

# PLR serie

## Overzicht



- Zwart gelakt stalen behuizing, stalen uitgaande flens en aluminium motor adapterplaat
- Stalen uitgaande as, speciaal voor tandriempeolie
- Rechte vertanding
- Nominale koppels:
  - $T_{2N}$  : 27 Nm – 143 Nm
- Overbrengverhouding
  - 1-traps : 3 / 4 / 5 / 7 / 10
  - 2-traps : 12 / 15 / 16 / 20 / 25 / 30 / 35 / 40 / 50 / 70 / 100
- Spelingarm
  - 1-traps :  $\leq 10 \sim 11$  arcmin
  - 2-traps :  $\leq 12 \sim 13$  arcmin
- Hoog rendement
  - 1-traps :  $\geq 93\%$
  - 2-traps :  $\geq 90\%$
- Eenvoudige montage
- Compacte bouw
- Bouwgrootte: PLR 070 / PLR 090 / PLR 120

# Specificaties

| PLR  |             | Trap | Ratio <sup>(1)</sup> | Type | PLR 070                                 | PLR 090 | PLR 120 |
|--|-------------|------|----------------------|------|---|---------|---------|
| Nominaal uitgangskoppel $T_{2N}$           | Nm          | 1    | 3                    | Alle | 30                                      | 67      | 107     |
|  |             |      | 4                    |      | 39                                      | 86      | 137     |
|  |             |      | 5                    |      | 40                                      | 89      | 140     |
|  |             |      | 7                    |      | 37                                      | 80      | 128     |
|  |             |      | 10                   |      | 27                                      | 59      | 93      |
|  |             |      | 12                   |      | 31                                      | 69      | 109     |
|  |             |      | 15                   |      | 31                                      | 70      | 110     |
|  |             |      | 16                   |      | 39                                      | 86      | 137     |
|  |             |      | 20                   |      | 39                                      | 88      | 141     |
|  |             |      | 25                   |      | 40                                      | 89      | 140     |
|  |             | 2    | 30                   | 32   | 72                                      | 111     |         |
|  |             |      | 35                   | 36   | 80                                      | 130     |         |
|  |             |      | 40                   | 41   | 92                                      | 143     |         |
|  |             |      | 50                   | 42   | 90                                      | 143     |         |
|  |             | 70   | 37                   | 81   | 131                                     |         |         |
|  |             | 100  | 27                   | 59   | 93                                      |         |         |
| Noodstop koppel $T_{2NOT}$                 | Nm          | 1,2  | 3~100                | Alle | 3 keer Nominaal uitgangskoppel $T_{2N}$ |         |         |
| Max. Acceleratie koppel $T_{2B}$           | Nm          | 1,2  | 3~100                | Alle | $T_{2B} = 60\%$ van $T_{2NOT}$          |         |         |
| Nullast koppel <sup>(4)</sup>              | Nm          | 1    | 3~10                 | Alle | 0,15                                    | 0,45    | 0,85    |
|  |             | 2    | 12~100               | Alle | 0,15                                    | 0,35    | 0,45    |
| Verdraaispeling <sup>(2)</sup>             | boogminuten | 1    | 3~10                 | Alle | ≤ 11                                    | ≤ 10    | ≤ 10    |
|  |             | 2    | 12~100               | Alle | ≤ 13                                    | ≤ 12    | ≤ 12    |
| Torsie stijfheid <sup>(4)</sup>            | Nm/arcmin   | 1,2  | 3~100                | Alle | 2,2                                     | 8       | 12      |
| Nominaal ingangssnelheid $n_{1N}$          | rpm         | 1,2  | 3~100                | Alle | 4.000                                   | 3.600   | 3.600   |
| Max. ingangssnelheid $n_{1B}$              | rpm         | 1,2  | 3~100                | Alle | 6.000                                   | 6.000   | 4.800   |
| Max. radiale last $F_{2rB}$ <sup>(3)</sup> | N           | 1,2  | 3~100                | Alle | 2.600                                   | 3.100   | 6.550   |
| Max. axiale last $F_{2aB}$ <sup>(3)</sup>  | N           | 1,2  | 3~100                | Alle | 1.300                                   | 1.550   | 3.275   |
| Service Life <sup>(5)</sup>                | hr          | 1,2  | 3~100                | Alle | 20.000                                  |         |         |
| Bedrijfstemperatuur                        | °C          | 1,2  | 3~100                | Alle | 0° C ~ +90°C                            |         |         |
| Beschermingsklasse                         |             | 1,2  | 3~100                | Alle | IP65                                    |         |         |
| Smeermiddel                                |             | 1,2  | 3~100                | Alle | Synthetisch smeervet                    |         |         |
| Montage positie                            |             | 1,2  | 3~100                | Alle | Alle richtingen                         |         |         |
| Geluidsniveau <sup>(4)</sup>               | dB (A)      | 1,2  | 3~100                | Alle | ≤ 72                                    | ≤ 74    | ≤ 75    |
| Rendement n                                | %           | 1    | 3~10                 | Alle | ≥ 93%                                   |         |         |
|  |             | 2    | 12~100               |      | ≥ 90%                                   |         |         |

(1) Overbrengverhouding (ratio) ( i = N in / N out )

(2) Verdraaispeling is gemeten bij 2% van het Nominaal uitgangskoppel  $T_{2N}$

(3) Uitgeoefend op het midden van de as @ 100 rpm

(4) Deze waarden zijn gemeten bij een reductor met ratio=10 (1-traps) en ratio=100 (2-traps) bij 3.000 rpm zonder last

(5) Voor continue bedrijf (S1), service life is ≤ 10.000 uur

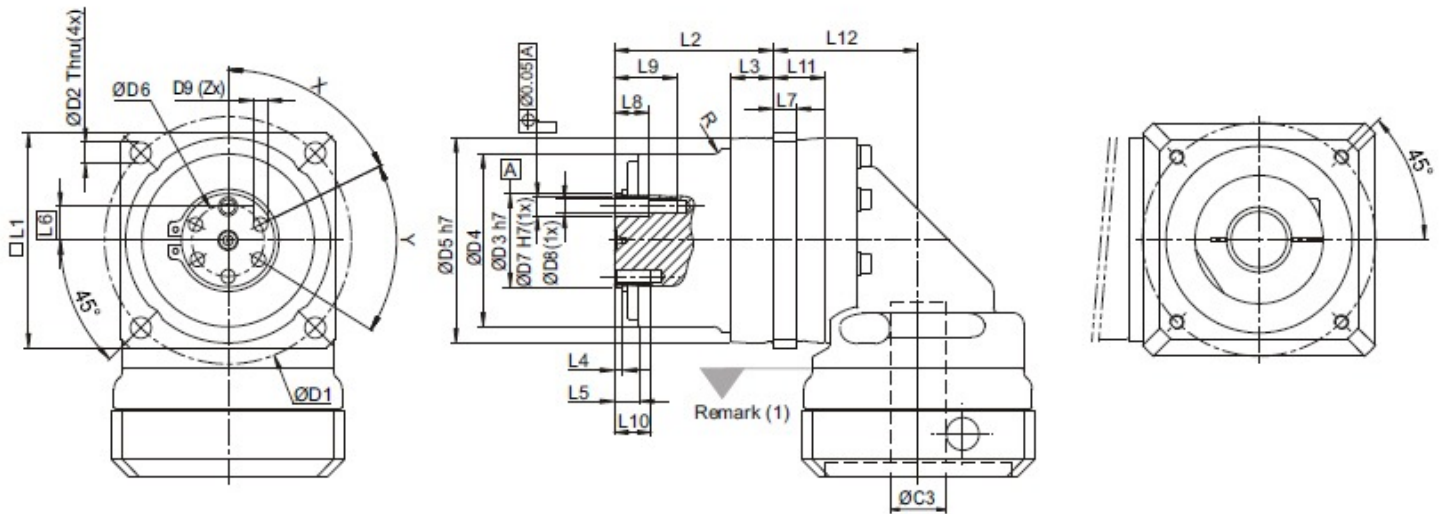
# Massatraagheid

| Uitvoering            | PLR 070 |         | PLR 090 |         | PLR 120 |         |
|-----------------------|---------|---------|---------|---------|---------|---------|
|                       | 1-traps | 2-traps | 1-traps | 2-traps | 1-traps | 2-traps |
| Ø <sup>(A)</sup> (C3) |         |         |         |         |         |         |
| 8                     | 0,36    | 0,36    | -       | -       | -       | -       |
| 11                    | 0,39    | 0,39    | -       | -       | -       | -       |
| 14                    | 0,43    | 0,43    | 1,87    | 1,87    | -       | -       |
| 19                    | 1,24    | 1,24    | 2,67    | 2,67    | 6,80    | 6,80    |
| 24                    | -       | -       | 2,97    | 2,97    | 7,10    | 7,10    |
| 28                    | -       | -       | 3,47    | 3,47    | 7,59    | 7,59    |
| 32                    | -       | -       | -       | -       | 10,56   | 10,56   |
| 35                    | -       | -       | -       | -       | 11,97   | 11,97   |
| 38                    | -       | -       | -       | -       | 13,95   | 13,95   |
| 42                    | -       | -       | -       | -       | -       | -       |

(A) Ø Ingaande as diameter

# Afmetingen

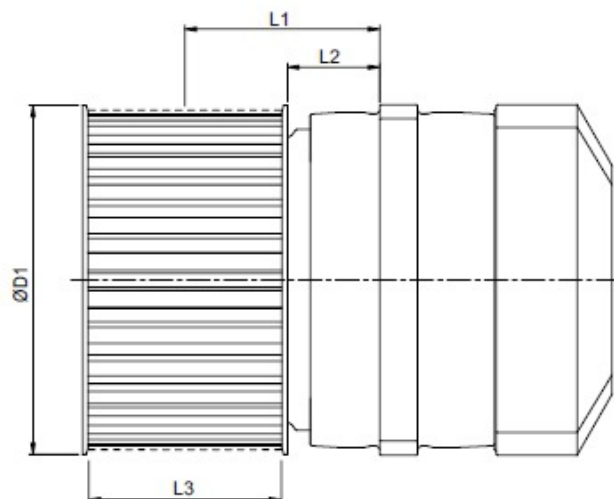
PLR serie:



| Afmeting    | PLR 070   |         | PLR 090 |         | PLR 120    |         |
|-------------|-----------|---------|---------|---------|------------|---------|
|             | 1-traps   | 2-traps | 1-traps | 2-traps | 1-traps    | 2-traps |
| D1          | 82        |         | 106     |         | 144        |         |
| D2          | 6,6       |         | 9       |         | 13         |         |
| D3 h7       | 25        |         | 40      |         | 50         |         |
| D4          | 58        |         | 74      |         | 100        |         |
| D5 h7       | 68        |         | 88      |         | 118        |         |
| D6          | 18        |         | 31      |         | 37         |         |
| D7 H7       | 6         |         | 8       |         | 147        |         |
| D8          | M5 x 0,8P |         | M6 x 1P |         | M6 x 1P    |         |
| D9          | M5 x 0,8P |         | M6 x 1P |         | M8 x 1,25P |         |
| R           | -         |         | 4       |         | 2          |         |
| L1          | 70        |         | 92      |         | 122        |         |
| L2          | 60,2      |         | 68,3    |         | 82,2       |         |
| L3          | 12,7      |         | 18,3    |         | 15,7       |         |
| L4          | 3,8       |         | 3,7     |         | 4,5        |         |
| L5          | 10        |         | 10,5    |         | 12,5       |         |
| L6          | 8,8       |         | 14,5    |         | 18,5       |         |
| L7          | 8         |         | 10      |         | 12         |         |
| L8          | 10        |         | 15      |         | 16         |         |
| L9          | 18,5      |         | 27      |         | 28         |         |
| L10         | 12        |         | 16      |         | 16         |         |
| L11         | 16,8      | 36,8    | 22,2    | 48,9    | 34,8       | 71,1    |
| L12         | 46,3      | 66,3    | 62,2    | 88,9    | 85,8       | 122,1   |
| X in graden | 64°       |         | 45°     |         | 45°        |         |
| Y in graden | 58°       |         | 45°     |         | 45°        |         |
| Z           | 5         |         | 7       |         | 7          |         |

(1) Afmetingen aan de ingaande kant zijn afhankelijk van de motor adapter. Neem contact op met Apex Dynamics voor details.

# Pulley dimensions



| Type    | Tandriel Poellie | D1    | L1   | L2   | L3 | Pitch<br>P<br>mm | aantan<br>tanden<br>Z | Omtrek<br>Z*P<br>mm/rotation | Inertia<br>J<br>kg/cm <sup>2</sup> | Gewicht<br>m<br>kg |
|---------|------------------|-------|------|------|----|------------------|-----------------------|------------------------------|------------------------------------|--------------------|
| PLR 070 | AT05-W50-T43     | 71    | 41,8 | 14,8 | 51 | 5                | 43                    | 215                          | 4,68                               | 0,57               |
|         | HTD 5M-W50-T44   | 72,9  | 41,8 | 14,8 | 51 | 5                | 44                    | 220                          | 5,58                               | 0,65               |
|         | 5GT-W50-T44      | 72,9  | 41,8 | 14,8 | 51 | 5                | 44                    | 220                          | 5,58                               | 0,65               |
| PLR 090 | AT10-W50-T28     | 91,7  | 51,3 | 24,3 | 51 | 10               | 28                    | 280                          | 14,07                              | 1,00               |
|         | HTD 8M-W50-T36   | 98,4  | 51,3 | 24,3 | 51 | 8                | 36                    | 288                          | 17,78                              | 1,18               |
|         | 8YU-W50-T36      | 98,4  | 51,3 | 24,3 | 51 | 8                | 36                    | 288                          | 17,78                              | 1,18               |
| PLR120  | AT20-W75-T19     | 124,6 | 57,7 | 17,7 | 76 | 20               | 19                    | 380                          | 69,55                              | 2,71               |
|         | HTD 14M-W75-T28  | 137   | 57,7 | 17,7 | 76 | 14               | 28                    | 392                          | 87,83                              | 3,20               |

(1) Pulley size.

(2) Pulley specification

(3) Pulley appearance: B = Manganese phosphate blackening (standard), N = Nickel plating

