

Brushless servomotors

NX series

0,45 to 64 Nm



Description

NX Series brushless servomotors from Parker SSD Parvex combine exceptional precision and motion quality, high dynamic performances and very compact dimensions. A large set of torque / speed characteristics, options and customization possibilities are available, making NX Series servomotors the ideal solution for most servosystems applications.

Advantages

High precision and motion quality

High dynamic performances

Compact dimensions and robustness

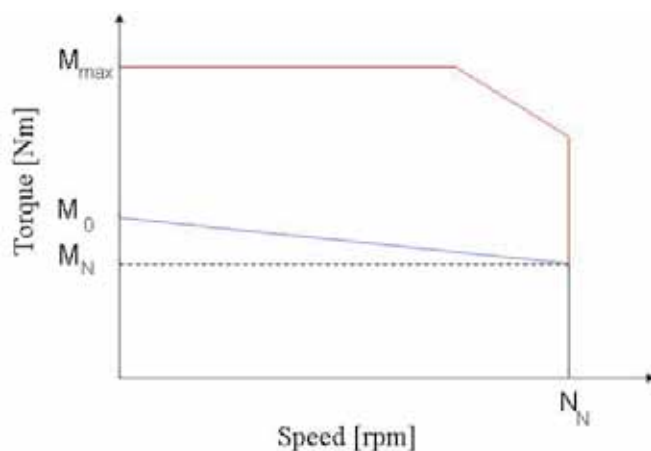
Large set of options and customization possibilities

CE and UL marking certification available

Applications

- Machine-tools axis
- Packaging machinery
- Robot applications
- Special machinery

General technical characteristics		
Motor type	Permanent magnets synchronous servomotors	
Rotor design	Rotor with concentrated-flux rare earth magnets	
Number of poles	10	
Power range	0,2 - 13,7 kW	
Torque range	0,45 - 64 Nm	
Speed range	0 - 7500 rpm	
Mounting	Flange with smooth holes	
Shaft end	<ul style="list-style-type: none"> • Plain smooth shaft (standard) • Plain keyed shaft (option) 	
Cooling	<ul style="list-style-type: none"> • Natural ventilation • Forced ventilation (NX860V only) 	
Protection level (IEC60034-5)	<ul style="list-style-type: none"> • IP64 (standard) • IP65 (option) • IP44 (ventilated version) 	
Feedback sensors	<ul style="list-style-type: none"> • Resolver (standard) • Absolute Endat, Hiperface, Encoder • Posivex (only with Digivex Motion) 	
Other options	<ul style="list-style-type: none"> • Brake • Thermal protection (PTC, Thermo Switch or KTY) 	
Marking	CE	UL
Voltage supply	230 / 400 VAC	230 / 480 VAC
Temperature class (IEC60034-1)	<ul style="list-style-type: none"> • Class F 	<ul style="list-style-type: none"> • Class A (NX1 – 2) • Class F (NX3 – 8)
Connections	<ul style="list-style-type: none"> • Connectors (standard) • Flying cables (option) • Terminal box (option) 	<ul style="list-style-type: none"> • Connectors (NX1 – 8) • Terminal box (NX860V)



NX1 - NX2 models

CE motors

0,45 - 1 Nm



Selection and ordering

Rated Speed N_N (rpm)	Stall Torque M_0^* (Nm)	Rated Torque M_N (Nm)	Peak Torque N_{MAX} (Nm)	Stall Current I_0^* (A _{RMS})	Rated Current I_N (A _{RMS})	Peak Current I_{MAX} (A _{RMS})	Rated Power P_N (kW)	Moment of Inertia J (kg.m ² .10 ⁻⁵)	Product Code												
230 VAC supply voltage - mono or three-phased																					
6000	0.45	0.33	1.72	0.99	0.78	3.96	0.21	1.30	N	X	1	1	0	E	■	P	■	■	■	■	■
5000	0.45	0.37	2	1.01	0.84	5.08	0.19	2.10	N	X	2	0	5	E	■	V	■	■	■	■	■
7500	0.45	0.29	2	1.4	0.95	7.01	0.23	2.10	N	X	2	0	5	E	■	S	■	■	■	■	■
4000	1	0.80	3.4	1.34	1.11	5.35	0.34	3.80	N	X	2	1	0	E	■	T	■	■	■	■	■
6000	1	0.61	3.4	1.99	1.32	7.96	0.38	3.80	N	X	2	1	0	E	■	P	■	■	■	■	■
400 VAC supply voltage - three-phase																					
8900	0.45	0.23	2	1.34	0.79	7.01	0.21	2.10	N	X	2	0	5	E	■	S	■	■	■	■	■
6000	1	0.61	3.4	1.34	0.89	5.35	0.38	3.80	N	X	2	1	0	E	■	T	■	■	■	■	■
7000	1	0.5	2	2.75			0.21	3.80	N	X	2	1	0	E	■	G	■	■	■	■	■

* Mounting on aluminium flange : 280 x 280 x 8 mm (NX1-2),
Temperature < 40°C near motor's flange

Drives associations

Motor	Rated Speed N_N (rpm)	Compax 3		637f/638	Digivex
		Drive reference	Max.Speed (rpm)	Drive reference	Drive reference
230 VAC supply voltage - mono or three-phased					
N X 1 1 0 E ■ P ■ ■ ■ ■ ■	6000	C3S100V2...	6000	638A-01-3-F-0-STO...	DLD13M04R
N X 2 0 5 E ■ V ■ ■ ■ ■ ■	5000	C3S100V2...	5000	638A-01-3-F-0-STO...	DLD13M04R
N X 2 0 5 E ■ S ■ ■ ■ ■ ■	7500	C3S100V2...	7500	638A-02-3-F-0-STO...	DLD13M04R
N X 2 1 0 E ■ T ■ ■ ■ ■ ■	4000	C3S100V2...	3420	638A-02-3-F-0-STO...	DLD13M04R
N X 2 1 0 E ■ P ■ ■ ■ ■ ■	6000	C3S100V2...	5530	638A-02-3-F-0-STO...	DLD13M04R
400 VAC supply voltage - three-phased					
N X 2 0 5 E ■ S ■ ■ ■ ■ ■	8900	C3S015V4...	8900	638B-03-6-F-0-STO...	DSD16002...
N X 2 1 0 E ■ T ■ ■ ■ ■ ■	6000	C3S015V4...	6000	638B-03-6-F-0-STO...	DSD16002...
N X 2 1 0 E ■ G ■ ■ ■ ■ ■	7000	C3S038V4...	7000	638B-05-6-F-0-STO...	DSD16004...

NX1 - NX2 models

CE motors

0,45 - 1 Nm



NX1, NX2, CE - codification

NX1/NX2 - Natural cooling		Product Code Example											
		N	X	2	1	0	E	G					
FEEDBACK SENSOR													
2 poles resolver (standard)								A					
Cost effective absolute POSIVEX encoder (NX1 on request)								M					
Absolute single-turn HIPERFACE encoder 128 ppr SKS36 (NX1 on request)								R					
Absolute multi-turn HIPERFACE encoder 128 ppr SKM36 (NX1 on request)								S					
Absolute single-turn ENDAT encoder ECN 1113 (NX1 on request)								V					
Absolute multi-turn ENDAT encoder EQN 1125 (NX 1 on request)								W					
Low cost encoder with 10 commutation tracks 2048 ppr (NX1 on request)								X					
Absolute multi-turn HIPERFACE 16ppr SEL37 (NX1 on request)								Q					
PAINTING													
Without painting (standard)									R				
Black mat									B				
CONNECTIONS		VENTILATION											
Flying cables		No										1	
Wires with shielded sleeve		No										4	
Connectors (standard)		No										7	
BRAKE		THERMAL PROTECTION											
Without brake		No protection											0
Without brake		PTC on power connection											1
With brake		No protection											3
With brake		PTC on power connection											4
PROTECTION DEGREE													
IP64 (standard)													0
IP65													1
SHAFT END													
Smooth shaft (standard)													0
Keyed shaft													1

* Mounting on aluminium flange : 280 x 280 x 8 mm (NX1-2),
Temperature < 40°C near motor's flange

NX1 - NX2 models

CE motors

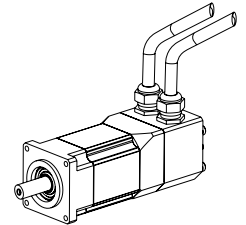
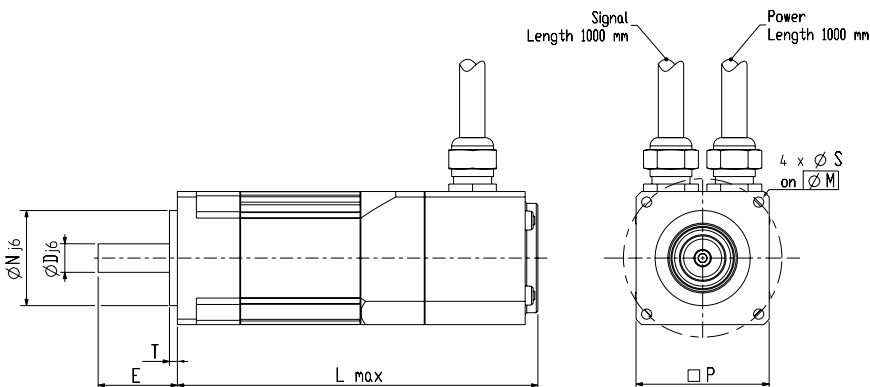
0,45 - 1 Nm



Dimensions and drawings (resolver version)

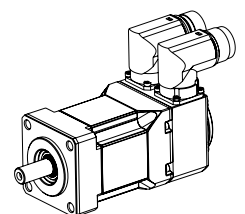
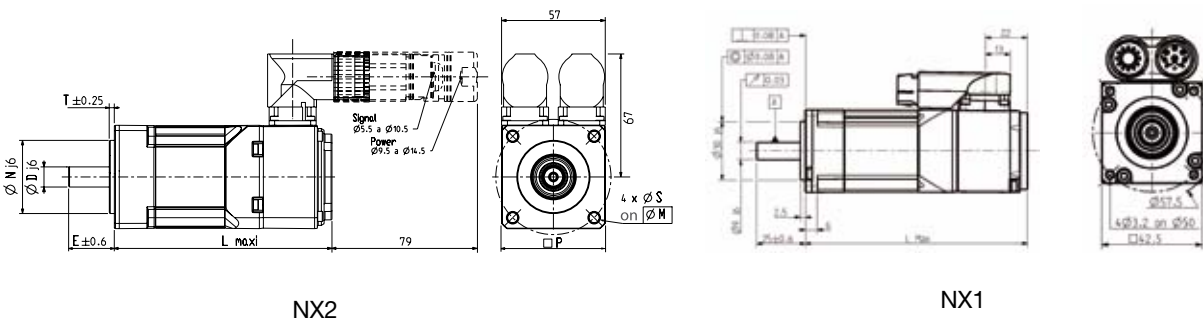
NX1 and NX2 dimensions - wires with shielded sleeve													
Motor	N (mm)	M (mm)	D (mm)	E (mm)	T (mm)	P (mm)	S (mm)	Without brake		With brake		Fr* (daN)	Fa* (daN)
								Weight (kg)	L (mm)	Weight (kg)	L (mm)		
NX110	30	50	9	25	2.5	42.5	3.2	0.8	110	1	141	15	6.9
NX205	40	63	11	25	2.5	56.5	5.5	0.8	100	1.1	137	28	15.5
NX210	40	63	11	25	2.5	56.5	5.5	1.3	120	1.6	157	30	16.7

* Fr and Fa not cumulative : At 1500 rpm for a bearing service life of 20000 hours



NX 1 and NX2 dimensions - connectors version													
Moteur	N (mm)	M (mm)	D (mm)	E (mm)	T (mm)	P (mm)	S (mm)	Without brake		With brake		Fr* (daN)	Fa* (daN)
								Weight (kg)	L (mm)	Weight (kg)	L (mm)		
NX 1 1 0	30	50	9	25	2.5	42.5	3.2	0.8	110	1	141	15	6.9
NX 2 0 5	40	63	11	25	2.5	56.5	5.5	0.8	100	1.1	137	28	15.5
NX 2 1 0	40	63	11	25	2.5	56.5	5.5	1.3	120	1.6	157	30	16.7

* Fr and Fa not cumulative : At 1500 rpm for a bearing service life of 20000 hours



NX1 - NX2 models

UL motors

0,31 - 0,7 Nm



Selection and ordering

Rated Speed N_N (rpm)	Stall Torque M_0^* (Nm)	Rated Torque M_N (Nm)	Peak Torque M_{MAX} (Nm)	Stall Current I_0^* (A _{RMS})	Rated Current I_N (A _{RMS})	Peak Current I_{MAX} (A _{RMS})	Rated Power P_N (kW)	Moment of Inertia J (kg.m ² .10 ⁻⁵)	Product Code
230 VAC supply voltage - mono or three-phased									
5000	0.31	0.09	1.72	0.97	0.34	1.72	0.05	1.30	N X 1 1 0 A ■ J ■ 7 ■ ■ ■
5000	0.40	0.21	2	0.91	0.52	5.5	0.11	2.10	N X 2 0 5 A ■ V ■ 7 ■ ■ ■
4000	0.70	0.41	3.4	1	0.61	5.58	0.17	3.80	N X 2 1 0 A ■ T ■ 7 ■ ■ ■
480 VAC supply voltage - three-phased									
6600	0.4	0.11	2	0.91	0.32	5.5	0.08	2.10	N X 2 0 5 A ■ V ■ 7 ■ ■ ■
6000	0.7	0.15	3.4	1	0.27	5.58	0.09	3.80	N X 2 1 0 A ■ T ■ 7 ■ ■ ■

Drives associations

Motor	Rated Speed N_N (rpm)	Compax 3		AC890SD	637f/638	Digivex
		Drive reference	Max. speed (rpm)	Drive reference	Drive reference	Drive reference
230 VAC supply voltage - mono or three-phased						
NX110A■J■7■ ■ ■	5000	C3S100V2 ...	5000	890SD-231300B0 ...	638A-01-3-F-0-STO...	DSD13004...
NX205A■V■7■ ■ ■	5000	C3S100V2 ...	5000	890SD-231300B0...	638A-01-3-F-0-STO...	DSD13004...
NX210A■T■7■ ■ ■	4000	C3S100V2 ...	3420	890SD-231300B0...	638A-01-3-F-0-STO...	DSD13004...
480 VAC supply voltage - three-phased						
NX205A■V■7■ ■ ■	6600	-	-	890SD-531200B0...	-	-
NX210A■T■7■ ■ ■	6000	-	-	890SD-531200B0...	-	-

NX1 - NX2 models

UL motors

0,31 - 0,7 Nm



NX 1, NX2 UL codification

NX1, NX2 - natural cooling		Product code example												
		N	X	2	1	0	A	▪	T	▪	7	▪	▪	▪
FEEDBACK SENSOR														
2 poles resolver (standard)									A					
Cost effective absolute POSIVEX encoder (NX2 only)									M					
Absolute single-turn HIPERFACE encoder 128 ppt SKS36 (NX2 only)									R					
Absolute multi-turn HIPERFACE encoder 128 ppt SKM36 (NX2 only)									S					
Absolute single-turn ENDAT encoder ECN 1113 (NX2 only)									V					
Absolute multi-turn ENDAT encoder EQN 1125 (NX 2 only)									W					
Low cost encoder with 10 commutation tracks 2048 ppr (NX2 only)									X					
PAINTING														
Without painting (standard)										R				
Black mat										B				
BRAKE	THERMAL PROTECTION													
Without brake (standard)	No protection												0	
With brake	No protection												3	
PROTECTION DEGREE														
IP64 (standard)														0
IP65														1
SHAFT END														
Smooth shaft (standard)														0
Keyed shaft														1

NX1 - NX2 models

UL motors

0,31 - 0,7 Nm



Dimensions and drawings (resolver version)

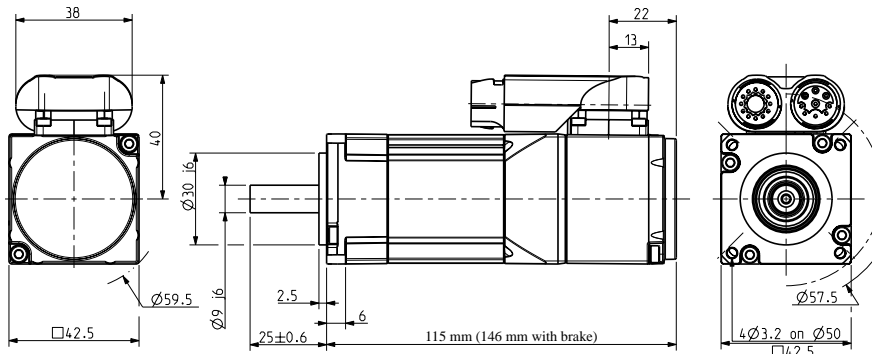
NX1- NX2 - connectors version													
Motor	N (mm)	M (mm)	D (mm)	E (mm)	T (mm)	P (mm)	S (mm)	Without brake		With brake		Fr* (daN)	Fa* (daN)
								Weight (kg)	L (mm)	Weight (kg)	L (mm)		
NX110	30	50	9	25	2.5	42.5	3.2	0.8	134	1	141	15	6.9
NX205	40	63	11	25	2.5	56.5	5.5	0.8	129	1.1	137	28	15.5
NX210	40	63	11	25	2.5	56.5	5.5	1.3	149	1.6	157	30	16.7

NX2 - cables version													
Motor	N (mm)	M (mm)	D (mm)	E (mm)	T (mm)	P (mm)	S (mm)	Without brake Weight (kg)	Without brake L (mm)	With brake Weight (kg)	With brake L (mm)	Fr* (daN)	Fa* (daN)
NX205	40	63	11	25	2.5	56.5	5.5	0.8	129	1.1	137	28	15.5
NX210	40	63	11	25	2.5	56.5	5.5	1.3	149	1.6	157	30	16.7

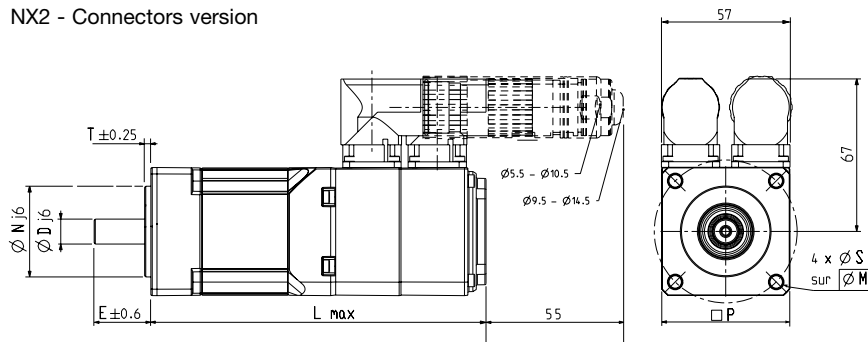


* Fr and Fa not cumulative : At 1500 rpm for a bearing service life of 20000 hours

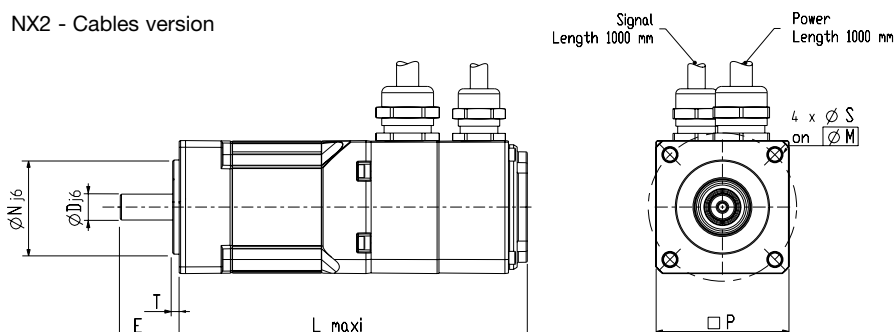
NX1 - Connectors version



NX2 - Connectors version



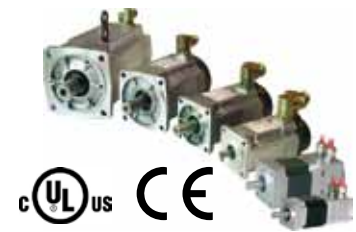
NX2 - Cables version



NX3 - NX8 models

CE and UL motors

2 - 41 Nm



Selection and ordering

Rated Speed N_N (rpm)	Stall Torque M_0^* (Nm)	Rated Torque M_N (Nm)	Peak Torque M_{MAX} (Nm)	Stall Current I_0^* (A_{RMS})	Rated Current I_N (A_{RMS})	Peak Current I_{MAX} (A_{RMS})	Rated Power P_N (kW)	Moment of Inertia J ($kg.m^2.10^{-5}$)	Product Code												
230 VAC supply voltage - mono or three-phased																					
2300	2	1.8	6.6	1.39	1.27	5.56	0.43	7.90	N X 3 1 0 E	P											
4000	2	1.65	6.6	2.43	2.06	9.71	0.69	7.90	N X 3 1 0 E	K											
6600	2	1.4	6.6	3.85	2.85	15.4	0.97	7.90	N X 3 1 0 E	X											
2300	4	3.53	13.4	2.71	2.41	10.9	0.85	29.00	N X 4 2 0 E	P											
4000	4	3.14	13.4	4.69	3.74	18.8	1.32	29.00	N X 4 2 0 E	J											
550	5.5	5.45	18.8	1.41	1.4	5.64	0.31	42.60	N X 4 3 0 E	V											
3200	5.5	4.68	18.8	5.24	4.53	21	1.57	42.60	N X 4 3 0 E	J											
3400	5.5	4.59	18.8	5.64	4.78	22.5	1.64	42.60	N X 4 3 0 E	H											
4000	5.5	4.29	18.8	6.64	5.28	26.5	1.80	42.60	N X 4 3 0 E	F											
2200	8	7.42	26.7	5.31	4.99	21.2	1.71	98.00	N X 6 2 0 E	R											
4000	8	6.08	26.7	9.89	7.82	39.5	2.55	98.00	N X 6 2 0 E	J											
1450	12	10.73	40	5.25	4.75	21	1.63	147.00	N X 6 3 0 E	R											
2800	12	9.21	40	9.86	7.8	39.4	2.70	147.00	N X 6 3 0 E	K											
4000	12	7.6	40	13.9	9.31	55.6	3.18	147.00	N X 6 3 0 E	G											
1000	16	15.38	50	5.16	4.99	20.3	1.61	320.00	N X 8 2 0 E	X											
2200	16	14.48	50	11	10.04	43.2	3.34	320.00	N X 8 2 0 E	R											
3600	16	13.24	50	17.5	14.82	69.1	4.99	320.00	N X 8 2 0 E	L											
1200	258	25.54	92	10.1	9.27	39.9	3.21	620.00	N X 8 4 0 E	Q											
1700	20.5	20.5	92	11.1	11.24	59.8	3.65	620.00	N X 8 4 0 E	L											
2200	28	22.88	92	18.9	15.7	74.8	5.27	620.00	N X 8 4 0 E	J											
2600	41	27.47	137	33	22.72	132	7.48	920.00	N X 8 6 0 E	D											
400 VAC supply voltage - three-phase																					
4000	2	1.65	6.6	1.39	1.18	5.56	0.69	7.90	N X 3 1 0 E	P											
9800	2	0.71	6.6	3.38	1.42	13.5	0.72	7.90	N X 3 1 0 E	I											
2000	4	3.60	13.4	1.36	1.23	5.47	0.75	29.00	N X 4 2 0 E	V											
4000	4	3.14	13.4	2.71	2.16	10.9	1.32	29.00	N X 4 2 0 E	P											
7500	4	1.90		5.43			1.49	29.00	N X 4 2 0 E	X											
1000	5.5	5.38	18.8	1.41	1.38	5.64	0.56	42.60	N X 4 3 0 E	V											
3000	5.5	4.77	18.8	2.82	2.48	11.3	1.50	42.60	N X 4 3 0 E	P											
4000	5.5	4.29	18.8	3.78	3.01	15.1	1.80	42.60	N X 4 3 0 E	L											
6000	5.5	2.98	18.8	6.64	3.76	26.5	1.87	42.60	N X 4 3 0 E	F											
2000	8	7.52	26.7	2.83	2.69	11.3	1.58	98.00	N X 6 2 0 E	V											
3900	8	6.17	26.7	5.31	4.25	21.2	2.52	98.00	N X 6 2 0 E	R											
4500	8	4.10	26.7	9.89	5.56	39.5	1.93	98.00	N X 6 2 0 E	J											
6000	8	3.68	26.7	12.1	6.19	48.3	2.31	98.00	N X 6 2 0 E	D											
1350	12	10.83	40	2.62	2.4	10.5	1.53	147.00	N X 6 3 0 E	V											
2700	12	9.34	40	5.25	4.2	21	2.64	147.00	N X 6 3 0 E	R											
4000	12	7.60	40	7.92	5.3	31.6	3.18	147.00	N X 6 3 0 E	N											
5000	12	6.07	40	13.9	7.64	55.6	3.18	147.00	N X 6 3 0 E	G											
1900	16	14.72	50	5.16	4.79	20.3	2.93	320.00	N X 8 2 0 E	X											
3900	160	12.94	50	11	9.07	43.2	5.28	320.00	N X 8 2 0 E	R											
2100	28	23.17	92	10.1	8.47	39.9	5.10	620.00	N X 8 4 0 E	Q											
3100	20.5	20.50	92	11.1	11.09	59.8	6.49	620.00	N X 8 4 0 E	L											
3500	28	18.56	92	16.8	11.51	66.5	6.80	620.00	N X 8 4 0 E	K											
4500	28	14.00	65	21.7			6.60	620.00	N X 8 4 0 E	H											
1700	41	34.10	137	14.8	12.44	59.2	6.07	920.00	N X 8 6 0 E	L											
2600	41	27.47	137	18.5	12.78	74	7.48	920.00	N X 8 6 0 E	J											
3200	41	21.89	137	27	14.88	108	7.34	920.00	N X 8 6 0 E	F											

* Mounting on aluminium flange : 400 x 400 x 12 mm (NX3-8)
Temperature < 40°C near motor's flange

NX3 - NX8 models

CE and UL motors

2 - 41 Nm



Selection and ordering

Rated Speed N_N (rpm)	Stall Torque M_0^* (Nm)	Rated Torque M_N (Nm)	Peak Torque M_{MAX} (Nm)	Stall Current I_0^* (A _{RMS})	Rated Current I_N (A _{RMS})	Peak Current I_{MAX} (A _{RMS})	Rated Power P_N (kW)	Moment of Inertia J (kg.m ² .10 ⁻⁵)	Product Code																		
480 VAC supply voltage - three-phase																											
4800	2.00	1.57	6.6	1.39	1.13	5.56	0.79	7.90	N	X	3	1	0	E	■	P	■	■	■	■	■	■	■	■	■	■	
2300	4.00	3.53	13.4	1.36	1.21	5.47	0.85	29.00	N	X	4	2	0	E	■	V	■	■	■	■	■	■	■	■	■	■	■
4700	4.00	2.96	13.4	2.71	2.05	10.9	1.46	29.00	N	X	4	2	0	E	■	P	■	■	■	■	■	■	■	■	■	■	■
1200	5.50	5.34	18.8	1.41	1.37	5.64	0.67	42.60	N	X	4	3	0	E	■	V	■	■	■	■	■	■	■	■	■	■	■
3500	5.50	4.55	18.8	2.82	2.37	11.3	1.67	42.60	N	X	4	3	0	E	■	P	■	■	■	■	■	■	■	■	■	■	■
4600	5.50	3.95	18.8	3.78	2.78	15.1	1.90	42.60	N	X	4	3	0	E	■	L	■	■	■	■	■	■	■	■	■	■	■
2300	8.00	7.36	26.7	2.83	2.64	11.3	1.77	98.00	N	X	6	2	0	E	■	V	■	■	■	■	■	■	■	■	■	■	■
4500	8.00	5.57	26.7	5.31	3.89	21.2	2.62	98.00	N	X	6	2	0	E	■	R	■	■	■	■	■	■	■	■	■	■	■
5700	8.00	4.10	26.7	9.89	5.56	39.5	2.45	98.00	N	X	6	2	0	E	■	J	■	■	■	■	■	■	■	■	■	■	■
1500	12.00	10.68	40	2.62	2.37	10.5	1.68	147.00	N	X	6	3	0	E	■	V	■	■	■	■	■	■	■	■	■	■	■
3100	12.00	8.84	40	5.25	4	21	2.87	147.00	N	X	6	3	0	E	■	R	■	■	■	■	■	■	■	■	■	■	■
4600	12.00	6.70	40	7.92	4,74	31.6	3.23	147.00	N	X	6	3	0	E	■	N	■	■	■	■	■	■	■	■	■	■	■
2100	16.00	14.56	50	5.16	4.75	20.3	3.20	320.00	N	X	8	2	0	E	■	X	■	■	■	■	■	■	■	■	■	■	■
4600	16.00	12.22	50	11	8.62	43.2	5.89	320.00	N	X	8	2	0	E	■	R	■	■	■	■	■	■	■	■	■	■	■
2400	28.00	22.27	92	10.1	8.17	39.9	5.60	620.00	N	X	8	4	0	E	■	Q	■	■	■	■	■	■	■	■	■	■	■
4000	28.00	16.65	92	16.8	10.43	66.5	6.97	620.00	N	X	8	4	0	E	■	K	■	■	■	■	■	■	■	■	■	■	■
3000	41.00	23.85	137	18.5	11.22	74	7.49	920.00	N	X	8	6	0	E	■	J	■	■	■	■	■	■	■	■	■	■	■

* Mounting on aluminium flange : 400 x 400 x 12 mm (NX3-8)
Temperature < 40°C near motor's flange

NX3 - NX8 models

CE and UL motors

2 - 41 Nm



Drives associations

Motor	Rated Speed N_N (rpm)	Compax 3		AC890SD	637f/638	Digivex
		Drive reference	Max. speed (rpm)	Drive reference	Drive reference	Drive reference
230 VAC supply voltage - mono or three-phased						
NX310E■P■.....	2300	C3S025V2...	1930	890SD-231300B0...	638A-02-3-F-0-STO	DLD13M04...
NX310E■K■.....	4000	C3S025V2...	3600	890SD-231550B0...	638A-04-3-F-0-STO	DLD13M04...
NX310E■X■.....	6600	C3S063V2...	5590	890SD-231550B0...	638A-04-3-F-0-STO	DLD13M04...
NX420E■P■.....	2300	C3S100V2...	1990	890SD-231550B0...	638A-04-3-F-0-STO	DLD13M04...
NX420E■J■.....	4000	C3S100V2...	3620	890SD-231700B0...	638A-04-3-F-0-STO	DLD13007...
NX430E■V■.....	550	C3S025V2...	550	890SD-231300B0...	638A-02-3-F-0-STO	DLD13M02...
NX430E■J■.....	3200	C3S100V2...	2860	890SD-231700B0...	638A-06-3-F-0-STO	DLD13007...
NX430E■H■.....	3400	C3S100V2...	3110	890SD-231700B0...	638A-06-3-F-0-STO	DLD13007...
NX430E■F■.....	4000	C3S100V2...	3700	890SD-232110B0...	-	DSD13015...
NX620E■R■.....	2200	C3S100V2...	1880	890SD-231700B0...	638A-06-3-F-0-STO	DLD13007...
NX620E■J■.....	4000	C3S100V2...	3670	890SD-232165B0...	-	DSD13015...
NX630E■R■.....	1450	C3S100V2...	1320	890SD-231700B0...	638A-06-3-F-0-STO-	DLD13007...
NX630E■K■.....	2800	C3S100V2...	2600	890SD-232165B0...	-	DSD13015...
NX630E■G■.....	4000	C3S150V2...	3750	890SD-232240C0...	-	DSD13015...
NX820E■X■.....	1000	C3S100V2...	890	890SD-231700B0...	638A-06-3-F-0-STO-	DLD13007...
NX820E■R■.....	2200	C3S150V2...	2000	890SD-232165B0...	-	DSD13015...
NX820E■L■.....	3600	-	3310	890SD-232240C0...	-	DSD13030...
NX840E■Q■.....	1200	C3S100V2...	1060	890SD-232165B0...	-	DSD13015...
NX840E■L■.....	1700	C3S150V2...	1630	890SD-232165B0...	-	DSD13015...
NX840E■J■.....	2200	-	2070	890SD-232240C0...	-	DSD13030...
NX860E■D■.....	2600	-	2510	890SD-232300C0...	-	-

400 VAC supply voltage - three-phased						
NX310E■P■.....	4000	C3S015V4...	3570	890SD-531200B0...	638B-03-6-F-0-STO	DSD16002...
NX310E■I■.....	9800	C3S038V4...	9510	890SD-531450B0...	638B-05-6-F-0-STO	DSD16004...
NX420E■V■.....	2000	C3S015V4...	1710	890SD-531200B0...	638B-03-6-F-0-STO	DSD16002...
NX420E■P■.....	4000	C3S038V4...	3630	890SD-531450B0...	638B-05-6-F-0-STO	DSD16004...
NX420E■X■.....	7500	C3S075V4...	7500	890SD-532100B0...	638B-08-6-F-0-STO	DSD16008...
NX430E■V■.....	1000	C3S015V4...	1000	890SD-531200B0...	638B-03-6-F-0-STO	DSD16002...
NX430E■P■.....	3000	C3S038V4...	2670	890SD-531450B0...	638B-05-6-F-0-STO	DSD16004...
NX430E■L■.....	4000	C3S038V4...	3650	890SD-531600B0...	638B-05-6-F-0-STO	DSD16008...
NX430E■F■.....	6000	C3S075V4...	6000	890SD-532120B0...	638B-08-6-F-0-STO	DSD16008...
NX620E■V■.....	2000	C3S038V4...	1730	890SD-531450B0...	638B-05-6-F-0-STO	DSD16004...
NX620E■R■.....	3900	C3S075V4...	3440	890SD-532100B0...	638B-08-6-F-0-STO	DSD16008...
NX620E■J■.....	4500	C3S150V4...	5700	890SD-532160B0...	638B-10-6-F-0-STO	DSD16016...
NX620E■D■.....	6000	C3S150V4...	6000	890SD-532240C0...	637F/KD6R22-7	DSD16016...
NX630E■V■.....	1350	C3S038V4...	1150	890SD-531450B0...	638B-05-6-F-0-STO	DSD16004...
NX630E■R■.....	2700	C3S075V4...	2390	890SD-532100B0...	638B-08-6-F-0-STO	DSD16008...
NX630E■N■.....	4000	C3S150V4...	3710	890SD-532120B0...	638B-10-6-F-0-STO	DSD16016...
NX630E■G■.....	5000	C3S150V4...	5000	890SD-532240C0...	637F/KD6R22-7	DSD16016...
NX820E■X■.....	1900	C3S075V4...	1620	890SD-532100B0...	638B-08-6-F-0-STO	DSD16008...
NX820E■R■.....	3900	C3S150V4...	3600	890SD-532160B0...	638B-15-6-F-0-STO	DSD16016...
NX840E■Q■.....	2100	C3S150V4...	1910	890SD-532160B0...	638B-10-6-F-0-STO	DSD16016...
NX840E■L■.....	3100	C3S150V4...	2930	890SD-532160B0...	638B-15-6-F-0-STO	DSD16016...
NX840E■K■.....	3500	C3S300V4...	3270	890SD-532240C0...	637F/KD6R22-7	DSD16032...
NX840E■H■.....	4500	C3S300V4...	4290	890SD-532300C0...	637F/KD6R22-7	DSD16032...
NX860E■L■.....	1700	C3S150V4...	1700	890SD-532240C0...	637F/KD6R22-7	DSD16016...
NX860E■J■.....	2600	C3S300V4...	2440	890SD-532240C0...	637F/KD6R22-7	DSD16032...
NX860E■F■.....	3200	C3S300V4...	3200	890SD-532390C0...	637F/KD6R22-7	DSD16032...

NX3 - NX8 models

CE and UL motors

2 - 41 Nm



NX3 - NX8, CE and UL - codification

NX3/4/6/8 - natural cooling		Product Code Example							
		NX860E	▪	D	▪	▪	▪	▪	▪
FEEDBACK SENSOR									
2 poles resolver (standard)			A						
Cost effective absolute POSIVEX encoder			M						
Absolute singleturn HIPERFACE encoder 128 ppr SKS36			R						
Absolute multiturn HIPERFACE encoder 128 ppr SKM36			S						
Absolute singleturn HIPERFACE encoder 1024 ppr SRS50			T						
Absolute multiturn HIPERFACE encoder 1024 ppr SRM50			U						
Absolute singleturn ENDAT encoder ECN 1113			V						
Absolute multiturn ENDAT encoder EQN 1125			W						
Low cost encoder with 10 commutation tracks 2048 ppr			X						
Absolute multi-turn HIPERFACE 16ppr SEL37			Q						
PAINTING									
Without painting (standard)						R			
Black mat						B			
CONNECTIONS		VENTILATION							
Shielded cables		No							1
Connectors (standard)		No							7
BRAKE		THERMAL PROTECTION							
Without brake (standard)		No protection							0
Without brake		PTC on power connection							1
Without brake		Thermo switch on power connection							2
With brake		No protection							3
With brake		PTC on power connection							4
With brake		Thermo switch on power connection							5
Without brake		PTC on sensor connection (not available for UL version)							A
Without brake		Thermo switch on sensor connection (not available for UL version)							B
Without brake		KTY on sensor connector (not available for UL version)							C
With brake		PTC on sensor connection (not available for UL version)							D
With brake		Thermo switch on sensor connection (not available for UL version)							E
With brake		KTY on sensor connection (not available for UL version)							F
PROTECTION DEGREE									
IP64									0
IP65									1
SHAFT END									
Smooth shaft									0
Keyed shaft									1

NX3 - NX8 models

CE and UL motors

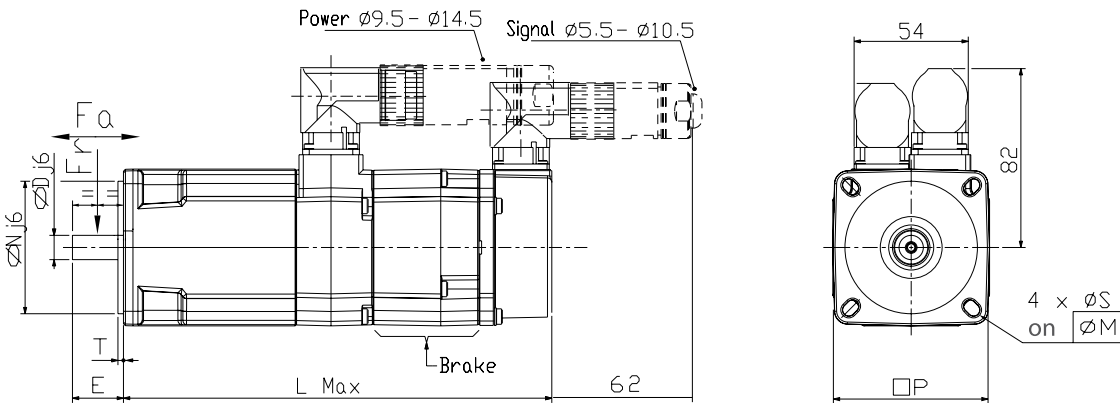
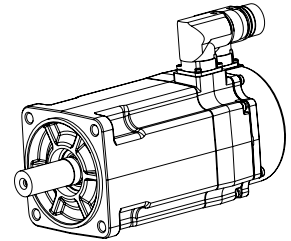
2 - 41 Nm



Dimensions and drawings (resolver version)

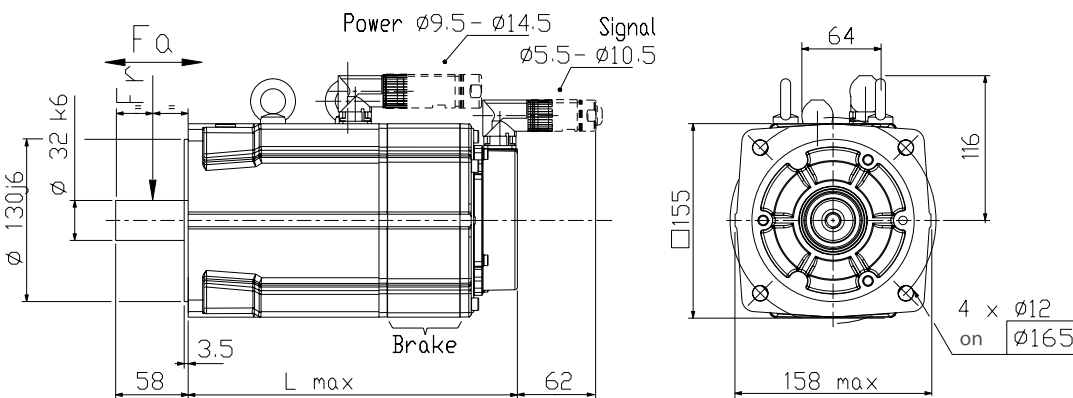
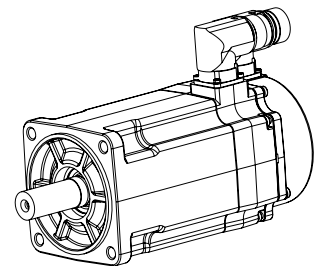
NX3, NX4, NX6 dimensions													
Motor	N (mm)	M (mm)	D (mm)	E (mm)	T (mm)	P (mm)	S (mm)	Without brake		With brake		Fr* (daN)	Fa* (daN)
								Weight (kg)	L (mm)	Weight (kg)	L (mm)		
NX310	60	75-80	11	23	2.5	71	5.5	2	147	2.4	195	36	20
NX420	80	100	19	40	3	91.5	7	3.7	175	4.5	226	72	24
NX430	80	100	19	40	3	91.5	7	4.6	200	5.4	251	82	24
NX620	110	130	24	50	3.5	121	9	6.9	181	8	236	82	52
NX630	110	130	24	50	3.5	121	9	8.8	210	10	265	86	54

* Fr and Fa not cumulative : At 1500 rpm for a bearing service life of 20000 hours



NX8 dimensions						
Moteur	Without brake		With brake		Fr* (daN)	Fa* (daN)
	Weight (kg)	L (mm)	Weight (kg)	L (mm)		
N X 8 2 0	13	200	16.5	266	151	28
N X 8 4 0	20	260	23.5	326	165	33
N X 8 6 0	27	320	30.5	386	172	37

* Fr and Fa not cumulative : At 1500 rpm for a bearing service life of 20000 hours



NX8 Model - ventilated version

CE and UL motors

64 Nm



Selection and ordering

Rated Speed N_N (rpm)	Stall Torque M_0 (Nm)	Rated Torque M_N (Nm)	Peak Torque M_{MAX} (Nm)	Stall Current I_0 (A _{RMS})	Rated Current I_N (A _{RMS})	Peak Current I_{MAX} (A _{RMS})	Rated Power P_N (kW)	Moment of Inertia J (kg.m ² .10 ⁻⁵)	F Product Code												
230 VAC supply voltage - mono or three-phased																					
1450	64.00	57.50	137	29.3	26.4	74	8.73	920	N	X	8	6	0	V	▪	J	▪	▪	▪	▪	▪
400 VAC supply voltage - three-phased																					
2600	64.00	50.52	137	29.3	23.22	74	13.76	920	N	X	8	6	0	V	▪	J	▪	▪	▪	▪	▪
3750	64.00	41.78	137	42.7	28.11	108	16.40	920	N	X	8	6	0	V	▪	F	▪	▪	▪	▪	▪
480 VAC supply voltage - three-phased																					
3000	64.00	47.67	137	29.3	21.95	74	14.98	920	N	X	8	6	0	V	▪	J	▪	▪	▪	▪	▪
4400	64.00	36.09	137	42.7	24.47	108	16.63	920	N	X	8	6	0	V	▪	F	▪	▪	▪	▪	▪

Drives associations

Motor	Rated Speed N_N (rpm)	Compax 3		AC890SD	637f/638	Digivex
		Drive reference	Max. speed (rpm)	Drive reference	Drive reference	Drive reference
230 VAC supply voltage - mono or three-phased						
N X 8 6 0 V ▪ J ▪ ▪ ▪ ▪ ▪	1450	-	-	890SD-232300C0...	-	DP▪2705
400 VAC supply voltage - three-phased						
N X 8 6 0 V ▪ J ▪ ▪ ▪ ▪ ▪	2600	C3S300V4...	2230	890SD-532300C0...	637F/KD6R30-7	DP▪2705
N X 8 6 0 V ▪ F ▪ ▪ ▪ ▪ ▪	3750	C3S500V4...	3400	890SD-532590C0...		DP▪170
480 VAC supply voltage - three-phased						
N X 8 6 0 V ▪ J ▪ ▪ ▪ ▪ ▪	3000	-	-	890SD-532390D0...	-	-
N X 8 6 0 V ▪ F ▪ ▪ ▪ ▪ ▪	4400	-	-	890SD-532390D0...	-	-

NX8 Model - ventilated version

CE and UL motors

64 Nm



NX 8 ventilated version, CE and UL - codification

		Product code example												
		N	X	8	6	0	V	▪	J	▪	▪	▪	▪	▪
FEEDBACK SENSOR														
2 poles resolver (standard)														
Cost effective absolute POSIVEX encoder		A												
Absolute multi-turn HIPERFACE 16ppr SEL37		M												
Absolute single-turn HIPERFACE encoder 128 ppr SKS36		Q												
Absolute multi-turn HIPERFACE encoder 128 ppr SKM36		R												
Absolute single-turn HIPERFACE encoder 1024 ppr SRS50		S												
Absolute multi-turn HIPERFACE encoder 1024 ppr SRM50		T												
Absolute single-turn ENDAT encoder ECN 1113		U												
Absolute multi-turn ENDAT encoder EQN 1125		V												
Low cost encoder with 10 commutation tracks 2048 ppr		W												
		X												
PAINTING														
Without painting (standard)		R												
Black mat		B												
CONNECTIONS														
UL power terminal box + feedback connector		5												
CE power terminal box + feedback connector		9												
BRAKE		THERMAL PROTECTION												
Without brake (standard)		No protection										0		
Without brake		PTC on power connection										1		
Without brake		Thermo switch on power connection										2		
With brake		No protection										3		
With brake		PTC on power connection										4		
With brake		Thermo switch on power connection										5		
Without brake		PTC on sensor connection (not available for UL version)										A		
Without brake		Thermo switch on sensor connection (not available for UL version)										B		
Without brake		KTY on sensor connection (not available for UL version)										C		
With brake		PTC on sensor connection (not available for UL version)										D		
With brake		Thermo switch on sensor connection (not available for UL version)										E		
With brake		KTY on sensor connection (not available for UL version)										F		
PROTECTION DEGREE														
IP44		0												
SHAFT END														
Smooth shaft (standard)		0												
Keyed shaft		1												

* Mounting on aluminium flange : 400 x 400 x 12 mm (NX3-8)
 Temperature < 40°C near motor's flange

NX8 Model - ventilated version

CE and UL motors

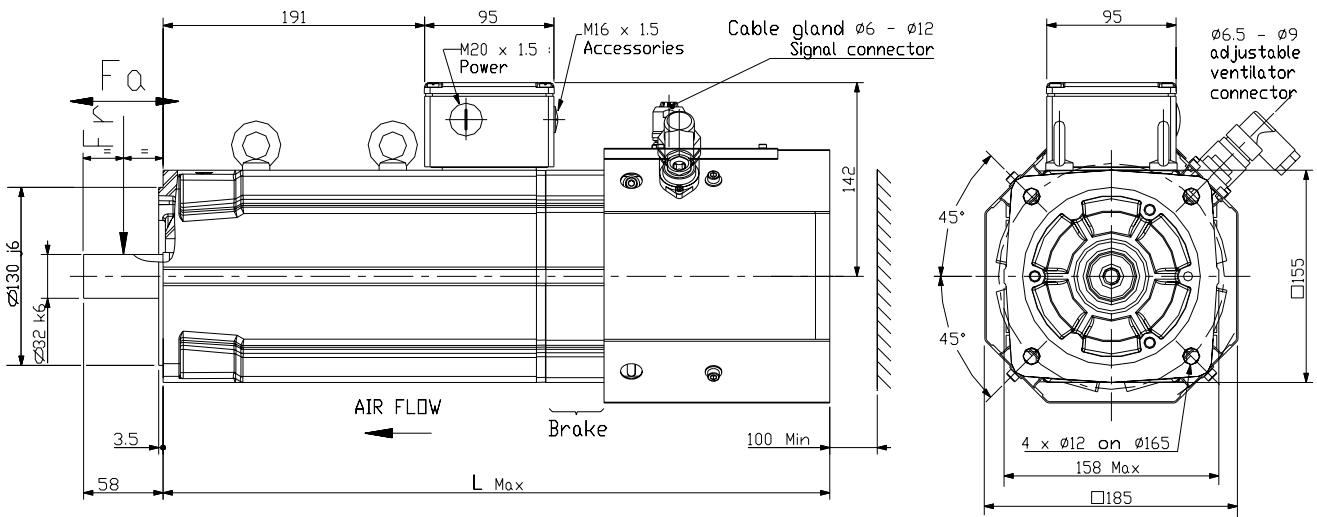
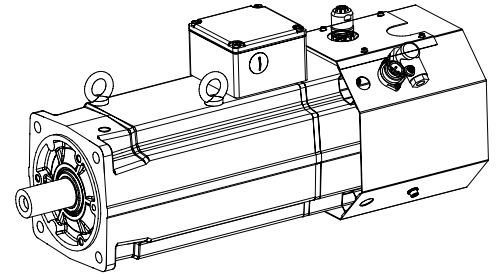
64 Nm



Dimensions and drawings (resolver version)

Dimensions NX8 ventilé						
Moteur	Sans frein		Sans frein		Fr* (daN)	Fa* (daN)
	Masse (kg)	L (mm)	Masse (kg)	L (mm)		
NX860V	30.5	424	34	490	172	37

* Fr and Fa not cumulative : At 1500 rpm for a bearing service life of 20000 hours



Sensorless motors

NX series

0,5 - 7,5 kW, 0,45 - 41 Nm



Description

The sensorless version of NX Series motors has been designed to offer a cost effective brushless solution in association with AC650S drives.

Controlled without feedback sensor, NX Series servomotors are innovative, compact, performant and highly efficient alternative to traditional induction motors.

Features and benefits

Cost effective brushless solution

Sensorless control with AC650S drives

Increased compactness and efficiency compared to induction motors

Increased robustness due to suppression of feedback sensor

No need fan ventilation

Associations with Parker NX servo moteurs

230 Vac power supply

At rated speed		@ 1500 rpm		@ 3000 rpm	At low speed		Inertia	Motor code	Drive Code
Nn (rpm)	Pn (kW)	P (kW)	P (kW)	P (kW)	M0 (Nm)	I0 (Ams)	(kg.m ² .10 ⁻⁵)		
6000	0,21	0,07	0,13	0,45	1,14	2,1		NX205EYUR6000	650S-21140010-001P00-A1
5000	0,37	0,15	0,27	1	1,99	3,8		NX210EYPR6000	650S-21140010-001P00-A1
2000	0,38	0,29	-	2	1,39	7,9		NX310EYPR6000	650S-21140010-001P00-A1
3500	0,62	0,29	0,55	2	2,43	7,9		NX310EYKR6000	650S-21140010-001P00-A1
1900	0,72	0,58	-	4	2,71	29		NX420EYPR6000	650S-21140010-001P00-A1
3350	1,09	0,58	1,06	4	4,43	29		NX420EYKR6000	650S-21170020-001P00-A1
1750	0,95	0,83	-	5,5	3,43	42,6		NX430EYMR6000	650S-21140010-001P00-A1
2700	1,38	0,83	-	5,5	5,24	42,6		NX430EYJR6000	650S-21170020-001P00-A1
3500	1,67	0,83	1,5	5,5	6,64	42,6		NX430EYFR6000	650S-21170020-001P00-A1
1850	1,47	1,21	-	8	5,31	98		NX620EYRR6000	650S-21170020-001P00-A1
1650	1,82	1,8	-	12	6,74	147		NX630EYWR6000	650S-21170020-001P00-A1
850	1,38	-	-	16	5,16	320		NX820EYXR6000	650S-21170020-001P00-A1

400 Vac power supply

6000	0,21	0,07	0,13	0,45	1,14	2,1		NX205EYUR6000	650S-43125020-B01P00-A1
6000	0,39	0,15	0,27	1	1,99	3,8		NX210EYPR6000	650S-43125020-B01P00-A1
3700	0,65	0,29	0,55	2	1,39	7,9		NX310EYPR6000	650S-43125020-B01P00-A1
6000	0,88	0,29	0,55	2	2,43	7,9		NX310EYKR6000	650S-43125020-B01P00-A1
1750	0,67	0,58	-	4	1,36	29		NX420EYVR6000	650S-43125020-B01P00-A1
3500	1,19	0,58	1,06	4	2,71	29		NX420EYPR6000	650S-43155020-B01P00-A1
6000	1,65	0,58	1,06	4	4,43	29		NX420EYKR6000	650S-43155020-B01P00-A1
2250	1,19	0,83	-	5,5	2,45	42,6		NX430EYQR6000	650S-43125020-B01P00-A1
3150	1,55	0,83	1,5	5,5	3,43	42,6		NX430EYMR6000	650S-43155020-B01P00-A1
3500	1,67	0,83	1,5	5,5	3,78	42,6		NX430EYLR6000	650S-43155020-B01P00-A1
1500	1,21	1,21	-	8	2,42	98		NX620EYIR6000	650S-43125020-B01P00-A1
3350	2,33	1,21	2,17	8	5,31	98		NX620EYRR6000	650S-43155020-B01P00-A1
5800	2,41	1,21	2,17	8	8,88	98		NX620EYKR6000	650S-43190030-B01P00-A1
2350	2,4	1,8	-	12	5,25	147		NX630EYRR6000	650S-43155020-B01P00-A1
3000	3,12	1,8	3,12	12	6,74	147		NX630EYWR6000	650S-43190030-B01P00-A1
4000	3,48	1,8	3,12	12	8,98	147		NX630EYLR6000	650S-43190030-B01P00-A1
1620	2,53	2,36	-	16	5,16	320		NX820EYXR6000	650S-43155020-B01P00-A1
3500	4,89	2,36	4,33	16	11	320		NX820EYRR6000	650S-43216030-B01P00-A1
5150	6,26	2,36	4,33	16	16	320		NX820EYMR6000	650S-43216030-B01P00-A1
1650	4,22	3,9	-	28	8,9	620		NX840EYRR6000	650S-43290030-B01P00-A1
3000	6,39	3,9	6,39	28	15,9	620		NX840EYWR6000	650S-43216030-B01P00-A1
1400	5,26	-	-	41	15,6	920		NX860EYWR6000	650S-43216030-B01P00-A1

Sensorless motors

NX series

0,5 - 7,5 kW, 0,45 - 41 Nm



Associations with Parker NX servo moteurs

460 Vac power supply								
At rated speed		@ 1500 rpm	@ 3000 rpm	At low speed		Inertia	Motor code	Drive Code
Nn (rpm)	Pn (kW)	P (kW)	P (kW)	M0 (Nm)	I0 (Ams)	(kg.m ² .10 ⁻⁵)		
6000	0,24	0,08	0,16	0,45	1,14	2,1	NX205EYUR6000	650S-43125020-B01P00-A1
6000	0,45	0,18	0,32	1	1,99	3,8	NX210EYPR6000	650S-43125020-B01P00-A1
4200	0,75	0,35	0,66	2	1,39	7,9	NX310EYPR6000	650S-43125020-B01P00-A1
6000	1,01	0,35	0,66	2	2,43	7,9	NX310EYKR6000	650S-43125020-B01P00-A1
2000	0,77	0,7	–	4	1,36	29	NX420EYVR6000	650S-43125020-B01P00-A1
4000	1,37	0,7	1,27	4	2,71	29	NX420EYPR6000	650S-43155020-B01P00-A1
6000	1,9	0,7	1,27	4	4,43	29	NX420EYKR6000	650S-43155020-B01P00-A1
2500	1,37	1	–	5,5	2,45	42,6	NX430EYQR6000	650S-43125020-B01P00-A1
3600	1,78	1	1,8	5,5	3,43	42,6	NX430EYMR6000	650S-43155020-B01P00-A1
4000	1,92	1,00	1,8	5,5	3,78	42,6	NX430EYLR6000	650S-43155020-B01P00-A1
1700	1,39	1,45	–	8	2,42	98	NX620EYIR6000	650S-43125020-B01P00-A1
3800	2,68	1,45	2,6	8	5,31	98	NX620EYRR6000	650S-43155020-B01P00-A1
6000	2,77	1,45	2,6	8	8,88	98	NX620EYKR6000	650S-43190030-B01P00-A1
2700	2,76	2,16	–	12	5,25	147	NX630EYRR6000	650S-43155020-B01P00-A1
3400	3,24	2,16	3,38	12	6,74	147	NX630EYWR6000	650S-43190030-B01P00-A1
4600	3,66	2,16	3,38	12	8,98	147	NX630EYLR6000	650S-43190030-B01P00-A1
1800	2,83	2,83	–	16	5,16	320	NX820EYXR6000	650S-43155020-B01P00-A1
4000	5,62	2,83	5,2	16	11	320	NX820EYRR6000	650S-43216030-B01P00-A1
5900	7,2	2,83	5,2	16	16	320	NX820EYMR6000	650S-43216030-B01P00-A1
1900	4,85	4,68	–	28	8,9	620	NX840EYRR6000	650S-43290030-B01P00-A1
3400	7,35	4,68	7,67	28	15,9	620	NX840EYWR6000	650S-43216030-B01P00-A1
1600	5,53	4,68	–	41	15,6	920	NX860EYWR6000	650S-43216030-B01P00-A1

Sensorless motors

NX series

0,5 - 7,5 kW



NX sensorless codification

NX Sensorless - natural cooling		Product code example														
		N	X	8	6	0	E	Y	J	▪	▪	▪	▪	▪		
PAINTING																
Without painting (standard)												R				
Black mat												B				
CONNECTION																
Terminal Box (standard)												6				
Connectors												7				
BRAKE	THERMAL PROTECTION															
Without brake	No thermal protection														0	
Without brake	PTC (only with connectors : 7)														1	
Without brake	Thermo switch (only with connectors : 7)														2	
With brake	No thermal protection (only with connectors : 7)														3	
With brake	PTC (only with connectors : 7)														4	
With brake	Thermo switch (only with connectors : 7)														5	
PROTECTION DEGREE																
IP64 (standard)															0	
IP65															1	
SHAFT END																
Smooth shaft (standard)															0	
Keyed shaft															1	

* Mounting on aluminium flange : 280 x 280 x 8 mm (NX1-2), 400 x 400 x 12 mm (NX3-8)
Temperature < 40°C near motor's flange

Sensorless motors

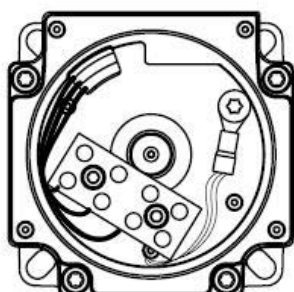
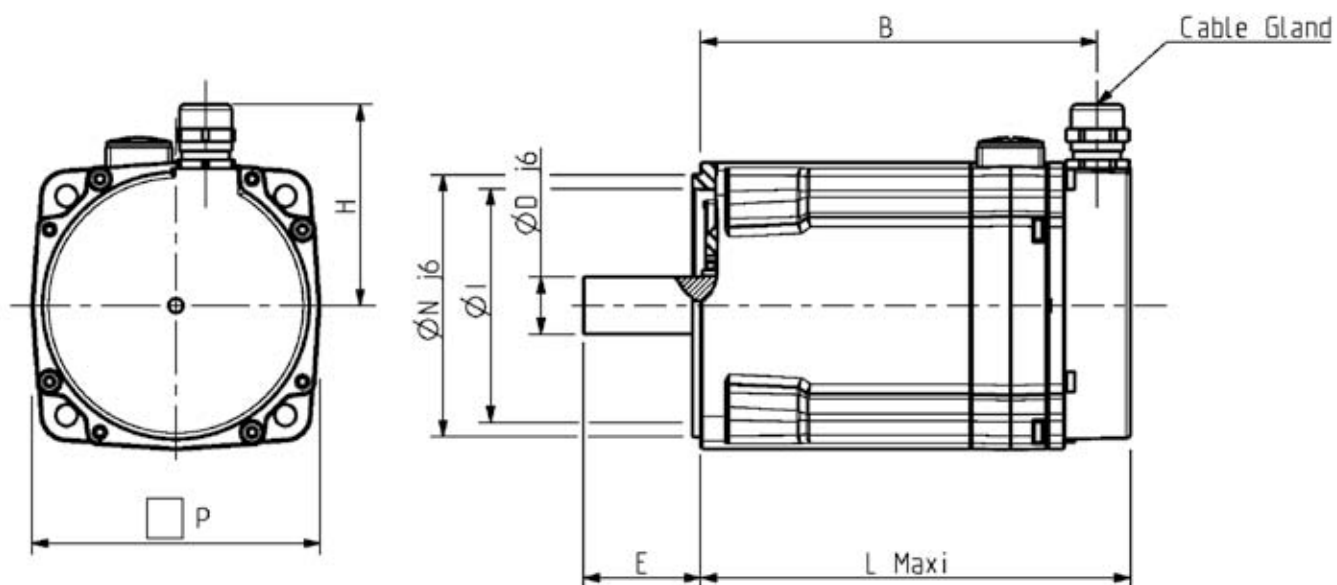
NX series

0,5 - 7,5 kW



Dimensions and drawings

NX sensorless dimensions [mm]								
Motor	B	Lmaxi	P	N	I	D	E	H
N X 2 0 5	7 8	100	56.5	40 j6	NA	11 j6	25 ± 0,6	53
N X 2 1 0	9 8	120	56.5	40 j6	NA	11 j6	25 ± 0,6	53
N X 3 1 0	1 3 5	147	71	60 j6	NA	11 j6	23 ± 0,6	59.3
N X 4 2 0	1 6 0	175	91.5	80 j6	74	19 j6	40 ± 0,6	67
N X 4 3 0	1 8 5	200	91.5	80 j6	74	19 j6	40 ± 0,6	67
N X 6 2 0	1 6 7	181	121	110 j6	98	24 j6	50 ± 0,6	84.5
N X 6 3 0	1 9 6	210	121	110 j6	98	24 j6	50 ± 0,6	84.5
N X 8 2 0	18 5	200	158	130j6	118	32k6	58 ± 0,6	84.5
N X 8 4 0	24 5	260	158	130j6	118	32k6	58 ± 0,6	84.5
N X 8 6 0	30 5	320	158	130j6	118	32k6	58 ± 0,6	84.5



POWER CONNECTORS

Black : phase U
 White : phase V
 Red : phase W
 Yellow/Green : Ground