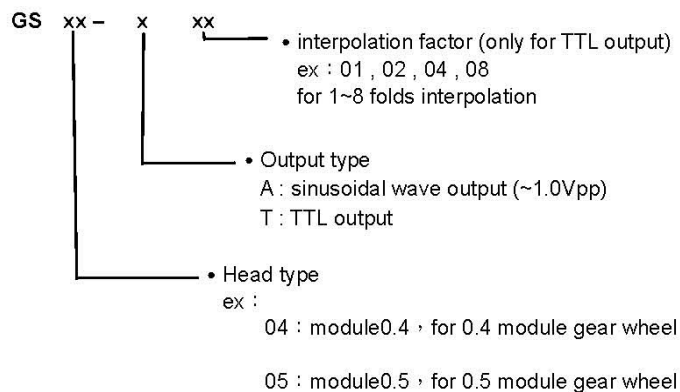


# IGS Speed Sensor

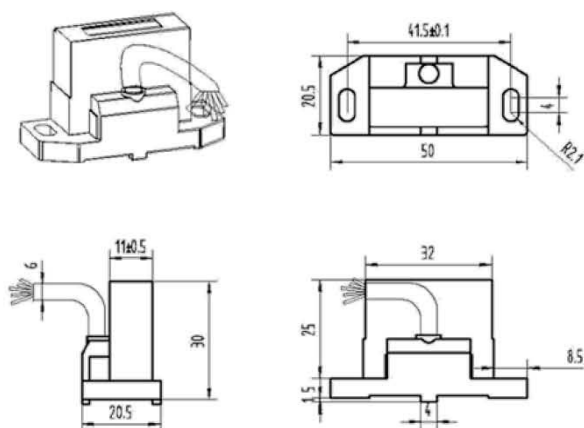
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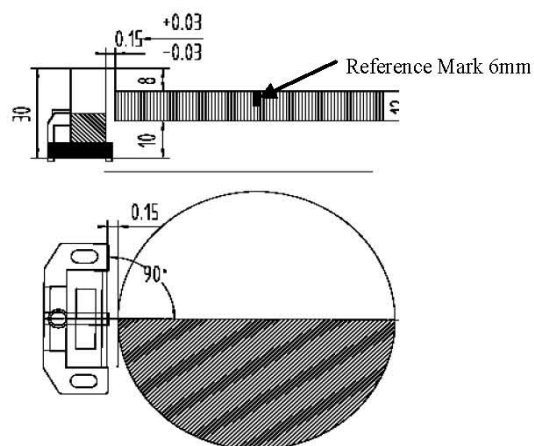
### ■ Scanning Head Selection



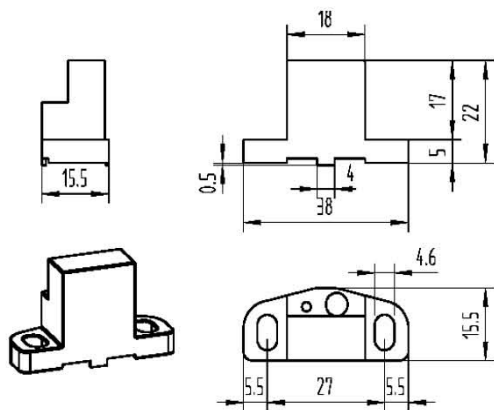
### ■ Scanning head drawing (Standard head)



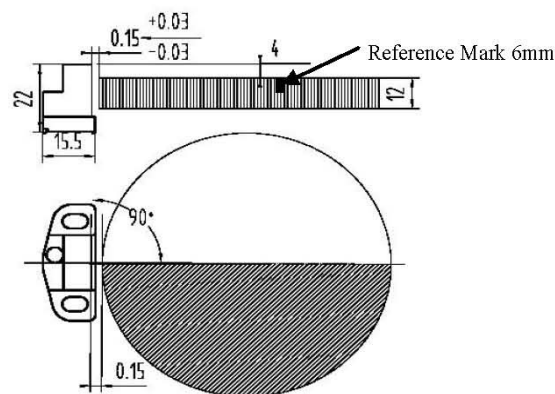
### ■ Layout of Scanning head and Gear Wheel ( Standard Head )



### ■ Scanning head drawing (Mini Head)



### ■ Layout of Scanning head and Gear Wheel (Mini Head)



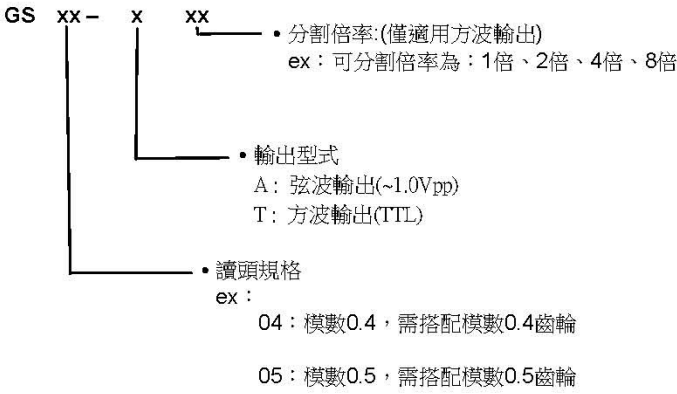
### ■ Scanning Head specification

|                                        | GS A                | GS T          |
|----------------------------------------|---------------------|---------------|
| Power supply Vcc (DCV)                 | 5 V±5%              | 5 V±5%        |
| Load Current (open output)             | ≤ 60 ma             | ≤ 60 ma       |
| VOH (open-output)                      | -                   | ≥ 2.5V        |
| VOL (open-output)                      | -                   | ≤ 0.5V        |
| Output signal type                     | Differential analog | RS 422A       |
| Max. Output signal frequency           | 150 KHz             | 500KHz        |
| Output signal amplitude                | ≥ 1Vpp              | -             |
| A, B phase shifting                    | ≤ 90±10°            | ≤ 90± 25°     |
| Sensing gap                            | 0.15± 0.03 mm       | 0.15± 0.03 mm |
| Operating temperature                  | -20 ~ 100 °C        | -20 ~ 100 °C  |
| Protection class (scanning head)       | IP67                | IP67          |
| Approx Weight scanning head (standard) | 30± 5% (g)          | 30± 5% (g)    |
| Approx Weight scanning head (Mini)     | 10± 5% (g)          | 10± 5% (g)    |

### ■ D-type 15 pin male output connector assignment

| D-sub 15pin (male) | Pin    | Color  | GS A           | GS T           |
|--------------------|--------|--------|----------------|----------------|
| Vcc                | 1      | brown  | Power +5V      | Power +5V      |
| GND                | 2      | white  | Power 0V       | Power 0V       |
| A+                 | 3      | green  | A+             | A+             |
| A-                 | 4      | yellow | A-             | A-             |
|                    | 5      |        | Do not connect | Do not connect |
| B+                 | 6      | blue   | B+             | B+             |
| B-                 | 7      | red    | B-             | B-             |
|                    | 8      |        | Do not connect | Do not connect |
| Sensor+            | 9      |        | Sensor +5V     | Sensor+        |
| Z+                 | 10     | gray   | Z+             | Z+             |
| Sensor-            | 11     |        | Sensor 0V      | Sensor-        |
| Z-                 | 12     | pink   | Z-             | Z-             |
|                    | 13 ~15 |        | Do not connect | Do not connect |

■ 讀頭規格說明

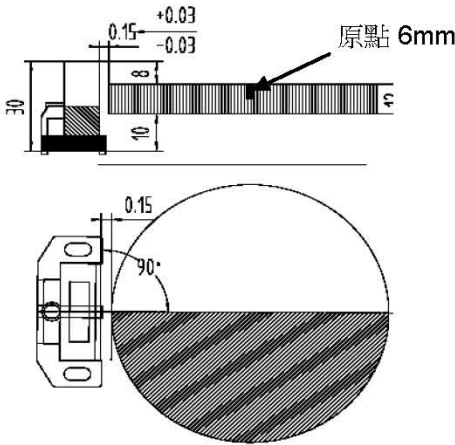


IGS Speed Sensor

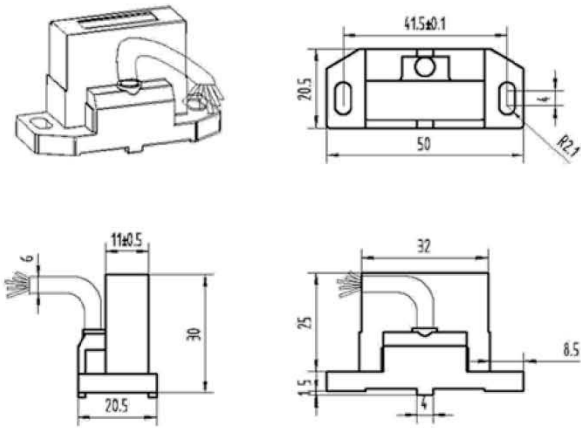
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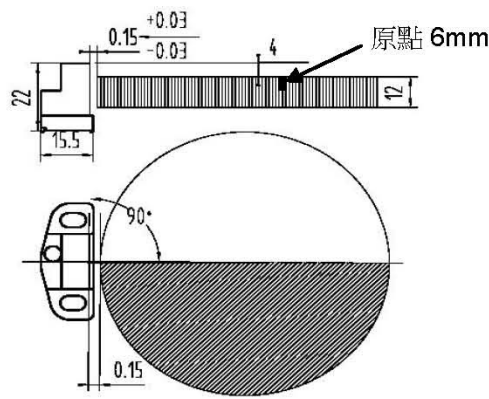
■ 標準型讀頭安裝位置示意圖



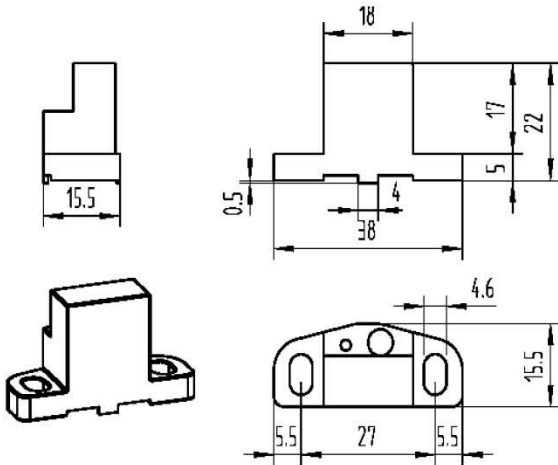
■ 標準型讀頭尺寸



■ 微小型讀頭安裝位置示意圖



■ 微小型讀頭尺寸



■ D-15 Pin(公)接腳、線色定義規格表

| D-sub 15pin<br>(公座) | 腳位<br>定義 | 顏色 | 弦波 ~       | 方波 □      |
|---------------------|----------|----|------------|-----------|
| Vcc                 | 1        | 棕  | Power +5V  | Power +5V |
| GND                 | 2        | 白  | Power 0V   | Power 0V  |
| A+                  | 3        | 綠  | A+         | A+        |
| A-                  | 4        | 黃  | A-         | A-        |
|                     | 5        |    | 不用接        | 不用接       |
| B+                  | 6        | 藍  | B+         | B+        |
| B-                  | 7        | 紅  | B-         | B-        |
|                     | 8        |    | 不用接        | 不用接       |
| Sensor+             | 9        |    | Sensor +5V | Sensor+   |
| Z+                  | 10       | 灰  | Z+         | Z+        |
| Sensor-             | 11       |    | Sensor 0V  | Sensor-   |
| Z-                  | 12       | 粉紅 | Z-         | Z-        |
|                     | 13~15    |    | 不用接        | 不用接       |

■ 讀頭電器規格表

|                        | 弦波                  | 方波            |
|------------------------|---------------------|---------------|
| 供應電壓 Vcc (DCV)         | 5 V±5%              | 5 V±5%        |
| 負載電流 (open output)     | ≤60 ma              | ≤60 ma        |
| 電壓準位輸出最小值(open-output) | -                   | ≥ 2.5V        |
| 電壓準位輸出最大值(open-output) | -                   | ≤ 0.5V        |
| 信號輸出類型                 | Differential analog | RS 422A       |
| 響應頻率                   | 150 KHz             | 500 KHz       |
| 信號輸出振幅                 | ≥1Vpp               | -             |
| A、B 相角差                | ≤90±10°             | ≤90± 25°      |
| 讀頭感測距離                 | 0.15± 0.03 mm       | 0.15± 0.03 mm |
| 工作溫度                   | -20 ~ 100 °C        | -20 ~ 100 °C  |
| 讀頭防護等級                 | IP67                | IP67          |
| 讀頭重量(standard)         | 30± 5% (g)          | 30± 5% (g)    |
| 讀頭重量(mini)             | 10± 5% (g)          | 10± 5% (g)    |