

LP+ 070 MF 1/2-stage

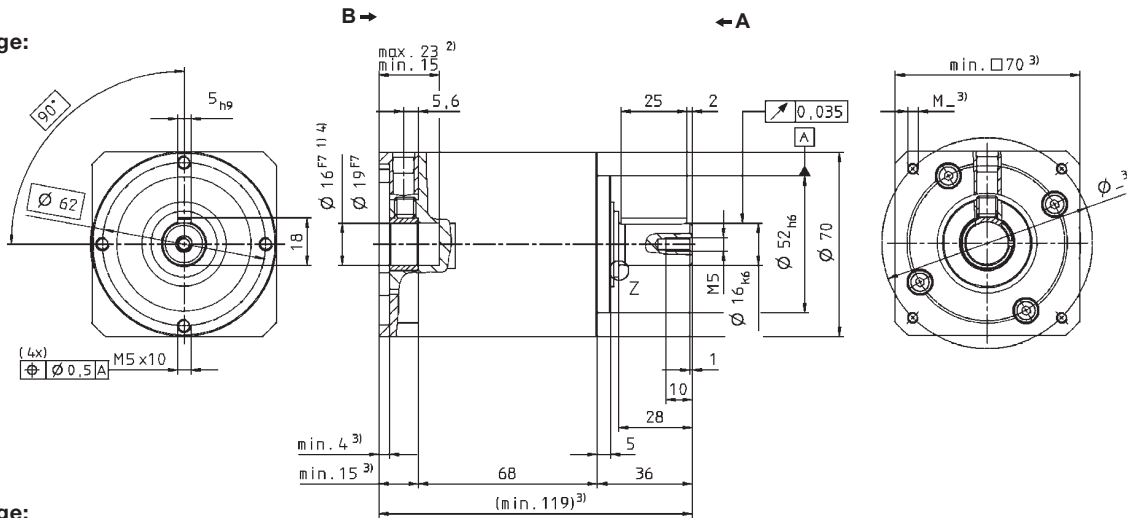
| | | | 1-stage | | | | | 2-stage | | | | | | | | | | |
|---|-----------------------------------|-----------------|------------|--------------------------------------|------|------|------|---------|------|------|------|------|------|------|------|------|------|-----|
| Ratio ^{a)} | <i>i</i> | | 3 | 4 | 5 | 7 | 10 | 9 | 12 | 16 | 20 | 25 | 30 | 40 | 50 | 70 | 100 | |
| Max. acceleration torque (max. 1000 cycles per hour) | T_{2B} | Nm | 55 | 42 | 40 | 40 | 37 | 55 | 55 | 42 | 42 | 40 | 55 | 42 | 40 | 40 | 37 | |
| | | in.lb | 490 | 370 | 350 | 350 | 330 | 490 | 490 | 490 | 370 | 350 | 490 | 370 | 350 | 350 | 330 | |
| Nominal output torque (with n_m) | T_{2N} | Nm | 29 | 22 | 21 | 21 | 19 | 29 | 29 | 22 | 22 | 21 | 29 | 22 | 21 | 21 | 19 | |
| | | in.lb | 260 | 190 | 190 | 190 | 170 | 260 | 260 | 260 | 190 | 190 | 260 | 190 | 190 | 190 | 170 | |
| Emergency stop torque (permitted 1000 times during the service life of the gearhead) | T_{2Not} | Nm | 65 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | |
| | | in.lb | 580 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | 660 | |
| Nominal input speed (with T_{2N} and 20°C ambient temperature ^{b)}) | n_{1N} | rpm | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | 3700 | |
| Max. input speed | n_{1Max} | rpm | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | |
| Mean no load running torque (with $n_1 = 3000$ rpm and 20°C gearhead temperature) | T_{012} | Nm | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | |
| | | in.lb | 2.7 | 2.2 | 1.8 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | |
| Max. torsional backlash | j_t | arcmin | ≤ 8 | | | | | ≤ 10 | | | | | | | | | | |
| Torsional rigidity | C_{t21} | Nm/arcmin | 4 | 4 | 3.3 | 3.3 | 2.8 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.3 | 3.3 | 3.3 | 2.8 | |
| | | in.lb/arcmin | 35 | 35 | 29 | 29 | 25 | 35 | 35 | 35 | 35 | 35 | 35 | 29 | 29 | 29 | 25 | |
| Max. axial force ^{c)} | F_{2AMax} | N | 1550 | | | | | 1550 | | | | | | | | | | |
| | | lb _f | 349 | | | | | 349 | | | | | | | | | | |
| Max. radial force ^{c)} | F_{2RMax} | N | 1450 | | | | | 1450 | | | | | | | | | | |
| | | lb _f | 326 | | | | | 326 | | | | | | | | | | |
| Efficiency at full load | η | % | 97 | | | | | 95 | | | | | | | | | | |
| Service life (For calculation, see the Chapter "Information") | L_n | h | > 20000 | | | | | > 20000 | | | | | | | | | | |
| Weight incl. standard adapter plate | m | kg | 2.0 | | | | | 2.4 | | | | | | | | | | |
| | | lb _m | 4.4 | | | | | 5.3 | | | | | | | | | | |
| Operating noise for $i=10$ and $n_1 = 3000$ rpm without load | L_{PA} | dB(A) | ≤ 64 | | | | | | | | | | | | | | | |
| Max. permitted housing temperature | °C | | +90 | | | | | | | | | | | | | | | |
| | F | | 194 | | | | | | | | | | | | | | | |
| Ambient temperature | °C | | -15 to +40 | | | | | | | | | | | | | | | |
| | F | | 5 to 104 | | | | | | | | | | | | | | | |
| Lubrication | Lubricated for life | | | | | | | | | | | | | | | | | |
| Paint | Blue RAL 5002 | | | | | | | | | | | | | | | | | |
| Direction of rotation | Motor and gearhead same direction | | | | | | | | | | | | | | | | | |
| Protection class | IP 64 | | | | | | | | | | | | | | | | | |
| Moment of inertia (relates to the drive) | D | 16 | J_1 | kgcm ² | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | 10 ² in.lb.s ² | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Clamping hub diameter (mm) | E | 19 | J_1 | kgcm ² | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | 10 ² in.lb.s ² | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 |

^{a)} Other ratios are available on request: $i = 15, 21, 28$ and 35 .

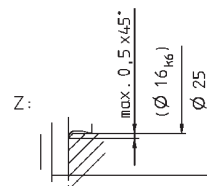
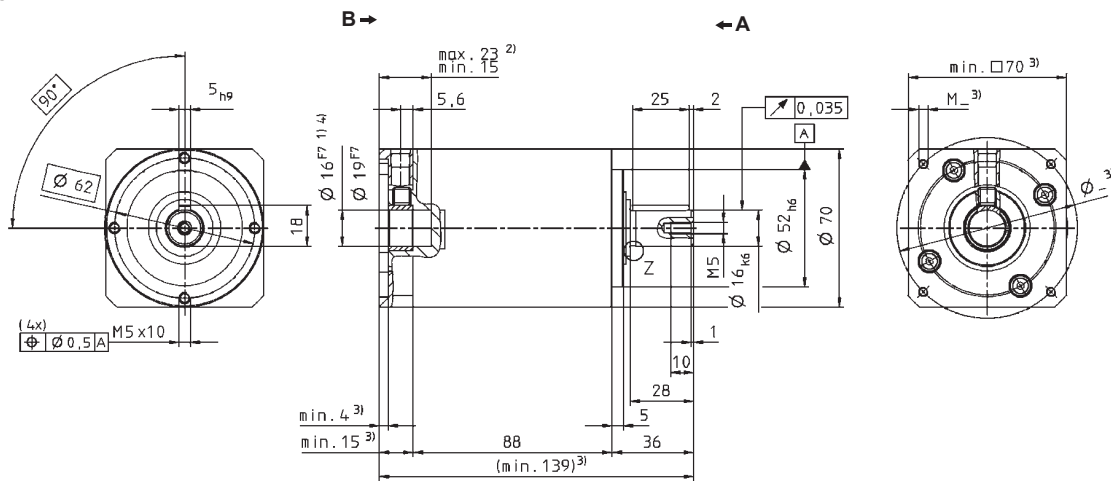
^{b)} For higher ambient temperatures, please reduce input speed

^{c)} Refers to center of the output shaft, if $n_2 = 100$ rpm

LP+ 1-stage:



LP+ 2-stage:



Non-tolerated dimensions $\pm 1\text{mm}$

- 1) Check motor shaft fit.
- 2) Min./Max. permissible motor shaft length. Longer motor shafts are adaptable, please contact us.
- 3) The dimensions depend on the motor.
- 4) Smaller motor shaft diameter is compensated by a bushing. Motor shaft diameters up to 19mm available – please contact WITTENSTEIN alpha

CAD data is available under www.wittenstein-alpha.com

Motor mounting according to operating manual