

Brushless Gearmotors

Electronic Commutation

5 mNm

For combination with
Drive Electronics:
BLD 1501 H, SC 1801

Series 1307 ... BH

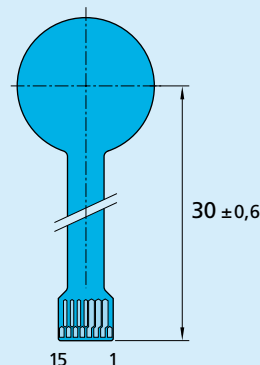
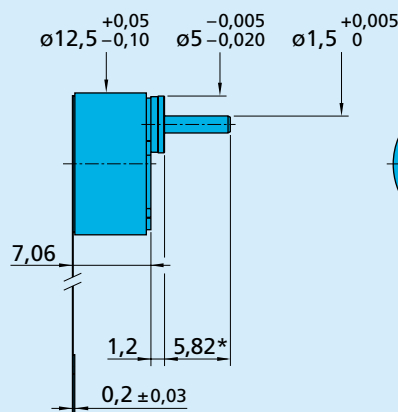
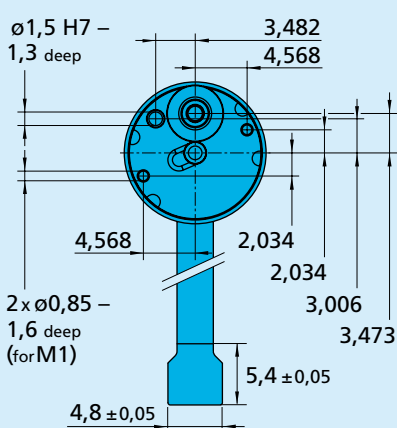
| | 1307 C | 008 BH | 035 BH | |
|---|-------------------|---|---|-------------------|
| Power supply Electronic ¹⁾ | U _B | 5 ... 15 | 5 ... 15 | Volt |
| Strand resistance | R | 8 | 35 | Ω |
| Max. continuous current ²⁾ | I _c | 200 | 100 | mA |
| Max. intermittent current ²⁾ | I _s | 400 | 200 | mA |
| No-load current at 10 000 min ⁻¹ | I ₀ | 14 | 9 | mA |
| Recommended max. input speed for: – continuous operation | n _{max.} | 10 000 | 10 000 | min ⁻¹ |
| Rotor inertia | J | 0,16 | 0,16 | gcm ² |
| Operating temperature range | | 0 ... +70 | 0 ... +70 | °C |
| Bearings on output shaft – gearhead – motor | | ball bearings sleeve bearings excentric | ball bearings sleeve bearings excentric | |
| Orientation output shaft | | | | |
| Housing material | | plastic | plastic | |
| Geartrain material | | metal | metal | |
| Magnet material | | NdFeB | NdFeB | |

| Reduction ratio (rounded) | 008 BH | | | | 035 BH | | | weight with motor |
|------------------------------|---|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|-------------------------|
| | output speed up to n _{max} rpm | output torque | | torque constant | output torque | | torque constant | |
| | | continuous operation | intermittent operation | | continuous operation | intermittent operation | | |
| | | M _{max.} mNm | M _{max.} mNm | k _n μNm/mA | M _{max.} mNm | M _{max.} mNm | k _n μNm/mA | g |
| 6 : 1 | 1 639 | 0,4 | 0,9 | 2,3 | 0,3 | 0,7 | 3,6 | 2,1 |
| 11 : 1 | 893 | 0,7 | 1,4 | 3,6 | 0,5 | 1,1 | 5,7 | 2,2 |
| 32 : 1 | 310 | 1,7 | 3,4 | 8,9 | 1,3 | 2,7 | 14,2 | 2,3 |
| 93 : 1 | 107 | 4,1 | 8,5 | 22 | 3,2 | 6,7 | 35 | 2,4 |
| 270 : 1 | 37 | 5,0 | 10,0 | 55 | 5,0 | 10,0 | 88 | 2,5 |
| 659 : 1 | 15 | 5,0 | 10,0 | 115 | 5,0 | 10,0 | 184 | 2,5 |

¹⁾ DC link voltage with BLD 1501 H

²⁾ DC link current

Scale enlarged M 1,5:1



Connection

| No. | Function |
|-----|--------------------|
| 1 | Star point |
| 2 | Phase A |
| 3 | Phase A |
| 4 | Phase B |
| 5 | Phase B |
| 6 | Phase C |
| 7 | Phase C |
| 8 | Hall sensor In+ |
| 9 | Hall sensor In- |
| 10 | analog Hall A Out+ |
| 11 | analog Hall A Out- |
| 12 | analog Hall B Out+ |
| 13 | analog Hall B Out- |
| 14 | analog Hall C Out+ |
| 15 | analog Hall C Out- |

Connectors

15-pole; 0,3 mm pitch; e.g.:
Hirose: FH23-15S-0.35HAW

* also available with 2,82 mm output shaft length

1307 C