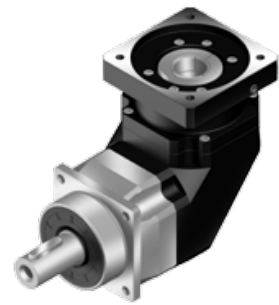


AFR serie

Overzicht



- Speciaal ontworpen voor continue bedrijf (S1) of cyclisch bedrijf (S5)
- Roestvast stalen behuizing, aluminium zwart geanodiseerde haakse behuizing en motor adapterplaat
- Roestvast stalen uitgaande as met of zonder spie, of met spline (DIN5480)
- Schuine vertanding
- Nominale koppels:
 - T_{2N} : 9 Nm – 2000 Nm
- Overbrengverhouding
 - 1-traps : 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 14 / 20
 - 2-traps : 12 / 15 / 16 / 20 / 25 / 28 / 30 / 32 / 35 / 40 / 45 / 48 / 50 / 60 / 64 / 70 / 80 / 90 / 100 / 120 / 140 / 160 / 180 / 200
 - * Alleen de AFR042 2-traps biedt 15 en 20 optie.
- Spelingarm
 - 1-traps : ≤ 2 arcmin / ≤ 4 arcmin / ≤ 6 arcmin
 - 2-traps : ≤ 4 arcmin / ≤ 7 arcmin / ≤ 9 arcmin
- Hoog rendement
 - 1-traps : $\geq 97\%$
 - 2-traps : $\geq 94\%$
- Eenvoudige montage
- Laag geluidsniveau
- Compacte bouw
- Bouwgrootte: AFR042 / AFR060 / AFR075 / AFR100 / AFR140 / AFR180 / AFR220

Specificaties

| Bouwgrootte | Trap | Ratio ¹ | AFR042 | AFR060 | AFR075 | AFR100 | AFR140 | AFR180 | AFR220 | | |
|--|--------------------|--------------------|--------|--|--------|--------|--------|--------|--------|--------|--------|
| Nominaal uitgangskoppel T _{2N} | 1 | 3 | 9 | 36 | 90 | 195 | 342 | 588 | 1,140 | | |
| | | 4 | 12 | 48 | 120 | 260 | 520 | 1,040 | 1,680 | | |
| | | 5 | 15 | 60 | 150 | 325 | 650 | 1,200 | 2,000 | | |
| | | 6 | 20 | 55 | 150 | 310 | 600 | 1,100 | 1,900 | | |
| | | 7 | 19 | 50 | 140 | 300 | 550 | 1,100 | 1,800 | | |
| | | 8 | 17 | 45 | 120 | 260 | 500 | 1,000 | 1,600 | | |
| | | 9 | 14 | 40 | 100 | 230 | 450 | 900 | 1,500 | | |
| | | 10 | 14 | 60 | 150 | 325 | 650 | 1,200 | 2,000 | | |
| | | 12 | - | 55 | 150 | 310 | 600 | 1,100 | 1,900 | | |
| | | 14 | - | 42 | 140 | 300 | 550 | 1,100 | 1,800 | | |
| | 16 | - | 45 | 120 | 260 | 500 | 1,000 | 1,600 | | | |
| | 20 | - | 40 | 100 | 230 | 450 | 900 | 1,500 | | | |
| | 2 | 12 | 12 | - | - | - | - | - | - | - | |
| | | 15 | 14 | - | - | - | - | - | - | - | |
| | | 16 | 15 | - | - | - | - | - | - | - | |
| | | 20 | 14 | - | - | - | - | - | - | - | |
| | | 25 | 15 | 60 | 150 | 325 | 650 | 1,200 | 2,000 | | |
| | | 28 | 19 | 50 | 140 | 300 | 550 | 1,100 | 1,800 | | |
| | | 30 | 20 | 55 | 150 | 310 | 600 | 1,100 | 1,900 | | |
| | | 32 | 17 | 45 | 120 | 260 | 500 | 1,000 | 1,600 | | |
| 35 | | 19 | 50 | 140 | 300 | 550 | 1,100 | 1,800 | | | |
| 40 | | 17 | 45 | 120 | 260 | 500 | 1,000 | 1,600 | | | |
| 45 | 14 | 40 | 100 | 230 | 450 | 900 | 1,500 | | | | |
| 48 | - | 55 | 150 | 310 | 600 | 1,100 | 1,900 | | | | |
| 50 | 14 | 60 | 100 | 230 | 650 | 1,200 | 2,000 | | | | |
| 60 | 20 | 55 | 150 | 310 | 600 | 1,100 | 1,900 | | | | |
| 64 | - | 45 | 120 | 260 | 500 | 1,000 | 1,600 | | | | |
| 70 | 19 | 50 | 140 | 300 | 550 | 1,100 | 1,800 | | | | |
| 80 | 17 | 45 | 120 | 260 | 500 | 1,000 | 1,600 | | | | |
| 90 | 14 | 40 | 100 | 230 | 450 | 900 | 1,500 | | | | |
| 100 | 14 | 40 | 100 | 230 | 450 | 900 | 1,500 | | | | |
| 120 | - | - | 150 | 310 | 600 | 1,100 | 1,900 | | | | |
| 140 | - | - | 140 | 300 | 550 | 1,100 | 1,800 | | | | |
| 160 | - | - | 120 | 260 | 550 | 1,000 | 1,600 | | | | |
| 180 | - | - | 100 | 230 | 450 | 900 | 1,500 | | | | |
| 200 | - | - | 100 | 230 | 450 | 900 | 1,500 | | | | |
| Noodstop koppel T _{2NOT3} | Nm | 1,2 | 3-200 | 3 keer Nominaal koppel T _{2N} | | | | | | | |
| Nominaal Ingangssnelheid N _{1N} | rpm | 1,2 | 3-200 | 5,000 | 5,000 | 4,000 | 4,000 | 3,000 | 3,000 | 2,000 | |
| Max. Ingangssnelheid N _{1B} | rpm | 1,2 | 3-200 | 10,000 | 10,000 | 8,000 | 8,000 | 6,000 | 6,000 | 4,000 | |
| Micro verdraaispeling P0 | arcmin | 1 | 3~20 | - | - | ≤ 2 | ≤ 2 | ≤ 2 | ≤ 2 | ≤ 2 | |
| | | 2 | 25~200 | - | - | ≤ 4 | ≤ 4 | ≤ 4 | ≤ 4 | ≤ 4 | |
| Reduced verdraaispeling P1 | arcmin | 1 | 3~20 | ≤ 4 | ≤ 4 | ≤ 4 | ≤ 4 | ≤ 4 | ≤ 4 | ≤ 4 | |
| | | 2 | 25~200 | ≤ 7 | ≤ 7 | ≤ 7 | ≤ 7 | ≤ 7 | ≤ 7 | ≤ 7 | |
| Standard verdraaispeling P2 | arcmin | 1 | 3~20 | ≤ 6 | ≤ 6 | ≤ 6 | ≤ 6 | ≤ 6 | ≤ 6 | ≤ 6 | |
| | | 2 | 25~200 | ≤ 9 | ≤ 9 | ≤ 9 | ≤ 9 | ≤ 9 | ≤ 9 | ≤ 9 | |
| Torsie stijfheid | Nm/ arcmin | 1,2 | 3-200 | 3 | 7 | 14 | 25 | 50 | 145 | 225 | |
| Max. Radiale Last F _{2rB2} | N | 1,2 | 3-200 | 610 | 1,400 | 4,100 | 9,200 | 14,000 | 18,000 | 33,000 | |
| Max. Axiale Last | F _{2a1B2} | N | 1,2 | 3-200 | 302 | 1,000 | 3,300 | 5,220 | 10,800 | 13,000 | 25,000 |
| | F _{2a2B2} | N | 1,2 | 3-200 | 320 | 1,100 | 3,700 | 5,800 | 11,400 | 19,500 | 16,300 |
| Service Life | hr | 1,2 | 3-200 | 30,000 * | | | | | | | |
| Rendement | % | 1 | 3-20 | ≥95 % | | | | | | | |
| | | 2 | 25~200 | ≥92 % | | | | | | | |
| Gewicht | kg | 1 | 3~20 | 0.9 | 2.1 | 6.4 | 13.9 | 23.7 | 50 | 83 | |
| | | 2 | 25~200 | 1.2 | 1.5 | 7.8 | 15.1 | 26.7 | 54 | 95 | |
| Bedrijfstemperatuur | °C | 1,2 | 3-200 | -10°C~+90°C | | | | | | | |
| Smeermiddel | | 1,2 | 3-200 | synthetisch tandwiel smeermiddel (NYOGEL 792D) | | | | | | | |
| Beschermingsklasse | | 1,2 | 3-200 | IP65 | | | | | | | |
| Montage positie | | 1,2 | 3-200 | alle richtingen | | | | | | | |

1. Overbrengverhouding (ratio) ($i=N$ in / N out)
 2. Uitgeoefend op het midden van de as @ 100 rpm
 3. Maximaal versnellingskoppel $T_{2B} = 60\%$ van T_{2NOT}
- * S1 service life 15,000 hrs.

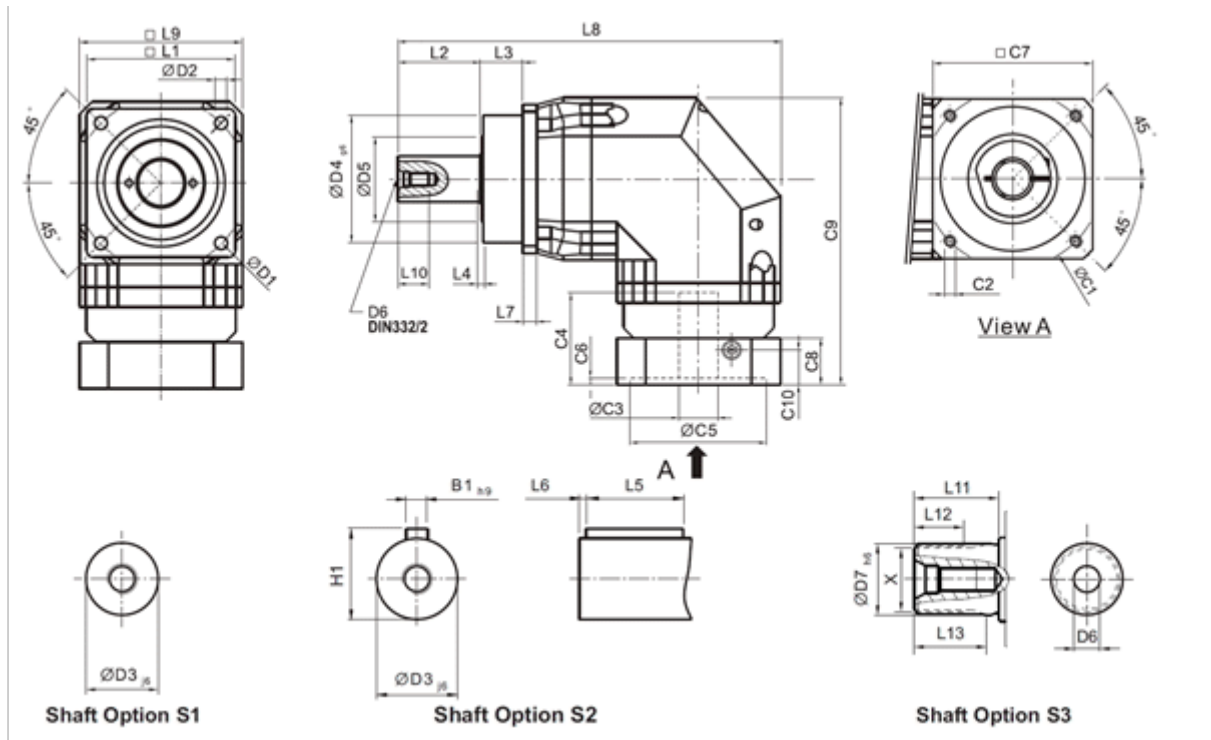
Massatraagheid

| Bouwgrootte | Trap | Ratio ¹ | AFR042 | AFR060 | AFR075 | AFR100 | AFR140 | AFR180 | AFR220 |
|--|------|--------------------|--------|--------|--------|--------|--------|--------|--------|
| Massatraagheid of inertia J ₁ | 1 | 3~10 | 0.09 | 0.35 | 2.25 | 6.84 | 23.4 | 68.9 | 135.4 |
| | | 14 | - | 0.07 | 1.87 | 6.25 | 21.8 | 65.6 | 119.8 |
| | | 20 | - | 0.07 | 1.87 | 6.25 | 21.8 | 65.6 | 119.8 |
| | 2 | 15 | 0.09 | - | - | - | - | - | - |
| | | 20 | 0.09 | - | - | - | - | - | - |
| | | 25~100 | 0.09 | 0.09 | 0.35 | 2.25 | 6.84 | 23.4 | 68.9 |
| | | 120~200 | - | - | 0.31 | 1.87 | 6.25 | 21.8 | 65.6 |

kg*cm²

Afmetingen

AFR serie 1-traps, ratio i= 3 ~ 20



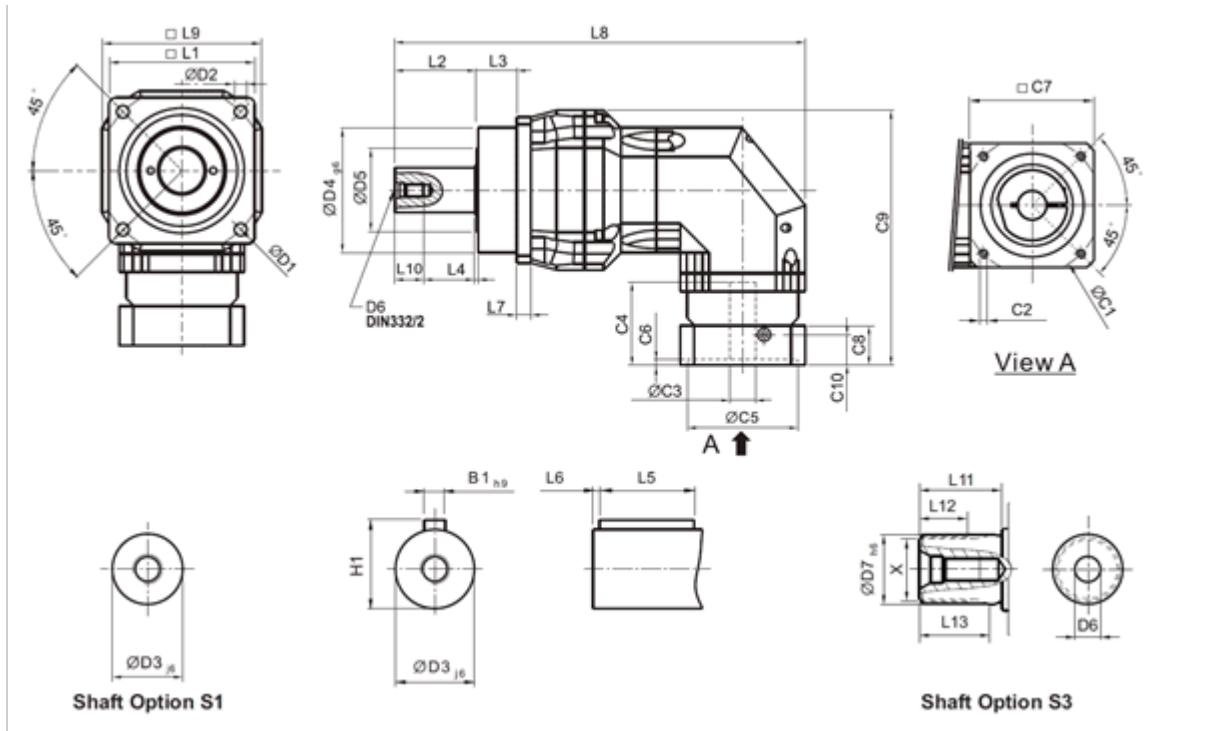
| | AFR042 | AFR060 | AFR075 | AFR100 | AFR140 | AFR180 | AFR220 |
|-------------------------------|-----------|-----------|------------|------------|------------|-------------|-------------|
| D1 | 50 | 68 | 85 | 120 | 165 | 215 | 250 |
| D2 | 3.4 | 5.5 | 6.8 | 9 | 11 | 13 | 17 |
| D3 _{js} | 13 | 16 | 22 | 32 | 40 | 55 | 75 |
| D4 _{gs} | 35 | 60 | 70 | 90 | 130 | 160 | 180 |
| D5 | 22 | 45 | 60 | 80 | 75 | 95 | 115 |
| D6 | M4 X 0.7P | M5 X 0.8P | M8 X 1.25P | M12X1.75P | M16 X 2P | M20 X 2.5P | M20 X 2.5P |
| L1 | 42 | 62 | 76 | 105 | 142 | 180 | 220 |
| L2 | 19.5 | 28.5 | 36 | 58 | 82 | 82 | 105 |
| L3 | 6.5 | 20 | 20 | 30 | 30 | 30 | 33 |
| L4 | 1 | 1.5 | 2 | 2 | 3 | 3 | 3 |
| L5 | 16 | 25 | 32 | 40 | 63 | 70 | 90 |
| L6 | 2 | 2 | 3 | 5 | 5 | 6 | 7 |
| L7 | 4 | 6 | 7 | 10 | 12 | 15 | 20 |
| L8 | 115.5 | 150 | 219 | 269.5 | 338.5 | 397 | 484 |
| L9 | 42 | 60 | 90 | 115 | 142 | 180 | 220 |
| L10 | 10 | 12.5 | 19 | 28 | 36 | 42 | 42 |
| C1 ³ | 46 | 70 | 100 | 130 | 165 | 215 | 235 |
| C2 ³ | M4 X 0.7P | M5 X 0.8P | M6 X 1P | M8 X 1.25P | M10 X 1.5P | M12 X 1.75P | M12 X 1.75P |
| C3 ³ | ≤11 | ≤14 / ≤16 | ≤19 / ≤24 | ≤32 | ≤38 | ≤48 | ≤55 |
| C4 ³ | 25 | 34 | 40 | 50 | 60 | 85 | 116 |
| C5 ³ _{G6} | 30 | 50 | 80 | 110 | 130 | 180 | 200 |
| C6 ³ | 3.5 | 8 | 4 | 5 | 6 | 6 | 6 |
| C7 ³ | 42 | 60 | 90 | 115 | 142 | 190 | 220 |
| C8 ³ | 29.5 | 19 | 17 | 19.5 | 22.5 | 29 | 63 |
| C9 ³ | 90.5 | 111.5 | 152.5 | 191.5 | 235.5 | 303.5 | 378.5 |
| C10 ³ | 8.75 | 13.5 | 10.75 | 13 | 15 | 20.75 | 53 |
| B1 _{h9} | 5 | 5 | 6 | 10 | 12 | 16 | 20 |
| H1 | 15 | 18 | 24.5 | 35 | 43 | 59 | 79.5 |

3. C1~C10 zijn motor specifieke afmetingen.

* AFR060M1 biedt C3 ≤16 optie.

* AFR075M1 biedt C3 ≤24 optie.

AFR serie 2-traps, ratio 1 = 15 ~ 200



| | AFR042 | AFR060 | AFR075 | AFR100 | AFR140 | AFR180 | AFR220 |
|-------------------------------|-----------|-----------|---------------------------|-------------|------------|------------|-------------|
| D1 | 50 | 68 | 85 | 120 | 165 | 215 | 250 |
| D2 | 3.4 | 5.5 | 6.8 | 9 | 11 | 13 | 17 |
| D3 _{j6} | 13 | 16 | 22 | 32 | 40 | 55 | 75 |
| D4 _{g6} | 35 | 60 | 70 | 90 | 130 | 160 | 180 |
| D5 | 22 | 45 | 60 | 80 | 75 | 95 | 115 |
| D6 | M4 X 0.7P | M5 X 0.8P | M8 X 1.25P | M12 X 1.75P | M16 X 2P | M20 X 2.5P | M20 X 2.5P |
| L1 | 42 | 62 | 76 | 105 | 142 | 180 | 220 |
| L2 | 19.5 | 28.5 | 36 | 58 | 82 | 82 | 105 |
| L3 | 6.5 | 20 | 20 | 30 | 30 | 30 | 33 |
| L4 | 1 | 1.5 | 2 | 2 | 3 | 3 | 3 |
| L5 | 16 | 25 | 32 | 40 | 63 | 70 | 90 |
| L6 | 2 | 2 | 3 | 5 | 5 | 6 | 7 |
| L7 | 4 | 6 | 7 | 10 | 12 | 15 | 20 |
| L8 | 139 | 168.5 | 222.5 | 295.5 | 370.5 | 434 | 521 |
| L9 | 42 | 60 | 90 | 115 | 142 | 180 | 220 |
| L10 | 10 | 12.5 | 19 | 28 | 36 | 42 | 42 |
| C1 ⁴ | 46 | 46 | 70 | 100 | 130 | 165 | 215 |
| C2 ⁴ | M4 X 0.7P | M4 X 0.7P | M5 X 0.8P | M6 X 1P | M8 X 1.25P | M10 X 1.5P | M12 X 1.75P |
| C3 ⁴ | ≤11 | ≤11 / ≤12 | ≤14 / ≤15.875 / ≤16 | ≤19 / ≤24 | ≤32 | ≤38 | ≤48 |
| C4 ⁴ | 25 | 25 | 34 | 40 | 50 | 60 | 85 |
| C5 ⁴ _{G6} | 30 | 30 | 50 | 80 | 110 | 130 | 180 |
| C6 ⁴ | 3.5 | 3.5 | 8 | 4 | 5 | 6 | 6 |
| C7 ⁴ | 42 | 42 | 60 | 90 | 115 | 142 | 190 |
| C8 ⁴ | 29.5 | 29.5 | 19 | 17 | 19.5 | 22.5 | 29 |
| C9 ⁴ | 90.5 | 99.5 | 126.5 | 165 | 205 | 254.5 | 323.5 |

| | | | | | | | |
|------------------|------|------|------|-------|----|----|-------|
| C10 ⁴ | 8.75 | 8.75 | 13.5 | 10.75 | 13 | 15 | 20.75 |
| B1 _{h9} | 5 | 5 | 6 | 10 | 12 | 16 | 20 |
| H1 | 15 | 18 | 24.5 | 35 | 43 | 59 | 79.5 |

4. C1~C10 zijn motor specifieke afmetingen.

* AFR060M1 biedt C3 ≤12 optie.

* AFR075M1 biedt C3 ≤16 optie.

* AFR075M2 biedt C3 ≤15.875 optie.

* AFR100M1 biedt C3 ≤24 optie.