



Brushless Servomotors

N2-xxxx Series

U_{dc} = 320 / 560 VDC

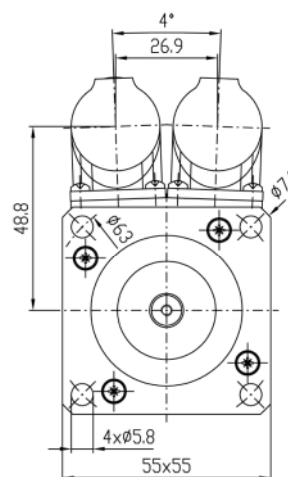
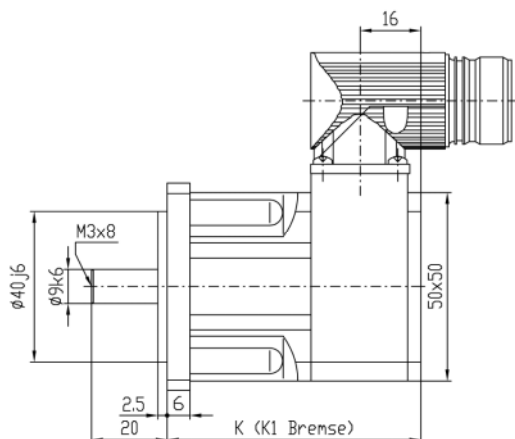


General Description:

Compact Design
Rare Earth Magnets
Resolver Feedback
Intercontec-Connectors

Options:

Holding Brake, different Encoders,
Shaft Keyway DIN 6885, UL, ATEX,
spec. Shaft / Flange / Housing,
Gearbox, Flying Leads, etc...



| Parameters | | | N2-0028 | | N2-0054 | | N2-0075 | | N2-0095 | |
|--------------------|------------------|-------------------|---------|------|---------|------|---------|------|---------|------|
| DC Bus Voltage | U _{dc} | V | 320 | 560 | 320 | 560 | 320 | 560 | 320 | 560 |
| Rated Torque | M _N | Nm | 0,25 | | 0,48 | | 0,68 | | 0,85 | |
| Rated AC Current | I _N | A | 0,96 | 0,96 | 1,12 | 0,9 | 1,48 | 0,83 | 1,7 | 1,07 |
| Stall Torque | M ₀ | Nm | 0,28 | | 0,54 | | 0,75 | | 0,95 | |
| Stall Current | I ₀ | A | 0,97 | 0,97 | 1,17 | 0,93 | 1,54 | 0,86 | 1,82 | 1,15 |
| Peak Torque | M _{max} | Nm | 1,1 | | 2,2 | | 3,0 | | 3,8 | |
| Peak AC Current | I _{max} | A | 4,5 | 4,5 | 5,4 | 4,3 | 7,1 | 3,9 | 8,4 | 5,3 |
| Rated Speed* | n _N | min ⁻¹ | 4500 | | | | | | | |
| Max. Mech. Speed | n _{max} | min ⁻¹ | 12000 | | | | | | | |
| Torque Constant | K _T | Nm/A | 0,29 | 0,29 | 0,46 | 0,58 | 0,49 | 0,88 | 0,52 | 0,83 |
| Voltage Constant | K _E | V/1000 | 17,5 | 17,5 | 28 | 35 | 29,5 | 53 | 31,5 | 50 |
| Resistance Ph-Ph | R _{Ph} | Ω | 28,3 | 28,3 | 25,9 | 41,1 | 17,0 | 54,0 | 13,1 | 33,6 |
| Inductance Ph-Ph | L _{Ph} | mH | 28,4 | 28,4 | 32,3 | 51,0 | 22,7 | 72,0 | 19,0 | 48,5 |
| El. Time Constant | T _{el} | ms | 1,0 | 1,0 | 1,2 | 1,2 | 1,3 | 1,3 | 1,45 | 1,45 |
| Therm. Constant | T _{th} | min | 10 | | 12 | | 15 | | 18 | |
| Inertia | J | kgcm ² | 0,05 | | 0,07 | | 0,09 | | 0,11 | |
| Rated Brake Torque | M _{Br} | Nm | 2,0 | | | | | | | |
| Weight w/o brake | m | kg | 0,76 | | 0,93 | | 1,1 | | 1,27 | |
| Weight with brake | m _{Br} | kg | 1,20 | | 1,37 | | 1,54 | | 1,71 | |
| Length w/o brake | K | mm | 67 | | 82 | | 97 | | 112 | |
| Length with brake | K1 | mm | 105 | | 120 | | 135 | | 150 | |

*Windings for different rated speeds are available; parameter tolerance +/-10%

| | |
|------------------------|---|
| Protection Class | IP64, optional IP65 or IP67 |
| Electrical Connections | Intercontec-Connectors (2 pcs) |
| Thermal Protection | PTC, optional thermal switch (normally closed type) tripping out at 140°C, KTY or NTC |
| Rated Parameters | Acc. to EN 60034-1, T _{Ambient} = 40°C, T _{Rise} = 110 K, Flange Temperature ≤ 65°C |
| Motor Controller | Standard winding designed for power supply U _{cc} = 320 or 560 VDC, different execution optional |
| Flange/Shaft | Acc. To DIN 42955N, optional R |