



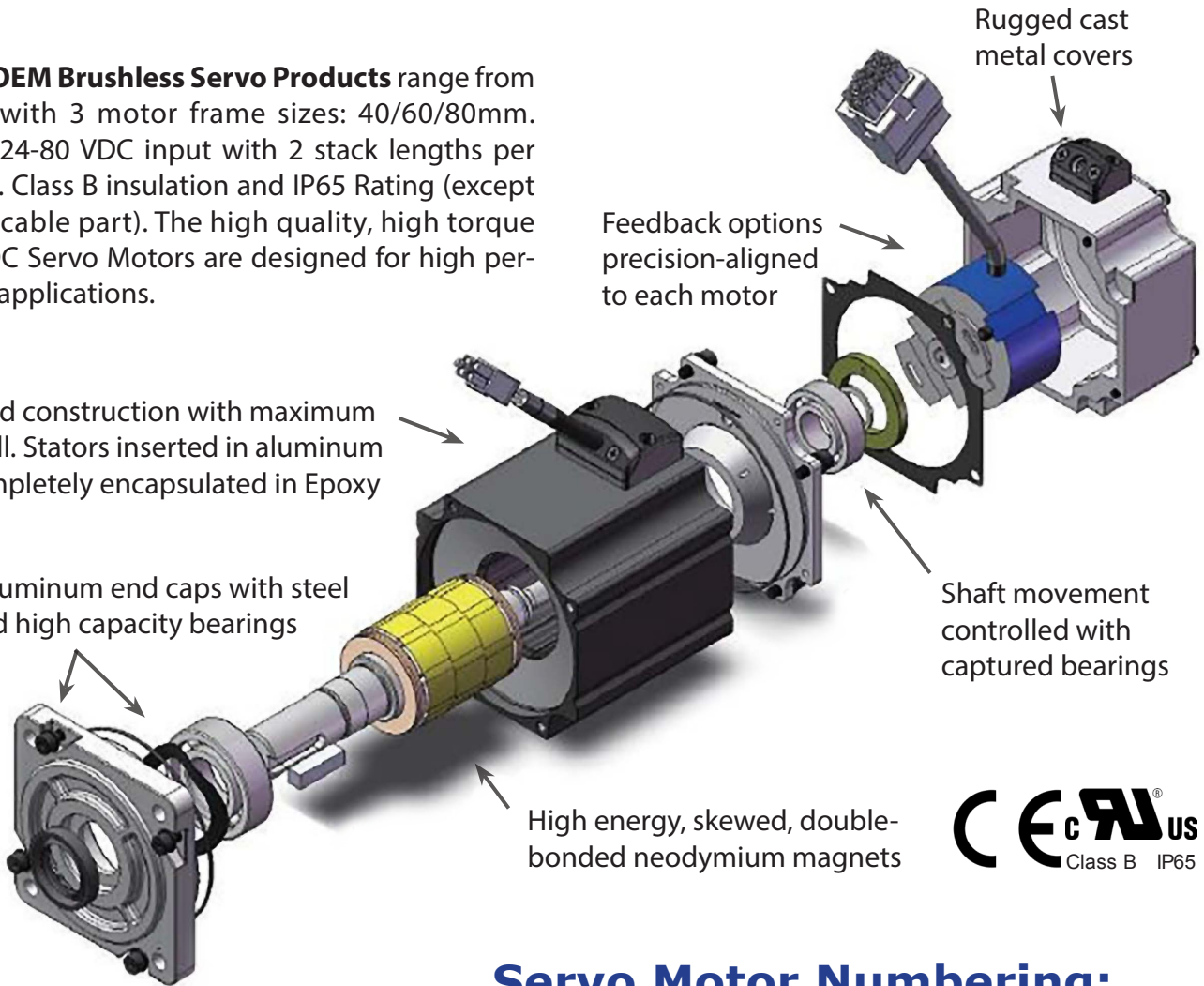
NEOTEC

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.

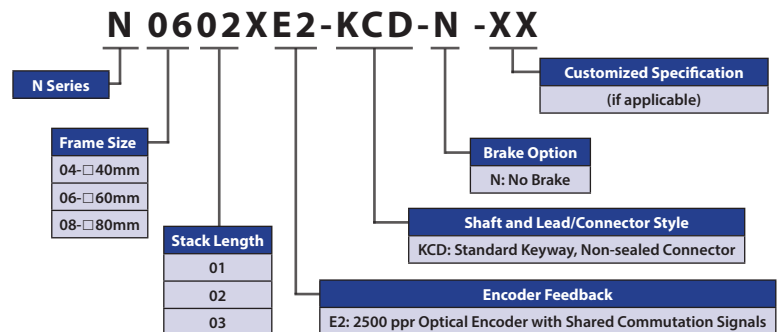
Segmented construction with maximum winding fill. Stators inserted in aluminum shells; completely encapsulated in Epoxy

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:

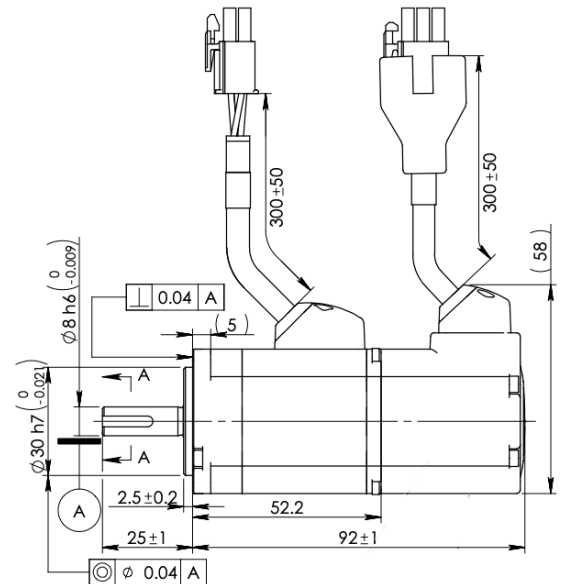
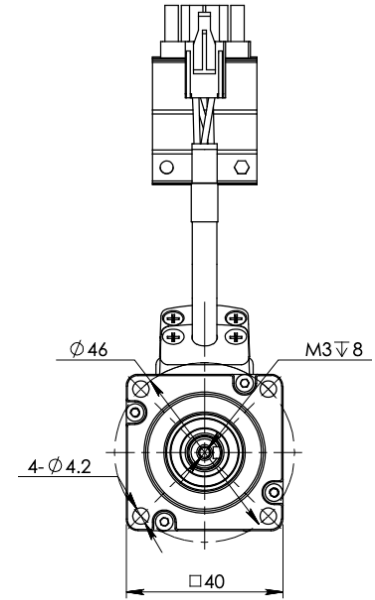


insidesales@olympus-controls.com
<https://olympus-controls.com/toolbox/neotec-motors/>

NEOTEC Servo Motor Series: N0401XE2-KCD-N

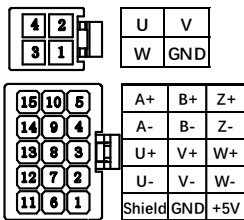
Motor Specifications

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	



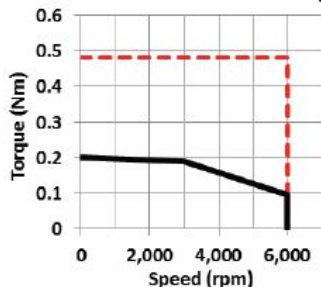
Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)

Motor Cable Pin Outs

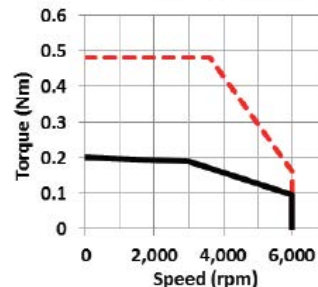


Speed Torque

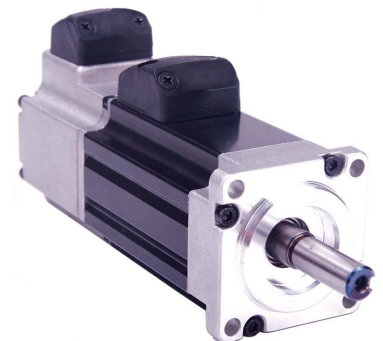
SM0401 (60 Watts) - Winding H
48 VDC - 5.7 Amps



SM0401 (60 Watts) - Winding H
24 VDC - 5.7 Amps



— Max. Intermittent Torque
— Max. Continuous Torque

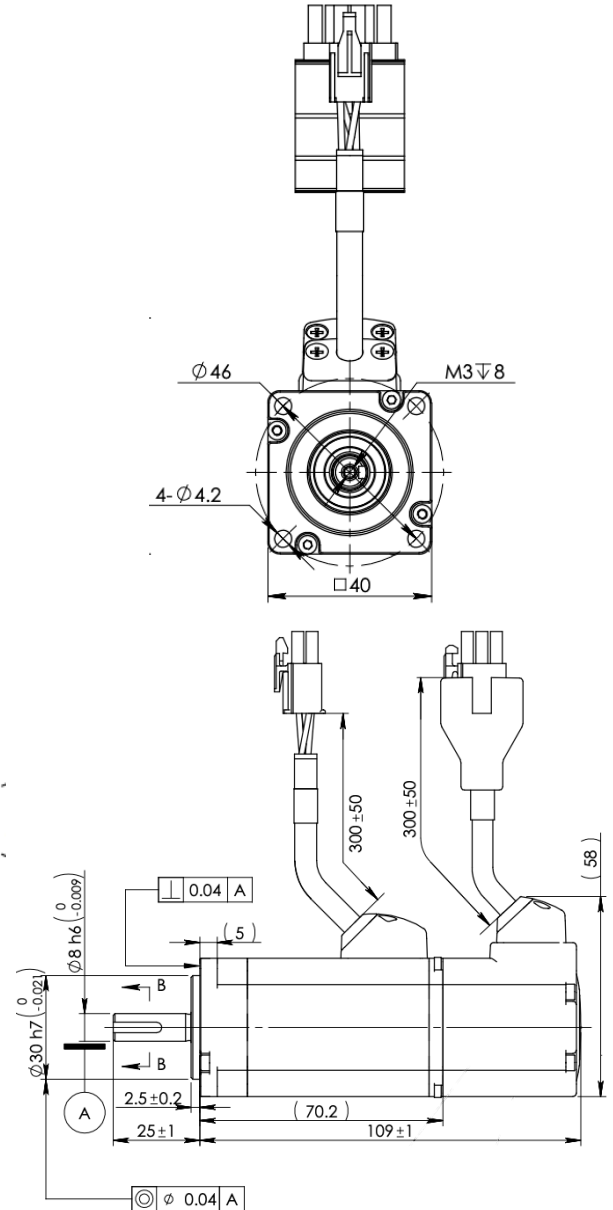


NEOTEC Servo Motor Series: N0402XE2-KCD-N

Motor Specifications

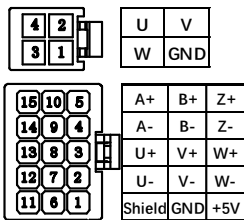
Brake option available (N0402XE2-KCD-B)

1	Typical Supply Voltages		
2	Basic DC Bus Voltage	V (DC)	36
3	Rated Output Power	Watts	67
4	Rated Speed	rpm	2000
5	Max. Mechanical Speed	rpm	3100
6	Rated Torque	Nm	0.32
7	Continuous Stall Torque	Nm	0.34
8	Peak Torque	Nm	0.91
9	Rated Current	A (rms)	3.2
10	Continuous Stall Current	A (rms)	3.4
11	Peak Current	A (rms)	9.6
12	Voltage Constant $\pm 10\%$	V(rms)/K rpm	6.1
13	Torque Constant $\pm 10\%$	Nm/A(rms)	0.1
14	Winding Resistance(Line-Line) $\pm 10\%$	Ohm @20°C	1.23
15	Winding Inductance(Line-Line) $\pm 20\%$	mH (typ.)	1.56
16	Inertia -(with encoder)	kg m ²	0.00000428
17	Thermal Resistance(mounted)	°C / W	2.4
18	Thermal Time Constant	Minutes	14.5
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.)	60 N / 13.5 Lb
22	Weight (with std. encoder)	kg	0.55 kg / 1.2 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



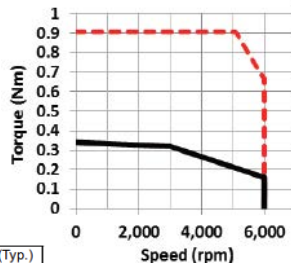
• Brake Connector:
Housing AMP 172165-1
Terminal Amp 170360-1

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

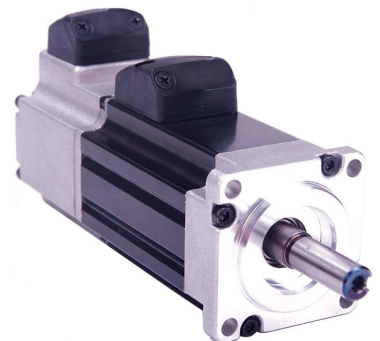
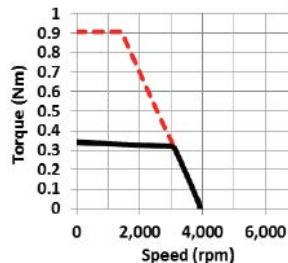
Static Friction Torque	0.35Nm
Rated Voltage	24VDC
Rated Current	0.25A

Speed Torque

SM0402 (100 Watts) - Winding F
48 VDC - 5.2 Amps



SM0402 (100 Watts) - Winding F
24 VDC - 5.2 Amps

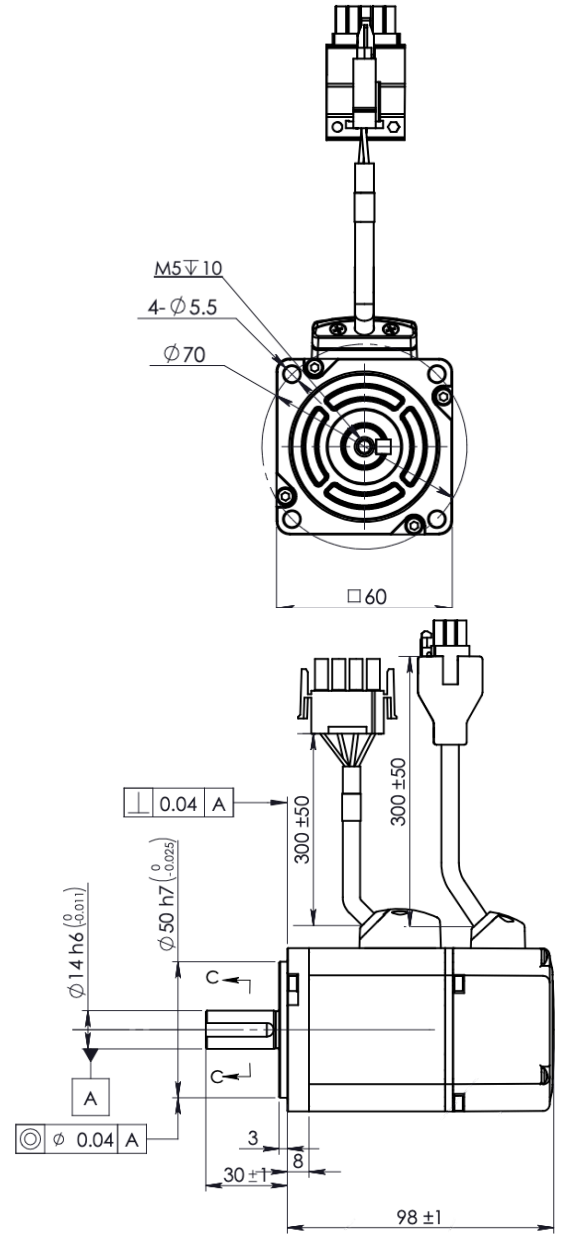


CE cRU US
Class B IP65

NEOTEC Servo Motor Series: N0601XE2-KCD-N

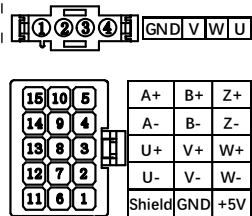
Motor Specifications

1	Typical Supply Voltages		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	



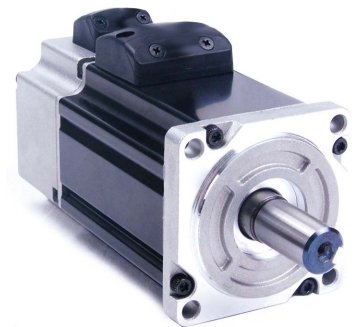
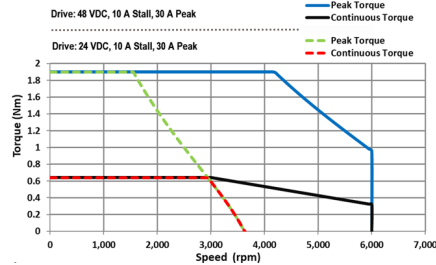
Shaft Load: (L₁₀ life, 20,000 hours, 2,000 RPM)

Motor Cable Pin Outs



Speed Torque

Accelnet Plus Amplifiers
BE, BP Series: 30

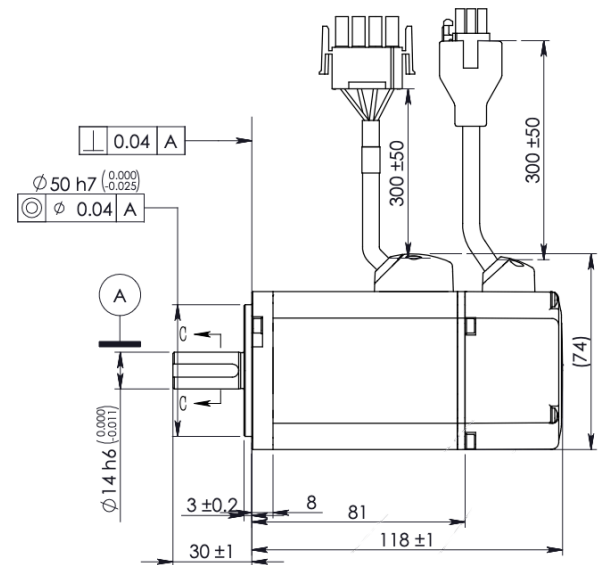
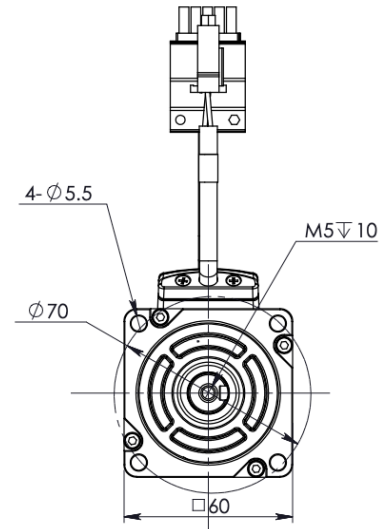


NEOTEC Servo Motor Series: N0602XE2-KCD-N

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 ±10%	V(rms)/K rpm	7.4
13	Torque Constant ±10%	Nm/A(rms)	0.123
14	Winding Resistance(Line-Line)±10%	Ohm @20°C	0.25
15	Winding Inductance(Line-Line)±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(Aluminum)	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 B (130°C)	
25	Insulation Class		
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)

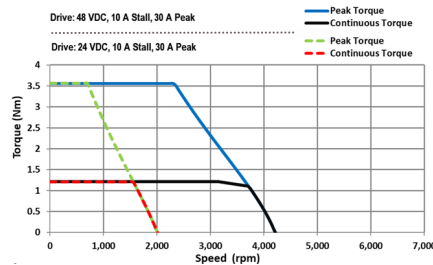
Motor Cable Pin Outs



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

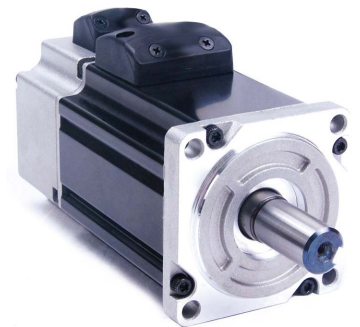
Accelnet Plus Amplifiers
BE, BP Series: 30



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

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

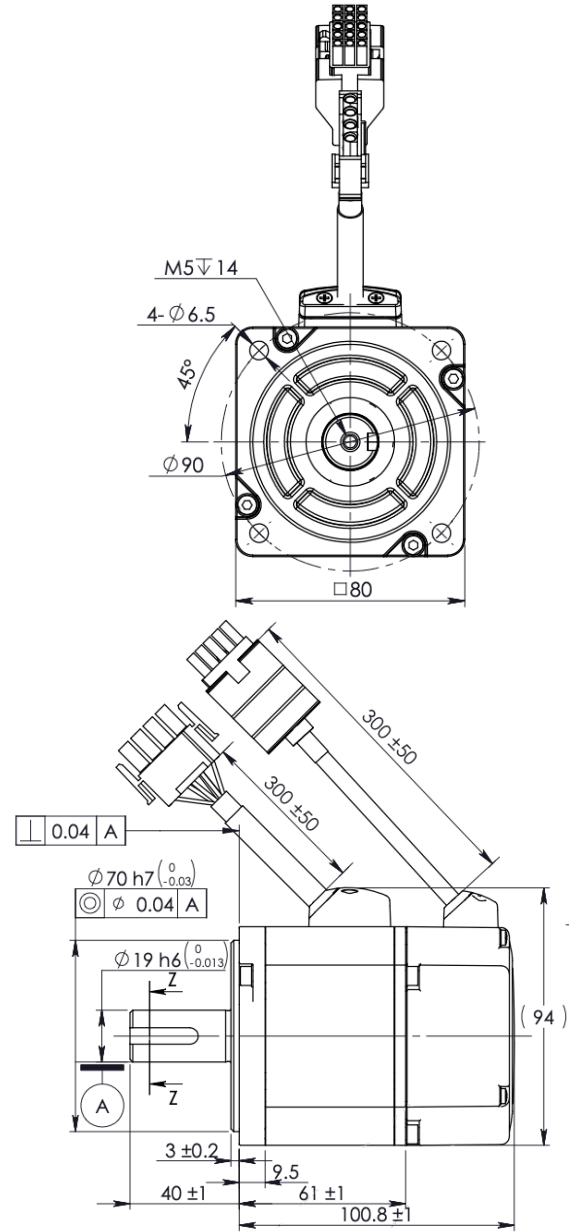
Static Friction Torque	2Nm
Rated Voltage	24VDC
Rated Current	0.38A



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)

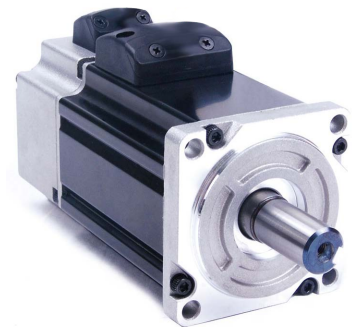
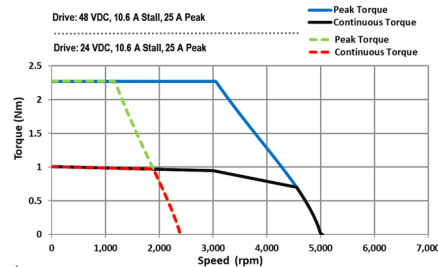
Motor Cable Pin Outs



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

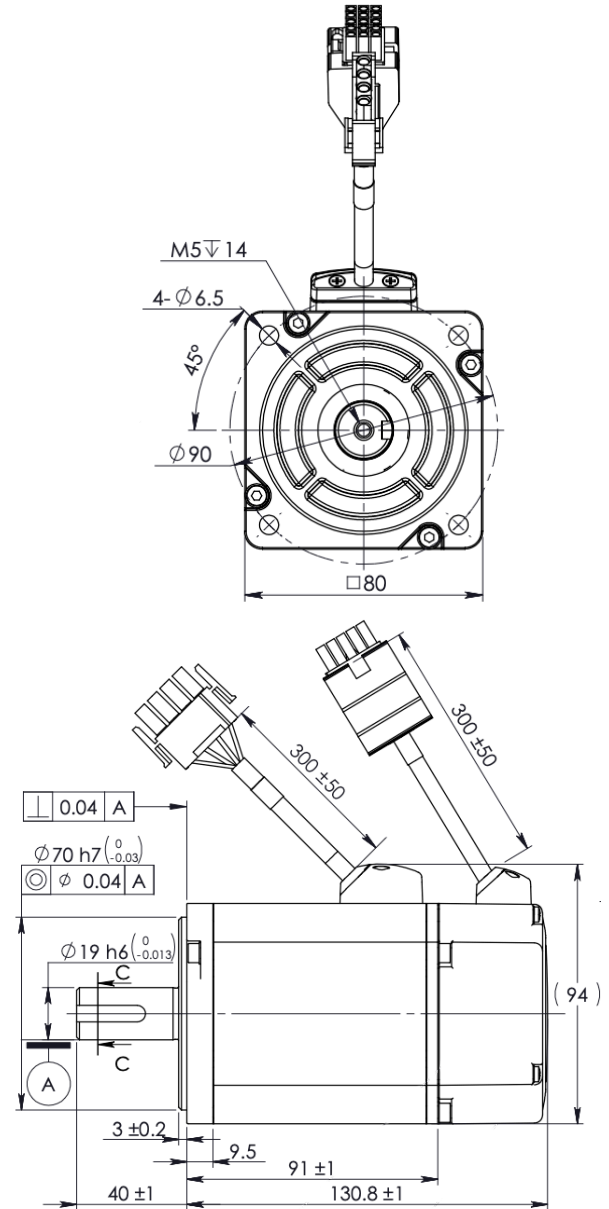


NEOTEC Servo Motor Series: N0803XE2-KCD-N

Motor Specifications

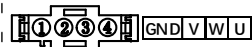
Brake option available (N0803XE2-KCD-B)

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 B (130°C)	
25	Insulation Class	IP65 (except shaft through hole and cable end conetor)	
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/s ²	
31	Vibration Resistance	8	
32	Rotor Poles		



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

Motor Cable Pin Outs

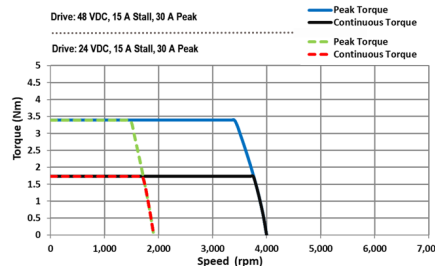


15	10	5	A+	B+	Z+
14	9	4	A-	B-	Z-
13	8	3	U+	V+	W+
12	7	2	U-	V-	W-
11	6	1	Shield	GND	+5V

Speed Torque

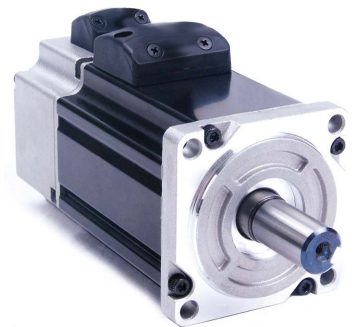
Accelnet Plus Amplifiers
BE, BP Series: 30

• 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



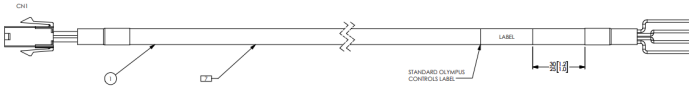
BEL-090-06
BEL-090-14
BEL-090-30

Accelnet Plus Dual-Axis Panel EtherCAT

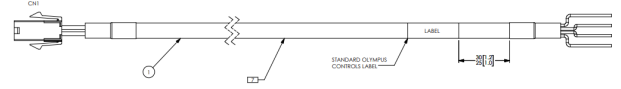


BE2-090-06
BE2-090-14
BE2-090-20

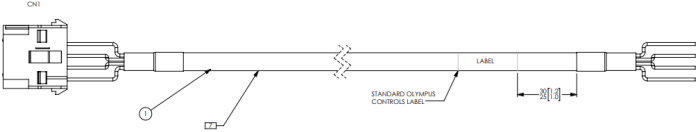
Power Cables



CA, PWR, NEOTEC40, COPLEY, 3M
SA0174151



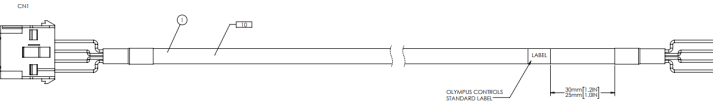
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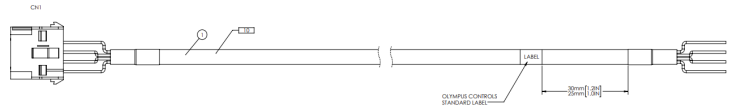
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CA, PWR, NEOTEC60/80, COPLEY, 5M
SA0174154

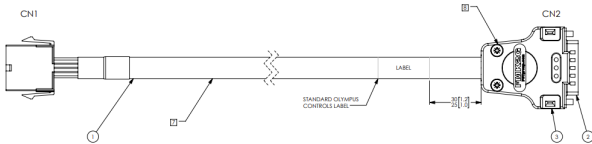


CA, PWR, NEOTEC N0803, 3M
SA0182862

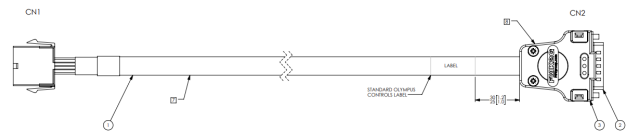


CA, PWR, NEOTEC N0803, 5M
SA0182864

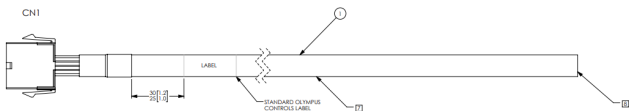
Feedback Cables



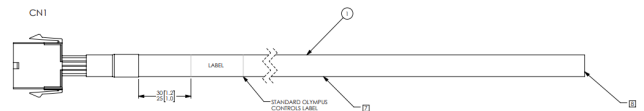
CA, FDBK, NEOTEC, COPLEY, 3M
SA0174155



CA, FDBK, NEOTEC, COPLEY, 5M
SA0174156

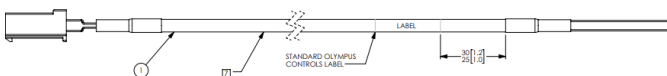


CA, FDBK, NEOTEC, FL, 3M
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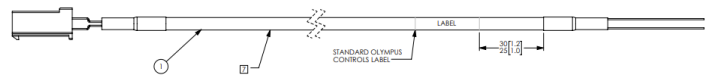


CA, FDBK, NEOTEC, FL, 5M
SA0174157

Brake Cables



CA, BRK, NEOTEC, FL, 3M
SA0174159



CA, BRK, NEOTEC, FL, 5M
SA0174160