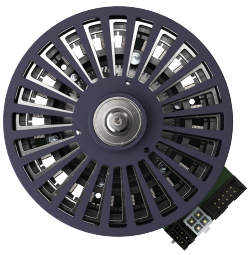
FD-120-15-g10 (Quasi-Direct Drive)

✓ **Winding Type A**

- Phase Resistance: 0.7[Ω]
- Torque Constant: 7.7[Nm/A]
- Nominal Torque: 50[Nm] (@6.5[A])
- Weight: 1100 [g]
- Continuous Torque Density: 45[Nm/kg]
- Nominal Speed: 50[RPM] (@48[V])
- Power: 260[W] (@48[V])
- Dimension: $\phi 128 \times 37$

FD-90-15-g■ (Quasi-Direct Drive) ■: Gear Ratio



✓ **Winding Type A**

- Phase Resistance: 0.47[Ω]
- Torque Constant: (g6: 2.1[Nm/A], g7: 2.5[Nm/A], g9: 3.2[Nm/A])
- Nominal Torque: (g6: 14[Nm], g7: 17[Nm], g9: 22[Nm])(@7[A])
- Weight: 650[g]
- Continuous Torque Density: (g6: 22[Nm/kg], g7: 27[Nm/kg], g9: 34[Nm/kg])
- Nominal Speed: g6: 180 [RPM] , g7: 150 [RPM] , g9: 110 [RPM] (@48[V])
- Power: 320[W] (@48[V])
- Dimension: $\phi 100 \times 37$

✓ **Winding Type B**

- Phase Resistance: 0.12[Ω]
- Torque Constant: (g6: 1.0[Nm/A], g7: 1.2[Nm/A], g9: 1.6[Nm/A])
- Nominal Torque: (g6: 14[Nm], g7: 17[Nm], g9: 22[Nm])(@14[A])
- Weight: 650[g]
- Continuous Torque Density: (g6: 22[Nm/kg], g7: 27[Nm/kg], g9: 34[Nm/kg])
- Nominal Speed: g6: 400 [RPM] , g7: 330 [RPM] , g9: 250 [RPM] (@48[V])
- Power: 600[W] (@48[V])
- Dimension: $\phi 100 \times 37$

FD-90-07-g■ (Quasi-Direct Drive) ■: Gear Ratio

✓ **Winding Type A**

- Phase Resistance: 0.29[Ω]
- Torque Constant: (g6: 0.8[Nm/A], g7: 1.1[Nm/A], g9: 1.3[Nm/A])
- Nominal Torque: (g6: 5.8[Nm], g7: 7.1[Nm], g9: 9.1[Nm])(@7[A])
- Weight: 450[g]
- Continuous Torque Density: (g6: 12[Nm/kg], g7: 15[Nm/kg], g9: 20[Nm/kg])
- Nominal Speed: g6: 430 [RPM] , g7: 350 [RPM] , g9: 270 [RPM] (@48[V])
- Power: 260[W] (@48[V])
- Dimension: $\phi 102 \times 29$

✓ **Winding Type B**

- Phase Resistance: 0.07[Ω]
- Torque Constant: (g6: 0.40[Nm/A], g7: 0.55[Nm/A], g9: 0.65[Nm/A])
- Nominal Torque: (g6: 5.8[Nm], g7: 7.1[Nm], g9: 9.1[Nm])(@14[A])
- Weight: 450[g]
- Continuous Torque Density: (g6: 12[Nm/kg], g7: 15[Nm/kg], g9: 20[Nm/kg])
- Nominal Speed: g6: 860 [RPM] , g7: 700 [RPM] , g9: 540 [RPM] (@48[V])
- Power: 520[W] (@48[V])
- Dimension: $\phi 102 \times 29$

FD-90-15

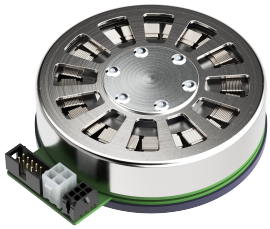
✓ **Winding Type A**

- Phase Resistance: 0.47[Ω]
- Torque Constant: 0.35[Nm/A]
- Nominal Torque: 2.45[Nm] (@7[A])
- Weight: 530[g] (Frameless: 400[g])
- Continuous Torque Density: 4.6[Nm/kg] (Frameless: 6.1[Nm/kg])
- Nominal Speed: 470 [RPM] (@24[V]), 1100 [RPM] (@48[V])
- Power: 120[W] (@24[V]), 280[W] (@48[V])
- Dimension: $\phi 93 \times 27$

✓ **Winding Type B**

- Phase Resistance: 0.12[Ω]
- Torque Constant: 0.17[Nm/A]
- Nominal Torque: 2.45[Nm] (@14[A])
- Weight: 530[g] (Frameless: 400[g])
- Continuous Torque Density: 4.6[Nm/kg] (Frameless: 6.1[Nm/kg])
- Nominal Speed: 1100 [RPM] (@24[V]), 2400 [RPM] (@48[V])
- Power: 280[W] (@24[V]), 600[W] (@48[V])
- Dimension: $\phi 93 \times 27$

FD-90-15-F



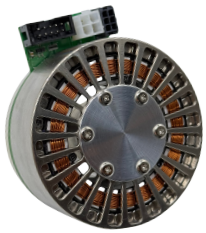
✓ **Winding Type A**

- Phase Resistance: 0.56[Ω]
- Torque Constant: 0.60[Nm/A]
- Nominal Torque: 3.50[Nm] (@7[A])
- Weight: 650[g] (Frameless: 540[g])
- Continuous Torque Density: 5.3[Nm/kg] (Frameless: 6.4[Nm/kg])
- Nominal Speed: 650 [RPM] (@48[V])
- Power: 230[W] (@48[V])
- Dimension: $\phi 93 \times 27$

✓ **Winding Type B**

- Phase Resistance: 0.14[Ω]
- Torque Constant: 0.30[Nm/A]
- Nominal Torque: 3.50[Nm] (@14[A])
- Weight: 650[g] (Frameless: 540[g])
- Continuous Torque Density: 5.3[Nm/kg] (Frameless: 6.4[Nm/kg])
- Nominal Speed: 1400 [RPM] (@48[V])
- Power: 500[W] (@48[V])
- Dimension: $\phi 93 \times 27$

FD-75-17



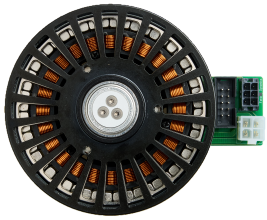
✓ **Winding Type A**

- Phase Resistance: 0.60[Ω]
- Torque Constant: 0.28[Nm/A]
- Nominal Torque: 1.96[Nm] (@7[A])
- Weight: 400[g] (Frameless: 330[g])
- Continuous Torque Density: 4.9[Nm/kg] (Frameless: 5.9[Nm/kg])
- Nominal Speed: 1350 [RPM] (@48[V])
- Power: 250[W] (@48[V])
- Dimension: $\phi 74 \times 30$

✓ **Winding Type B**

- Phase Resistance: 0.15[Ω]
- Torque Constant: 0.14[Nm/A]
- Nominal Torque: 1.96[Nm] (@14[A])
- Weight: 400[g] (Frameless: 330[g])
- Continuous Torque Density: 4.9[Nm/kg] (Frameless: 5.9[Nm/kg])
- Nominal Speed: 3000 [RPM] (@48[V])
- Power: 550[W] (@48[V])
- Dimension: $\phi 74 \times 30$

FD-75-17-g7 (Quasi-Direct Drive)



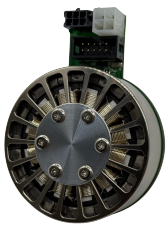
✓ **Winding Type A**

- Phase Resistance: 0.60[Ω]
- Torque Constant: 1.96[Nm/A]
- Nominal Torque: 14[Nm] (@7[A])
- Weight: 550[g]
- Continuous Torque Density: 25[Nm/kg]
- Nominal Speed: 190 [RPM] (@48[V])
- Power: 250[W] (@48[V])
- Dimension: $\phi 81 \times 39$

✓ **Winding Type B**

- Phase Resistance: 0.15[Ω]
- Torque Constant: 0.98[Nm/A]
- Nominal Torque: 14[Nm] (@14[A])
- Weight: 550[g]
- Continuous Torque Density: 25[Nm/kg]
- Nominal Speed: 420 [RPM] (@48[V])
- Power: 600[W] (@48[V])
- Dimension: $\phi 81 \times 39$

FD-60-15-F



✓ **Winding Type A**

- Phase Resistance: 0.38[Ω]
- Torque Constant: 0.18[Nm/A]
- Nominal Torque: 1.26[Nm] (@7[A])
- Weight: 320[g] (Frameless: 250[g])
- Continuous Torque Density: 3.9[Nm/kg] (Frameless: 5.0[Nm/kg])
- Nominal Speed: 2000[RPM] (@48[V])
- Power: 250[W] (@48[V])
- Dimension: $\phi 61 \times 27$

✓ **Winding Type B**

- Phase Resistance: 0.09[Ω]
- Torque Constant: 0.09[Nm/A]
- Nominal Torque: 1.26[Nm] (@14[A])
- Weight: 320[g] (Frameless: 250[g])
- Continuous Torque Density: 3.9[Nm/kg] (Frameless: 5.0[Nm/kg])
- Nominal Speed: 4000[RPM] (@48[V])
- Power: 500[W] (@48[V])
- Dimension: $\phi 61 \times 27$

FD-60-25-F

✓ **Winding Type A**

- Phase Resistance: 0.57[Ω]
- Torque Constant: 0.29[Nm/A]
- Nominal Torque: 2.05[Nm] (@7[A])
- Weight: 490[g] (Frameless: 400[g])
- Continuous Torque Density: 4.0[Nm/kg] (Frameless: 5.1[Nm/kg])
- Nominal Speed: 1100[RPM] (@48[V])
- Power: 250[W] (@48[V])
- Dimension: $\phi 61 \times 37$

✓ **Winding Type B**

- Phase Resistance: 0.14[Ω]
- Torque Constant: 0.14[Nm/A]
- Nominal Torque: 2.05[Nm] (@14[A])
- Weight: 490[g] (Frameless: 400[g])
- Continuous Torque Density: 4.0[Nm/kg] (Frameless: 5.1[Nm/kg])
- Nominal Speed: 2700[RPM] (@48[V])
- Power: 550[W] (@48[V])
- Dimension: $\phi 61 \times 37$

FD-60-15-g5 (Quasi-Direct Drive)

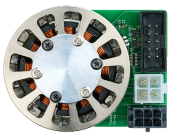
✓ **Winding Type A**

- Phase Resistance: 0.29[Ω]
- Torque Constant: 0.68[Nm/A]
- Nominal Torque: 4.8[Nm] (@7[A])
- Weight: 330 [g]
- Continuous Torque Density: 14[Nm/kg]
- Nominal Speed: 560[RPM] (@48[V])
- Power: 280[W] (@48[V])
- Dimension: $\phi 68 \times 37$

✓ **Winding Type B**

- Phase Resistance: 0.07[Ω]
- Torque Constant: 0.34[Nm/A]
- Nominal Torque: 4.8[Nm] (@14[A])
- Weight: 330 [g]
- Continuous Torque Density: 14[Nm/kg]
- Nominal Speed: 1120[RPM] (@48[V])
- Power: 550[W] (@48[V])
- Dimension: $\phi 68 \times 37$

FD-42-15-F



✓ **Winding Type A**

- Phase Resistance: 0.32[Ω]
- Torque Constant: 0.067[Nm/A]
- Nominal Torque: 0.30[Nm] (@4.5[A])
- Weight: 135 [g]
- Continuous Torque Density: 2.2[Nm/kg]
- Nominal Speed: 2800 [RPM] (@24[V])
- Power: 80[W] (@24[V])
- Dimension: $\phi 42 \times 23$

✓ **Winding Type B**

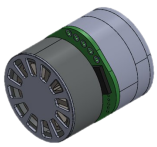
- Phase Resistance: 0.08[Ω]
- Torque Constant: 0.033[Nm/A]
- Nominal Torque: 0.30[Nm] (@9[A])
- Weight: 135 [g]
- Continuous Torque Density: 2.2[Nm/kg]
- Nominal Speed: 6000 [RPM] (@24[V])
- Power: 180[W] (@24[V])
- Dimension: $\phi 42 \times 23$

FD-20-07

✓ **Winding Type A**

- Phase Resistance: 0.97[Ω]
- Torque Constant: 0.019[Nm/A]
- Nominal Torque: 0.055[Nm] (@2.8[A])
- Weight: 14 [g]
- Continuous Torque Density: 3.9[Nm/kg]
- Nominal Speed: 3000 [RPM] (@12[V])
- Power: 17[W] (@12[V])
- Dimension: $\phi 20 \times 12$

FD-20-07-g30



✓ **Winding Type A**

- Phase Resistance: 0.97[Ω]
- Torque Constant: 0.57[Nm/A]
- Nominal Torque: 1.6[Nm] (@2.8[A])
- Weight: 28 [g]
- Continuous Torque Density: 57[Nm/kg]
- Nominal Speed: 100 [RPM] (@12[V])
- Power: 17[W] (@12[V])
- Dimension: $\phi 20 \times 23$

FD-18-07

✓ **Winding Type A**

- Phase Resistance: 0.5[Ω]
- Torque Constant: 11[mNm/A]
- Nominal Torque: 28[mNm]
- Weight: 12 [g]
- Continuous Torque Density: 2.3[Nm/kg]
- Nominal Speed: 7800 [RPM] (@12[V])
- Power: 22 [W] (@12 [V])
- Dimension: $\phi 18 \times 12$