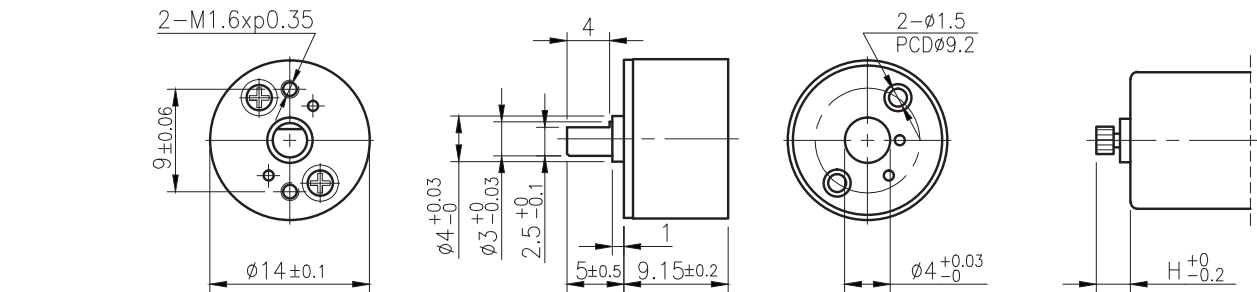


# Spur Gearbox - Center Output Shaft

## RA-14



### 外形尺寸 & 馬達齒鉚合尺寸 / Appearance Size & Pinion Assembly Dimension



unit:mm

### 產品規格/ Product Specifications

| 外殼材質<br>Housing material | 輸出軸承型式<br>Output shaft bearing | 徑向負荷<br>Radial load (5mm from flange) | 軸向負荷<br>Shaft axial load | 主軸承受壓入力<br>Shaft press fit force | 徑向間隙<br>Radial play of shaft | 軸向間隙<br>Thrust play of shaft | 背隙 (無負荷時)<br>Backlash, at no-load |
|--------------------------|--------------------------------|---------------------------------------|--------------------------|----------------------------------|------------------------------|------------------------------|-----------------------------------|
| 塑膠<br>Plastic            | 滑動軸承<br>Sleeve bearing         | $\leq 0.4$ kgf                        | $\leq 0.2$ kgf           | $\leq 2$ kgf                     | $\leq 0.06$ mm               | $\leq 0.2$ mm                | $\leq 1.5^\circ$                  |

### 馬達齒輪型式/ Pinion Specifications

| 模數<br>Module | 齒數<br>No. of teeth | 壓力角<br>Pressure angle | 孔徑 (mm)<br>Hole diameter | 減速比<br>Reduction ratio         |
|--------------|--------------------|-----------------------|--------------------------|--------------------------------|
| 0.15         | 12                 | $20^\circ$            | $\phi 0.99$              | 1/29, 1/235, 1/298             |
| 0.15         | 13                 | $20^\circ$            | $\phi 0.99$              | 1/10, 1/102                    |
| 0.15         | 16                 | $20^\circ$            | $\phi 0.99$              | 1/19, 1/60, 1/76, 1/134, 1/197 |

### 標準減速比型式/ Gearboxes Specifications

| 減速比<br>Reduction ratio                            | 1/10 | 1/19 | 1/29 | 1/60 | 1/76 | 1/102 | 1/134 | 1/197 | 1/235 | 1/298 |  |  |  |  |  |  |  |  |
|---------------------------------------------------|------|------|------|------|------|-------|-------|-------|-------|-------|--|--|--|--|--|--|--|--|
| 定格容許扭力 (kgf-cm max.)<br>Rated tolerance torque    | 0.2  | 0.3  | 0.3  | 0.5  | 0.5  | 0.8   | 0.8   | 1     | 1     | 1     |  |  |  |  |  |  |  |  |
| 瞬間容許扭力 (kgf-cm)<br>Max momentary tolerance torque | 0.6  | 0.9  | 0.9  | 1.5  | 1.5  | 2.4   | 2.4   | 3     | 3     | 3     |  |  |  |  |  |  |  |  |
| 效率<br>Efficiency                                  | 81%  | 73%  | 73%  | 66%  | 66%  | 66%   | 59%   | 59%   | 59%   | 59%   |  |  |  |  |  |  |  |  |
| 高度<br>Height (H)                                  | 2.5  | 2.1  | 2.1  | 2.5  | 2.5  | 2.5   | 2.1   | 2.1   | 2.1   | 2.1   |  |  |  |  |  |  |  |  |
| 重量<br>Weight (g)                                  | 4.7  | 4.7  | 4.7  | 4.7  | 4.7  | 4.7   | 4.7   | 4.7   | 4.7   | 4.7   |  |  |  |  |  |  |  |  |

- 使用相對溼度：20%~85%RH  
Operating relative humidity
- 使用溫度範圍：-10℃~+60℃  
Operating temperature range