



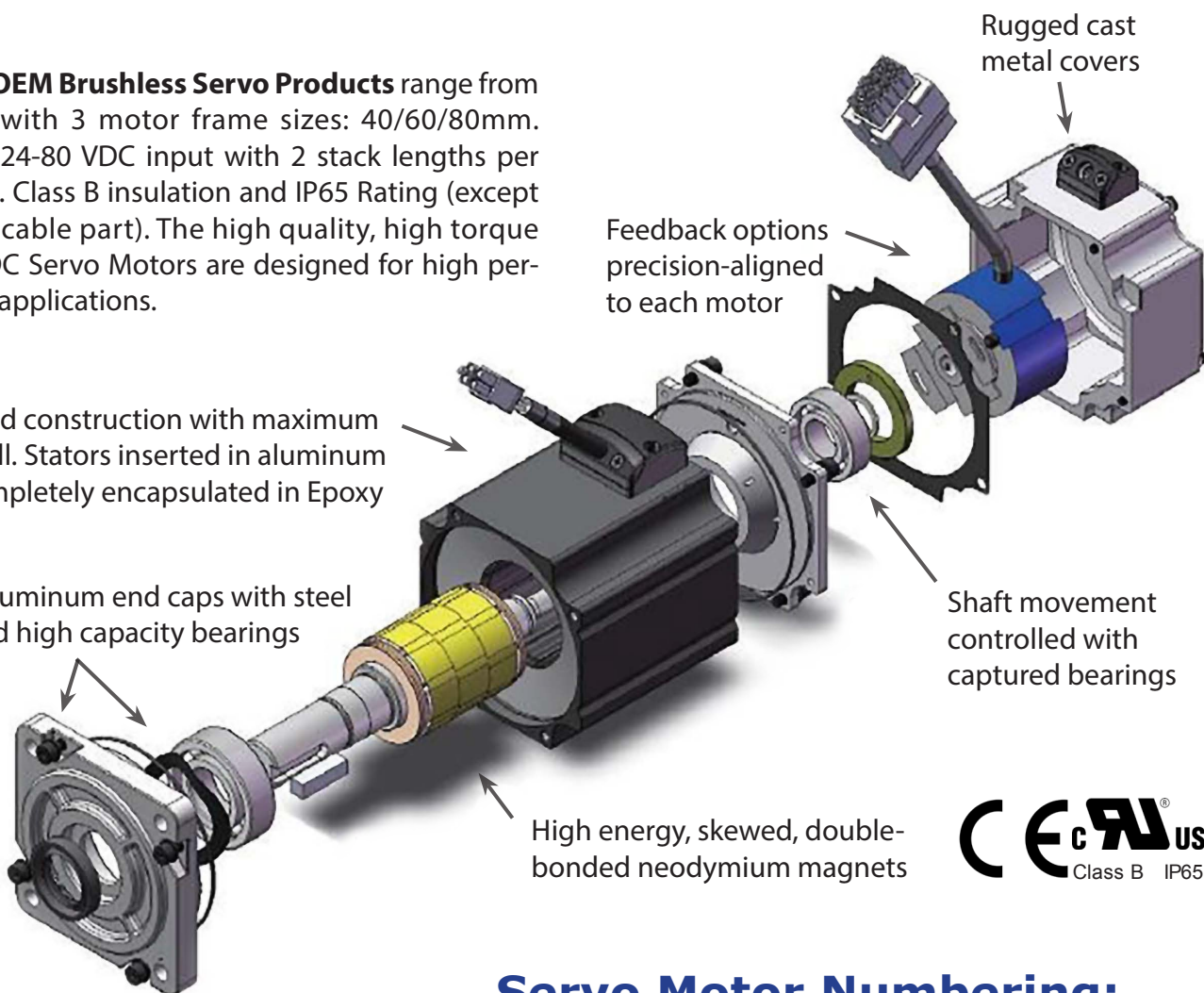
NEOTEC

OEM Brushless Servo Motors

Neotec's OEM Brushless Servo Products range from 50-750W with 3 motor frame sizes: 40/60/80mm. Rated for 24-80 VDC input with 2 stack lengths per frame size. Class B insulation and IP65 Rating (except shaft and cable part). The high quality, high torque N Series DC Servo Motors are designed for high performance applications.

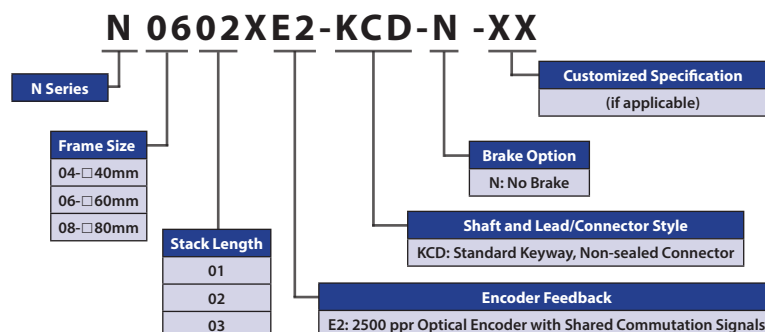
Segmented construction with maximum winding fill. Stators inserted in aluminum shells; completely encapsulated in Epoxy

Rugged aluminum end caps with steel inserts and high capacity bearings



- Highest torque density
- High IP protection class
- High efficiency
- High precision control
- Cost effective

Servo Motor Numbering:

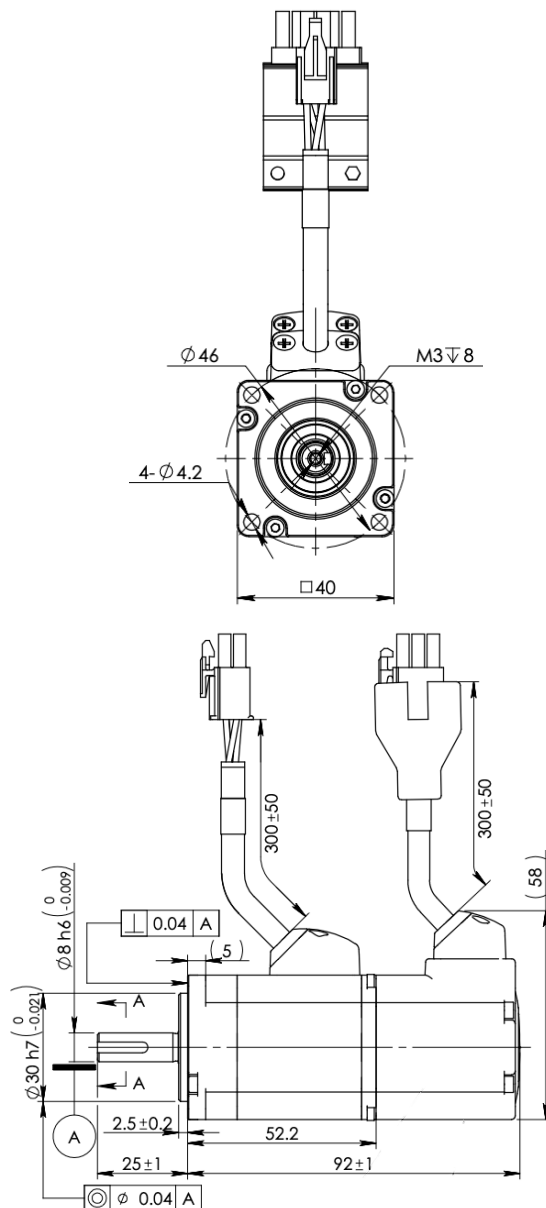


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<https://olympus-controls.com/toolbox/neotec-motors/>

NEOTEC Servo Motor Series: N0401XE2-KCD-N

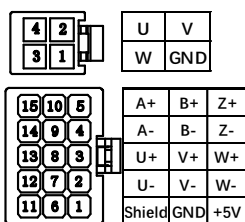
Motor Specifications

1	Typical Supply Voltages		
2	Basic DC Bus Voltage	V (DC)	36
3	Rated Output Power	Watts	50
4	Rated Speed	rpm	2500
5	Max. Mechanical Speed	rpm	4100
6	Rated Torque	Nm	0.19
7	Continuous Stall Torque	Nm	0.2
8	Peak Torque	Nm	0.48
9	Rated Current	A (rms)	2.6
10	Continuous Stall Current	A (rms)	2.8
11	Peak Current	A (rms)	6.5
12	Voltage Constant $\pm 10\%$	V(rms)/K rpm	4.6
13	Torque Constant $\pm 10\%$	Nm/A(rms)	0.077
14	Winding Resistance(Line-Line) $\pm 10\%$	Ohm @20°C	1.67
15	Winding Inductance(Line-Line) $\pm 20\%$	mH (typ.)	1.88
16	Inertia -(with encoder)	kg m ²	0.00000232
17	Thermal Resistance(mounted)	°C / W	2.9
18	Thermal Time Constant	Minutes	12
19	Heat Sink Size(Alumnum)	mm	120×120×5
20	Shaft Load - Axial	N (max.)	50 N / 11 Lb
21	Shaft Load - Radial(End of Shaft)	N (max.)	50 N / 11 Lb
22	Weight (with std. encoder)	kg	0.4 kg / 0.9 Lb
23	Approvals	CE, cUL, RoHS	
24	Encoder	2500 P/r Incremental	
25	Insulation Class	B (130°C)	
26	IP rating	IP65 (except shaft without seal and non-sealed connectors)	
27	Installation Location	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
28	Ambient Temperature	Operating 0 to 40°C, Storage -20 to 80 °C	
29	Ambient Humidity (max.)	85% (free from condensing)	
30	Altitude (max.)	1000 m	
31	Vibration Resistance	49 m/s ²	
32	Rotor Poles	8	



Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)

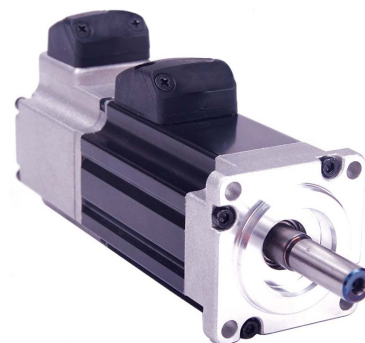
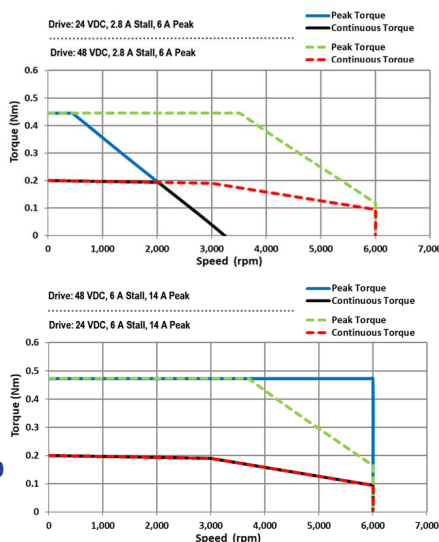
Motor Cable Pin Outs



Speed Torque

Accelnet Plus Amplifiers
BE, BP Series: 06

Accelnet Plus Amplifiers
BE, BP Series: 14,20



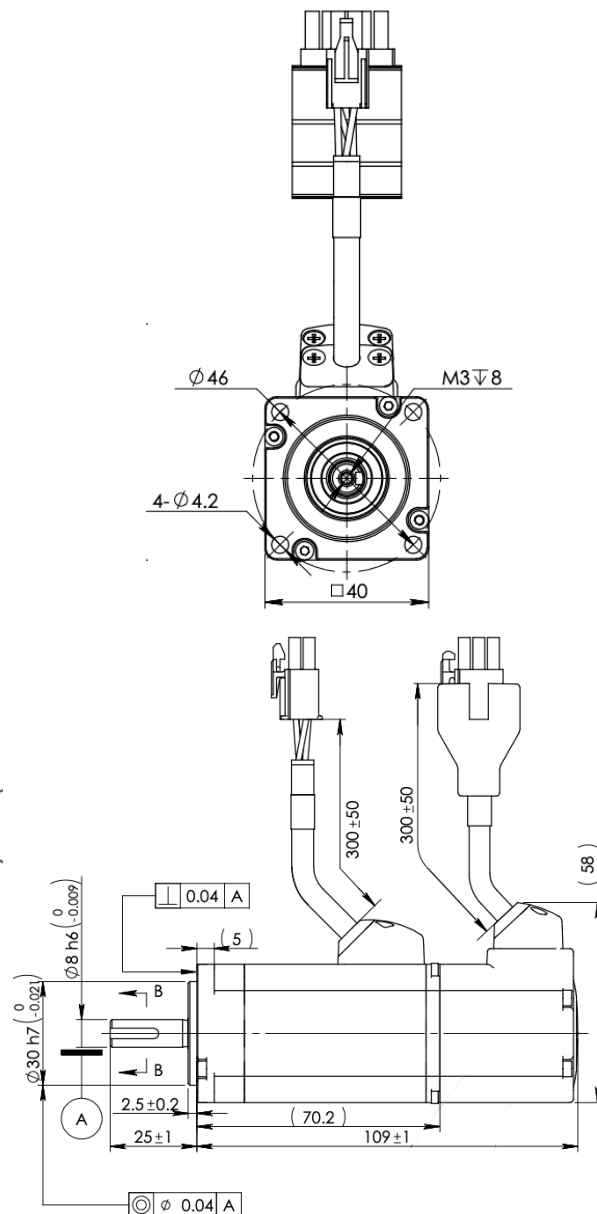
CE cUL[®] US
Class B IP65

NEOTEC Servo Motor Series: N0402XE2-KCD-N

Motor Specifications

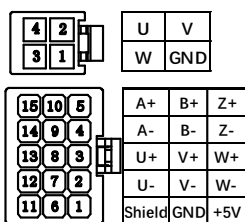
Brake option available (N0402XE2-KCD-B)

1	Typical Supply Voltages	V (DC)	36
2	Basic DC Bus Voltage	Watts	67
3	Rated Output Power	rpm	2000
4	Rated Speed	rpm	3100
5	Max. Mechanical Speed	Nm	0.32
6	Rated Torque	Nm	0.34
7	Continuous Stall Torque	Nm	0.91
8	Peak Torque	A (rms)	3.2
9	Rated Current	A (rms)	3.4
10	Continuous Stall Current	A (rms)	9.6
11	Peak Current	V(rms)/K rpm	6.1
12	Voltage Constant ±10%	Nm/A(rms)	0.1
13	Torque Constant ±10%	Ohm @20°C	1.23
14	Winding Resistance(Line-Line)±10%	mH (typ.)	1.56
15	Winding Inductance(Line-Line)±20%	kg m²	0.00000428
16	Inertia -(with encoder)	°C / W	2.4
17	Thermal Resistance(mounted)	Minutes	14.5
18	Thermal Time Constant	mm	120×120×5
19	Heat Sink Size(Alumnum)	N (max.)	50 N / 11 Lb
20	Shaft Load - Axial	N (max.)	60 N / 13.5 Lb
21	Shaft Load - Radial(End of Shaft)	kg	0.55 kg / 1.2 Lb
22	Weight (with std. encoder)	CE, cUL, RoHS	
23	Approvals	2500 P/r Incremental	
24	Encoder	B (130°C)	
25	Insulation Class	IP65 (except shaft without seal and non-sealed connectors)	
26	IP rating	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
27	Installation Location	Operating 0 to 40°C, Storage -20 to 80 °C	
28	Ambient Temperature	85% (free from condensing)	
29	Ambient Humidity (max.)	1000 m	
30	Altitude (max.)	49 m/s²	
31	Vibration Resistance	8	
32	Rotor Poles		



Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)

Motor Cable Pin Outs



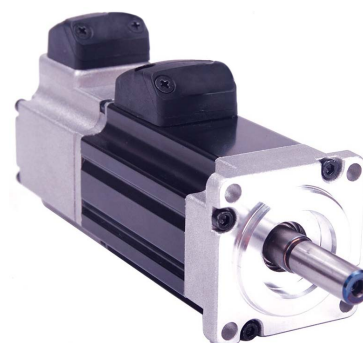
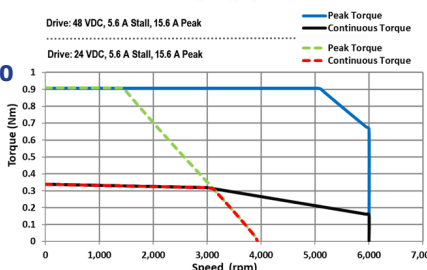
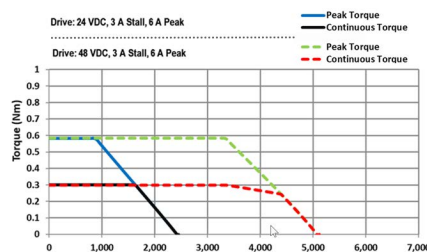
• Brake Connector:
Housing AMP 172165-1
Terminal Amp 170360-1

Pin #	Signal	Colour (Typ.)
1	Brake	Red
2	Brake	Black
Static Friction Torque 0.35Nm		
Rated Voltage 24VDC		
Rated Current 0.25A		

Speed Torque

Accelnet Plus
Amplifiers
BE, BP Series: 06

Accelnet Plus
Amplifiers
BE, BP Series: 14,20



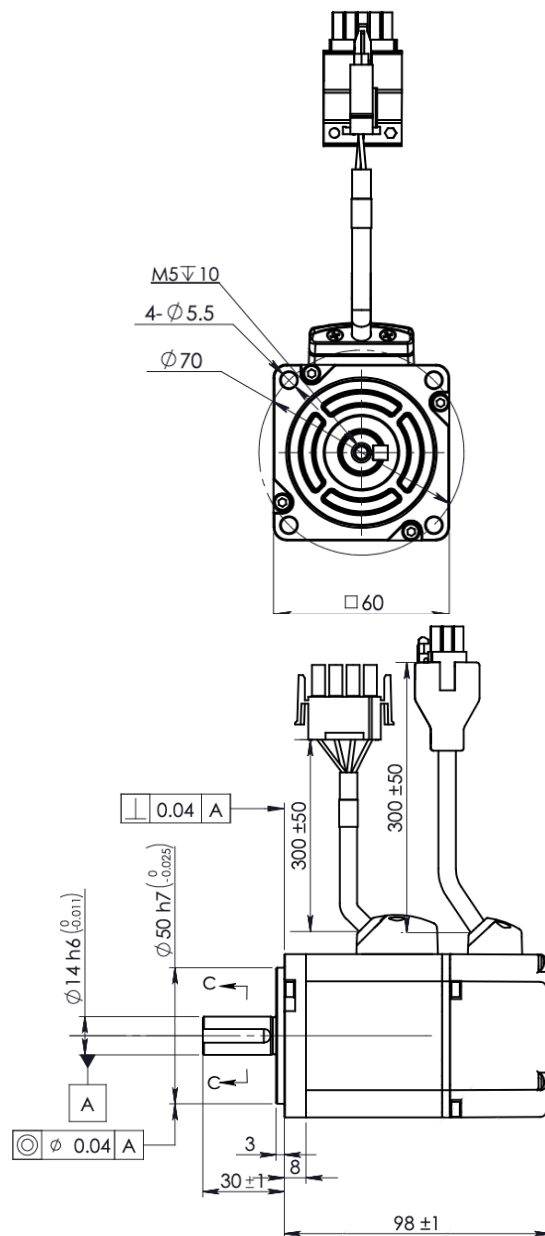
CE cUL[®] US
Class B IP65

NEOTEC Servo Motor Series: N0601XE2-KCD-N

Motor Specifications

1	Typical Supply Voltages	V (DC)	24-60 VDC
2	Basic DC Bus Voltage	V (DC)	48
3	Rated Output Power	Watts	200
4	Rated Speed	rpm	3000
5	Max. Mechanical Speed	rpm	6000
6	Rated Torque	Nm	0.64
7	Continuous Stall Torque	Nm	0.64
8	Peak Torque	Nm	1.9
9	Rated Current	A (rms)	10
10	Continuous Stall Current	A (rms)	10
11	Peak Current	A (rms)	30
12	Voltage Constant $\pm 10\%$	V(rms)/K rpm	4.1
13	Torque Constant $\pm 10\%$	Nm/A(rms)	0.065
14	Winding Resistance(Line-Line) $\pm 10\%$	Ohm @20°C	0.192
15	Winding Inductance(Line-Line) $\pm 20\%$	mH (typ.)	0.56
16	Inertia -(with encoder)	kg m ²	0.0000165
17	Thermal Resistance(mounted)	°C / W	1.8
18	Thermal Time Constant	Minutes	15
19	Heat Sink Size(Alumnum)	mm	180×180×5
20	Shaft Load - Axial	N (max.)	70 N / 15 Lb
21	Shaft Load - Radial(End of Shaft)	N (max.)	200 N / 45 Lb
22	Weight (with std. encoder)	kg	1.1 kg / 2.3 Lb
23	Approvals	CE, cUL, RoHS	
24	Encoder	2500 P/r Incremental	
25	Insulation Class	B (130°C)	
26	IP rating	IP65 (except shaft through hole and cable end connector)	
27	Installation Location	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
28	Ambient Temperature	Operating 0 to 40°C, Storage -20 to 80°C	
29	Ambient Humidity (max.)	85% (free from condensing)	
30	Altitude (max.)	1000 m	
31	Vibration Resistance	49 m/s ²	
32	Rotor Poles	8	

Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)



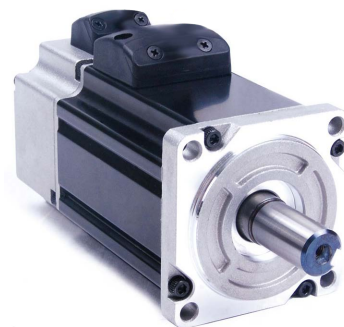
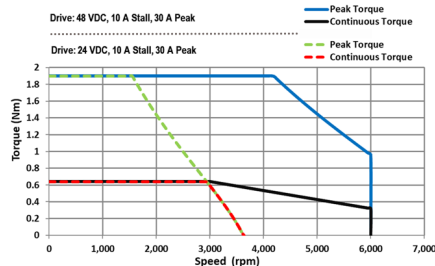
Motor Cable Pin Outs



16	10	8	A+	B+	Z+
14	9	4	A-	B-	Z-
13	8	3	U+	V+	W+
12	7	2	U-	V-	W-
11	6	1	Shield	GND	+5V

Speed Torque

Accelnet Plus Amplifiers
BE, BP Series: 30



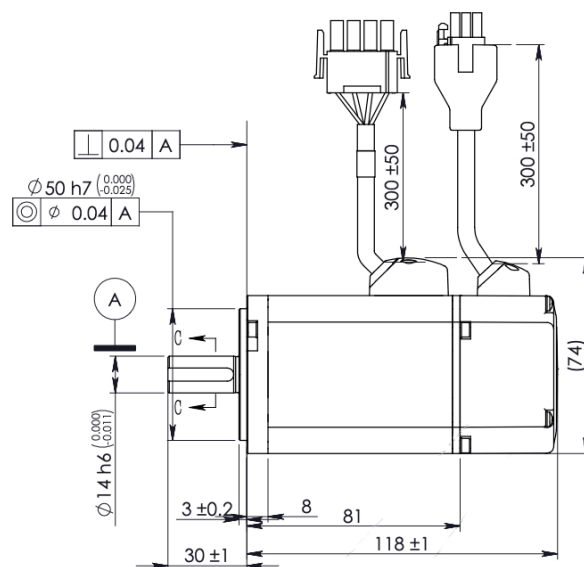
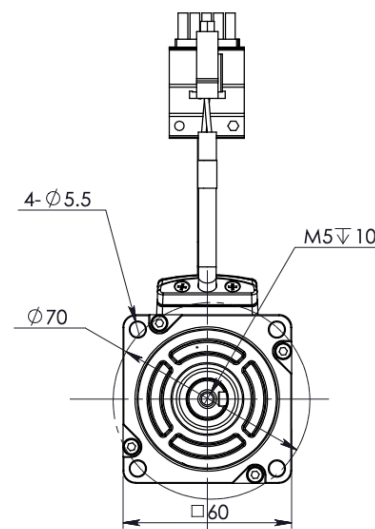
NEOTEC Servo Motor Series: N0602XE2-KCD-N

Motor Specifications

Brake option available (N0602XE2-KCD-B)

1	Typical Supply Voltages		48~80VDC
2	Basic DC Bus Voltage	V (DC)	60
3	Rated Output Power	Watts	400
4	Rated Speed	rpm	3000
5	Max. Mechanical Speed	rpm	6000
6	Rated Torque	Nm	1.27
7	Continuous Stall Torque	Nm	1.27
8	Peak Torque	Nm	3.4
9	Rated Current	A (rms)	10
10	Continuous Stall Current	A (rms)	10
11	Peak Current	A (rms)	30
12	Voltage Constant $\pm 10\%$	V(rms)/K rpm	7.4
13	Torque Constant $\pm 10\%$	Nm/A(rms)	0.123
14	Winding Resistance(Line-Line) $\pm 10\%$	Ohm @20°C	0.25
15	Winding Inductance(Line-Line) $\pm 20\%$	mH (typ.)	0.84
16	Inertia -(with encoder)	kg m ²	0.0000272
17	Thermal Resistance(mounted)	°C / W	0.000024
18	Thermal Time Constant	Minutes	1.43
19	Heat Sink Size(Alumnum)	mm	180×180×5
20	Shaft Load - Axial	N (max.)	70 N / 15 Lb
21	Shaft Load - Radial(End of Shaft)	N (max.)	240 N / 54 Lb
22	Weight (with std. encoder)	kg	1.4 kg / 3.1 Lb
23	Approvals	CE, cUL, RoHS	
24	Encoder	2500 P/r Incremental	
25	Insulation Class	B (130°C)	
26	IP rating	IP65 (except shaft through hole and cable end connector)	
27	Installation Location	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
28	Ambient Temperature	Operating 0 to 40°C, Storage -20 to 80°C	
29	Ambient Humidity (max.)	85% (free from condensing)	
30	Altitude (max.)	1000 m	
31	Vibration Resistance	49 m/s ²	
32	Rotor Poles	8	

Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)



Motor Cable Pin Outs

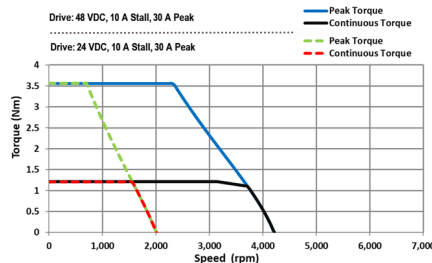


15	10	5	A+	B+	Z+
14	9	4	A-	B-	Z-
13	8	3	U+	V+	W+
12	7	2	U-	V-	W-
11	6	1	Shield	GND	+5V

Speed Torque

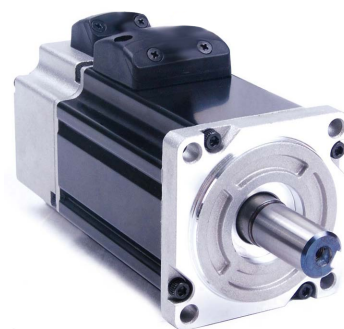
Accelnet Plus Amplifiers
BE, BP Series: 30

• Brake Connector:
Housing AMP 172165-1
Terminal Amp 170360-1



Pin #	Signal	Colour (Typ.)
1	Brake	Red
2	Brake	Black

Static Friction Torque	2Nm
Rated Voltage	24VDC
Rated Current	0.38A



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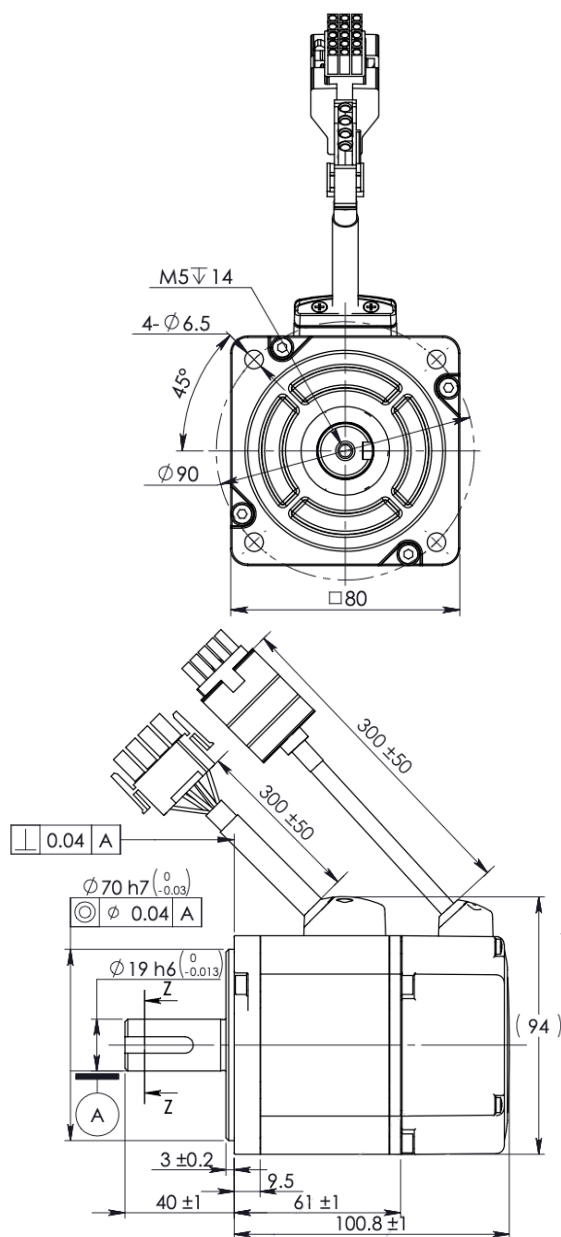
Rev. 4-23-24

NEOTEC Servo Motor Series: N0801XE2-KCD-N

Motor Specifications

1	Typical Supply Voltages		24-60 VAC
2	Basic DC Bus Voltage	V (DC)	48
3	Rated Output Power	Watts	300
4	Rated Speed	rpm	3000
5	Max. Mechanical Speed	rpm	6000
6	Rated Torque	Nm	0.95
7	Continuous Stall Torque	Nm	1
8	Peak Torque	Nm	2.3
9	Rated Current	A (rms)	10
10	Continuous Stall Current	A (rms)	10.6
11	Peak Current	A (rms)	25
12	Voltage Constant $\pm 10\%$	V(rms)/K rpm	6.2
13	Torque Constant $\pm 10\%$	Nm/A(rms)	0.096
14	Winding Resistance(Line-Line) $\pm 10\%$	Ohm @20°C	0.188
15	Winding Inductance(Line-Line) $\pm 20\%$	mH (typ.)	0.85
16	Inertia -(with encoder)	kg m ²	0.000045
17	Thermal Resistance(mounted)	°C / W	1.48
18	Thermal Time Constant	Minutes	14
19	Heat Sink Size(Alumnum)	mm	240×240×6
20	Shaft Load - Axial	N (max.)	90 N / 20 Lb
21	Shaft Load - Radial(End of Shaft)	N (max.)	200 N / 45 Lb
22	Weight (with std. encoder)	kg	1.7 kg / 3.7 Lb
23	Approvals	CE, cUL, RoHS	
24	Encoder	2500 P/r Incremental	
25	Insulation Class	B (130°C)	
26	IP rating	IP65 (except shaft without seal and non-sealed connectors)	
27	Installation Location	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
28	Ambient Temperature	Operating 0 to 40°C, Storage -20 to 80 °C	
29	Ambient Humidity (max.)	85% (free from condensing)	
30	Altitude (max.)	1000 m	
31	Vibration Resistance	49 m/s ²	
32	Rotor Poles	8	

Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)



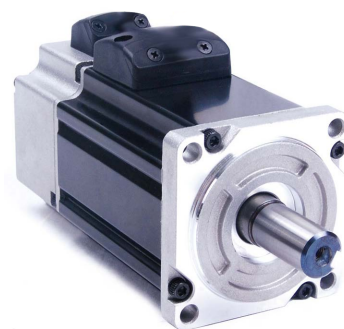
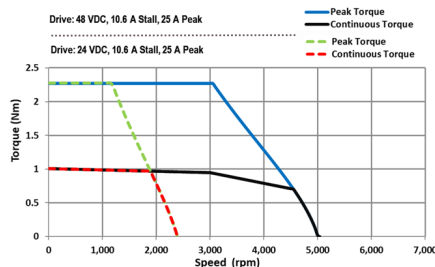
Motor Cable Pin Outs



15	10	5	A+	B+	Z+
14	9	4	A-	B-	Z-
13	8	3	U+	V+	W+
12	7	2	U-	V-	W-
11	6	1	Shield	GND	+5V

Speed Torque

Accelnet Plus Amplifiers
BE, BP Series: 30



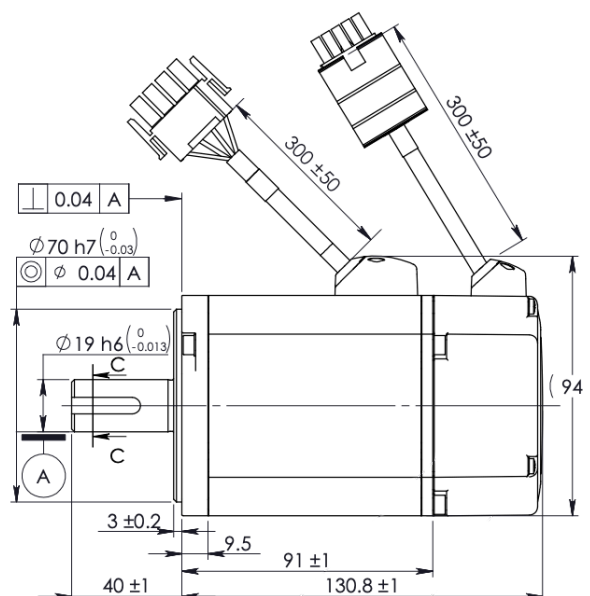
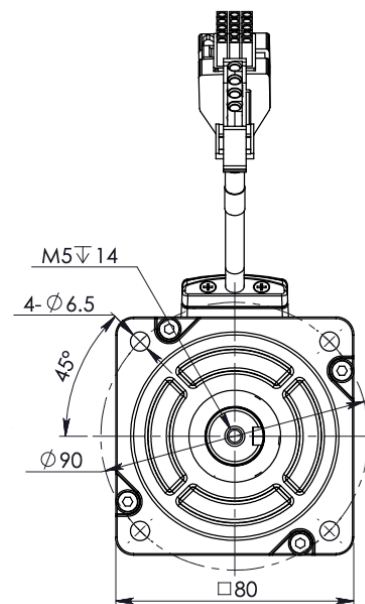
NEOTEC Servo Motor Series: N0803XE2-KCD-N

Motor Specifications

Brake option available (N0803XE2-KCD-B)

1	Typical Supply Voltages		24-60 VDC
2	Basic DC Bus Voltage	V (DC)	48
3	Rated Output Power	Watts	750
4	Rated Speed	rpm	3000
5	Max. Mechanical Speed	rpm	3600
6	Rated Torque	Nm	2.4
7	Continuous Stall Torque	Nm	2.4
8	Peak Torque	Nm	6
9	Rated Current	A (rms)	22.5
10	Continuous Stall Current	A (rms)	22.5
11	Peak Current	A (rms)	56.5
12	Voltage Constant $\pm 10\%$	V(rms)/K rpm	6.8
13	Torque Constant $\pm 10\%$	Nm/A(rms)	0.11
14	Winding Resistance(Line-Line) $\pm 10\%$	Ohm @20°C	0.06
15	Winding Inductance(Line-Line) $\pm 20\%$	mH (typ.)	0.25 $\triangle 1$
16	Inertia -(with encoder)	kg m ²	0.000089
17	Thermal Resistance(mounted)	°C / W	1.04
18	Thermal Time Constant	Minutes	22
19	Heat Sink Size(Alumnum)	mm	240×240×6
20	Shaft Load - Axial	N (max.)	90 N / 20 Lb
21	Shaft Load - Radial(End of Shaft)	N (max.)	240 N / 54 Lb
22	Weight (with std. encoder)	kg	2.6 kg / 5.8 Lb
23	Approvals	CE, cUL, RoHS	
24	Encoder	2500 P/r Incremental	
25	Insulation Class	B (130°C)	
26	IP rating	IP65 (except shaft through hole and cable end connector)	
27	Installation Location	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
28	Ambient Temperature	Operating 0 to 40°C, Storage -20 to 80°C	
29	Ambient Humidity (max.)	85% (free from condensing)	
30	Altitude (max.)	1000 m	
31	Vibration Resistance	49 m/s ²	
32	Rotor Poles	8	

Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)



Motor Cable Pin Outs

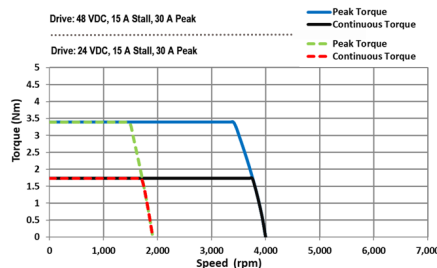


15	10	5	A+	B+	Z+
14	9	4	A-	B-	Z-
13	8	3	U+	V+	W+
12	7	2	U-	V-	W-
11	6	1	Shield	GND	+5V

Speed Torque

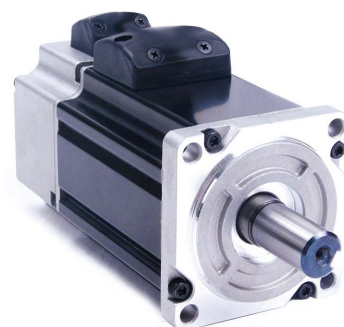
Accelnet Plus Amplifiers
BE, BP Series: 30

• Brake Connector:
Housing AMP 172165-1
Terminal Amp 170360-1



Pin #	Signal	Colour (Typ.)
1	Brake	Red
2	Brake	Black

Static Friction Torque	4.5Nm
Rated Voltage	24VDC
Rated Current	0.61A



NEOTEC Copley Amplifiers

AccelnetPlus sets a new standard for performance. This unique product is available in both EtherCAT and CANopen versions. Both models offer optimal cost per node to deliver efficient and cost-effective operation. A wide range of absolute encoder interfaces are built

in for unbeatable versatility, including: BiSS, SSI, Absolute A, and Endat. Higher-resolution current loops enable AccelnetPlus to meet the needs of the most demanding applications, and Safe Torque Off functionality reduces system cost in safety critical applications.

Accelnet Plus CANopen: Single & Dual

Accelnet Plus Panel CANopen



BPL-090-06
BPL-090-14
BPL-090-30

Accelnet Plus Dual-Axis Panel CANopen



BP2-090-06
BP2-090-14
BP2-090-20

Accelnet Plus EtherCAT: Single & Dual

Accelnet Plus Panel EtherCAT



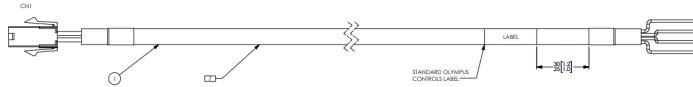
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BEL-090-14
BEL-090-30

Accelnet Plus Dual-Axis Panel EtherCAT

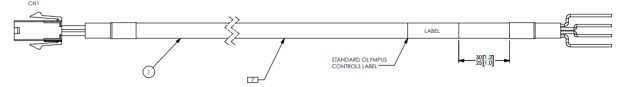


BE2-090-06
BE2-090-14
BE2-090-20

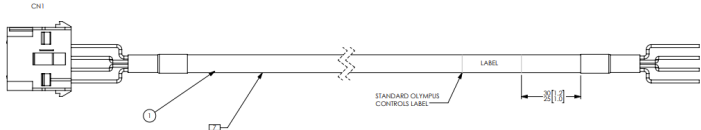
Power Cables



CA, PWR, NEOTEC40, COPLEY, 3M
SA0174151



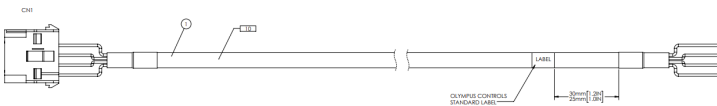
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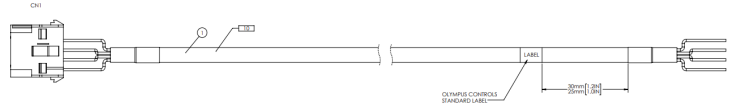
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CA, PWR, NEOTEC60/80, COPLEY, 5M
SA0174154

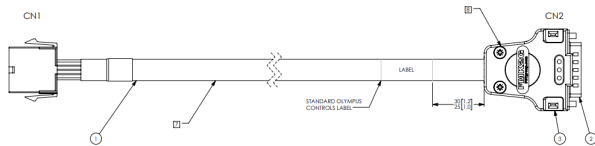


CA, PWR, NEOTEC N0803, 3M
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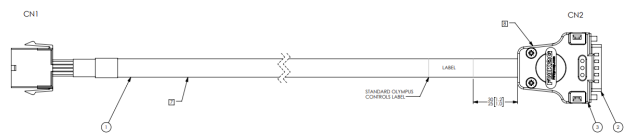


CA, PWR, NEOTEC N0803, 5M
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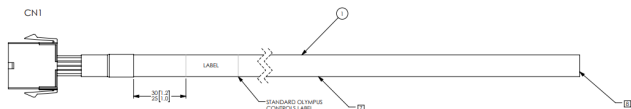
Feedback Cables



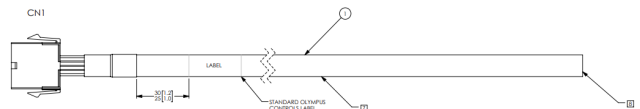
CA, FDBK, NEOTEC, COPLEY, 3M
SA0174155



CA, FDBK, NEOTEC, COPLEY, 5M
SA0174156

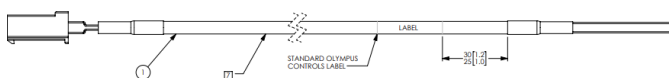


CA, FDBK, NEOTEC, FL, 3M
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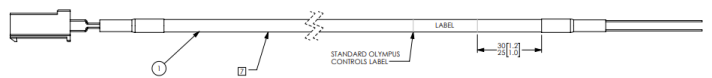


CA, FDBK, NEOTEC, FL, 5M
SA0174157

Brake Cables



CA, BRK, NEOTEC, FL, 3M
SA0174159



CA, BRK, NEOTEC, FL, 5M
SA0174160