

# CHANGZHOU HIYOSHI TRADING CO., LTD.

## GEARBOX CATALOGUE 2024

### \*\*\*\*\*PRECISION PLANETARY GEARBOX SELECTION GUIDE

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### \*\*\*\*\*NEW ARRIVAL: ROTATING PLATFORM SELECTION GUIDE

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## Gearbox Performance Parameters

| 产品型号<br>Product type                | 级数<br>Stage | 减速比<br>Ratio | HPR28                                     | HPR35 | HPR42 | HPS42 | HPS42<br>MA,MB<br>,MC | FLE42 | FLF57 | HPR60 | HPS60 | HPR60<br>MA,MB<br>,MC | HPS60<br>MA,MB<br>,MC | HPS90<br>MA,MB | HPZS60<br>MA,MB<br>,MC | HPZS90<br>MA,MB | HPS115 /130<br>MA,MB, MC | Rotating<br>platform               |
|-------------------------------------|-------------|--------------|-------------------------------------------|-------|-------|-------|-----------------------|-------|-------|-------|-------|-----------------------|-----------------------|----------------|------------------------|-----------------|--------------------------|------------------------------------|
| 额定扭矩 (N.m)<br>Nominal Output Torque | L1          | 3            | Please refer to<br>page 04~07             |       |       | 8     | /                     | /     | /     | 16    | 16    | /                     | /                     | /              | /                      | /               | /                        | Please refer<br>to page<br>34 ~ 36 |
|                                     |             | 4            |                                           |       |       | 9     | 9                     | 9     | 9     | 25    | 25    | 25                    | 25                    | 80             | 25                     | 80              | 220                      |                                    |
|                                     |             | 5            |                                           |       |       | 9     | 9                     | 9     | 9     | 25    | 28    | 28                    | 28                    | 90             | 28                     | 90              | 230                      |                                    |
|                                     |             | 7            |                                           |       |       | 5     | 5                     | 5     | /     | /     | 20    | 20                    | 20                    | 60             | 20                     | 60              | 150                      |                                    |
|                                     |             | 10           |                                           |       |       | 5     | 5                     | 5     | 5     | 10    | 10    | 10                    | 10                    | 39             | 10                     | 39              | 90                       |                                    |
|                                     | L2          | 15           |                                           |       |       | 10    | /                     | /     | /     | /     | /     | /                     | /                     | /              | /                      | /               | /                        |                                    |
|                                     |             | 16           |                                           |       |       | 12    | 12                    | 12    | /     | /     | 30    | 30                    | 30                    | 90             | 30                     | 90              | 250                      |                                    |
|                                     |             | 20           |                                           |       |       | 12    | 12                    | 12    | 10    | 25    | 30    | 30                    | 30                    | 90             | 30                     | 90              | 250                      |                                    |
|                                     |             | 25           |                                           |       |       | 10    | 10                    | 10    | 10    | 25    | 32    | 32                    | 32                    | 100            | 32                     | 100             | 260                      |                                    |
|                                     |             | 28           |                                           |       |       | 10    | 10                    | 10    | /     | /     | 30    | 30                    | 30                    | 90             | 30                     | 90              | 250                      |                                    |
|                                     |             | 30           |                                           |       |       | 10    | /                     | /     | /     | /     | 30    | 30                    | /                     | /              | /                      | /               | /                        |                                    |
|                                     |             | 35           |                                           |       |       | 10    | 10                    | 10    | /     | /     | 30    | 30                    | 30                    | 100            | 30                     | 100             | 260                      |                                    |
|                                     |             | 40           |                                           |       |       | 10    | 10                    | 10    | /     | /     | 25    | 25                    | 25                    | 90             | 25                     | 90              | 250                      |                                    |
|                                     |             | 50           |                                           |       |       | 10    | 10                    | 10    | 10    | 20    | 25    | 25                    | 25                    | 100            | 25                     | 100             | 260                      |                                    |
|                                     |             | 70           |                                           |       |       | 10    | 10                    | 10    | /     | /     | 20    | 20                    | 20                    | 70             | 20                     | 70              | 160                      |                                    |
|                                     |             | 100          |                                           |       |       | 5     | 5                     | 5     | 5     | /     | 10    | 10                    | 10                    | /              | 10                     | /               | /                        |                                    |
| 故障停止扭矩 (N.m)<br>Sudden Stop Torque  | N.m         | L1/L2/L3     | 2倍的额定扭矩 / 2Times of Nominal Output Torque |       |       |       |                       |       |       |       |       |                       |                       |                |                        |                 |                          |                                    |



## Rotating Platform Performance Parameters

| 产品型号<br>Product type                                   |        | 减速比<br>Ratio | HRP60K      | HRP85K | HRP130K |
|--------------------------------------------------------|--------|--------------|-------------|--------|---------|
| 额定扭矩 (N.m)<br>Nominal Output                           | N.m    | 5            | 5.2N.m      | 12N.m  | /       |
|                                                        |        | 10           | 4.5N.m      | 10N.m  | 32N.m   |
|                                                        |        | 18           | /           | /      | 20N.m   |
| 定位精度<br>Positioning accuracy                           | arcmin | 5/10/18      | 3arcmin     |        |         |
| 重复精度<br>Repeatable positioning accuracy                | arcsec |              | ±15arcsec   |        |         |
| 最大轴向负载<br>Max Axial Load                               | (Ka)Kg |              | 10Kg        | 30Kg   | 100Kg   |
| 最大径向负载<br>Max Radial Load                              | N.m    |              | 5N.m        | 20N.m  | 60N.m   |
| 旋转平台平行度<br>Rotation platform parallelism               | mm     |              | ≤0.015mm    |        |         |
| 旋转平台同轴度<br>Rotation platform coaxiality                | mm     |              | ≤0.015mm    |        |         |
| 防护等级<br>Protection Level                               | IP     |              | IP40        |        |         |
| 重量<br>weight                                           | Kg     |              | 0.6Kg       | 1.2Kg  | 2.8Kg   |
| 允许输出转速<br>Allowable output speed                       | rpm    | 5/10/18      | 200rpm      |        |         |
| 精度寿命 (间歇运转)<br>Precision life (Intermittent operation) | H      |              | 20000H      |        |         |
| 传动效率<br>Transmission efficiency                        | %      |              | ≥95%        |        |         |
| 噪音<br>noises                                           | dB     |              | 65db        |        |         |
| 工作环境温度<br>Working Temp                                 | °C     |              | ~15° - +90° |        |         |
| 润滑方式<br>Lubrication Method                             |        |              | 长效润滑        |        |         |



28 Series Performance Parameters

| 产品型号<br>Product type             |        | HPR28 | 减速比<br>Ratio               | 级数Number of stage |  |  |
|----------------------------------|--------|-------|----------------------------|-------------------|--|--|
| 额定输出扭矩 (T) Nominal Output Torque | N.m    | 2     | 4                          | L1                |  |  |
|                                  |        | 2     | 5                          |                   |  |  |
|                                  |        | 2     | 7                          |                   |  |  |
|                                  |        | 1     | 10                         |                   |  |  |
|                                  |        | 4     | 16                         | L2                |  |  |
|                                  |        | 4     | 20                         |                   |  |  |
|                                  |        | 4     | 25                         |                   |  |  |
|                                  |        | 4     | 28                         |                   |  |  |
|                                  |        | 4     | 35                         |                   |  |  |
|                                  |        | 3     | 40                         |                   |  |  |
|                                  |        | 3     | 50                         |                   |  |  |
|                                  |        | 3     | 70                         |                   |  |  |
|                                  |        | 6     | 64                         | L3                |  |  |
|                                  |        | 6     | 80                         |                   |  |  |
|                                  |        | 6     | 100                        |                   |  |  |
|                                  |        | 6     | 125                        |                   |  |  |
|                                  |        | 6     | 140                        |                   |  |  |
|                                  |        | 6     | 175                        |                   |  |  |
|                                  |        | 6     | 200                        |                   |  |  |
| 故障停止扭矩 Sudden Stop Torque        |        | N.m   | 2倍额定输出扭矩                   |                   |  |  |
| 额定输入转速 Nominal Input Speed       |        | rpm   | 1000                       |                   |  |  |
| 最大输入转速 Max Input Speed           |        | rpm   | 2000                       |                   |  |  |
| 最大径向负载 Max Radial Load           |        | N     | 100                        |                   |  |  |
| 最大轴向负载 Max Axial Load            |        | N     | 50                         |                   |  |  |
| 效率 Efficiency                    | %      |       | 96%                        | L1                |  |  |
|                                  |        |       | 94%                        | L2                |  |  |
|                                  |        |       | 90%                        | L3                |  |  |
| 回程间隙 Backlash                    | arcmin |       | ≤15                        | L1                |  |  |
|                                  |        |       | ≤20                        | L2                |  |  |
|                                  |        |       | ≤25                        | L3                |  |  |
| 噪音 Noise                         |        | dB    | ≤55dB                      |                   |  |  |
| 防护等级 Protection Level            |        | IP    | IP54                       |                   |  |  |
| 使用寿命 Life Span                   |        | H     | 20000H                     |                   |  |  |
| 工作环境温度 Working Temp              |        | ℃     | -20° ~ +150°               |                   |  |  |
| 润滑方式 Lubrication Method          |        |       | 长效润滑 Permanent Lubrication |                   |  |  |
| 重量 Weight                        | kg     |       | ≈ 0.096                    | L1                |  |  |
|                                  |        |       | ≈ 0.13                     | L2                |  |  |
|                                  |        |       | ≈ 0.16                     | L3                |  |  |



## 35 Series Performance Parameters

| 产品型号<br>Product type             |        | HPR35                      | 减速比<br>Ratio | 级数Number of stage |  |  |
|----------------------------------|--------|----------------------------|--------------|-------------------|--|--|
| 额定输出扭矩 (T) Nominal Output Torque | N.m    | 6                          | 3            | L1                |  |  |
|                                  |        | 7                          | 4            |                   |  |  |
|                                  |        | 6.5                        | 5            |                   |  |  |
|                                  |        | 5                          | 6            |                   |  |  |
|                                  |        | 5                          | 7            |                   |  |  |
|                                  |        | 8                          | 9            | L2                |  |  |
|                                  |        | 9                          | 15           |                   |  |  |
|                                  |        | 8.5                        | 20           |                   |  |  |
|                                  |        | 8.5                        | 25           |                   |  |  |
|                                  |        | 7                          | 30           |                   |  |  |
|                                  |        | 7                          | 35           | L3                |  |  |
|                                  |        | 7                          | 42           |                   |  |  |
|                                  |        | 10                         | 45           |                   |  |  |
|                                  |        | 9                          | 100          |                   |  |  |
|                                  |        | 9                          | 120          |                   |  |  |
|                                  |        | 9                          | 140          |                   |  |  |
|                                  |        | 8.5                        | 150          |                   |  |  |
|                                  |        | 8.5                        | 175          |                   |  |  |
|                                  |        | 8.5                        | 210          |                   |  |  |
| 故障停止扭矩 Sudden Stop Torque        |        | N.m                        | 2倍额定输出扭矩     |                   |  |  |
| 额定输入转速 Nominal Input Speed       |        | rpm                        | 1000         |                   |  |  |
| 最大输入转速 Max Input Speed           |        | rpm                        | 2000         |                   |  |  |
| 最大径向负载 Max Radial Load           |        | N                          | 270          |                   |  |  |
| 最大轴向负载 Max Axial Load            |        | N                          | 100          |                   |  |  |
| 效率 Efficiency                    | %      | 96%                        |              | L1                |  |  |
|                                  |        | 94%                        |              | L2                |  |  |
|                                  |        | 90%                        |              | L3                |  |  |
| 回程间隙 Backlash                    | arcmin | ≤15                        |              | L1                |  |  |
|                                  |        | ≤20                        |              | L2                |  |  |
|                                  |        | ≤25                        |              | L3                |  |  |
| 噪音 Noise                         |        | dB                         | ≤55dB        |                   |  |  |
| 防护等级 Protection Level            |        | IP                         | IP54         |                   |  |  |
| 使用寿命 Life Span                   |        | H                          | 20000H       |                   |  |  |
| 工作环境温度 Working Temp              |        | °C                         | -20° ~ +150° |                   |  |  |
| 润滑方式 Lubrication Method          |        | 长效润滑 Permanent Lubrication |              |                   |  |  |
| 重量 Weight                        | kg     | ≈0.17                      |              | L1                |  |  |
|                                  |        | ≈0.22                      |              | L2                |  |  |
|                                  |        | ≈0.28                      |              | L3                |  |  |



























































