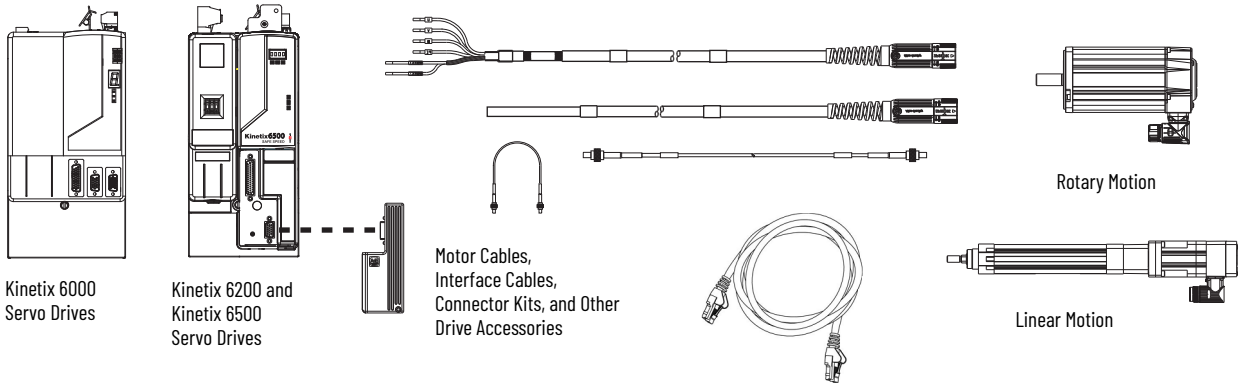


# Kinetix 6000 and Kinetix 6200/6500 Drive Systems

Catalog Numbers 2094-ACxx-Mxx-S, 2094-BCxx-Mxx-S, 2094-AMxx-S, 2094-BMxx-S, 2094-BCxx-Mxx-M, 2094-BMxx-M, 2094-SE02F-M00-Sx, 2094-EN02D-M01-Sx



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## Summary of Changes

This publication contains new and updated information as indicated in the following table.

Topic	Page
Added Series E	Throughout
Updated terminology for Kinetix products	Throughout

## Introduction

Use this publication if your application includes Kinetix® 6000, Kinetix 6200, or Kinetix 6500 drive families with any of the compatible Allen-Bradley® motors and actuators. For more Kinetix drive and motor information, see the Kinetix Motion Control Selection Guide, publication [KNX-SG001](#) or the Motion Analyzer sizing and selection tool.

The purpose of this publication is to help you identify the drive system components and accessory items that are needed for your drive and motor/actuator combination. Diagrams in this publication illustrate how many of the common drive accessories are used in a typical system. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for detailed accessory descriptions and specifications.

Also provided are drive/motor or drive/actuator system combinations that include the following:

- Motor/cable combinations table
- Drive and motor/actuator performance specification table
- Torque/speed curves with each motor that is matched to the drive that provides optimum performance

Performance specification data and curves reflect the nominal system performance of a typical system with motor/drive at rated ambient temperature and line voltage. For additional information on ambients, line conditions, and valid combinations that are not shown in this publication, see the Motion Analyzer sizing and selection tool.

**IMPORTANT** These system combinations do not include all possible motor/drive combinations. See the Motion Analyzer sizing and selection tool to verify compatibility. Access the tool from the website <https://motionanalyzer.rockwellautomation.com/>.

## Kinetix 6000 and Kinetix 6200/6500 Drive Systems

For each Kinetix 6000, Kinetix 6200, or Kinetix 6500 drive system, the drive and motor/actuator catalog numbers are required to determine the motor power and feedback cable catalog numbers. Interface cables, connector kits, and a Bulletin 2094 power rail are also required. Optional equipment includes the 2094 shunt module, slot-filler modules, line interface module, Bulletin 2198 encoder output module, AC line filter, and others. See the following for examples:

- Example configurations of the required equipment are shown on [page 4](#). Optional equipment configurations are shown on [page 4](#) and [page 5](#).
- For Kinetix 6000 and Kinetix 6200/6500 (rotary motion) system combinations, see [page 8](#). For linear motion system combinations, see [page 50](#).

## Determine What You Need

These tables list the drive modules and accessory items available for the Kinetix 6000 and Kinetix 6200/6500 drive systems.

### Kinetix 6000 Drive Modules

Drive Module	Drive Cat. No. <sup>(1)</sup>	Continuous Output Ratings		Slot Usage	Quantity
		Converter (A <sub>DC</sub> )	Inverter (A, 0-pk)		
Integrated axis module (IAM) 200V-class	2094-AC05-MP5-S	3 kW, 10 A	1.2 kW, 5 A	Single-wide	1 for each power rail
	2094-AC05-M01-S	3 kW, 10 A	1.9 kW, 9 A		
	2094-AC09-M02-S	6 kW, 19 A	3.4 kW, 15 A		
	2094-AC16-M03-S	11.3 kW, 36 A	5.5 kW, 25 A		
	2094-AC32-M05-S	22.5 kW, 71 A	11.0 kW, 49 A	Double wide	
Integrated axis module (IAM) 400V-class	2094-BC01-MP5-S	6 kW, 9 A	1.8 kW, 4.0 A	Single-wide	
	2094-BC01-M01-S	6 kW, 9 A	3.9 kW, 8.6 A		
	2094-BC02-M02-S	15 kW, 23 A	6.6 kW, 14.6 A		
	2094-BC04-M03-S	28 kW, 42 A	13.5 kW, 30 A	Double wide	
	2094-BC07-M05-S	45 kW, 68 A	22.0 kW, 49 A		
Axis module (AM) 200V-class	2094-AMP5-S	N/A	1.2 kW, 5 A	Single-wide	Up to 7 for each 8-axis power rail
	2094-AM01-S		1.9 kW, 9 A		
	2094-AM02-S		3.4 kW, 15 A		
	2094-AM03-S		5.5 kW, 25 A		
	2094-AM05-S		11.0 kW, 49 A		
Axis module (AM) 400V-class	2094-BMP5-S	N/A	1.8 kW, 4.0 A	Single-wide	Up to 7 for each 8-axis power rail
	2094-BM01-S		3.9 kW, 8.6 A		
	2094-BM02-S		6.6 kW, 14.6 A		
	2094-BM03-S		13.5 kW, 30 A	Double wide	
	2094-BM05-S		22.0 kW, 49 A		

(1) The -S designator indicates safe-off functionality.

See the Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for detailed descriptions and additional specifications for the Kinetix 6000 drive family.

**Kinetix 6200 and Kinetix 6500 Drive Modules**

Drive Module	Drive Cat. No.	Continuous Output Ratings		Slot Usage	Quantity
		Converter (A <sub>DC</sub> )	Inverter (A, 0-pk)		
IAM power module 400V-class	2094-BC01-MP5-M	6 kW, 9 A	1.8 kW, 4.0 A	Single-wide	1 for each power rail
	2094-BC01-M01-M	6 kW, 9 A	3.9 kW, 8.6 A		
	2094-BC02-M02-M	15 kW, 23 A	6.6 kW, 14.6 A		
	2094-BC04-M03-M	28 kW, 42 A	13.5 kW, 30 A	Double wide	
	2094-BC07-M05-M	45 kW, 68 A	22.0 kW, 49 A		
AM power module 400V-class	2094-BMP5-M	N/A	1.8 kW, 4.0 A	Single-wide	Up to 7 for each 8-axis power rail
	2094-BM01-M		3.9 kW, 8.6 A		
	2094-BM02-M		6.6 kW, 14.6 A		
	2094-BM03-M		13.5 kW, 30 A	Double wide	
	2094-BM05-M		22.0 kW, 49 A		
Kinetix 6200 Control module (Sercos)	2094-SE02F-M00-S0, Safe Torque Off		1 for each IAM and AM power module		
	2094-SE02F-M00-S1, Safe speed monitoring				
Kinetix 6500 Control module (EtherNet/IP™ network)	2094-EN02D-M01-S0, Safe Torque Off		1 for each IAM and AM power module		
	2094-EN02D-M01-S1, Safe speed monitoring				

See the Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for detailed descriptions and additional specifications for the Kinetix 6200 and Kinetix 6500 drive families.

**Required Drive Accessories**

Drive Accessory	Description	Kinetix 6000 Systems	Kinetix 6200 Systems	Kinetix 6500 Systems
2094 power rail	Backplane and mounting fixture for Bulletin 2094 drive modules	2094-PRSx, available for 1, 2, 3, 4, 5, 7, and 8-axis drive systems		
Low-profile connector kits (required for flying lead cables)	Motor feedback connections	2090-K6CK-D15M	N/A	N/A
		2090-K6CK-KENDAT <sup>(1)</sup>		
	Auxiliary feedback connections	2090-K6CK-D15F	N/A	N/A
	I/O connections	2090-K6CK-D26M		
	I/O, safety, and auxiliary feedback connections	N/A	2090-K6CK-D44M	
I/O and cascading Safe Torque Off connections	N/A	2090-K6CK-D44S0		
Sercos fiber-optic cables (required as needed)	Plastic, in-cabinet duty	2090-SCEPx-x	N/A	
	Plastic, on-machine duty	2090-SCNPx-x		
	Plastic, outdoor, and conduit duty	2090-SCVPx-x		
	Glass, outdoor, and conduit duty	2090-SCVGx-x		
Ethernet network cables	Double-ended, non-flex, shielded	N/A	N/A	1585J-M8CBJM-x
	Double-ended, high-flex, shielded			1585J-M8UBJM-x
Motor power and feedback cables	See the specific drive/motor combination for the motor cables required for your system.			

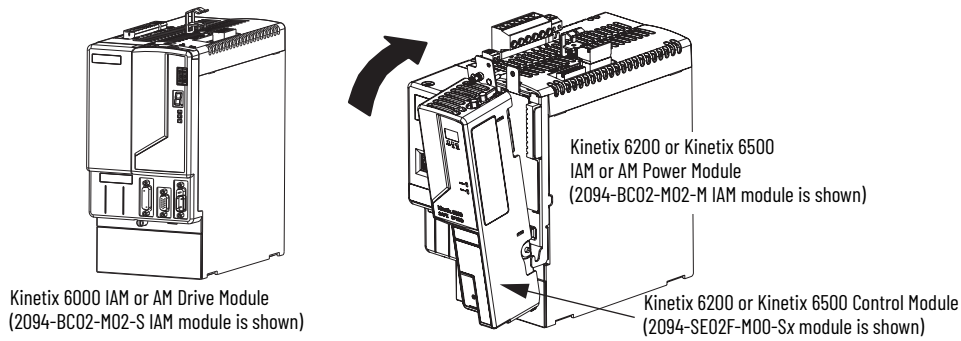
(1) Applies to only Kinetix RDB direct-drive motors with EnDat encoder.

See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for detailed descriptions and specifications of these required servo drive accessories.

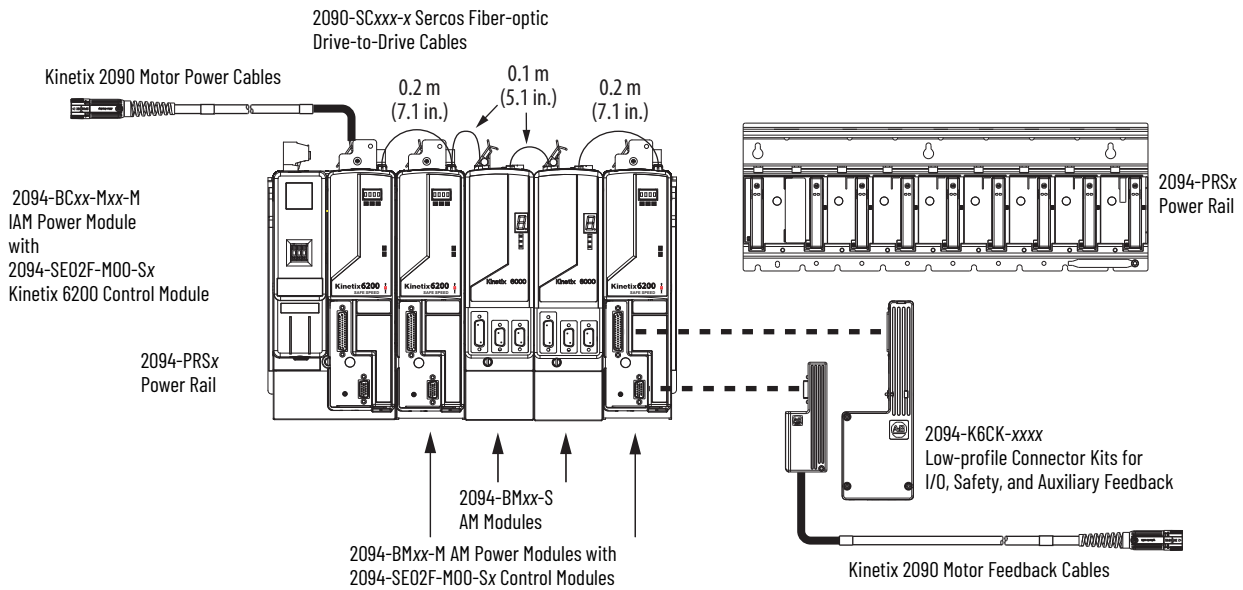
## Kinetix 6000 and Kinetix 6200/6500 System Examples

These system examples illustrate how the required drive modules and accessories are used in a typical system.

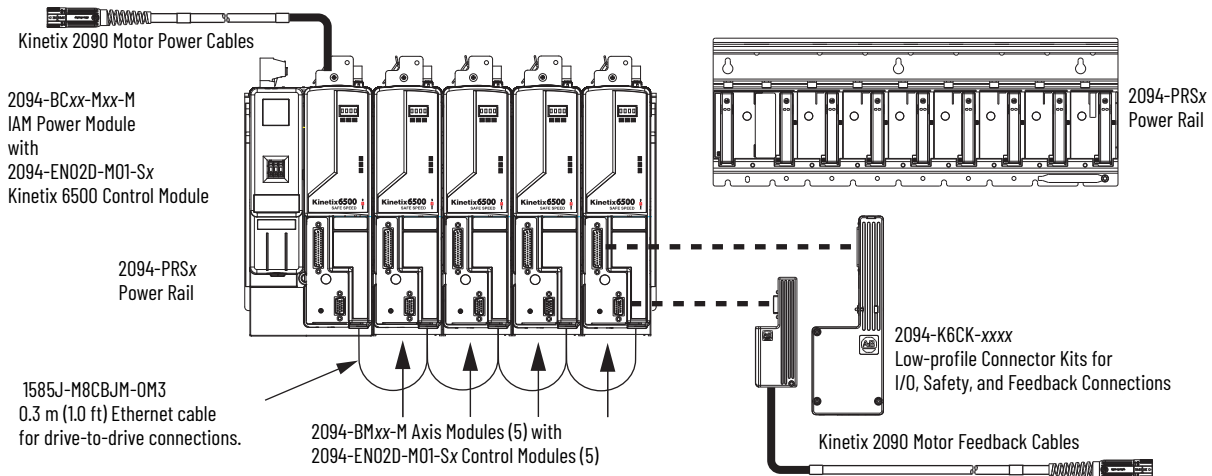
### Drive Module Examples



### Kinetix 6000 and Kinetix 6200 Drive System Example (Sercos interface)



### Kinetix 6500 Drive System Example (EtherNet/IP Network)



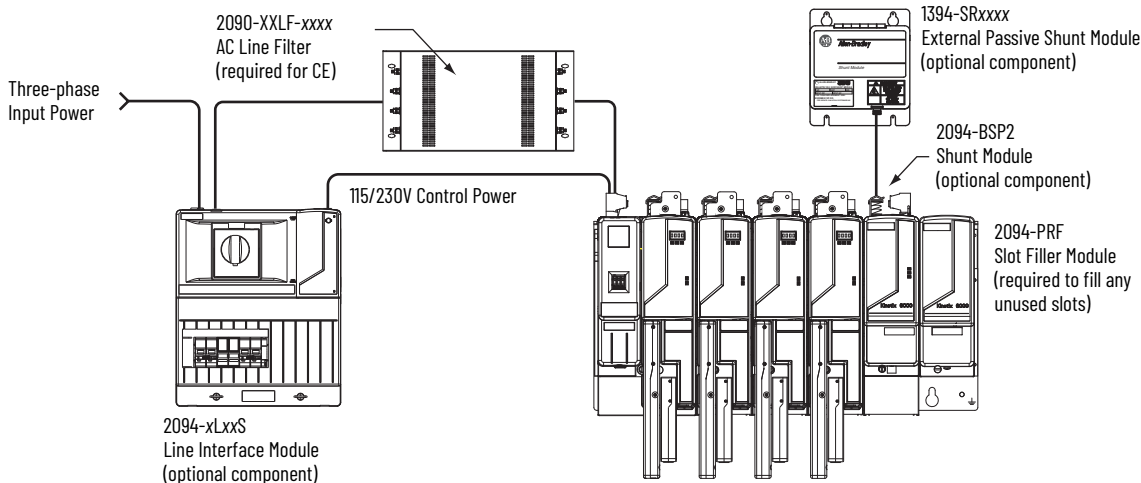


Optional Drive Accessories

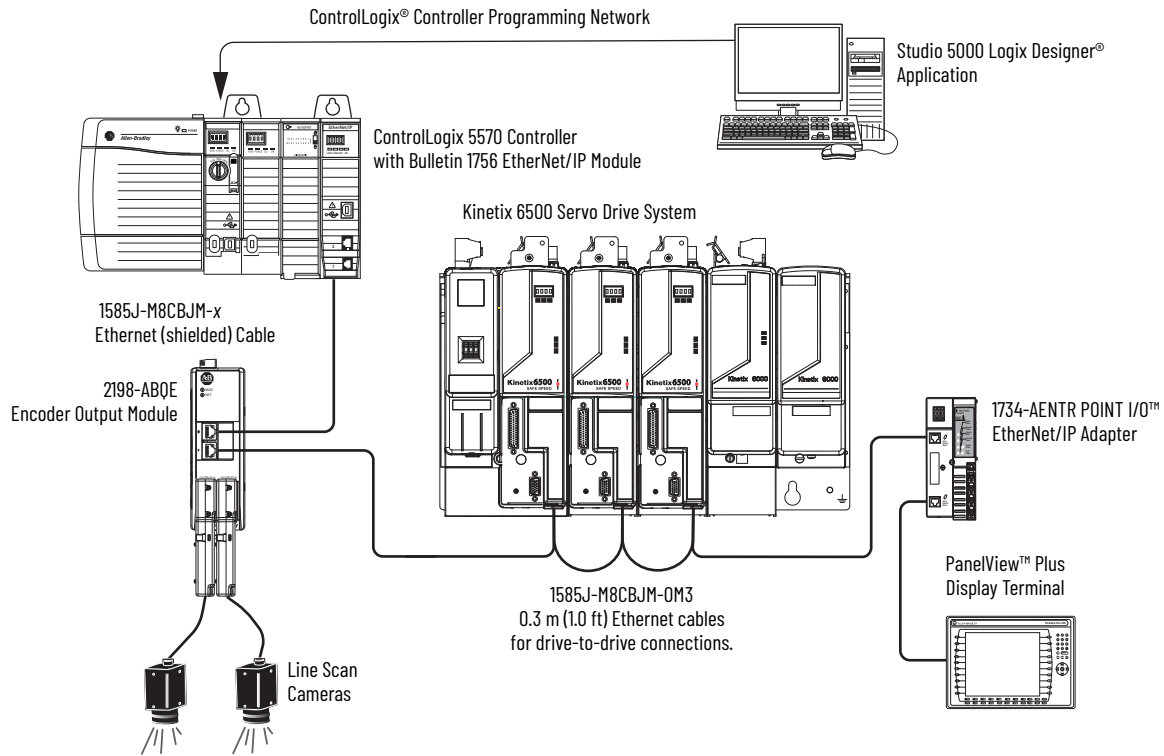
Drive Accessory	Description	Kinetix 6000 Systems	Kinetix 6200 Systems	Kinetix 6500 Systems
2094 shunt module	200 W continuous shunt power	2094-BSP2		
2094 slot-filler module	Fills unused slots on the 2094 power rail	2094-PRF		
2094 line interface module	Replaces many of the common input power devices for your drive system	2094-ALxxS, 2094-AL09, 2094-BLxxS, 2094-BL02, 2094-XL75S-Cx	2094-BLxxS, 2094-BL02, 2094-XL75S-Cx	
2090 AC line filters	AC line conditioning for EMC	2090-XXLF-xxxx		
1394 external passive shunt modules	Shunt capacity in addition to the 2094-BSP2 shunt module	1394-SRxxx		
Safety headers <sup>(1)</sup>	Cascading Safe Torque Off connections from drive-to-drive	2090-XNSM-x	N/A	
Safety interface cables <sup>(1)</sup>		1202-Cxx	2090-CS0SDS-AAxx	
2094 mounting brackets	Panel space-saving brackets that let you mount the line filter behind the LIM module or power rail	2094-XNBRKT-1		
Encoder output module	DIN rail mounted EtherNet/IP network-based standalone module capable of outputting encoder pulses to a customer-supplied peripheral device	N/A	N/A	2198-ABQE
External auxiliary encoders	Allen-Bradley sine/cosine and incremental external encoders	Bulletin 842A, 844D, 847H, and 847T		
Connector sets	Replacement connectors for input power, control power, motor power, and others	2094-xxxCON, 2094-xxxINV, and 2094-XNSHT		
Resistive brake module (RBM)	Physically and electrically separate the drive power output from its corresponding motor	2090-XBxxx-xx		
RBM interface cables	Motor power, RBM to drive	2090-XXNRB-10FOP5 2090-XXNRB-8FOP6		
8720MC regenerative power supply (RPS)	Power components required in regenerative applications	8720MC-RPSxxx		
8720MC line reactors		8720MC-LRxx-xxxx		

(1) For drive system examples of safe-off headers and cables, see the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#).

Kinetix 6000 and Kinetix 6200/6500 Power Accessories Example



**Kinetix 6500 Drives and Encoder Output Module Example**



Motor-end cable connector kits, for use when building your own cables, and panel-mounted breakout components are also available. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for detailed descriptions and specifications of optional servo drive accessories.

For Kinetix 6000 and Kinetix 6200/6500 (rotary motion) system combinations, see [page 8](#). For linear motion system combinations, see [page 50](#).

**Kinetix 2090 Motor/Actuator Cables Overview**

**Feedback Cable Descriptions (standard, non-flex)**

Standard Cable Cat. No.	Description	Cable Configuration	Motor/Actuator Connector
		Motor/Actuator End Drive End	
2090-CFBM7DF-CEAxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>High-resolution or resolver applications (CE)</li> </ul>		SpeedTec DIN (M7)
2090-CFBM7DD-CEAxx	<ul style="list-style-type: none"> <li>Drive-end 15-pin connector (DD)</li> <li>High-resolution or resolver applications (CE)</li> </ul>		
2090-XXNFMF-Sxx	<ul style="list-style-type: none"> <li>Drive-end flying leads</li> <li>High-resolution or incremental applications</li> </ul>		Threaded DIN (M4)
2090-CFBM4E2-CATR	<ul style="list-style-type: none"> <li>Drive-end bayonet (E2), transition (TR) cable <sup>(1)</sup></li> <li>Motor-end threaded DIN (M4)</li> <li>All feedback types (CA)</li> </ul>		
2090-CFBM6DF-CBAxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>High-resolution, battery backup or Incremental applications (CB)</li> </ul>		Circular Plastic (M6)
2090-CFBM6DD-CCAxx	<ul style="list-style-type: none"> <li>Drive-end 15-pin connector (DD)</li> <li>Incremental applications only (CC)</li> </ul>		

(1) Threaded DIN connector (motor end) and bayonet connector for 2090-XXNFMF-Sxx cable.

**Feedback Cable Descriptions (continuous-flex)**

Continuous-flex Cable Cat. No.	Description	Cable Configuration		Motor/Actuator Connector
		Motor/Actuator End	Drive End	
2090-CFBM7DF-CDAFxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>High-resolution or incremental applications (CD)</li> </ul>			SpeedTec DIN (M7)
2090-CFBM7DF-CEAFxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>High-resolution or resolver applications (CE)</li> </ul>			
2090-CFBM7DD-CEAFxx	<ul style="list-style-type: none"> <li>Drive-end 15-pin connector (DD)</li> <li>High-resolution or resolver applications (CE)</li> </ul>			
2090-CFBM7E7-CDAFxx 2090-CFBM7E7-CEAFxx	<ul style="list-style-type: none"> <li>Drive-end (male) connector, extension (E7) <sup>(1)</sup></li> <li>Motor-end SpeedTec DIN cable plug (M7)</li> </ul>			
2090-CFBM4DF-CDAFxx	<ul style="list-style-type: none"> <li>Drive-end flying leads</li> <li>High-resolution or incremental applications</li> </ul>			Threaded DIN (M4)

(1) SpeedTec DIN connector (motor end) and plug connector for extending SpeedTec or threaded DIN cable.

**IMPORTANT** Feedback cables with the CE designation, for example 2090-CFBM7DF-CEAAxx, are intended for high-resolution encoder or resolver applications and have fewer conductors than feedback cables with the CD designation, for example 2090-CFBM7DF-CDAFxx, which are intended for high-resolution or incremental encoder applications.

**Power/Brake Cable Descriptions (standard, non-flex)**

Standard Cable Cat. No.	Description	Cable Configuration		Motor/Actuator Connector
		Motor/Actuator End	Drive End	
2090-CPBM7DF-xxAAxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>Power/brake wires (PB)</li> </ul>			SpeedTec DIN (M7)
2090-CPWM7DF-xxAAxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>Power wires only (PW)</li> </ul>			
2090-XXNPMF-xxSxx	<ul style="list-style-type: none"> <li>Drive-end flying leads</li> <li>Power/brake wires</li> </ul>			Threaded DIN (M4)
2090-CPBM4E2-xxTR	<ul style="list-style-type: none"> <li>Drive-end bayonet (E2), transition (TR) cable <sup>(1)</sup></li> <li>Motor-end threaded DIN (M4)</li> <li>Power/brake wires (PB)</li> </ul>			Threaded DIN (M4)
2090-CPWM4E2-xxTR	<ul style="list-style-type: none"> <li>Drive-end bayonet (E2), transition (TR) cable <sup>(1)</sup></li> <li>Motor-end threaded DIN (M4)</li> <li>Power wires only (PW)</li> </ul>			
2090-CPBM6DF-16AAxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>Power/brake wires (PB)</li> </ul>			Circular Plastic (M6)
2090-CPWM6DF-16AAxx	<ul style="list-style-type: none"> <li>Drive-end flying leads (DF)</li> <li>Power wires only (PW)</li> </ul>			

(1) Threaded DIN connector (motor end) and bayonet connector for 2090-XXNFMP-Sxx cable.

**Power/Brake Cable Descriptions (continuous-flex)**

Continuous-flex Cable Cat. No.	Description	Cable Configuration		Motor/Actuator Connector
		Motor/Actuator End	Drive End	
2090-CPBM7DF-xxAFxx	<ul style="list-style-type: none"> <li>• Drive-end flying leads (DF)</li> <li>• Power/brake wires (PB)</li> </ul>			SpeedTec DIN (M7)
2090-CPWM7DF-xxAFxx	<ul style="list-style-type: none"> <li>• Drive-end flying leads (DF)</li> <li>• Power wires only (PW)</li> </ul>			
2090-CPBM7E7-xxAFxx	<ul style="list-style-type: none"> <li>• Drive-end (male) connector, extension (E7) <sup>(1)</sup></li> <li>• Motor-end SpeedTec DIN cable plug (M7)</li> </ul>			Threaded DIN (M4)
2090-CPBM4DF-xxAFxx	<ul style="list-style-type: none"> <li>• Drive-end flying leads (DF)</li> <li>• Power/brake wires (PB)</li> </ul>			
2090-CPWM4DF-xxAFxx	<ul style="list-style-type: none"> <li>• Drive-end flying leads (DF)</li> <li>• Power wires only (PW)</li> </ul>			

(1) SpeedTec DIN connector (motor end) and plug connector for extending SpeedTec or threaded DIN cable.

**Kinetix 6000 Drive Rotary Performance Example with Peak Enhancement Feature**

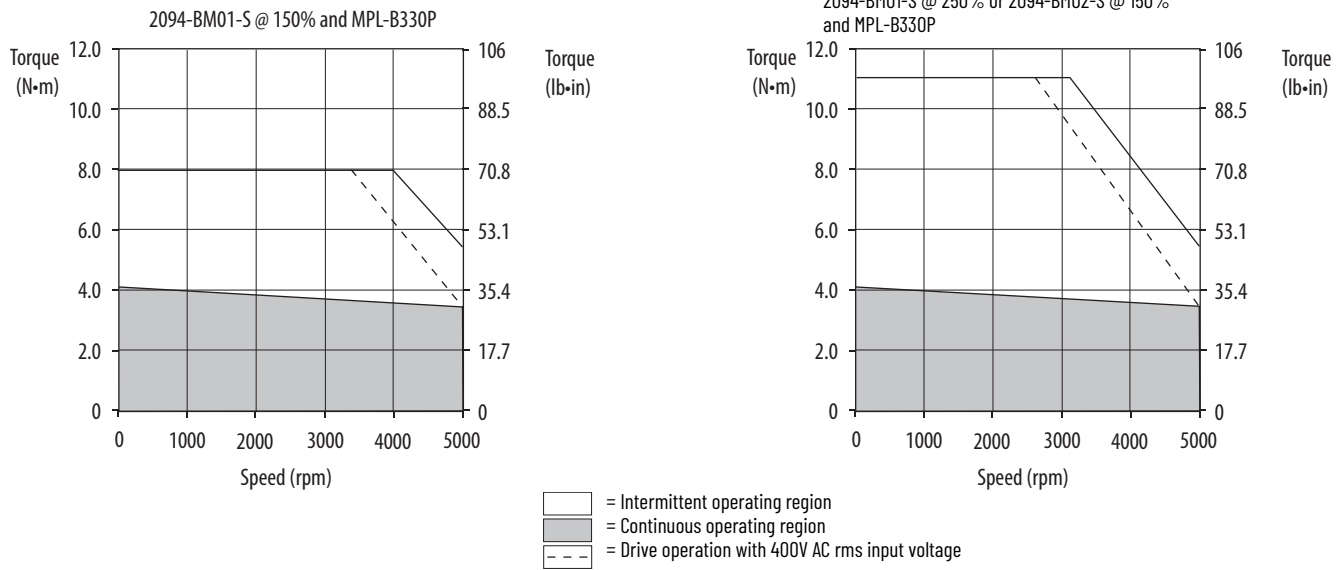
The peak current ratings of the Kinetix 6000 AM modules are configured at the factory as 150% of continuous current. You can program 400V-class (series B and later) AM modules, and the equivalent IAM (inverter) modules, to operate with up to 250% of continuous inverter current. See the Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-ID005](#), for more information.

**IMPORTANT** Before your Kinetix 6000 drive can deliver enhanced-peak performance, you must enable the peak enhancement feature by configuring your drive by using DriveExplorer™ or RSLogix 5000® software, or the Studio 5000 Logix Designer application. See the Kinetix 6000 Multi-axis Servo Drive User Manual, publication [2094-UM001](#), to recalculate torque and acceleration/deceleration limit values, and paste them into the appropriate Axis Properties dialog box in RSLogix 5000 software or the Logix Designer application. For sizing your drive/motor combination when using series B and later drives with the peak enhancement feature, use Motion Analyzer, version 4.6 or later.

In this example, the MPL-B330P motor, usually paired with the 2094-BM02 (series A) AM module, is shown paired with the 2094-BM01-S (series B and later) AM module. The two curves illustrate how the 2094-BM01-S (series B and later) drive, when configured for 250% peak, can achieve full motor performance.

**Rotary Motor Performance Specifications Example with Kinetix 6000 Drives**

Rotary Motor Cat. No.	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPL-B330P	5000	6.10	4.18 (37)	13.0	8.0 (71)	1.8	2094-BM01-S @ 150%
				19.0	11.1 (98)		2094-BM01-S @ 250%
							2094-BM02-S @ 150%



**IMPORTANT** The 2094-BC07-M05-S and 2094-BM05-S (series B and later) modules are limited to 200% of continuous inverter current.

## Kinetix 6000 (200V-class) Drives with Kinetix MPL Low-inertia Motors

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with Kinetix MPL low-inertia motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

**IMPORTANT** The Kinetix MPL low-inertia motors on this page are equipped with DIN connectors (specified by 7 in the catalog number) and are not compatible with cables that are designed for motors that are equipped with bayonet connectors (specified by 2 in the catalog number). The motors with bayonet connectors (for example, MPL-A310P-xx2xAA) are being discontinued and require 2090-XXNxMP (bayonet) cables. For help with migration or to select bayonet cables, contact your Rockwell Automation® sales representative.

### Kinetix MPL Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPL-A1510V-xx7xAA, MPL-A1520U-xx7xAA, MPL-A1530U-xx7xAA	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or <sup>(2)(3)</sup> 2090-CFBM7DD-CEAAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback
MPL-A210V-xx7xAA, MPL-A220T-xx7xAA, MPL-A230P-xx7xAA		
MPL-A310F-xx7xAA, MPL-A310P-xx7xAA, MPL-A320H-xx7xAA, MPL-A320P-xx7xAA, MPL-A330P-xx7xAA		
MPL-A420P-xx7xAA, MPL-A430H-xx7xAA		
MPL-A4530F-xx7xAA, MPL-A4540C-xx7xAA	2090-CPxM7DF-14AAxx (standard, non-flex) 2090-CPxM7DF-14AFxx (continuous-flex)	2090-XXNFMF-Sxx (standard, non-flex) <sup>(4)</sup> 2090-CFBM7DF-CDAFxx (continuous-flex) Incremental Feedback
MPL-A430P-xx7xAA		
MPL-A4530K-xx7xAA, MPL-A4540F-xx7xAA	2090-CPxM7DF-12AAxx (standard, non-flex) 2090-CPxM7DF-10AAxx (standard, non-flex) 2090-CPxM7DF-10AFxx (continuous-flex)	
MPL-A4560F-xx7xAA		
MPL-A520K-xx7xAA	2090-CPxM7DF-08AAxx (standard, non-flex) 2090-CPxM7DF-08AFxx (continuous-flex)	
MPL-A540K-xx7xAA, MPL-A560F-xx7xAA		

- (1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).
- (2) Applies to Kinetix 6000 drives and MPL-A3xxx-M/S...MPL-A5xxx-M/S motors with absolute high-resolution feedback.
- (3) Applies to Kinetix 6000 drives and MPL-A15xxx-V/E...MPL-A2xxx-V/E motors with absolute high-resolution feedback.
- (4) Applies to Kinetix 6000 drives and MPL-A15xxx-H...MPL-A45xxx-H motors with incremental feedback.

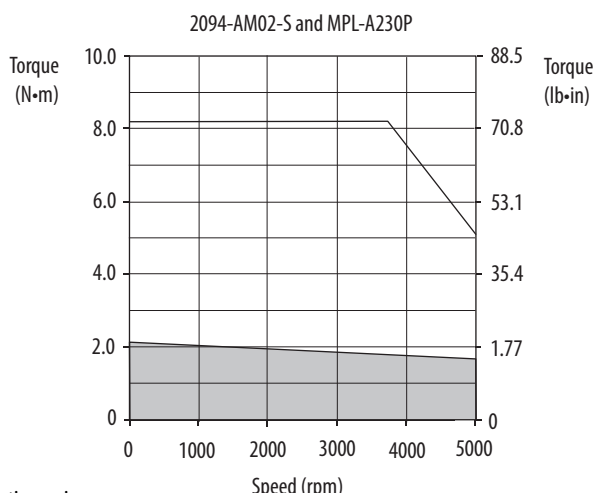
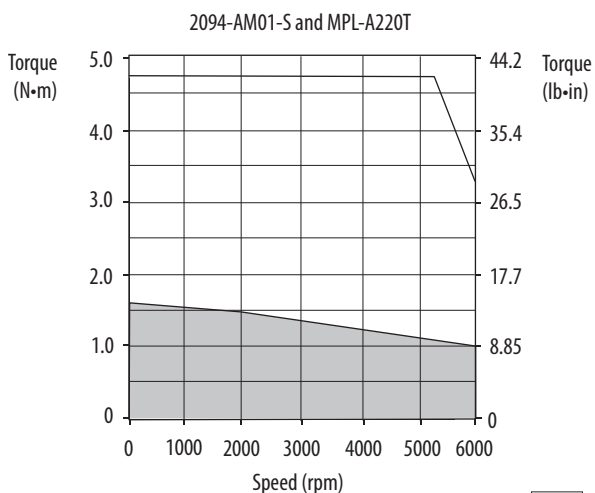
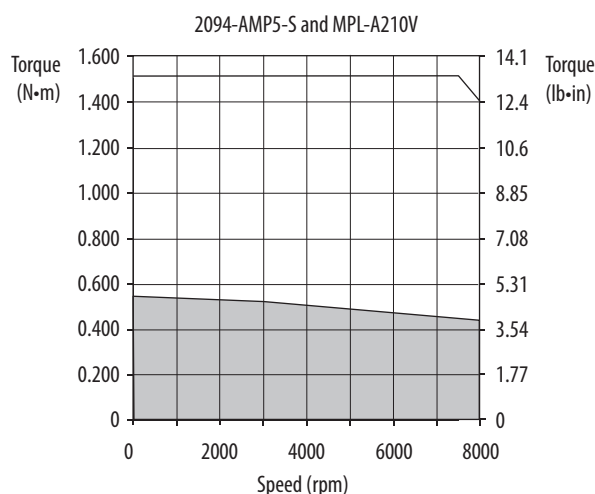
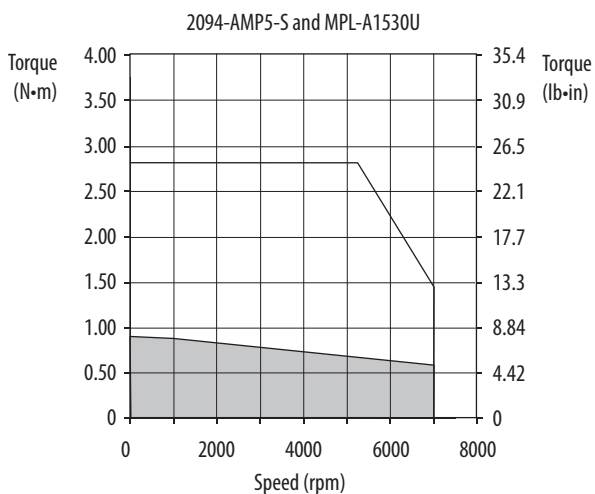
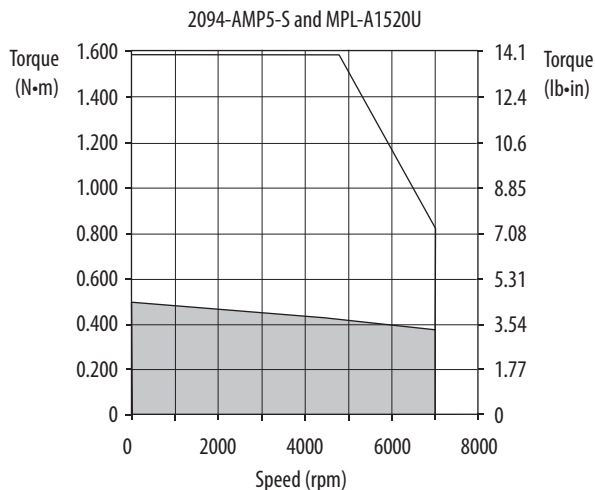
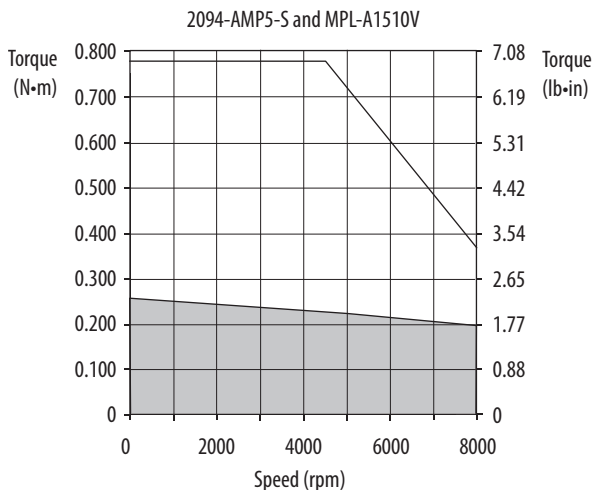
For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

Kinetix MPL Motor Performance Specifications with Kinetix 6000 (200V-class) Drives (Continued)

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
MPL-A1510V	8000	8000	1.05	0.26 (2.3)	3.40	0.77 (6.8)	0.16	2094-AMP5-S
MPL-A1520U	7000	7000	1.80	0.49 (4.3)	6.10	1.58 (13.9)	0.27	2094-AMP5-S
MPL-A1530U	7000	7000	2.82	0.90 (8.0)	10.1	2.82 (24.9)	0.39	2094-AMP5-S
MPL-A210V	8000	8000	3.09	0.55 (4.8)	10.2	1.52 (13.4)	0.37	2094-AMP5-S
MPL-A220T	6000	6000	4.54	1.61 (14.2)	10.5	3.45 (30.0)	0.62	2094-AMP5-S
					15.5	4.74 (41.9)		2094-AM01-S
MPL-A230P	5000	5000	5.40	2.10 (18.6)	17.0	8.0 (70.8)	0.86	2094-AM01-S
					23.0	8.2 (73.0)		2094-AM02-S
MPL-A310F	3000	3000	3.24	1.58 (14.0)	9.30	3.61 (31.9)	0.46	2094-AMP5-S
MPL-A310P	4750	5000	4.91	1.58 (14.0)	10.5	2.90 (25.6)	0.73	2094-AMP5-S
					14.0	3.61 (31.9)		2094-AM01-S
MPL-A320H	3500	3500	6.10	3.05 (27.0)	17.0	7.13 (63.0)	1.0	2094-AM01-S
					19.3	7.91 (70.0)		2094-AM02-S
MPL-A320P	5000	5000	8.50	2.88 (25.5)	17.0	5.07 (44.8)	1.3	2094-AM01-S
					29.5	7.91 (70.0)		2094-AM02-S
MPL-A330P	5000	5000	12.0	4.18 (37.0)	30.0	9.10 (80.5)	1.8	2094-AM02-S
					38.0	11.1 (98.2)		2094-AM03-S
MPL-A420P	5000	5000	12.9	4.79 (42.3)	30.0	9.67 (85.5)	2.0	2094-AM02-S
					46.0	13.6 (119)		2094-AM03-S
MPL-A430H	3500	3500	12.2	6.21 (55.0)	30.0	13.9 (123)	1.8	2094-AM02-S
					45.0	19.8 (175)		2094-AM03-S
MPL-A430P	5000	5000	15.0	5.35 (47.3)	30.0	9.99 (88.3)	2.2	2094-AM02-S
					49.0	15.4 (136)		2094-AM03-S
					67.0	19.8 (175)		2094-AM05-S
MPL-A4530F	2800	2800	13.40	8.36 (74.0)	30.0	15.8 (139)	1.9	2094-AM02-S
					42.0	20.3 (179)		2094-AM03-S
MPL-A4530K	4000	4000	19.50	8.13 (71.9)	49.0	17.0 (150)	2.5	2094-AM03-S
					62.0	20.3 (179)		2094-AM05-S
MPL-A4540C	1500	1500	8.50	9.15 (80.9)	17.0	16.9 (150)	1.5	2094-AM01-S
					29.0	27.1 (239)		2094-AM02-S
MPL-A4540F	3000	3000	18.40	10.19 (90.1)	49.0	23.6 (208)	2.6	2094-AM03-S
					58.0	27.1 (239)		2094-AM05-S
MPL-A4560F	3000	3000	22.0	14.1 (125)	49.0	27.0 (239)	3.0	2094-AM03-S
					66.0	34.4 (305)		2094-AM05-S
MPL-A520K	3500	4000	15.0	10.77 (95.2)	49.0	19.3 (171)	3.5	2094-AM03-S
					65.0	24.2 (214)		2094-AM05-S
MPL-A540K	4000	4000	41.5	19.42 (171)	73.4	31.3 (277)	5.5	2094-AM05-S
MPL-A560F	3000	3000	42.0	27.39 (242)	73.4	39.6 (350)	5.3	2094-AM05-S

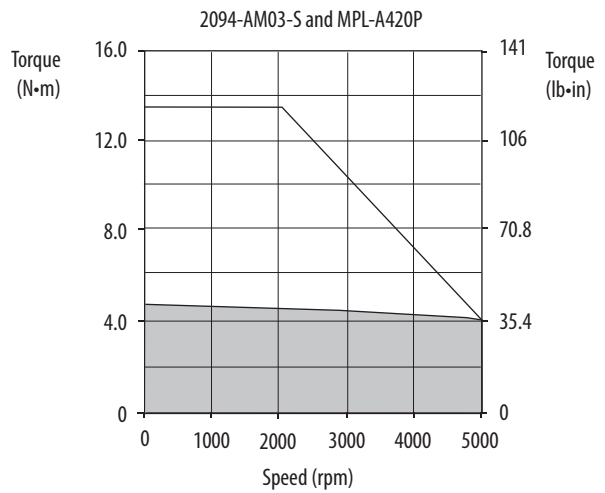
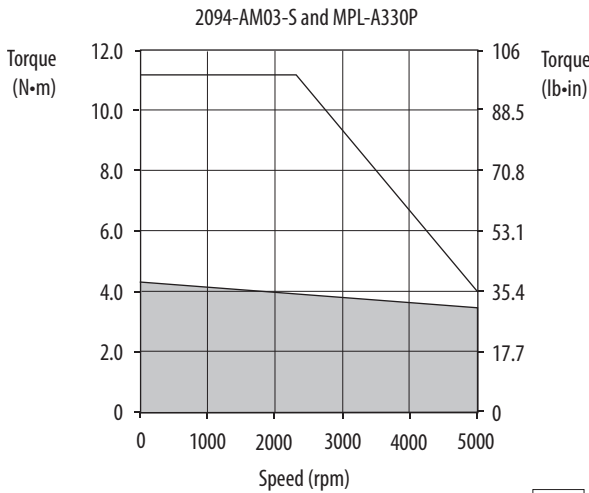
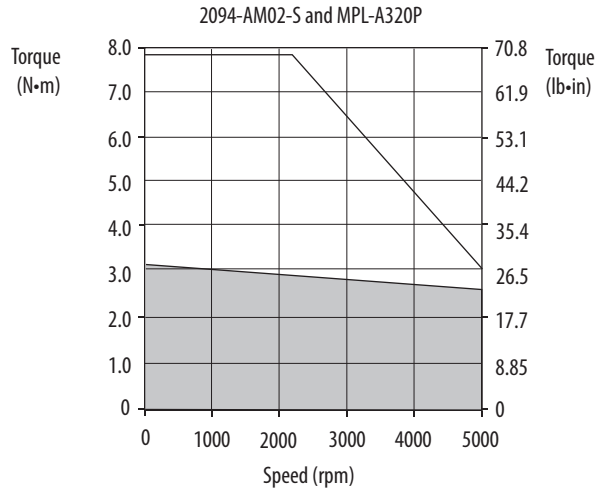
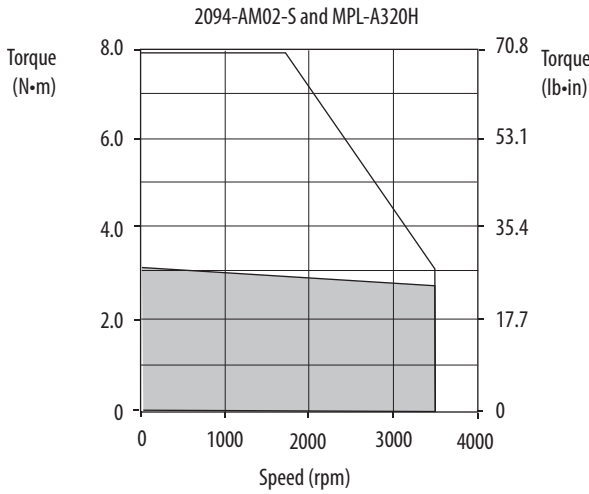
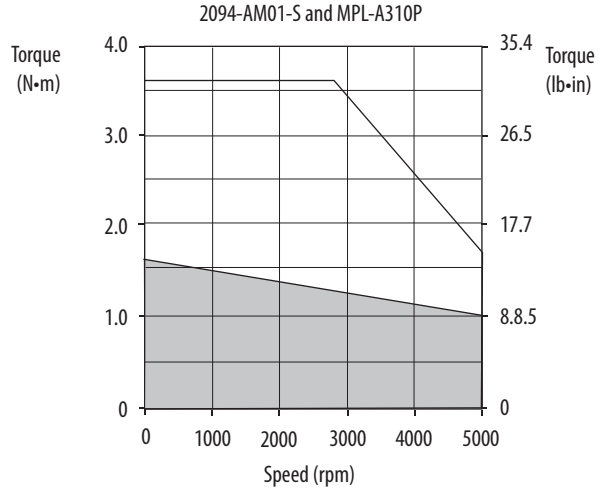
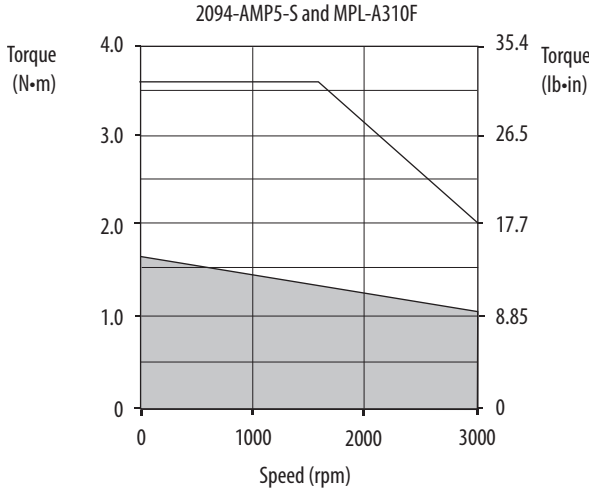
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix 6000 (200V-class) Drives/Kinetix MPL Low-inertia Motor Curves



= Intermittent operating region  
 = Continuous operating region

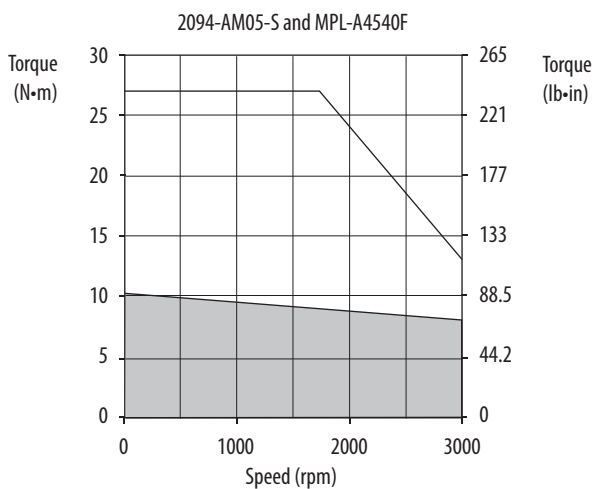
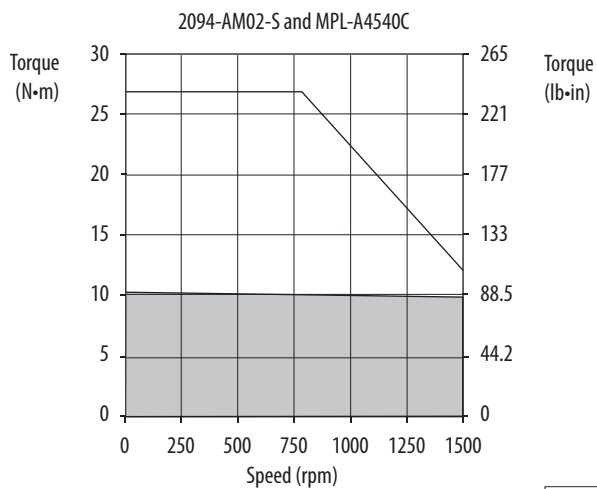
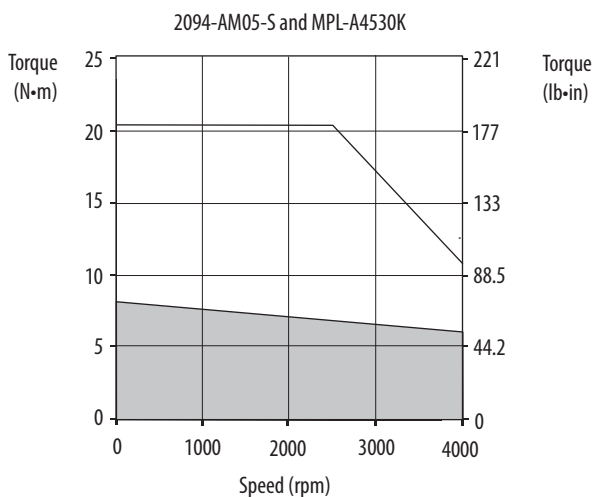
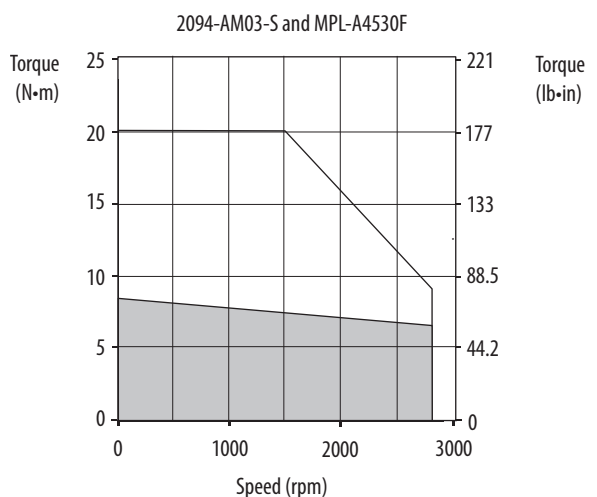
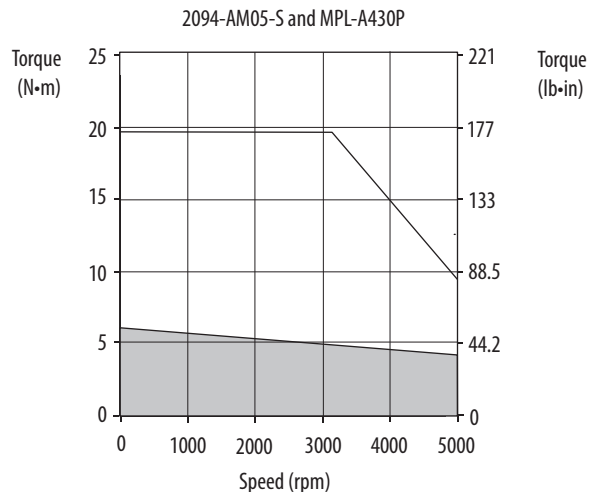
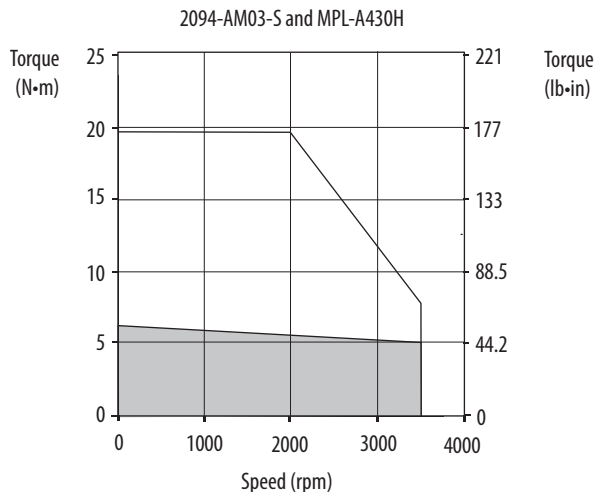
**Kinetix 6000 (200V-class) Drives/Kinetix MPL Low-inertia Motor Curves (continued)**



□ = Intermittent  
 ■ = Continuous operating region

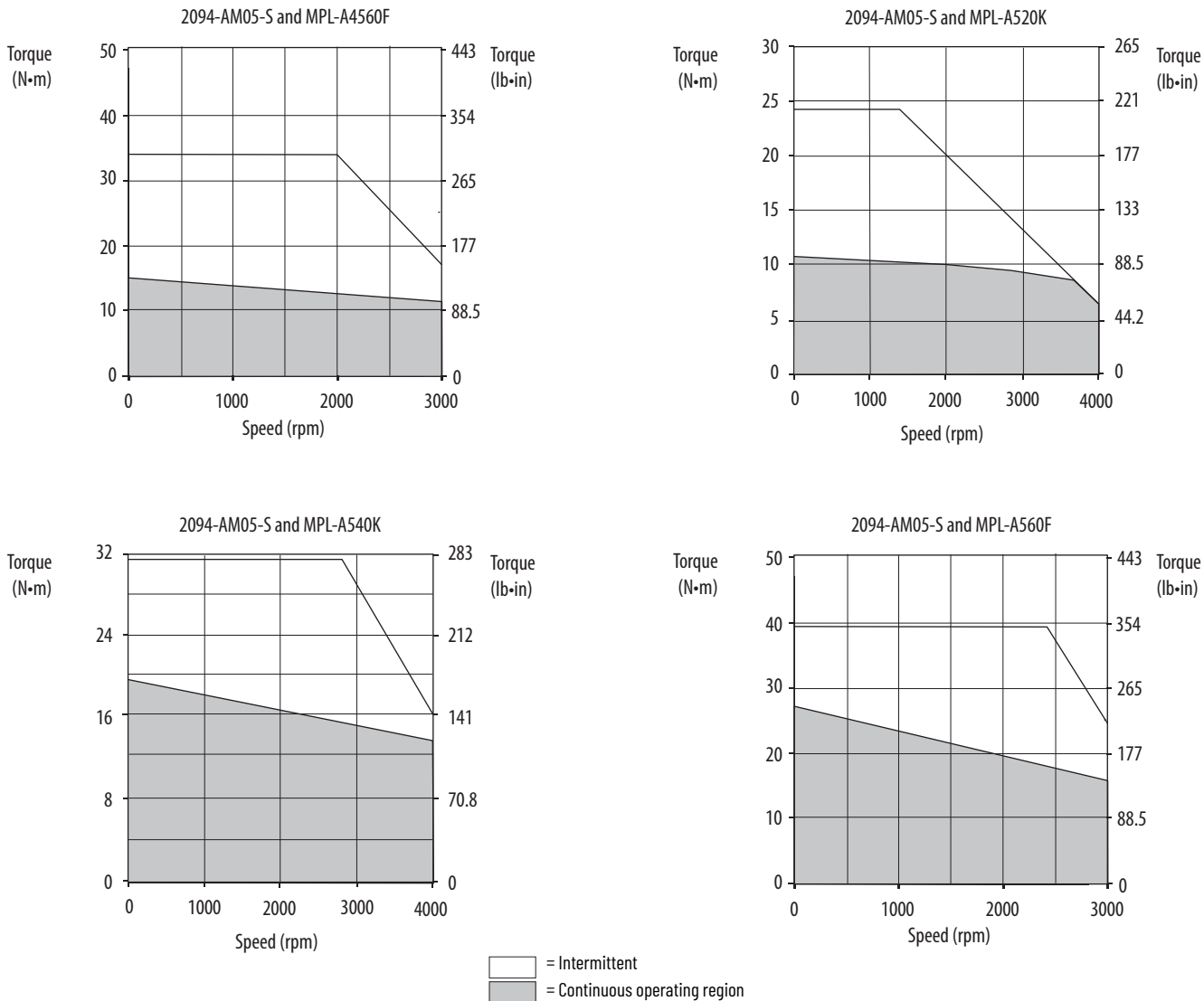


### Kinetix 6000 (200V-class) Drives/Kinetix MPL Low-inertia Motor Curves (continued)



= Intermittent  
 = Continuous operating region

### Kinetix 6000 (200V-class) Drives/Kinetix MPL Low-inertia Motor Curves (continued)



### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix MPL Low-inertia Motors

This section provides system combination information for the Kinetix 6000 and the Kinetix 6200/6500 (400V-class) drives when matched with Kinetix MPL low-inertia motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

**IMPORTANT** When using Kinetix 6000 (series B and later) drives, which are configured for enhanced peak performance, you can usually achieve full motor performance with a smaller drive. Kinetix 6200 and Kinetix 6500 drives are configured for enhanced peak performance by default. Expect the same peak performance from Kinetix 6200/6500 drives as you get from Kinetix 6000 (series B and later) drives configured for enhanced peak performance.  
 See Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for more information.

**IMPORTANT** The Kinetix MPL low-inertia motors on this page are equipped with DIN connectors (specified by 7 in the catalog number) and are not compatible with cables that are designed for motors that are equipped with bayonet connectors (specified by 2 in the catalog number). The motors with bayonet connectors (for example, MPL-A310P-xx2xAA) are being discontinued and require 2090-XXNMP (bayonet) cables. For help with migration or to select bayonet cables, contact your Rockwell Automation sales representative.

**Kinetix MPL Motor Cable Combinations**

Motor Cat. No. (400V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPL-B1510V-xx7xAA, MPL-B1520U-xx7xAA, MPL-B1530U-xx7xAA	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAxx or (2)(3) 2090-CFBM7DD-CEAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback
MPL-B210V-xx7xAA, MPL-B220T-xx7xAA, MPL-B230P-xx7xAA		
MPL-B310P-xx7xAA, MPL-B320P-xx7xAA, MPL-B330P-xx7xAA		
MPL-B420P-xx7xAA, MPL-B430P-xx7xAA		
MPL-B4530F-xx7xAA, MPL-B4530K-xx7xAA, MPL-B4540F-xx7xAA, MPL-B4560F-xx7xAA		
MPL-B520K-xx7xAA		
MPL-B540D-xx7xAA, MPL-B540K-xx7xAA, MPL-B560F-xx7xAA	2090-CPxM7DF-14AAxx (standard, non-flex) 2090-CPxM7DF-14AFxx (continuous-flex)	2090-XXNFMF-Sxx (standard) <sup>(4)</sup> 2090-CFBM7DF-CDAFxx (continuous-flex) Incremental Feedback
MPL-B580F-xx7xAA, MPL-B580J-xx7xAA, MPL-B640F-xx7xAA	2090-CPxM7DF-10AAxx (standard, non-flex) 2090-CPxM7DF-10AFxx (continuous-flex)	2090-CFBM7DF-CEAxx (standard, non-flex) <sup>(5)</sup> 2090-CFBM7DF-CEAFxx (continuous-flex) Resolver Feedback
MPL-B660F-xx7xAA, MPL-B680D-xx7xAA, MPL-B960B-xx7xAA, MPL-B980B-xx7xAA	2090-CPxM7DF-08AAxx (standard, non-flex) 2090-CPxM7DF-08AFxx (continuous-flex)	
MPL-B680F-xx7xAA, MPL-B680H-xx7xAA, MPL-B860D-xx7xAA, MPL-B880C-xx7xAA MPL-B880D-xx7xAA	2090-CPxM7DF-06AAxx (standard, non-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).

(2) Applies to Kinetix 6000 drives and MPL-B3xxx-M/S...MPL-B9xxx-M/S motors with absolute high-resolution feedback.

(3) Applies to Kinetix 6000 drives and MPL-B15xxx-V/E...MPL-B2xxx-V/E motors with absolute high-resolution feedback.

(4) Applies to Kinetix 6000 drives and MPL-B15xxx-H...MPL-B45xxx-H motors with incremental feedback.

(5) Applies to Kinetix 6000 drives and MPL-B3xxx-R...MPL-B45xxx-R motors with resolver feedback.

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

**Kinetix MPL Motor Performance Specifications with Kinetix 6200/6500 (400V-class) Drives**

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPL-B1510V	8000	8000	0.95	0.26 (2.3)	3.10	0.77 (6.8)	0.16	2094-BMP5-M
MPL-B1520U	7000	7000	1.80	0.49 (4.3)	6.10	1.58 (13.9)	0.27	2094-BMP5-M
MPL-B1530U	7000	7000	2.0	0.90 (8.0)	7.20	2.82 (24.9)	0.39	2094-BMP5-M
MPL-B210V	8000	8000	1.75	0.55 (4.9)	5.80	1.52 (13.4)	0.37	2094-BMP5-M
MPL-B220T	6000	6000	3.30	1.61 (14.2)	9.90	4.12 (36.4)	0.62	2094-BMP5-M
					11.3	4.74 (41.9)		2094-BM01-M
MPL-B230P	5000	5000	2.60	2.10 (18.6)	9.90	7.24 (64.0)	0.86	2094-BMP5-M
					11.3	8.20 (73.0)		2094-BM01-M
MPL-B310P	5000	5000	2.4	1.6 (14.1)	7.10	3.6 (32)	0.77	2094-BMP5-M
MPL-B320P	5000	5000	4.0	2.7 (23.9)	9.90	5.9 (52.2)	1.5	2094-BMP5-M
			4.5	3.10 (27)	14.0	8.2 (72.5)		2094-BM01-M
MPL-B330P	5000	5000	4.0	2.7 (23.9)	9.90	6.8 (60.2)	1.8	2094-BMP5-M
			6.1	4.18 (37)	19.0	11.1 (98)		2094-BM01-M
MPL-B420P	5000	5000	6.3	4.74 (42)	21.6	13.1 (116)	1.9	2094-BM01-M
					22.0	13.5 (119)		2094-BM02-M
MPL-B430P	5000	5000	8.6	6.2 (54.9)	21.6	13.9 (123)	2.2	2094-BM01-M
			9.2	6.55 (58)	32.0	19.8 (175)		2094-BM02-M
MPL-B4530F	3000	3000	4.0	4.9 (43.3)	9.90	11.0 (97.3)	2.1	2094-BMP5-M
			6.7	8.36 (74)	21.0	20.3 (180)		2094-BM01-M
MPL-B4530K	4000	4000	8.6	7.1 (62.8)	21.6	15.1 (133)	2.6	2094-BM01-M
			9.9	8.25 (73)	31.0	20.3 (179)		2094-BM02-M
MPL-B4540F	3000	3000	8.6	9.5 (84.1)	21.6	20.9 (185)	2.6	2094-BM01-M
			9.1	10.20 (90)	29.0	27.1 (240)		2094-BM02-M
MPL-B4560F	3000	3000	8.6	10.5 (92.9)	21.6	22.7 (201)	3.2	2094-BM01-M
			11.8	14.0 (124)	36.0	34.4 (304)		2094-BM02-M

**Kinetix MPL Motor Performance Specifications with Kinetix 6200/6500 (400V-class) Drives (Continued)**

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPL-B520K	3500	4000	8.6	7.9 (69.9)	21.6	16.6 (147)	3.5	2094-BM01-M
			11.5	10.7 (95)	33.0	23.2 (205)		2094-BM02-M
MPL-B540D	2000	2000	8.6	15.8 (139)	21.6	37.9 (335)	3.4	2094-BM01-M
			10.5	19.4 (172)	23.0	41.0 (362)		2094-BM02-M
MPL-B540K	4000	4000	20.4	19.4 (171)	60.0	48.6 (430)	5.4	2094-BM03-M
MPL-B560F	3000	3000	20.6	26.8 (237)	68.0	67.8 (600)	5.5	2094-BM03-M
MPL-B580F	3000	3000	26.0	34.0 (300)	75.0	74.6 (660)	7.1	2094-BM03-M
					94.0	87.0 (770)		2094-BM05-M
MPL-B580J	3800	3800	30.0	31.7 (280)	75.0	67.0 (592)	7.9	2094-BM03-M
			32.0	34.0 (301)	94.0	81.0 (716)		2094-BM05-M
MPL-B640F	2000	3000	30.0	34.4 (304)	65.0	72.3 (640)	6.1	2094-BM03-M
			32.0	36.7 (325)				2094-BM05-M
MPL-B660F	2000	3000	38.5	48.0 (425)	96.0	101 (895)	6.1	2094-BM05-M
MPL-B680D	2000	2000	30.0	55.4 (490)	75.0	125 (1105)	9.3	2094-BM03-M
			34.0	62.8 (556)	94.0	154 (1365)		2094-BM05-M
MPL-B680F	2000	3000	47.9	60.0 (531)	96.0	108 (960)	7.5	2094-BM05-M
MPL-B680H	2000	3500	48.9	58.0 (513)	97.8	107 (947)	7.5	2094-BM05-M
MPL-B860D	2000	2000	47.3	83.0 (735)	95.5	152 (1350)	12.5	2094-BM05-M
MPL-B880C	1500	1500	47.5	110 (973)	97.5	203 (1800)	12.6	2094-BM05-M
MPL-B880D	2000	2000	48.9	79.9 (706)	96.0	147 (1300)	12.6	2094-BM05-M
MPL-B960B	1200	1200	42.5	130 (1150)	94.0	231 (2050)	12.7	2094-BM05-M
MPL-B980B	1000	1000	40.0	162 (1440)	94.0	278 (2460)	15.2	2094-BM05-M

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Kinetix MPL Motor Performance Specifications with Kinetix 6000 (400V-class) Drives**

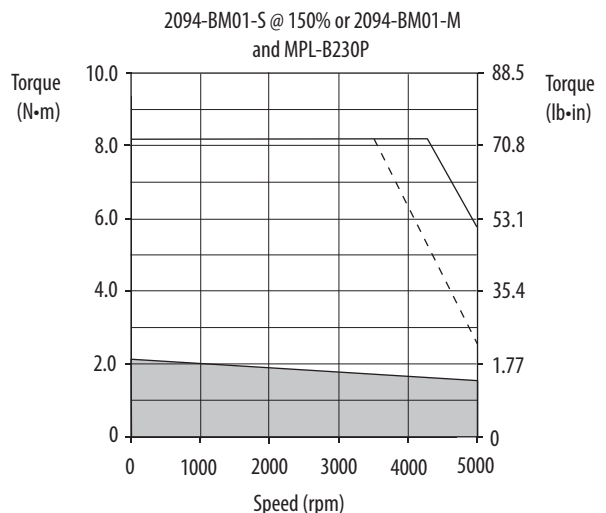
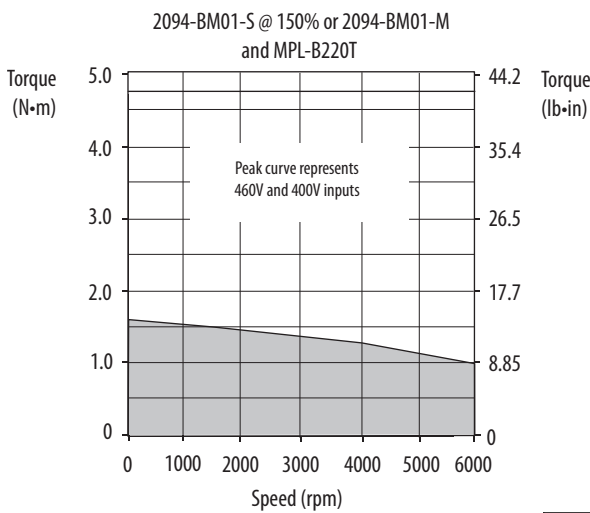
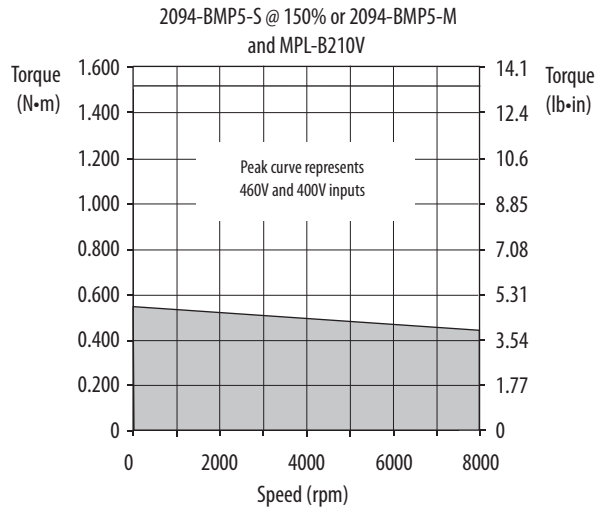
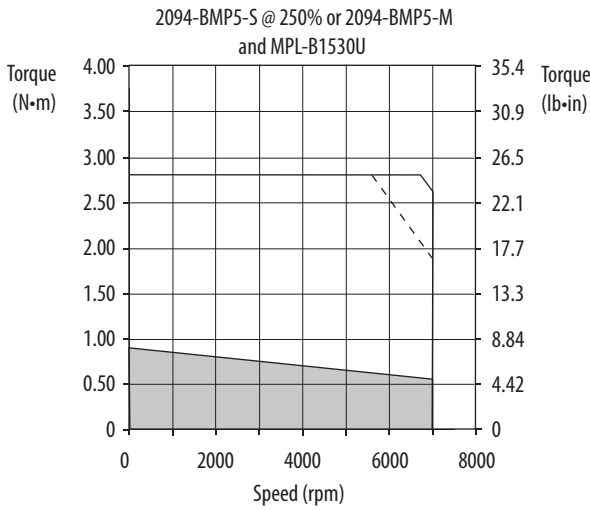
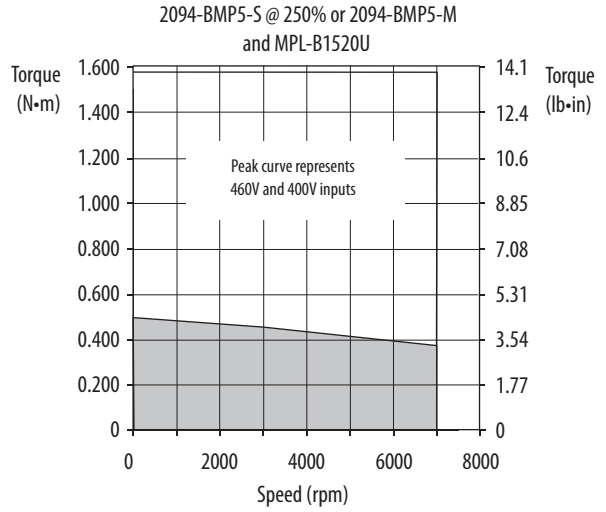
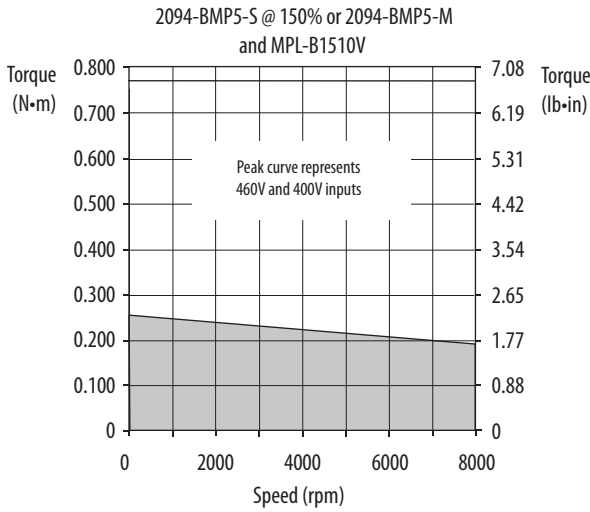
Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPL-B1510V	8000	8000	0.95	0.26 (2.3)	3.10	0.77 (6.8)	0.16	2094-BMP5-S @ 150%
MPL-B1520U	7000	7000	1.80	0.49 (4.3)	5.90	1.53 (13.3)	0.27	2094-BMP5-S @ 150%
					6.10	1.58 (13.9)		2094-BMP5-S @ 250%
MPL-B1530U	7000	7000	2.0	0.90 (8.0)	5.90	2.34 (20.7)	0.39	2094-BMP5-S @ 150%
					7.20	2.82 (24.9)		2094-BMP5-S @ 250%
MPL-B210V	8000	8000	1.75	0.55 (4.9)	5.80	1.52 (13.4)	0.37	2094-BMP5-S @ 150%
MPL-B220T	6000	6000	3.30	1.61 (14.2)	9.90	4.12 (36.4)	0.62	2094-BMP5-S @ 250%
					11.3	4.74 (41.9)		2094-BM01-S @ 150%
MPL-B230P	5000	5000	2.60	2.10 (18.6)	9.90	7.24 (64.0)	0.86	2094-BMP5-S @ 250%
					11.3	8.20 (73.0)		2094-BM01-S @ 150%
MPL-B310P	5000	5000	2.4	1.6 (14)	5.90	3.2 (28)	0.77	2094-BMP5-S @ 150%
					7.10	3.6 (32)		2094-BMP5-S @ 250%
MPL-B320P	5000	5000	4.5	3.10 (27)	13.0	7.5 (66)	1.5	2094-BM01-S @ 150%
					14.0	8.2 (72.5)		2094-BM01-S @ 250%
MPL-B330P	5000	5000	6.1	4.18 (37)	13.0	8.0 (71)	1.8	2094-BM01-S @ 150%
					19.0	11.1 (98)		2094-BM01-S @ 250%
MPL-B420P	5000	5000	6.3	4.74 (42)	21.6	13.1 (116)	1.9	2094-BM01-S @ 250%
					21.8	13.4 (118)		2094-BM02-S @ 150%
					22.0	13.5 (119)		2094-BM02-S @ 250%

**Kinetix MPL Motor Performance Specifications with Kinetix 6000 (400V-class) Drives (Continued)**

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPL-B430P	5000	5000	9.2	6.55 (58)	21.8	14.4 (127)	2.2	2094-BM02-S @ 150%
					32.0	19.8 (175)		2094-BM02-S @ 250%
MPL-B4530F	3000	3000	6.7	8.36 (74)	13.0	13.9 (123)	2.1	2094-BM01-S @ 150%
					21.0	20.3 (180)		2094-BM01-S @ 250%
MPL-B4530K	4000	4000	9.9	8.25 (73)	21.8	15.5 (137)	2.6	2094-BM02-S @ 150%
					31.0	20.3 (179)		2094-BM02-S @ 250%
MPL-B4540F	3000	3000	9.1	10.20 (90)	21.8	21.4 (189)	2.6	2094-BM02-S @ 150%
					29.0	27.1 (240)		2094-BM02-S @ 250%
MPL-B4560F	3000	3000	11.8	14.0 (124)	21.8	23.3 (206)	3.2	2094-BM02-S @ 150%
					36.0	34.4 (304)		2094-BM02-S @ 250%
MPL-B520K	3500	4000	11.5	10.7 (95)	21.8	17.0 (150)	3.5	2094-BM02-S @ 150%
					33.0	23.2 (205)		2094-BM02-S @ 250%
MPL-B540D	2000	2000	10.5	19.4 (172)	21.8	38.8 (343)	3.4	2094-BM02-S @ 150%
					23.0	41.0 (362)		2094-BM02-S @ 250%
MPL-B540K	4000	4000	20.4	19.4 (171)	45.0	38.1 (337)	5.4	2094-BM03-S @ 150%
					60.0	48.6 (430)		2094-BM03-S @ 250%
MPL-B560F	3000	3000	20.9	26.8 (237)	45.0	49.3 (436)	5.5	2094-BM03-S @ 150%
					68.0	67.8 (600)		2094-BM03-S @ 250%
MPL-B580F	3000	3000	26.1	34.0 (300)	75.0	74.6 (660)	7.1	2094-BM03-S @ 250%
					73.4	73.5 (650)		2094-BM05-S @ 150%
					94.0	87.0 (770)		2094-BM05-S @ 200%
MPL-B580J	3800	3800	32.0	34.0 (301)	73.4	66.6 (589)	7.9	2094-BM05-S @ 150%
					94.0	81.0 (716)		2094-BM05-S @ 200%
MPL-B640F	2000	3000	30.0	34.4 (304)	45.0	50.4 (446)	6.1	2094-BM03-S @ 150%
					65.0	72.3 (640)		2094-BM03-S @ 250%
					32.0	36.7 (325)		2094-BM05-S @ 150%
MPL-B660F	2000	3000	38.5	48.0 (425)	73.4	81.0 (716)	6.1	2094-BM05-S @ 150%
					96.0	101 (895)		2094-BM05-S @ 200%
MPL-B680D	2000	2000	30.0	55.4 (490)	75.0	125 (1105)	9.3	2094-BM03-S @ 250%
					73.4	124 (1098)		2094-BM05-S @ 150%
					94.0	152 (1350)		2094-BM05-S @ 200%
MPL-B680F	2000	3000	47.9	60.0 (531)	73.4	85.4 (755)	7.5	2094-BM05-S @ 150%
					96.0	108 (960)		2094-BM05-S @ 200%
MPL-B680H	2000	3500	48.9	58.0 (513)	97.8	107 (947)	7.5	2094-BM05-S @ 200%
MPL-B860D	2000	2000	47.3	83.0 (735)	73.4	120 (1065)	12.5	2094-BM05-S @ 150%
					95.5	152 (1350)		2094-BM05-S @ 200%
MPL-B880C	1500	1500	47.5	110 (973)	73.4	157 (1387)	12.6	2094-BM05-S @ 150%
					97.5	203 (1800)		2094-BM05-S @ 200%
MPL-B880D	2000	2000	48.9	79.9 (706)	96.0	147 (1300)	12.6	2094-BM05-S @ 200%
MPL-B960B	1200	1200	42.5	130 (1150)	73.4	190 (1684)	12.7	2094-BM05-S @ 150%
					94.0	231 (2050)		2094-BM05-S @ 200%
MPL-B980B	1000	1000	40.0	162 (1440)	73.4	235 (2077)	15.2	2094-BM05-S @ 150%
					94.0	278 (2460)		2094-BM05-S @ 200%

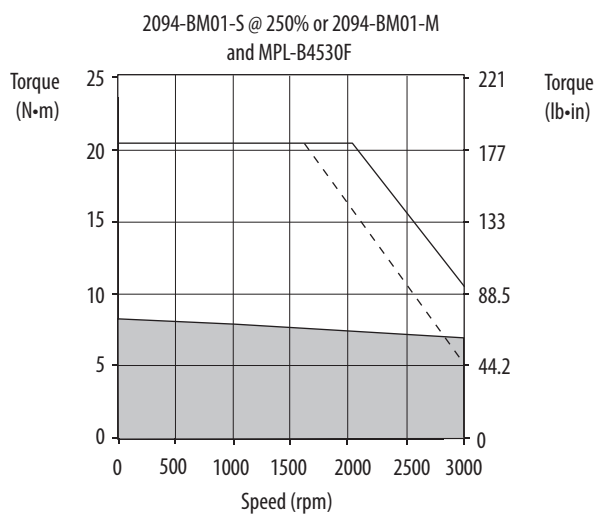
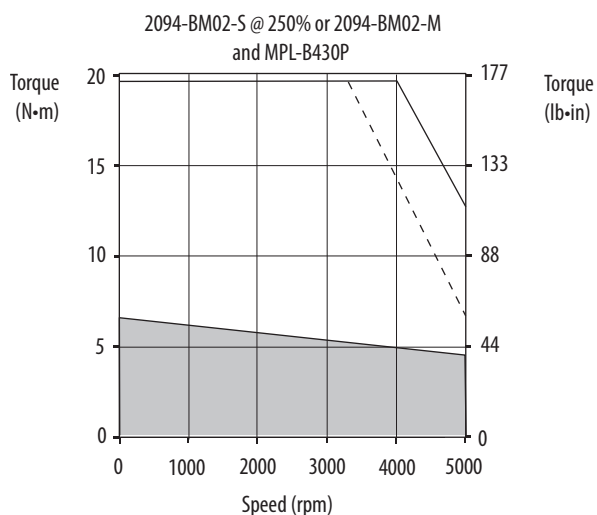
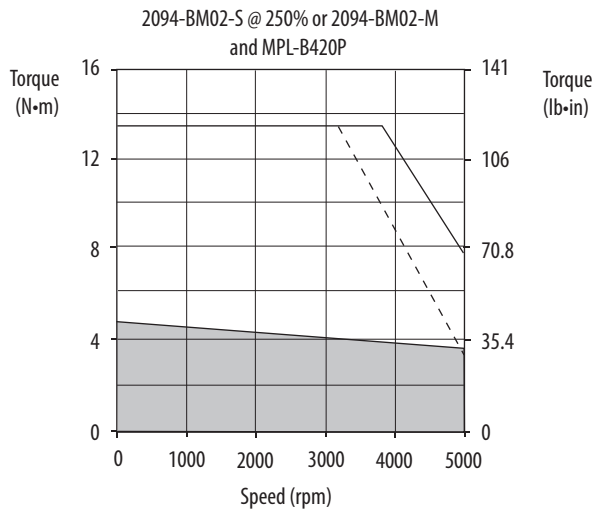
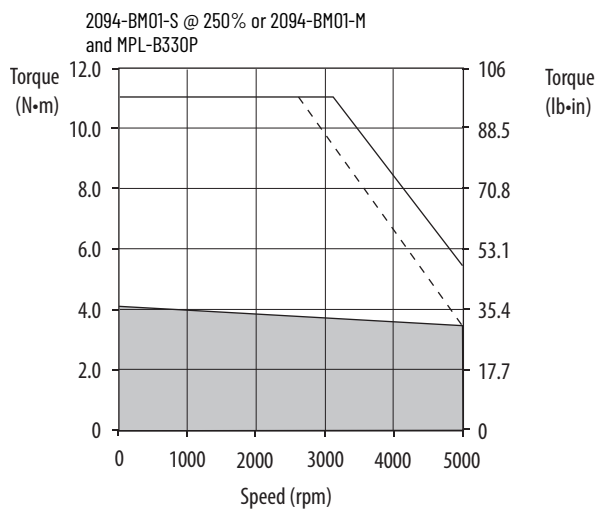
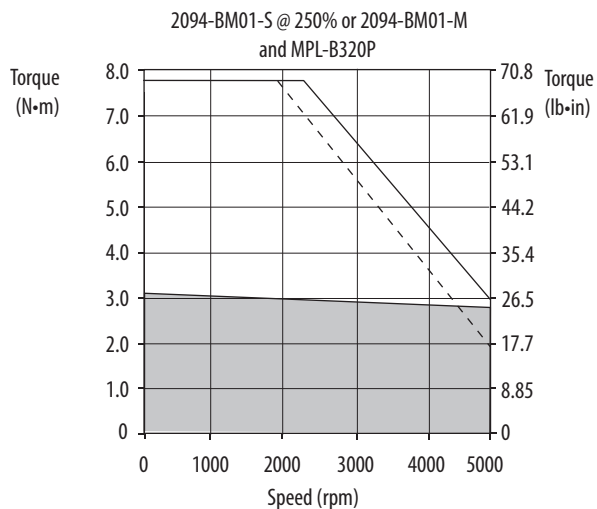
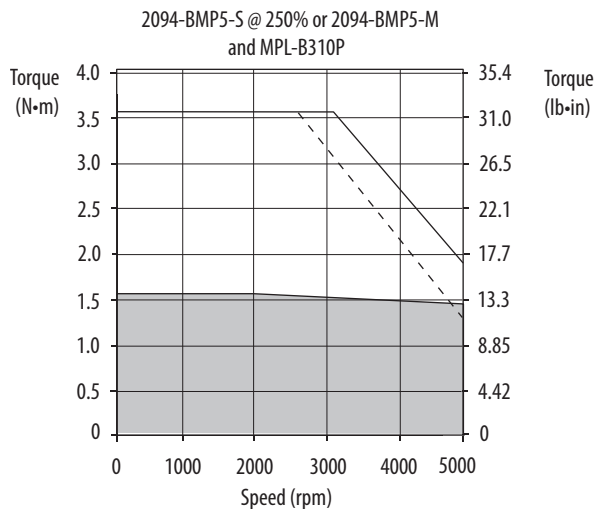
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPL Low-inertia Motor Curves



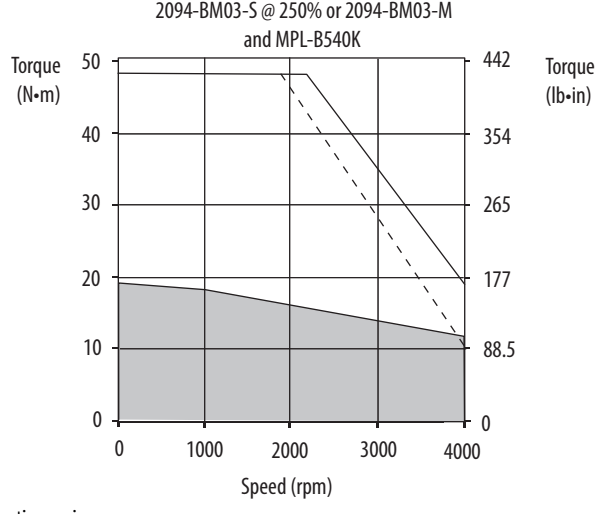
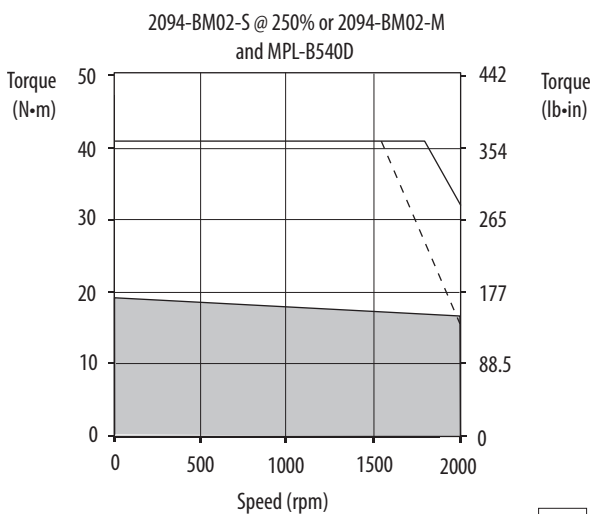
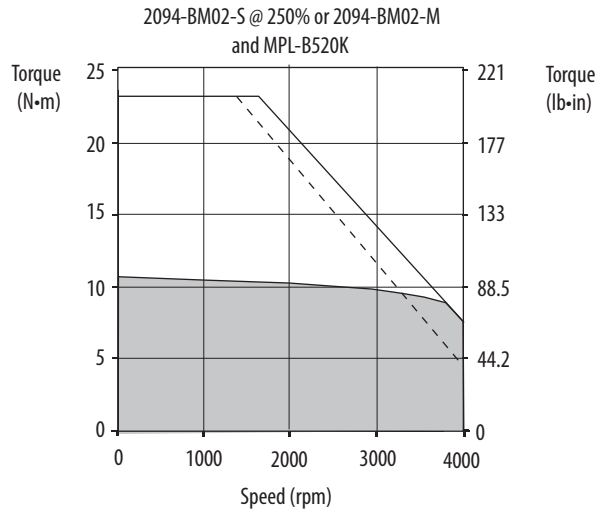
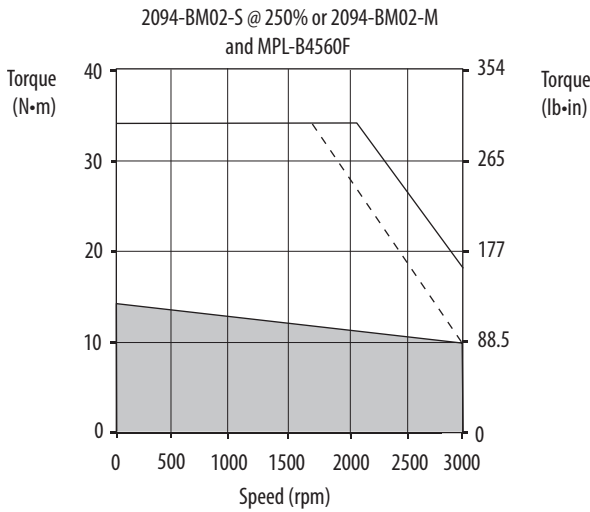
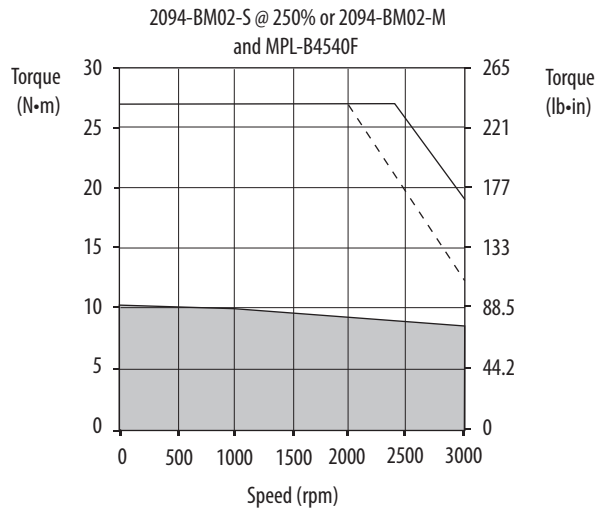
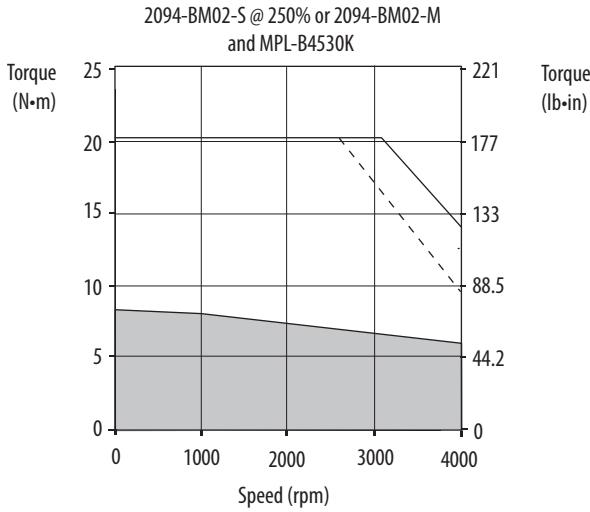
- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC rms input voltage

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPL Low-inertia Motor Curves (cont.)



= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage

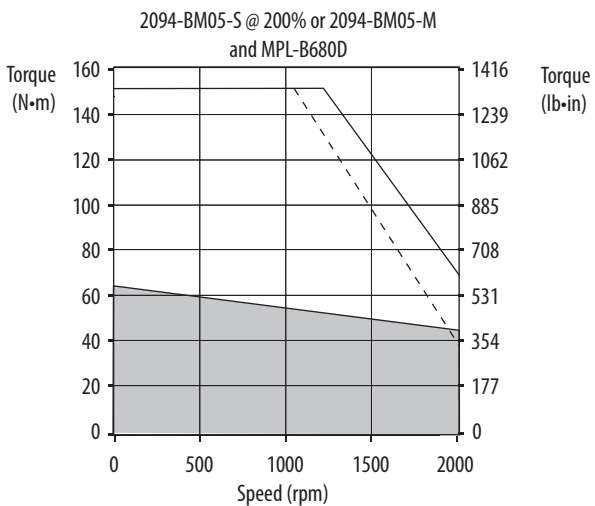
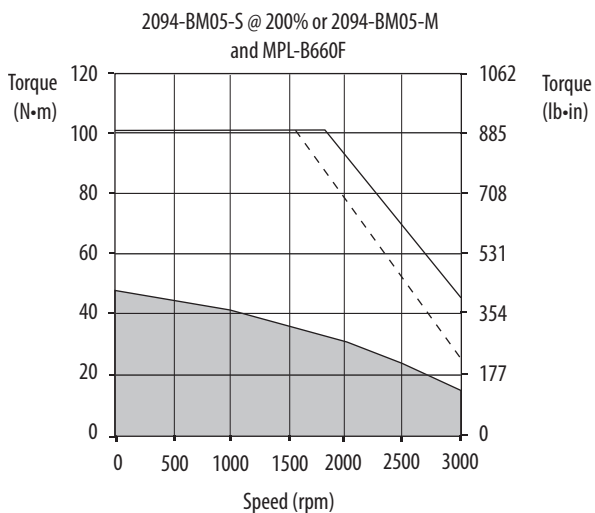
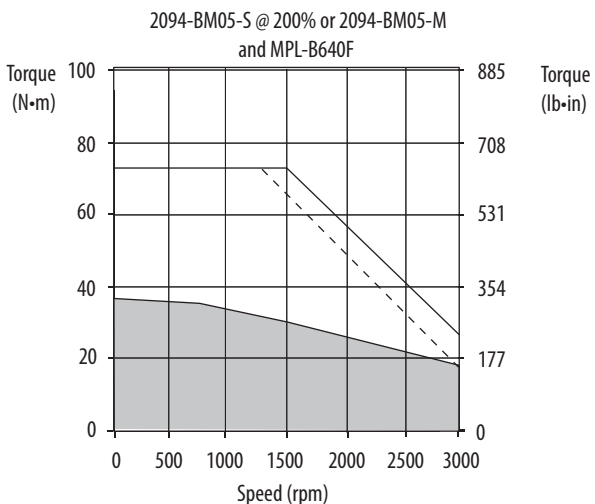
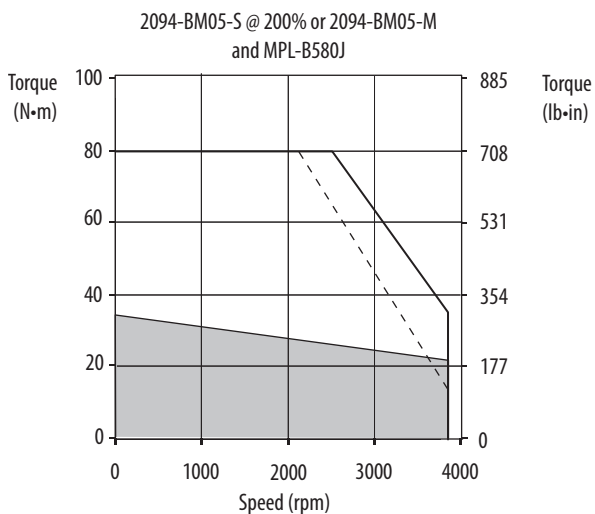
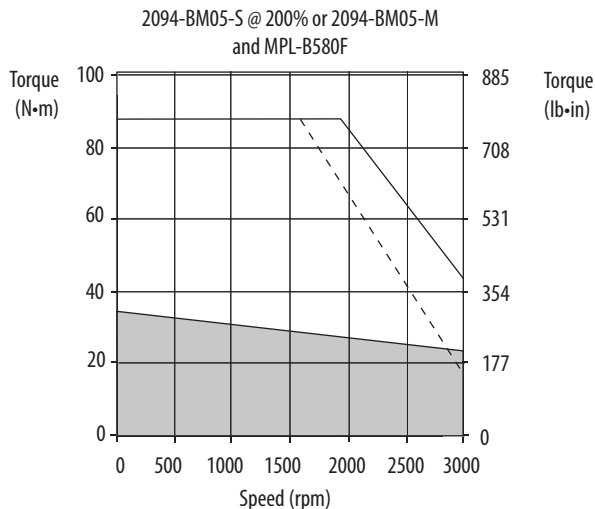
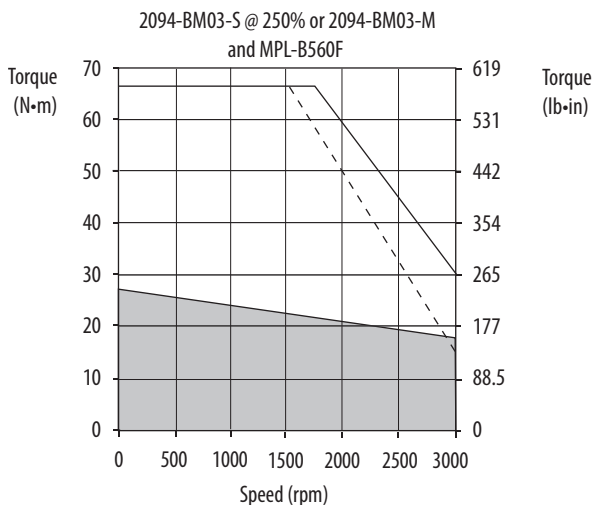
**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPL Low-inertia Motor Curves (cont.)**



= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage

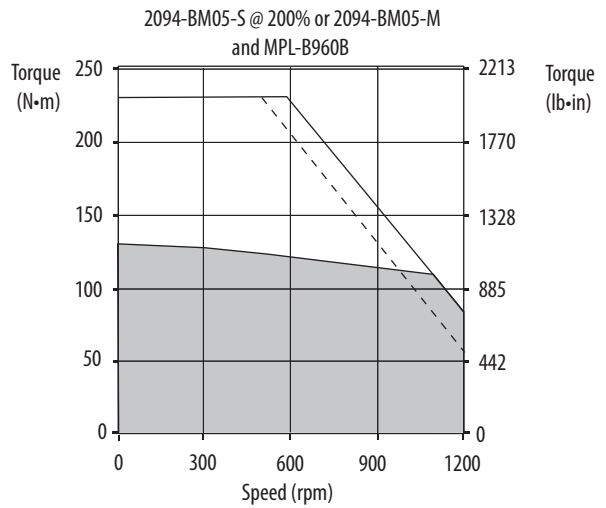
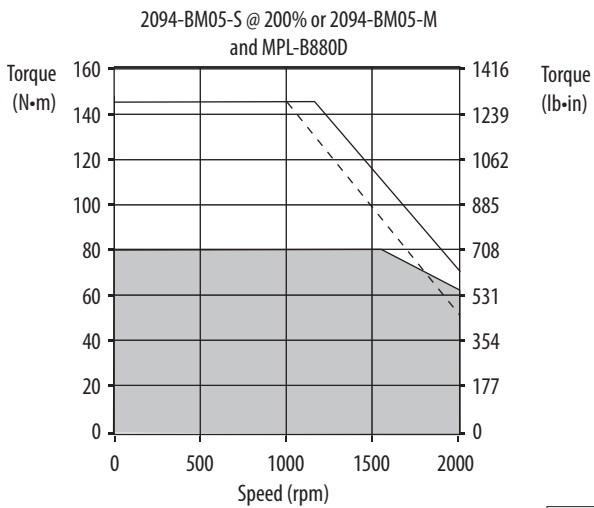
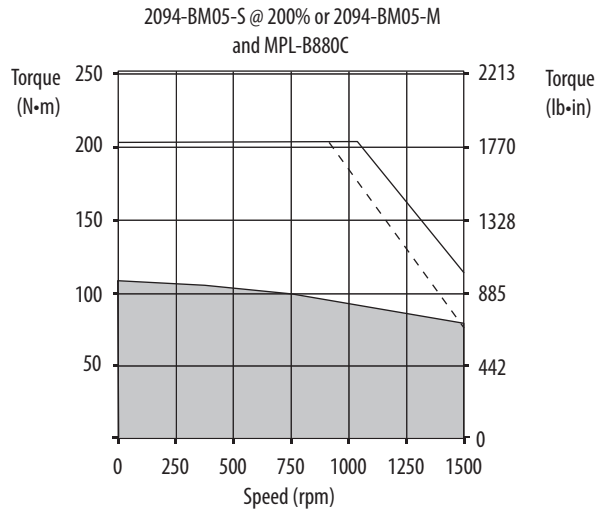
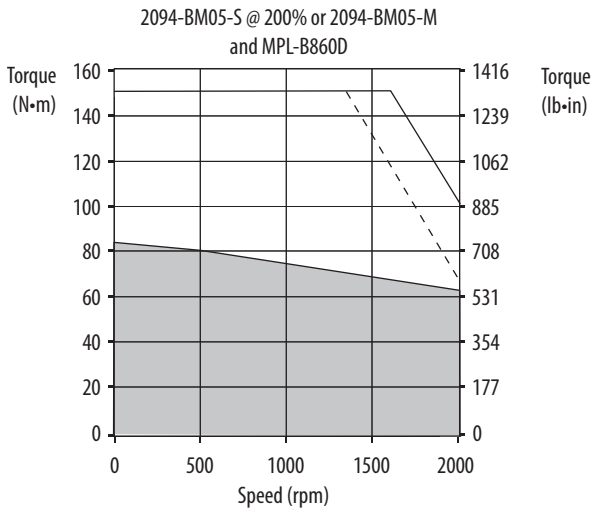
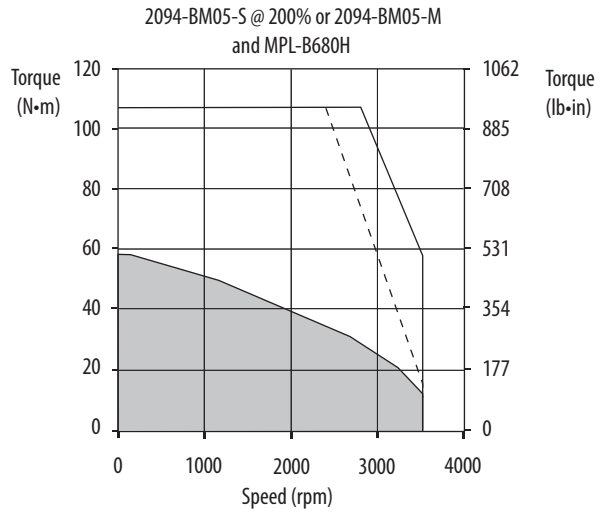
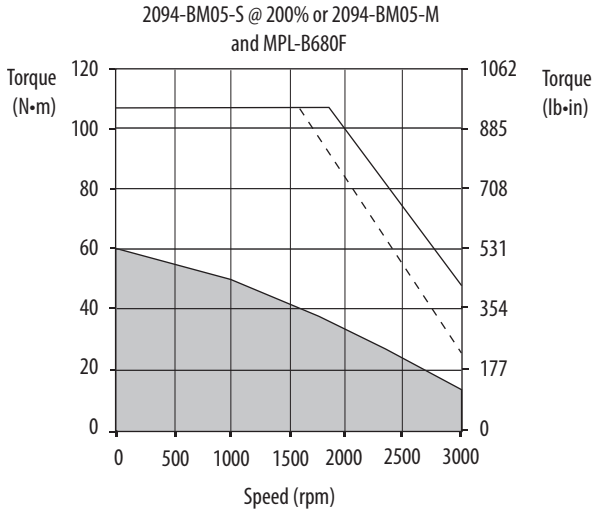


**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPL Low-inertia Motor Curves (cont.)**



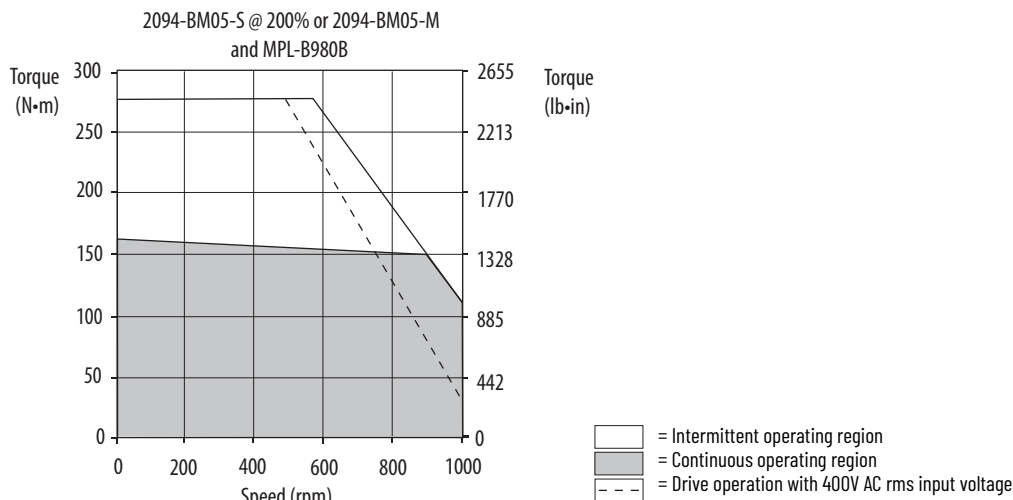
= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage

**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPL Low-inertia Motor Curves (cont.)**



= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage

## Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPL Low-inertia Motor Curves (cont.)



## Kinetix 6000 (200V-class) Drives with Kinetix MPM Medium Low-inertia Motors

### Kinetix MPM Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPM-A1151M, MPM-A1152F, MPM-A1153F	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex)
MPM-A1302F	2090-CPxM7DF-14AAxx (standard, non-flex) 2090-CPxM7DF-14AFxx (continuous-flex)	2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex)
MPM-A1304F	2090-CPxM7DF-12AAxx (standard, non-flex)	Absolute High-resolution Feedback
MPM-A1651F	2090-CPxM7DF-10AAxx (standard, non-flex) 2090-CPxM7DF-10AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx (standard, non-flex) <sup>(2)</sup> 2090-CFBM7DF-CEAFxx (continuous-flex)
MPM-A1652F, MPM-A1653F	2090-CPxM7DF-08AAxx (standard, non-flex) 2090-CPxM7DF-08AFxx (continuous-flex)	Resolver Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).

(2) These cables apply to Kinetix 6000 drives and MPM-Axxxx-2 motors (resolver feedback).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-10004](#), for standard cable lengths.

### Kinetix MPM Motor Performance Specifications with Kinetix 6000 (200V-class) Drives

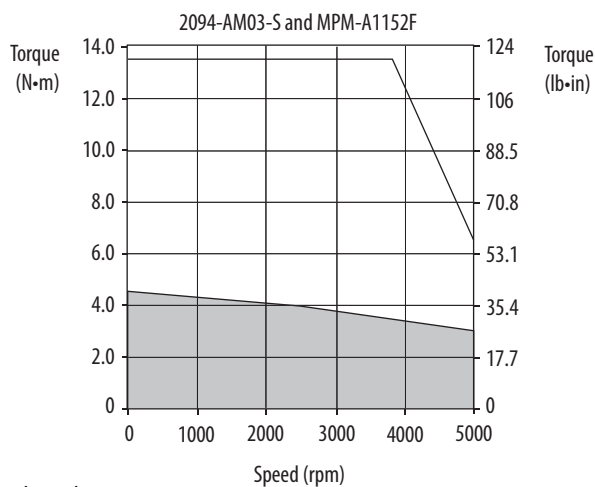
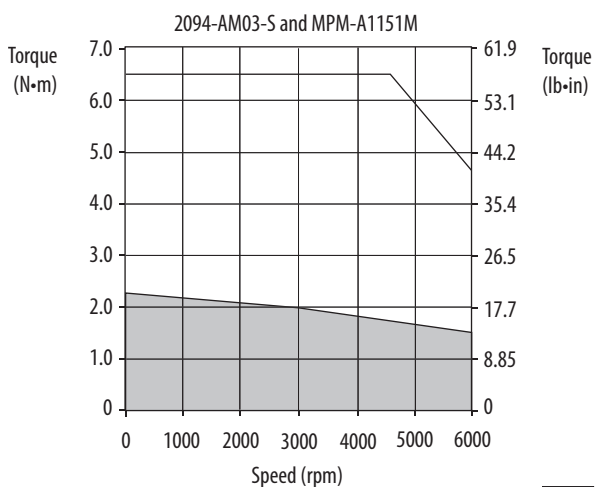
Rotary Motor Cat. No.	Base Speed rpm	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
MPM-A1151M	4500	5000	6000	7.65	2.3 (20.3)	30.0	6.5 (57.5)	0.90	2094-AM02-S
						30.5	6.6 (58.4)		2094-AM03-S
MPM-A1152F	3000	4000	5000	11.93	4.7 (41.6)	30.0	9.9 (87.6)	1.40	2094-AM02-S
						44.8	13.5 (119)		2094-AM03-S
MPM-A1153F	3000	4000	5000	16.18	6.0 (53.1)	30.0	10.7 (94.7)	1.45	2094-AM02-S
						49.0	16.1 (142)		2094-AM03-S
MPM-A1302F	3000	4000	4500	17.28	6.6 (58.4)	49.0	13.2 (117)	1.65	2094-AM03-S
						50.2	13.5 (119)		2094-AM05-S
MPM-A1304F	3000	3500	4000	19.65	7.6 (67.2)	30.0	13.2 (117)	2.20	2094-AM02-S
						48.3	19.3 (171)		2094-AM03-S
MPM-A1651F	3000	3000	5000	30.96	9.3 (82.3)	49.0	15.2 (134)	2.50	2094-AM03-S
						73.4	20.3 (179)		2094-AM05-S

**Kinetix MPM Motor Performance Specifications with Kinetix 6000 (200V-class) Drives (Continued)**

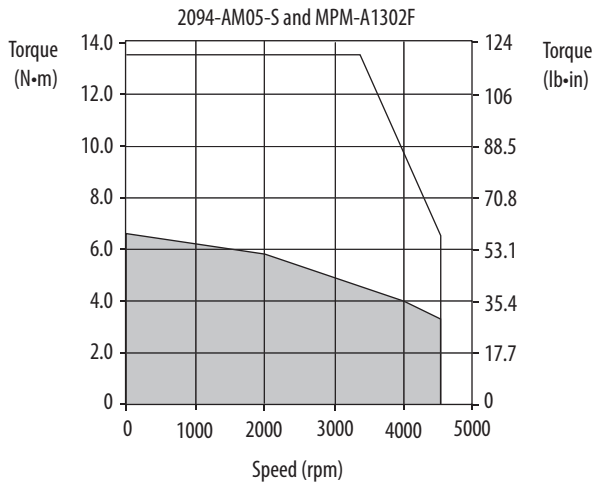
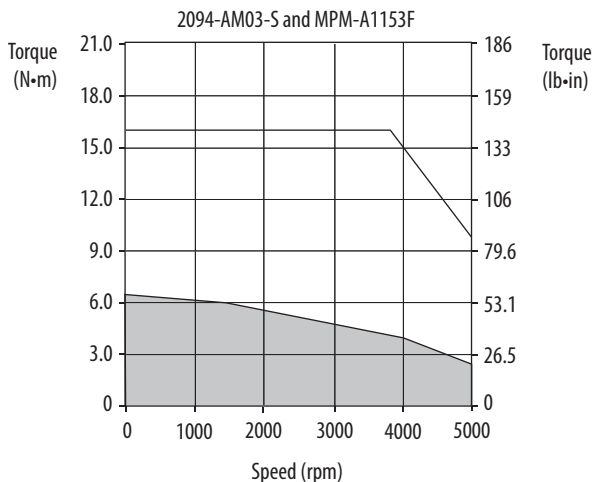
Rotary Motor Cat. No.	Base Speed rpm	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
MPM-A1652F	3000	3500	4000	33.54	11.0 (97.3)	49.0	19.7 (174)	4.03	2094-AM03-S
					13.4 (119)	73.4	27.7 (245)		2094-AM05-S
MPM-A1653F	3000	3000	4000	42.4	11.7 (103)	49.0	21.1 (187)	5.10	2094-AM03-S
					18.6 (165)	73.4	29.6 (262)		2094-AM05-S

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

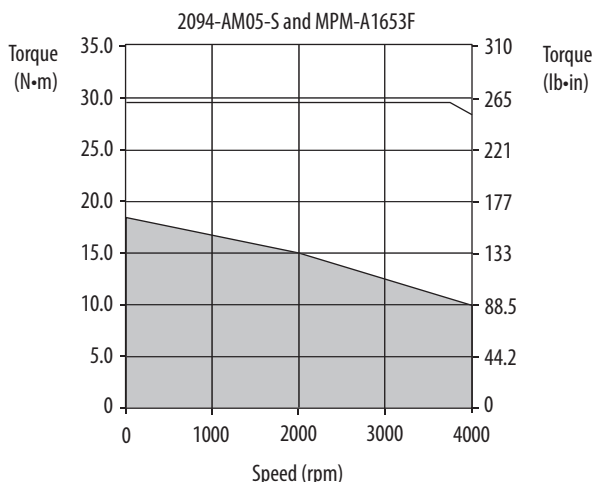
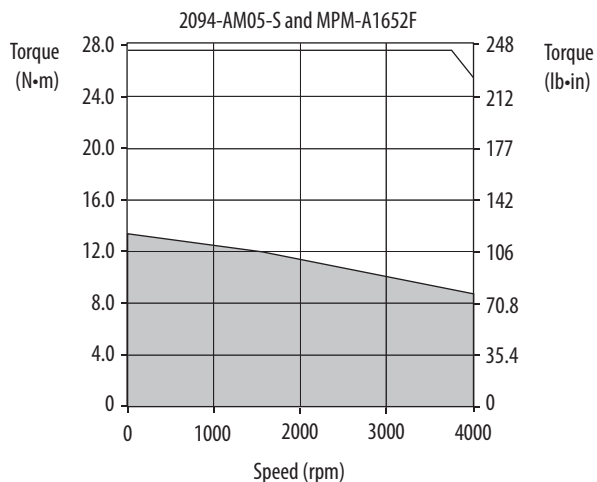
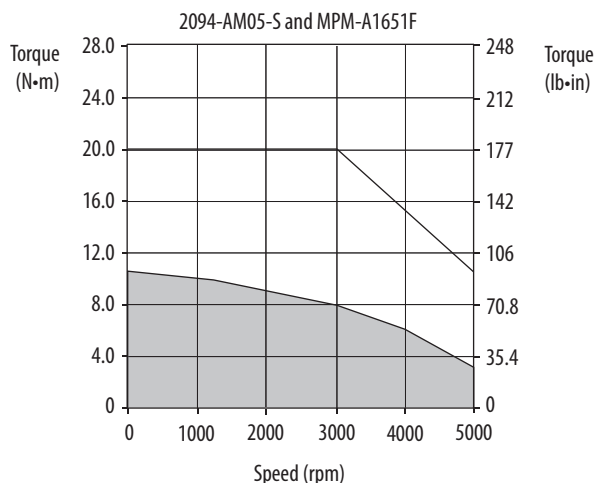
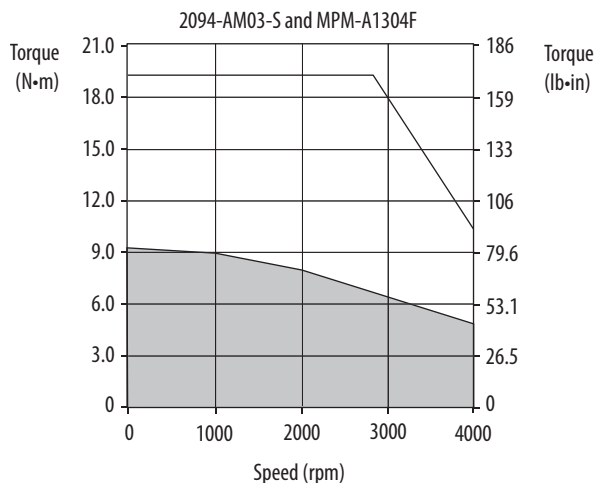
**Kinetix 6000 (200V-class) Drives/Kinetix MPM Medium-inertia Motor Curves**



□ = Intermittent operating region  
 ■ = Continuous operating region



### Kinetix 6000 (200V-class) Drives/Kinetix MPM Medium-inertia Motor Curves (continued)



= Intermittent operating region  
 = Continuous operating region

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix MPM Medium-inertia Motors

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with Kinetix MPM medium-inertia motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

**IMPORTANT** When using Kinetix 6000 (series B and later) drives, which are configured for enhanced peak performance, you can usually achieve full motor performance with a smaller drive. Kinetix 6200 and Kinetix 6500 drives are configured for enhanced peak performance by default. Expect the same peak performance from Kinetix 6200/6500 drives as you get from Kinetix 6000 (series B and later) drives configured for enhanced peak performance.

See Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for more information.

**Kinetix MPM Motor Cable Combinations**

Motor Cat. No. (400V-class)	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPM-B1151x, MPM-B1152x, MPM-B1153E, MPM-B1153F	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback
MPM-B1302F, MPM-B1302M, MPM-B1304C, MPM-B1304E		
MPM-B1651C, MPM-B1652C		
MPM-B1153T		
MPM-B1302T, MPM-B1304M	2090-CPxM7DF-14AAxx (standard, non-flex) 2090-CPxM7DF-14AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx (standard, non-flex) <sup>(2)</sup> 2090-CFBM7DF-CEAFxx (continuous-flex)
MPM-B1651F, MPM-B1653C		
MPM-B1651M, MPM-B1652E, MPM-B1652F, MPM-B1653E	2090-CPxM7DF-10AAxx (standard, non-flex) 2090-CPxM7DF-10AFxx (continuous-flex)	Resolver Feedback
MPM-B2152C, MPM-B2153B		
MPM-B1653F	2090-CPxM7DF-08AAxx (standard, non-flex) 2090-CPxM7DF-08AFxx (continuous-flex)	
MPM-B2152F, MPM-B2152M, MPM-B2153E, MPM-B2153F, MPM-B2154B, MPM-B2154E, MPM-B2154F		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).

(2) These cables apply to Kinetix 6000 drives and MPM-Bxxxx-2 motors (resolver feedback).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

**Kinetix MPM Motor Performance Specifications with Kinetix 6200/6500 (400V-class) Drives**

Rotary Motor Cat. No.	Base Speed rpm	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N-m (lb-in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N-m (lb-in)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPM-B1151F	3000	4000	5000	2.71	2.3 (20.3)	9.9	6.6 (58.4)	0.75	2094-BMP5-M
MPM-B1151T	6000	5000	7000	5.62	2.3 (20.3)	20.5	5.8 (51.3)	0.90	2094-BM01-M
MPM-B1152C	1500	2500	3000	3.61	5.0 (44.2)	12.4	13.5 (119)	1.20	2094-BM02-M
MPM-B1152F	3000	4000	5200	6.17	5.0 (44.2)	21.1	13.3 (118)	1.40	2094-BM01-M
MPM-B1152T	6000	4000	7000	11.02	5.0 (44.2)	36.5	13.1 (116)	1.40	2094-BM02-M
MPM-B1153E	2250	3000	3500	6.21	6.5 (57.5)	21.6	19.7 (174)	1.40	2094-BM01-M
MPM-B1153F	3000	4000	5500	9.20	6.4 (56.6)	32.0	19.7 (174)	1.40	2094-BM02-M
MPM-B1153T	6000	4000	7000	15.95	6.4 (56.6)	45.0	14.5 (128)	1.45	2094-BM03-M
MPM-B1302F	3000	4000	4500	8.57	6.6 (58.4)	21.5	13.0 (115)	1.65	2094-BM01-M
MPM-B1302M	4500	4000	6000	12.57	6.6 (58.4)	32.4	13.3 (118)	1.65	2094-BM02-M
MPM-B1302T	6000	4000	7000	16.83	6.7 (59.3)	43.4	13.3 (118)	1.65	2094-BM03-M
MPM-B1304C	1500	1870	2750	7.00	10.3 (91.1)	21.5	26.4 (233)	2.00	2094-BM01-M
MPM-B1304E	2250	3500	4000	10.75	10.2 (90.3)	34.2	27.1 (240)	2.20	2094-BM02-M
MPM-B1304M	4500	3500	6000	19.02	10.4 (92.0)	60.6	27.1 (240)	2.20	2094-BM03-M
MPM-B1651C	1500	3000	3500	10.21	11.4 (101)	29.2	23.2 (205)	2.50	2094-BM02-M
MPM-B1651F	3000	3000	5000	17.75	11.4 (101)	50.9	23.2 (205)	2.50	2094-BM03-M
MPM-B1651M	4500	3000	5000	22.46	11.3 (100)	56.8	21.4 (189)	2.50	2094-BM03-M
MPM-B1652C	1500	2500	2500	11.51	16.4 (145)	33.6	40.2 (356)	3.80	2094-BM02-M
MPM-B1652E	2250	3500	3500	20.94	21.1 (187)	60.5	48.0 (425)	4.30	2094-BM03-M
MPM-B1652F	3000	3500	4500	28.74	21.1 (187)	84.1	48.0 (424)	4.30	2094-BM05-M
MPM-B1653C	1500	2000	2500	20.05	26.7 (236)	59.2	67.7 (599)	4.60	2094-BM03-M
MPM-B1653E	2250	3000	3500	27.00	26.8 (237)	72.9	62.0 (549)	5.10	2094-BM03-M
MPM-B1653F	3000	3000	4000	34.94	31.0 (274)	94.3	56.0 (495)	5.10	2094-BM05-M
MPM-B2152C	1500	2000	2500	27.40	36.7 (325)	55.4	72.2 (639)	5.60	2094-BM03-M
MPM-B2152F	3000	2500	4500	43.54	34.1 (302)	97.8	72.3 (495)	5.90	2094-BM05-M
MPM-B2152M	4500	2500	5000	44.58	34.1 (302)	76.3	52.9 (468)	5.90	2094-BM05-M
MPM-B2153B	1250	1750	2000	24.06	48.0 (425)	60.0	101 (894)	6.80	2094-BM03-M
MPM-B2153E	2250	2000	3000	39.63	47.9 (424)	97.8	101 (894)	7.20	2094-BM05-M
MPM-B2153F	3000	2000	3800	43.86	45.6 (403)	97.8	99.0 (875)	7.20	2094-BM05-M

**Kinetix MPM Motor Performance Specifications with Kinetix 6200/6500 (400V-class) Drives (Continued)**

Rotary Motor Cat. No.	Base Speed rpm	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPM-B2154B	1250	1750	2000	35.46	62.7 (555)	97.8	154 (1362)	6.90	2094-BM05-M
MPM-B2154E	2250	2000	3000	43.68	55.9 (495)	97.8	112 (990)	7.50	2094-BM05-M
MPM-B2154F	3000	2000	3300	44.40	56.2 (497)	83.6	88.0 (778)	7.50	2094-BM05-M

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Kinetix MPM Motor Performance Specifications with Kinetix 6000 (400V-class) Drives**

Rotary Motor Cat. No.	Base Speed rpm	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPM-B1151F	3000	4000	5000	2.71	2.3 (20.3)	5.9	4.3 (38.0)	0.75	2094-BMP5-S @ 150%
						9.9	6.6 (58.4)		2094-BMP5-S @ 250%
MPM-B1151T	6000	5000	7000	5.62	2.3 (20.3)	13.0	4.1 (36.3)	0.90	2094-BM01-S @ 150%
						20.5	5.8 (51.3)		2094-BM01-S @ 250%
MPM-B1152C	1500	2500	3000	3.61	5.0 (44.2)	5.9	7.2 (63.7)	1.20	2094-BMP5-S @ 150%
						10.0	11.3 (100)		2094-BMP5-S @ 250%
						12.4	13.5 (119)		2094-BM01-S @ 150%
MPM-B1152F	3000	4000	5200	6.17	5.0 (44.2)	13.0	9.0 (79.6)	1.40	2094-BM01-S @ 150%
						21.1	13.3 (118)		2094-BM01-S @ 250%
MPM-B1152T	6000	4000	7000	11.02	5.0 (44.2)	21.8	8.5 (75.2)	1.40	2094-BM02-S @ 150%
						36.5	13.1 (116)		2094-BM02-S @ 250%
MPM-B1153E	2250	3000	3500	6.21	6.5 (57.5)	21.5	13.0 (115)	1.40	2094-BM01-S @ 150%
						21.6	19.7 (174)		2094-BM01-S @ 250%
MPM-B1153F	3000	4000	5500	9.20	6.4 (56.6)	21.8	14.4 (127)	1.40	2094-BM02-S @ 150%
						32.0	19.7 (174)		2094-BM02-S @ 250%
MPM-B1153T	6000	4000	7000	15.95	6.4 (56.6)	45.0	14.5 (128)	1.45	2094-BM03-S @ 150%
MPM-B1302F	3000	4000	4500	8.57	6.6 (58.4)	13.0	8.9 (78.8)	1.65	2094-BM01-S @ 150%
						21.5	13.0 (115)		2094-BM01-S @ 250%
MPM-B1302M	4500	4000	6000	12.57	6.6 (58.4)	21.8	9.9 (87.6)	1.65	2094-BM02-S @ 150%
						32.4	13.3 (118)		2094-BM02-S @ 250%
MPM-B1302T	6000	4000	7000	16.83	6.0 (53.1)	36.5	11.8 (104)	1.65	2094-BM02-S @ 250%
						6.7 (59.3)	43.4		13.3 (118)
MPM-B1304C	1500	1870	2750	7.00	10.3 (91.1)	13.0	17.6 (156)	2.00	2094-BM01-S @ 150%
						21.5	26.4 (233)		2094-BM01-S @ 250%
MPM-B1304E	2250	3500	4000	10.75	10.2 (90.3)	21.8	19.0 (168)	2.20	2094-BM02-S @ 150%
						34.2	27.1 (240)		2094-BM02-S @ 250%
MPM-B1304M	4500	3500	6000	19.02	10.4 (92.0)	45.0	21.5 (190)	2.20	2094-BM03-S @ 150%
						60.6	27.1 (240)		2094-BM03-S @ 250%
MPM-B1651C	1500	3000	3500	10.21	11.4 (101)	21.8	19.4 (172)	2.50	2094-BM02-S @ 150%
						29.2	23.2 (205)		2094-BM02-S @ 250%
MPM-B1651F	3000	3000	5000	17.75	11.4 (101)	45.0	21.6 (191)	2.50	2094-BM03-S @ 150%
						50.9	23.2 (205)		2094-BM03-S @ 250%
MPM-B1651M	4500	3000	5000	22.46	11.3 (100)	45.0	18.8 (166)	2.50	2094-BM03-S @ 150%
						56.8	21.4 (189)		2094-BM03-S @ 250%
MPM-B1652C	1500	2500	2500	11.51	16.4 (145)	21.8	28.7 (254)	3.80	2094-BM02-S @ 150%
						33.6	40.2 (356)		2094-BM02-S @ 250%
MPM-B1652E	2250	3500	3500	20.94	21.1 (187)	45.0	38.4 (340)	4.30	2094-BM03-S @ 150%
						60.5	48.0 (425)		2094-BM03-S @ 250%

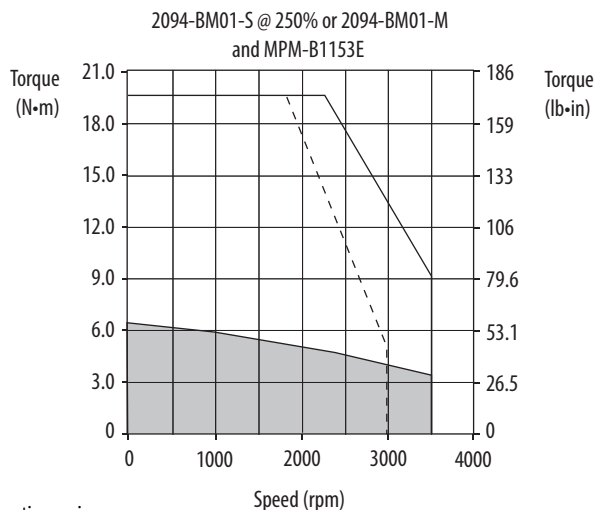
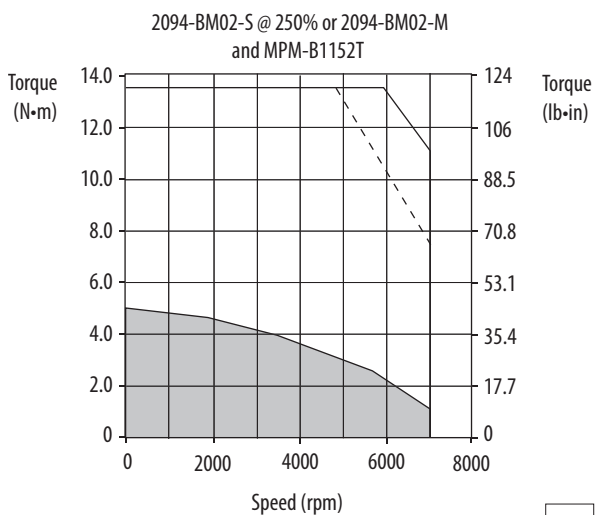
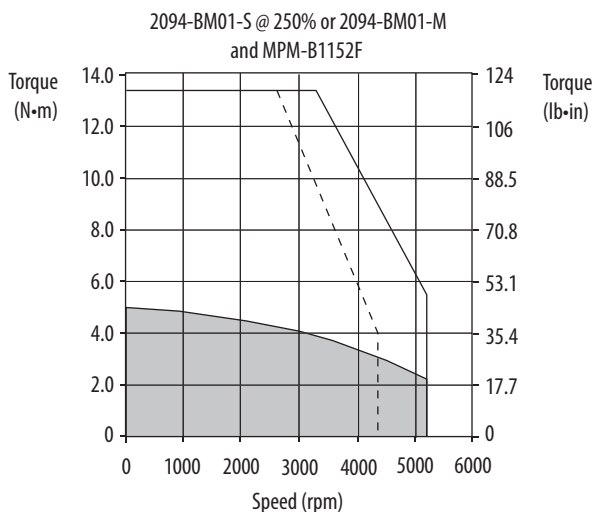
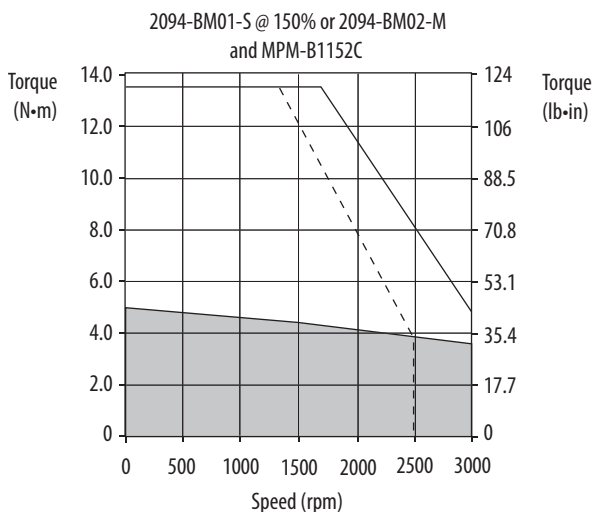
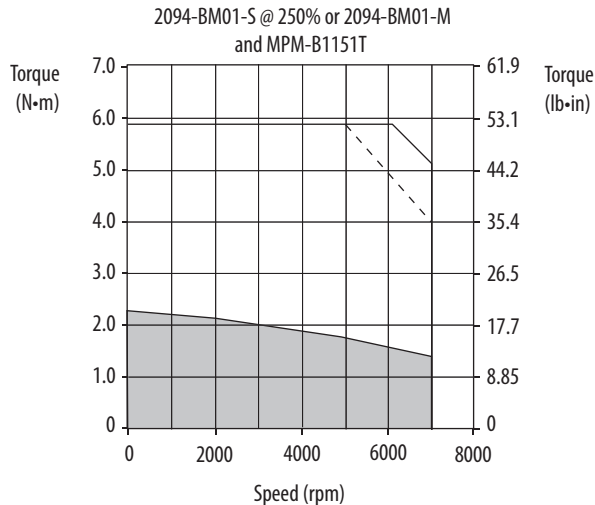
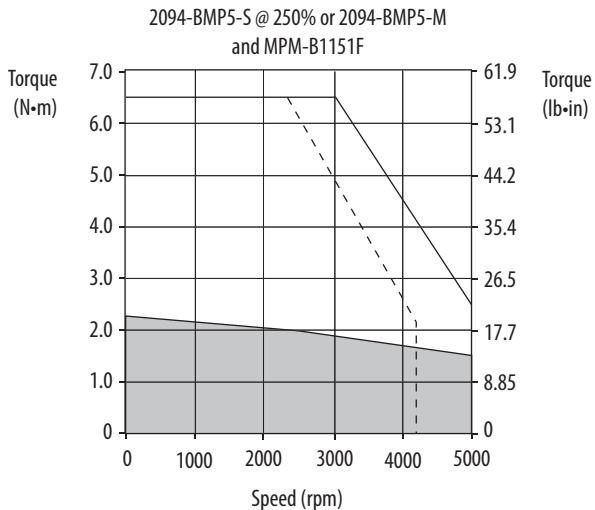
**Kinetix MPM Motor Performance Specifications with Kinetix 6000 (400V-class) Drives (Continued)**

Rotary Motor Cat. No.	Base Speed rpm	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N-m (lb-in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N-m (lb-in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPM-B1652F	3000	3500	4500	28.74	21.1 (187)	73.4	41.1 (364)	4.30	2094-BM05-S @ 150%
						84.1	48.0 (424)		2094-BM05-S @ 200%
MPM-B1653C	1500	2000	2500	20.05	26.7 (236)	45.0	55.0 (487)	4.60	2094-BM03-S @ 150%
						59.2	87.7 (599)		2094-BM03-S @ 250%
MPM-B1653E	2250	3000	3500	27.00	26.8 (237)	45.0	42.5 (376)	5.10	2094-BM03-S @ 150%
						72.9	62.0 (549)		2094-BM03-S @ 250%
MPM-B1653F	3000	3000	4000	34.94	31.0 (274)	73.4	47.8 (423)	5.10	2094-BM05-S @ 150%
						94.3	56.0 (495)		2094-BM05-S @ 200%
MPM-B2152C	1500	2000	2500	27.4	36.7 (325)	45.0	60.3 (534)	5.60	2094-BM03-S @ 150%
						55.4	72.2 (639)		2094-BM03-S @ 250%
MPM-B2152F	3000	2500	4500	43.54	34.1 (302)	73.4	56.2 (497)	5.90	2094-BM05-S @ 150%
						97.8	72.3 (495)		2094-BM05-S @ 200%
MPM-B2152M	4500	2500	5000	44.58	34.1 (302)	73.4	51.0 (451)	5.90	2094-BM05-S @ 150%
						76.3	52.9 (468)		2094-BM05-S @ 200%
MPM-B2153B	1250	1750	2000	24.06	48.0 (425)	45.0	80.0 (708)	6.80	2094-BM03-S @ 150%
						60.0	101 (894)		2094-BM03-S @ 250%
MPM-B2153E	2250	2000	3000	39.63	47.9 (424)	73.4	79.4 (703)	7.20	2094-BM05-S @ 150%
						97.8	101 (894)		2094-BM05-S @ 200%
MPM-B2153F	3000	2000	3800	43.86	45.6 (403)	73.4	75.0 (664)	7.20	2094-BM05-S @ 150%
						97.8	99.0 (875)		2094-BM05-S @ 200%
MPM-B2154B	1250	1750	2000	35.46	62.7 (555)	73.4	121 (1071)	6.90	2094-BM05-S @ 150%
						97.8	154 (1362)		2094-BM05-S @ 200%
MPM-B2154E	2250	2000	3000	43.68	55.9 (495)	73.4	87.7 (776)	7.50	2094-BM05-S @ 150%
						97.8	112 (990)		2094-BM05-S @ 200%
MPM-B2154F	3000	2000	3300	44.40	56.2 (497)	73.4	78.8 (697)	7.50	2094-BM05-S @ 150%
						83.6	88.0 (778)		2094-BM05-S @ 200%

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

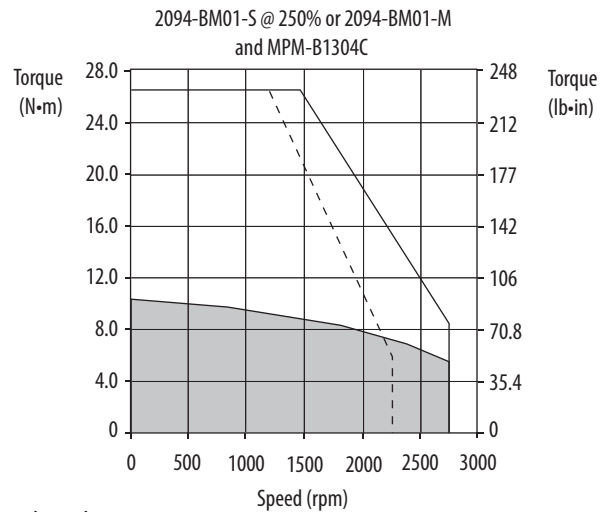
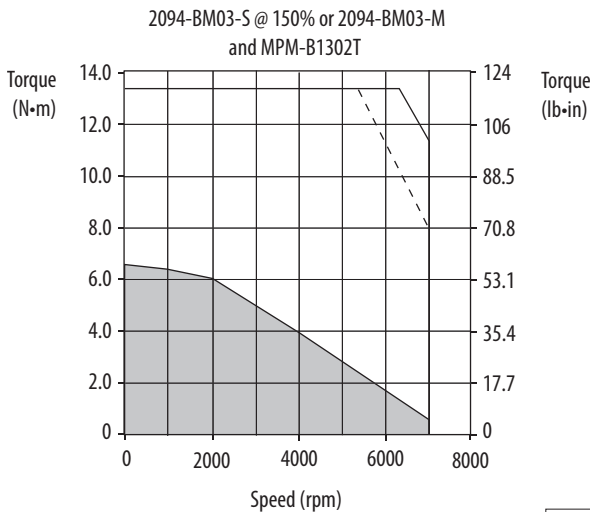
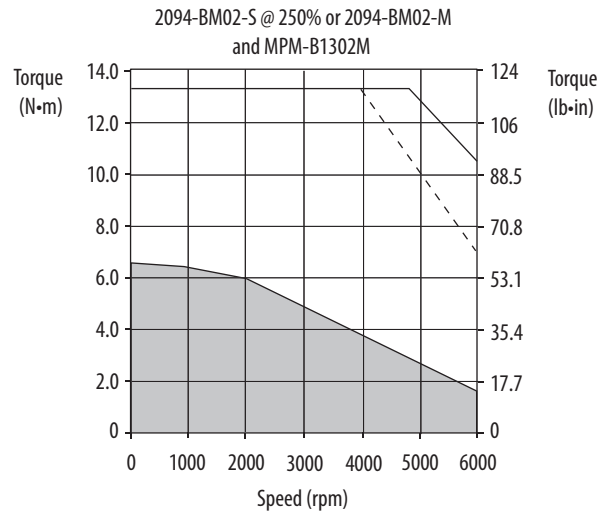
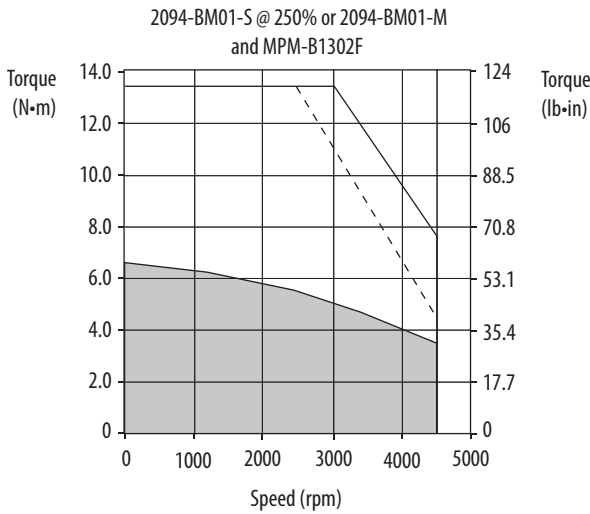
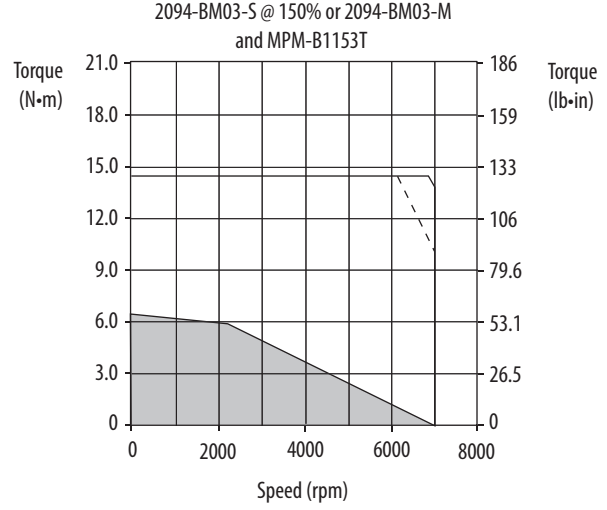
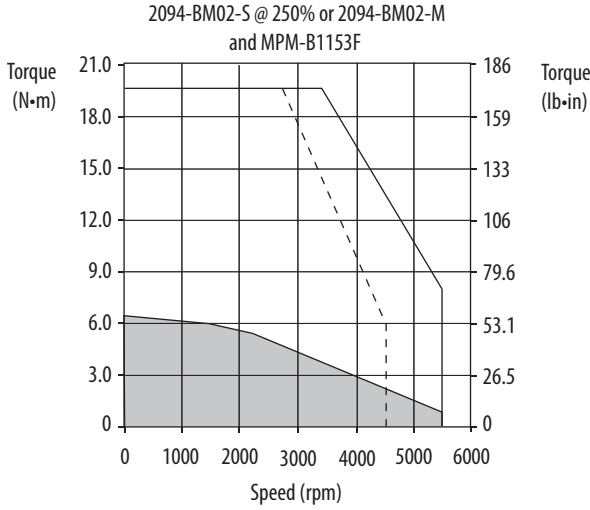


### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPM Medium-inertia Motor Curves



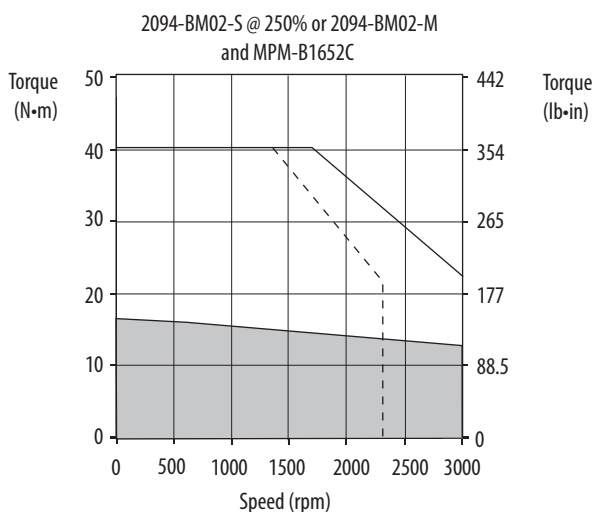
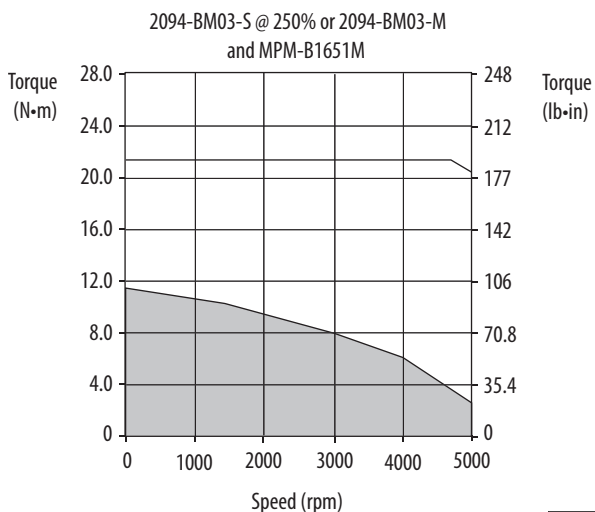
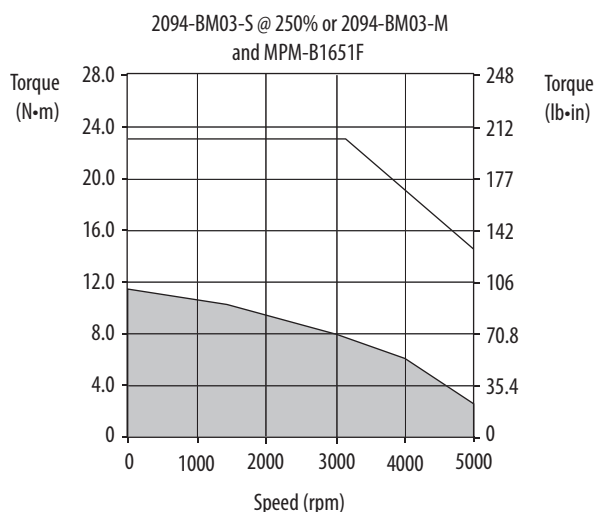
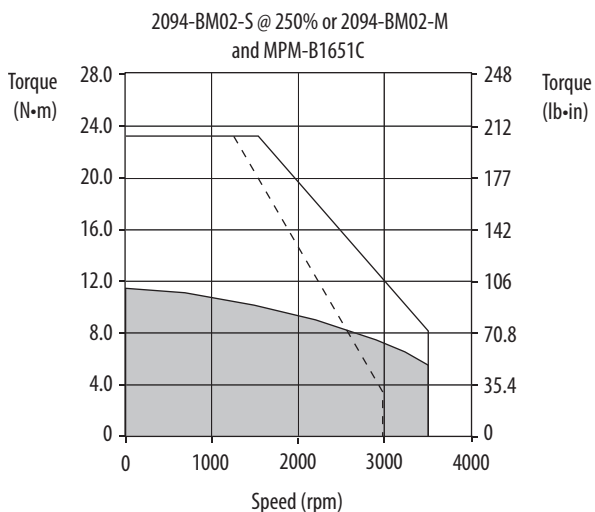
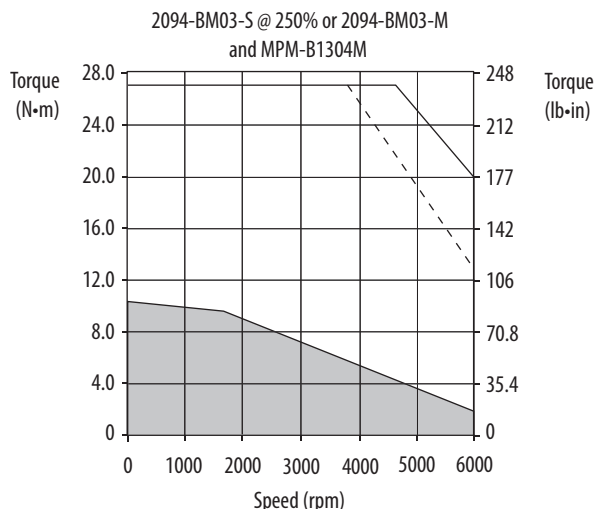
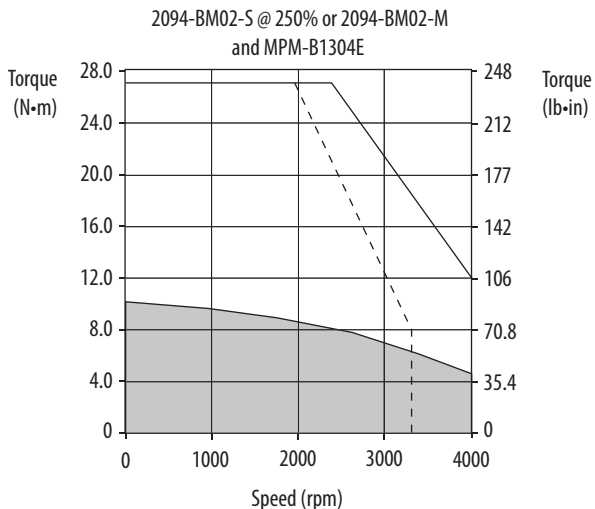
- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC rms input voltage

**Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/Kinetix MPM Medium-inertia Motor Curves (cont.)**



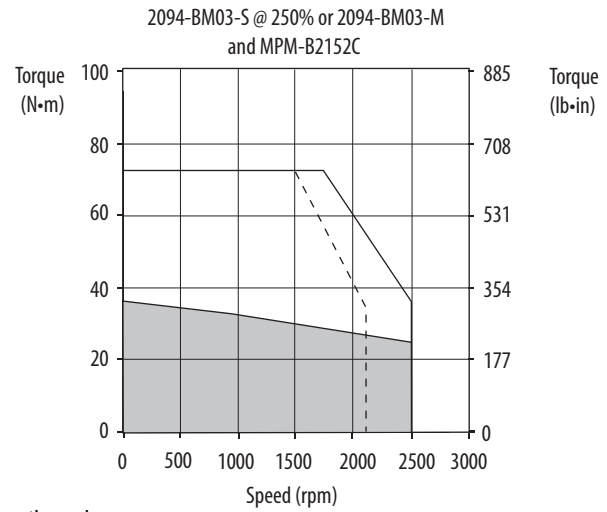
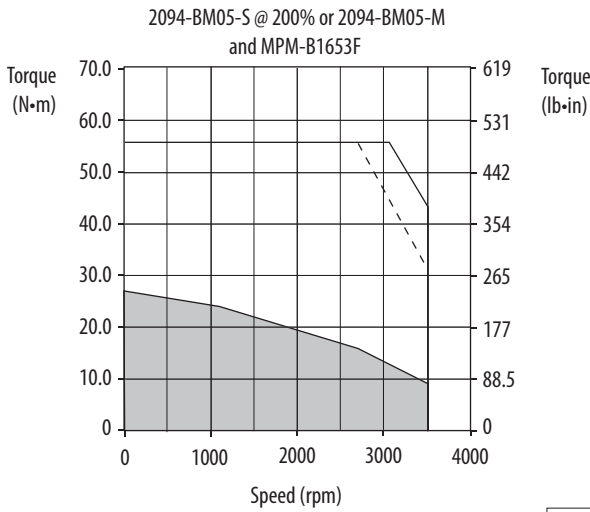
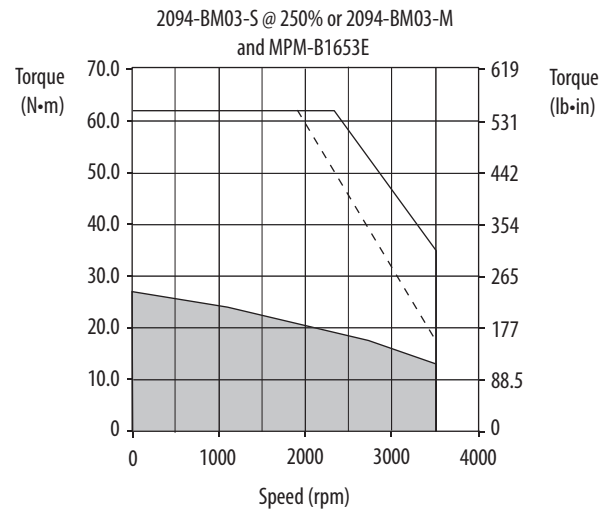
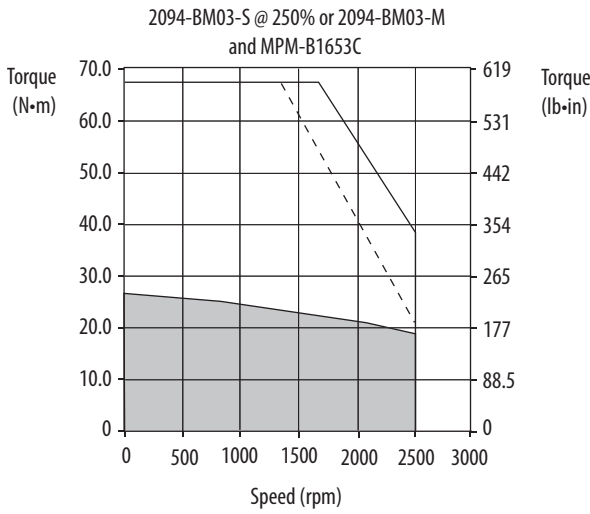
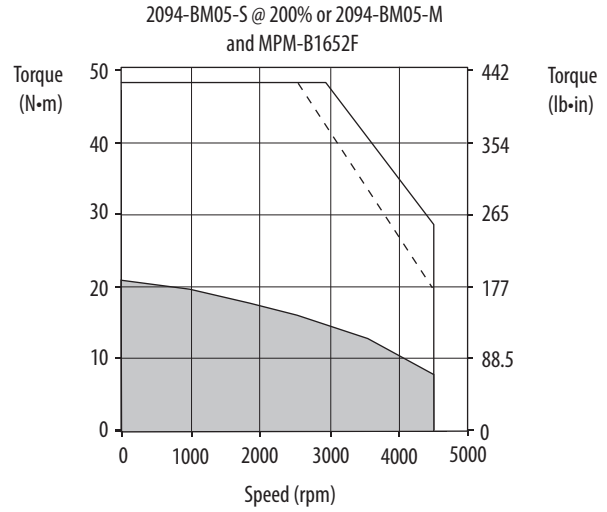
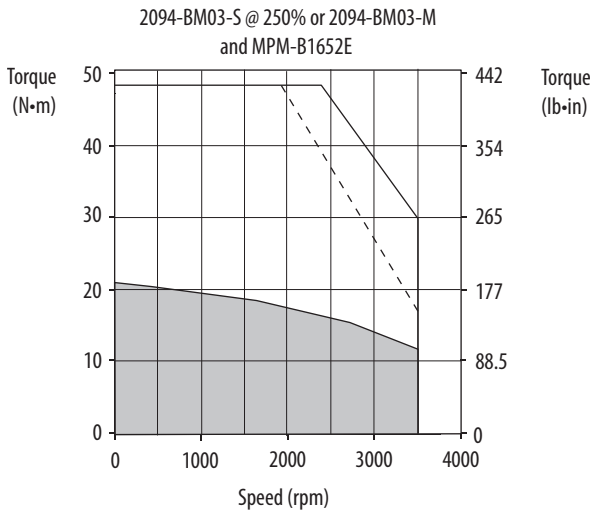
- = Intermittent operating region
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- = Drive operation with 400V AC rms input voltage

### Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/Kinetix MPM Medium-inertia Motor Curves (cont.)



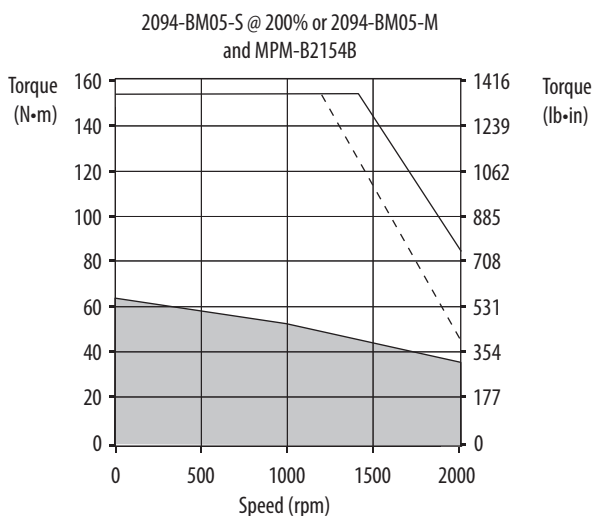
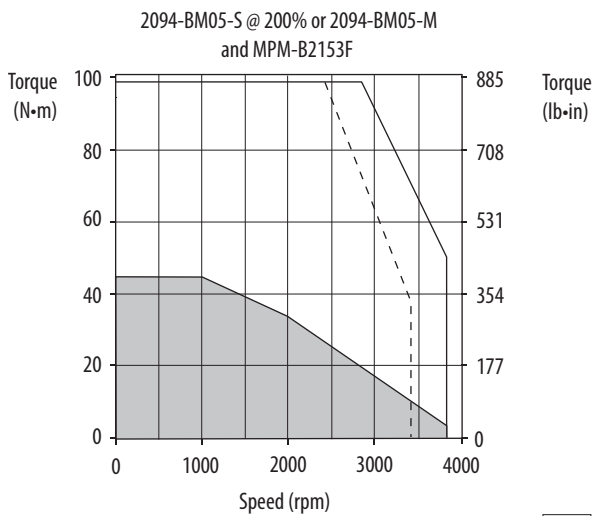
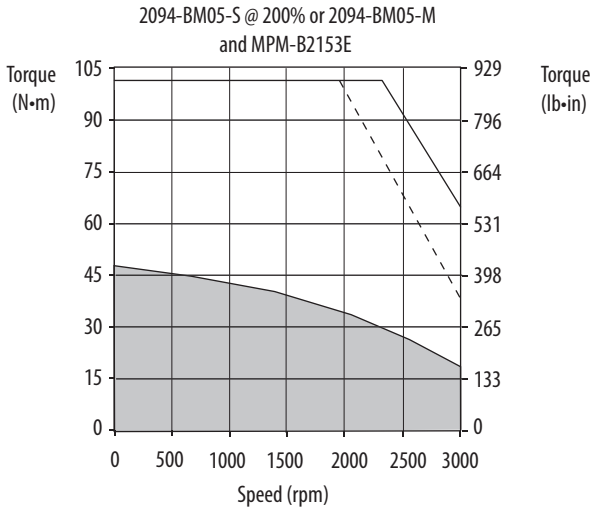
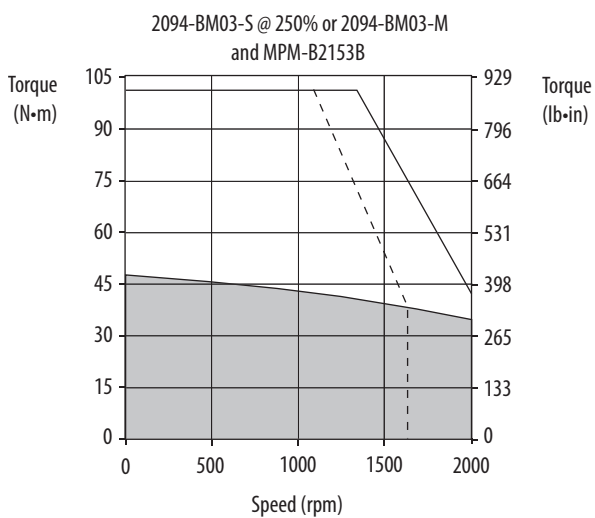
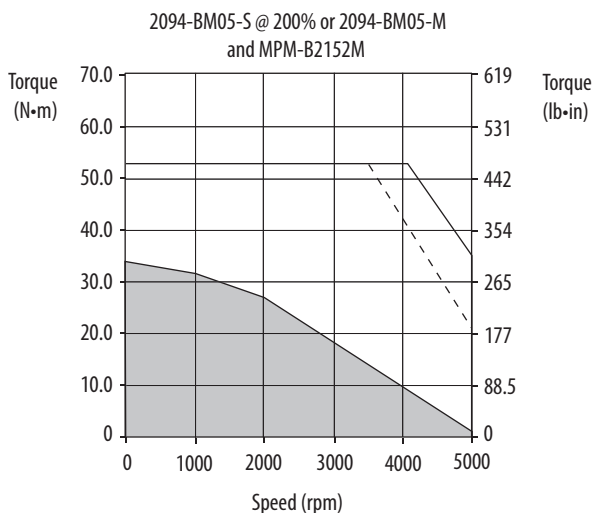
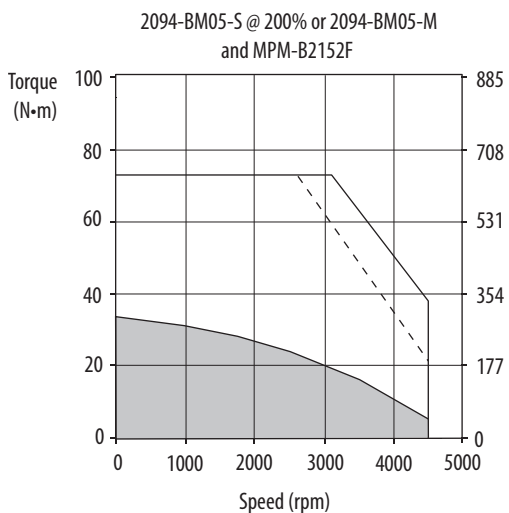
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 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage

**Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/Kinetix MPM Medium-inertia Motor Curves (cont.)**



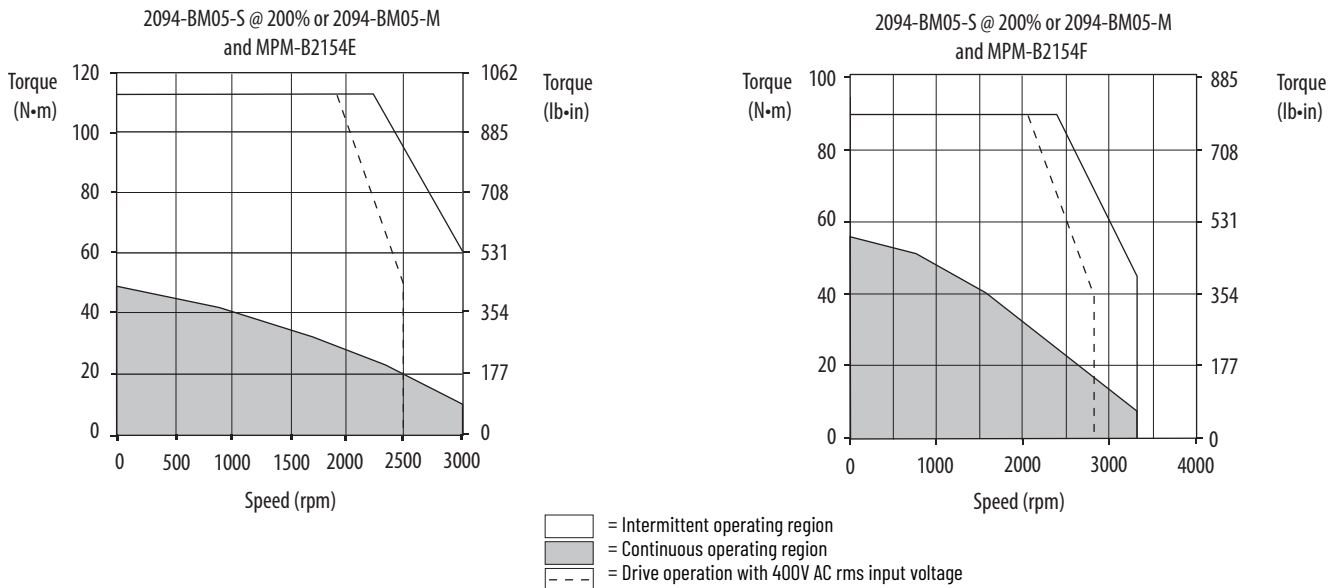
= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage

**Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/Kinetix MPM Medium-inertia Motor Curves (cont.)**



- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC rms input voltage

### Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/Kinetix MPM Medium-inertia Motor Curves (cont.)



### Kinetix 6000 (200V-class) Drives with Kinetix MPF Food-grade Motors

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with Kinetix MPF food-grade motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

#### Kinetix MPF Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPF-A310P, MPF-A320H, MPF-A320P, MPF-A330P	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex)
MPF-A430H		2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex)
MPF-A430P	2090-CPxM7DF-14AAxx (standard, non-flex) 2090-CPxM7DF-14AFxx (continuous-flex)	Absolute High-resolution Feedback
MPF-A4540F, MPF-A4530K		
MPF-A540K	2090-CPxM7DF-08AAxx (standard, non-flex) 2090-CPxM7DF-08AFxx (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

#### Kinetix MPF Motor Performance Specifications with Kinetix 6000 (200V-class) Drives

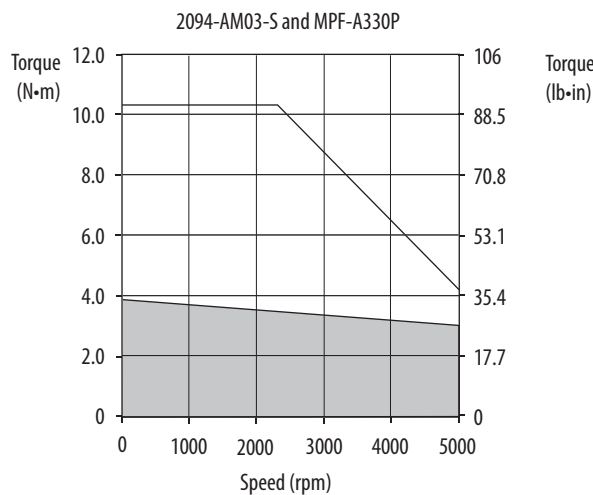
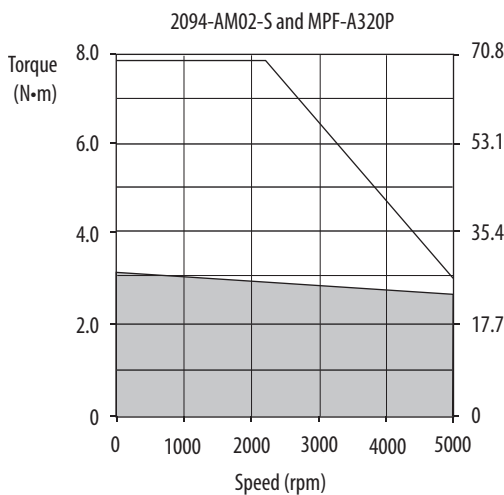
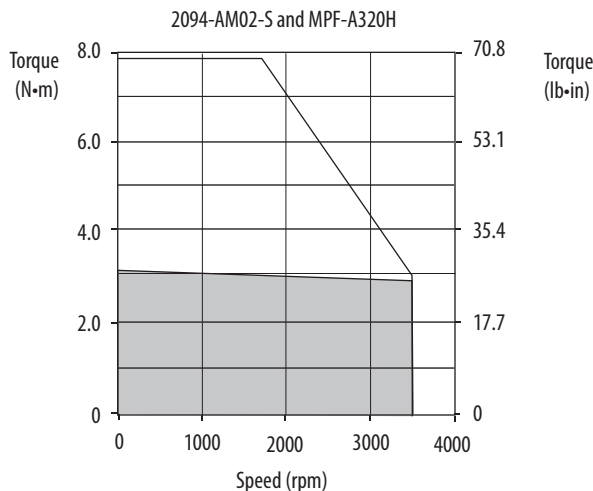
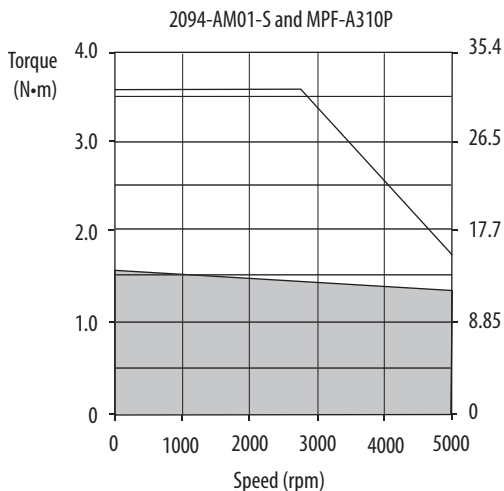
Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
MPF-A310P	4750	5000	4.50	1.58 (14.0)	10.5	2.91 (25.7)	0.73	2094-AMP5-S
					14.0	3.61 (31.9)		2094-AM01-S
MPF-A320H	3350	3500	6.10	3.05 (27.0)	17.0	6.97 (61.6)	1.0	2094-AM01-S
					19.3	7.91 (70.0)		2094-AM02-S
MPF-A320P	4750	5000	8.50 9.00	2.88 (25.5) 3.05 (27.0)	17.0	5.07 (44.8)	1.3	2094-AM01-S
					29.5	7.91 (70.0)		2094-AM02-S
MPF-A330P	5000	5000	12.0	3.85 (34.0)	30.0	8.47 (74.9)	1.6	2094-AM02-S
					38.0	10.32 (91.2)		2094-AM03-S
MPF-A430H	3500	3500	12.2	6.21 (55.0)	30.0	13.20 (117)	1.8	2094-AM02-S
					45.0	19.82 (175)		2094-AM03-S
MPF-A430P	5000	5000	16.80	5.94 (52.5)	49.0	15.36 (136)	1.9	2094-AM03-S
					67.0	19.80 (175)		2094-AM05-S
MPF-A4530K	4000	4000	19.50	8.08 (71.4)	49.0	17.01 (150)	2.3	2094-AM03-S
					62.0	20.30 (179)		2094-AM05-S

**Kinetix MPF Motor Performance Specifications with Kinetix 6000 (200V-class) Drives (Continued)**

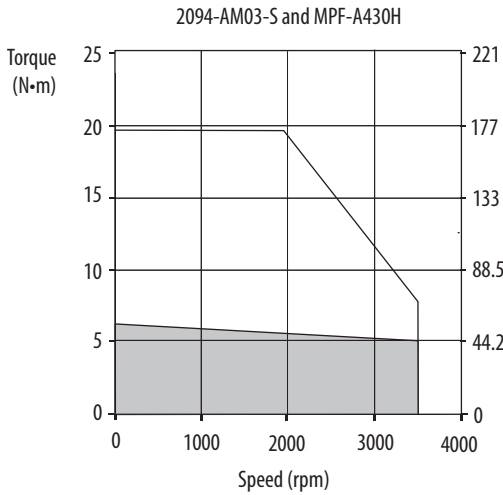
Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
MPF-A4540F	3000	3000	18.40	10.15 (89.7)	49.0	23.56 (208)	2.5	2094-AM03-S
					58.0	27.10 (239)		2094-AM05-S
MPF-A540K	4000	4000	24.5	11.40 (100)	49.0	21.68 (192)	4.1	2094-AM03-S
			41.5	19.42 (171)	73.4	31.55 (279)		2094-AM05-S

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

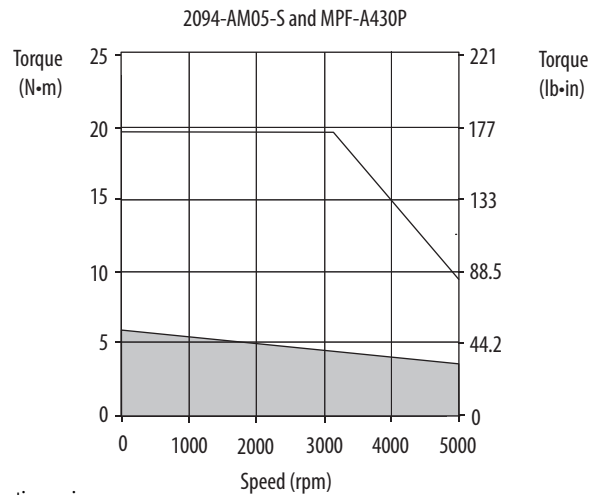
**Kinetix 6000 (200V-class) Drives/Kinetix MPF Food-grade Motor Curves**



**Kinetix 6000 (200V-class) Drives/Kinetix MPF Food-grade Motor Curves (continued)**

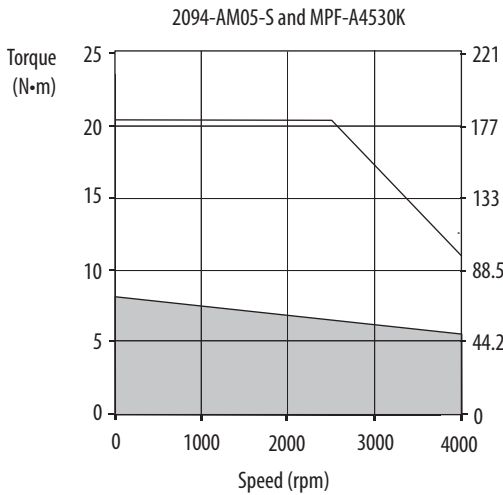


Torque (lb·in)

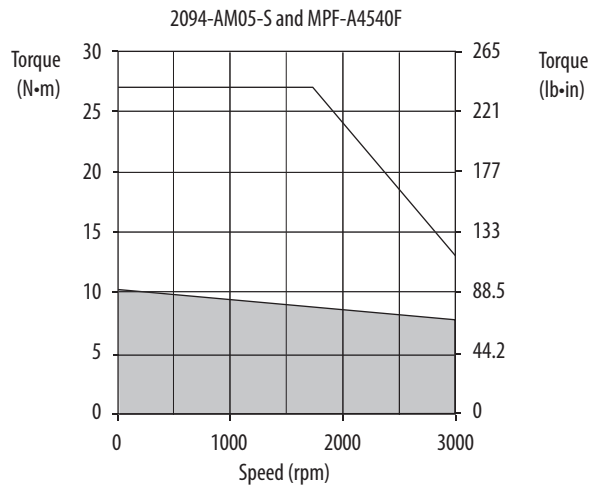


Torque (lb·in)

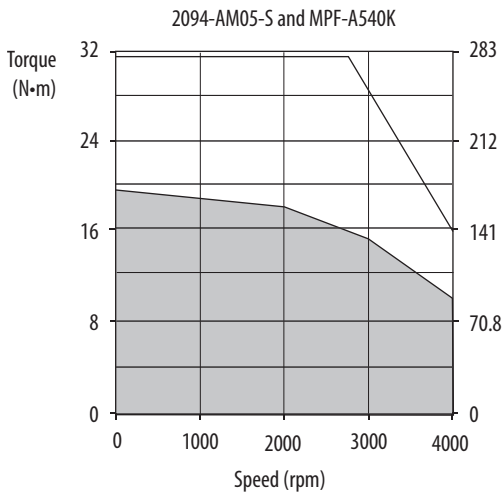
□ = Intermittent operating region  
 ■ = Continuous operating region



Torque (lb·in)



Torque (lb·in)



Torque (lb·in)

□ = Intermittent operating region  
 ■ = Continuous operating region



## Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix MPF Food-grade Motors

This section provides system combination information for the Kinetix 6000 and the Kinetix 6200/6500 (400V-class) drives when matched with Kinetix MPF food-grade motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

**IMPORTANT** When using Kinetix 6000 (series B and later) drives, which are configured for enhanced peak performance, you can usually achieve full motor performance with a smaller drive. Kinetix 6200 and Kinetix 6500 drives are configured for enhanced peak performance by default. Expect the same peak performance from Kinetix 6200/6500 drives as you get from Kinetix 6000 (series B and later) drives configured for enhanced peak performance.  
See Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for more information.

### Kinetix MPF Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPF-B310P, MPF-B320P, MPF-B330P	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex)
MPF-B430P		2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex)
MPF-B4530K, MPF-B4540F	2090-CPxM7DF-10AAxx (standard, non-flex) 2090-CPxM7DF-10AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex)
MPF-B540K		Absolute High-resolution Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix MPF Motor Performance Specifications with Kinetix 6200/6500 (400V-class) Drives

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N-m (lb-in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N-m (lb-in)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPF-B310P	5000	5000	2.30	1.60 (14)	7.10	3.6 (32)	0.77	2094-BMP5-M
MPF-B320P	5000	5000	4.0	2.90 (25.6)	9.90	6.0 (53.1)	1.5	2094-BMP5-M
			4.24	3.10 (27)	14.0	7.8 (69)		2094-BM01-M
MPF-B330P	5000	5000	4.0	2.90 (25.6)	9.90	6.5 (57.5)	1.6	2094-BMP5-M
			5.70	4.18 (37)	19.0	11.1 (98)		2094-BM01-M
MPF-B430P	5000	5000	8.60	6.20 (54.9)	21.5	13.9 (123)	2.0	2094-BM01-M
			9.20	6.55 (58)	32.0	19.8 (175)		2094-BM02-M
MPF-B4530K	4000	4000	8.60	7.10 (62.8)	21.5	15.1 (133)	2.4	2094-BM01-M
			9.90	8.25 (73)	31.0	20.3 (179)		2094-BM02-M
MPF-B4540F	3000	3000	8.60	9.50 (84.1)	21.5	20.9 (185)	2.5	2094-BM01-M
			9.10	10.20 (90)	29.0	27.1 (240)		2094-BM02-M
MPF-B540K	4000	4000	20.5	19.4 (171)	60.0	48.6 (430)	4.1	2094-BM03-M

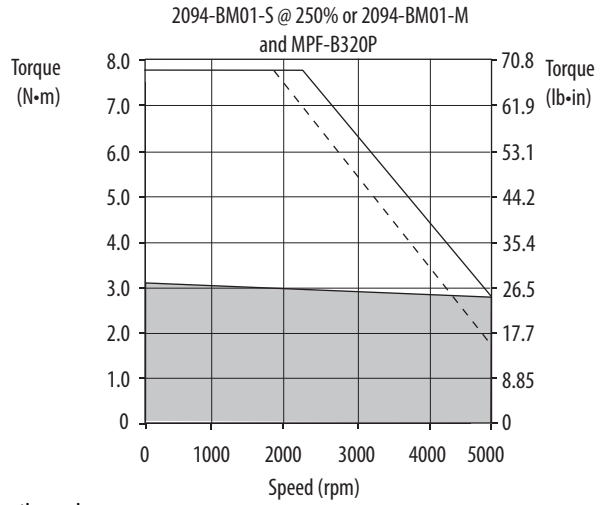
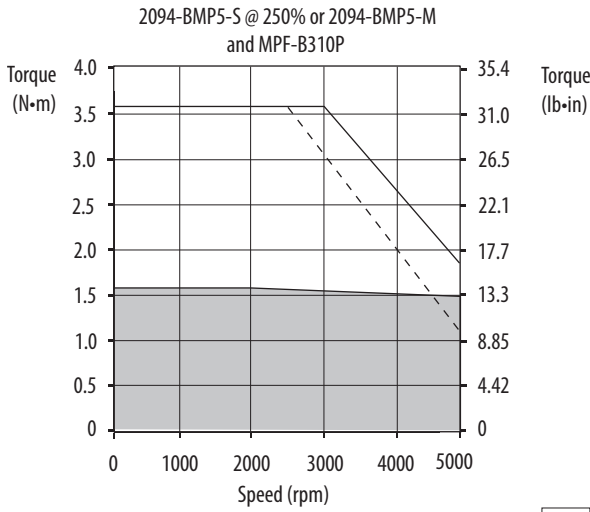
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix MPF Motor Performance Specifications with Kinetix 6000 (400V-class) Drives

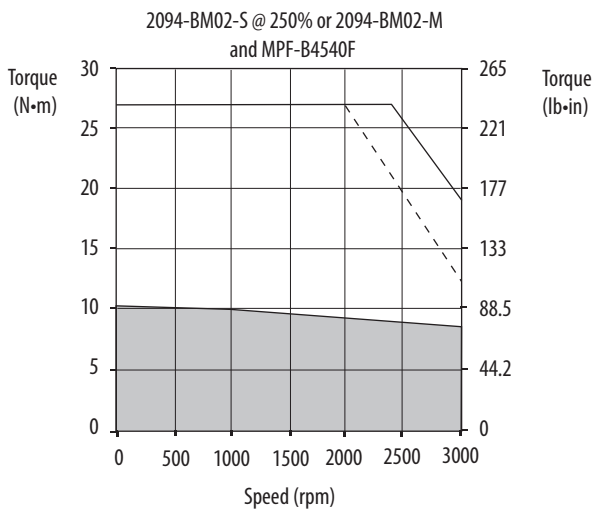
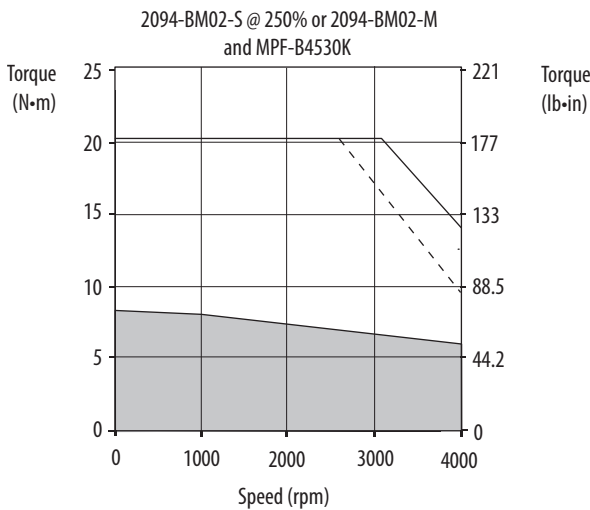
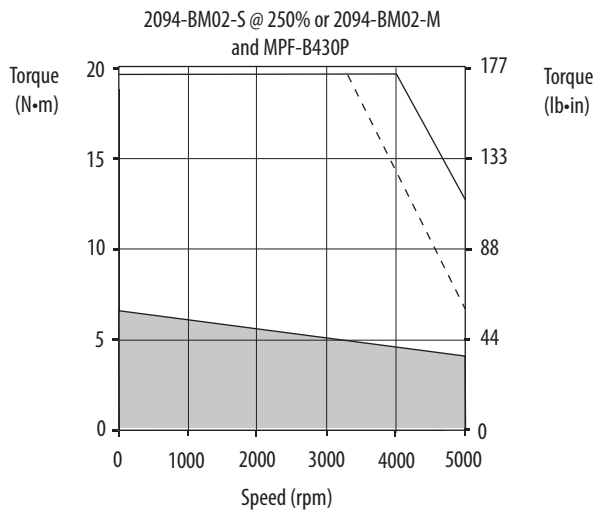
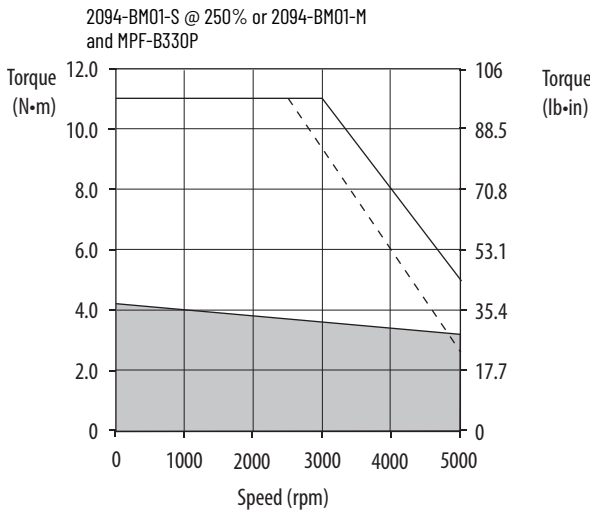
Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N-m (lb-in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N-m (lb-in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPF-B310P	5000	5000	2.30	1.6 (14)	5.90	3.2 (28)	0.77	2094-BMP5-S @ 150%
					7.10	3.6 (32)		2094-BMP5-S @ 250%
MPF-B320P	5000	5000	4.00	2.90 (26)	5.90	3.9 (34)	1.5	2094-BMP5-S @ 150%
			4.24	3.10 (27)	13.0	7.5 (66)		2094-BM01-S @ 150%
MPF-B330P	5000	5000	5.70	4.18 (37)	14.0	7.8 (69)	1.6	2094-BM01-S @ 250%
					13.0	8.2 (72)		2094-BM01-S @ 150%
MPF-B430P	5000	5000	9.20	6.55 (58)	21.8	14.2 (125)	2.0	2094-BM02-S @ 150%
					32.0	19.8 (175)		2094-BM02-S @ 250%
MPF-B4530K	4000	4000	9.90	8.25 (73)	21.8	15.4 (136)	2.4	2094-BM02-S @ 150%
					31.0	20.3 (179)		2094-BM02-S @ 250%
MPF-B4540F	3000	3000	9.10	10.20 (90)	21.8	21.4 (189)	2.5	2094-BM02-S @ 150%
					29.0	27.1 (240)		2094-BM02-S @ 250%
MPF-B540K	4000	4000	20.5	19.4 (171)	45.0	37.9 (335)	4.1	2094-BM03-S @ 150%
					60.0	48.6 (430)		2094-BM03-S @ 250%

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

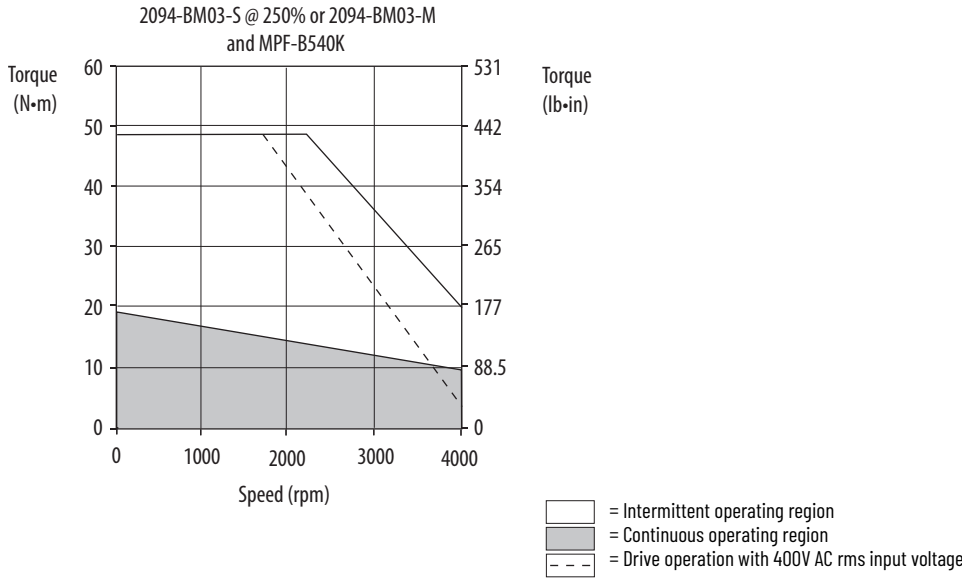
### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPF Food-grade Motor Curves



= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage



## Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPF Food-grade Motor Curves (cont.)



## Kinetix 6000 (200V-class) Drives with Kinetix MPS Stainless-steel Motors

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with MP-Series stainless-steel motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

### Kinetix MPS Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPS-A330P	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback
MPS-A4540F		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

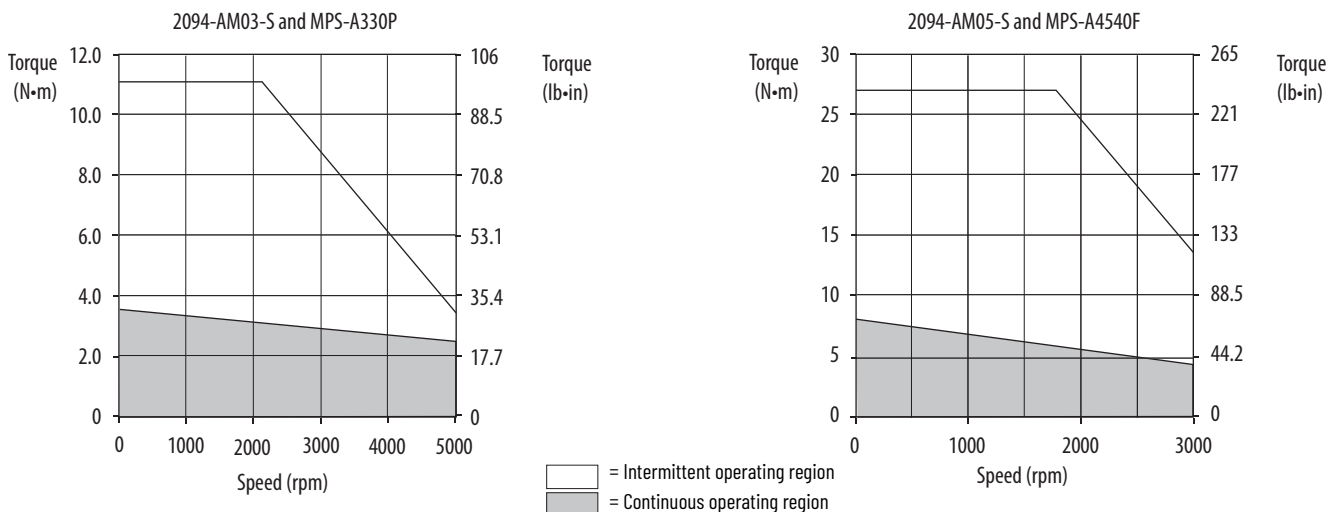
For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix MPS Motor Performance Specifications with Kinetix 6000 (200V-class) Drives

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
MPS-A330P	5000	5000	8.50	3.10 (27)	17.0	5.80 (51)	1.3	2094-AM01-S
			9.80	3.60 (32.0)	30.0	9.30 (82)		2094-AM02-S
					38.0	11.10 (98)		2094-AM03-S
MPS-A4540F	3000	3000	14.4	8.1 (72)	30.0	15.9 (140)	1.4	2094-AM02-S
					49.0	24.2 (214)		2094-AM03-S
					56.0	27.1 (240)		2094-AM05-S

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix 6000 (200V-class) Drives/Kinetix MPS Stainless-steel Motor Curves



### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix MPS Stainless-steel Motors

This section provides system combination information for the Kinetix 6000 and the Kinetix 6200/Kinetix 6500 (400V-class) drives when matched with Kinetix MPS stainless-steel motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

**IMPORTANT** When using Kinetix 6000 (series B and later) drives, which are configured for enhanced peak performance, you can usually achieve full motor performance with a smaller drive. Kinetix 6200 and Kinetix 6500 drives are configured for enhanced peak performance by default. Expect the same peak performance from Kinetix 6200/6500 drives as you get from Kinetix 6000 (series B and later) drives configured for enhanced peak performance.  
 See Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for more information.

#### Kinetix MPS Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power Cable	Motor Feedback Cable <sup>(1)</sup>
MPS-B330P	2090-CPxM7DF-16AAxx (standard, non-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex)
MPS-B4540F	2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex)
MPS-B560F	2090-CPxM7DF-14AAxx (standard, non-flex) 2090-CPxM7DF-14AFxx (continuous-flex)	Absolute High-resolution Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

#### Kinetix MPS Motor Performance Specifications with Kinetix 6200/6500 (400V-class) Drives

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N-m (lb-in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N-m (lb-in)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPS-B330P	5000	5000	4.0	3.0 (26.5)	9.90	6.6 (58.4)	1.3	2094-BMP5-M
			4.9	3.6 (32)	19.0	11.0 (97.2)		2094-BM01-M
MPS-B4540F	3000	3000	7.1	8.1 (72)	21.5	22.8 (202)	1.4	2094-BM01-M
					26.0	27.1 (240)		2094-BM02-M
MPS-B560F	3000	3000	17.0	21.5 (190)	68.0	67.8 (600)	3.5	2094-BM03-M

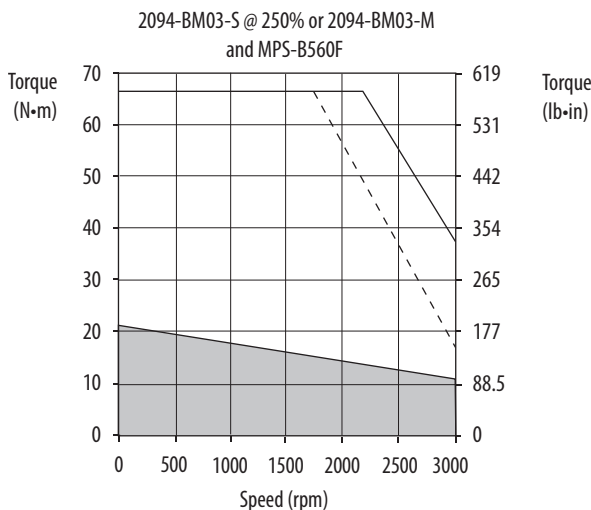
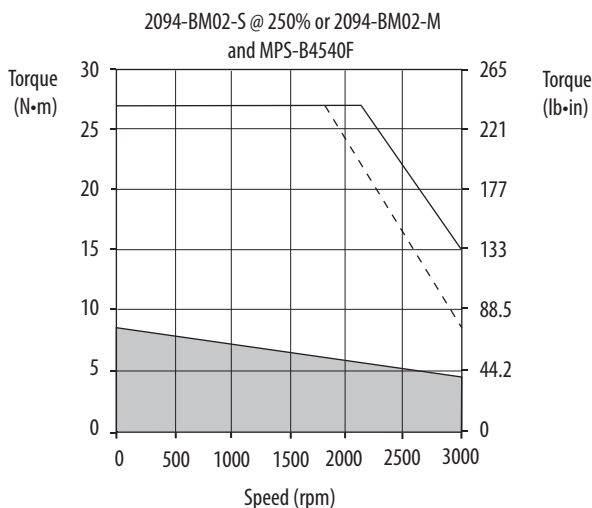
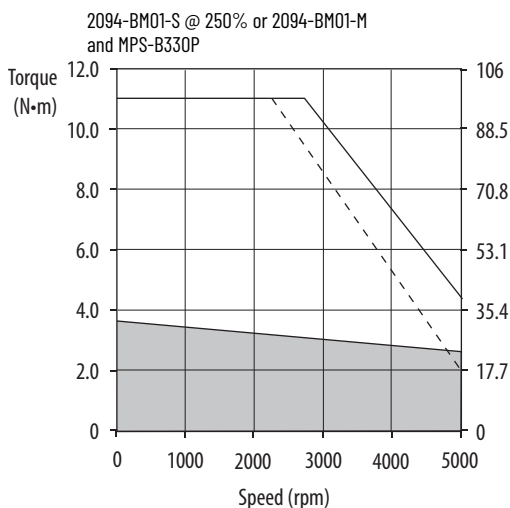
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Kinetix MPS Motor Performance Specifications with Kinetix 6000 (400V-class) Drives**

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPS-B330P	5000	5000	4.9	3.60 (32)	13.0	8.2 (72.5)	1.3	2094-BM01-S @ 150%
					19.0	11.0 (97.2)		2094-BM01-S @ 250%
MPS-B4540F	3000	3000	7.1	8.1 (72)	21.5	22.8 (202)	1.4	2094-BM01-S @ 250%
					21.8	23.2 (205)		2094-BM02-S @ 150%
					26.0	27.1 (240)		2094-BM02-S @ 250%
MPS-B560F	3000	3000	17.0	21.5 (190)	45.0	49.2 (435)	3.5	2094-BM03-S @ 150%
					68.0	67.8 (600)		2094-BM03-S @ 250%

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPS Stainless-steel Motor Curves**



- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC rms input voltage

## Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix RDB Direct-drive Servo Motors

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with Kinetix RDB direct-drive motors. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

**IMPORTANT** When using Kinetix 6000 (series B and later) drives, which are configured for enhanced peak performance, you can usually achieve full motor performance with a smaller drive. Kinetix 6200 and Kinetix 6500 drives are configured for enhanced peak performance by default. Expect the same peak performance from Kinetix 6200/6500 drives as you get from Kinetix 6000 (series B and later) drives configured for enhanced peak performance.  
See Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for more information.

### Kinetix RDB Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power Cable	Motor Feedback Cable <sup>(1)</sup>
RDB-B21519, RDB-B21529	2090-CPWM7DF-16AAxx (standard, non-flex) 2090-CPWM7DF-16AFxx (continuous-flex)	2090-XXNFMF-Sxx (standard, non-flex) 2090-CFBM7DF-CDAFxx (continuous-flex) Absolute High-resolution Feedback
RDB-B29014, RDB-B29016, RDB-B29024		
RDB-B2151C, RDB-B21539	2090-CPWM7DF-14AAxx (standard, non-flex) 2090-CPWM7DF-14AFxx (continuous-flex)	
RDB-B29019, RDB-B29034		
RDB-B2152C	2090-CPWM7DF-12AAxx (standard, non-flex)	
RDB-B29026		
RDB-B2153C	2090-CPWM7DF-10AAxx (standard, non-flex) 2090-CPWM7DF-10AFxx (continuous-flex)	
RDB-B29036, RDB-B41014		
RDB-B29029, RDB-B41016, RDB-B41024	2090-CPWM7DF-08AAxx (standard, non-flex) 2090-CPWM7DF-08AFxx (continuous-flex)	

(1) For Kinetix 6200/6500 drives, use low-profile connector kit (catalog number 2090-K6CK-D15M) or panel-mounted breakout components on the drive end. For Kinetix 6000 drives, use low-profile feedback module (catalog number 2090-K6CK-KENDAT). See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix RDB Motor Performance Specifications with Kinetix 6200/6500 (400V-class) Drives

Motor Cat. No.	Base Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
RDB-B21519	750	1235	9.9	31.2 (276)	27.3	83.1 (735)	3.64	2094-BM02-M
RDB-B2151C	1500	2125	17.3	31.3 (277)	46.4	82.8 (733)	5.23	2094-BM03-M
RDB-B21529	750	1035	12.2	43.4 (384)	32.8	111 (982)	4.33	2094-BM02-M
RDB-B2152C	1500	2125	23.5	43.4 (384)	63.2	111 (982)	6.41	2094-BM03-M
RDB-B21539	750	1250	15.8	51.5 (456)	47.9	137 (1212)	5.34	2094-BM03-M
RDB-B2153C	1500	2250	29.4	51.5 (456)	82.6	137 (1212)	5.87	2094-BM03-M
RDB-B29014	200	450	5.9	48.9 (433)	17.6	110 (973)	1.97	2094-BM01-M
RDB-B29016	375	785	10.0	48.9 (433)	31.0	110 (973)	3.18	2094-BM02-M
RDB-B29019	750	1500	19.1	48.9 (167)	58.7	110 (973)	3.63	2094-BM03-M
RDB-B29024	200	435	10.7	97.8 (865)	33.0	214 (1894)	3.33	2094-BM02-M
RDB-B29026	375	885	21.9	97.8 (865)	67.2	214 (1894)	4.05	2094-BM03-M
RDB-B29029	750	1200	36.2	97.5 (863)	97.8	195 (1726)	4.05	2094-BM05-M
RDB-B29034	200	500	17.4	140 (1239)	56.6	321 (2841)	5.16	2094-BM03-M
RDB-B29036	375	750	26.0	140 (1239)	84.9	318 (2814)	5.49	2094-BM05-M
RDB-B29039	750	1000	48.9	113 (1000)	97.8	194 (1717)	4.41	2094-BM05-M
RDB-B41014	200	385	17.8	183 (1619)	51.2	340 (3009)	5.20	2094-BM03-M
RDB-B41016	375	700	33.2	183 (1619)	95.5	339 (3000)	4.83	2094-BM05-M
RDB-B41018	625	700	48.9	175 (1549)	97.8	271 (2398)	4.83	2094-BM05-M
RDB-B41024	200	365	31.5	330 (2929)	95.5	690 (6107)	7.29	2094-BM05-M

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix RDB Motor Performance Specifications with Kinetix 6000 (400V-class) Drives

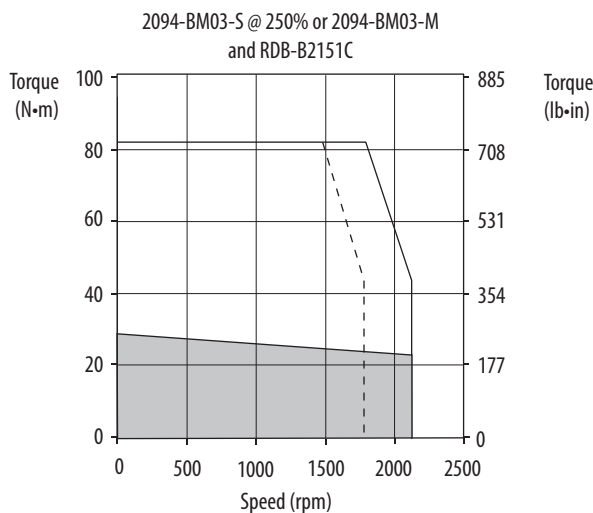
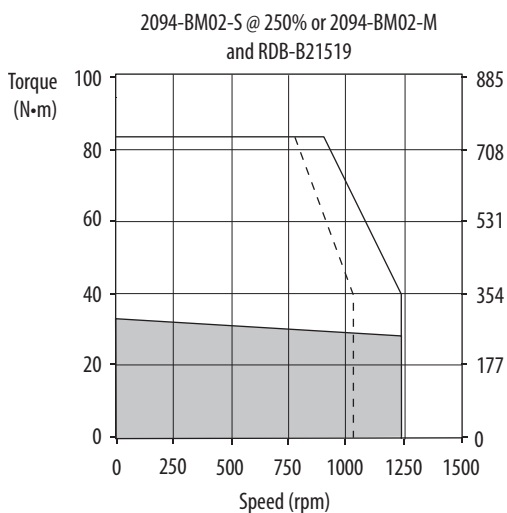
Rotary Motor Cat. No.	Base Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
RDB-B21519	750	1235	9.90	31.2 (276)	21.8	66.8 (591)	3.64	2094-BM02-S @ 150%
					27.3	83.1 (735)		2094-BM02-S @ 250%
RDB-B2151C	1500	2125	17.3	31.3 (277)	45.0	80.2 (710)	5.23	2094-BM03-S @ 150%
					46.4	82.8 (733)		2094-BM03-S @ 250%

Kinetix RDB Motor Performance Specifications with Kinetix 6000 (400V-class) Drives (Continued)

Rotary Motor Cat. No.	Base Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
RDB-B21529	750	1035	12.2	43.4 (384)	21.8 32.8	76.8 (680) 111 (982)	4.33	2094-BM02-S @ 150% 2094-BM02-S @ 250%
RDB-B2152C	1500	2125	23.5	43.4 (384)	45.0 63.2	80.4 (711) 111 (982)	6.41	2094-BM03-S @ 150% 2094-BM03-S @ 250%
RDB-B21539	750	1250	15.8	51.5 (456)	45.0 47.9	130 (1150) 137 (1212)	5.34	2094-BM03-S @ 150% 2094-BM03-S @ 250%
RDB-B2153C	1500	2250	29.4	51.5 (456)	75.0 73.4 82.6	125 (1106) 122 (1080) 137 (1212)	5.87	2094-BM03-S @ 250% 2094-BM05-S @ 150% 2094-BM05-S @ 200%
RDB-B29014	200	450	5.9	48.9 (167)	13.0 17.6	89.2 (789) 110 (973)	1.97	2094-BM01-S @ 150% 2094-BM01-S @ 250%
RDB-B29016	375	785	10.0	48.9 (167)	21.8 31.0	86.6 (766) 110 (973)	3.18	2094-BM02-S @ 150% 2094-BM02-S @ 250%
RDB-B29019	750	1500	19.1	48.9 (167)	45.0 58.7	90.8 (803) 110 (973)	3.63	2094-BM03-S @ 150% 2094-BM03-S @ 250%
RDB-B29024	200	435	10.7	97.8 (865)	21.8 33.0	159 (1407) 214 (1894)	3.33	2094-BM02-S @ 150% 2094-BM02-S @ 250%
RDB-B29026	375	885	21.9	97.8 (865)	45.0 67.2	161 (1425) 214 (1894)	4.05	2094-BM03-S @ 150% 2094-BM03-S @ 250%
RDB-B29029	750	1200	36.2	97.5 (863)	97.8	195 (1726)	4.05	2094-BM05-S @ 200%
RDB-B29034	200	500	17.4	140 (1239)	45.0 56.6	274 (2425) 321 (2841)	5.16	2094-BM03-S @ 150% 2094-BM03-S @ 250%
RDB-B29036	375	750	26.0	140 (1239)	73.4 84.9	290 (2566) 318 (2814)	5.49	2094-BM05-S @ 150% 2094-BM05-S @ 200%
RDB-B29039	750	1000	48.9	113 (1000)	97.8	194 (1717)	4.41	2094-BM05-S @ 200%
RDB-B41014	200	385	17.8	183 (1619)	45.0 51.2	317 (2805) 340 (3009)	5.20	2094-BM03-S @ 150% 2094-BM03-S @ 250%
RDB-B41016	375	700	33.2	183 (1619)	73.4 95.5	292 (2584) 339 (3000)	4.83	2094-BM05-S @ 150% 2094-BM05-S @ 200%
RDB-B41018	625	700	48.9	175 (1549)	97.8	271 (2398)	4.83	2094-BM05-S @ 200%
RDB-B41024	200	365	31.5	330 (2929)	73.4 95.5	593 (5248) 690 (6107)	7.29	2094-BM05-S @ 150% 2094-BM05-S @ 200%

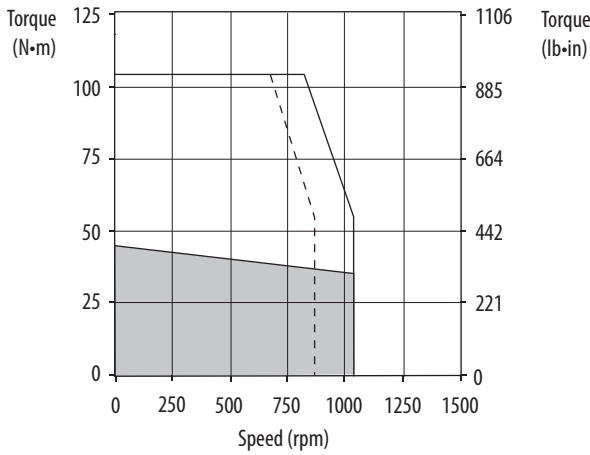
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix RDB Direct-drive Motor Curves

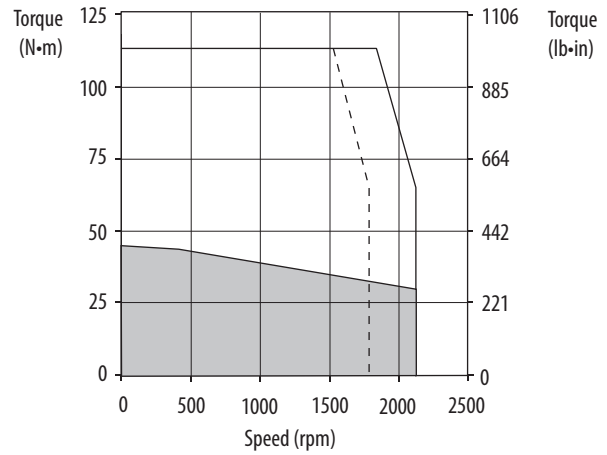


**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix RDB Direct-drive Motor Curves (continued)**

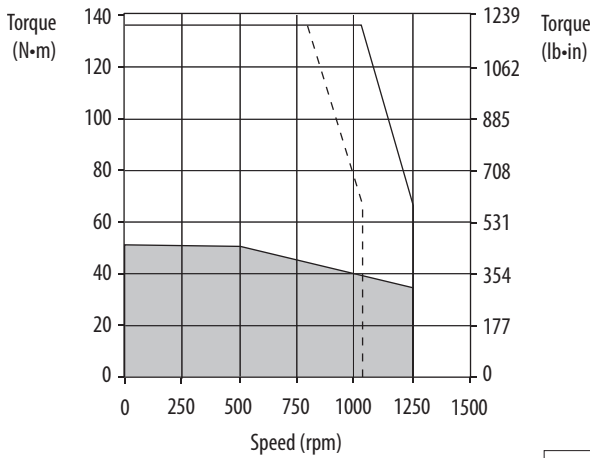
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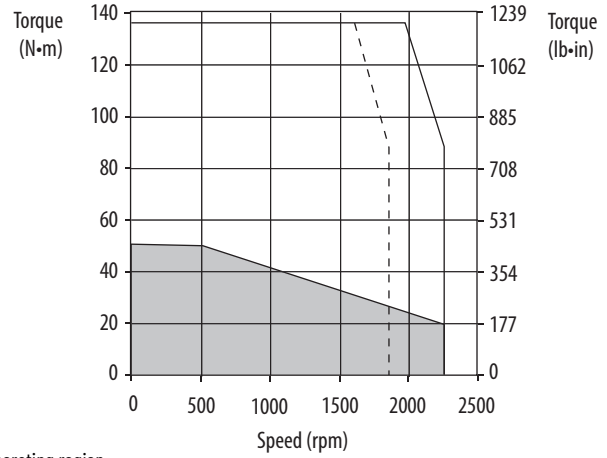
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and RDB-B2152C






2094-BM03-S @ 250% or 2094-BM03-M  
and RDB-21539

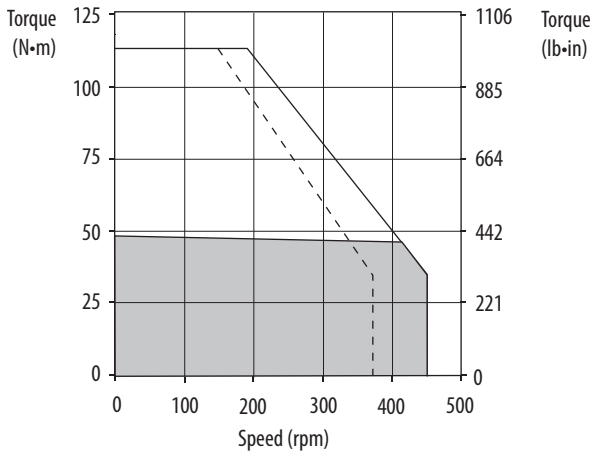


2094-BM05-S @ 200% or 2094-BM05-M  
and RDB-2153C

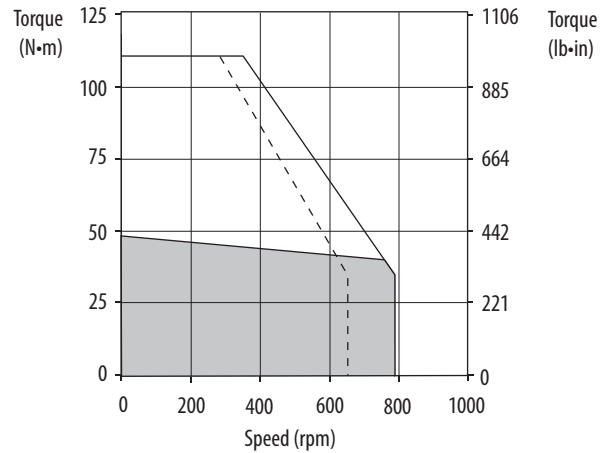


-  = Intermittent operating region
-  = Continuous operating region
-  = Drive operation with 400V AC rms input voltage

2094-BM01-S @ 250% or 2094-BM01-M  
and RDB-B29014



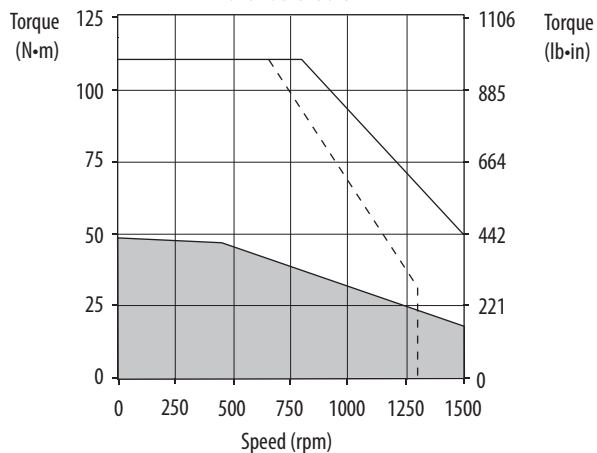
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and RDB-B29016



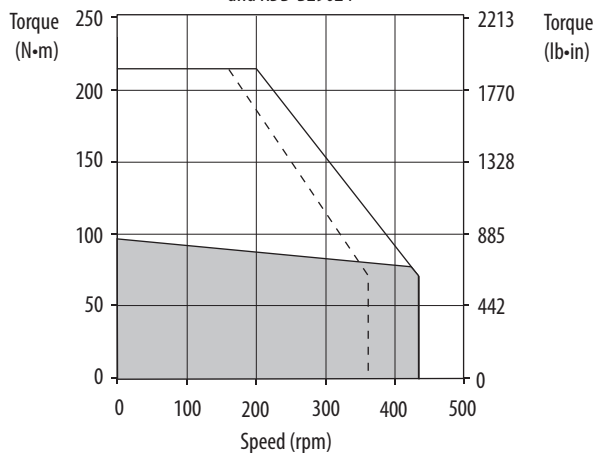


### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix RDB Direct-drive Motor Curves (continued)

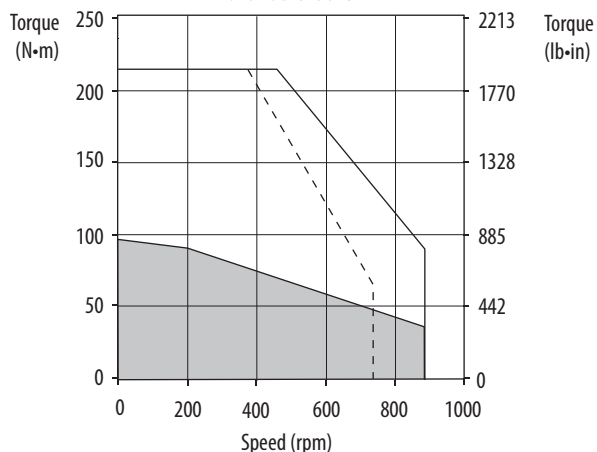
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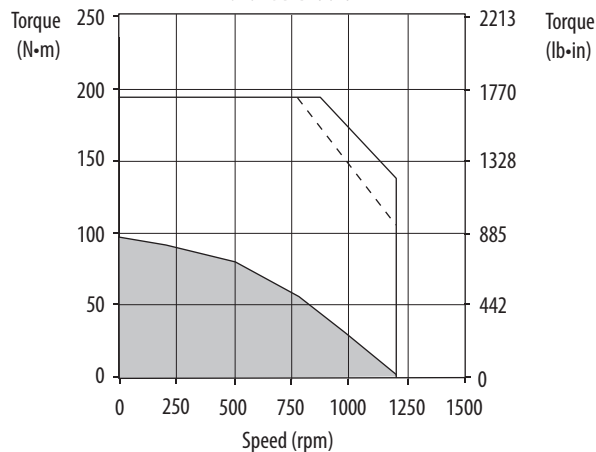
2094-BM02-S @ 250% or 2094-BM02-M and RDB-B29024



2094-BM03-S @ 250% or 2094-BM03-M and RDB-B29026

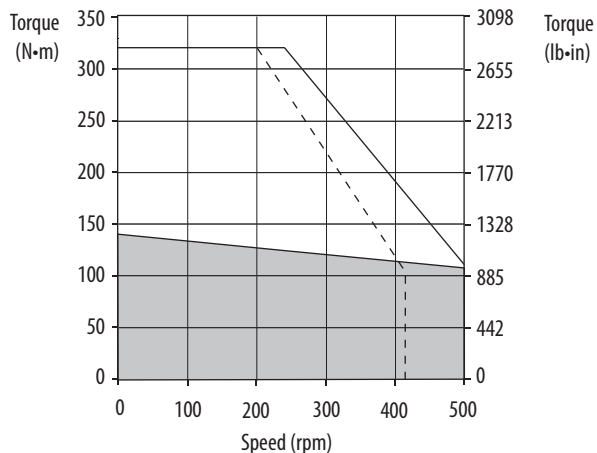


2094-BM05-S @ 200% or 2094-BM05-M and RDB-B29029

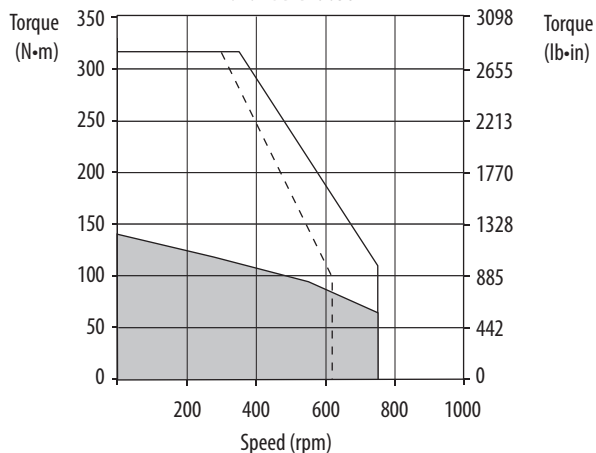


- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC rms input voltage

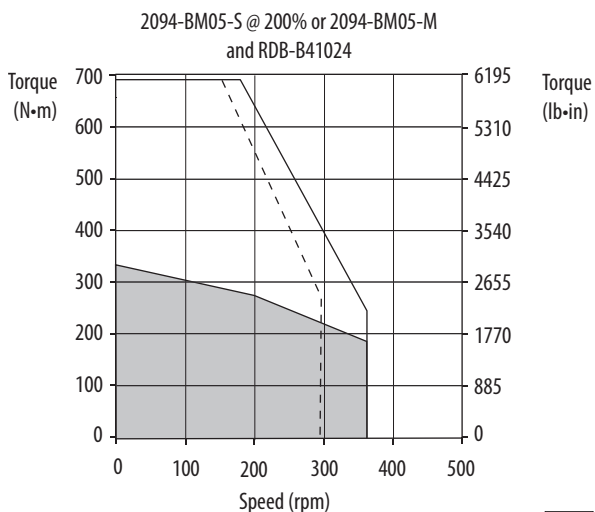
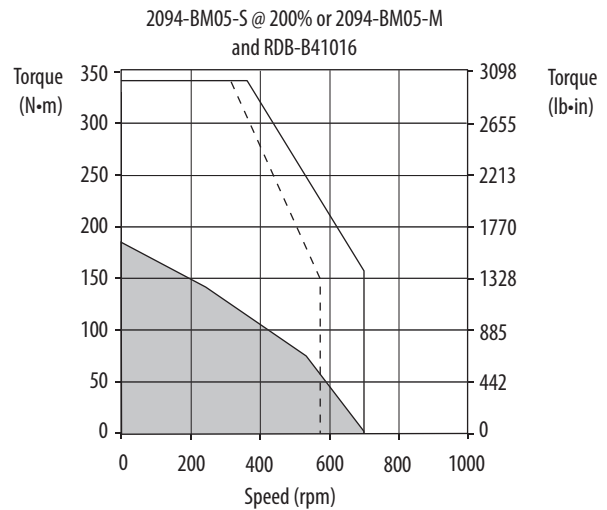
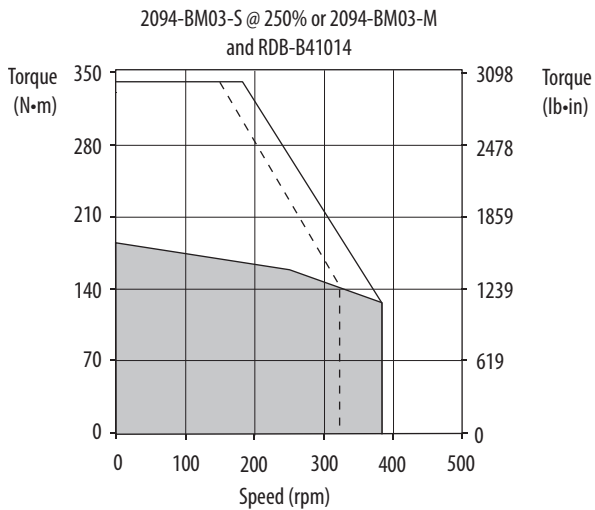
2094-BM03-S @ 250% or 2094-BM03-M and RDB-B29034



2094-BM05-S @ 200% or 2094-BM05-M and RDB-B29036



### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix RDB Direct-drive Motor Curves (continued)



= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC rms input voltage

### Kinetix 6000 (200V-class) Drives with Kinetix TLY Low-inertia Motors

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with Kinetix TLY low-inertia motors. Compatible Kinetix TLY motors are equipped with incremental encoder feedback. Included are motor power/brake and feedback cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

#### Kinetix TLY Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
TLY-A110T, TLY-A120T, TLY-A130T	2090-CPWM6DF-16AAxx (standard, non-flex) without brake	2090-CFBM6DF-CBAAxx or 2090-CFBM6DD-CCAAxx (standard, non-flex) Incremental Feedback
TLY-A220T, TLY-A230T	2090-CPBM6DF-16AAxx (standard, non-flex) with brake	2090-CFBM6DF-CBAAxx or 2090-CFBM6DD-CCAAxx (standard, non-flex) Incremental Feedback
TLY-A2530P, TLY-A2540P		
TLY-A310M		

(1) For TLY-Axxxx-H motors with incremental encoder feedback, use 2090-CFBM6DF-CBAAxx flying-lead cables and 2090-K6CK-D15M connector kit or use 2090-CFBM6DD-CCAAxx (15-pin connector) cable on the drive end. See [Required Drive Accessories on page 3](#).

Kinetix TLY motors are characterized as having 1000 mm (39.4 in.) cable extensions with circular plastic (M6) connectors. For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

**Kinetix TLY (non-brake) Motor Performance Specifications with Kinetix 6000 (200V-class) Drives**

Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
TLY-A110T	5000	6000	0.55	0.086 (0.85)	1.50	0.20 (1.75)	0.041	2094-AMP5-S
TLY-A120T	5000		1.03	0.181 (1.60)	2.50	0.36 (3.20)	0.086	2094-AMP5-S
TLY-A130T	5000		1.85	0.325 (2.88)	4.90	0.76 (6.70)	0.14	2094-AMP5-S
TLY-A220T	5000		3.50	0.836 (7.40)	7.90	1.48 (13.1)	0.35	2094-AMP5-S
TLY-A230T	5000		5.20	1.23 (10.9)	10.5	2.07 (18.3)	0.44	2094-AMP5-S
		5.50	1.30 (11.5)	15.5	3.05 (27.0)	2094-AM01-S		
TLY-A2530P	4400	5000	8.50	2.20 (19.5)	17.0	4.18 (37.0)	0.69	2094-AM01-S
			10.0	2.60 (23.0)	21.0	5.20 (46.0)		2094-AM02-S
TLY-A2540P	4575	5000	8.50	2.48 (22.0)	17.0	4.97 (44.0)	0.86	2094-AM01-S
			10.0	2.94 (26.0)	24.8	7.10 (63.0)		2094-AM02-S
TLY-A310M	4000	4500	10.0	3.61 (31.9)	30.0	9.0 (79.6)	0.95	2094-AM02-S

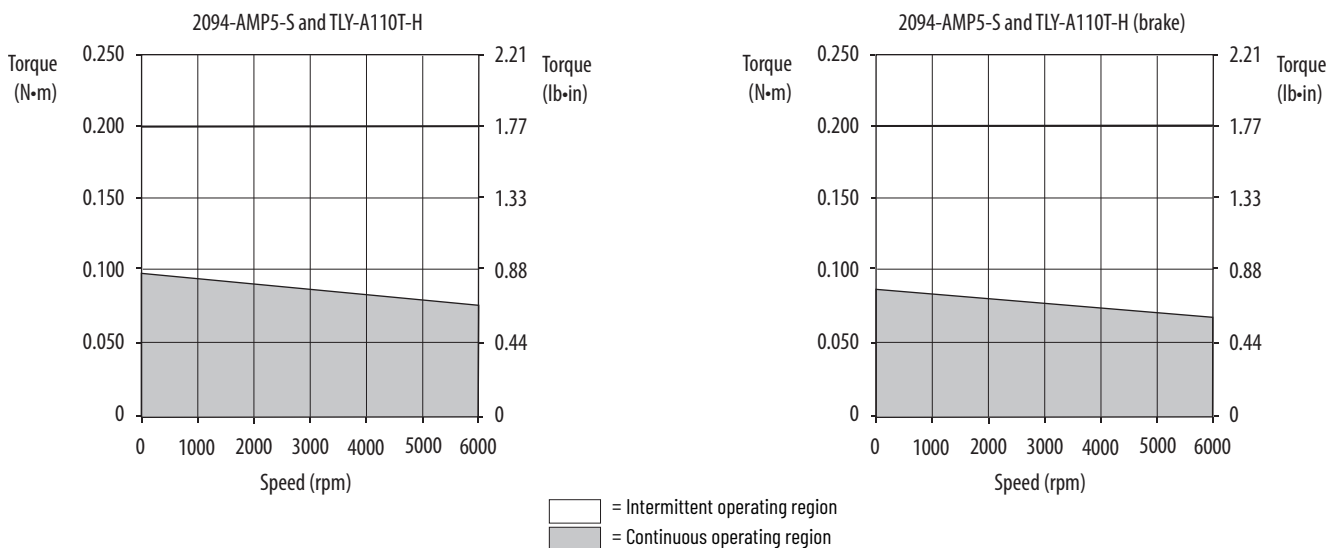
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Kinetix TLY (brake) Motor Performance Specifications with Kinetix 6000 (200V-class) Drives**

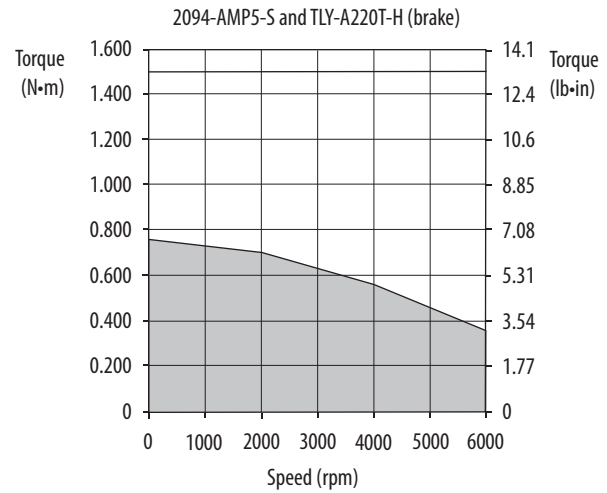
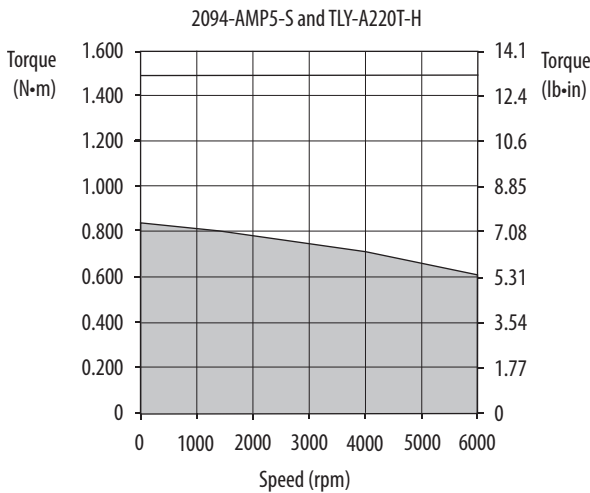
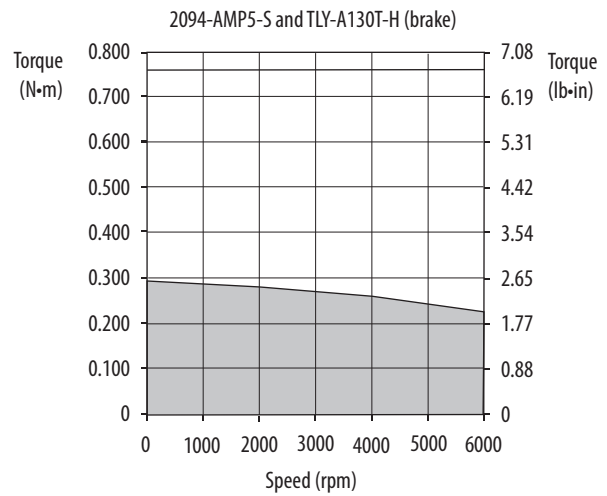
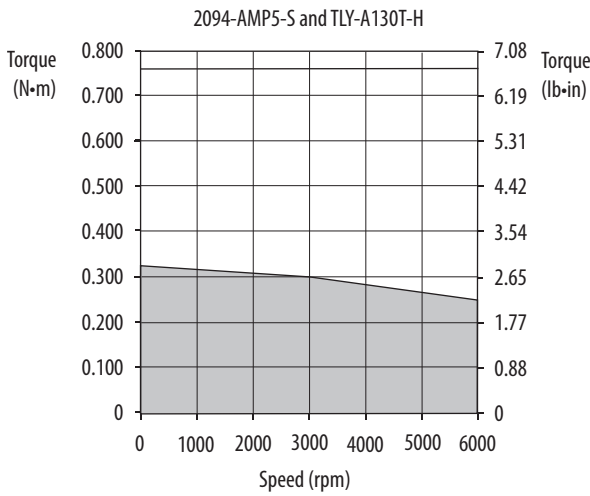
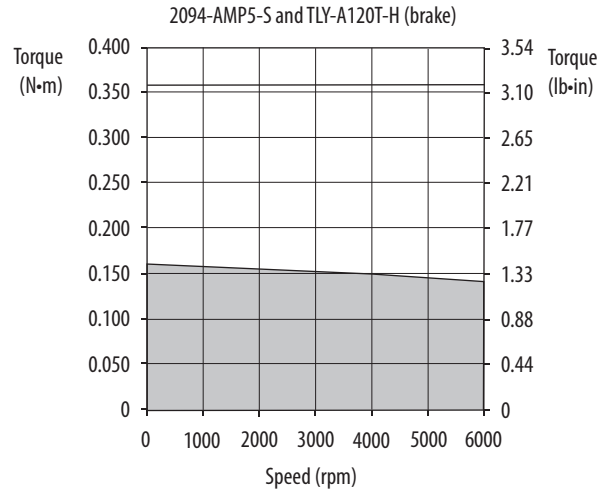
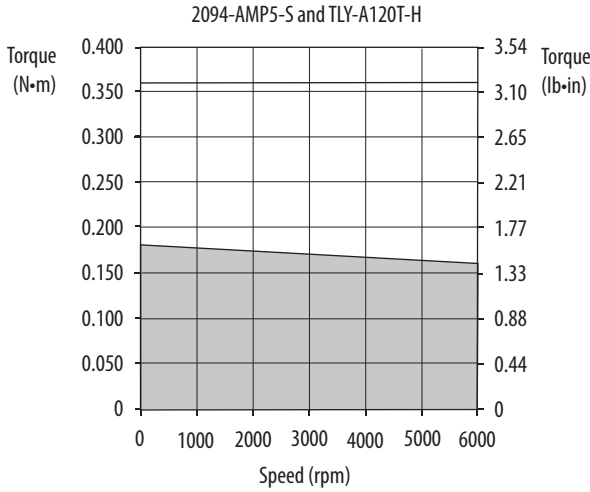
Rotary Motor Cat. No.	Rated Speed rpm	Speed, Max rpm	System Continuous Stall Current A 0-pk	System Continuous Stall Torque N·m (lb·in)	System Peak Stall Current A 0-pk	System Peak Stall Torque N·m (lb·in)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
TLY-A110T	5000	6000	0.50	0.086 (0.76)	1.50	0.20 (1.75)	0.037	2094-AMP5-S
TLY-A120T	5000		0.93	0.183 (1.44)	2.50	0.36 (3.20)	0.077	2094-AMP5-S
TLY-A130T	5000		1.67	0.293 (2.59)	4.90	0.76 (6.70)	0.13	2094-AMP5-S
TLY-A220T	5000		3.15	0.757 (6.70)	7.90	1.48 (13.1)	0.24	2094-AMP5-S
TLY-A230T	4250		4.95	1.16 (10.3)	10.5	2.07 (18.3)	0.32	2094-AMP5-S
		4.95	1.16 (10.3)	15.5	3.05 (27.0)	2094-AM01-S		
TLY-A2530P	3650	5000	8.50	2.20 (19.5)	17.0	4.18 (37.0)	0.55	2094-AM01-S
			10.0	2.60 (23.0)	21.0	5.20 (46.0)		2094-AM02-S
TLY-A2540P	3750	5000	8.50	2.48 (22.0)	17.0	4.97 (44.0)	0.66	2094-AM01-S
			10.0	2.94 (26.0)	24.8	7.10 (63.0)		2094-AM02-S
TLY-A310M	3900	4500	10.0	3.61 (31.9)	30.0	9.0 (79.6)	0.90	2094-AM02-S

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Kinetix 6000 (200V-class) Drives/TLY-Axxxx-H (Incremental) Motor Curves**

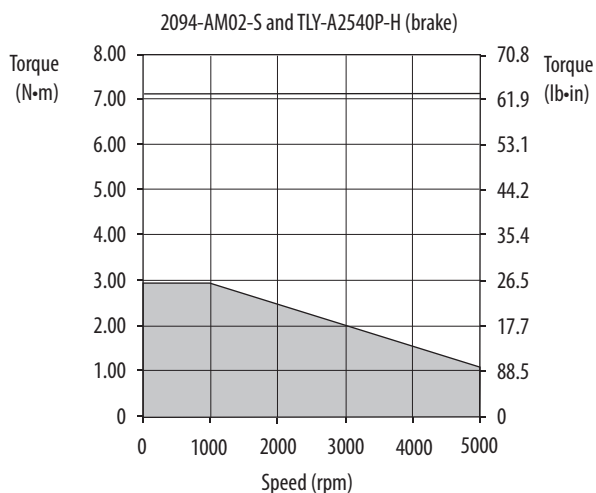
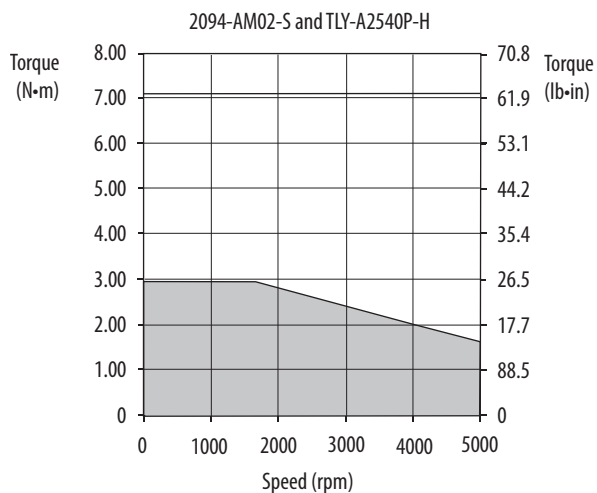
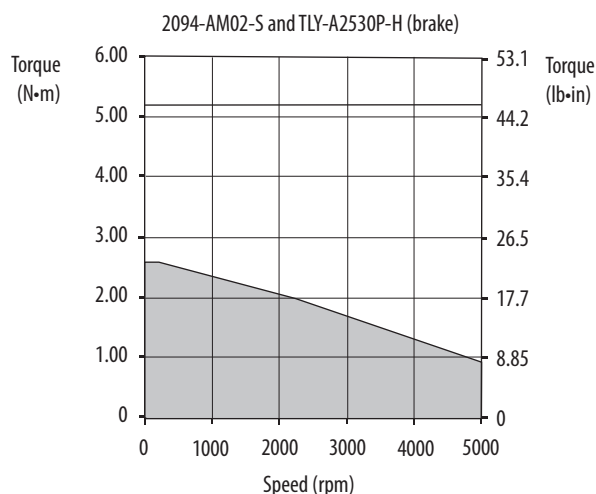
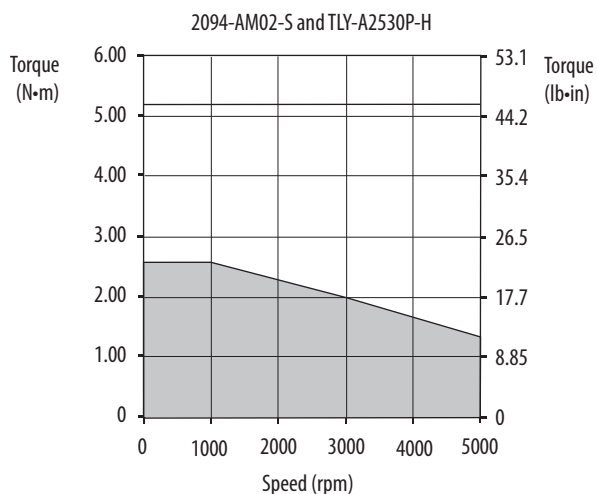
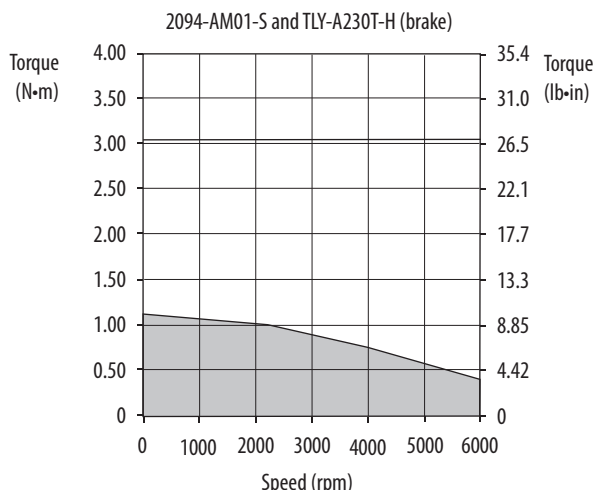
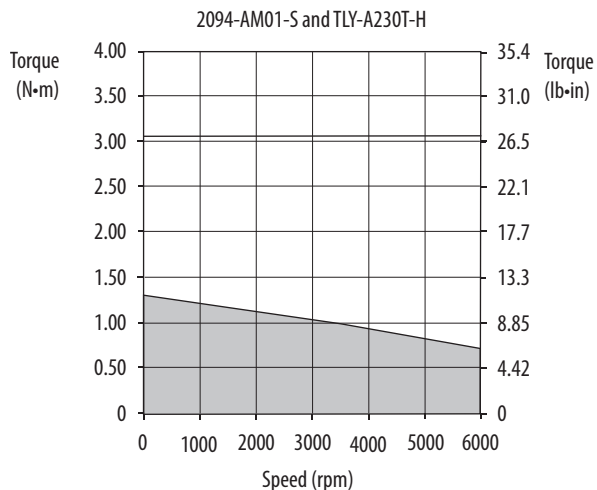


**Kinetix 6000 (200V-class) Drives/TLY-Axxxx-H (Incremental) Motor Curves (continued)**



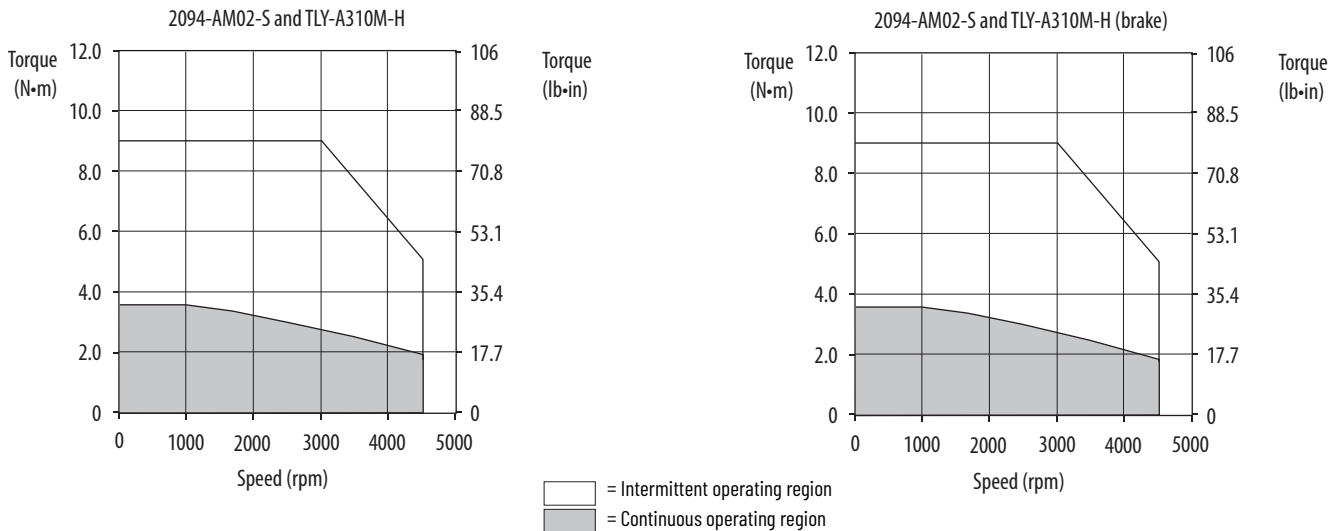
= Intermittent operating region  
 = Continuous operating region

**Kinetix 6000 (200V-class) Drives/TLY-Axxxx-H (incremental) Motor Curves (continued)**



□ = Intermittent operating region  
 ■ = Continuous operating region

## Kinetix 6000 (200V-class) Drives/TLY-Axxxx-H (incremental) Motor Curves (continued)



## Kinetix 6000 Servo Drives with Kinetix LDAT Integrated Linear Thrusters

This section provides system combination information for the Kinetix 6000 drives when matched with Kinetix LDAT integrated linear thrusters. Included are motor power and feedback cable catalog numbers, system performance specifications, and force/velocity curves.

### Kinetix LDAT Cable Combinations

Kinetix LDAT (200V or 400V-class) Linear Thrusters	Motor Power Cable	Motor Feedback Cable <sup>(1)</sup>
LDAT-S031xxx-xBx, LDAT-S032xxx-xBx, LDAT-S033xxx-xBx	2090-CPWM7DF-16AAxx (standard, non-flex) 2090-CPWM7DF-16AFxx (continuous-flex)	2090-XXNFMF-Sxx (standard, non-flex) 2090-CFBM7DF-CDAFxx (continuous-flex) Incremental Feedback
LDAT-S051xxx-xBx, LDAT-S052xxx-xBx, LDAT-S053xxx-xBx, LDAT-S054xxx-xBx		
LDAT-S072xxx-xBx, LDAT-S073xxx-xBx, LDAT-S074xxx-xBx, LDAT-S076xxx-EBx		
LDAT-S102xxx-xBx, LDAT-S103xxx-xBx, LDAT-S104xxx-xBx, LDAT-S106xxx-EBx		
LDAT-S152xxx-xBx, LDAT-S153xxx-xBx, LDAT-S154xxx-xBx, LDAT-S156xxx-EBx		
LDAT-S076xxx-DBx	2090-CPWM7DF-14AAxx (standard, non-flex) 2090-CPWM7DF-14AFxx (continuous-flex)	
LDAT-S106xxx-DBx		
LDAT-S156xxx-DBx		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

## Kinetix LDAT Performance Specifications with Kinetix 6000 (200V-class) Drives

### Performance Specifications with Frame 30 Linear Thrusters

Linear Thruster Cat. No.	Velocity, Max 230V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 230V AC kW	Kinetix 6000 200V-class Drives
LDAT-S031010-DBx	2.4	4.8	81 (18)	12.2	168 (38)	0.20	2094-AM01-S
LDAT-S031020-DBx	3.1					0.25	
LDAT-S031030-DBx	3.5					0.29	
LDAT-S031040-DBx	3.8					0.31	

Performance Specifications with Frame 30 Linear Thrusters (Continued)

Linear Thruster Cat. No.	Velocity, Max 230V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 230V AC kW	Kinetix 6000 200V-class Drives
LDAT-S032010-DBx	3.1	7.4	126 (28)	24.3	336 (76)	0.44	2094-AM02-S
LDAT-S032020-DBx	4.1					0.52	
LDAT-S032030-DBx	4.7					0.59	
LDAT-S032040-DBx	5.0					0.63	
LDAT-S032010-EBx	3.1	3.7	126 (28)	12.2	336 (76)	0.40	2094-AM01-S
LDAT-S032020-EBx	4.1					0.47	
LDAT-S032030-EBx	4.7					0.52	
LDAT-S032040-EBx	5.0					0.55	
LDAT-S033010-DBx	3.5	11.1	190 (43)	36.5	504 (113)	0.67	2094-AM03-S
LDAT-S033020-DBx	4.7					0.88	
LDAT-S033030-DBx	5.0					0.95	
LDAT-S033040-DBx						0.95	
LDAT-S033010-EBx	3.5	3.7	190 (43)	12.2	504 (113)	0.55	2094-AM01-S
LDAT-S033020-EBx	4.4					0.65	
LDAT-S033030-EBx						0.65	
LDAT-S033040-EBx						0.65	

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

Performance Specifications with Frame 50 Linear Thrusters

Linear Thruster Cat. No.	Velocity, Max 230V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 230V AC kW	Kinetix 6000 200V-class Drives
LDAT-S051010-DBx	2.8	3.1	119 (27)	11.4	363 (82)	0.31	2094-AMP5-S
LDAT-S051020-DBx	3.7					0.38	
LDAT-S051030-DBx	4.1					0.42	
LDAT-S051040-DBx	4.4					0.44	
LDAT-S051050-DBx	4.7					0.46	
LDAT-S052010-DBx	3.7	6.2	251 (56)	22.7	727 (163)	0.79	2094-AM01-S
LDAT-S052020-DBx	4.8					0.97	
LDAT-S052030-DBx	5.00					1.01	
LDAT-S052040-DBx						1.01	
LDAT-S052050-DBx						1.01	
LDAT-S052010-EBx ... LDAT-S052050-EBx	2.6	3.1	119 (27)	11.4	363 (82)	0.50	2094-AMP5-S
LDAT-S053010-DBx	4.1	9.4	378 (85)	34.2	1093 (246)	1.31	2094-AM02-S
LDAT-S053020-DBx	5.0					1.53	
LDAT-S053030-DBx ... LDAT-S053050-DBx	5.0					1.53	
LDAT-S053010-EBx ... LDAT-S053050-EBx	1.7					3.1	
LDAT-S054010-DBx	4.4	12.4	509 (114)	45.5	1453 (327)	1.87	2094-AM02-S
LDAT-S054020-DBx ... LDAT-S054050-DBx	5.0					2.05	
LDAT-S054010-EBx ... LDAT-S054050-EBx	2.6					6.2	

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Performance Specifications with Frame 70 Linear Thrusters**

Linear Thruster Cat. No.	Velocity, Max 230V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 230V AC kW	Kinetix 6000 200V-class Drives
LDAT-S072010-DBx ... LDAT-S072070-DBx	3.5	6.0	364 (82)	22.0	1055 (237)	1.03	2094-AM01-S
LDAT-S072010-EBx ... LDAT-S072070-EBx	1.7	3.0		11.0		0.47	2094-AMP5-S
LDAT-S073010-DBx ... LDAT-S073070-DBx	3.5	9.0	554 (125)	32.8	1576 (354)	1.57	2094-AM02-S
LDAT-S073010-EBx ... LDAT-S073070-EBx	1.2	3.0		10.9		0.41	2094-AMP5-S
LDAT-S074010-DBx ... LDAT-S074070-DBx	3.5	11.9	730 (164)	43.5	2088 (469)	2.08	2094-AM02-S
LDAT-S074010-EBx ... LDAT-S074070-EBx	1.8	6.0		21.7		0.95	2094-AM01-S
LDAT-S076010-DBx ... LDAT-S076070-DBx	3.5	18.2	1122 (252)	66.4	3189 (717)	3.17	2094-AM03-S
LDAT-S076010-EBx ... LDAT-S076070-EBx	1.8	9.1		33.2		1.45	2094-AM02-S

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Performance Specifications with Frame 100 Linear Thrusters**

Linear Thruster Cat. No.	Velocity, Max 230V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 230V AC kW	Kinetix 6000 200V-class Drives
LDAT-S102010-DBx ... LDAT-S102090-DBx	2.6	5.7	456 (103)	21.0	1289 (290)	0.96	2094-AM01-S
LDAT-S102010-EBx ... LDAT-S102090-EBx	1.3	2.9		10.5		0.42	2094-AMP5-S
LDAT-S103010-DBx ... LDAT-S103090-DBx	2.7	8.6	702 (158)	31.5	1935 (435)	1.47	2094-AM02-S
LDAT-S103010-EBx ... LDAT-S103090-EBx	0.9	2.9		10.5		0.30	2094-AMP5-S
LDAT-S104010-DBx ... LDAT-S104090-DBx	2.7	11.5	929 (209)	42.0	2578 (580)	2.07	2094-AM02-S
LDAT-S104010-EBx ... LDAT-S104090-EBx	1.3	5.7		21.0		0.86	2094-AM01-S
LDAT-S106010-DBx ... LDAT-S106090-DBx	2.7	17.3	1403 (315)	63.0	3871 (870)	2.94	2094-AM03-S
LDAT-S106010-EBx ... LDAT-S106090-EBx	1.3	8.6		31.5		1.28	2094-AM02-S

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Performance Specifications with Frame 150 Linear Thrusters**

Linear Thruster Cat. No.	Velocity, Max 230V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 230V AC kW	Kinetix 6000 200V-class Drives
LDAT-S152010-DBx ... LDAT-S152090-DBx	1.8	5.3	643 (145)	19.5	1799 (404)	0.87	2094-AM01-S
LDAT-S152010-EBx ... LDAT-S152090-EBx	0.9	2.7		9.8		0.34	2094-AMP5-S
LDAT-S153010-DBx ... LDAT-S153090-DBx	1.8	8.0	978 (220)	29.1	2680 (602)	1.33	2094-AM02-S

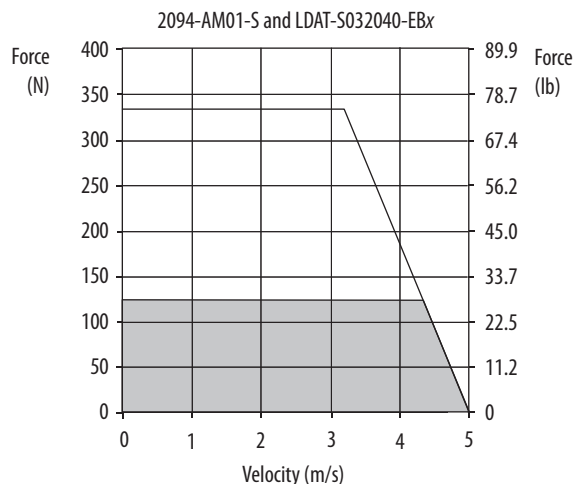
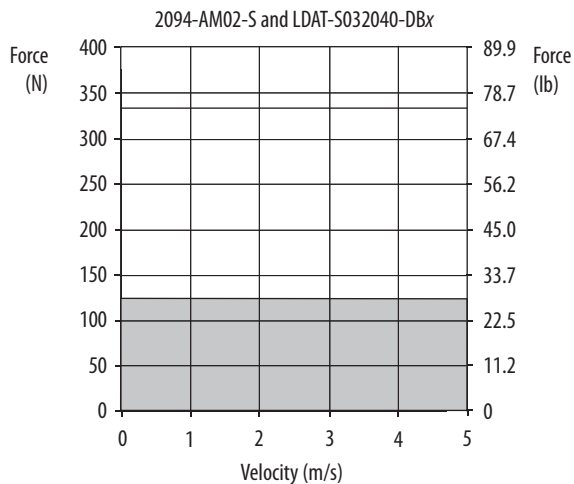
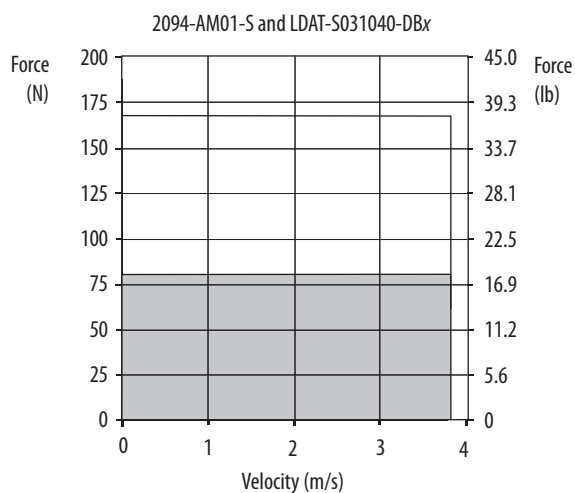


Performance Specifications with Frame 150 Linear Thrusters (Continued)

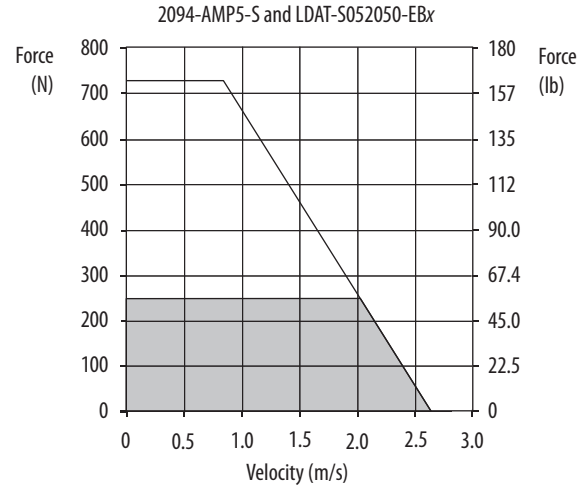
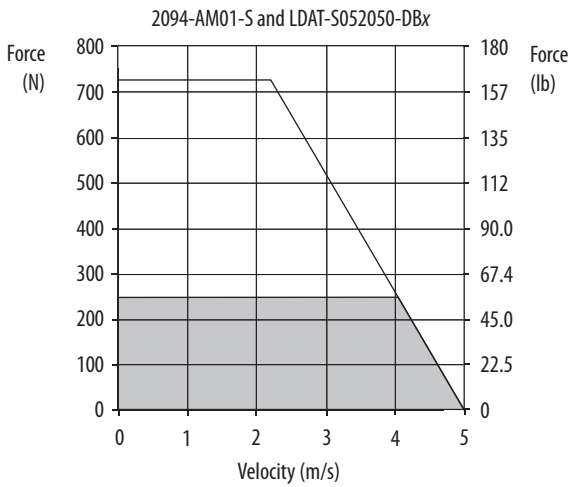
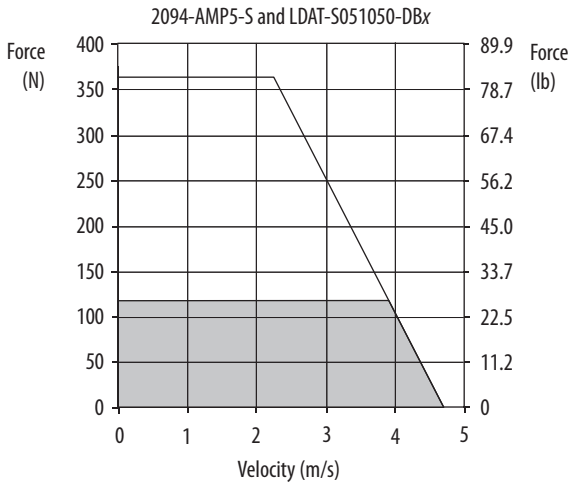
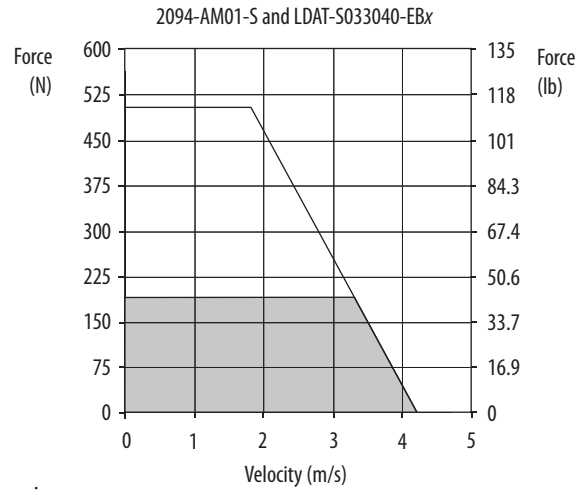
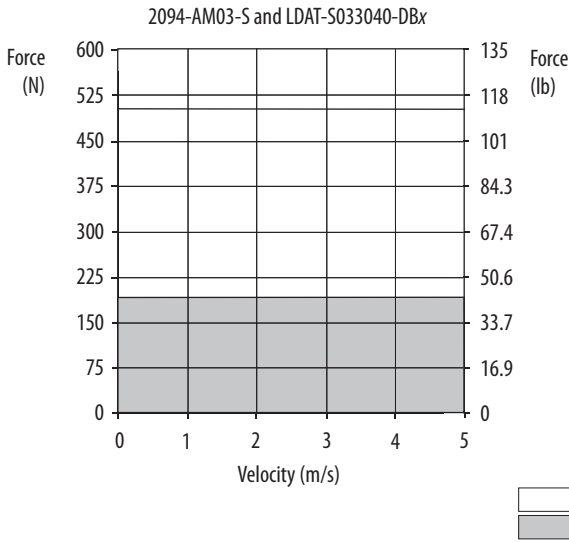
Linear Thruster Cat. No.	Velocity, Max 230V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 230V AC kW	Kinetix 6000 200V-class Drives
LDAT-S154010-DBx ... LDAT-S154090-DBx	1.8	10.7	1306 (294)	39.1	3597 (809)	1.78	2094-AM02-S
LDAT-S154010-EBx ... LDAT-S154090-EBx	0.9	5.3		19.5	3383 (761)	0.70	2094-AM01-S
LDAT-S156010-DBx ... LDAT-S156090-DBx	1.8	16.3	1997 (449)	59.4	5469 (1229)	2.71	2094-AM03-S
LDAT-S156010-EBx ... LDAT-S156090-EBx	0.9	8.1		19.8	5110 (1149)	1.05	2094-AM02-S

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

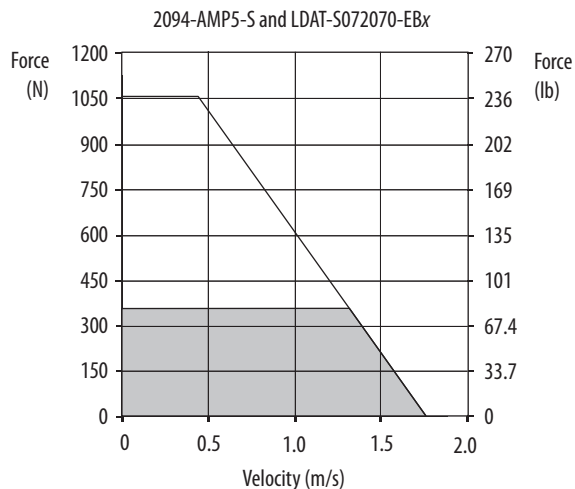
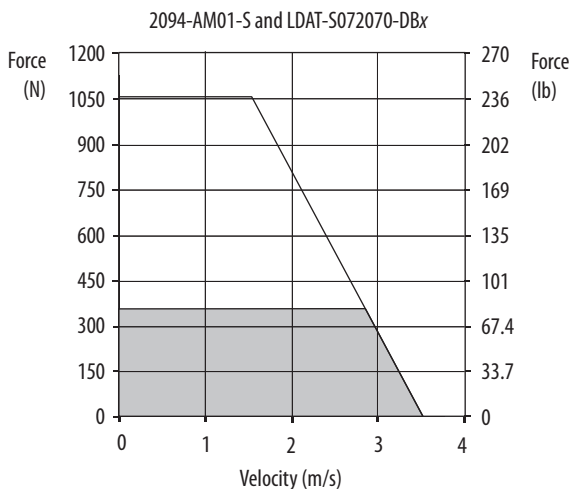
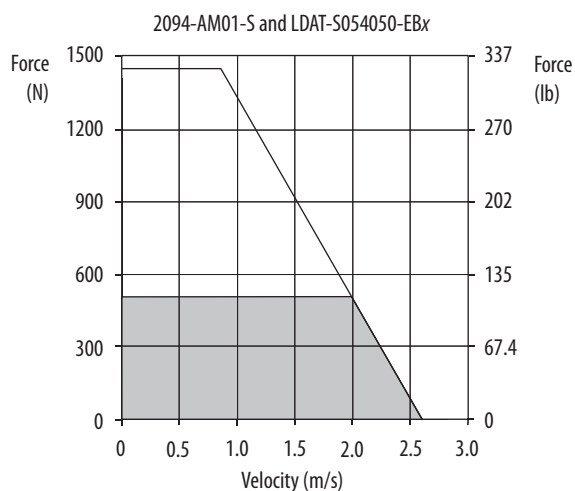
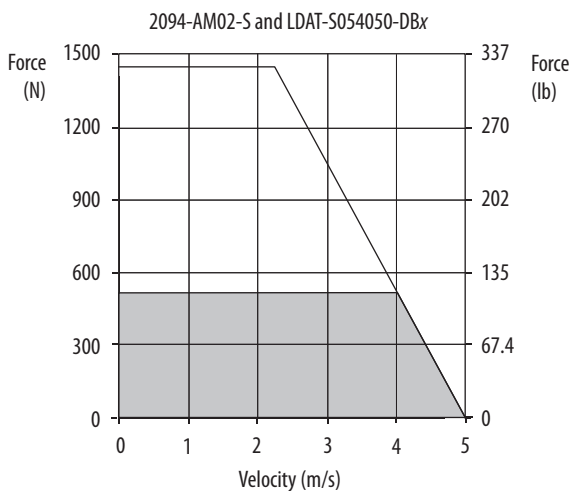
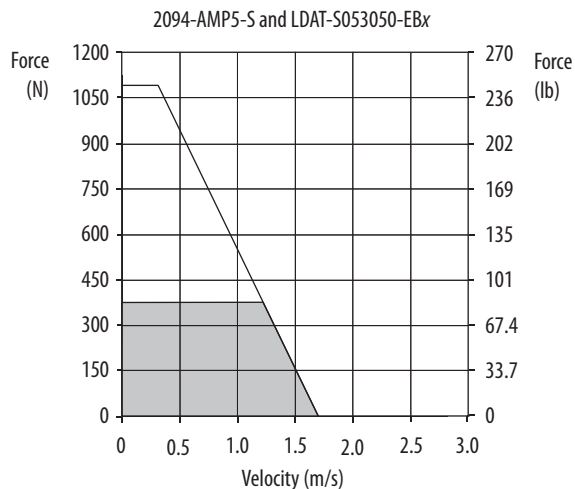
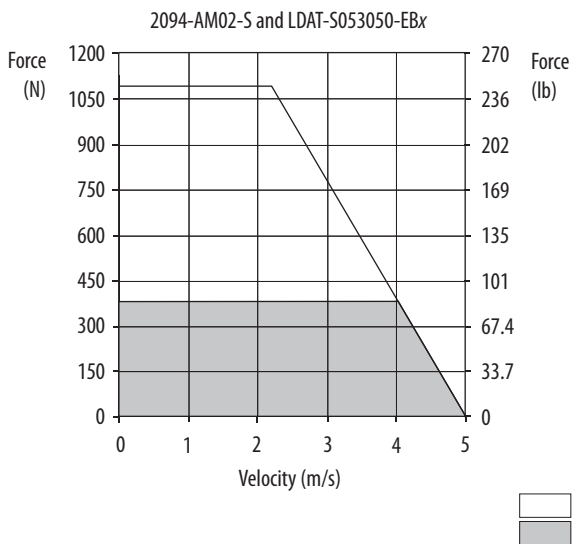
Kinetix 6000 (200V-class) Drives/Kinetix LDAT Integrated Linear Thruster Curves



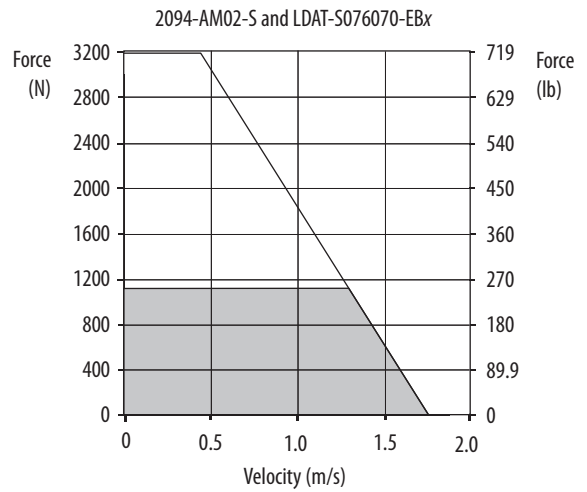
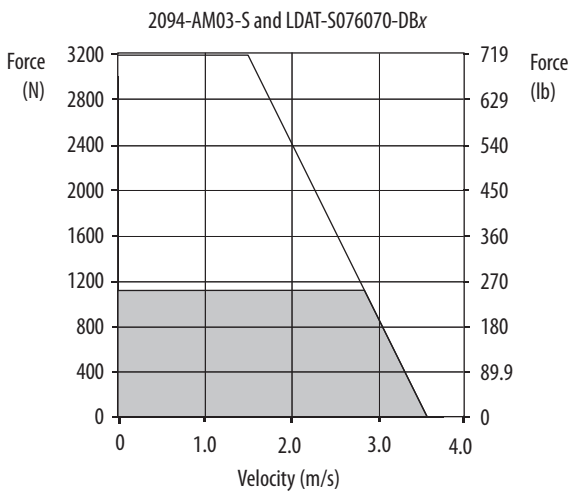
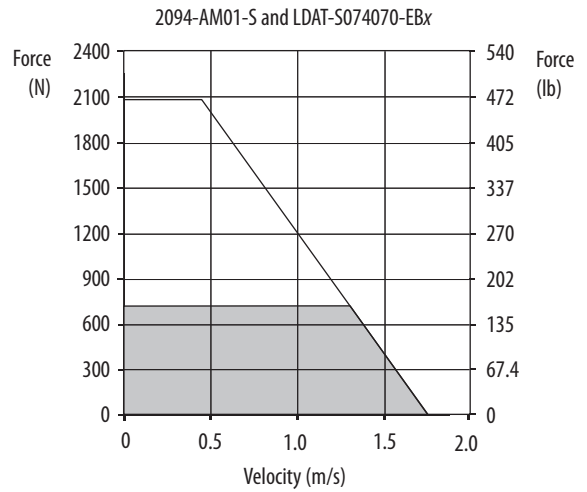
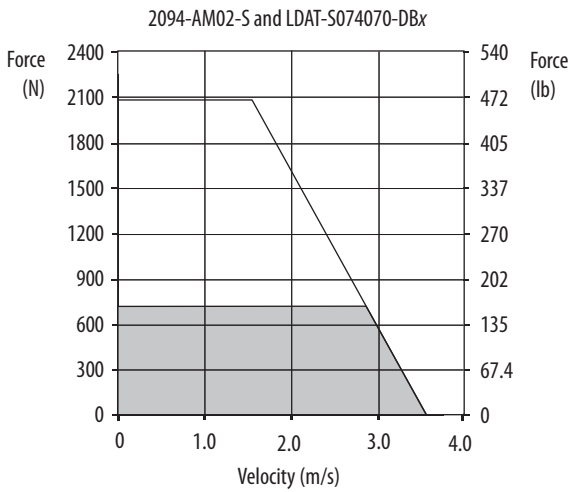
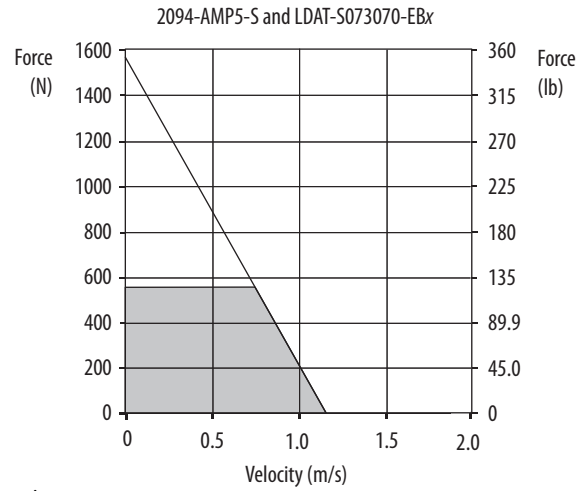
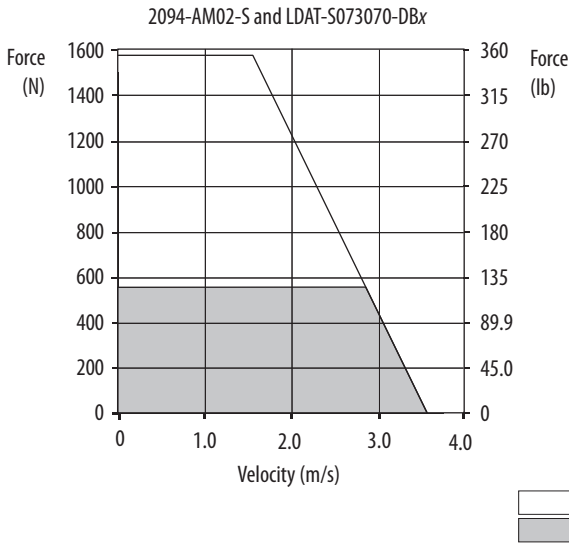
### Kinetix 6000 (200V-class) Drives/Kinetix LDAT Integrated Linear Thruster Curves (continued)



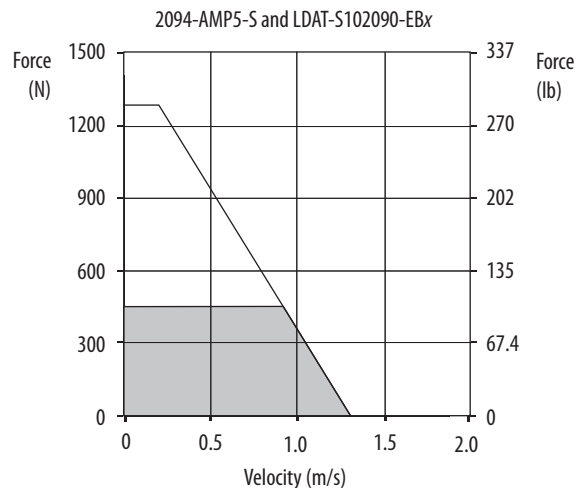
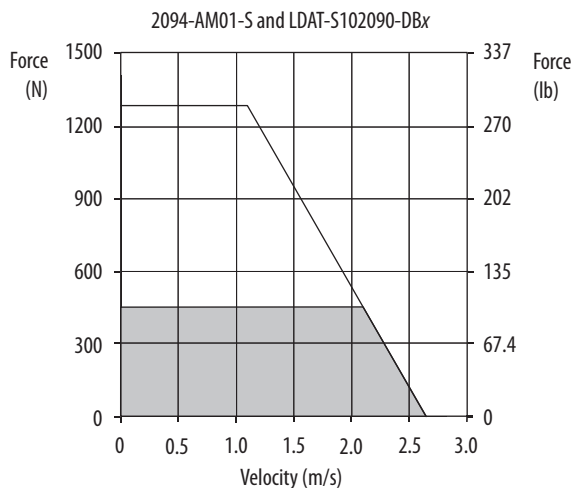
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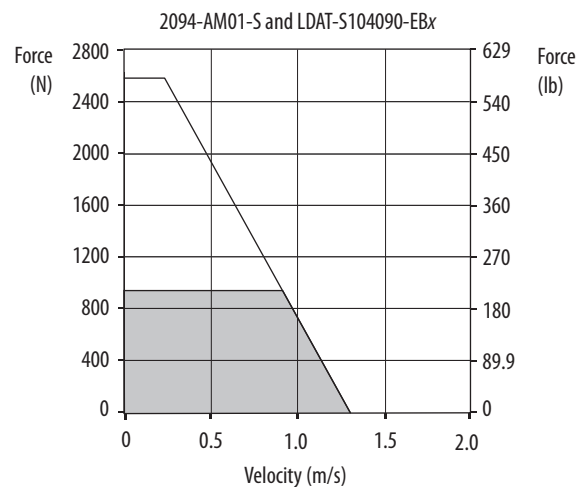
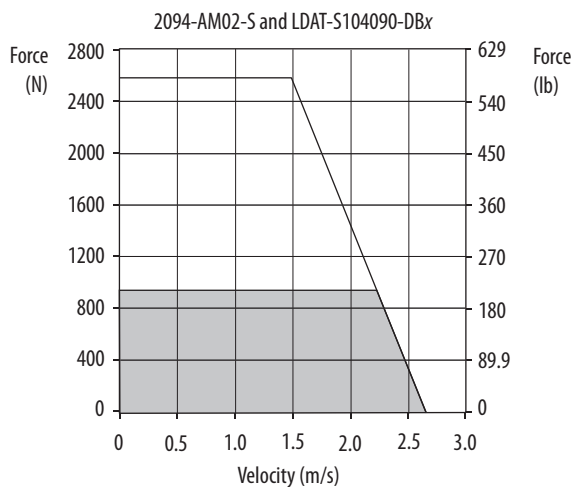
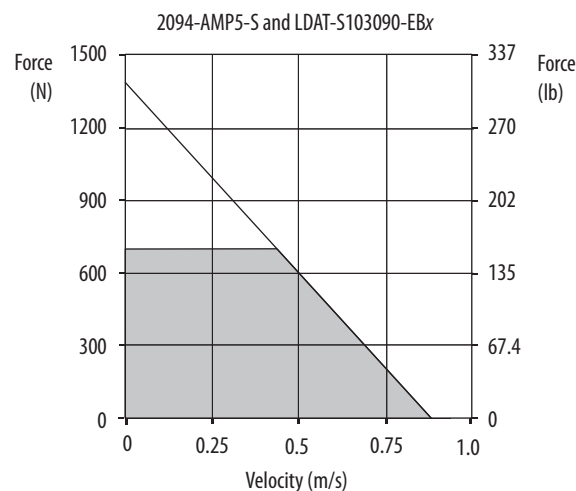
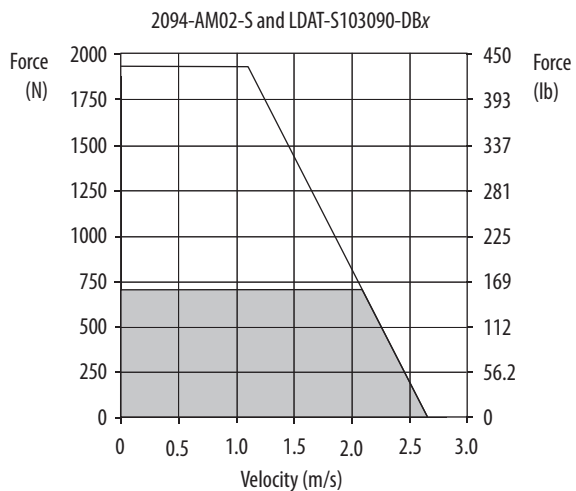
### Kinetix 6000 (200V-class) Drives/Kinetix LDAT Integrated Linear Thruster Curves (continued)



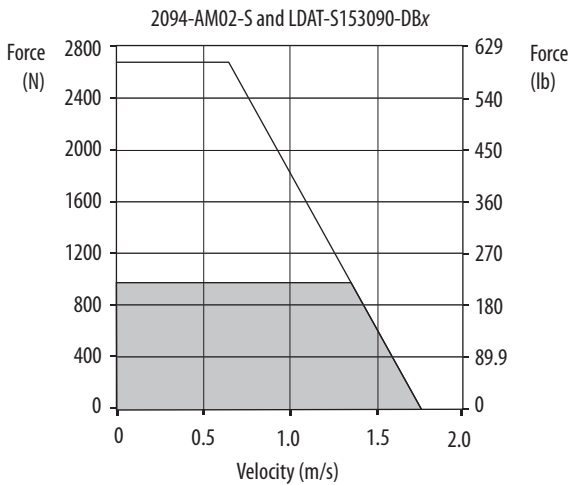
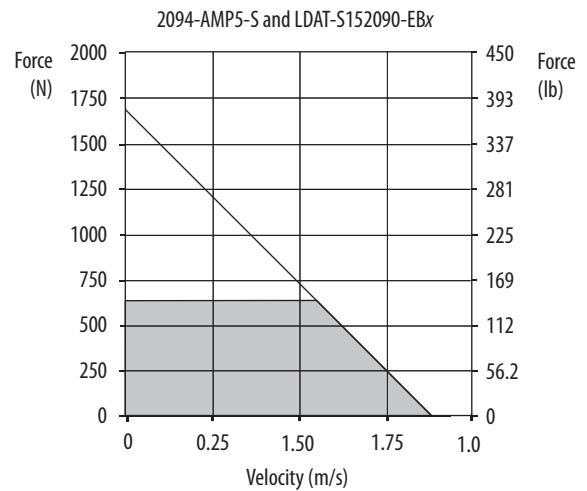
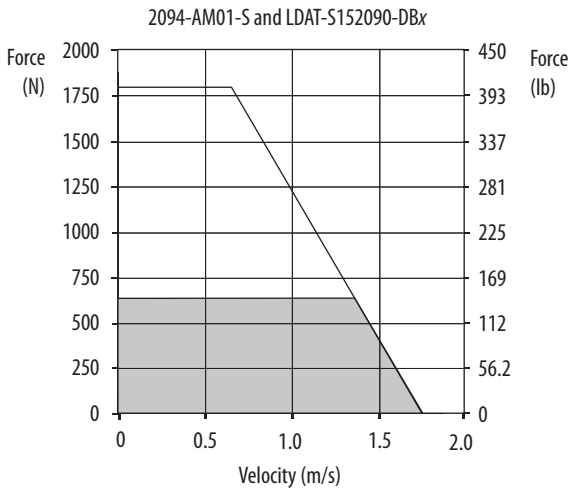
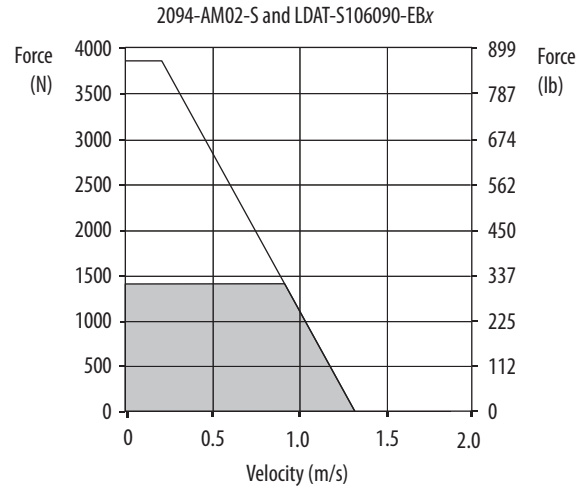
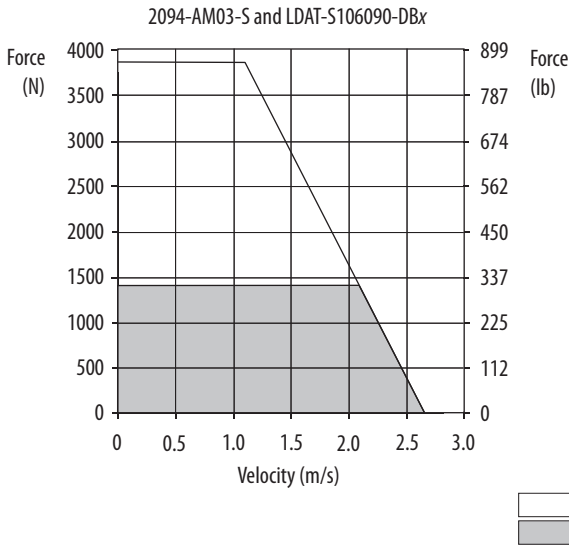
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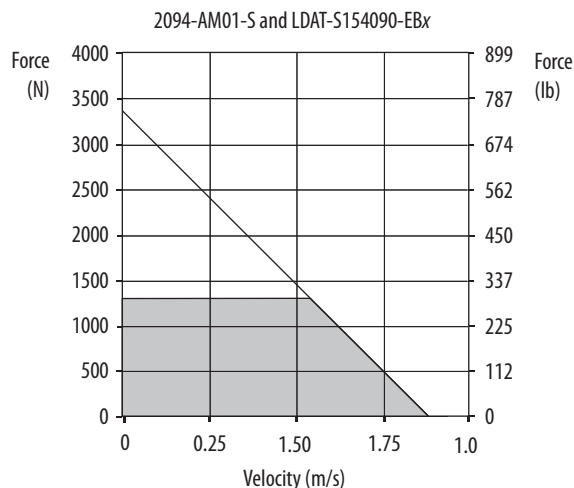
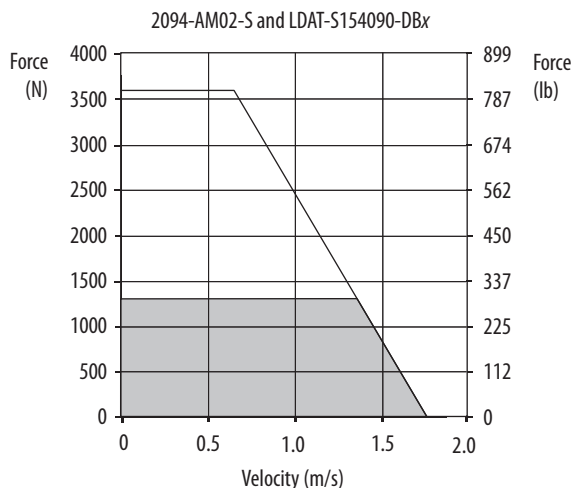
□ = Intermittent operating region  
 ■ = Continuous operating region



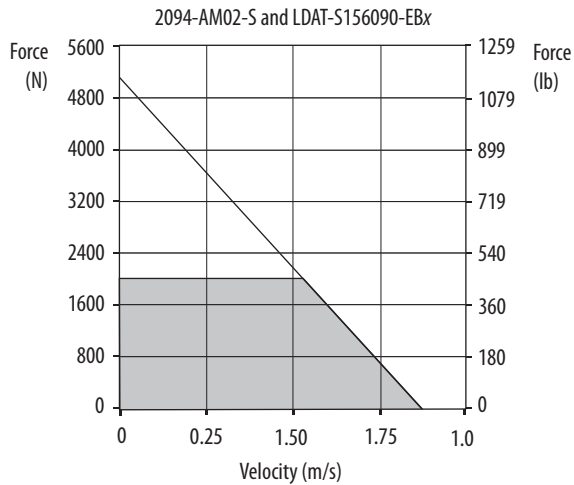
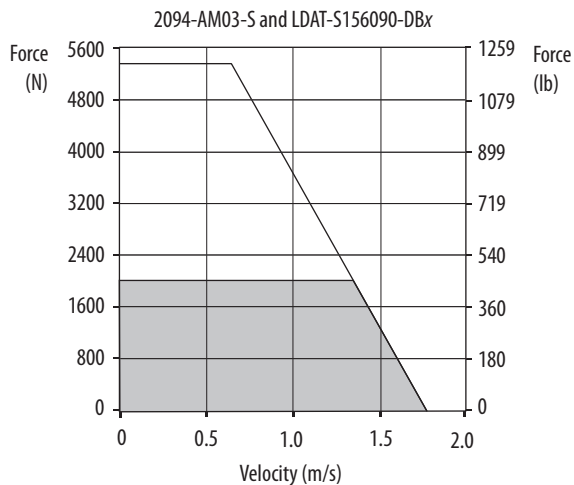
### Kinetix 6000 (200V-class) Drives/Kinetix LDAT Integrated Linear Thruster Curves (continued)



### Kinetix 6000 (200V-class) Drives/Kinetix LDAT Integrated Linear Thruster Curves (continued)



□ = Intermittent operating region  
 ■ = Continuous operating region



### Kinetix LDAT Performance Specifications with Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives

#### Performance Specifications with Frame 30 Linear Thrusters

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S031010-DBx	2.4	4.8	81 (18)	12.2	168 (38)	0.20	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S031020-DBx	3.1					0.25		
LDAT-S031030-DBx	3.5					0.29		
LDAT-S031040-DBx	3.8					0.31		

Performance Specifications with Frame 30 Linear Thrusters (Continued)

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S032010-DBx	3.1	7.4	126 (28)	24.3	336 (76)	0.40	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S032020-DBx	4.1					0.52		
LDAT-S032030-DBx	4.7					0.59		
LDAT-S032040-DBx	5.0					0.63		
LDAT-S032010-EBx	3.1	3.7	126 (28)	12.2	336 (76)	0.40	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S032020-EBx	4.1					0.52		
LDAT-S032030-EBx	4.7					0.59		
LDAT-S032040-EBx	5.0					0.63		
LDAT-S033010-DBx	3.5	11.1	190 (43)	36.5	504 (113)	0.67	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S033020-DBx	4.7					0.88		
LDAT-S033030-DBx	5.0					0.95		
LDAT-S033040-DBx						0.95		
LDAT-S033010-EBx	3.5	3.7	190 (43)	12.2	504 (113)	0.67	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S033020-EBx	4.7					0.87		
LDAT-S033030-EBx	5.0					0.91		
LDAT-S033040-EBx						0.91		

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

Performance Specifications with Frame 50 Linear Thrusters

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S051010-DBx	2.8	3.1	119 (27)	11.4	363 (82)	0.34	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S051020-DBx	3.7					0.43		
LDAT-S051030-DBx	4.1					0.49		
LDAT-S051040-DBx	4.4					0.53		
LDAT-S051050-DBx	4.7					0.55		
LDAT-S052010-DBx	3.7	6.2	251 (56)	22.7	727 (163)	0.92	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S052020-DBx	4.8					1.20		
LDAT-S052030-DBx	5.0					1.24		
LDAT-S052040-DBx						1.24		
LDAT-S052050-DBx	5.0	1.24						
LDAT-S052010-EBx	3.7	3.1	251 (56)	11.4	727 (163)	0.80	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S052020-EBx	4.6					0.98		
LDAT-S052030-EBx	4.6					1.02		
LDAT-S052040-EBx						1.02		
LDAT-S052050-EBx						1.02		
LDAT-S053010-DBx	4.1	9.4	378 (85)	34.2	1093 (246)	1.56	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S053020-DBx	5.0					1.87		
LDAT-S053030-DBx						1.87		
LDAT-S053050-DBx						1.87		
LDAT-S053010-EBx	3.5	3.1	378 (85)	11.4	1093 (246)	1.04	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S053050-EBx						1.04		



**Performance Specifications with Frame 50 Linear Thrusters (Continued)**

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S054010-DBx	4.4	12.4	509 (114)	45.5	1453 (327)	2.26	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S054020-DBx ... LDAT-S054050-DBx	5.00					2.53		
LDAT-S054010-EBx	4.4	6.2	509 (114)	22.7	1453 (327)	1.87	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S054020-EBx ... LDAT-S054050-EBx	5.0					2.05		

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Performance Specifications with Frame 70 Linear Thrusters**

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S072010-DBx	3.9	6.0	364 (82)	22.0	1055 (237)	1.37	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S072020-DBx LDAT-S072030-DBx ... LDAT-S072070-DBx	5.0					1.64		
LDAT-S072010-EBx LDAT-S072020-EBx ... LDAT-S072070-EBx	3.5	3.0	364 (82)	11.0	1055 (237)	1.03	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S073010-DBx	4.4	9.0	554 (125)	32.8	1576 (354)	2.27	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S073020-DBx ... LDAT-S073070-DBx	5.0					2.50		
LDAT-S073010-EBx ... LDAT-S073070-EBx	2.4	3.0	554 (125)	10.9	1576 (354)	1.01	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S074010-DBx	4.7	11.9	730 (164)	43.5	2088 (469)	3.15	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S074020-DBx ... LDAT-S074070-DBx	5.0					3.30		
LDAT-S074010-EBx ... LDAT-S074070-EBx	3.5	6.0	730 (164)	21.7	2088 (469)	2.08	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S076010-DBx	5.0	18.2	1122 (252)	66.4	3189 (717)	5.02	2094-BM03-S @ 150%	2094-BM03-M
LDAT-S076020-DBx ... LDAT-S076070-DBx						3.18		
LDAT-S076010-EBx ... LDAT-S076070-EBx	3.5	9.1	1122 (252)	33.2	3189 (717)	3.18	2094-BM02-S @ 150%	2094-BM02-M

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

**Performance Specifications with Frame 100 Linear Thrusters**

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S102010-DBx	3.4	5.7	456 (103)	21.0	1289 (290)	1.44	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S102020-DBx	4.4					1.74		
LDAT-S102030-DBx LDAT-S102040-DBx ... LDAT-S102090-DBx	5.0	5.7	456 (103)	21.0	1289 (290)	1.91	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S102010-EBx ... LDAT-S102090-EBx	2.6	2.9	456 (103)	10.5	1289 (290)	0.96	2094-BMP5-S @ 150%	2094-BMP5-M

Performance Specifications with Frame 100 Linear Thrusters (Continued)

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S103010-DBx	3.8	8.6	702 (158)	31.5	1935 (435)	2.41	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S103020-DBx	5.0					2.93		
LDAT-S103030-DBx ... LDAT-S103090-DBx						0.92		
LDAT-S103010-EBx ... LDAT-S103090-EBx	1.8	2.9		10.5		2094-BMP5-S @ 150%	2094-BMP5-M	
LDAT-S104010-DBx	4.1	11.5	929 (209)	42.0	2578 (580)	3.76	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S104020-DBx	5.0					4.29		
LDAT-S104030-DBx ... LDAT-S104090-DBx						2.07		
LDAT-S104010-EBx ... LDAT-S104090-EBx	2.7	5.7		21.0		2094-BM01-S @ 150%	2094-BM01-M	
LDAT-S106010-DBx	4.5	17.3	1403 (315)	63.0	3871 (870)	5.41	2094-BM03-S @ 150%	2094-BM03-M
LDAT-S106020-DBx	5.0					5.87		
LDAT-S106090-DBx						2.94		
LDAT-S106010-EBx ... LDAT-S106090-EBx	2.7	8.6		31.5		2094-BM02-S @ 150%	2094-BM02-M	

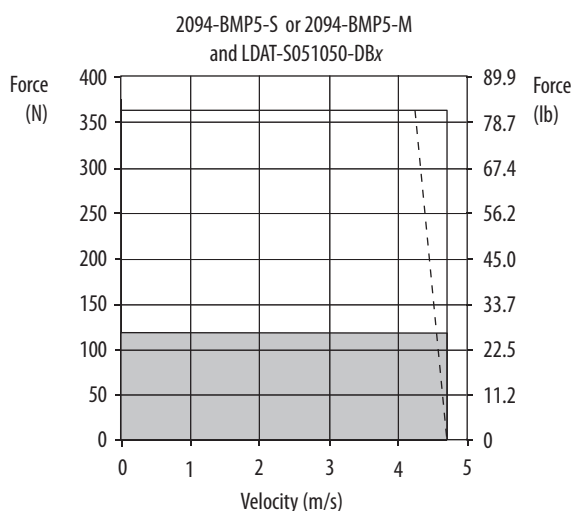
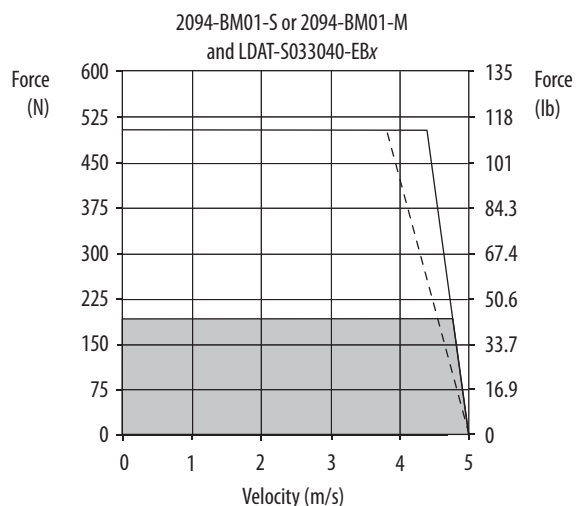
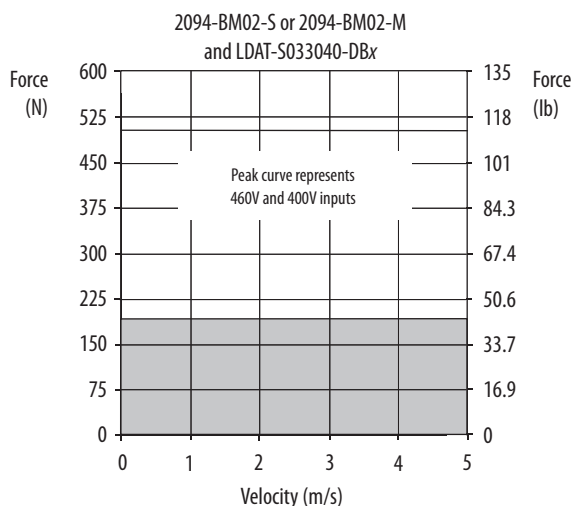
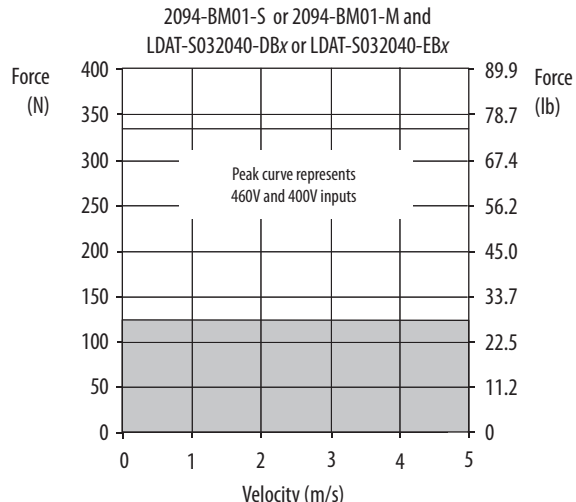
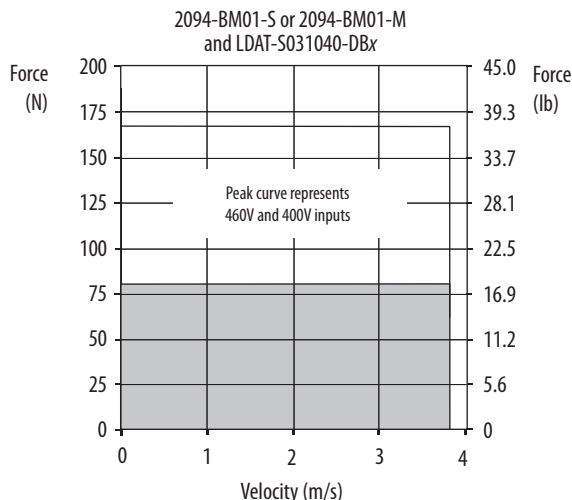
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

Performance Specifications with Frame 150 Linear Thrusters

Linear Thruster Cat. No.	Velocity, Max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 6000 400V-class Drives	Kinetix 6200/6500 400V-class Drives
LDAT-S152010-DBx	3.2	5.3	643 (145)	19.5	1799 (404)	1.76	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S152020-DBx	3.5					1.89		
LDAT-S152090-DBx						0.87		
LDAT-S152010-EBx ... LDAT-S152090-EBx	1.8	2.7		9.8		2094-BMP5-S @ 150%	2094-BMP5-M	
LDAT-S153010-DBx ... LDAT-S153090-DBx	3.6	8.0	978 (220)	29.1	2680 (602)	2.87	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S153010-EBx ... LDAT-S153090-EBx	1.2	2.7				0.80		
LDAT-S154010-DBx ... LDAT-S154090-DBx	3.5	10.7				1306 (294)		
LDAT-S154010-EBx ... LDAT-S154090-EBx	1.8	5.3	1.78					
LDAT-S156010-DBx ... LDAT-S156090-DBx	3.6	16.3	1997 (449)	59.4	5469 (1229)		5.85	2094-BM03-S @ 150%
LDAT-S156010-EBx ... LDAT-S156090-EBx	1.8	8.1				2.71		

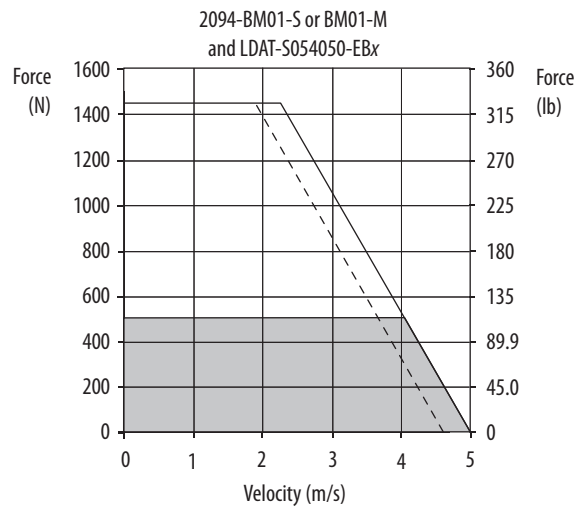
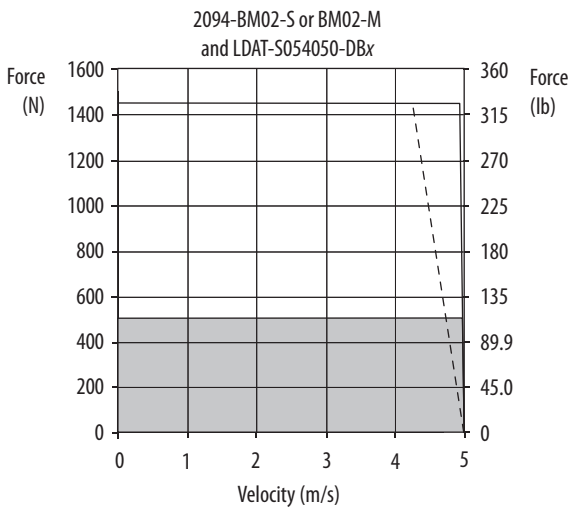
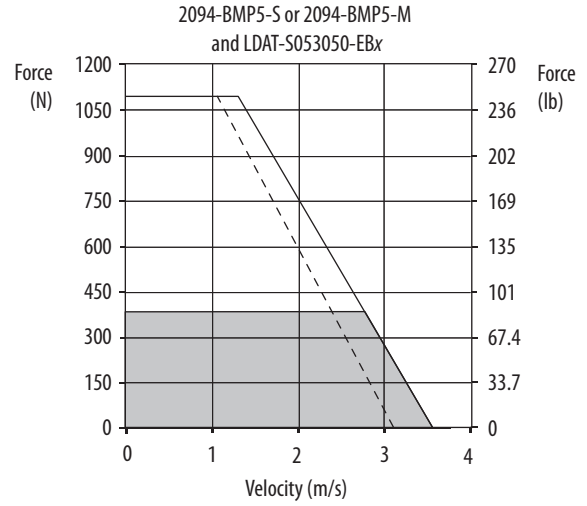
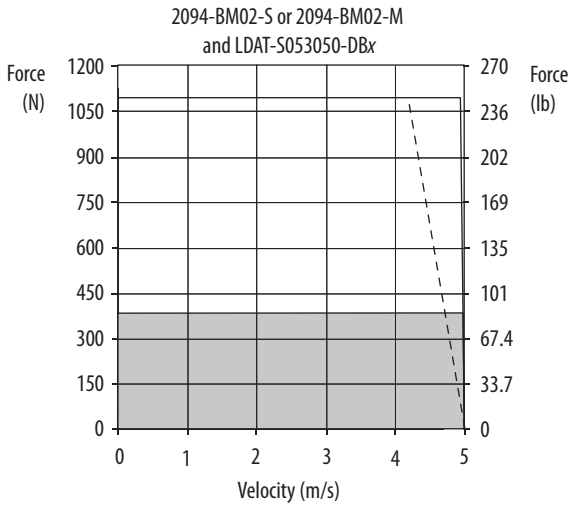
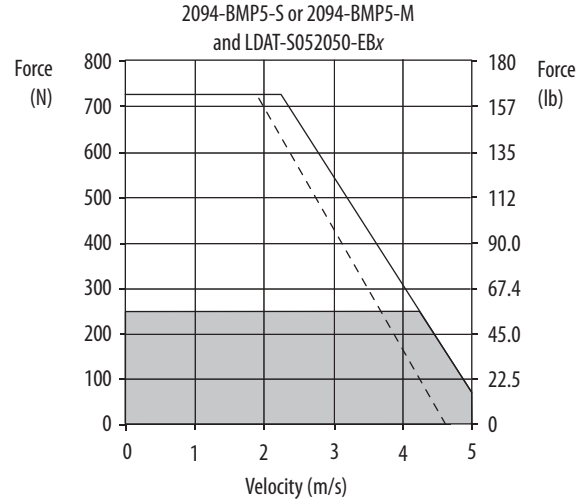
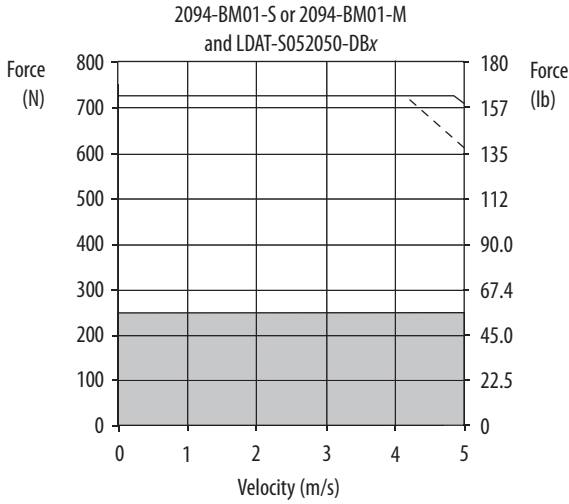
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDAT Integrated Linear Thruster Curves



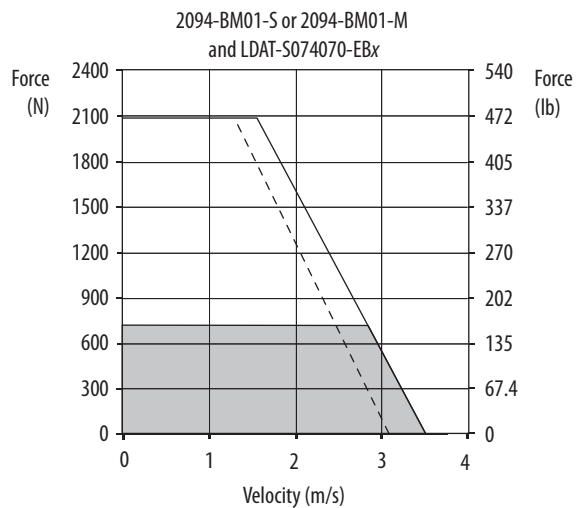
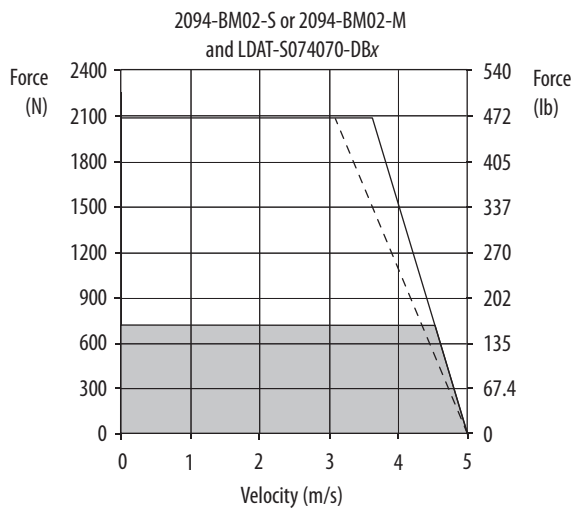
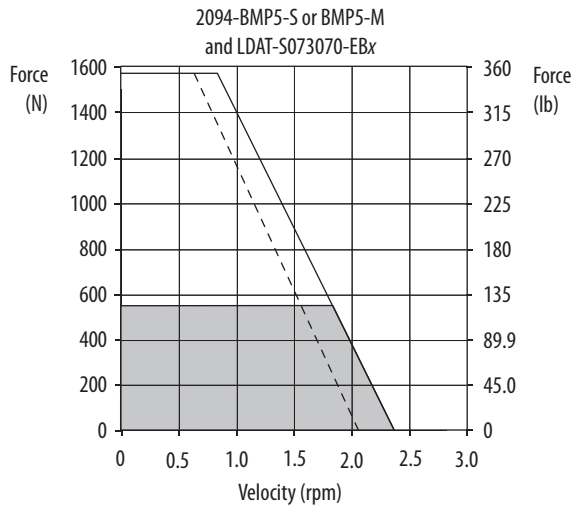
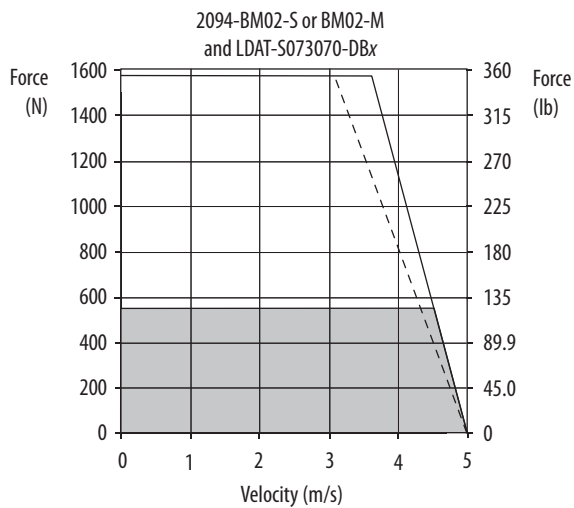
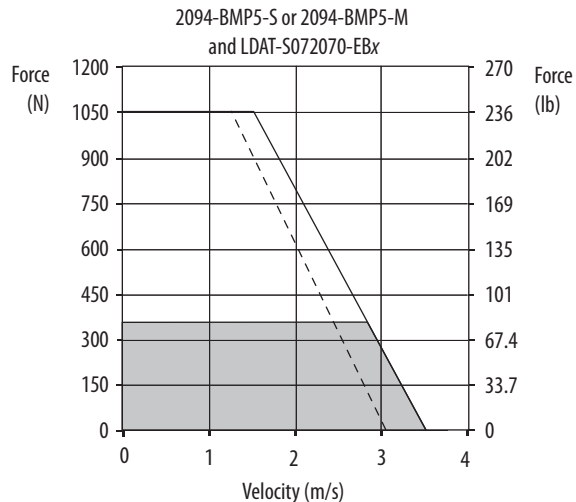
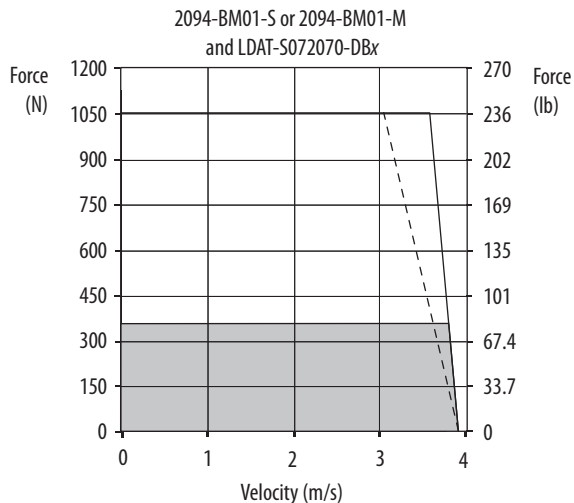
- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC input voltage

**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDAT Linear Thruster Curves (continued)**



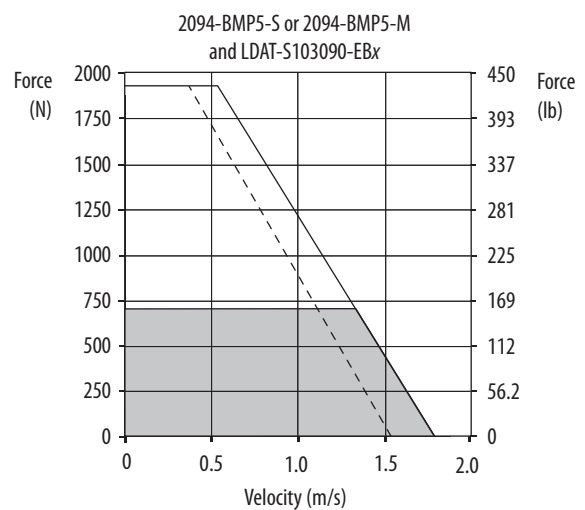
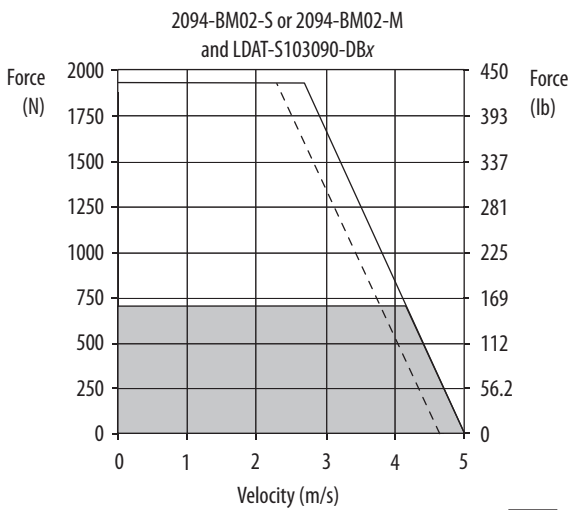
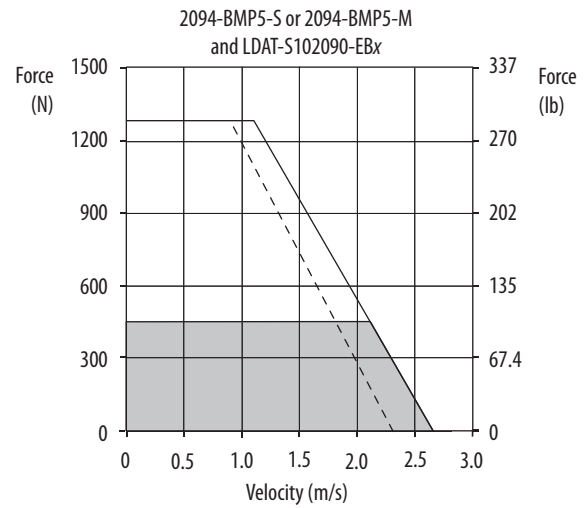
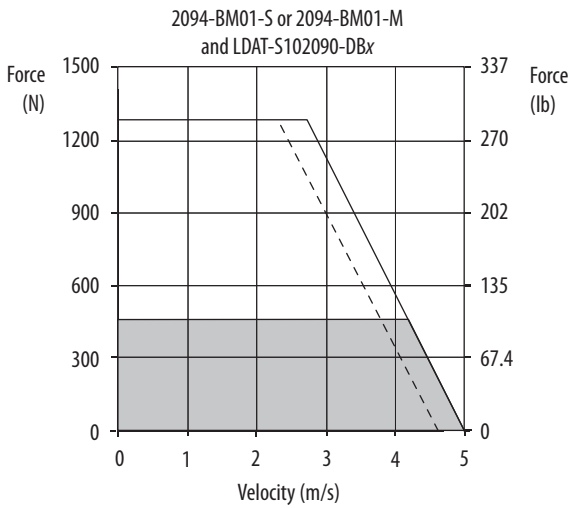
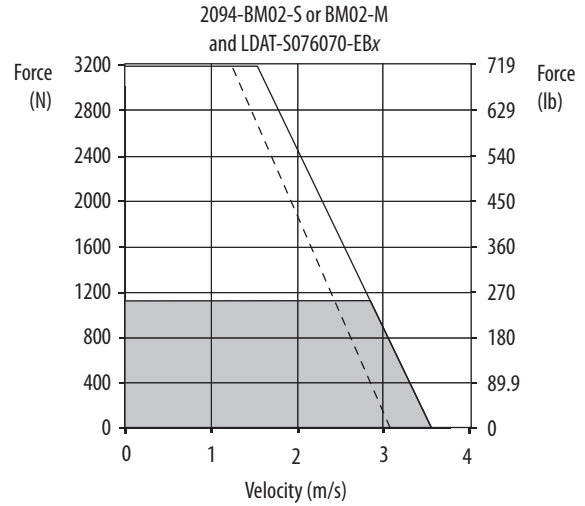
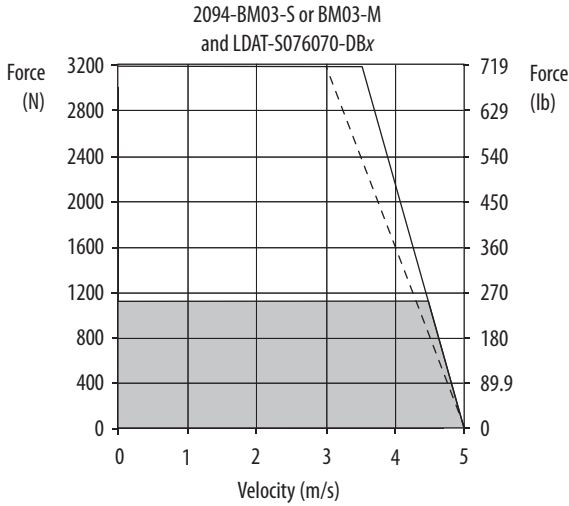
- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC input voltage

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDAT Linear Thruster Curves (continued)



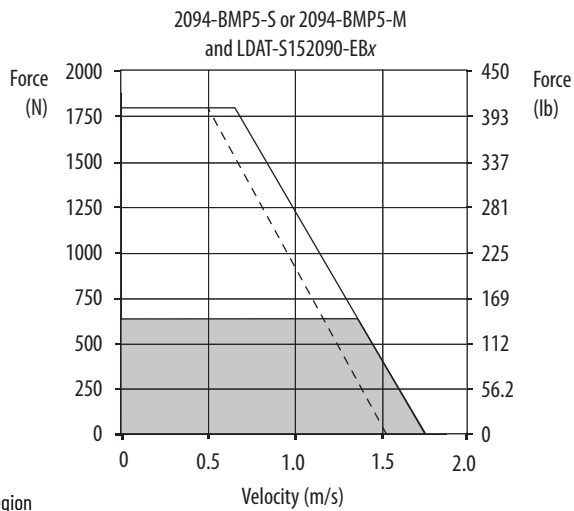
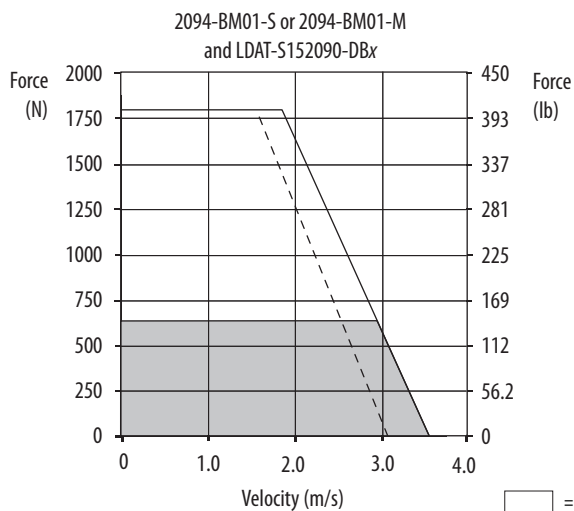
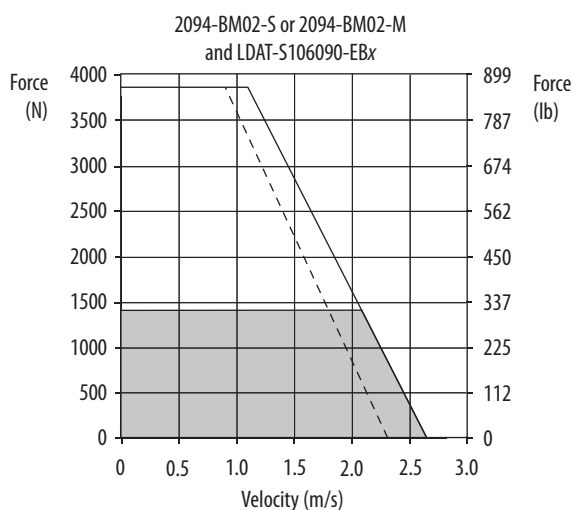
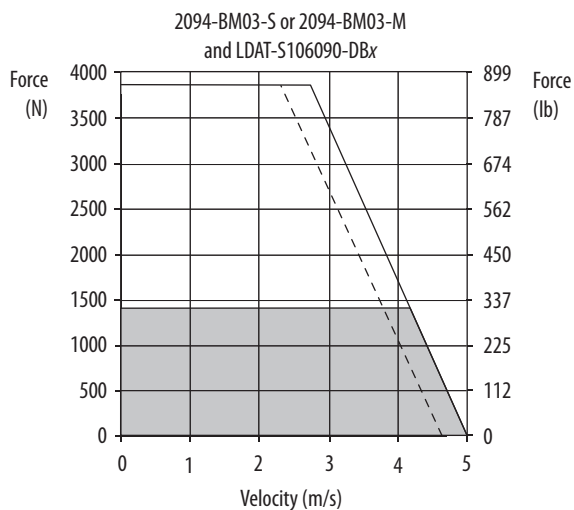
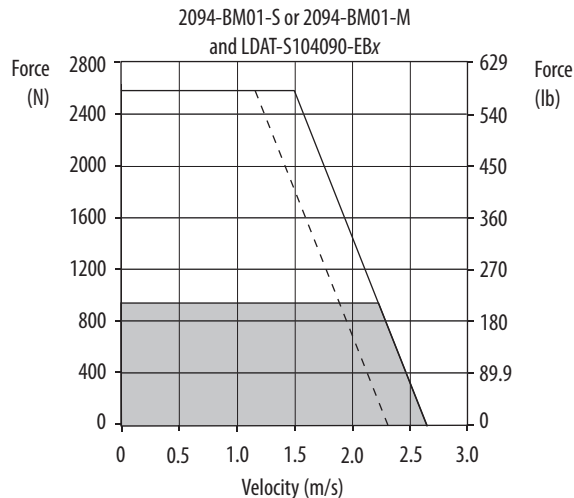
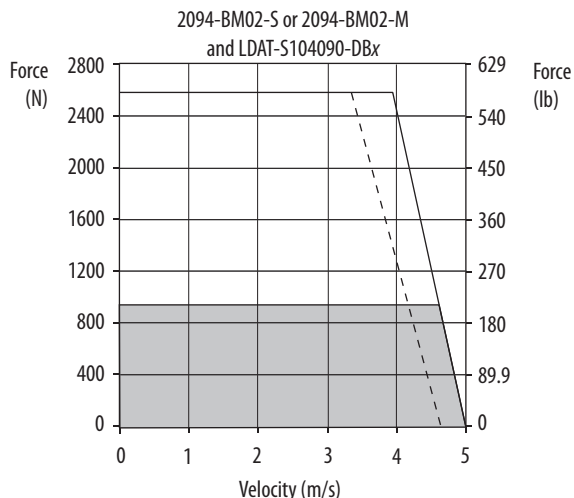
- = Intermittent operating region
- = Continuous operating region
- = Drive operation with 400V AC input voltage

**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDAT Linear Thruster Curves (continued)**



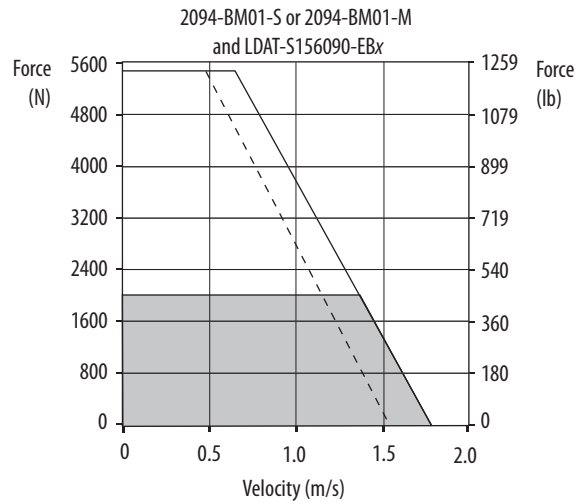
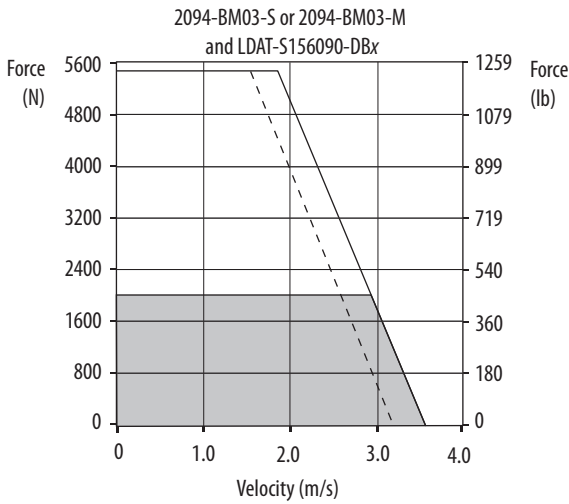
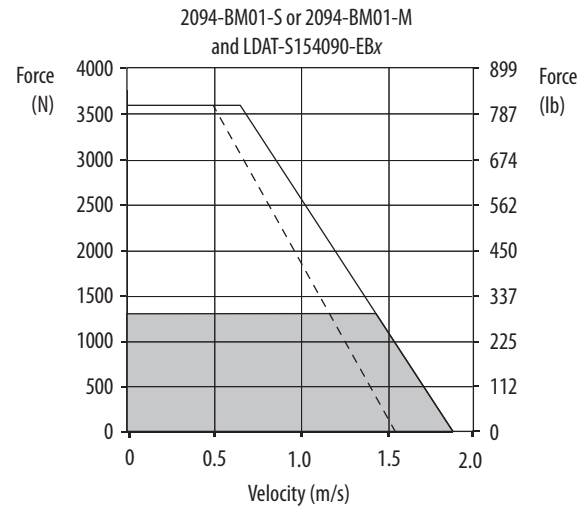
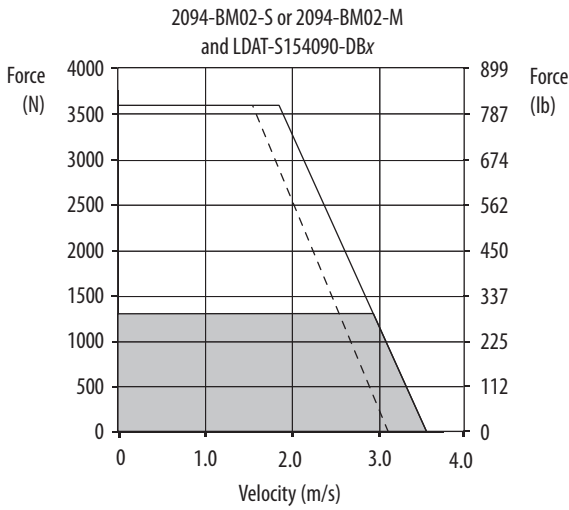
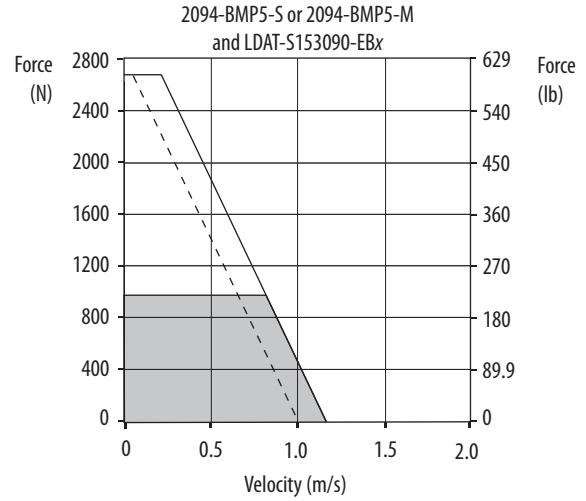
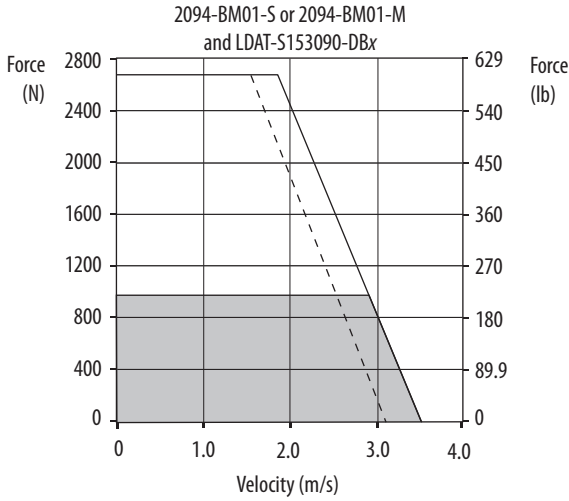
= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC input voltage

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDAT Linear Thruster Curves (continued)



= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC input voltage

**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDAT Linear Thruster Curves (continued)**



= Intermittent operating region  
 = Continuous operating region  
 = Drive operation with 400V AC input voltage



## Kinetix 6000 Drive Linear Performance Example with Peak Enhancement Feature

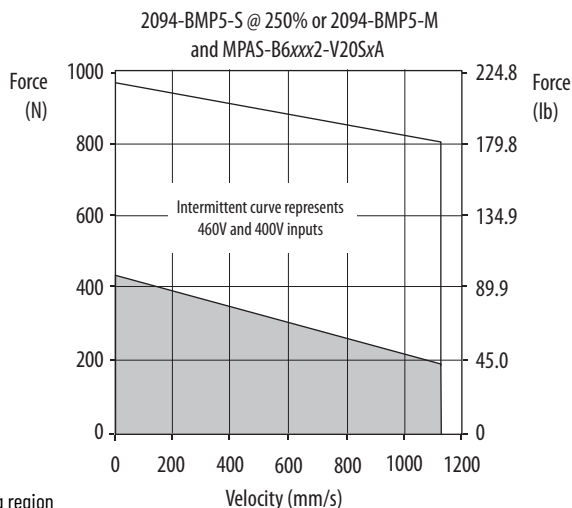
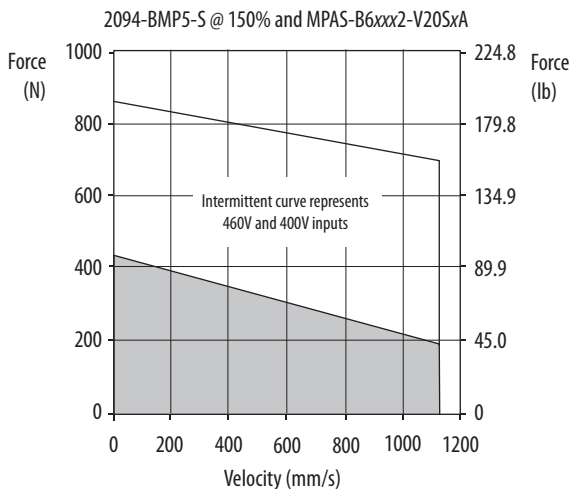
The peak current ratings of the Kinetix 6000 AM modules are configured at the factory as 150% of continuous current. You can program 400V-class (series B and later) AM modules and the equivalent IAM (inverter) modules, for up to 250% of continuous inverter current. See the Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for more information.

**IMPORTANT** Before your Kinetix 6000 drive can deliver enhanced-peak performance, you must enable the peak enhancement feature by configuring your drive by using DriveExplorer or RSLogix 5000 software, or the Logix Designer application.  
 See the Kinetix 6000 Multi-axis Servo Drive User Manual, publication [2094-UM001](#), to recalculate torque and acceleration/deceleration limit values, and paste them into the appropriate Axis Properties dialog box in RSLogix 5000 software or the Logix Designer application.  
 For sizing your drive/motor combination when using series B and later drives with the peak enhancement feature, use Motion Analyzer, version 4.6 or later.

In this example, the MPAS-Bxxxx2-V20SxA linear stage, usually paired with the 2094-BM01 (series A) AM module, is shown paired with the 2094-BMP5-S (series B and later) AM module. The two curves illustrate how the 2094-BMP5-S (series B and later) drive, when configured for 250% peak, can achieve full performance.

### Linear Stage Performance Specifications Example with Kinetix 6000 Drives

Linear Stage	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Stage Rated Output kW	Kinetix 6000 400V-class Drives
MPAS-Bxxxx2-V20SxA	1124 (44.3)	3.30	462 (104)	5.90	865 (194)	0.52	2094-BMP5-S @ 150%
				6.60	968 (218)		2094-BMP5-S @ 250%
							2094-BM01-S @ 150%



- = Intermittent operating region
- = Continuous operating region
- = System operation for specified stroke length

## Kinetix 6000 (200V-class) Drives with Kinetix MPAS Integrated Linear Stages

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with Kinetix MPAS (200V-class) integrated direct-drive or ballscrew linear stages. Included are motor power and feedback cable catalog numbers, system performance specifications, and force/velocity curves.

### Kinetix MPAS Cable Combinations

Linear Stage	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPAS-Axxxx1-V05SxA, MPAS-Axxxx2-V20SxA	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback
MPAS-A6xxxB-ALMx2C, MPAS-A8xxxE-ALMx2C, MPAS-A9xxxK-ALMx2C		2090-XXNFMF-Sxx (standard, non-flex) 2090-CFBM7DF-CDAFxx (continuous-flex) Incremental Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix MPAS Performance Specifications with Kinetix 6000 (200V-class) Drives

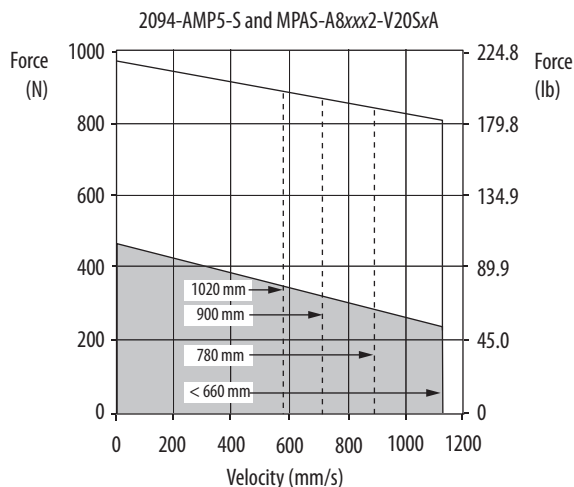
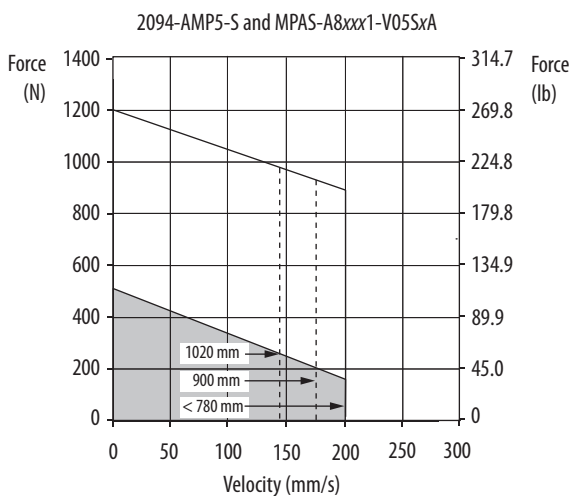
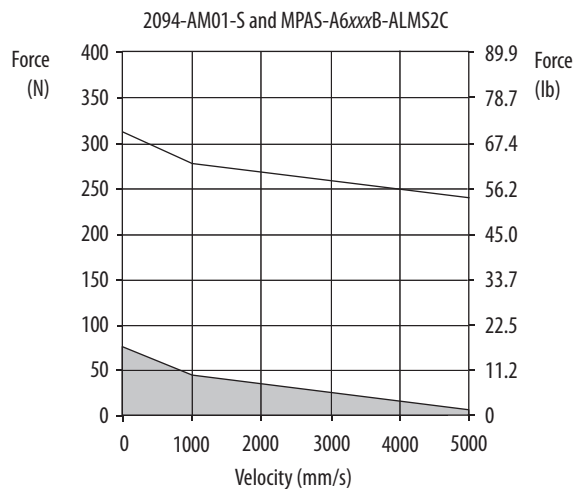
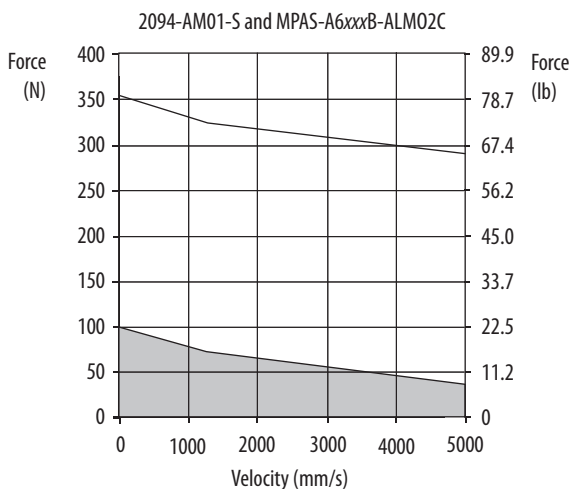
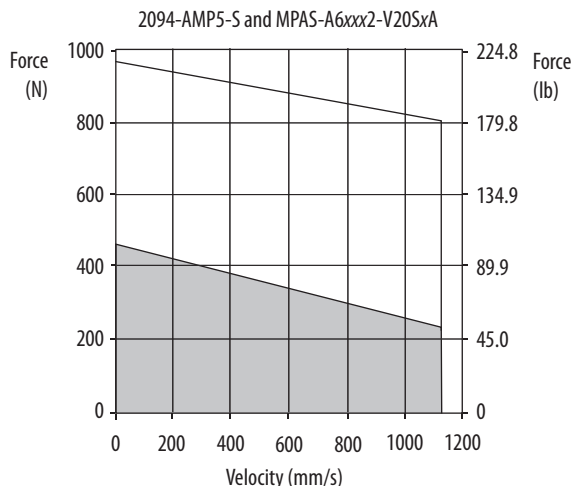
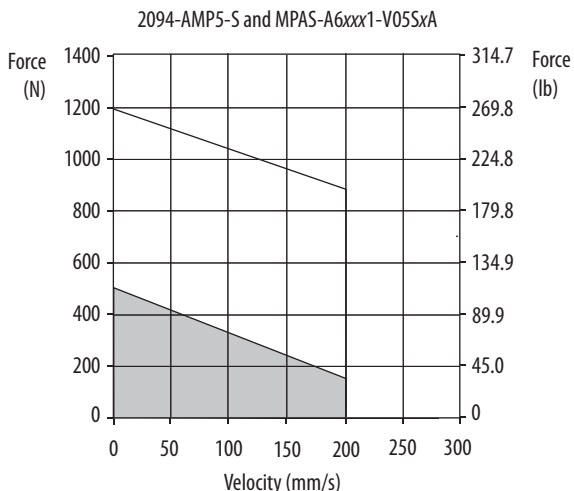
Linear Stage	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Stage Rated Output kW	Kinetix 6000 200V-class Drives	
MPAS-Axxxx1-V05SxA	200 (7.9) <sup>(1)</sup>	3.09	521 (117)	6.10	1212 (272)	0.37	2094-AMP5-S	
MPAS-Axxxx2-V20SxA	1124 (44.3) <sup>(2)</sup>	4.54	462 (104)	9.10	968 (218)	0.62	2094-AMP5-S	
MPAS-A6xxxB-ALM02C	5000 (200)	5.3	105 (23.6)	15.8	359 (80.7)	0.32	2094-AM01-S	
MPAS-A6xxxB-ALMS2C		4.7	83.0 (18.7)	14.2	312 (70.1)	0.29	2094-AM01-S	
MPAS-A8xxxE-ALM02C		7.0	189 (42.5)	17.0	417 (93.7)	0.53	2094-AM01-S	
MPAS-A8xxxE-ALMS2C		6.3	159 (35.7)	16.7	399 (89.7)		2094-AM02-S	
MPAS-A9xxxK-ALM02C		6.7	285 (64.1)	17.0	630 (142)	0.77	2094-AM01-S	
MPAS-A9xxxK-ALMS2C		6.1	245 (55.1)	16.5	680 (153)		2094-AM02-S	
MPAS-A9xxxK-ALMS2C						601 (135)	0.69	2094-AM01-S

(1) For 900 mm stroke length, maximum speed is 176 mm/s (6.9 in/s). For 1020 mm stroke length, maximum speed is 143 mm/s (5.6 in/s).

(2) For 780 mm stroke length, maximum speed is 889 mm/s (35.0 in/s). For 900 mm stroke length, maximum speed is 715 mm/s (28.2 in/s). For 1020 mm stroke length, maximum speed is 582 mm/s (22.9 in/s).

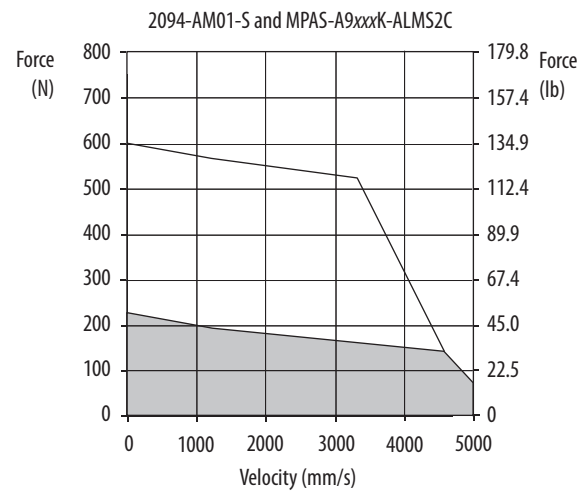
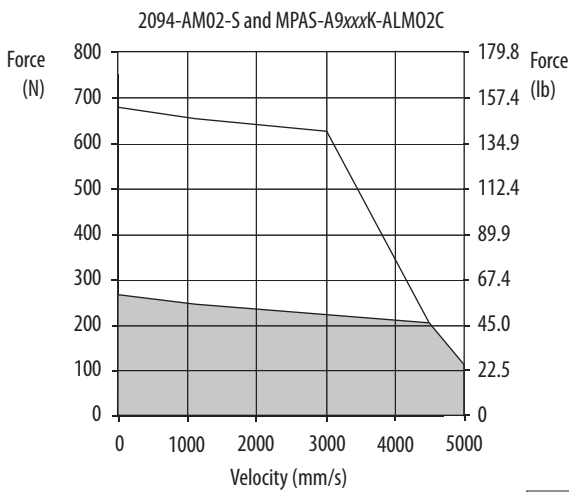
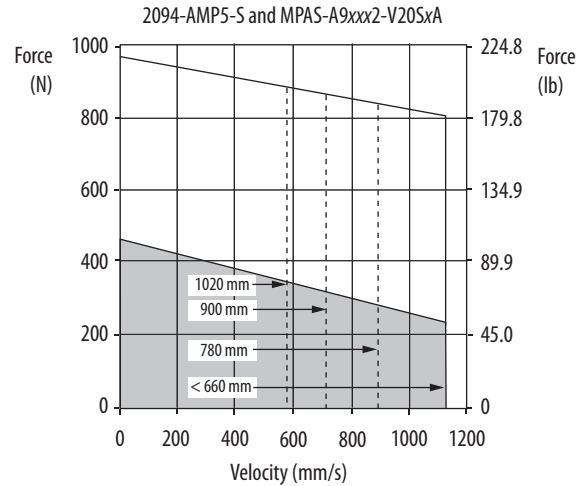
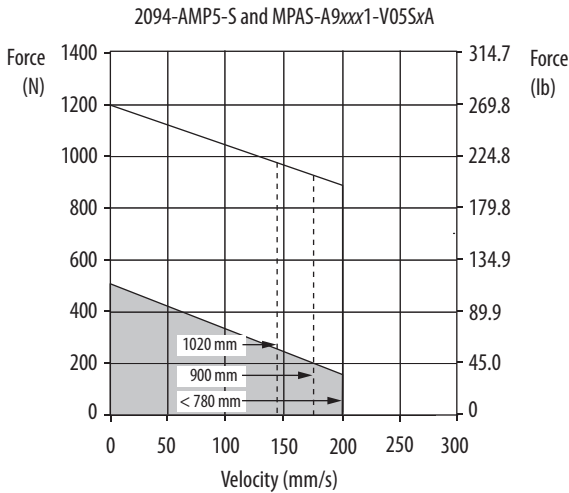
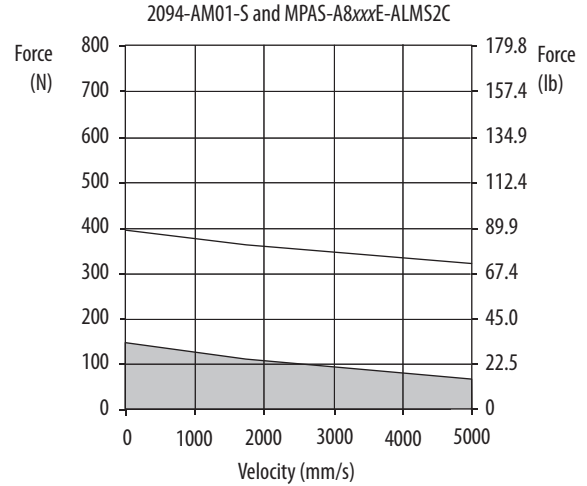
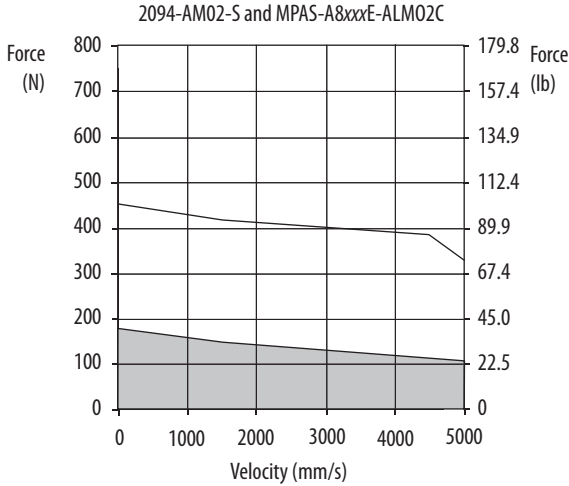
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix 6000 (200V-class) Drives/Kinetix MPAS Integrated Linear Stage Curves



- = Intermittent operating region
- = Continuous operating region
- = System operation for specified stroke length

### Kinetix 6000 (200V-class) Drives/Kinetix MPAS Integrated Linear Stage Curves (continued)



- = Intermittent operating region
- = Continuous operating region
- = System operation for specified stroke length

## Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix MPAS Linear Stages

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with Kinetix MPAS (400V-class) integrated direct-drive or ballscrew linear stages. Included are power/brake and feedback cable catalog numbers, system performance specifications, and the optimum force/velocity curves.

### Kinetix MPAS Cable Combinations

Linear Stage	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPAS-Bxxxx1-V05SxA MPAS-Bxxxx2-V20SxA	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback
MPAS-B8xxx-ALMx2C MPAS-B9xxx-ALMx2C		2090-XXNFMF-Sxx (standard, non-flex) 2090-CFBM7DF-CDAFxx (continuous-flex) Incremental Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix MPAS Performance Specifications with Kinetix 6200/6500 (400V-class) Drives

Linear Stage Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Stage Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPAS-Bxxxx1-V05SxA	200 (7.9) <sup>(1)</sup>	1.75	521 (117)	3.50	1212 (272)	0.138	2094-BMP5-M
MPAS-Bxxxx2-V20SxA	1124 (44.3) <sup>(2)</sup>	3.30	462 (104)	6.60	968 (218)	0.52	2094-BMP5-M
MPAS-B8xxxF-ALM02C	5000 (200)	3.50	189 (42.5)	9.30	456 (103)	0.527	2094-BMP5-M
MPAS-B8xxxF-ALMS2C	5000 (200)	3.15	159 (35.7)	8.37	399 (89.7)	0.475	2094-BMP5-M
MPAS-B9xxxL-ALM02C	5000 (200)	3.40	285 (64.1)	9.10	680 (153)	0.768	2094-BMP5-M
MPAS-B9xxxL-ALMS2C	5000 (200)	3.03	245 (55.1)	8.19	601 (135)	0.69	2094-BMP5-M

(1) For 900 mm stroke length, maximum speed is 176 mm/s (6.9 in/s). For 1020 mm stroke length, maximum speed is 143 mm/s (5.6 in/s).  
 (2) For 780 mm stroke length, maximum speed is 889 mm/s (35.0 in/s). For 900 mm stroke length, maximum speed is 715 mm/s (28.2 in/s). For 1020 mm stroke length, maximum speed is 582 mm/s (22.9 in/s).

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

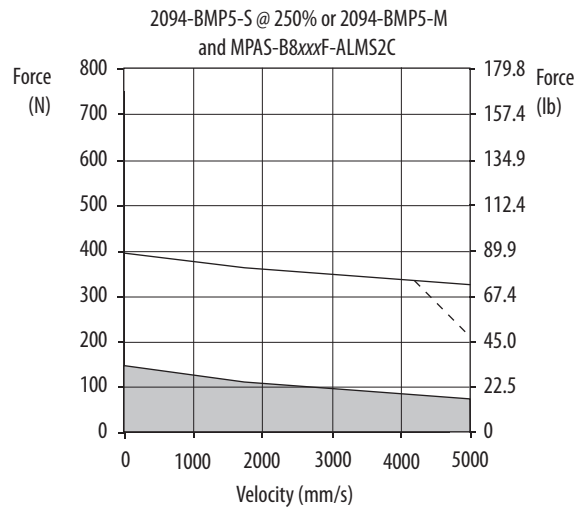
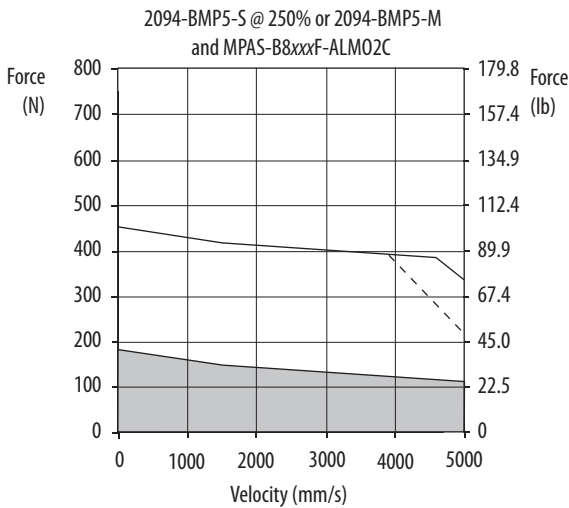
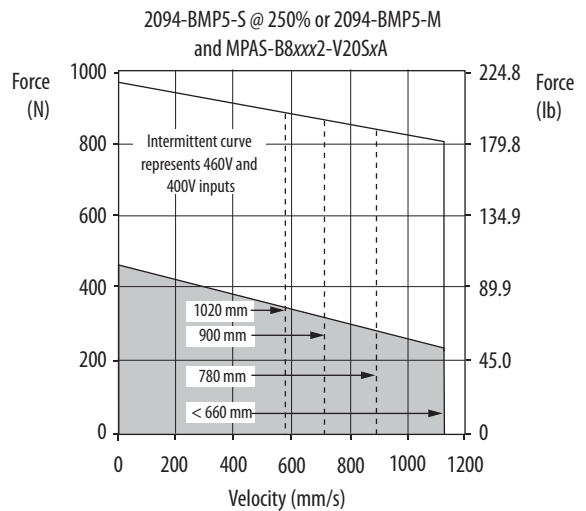
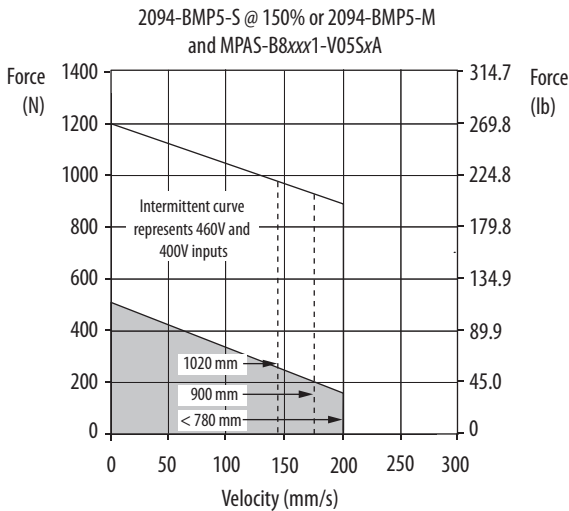
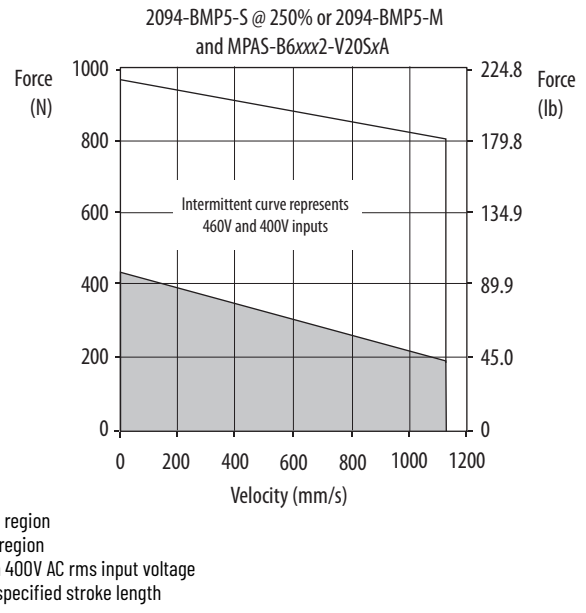
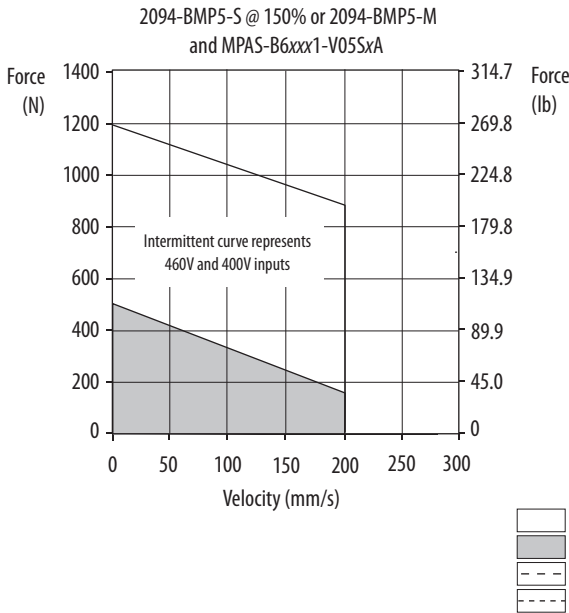
### Kinetix MPAS Performance Specifications with Kinetix 6000 (400V-class) Drives

Linear Stage Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Stage Rated Output kW	Kinetix 6000 400V-class Drives
MPAS-Bxxxx1-V05SxA	200 (7.9) <sup>(1)</sup>	1.75	521 (117)	3.50	1212 (272)	0.138	2094-BMP5-S @ 150%
MPAS-Bxxxx2-V20SxA	1124 (44.3) <sup>(2)</sup>	3.30	462 (104)	5.90	865 (194)	0.52	2094-BMP5-S @ 150%
				6.60	968 (218)		2094-BMP5-S @ 250%
MPAS-B8xxxF-ALM02C	5000 (200)	3.50	189 (42.5)	5.90	281 (63.2)	0.527	2094-BMP5-S @ 150%
				9.30	456 (103)		2094-BMP5-S @ 250%
MPAS-B8xxxF-ALMS2C	5000 (200)	3.15	159 (35.7)	5.90	272 (61.1)	0.475	2094-BMP5-S @ 150%
				8.37	399 (89.7)		2094-BMP5-S @ 250%
MPAS-B9xxxL-ALM02C	5000 (200)	3.40	285 (64.1)	5.90	433 (97.3)	0.768	2094-BMP5-S @ 150%
				9.10	680 (153)		2094-BMP5-S @ 250%
MPAS-B9xxxL-ALMS2C	5000 (200)	3.03	245 (55.1)	5.90	424 (95.3)	0.69	2094-BMP5-S @ 150%
				8.19	601 (135)		2094-BMP5-S @ 250%

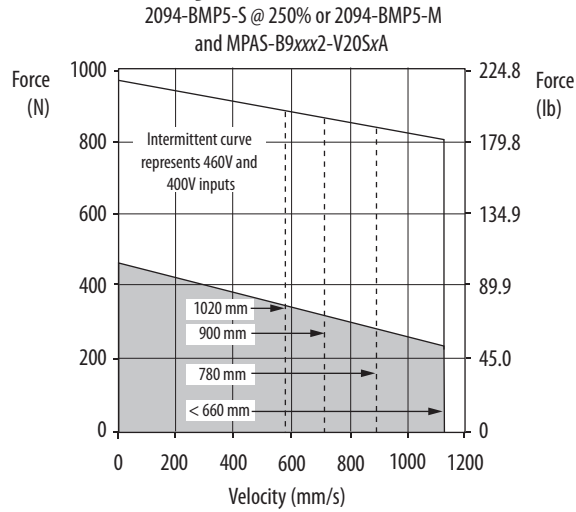
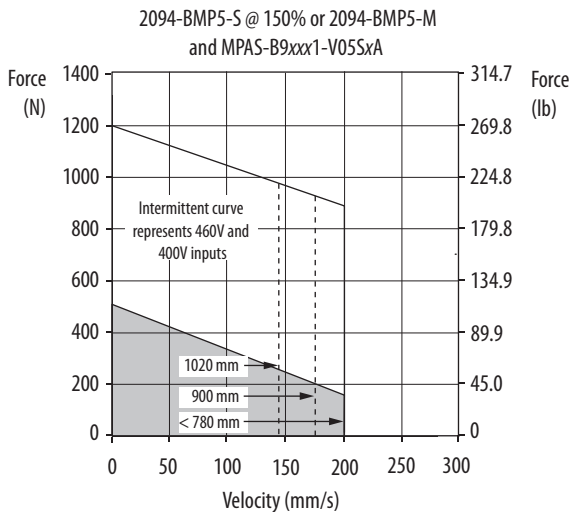
(1) For 900 mm stroke length, maximum speed is 176 mm/s (6.9 in/s). For 1020 mm stroke length, maximum speed is 143 mm/s (5.6 in/s).  
 (2) For 780 mm stroke length, maximum speed is 889 mm/s (35.0 in/s). For 900 mm stroke length, maximum speed is 715 mm/s (28.2 in/s). For 1020 mm stroke length, maximum speed is 582 mm/s (22.9 in/s).

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

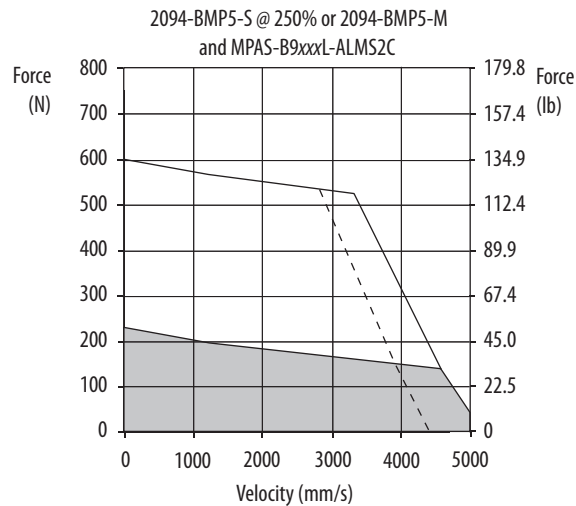
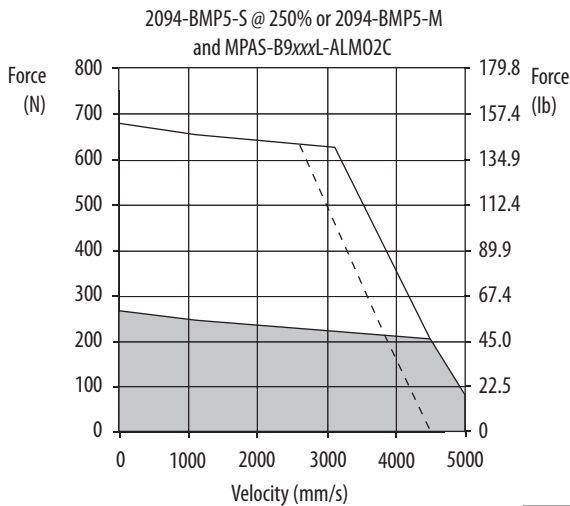
### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPAS Linear Stage Curves



### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix MPAS Linear Stage Curves (continued)



- = Intermittent operating region
- = Continuous operating region
- = System operation with 400V AC rms input voltage
- = System operation for specified stroke length



- = Intermittent operating region
- = Continuous operating region
- = System operation with 400V AC rms input voltage
- = System operation for specified stroke length

## Kinetix 6000 and Kinetix 6200/6500 Drives with Kinetix MPAR Electric Cylinders

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 drives when matched with Kinetix MPAR electric cylinders. Included are power/brake and feedback cable catalog numbers, system performance specifications, and the optimum force/velocity curves.

### Kinetix MPAR Cable Combinations

Electric Cylinder	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPAR-A/B1xxxB MPAR-A/B1xxxE MPAR-A/B2xxxC MPAR-A/B2xxxF MPAR-A/B3xxxE MPAR-A/B3xxxH	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

## Kinetix MPAR Performance Specifications with Kinetix 6000 and Kinetix 6200/6500 Drives

### Performance Specifications with Kinetix 6200/6500 (400V-class) Drives

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
MPAR-B1xxxB	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2094-BMP5-M
MPAR-B1xxxE	500	1.49	280 (62.9)	1.71	350 (78.7)	0.140	2094-BMP5-M
MPAR-B2xxxC	250	1.67	420 (94.4)	1.90	525 (118)	0.105	2094-BMP5-M
MPAR-B2xxxF	640	3.29	640 (144)	3.93	800 (180)	0.410	2094-BMP5-M
MPAR-B3xxxE	500	5.16	2000 (450)	6.17	2500 (562)	1.00	2094-BM01-M
MPAR-B3xxxH	1000	6.13	1300 (292)	6.79	1625 (365)	1.30	2094-BM01-M

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Performance Specifications with Kinetix 6000 (200V-class) Drives

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
MPAR-A1xxxB	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2094-AMP5-S
MPAR-A1xxxE	500	2.16	280 (62.9)	2.48	350 (78.7)	0.140	2094-AMP5-S
MPAR-A2xxxC	250	2.42	420 (94.4)	2.72	525 (118)	0.105	2094-AMP5-S
MPAR-A2xxxF	640	4.54	640 (144)	5.41	800 (180)	0.410	2094-AM01-S
MPAR-A3xxxE	500	10.33	2000 (450)	12.34	2500 (562)	1.00	2094-AM02-S
MPAR-A3xxxH	1000	12.20	1300 (292)	16.40	1625 (365)	1.30	2094-AM02-S

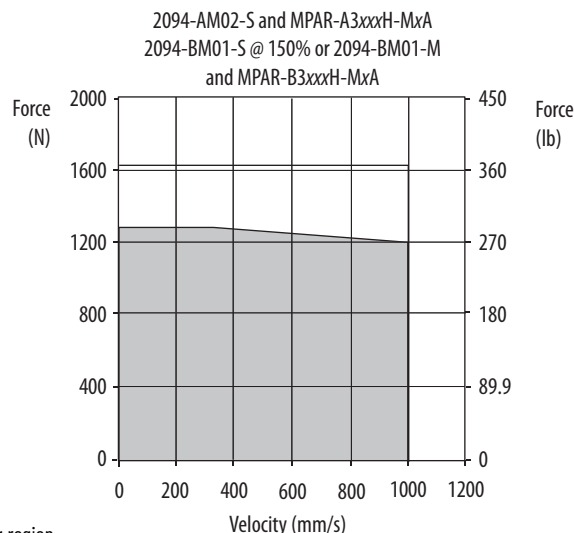
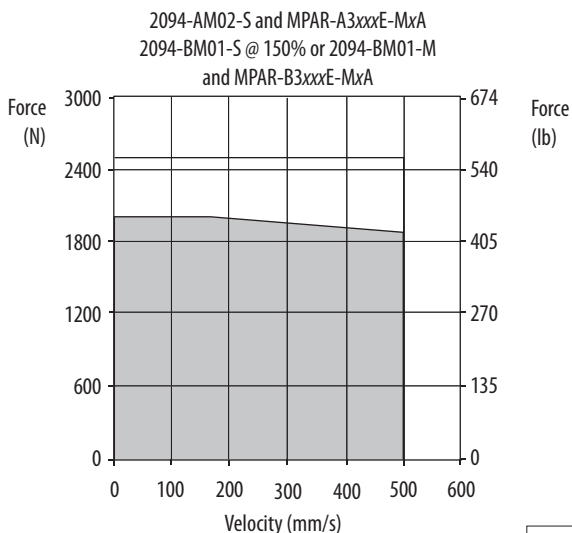
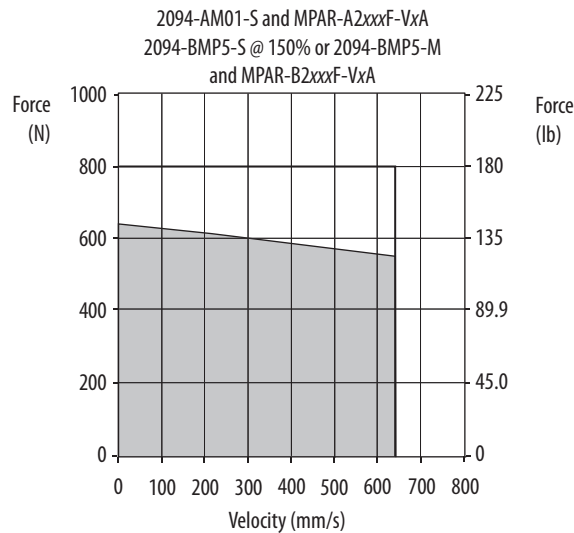
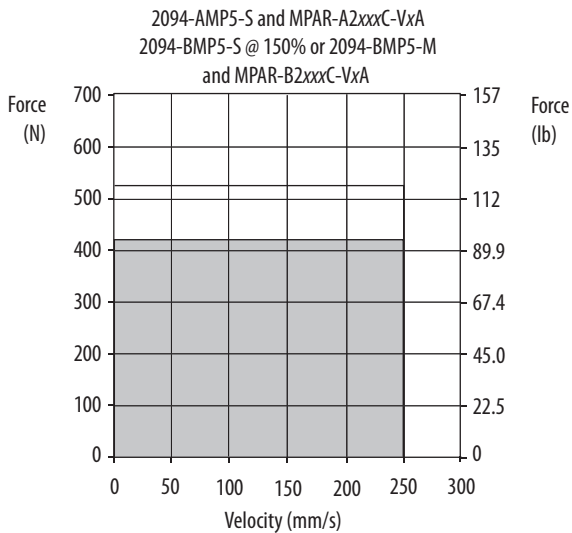
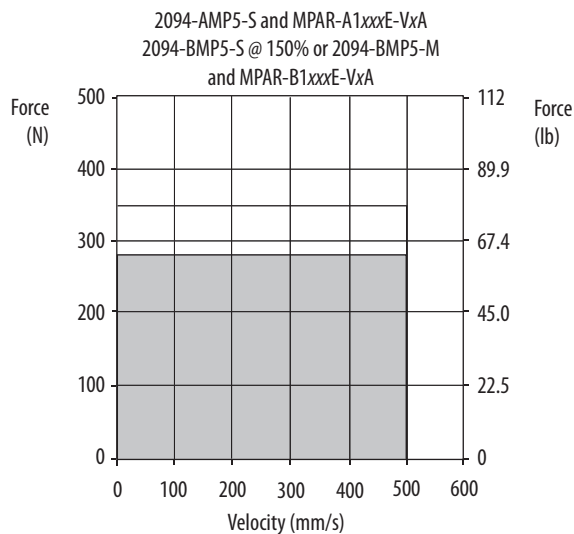
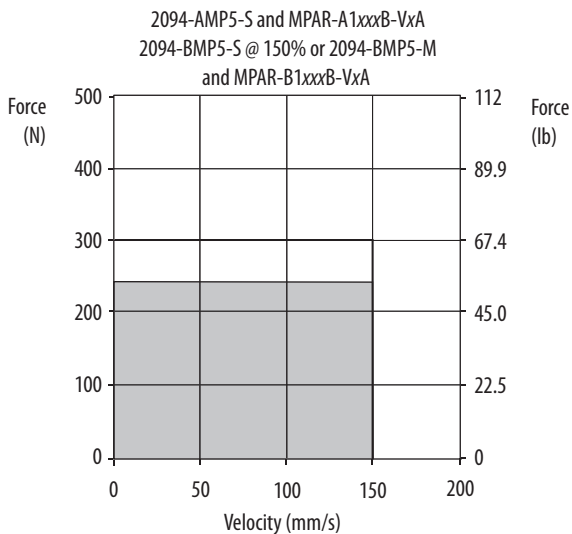
### Performance Specifications with Kinetix 6000 (400V-class) Drives

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
MPAR-B1xxxB	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2094-BMP5-S @ 150%
MPAR-B1xxxE	500	1.49	280 (62.9)	1.71	350 (78.7)	0.140	2094-BMP5-S @ 150%
MPAR-B2xxxC	250	1.67	420 (94.4)	1.90	525 (118)	0.105	2094-BMP5-S @ 150%
MPAR-B2xxxF	640	3.29	640 (144)	3.93	800 (180)	0.410	2094-BMP5-S @ 150%
MPAR-B3xxxE	500	5.16	2000 (450)	6.17	2500 (562)	1.00	2094-BM01-S @ 150%
MPAR-B3xxxH	1000	6.13	1300 (292)	6.79	1625 (365)	1.30	2094-BM01-S @ 150%

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.



### Kinetix 6000 and Kinetix 6200/6500 Drives/Kinetix MPAR Electric Cylinder Curves



= Intermittent operating region  
 = Continuous operating region

## Kinetix 6000 and Kinetix 6200/6500 Drives with Kinetix MPAI Heavy-Duty Electric Cylinders

This section provides system combination information for the Kinetix 6000 and the Kinetix 6200/6500 drives when matched with Kinetix MPAI heavy-duty electric cylinders. Included are power/brake and feedback cable catalog numbers, system performance specifications, and the optimum force/velocity curves.

### Kinetix MPAI Cable Combinations

Electric Cylinder	Motor Power/Brake Cable	Motor Feedback Cable <sup>(1)</sup>
MPAI-A/B2xxxC	2090-CPxM7DF-16AAxx (standard, non-flex) 2090-CPxM7DF-16AFxx (continuous-flex)	2090-CFBM7DF-CEAAxx or 2090-CFBM7DD-CEAAxx (standard, non-flex) 2090-CFBM7DF-CEAFxx or 2090-CFBM7DD-CEAFxx (continuous-flex) Absolute High-resolution Feedback
MPAI-A/B3xxxC, MPAI-A/B3xxxE MPAI-A/B3xxxR, MPAI-A/B3xxxS		
MPAI-A/B4xxxC, MPAI-A/B4xxxE MPAI-A/B4xxxR, MPAI-A/B4xxxS		
MPAI-B5xxxC, MPAI-B5xxxE		
MPAI-A5xxxC, MPAI-A5xxxE	2090-CPxM7DF-14AAxx (standard, non-flex) 2090-CPxM7DF-14AFxx (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

## Kinetix MPAI Performance Specifications with Kinetix 6200/6500 (400V-class) Drives

### Performance Specifications with Ballscrew Electric Cylinders

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-B2076CV1	305 (12)	0.90	890 (200)	706 (159)	2.30	1446 (325)	0.22	2094-BMP5-M
MPAI-B2150CV3		1.29	1446 (325)	1147 (258)	3.25			
MPAI-B2300CV3		1.35	1624 (365)	1290 (290)	4.57			
MPAI-B3076EM1	610 (24)	1.35	814 (183)	645 (145)	4.57	2570 (578)	0.27	2094-BMP5-M
MPAI-B3150CM3	279 (11)	2.81	4003 (900)	3176 (714)	4.30	4448 (1000)	0.39	2094-BMP5-M
MPAI-B3300CM3	188 (7.3)							
MPAI-B3450CM3	559 (22)							
MPAI-B3150EM3	376 (15)							
MPAI-B3300EM3	2002 (450)							
MPAI-B4150CM3	279 (11)	5.61	7784 (1750)	6179 (1389)	8.68	8896 (2000)	0.43	2094-BM01-M
MPAI-B4300CM3	245 (9.5)							
MPAI-B4450CM3	559 (22)							
MPAI-B4150EM3	491 (19)							
MPAI-B4300EM3	3892 (875)							
MPAI-B4450EM3	491 (19)	6.62	13,123 (2950)	10,415 (2341)	8.48	13,345 (3000)	0.55	2094-BM01-M
MPAI-B5xxxCM3	200 (7.8)							
MPAI-B5xxxEM3	400 (15.6)							

### Performance Specifications with Roller Screw Electric Cylinders

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-B3076RM1	305 (12)	1.45	1557 (350)	1237 (278)	4.57	4862 (1093)	0.27	2094-BMP5-M
MPAI-B3076SM1	610 (24)		778 (175)	618 (139)		2431 (547)		
MPAI-B3150RM3	279 (11)	2.81	3781 (850)	3003 (675)	7.07	7562 (1700)	0.39	2094-BMP5-M
MPAI-B3300RM3	176 (6.9)							
MPAI-B3450RM3	559 (22)							
MPAI-B3150SM3	353 (14)							
MPAI-B3300SM3	1891 (425)							

Performance Specifications with Roller Screw Electric Cylinders (Continued)

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-B4150RM3	279 (11)	5.61	7340 (1650)	5827 (1310)	14.14	14,679 (3300)	0.43	2094-BM01-M
MPAI-B4300RM3								
MPAI-B4450RM3	196 (7.6)							
MPAI-B4150SM3	559 (22)		3670 (825)	2914 (655)		7340 (1650)		
MPAI-B4300SM3								
MPAI-B4450SM3			393 (15)					

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

Kinetix MPAI Performance Specifications with Kinetix 6000 (200V-class) Drives

Performance Specifications with Ballscrew Electric Cylinders

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-A2078CV1	305 (12)	1.80	890 (200)	706 (159)	4.50	1446 (325)	0.22	2094-AMP5-S
MPAI-A2150CV3		2.47	1446 (325)	1147 (258)	6.20			
MPAI-A2300CV3								
MPAI-A3076CM1	305 (12)	2.68	1624 (365)	1290 (290)	8.90	4448 (1000)	0.27	2094-AM01-S
MPAI-A3076EM1	610 (24)		814 (183)	645 (145)		2570 (578)		
MPAI-A3150CM3	279 (11)	5.61	4003 (900)	3176 (714)	8.40	4448 (1000)	0.39	2094-AM01-S
MPAI-A3300CM3								
MPAI-A3450CM3	188 (7.3)							
MPAI-A3150EM3	559 (22)		2002 (450)	1588 (357)	14.14	4003 (900)		
MPAI-A3300EM3								
MPAI-A3450EM3			376 (15)					
MPAI-A4150CM3	279 (11)	10.89	7784 (1750)	6179 (1389)	17.07	8896 (2000)	0.43	2094-AM02-S
MPAI-A4300CM3								
MPAI-A4450CM3	245 (9.5)							
MPAI-A4150EM3	559 (22)		3892 (875)	3092 (695)	27.44	7784 (1750)		
MPAI-A4300EM3								
MPAI-A4450EM3			491 (19)					
MPAI-A5xxxCM3	200 (7.8)	13.25	13,123 (2950)	10,415 (2341)	16.70	13,345 (3000)	0.55	2094-AM03-S
MPAI-A5xxxEM3	400 (15.6)		6562 (1475)	5208 (1171)	33.40	13,122 (2950)		

Performance Specifications with Roller Screw Electric Cylinders

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6000 200V-class Drives
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-A3076RM1	305 (12)	2.87	1557 (350)	1237 (278)	8.90	4862 (1093)	0.27	2094-AM01-S
MPAI-A3076SM1	610 (24)		778 (175)	618 (139)		2431 (547)		
MPAI-A3150RM3	279 (11)	5.61	3781 (850)	3003 (675)	14.14	7562 (1700)	0.39	2094-AM01-S
MPAI-A3300RM3								
MPAI-A3450RM3	176 (6.9)							
MPAI-A3150SM3	559 (22)		1891 (425)	1499 (337)		3781 (850)		
MPAI-A3300SM3								
MPAI-A3450SM3			353 (14)					
MPAI-A4150RM3	279 (11)	10.89	7340 (1650)	5827 (1310)	27.44	14,679 (3300)	0.43	2094-AM02-S
MPAI-A4300RM3								
MPAI-A4450RM3	196 (7.6)							
MPAI-A4150SM3	559 (22)		3670 (825)	2914 (655)		7340 (1650)		
MPAI-A4300SM3								
MPAI-A4450SM3			393 (15)					

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

## Kinetix MPAI Performance Specifications with Kinetix 6000 (400V-class) Drives

### Performance Specifications with Ballscrew Electric Cylinders

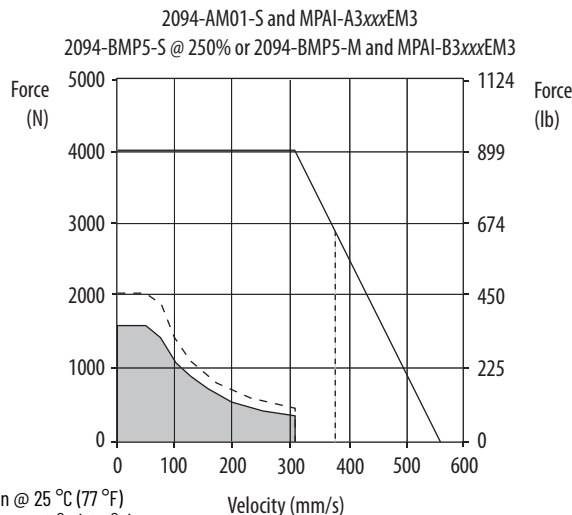
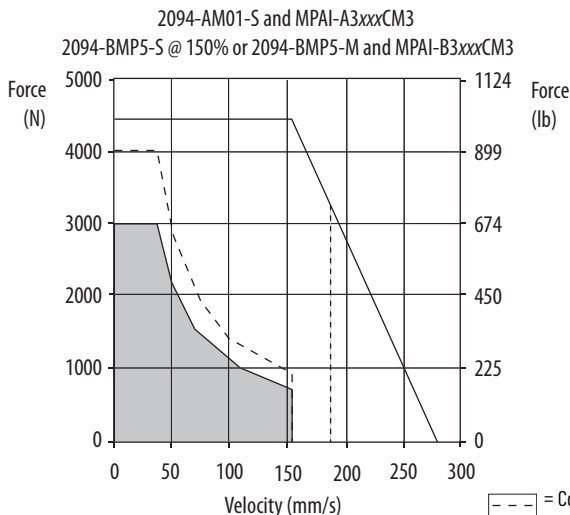
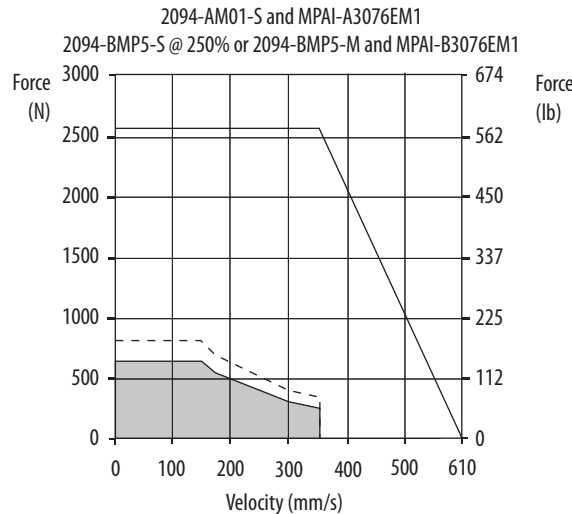
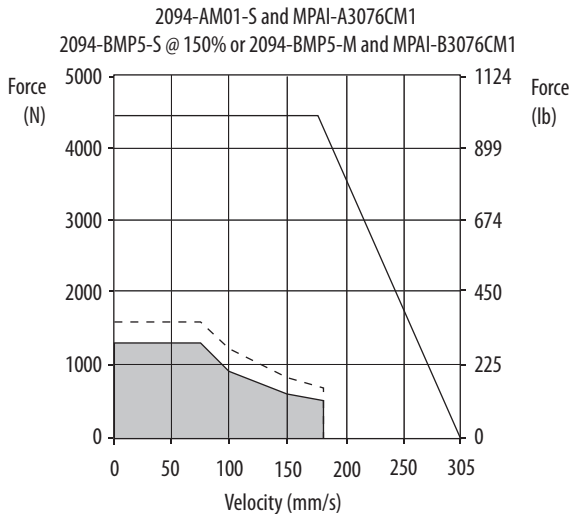
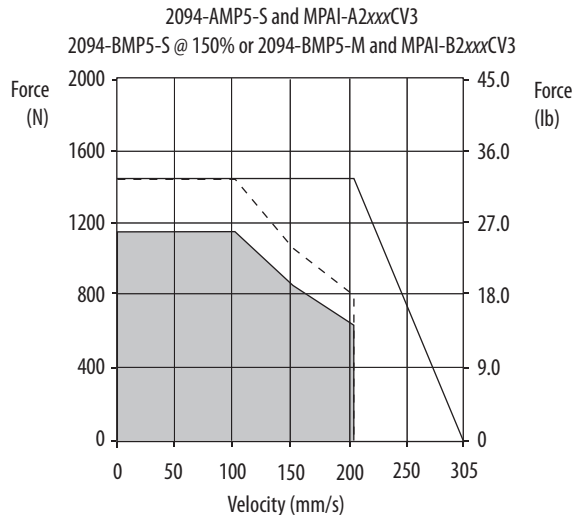
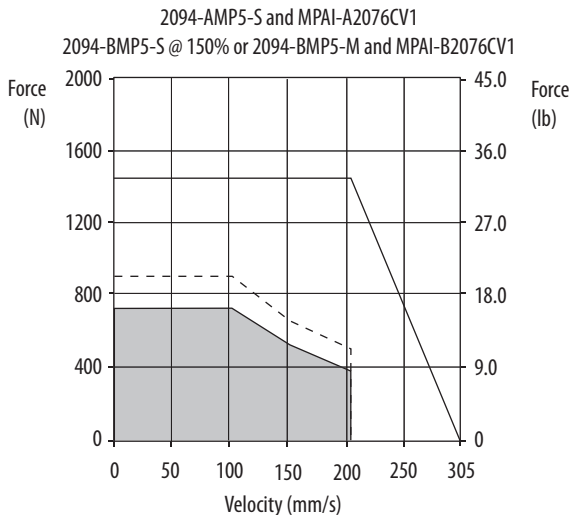
Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-B2076CV1	305 (12)	0.90	890 (200)	706 (159)	2.30	1446 (325)	0.22	2094-BMP5-S @ 150%
MPAI-B2150CV3		1.29	1446 (325)	1147 (258)	3.25			
MPAI-B2300CV3								
MPAI-B3076CM1	305 (12)	1.35	1624 (365)	1290 (290)	4.57	4448 (1000)	0.27	2094-BMP5-S @ 150%
MPAI-B3076EM1	610 (24)		814 (183)	645 (145)		2570 (578)		2094-BMP5-S @ 250%
MPAI-B3150CM3	279 (11)	2.81	4003 (900)	3176 (714)	4.30	4448 (1000)	0.39	2094-BMP5-S @ 150%
MPAI-B3300CM3								
MPAI-B3450CM3	188 (7.3)		2002 (450)	1588 (357)	7.07	4003 (900)	0.39	2094-BMP5-S @ 250%
MPAI-B3150EM3	559 (22)							
MPAI-B3300EM3								
MPAI-B3450EM3	376 (15)							
MPAI-B4150CM3	279 (11)	5.61	7784 (1750)	6179 (1389)	8.68	8896 (2000)	0.43	2094-BM01-S @ 150%
MPAI-B4300CM3								
MPAI-B4450CM3	245 (9.5)		3892 (875)	3092 (695)	14.14	7784 (1750)	0.43	2094-BM01-S @ 250%
MPAI-B4150EM3	559 (22)							
MPAI-B4300EM3								
MPAI-B4450EM3	491 (19)							
MPAI-B5xxxCM3	200 (7.8)	6.62	13,123 (2950)	10,415 (2341)	8.48	13,345 (3000)	0.55	2094-BM01-S @ 150%
MPAI-B5xxxEM3	400 (15.6)		6562 (1475)	5208 (1171)	16.70	13,122 (2950)		2094-BM01-S @ 250%

### Performance Specifications with Roller Screw Electric Cylinders

Electric Cylinder Cat. No.	Speed, Max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Rated Output kW	Kinetix 6000 400V-class Drives
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-B3076RM1	305 (12)	1.45	1557 (350)	1237 (278)	4.57	4862 (1093)	0.27	2094-BMP5-S @ 250%
MPAI-B3076SM1	610 (24)		778 (175)	618 (139)		2431 (547)		
MPAI-B3150RM3	279 (11)	2.81	3781 (850)	3003 (675)	7.07	7562 (1700)	0.39	2094-BMP5-S @ 250%
MPAI-B3300RM3								
MPAI-B3450RM3	176 (6.9)		1891 (425)	1499 (337)	7.07	3781 (850)	0.39	2094-BMP5-S @ 250%
MPAI-B3150SM3	559 (22)							
MPAI-B3300SM3								
MPAI-B3450SM3	353 (14)							
MPAI-B4150RM3	279 (11)	5.61	7340 (1650)	5827 (1310)	14.14	14,679 (3300)	0.43	2094-BM01-S @ 250%
MPAI-B4300RM3								
MPAI-B4450RM3	196 (7.6)		3670 (825)	2914 (655)	14.14	7340 (1650)	0.43	2094-BM01-S @ 250%
MPAI-B4150SM3	559 (22)							
MPAI-B4300SM3								
MPAI-B4450SM3	393 (15)							

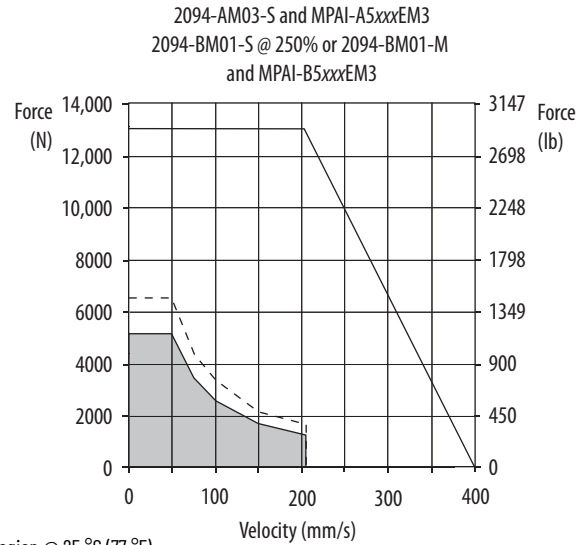
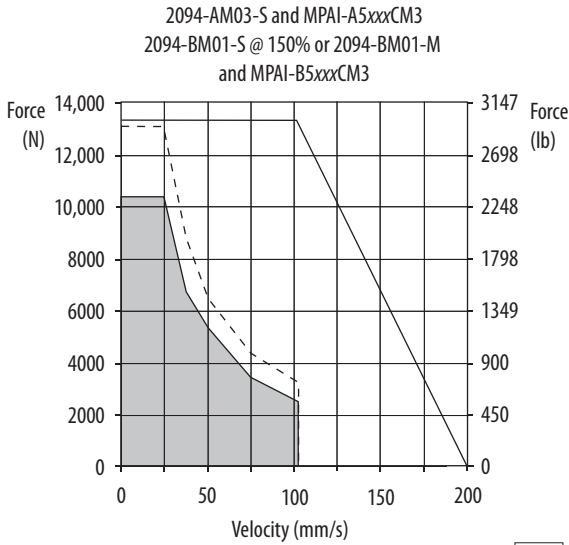
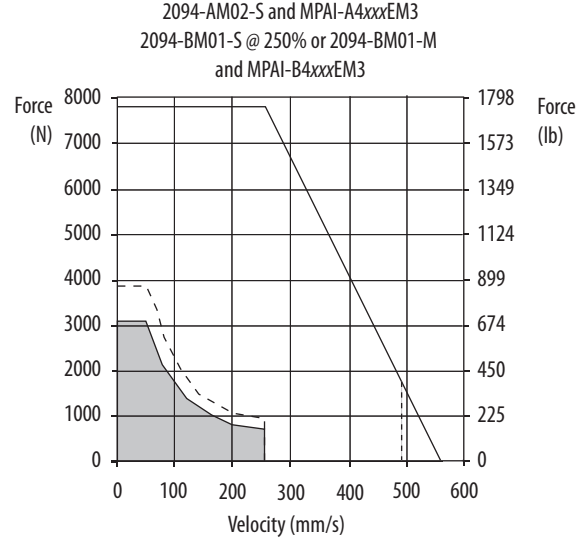
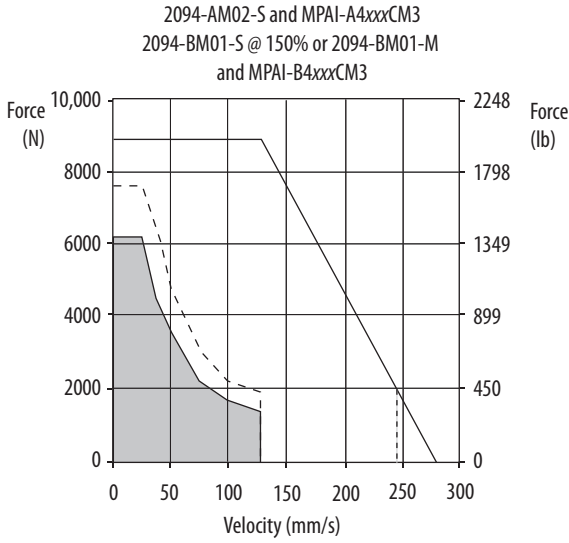
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix 6000 and Kinetix 6200/6500 Drives/Kinetix MPAl (Ballscrew) Electric Cylinder Curves



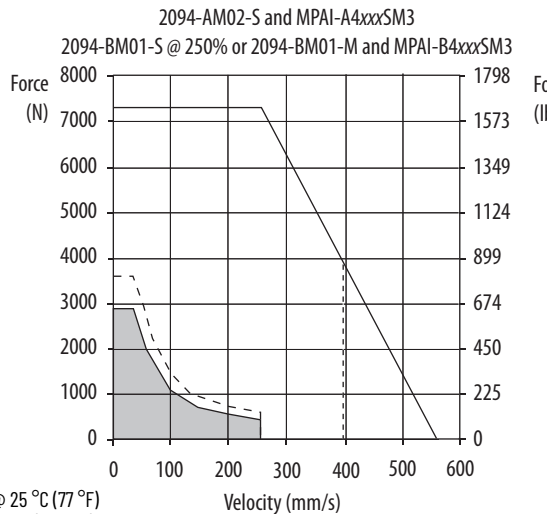
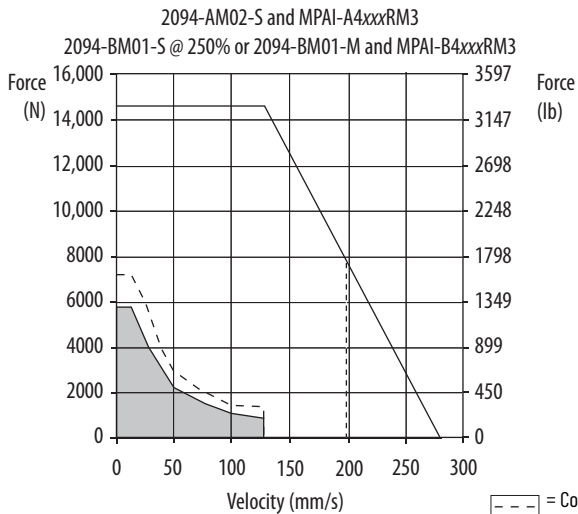
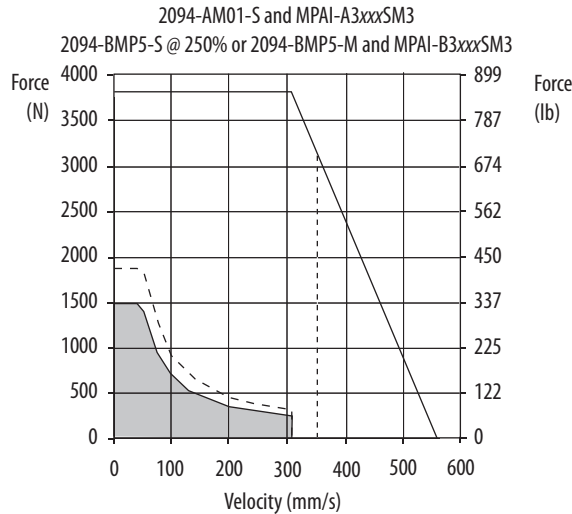
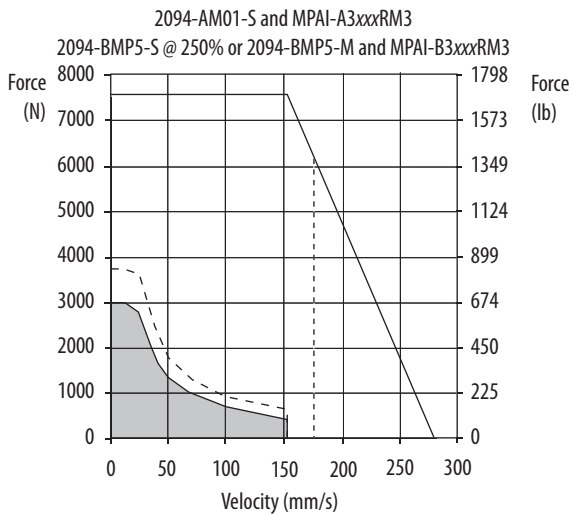
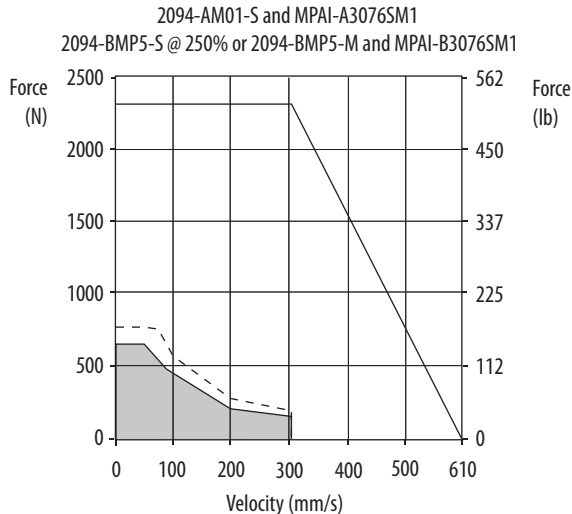
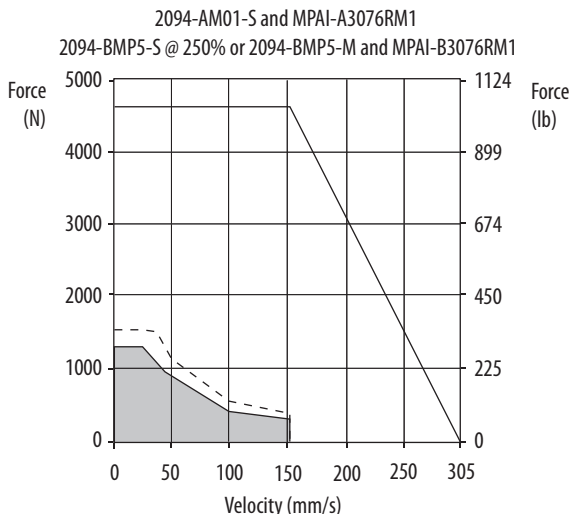
- - - = Continuous operating region @ 25 °C (77 °F)
- █ = Continuous operating region @ 40 °C (104 °F)
- - - = Intermittent operating region, 450 mm (18 in.) stroke length only
- █ = Intermittent operating region, 076...300 mm (3...12 in.) stroke lengths

### Kinetix 6000 and Kinetix 6200/6500 Drives/Kinetix MPAI (Ballscrew) Electric Cylinder Curves (continued)



- = Continuous operating region @ 25 °C (77 °F)
- = Continuous operating region @ 40 °C (104 °F)
- = Intermittent operating region, 450 mm (18 in.) stroke length only
- = Intermittent operating region, 076...300 mm (3...12 in.) stroke lengths

**Kinetix 6000 and Kinetix 6200/6500 Drives/Kinetix MPAI (roller screw) Electric Cylinder Curves**



- - - = Continuous operating region @ 25 °C (77 °F)
- ▒ = Continuous operating region @ 40 °C (104 °F)
- ▒ = Intermittent operating region, 450 mm (18 in.) stroke length only
- ▒ = Intermittent operating region, 076...300 mm (3...12 in.) stroke lengths

## Kinetix 6000 (200V-class) Drives with Kinetix LDC Linear Motors

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with Kinetix LDC iron-core linear motors. Included are power and feedback cable catalog numbers, system performance specifications, and the optimum force/velocity curves.

### Kinetix LDC Cable Combinations

Linear Motor	Motor Power Cable	Motor Feedback Cable <sup>(1)</sup>
LDC-C030100-DHT, LDC-C030200-DHT, LDC-C030200-EHT	2090-CPWM7DF-16AAxx (standard, non-flex) 2090-CPWM7DF-16AFxx (continuous-flex)	2090-XXNFMF-Sxx (standard, non-flex) 2090-CFBM7DF-CDAFxx (continuous-flex) Sin/Cos or TTL Encoder Feedback
LDC-C050100-DHT, LDC-C050200-DHT, LDC-C050200-EHT, LDC-C050300-DHT, LDC-C050300-EHT		
LDC-C075200-DHT, LDC-C075200-EHT, LDC-C075300-DHT, LDC-C075300-EHT, LDC-C075400-DHT, LDC-C075400-EHT		
LDC-C100300-DHT, LDC-C100300-EHT, LDC-C100400-DHT, LDC-C100400-EHT, LDC-C100600-DHT		
LDC-C150400-DHT, LDC-C150600-DHT		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix LDC Performance Specifications with Kinetix 6000 (200V-class) Drives

Linear Motor Cat. No.	Speed, Max m/s (ft/s)	System Continuous Stall Current <sup>(1)</sup> Amps 0-pk	System Continuous Stall Force <sup>(1)</sup> N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6000 200V-class Drives
LDC-C030100-DHT	10.0 (32.8)	4.1...6.1	74...111 (17...25)	12.1	188 (42)	0.37...0.55	2094-AM01-S
LDC-C030200-DHT		8.1...12.2	148...222 (33...50)	24.3	375 (84)	0.74...1.11	2094-AM02-S
LDC-C030200-EHT		4.1...6.1		12.1			2094-AM01-S
LDC-C050100-DHT	10.0 (32.8)	3.9...5.9	119...179 (27...40)	11.7	302 (68)	0.59...0.89	2094-AM01-S
LDC-C050200-DHT		7.9...11.8	240...359 (54...81)	23.3	600 (135)	1.20...1.79	2094-AM02-S
LDC-C050200-EHT		3.9...5.9		11.6			2094-AMP5-S
LDC-C050300-DHT		11.8...17.7	363...544 (82...122)	35.9	941 (212)	1.81...2.72	2094-AM03-S
LDC-C050300-EHT		3.9...5.9		12.0			2094-AMP5-S

(1) Values represent the range between no cooling (low value) and water cooling (high value).

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix LDC Performance Specifications with Kinetix 6000 (200V-class) Drives (continued)

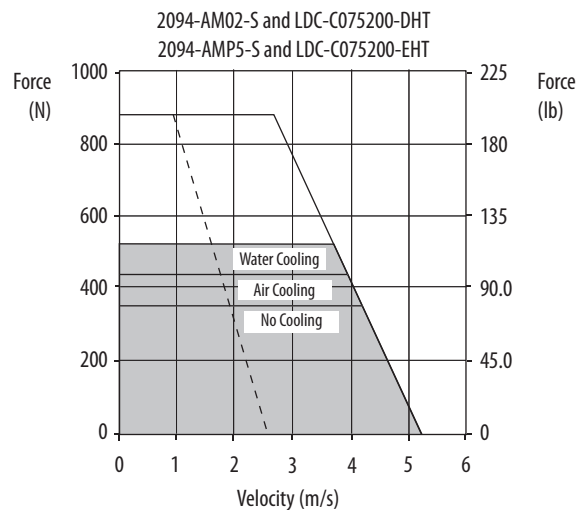
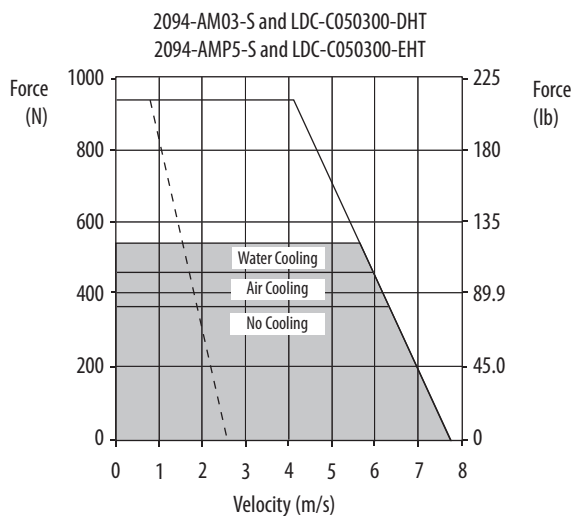
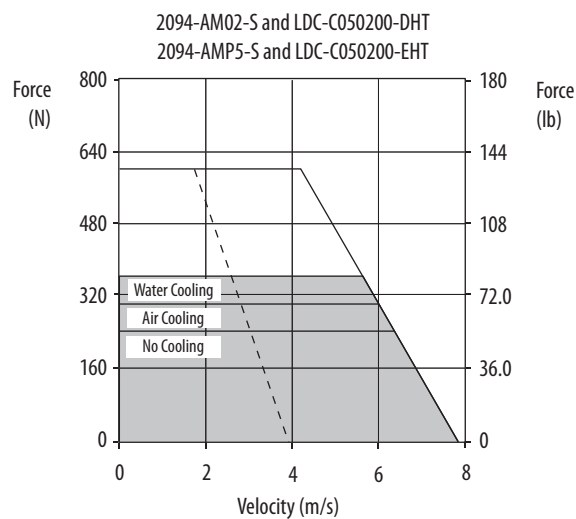
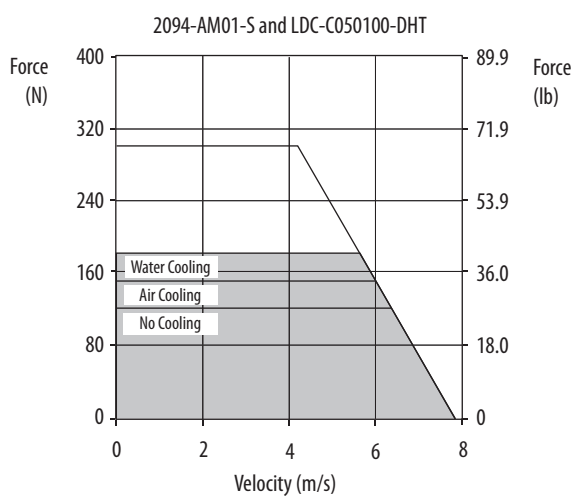
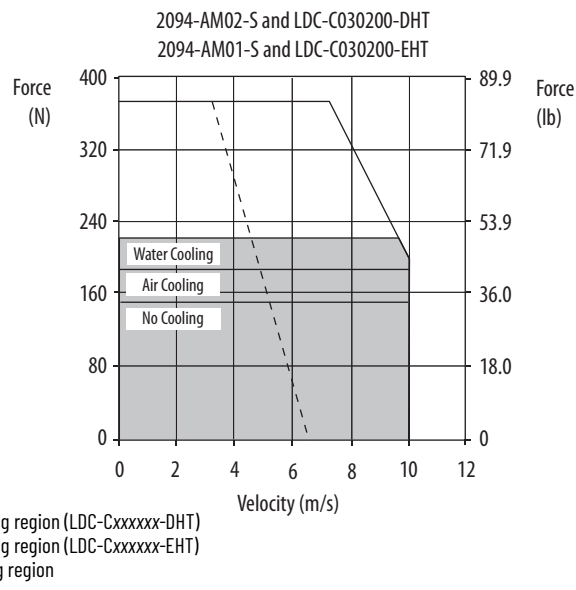
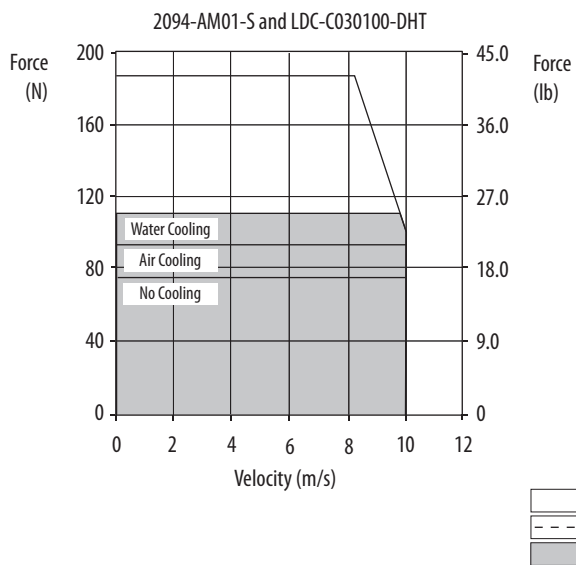
Linear Motor Cat. No.	Speed, Max m/s (ft/s)	System Continuous Stall Current <sup>(1)</sup> Amps 0-pk	System Continuous Stall Force <sup>(1)</sup> N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6000 200V-class Drives
LDC-C075200-DHT	10.0 (32.8)	7.7...11.5	348...523 (78...117)	22.9	882 (198)	1.74...2.61	2094-AM02-S
LDC-C075200-EHT		3.8...5.7		11.5			2094-AMP5-S
LDC-C075300-DHT		11.5...17.2	523...784 (117...176)	35.6	1368 (308)	2.61...3.92	2094-AM03-S
LDC-C075300-EHT		3.8...5.7		11.9			2094-AM01-S
LDC-C075400-DHT		15.3...23.0	697...1045 (157...235)	47.4	1824 (410)	3.48...5.22	2094-AM03-S
LDC-C075400-EHT		7.7...11.5		23.7			2094-AM02-S
LDC-C100300-DHT	10.0 (32.8)	11.1...16.7	674...1012 (152...227)	34.3	1767 (397)	3.37...5.06	2094-AM03-S
LDC-C100300-EHT		3.7...5.6		11.4			2094-AM01-S
LDC-C100400-DHT		14.8...22.2	899...1349 (202...303)	45.7	2356 (530)	4.49...6.74	2094-AM03-S
LDC-C100400-EHT		7.4...11.1		22.8			2094-AM02-S
LDC-C100600-DHT	10.0 (32.8)	22.2...33.3	1349...2023 (303...455)	68.5	3534 (794)	6.74...10.11	2094-AM05-S
LDC-C150400-DHT		14.1...21.1	1281...1922 (288...432)	45.2	3498 (786)	6.40...9.61	2094-AM03-S
LDC-C150600-DHT		21.1...31.7	1922...2882 (432...648)	67.8	5246 (1179)	9.61...14.41	2094-AM05-S

(1) Values represent the range between no cooling (low value) and water cooling (high value).

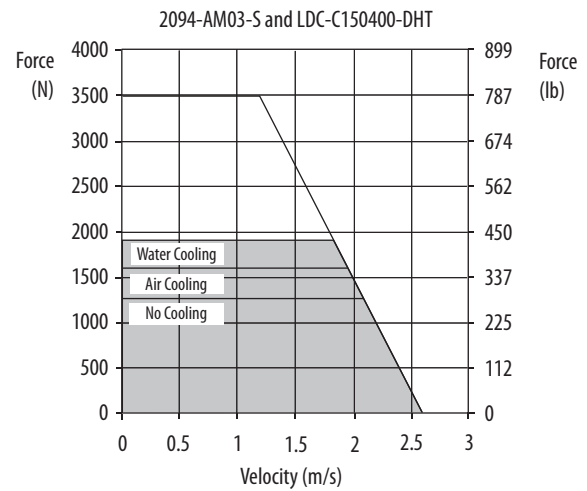
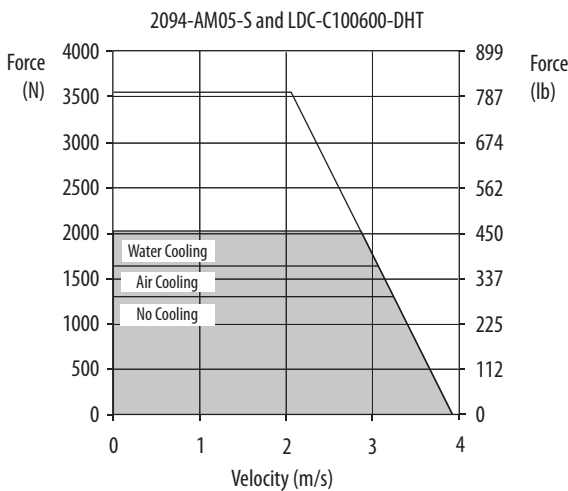
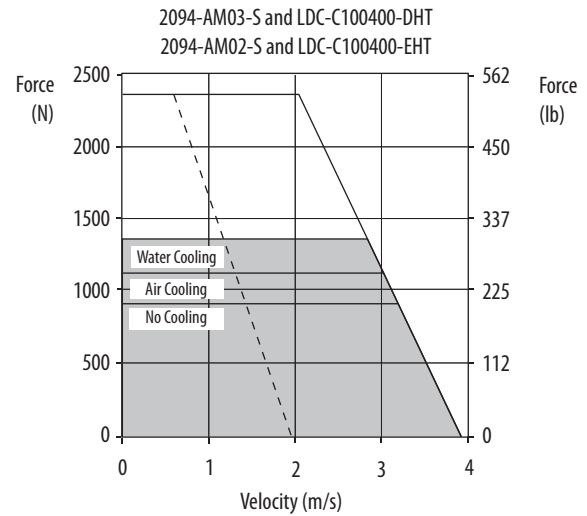
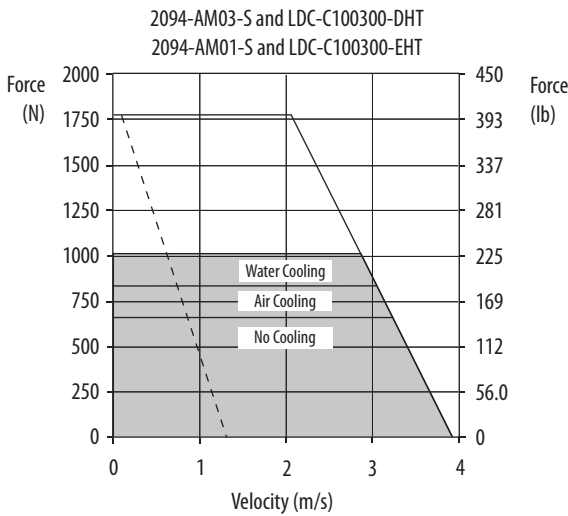
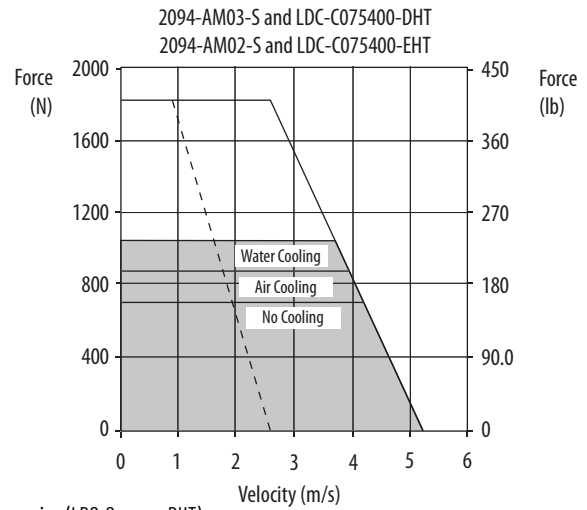
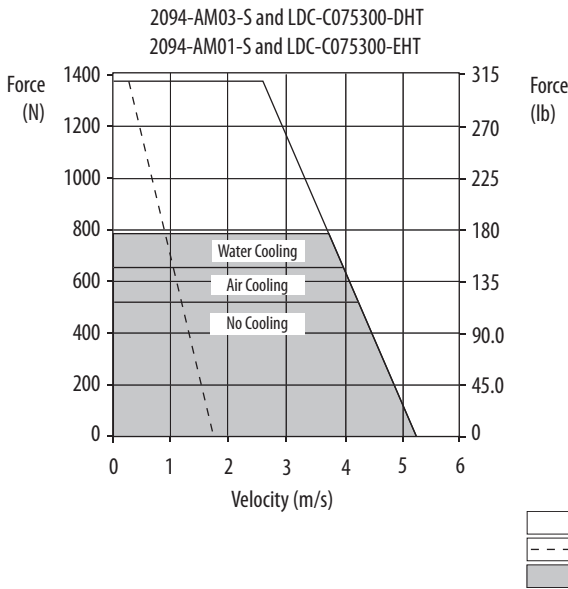
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.



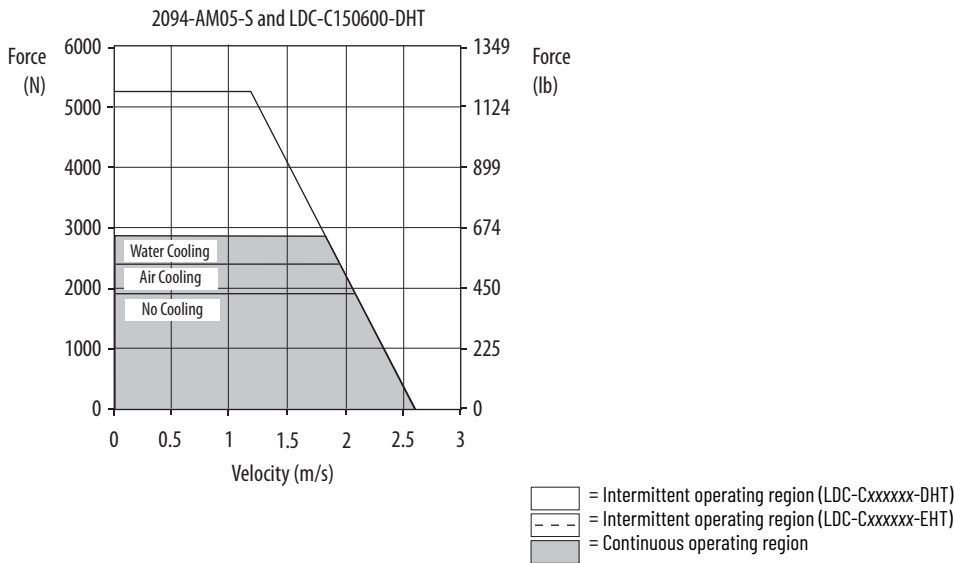
### Kinetix 6000 (200V-class) Drives/Kinetix LDC Linear Motor Curves



### Kinetix 6000 (200V-class) Drives/Kinetix LDC Linear Motor Curves (continued)



## Kinetix 6000 (200V-class) Drives/Kinetix LDC Linear Motor Curves (continued)



## Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with Kinetix LDC Linear Motors

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with Kinetix LDC iron-core linear motors. Included are power and feedback cable catalog numbers, system performance specifications, and the optimum force/velocity curves.

**IMPORTANT** When using Kinetix 6000 (series B and later) drives, which are configured for enhanced peak performance, you can usually achieve full motor performance with a smaller drive. Kinetix 6200 and Kinetix 6500 drives are configured for enhanced peak performance by default. Expect the same peak performance from Kinetix 6200/6500 drives as you get from Kinetix 6000 (series B and later) drives configured for enhanced peak performance.

See Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication [KNX-TD005](#), for more information.

### Kinetix LDC Cable Combinations

Linear Motor	Motor Power Cable	Motor Feedback Cable <sup>(1)</sup>
LDC-C030100-DHT, LDC-C030200-DHT, LDC-C030200-EHT	2090-CPWM7DF-16AAxx (standard, non-flex) 2090-CPWM7DF-16AFxx (continuous-flex)	2090-XXNFMF-Sxx (standard, non-flex) 2090-CFBM7DF-CDAFxx (continuous-flex) Sin/Cos or TTL Encoder Feedback
LDC-C050100-DHT, LDC-C050200-DHT, LDC-C050200-EHT, LDC-C050300-DHT, LDC-C050300-EHT		
LDC-C075200-DHT, LDC-C075200-EHT, LDC-C075300-DHT, LDC-C075300-EHT, LDC-C075400-DHT, LDC-C075400-EHT		
LDC-C100300-DHT, LDC-C100300-EHT, LDC-C100400-DHT, LDC-C100400-EHT, LDC-C100600-DHT		
LDC-C150400-DHT, LDC-C150600-DHT		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix LDC Performance Specifications with Kinetix 6200/6500 (400V-class) Drives

Linear Motor Cat. No.	Speed, Max m/s (ft/s)	System Continuous Stall Current <sup>(1)</sup> Amps 0-pk	System Continuous Stall Force <sup>(1)</sup> N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
LDC-C030100-DHT	10.0 (32.8)	4.1...6.1	74...111 (17...25)	12.1	188 (42)	0.37...0.55	2094-BM01-M
LDC-C030200-DHT		8.1...12.2	148...222 (33...50)	24.3	375 (84)	0.74...1.11	2094-BM02-M
LDC-C030200-EHT		4.1...6.1		12.1			2094-BM01-M
LDC-C050100-DHT	10.0 (32.8)	3.9...5.9	119...179 (27...40)	11.7	302 (68)	0.59...0.89	2094-BM01-M
LDC-C050200-DHT		7.9...11.8	240...359 (54...81)	23.3	600 (135)	1.20...1.79	2094-BM02-M
LDC-C050200-EHT		3.9...5.9		11.6			2094-BM01-M
LDC-C050300-DHT		11.8...17.7		363...544 (82...122)	35.9	941 (212)	2094-BM02-M
LDC-C050300-EHT		3.9...5.9			12.0		2094-BM01-M

Kinetix LDC Performance Specifications with Kinetix 6200/6500 (400V-class) Drives (Continued)

Linear Motor Cat. No.	Speed, Max m/s (ft/s)	System Continuous Stall Current <sup>(1)</sup> Amps 0-pk	System Continuous Stall Force <sup>(1)</sup> N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6200/ Kinetix 6500 400V-class Drives
LDC-C075200-DHT	10.0 (32.8)	7.7...11.5	348...523 (78...117)	22.9	882 (198)	1.74...2.61	2094-BM02-M
LDC-C075200-EHT		3.8...5.7		11.5			2094-BM01-M
LDC-C075300-DHT		11.5...17.2	523...784 (117...176)	35.6	1368 (308)	2.61...3.92	2094-BM02-M
LDC-C075300-EHT		3.8...5.7		11.9			2094-BM01-M
LDC-C075400-DHT		15.3...23.0	697...1045 (157...235)	47.4	1824 (410)	3.48...5.22	2094-BM03-M
LDC-C075400-EHT		7.7...11.5		23.7			2094-BM02-M
LDC-C100300-DHT	10.0 (32.8)	11.1...16.7	674...1012 (152...227)	34.3	1767 (397)	3.37...5.06	2094-BM02-M
LDC-C100300-EHT		3.7...5.6		11.4			2094-BM01-M
LDC-C100400-DHT		14.8...22.2	899...1349 (202...303)	45.7	2356 (530)	4.49...6.74	2094-BM03-M
LDC-C100400-EHT		7.4...11.1		22.8			2094-BM02-M
LDC-C100600-DHT		22.2...33.3	1349...2023 (303...455)	68.5	3534 (794)	6.74...10.11	2094-BM03-M
LDC-C100600-EHT		11.1...16.7		34.3			2094-BM02-M
LDC-C150400-DHT	10.0 (32.8)	14.1...21.1	1281...1922 (288...432)	45.2	3498 (786)	6.40...9.61	2094-BM03-M
LDC-C150400-EHT		7.0...10.6		22.6			2094-BM02-M
LDC-C150600-DHT		21.1...31.7	1922...2882 (432...648)	67.8	5246 (1179)	9.61...14.41	2094-BM03-M
LDC-C150600-EHT		10.6...15.8		33.9			2094-BM02-M

(1) Values represent the range between no cooling (low value) and water cooling (high value).

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

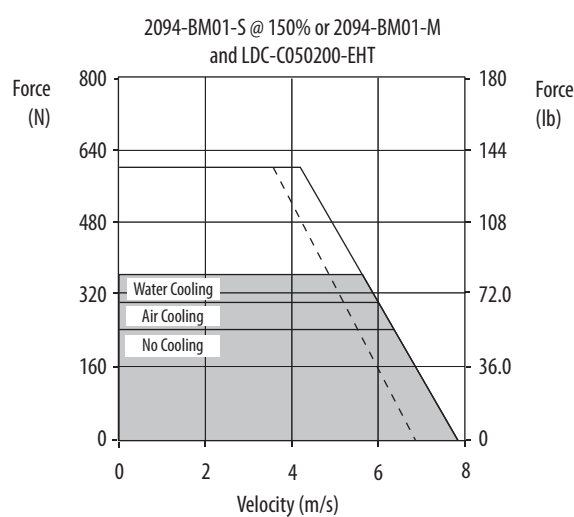
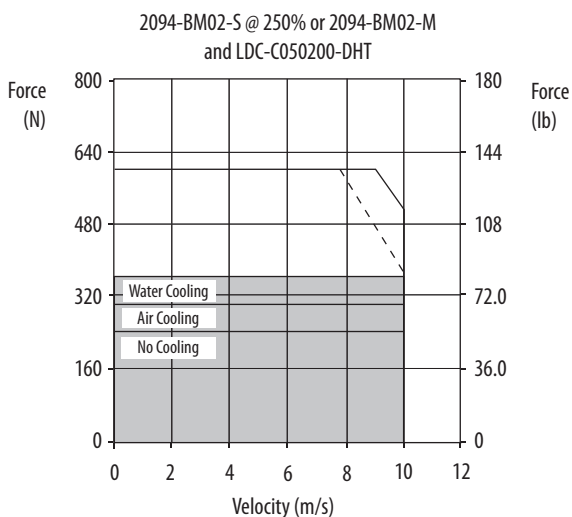
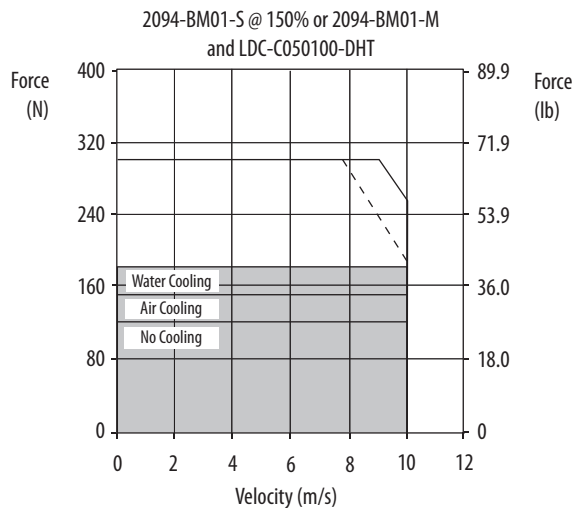
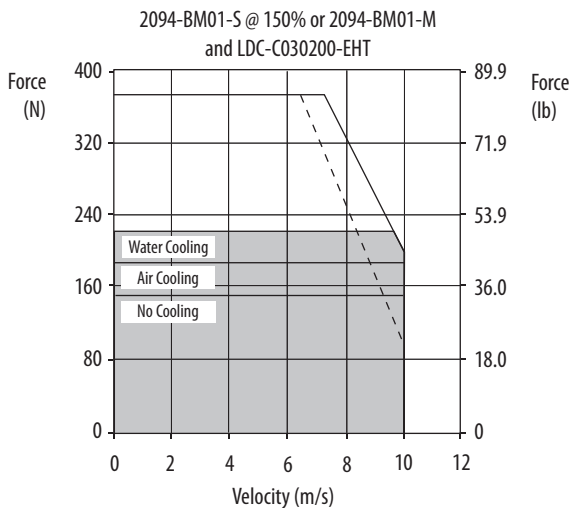
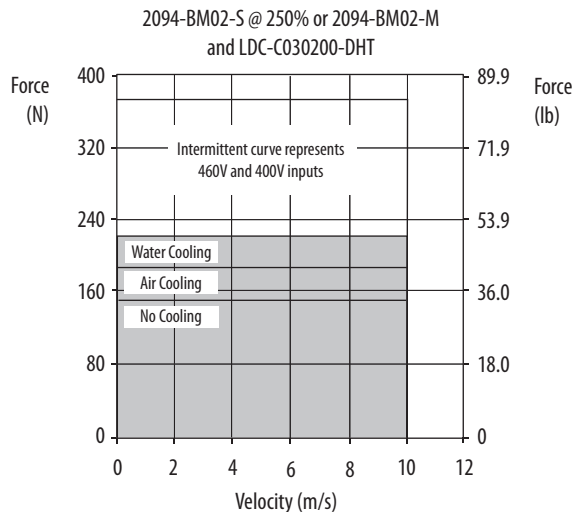
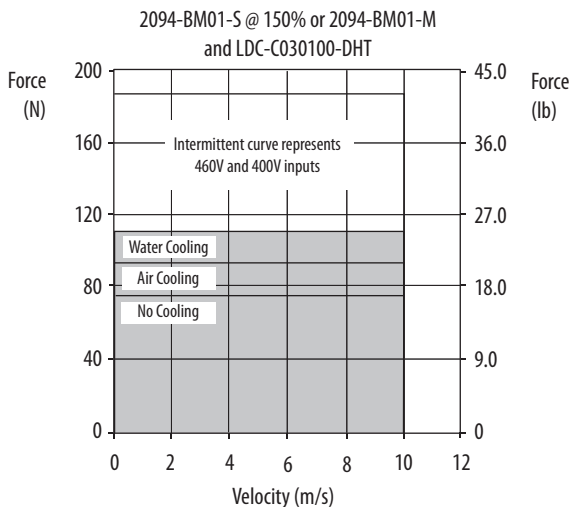
Kinetix LDC Performance Specifications with Kinetix 6000 (400V-class) Drives

Linear Motor	Speed, Max m/s (ft/s)	System Continuous Stall Current <sup>(1)</sup> Amps 0-pk	System Continuous Stall Force <sup>(1)</sup> N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6000 400V-class Drives	
LDC-C030100-DHT	10.0 (32.8)	4.1...6.1	74...111 (17...25)	12.1	188 (42)	0.37...0.55	2094-BM01-S @ 150%	
LDC-C030200-DHT		8.1...12.2	148...222 (33...50)	24.3	375 (84)	0.74...1.11	2094-BM02-S @ 250%	
LDC-C030200-EHT		4.1...6.1		12.1			2094-BM01-S @ 150%	
LDC-C050100-DHT	10.0 (32.8)	3.9...5.9	119...179 (27...40)	11.7	302 (68)	0.59...0.89	2094-BM01-S @ 150%	
LDC-C050200-DHT		7.9...11.8		23.3			600 (135)	2094-BM02-S @ 250%
LDC-C050200-EHT		3.9...5.9	240...359 (54...81)	11.6	941 (212)	1.81...2.72	2094-BM01-S @ 150%	
LDC-C050300-DHT		11.8...17.7		35.9			2094-BM02-S @ 250%	
LDC-C050300-EHT		3.9...5.9	363...544 (82...122)	12.0	1824 (410)	3.48...5.22	2094-BM01-S @ 150%	
LDC-C075200-DHT		7.7...11.5	348...523 (78...117)	22.9			882 (198)	1.74...2.61
LDC-C075200-EHT	3.8...5.7	11.5		2094-BM01-S @ 150%				
LDC-C075300-DHT	10.0 (32.8)	11.5...17.2	523...784 (117...176)	35.6	1368 (308)	2.61...3.92	2094-BM02-S @ 250%	
LDC-C075300-EHT		3.8...5.7		11.9			2094-BM01-S @ 150%	
LDC-C075400-DHT		15.3...23.0	697...1045 (157...235)	47.4	1824 (410)	3.48...5.22	2094-BM03-S @ 250%	
LDC-C075400-EHT		7.7...11.5		23.7			2094-BM02-S @ 250%	
LDC-C100300-DHT		10.0 (32.8)	11.1...16.7	674...1012 (152...227)	34.3	1767 (397)	3.37...5.06	2094-BM02-S @ 250%
LDC-C100300-EHT			3.7...5.6		11.4			2094-BM01-S @ 150%
LDC-C100400-DHT	14.8...22.2		899...1349 (202...303)	45.7	2356 (530)	4.49...6.74	2094-BM03-S @ 250%	
LDC-C100400-EHT	7.4...11.1			22.8			2094-BM02-S @ 250%	
LDC-C100600-DHT	22.2...33.3		1349...2023 (303...455)	68.5	3534 (794)	6.74...10.11	2094-BM03-S @ 250%	
LDC-C100600-EHT	11.1...16.7			34.3			2094-BM02-S @ 250%	
LDC-C150400-DHT	10.0 (32.8)	14.1...21.1	1281...1922 (288...432)	45.2	3498 (786)	6.40...9.61	2094-BM03-S @ 150%	
LDC-C150400-EHT		7.0...10.6		22.6			2094-BM02-S @ 250%	
LDC-C150600-DHT		21.1...31.7	1922...2882 (432...648)	67.8	5246 (1179)	9.61...14.41	2094-BM03-S @ 250%	
LDC-C150600-EHT		10.6...15.8		33.9			2094-BM02-S @ 250%	

(1) Values represent the range between no cooling (low value) and water cooling (high value).

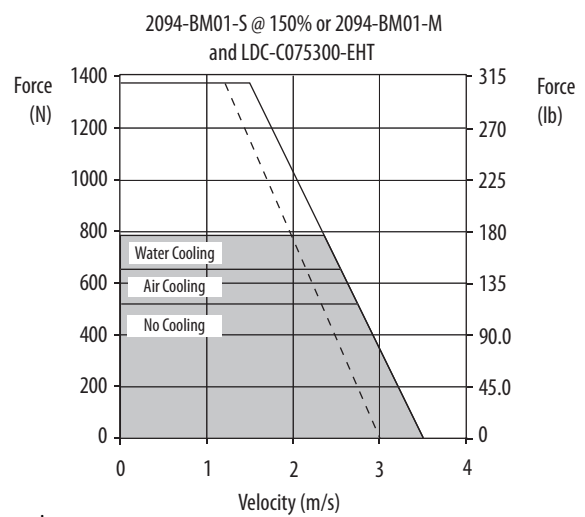
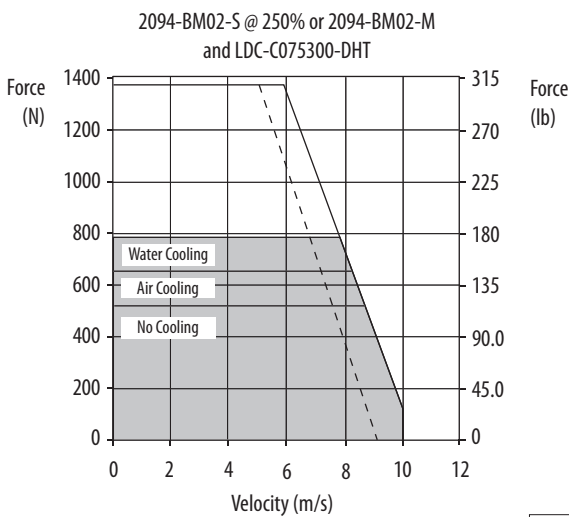
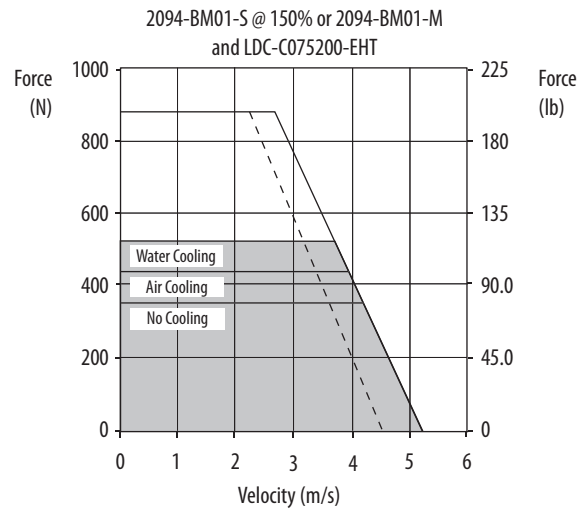
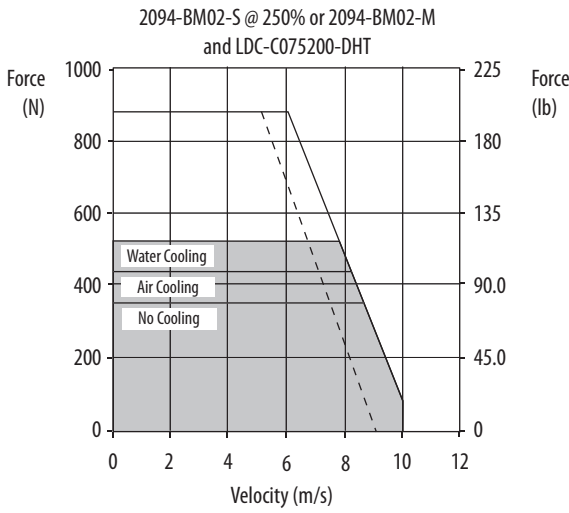
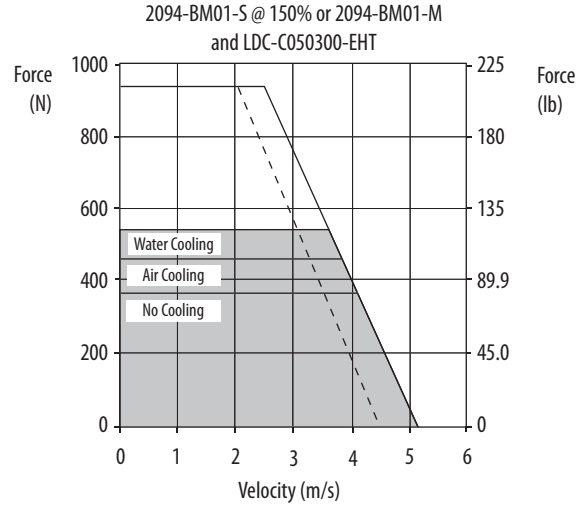
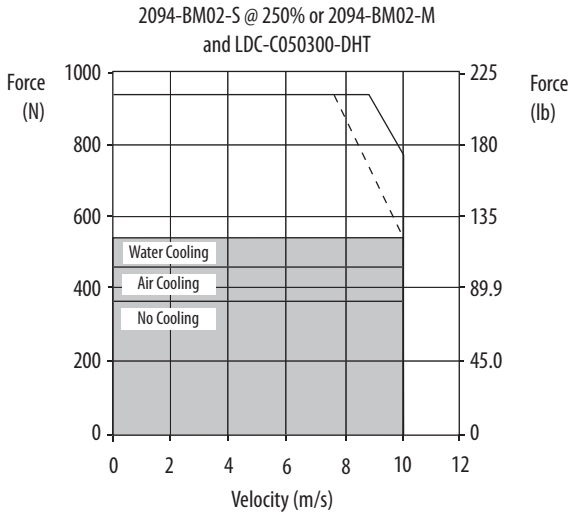
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDC Linear Motor Curves



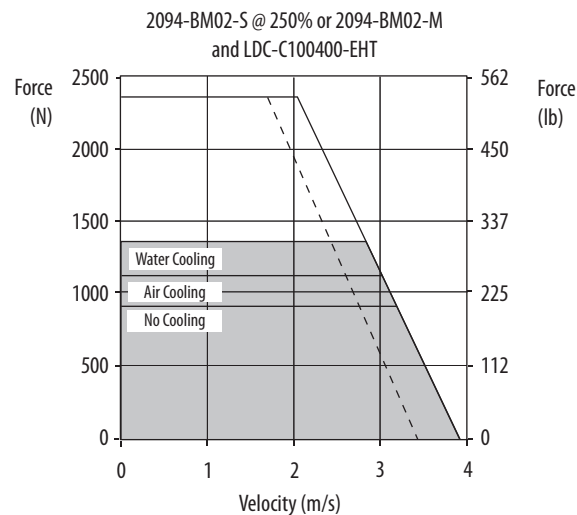
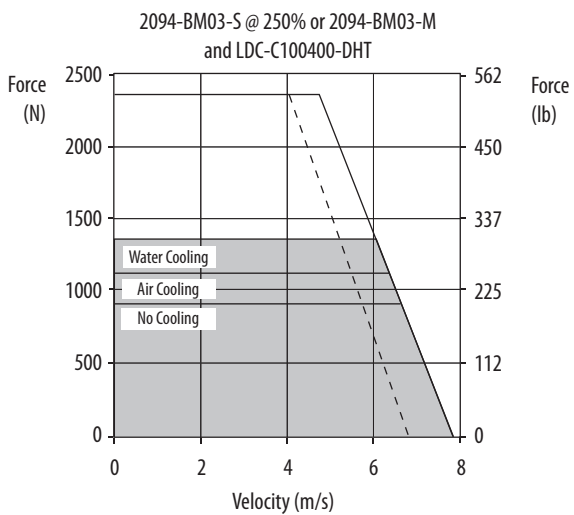
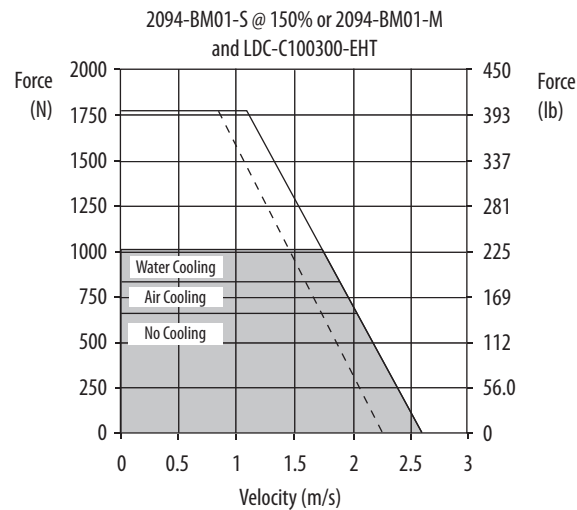
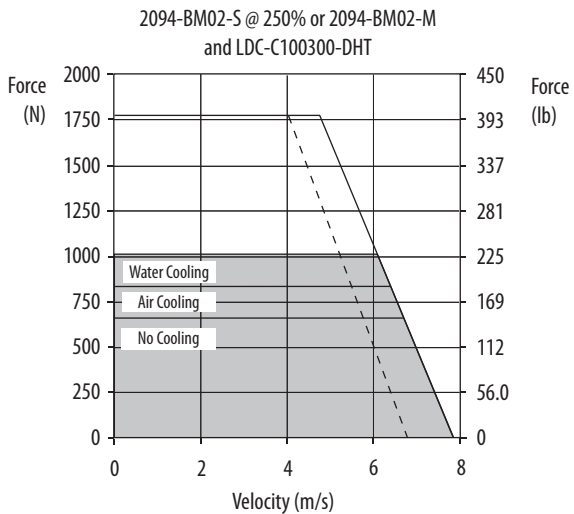
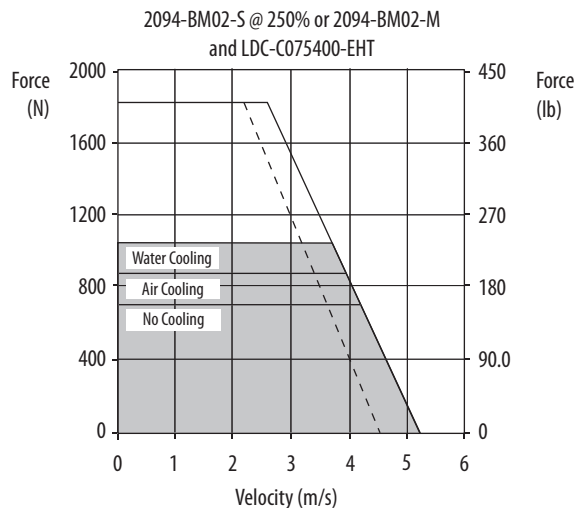
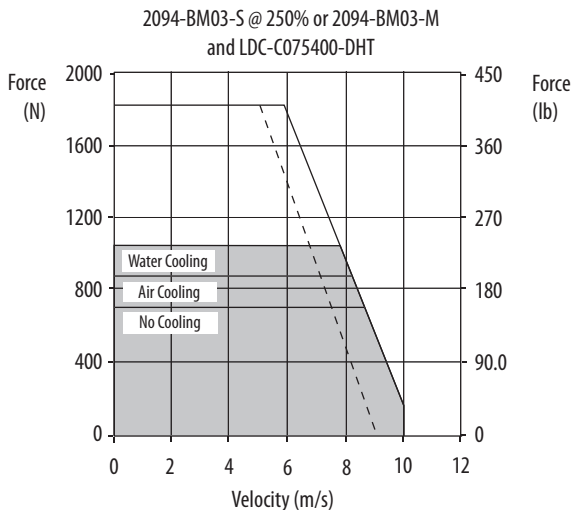
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- = Intermittent operating region with 400V AC rms input voltage
- = Continuous operating region

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDC Linear Motor Curves (continued)



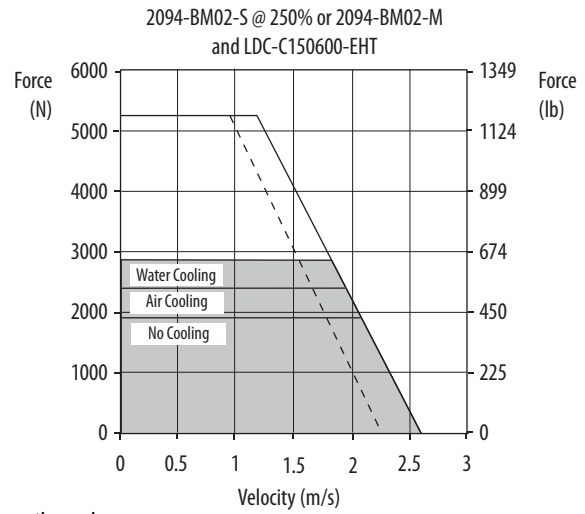
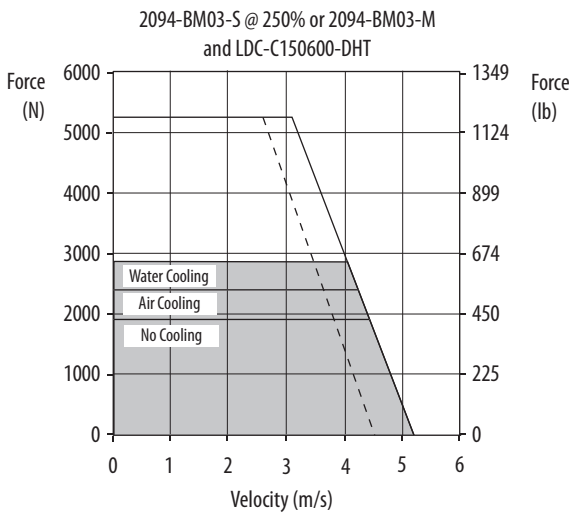
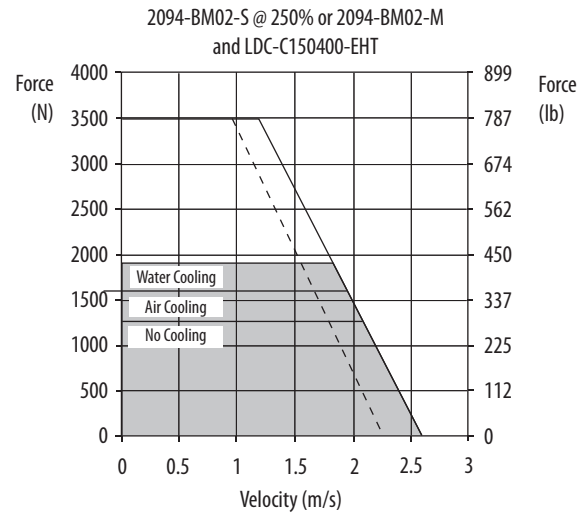
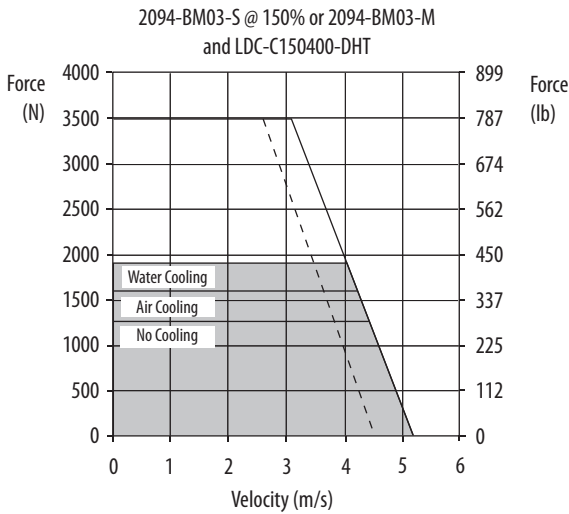
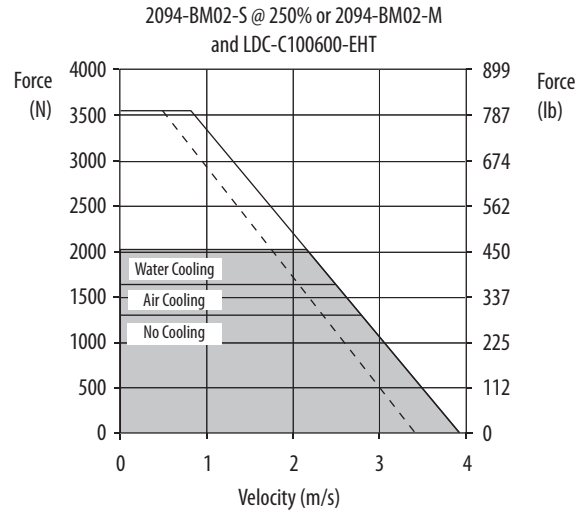
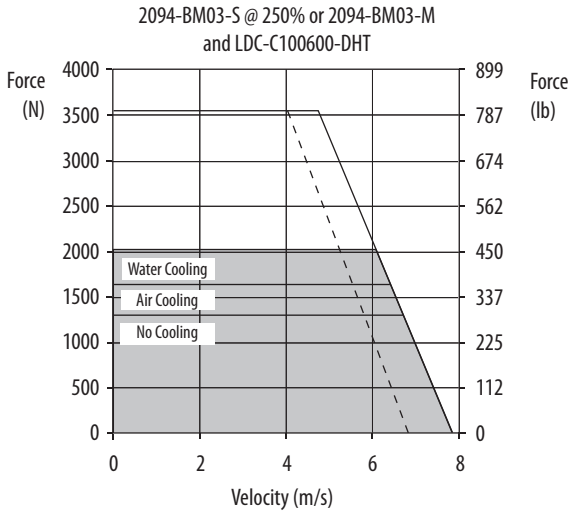
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 = Intermittent operating region with 400V AC rms input voltage  
 = Continuous operating region

**Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDC Linear Motor Curves (continued)**



- = Intermittent operating region
- = Intermittent operating region with 400V AC rms input voltage
- = Continuous operating region

### Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/Kinetix LDC Linear Motor Curves (continued)



- = Intermittent operating region
- = Intermittent operating region with 400V AC rms input voltage
- = Continuous operating region



## Kinetix 6000 (200V-class) Drives with Kinetix LDL Linear Motors

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with Kinetix LDL ironless linear motors. Included are power and feedback cable catalog numbers, system performance specifications, and the optimum force/velocity curves.

### Kinetix LDL Cable Combinations

Linear Motors	Motor Power Cable	Motor Feedback Cable <sup>(1)</sup>
LDL-N030120-DHT, LDL-N030240-DHT, LDL-N030240-EHT	2090-CPWM7DF-16AAxx (standard, non-flex) 2090-CPWM7DF-16AFxx (continuous-flex)	2090-XXNFMF-Sxx (standard, non-flex) 2090-CFBM7DF-CDAFxx (continuous-flex) Sin/Cos or TTL Encoder Feedback
LDL-N050120-DHT, LDL-N050240-DHT, LDL-N050240-EHT, LDL-N050360-DHT, LDL-N050360-EHT, LDL-N050480-DHT, LDL-N050480-EHT		
LDL-N075480-DHT, LDL-N075480-EHT		
LDL-T030120-DHT, LDL-T030240-DHT, LDL-T030240-EHT		
LDL-T050120-DHT, LDL-T050240-DHT, LDL-T050240-EHT, LDL-T050360-DHT, LDL-T050480-DHT, LDL-T050480-EHT		
LDL-T075480-DHT, LDL-T075480-EHT		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. See [Required Drive Accessories on page 3](#).

For cable configuration illustrations and feature descriptions, by catalog number, see [Kinetix 2090 Motor/Actuator Cables Overview](#) beginning on [page 6](#). Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. See [Optional Drive Accessories on page 5](#). Cable length xx is in meters. See the Kinetix Rotary and Linear Motion Cable Specifications, publication [KNX-TD004](#), for standard cable lengths.

### Kinetix LDL Performance Specifications with Kinetix 6000 (200V-class) Drives

Linear Motor Cat. No.	Speed, Max m/s (ft/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6000 200V-class Drives
LDL-N030120-DHT	10.0 (32.8)	3.0	63 (14)	9.9	209 (47)	0.31	2094-AMP5-S
LDL-N030240-DHT		6.0	126 (28)	19.9	417 (94)	0.63	2094-AM01-S
LDL-N030240-EHT		3.0		9.9			
LDL-T030120-DHT		3.0	72 (16)	9.9	239 (54)	0.36	2094-AMP5-S
LDL-T030240-DHT		6.0	144 (32)	19.9	479 (108)	0.72	2094-AM01-S
LDL-T030240-EHT		3.0		9.9			

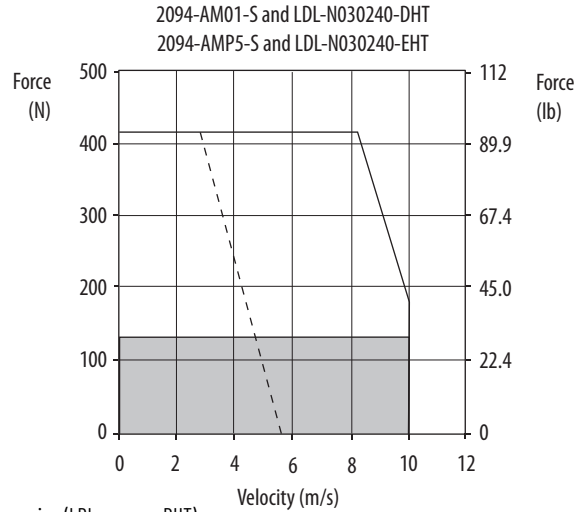
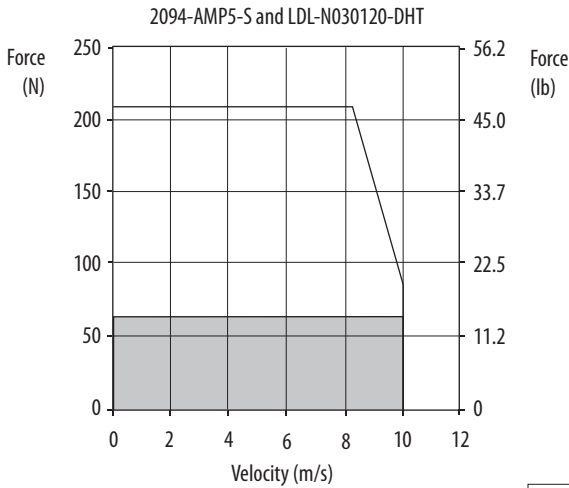
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

### Kinetix LDL Performance Specifications with Kinetix 6000 (200V-class) Drives (continued)

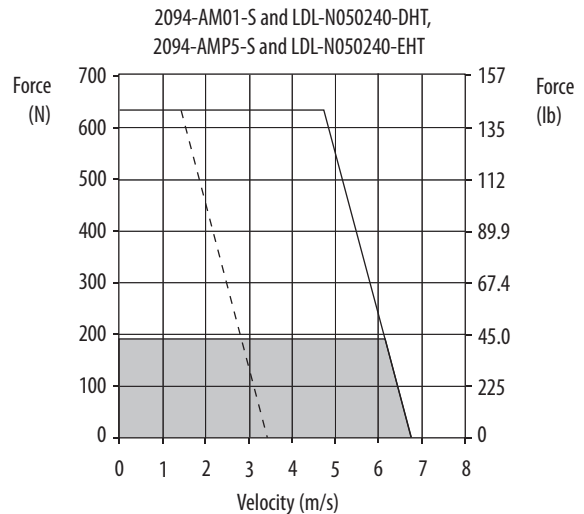
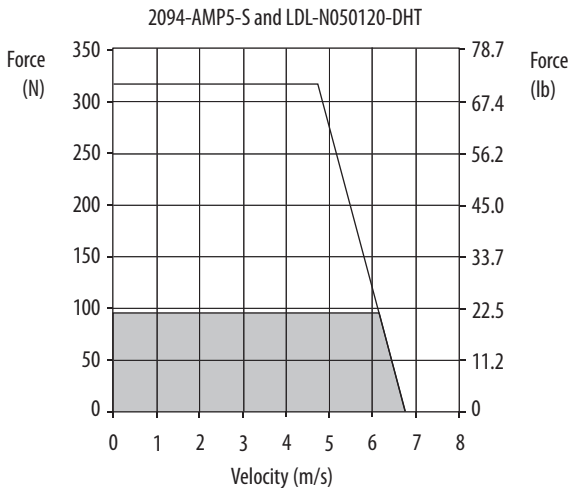
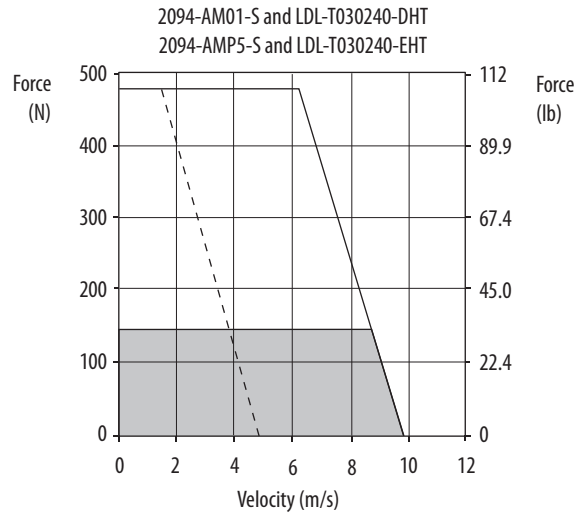
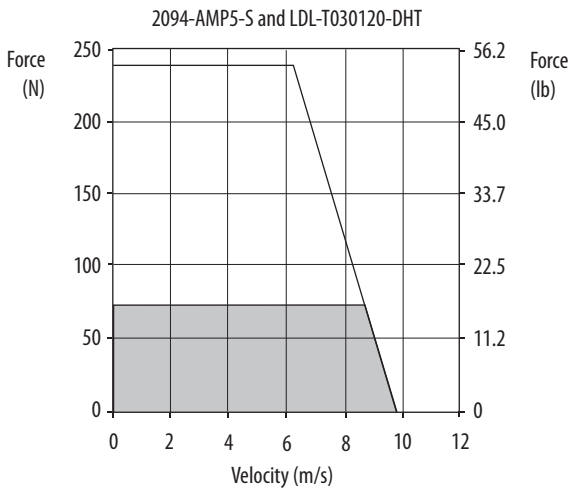
Linear Motor Cat. No.	Speed, Max m/s (ft/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6000 200V-class Drives
LDL-N050120-DHT	10.0 (32.8)	2.7	96 (22)	9.1	317 (71)	0.48	2094-AMP5-S
LDL-N050240-DHT		5.5	191 (43)	18.1	635 (143)	0.95	2094-AM01-S
LDL-N050240-EHT		2.7		9.1			
LDL-N050360-DHT		8.2	287 (65)	27.2	952 (214)	1.43	2094-AM02-S
LDL-N050360-EHT		2.7		9.1			
LDL-N050480-DHT		10.9	383 (86)	36.3	1269 (285)	1.91	2094-AM03-S
LDL-N050480-EHT		5.5		18.1			
LDL-T050120-DHT		2.7	110 (25)	9.1	364 (82)	0.55	2094-AMP5-S
LDL-T050240-DHT		5.5	220 (49)	18.1	728 (164)	1.10	2094-AM01-S
LDL-T050240-EHT		2.7		9.1			
LDL-T050360-DHT		8.2	329 (74)	27.2	1093 (246)	1.64	2094-AM02-S
LDL-T050480-DHT		10.9	439 (99)	36.3	1457 (327)	2.19	2094-AM03-S
LDL-T050480-EHT		5.5		18.1			
LDL-N075480-DHT		10.0 (32.8)	9.9	519 (117)	32.8	1723 (387)	2.59
LDL-N075480-EHT	4.9		16.4				
LDL-T075480-DHT	9.9		596 (134)	32.8	1977 (444)	2.98	2094-AM03-S
LDL-T075480-EHT	4.9			16.4			

Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, see Motion Analyzer.

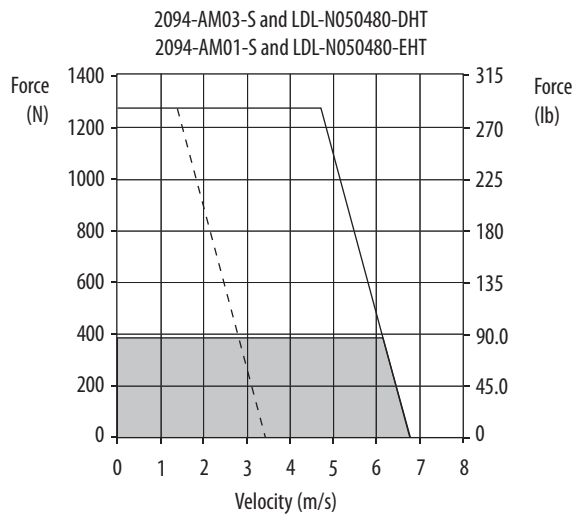
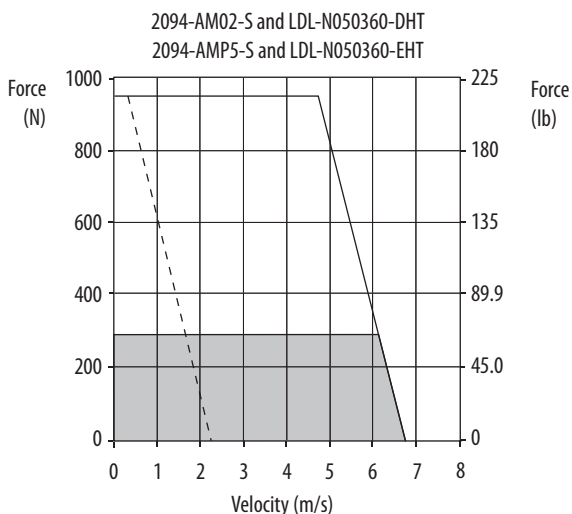
### Kinetix 6000 (200V-class) Drives/Kinetix LDL Linear Motor Curves



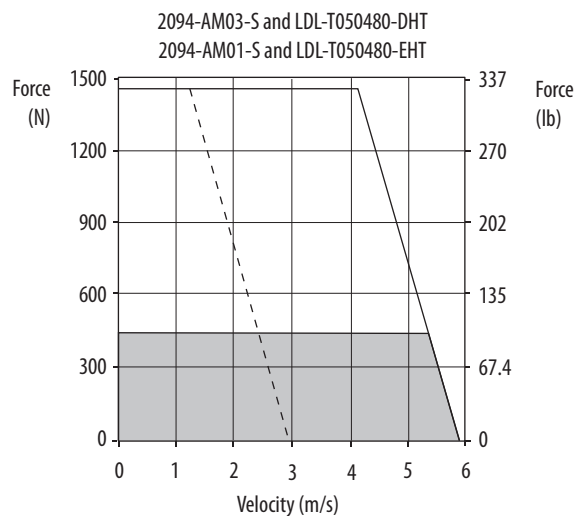
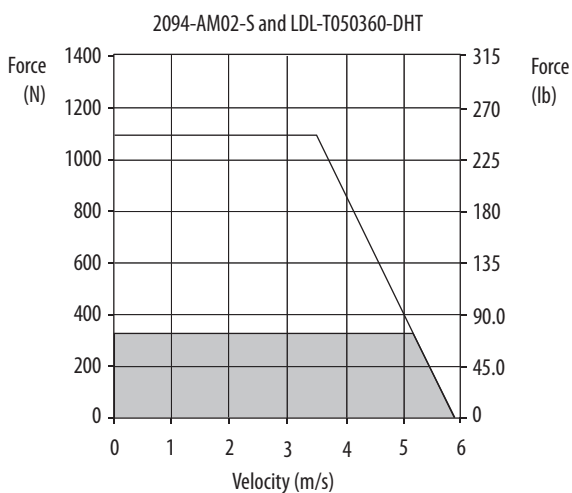
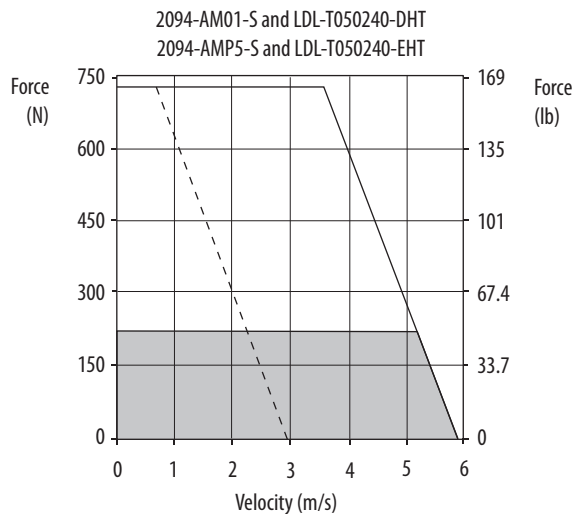
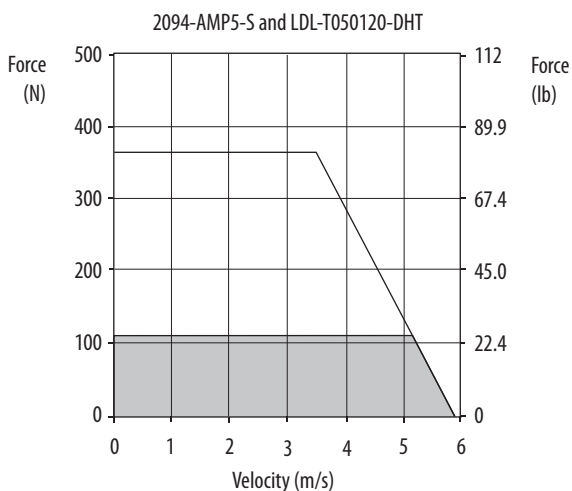
= Intermittent operating region (LDL-xxxxxx-DHT)  
 = Intermittent operating region (LDL-xxxxxx-EHT)  
 = Continuous operating region



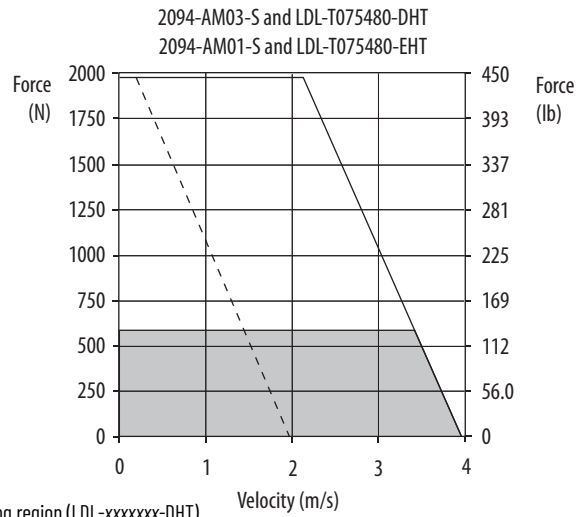
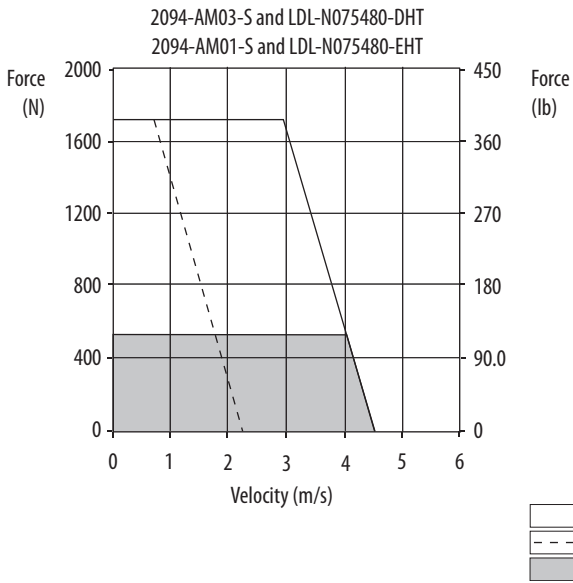
**Kinetix 6000 (200V-class) Drives/Kinetix LDL Linear Motor Curves (continued)**



= Intermittent operating region (LDL-xxxxxxx-DHT)  
 = Intermittent operating region (LDL-xxxxxxx-EHT)  
 = Continuous operating region



**Kinetix 6000 (200V-class) Drives/Kinetix LDL Linear Motor Curves (continued)**



## Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Kinetix Rotary Motion Specifications, publication <a href="#">KNX-TD001</a>	Provides product specifications for Kinetix VPL, VPC, VPF, VPH, VPS, Kinetix MPL, MPM, MPF, MPS; Kinetix TL and TLY, Kinetix RDB, Kinetix MMA, and Kinetix HPK rotary motors.
Kinetix Linear Motion Specifications, publication <a href="#">KNX-TD002</a>	Provides product specifications for Kinetix MPAS and MPMA linear stages, Kinetix VPAR, MPAR, and MPAL electric cylinders, and Kinetix LDC and Kinetix LDL linear motors.
Kinetix Rotary and Linear Motion Cable Specifications, publication <a href="#">KNX-TD004</a>	Product specifications for Kinetix 2090 motor and interface cables.
Kinetix 3, 300, 350, 2000, 6000, 6200, 6500, 7000 Servo Drives Specifications, publication <a href="#">KNX-TD005</a>	Provides product specifications for Kinetix Integrated Motion over the EtherNet/IP network (Kinetix 6500 and Kinetix 350), Integrated Motion over Sercos interface (Kinetix 6200, Kinetix 6000, Kinetix 2000, and Kinetix 7000), and component (Kinetix 3) servo drive families.
Kinetix Motion Control Selection Guide, publication <a href="#">KNX-SG001</a>	Provides an overview of Kinetix servo drives, motors, actuators, and motion accessories that are designed to help make initial decisions for the motion control products best suited for your system requirements.
Kinetix 5700 Drive Systems Design Guide, publication <a href="#">KNX-RM010</a>	Provides information to determine and select the required (drive specific) drive module, power accessory, connector kit, motor cable, and interface cable catalog numbers for your drive and motor/actuator motion control system. Includes system performance specifications and torque/speed curves (rotary motion) and force/velocity curves (linear motion) for your motion application.
Kinetix 5500 Drive Systems Design Guide, publication <a href="#">KNX-RM009</a>	
Kinetix 300/350 Drive Systems Design Guide, publication <a href="#">KNX-RM004</a>	
Kinetix 3 Drive Systems Design Guide, publication <a href="#">KNX-RM005</a>	
Kinetix 2000 Drive Systems Design Guide, publication <a href="#">KNX-RM006</a>	
Kinetix 7000 Drive Systems Design Guide, publication <a href="#">KNX-RM007</a>	
Kinetix 6000 Multi-axis Servo Drives User Manual, publication <a href="#">2094-UM001</a>	Provides information on installing, configuring, startup, troubleshooting, and applications for your Kinetix servo drive system.
Kinetix 6200 and Kinetix 6500 Modular Servo Drives User Manual, publication <a href="#">2094-UM002</a>	
Kinetix 6200 and Kinetix 6500 Safe Speed Monitoring Servo Drives Safety Reference Manual, publication <a href="#">2094-RM001</a>	Provides information on wiring, configuring, and troubleshooting the safe-speed features of your Kinetix 6200 and Kinetix 6500 drives.
Kinetix 6200 and Kinetix 6500 Safe Torque Off Servo Drives Safety Reference Manual, publication <a href="#">2094-RM002</a>	Provides information on wiring, configuring, and troubleshooting the Safe Torque Off features of your Kinetix 6200 and Kinetix 6500 drives.
Kinetix Safe-Torque off Feature Safety Reference Manual, publication <a href="#">GMC-RM002</a>	Provides information on wiring and troubleshooting your Kinetix 6000 and Kinetix 7000 servo drives with the Safe Torque Off feature.
System Design for Control of Electrical Noise Reference Manual, publication <a href="#">GMC-RM001</a>	Provides information, examples, and techniques that are designed to minimize system failures caused by electrical noise.
ControlLogix Selection Guide, publication <a href="#">1756-SG001</a>	Provides information to determine which ControlLogix controller fits your application and the product specifications to help design a ControlLogix system and select the appropriate components.
CompactLogix Selection Guide, publication <a href="#">1769-SG001</a>	Provides information to determine which CompactLogix™ controller fits your application and the product specifications to help design a CompactLogix system and select the appropriate components.
Motion Analyzer Sizing and Selection Tool Website <a href="https://motionanalyzer.rockwellautomation.com/">https://motionanalyzer.rockwellautomation.com/</a>	Comprehensive motion application sizing tool used for analysis, optimization, selection, and validation of your Kinetix Motion Control system.
Product Certifications website, <a href="http://rok.auto/certifications">rok.auto/certifications</a>	Online product selection and system configuration tools, including AutoCAD (DXF) drawings.

You can view or download publications at [rok.auto/literature](http://rok.auto/literature).

# Rockwell Automation Support

Use these resources to access support information.

<b>Technical Support Center</b>	Find help with how-to videos, FAQs, chat, user forums, Knowledgebase, and product notification updates.	<a href="http://rok.auto/support">rok.auto/support</a>
<b>Local Technical Support Phone Numbers</b>	Locate the telephone number for your country.	<a href="http://rok.auto/phonesupport">rok.auto/phonesupport</a>
<b>Technical Documentation Center</b>	Quickly access and download technical specifications, installation instructions, and user manuals.	<a href="http://rok.auto/techdocs">rok.auto/techdocs</a>
<b>Literature Library</b>	Find installation instructions, manuals, brochures, and technical data publications.	<a href="http://rok.auto/literature">rok.auto/literature</a>
<b>Product Compatibility and Download Center (PCDC)</b>	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	<a href="http://rok.auto/pcdc">rok.auto/pcdc</a>

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## Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at [rok.auto/pec](http://rok.auto/pec).

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Publication KNX-RM003C-EN-P - August 2022 | Supersedes Publication KNX-RM003B-EN-P - March 2019

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