

Planetary Gearheads

10 Nm

For combination with
DC-Micromotors
Brushless DC-Motors

Series 38/1

| | 38/1 |
|-------------------------------------|--------------------------|
| Housing material | metal |
| Geartrain material ¹⁾ | plastic/steel |
| Recommended max. input speed for: | |
| – continuous operation | 4 000 min ⁻¹ |
| Backlash, at no-load | ≤ 1 ° |
| Bearings on output shaft | ball bearings, preloaded |
| Shaft load, max.: | |
| – radial (10 mm from mounting face) | ≤ 300 N |
| – axial | ≤ 300 N |
| Shaft press fit force, max. | ≤ 350 N |
| Shaft play | |
| – radial (10 mm from mounting face) | ≤ 0,03 mm |
| – axial | ≤ 0,2 mm |
| Operating temperature range | - 20 ... + 125 °C |

| Technical data | | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 5 |
|--|----|--------------|-------|-------|-------|-------|-------|-------|------------------------------------|
| Number of gear stages | | | | | | | | | |
| Continuous torque | Nm | 6 | 0,4 | 1,4 | 2,2 | 4,5 | 5,3 | 8,2 | 10 |
| Intermittent torque | Nm | 8 | 0,6 | 1,9 | 2,9 | 6 | 7 | 11 | 15 |
| Mass without motor, ca. | g | 166 | 215 | 268 | 268 | 320 | 320 | 320 | 375 |
| Efficiency, max. | % | 88 | 80 | 70 | 70 | 60 | 60 | 60 | 55 |
| Direction of rotation, drive to output | | = | = | = | = | = | = | = | = |
| Reduction ratio ²⁾ (rounded) | | 3,71:1 | 14:1 | 43:1 | 66:1 | 134:1 | 159:1 | 246:1 | 415:1 592:1 989:1 1 526:1 |
| L2 [mm] = length without motor ³⁾ | | 32,3 | 40,1 | 47,9 | 47,9 | 55,7 | 55,7 | 55,7 | 63,5 |
| L1 [mm] = length with motor | | 73,5 | 81,3 | 89,1 | 89,1 | 96,9 | 96,9 | 96,9 | 104,7 |
| | | 3257G...CR | 88,5 | 96,3 | 104,1 | 104,1 | 111,9 | 111,9 | 119,7 |
| | | 3272G...CR | 103,5 | 111,3 | 119,1 | 119,1 | 126,9 | 126,9 | 134,7 |
| | | 3863A...CR | 91,3 | 99,1 | 106,9 | 106,9 | 114,7 | 114,7 | 122,5 |
| | | 3890A...CR | 117,3 | 125,1 | 132,9 | 132,9 | 140,7 | 140,7 | 148,5 |
| | | 3056K...B | 88,3 | 96,1 | 103,9 | 103,9 | 111,7 | 111,7 | 119,5 |
| | | 3242G...BX4 | 75,7 | 83,5 | 91,3 | 91,3 | 99,1 | 99,1 | 106,9 |
| | | 3268G...BX4 | 101,7 | 109,5 | 117,3 | 117,3 | 125,1 | 125,1 | 132,9 |
| | | 3274G...BP4 | 105,5 | 113,3 | 121,1 | 121,1 | 128,9 | 128,9 | 136,7 |
| | | 3564K...B | 96,3 | 104,1 | 111,9 | 111,9 | 119,7 | 119,7 | 127,5 |
| | | 4221G...BXT | 53,5 | 61,3 | 69,1 | 69,1 | 76,9 | 76,9 | 84,7 |
| | | 4221G...BXTR | 52,7 | 60,5 | 68,3 | 68,3 | 76,1 | 76,1 | 83,9 |

¹⁾ Gearheads with ratios < 14:1 have all steel gears.

²⁾ The reduction ratios are rounded, the exact values are available on request or at www.faulhaber.com.

³⁾ L2 - 0,8 mm, in combination with 3242G...CR, 3257G...CR, 3272G...CR, 3242G...BX4, 3268G...BX4, 3274G...BP4 and 4221G...BXT R/H.

L2 - 5 mm, in combination with 3863A...CR and 3890A...CR.

