

Planetary Gearheads

0,5 Nm

For combination with
DC-Micromotors
Brushless DC-Motors

Series 20/1

| | 20/1 |
|--------------------------------------|--------------------------|
| Housing material | steel |
| Geartrain material | metal |
| Recommended max. input speed for: | |
| – continuous operation | 5 000 rpm |
| Backlash, at no-load | ≤ 1 ° |
| Bearings on output shaft | ball bearings, preloaded |
| Shaft load, max.: | |
| – radial (8,5 mm from mounting face) | ≤ 75 N |
| – axial | ≤ 20 N |
| Shaft press fit force, max. | ≤ 35 N |
| Shaft play | |
| – radial (8,5 mm from mounting face) | ≤ 0,04 mm |
| – axial | = 0 mm |
| Operating temperature range | - 30 ... + 100 °C |

Specifications

| | 1 | 2 | 2 | 3 | 3 | 4 | 5 | |
|--|-----|--------|---------------|------|--------------|------|---|------------------------------------|
| Number of gear stages | | | | | | | | |
| Continuous torque | mNm | 500 | 500 | 500 | 500 | 500 | 500 | |
| Intermittent torque | mNm | 700 | 700 | 700 | 700 | 700 | 700 | |
| Weight without motor, ca. | g | 28 | 38 | 38 | 48 | 48 | 68 | |
| Efficiency, max. | % | 88 | 80 | 80 | 70 | 70 | 55 | |
| Direction of rotation, drive to output | | = | = | = | = | = | = | |
| Reduction ratio ¹⁾ (rounded) | | 3,71:1 | 9,7:1 14:1 | 23:1 | 43:1 66:1 | 86:1 | 112:1 134:1 159:1 190:1 246:1 | 415:1 592:1 989:1 1 526:1 |
| L2 [mm] = length without motor ²⁾ | | 18,4 | 23,5 | 23,5 | 28,6 | 28,6 | 33,7 | 38,8 |
| L1 [mm] = length with motor | | | | | | | | |
| 1727U...C | | 45,6 | 50,7 | 50,7 | 55,8 | 55,8 | 60,9 | 66,0 |
| 2224U...SR | | 42,6 | 47,7 | 47,7 | 52,8 | 52,8 | 57,9 | 63,0 |
| 2230U...S | | 48,4 | 53,5 | 53,5 | 58,6 | 58,6 | 63,7 | 68,8 |
| 2232U...SR | | 50,6 | 55,7 | 55,7 | 60,8 | 60,8 | 65,9 | 71,0 |
| 2233U...S | | 51,0 | 56,1 | 56,1 | 61,2 | 61,2 | 66,3 | 71,4 |
| 2036U...B | | 54,4 | 59,5 | 59,5 | 64,6 | 64,6 | 69,7 | 74,8 |
| 2057S...B | | 77,3 | 82,4 | 87,9 | 87,5 | 93,0 | 92,6 | 97,7 |
| 2232U...BSL | | 54,5 | 59,6 | 59,6 | 64,7 | 64,7 | 69,8 | 74,9 |
| 2248U...BSL | | 70,1 | 75,2 | 75,2 | 80,3 | 80,3 | 85,4 | 90,5 |

¹⁾ The reduction ratios are rounded, the exact values are available on request or at www.faulhaber.com.

²⁾ L2 + 1,9 mm or 7,4 mm, in combination with 2057S...B.

