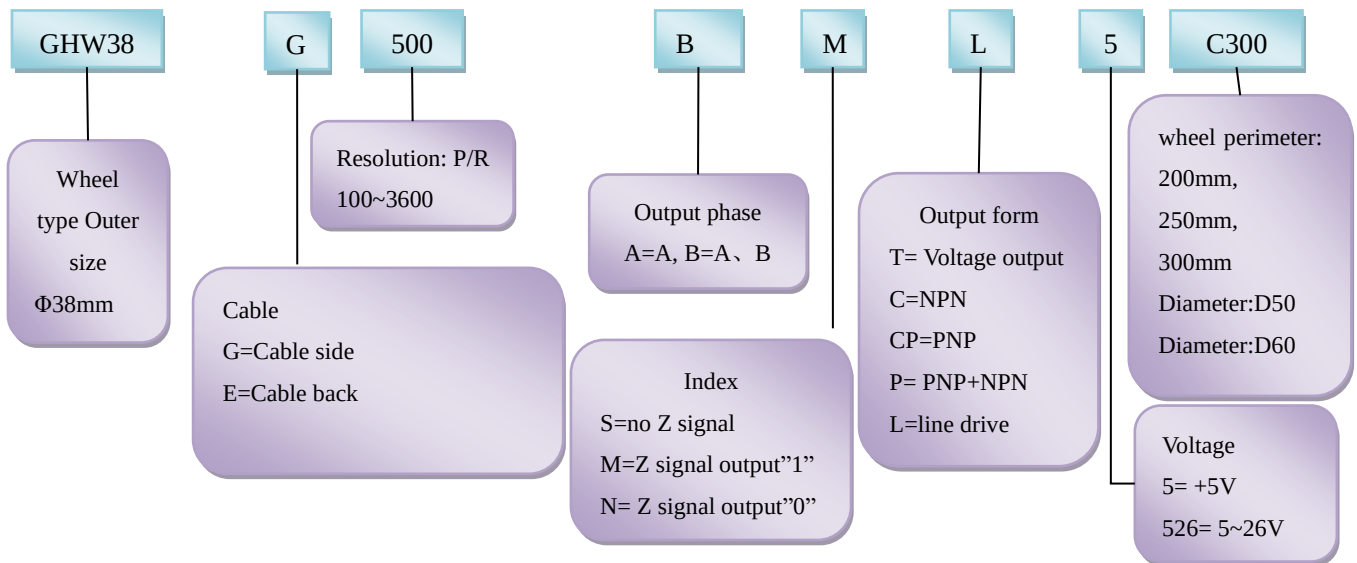
## Incremental encoder-----GHW38 series

### Application & Features:

Used in automatic control, measurement, robot X-Y working platform, printing and packaging. Internal ASIC devices, high reliability, long life, strong anti-interference. Stability and protection of the stainless steel shaft has a higher capacity, more solid metal housing could anti-shock. Outlet end metal interface sets of waterproof protection.



### Model



### Electrical spec:

| Output circuit             | Open-collector output (NPN or PNP) | Voltage output | Push-pull complementary outputs | Line driver  |
|----------------------------|------------------------------------|----------------|---------------------------------|--------------|
| Supply voltage             | 5~26V                              | 5~26V          | 5±0.25 5~26V                    | 5±0.25 5~26V |
| Current consumption        | ≤80mA                              | ≤80mA          | ≤80mA                           | ≤150mA       |
| Load current               | 40mA                               | 40mA           | 40mA                            | 60mA         |
| Output high                | Min Vcc*70%                        | Min Vcc-2.5V   | Min Vcc-1.5V                    | Min 3.4V     |
| Output low                 | MAX 0.4V                           | MAX 0.4V       | MAX 0.8V                        | MAX 0.4V     |
| Rise time Tr               | MAX 1us                            | MAX 1us        | MAX 1us                         | MAX 200ns    |
| Fall time Tf               | MAX 1us                            | MAX 1us        | MAX 1us                         | MAX 200ns    |
| Highest frequency response | 300kHz                             | 300kHz         | 300kHz                          | 300kHz       |

### Mechanical spec:

| Max speed r/min           | Starting torque  | Axis maximum load     | Impact            | Anti-vibration |
|---------------------------|------------------|-----------------------|-------------------|----------------|
| 6000                      | <0.05Nm          | Radial 25 N Axial 15N | 50G/11ms          | 10G 10-2000Hz  |
| Moment inertia            | Work Temperature | Storage Temperature   | Protection Degree | Weight         |
| 4 x 10.-8kgm <sup>2</sup> | -40~85°C         | -40~85°C              | IP50              | 250g           |

Dimensions :



Output phase shift



Connections:

| Signal                  | A     | B     | Z      | A-    | B-   | Z-     | Vcc | GND   |
|-------------------------|-------|-------|--------|-------|------|--------|-----|-------|
| Color                   | Green | White | Yellow | Brown | Grey | Orange | Red | Black |
| Without inverted signal | Green | White | Yellow | -     | -    | -      | Red | Black |