



Overview of the Output Torques and the Moments of Inertia

| PLE 40 | Single stage | | | | Double stage | | | | | | | | Triple stage | | | | | | | | | |
|-------------------|--------------|-----|-----|-----|--------------|-----|-----|-----|-----|-----|-----|-----|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear reduction i= | 3 | 4 | 5 | 8 | 9 | 12 | 15 | 16 | 20 | 25 | 32 | 40 | 64 | 60 | 80 | 100 | 120 | 160 | 200 | 256 | 320 | 512 |
| Output moment | 4.5 | 6.0 | 6.0 | 5.0 | 20 | 20 | 18 | 20 | 20 | 18 | 20 | 18 | 7.5 | 20 | 20 | 20 | 18 | 20 | 18 | 20 | 18 | 7.5 |
| Moment of inertia | 1.6 | 0.7 | 0.5 | 0.2 | 1.5 | 1.4 | 1.3 | 0.6 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 1.3 | 0.4 | 0.4 | 1.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0 | 8 | 1 | 6 | 0 | 0 | 0 | 7 | 5 | 4 | 5 | 0 | 0 | 0 | 5 | 5 | 0 | 4 | 4 | 0 | 0 | 0 |
| PLE 60 | | | | | | | | | | | | | | | | | | | | | | |
| Gear reduction i= | 3 | 4 | 5 | 8 | 9 | 12 | 15 | 16 | 20 | 25 | 32 | 40 | 64 | 60 | 80 | 100 | 120 | 160 | 200 | 256 | 320 | 512 |
| Output moment | 12 | 16 | 16 | 15 | 44 | 44 | 44 | 44 | 44 | 40 | 44 | 40 | 18 | 44 | 44 | 44 | 44 | 44 | 40 | 44 | 40 | 18 |
| Moment of inertia | 6.5 | 3.3 | 2.2 | 1.2 | 7.2 | 7.0 | 2.4 | 3.4 | 2.4 | 2.3 | 1.2 | 1.2 | 1.0 | 2.4 | 2.4 | 2.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 |
| PLE 80 | | | | | | | | | | | | | | | | | | | | | | |
| Gear reduction i= | 3 | 4 | 5 | 8 | 9 | 12 | 15 | 16 | 20 | 25 | 32 | 40 | 64 | 60 | 80 | 100 | 120 | 160 | 200 | 256 | 320 | 512 |
| Output moment | 40 | 50 | 50 | 50 | 120 | 130 | 110 | 120 | 120 | 110 | 120 | 110 | 50 | 110 | 120 | 120 | 110 | 120 | 110 | 120 | 110 | 50 |
| Moment of inertia | 0.6 | 0.2 | 0.1 | 0.0 | 0.6 | 0.2 | 0.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 5 | 4 | 8 | 3 | 6 | 2 | 5 | 5 | 5 | 8 | 8 | 6 | 8 | 8 | 5 | 0 | 8 | 8 | 8 | 6 | 6 |
| PLE 120 | | | | | | | | | | | | | | | | | | | | | | |
| Gear reduction i= | 3 | 4 | 5 | 8 | 9 | 12 | 15 | 16 | 20 | 25 | 32 | 40 | 64 | 60 | 80 | 100 | 120 | 160 | 200 | 256 | 320 | 512 |
| Output moment | 80 | 100 | 110 | 120 | 240 | 260 | 230 | 260 | 260 | 230 | 260 | 230 | 120 | 260 | 260 | 260 | 230 | 260 | 230 | 260 | 230 | 120 |
| Moment of inertia | 2.0 | 1.6 | 1.4 | 1.2 | 2.6 | 2.0 | 2.0 | 1.5 | 1.6 | 1.4 | 1.4 | 1.2 | 1.2 | 2.0 | 1.6 | 1.4 | 2.0 | 1.4 | 1.2 | 1.2 | 1.1 | 1.1 |
| | 5 | 5 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

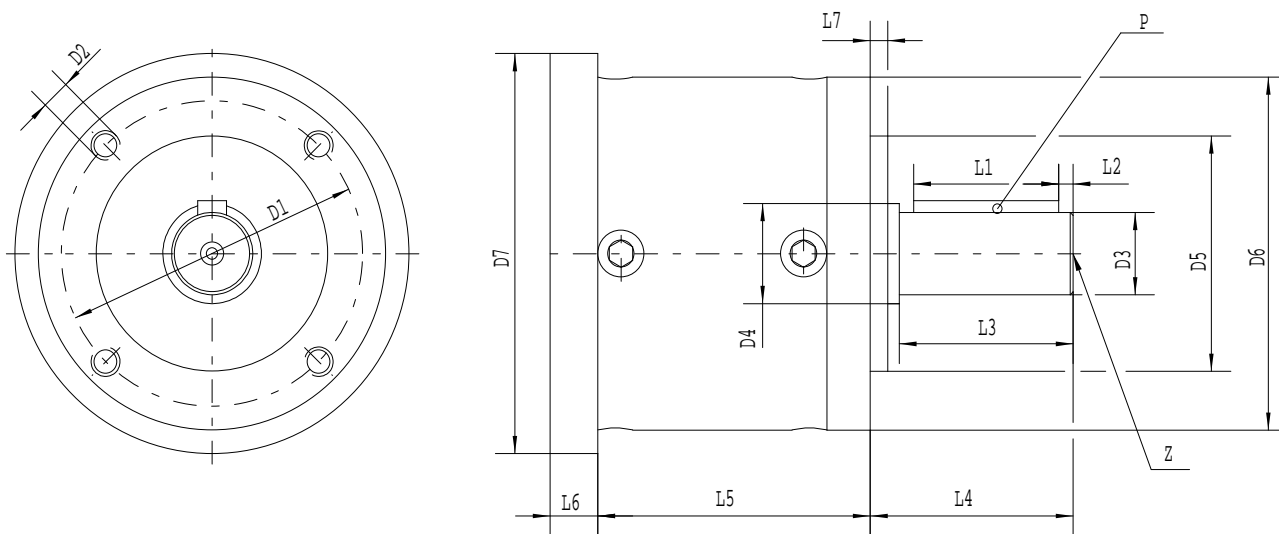
Remark:

- all moments are given in newton meter [Nm]
- all moments refer to the fatigue strength of the teeth
- the moment of inertia with the gears PLE 22 to PLE 60 is given in Kg/mm²
- the moment of inertia with the gears PLE 80 and PLE 120 is given in Kg/cm²
- all moments of inertia refer to the driveshaft of the gear

Technical modifications reserved



Drawing



| Gear type | PLE 40 | | | PLE 60 | | | PLE 80 | | | PLE 120 | | |
|--------------------|--------------------------|------|------|--------|------|------|--------|-------|-------|---------|-------|-------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Gear stages | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| D 1 | 34 | 34 | 34 | 52 | 52 | 52 | 70 | 70 | 70 | 100 | 100 | 100 |
| D 2 - 4x | M4x6 | M4x6 | M4x6 | M5x8 | M5x8 | M5x8 | M6x10 | M6x10 | M6x10 | M6x10 | M6x10 | M6x10 |
| D 3 - h7 | 10 | 10 | 10 | 14 | 14 | 14 | 20 | 20 | 20 | 25 | 25 | 25 |
| D 4 | 12 | 12 | 12 | 17 | 17 | 17 | 25 | 25 | 25 | 35 | 35 | 35 |
| D 5 - h7 | 26 | 26 | 26 | 40 | 40 | 40 | 60 | 60 | 60 | 80 | 80 | 80 |
| D 6 | 40 | 40 | 40 | 60 | 60 | 60 | 80 | 80 | 80 | 120 | 120 | 120 |
| D 7 (#) | 40 | 40 | 40 | 76 | 76 | 76 | 86 | 86 | 86 | 135 | 135 | 135 |
| L 1 | 18 | 18 | 18 | 25 | 25 | 25 | 28 | 28 | 28 | 40 | 40 | 40 |
| L 2 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 4 | 4 | 4 | 5 | 5 | 5 |
| L 3 | 23 | 23 | 23 | 30 | 30 | 30 | 36 | 36 | 36 | 50 | 50 | 50 |
| L 4 | 26 | 26 | 26 | 35 | 35 | 35 | 40 | 40 | 40 | 55 | 55 | 55 |
| L 5 | 39 | 52 | 64 | 47 | 59 | 71 | 60.5 | 77 | 94.5 | 74 | 101 | 128 |
| L 6 (#) | 10.3 | 10.3 | 10.3 | 8.2 | 8.2 | 8.2 | 11.7 | 11.7 | 11.7 | 47.3 | 47.3 | 47.3 |
| L 7 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| P (Key) | DIN 6885 T1 , Form A | | | | | | | | | | | |
| Z (Centering mode) | DIN 332, Page 2, Form DS | | | | | | | | | | | |

Remark:

The flange diameter D7 and the flange length L6 are modulated to match the motor which shall be mounted.

Technical modifications reserved