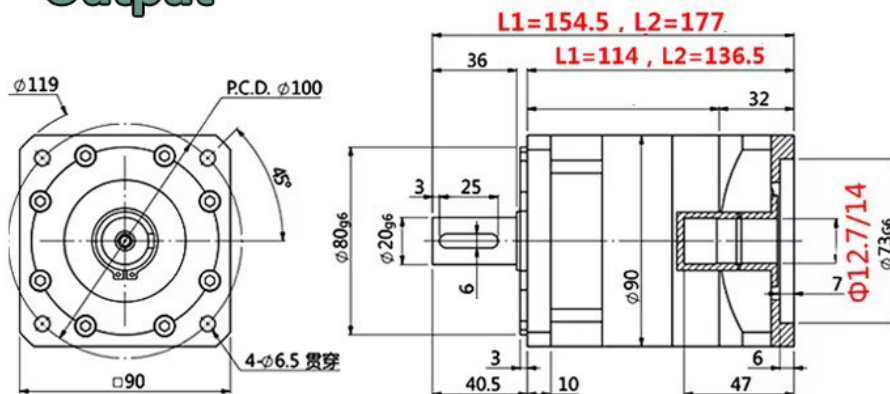


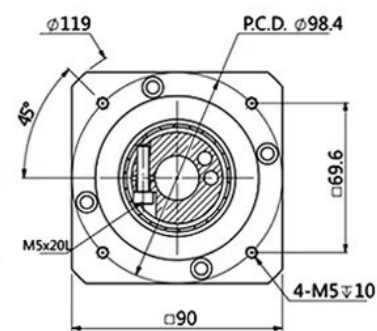
# PLF090 Series Nema 34 Planetary Gearbox Ratio 3:1 - 100:1 Parameter

| Straight Gear Planetary Reducer PLF090 |           |                               |
|----------------------------------------|-----------|-------------------------------|
| Technical Parameter                    | Unit      | Value                         |
| Max. Output Torque                     | Nm        | 1.5 Times Rated Output Torque |
| Instant Braking Torque                 | Nm        | 2 Times Rated Output Torque   |
| Max Radial Torque                      | N         | 450                           |
| Max Axis Torque                        | N         | 430                           |
| Torsional Stiffness                    | Nm/arcmin | 4.85                          |
| Max Input Speed                        | rpm       | 6000                          |
| Rated Input Speed                      | rpm       | 3500                          |
| Noise                                  | dB        | ≤60                           |
| Life time                              | h         | 20000                         |
| Full Load Efficiency                   | %         | L1≥96%, L2≥94%                |
| Backlash (L1)                          | arcmin    | ≤7                            |
| Backlash (L2)                          | arcmin    | ≤12                           |
| IP Degree                              | -         | IP65                          |
| Operating Temp                         | °C        | -10°C~+90°C                   |
| Rated Output Torque (Nm)               |           |                               |
| Stage                                  | Ratio     | Rated Output Torque           |
| L1                                     | 3:01      | 96                            |
|                                        | 4:01      | 122                           |
|                                        | 5:01      | 122                           |
|                                        | 7:01      | 95                            |
|                                        | 10:01     | 56                            |
| L2                                     | 15:01     | 96                            |
|                                        | 20:01     | 122                           |
|                                        | 25:01:00  | 122                           |
|                                        | 30:01:00  | 96                            |
|                                        | 35:01:00  | 122                           |
|                                        | 40:01:00  | 122                           |
|                                        | 50:01:00  | 122                           |
|                                        | 70:01:00  | 95                            |
|                                        | 100:01:00 | 56                            |
| Moment of Inertia (Kg.cm²)             |           |                               |
| Stage                                  | Ratio     | Moment of Inertia             |
| L1                                     | 3:01      | 1.73                          |
|                                        | 4:01      | 1.73                          |
|                                        | 5:01      | 1.73                          |
|                                        | 7:01      | 1.42                          |
|                                        | 10:01     | 1.42                          |
| L2                                     | 15:01     | 1.49                          |
|                                        | 20:01     | 1.49                          |
|                                        | 25:01:00  | 1.49                          |
|                                        | 30:01:00  | 1.49                          |
|                                        | 35:01:00  | 1.49                          |
|                                        | 40:01:00  | 1.49                          |
|                                        | 50:01:00  | 1.49                          |
|                                        | 70:01:00  | 1.25                          |
|                                        | 100:01:00 | 1.25                          |

## Output

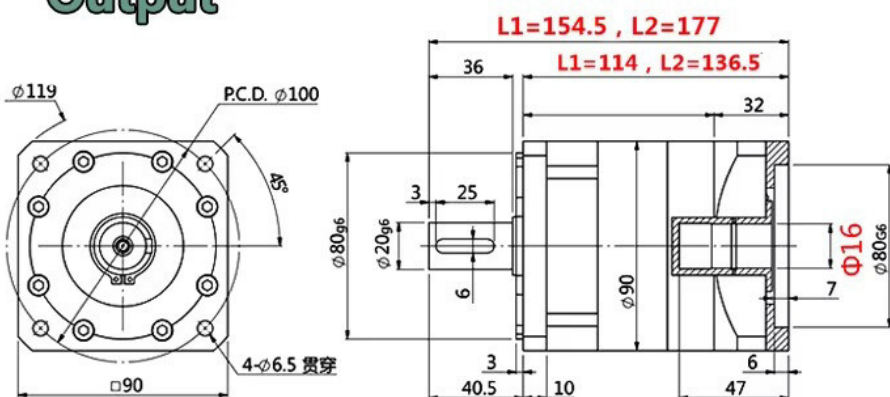


## Input

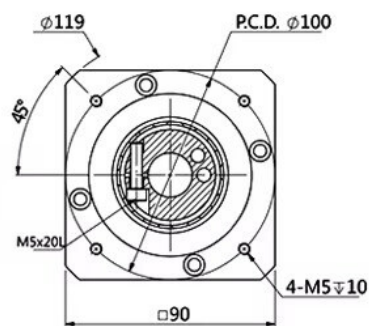


## 16mm Input for 90mm Flange Servo Motor

## Output

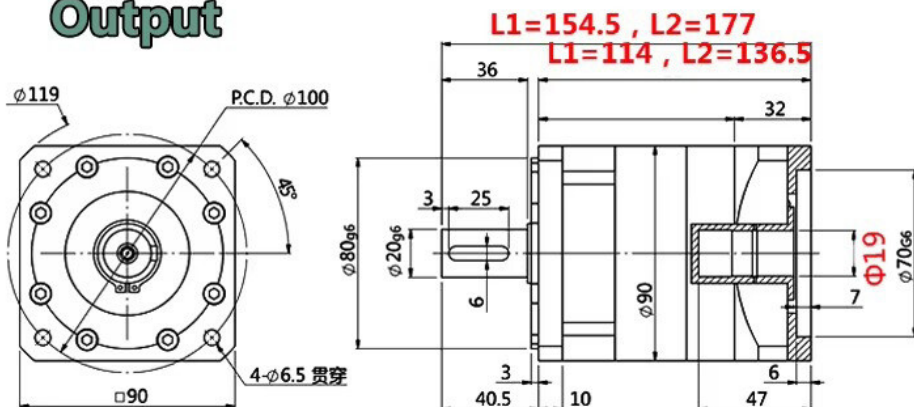


## Input

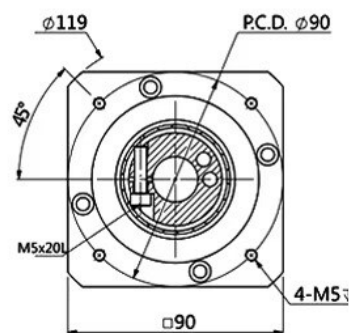


## 19mm Input for 80mm Flange Servo Motor

## Output

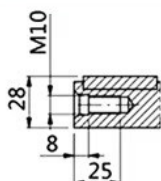


## Input



## Output Shaft With Key

## Speed Ratio



1 Stage (L1): 3:1 / 4:1 / 5:1 / 7:1 / 10:1

2 Stage (L2): 15:1 / 20:1 / 25:1 / 30:1 / 35:1 / 40:1 / 50:1 / 70:1 / 100:1