

## EVT 064 2-Stage Specifications

| Frame Size                                  | 064                  |      |             |       |       |       |       |       |       |  |  |
|---|----------------------|------|-------------|-------|-------|-------|-------|-------|-------|--|--|
| Ratio                                       | Unit                 | Note | 4           | 5     | 6     | 7     | 8     | 9     | 10    |  |  |
| Nominal Output Torque                       | [Nm]                 | *1   | 16          | 22    | 24    | 24    | 24    | 19    | 19    |  |  |
| Maximum Acceleration Torque                 | [Nm]                 | *2   | 38          | 48    | 54    | 54    | 54    | 38    | 38    |  |  |
| Maximum Torque                              | [Nm]                 | *3   | 45          | 56    | 63    | 63    | 61    | 45    | 45    |  |  |
| Emergency Stop Torque                       | [Nm]                 | *4   | 65          | 80    | 90    | 90    | 90    | 65    | 65    |  |  |
| Nominal Input Speed                         | [rpm]                | *5   | 3300        |       |       |       |       |       |       |  |  |
| Maximum Input Speed                         | [rpm]                | *6   | 6000        |       |       |       |       |       |       |  |  |
| No Load Running Torque                      | [Nm]                 | *7   | 0.33        |       |       |       |       |       |       |  |  |
| Maximum Radial Load                         | [N]                  | *8   | 1500        |       |       |       |       |       |       |  |  |
| Maximum Axial Load                          | [N]                  | *9   | 750         |       |       |       |       |       |       |  |  |
| Maximum Tilting Moment                      | [Nm]                 | *10  | 58          |       |       |       |       |       |       |  |  |
| Moment of Inertia ( $\leq \varnothing 8$ )  | [kgcm <sup>2</sup> ] | --   | 0.305       | 0.273 | 0.256 | 0.246 | 0.240 | 0.236 | 0.233 |  |  |
| Moment of Inertia ( $\leq \varnothing 14$ ) | [kgcm <sup>2</sup> ] | --   | 0.379       | 0.348 | 0.331 | 0.321 | 0.315 | 0.311 | 0.308 |  |  |
| Moment of Inertia ( $\leq \varnothing 19$ ) | [kgcm <sup>2</sup> ] | --   | 0.569       | 0.537 | 0.521 | 0.510 | 0.504 | 0.500 | 0.497 |  |  |
| Efficiency                                  | [%]                  | *11  | 93          |       |       |       |       |       |       |  |  |
| Torsional Rigidity                          | [Nm/arcmin]          | *12  | 7.5         |       |       |       |       |       |       |  |  |
| Maximum Torsional Backlash                  | [Arc-min]            | --   | $\leq 4$    |       |       |       |       |       |       |  |  |
| Noise Level                                 | dB [A]               | *13  | $\leq 80$   |       |       |       |       |       |       |  |  |
| Protection Class                            | --                   | *14  | IP54 (IP65) |       |       |       |       |       |       |  |  |
| Ambient Temperature                         | [°C]                 | --   | 0-40        |       |       |       |       |       |       |  |  |
| Permitted Housing Temperature               | [°C]                 | --   | 90          |       |       |       |       |       |       |  |  |
| Weight                                      | [kg]                 | *15  | 1.9         |       |       |       |       |       |       |  |  |

## EVT 064 3-Stage Specifications

| Frame Size                                  | 064                  |      |             |       |       |       |       |       |       |  |  |
|---|----------------------|------|-------------|-------|-------|-------|-------|-------|-------|--|--|
| Ratio                                       | Unit                 | Note | 16          | 20    | 25    | 28    | 35    | 40    | 45    |  |  |
| Nominal Output Torque                       | [Nm]                 | *1   | 26          | 26    | 28    | 28    | 28    | 28    | 19    |  |  |
| Maximum Acceleration Torque                 | [Nm]                 | *2   | 54          | 54    | 54    | 54    | 54    | 54    | 38    |  |  |
| Maximum Torque                              | [Nm]                 | *3   | 54          | 54    | 54    | 54    | 54    | 54    | 38    |  |  |
| Emergency Stop Torque                       | [Nm]                 | *4   | 90          | 90    | 90    | 90    | 90    | 90    | 65    |  |  |
| Nominal Input Speed                         | [rpm]                | *5   | 3800        |       |       |       |       |       |       |  |  |
| Maximum Input Speed                         | [rpm]                | *6   | 6000        |       |       |       |       |       |       |  |  |
| No Load Running Torque                      | [Nm]                 | *7   | 0.2         |       |       |       |       |       |       |  |  |
| Maximum Radial Load                         | [N]                  | *8   | 1500        |       |       |       |       |       |       |  |  |
| Maximum Axial Load                          | [N]                  | *9   | 750         |       |       |       |       |       |       |  |  |
| Maximum Tilting Moment                      | [Nm]                 | *10  | 58          |       |       |       |       |       |       |  |  |
| Moment of Inertia ( $\leq \varnothing 8$ )  | [kgcm <sup>2</sup> ] | --   | 0.082       | 0.073 | 0.072 | 0.078 | 0.071 | 0.062 | 0.070 |  |  |
| Moment of Inertia ( $\leq \varnothing 14$ ) | [kgcm <sup>2</sup> ] | --   | 0.126       | 0.118 | 0.116 | 0.123 | 0.115 | 0.106 | 0.115 |  |  |
| Moment of Inertia ( $\leq \varnothing 19$ ) | [kgcm <sup>2</sup> ] | --   | --          | --    | --    | --    | --    | --    | --    |  |  |
| Efficiency                                  | [%]                  | *11  | 88          |       |       |       |       |       |       |  |  |
| Torsional Rigidity                          | [Nm/arcmin]          | *12  | 7.5         |       |       |       |       |       |       |  |  |
| Maximum Torsional Backlash                  | [Arc-min]            | --   | $\leq 7$    |       |       |       |       |       |       |  |  |
| Noise Level                                 | dB [A]               | *13  | $\leq 80$   |       |       |       |       |       |       |  |  |
| Protection Class                            | --                   | *14  | IP54 (IP65) |       |       |       |       |       |       |  |  |
| Ambient Temperature                         | [°C]                 | --   | 0-40        |       |       |       |       |       |       |  |  |
| Permitted Housing Temperature               | [°C]                 | --   | 90          |       |       |       |       |       |       |  |  |
| Weight                                      | [kg]                 | *15  | 1.6         |       |       |       |       |       |       |  |  |

## EVT 064 3-Stage Specifications

| Frame Size                                  | 064                  |      |             |       |       |       |       |       |  |
|---|----------------------|------|-------------|-------|-------|-------|-------|-------|--|
| Ratio                                       | Unit                 | Note | 50          | 60    | 70    | 80    | 90    | 100   |  |
| Nominal Output Torque                       | [Nm]                 | *1   | 28          | 28    | 28    | 28    | 19    | 19    |  |
| Maximum Acceleration Torque                 | [Nm]                 | *2   | 54          | 54    | 54    | 54    | 38    | 38    |  |
| Maximum Torque                              | [Nm]                 | *3   | 54          | 54    | 54    | 54    | 38    | 38    |  |
| Emergency Stop Torque                       | [Nm]                 | *4   | 90          | 90    | 90    | 90    | 65    | 65    |  |
| Nominal Input Speed                         | [rpm]                | *5   | 3800        |       |       |       |       |       |  |
| Maximum Input Speed                         | [rpm]                | *6   | 6000        |       |       |       |       |       |  |
| No Load Running Torque                      | [Nm]                 | *7   | 0.2         |       |       |       |       |       |  |
| Maximum Radial Load                         | [N]                  | *8   | 1500        |       |       |       |       |       |  |
| Maximum Axial Load                          | [N]                  | *9   | 750         |       |       |       |       |       |  |
| Maximum Tilting Moment                      | [Nm]                 | *10  | 58          |       |       |       |       |       |  |
| Moment of Inertia ( $\leq \varnothing 8$ )  | [kgcm <sup>2</sup> ] | --   | 0.061       | 0.061 | 0.061 | 0.061 | 0.061 | 0.061 |  |
| Moment of Inertia ( $\leq \varnothing 14$ ) | [kgcm <sup>2</sup> ] | --   | 0.106       | 0.106 | 0.106 | 0.106 | 0.106 | 0.105 |  |
| Moment of Inertia ( $\leq \varnothing 19$ ) | [kgcm <sup>2</sup> ] | --   | --          | --    | --    | --    | --    | --    |  |
| Efficiency                                  | [%]                  | *11  | 88          |       |       |       |       |       |  |
| Torsional Rigidity                          | [Nm/arcmin]          | *12  | 7.5         |       |       |       |       |       |  |
| Maximum Torsional Backlash                  | [Arc-min]            | --   | $\leq 7$    |       |       |       |       |       |  |
| Noise Level                                 | dB [A]               | *13  | $\leq 80$   |       |       |       |       |       |  |
| Protection Class                            | --                   | *14  | IP54 (IP65) |       |       |       |       |       |  |
| Ambient Temperature                         | [°C]                 | --   | 0-40        |       |       |       |       |       |  |
| Permitted Housing Temperature               | [°C]                 | --   | 90          |       |       |       |       |       |  |
| Weight                                      | [kg]                 | *15  | 1.6         |       |       |       |       |       |  |

- \*1) At nominal input speed, service life is 20,000 hours
- \*2) The maximum torque when starting or stopping operation. Apply Cycle Factor  $f_0$ , found on page 468, for higher duty cycle applications
- \*3) Permitted 10,000 times during service life. Based on 10% of maximum radial load and smooth output shaft
- \*4) The maximum torque allowed under a stress situation. Permitted 1,000 times during service life
- \*5) The average input speed at nominal input torque. Maintain housing temperature below permitted value
- \*6) The maximum intermittent input speed
- \*7) Torque at no load applied to the input shaft at nominal input speed
- \*8) The maximum radial load that the gearbox can accept
- \*9) The maximum axial load that the gearbox can accept
- \*10) The moment is the maximum load at output flange surface
- \*11) The efficiency at the nominal output torque rating
- \*12) This does not include lost motion
- \*13) Contact NIDEC-SHIMPO for the testing conditions and environment
- \*14) Various wash-down options are available. Contact NIDEC-SHIMPO for more details
- \*15) Weight may vary slightly between models