

Brushless DC motors 1W - 1300W General catalogue



B4247 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

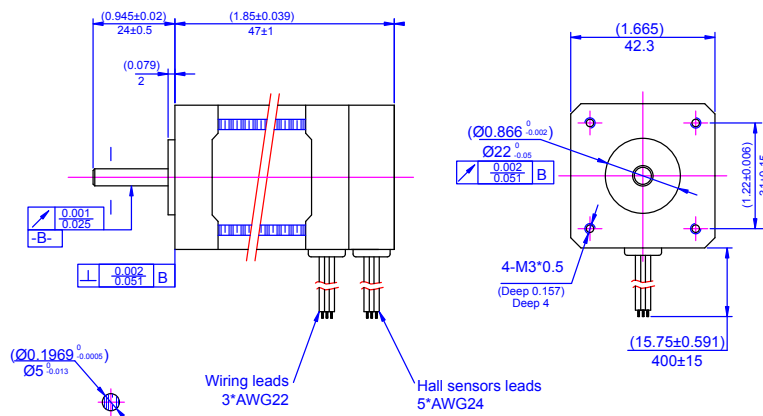
MOTOR FEATURES

- High torque at low speed
- Standard voltages 12 – 24 – 36 – 48 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

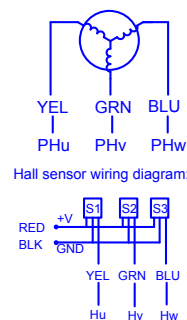
BRUSHLESS MOTOR DATA

MODEL	UNITS	B4247-12	B4247-24	B4247-36	B4247-48
Rated terminal voltage	VDC	12	24	36	48
Poles		8	8	8	8
Rated speed	RPM	3000	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	0.06 (8.57)	0.06 (8.57)	0.06 (8.57)	0.06 (8.57)
Peak stall torque	N.m (oz-in)	0.15(21.42)	0.15(21.42)	0.15(21.42)	0.15(21.42)
Continuous stall current TENV	Amps	2.2	1.1	0.72	0.55
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	0.13 (1.10E-04)	0.13 (1.10E-04)	0.13 (1.10E-04)	0.13 (1.10E-04)
Voltage constant KV	V/K rpm	2.84	5.79	8.74	11.47
Torque constant KT	N.m/Amp (oz-in/Amp)	0.027 (3.86)	0.055 (7.8)	0.085 (11.92)	0.12 (15.59)
Line to line resistance	Ohms	2.4	4.3	7.8	12.5
Line to line inductance	mH	0.5	1.7	3.9	6.8
Mechanical time constant	ms	0.8	0.8	0.8	0.8
Electrical time constant	ms	0.21	0.4	0.5	0.54
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)	0.02 (2.86)
Weight	Kg (lb)	0.25 (0.55)	0.25 (0.55)	0.25 (0.55)	0.25 (0.55)

APPEARANCE SIZE



Wiring connection diagram:



NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

B4263 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

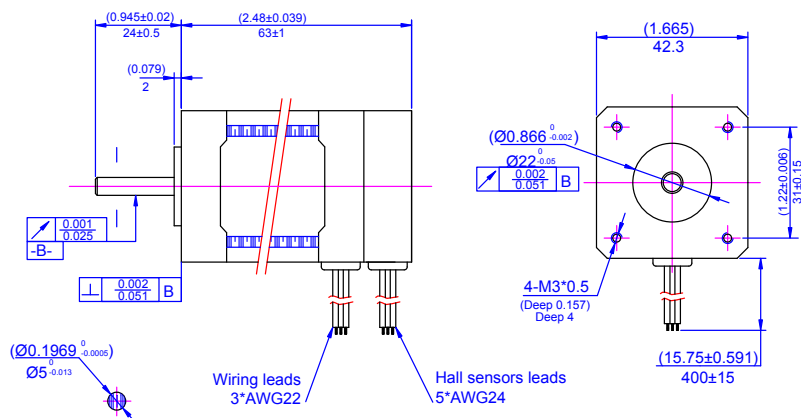
MOTOR FEATURES

- High torque at low speed
- Standard voltages 12 – 24 – 36 – 48 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

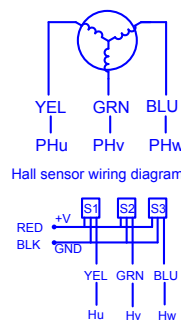
BRUSHLESS MOTOR DATA

MODEL	UNITS	B4263-12	B4263-24	B4263-36	B4263-48
Rated terminal voltage	VDC	12	24	36	48
Poles		8	8	8	8
Rated speed	RPM	3000	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	0.12 (17.16)	0.12 (17.16)	0.12 (17.16)	0.12 (17.16)
Peak stall torque	N.m (oz-in)	0.3(42.9)	0.3(42.9)	0.3(42.9)	0.3(42.9)
Continuous stall current TENV	Amps	4.4	2.2	1.35	1.0
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	0.26 (2.20E-04)	0.26 (2.20E-04))	0.26 (2.20E-04)	0.26 (2.20E-04)
Voltage constant KV	V/K rpm	2.84	5.79	8.74	11.47
Torque constant KT	N.m/Amp (oz-in/Amp)	0.027 (3.86)	0.055 (7.8)	0.085 (11.92)	0.12 (15.59)
Line to line resistance	Ohms	0.5	1.25	2.8	4.9
Line to line inductance	mH	0.4	1.60	3.6	6.4
Mechanical time constant	ms	0.6	0.6	0.6	0.6
Electrical time constant	ms	0.8	1.28	1.29	1.3
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)	0.02 (2.86)
Weight	Kg (lb)	0.34 (0.74)	0.34 (0.74)	0.34 (0.74)	0.34 (0.74)

APPEARANCE SIZE



Wiring connection diagram:



NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

B4279 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

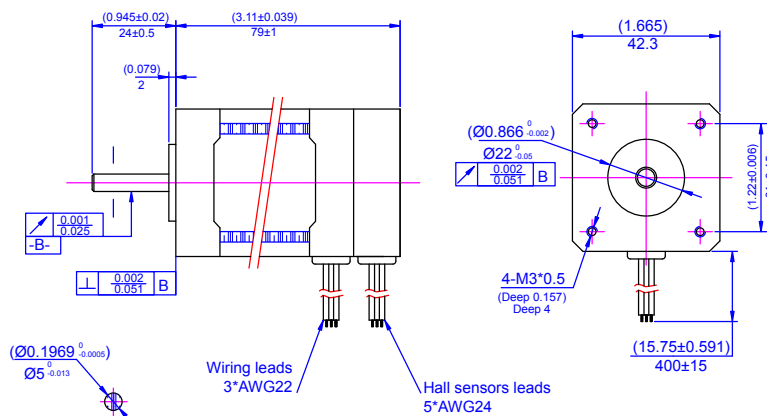
MOTOR FEATURES

- High torque at low speed
- Standard voltages 12 – 24 – 36 – 48 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

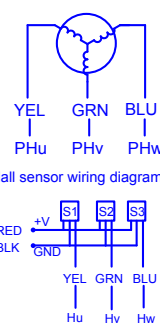
BRUSHLESS MOTOR DATA

MODEL	UNITS	B4279-12	B4279-24	B4279-36	B4279-48
Rated terminal voltage	VDC	12	24	36	48
Poles		8	8	8	8
Rated speed	RPM	3000	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	0.19 (27.17)	0.19 (27.17)	0.19 (27.17)	0.19 (27.17)
Peak stall torque	N.m (oz-in)	0.48(68.64)	0.48(68.64)	0.48(68.64)	0.48(68.64)
Continuous stall current TENV	Amps	7	3.2	2.1	1.3
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	0.39 (3.30E-04)	0.39 (3.30E-04)	0.39 (3.30E-04)	0.39 (3.30E-04)
Voltage constant KV	V/K rpm	2.84	5.79	8.74	11.47
Torque constant KT	N.m/Amp (oz-in/Amp)	0.027 (3.86)	0.055 (7.8)	0.085 (11.92)	0.12 (15.59)
Line to line resistance	Ohms	0.2	0.7	1.48	2.6
Line to line inductance	mH	0.17	0.6	1.35	2.4
Mechanical time constant	ms	0.5	0.5	0.5	0.5
Electrical time constant	ms	0.85	0.86	0.91	0.92
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)	0.02 (2.86)
Weight	Kg (lb)	0.39 (0.85)	0.39 (0.85)	0.39 (0.85)	0.39 (0.85)

APPEARANCE SIZE



Wiring connection diagram:



NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

B5759 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

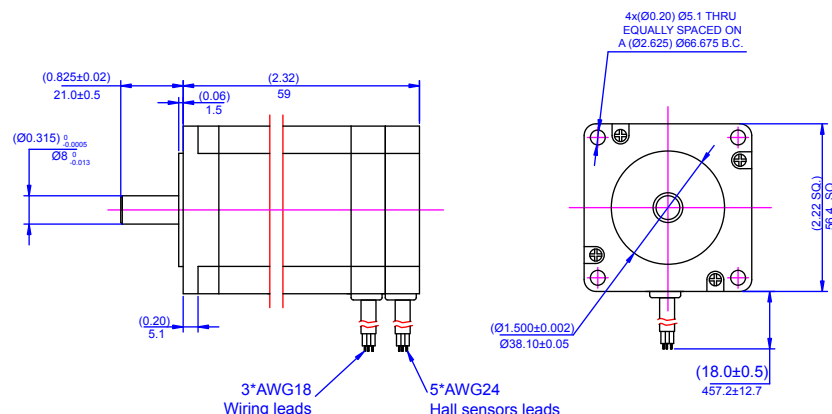
MOTOR FEATURES

- High torque at low speed
- Standard voltages 12 – 24 – 36 – 48 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

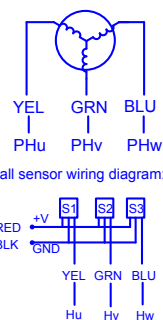
BRUSHLESS MOTOR DATA

MODEL	UNITS	B5759-12	B5759-24	B5759-36	B5759-48
Rated terminal voltage	VDC	12	24	36	48
Poles		8	8	8	8
Rated speed	RPM	3000	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	0.24 (34.32)	0.24 (34.32)	0.24 (34.32)	0.24 (34.32)
Peak stall torque	N.m (oz-in)	0.6(85.8)	0.6(85.8)	0.6(85.8)	0.6(85.8)
Continuous stall current TENV	Amps	8.7	4.2	2.6	2
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	0.3 (2.60E-04)	0.3 (2.60E-04)	0.3 (2.60E-04)	0.3 (2.60E-04)
Voltage constant KV	V/K rpm	2.95	6	9.68	12.63
Torque constant KT	N.m/Amp (oz-in/Amp)	0.028 (4.0)	0.057 (8.15)	0.092 (13.16)	0.12 (17.16)
Line to line resistance	Ohms	0.4	1.1	2.45	4.3
Line to line inductance	mH	0.48	1.9	4.3	7.6
Mechanical time constant	ms	1.3	1.3	1.3	1.3
Electrical time constant	ms	1.2	1.73	1.75	1.76
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)	0.02 (2.86)
Weight	Kg (lb)	0.65 (1.42)	0.65 (1.42)	0.65 (1.42)	0.65 (1.42)

APPEARANCE SIZE



Wiring connection diagram:



NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

B5780 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

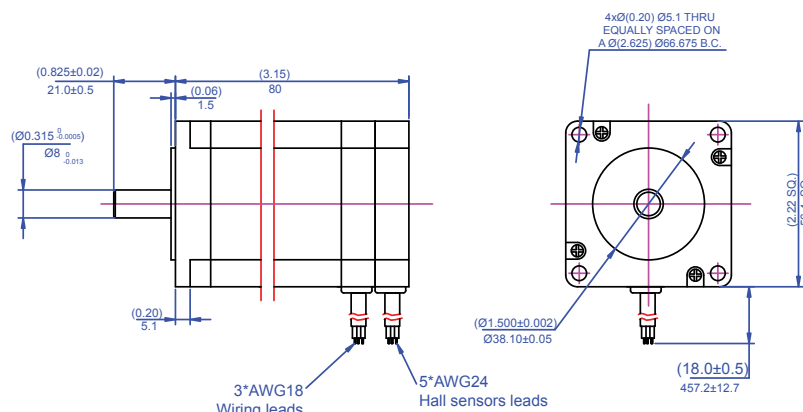
MOTOR FEATURES

- High torque at low speed
- Standard voltages 12 – 24 – 36 – 48 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

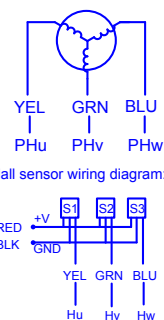
BRUSHLESS MOTOR DATA

MODEL	UNITS	B5780-12	B5780-24	B5780-36	B5780-48
Rated terminal voltage	VDC	12	24	36	48
Poles		8	8	8	8
Rated speed	RPM	3000	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	0.48 (68.64)	0.48 (68.64)	0.48 (68.64)	0.48 (68.64)
Peak stall torque	N.m (oz-in)	1.2(171.6)	1.2(171.6)	1.2(171.6)	1.2(171.6)
Continuous stall current TENV	Amps	17.5	8.5	5.3	4
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	0.6 (5.20E-04)	0.6 (5.20E-04)	0.6 (5.20E-04)	0.6 (5.20E-04)
Voltage constant KV	V/K rpm	2.89	5.94	9.53	12.63
Torque constant KT	N.m/Amp (oz-in/Amp)	0.027 (3.86)	0.056 (8)	0.091 (13.01)	0.12 (17.16)
Line to line resistance	Ohms	0.14	0.4	0.83	1.5
Line to line inductance	mH	0.15	0.54	1.2	2.16
Mechanical time constant	ms	13.4	13.4	13.4	13.4
Electrical time constant	ms	1.2	1.35	1.44	1.44
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)	0.02 (2.86)
Weight	Kg (lb)	1 (2.18)	1 (2.18)	1 (2.18)	1 (2.18)

APPEARANCE SIZE



Wiring connection diagram:



Hall sensor wiring diagram:

NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

B57101 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

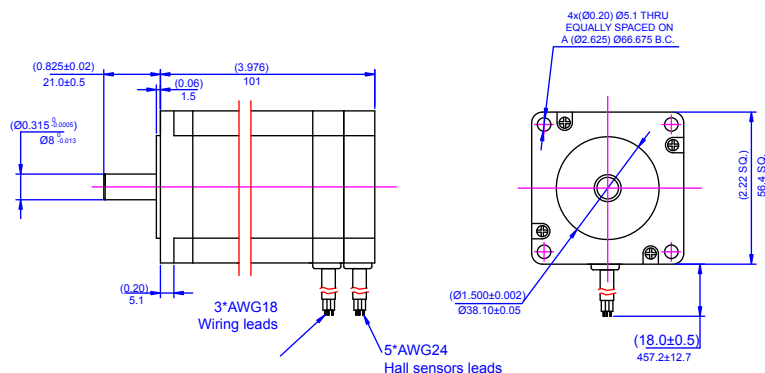
MOTOR FEATURES

- High torque at low speed
- Standard voltages 12 – 24 – 36 – 48 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

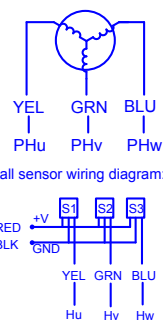
BRUSHLESS MOTOR DATA

MODEL	UNITS	B57101-24	B57101-36	B57101-48	B57101-170
Rated terminal voltage	VDC	24	36	48	170
Poles		8	8	8	8
Rated speed	RPM	3000	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	0.69 (98.67)	0.69 (98.67)	0.69 (98.67)	0.69 (98.67)
Peak stall torque	N.m (oz-in)	1.8(257.4)	1.8(257.4)	1.8(257.4)	1.8(257.4)
Continuous stall current TENV	Amps	12.7	7.7	5.7	1.6
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	0.9 (7.80E-04)	0.9 (7.80E-04)	0.9 (7.80E-04)	0.9 (7.80E-04)
Voltage constant KV	V/K rpm	5.68	9.42	12.63	38.95
Torque constant KT	N.m/Amp (oz-in/Amp)	0.054 (7.77)	0.09 (12.81)	0.12 (17.16)	0.37 (52.91)
Line to line resistance	Ohms	0.2	0.45	1.5	7.3
Line to line inductance	mH	0.26	0.6	0.82	1.1
Mechanical time constant	ms	15.2	15.2	15.2	15.2
Electrical time constant	ms	1.3	1.33	1.44	1.5
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)	0.02 (2.86)
Weight	Kg (lb)	1.4 (3.05)	1.4 (3.05)	1.4 (3.05)	1.4 (3.05)

APPEARANCE SIZE



Wiring connection diagram:



NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

B8671 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

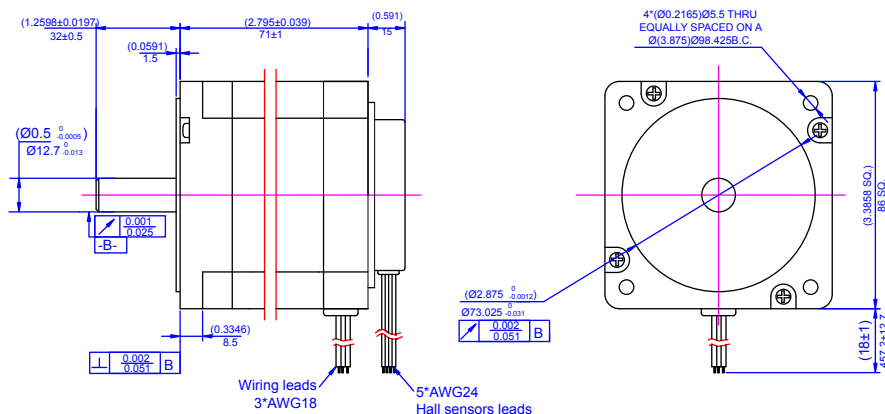
MOTOR FEATURES

- High torque at low speed
- Standard voltages 36 – 48 – 170 – 325 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

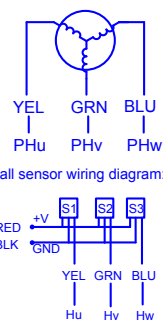
BRUSHLESS MOTOR DATA

MODEL	UNITS	B8671-36	B8671-48	B8671-170	B8671-325
Rated terminal voltage	VDC	36	48	170	325
Poles		8	8	8	8
Rated speed	RPM	3000	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	0.8 (114.4)	0.8 (114.4)	0.8 (114.4)	0.8 (114.4)
Peak stall torque	N.m (oz-in)	2.1(300.3)	2.1(300.3)	2.1(300.3)	2.1(300.3)
Continuous stall current TENV	Amps	8.8	6.6	1.9	0.98
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	0.8 (6.930E-04)	0.8 (6.930E-04)	0.8 (6.930E-04)	0.8 (6.930E-04)
Voltage constant KV	V/K rpm	9.58	12.74	44.23	85.89
Torque constant KT	N.m/Amp (oz-in/Amp)	0.091 (13.01)	0.121 (17.3)	0.421 (60.2)	0.816 (116.7)
Line to line resistance	Ohms	0.25	0.45	3.8	9.2
Line to line inductance	mH	0.8	1.4	13	31
Mechanical time constant	ms	0.6	0.6	0.6	0.6
Electrical time constant	ms	3.2	3.11	3.4	3.4
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)	0.02 (2.86)
Weight	Kg (lb)	1.9 (4.14)	1.9 (4.14)	1.9 (4.14)	1.9 (4.14)

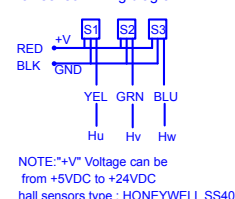
APPEARANCE SIZE



Wiring connection diagram:



Hall sensor wiring diagram:



B8698 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

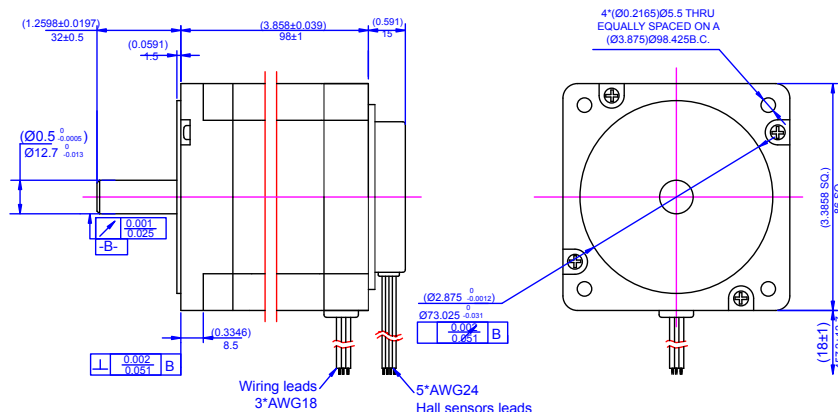
MOTOR FEATURES

- High torque at low speed
- Standard voltages 48 – 170 – 325 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

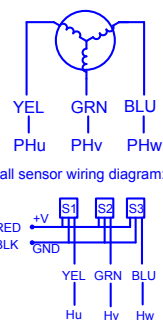
BRUSHLESS MOTOR DATA

MODEL	UNITS	B8698N-48	B8698N-170	B8698N-325
Rated terminal voltage	VDC	48	170	325
Poles		8	8	8
Rated speed	RPM	3000	3000	3000
Continuous stall torque TENV	N.m (oz-in)	1.61 (230.23)	1.61 (230.23)	1.61 (230.23)
Peak stall torque	N.m (oz-in)	4.2(600.6)	4.2(600.6)	4.2(600.6)
Continuous stall current TENV	Amps	13.2	3.7	2
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	1.6 (1.39E-03)	1.6 (1.39E-03)	1.6 (1.39E-03)
Voltage constant KV	V/K rpm	12.84	45.79	84.74
Torque constant KT	N.m/Amp (oz-in/Amp)	0.122 (17.45)	0.435 (62.22)	0.805 (115.5)
Line to line resistance	Ohms	0.2	1.5	5.3
Line to line inductance	mH	0.68	5.1	18.6
Mechanical time constant	ms	0.43	0.43	0.43
Electrical time constant	ms	3.4	3.4	3.5
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)	0.02(2.86)
Weight	Kg (lb)	3 (6.54)	3 (6.54)	3 (6.54)

APPEARANCE SIZE



Wiring connection diagram:

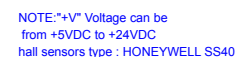


NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

- BRUSHLESS MOTOR DATA

MODEL	UNITS	R86125-48	R86125-170	R86125-325
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B110113 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

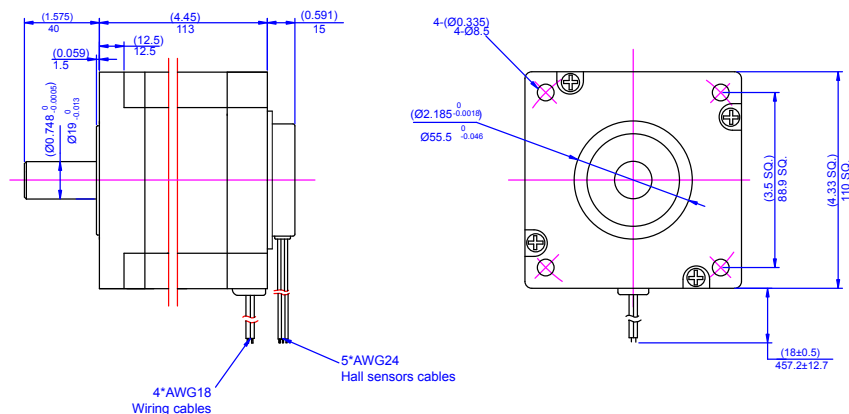
MOTOR FEATURES

- High torque at low speed
- Standard voltages 170 – 325 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

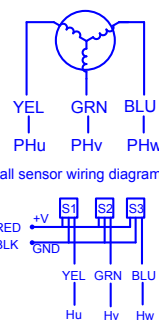
BRUSHLESS MOTOR DATA

MODEL	UNITS	B110113-170	B110113N-325
Rated terminal voltage	VDC	170	325
Poles		8	8
Rated speed	RPM	2000	2000
Continuous stall torque TENV	N.m (oz-in)	2.9 (411.13)	2.9 (411.13)
Peak stall torque	N.m (oz-in)	7.5(1072.5)	7.5(1072.5)
Continuous stall current TENV	Amps	4.5	2.3
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	3.0 (1.39E-03)	3.0 (1.39E-03)
Voltage constant KV	V/K rpm	58.53	114.42
Torque constant KT	N.m/Amp (oz-in/Amp)	0.556 (79.44)	1087 (155.44)
Line to line resistance	Ohms	0.6	2.1
Line to line inductance	mH	5.1	18.64
Mechanical time constant	ms	0.84	0.84
Electrical time constant	ms	8.5	8.5
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)
Weight	Kg (lb)	6 (13.08)	6 (13.08)

APPEARANCE SIZE



Wiring connection diagram:



NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40

B110173 BRUSHLESS DC MOTORS

Brushless dc motors designed for high torque at low speed. The high torque output is achieved by using eight pole neodymium rotor magnets. All motors have double ball bearings and method of commutation is by using integral hall-effect sensors. External electronic speed drivers are available as specified on separate datasheet.

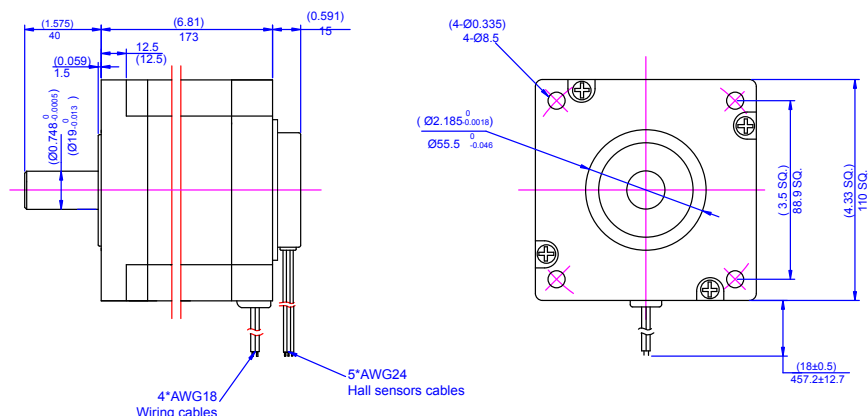
MOTOR FEATURES

- High torque at low speed
- Standard voltages 170 – 325 VDC
- Integral hall-effect sensors Honeywell SS40
- Hall-effect angle 120 degree
- Number of magnet poles 8
- Double ball bearings
- Ambient temperature -20~+60 deg. C
- Protection IP41
- Insulation resistance 100Mohm
- Dielectric strength 1 min 1000 VAC 50 Hz
- Customization is possible

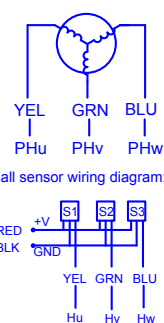
BRUSHLESS MOTOR DATA

MODEL	UNITS	B110173-170	B110173-325
Rated terminal voltage	VDC	170	325
Poles		8	8
Rated speed	RPM	2000	2000
Continuous stall torque TENV	N.m (oz-in)	5.8 (829.4)	5.8 (829.4)
Peak stall torque	N.m (oz-in)	15(2145)	15(2145)
Continuous stall current TENV	Amps	8.9	4.7
Armature polar moment of inertia	Kg.cm ² / lb-in Sec ²	6.0 (2.78E-03)	6.0 (2.78E-03)
Voltage constant KV	V/K rpm	68.6	129.9
Torque constant KT	N.m/Amp (oz-in/Amp)	0.652 (93.24)	1.234 (176.5)
Line to line resistance	Ohms	0.3	1.1
Line to line inductance	mH	3.4	12.5
Mechanical time constant	ms	0.68	0.68
Electrical time constant	ms	11.33	11.4
Static friction torque	N.m (oz-in)	0.02 (2.86)	0.02 (2.86)
Weight	Kg (lb)	9. (20.71)	9. (20.71)

APPEARANCE SIZE



Wiring connection diagram:



NOTE: "+V" Voltage can be from +5VDC to +24VDC
hall sensors type : HONEYWELL SS40