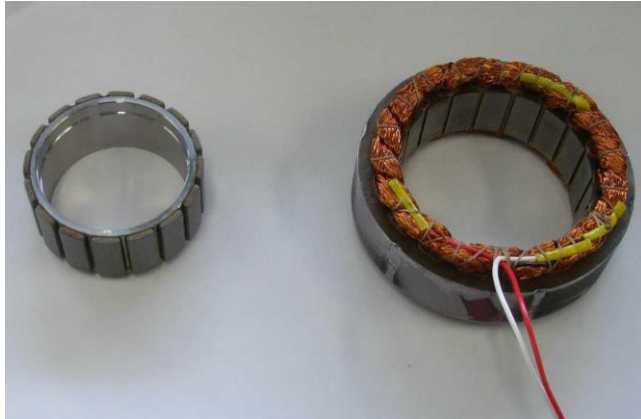
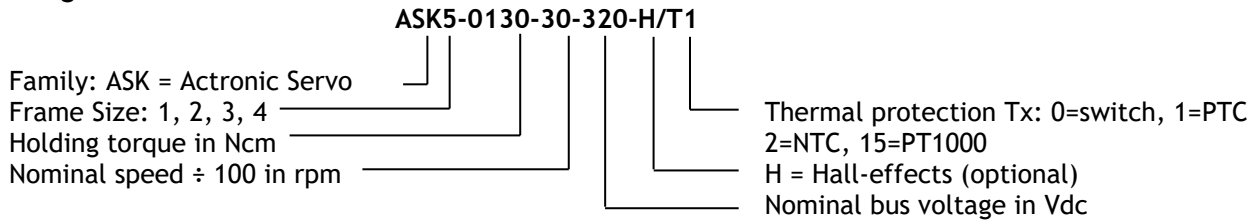


ASK Family of brushless Servomotors as motor kit version (ASK5 to ASK8)

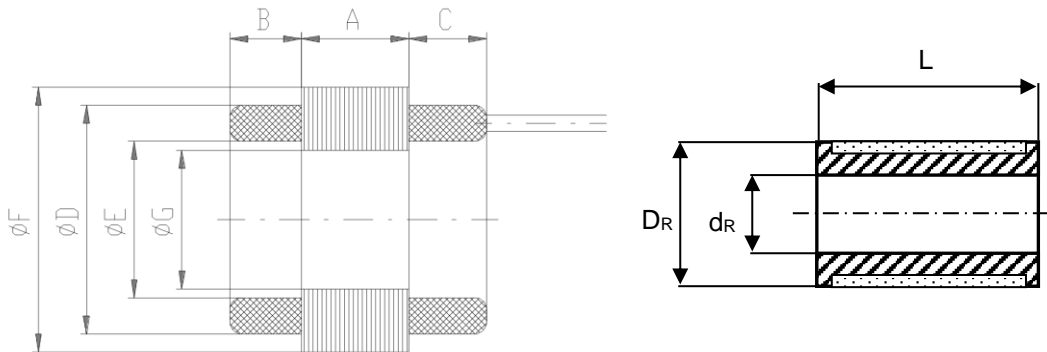


- No. of poles: 6
- Feedback: Blank = no feedback, H = Hall effects (optional)
- Electrical connections: flying leads, 150mm
- Thermal motor protection: PTC, optional: thermal switch 145°C, PT1000 or NTC
- Rotor with bore, no key, optional with shaft (tbd)

Designation:



Dimensions (mm):



| | Stator | | | | | | | Rotor | | |
|------------|--------|--------|--------|--------|--------|-------|-----|---------|---------|--------|
| | A | B max. | C max. | D max. | E min. | F | G | DR max. | dR max. | L max. |
| ASK5-0660 | 51 | 23 | 29 | 112 | 74 | 120.2 | 60 | 59.5 | 44 | 68 |
| ASK5-1050 | 85 | 23 | 29 | 112 | 74 | 120.2 | 60 | 59.5 | 44 | 103 |
| ASK5-1350 | 102 | 23 | 29 | 112 | 74 | 120.2 | 60 | 59.5 | 44 | 120 |
| ASK5-1700 | 136 | 23 | 29 | 112 | 74 | 120.2 | 60 | 59.5 | 44 | 154 |
| ASK5-2200 | 170 | 23 | 29 | 112 | 74 | 120.2 | 60 | 59.5 | 44 | 188 |
| ASK6-1350 | 68 | 28 | 31 | 142 | 80 | 149.8 | 75 | 74.3 | 50 | 84 |
| ASK6-1900 | 102 | 28 | 31 | 142 | 80 | 149.8 | 75 | 74.3 | 50 | 118 |
| ASK6-2200 | 119 | 28 | 31 | 142 | 80 | 149.8 | 75 | 74.3 | 50 | 135 |
| ASK6-2900 | 170 | 28 | 31 | 142 | 80 | 149.8 | 75 | 74.3 | 50 | 186 |
| ASK6-3500 | 238 | 28 | 31 | 142 | 80 | 149.8 | 75 | 74.3 | 50 | 254 |
| ASK7-2700 | 92 | 34 | 41 | 172 | 96 | 180.2 | 90 | 89.3 | 61 | 112 |
| ASK7-3200 | 105 | 34 | 41 | 172 | 96 | 180.2 | 90 | 89.3 | 61 | 125 |
| ASK7-4000 | 135 | 34 | 41 | 172 | 96 | 180.2 | 90 | 89.3 | 61 | 155 |
| ASK8-4000 | 93 | 52 | 62 | 197 | 110 | 210 | 100 | 99.0 | 68 | 113 |
| ASK8-6800 | 162 | 52 | 62 | 197 | 110 | 210 | 100 | 99.0 | 68 | 182 |
| ASK8-9300 | 231 | 52 | 62 | 197 | 110 | 210 | 100 | 99.0 | 68 | 251 |
| ASK8-11500 | 299 | 52 | 62 | 197 | 110 | 210 | 100 | 99.0 | 68 | 319 |

Winding data for operation at 90 to 320Vdc bus voltage:

| Motor model | Nominal torque | Nominal current | Nominal speed | Peak torque | Peak current | Voltage constant | Torque constant | Resistance (Ph.-Ph.) | Inductance (Ph.-Ph.) | Rotor inertia | Weight |
|------------------|----------------|-----------------|---------------|-------------|--------------|------------------|-----------------|----------------------|----------------------|---------------|--------|
| | M_n | I_n | n_n | M_{max} | I_{max} | K_E | K_T | R_{2ph} | L_{2ph} | J | m |
| | Nm | $A_{eff.}$ | min^{-1} | Nm | $A_{eff.}$ | $V_{dc}/1000$ | $Nm/A_{eff.}$ | Ω | mH | $kgcm^2$ | kg |
| ASK5-0660-30-320 | 5.7 | 6.8 | 3000 | 19.8 | 38 | 73.5 | 0.86 | 1.44 | 9.6 | 4.0 | |
| ASK5-1050-30-320 | 8.8 | 10.5 | 3000 | 31.5 | 61 | 73.5 | 0.86 | 0.61 | 5.5 | 6.2 | |
| ASK5-1350-30-320 | 11.0 | 14.5 | 3000 | 40.5 | 87 | 66.5 | 0.78 | 0.38 | 3.6 | 7.3 | |
| ASK5-1700-30-320 | 14.5 | 18.5 | 3000 | 51.0 | 106 | 68.6 | 0.80 | 0.28 | 2.9 | 9.5 | |
| ASK5-2200-30-320 | 17 | 20.2 | 3000 | 66.0 | 127 | 73.5 | 0.86 | 0.24 | 2.6 | 11.7 | |
| ASK6-1350-30-320 | 13 | 14.6 | 3000 | 40.5 | 62 | 79.2 | 0.93 | 0.34 | 4.2 | 13.1 | |
| ASK6-1900-30-320 | 17 | 19.0 | 3000 | 57 | 87 | 79.2 | 0.93 | 0.19 | 2.8 | 18.7 | |
| ASK6-2200-30-320 | 19 | 20.5 | 3000 | 66 | 97 | 82.0 | 0.96 | 0.17 | 2.6 | 21.5 | |
| ASK6-2900-30-320 | 24 | 26.8 | 3000 | 87 | 132 | 79.2 | 0.93 | 0.09 | 1.7 | 32.8 | |
| ASK7-2700-30-320 | 21 | 23.7 | 3000 | 27 | 110 | 82.0 | 0.96 | 0.15 | 2.2 | 36 | |
| ASK7-3200-30-320 | 23 | 25.9 | 3000 | 32 | 128 | 83.4 | 0.98 | 0.12 | 1.3 | 39 | |
| ASK7-4000-30-320 | 26 | 31.8 | 3000 | 40 | 172 | 77.8 | 0.91 | 0.07 | 0.8 | 45 | |

Winding data for operation at 320 to 680Vdc bus voltage:

| Motor model | Nominal torque | Nominal current | Nominal speed | Peak torque | Peak current | Voltage constant | Torque constant | Resistance (Ph.-Ph.) | Inductance (Ph.-Ph.) | Rotor inertia | Weight |
|-------------------|----------------|-----------------|---------------|-------------|--------------|------------------|-----------------|----------------------|----------------------|---------------|--------|
| | M_n | I_n | n_n | M_{max} | I_{max} | K_E | K_T | R_{2ph} | L_{2ph} | J | m |
| | Nm | $A_{eff.}$ | min^{-1} | Nm | $A_{eff.}$ | $V_{dc}/1000$ | $Nm/A_{eff.}$ | Ω | mH | $kgcm^2$ | kg |
| ASK5-0660-30-560 | 5.7 | 4.0 | 3000 | 19.8 | 23 | 124.5 | 1.46 | 4.51 | 27.8 | 4.0 | |
| ASK5-1050-30-560 | 8.8 | 6.3 | 3000 | 31.5 | 36 | 123.0 | 1.44 | 1.70 | 15.2 | 6.2 | |
| ASK5-1350-30-560 | 11.0 | 9.5 | 3000 | 40.5 | 56 | 103.2 | 1.21 | 0.95 | 9.0 | 7.3 | |
| ASK5-1700-30-560 | 14.5 | 10.0 | 3000 | 51.0 | 57 | 127.3 | 1.49 | 0.95 | 10.0 | 9.5 | |
| ASK5-2200-30-560 | 17 | 13.0 | 3000 | 66.0 | 82 | 114.5 | 1.34 | 0.54 | 5.9 | 11.7 | |
| ASK6-1350-30-560 | 13 | 8.2 | 3000 | 40.5 | 35 | 141.4 | 1.65 | 1.10 | 13.5 | 13.1 | |
| ASK6-1900-30-560 | 17 | 10.6 | 3000 | 57 | 49 | 141.4 | 1.65 | 0.61 | 9.0 | 18.7 | |
| ASK6-2200-30-560 | 19 | 13.1 | 3000 | 66 | 62 | 128.7 | 1.51 | 0.41 | 6.4 | 21.5 | |
| ASK6-2900-30-560 | 24 | 14.7 | 3000 | 87 | 73 | 144.2 | 1.69 | 0.31 | 5.6 | 32.8 | |
| ASK6-3500-30-560 | 26 | 18.2 | 3000 | 105 | 99 | 127.3 | 1.49 | 0.16 | 3.2 | 46.0 | |
| ASK7-2700-30-560 | 21 | 13.5 | 3000 | 27 | 62 | 144.2 | 1.69 | 0.43 | 4.4 | 36 | |
| ASK7-3200-30-560 | 23 | 15.0 | 3000 | 32 | 74 | 144.2 | 1.69 | 0.35 | 3.8 | 39 | |
| ASK7-4000-30-560 | 26 | 17.9 | 3000 | 40 | 96 | 138.6 | 1.62 | 0.23 | 2.7 | 45 | |
| ASK8-4000-30-560 | 30 | 17.8 | 3000 | 120 | 85 | 157.0 | 1.84 | 0.25 | 5.7 | 76 | |
| ASK8-6800-30-560 | 50 | 31.1 | 3000 | 204 | 156 | 145.7 | 1.70 | 0.10 | 2.5 | 114 | |
| ASK8-9300-20-560 | 70 | 25.3 | 2000 | 279 | 129 | 240.4 | 2.81 | 0.15 | 4.8 | 153 | |
| ASK8-11500-20-560 | 85 | 32.4 | 2000 | 345 | 164 | 233.3 | 2.73 | 0.11 | 3.4 | 190 | |

Other windings (also for low voltage) on request.

Colour coding of the lead wires:

| Motor-Phases | | Halls | | Thermal protection | |
|--------------|-------|-------|--|--------------------|--|
| U | white | U, /U | | PTC | |
| V | Blue | V, /V | | NTC | |
| W | red | W, /W | | PT1000 | |
| | | +5V | | | |
| | | GND | | | |