

Digitax ST

230V FM Motor Selection

The FM motor line is a medium inertia servo motor suitable for larger inertial load applications. The FM motor line uses a 4096 line encoder for high precision and is designed with low cogging torque to provide smooth operation and excellent velocity regulation. FM motors are available with or without brakes. The system torque range is from 10.6 lb-in (1.2 Nm) to 62 lb-in (7.1 Nm).

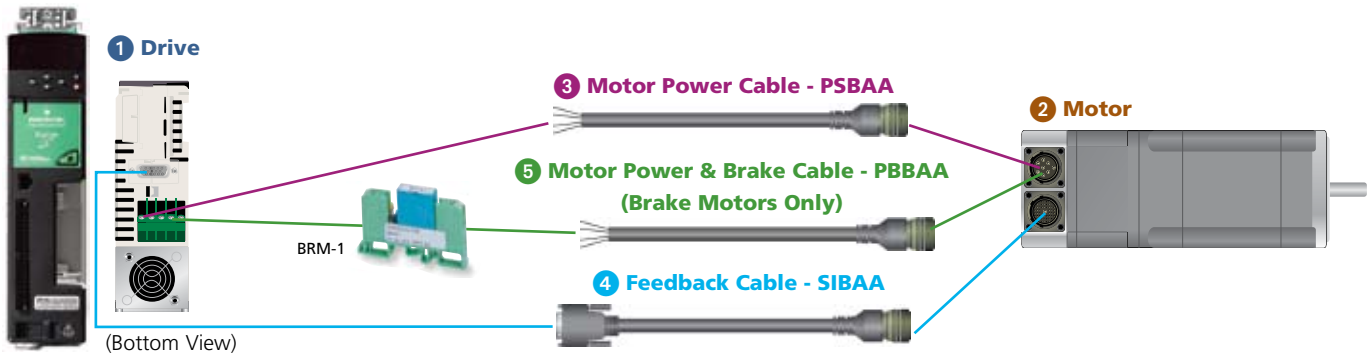
This is a flexible motor line with numerous options available including: feedback, connectors, brake, high inertia and faceplate mounting.

Order String

xxx	E	2	x	xx	x	V	A	CA	A	BCD*	DIA*

Inertia: A = Standard
 Feedback Device: CA = 4096 Incremental Encoder
 Shaft Key: A = With Key
 Connection Type: V = Vertical Connectors
 Brake: 0 = None, 1 = 24 VDC
 Rated Speed: 20 = 2,000 rpm, 30 = 3,000 rpm, 40 = 4,000 rpm, 50 = 5,000 rpm, 60 = 6,000 rpm
 Stator Length: A, B, C, D, E, F, G, H
 Peak Torque: 2 = Standard Peak Torque
 Voltage E = 230V
 Frame Size: 055, 075, 095, 115, 142, 190

* Bolt Circle & Shaft Diameter are standard dimensions see FM Motor section for additional options.



Digitax ST

Servo System Order Guide

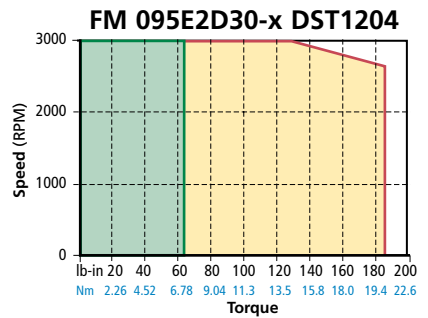
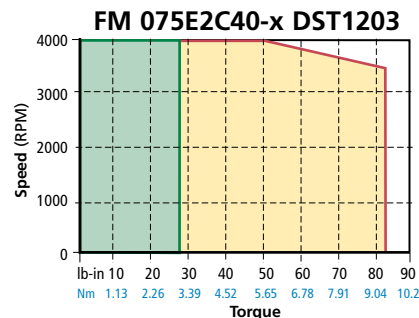
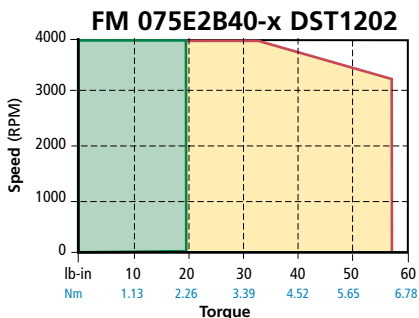
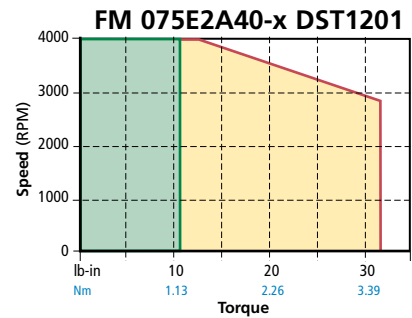
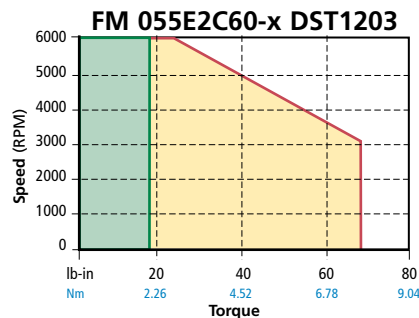
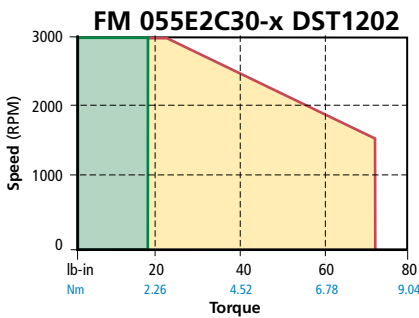
① Drive Model x=B,I,P,Z	② Motor Model*	③ Motor Power Cable (yyy=meters)	④ Feedback Cable** (yyy=meters)	⑤ Motor Power & Brake Cable (required w/all brake motors) (yyy= meters)
DST1201x	075E2A400 BACAA075110	PSBAA-yyy	SIBAA-yyy	-
	075E2A401 BACAA075110	-	SIBAA-yyy	PBBAA-yyy
DST1202x	055E2C300 BACPA063110	PSBAA-yyy	SIBAA-yyy	-
	055E2C301 BACPA063110	-	SIBAA-yyy	PBBAA-yyy
DST1202x	075E2B400 BACAA075140	PSBAA-yyy	SIBAA-yyy	-
	075E2B401 BACAA075140	-	SIBAA-yyy	PBBAA-yyy
DST1203x	055E2C600 BACPA063110	PSBAA-yyy	SIBAA-yyy	-
	055E2C601 BACPA063110	-	SIBAA-yyy	PBBAA-yyy
DST1203x	075E2C400 BACAA075140	PSBAA-yyy	SIBAA-yyy	-
	075E2C401 BACAA075140	-	SIBAA-yyy	PBBAA-yyy
DST1204x	095E2D300 BACAA100190	PSBAA-yyy	SIBAA-yyy	-
	095E2D301 BACAA100190	-	SIBAA-yyy	PBBAA-yyy

* Standard motor configuration. (Standard peak torque, No brake, 90° rotatable connectors, Keyed shaft, 4096 incremental encoder, standard PCD and Shaft Diameter)
 ** Standard feedback cable for use with incremental encoder and Digitax drive.

Digitax ST - 230V FM Motor Specifications											
Drive Model	Motor Model*	Cont. Stall Torque lb-in Nm	Peak Stall Torque lb-in Nm	Rated Torque @Rated Speed lb-in Nm	Rated Power HP kWatts	Max. Speed RPM	Encoder Resolution lines/rev	Inertia lb-in-sec ² kg-cm ²	Motor Ke Vrms/krpm	Motor Kt lb-in/Arms Nm/Arms	Motor Weight lb kg
DST1201	075E2A40	10.6 1.2	31.9 3.6	8.9 1.0	0.6 0.42	4000	4096	0.00062 0.70	44	6.37 0.72	7.92 3.60
DST1202	055E2C30	18.7 2.1	73.0 8.3	15.9 1.8	0.9 0.64	3000	4096	0.00030 0.34	53	7.61 0.86	3.96 1.80
DST1202	075E2B40	19.5 2.2	58.4 6.6	15.0 1.7	0.9 0.71	4000	4096	0.00106 1.20	44	6.37 0.72	9.68 4.40
DST1203	055E2C60	18.7 2.1	63.1 7.1	11.9 1.4	1.3 0.99	6000	4096	0.00030 0.34	27	3.89 0.44	3.96 1.80
DST1203	075E2C40	27.4 3.1	82.3 9.3	20.4 2.3	1.3 0.96	4000	4096	0.00142 1.60	44	6.37 0.72	11.44 5.20
DST1204	095E2D30	62.6 7.1	187.7 21.2	60.2 6.8	2.9 2.14	3000	4096	0.00451 5.10	57	8.23 0.93	19.14 8.70

See order guide on previous page for complete motor model number.

Digitax ST - 230V FM Motor Speed Torque Curves



SPECIFICATIONS

- Voltage 240 VAC
- Drive Frequency 6 kHz
- Ambient Temperature 25°C (77°F)
- Case Temperature 100°C (212°F)

Legend

- Continuous Torque
- Peak Torque

All performance data listed above has a +/-10% tolerance and is subject to change at any time without notice. For more detailed information on performance data and test conditions please refer to the motor section of the catalog. For brake motor information, complete motor specifications and dimensions please refer to our motor section.

Digitax ST

460V FM Motor Selection

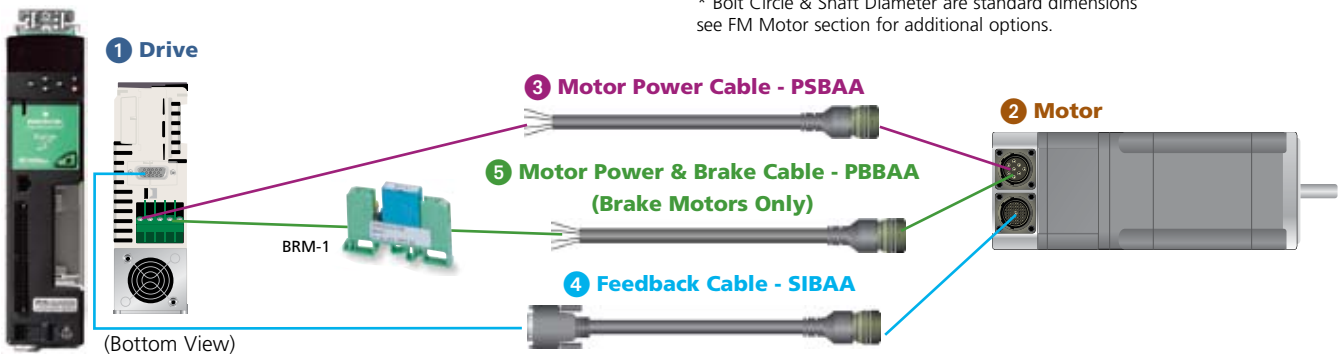
The FM motor line is a medium inertia servo motor suitable for larger inertial load applications. The FM motor line uses a 4096 line encoder for high precision and is designed with low cogging torque to provide smooth operation and excellent velocity regulation. FM motors are available with or without brakes. The system torque range is from 15.9 lb-in (1.8 Nm) to 109 lb-in (12.4 Nm).

This is a flexible motor line with numerous options available including: feedback, connectors, brake, high inertia and faceplate mounting.

Order String

xxx	U	2	x	xx	x	V	A	CA	A	BCD*	DIA*
<p>↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑</p> <p style="font-size: small;"> Inertia: A = Standard Feedback Device: CA = 4096 Incremental Encoder Shaft Key: A = With Key Connection Type: V = Vertical Connectors Brake: 0 = None, 1 = 24 VDC Rated Speed: 20 = 2,000 rpm, 30 = 3,000 rpm, 40 = 4,000 rpm, 50 = 5,000 rpm, 60 = 6,000 rpm Stator Length: A, B, C, D, E, F, G, H Peak Torque: 2 = Standard Peak Torque Voltage U = 460V Frame Size: 055, 075, 095, 115, 142, 190 </p>											

* Bolt Circle & Shaft Diameter are standard dimensions see FM Motor section for additional options.



Servo System Order Guide

① Drive Model x=B,I,P,Z	② Motor Model*	③ Motor Power Cable (yyy=meters)	④ Feedback Cable** (yyy=meters)	⑤ Motor Power & Brake Cable (required w/all brake motors) (yyy= meters)
DST1401x	055U2C300 BACPA063110	PSBAA-yyy	SIBAA-yyy	
	055U2C301 BACPA063110		SIBAA-yyy	PBBAA-yyy
DST1401x	075U2B400 BACAA075140	PSBAA-yyy	SIBAA-yyy	
	075U2B401 BACAA075140		SIBAA-yyy	PBBAA-yyy
DST1402x	055U2C600 BACPA063110	PSBAA-yyy	SIBAA-yyy	
	055U2C601 BACPA063110		SIBAA-yyy	PBBAA-yyy
DST1402x	075U2C400 BACAA075140	PSBAA-yyy	SIBAA-yyy	
	075U2C401 BACAA075140		SIBAA-yyy	PBBAA-yyy
DST1403x	095U2B400 BACAA100190	PSBAA-yyy	SIBAA-yyy	
	095U2B401 BACAA100190		SIBAA-yyy	PBBAA-yyy
DST1404x	115U2C300 BACAA115190	PSBAA-yyy	SIBAA-yyy	
	115U2C301 BACAA115190		SIBAA-yyy	PBBAA-yyy
DST1405x	115U2D300 BACAA115240	PSBAA-yyy	SIBAA-yyy	
	115U2D301 BACAA115240		SIBAA-yyy	PBBAA-yyy

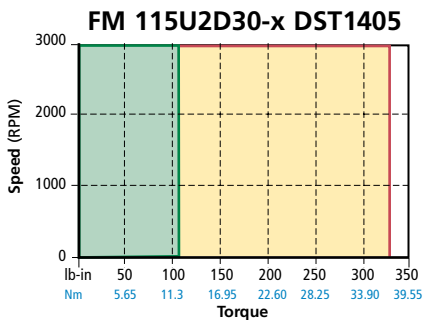
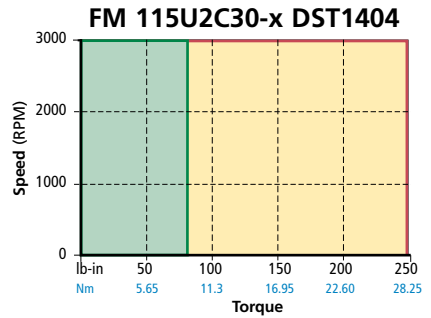
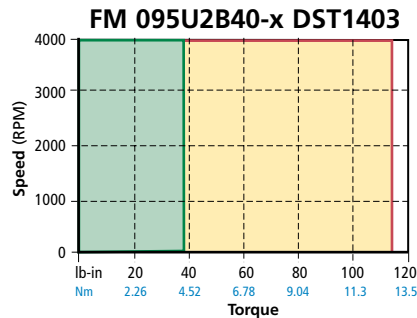
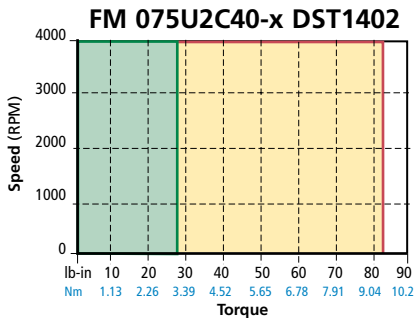
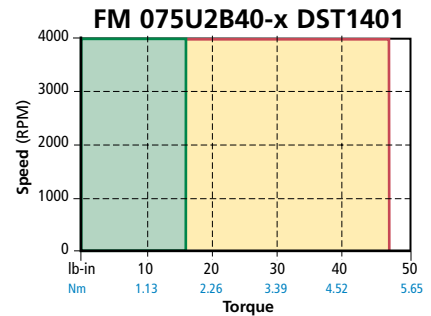
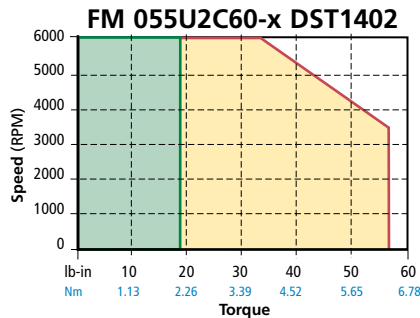
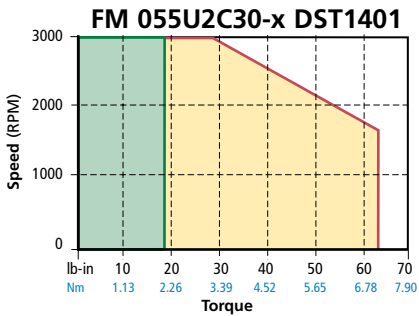
* Standard motor configuration. (Standard peak torque, No brake, 90° rotatable connectors, Keyed shaft, 4096 incremental encoder, standard PCD and Shaft Diameter)
 ** Standard feedback cable for use with incremental encoder and Digitax drive.

Digitax ST

Digitax ST - 460V FM Motor Specifications											
Drive Model	Motor Model*	Cont. Stall Torque lb-in Nm	Peak Stall Torque lb-in Nm	Rated Torque @Rated Speed lb-in Nm	Rated Power HP kWatts	Max. Speed RPM	Encoder Resolution lines/rev	Inertia lb-in-sec ² kg-cm ²	Motor Ke Vrms/krpm	Motor Kt lb-in/Arms Nm/Arms	Motor Weight lb kg
DST1401	055U2C30	18.7 2.1	62.9 7.1	15.9 1.8	0.9 0.64	3000	4096	0.00030 0.34	96	13.98 1.58	4.0 1.80
DST1401	075U2B40	15.9 1.8	47.8 5.4	15.0 1.7	0.9 0.71	4000	4096	0.00106 1.20	74	10.62 1.20	9.7 4.40
DST1402	055U2C60	18.7 2.1	56.6 6.4	11.9 1.4	1.3 0.99	6000	4096	0.00030 0.34	48	6.99 0.79	4.0 1.80
DST1402	075U2C40	27.4 3.1	82.3 9.3	20.4 2.3	1.3 0.96	4000	4096	0.00142 1.60	74	10.62 1.20	11.4 5.20
DST1403	095U2B40	38.1 4.3	114.2 12.9	26.5 3.0	1.7 1.26	4000	4096	0.00257 2.90	74	10.62 1.20	13.9 6.30
DST1404	115U2C30	83.2 9.4	249.6 28.2	71.7 8.1	3.4 2.54	3000	4096	0.00797 9.00	98	14.16 1.60	25.5 11.60
DST1405	115U2D30	109.7 12.4	329.2 37.2	92.0 10.4	4.4 3.27	3000	4096	0.01009 11.40	98	14.16 1.60	29.7 13.50

*See order guide on previous page for complete motor model number.

Digitax ST - 460V FM Motor Speed Torque Curves



SPECIFICATIONS

Voltage	240 VAC
Drive Frequency	6 kHz
Ambient Temperature	25°C (77°F)
Case Temperature	100°C (212°F)

Legend

- Continuous Torque
- Peak Torque

All performance data listed above has a +/-10% tolerance and is subject to change at any time without notice. For more detailed information on performance data and test conditions please refer to the motor section of the catalog. For brake motor information, complete motor specifications and dimensions please refer to our motor section.

Digitax ST

230V NT Motor Selection

The NT Series Motors deliver high torque-power to motor-size ratios that were previously impossible. Using the latest motor design and production technology greatly reduces motor size. High-energy neodymium iron born magnets give the NT motor high torque output and low rotor inertia, providing superior dynamic performance for servo applications. The NT motor design delivers up to 46% more torque in 20% less space when compared to standard high-performance motor designs.

Order String

NT
x
x
xx
x
x
N
S
0000

↑

NT Motor Family

↑

Connector Type:

C = MS connectors on motor

T = Leads with connectors

L = Leads without connectors

↑

Brake Option: **B** = with Brake,
O = No Brake

↑

Inertia: **S** = Standard, **I** = Medium

↑

Encoder Feedback Type: **N** = Encoder

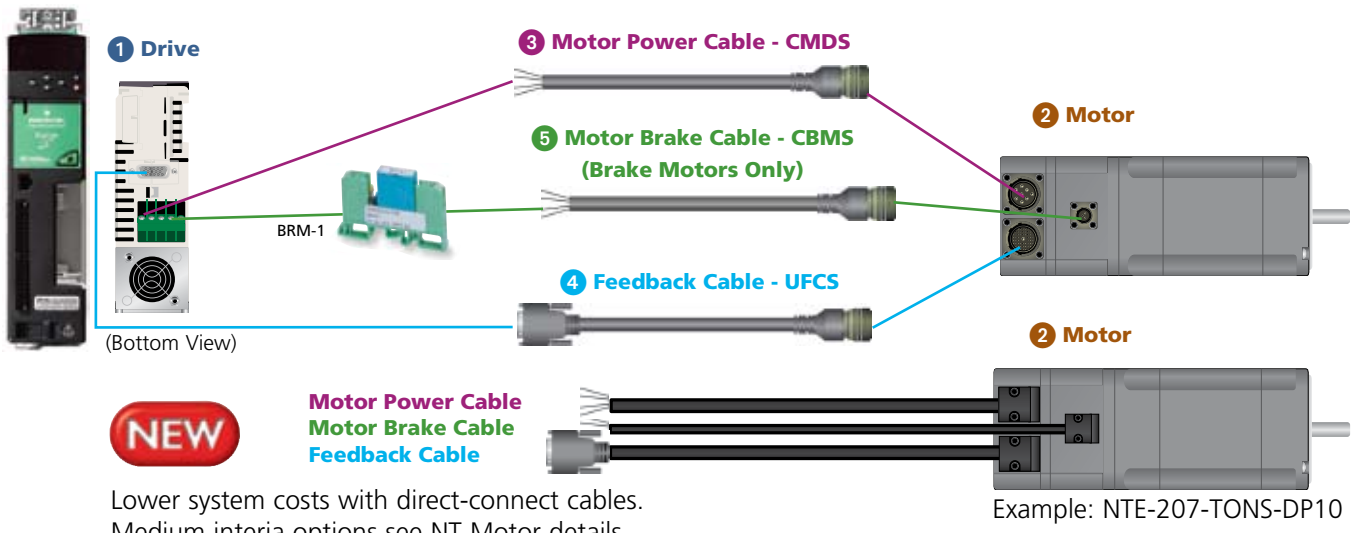
↑

Special Options: DPXX = DSUB
(DP = 15 pin, XX = feet)

Continuous Torque (lb-in): 7, 12, 20, 30, 45 or 55

Frame Size (in inches): 2 or 3

Mounting Flange: **E** = English, **M** = Metric



Digitax ST

Servo System Order Guide

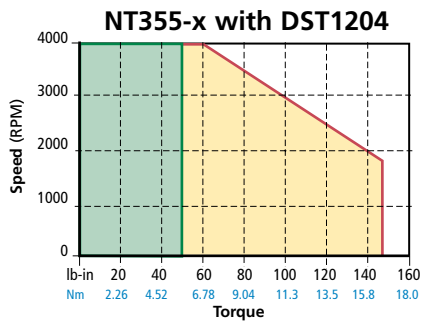
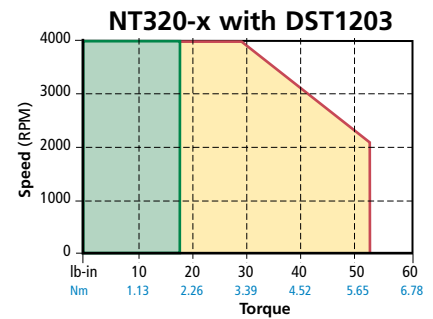
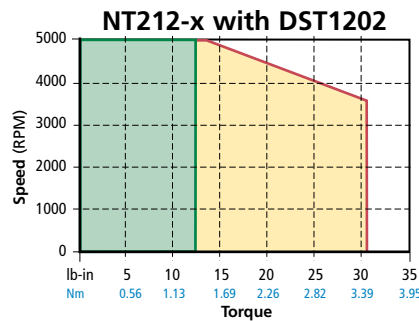
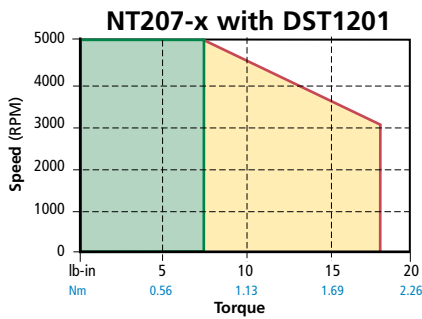
① Drive Model x=B,I,P,Z	② Motor Model (x=Flange, y=Connector z=Brake, ww=Cable Length)	③ Motor Power Cable (xxx=feet)	④ Feedback Cable (xxx=feet)	⑤ Motor Brake Cable (required w/all brake motors) (xxx=feet)
DST1201x	NTx-207-yONS-0000	CMDS-xxx	UFCS-xxx	
	NTx-207-yBNS-0001	CMDS-xxx	UFCS-xxx	CBMS-xxx
	NTx-207-TzNS-DPww	Integrated	Integrated	Integrated
DST1202x	NTx-212-yONS-0000	CMDS-xxx	UFCS-xxx	
	NTx-212-yBNS-0001	CMDS-xxx	UFCS-xxx	CBMS-xxx
	NTx-212-TzNS-DPww	Integrated	Integrated	Integrated
DST1203x	NTx-320-yONS-0000	CMDS-xxx	UFCS-xxx	
	NTx-320-yBNS-0001	CMDS-xxx	UFCS-xxx	CBMS-xxx
	NTx-320-TzNS-DPww	Integrated	Integrated	Integrated
DST1204x	NTx-355-yONS-0000	CMDS-xxx	UFCS-xxx	
	NTx-355-yBNS-0001	CMDS-xxx	UFCS-xxx	CBMS-xxx
	NTx-355-TzNS-DPww	Integrated	Integrated	Integrated

Digitax ST - 230V NT Motor Specifications												
Drive Model	Motor Model*	Cont. Stall Torque lb-in Nm	Peak Stall Torque lb-in Nm	Rated Torque @Rated Speed* lb-in Nm	Rated Power HP kWatts	Max. Speed RPM	Encoder Resolution lines/rev	Inertia** lb-in-sec ² kg-cm ²	Motor Ke Vrms/krpm	Motor Kt lb-in/Arms Nm/Arms	Motor Weight lb kg	
DST1201	NT207	7.5 0.8	18.4 2.1	7.5 0.8	0.6 0.45	5000	2048	0.000094 0.11	35	5.12 0.58	3.0 1.36	
DST1202	NT212	12.5 1.4	30.7 3.5	12.0 1.4	1.0 0.72	5000	2048	0.000164 0.19	35	5.12 0.58	4.0 1.82	
DST1203	NT320	18.5 2.1	56.7 6.4	16.0 1.8	1.0 0.77	4000	2048	0.000328 0.37	29	3.50 0.40	7.3 3.31	
DST1204	NT355	48.0 5.4	144.1 16.3	48.0 5.4	2.3 1.72	3000	2048	0.000888 1.00	50	6.32 0.71	12.3 5.58	

*See order guide on previous page for complete motor model number.

**See NT Motor detail section for medium inertia option details.

Digitax ST - 230V NT Motor Speed Torque Curves



SPECIFICATIONS

Voltage 240 VAC
 Drive Frequency 6 kHz
 Ambient Temperature 25°C (77°F)
 Case Temperature 100°C (212°F)

Legend

Continuous Torque
 Peak Torque

All performance data listed above has a +/-10% tolerance and is subject to change at any time without notice. For more detailed information on performance data and test conditions please refer to the motor section of the catalog. For brake motor information, complete motor specifications and dimensions please refer to our motor section.

Digitax ST

230V XV Motor Selection

The new XV Servo Motor line delivers high-performance, low inertia, and high torque in a compact motor package. It offers a low cost solution with the features of a premium priced servo offering. Intended for higher throughputs and smaller machines, XV motors are available in four frame sizes: 40, 60, 80 and 130 mm with speeds ranging from 2000 to 5000 RPM.

System Torque range is 3.1 lb-in (.3 Nm) to 105 lb-in (11.4 Nm).

XV motors are CE, UL and RoHS approved.

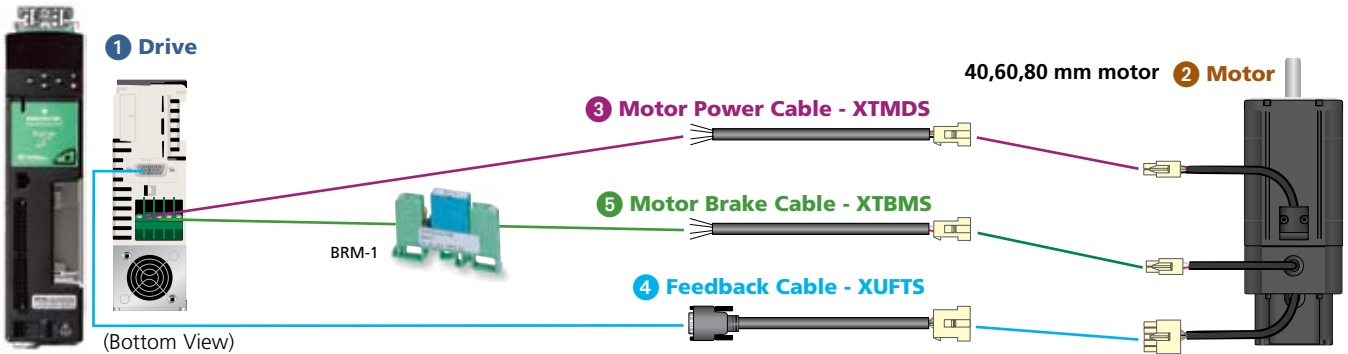
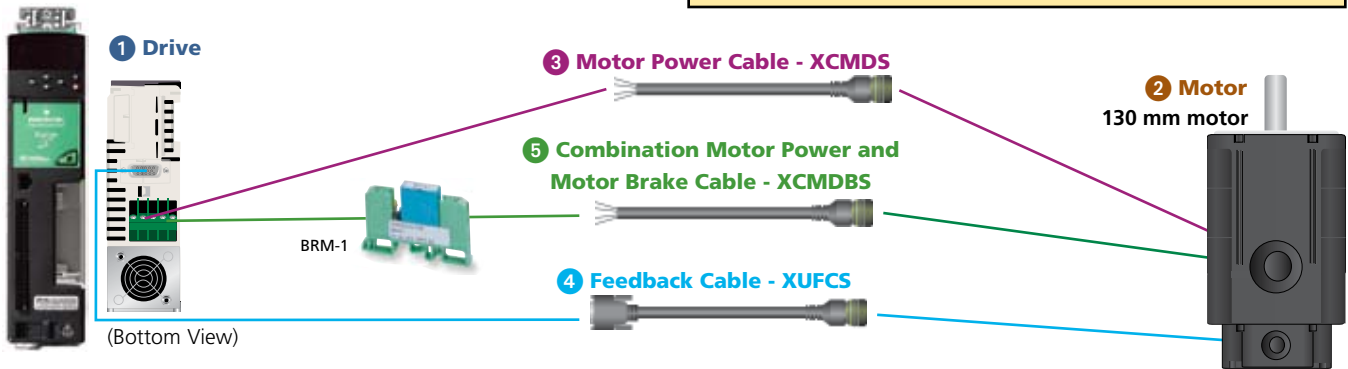
Order String

XVM	w	xx	C	x	NS	0000
↑	↑	↑	↑	↑		↑
XV Motor family	w = 40, 60, 80, 130 mm	xx = 1, 2, 3 for 40 mm xx = 4, 6, 11 for 60 mm xx = 17, 22, 23, 28 for 80 mm xx = 42, 46, 51, 68, 89, 101 for 130 mm	C	x: O = standard, B = brake		0000 = standard

Example: XVM-13046-CONS-0000
XVM-130101-CBNS-0000

For additional motor information see Motors.
For additional cable options see Options.

Digitax ST

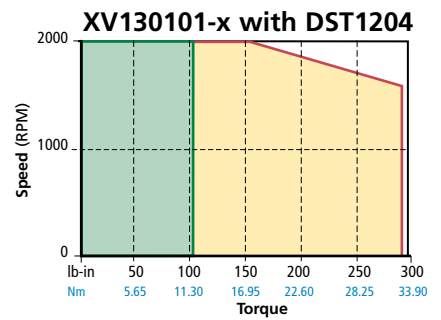
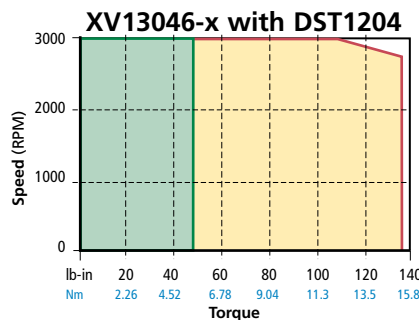
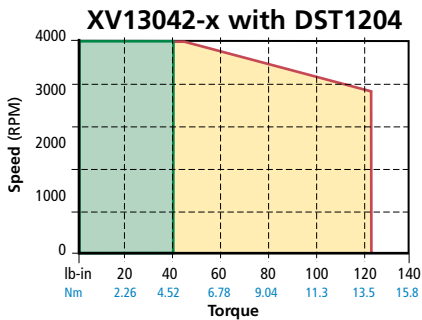
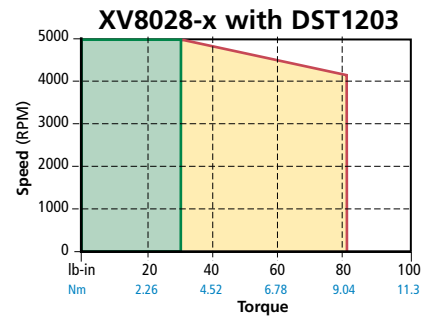
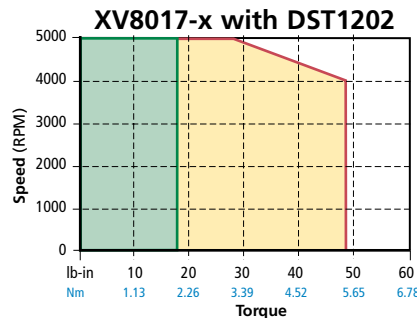
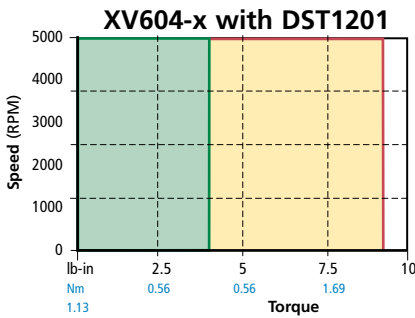


Servo System Order Guide

① Drive Model x=B,I,P,Z	② Motor Model (y: O=Standard, B=Brake)	③ Motor Power Cable (xxx=feet)	④ Feedback Cable (xxx=feet)	⑤ Motor Brake Cable (required w/all brake motors) (xxx=feet)
DST1201x	XV-604-TyNS-0000	XTMS-xxx	XUFTS-xxx	XTMS-xxx
DST1202x	XV-8017-TyNS-0000	XTMS-xxx	XUFTS-xxx	XTMS-xxx
DST1203x	XV-8028-TyNS-0000	XTMS-xxx	XUFTS-xxx	XTMS-xxx
DST1204x	XV-13042-CONS-0000	XCMS-xxx	XUFTS-xxx	-
	XV-13042-CBNS-0000	-	XUFTS-xxx	XCMS-xxx
DST1204x	XV-13046-CONS-0000	XCMS-xxx	XUFTS-xxx	-
	XV-13046-CBNS-0000	-	XUFTS-xxx	XCMS-xxx
DST1204x	XV-130101-CONS-0000	XCMS-xxx	XUFTS-xxx	-
	XV-130101-CBNS-0000	-	XUFTS-xxx	XCMS-xxx

Digitax ST - 230V XV Motor Specifications												
Drive Model	Motor Model	Cont. Stall Torque lb-in Nm	Peak Stall Torque lb-in Nm	Rated Torque @Rated Speed* lb-in Nm	Rated Power HP kWatts	Max. Speed RPM	Encoder Resolution lines/rev	Inertia lb-in-sec ² kg-cm ²	Motor Ke Vrms/krpm	Motor Kt lb-in/Arms Nm/Arms	Motor Weight lb kg	
DST1201	XV604	3.1 0.3	8.4 1.0	2.8 0.3	0.1 0.10	5000	2048	0.000101 0.11	14	1.86 0.21	1.8 0.84	
DST1202	XV8017	17.9 2.0	48.6 5.5	16.9 1.9	0.8 0.60	5000	2048	0.000960 1.08	35	5.00 0.56	5.4 2.49	
DST1203	XV8028	29.9 3.4	81.1 9.2	28.2 3.2	1.3 1.00	5000	2048	0.001705 1.93	39	5.57 0.63	8.3 3.80	
DST1204	XV13042	40.7 4.6	122.0 13.8	40.7 4.6	2.0 1.50	5000	2048	0.010611 11.99	39	5.35 0.60	15.8 7.20	
DST1204	XV13046	48.4 5.5	137.2 15.5	46.5 5.3	1.5 1.10	3000	2048	0.010611 11.99	53	7.71 0.87	15.8 7.20	
DST1204	XV130101	101.0 11.4	296.5 33.5	101.0 11.4	1.6 1.20	2000	2048	0.020007 22.61	90	13.88 1.57	22.4 10.20	

Digitax ST - 230V XV Motor Speed Torque Curves



SPECIFICATIONS

Voltage 240 VAC
 Drive Frequency 6 kHz
 Ambient Temperature 25°C (77°F)
 Case Temperature 75°C (167°F)

Legend

Continuous Torque
 Peak Torque

All performance data listed above has a +/-10% tolerance and is subject to change at any time without notice. For more detailed information on performance data and test conditions please refer to the motor section of the catalog. For brake motor information, complete motor specifications and dimensions please refer to our motor section.