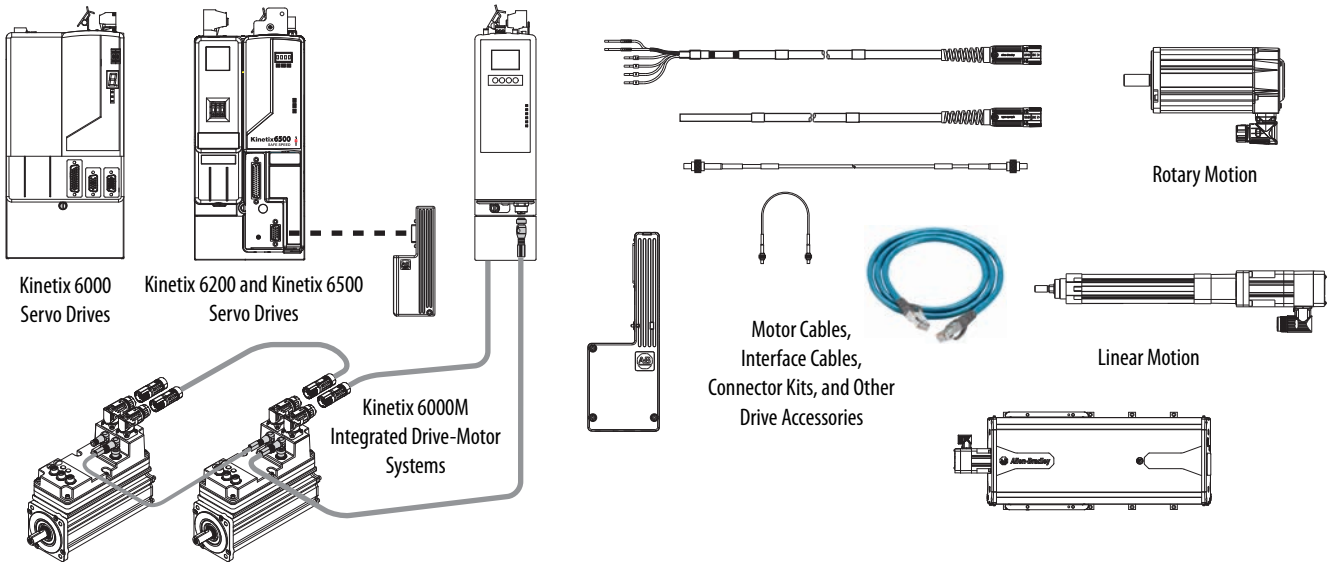
Allen-Bradley

Kinetix 6000 and Kinetix 6200/6500 Drive Systems

Catalog Numbers 2094-AC*xx*-M*xx*-S, 2094-BC*xx*-M*xx*-S, 2094-AM*xx*-S, 2094-BM*xx*-S
2094-BC*xx*-M*xx*-M, 2094-BM*xx*-M, 2094-SE02F-M00-S*x*, 2094-EN02D-M01-S*x*, 2094-SEPM-B24-S



LISTEN. THINK. SOLVE.®

Introduction

This publication assumes that your application uses the Kinetix® 6000, Kinetix 6200, or Kinetix 6500 drive family and that you have already determined your motor/actuator series. To revisit those decisions, refer to the Kinetix Motion Control Selection Guide, publication GMC-SG001, or Motion Analyzer software.

With Kinetix 6000 and Kinetix 6200 drive systems, Kinetix 6000M integrated drive-motor (IDM) systems are another option. Cables between the IDM units and the IDM power interface module (IPIM) are unique to IDM systems. Accessories shared with the Bulletin 2094 drive system include sercos fiber-optic cables and safe-off headers and cables.

The purpose of this publication is to assist you in identifying the drive system components and accessory items you'll need for your drive and motor/actuator combination or Kinetix 6000M integrated drive-motor system. Diagrams in this publication illustrate how many of the common drive accessory items are used in a typical system, but refer to the Kinetix Motion Accessories Technical Data, publication GMC-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 matched to the drive with optimum performance

Performance specification data and curves reflect 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 not shown in this publication, refer to Motion Analyzer software.

IMPORTANT These system combinations do not include all possible motor/drive combinations. Please refer to Motion Analyzer software to verify compatibility. Download from http://www.ab.rockwellautomation.com/motion-control/motion-analyzer-software.

Studio 5000 Environment

The Studio 5000™ Engineering and Design Environment combines engineering and design elements into a common environment. The first element in the Studio 5000 environment is the Logix Designer application. The Logix Designer application is the rebranding of RSLogix™ 5000 software and will continue to be the product to program Logix5000™ controllers for discrete, process, batch, motion, safety, and drive-based solutions.

The Studio 5000 environment is the foundation for the future of Rockwell Automation® engineering design tools and capabilities. It is the one place for design engineers to develop all the elements of their control system.

Kinetix 6000 and Kinetix 6200/6500 Drive Systems

For each Kinetix 6000, Kinetix 6200, or Kinetix 6500 drive system, you need to know the drive and motor/actuator catalog numbers 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, AC line filter, and others. Example diagrams of the required equipment listed on this page are shown on page 5.

For Kinetix 6000M integrated drive-motor system information including cables and torque/speed curves, refer to page 9.

For Kinetix 6000 and Kinetix 6200/6500 (rotary motion) system combinations, refer to page 17. For linear motion system combinations, refer to page 86.

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. (1)	Continuous Output Ratings		Slot Usage	Quantity
		Converter (A_{DC})	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	Up to 3 for each 8-axis power rail
	2094-BM05-S		22.0 kW, 49 A		

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

Refer to the Kinetix Servo Drives Technical Data, publication GMC-TD003, 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_{DC})	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	Up to 3 for each 8-axis power rail
	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)	2094-EN02D-M01-S0, Safe Torque-off				
	2094-EN02D-M01-S1, Safe speed monitoring				

Refer to the Kinetix Servo Drives Technical Data, publication GMC-TD003, 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-PRS*x*, 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		
		2090-K6CK-KENDAT (1)	N/A	N/A
	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-SCEP*x-x*		N/A
	Plastic, on-machine duty	2090-SCNP*x-x*		
	Plastic, outdoor and conduit duty	2090-SCVP*x-x*		
	Glass, outdoor and conduit duty	2090-SCVG*x-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	Refer to the specific drive/motor combination for the motor cables required for your system.			

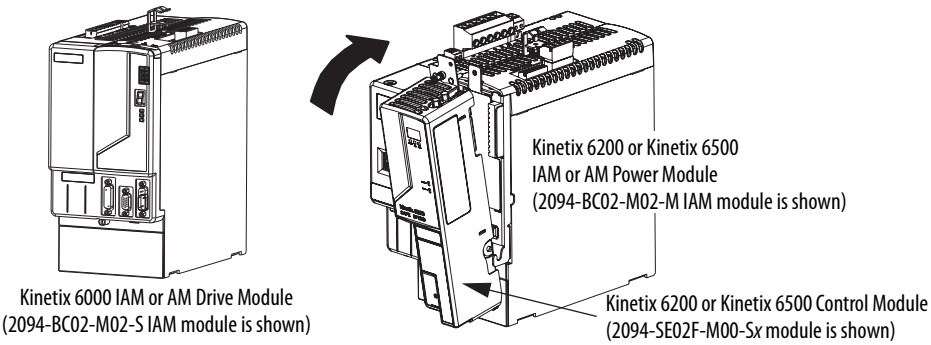
(1) Applies to only Bulletin RDB direct-drive motors with EnDat encoder.

Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for detailed descriptions and specifications of these required servo drive accessories.

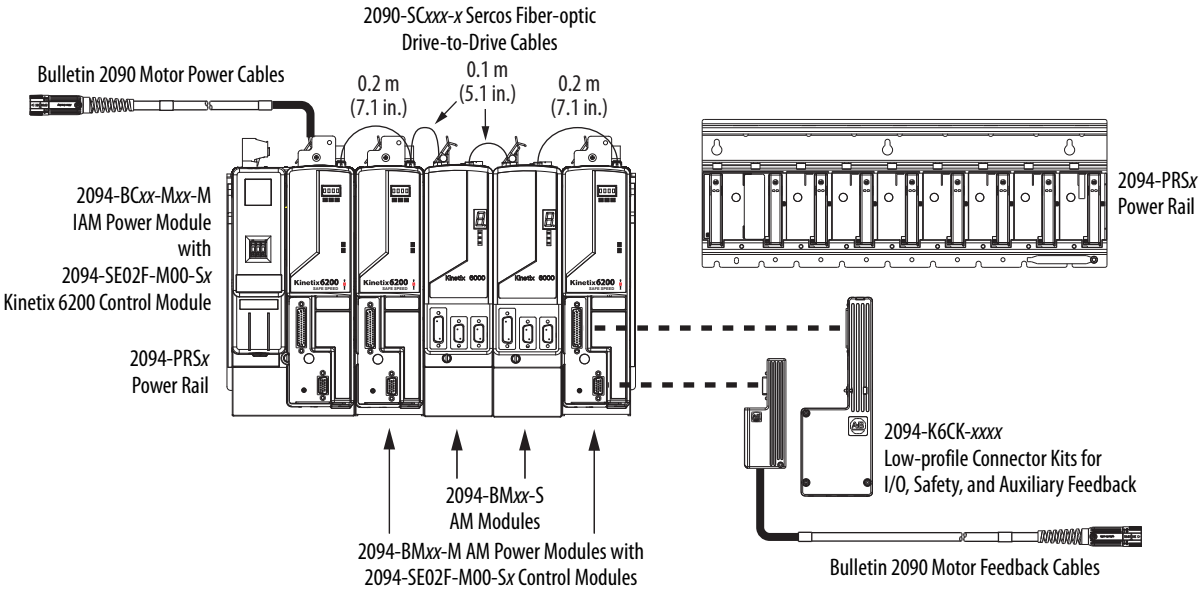
Kinetix 6000 and Kinetix 6200/6500 System Examples

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

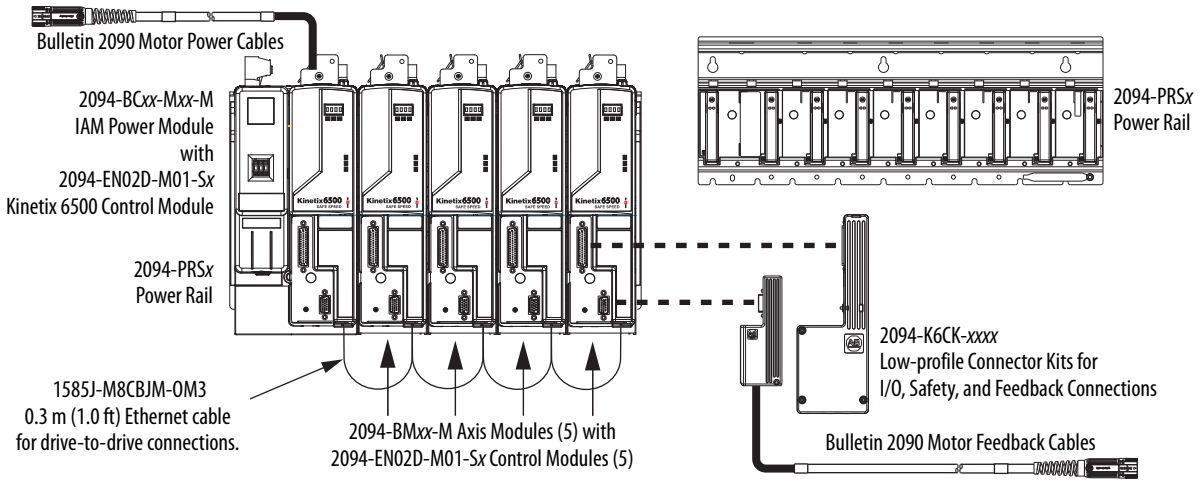
Drive Module Examples



Kinetix 6000 and Kinetix 6200 Drive System Example (sercos interface)



Kinetix 6500 Drive System Example (EtherNet/IP network)

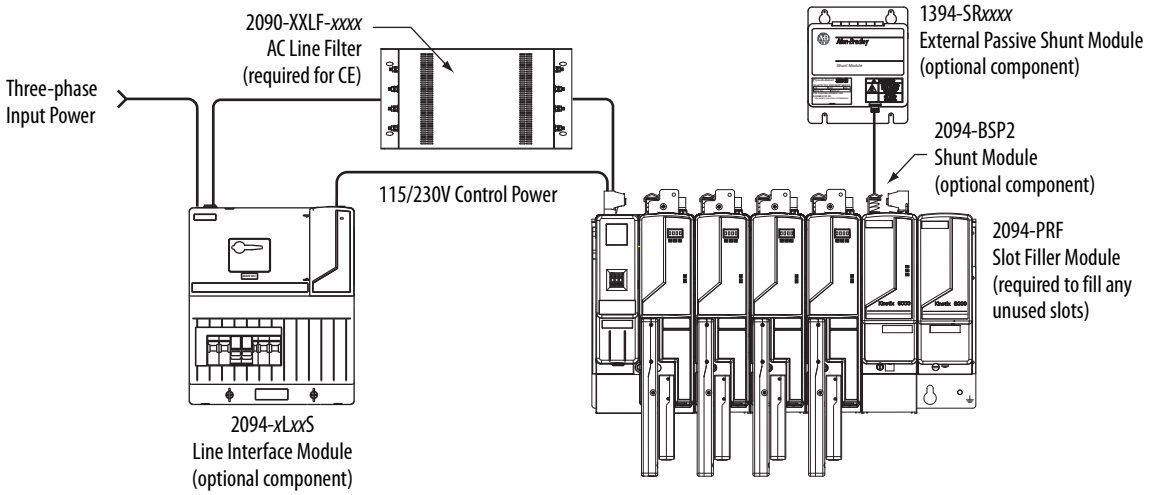


Optional Drive Accessories

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-AL*xx*S, 2094-AL09, 2094-BL*xx*S, 2094-BL02, 2094-XL75S-C*x*	2094-BL*xx*S, 2094-BL02, 2094-XL75S-C*x*	
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-SR*xxx*		
Safety headers (1)	Cascading safe-off connections from drive-to-drive	2090-XNSM-*x*	N/A	
Safety interface cables (1)		1202-C*xx*	2090-CS0DSDS-AA*xx*	
2094 mounting brackets	Panel space-saving brackets that let you mount the line filter behind the LIM module or power rail	2094-XNBRKT-1		
External auxiliary encoders	Allen-Bradley® sine/cosine and incremental external encoders	Bulletin 842A, 844D, 845H, and 845T		
Connector sets	Replacement connectors for input power, control power, motor power, and others	2094-*xxx*CON, 2094-*xxx*INV, and 2094-XNSHT		
Resistive brake module (RBM)	Physically and electrically separate the drive power output from its corresponding motor	2090-XB*xxx-xx*		
RBM interface cables	Motor power, RBM to drive	2090-XXNRB-10F0P5		
		2090-XXNRB-8F0P6		
8720MC regenerative power supply (RPS)	Power components required in regenerative applications	8720MC-RPS*xxx*		
8720MC line reactors		8720MC-LR*xx-xxxx*		

(1) For drive system examples of safe-off headers and cables, refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004.

Kinetix 6000 and Kinetix 6200/6500 Power Accessories Example

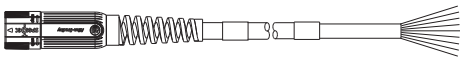
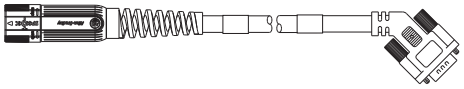
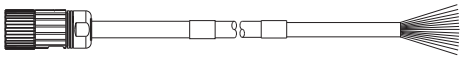
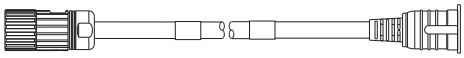
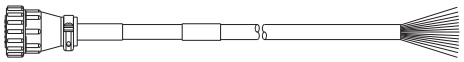
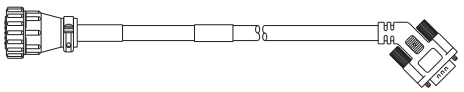


Motor-end cable connector kits, for use when building your own cables, and panel-mounted breakout components are also available. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for detailed descriptions and specifications of optional servo drive accessories.

For Kinetix 6000 and Kinetix 6200/6500 (rotary motion) system combinations, refer to page 17. For linear motion system combinations, refer to page 86.

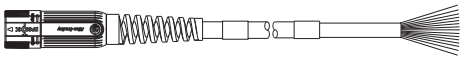
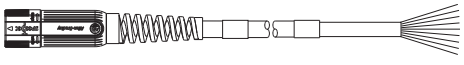
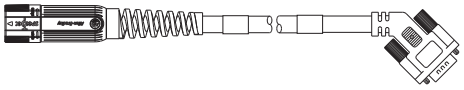
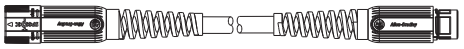
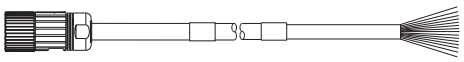
2090-Series Motor/Actuator Cables Overview

Feedback Cable Descriptions (standard, non-flex)

Standard Cable Cat. No.	Description	Cable Configuration		Motor/Actuator Connector
		Motor/Actuator End	Drive End	
2090-CFBM7DF-CEAA*xx*	• Drive-end flying-leads (DF) • High-resolution or resolver applications (CE)			SpeedTec DIN (M7)
2090-CFBM7DD-CEAA*xx*	• Drive-end 15-pin connector (DD) • High-resolution or resolver applications (CE)			
2090-XXNFMF-S*xx*	• Drive-end flying-leads • High-resolution or incremental applications			Threaded DIN (M4)
2090-CFBM4E2-CATR	• Drive-end bayonet (E2), transition (TR) cable (1) • Motor-end threaded DIN (M4) • All feedback types (CA)			
2090-CFBM6DF-CBAA*xx*	• Drive-end flying-leads (DF) • High-resolution, battery backup or Incremental applications (CB)			Circular Plastic (M6)
2090-CFBM6DD-CCAA*xx*	• Drive-end 15-pin connector (DD) • Incremental applications only (CC)			

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

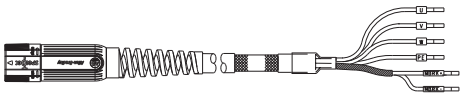
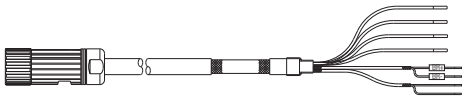
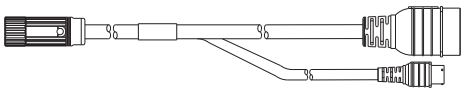
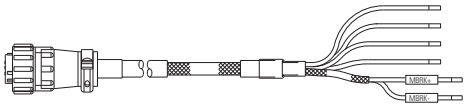
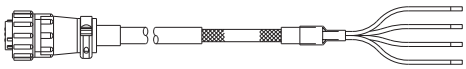
Feedback Cable Descriptions (continuous-flex)

Continuous-flex Cable Cat. No.	Description	Cable Configuration		Motor/Actuator Connector
		Motor/Actuator End	Drive End	
2090-CFBM7DF-CDAF*xx*	• Drive-end flying-leads (DF) • High-resolution or incremental applications (CD)			SpeedTec DIN (M7)
2090-CFBM7DF-CEAF*xx*	• Drive-end flying-leads (DF) • High-resolution or resolver applications (CE)			
2090-CFBM7DD-CEAF*xx*	• Drive-end 15-pin connector (DD) • High-resolution or resolver applications (CE)			
2090-CFBM7E7-CDAF*xx* 2090-CFBM7E7-CEAF*xx*	• Drive-end (male) connector, extension (E7) (1) • Motor-end SpeedTec DIN cable plug (M7)			
2090-CFBM4DF-CDAF*xx*	• Drive-end flying-leads • High-resolution or incremental applications			Threaded DIN (M4)

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

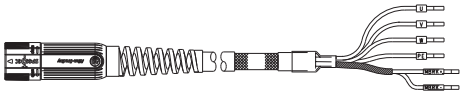
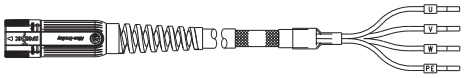
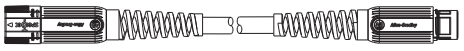
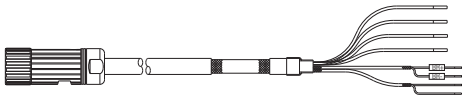
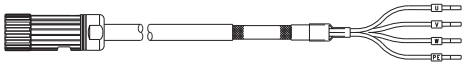
IMPORTANT Feedback cables with the CE designation, for example 2090-CFBM7DF-CEAA*xx*, are intended for high-resolution encoder or resolver applications and have fewer conductors than feedback cables with the CD designation, for example 2090-CFBM7DF-CDAF*xx*, which are intended for high-resolution or 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-*xx*AA*xx*	• Drive-end flying-leads (DF) • Power/brake wires (PB)			SpeedTec DIN (M7)
2090-CPWM7DF-*xx*AA*xx*	• Drive-end flying-leads (DF) • Power wires only (PW)			
2090-XXNPMF-*xx*S*xx*	• Drive-end flying-leads • Power/brake wires			Threaded DIN (M4)
2090-CPBM4E2-*xx*TR	• Drive-end bayonet (E2), transition (TR) cable (1) • Motor-end threaded DIN (M4) • Power/brake wires (PB)			
2090-CPWM4E2-*xx*TR	• Drive-end bayonet (E2), transition (TR) cable (1) • Motor-end threaded DIN (M4) • Power wires only (PW)			
2090-CPBM6DF-16AA*xx*	• Drive-end flying-leads (DF) • Power/brake wires (PB)			Circular Plastic (M6)
2090-CPWM6DF-16AA*xx*	• Drive-end flying-leads (DF) • Power wires only (PW)			

(1) Threaded DIN connector (motor end) and bayonet connector for 2090-XXNFMP-S*xx* 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-*xx*AF*xx*	• Drive-end flying-leads (DF) • Power/brake wires (PB)			SpeedTec DIN (M7)
2090-CPWM7DF-*xx*AF*xx*	• Drive-end flying-leads (DF) • Power wires only (PW)			
2090-CPBM7E7-*xx*AF*xx*	• Drive-end (male) connector, extension (E7) (1) • Motor-end SpeedTec DIN cable plug (M7)			
2090-CPBM4DF-*xx*AF*xx*	• Drive-end flying-leads (DF) • Power/brake wires (PB)			Threaded DIN (M4)
2090-CPWM4DF-*xx*AF*xx*	• Drive-end flying-leads (DF) • Power wires only (PW)			

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

Kinetix 6000M Integrated Drive-Motor Systems

For each Kinetix 6000M integrated drive-motor system, you need to know the integrated drive-motor (IDM) unit and IDM power interface module (IPIM) catalog numbers. The IPIM module is compatible with the Bulletin 2094 power rail in any configuration with Kinetix 6000 or Kinetix 6200 (400V-class) drive systems.

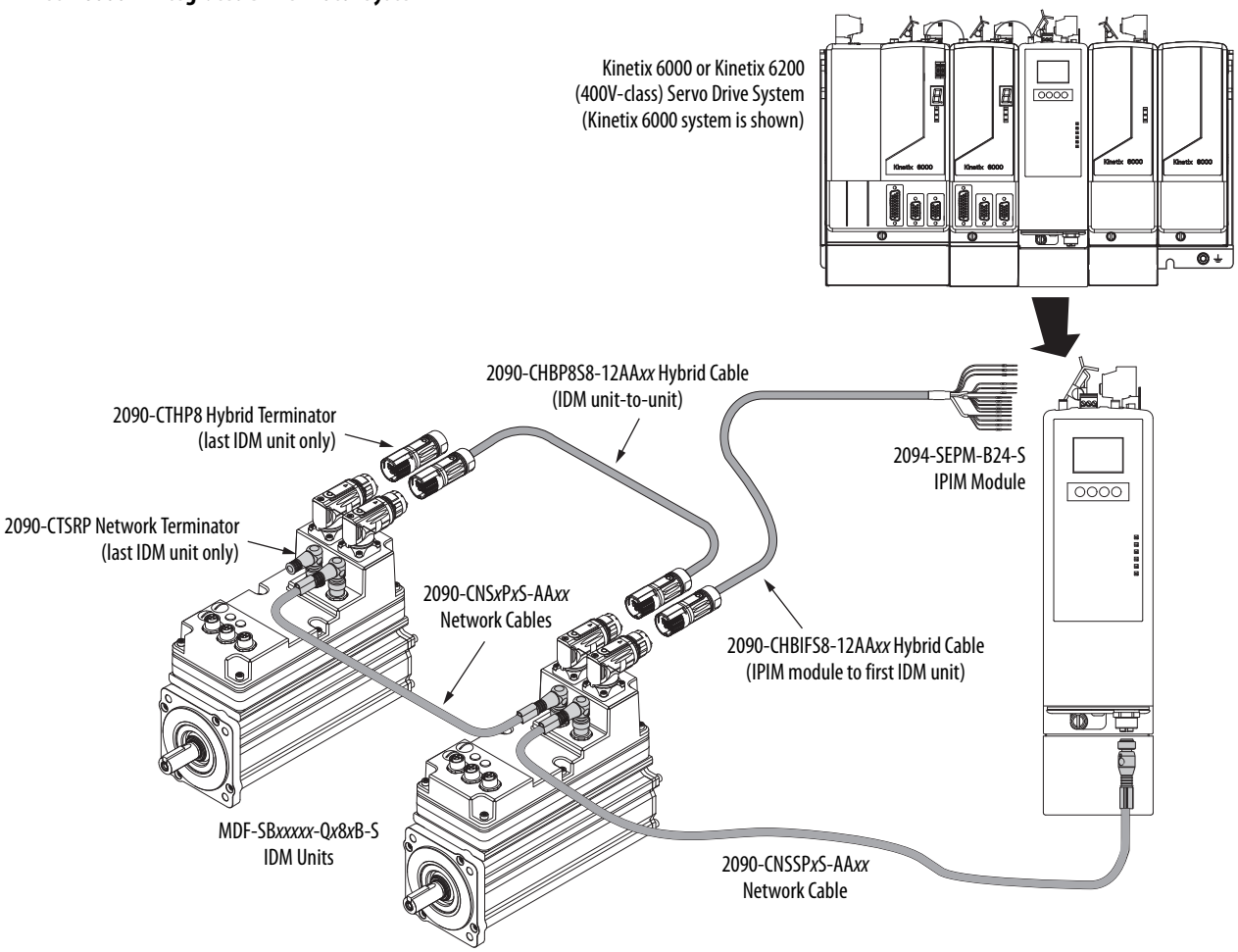
IMPORTANT Kinetix 6000 drives must be series B or series C.

You also need hybrid cables, network cables, and terminators. Optional equipment includes digital input cables, the hybrid coupler cable, bulkhead adapter kits, the holding brake manual release cable, and Bulletin 2090 safe-off headers and 1202-C*xx* safety cables.

Kinetix 6000M Integrated Drive-Motor System Example

This configuration illustrates the components needed to add Kinetix 6000M IDM units to a 400V-class Kinetix 6000 or Kinetix 6200 multi-axis servo drive system. The IDM power interface module (IPIM) is mounted to the Bulletin 2094 power rail and connects to the sercos fiber-optic ring. The IDM units are wired to the IPIM module.

Typical Kinetix 6000M Integrated Drive-Motor System



Determine What You Need

These tables list the system components and accessory items available for the Kinetix 6000M IDM drive systems.

Kinetix 6000M Integrated Drive-Motor (IDM) Units

Cat. No.	Speed	Continuous Torque	Peak Torque	Features	Quantity
MDF-SB1003P	5000 rpm	3.0 N•m (26.5 lb•in)	10.5 N•m (92.9 lb•in)	• USDA compliant food-grade paint • 400V-class • Safe-off	Up to 16 on each IPIM module (1)
MDF-SB1153H	3500 rpm	4.8 N•m (42.5 lb•in)	18.5 N•m (164 lb•in)		
MDF-SB1304F	3000 rpm	7.25 N•m (64.2 lb•in)	21.75 N•m (192 lb•in)		

(1) Use Motion Analyzer software, version 6.00 or later, to determine the maximum number of IDM units to daisy-chain on each IPIM module.

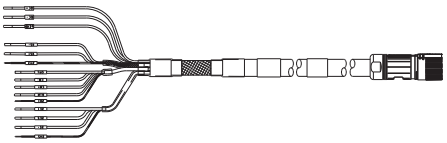
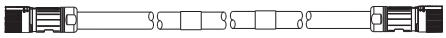
Kinetix 6000M IDM Power Interface Module (IPIM)

Cat. No.	Output Bus Voltage	Continuous Output	Peak Output	Slot Usage	Quantity
2094-SEPM-B24-S	650V DC	15 kW, 24 A, rms	60 A	1	Up to 4 on each power rail (1)

(1) Use Motion Analyzer software, version 6.00 or later, to determine the maximum number of IPIM modules on a single power rail.

Refer to the Kinetix Rotary Motion Technical Data, publication GMC-TD001, for detailed descriptions and additional specifications for the Kinetix 6000M integrated drive-motor (IDM) units and IPIM module.

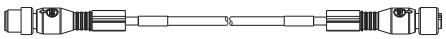
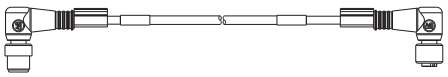
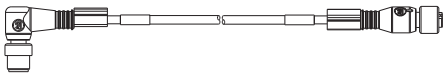
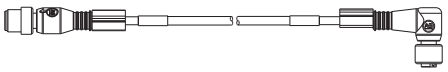
Required Hybrid Cables

Cat. No.	Description	Cable Configuration		Quantity
		Flying-lead/Pin	Socket	
2090-CHBIFS8-12AA*xx* (1)	From IPIM module (flying-leads) to the first IDM unit • IPIM-end flying-leads (IF) • SpeedTec connector, socket (S8)			1 required per system (IPIM module to first IDM unit)
2090-CHBP8S8-12AA*xx* (2)	IDM unit-to-unit connections • SpeedTec connector, pin (P8) • SpeedTec connector, socket (S8)			1 required for the second IDM unit and each additional downstream IDM unit
2090-CTHP8	Hybrid (SpeedTec) terminator • Required on last IDM unit, pin (P8) • Included with each IPIM module			1 required per system

(1) Cables are available in standard lengths of 1, 2, 3, 4, 5, 7, 9, 12, 15, 20, and 25 m (3.2, 6.6, 9.8, 13.1, 16.4, 22.9, 29.5, 39.3, 49.2, 65.5, and 82.0 ft).
(2) Cables are available in standard lengths of 0.5, 1, 2, 3, 4, 5, 7, 9, 12, 15, 20, and 25 m (1.6, 3.2, 6.6, 9.8, 13.1, 16.4, 22.9, 29.5, 39.3, 49.2, 65.5, and 82.0 ft).

Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for detailed descriptions and specifications of these required accessories.

Required Network Cables

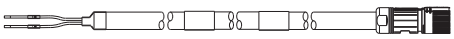
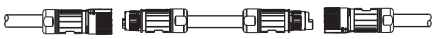
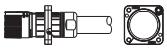
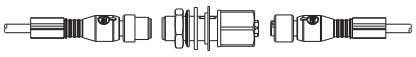
Cat. No.	Description	Cable Configuration Pin Socket	Quantity
2090-CNSSPSS-AA*xx* (1)	• Straight connector, pin (SP) • Straight connector, socket (SS)		1 required per system (IPIM module to first IDM unit) (2) Plus, 1 required for the second IDM unit and each additional downstream IDM unit (3)
2090-CNSRPRS-AA*xx* (1)	• Right-angle connector, pin (RP) • Right-angle connector, socket (RS) • Not compatible for connection to the IPIM module		
2090-CNSRPSS-AA*xx* (1)	• Right-angle connector, pin (RP) • Straight connector, socket (SS) • Not compatible for connection to the IPIM module		
2090-CNSSPRS-AA*xx* (1)	• Straight connector, pin (SP) • Right-angle connector, socket (RS)		
2090-CTSRP	Network terminator • Required on last IDM unit, right-angle, pin (RP) • Included with each IPIM module		1 required per system

(1) Cables are available in standard lengths of 0.5, 1, 2, 3, 4, 5, 7, 9, 12, 15, 20, and 25 m (1.6, 3.2, 6.6, 9.8, 13.1, 16.4, 22.9, 29.5, 39.3, 49.2, 65.5, and 82.0 ft).
(2) This cable must be either 2090-CNSSPSS-AA*xx* or 2090-CNSSPRS-AA*xx*. Only straight, pin (SP) connectors fit properly at the IPIM module.
(3) Use of straight or right-angle connectors depends on application.

IMPORTANT Right-angle (pin) connectors are not compatible for connection to the IPIM module. Only straight (pin) connectors fit properly.

Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for detailed descriptions and specifications of these required accessories.

Optional Accessories

Cat. No.	Accessory Item	Description
2090-CBKS8-16AA03	Manual brake release cable • Brake release wires (BK) • SpeedTec connector, socket (S8)	
2090-CCPP8S8	Hybrid coupler cable connects between two hybrid cables to bypass an IDM unit • SpeedTec connector, pin (P8) • SpeedTec connector, socket (S8)	
2090-KPB47-12CF	• The hybrid bulkhead adapter secures cables as they pass through the cabinet • Mating cable attaches on the other side	
2090-CBUSPSS	• The network cable bulkhead adapter feeds signals through the cabinet wall • Network cables attach on either side	
2090-XNSM-*x*	Safe-off headers	Cascading safe-off connections from drive-to-drive (applies to Kinetix 6000 drive systems)
1202-C*xx*	Safety cables	
Bulletin 889D and 879D	DC micro-style patchcords, V-cables, and splitters for digital input connections	Refer to Digital Input Cable Examples on page 12
2094-XNIPIM-1	Connector set	Includes hybrid power (DC bus), hybrid communication, safe-off, and enable input replacement connectors for the IPIM module
2094-SEPM-FUSE	Replacement fuses for the IPIM module, 6 each	Bussmann part number FWP-50A14Fa
MDF-SB-NODECVR	Replacement covers for the node address switches on the IDM units	
1485A-M12	Replacement covers for the digital input connectors on the IDM units	

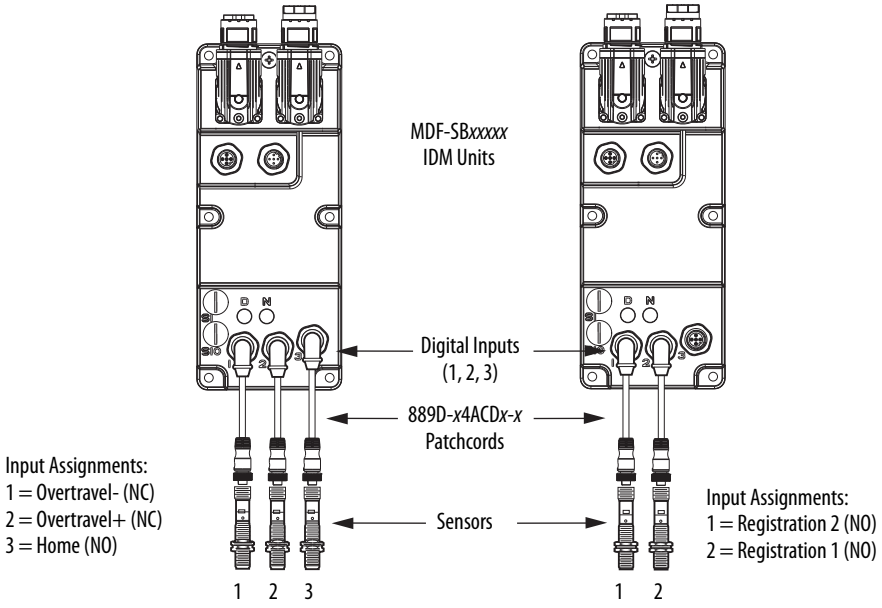
Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for detailed descriptions and specifications of these optional accessories.

Digital Input Cable Examples

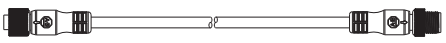
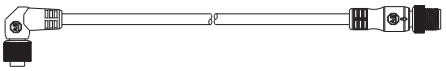
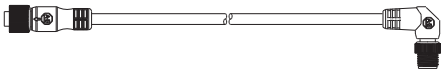
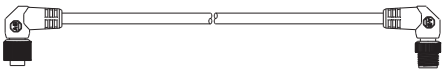
Kinetix 6000M IDM units have three 5-pin, M12, digital input connectors. Allen-Bradley (Bulletin 889D and 879D) DC micro-style patchcords, splitters, and V-cables are available with straight and right-angle connectors for making connections from the IDM unit to input sensors.

For the most popular patchcord specifications, refer to the Connection Systems Quick Selection Guide, publication CNSYS-BR001. For complete information, refer to On-Machine™ Connectivity, publication M117-CA001.

Digital Inputs Used for Home and Overtravel Functions

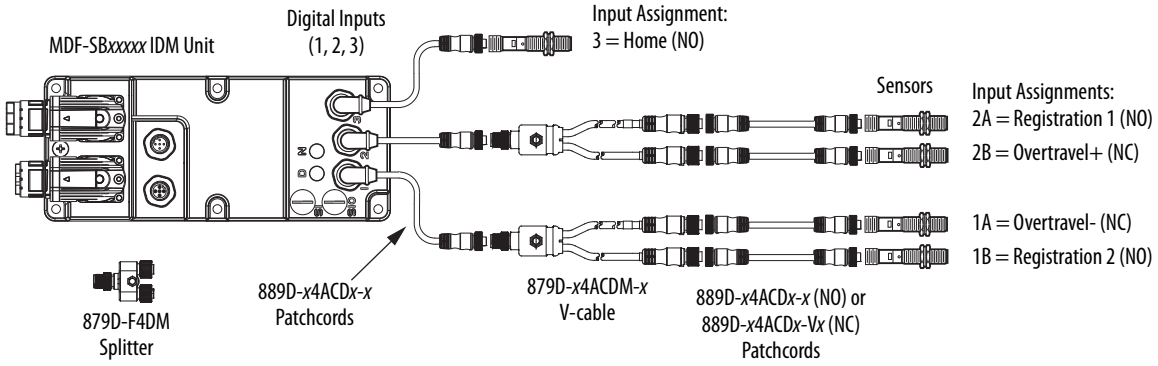


Digital Input Accessories Items

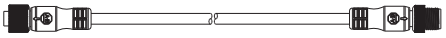
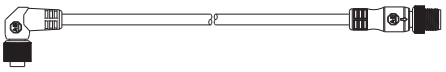
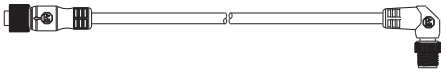
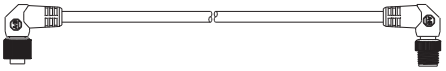
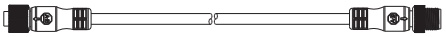
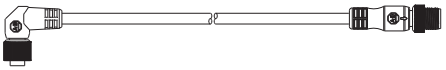
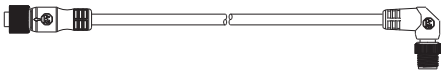
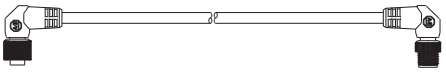
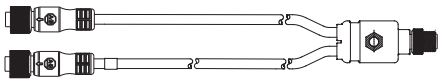
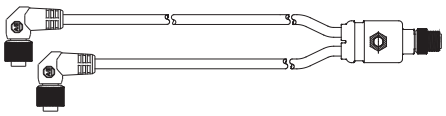
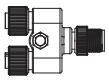
Cat. No.	Item Type	Description	Cable Configuration Socket — Pin (IDM unit)
889D-F4ACDM-*x*	Digital input patchcords (1) (IDM unit to NC and NO sensors)	• Straight connector, socket (F) • Straight connector, pin (M)	
889D-R4ACDM-*x*		• Right-angle connector, socket (R) • Straight connector, pin (M)	
889D-F4ACDE-*x*		• Straight connector, socket (F) • Right-angle connector, pin (E)	
889D-R4ACDE-*x*		• Right-angle connector, socket (R) • Right-angle connector, pin (E)	
871TS-N12BP18-D4	Sensor (example)	Proximity	N/A

(1) Patchcords are available in standard lengths of 2, 5, and 10 m (6.6, 16.4, and 32.8 ft).

Digital Inputs Used for Home, Overtravel, and Registration Functions

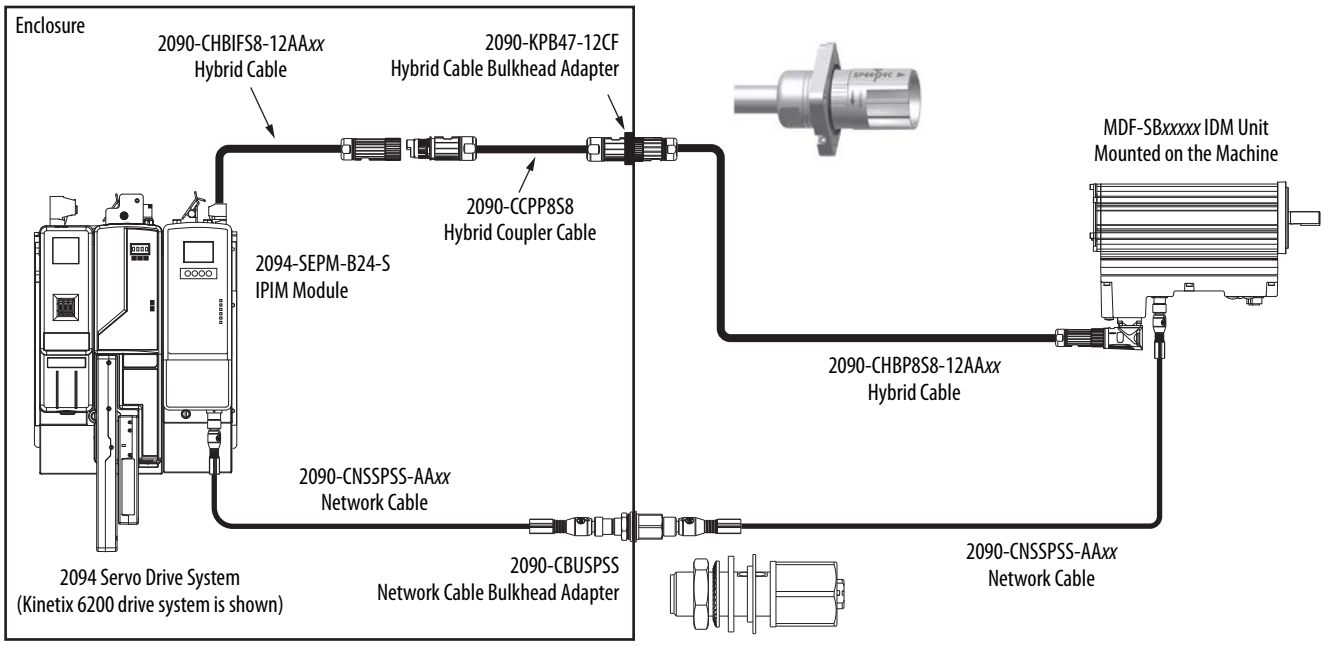


Digital Input Accessories Items

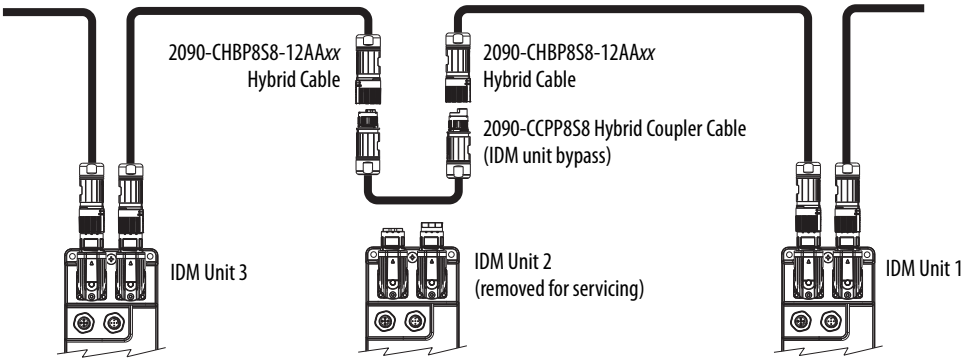
Cat. No.	Item Type	Description	Cable Configuration Socket — Pin (IDM unit)
889D-F4ACDM-*x*	Digital input patchcords [1] • IDM unit to NC and NO sensors • IDM unit to V-cable • V-cable to NO sensors	• Straight connector, socket (F) • Straight connector, pin (M)	
889D-R4ACDM-*x*		• Right-angle connector, socket (R) • Straight connector, pin (M)	
889D-F4ACDE-*x*		• Straight connector, socket (F) • Right-angle connector, pin (E)	
889D-R4ACDE-*x*		• Right-angle connector, socket (R) • Right-angle connector, pin (E)	
889D-F4ACDM-V*x*	Digital input patchcords [1] (V-cable to NC sensor)	• Straight connector, socket (F) • Straight connector, pin (M)	
889D-R4ACDM-V*x*		• Right-angle connector, socket (R) • Straight connector, pin (M)	
889D-F4ACDE-V*x*		• Straight connector, socket (F) • Right-angle connector, pin (E)	
889D-R4ACDE-V*x*		• Right-angle connector, socket (R) • Right-angle connector, pin (E)	
879D-F4ACDM-*x*	V-cables [2]	• Straight connectors, socket (F) • Straight connector, pin (M)	
879D-R4ACDM-*x*		• Right-angle connectors, socket (R) • Straight connector, pin (M)	
879D-F4DM	Splitter [3]	• Straight connectors, socket (F) • Straight connector, pin (M)	
871TS-N12BP18-D4	Sensor (example)	Proximity	N/A

(1) Patchcords are available in standard lengths of 2, 5, and 10 m (6.6, 16.4, and 32.8 ft).
(2) V-cables are available in standard lengths of 0.3, 1, 2, and 5 m (1.0, 3.2, 6.6, and 16.4 ft).
(3) Splitter can be used in place of the V-cable.

Bulkhead Adapter Examples



Hybrid Coupler Cable Example



Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for detailed descriptions and specifications of these optional accessories.

Kinetix 6000M Integrated Drive-Motor System Performance

This section provides system performance information for the Bulletin MDF integrated drive-motor units. Included are hybrid power and network cable catalog numbers, system performance specifications, and the optimum torque/speed curves.

IMPORTANT The Kinetix 6000M integrated drive-motor systems are compatible with Kinetix 6000 and Kinetix 6200 (400V-class) power rail configurations. Kinetix 6000 drives must be series B or series C.

Kinetix 6000M (Bulletin MDF) Integrated Drive-Motor Cable Combinations

Motor Cat. No. (400V-class)	Hybrid Cables (1)	Network Cables (2)
MDF-SB1003P	2090-CHBIFS8-12AA*xx* and 2090-CHBP8S8-12AA*xx*	2090-CNS*x*P*x*S-AA*xx*
MDF-SB1153H		
MDF-SB1304F		

(1) Hybrid terminator (catalog number 2090-CTHP8) is included with the IPIM module.

(2) Network terminator (catalog number 2090-CTSRP) is included with the IPIM module.

For cable configuration illustrations and feature descriptions, by catalog number, refer to the Kinetix 6000M Integrated Drive-Motor System Example on page 9.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

Performance Specifications with Kinetix 6000M (non-brake) Motors

IDM Drive-Motor Unit	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 6000M IPIM Module
MDF-SB1003P-*xxx*2*x*-S	5000	4.03	3.00 (26.5)	19.0	10.50 (92.9)	1.10	2094-SEPM-B24-S
MDF-SB1153H-*xxx*2*x*-S	3500	4.50	4.80 (42.5)	20.0	18.50 (164)	1.15	
MDF-SB1304F-*xxx*2*x*-S	3000	5.80	7.25 (64.2)	20.0	21.75 (192)	1.39	

Performance specification data and curves reflect nominal system performance of a typical system at 40 °C (104 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

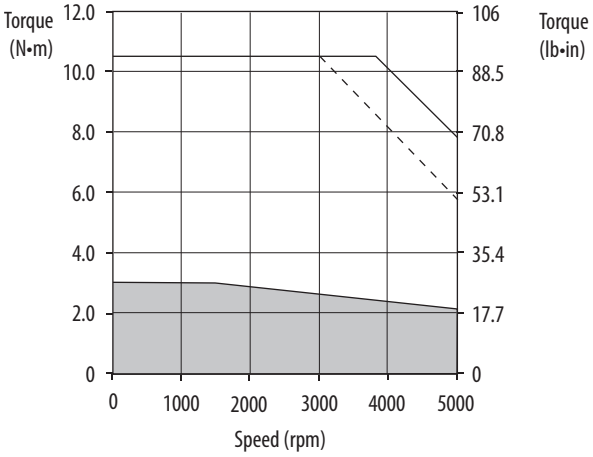
Performance Specifications with Kinetix 6000M (brake) Motors

IDM Drive-Motor Unit	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 6000M IPIM Module
MDF-SB1003P-*xxx*4*x*-S	5000	4.03	3.00 (26.5)	19.0	10.50 (92.9)	1.02	2094-SEPM-B24-S
MDF-SB1153H-*xxx*4*x*-S	3500	4.50	4.80 (42.5)	20.0	18.50 (164)	1.00	
MDF-SB1304F-*xxx*4*x*-S	3000	5.80	7.25 (64.2)	20.0	21.75 (192)	1.24	

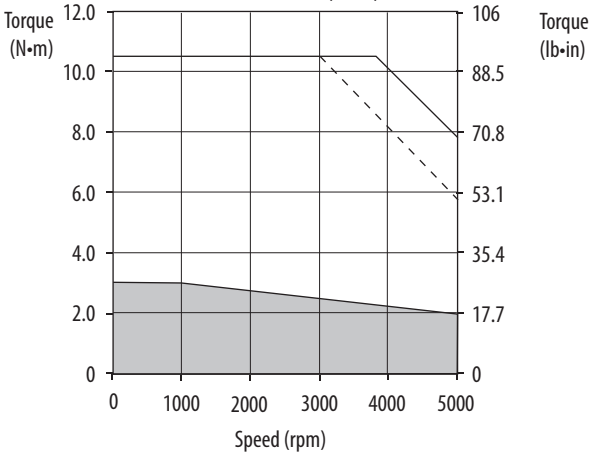
Performance specification data and curves reflect nominal system performance of a typical system at 40 °C (104 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000M Integrated Drive-Motor (400V-class) System Performance Curves

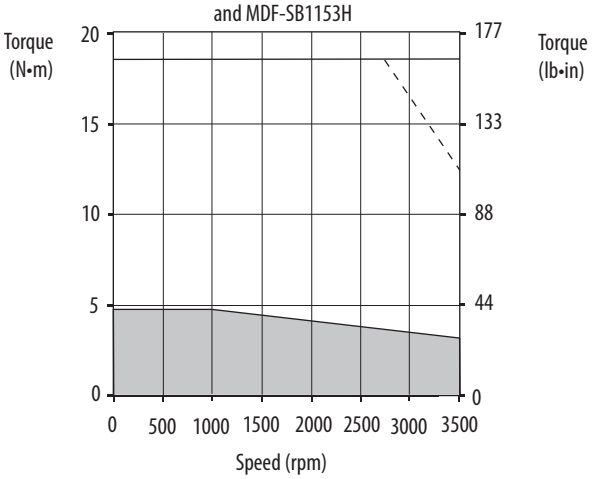
2094 Power Rail with 2094-SEPM-B24-S and MDF-SB1003P



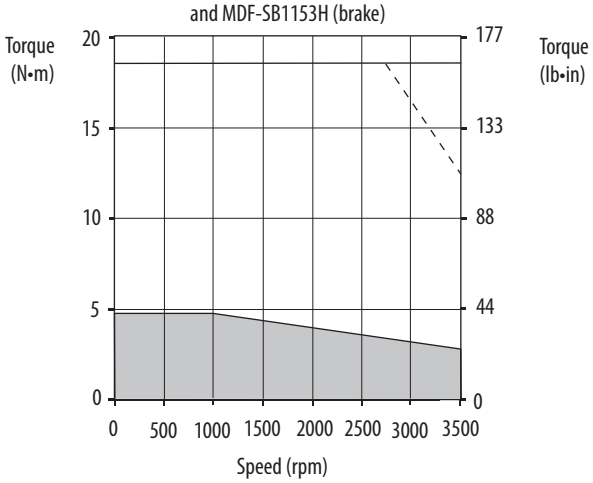
2094 Power Rail with 2094-SEPM-B24-S and MDF-SB1003P (brake)



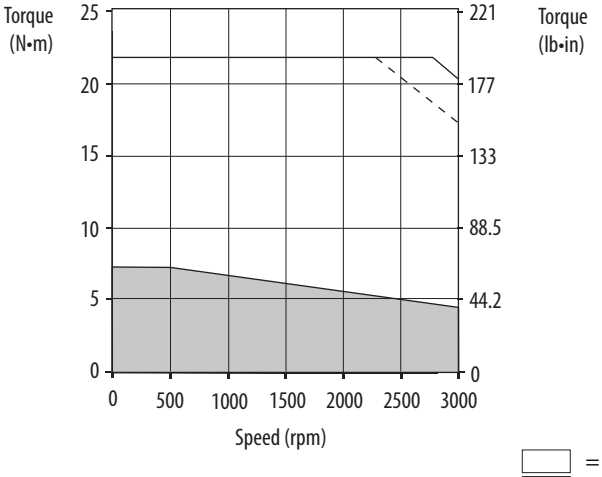
2094 Power Rail with 2094-SEPM-B24-S and MDF-SB1153H



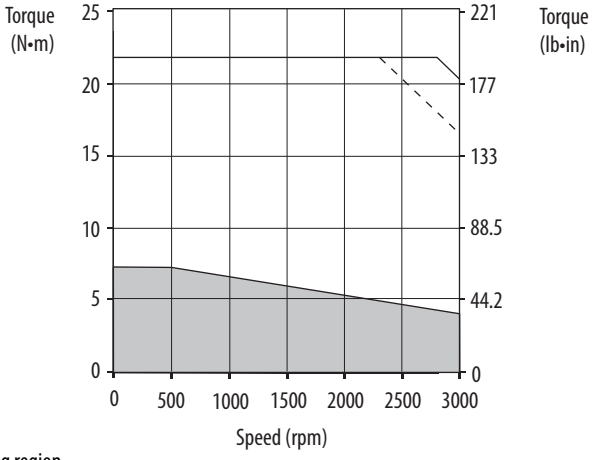
2094 Power Rail with 2094-SEPM-B24-S and MDF-SB1153H (brake)



2094 Power Rail with 2094-SEPM-B24-S and MDF-SB1304F



2094 Power Rail with 2094-SEPM-B24-S and MDF-SB1304F (brake)



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

Kinetix 6000 Drive Rotary Performance Example with Peak Enhancement Feature

The peak current ratings of the Kinetix 6000 AM modules (series A, B, and C) are configured at the factory as 150% of continuous current. You can program 400V-class (series B and C) AM modules, and the equivalent IAM (inverter) modules, to operate with up to 250% of continuous inverter current. Refer to the Kinetix Servo Drives Technical Data, publication GMC-TD003, 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.

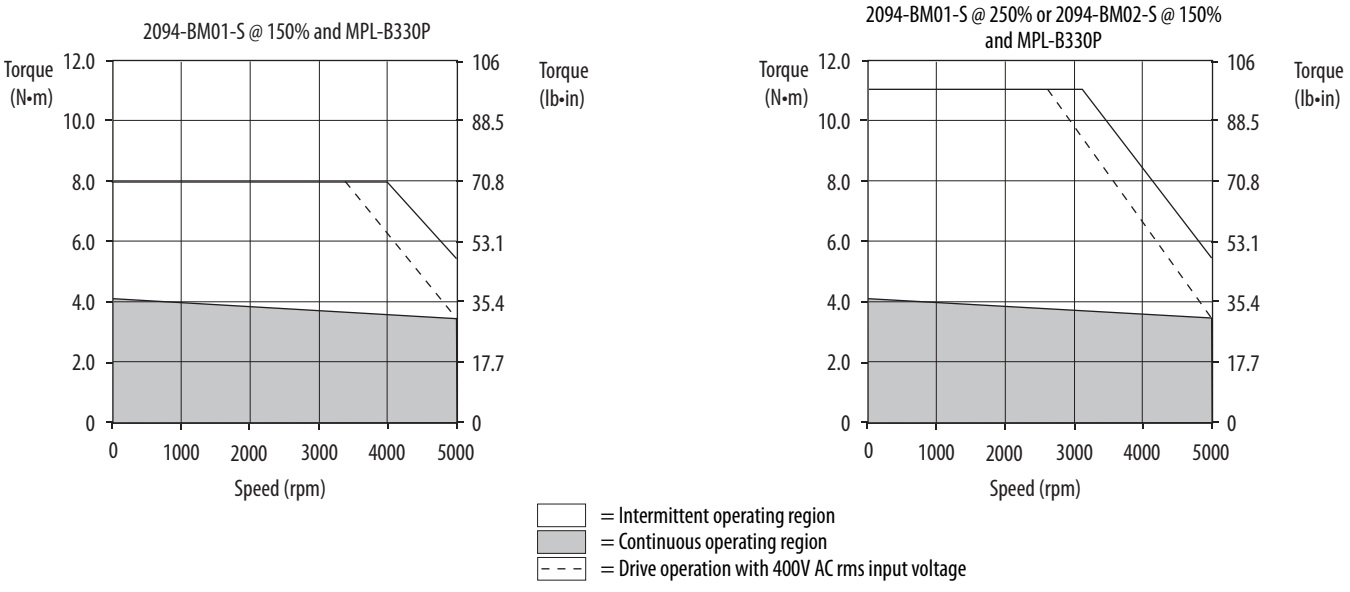
Refer to the Kinetix 6000 Multi-axis Servo Drive User Manual, publication 2094-UM001, to recalculate torque and acceleration/deceleration limit values, and paste them into the appropriate Axis Properties dialog box in RSLogix 5000 software or the Logix Designer application.

For sizing your drive/motor combination when using series B or C drives with the peak enhancement feature, use Motion Analyzer software, 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 or C) AM module. The two curves illustrate how the 2094-BM01-S (series B or C) drive, when configured for 250% peak, can achieve full motor performance.

Rotary Motor Performance Specifications Example with Kinetix 6000 Drives

Motor	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 C) modules are limited to 200% of continuous inverter current.

Kinetix 6000 (200V-class) Drives with MP-Series Low Inertia Motors

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

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

Bulletin MPL Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPL-A1510V-*xx*7*x*AA, MPL-A1520U-*xx*7*x*AA, MPL-A1530U-*xx*7*x*AA	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or (2) (3) 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback 2090-XXNFMF-S*xx* (standard, non-flex)(4) 2090-CFBM7DF-CDAF*xx* (continuous-flex) Incremental Feedback
MPL-A210V-*xx*7*x*AA, MPL-A220T-*xx*7*x*AA, MPL-A230P-*xx*7*x*AA		
MPL-A310F-*xx*7*x*AA, MPL-A310P-*xx*7*x*AA, MPL-A320H-*xx*7*x*AA, MPL-A320P,-*xx*7*x*AA, MPL-A330P-*xx*7*x*AA		
MPL-A420P-*xx*7*x*AA, MPL-A430H-*xx*7*x*AA		
MPL-A4530F-*xx*7*x*AA, MPL-A4540C-*xx*7*x*AA		
MPL-A430P-*xx*7*x*AA	2090-CP*x*M7DF-14AA*xx* (standard, non-flex) 2090-CP*x*M7DF-14AF*xx* (continuous-flex)	
MPL-A4530K-*xx*7*x*AA, MPL-A4540F-*xx*7*x*AA, MPL-A4560F-*xx*7*x*AA		
MPL-A520K-*xx*7*x*AA	2090-CP*x*M7DF-10AA*xx* (standard, non-flex) 2090-CP*x*M7DF-10AF*xx* (continuous-flex)	
MPL-A540K-*xx*7*x*AA, MPL-A560F-*xx*7*x*AA	2090-CP*x*M7DF-08AA*xx* (standard, non-flex) 2090-CP*x*M7DF-08AF*xx* (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. Refer to Required Drive Accessories on page 4.

(2) Applies to Kinetix 6000 drives and MPL-A3*xxx*-M/S…MPL-A5*xxx*-M/S motors with absolute high-resolution feedback.

(3) Applies to Kinetix 6000 drives and MPL-A15*xxx*-V/E…MPL-A2*xxx*-V/E motors with absolute high-resolution feedback.

(4) Applies to Kinetix 6000 drives and MPL-A15*xxx*-H…MPL-A45*xxx*-H motors with incremental feedback.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.

Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.

Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	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	1.05	0.26 (2.3)	3.40	0.77 (6.8)	0.16	2094-AMP5-S
MPL-A1520U	7000	1.80	0.49 (4.3)	6.10	1.58 (13.9)	0.27	2094-AMP5-S
MPL-A1530U	7000	2.82	0.90 (8.0)	10.1	2.82 (24.9)	0.39	2094-AMP5-S
MPL-A210V	8000	3.09	0.55 (4.8)	10.2	1.52 (13.4)	0.37	2094-AMP5-S
MPL-A220T	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	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

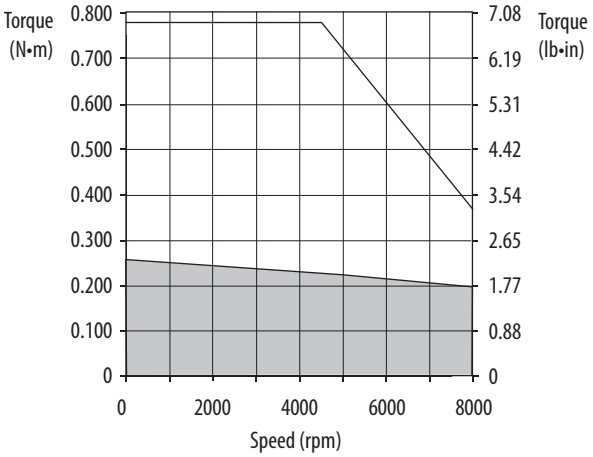
Bulletin MPL Motor Performance Specifications with Kinetix 6000 (200V-class) Drives (continued)

Rotary Motor	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-A310F	3000	3.24	1.58 (14.0)	9.30	3.61 (31.9)	0.46	2094-AMP5-S
MPL-A310P	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	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	8.50	2.88 (25.5)	17.0	5.07 (44.8)	1.3	2094-AM01-S
		9.00	3.05 (27.0)	29.5	7.91 (70.0)		2094-AM02-S
MPL-A330P	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	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	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	15.0	5.35 (47.3)	30.0	9.99 (88.3)	2.2	2094-AM02-S
		16.80	5.99 (52.9)	49.0	15.4 (136)		2094-AM03-S
				67.0	19.8 (175)		2094-AM05-S
MPL-A4530F	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	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	8.50	9.15 (80.9)	17.0	16.9 (150)	1.5	2094-AM01-S
		9.55	10.30 (91.1)	29.0	27.1 (239)		2094-AM02-S
MPL-A4540F	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	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	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	41.5	19.42 (171)	73.4	31.3 (277)	5.5	2094-AM05-S
MPL-A560F	3000	42.0	27.39 (242)	73.4	39.6 (350)	5.3	2094-AM05-S

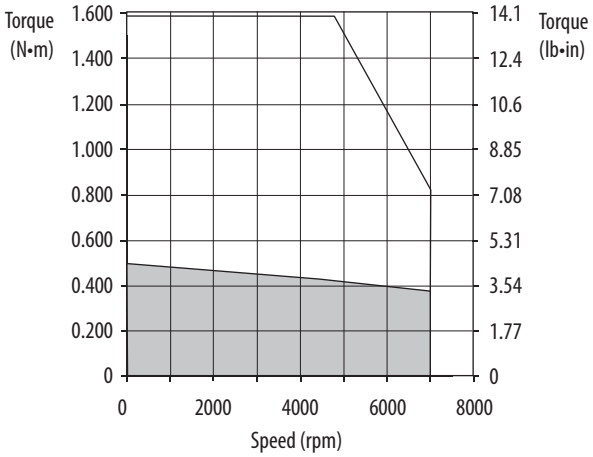
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 (200V-class) Drives/MP-Series Low Inertia Motor Curves

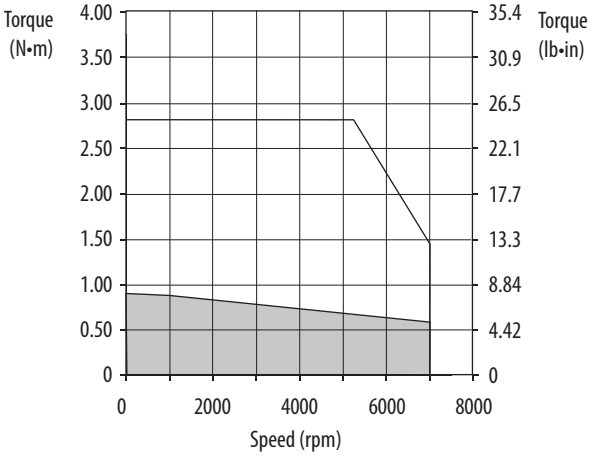
2094-AMP5-S and MPL-A1510V



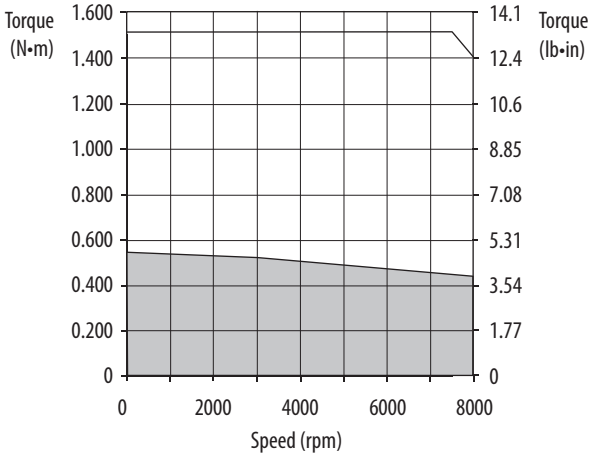
2094-AMP5-S and MPL-A1520U



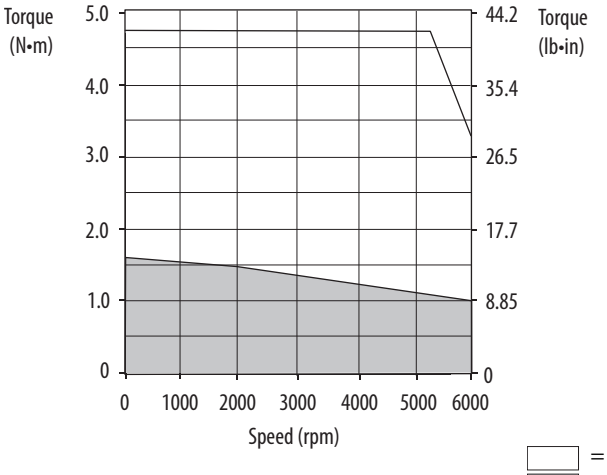
2094-AMP5-S and MPL-A1530U



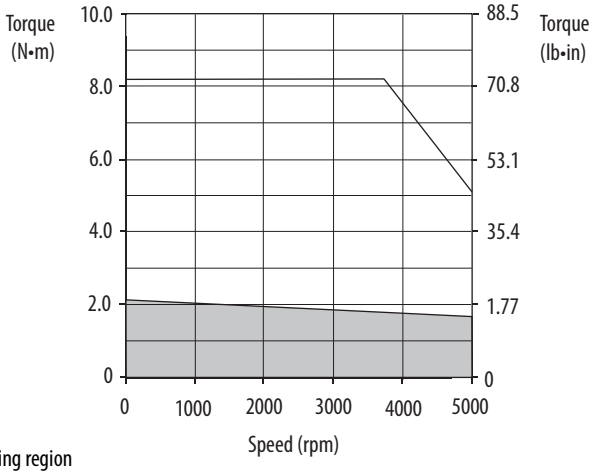
2094-AMP5-S and MPL-A210V



2094-AM01-S and MPL-A220T



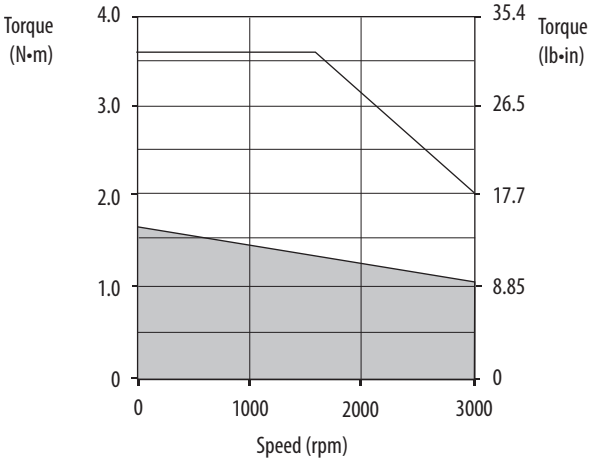
2094-AM02-S and MPL-A230P



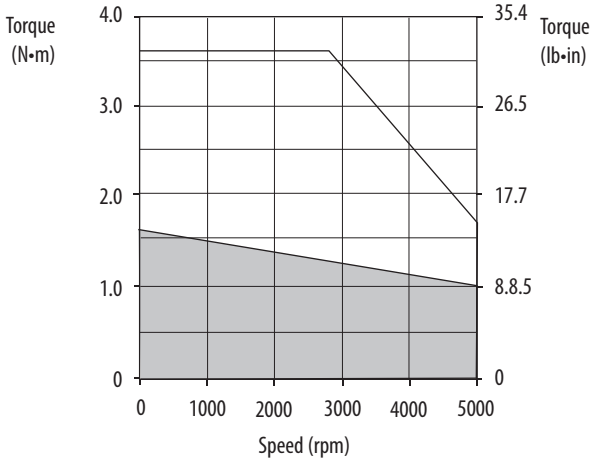
= Intermittent operating region
= Continuous operating region

Kinetix 6000 (200V-class) Drives/MP-Series Low Inertia Motor Curves (continued)

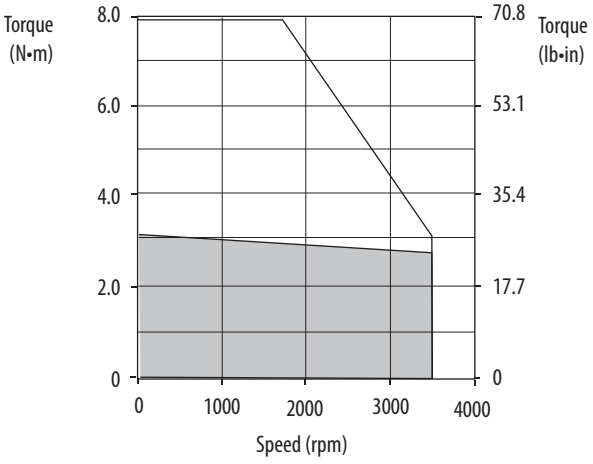
2094-AMP5-S and MPL-A310F



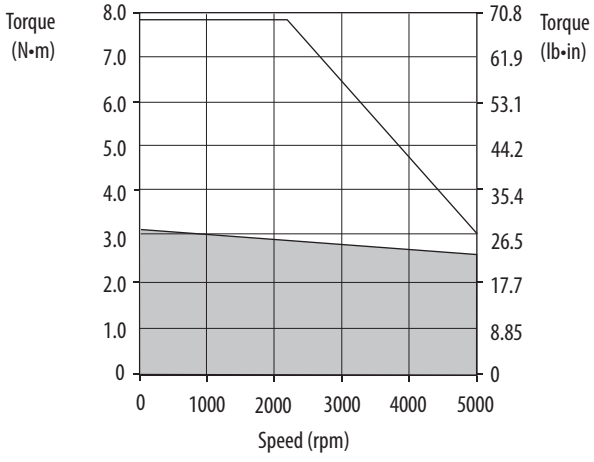
2094-AM01-S and MPL-A310P



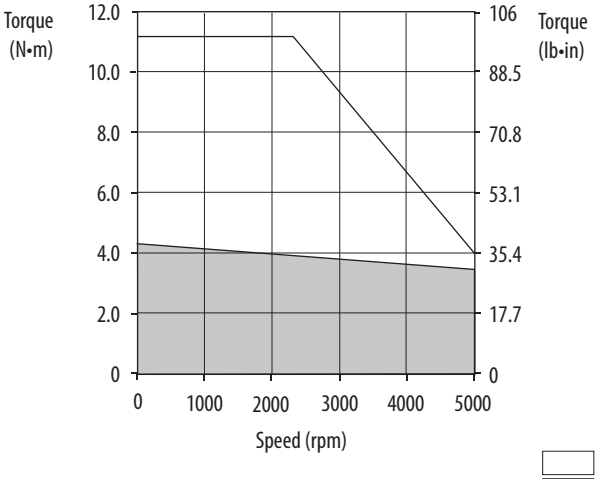
2094-AM02-S and MPL-A320H



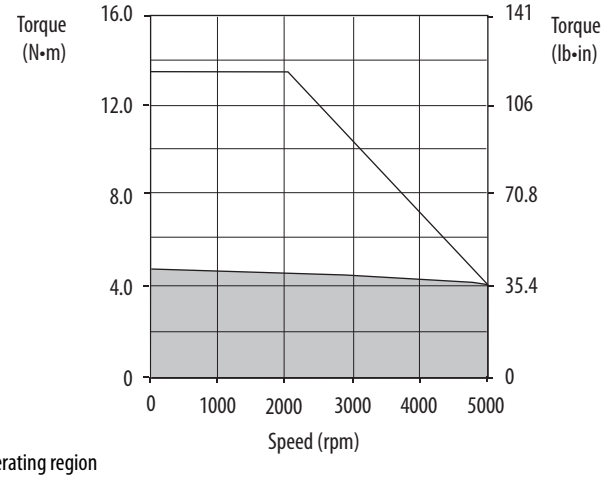
2094-AM02-S and MPL-A320P



2094-AM03-S and MPL-A330P



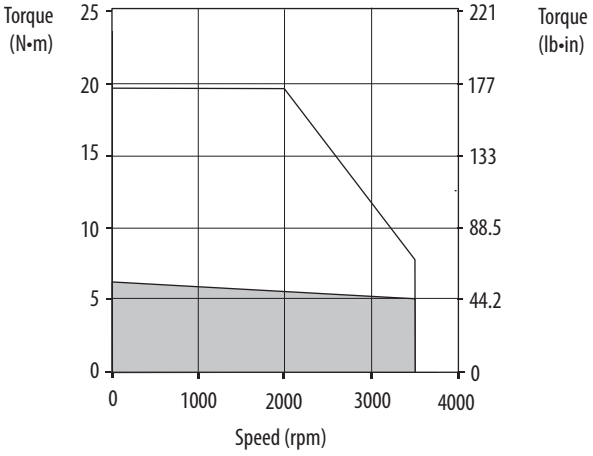
2094-AM03-S and MPL-A420P



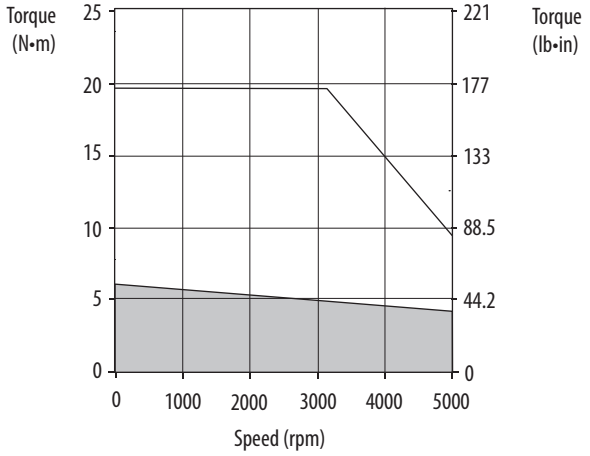
= Intermittent operating region
= Continuous operating region

Kinetix 6000 (200V-class) Drives/MP-Series Low Inertia Motor Curves (continued)

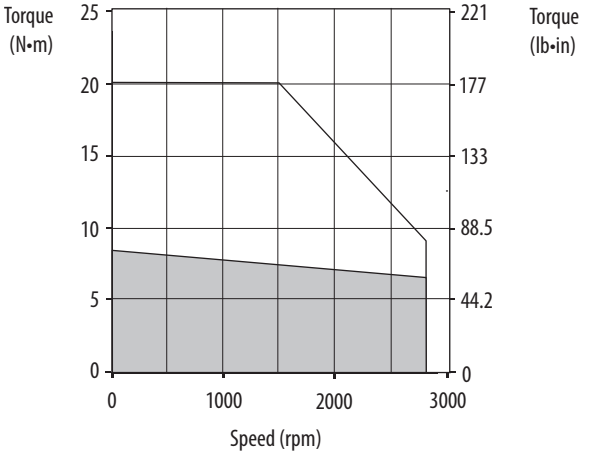
2094-AM03-S and MPL-A430H



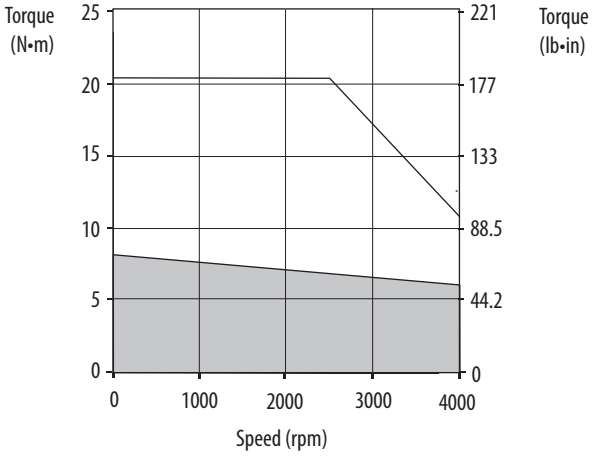
2094-AM05-S and MPL-A430P



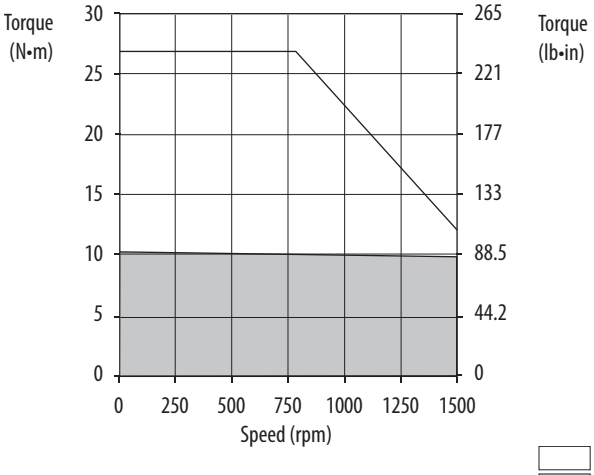
2094-AM03-S and MPL-A4530F



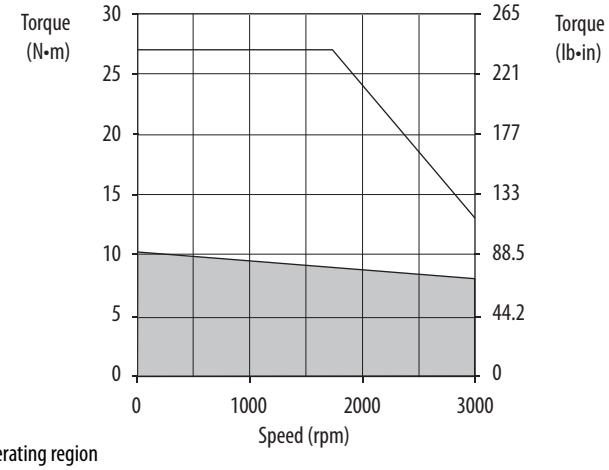
2094-AM05-S and MPL-A4530K

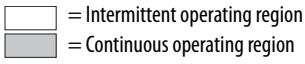


2094-AM02-S and MPL-A4540C



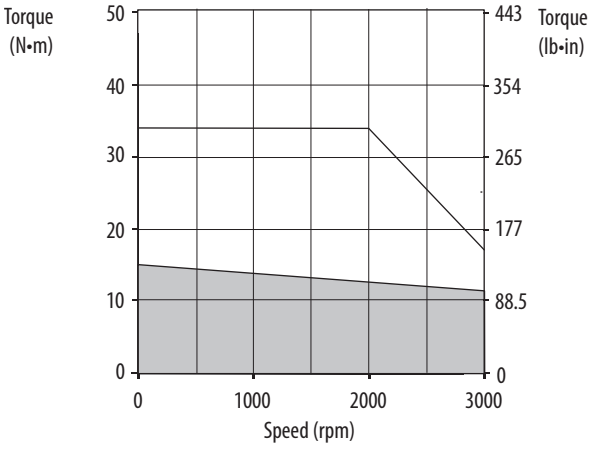
2094-AM05-S and MPL-A4540F



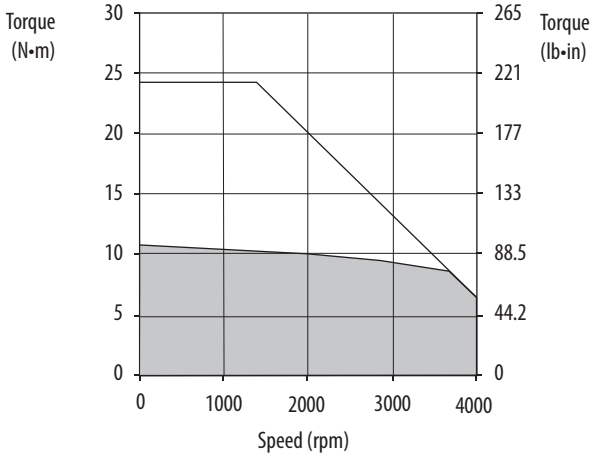


Kinetix 6000 (200V-class) Drives/MP-Series Low Inertia Motor Curves (continued)

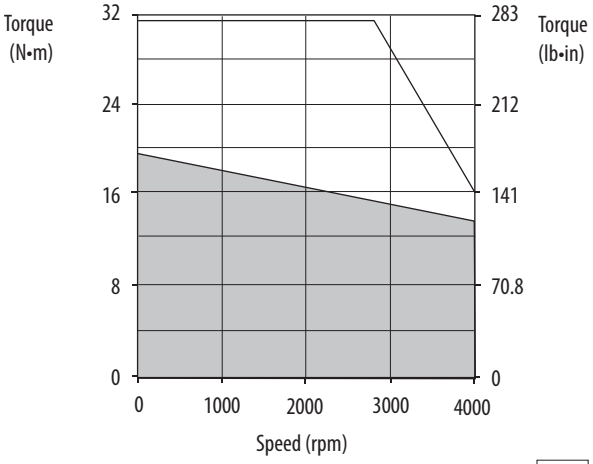
2094-AM05-S and MPL-A4560F



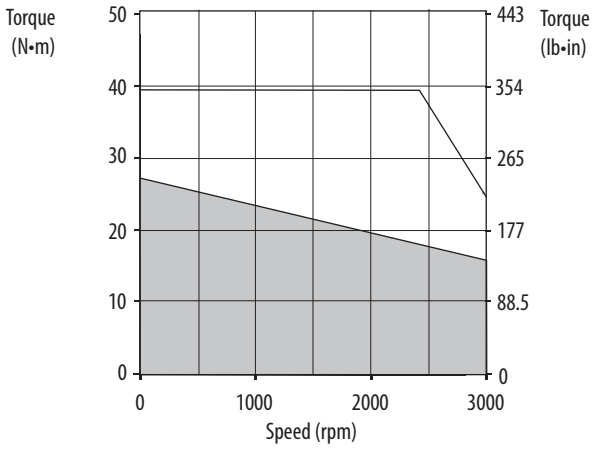
2094-AM05-S and MPL-A520K



2094-AM05-S and MPL-A540K



2094-AM05-S and MPL-A560F



= Intermittent operating region
= Continuous operating region

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with MP-Series Low Inertia Motors

This section provides system combination information for the Kinetix 6000 and the Kinetix 6200/6500 (400V-class) drives when matched with MP-Series 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 or C) drives, 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 or C) drives configured for enhanced peak performance.

Refer to Kinetix Servo Drives Specifications Technical Data, publication GMC-TD003, for more information.

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

Bulletin MPL Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPL-B1510V-*xx*7*x*AA, MPL-B1520U-*xx*7*x*AA, MPL-B1530U-*xx*7*x*AA	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or (2) (3) 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback 2090-XXNFMF-S*xx* (standard) (4) 2090-CFBM7DF-CDAF*xx* (continuous-flex) Incremental Feedback 2090-CFBM7DF-CEAA*xx* (standard, non-flex) (5) 2090-CFBM7DF-CEAF*xx* (continuous-flex) Resolver Feedback
MPL-B210V-*xx*7*x*AA, MPL-B220T-*xx*7*x*AA, MPL-B230P-*xx*7*x*AA		
MPL-B310P-*xx*7*x*AA, MPL-B320P-*xx*7*x*AA, MPL-B330P-*xx*7*x*AA		
MPL-B420P-*xx*7*x*AA, MPL-B430P-*xx*7*x*AA		
MPL-B4530F-*xx*7*x*AA, MPL-B4530K-*xx*7*x*AA, MPL-B4540F-*xx*7*x*AA, MPL-B4560F-*xx*7*x*AA		
MPL-B520K-*xx*7*x*AA		
MPL-B540D-*xx*7*x*AA, MPL-B540K-*xx*7*x*AA, MPL-B560F-*xx*7*x*AA	2090-CP*x*M7DF-14AA*xx* (standard, non-flex) 2090-CP*x*M7DF-14AF*xx* (continuous-flex)	
MPL-B580F-*xx*7*x*AA, MPL-B580J-*xx*7*x*AA, MPL-B640F-*xx*7*x*AA	2090-CP*x*M7DF-10AA*xx* (standard, non-flex) 2090-CP*x*M7DF-10AF*xx* (continuous-flex)	
MPL-B660F-*xx*7*x*AA, MPL-B680D-*xx*7*x*AA, MPL-B960B-*xx*7*x*AA, MPL-B980B-*xx*7*x*AA	2090-CP*x*M7DF-08AA*xx* (standard, non-flex) 2090-CP*x*M7DF-08AF*xx* (continuous-flex)	
MPL-B680F-*xx*7*x*AA, MPL-B680H-*xx*7*x*AA, MPL-B860D-*xx*7*x*AA, MPL-B880C-*xx*7*x*AA	2090-CP*x*M7DF-06AA*xx* (standard, non-flex)	
MPL-B880D-*xx*7*x*AA	2090-CP*x*M7DF-04AA*xx* (standard, non-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. Refer to Required Drive Accessories on page 4.

(2) Applies to Kinetix 6000 drives and MPL-B3*xxx*-M/S…MPL-B9*xxx*-M/S motors with absolute high-resolution feedback.

(3) Applies to Kinetix 6000 drives and MPL-B15*xxx*-V/E…MPL-B2*xxx*-V/E motors with absolute high-resolution feedback.

(4) Applies to Kinetix 6000 drives and MPL-B15*xxx*-H…MPL-B45*xxx*-H motors with incremental feedback.

(5) Applies to Kinetix 6000 drives and MPL-B3*xxx*-R…MPL-B45*xxx*-R motors with resolver feedback.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.

Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.

Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	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	0.95	0.26 (2.3)	3.10	0.77 (6.8)	0.16	2094-BMP5-M
MPL-B1520U	7000	1.80	0.49 (4.3)	6.10	1.58 (13.9)	0.27	2094-BMP5-M
MPL-B1530U	7000	2.0	0.90 (8.0)	7.20	2.82 (24.9)	0.39	2094-BMP5-M
MPL-B210V	8000	1.75	0.55 (4.9)	5.80	1.52 (13.4)	0.37	2094-BMP5-M
MPL-B220T	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	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	2.4	1.6 (14.1)	7.10	3.6 (32)	0.77	2094-BMP5-M
MPL-B320P	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	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	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	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	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	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	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	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
MPL-B520K	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	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	20.4	19.4 (171)	60.0	48.6 (430)	5.4	2094-BM03-M
MPL-B560F	3000	20.6	26.8 (237)	68.0	67.8 (600)	5.5	2094-BM03-M
MPL-B580F	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	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	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	3000	38.5	48.0 (425)	96.0	101 (895)	6.1	2094-BM05-M
MPL-B680D	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	3000	47.9	60.0 (531)	96.0	108 (960)	7.5	2094-BM05-M
MPL-B680H	3500	48.9	58.0 (513)	97.8	107 (947)	7.5	2094-BM05-M

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

Rotary Motor	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-B860D	2000	47.3	83.0 (735)	95.5	152 (1350)	12.5	2094-BM05-M
MPL-B880C	1500	47.5	110 (973)	97.5	203 (1800)	12.6	2094-BM05-M
MPL-B880D	2000	48.9	79.9 (706)	96.0	147 (1300)	12.6	2094-BM05-M
MPL-B960B	1200	42.5	130 (1150)	94.0	231 (2050)	12.7	2094-BM05-M
MPL-B980B	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, refer to Motion Analyzer software.

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

Rotary Motor	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	0.95	0.26 (2.3)	3.10	0.77 (6.8)	0.16	BMP5-S @ 150%
MPL-B1520U	7000	1.80	0.49 (4.3)	5.90	1.53 (13.3)	0.27	BMP5-S @ 150%
				6.10	1.58 (13.9)		BMP5-S @ 250%
MPL-B1530U	7000	2.0	0.90 (8.0)	5.90	2.34 (20.7)	0.39	BMP5-S @ 150%
				7.20	2.82 (24.9)		BMP5-S @ 250%
MPL-B210V	8000	1.75	0.55 (4.9)	5.80	1.52 (13.4)	0.37	BMP5-S @ 150%
MPL-B220T	6000	3.30	1.61 (14.2)	9.90	4.12 (36.4)	0.62	BMP5-S @ 250%
				11.3	4.74 (41.9)		BM01-S @ 150%
MPL-B230P	5000	2.60	2.10 (18.6)	9.90	7.24 (64.0)	0.86	BMP5-S @ 250%
				11.3	8.20 (73.0)		BM01-S @ 150%
MPL-B310P	5000	2.4	1.6 (14)	5.90	3.2 (28)	0.77	BMP5-S @ 150%
				7.10	3.6 (32)		BMP5-S @ 250%
MPL-B320P	5000	4.5	3.10 (27)	13.0	7.5 (66)	1.5	BM01-S @ 150%
				14.0	8.2 (72.5)		BM01-S @ 250%
MPL-B330P	5000	6.1	4.18 (37)	13.0	8.0 (71)	1.8	BM01-S @ 150%
				19.0	11.1 (98)		BM01-S @ 250%
MPL-B420P	5000	6.3	4.74 (42)	13.0	13.1 (116)	1.9	BM01-S @ 250%
				21.8	13.4 (118)		BM02-S @ 150%
				22.0	13.5 (119)		BM02-S @ 250%
MPL-B430P	5000	9.2	6.55 (58)	21.8	14.4 (127)	2.2	BM02-S @ 150%
				32.0	19.8 (175)		BM02-S @ 250%
MPL-B4530F	3000	6.7	8.36 (74)	13.0	13.9 (123)	2.1	BM01-S @ 150%
				21.0	20.3 (180)		BM01-S @ 250%
MPL-B4530K	4000	9.9	8.25 (73)	21.8	15.5 (137)	2.6	BM02-S @ 150%
				31.0	20.3 (179)		BM02-S @ 250%
MPL-B4540F	3000	9.1	10.20 (90)	21.8	21.4 (189)	2.6	BM02-S @ 150%
				29.0	27.1 (240)		BM02-S @ 250%
MPL-B4560F	3000	11.8	14.0 (124)	21.8	23.3 (206)	3.2	BM02-S @ 150%
				36.0	34.4 (304)		BM02-S @ 250%

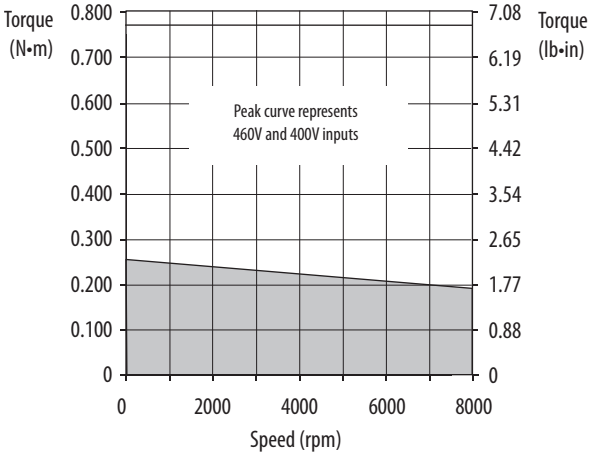
Bulletin MPL Motor Performance Specifications with Kinetix 6000 (400V-class) Drives (continued)

Rotary Motor	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-B520K	4000	11.5	10.7 (95)	21.8	17.0 (150)	3.5	BM02-S @ 150%
				33.0	23.2 (205)		BM02-S @ 250%
MPL-B540D	2000	10.5	19.4 (172)	21.8	38.8 (343)	3.4	BM02-S @ 150%
				23.0	41.0 (362)		BM02-S @ 250%
MPL-B540K	4000	20.4	19.4 (171)	45.0	38.1 (337)	5.4	BM03-S @ 150%
				60.0	48.6 (430)		BM03-S @ 250%
MPL-B560F	3000	20.9	26.8 (237)	45.0	49.3 (436)	5.5	BM03-S @ 150%
				68.0	67.8 (600)		BM03-S @ 250%
MPL-B580F	3000	26.1	34.0 (300)	75.0	74.6 (660)	7.1	BM03-S @ 250%
				73.4	73.5 (650)		BM05-S @ 150%
				94.0	87.0 (770)		BM05-S @ 200%
MPL-B580J	3800	32.0	34.0 (301)	73.4	66.6 (589)	7.9	BM05-S @ 150%
				94.0	81.0 (716)		BM05-S @ 200%
MPL-B640F	3000	30.0	34.4 (304)	45.0	50.4 (446)	6.1	BM03-S @ 150%
			34.4 (304)	65.0	72.3 (640)		BM03-S @ 250%
		32.0	36.7 (325)				BM05-S @ 150%
MPL-B660F	3000	38.5	48.0 (425)	73.4	81.0 (716)	6.1	BM05-S @ 150%
				96.0	101 (895)		BM05-S @ 200%
MPL-B680D	2000	30.0	55.4 (490)	75.0	125 (1105)	9.3	BM03-S @ 250%
		34.0	62.8 (556)	73.4	124 (1098)		BM05-S @ 150%
				94.0	152 (1350)		BM05-S @ 200%
MPL-B680F	3000	47.9	60.0 (531)	73.4	85.4 (755)	7.5	BM05-S @ 150%
				96.0	108 (960)		BM05-S @ 200%
MPL-B680H	3500	48.9	58.0 (513)	97.8	107 (947)	7.5	BM05-S @ 200%
MPL-B860D	2000	47.3	83.0 (735)	73.4	120 (1065)	12.5	BM05-S @ 150%
				95.5	152 (1350)		BM05-S @ 200%
MPL-B880C	1500	47.5	110 (973)	73.4	157 (1387)	12.6	BM05-S @ 150%
				97.5	203 (1800)		BM05-S @ 200%
MPL-B880D	2000	48.9	79.9 (706)	96.0	147 (1300)	12.6	BM05-S @ 200%
MPL-B960B	1200	42.5	130 (1150)	73.4	190 (1684)	12.7	BM05-S @ 150%
				94.0	231 (2050)		BM05-S @ 200%
MPL-B980B	1000	40.0	162 (1440)	73.4	235 (2077)	15.2	BM05-S @ 150%
				94.0	278 (2460)		BM05-S @ 200%

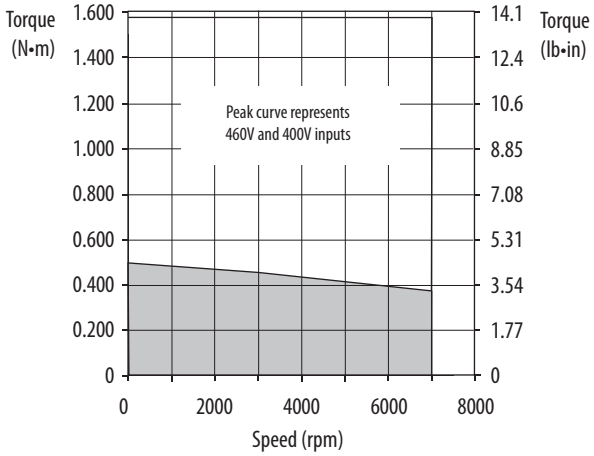
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Low Inertia Motor Curves

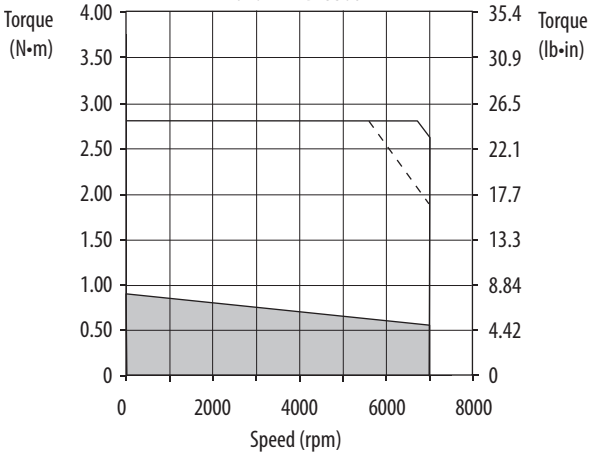
2094-BMP5-S @ 150% or 2094-BMP5-M and MPL-B1510V



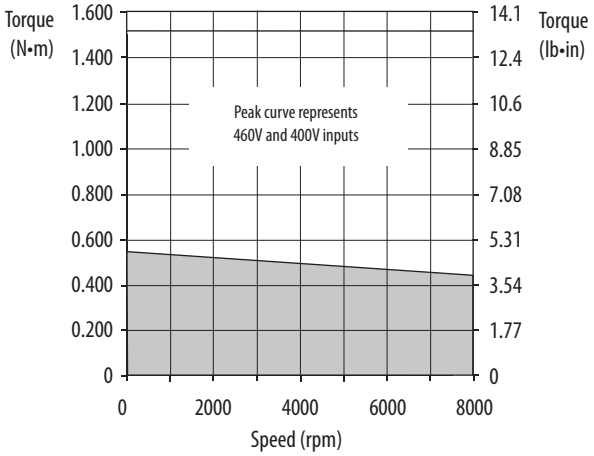
2094-BMP5-S @ 250% or 2094-BMP5-M and MPL-B1520U



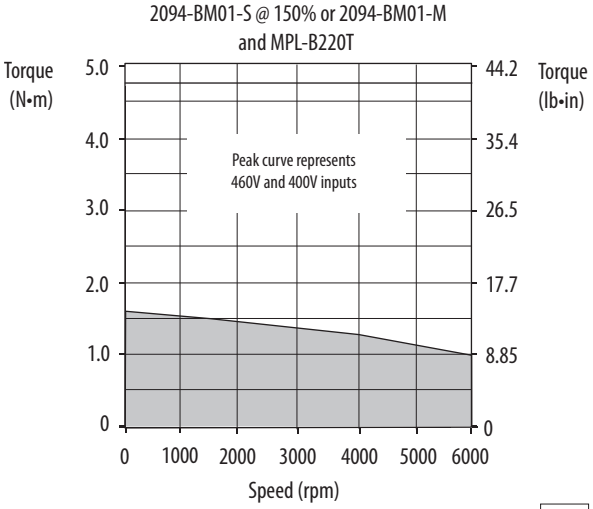
2094-BMP5-S @ 250% or 2094-BMP5-M and MPL-B1530U



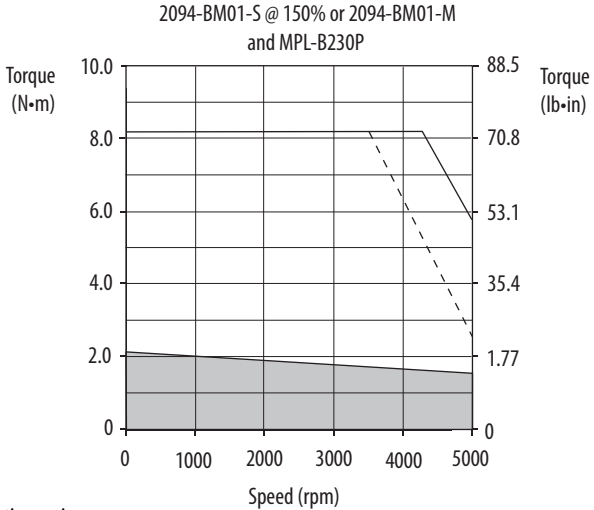
2094-BMP5-S @ 150% or 2094-BMP5-M and MPL-B210V



2094-BM01-S @ 150% or 2094-BM01-M and MPL-B220T



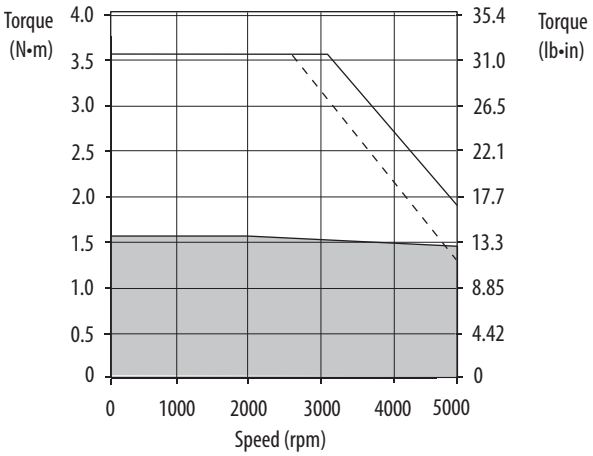
2094-BM01-S @ 150% or 2094-BM01-M and MPL-B230P



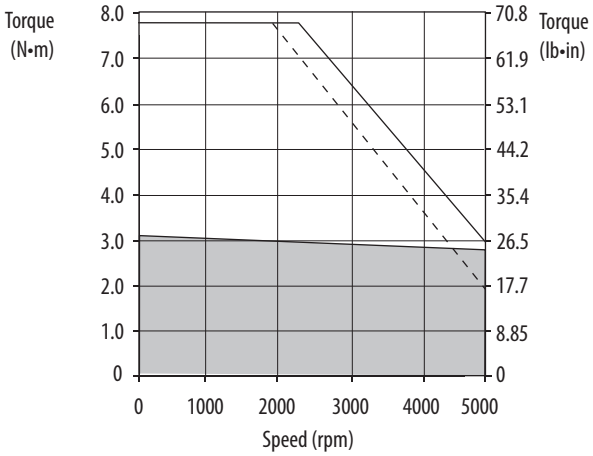
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Low Inertia Motor Curves (continued)

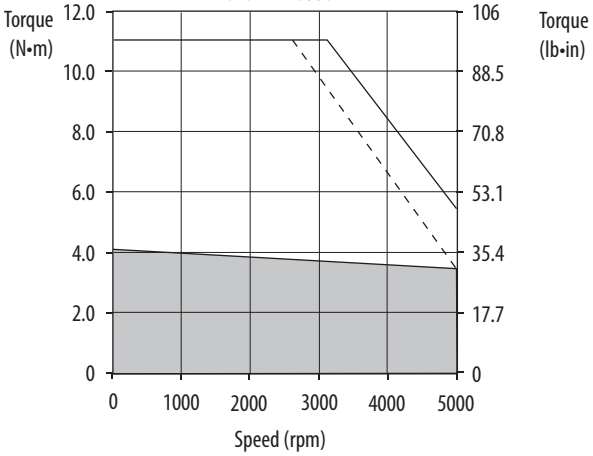
2094-BMP5-S @ 250% or 2094-BMP5-M and MPL-B310P



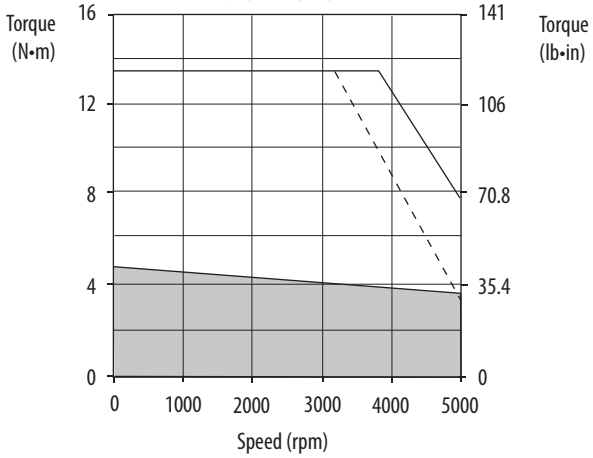
2094-BM01-S @ 250% or 2094-BM01-M and MPL-B320P



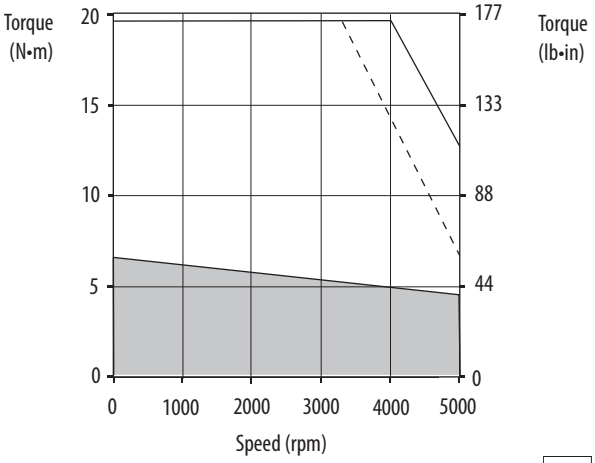
2094-BM01-S @ 250% or 2094-BM01-M and MPL-B330P



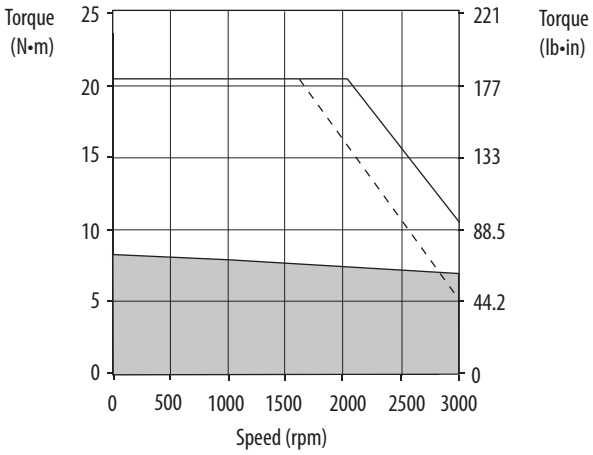
2094-BM02-S @ 250% or 2094-BM02-M and MPL-B420P



2094-BM02-S @ 250% or 2094-BM02-M and MPL-B430P



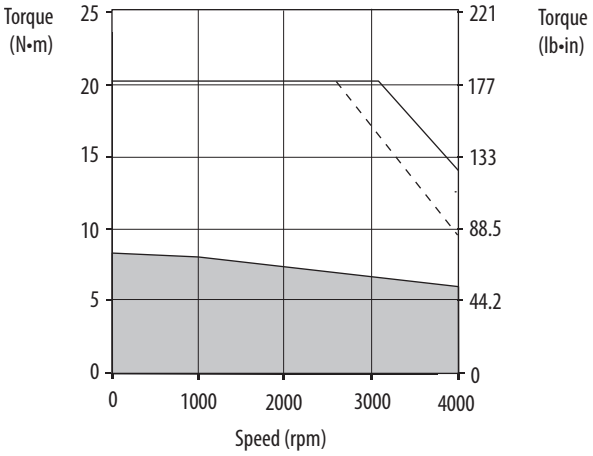
2094-BM01-S @ 250% or 2094-BM01-M and MPL-B4530F



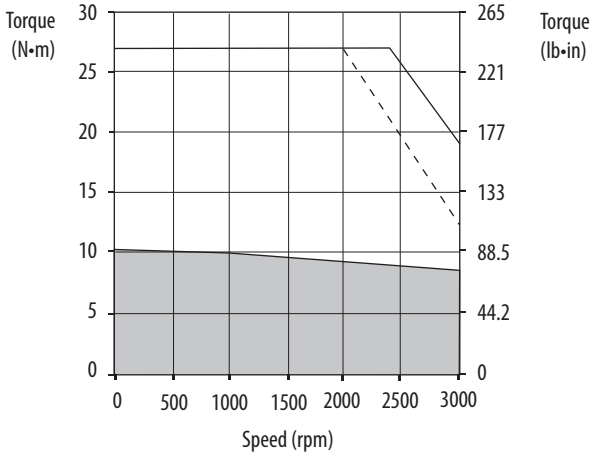
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Low Inertia Motor Curves (continued)

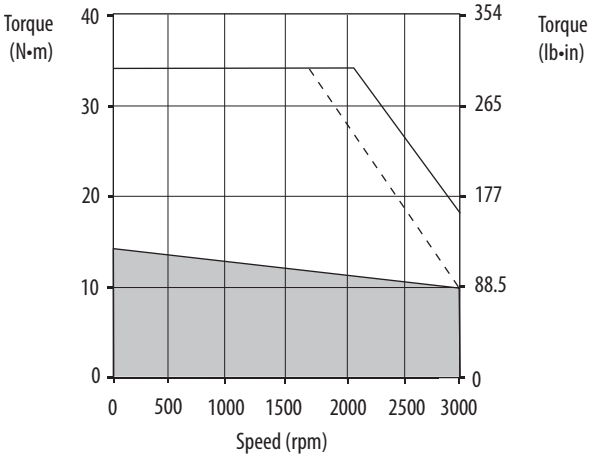
2094-BM02-S @ 250% or 2094-BM02-M and MPL-B4530K



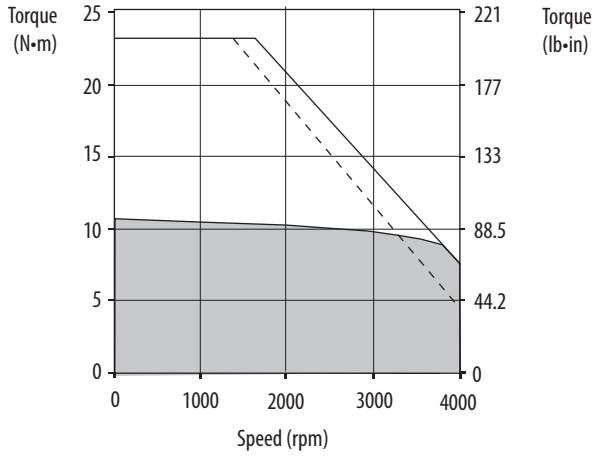
2094-BM02-S @ 250% or 2094-BM02-M and MPL-B4540F



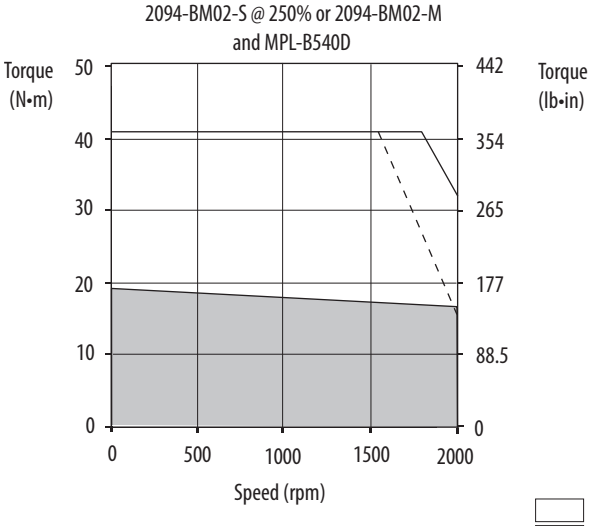
2094-BM02-S @ 250% or 2094-BM02-M and MPL-B4560F



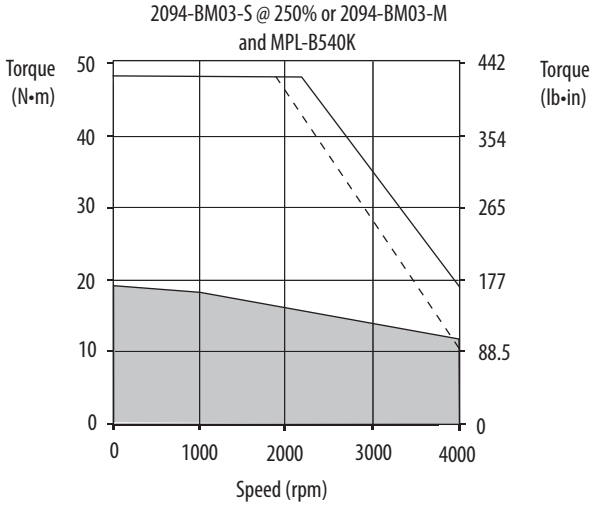
2094-BM02-S @ 250% or 2094-BM02-M and MPL-B520K



2094-BM02-S @ 250% or 2094-BM02-M and MPL-B540D



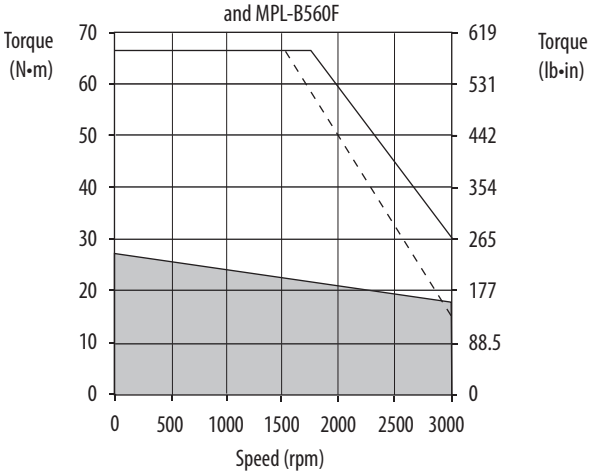
2094-BM03-S @ 250% or 2094-BM03-M and MPL-B540K



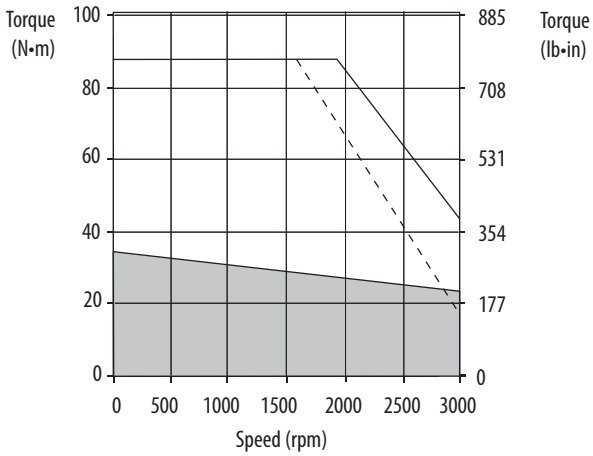
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Low Inertia Motor Curves (continued)

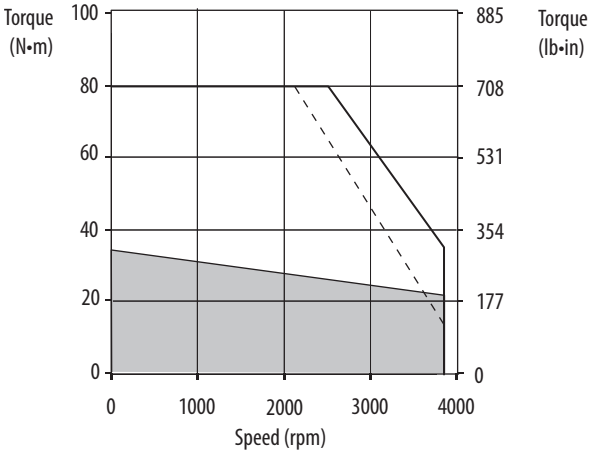
2094-BM03-S @ 250% or 2094-BM03-M and MPL-B560F



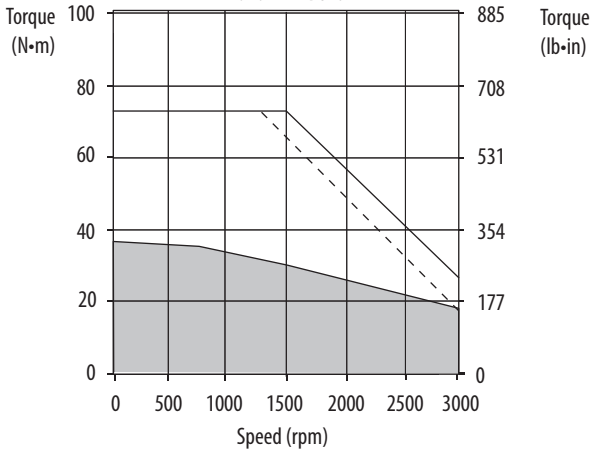
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B580F



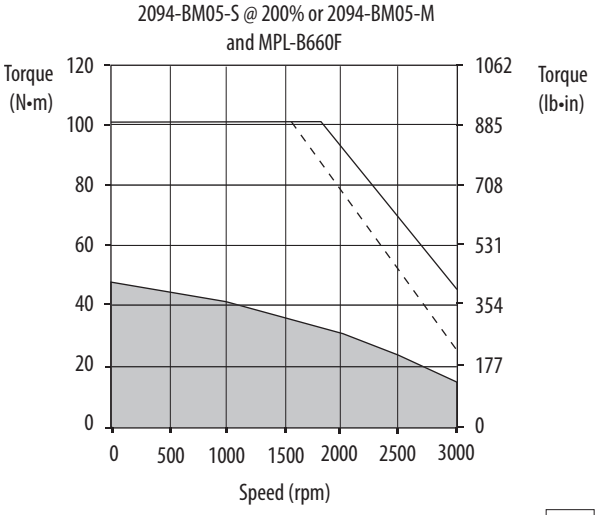
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B580J



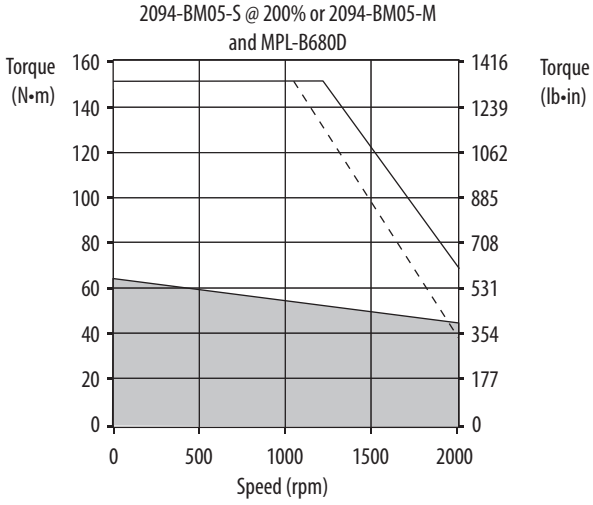
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B640F



2094-BM05-S @ 200% or 2094-BM05-M and MPL-B660F



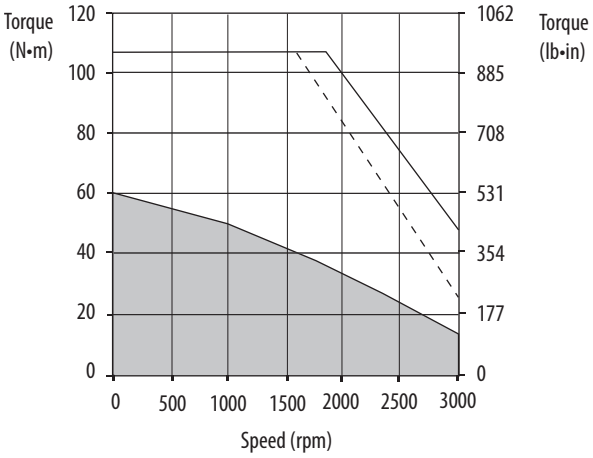
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B680D



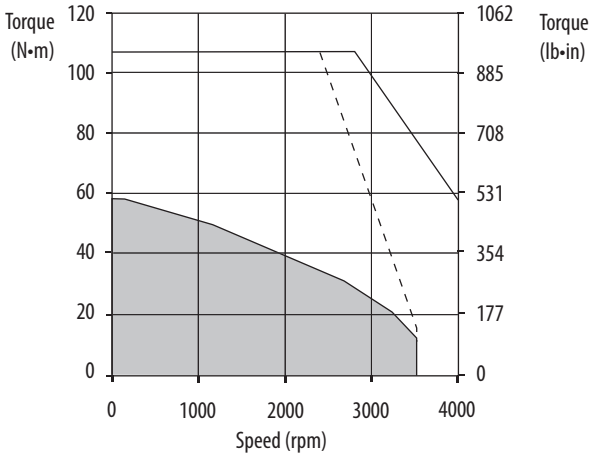
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Low Inertia Motor Curves (continued)

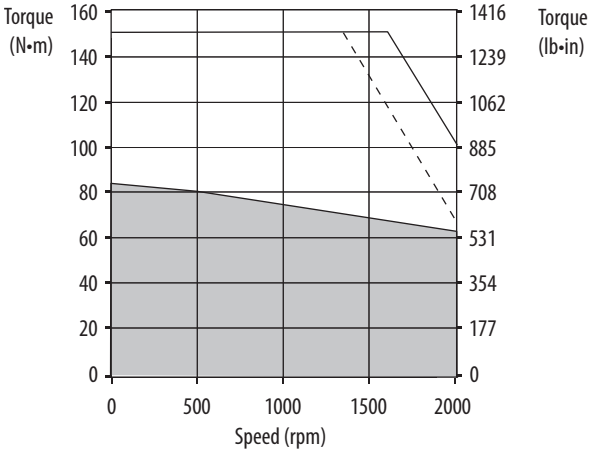
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B680F



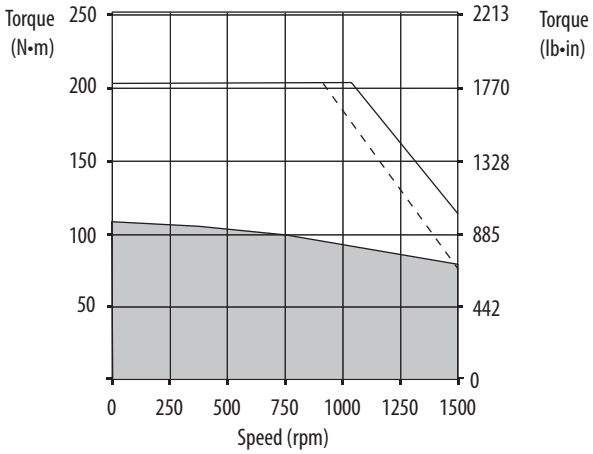
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B680H



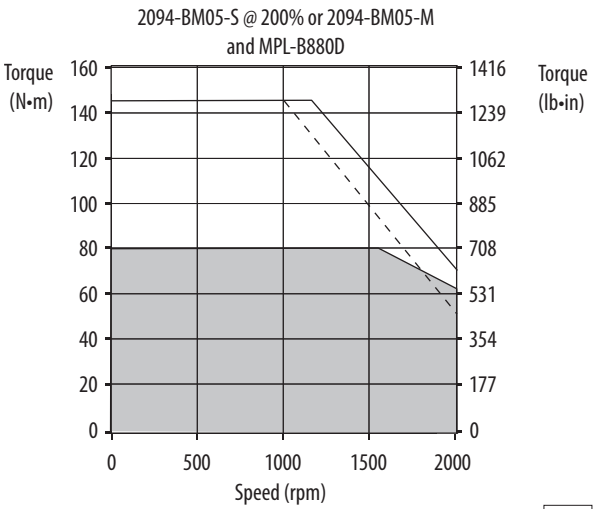
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B860D



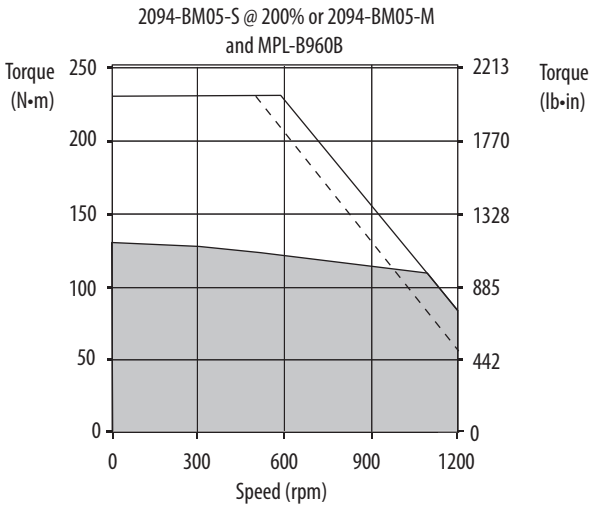
2094-BM05-S @ 200% or 2094-BM05-M and MPL-B880C



2094-BM05-S @ 200% or 2094-BM05-M and MPL-B880D

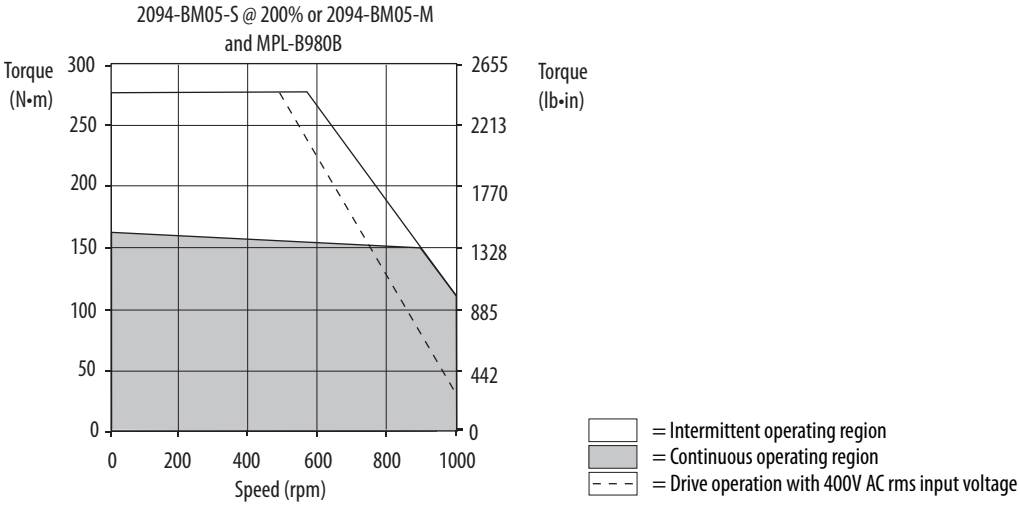


2094-BM05-S @ 200% or 2094-BM05-M and MPL-B960B



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

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Low Inertia Motor Curves (continued)



Kinetix 6000 (200V-class) Drives with MP-Series Medium Inertia Motors

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

Bulletin MPM Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPM-A1151M, MPM-A1152F, MPM-A1153F	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback 2090-CFBM7DF-CEAA*xx* (standard, non-flex) (2) 2090-CFBM7DF-CEAF*xx* (continuous-flex) Resolver Feedback
MPM-A1302F	2090-CP*x*M7DF-14AA*xx* (standard, non-flex) 2090-CP*x*M7DF-14AF*xx* (continuous-flex)	
MPM-A1304F	2090-CP*x*M7DF-12AA*xx* (standard, non-flex)	
MPM-A1651F	2090-CP*x*M7DF-10AA*xx* (standard, non-flex) 2090-CP*x*M7DF-10AF*xx* (continuous-flex)	
MPM-A1652F, MPM-A1653F	2090-CP*x*M7DF-08AA*xx* (standard, non-flex) 2090-CP*x*M7DF-08AF*xx* (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. Refer to Required Drive Accessories on page 4.

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

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.

Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.

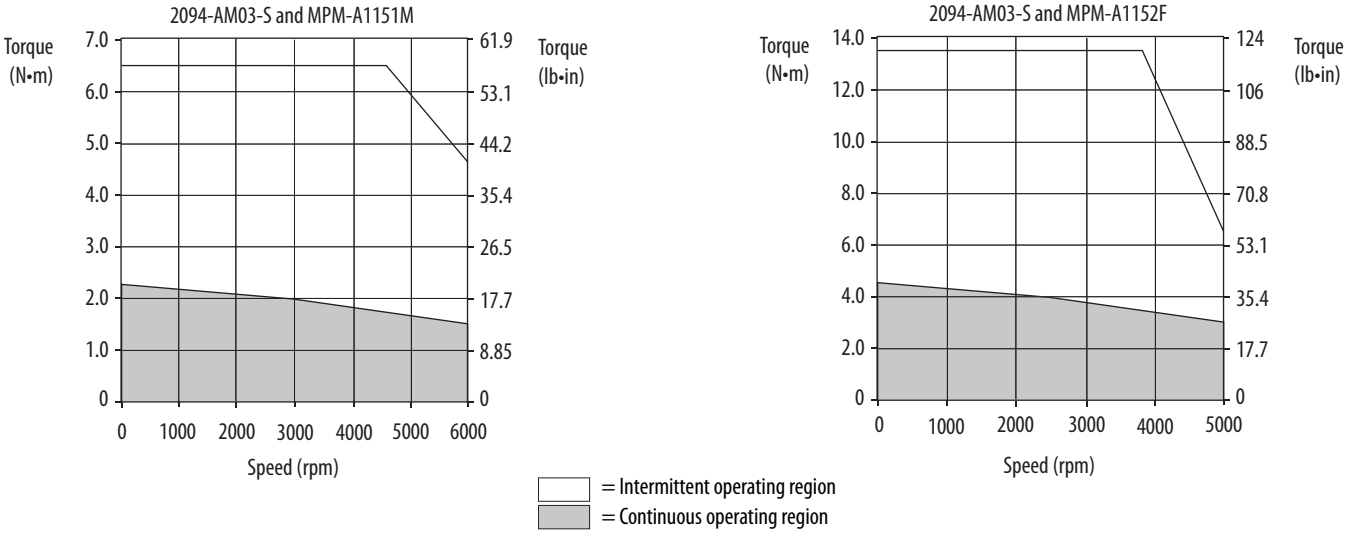
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	Speed, base 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	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	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	5000	16.18	6.0 (53.1)	30.0	10.7 (94.7)	1.45	2094-AM02-S
				6.5 (57.5)	49.0	16.1 (142)		2094-AM03-S
MPM-A1302F	3000	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	4000	19.65	7.6 (67.2)	30.0	13.2 (117)	2.20	2094-AM02-S
				9.2 (81.4)	48.3	19.3 (171)		2094-AM03-S
MPM-A1651F	3000	5000	30.96	9.3 (82.3)	49.0	15.2 (134)	2.50	2094-AM03-S
				10.7 (94.7)	73.4	20.3 (179)		2094-AM05-S
MPM-A1652F	3000	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	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

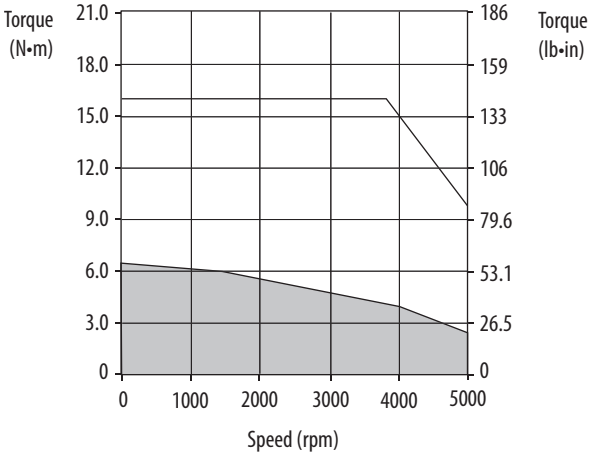
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 (200V-class) Drives/MP-Series Medium Inertia Motor Curves

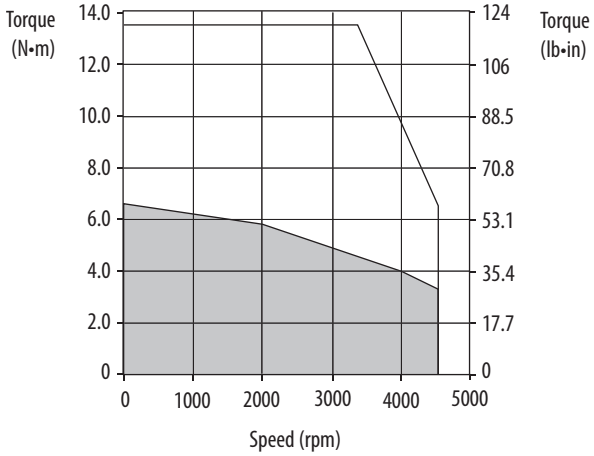


Kinetix 6000 (200V-class) Drives/MP-Series Medium Inertia Motor Curves (continued)

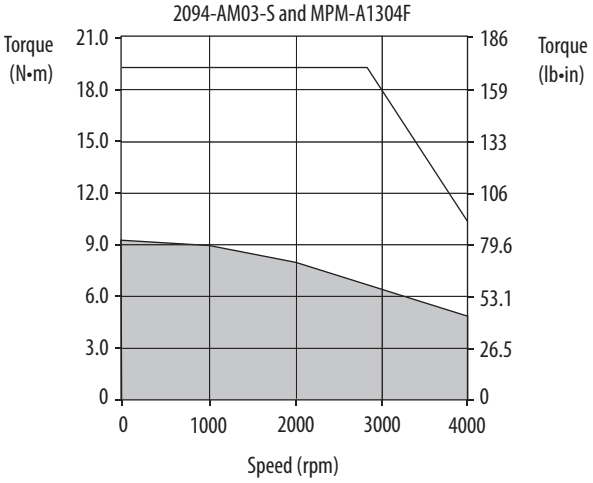
2094-AM03-S and MPM-A1153F



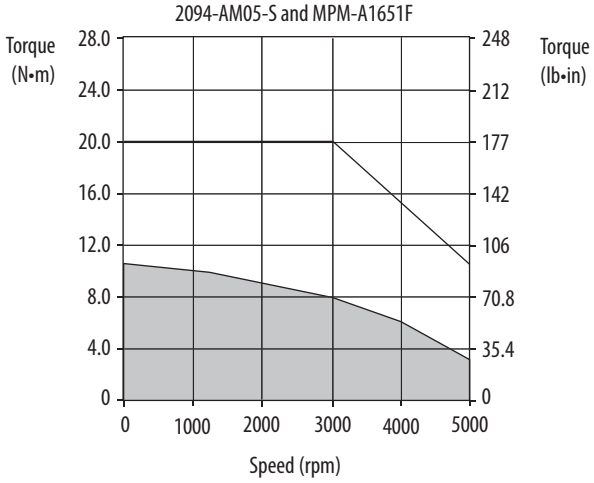
2094-AM05-S and MPM-A1302F



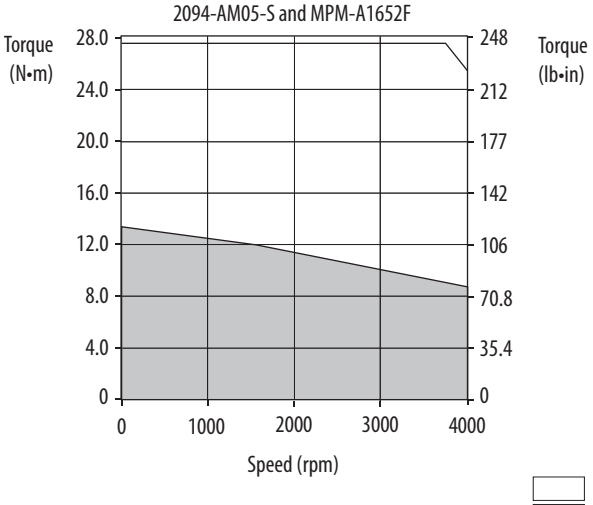
2094-AM03-S and MPM-A1304F



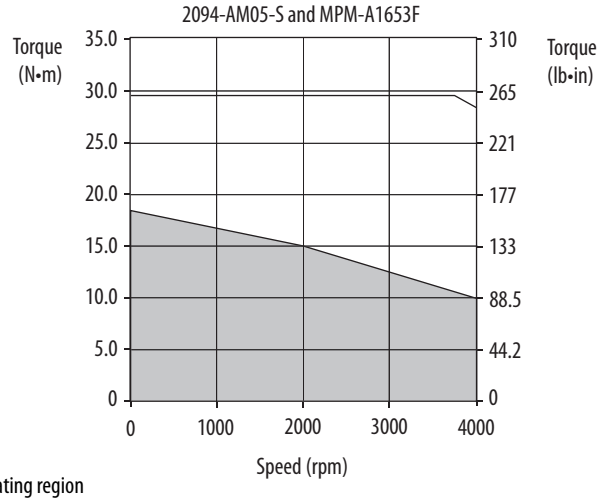
2094-AM05-S and MPM-A1651F



2094-AM05-S and MPM-A1652F



2094-AM05-S and MPM-A1653F



= Intermittent operating region
= Continuous operating region

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with MP-Series Medium Inertia Motors

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with MP-Series 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 or C) drives, 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 or C) drives configured for enhanced peak performance.

Refer to Kinetix Servo Drives Specifications Technical Data, publication GMC-TD003, for more information.

Bulletin MPM Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPM-B1151*x*, MPM-B1152*x*, MPM-B1153E, MPM-B1153F	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPM-B1302F, MPM-B1302M, MPM-B1304C, MPM-B1304E		
MPM-B1651C, MPM-B1652C		
MPM-B1153T	2090-CP*x*M7DF-14AA*xx* (standard, non-flex) 2090-CP*x*M7DF-14AF*xx* (continuous-flex)	
MPM-B1302T, MPM-B1304M		
MPM-B1651F, MPM-B1653C		
MPM-B1651M, MPM-B1652E, MPM-B1652F, MPM-B1653E	2090-CP*x*M7DF-10AA*xx* (standard, non-flex) 2090-CP*x*M7DF-10AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* (standard, non-flex) (2) 2090-CFBM7DF-CEAF*xx* (continuous-flex) Resolver Feedback
MPM-B2152C, MPM-B2153B		
MPM-B1653F	2090-CP*x*M7DF-08AA*xx* (standard, non-flex) 2090-CP*x*M7DF-08AF*xx* (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. Refer to Required Drive Accessories on page 4.

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

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.

Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.

Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	Speed, base 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	5000	2.71	2.3 (20.3)	9.9	6.6 (58.4)	0.75	2094-BMP5-M
MPM-B1151T	6000	7000	5.62	2.3 (20.3)	20.5	5.8 (51.3)	0.90	2094-BM01-M
MPM-B1152C	1500	3000	3.61	5.0 (44.2)	12.4	13.5 (119)	1.20	2094-BM02-M
MPM-B1152F	3000	5200	6.17	5.0 (44.2)	21.1	13.3 (118)	1.40	2094-BM01-M
MPM-B1152T	6000	7000	11.02	5.0 (44.2)	36.5	13.1 (116)	1.40	2094-BM02-M
MPM-B1153E	2250	3500	6.21	6.5 (57.5)	21.6	19.7 (174)	1.40	2094-BM01-M
MPM-B1153F	3000	5500	9.20	6.4 (56.6)	32.0	19.7 (174)	1.40	2094-BM02-M

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

Rotary Motor	Speed, base 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-B1153T	6000	7000	15.95	6.4 (56.6)	45.0	14.5 (128)	1.45	2094-BM03-M
MPM-B1302F	3000	4500	8.57	6.6 (58.4)	21.5	13.0 (115)	1.65	2094-BM01-M
MPM-B1302M	4500	6000	12.57	6.6 (58.4)	32.4	13.3 (118)	1.65	2094-BM02-M
MPM-B1302T	6000	7000	16.83	6.7 (59.3)	43.4	13.3 (118)	1.65	2094-BM03-M
MPM-B1304C	1500	2750	7.00	10.3 (91.1)	21.5	26.4 (233)	2.00	2094-BM01-M
MPM-B1304E	2250	4000	10.75	10.2 (90.3)	34.2	27.1 (240)	2.20	2094-BM02-M
MPM-B1304M	4500	6000	19.02	10.4 (92.0)	60.6	27.1 (240)	2.20	2094-BM03-M
MPM-B1651C	1500	3500	10.21	11.4 (101)	29.2	23.2 (205)	2.50	2094-BM02-M
MPM-B1651F	3000	5000	17.75	11.4 (101)	50.9	23.2 (205)	2.50	2094-BM03-M
MPM-B1651M	4500	5000	22.46	11.3 (100)	56.8	21.4 (189)	2.50	2094-BM03-M
MPM-B1652C	1500	2500	11.51	16.4 (145)	33.6	40.2 (356)	3.80	2094-BM02-M
MPM-B1652E	2250	3500	20.94	21.1 (187)	60.5	48.0 (425)	4.30	2094-BM03-M
MPM-B1652F	3000	4500	28.74	21.1 (187)	84.1	48.0 (424)	4.30	2094-BM05-M
MPM-B1653C	1500	2500	20.05	26.7 (236)	59.2	67.7 (599)	4.60	2094-BM03-M
MPM-B1653E	2250	3500	27.00	26.8 (237)	72.9	62.0 (549)	5.10	2094-BM03-M
MPM-B1653F	3000	4000	34.94	31.0 (274)	94.3	56.0 (495)	5.10	2094-BM05-M
MPM-B2152C	1500	2500	27.40	36.7 (325)	55.4	72.2 (639)	5.60	2094-BM03-M
MPM-B2152F	3000	4500	43.54	34.1 (302)	97.8	72.3 (495)	5.90	2094-BM05-M
MPM-B2152M	4500	5000	44.58	34.1 (302)	76.3	52.9 (468)	5.90	2094-BM05-M
MPM-B2153B	1250	2000	24.06	48.0 (425)	60.0	101 (894)	6.80	2094-BM03-M
MPM-B2153E	2250	3000	39.63	47.9 (424)	97.8	101 (894)	7.20	2094-BM05-M
MPM-B2153F	3000	3800	43.86	45.6 (403)	97.8	99.0 (875)	7.20	2094-BM05-M
MPM-B2154B	1250	2000	35.46	62.7 (555)	97.8	154 (1362)	6.90	2094-BM05-M
MPM-B2154E	2250	3000	43.68	55.9 (495)	97.8	112 (990)	7.50	2094-BM05-M
MPM-B2154F	3000	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, refer to Motion Analyzer software.

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

Rotary Motor	Speed, base 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	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	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	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	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	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	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	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	7000	15.95	6.4 (56.6)	45.0	14.5 (128)	1.45	2094-BM03-S @ 150%
MPM-B1302F	3000	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	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	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)		2094-BM03-S @ 150%
MPM-B1304C	1500	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	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	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	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	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	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	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	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%
MPM-B1652F	3000	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%

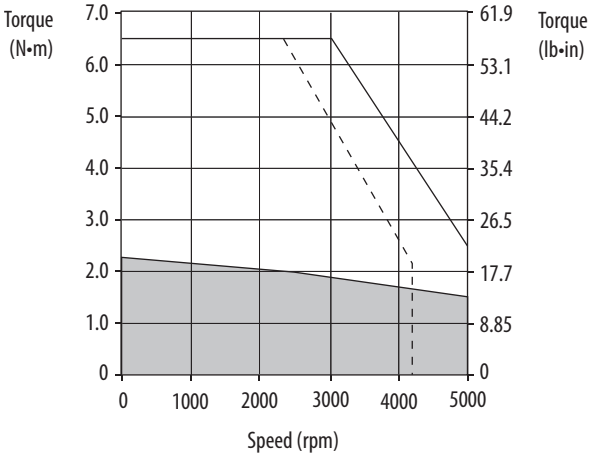
Bulletin MPM Motor Performance Specifications with Kinetix 6000 (400V-class) Drives (continued)

Rotary Motor	Speed, base 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-B1653C	1500	2500	20.05	26.7 (236)	45.0	55.0 (487)	4.60	2094-BM03-S @ 150%
					59.2	67.7 (599)		2094-BM03-S @ 250%
MPM-B1653E	2250	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	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	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	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	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	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	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	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	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	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	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%

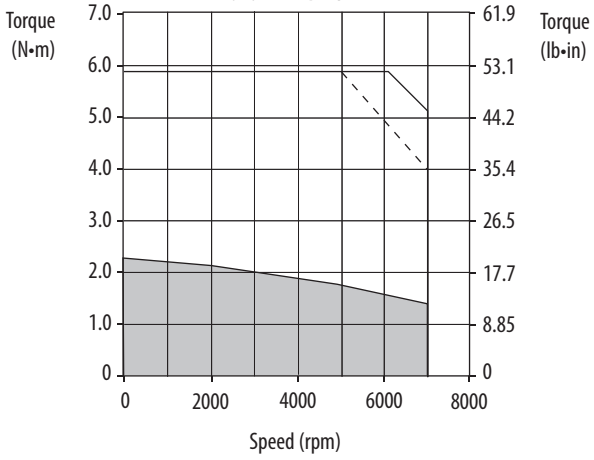
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Medium Inertia Motor Curves

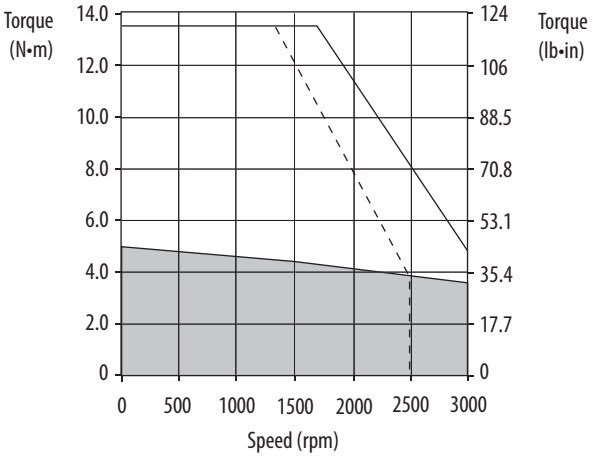
2094-BMP5-S @ 250% or 2094-BMP5-M and MPM-B1151F



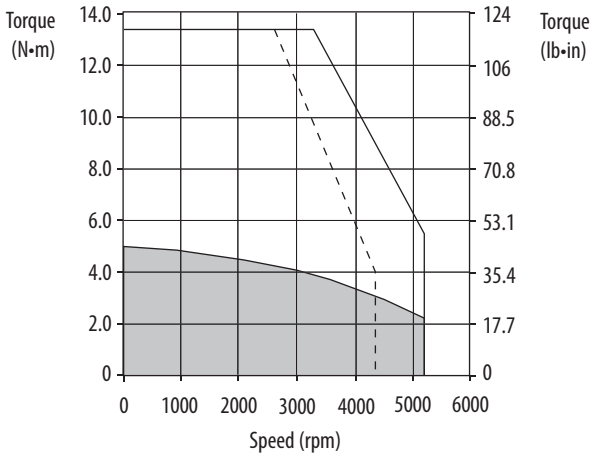
2094-BM01-S @ 250% or 2094-BM01-M and MPM-B1151T



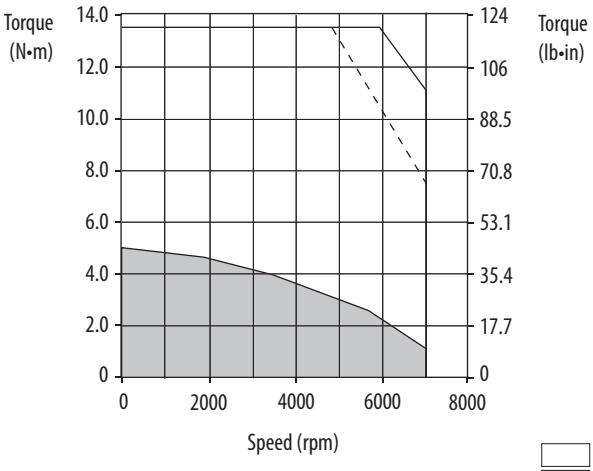
2094-BM01-S @ 150% or 2094-BM02-M and MPM-B1152C



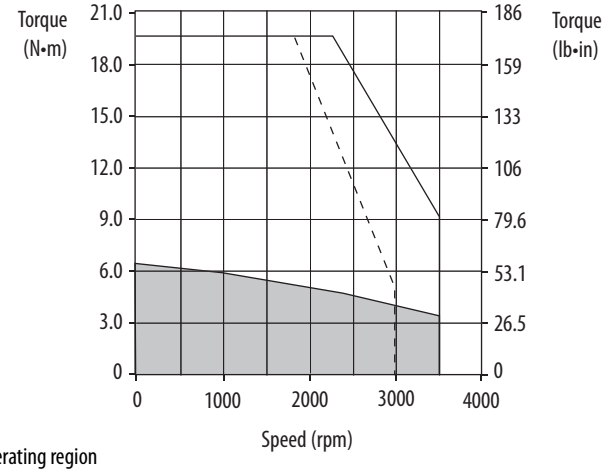
2094-BM01-S @ 250% or 2094-BM01-M and MPM-B1152F



2094-BM02-S @ 250% or 2094-BM02-M and MPM-B1152T



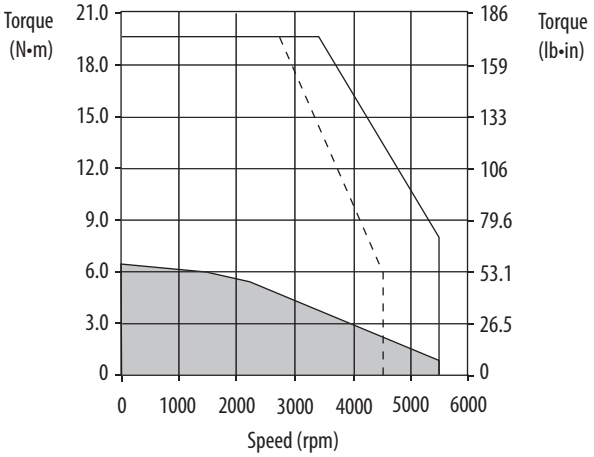
2094-BM01-S @ 250% or 2094-BM01-M and MPM-B1153E



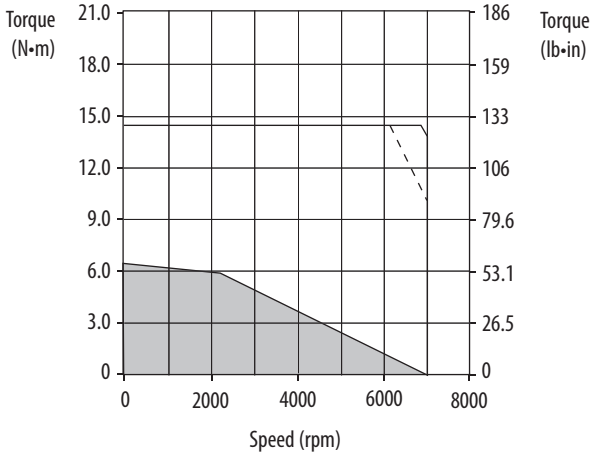
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/MP-Series Medium Inertia Motor Curves (continued)

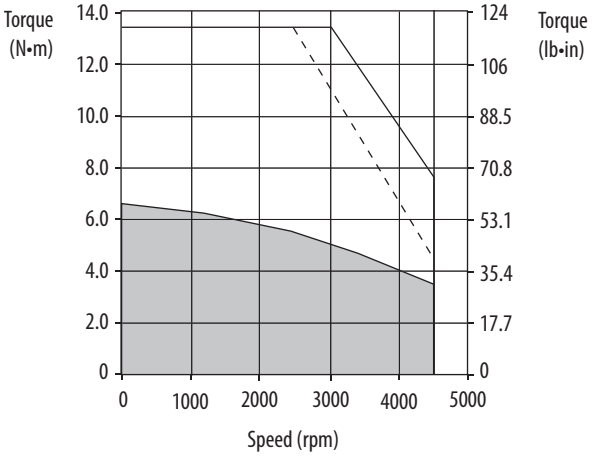
2094-BM02-S @ 250% or 2094-BM02-M and MPM-B1153F



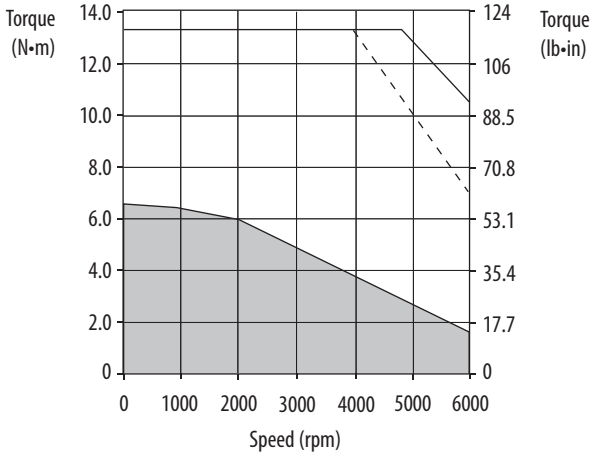
2094-BM03-S @ 150% or 2094-BM03-M and MPM-B1153T



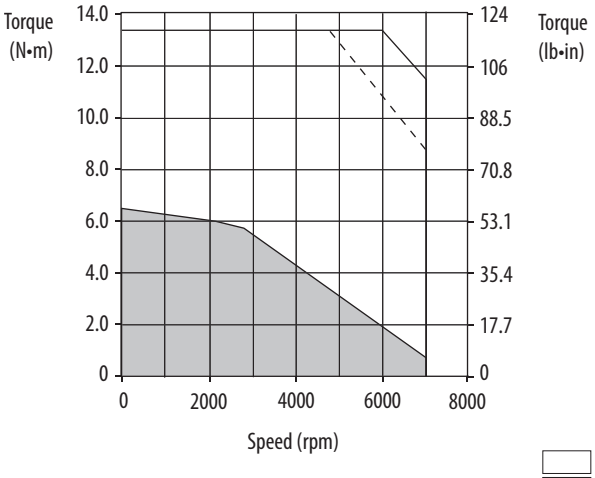
2094-BM01-S @ 250% or 2094-BM01-M and MPM-B1302F



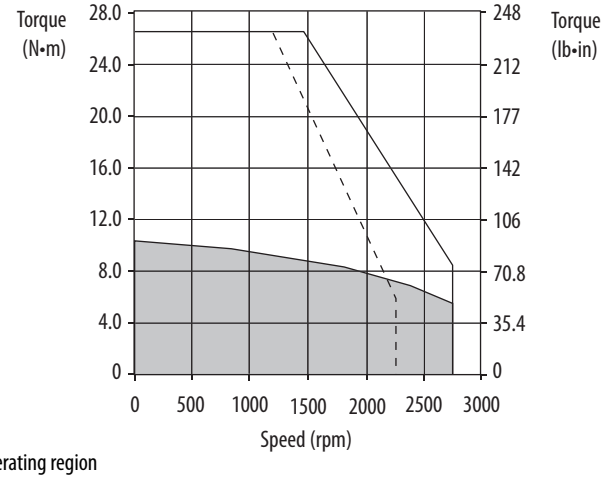
2094-BM02-S @ 250% or 2094-BM02-M and MPM-B1302M



2094-BM03-S @ 150% or 2094-BM03-M and MPM-B1302T



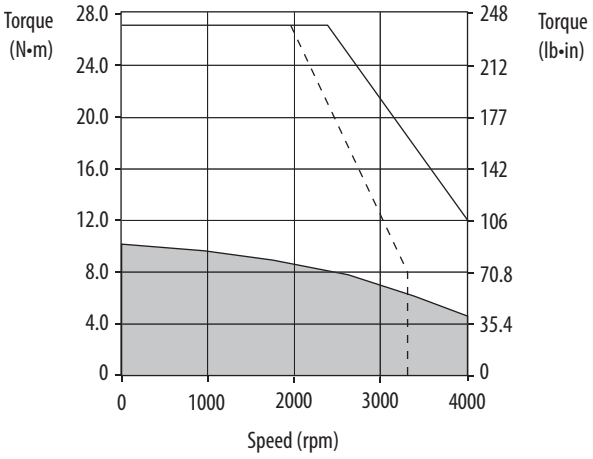
2094-BM01-S @ 250% or 2094-BM01-M and MPM-B1304C



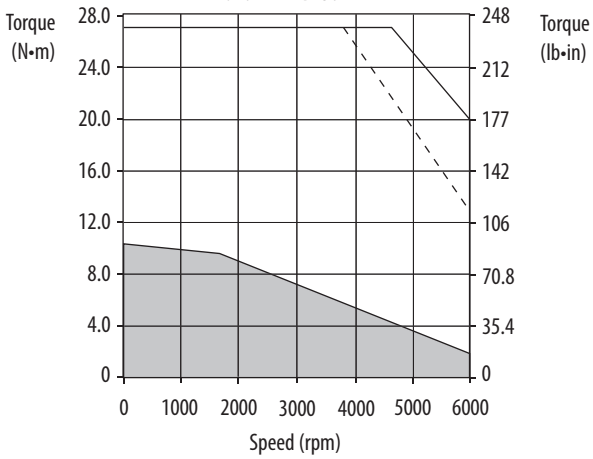
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/MP-Series Medium Inertia Motor Curves (continued)

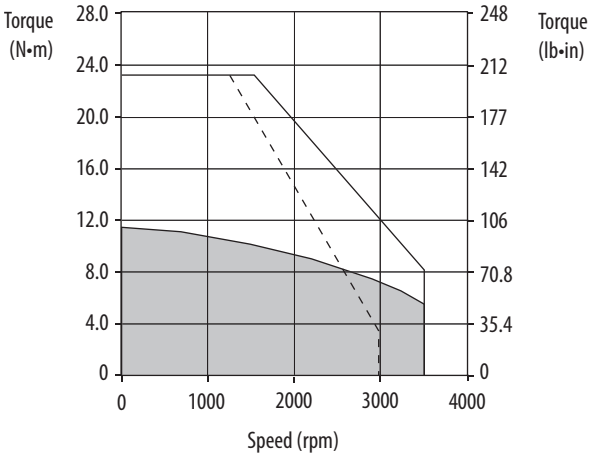
2094-BM02-S @ 250% or 2094-BM02-M and MPM-B1304E



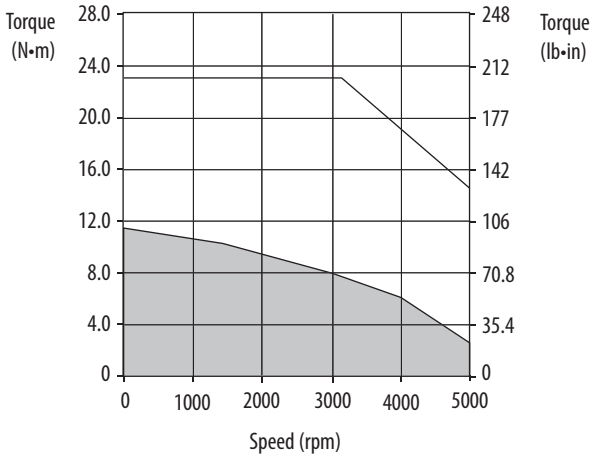
2094-BM03-S @ 250% or 2094-BM03-M and MPM-B1304M



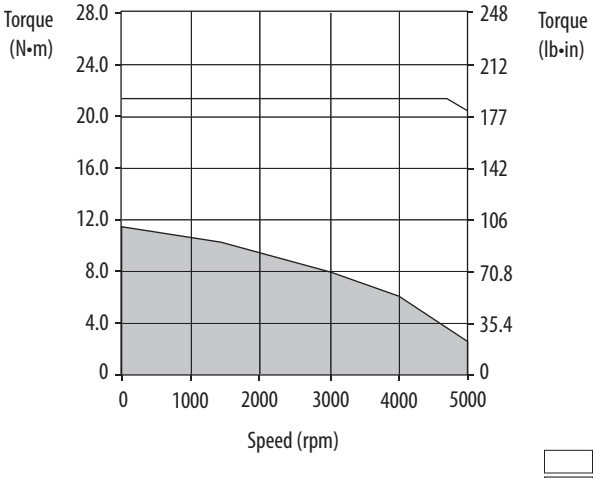
2094-BM02-S @ 250% or 2094-BM02-M and MPM-B1651C



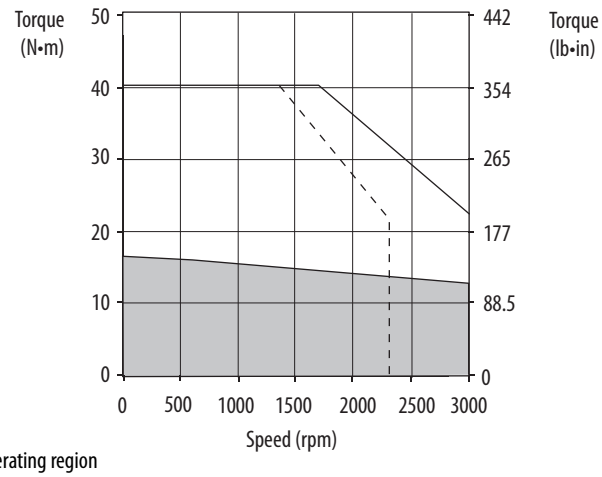
2094-BM03-S @ 250% or 2094-BM03-M and MPM-B1651F



2094-BM03-S @ 250% or 2094-BM03-M and MPM-B1651M



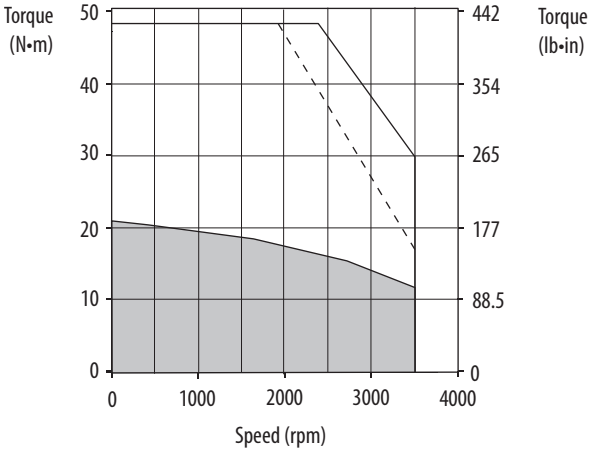
2094-BM02-S @ 250% or 2094-BM02-M and MPM-B1652C



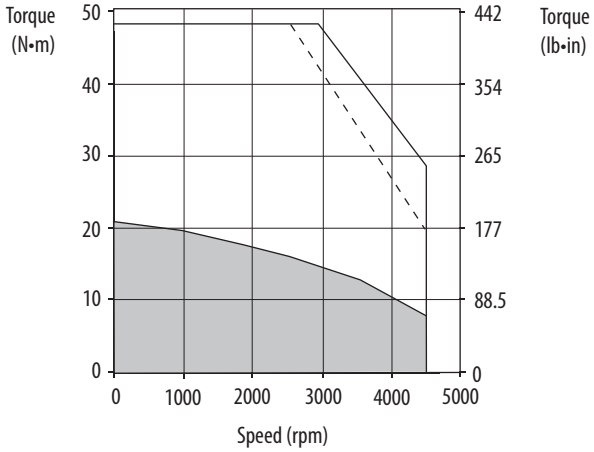
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/MP-Series Medium Inertia Motor Curves (continued)

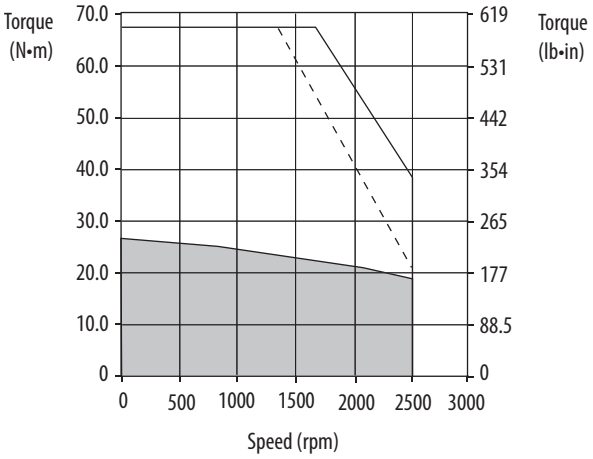
2094-BM03-S @ 250% or 2094-BM03-M and MPM-B1652E



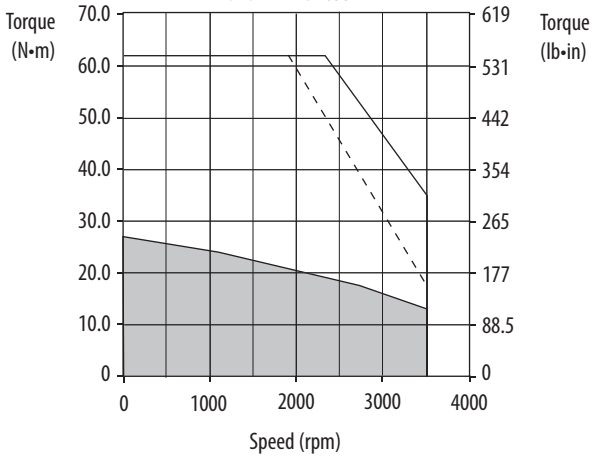
2094-BM05-S @ 200% or 2094-BM05-M and MPM-B1652F



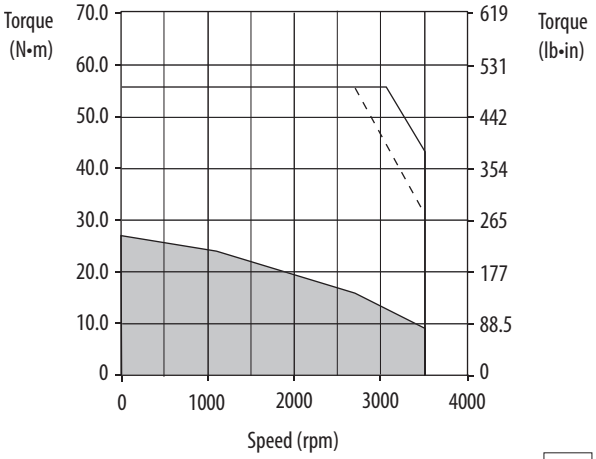
2094-BM03-S @ 250% or 2094-BM03-M and MPM-B1653C



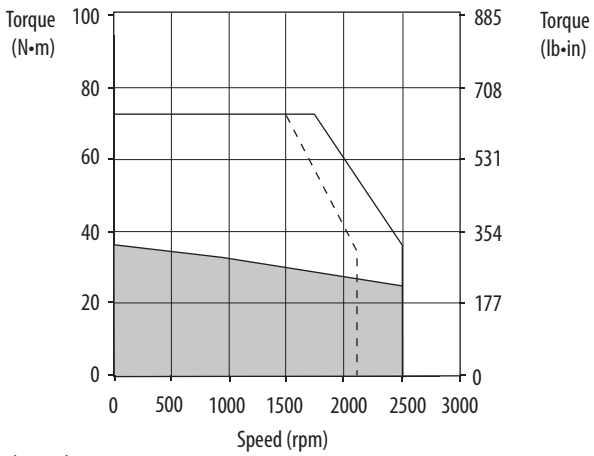
2094-BM03-S @ 250% or 2094-BM03-M and MPM-B1653E



2094-BM05-S @ 200% or 2094-BM05-M and MPM-B1653F



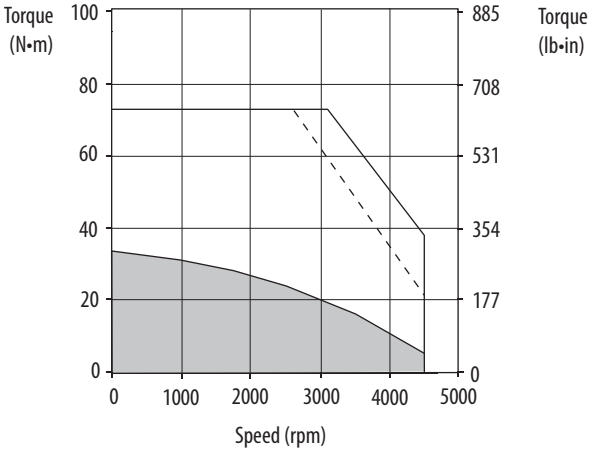
2094-BM03-S @ 250% or 2094-BM03-M and MPM-B2152C



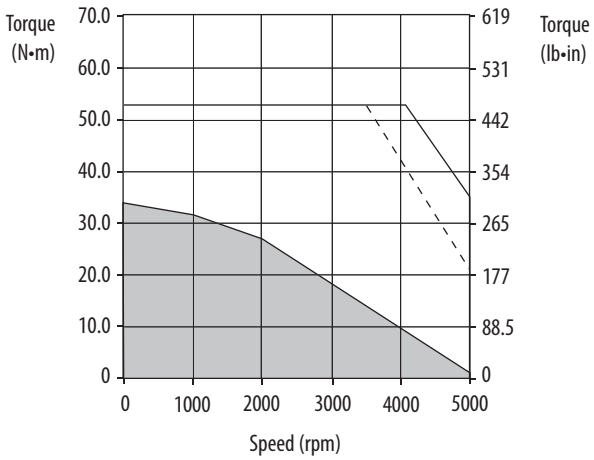
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/MP-Series Medium Inertia Motor Curves (continued)

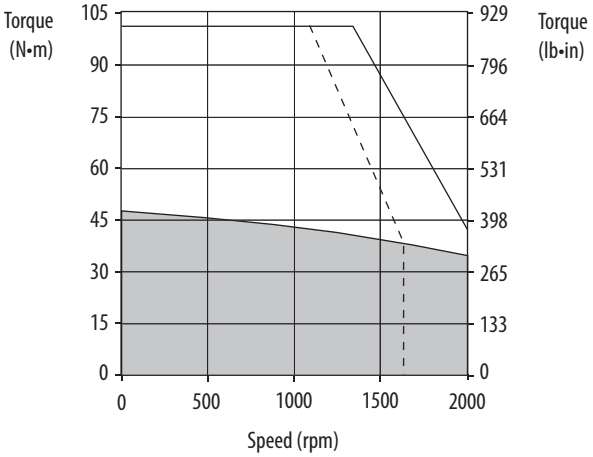
2094-BM05-S @ 200% or 2094-BM05-M and MPM-B2152F



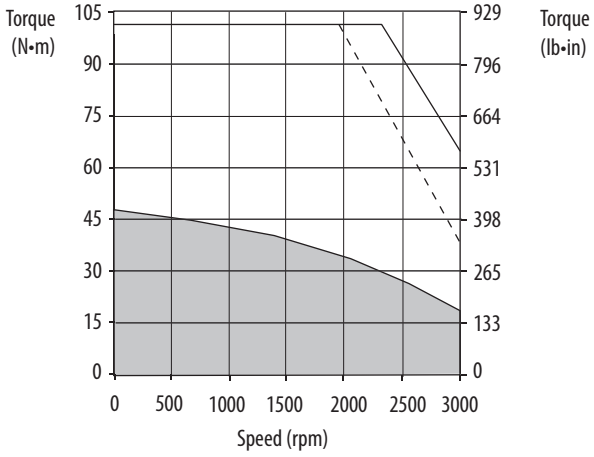
2094-BM05-S @ 200% or 2094-BM05-M and MPM-B2152M



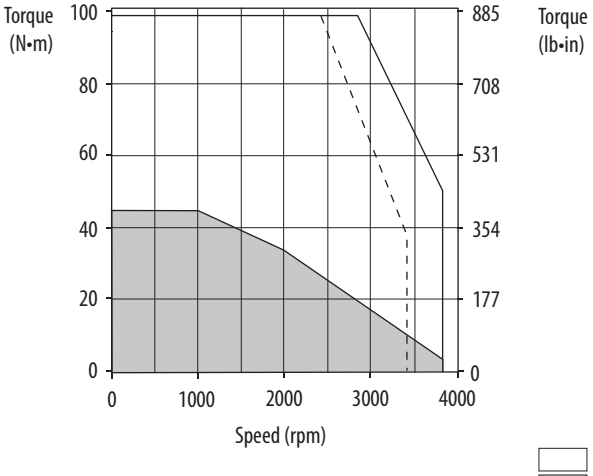
2094-BM03-S @ 250% or 2094-BM03-M and MPM-B2153B



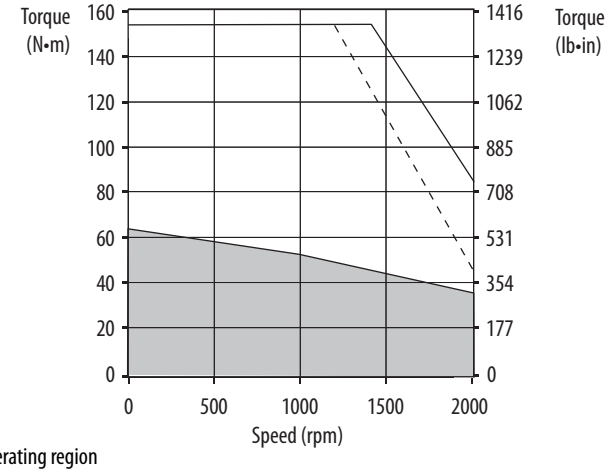
2094-BM05-S @ 200% or 2094-BM05-M and MPM-B2153E



2094-BM05-S @ 200% or 2094-BM05-M and MPM-B2153F

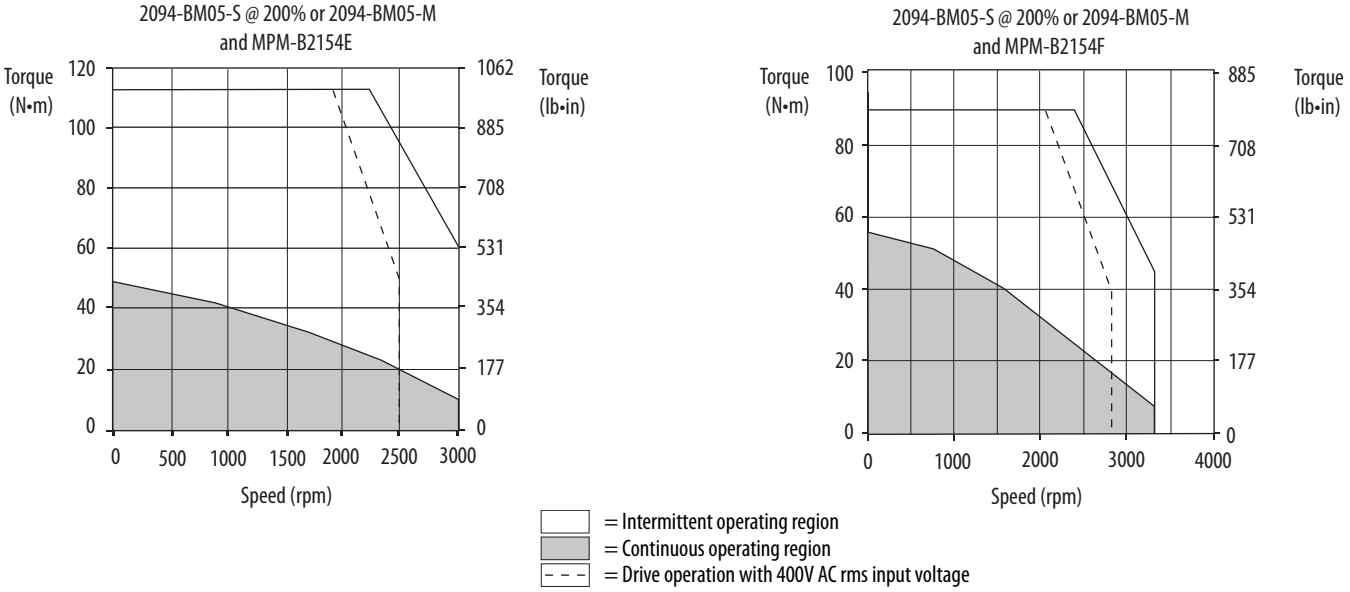


2094-BM05-S @ 200% or 2094-BM05-M and MPM-B2154B



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

Kinetix 6000/Kinetix 6200/6500 (400V-class) Drives/MP-Series Medium Inertia Motor Curves (continued)



Kinetix 6000 (200V-class) Drives with MP-Series Food Grade Motors

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

Bulletin MPF Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPF-A310P, MPF-A320H, MPF-A320P, MPF-A330P	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPF-A430H		
MPF-A430P MPF-A4540F, MPF-A4530K	2090-CP*x*M7DF-14AA*xx* (standard, non-flex) 2090-CP*x*M7DF-14AF*xx* (continuous-flex)	
MPF-A540K	2090-CP*x*M7DF-08AA*xx* (standard, non-flex) 2090-CP*x*M7DF-08AF*xx* (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.

Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.

Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

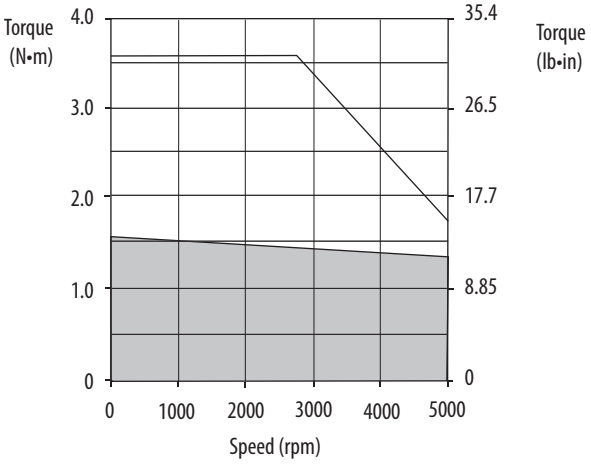
Bulletin MPF Motor Performance Specifications with Kinetix 6000 (200V-class) Drives

Rotary Motor	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	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	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	5000	8.50	2.88 (25.5)	17.0	5.07 (44.8)	1.3	2094-AM01-S
		9.00	3.05 (27.0)	29.5	7.91 (70.0)		2094-AM02-S
MPF-A330P	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	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	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	19.50	8.08 (71.4)	49.0	17.01 (150)	2.3	2094-AM03-S
				62.0	20.30 (179)		2094-AM05-S
MPF-A4540F	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	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

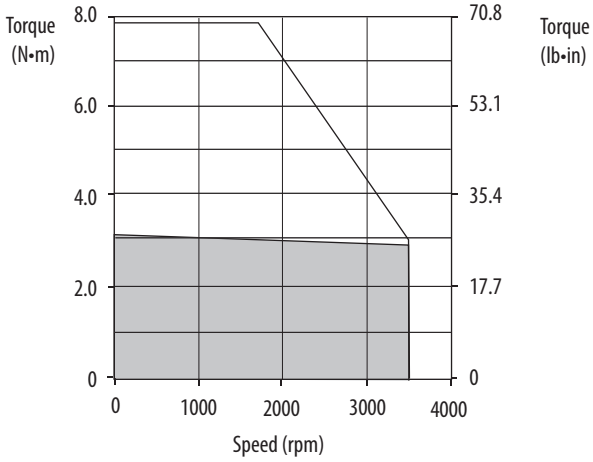
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 (200V-class) Drives/MP-Series Food Grade Motor Curves

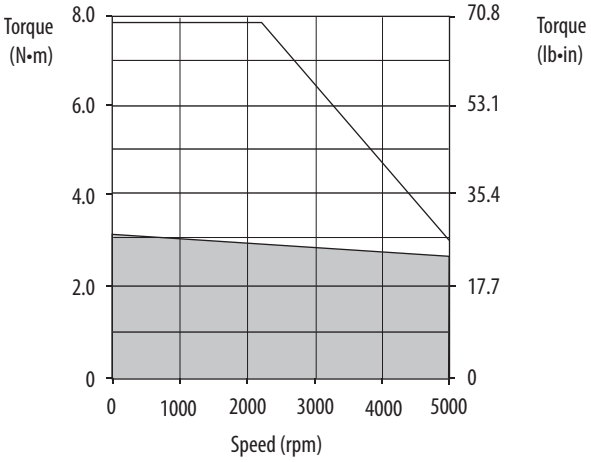
2094-AM01-S and MPF-A310P



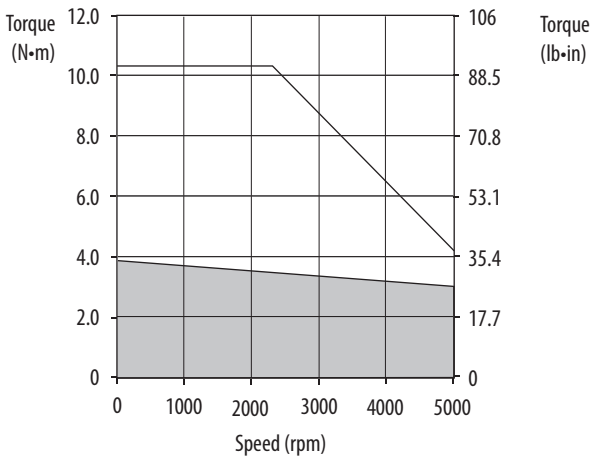
2094-AM02-S and MPF-A320H



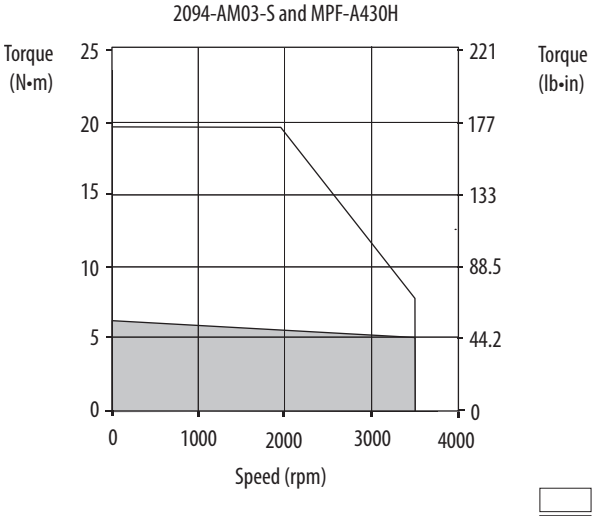
2094-AM02-S and MPF-A320P



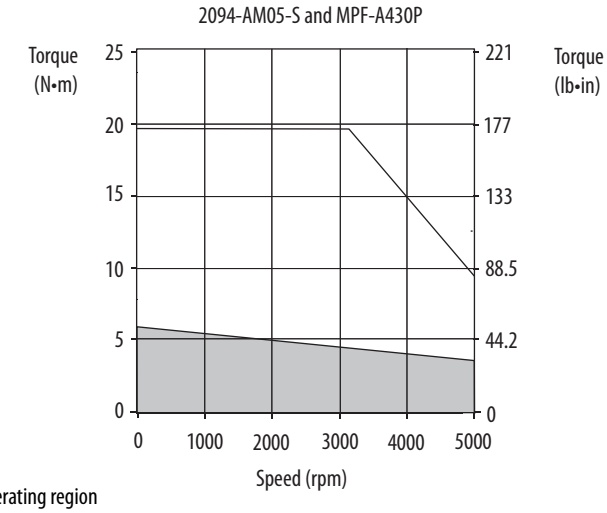
2094-AM03-S and MPF-A330P



2094-AM03-S and MPF-A430H



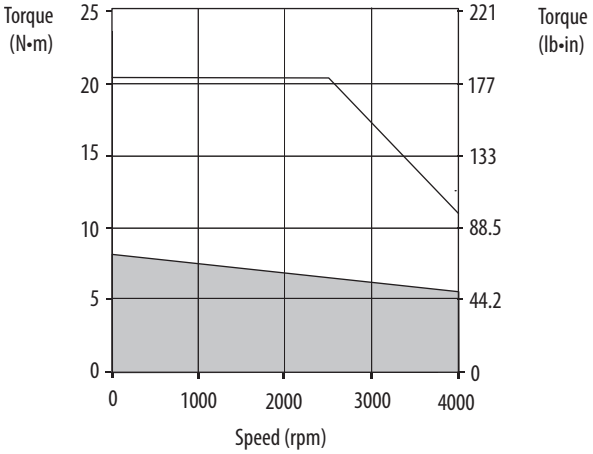
2094-AM05-S and MPF-A430P



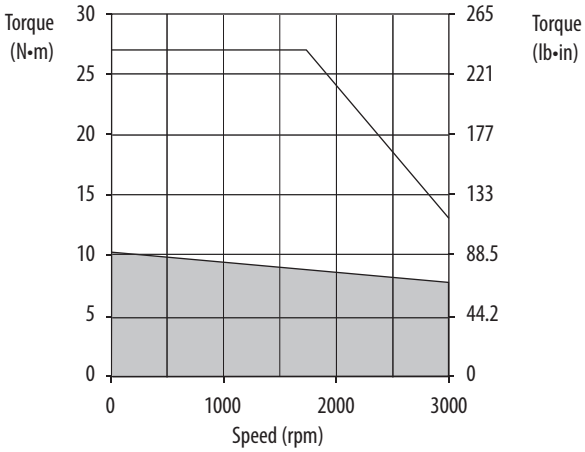
= Intermittent operating region
= Continuous operating region

Kinetix 6000 (200V-class) Drives/MP-Series Food Grade Motor Curves (continued)

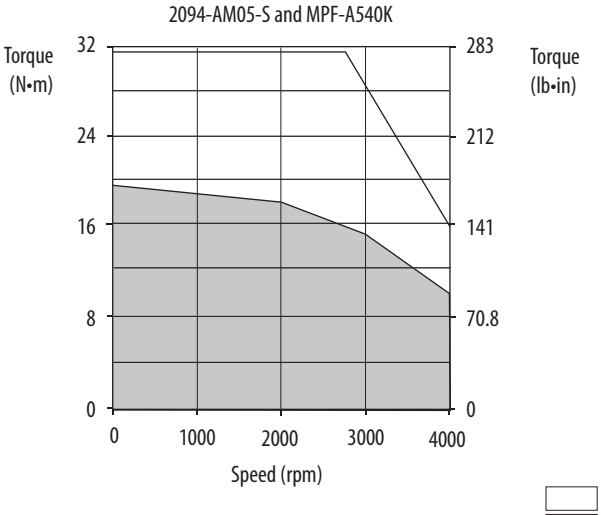
2094-AM05-S and MPF-A4530K



2094-AM05-S and MPF-A4540F



2094-AM05-S and MPF-A540K



= Intermittent operating region
= Continuous operating region

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with MP-Series Food Grade Motors

This section provides system combination information for the Kinetix 6000 and the Kinetix 6200/6500 (400V-class) drives when matched with MP-Series 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 or C) drives, 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 or C) drives configured for enhanced peak performance.

Refer to Kinetix Servo Drives Specifications Technical Data, publication GMC-TD003, for more information.

Bulletin MPF Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPF-B310P, MPF-B320P, MPF-B330P	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPF-B430P		
MPF-B4530K, MPF-B4540F		
MPF-B540K	2090-CP*x*M7DF-10AA*xx* (standard, non-flex) 2090-CP*x*M7DF-10AF*xx* (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.

Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.

Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	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	2.30	1.60 (14)	7.10	3.6 (32)	0.77	2094-BMP5-M
MPF-B320P	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	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	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	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	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	20.5	19.4 (171)	60.0	48.6 (430)	4.1	2094-BM03-M

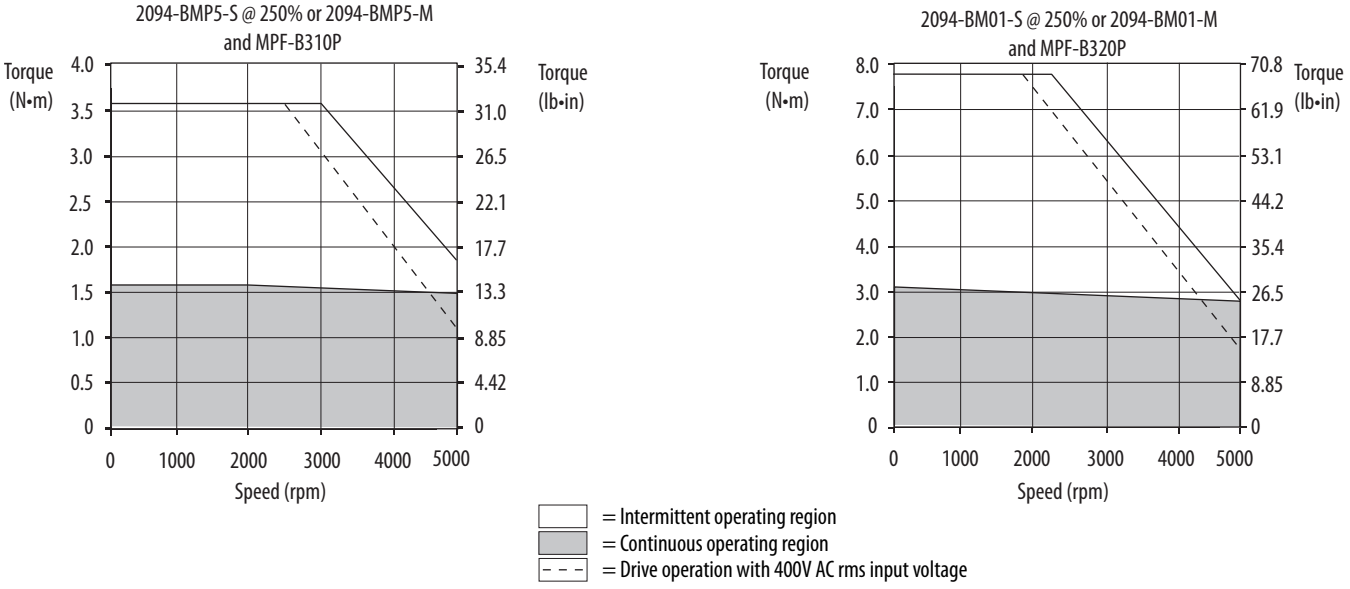
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

Rotary Motor	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	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	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%
				14.0	7.8 (69)		2094-BM01-S @ 250%
MPF-B330P	5000	5.70	4.18 (37)	13.0	8.2 (72)	1.6	2094-BM01-S @ 150%
				19.0	11.1 (98)		2094-BM01-S @ 250%
MPF-B430P	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	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	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	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%

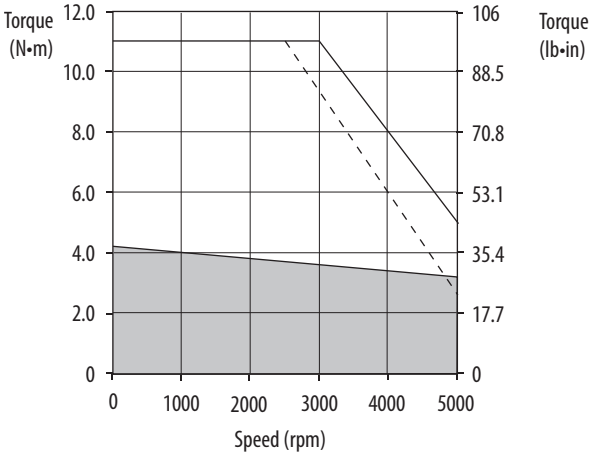
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Food Grade Motor Curves

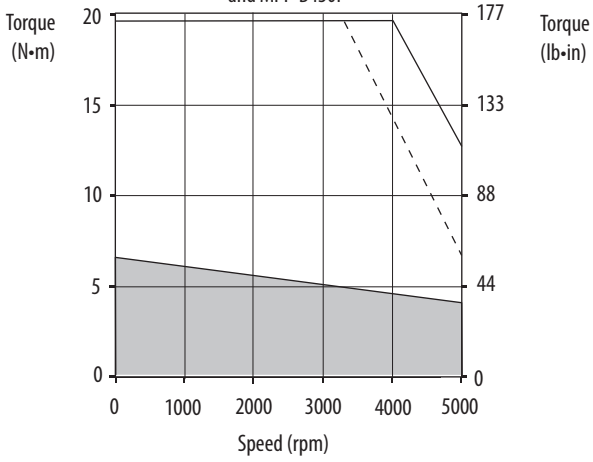


Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Food Grade Motor Curves (continued)

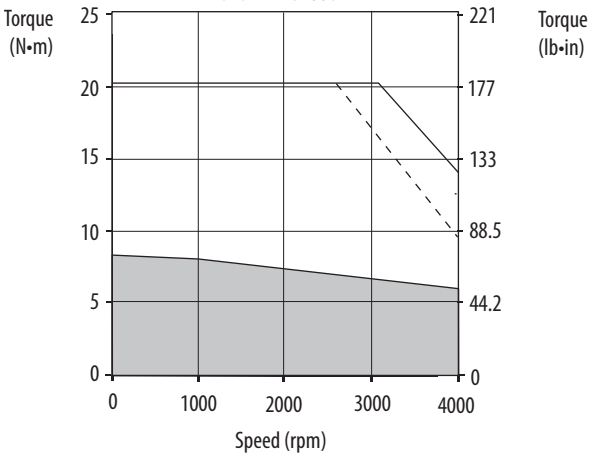
2094-BM01-S @ 250% or 2094-BM01-M and MPF-B330P



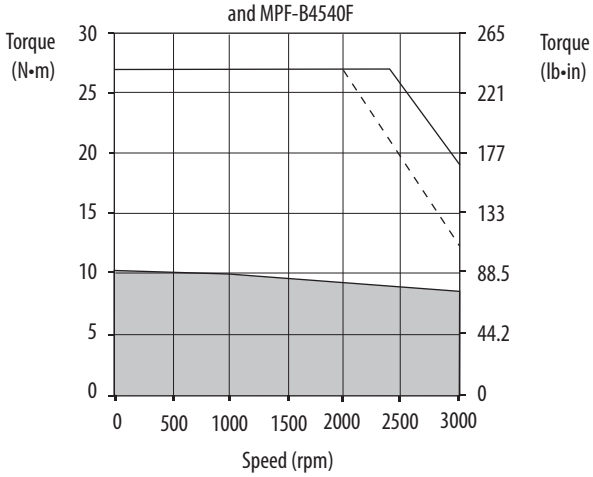
2094-BM02-S @ 250% or 2094-BM02-M and MPF-B430P



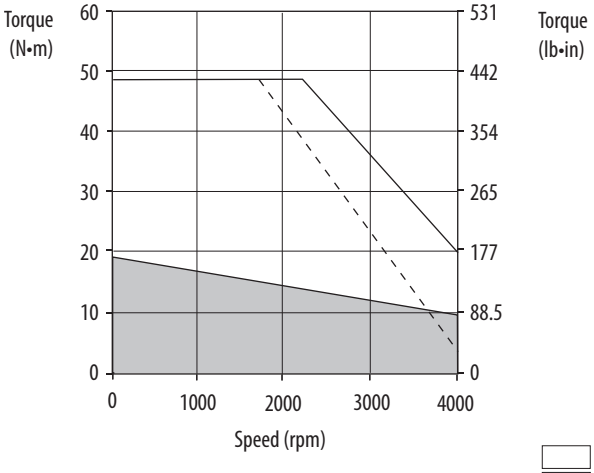
2094-BM02-S @ 250% or 2094-BM02-M and MPF-B4530K



2094-BM02-S @ 250% or 2094-BM02-M and MPF-B4540F



2094-BM03-S @ 250% or 2094-BM03-M and MPF-B540K



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

Kinetix 6000 (200V-class) Drives with MP-Series 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.

Bulletin MPS Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPS-A330P	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPS-A4540F		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. Refer to Required Drive Accessories on page 4.

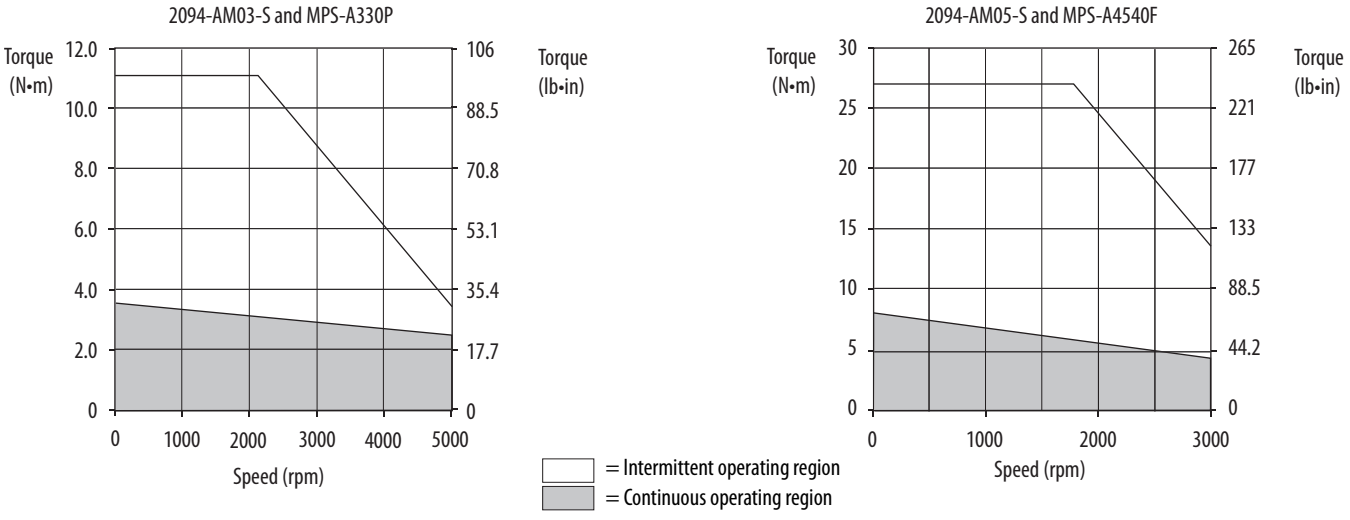
For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	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	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	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, refer to Motion Analyzer software.

Kinetix 6000 (200V-class) Drives/MP-Series Stainless Steel Motor Curves



Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with MP-Series 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 MP-Series 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 or C) drives, 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 or C) drives configured for enhanced peak performance.

Refer to Kinetix Servo Drives Specifications Technical Data, publication GMC-TD003, for more information.

Bulletin MPS Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power Cable	Motor Feedback Cable (1)
MPS-B330P	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPS-B4540F		
MPS-B560F	2090-CP*x*M7DF-14AA*xx* (standard, non-flex) 2090-CP*x*M7DF-14AF*xx* (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	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	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	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	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, refer to Motion Analyzer software.

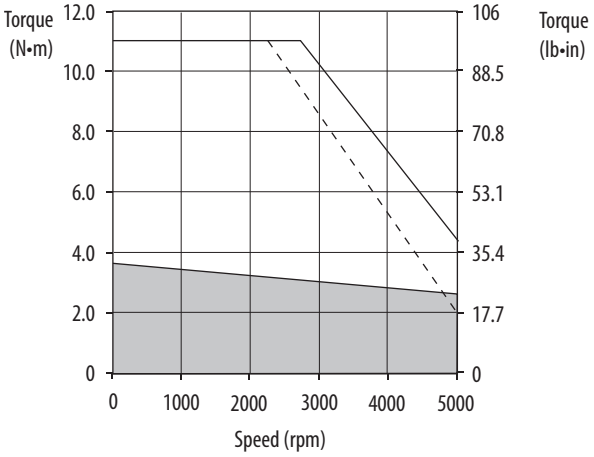
Bulletin MPS Motor Performance Specifications with Kinetix 6000 (400V-class) Drives

Rotary Motor	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	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	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	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%

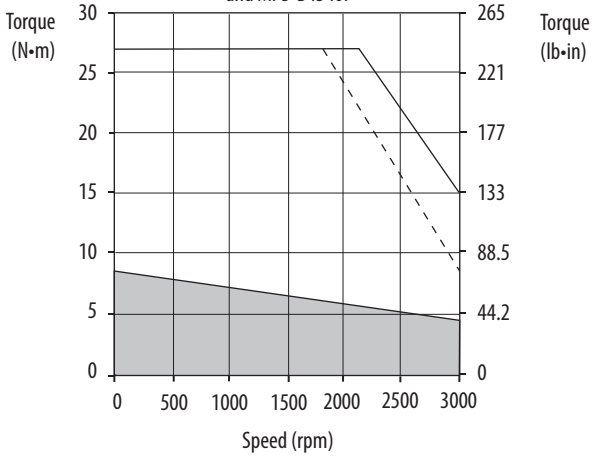
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives/MP-Series Stainless Steel Motor Curves

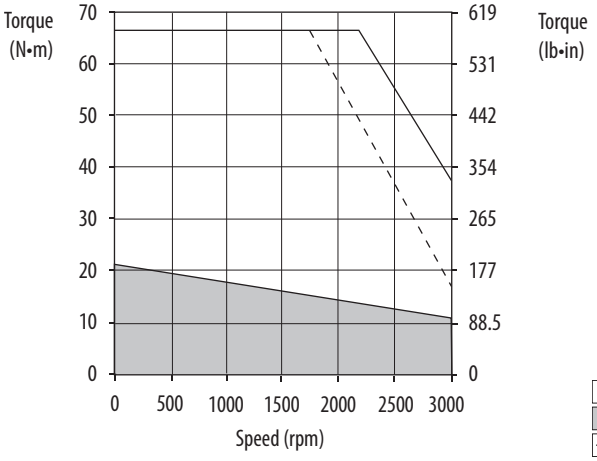
2094-BM01-S @ 250% or 2094-BM01-M and MPS-B330P



2094-BM02-S @ 250% or 2094-BM02-M and MPS-B4540F



2094-BM03-S @ 250% or 2094-BM03-M and MPS-B560F



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

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with RDD-Series Direct Drive Motors

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with RDD-Series™ 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 or C) drives, 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 or C) drives configured for enhanced peak performance.

Refer to Kinetix Servo Drives Specifications Technical Data, publication GMC-TD003, for more information.

Bulletin RDB Motor Cable Combinations

Motor Cat. No. (400V-class)	Motor Power Cable	Motor Feedback Cable (1)
RDB-B21519, RDB-B21529	2090-CPWM7DF-16AA*xx* (standard, non-flex) 2090-CPWM7DF-16AF*xx* (continuous-flex)	2090-XXNFMF-S*xx* (standard, non-flex) 2090-CFBM7DF-CDAF*xx* (continuous-flex) Absolute High-resolution Feedback
RDB-B29014, RDB-B29016, RDB-B29024		
RDB-B2151C, RDB-B21539	2090-CPWM7DF-14AA*xx* (standard, non-flex) 2090-CPWM7DF-14AF*xx* (continuous-flex)	
RDB-B29019, RDB-B29034		
RDB-B2152C	2090-CPWM7DF-12AA*xx* (standard, non-flex)	
RDB-B29026		
RDB-B2153C	2090-CPWM7DF-10AA*xx* (standard, non-flex) 2090-CPWM7DF-10AF*xx* (continuous-flex)	
RDB-B29036, RDB-B41014		
RDB-B29029, RDB-B41016, RDB-B41024	2090-CPWM7DF-08AA*xx* (standard, non-flex) 2090-CPWM7DF-08AF*xx* (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). Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	Speed, base 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, refer to Motion Analyzer software.

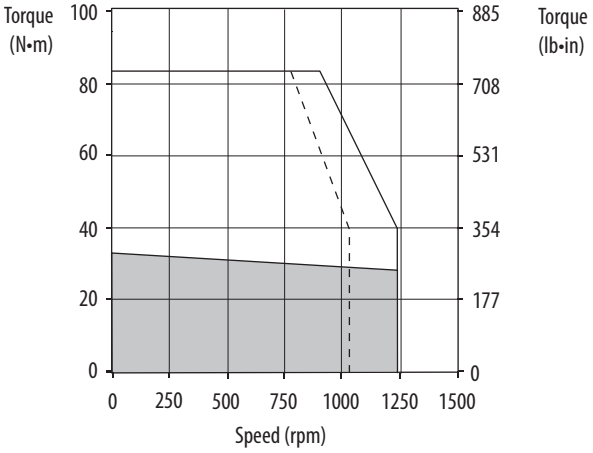
Bulletin RDB Motor Performance Specifications with Kinetix 6000 (400V-class) Drives

Rotary Motor	Speed, base 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%
RDB-B21529	750	1035	12.2	43.4 (384)	21.8	76.8 (680)	4.33	2094-BM02-S @ 150%
					32.8	111 (982)		2094-BM02-S @ 250%
RDB-B2152C	1500	2125	23.5	43.4 (384)	45.0	80.4 (711)	6.41	2094-BM03-S @ 150%
					63.2	111 (982)		2094-BM03-S @ 250%
RDB-B21539	750	1250	15.8	51.5 (456)	45.0	130 (1150)	5.34	2094-BM03-S @ 150%
					47.9	137 (1212)		2094-BM03-S @ 250%
RDB-B2153C	1500	2250	29.4	51.5 (456)	75.0	125 (1106)	5.87	2094-BM03-S @ 250%
					73.4	122 (1080)		2094-BM05-S @ 150%
					82.6	137 (1212)		2094-BM05-S @ 200%
RDB-B29014	200	450	5.9	48.9 (167)	13.0	89.2 (789)	1.97	2094-BM01-S @ 150%
					17.6	110 (973)		2094-BM01-S @ 250%
RDB-B29016	375	785	10.0	48.9 (167)	21.8	86.6 (766)	3.18	2094-BM02-S @ 150%
					31.0	110 (973)		2094-BM02-S @ 250%
RDB-B29019	750	1500	19.1	48.9 (167)	45.0	90.8 (803)	3.63	2094-BM03-S @ 150%
					58.7	110 (973)		2094-BM03-S @ 250%
RDB-B29024	200	435	10.7	97.8 (865)	21.8	159 (1407)	3.33	2094-BM02-S @ 150%
					33.0	214 (1894)		2094-BM02-S @ 250%
RDB-B29026	375	885	21.9	97.8 (865)	45.0	161 (1425)	4.05	2094-BM03-S @ 150%
					67.2	214 (1894)		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	274 (2425)	5.16	2094-BM03-S @ 150%
					56.6	321 (2841)		2094-BM03-S @ 250%
RDB-B29036	375	750	26.0	140 (1239)	73.4	290 (2566)	5.49	2094-BM05-S @ 150%
					84.9	318 (2814)		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	317 (2805)	5.20	2094-BM03-S @ 150%
					51.2	340 (3009)		2094-BM03-S @ 250%
RDB-B41016	375	700	33.2	183 (1619)	73.4	292 (2584)	4.83	2094-BM05-S @ 150%
					95.5	339 (3000)		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	593 (5248)	7.29	2094-BM05-S @ 150%
					95.5	690 (6107)		2094-BM05-S @ 200%

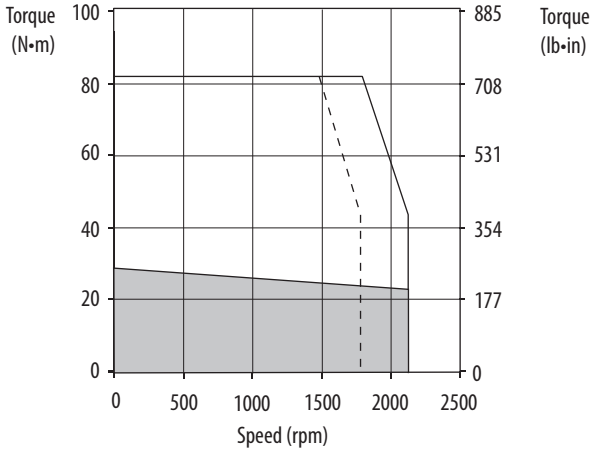
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with RDD-Series Direct Drive Motor Curves

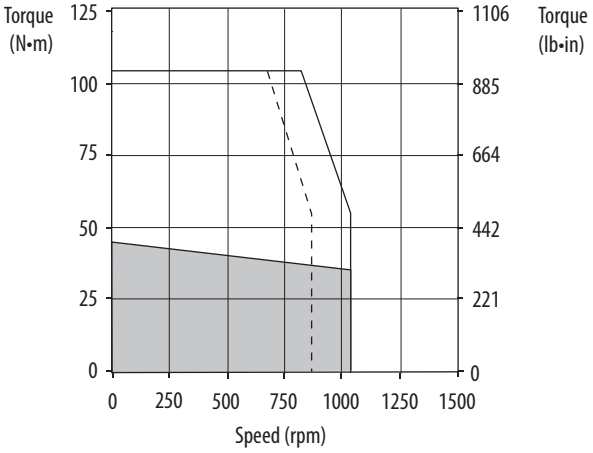
2094-BM02-S @ 250% or 2094-BM02-M and RDB-B21519



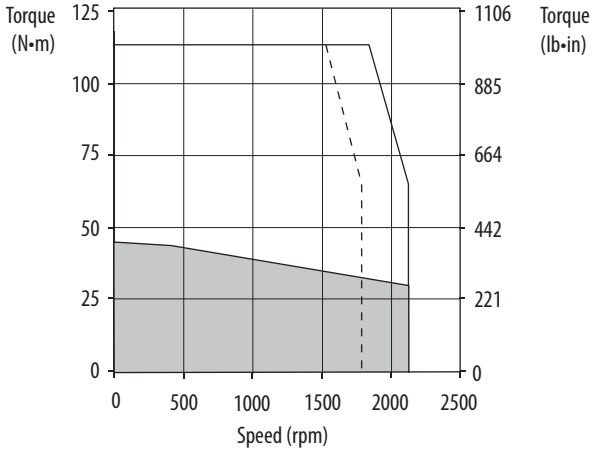
2094-BM03-S @ 250% or 2094-BM03-M and RDB-B2151C



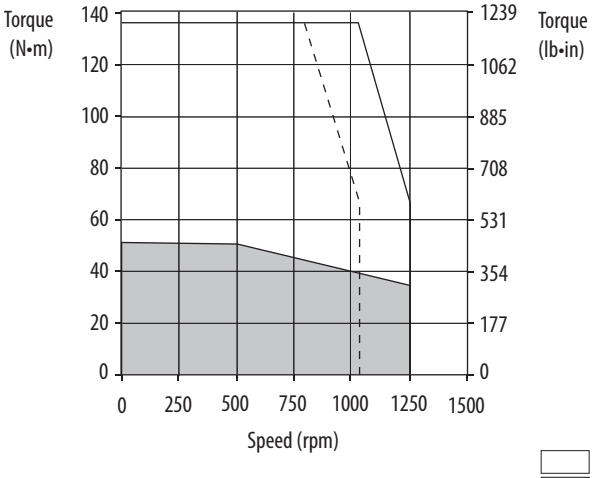
2094-BM02-S @ 250% or 2094-BM02-M and RDB-B21529



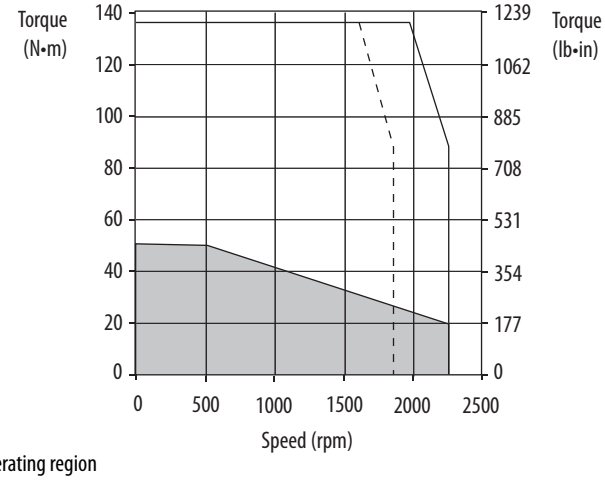
2094-BM03-S @ 250% or 2094-BM03-S and RDB-B2152C



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



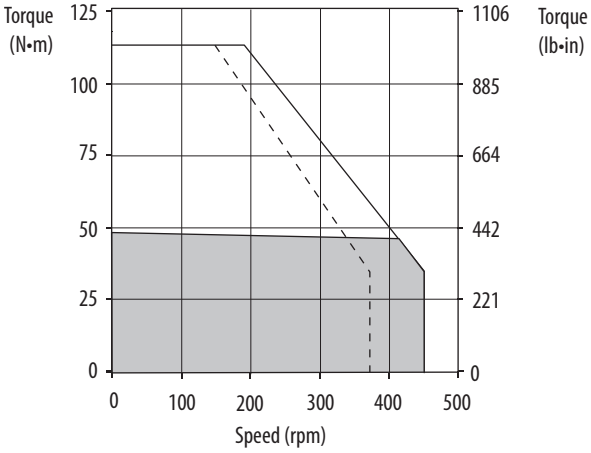
2094-BM05-S @ 200% or 2094-BM05-M and RDB-2153C



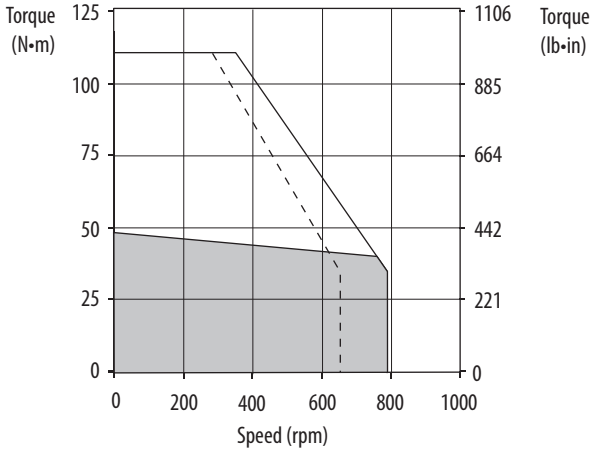
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with RDD-Series Motor Curves (continued)

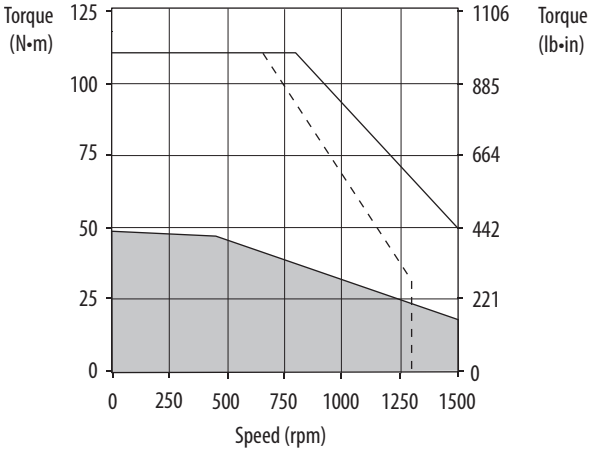
2094-BM01-S @ 250% or 2094-BM01-M and RDB-B29014



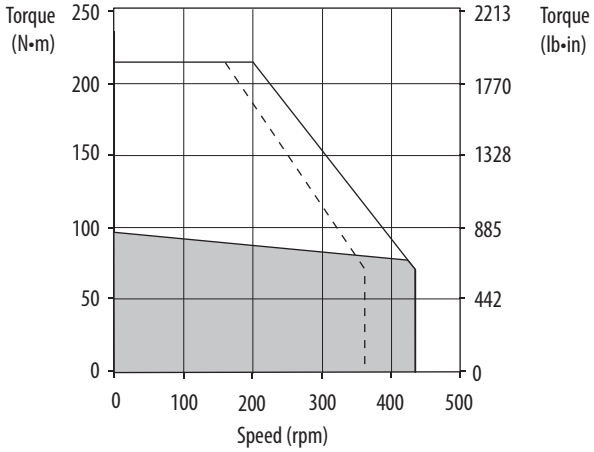
2094-BM02-S @ 250% or 2094-BM02-M and RDB-B29016



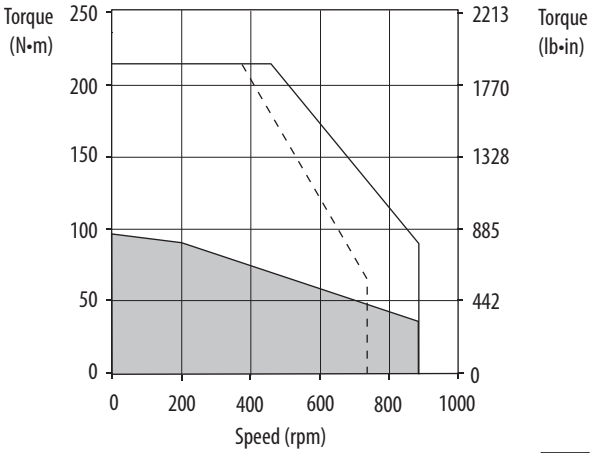
2094-BM03-S @ 250% or 2094-BM03-M and RDB-B29019



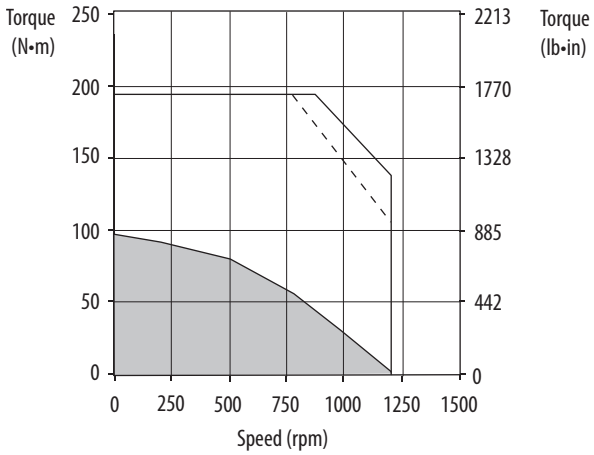
2094-BM02-S @ 250% or 2094-BM02-M and RDB-B29024



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



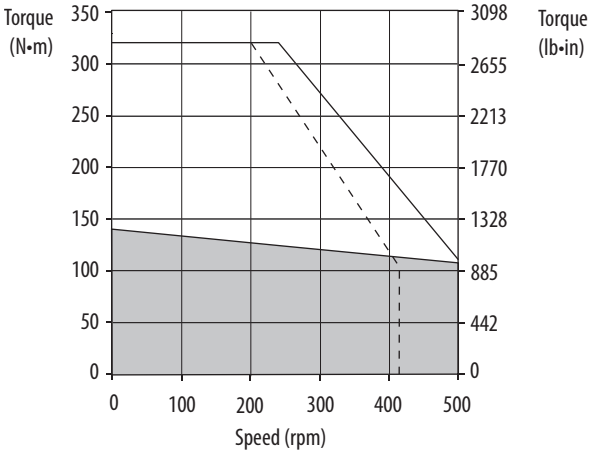
2094-BM05-S @ 200% or 2094-BM05-M and RDB-B29029



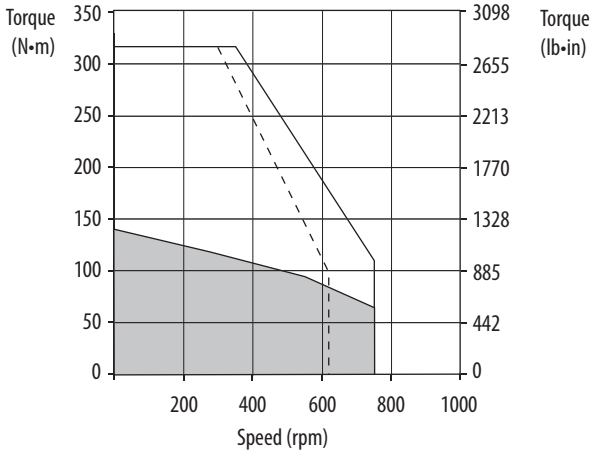
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC rms input voltage

Kinetix 6000 and Kinetix 6200/6500 (400V-class) Drives with RDD-Series Motor Curves (continued)

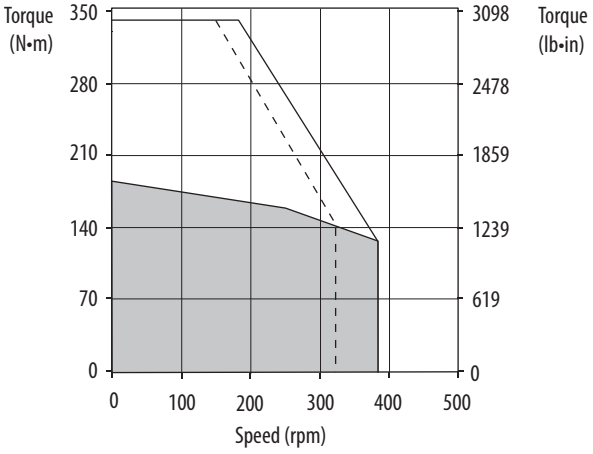
2094-BM03-S @ 250% or 2094-BM03-M and RDB-B29034



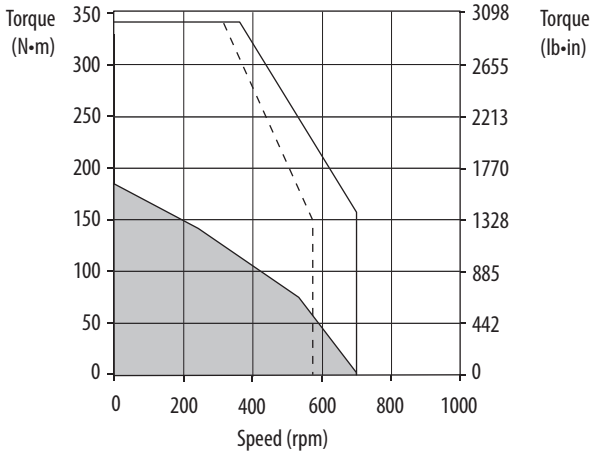
2094-BM05-S @ 200% or 2094-BM05-M and RDB-B29036



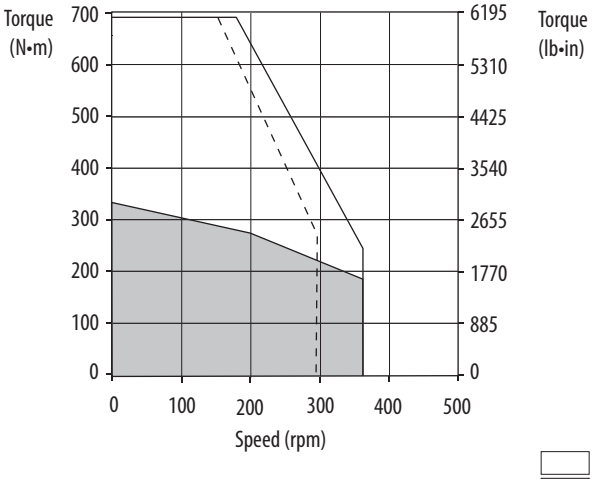
2094-BM03-S @ 250% or 2094-BM03-M and RDB-B41014



2094-BM05-S @ 200% or 2094-BM05-M and RDB-B41016



2094-BM05-S @ 200% or 2094-BM05-M and RDB-B41024



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

Kinetix 6000 (200V-class) Drives with TL-Series Low Inertia Motors

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with TL-Series™ (Bulletin TLY) low-inertia motors. Compatible TL-Series 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.

Bulletin TLY Motor Cable Combinations

Motor Cat. No. (200V-class)	Motor Power/Brake Cable	Motor Feedback Cable (1)
TLY-A110T, TLY-A120T, TLY-A130T	2090-CPWM6DF-16AA*xx* (standard, non-flex) without brake 2090-CPBM6DF-16AA*xx* (standard, non-flex) with brake	2090-CFBM6DF-CBAA*xx* or 2090-CFBM6DD-CCAA*xx* (standard, non-flex) Incremental Feedback
TLY-A220T, TLY-A230T		
TLY-A2530P, TLY-A2540P		
TLY-A310M		

(1) For TLY-A*xxxx*-H motors with incremental encoder feedback, use 2090-CFBM6DF-CBAA*xx* flying-lead cables and 2090-K6CK-D15M connector kit or use 2090-CFBM6DD-CCAA*xx* (15-pin connector) cable on the drive end. Refer to Required Drive Accessories on page 4.

TL-Series (Bulletin TLY-A*xxx*) 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, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Rotary Motor	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	6000	0.55	0.096 (0.85)	1.50	0.20 (1.75)	0.041	2094-AMP5-S
TLY-A120T		1.03	0.181 (1.60)	2.50	0.36 (3.20)	0.086	2094-AMP5-S
TLY-A130T		1.85	0.325 (2.88)	4.90	0.76 (6.70)	0.14	2094-AMP5-S
TLY-A220T		3.50	0.836 (7.40)	7.90	1.48 (13.1)	0.35	2094-AMP5-S
TLY-A230T		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	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		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	4500	10.0	3.61 (31.9)	30.0	9.0 (79.6)	0.95	2094-AM02-S

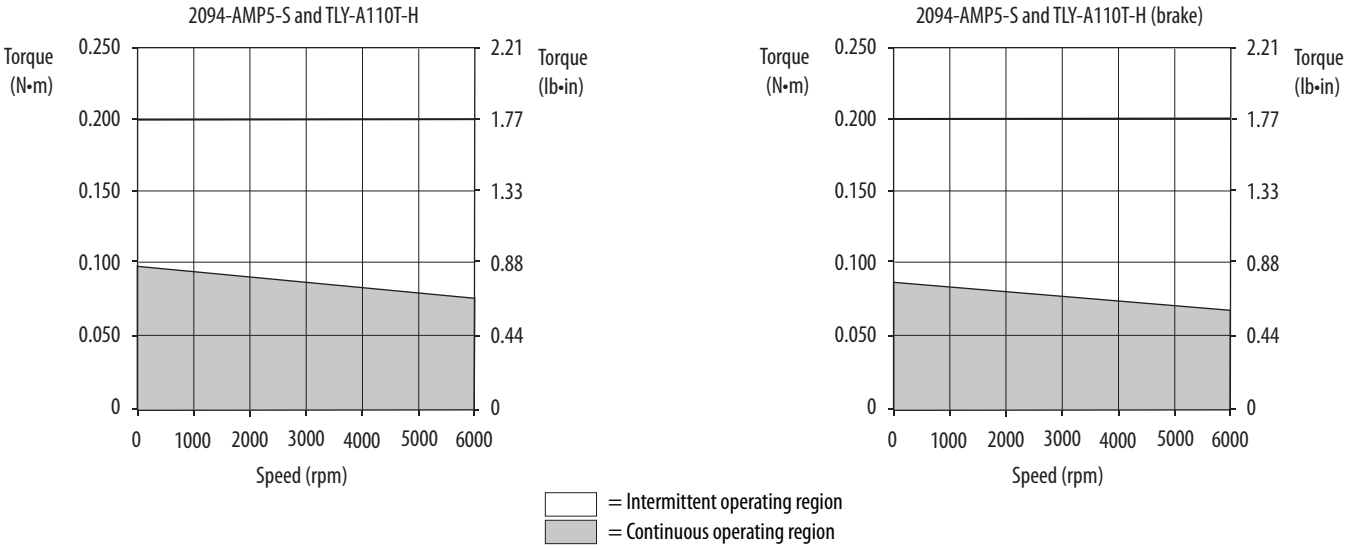
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

Rotary Motor	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	6000	0.50	0.086 (0.76)	1.50	0.20 (1.75)	0.037	2094-AMP5-S
TLY-A120T		0.93	0.163 (1.44)	2.50	0.36 (3.20)	0.077	2094-AMP5-S
TLY-A130T		1.67	0.293 (2.59)	4.90	0.76 (6.70)	0.13	2094-AMP5-S
TLY-A220T		3.15	0.757 (6.70)	7.90	1.48 (13.1)	0.24	2094-AMP5-S
TLY-A230T		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	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		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	4500	10.0	3.61 (31.9)	30.0	9.0 (79.6)	0.90	2094-AM02-S

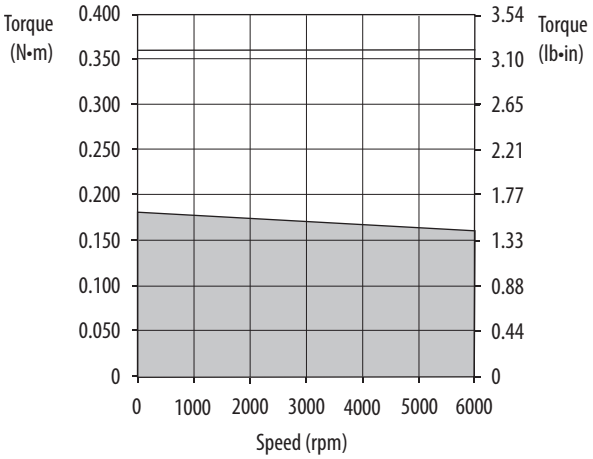
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

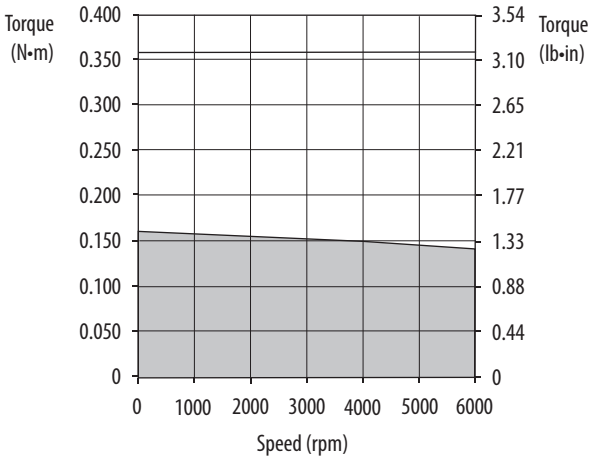


Kinetix 6000 (200V-class) Drives/TLY-A*xxxx*-H (incremental) Motor Curves (continued)

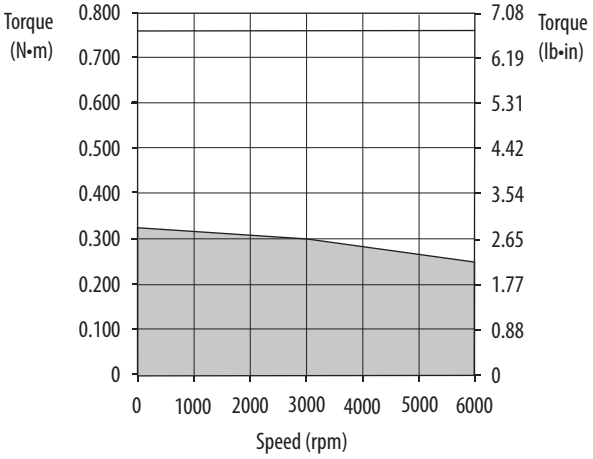
2094-AMP5-S and TLY-A120T-H



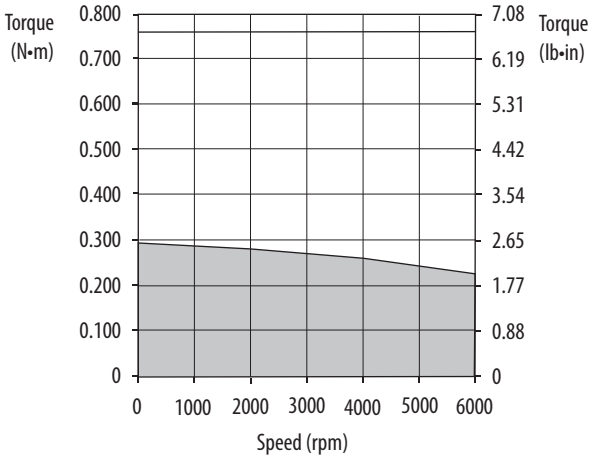
2094-AMP5-S and TLY-A120T-H (brake)



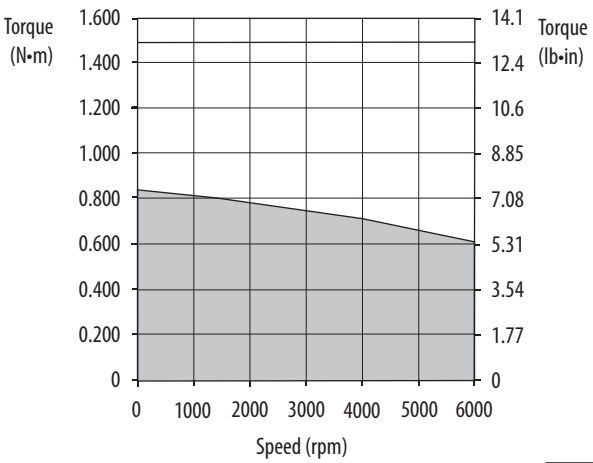
2094-AMP5-S and TLY-A130T-H



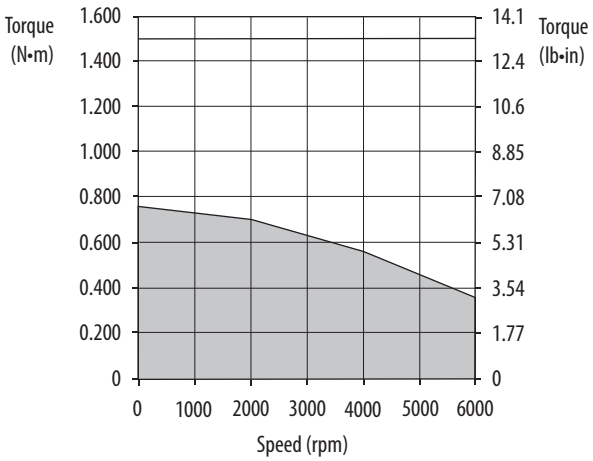
2094-AMP5-S and TLY-A130T-H (brake)



2094-AMP5-S and TLY-A220T-H



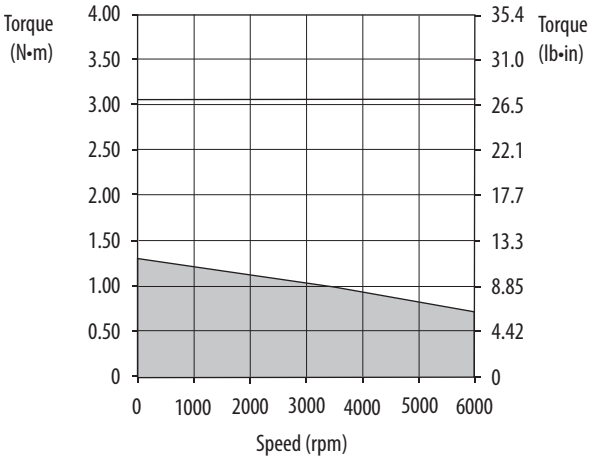
2094-AMP5-S and TLY-A220T-H (brake)



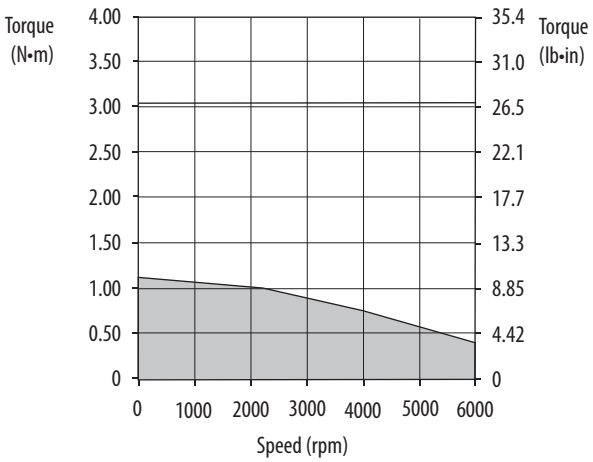
= Intermittent operating region
= Continuous operating region

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

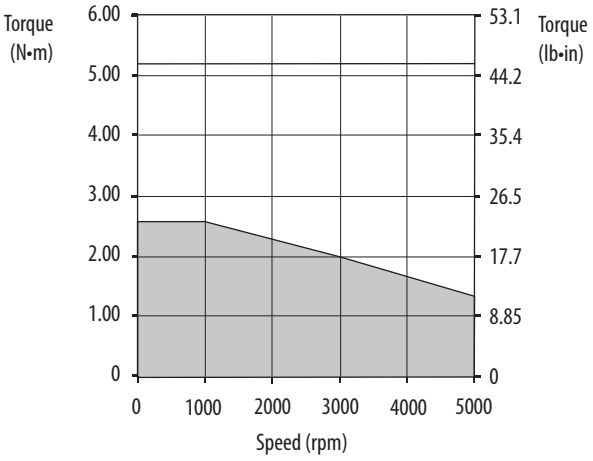
2094-AM01-S and TLY-A230T-H



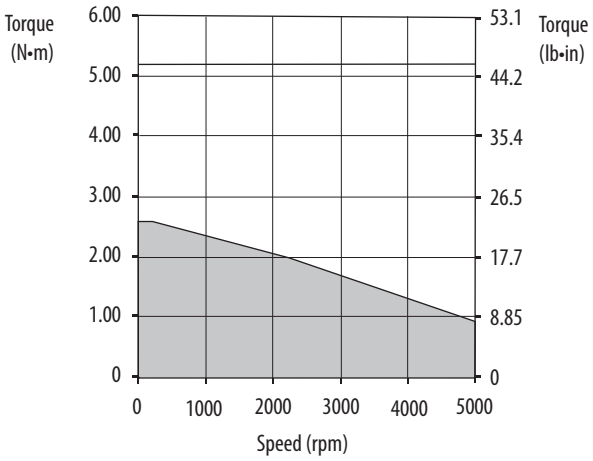
2094-AM01-S and TLY-A230T-H (brake)



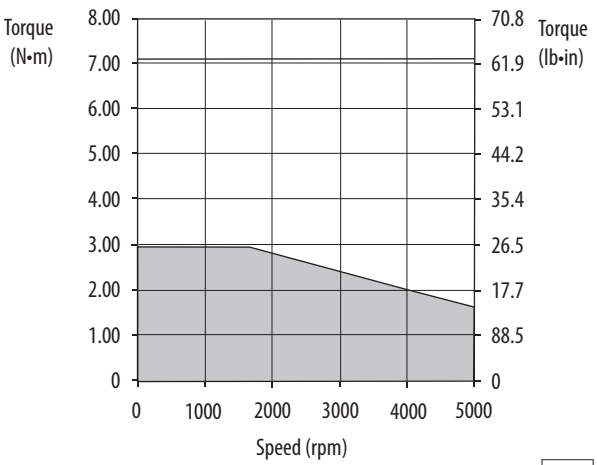
2094-AM02-S and TLY-A2530P-H



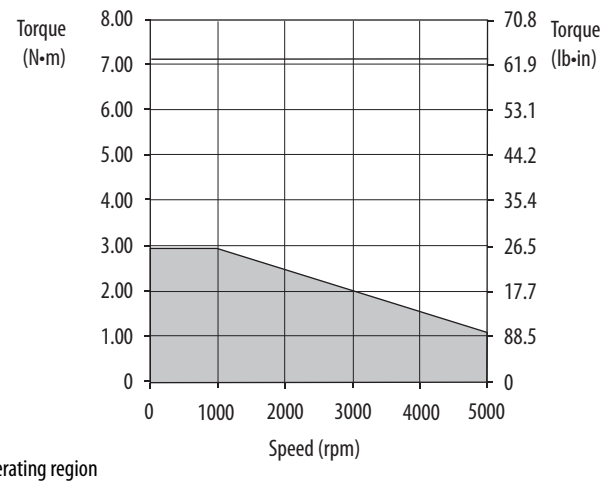
2094-AM02-S and TLY-A2530P-H (brake)

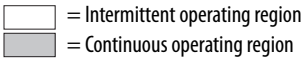


2094-AM02-S and TLY-A2540P-H

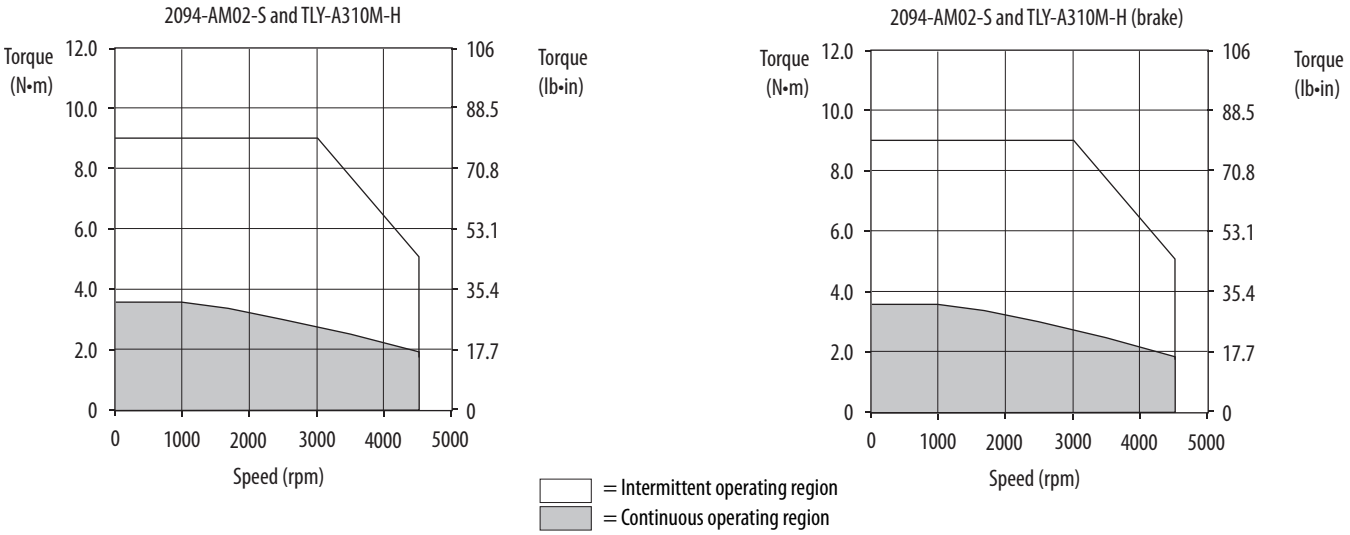


2094-AM02-S and TLY-A2540P-H (brake)





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



Kinetix 6000 Servo Drives with LDAT-Series Integrated Linear Thrusters

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

LDAT-Series Cable Combinations

LDAT-Series (200V or 400V-class) Linear Thrusters	Motor Power Cable	Motor Feedback Cable (1)
LDAT-S031*xxx*-x*B*x, LDAT-S032*xxx*-x*B*x, LDAT-S033*xxx*-x*B*x	2090-CPWM7DF-16AA*xx* (standard, non-flex) 2090-CPWM7DF-16AF*xx* (continuous-flex)	2090-XXNFMF-S*xx* (standard, non-flex) 2090-CFBM7DF-CDAF*xx* (continuous-flex) Incremental Feedback
LDAT-S051*xxx*-x*B*x, LDAT-S052*xxx*-x*B*x, LDAT-S053*xxx*-x*B*x, LDAT-S054*xxx*-x*B*x		
LDAT-S072*xxx*-x*B*x, LDAT-S073*xxx*-x*B*x, LDAT-S074*xxx*-x*B*x, LDAT-S076*xxx*-EB*x*		
LDAT-S102*xxx*-x*B*x, LDAT-S103*xxx*-x*B*x, LDAT-S104*xxx*-x*B*x, LDAT-S106*xxx*-EB*x*		
LDAT-S152*xxx*-x*B*x, LDAT-S153*xxx*-x*B*x, LDAT-S154*xxx*-x*B*x, LDAT-S156*xxx*-EB*x*		
LDAT-S076*xxx*-DB*x*	2090-CPWM7DF-14AA*xx* (standard, non-flex) 2090-CPWM7DF-14AF*xx* (continuous-flex)	
LDAT-S106*xxx*-DB*x*		
LDAT-S156*xxx*-DB*x*		

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

LDAT-Series 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-DB*x*	2.4	4.8	81 (18)	12.2	168 (38)	0.20	2094-AM01-S
LDAT-S031020-DB*x*	3.1					0.25	
LDAT-S031030-DB*x*	3.5					0.29	
LDAT-S031040-DB*x*	3.8					0.31	
LDAT-S032010-DB*x*	3.1	7.4	126 (28)	24.3	336 (76)	0.44	2094-AM02-S
LDAT-S032020-DB*x*	4.1					0.52	
LDAT-S032030-DB*x*	4.7					0.59	
LDAT-S032040-DB*x*	5.0					0.63	
LDAT-S032010-EB*x*	3.1	3.7		12.2		0.40	2094-AM01-S
LDAT-S032020-EB*x*	4.1					0.47	
LDAT-S032030-EB*x*	4.7					0.52	
LDAT-S032040-EB*x*	5.0					0.55	
LDAT-S033010-DB*x*	3.5	11.1	190 (43)	36.5	504 (113)	0.67	2094-AM03-S
LDAT-S033020-DB*x*	4.7					0.88	
LDAT-S033030-DB*x*	5.0					0.95	
LDAT-S033040-DB*x*							
LDAT-S033010-EB*x*	3.5	3.7		12.2		0.55	2094-AM01-S
LDAT-S033020-EB*x*	4.4					0.65	
LDAT-S033030-EB*x*							
LDAT-S033040-EB*x*							

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, refer to Motion Analyzer software.

Performance Specifications with Frame 50 Linear Thruster

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-DB*x*	2.8	3.1	119 (27)	11.4	363 (82)	0.31	2094-AMP5-S
LDAT-S051020-DB*x*	3.7					0.38	
LDAT-S051030-DB*x*	4.1					0.42	
LDAT-S051040-DB*x*	4.4					0.44	
LDAT-S051050-DB*x*	4.7					0.46	
LDAT-S052010-DB*x*	3.7	6.2	251 (56)	22.7	727 (163)	0.79	2094-AM01-S
LDAT-S052020-DB*x*	4.8					0.97	
LDAT-S052030-DB*x*	5.00					1.01	
LDAT-S052040-DB*x*							
LDAT-S052050-DB*x*							
LDAT-S052010-EB*x* … LDAT-S052050-EB*x*	2.6	3.1		11.4		0.50	2094-AMP5-S

Performance Specifications with Frame 50 Linear Thruster (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-S053010-DB*x*	4.1	9.4	378 (85)	34.2	1093 (246)	1.31	2094-AM02-S
LDAT-S053020-DB*x*	5.0					1.53	
LDAT-S053030-DB*x* … LDAT-S053050-DB*x*	5.0					1.53	
LDAT-S053010-EB*x* … LDAT-S053050-EB*x*	1.7	3.1		11.4		0.47	2094-AMP5-S
LDAT-S054010-DB*x*	4.4	12.4	509 (114)	45.5	1453 (327)	1.87	2094-AM02-S
LDAT-S054020-DB*x* … LDAT-S054050-DB*x*	5.0					2.05	
LDAT-S054010-EB*x* … LDAT-S054050-EB*x*	2.6	6.2		22.7		1.02	2094-AM01-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, refer to Motion Analyzer software.

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-DB*x* … LDAT-S072070-DB*x*	3.5	6.0	364 (82)	22.0	1055 (237)	1.03	2094-AM01-S
LDAT-S072010-EB*x* … LDAT-S072070-EB*x*	1.7	3.0		11.0		0.47	2094-AMP5-S
LDAT-S073010-DB*x* … LDAT-S073070-DB*x*	3.5	9.0	554 (125)	32.8	1576 (354)	1.57	2094-AM02-S
LDAT-S073010-EB*x* … LDAT-S073070-EB*x*	1.2	3.0		10.9		0.41	2094-AMP5-S
LDAT-S074010-DB*x* … LDAT-S074070-DB*x*	3.5	11.9	730 (164)	43.5	2088 (469)	2.08	2094-AM02-S
LDAT-S074010-EB*x* … LDAT-S074070-EB*x*	1.8	6.0		21.7		0.95	2094-AM01-S
LDAT-S076010-DB*x* … LDAT-S076070-DB*x*	3.5	18.2	1122 (252)	66.4	3189 (717)	3.17	2094-AM03-S
LDAT-S076010-EB*x* … LDAT-S076070-EB*x*	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, refer to Motion Analyzer software.

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-DB*x* … LDAT-S102090-DB*x*	2.6	5.7	456 (103)	21.0	1289 (290)	0.96	2094-AM01-S
LDAT-S102010-EB*x* … LDAT-S102090-EB*x*	1.3	2.9		10.5		0.42	2094-AMP5-S
LDAT-S103010-DB*x* … LDAT-S103090-DB*x*	2.7	8.6	702 (158)	31.5	1935 (435)	1.47	2094-AM02-S
LDAT-S103010-EB*x* … LDAT-S103090-EB*x*	0.9	2.9		10.5	1388 (312)	0.30	2094-AMP5-S
LDAT-S104010-DB*x* … LDAT-S104090-DB*x*	2.7	11.5	929 (209)	42.0	2578 (580)	2.07	2094-AM02-S
LDAT-S104010-EB*x* … LDAT-S104090-EB*x*	1.3	5.7		21.0		0.86	2094-AM01-S
LDAT-S106010-DB*x* … LDAT-S106090-DB*x*	2.7	17.3	1403 (315)	63.0	3871 (870)	2.94	2094-AM03-S
LDAT-S106010-EB*x* … LDAT-S106090-EB*x*	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, refer to Motion Analyzer software.

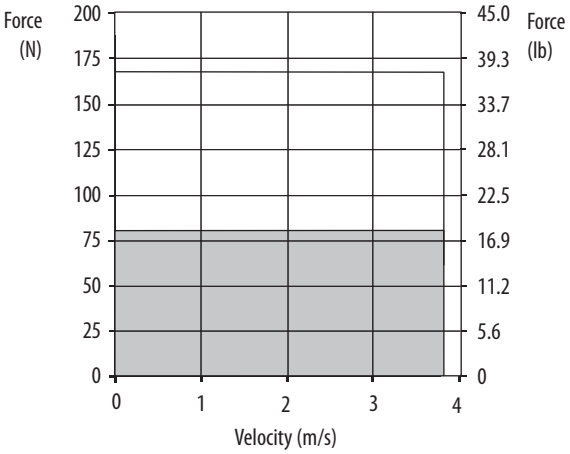
Performance Specifications with Frame 150 Linear Thrusters

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-DB*x* … LDAT-S152090-DB*x*	1.8	5.3	643 (145)	19.5	1799 (404)	0.87	2094-AM01-S
LDAT-S152010-EB*x* … LDAT-S152090-EB*x*	0.9	2.7		9.8	1679 (377)	0.34	2094-AMP5-S
LDAT-S153010-DB*x* … LDAT-S153090-DB*x*	1.8	8.0	978 (220)	29.1	2680 (602)	1.33	2094-AM02-S
LDAT-S154010-DB*x* … LDAT-S154090-DB*x*	1.8	10.7	1306 (294)	39.1	3597 (809)	1.78	2094-AM02-S
LDAT-S154010-EB*x* … LDAT-S154090-EB*x*	0.9	5.3		19.5	3383 (761)	0.70	2094-AM01-S
LDAT-S156010-DB*x* … LDAT-S156090-DB*x*	1.8	16.3	1997 (449)	59.4	5469 (1229)	2.71	2094-AM03-S
LDAT-S156010-EB*x* … LDAT-S156090-EB*x*	0.9	8.1		19.8	5110 (1149)	1.05	2094-AM02-S

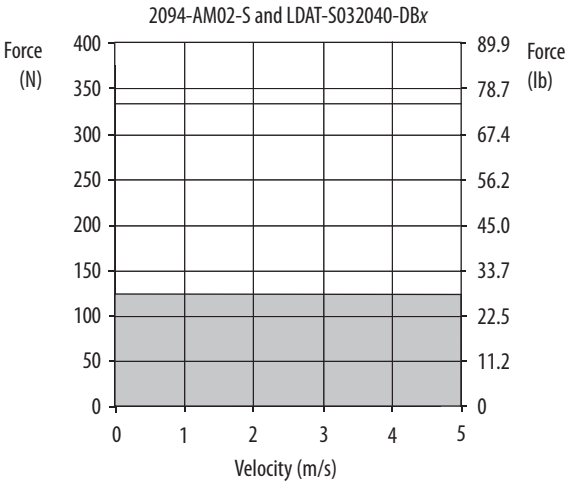
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

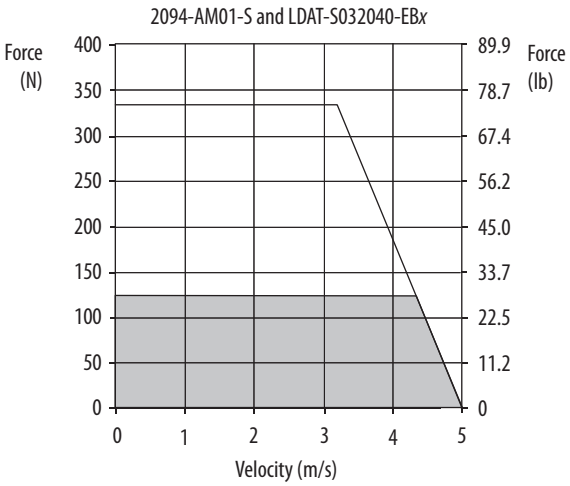
2094-AM01-S and LDAT-S031040-DB*x*



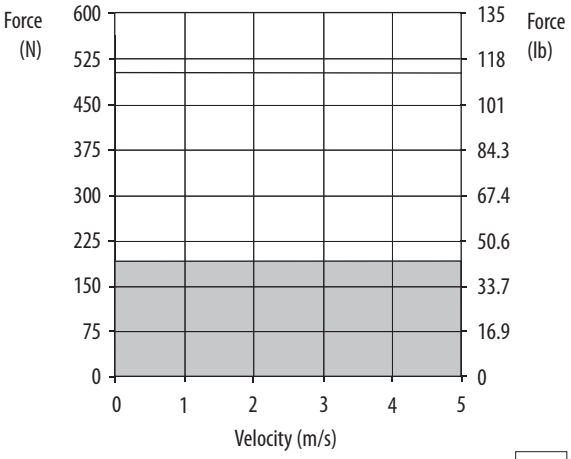
2094-AM02-S and LDAT-S032040-DB*x*



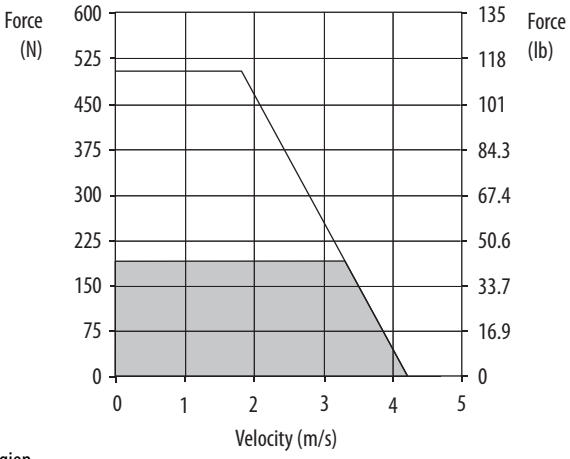
2094-AM01-S and LDAT-S032040-EB*x*



2094-AM03-S and LDAT-S033040-DB*x*



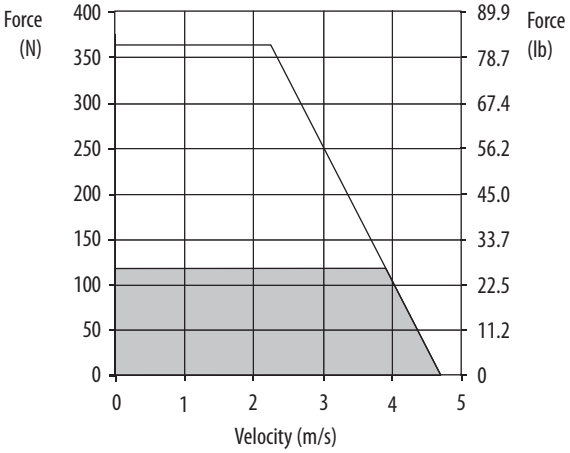
2094-AM01-S and LDAT-S033040-EB*x*



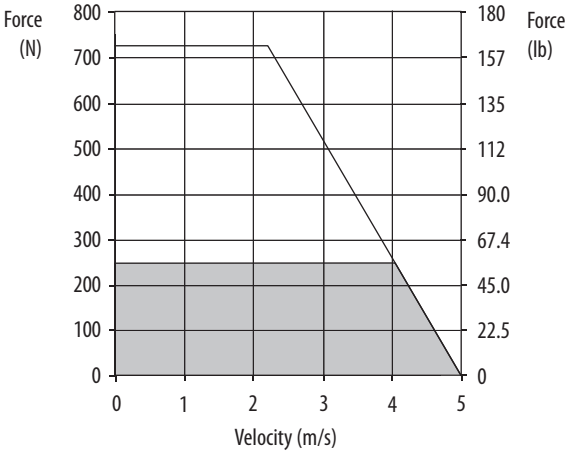
= Intermittent operating region
= Continuous operating region

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

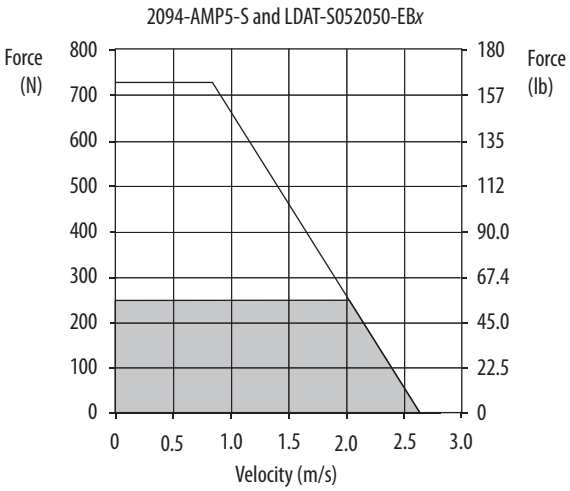
2094-AMP5-S and LDAT-S051050-DB*x*



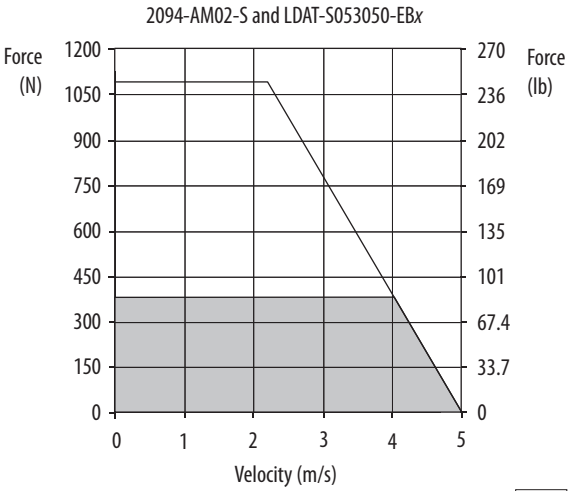
2094-AM01-S and LDAT-S052050-DB*x*



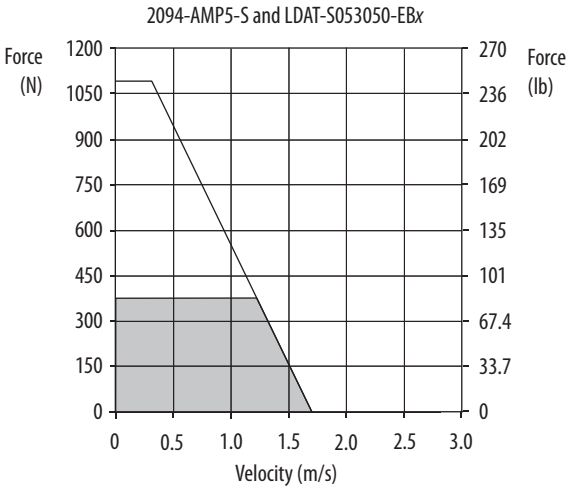
2094-AMP5-S and LDAT-S052050-EB*x*



2094-AM02-S and LDAT-S053050-EB*x*



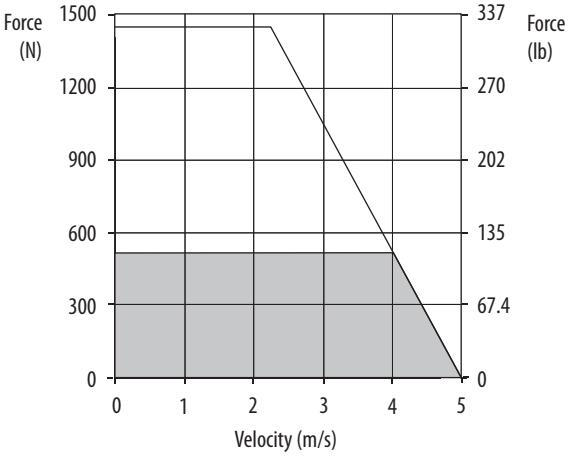
2094-AMP5-S and LDAT-S053050-EB*x*



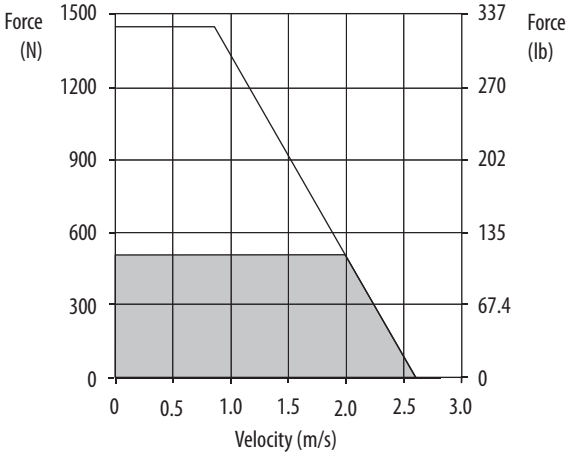
= Intermittent operating region
= Continuous operating region

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

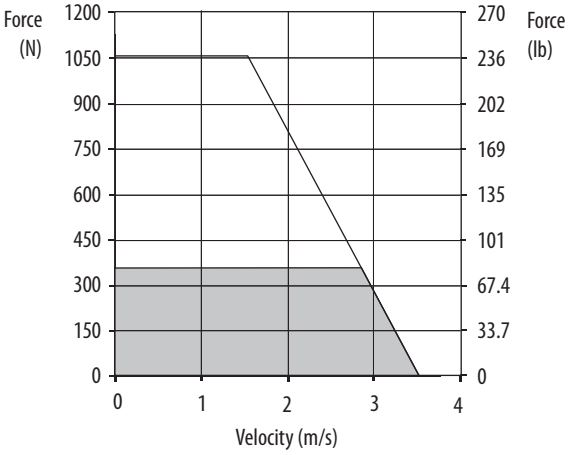
2094-AM02-S and LDAT-S054050-DB*x*



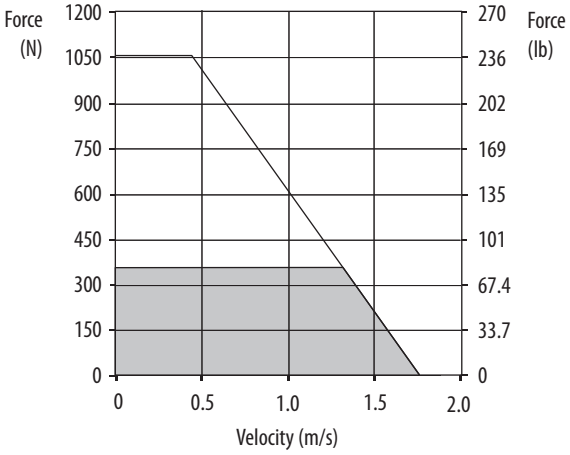
2094-AM01-S and LDAT-S054050-EB*x*



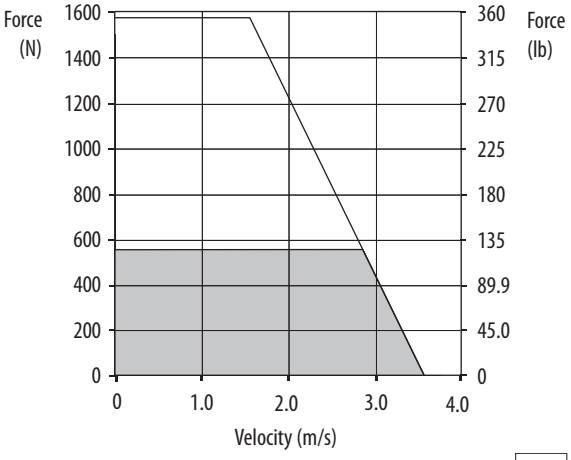
2094-AM01-S and LDAT-S072070-DB*x*



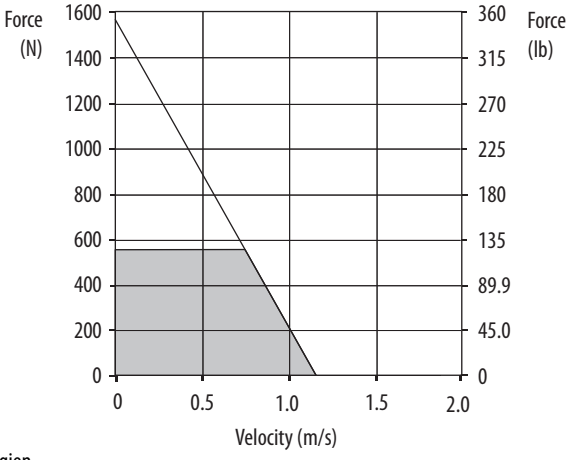
2094-AMP5-S and LDAT-S072070-EB*x*

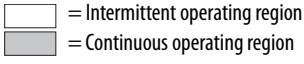


2094-AM02-S and LDAT-S073070-DB*x*



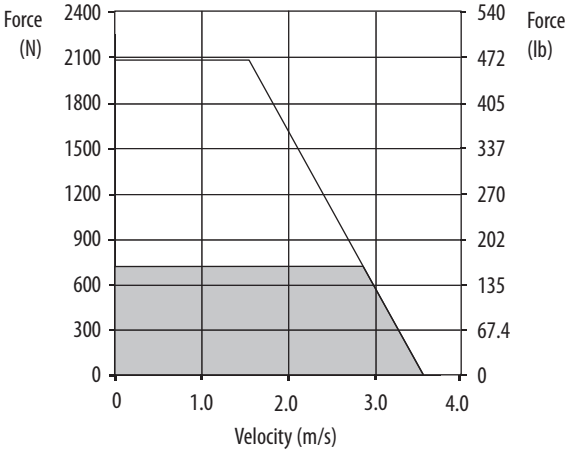
2094-AMP5-S and LDAT-S073070-EB*x*



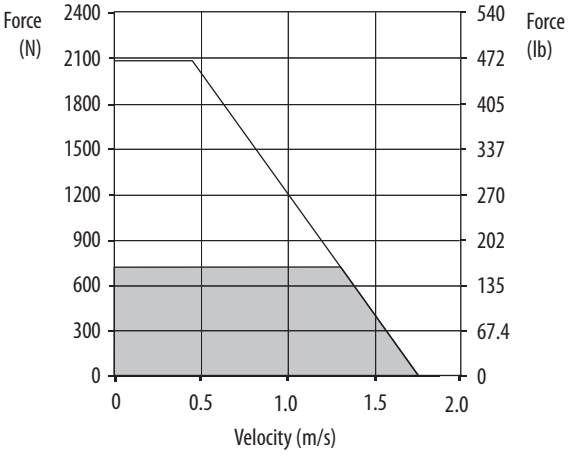


Kinetix 6000 (200V-class) Drives/LDAT-Series Integrated Linear Thruster Curves (continued)

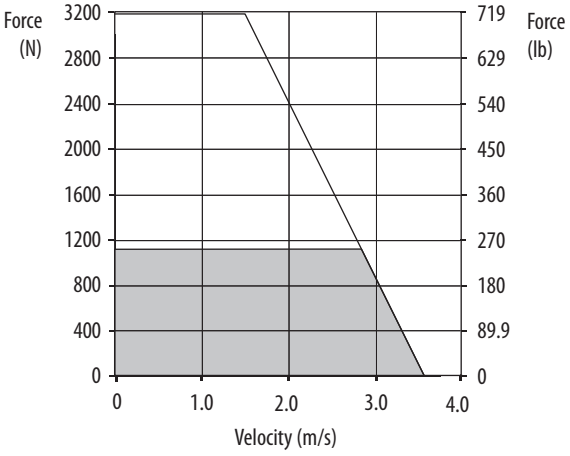
2094-AM02-S and LDAT-S074070-DB*x*



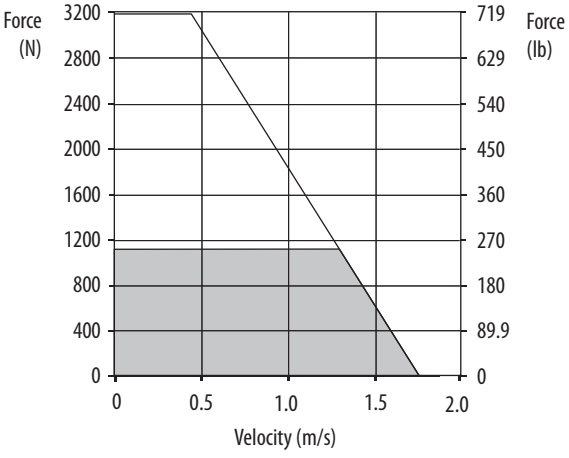
2094-AM01-S and LDAT-S074070-EB*x*



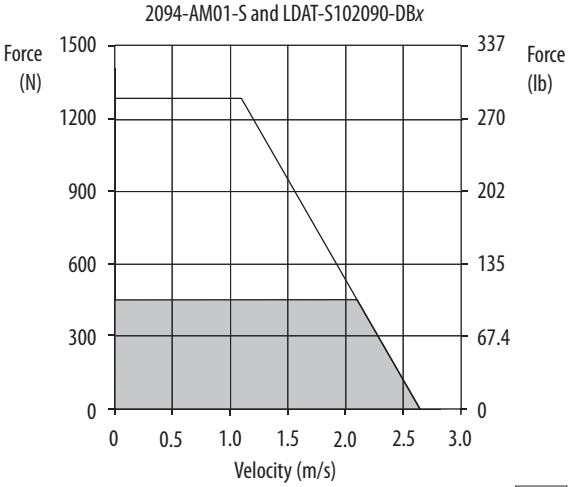
2094-AM03-S and LDAT-S076070-DB*x*



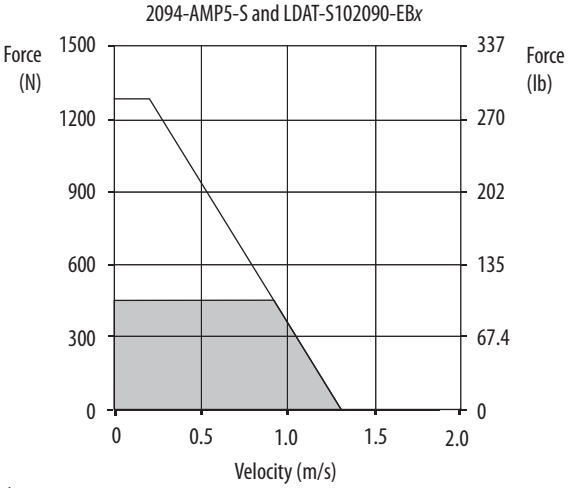
2094-AM02-S and LDAT-S076070-EB*x*



2094-AM01-S and LDAT-S102090-DB*x*



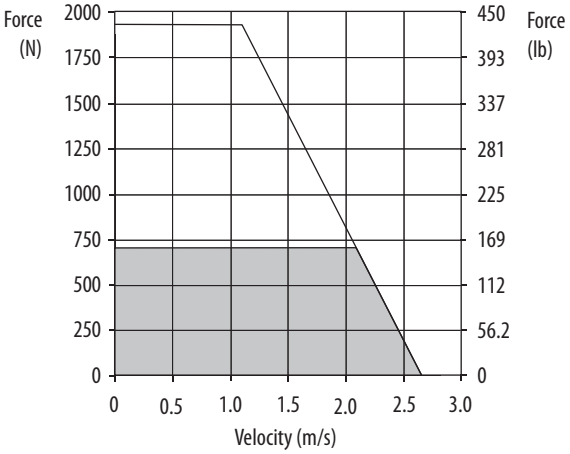
2094-AMP5-S and LDAT-S102090-EB*x*



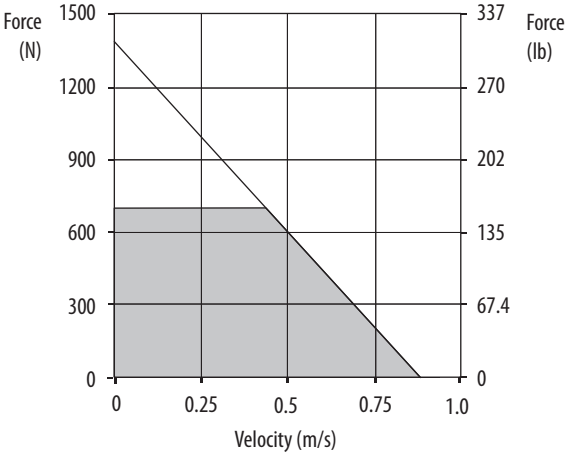
= Intermittent operating region
= Continuous operating region

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

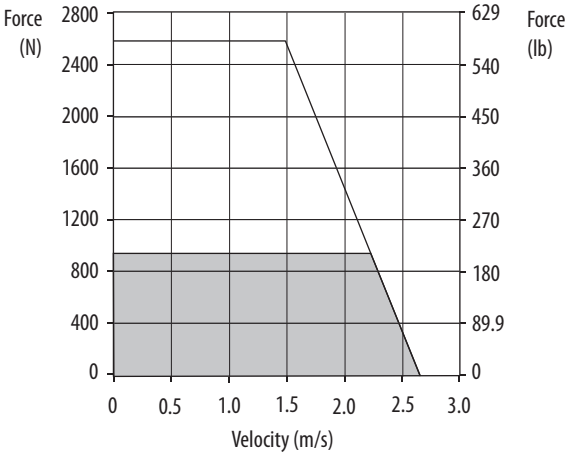
2094-AM02-S and LDAT-S103090-DB*x*



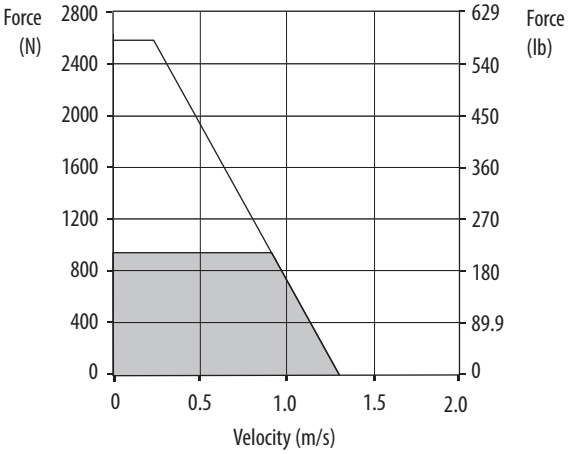
2094-AMP5-S and LDAT-S103090-EB*x*



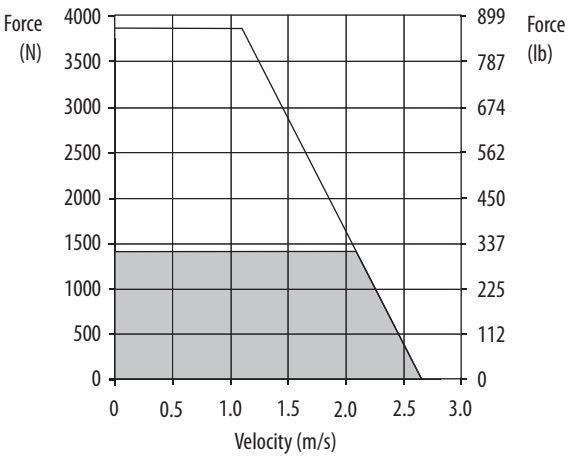
2094-AM02-S and LDAT-S104090-DB*x*



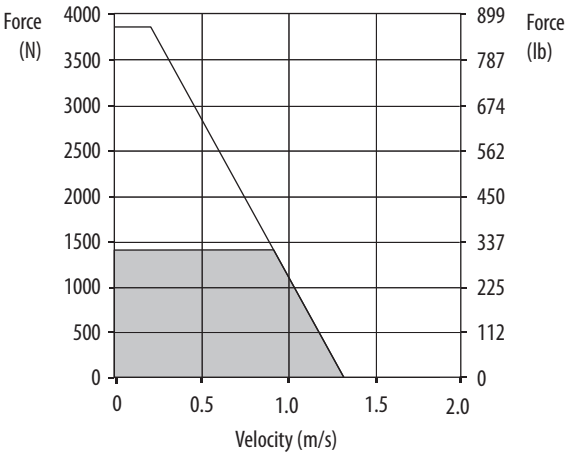
2094-AM01-S and LDAT-S104090-EB*x*



2094-AM03-S and LDAT-S106090-DB*x*



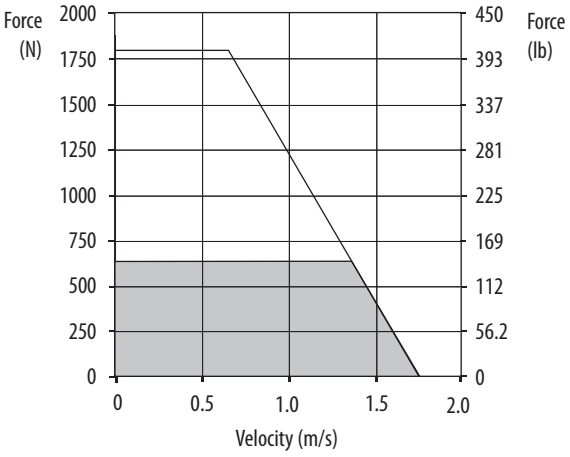
2094-AM02-S and LDAT-S106090-EB*x*



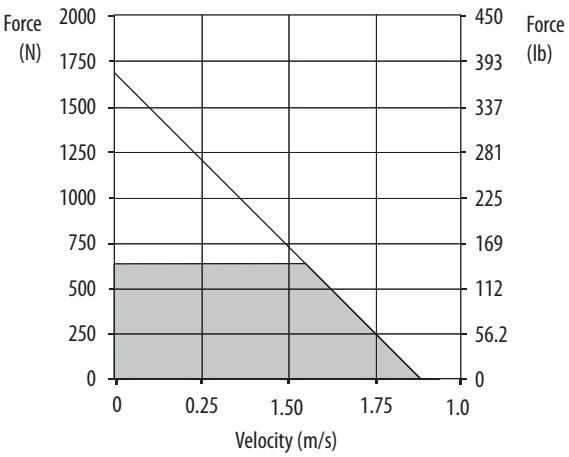
= Intermittent operating region
= Continuous operating region

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

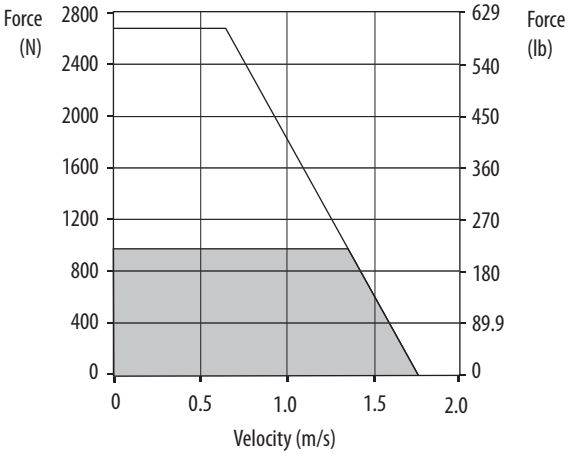
2094-AM01-S and LDAT-S152090-DB*x*



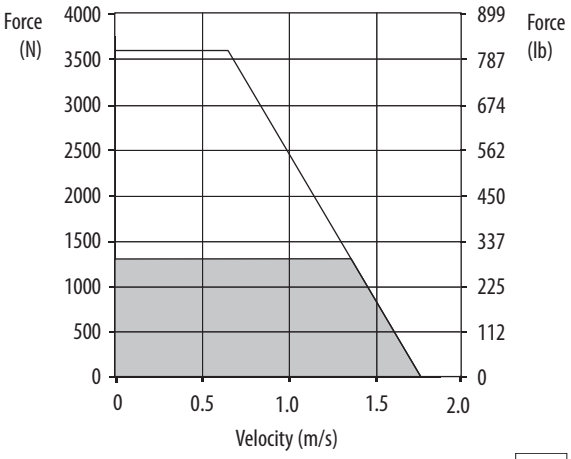
2094-AMP5-S and LDAT-S152090-EB*x*



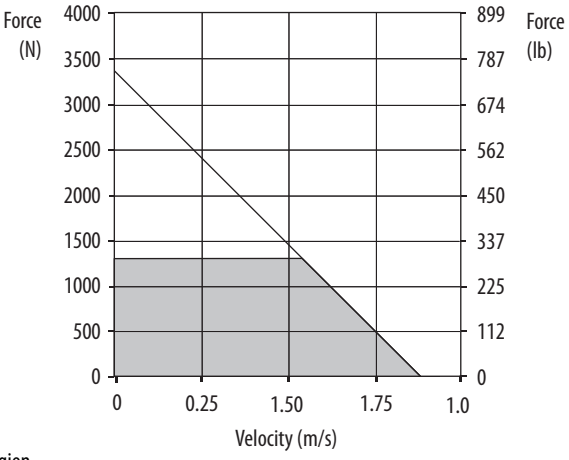
2094-AM02-S and LDAT-S153090-DB*x*



2094-AM02-S and LDAT-S154090-DB*x*

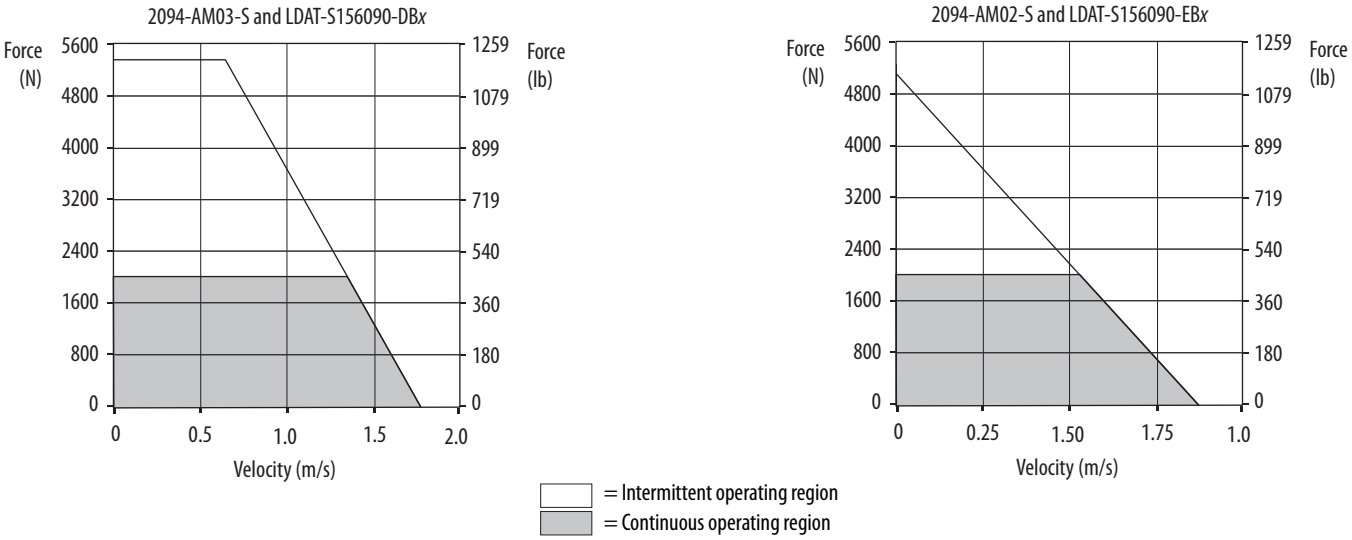


2094-AM01-S and LDAT-S154090-EB*x*



= Intermittent operating region
= Continuous operating region

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



LDAT-Series 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-DB*x*	2.4	4.8	81 (18)	12.2	168 (38)	0.20	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S031020-DB*x*	3.1					0.25		
LDAT-S031030-DB*x*	3.5					0.29		
LDAT-S031040-DB*x*	3.8					0.31		
LDAT-S032010-DB*x*	3.1	7.4	126 (28)	24.3	336 (76)	0.40	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S032020-DB*x*	4.1					0.52		
LDAT-S032030-DB*x*	4.7					0.59		
LDAT-S032040-DB*x*	5.0					0.63		
LDAT-S032010-EB*x*	3.1	3.7		12.2		0.40		
LDAT-S032020-EB*x*	4.1					0.52		
LDAT-S032030-EB*x*	4.7					0.59		
LDAT-S032040-EB*x*	5.0					0.63		
LDAT-S033010-DB*x*	3.5	11.1	190 (43)	36.5	504 (113)	0.67	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S033020-DB*x*	4.7					0.88		
LDAT-S033030-DB*x*	5.0					0.95		
LDAT-S033040-DB*x*								
LDAT-S033010-EB*x*	3.5	3.7		12.2		0.67	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S033020-EB*x*	4.7					0.87		
LDAT-S033030-EB*x*	5.0					0.91		
LDAT-S033040-EB*x*								

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, refer to Motion Analyzer software.

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-DB*x*	2.8	3.1	119 (27)	11.4	363 (82)	0.34	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S051020-DB*x*	3.7					0.43		
LDAT-S051030-DB*x*	4.1					0.49		
LDAT-S051040-DB*x*	4.4					0.53		
LDAT-S051050-DB*x*	4.7					0.55		
LDAT-S052010-DB*x*	3.7	6.2	251 (56)	22.7	727 (163)	0.92	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S052020-DB*x*	4.8					1.20		
LDAT-S052030-DB*x*	5.0					1.24		
LDAT-S052040-DB*x*								
LDAT-S052050-DB*x*								
LDAT-S052010-EB*x*	3.7	3.1		11.4		0.80	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S052020-EB*x*	4.6					0.98		
LDAT-S052030-EB*x*	4.6					1.02		
LDAT-S052040-EB*x*								
LDAT-S052050-EB*x*								
LDAT-S053010-DB*x*	4.1	9.4	378 (85)	34.2	1093 (246)	1.56	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S053020-DB*x*	5.0					1.87		
LDAT-S053030-DB*x* … LDAT-S053050-DB*x*								
LDAT-S053010-EB*x* … LDAT-S053050-EB*x*	3.5	3.1		11.4		1.04	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S054010-DB*x*	4.4	12.4	509 (114)	45.5	1453 (327)	2.26	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S054020-DB*x* … LDAT-S054050-DB*x*	5.00					2.53		
LDAT-S054010-EB*x*	4.4	6.2		22.7		1.87	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S054020-EB*x* … LDAT-S054050-EB*x*	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, refer to Motion Analyzer software.

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-DB*x*	3.9	6.0	364 (82)	22.0	1055 (237)	1.37	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S072020-DB*x*	5.0					1.64		
LDAT-S072030-DB*x* … LDAT-S072070-DB*x*								
LDAT-S072010-EB*x*	3.5	3.0		11.0		1.03	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S072020-EB*x* … LDAT-S072070-EB*x*								
LDAT-S073010-DB*x*	4.4	9.0	554 (125)	32.8	1576 (354)	2.27	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S073020-DB*x* … LDAT-S073070-DB*x*	5.0					2.50		
LDAT-S073010-EB*x* … LDAT-S073070-EB*x*	2.4	3.0		10.9		1.01	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S074010-DB*x*	4.7	11.9	730 (164)	43.5	2088 (469)	3.15	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S074020-DB*x* … LDAT-S074070-DB*x*	5.0					3.30		
LDAT-S074010-EB*x* … LDAT-S074070-EB*x*	3.5	6.0		21.7		2.08	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S076010-DB*x*	5.0	18.2	1122 (252)	66.4	3189 (717)	5.02	2094-BM03-S @ 150%	2094-BM03-M
LDAT-S076020-DB*x* … LDAT-S076070-DB*x*								
LDAT-S076010-EB*x* … LDAT-S076070-EB*x*	3.5	9.1		33.2		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, refer to Motion Analyzer software.

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-DB*x*	3.4	5.7	456 (103)	21.0	1289 (290)	1.44	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S102020-DB*x*	4.4					1.74		
LDAT-S102030-DB*x*	5.0					1.91		
LDAT-S102040-DB*x*								
LDAT-S102050-DB*x* … LDAT-S102090-DB*x*								
LDAT-S102010-EB*x* … LDAT-S102090-EB*x*	2.6	2.9		10.5		0.96	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S103010-DB*x*	3.8	8.6	702 (158)	31.5	1935 (435)	2.41	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S103020-DB*x*	5.0					2.93		
LDAT-S103030-DB*x* … LDAT-S103090-DB*x*								
LDAT-S103010-EB*x* … LDAT-S103090-EB*x*	1.8	2.9		10.5		0.92	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S104010-DB*x*	4.1	11.5	929 (209)	42.0	2578 (580)	3.76	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S104020-DB*x*	5.0					4.29		
LDAT-S104030-DB*x* … LDAT-S104090-DB*x*								
LDAT-S104010-EB*x* … LDAT-S104090-EB*x*	2.7	5.7		21.0		2.07	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S106010-DB*x*	4.5	17.3	1403 (315)	63.0	3871 (870)	5.41	2094-BM03-S @ 150%	2094-BM03-M
LDAT-S106020-DB*x* … LDAT-S106090-DB*x*	5.0					5.87		
LDAT-S106010-EB*x* … LDAT-S106090-EB*x*	2.7	8.6		31.5		2.94	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, refer to Motion Analyzer software.

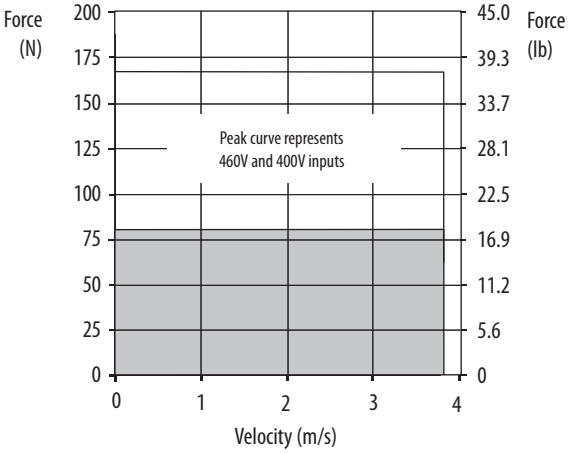
Performance Specifications with Frame 150 Linear Thrusters

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-DB*x*	3.2	5.3	643 (145)	19.5	1799 (404)	1.76	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S152020-DB*x* … LDAT-S152090-DB*x*	3.5					1.89		
LDAT-S152010-EB*x* … LDAT-S152090-EB*x*	1.8	2.7		9.8		0.87	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S153010-DB*x* … LDAT-S153090-DB*x*	3.6	8.0	978 (220)	29.1	2680 (602)	2.87	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S153010-EB*x* … LDAT-S153090-EB*x*	1.2	2.7		9.1		0.80	2094-BMP5-S @ 150%	2094-BMP5-M
LDAT-S154010-DB*x* … LDAT-S154090-DB*x*	3.5	10.7	1306 (294)	39.1	3597 (809)	3.83	2094-BM02-S @ 150%	2094-BM02-M
LDAT-S154010-EB*x* … LDAT-S154090-EB*x*	1.8	5.3		19.5		1.78	2094-BM01-S @ 150%	2094-BM01-M
LDAT-S156010-DB*x* … LDAT-S156090-DB*x*	3.6	16.3	1997 (449)	59.4	5469 (1229)	5.85	2094-BM03-S @ 150%	2094-BM03-M
LDAT-S156010-EB*x* … LDAT-S156090-EB*x*	1.8	8.1		19.8		2.71	2094-BM01-S @ 150%	2094-BM01-M

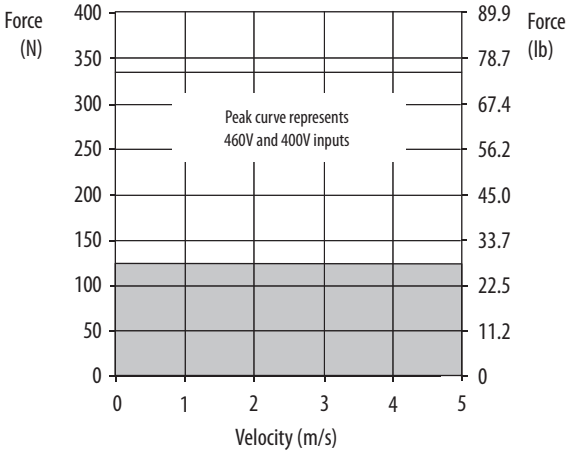
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

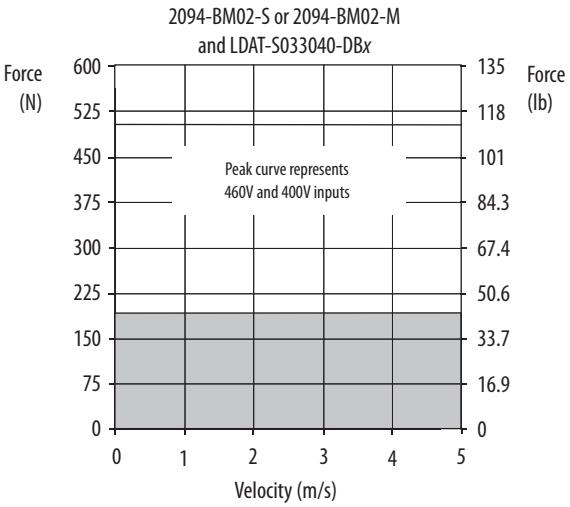
2094-BM01-S or 2094-BM01-M and LDAT-S031040-DB*x*



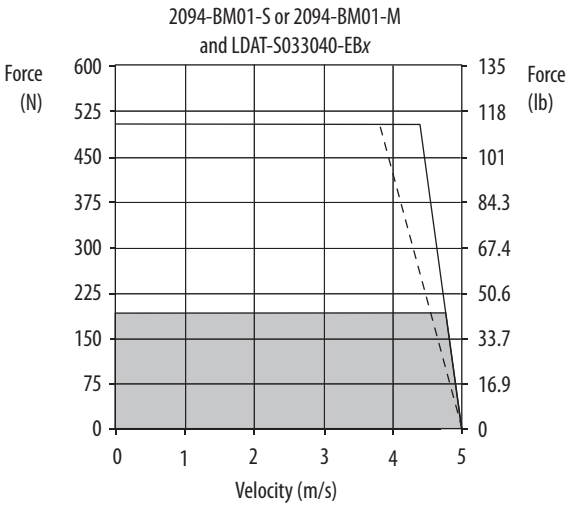
2094-BM01-S or 2094-BM01-M and LDAT-S032040-DB*x* or LDAT-S032040-EB*x*



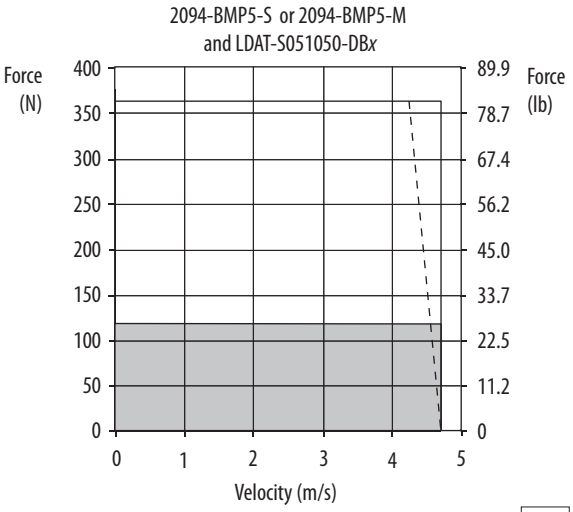
2094-BM02-S or 2094-BM02-M and LDAT-S033040-DB*x*



2094-BM01-S or 2094-BM01-M and LDAT-S033040-EB*x*



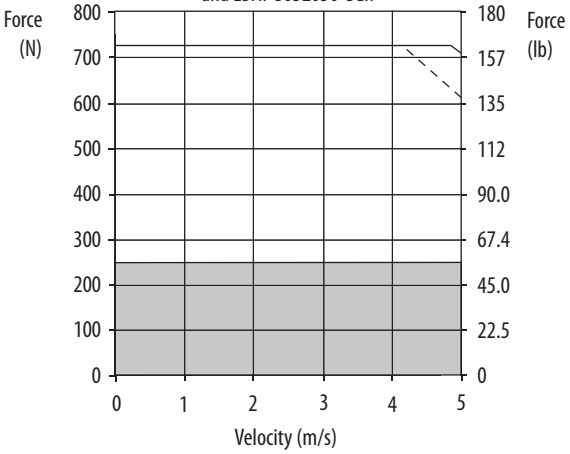
2094-BMP5-S or 2094-BMP5-M and LDAT-S051050-DB*x*



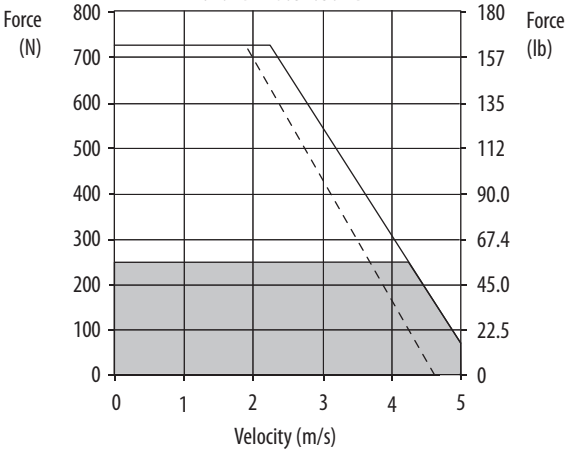
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC input voltage

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

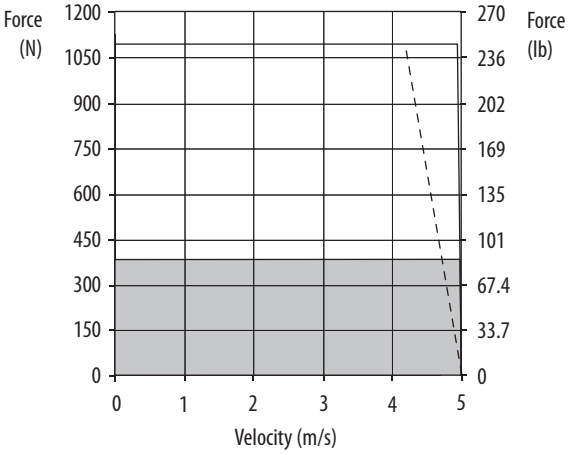
2094-BM01-S or 2094-BM01-M and LDAT-S052050-DB*x*



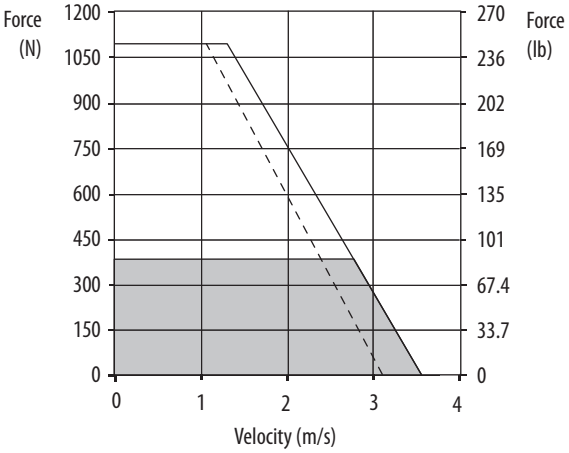
2094-BMP5-S or 2094-BMP5-M and LDAT-S052050-EB*x*



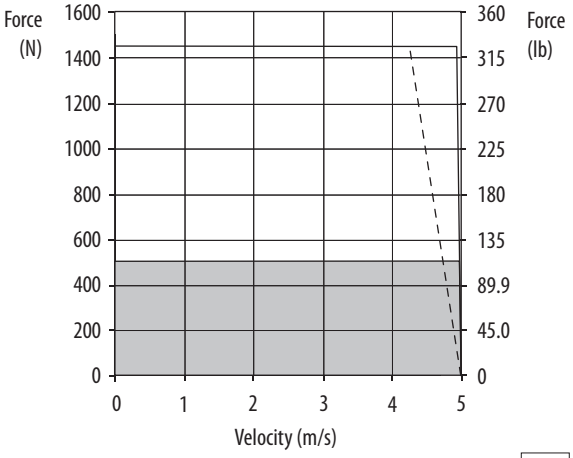
2094-BM02-S or 2094-BM02-M and LDAT-S053050-DB*x*



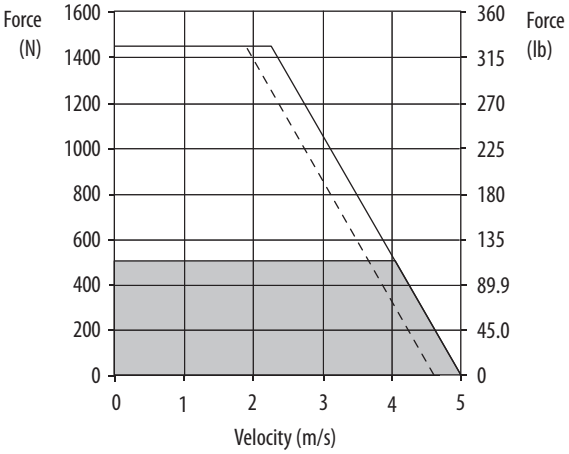
2094-BMP5-S or 2094-BMP5-M and LDAT-S053050-EB*x*



2094-BM02-S or BM02-M and LDAT-S054050-DB*x*



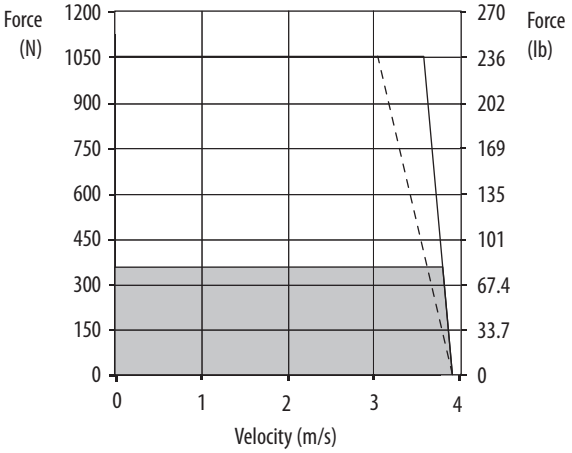
2094-BM01-S or BM01-M and LDAT-S054050-EB*x*



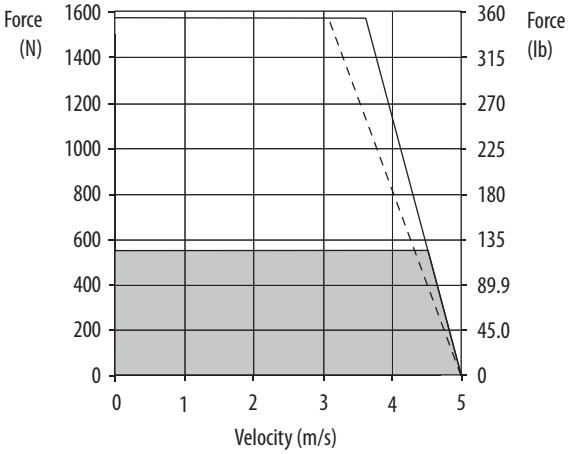
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC input voltage

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

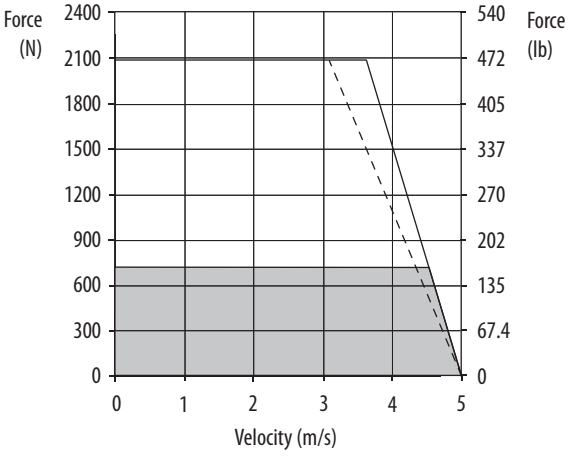
2094-BM01-S or 2094-BM01-M and LDAT-S072070-DB*x*



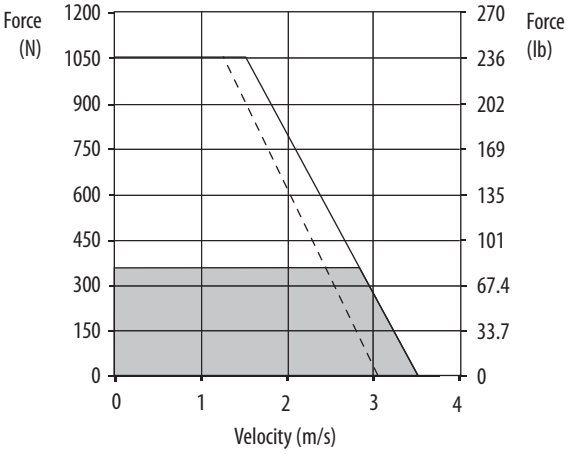
2094-BM02-S or BM02-M and LDAT-S073070-DB*x*



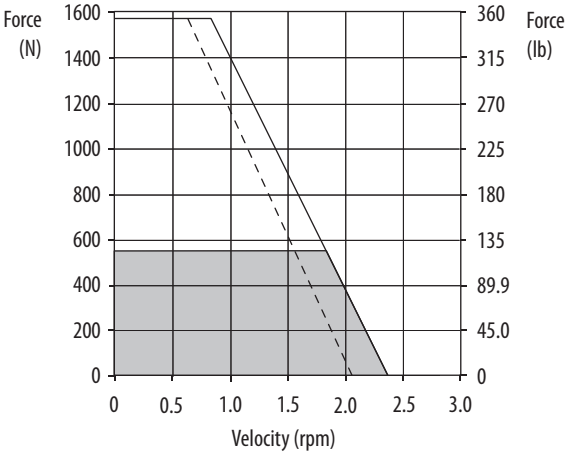
2094-BM02-S or 2094-BM02-M and LDAT-S074070-DB*x*



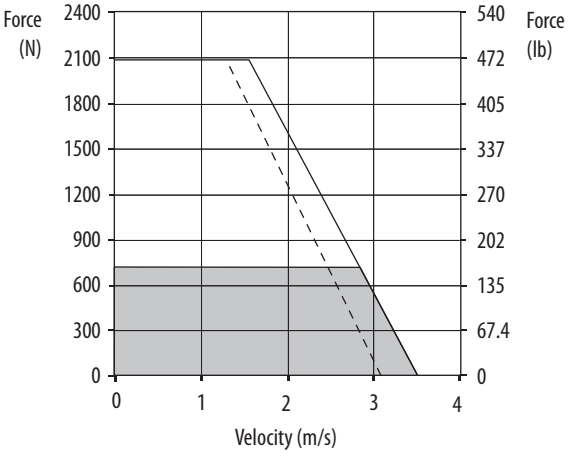
2094-BMP5-S or 2094-BMP5-M and LDAT-S072070-EB*x*



2094-BMP5-S or BMP5-M and LDAT-S073070-EB*x*



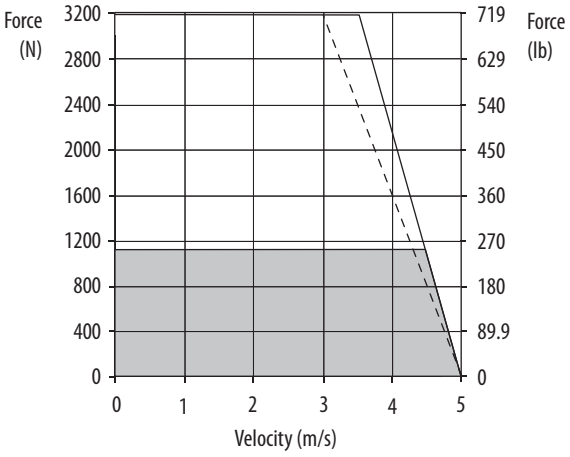
2094-BM01-S or 2094-BM01-M and LDAT-S074070-EB*x*



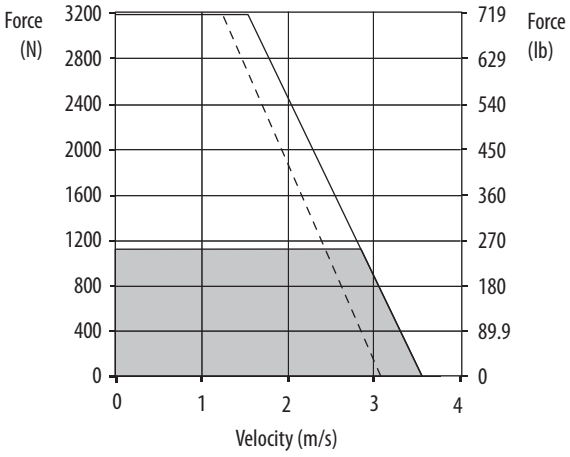
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC input voltage

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

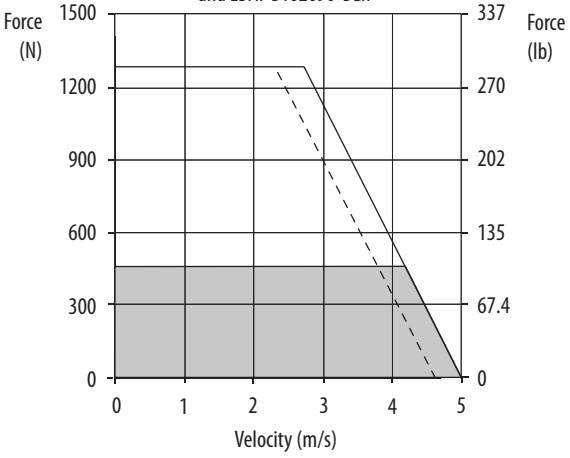
2094-BM03-S or BM03-M
and LDAT-S076070-DB*x*



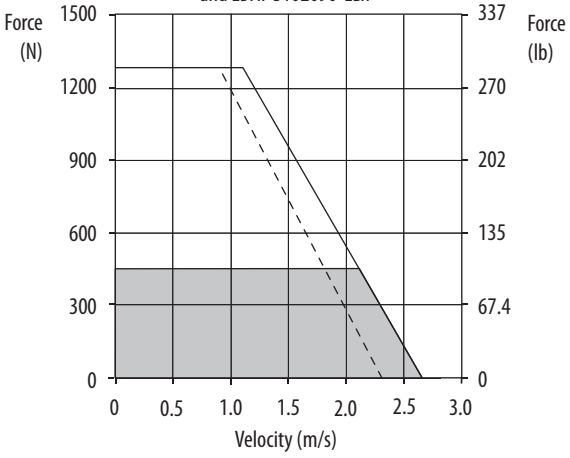
2094-BM02-S or BM02-M
and LDAT-S076070-EB*x*



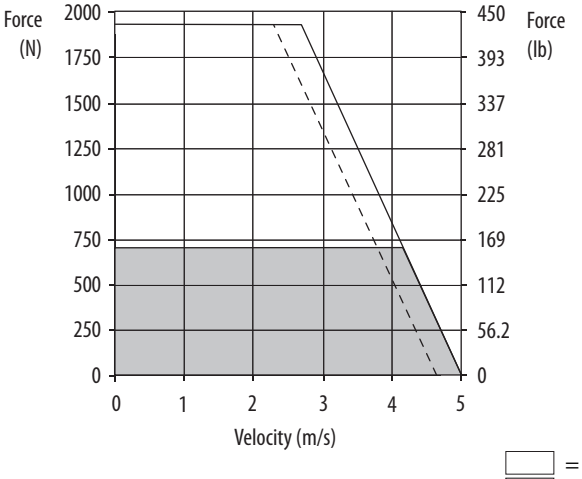
2094-BM01-S or 2094-BM01-M
and LDAT-S102090-DB*x*



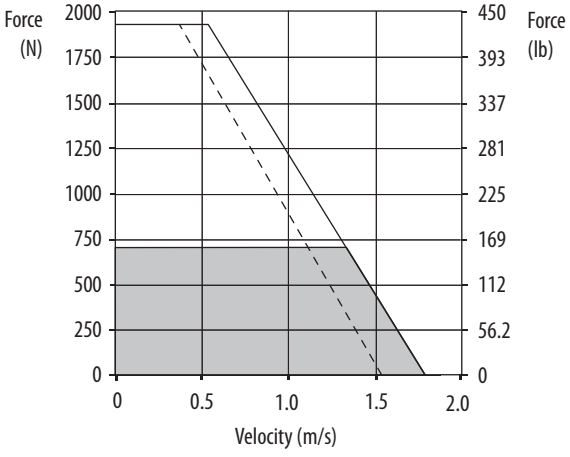
2094-BMP5-S or 2094-BMP5-M
and LDAT-S102090-EB*x*



2094-BM02-S or 2094-BM02-M
and LDAT-S103090-DB*x*



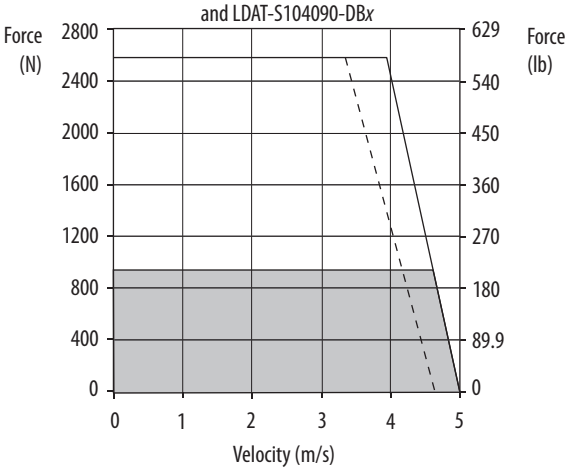
2094-BMP5-S or 2094-BMP5-M
and LDAT-S103090-EB*x*



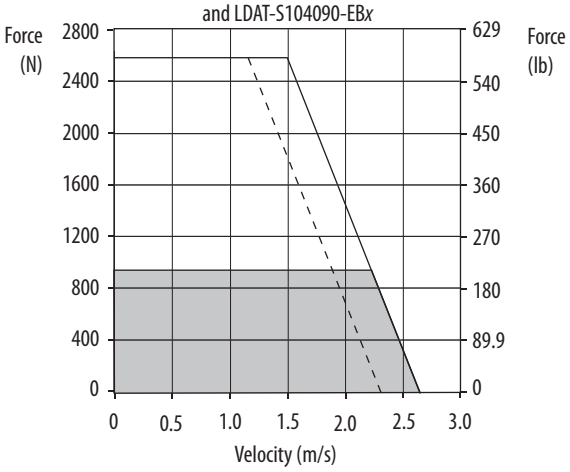
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC input voltage

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

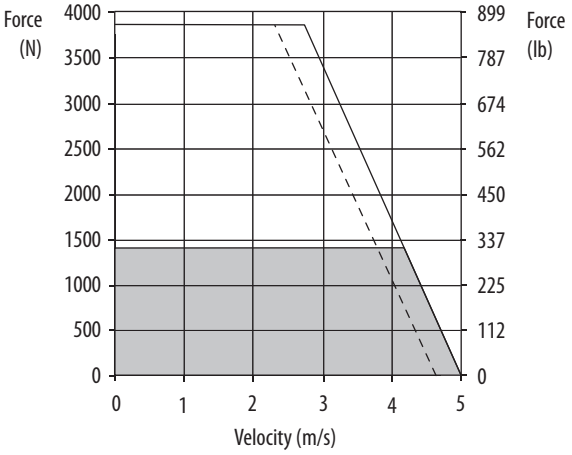
2094-BM02-S or 2094-BM02-M and LDAT-S104090-DB*x*



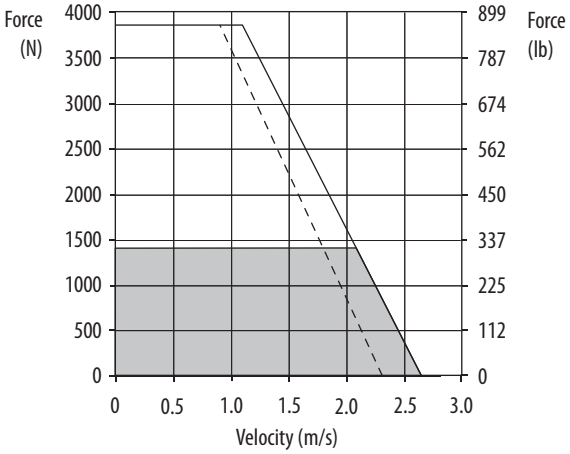
2094-BM01-S or 2094-BM01-M and LDAT-S104090-EB*x*



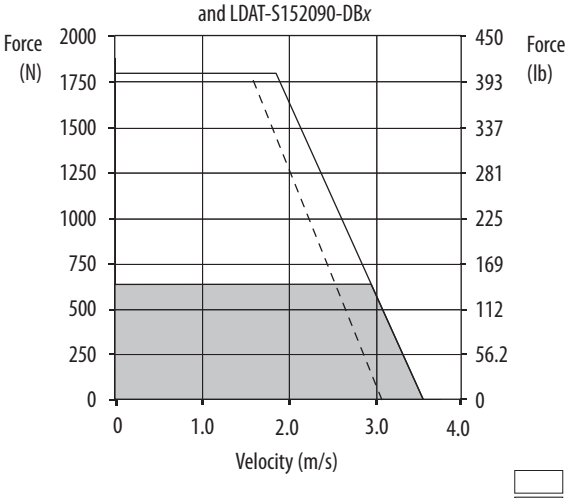
2094-BM03-S or 2094-BM03-M and LDAT-S106090-DB*x*



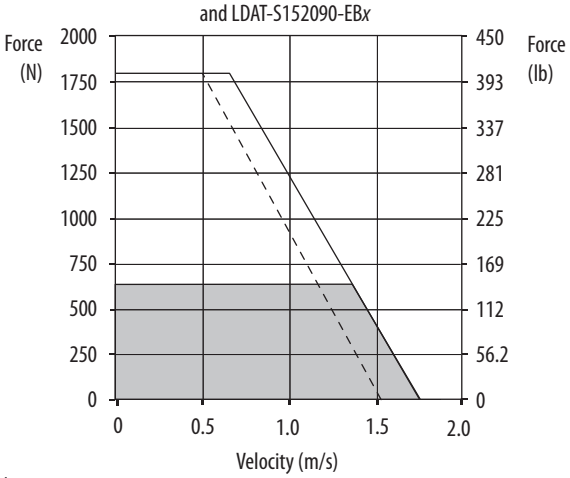
2094-BM02-S or 2094-BM02-M and LDAT-S106090-EB*x*



2094-BM01-S or 2094-BM01-M and LDAT-S152090-DB*x*



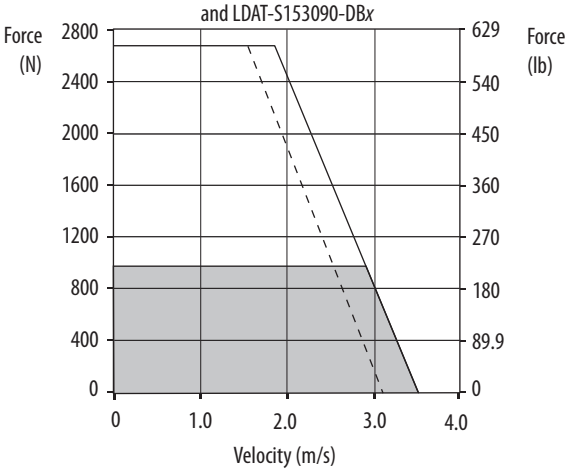
2094-BMP5-S or 2094-BMP5-M and LDAT-S152090-EB*x*



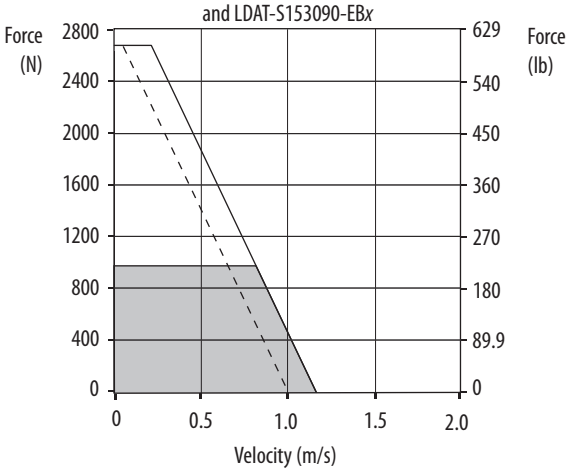
= Intermittent operating region
= Continuous operating region
= Drive operation with 400V AC input voltage

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

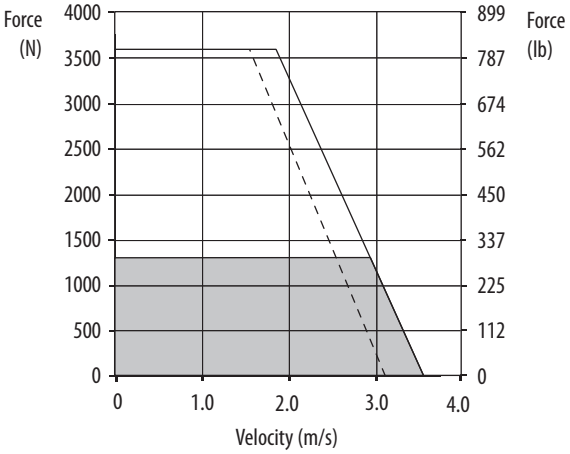
2094-BM01-S or 2094-BM01-M and LDAT-S153090-DB*x*



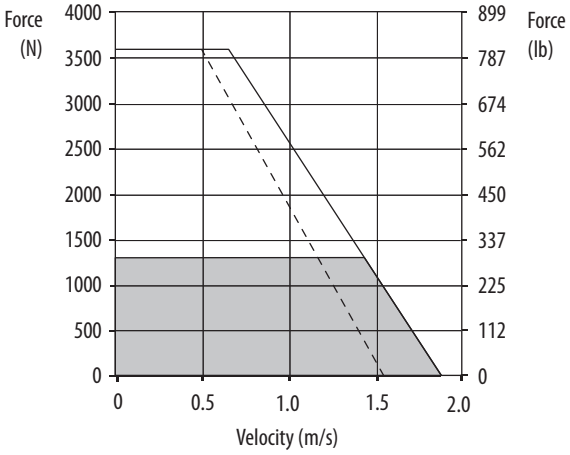
2094-BMP5-S or 2094-BMP5-M and LDAT-S153090-EB*x*



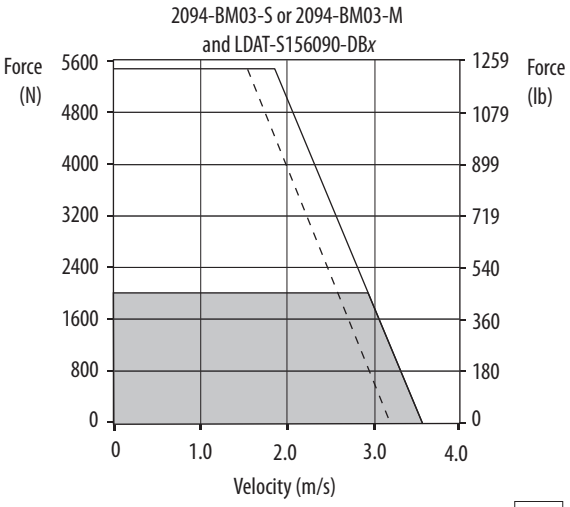
2094-BM02-S or 2094-BM02-M and LDAT-S154090-DB*x*



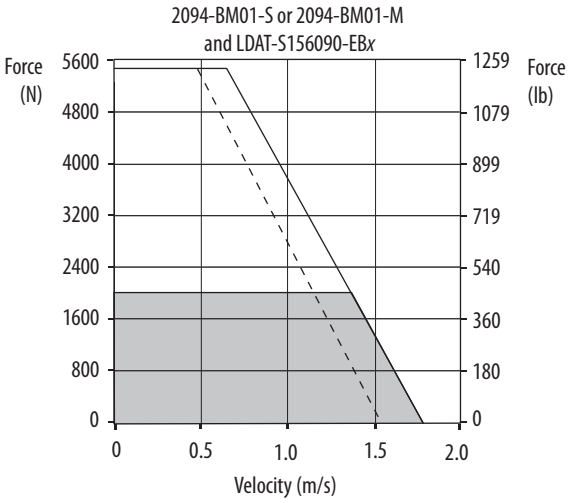
2094-BM01-S or 2094-BM01-M and LDAT-S154090-EB*x*



2094-BM03-S or 2094-BM03-M and LDAT-S156090-DB*x*



2094-BM01-S or 2094-BM01-M and LDAT-S156090-EB*x*



= 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 (series A, B, and C) are configured at the factory as 150% of continuous current. You can program 400V-class (series B and C) AM modules and the equivalent IAM (inverter) modules, for up to 250% of continuous inverter current. Refer to the Kinetix Servo Drives Technical Data, publication GMC-TD003, 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.

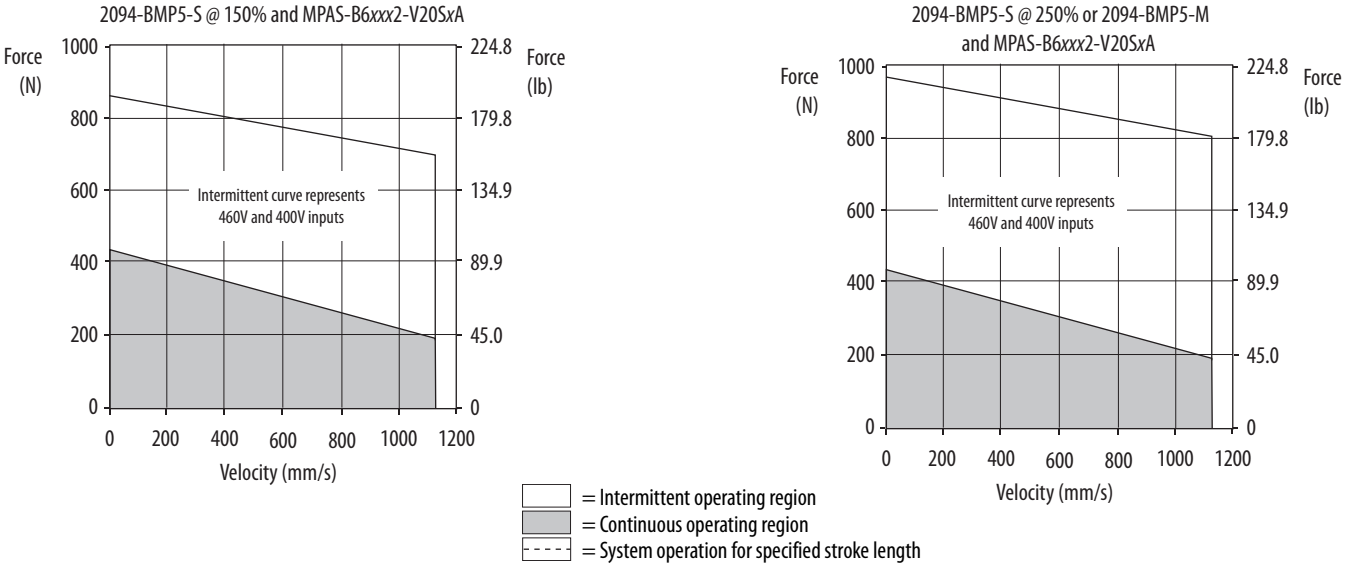
Refer to the Kinetix 6000 Multi-axis Servo Drive User Manual, publication 2094-UM001, to recalculate torque and acceleration/deceleration limit values, and paste them into the appropriate Axis Properties dialog box in RSLogix 5000 software or the Logix Designer application.

For sizing your drive/motor combination when using series B or C drives with the peak enhancement feature, use Motion Analyzer software, version 4.6 or later.

In this example, the MPAS-B*xxxx*2-V20S*x*A linear stage, usually paired with the 2094-BM01 (series A) AM module, is shown paired with the 2094-BMP5-S (series B or C) AM module. The two curves illustrate how the 2094-BMP5-S (series B or C) 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-B*xxxx*2-V20S*x*A	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%



Kinetix 6000 (200V-class) Drives with MP-Series Integrated Linear Stages

This section provides system combination information for the Kinetix 6000 (200V-class) drives when matched with MP-Series (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.

Bulletin MPAS Cable Combinations

Linear Stage	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPAS-A*xxxx*1-V05S*x*A, MPAS-A*xxxx*2-V20S*x*A	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPAS-A6*xxx*B-ALM*x*2C, MPAS-A8*xxx*E-ALM*x*2C, MPAS-A9*xxx*K-ALM*x*2C		2090-XXNFMF-S*xx* (standard, non-flex) 2090-CFBM7DF-CDAF*xx* (continuous-flex) Incremental Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

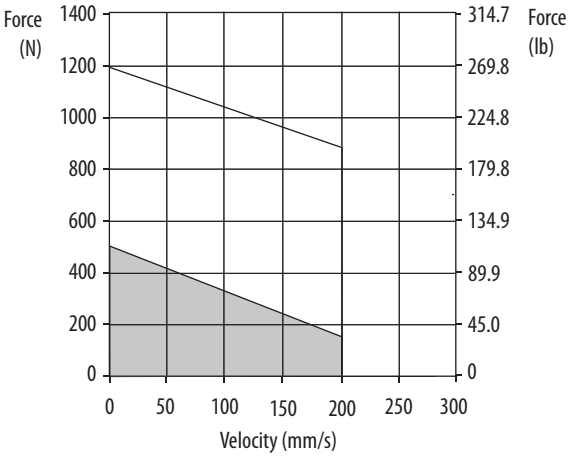
Linear Stage	Speed, max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Stage Rated Output kW	Kinetix 6000 200V-class Drives
MPAS-A*xxxx*1-V05S*x*A	200 (7.9) (1)	3.09	521 (117)	6.10	1212 (272)	0.37	2094-AMP5-S
MPAS-A*xxxx*2-V20S*x*A	1124 (44.3) (2)	4.54	462 (104)	9.10	968 (218)	0.62	2094-AMP5-S
MPAS-A6*xxx*B-ALM02C	5000 (200)	5.3	105 (23.6)	15.8	359 (80.7)	0.32	2094-AM01-S
MPAS-A6*xxx*B-ALMS2C		4.7	83.0 (18.7)	14.2	312 (70.1)	0.29	2094-AM01-S
MPAS-A8*xxx*E-ALM02C		7.0	189 (42.5)	17.0	417 (93.7)	0.53	2094-AM01-S
				18.5	456 (103)		2094-AM02-S
MPAS-A8*xxx*E-ALMS2C		6.3	159 (35.7)	16.7	399 (89.7)	0.48	2094-AM01-S
MPAS-A9*xxx*K-ALM02C		6.7	285 (64.1)	17.0	630 (142)	0.77	2094-AM01-S
				18.3	680 (153)		2094-AM02-S
MPAS-A9*xxx*K-ALMS2C		6.1	245 (55.1)	16.5	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).

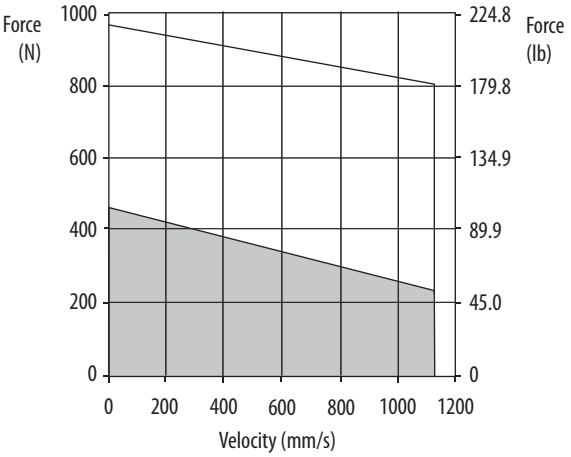
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 (200V-class) Drives/MP-Series Integrated Linear Stage Curves

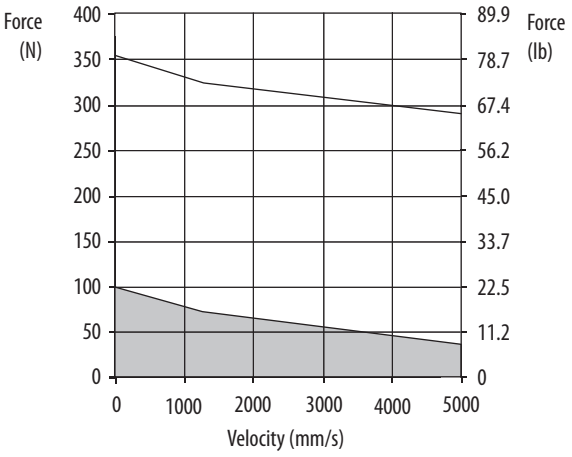
2094-AMP5-S and MPAS-A6*xxx*1-V05S*x*A



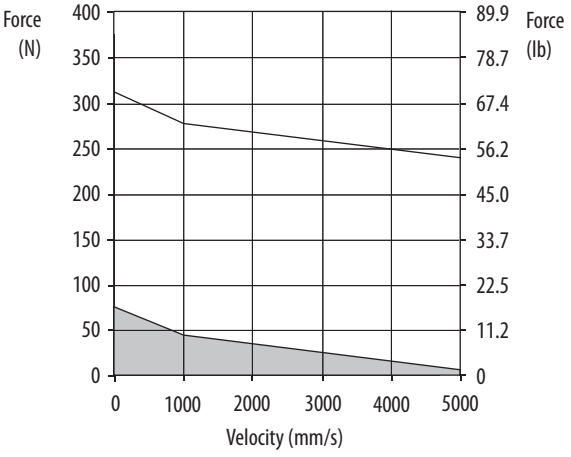
2094-AMP5-S and MPAS-A6*xxx*2-V20S*x*A



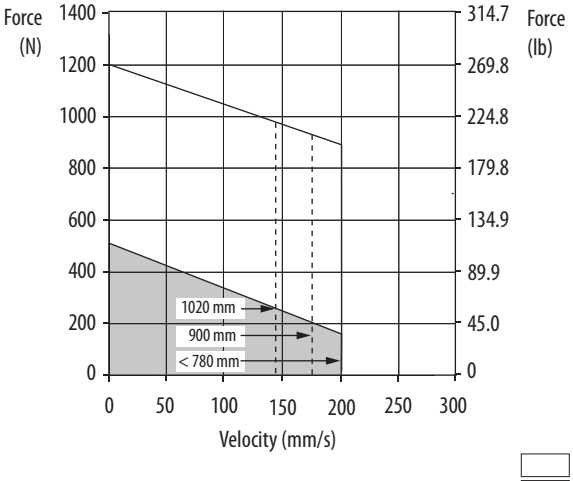
2094-AM01-S and MPAS-A6*xxx*B-ALMO2C



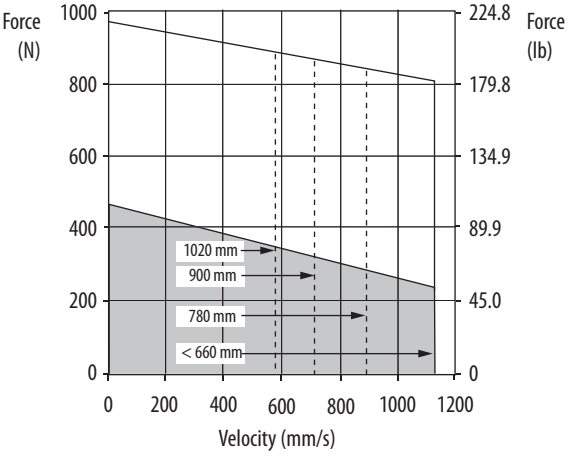
2094-AM01-S and MPAS-A6*xxx*B-ALMS2C



2094-AMP5-S and MPAS-A8*xxx*1-V05S*x*A



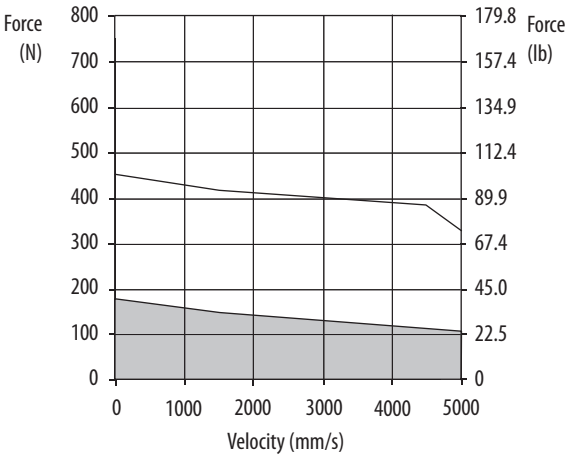
2094-AMP5-S and MPAS-A8*xxx*2-V20S*x*A



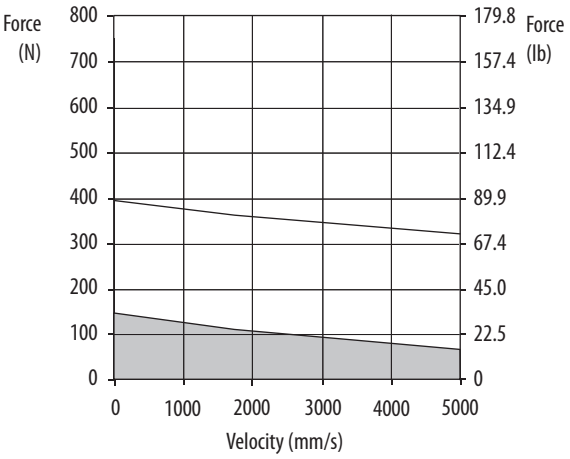
= Intermittent operating region
= Continuous operating region
= System operation for specified stroke length

Kinetix 6000 (200V-class) Drives/MP-Series Integrated Linear Stage Curves (continued)

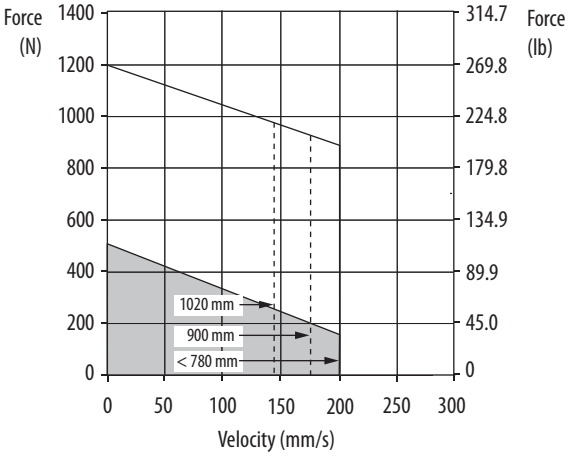
2094-AM02-S and MPAS-A8*xxx*E-ALM02C



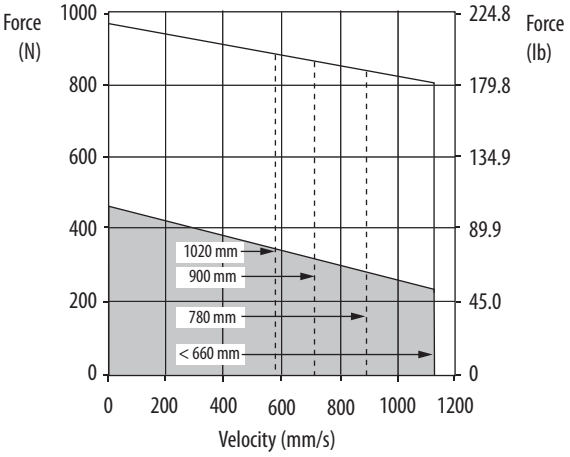
2094-AM01-S and MPAS-A8*xxx*E-ALMS2C



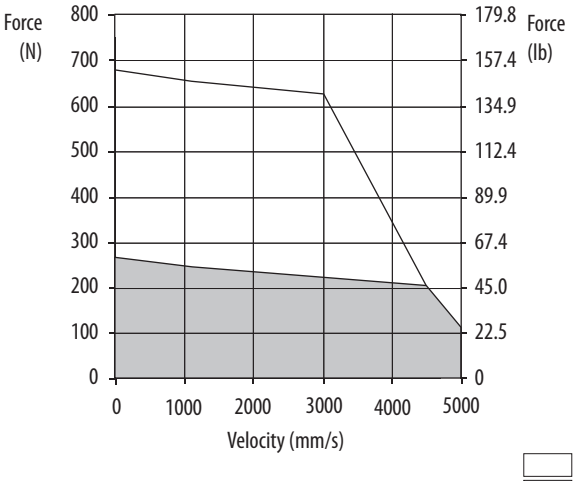
2094-AMP5-S and MPAS-A9*xxx*1-V05S*x*A



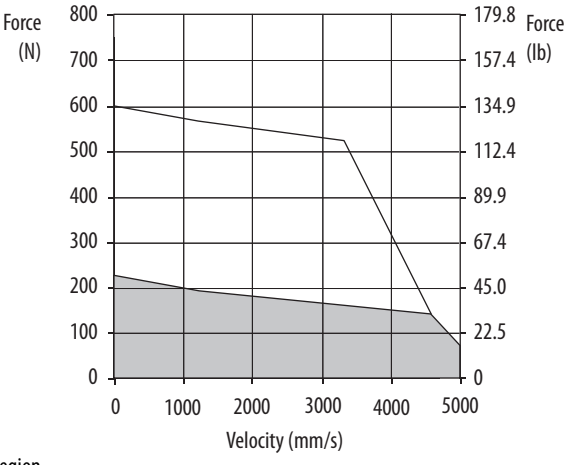
2094-AMP5-S and MPAS-A9*xxx*2-V20S*x*A



2094-AM02-S and MPAS-A9*xxx*K-ALM02C



2094-AM01-S and MPAS-A9*xxx*K-ALMS2C



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

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

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with MP-Series (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.

Bulletin MPAS Cable Combinations

Linear Stage	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPAS-B*xxxx*1-V05S*x*A MPAS-B*xxxx*2-V20S*x*A	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPAS-B8*xxxx*-ALM*x*2C MPAS-B9*xxxx*-ALM*x*2C		2090-XXNFMF-S*xx* (standard, non-flex) 2090-CFBM7DF-CDAF*xx* (continuous-flex) Incremental Feedback

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) on the drive end. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

Bulletin MPAS Performance Specifications with Kinetix 6200/ 6500 (400V-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 6200/ Kinetix 6500 400V-class Drives
MPAS-B*xxxx*1-V05S*x*A	200 (7.9) (1)	1.75	521 (117)	3.50	1212 (272)	0.138	2094-BMP5-M
MPAS-B*xxxx*2-V20S*x*A	1124 (44.3) (2)	3.30	462 (104)	6.60	968 (218)	0.52	2094-BMP5-M
MPAS-B8*xxx*F-ALMO2C	5000 (200)	3.50	189 (42.5)	9.30	456 (103)	0.527	2094-BMP5-M
MPAS-B8*xxx*F-ALMS2C	5000 (200)	3.15	159 (35.7)	8.37	399 (89.7)	0.475	2094-BMP5-M
MPAS-B9*xxx*L-ALMO2C	5000 (200)	3.40	285 (64.1)	9.10	680 (153)	0.768	2094-BMP5-M
MPAS-B9*xxx*L-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, refer to Motion Analyzer software.

Bulletin MPAS Performance Specifications with Kinetix 6000 (400V-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 400V-class Drives
MPAS-B*xxxx*1-V05S*x*A	200 (7.9) (1)	1.75	521 (117)	3.50	1212 (272)	0.138	2094-BMP5-S @ 150%
MPAS-B*xxxx*2-V20S*x*A	1124 (44.3) (2)	3.30	462 (104)	5.90	865 (194)	0.52	2094-BMP5-S @ 150%
				6.60	968 (218)		2094-BMP5-S @ 250%
MPAS-B8*xxx*F-ALMO2C	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-B8*xxx*F-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-B9*xxx*L-ALMO2C	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-B9*xxx*L-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%

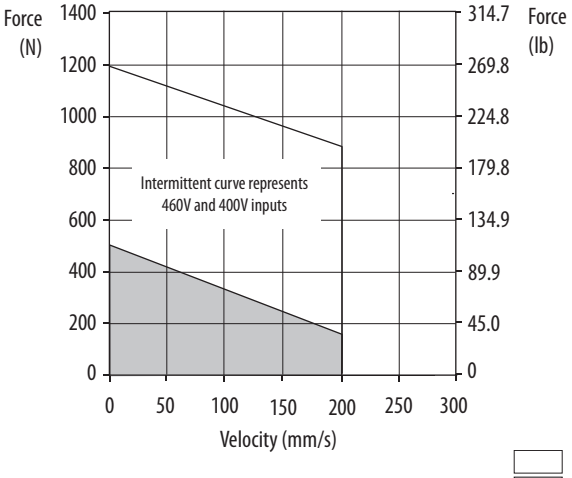
(1) For 900 mm stroke length, maximum speed is 176 mm/s (6.9 in/s). For 1020 mm stroke length, maximum speed is 143 mm/s (5.6 in/s).

(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).

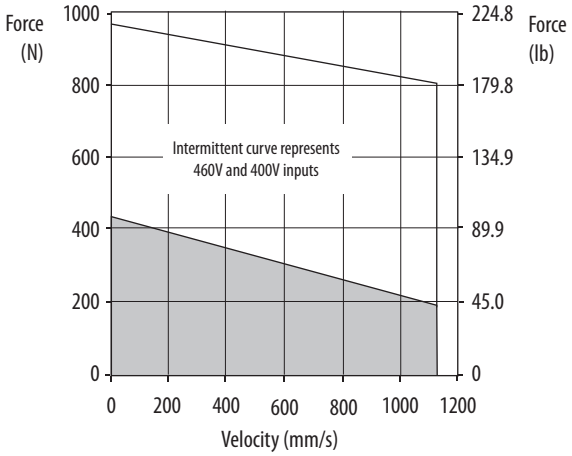
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

2094-BMP5-S @ 150% or 2094-BMP5-M and MPAS-B6*xxx*1-V05S*x*A



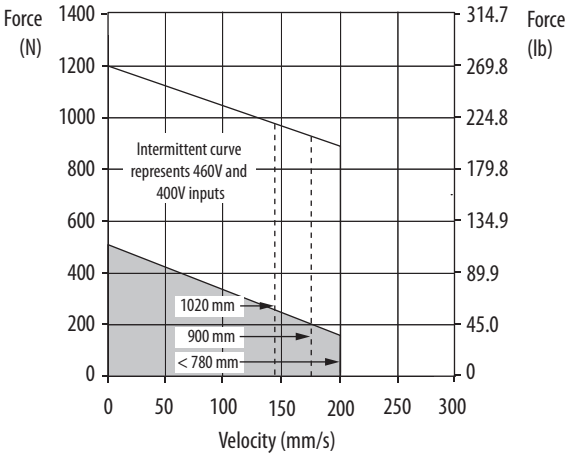
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAS-B6*xxx*2-V20S*x*A



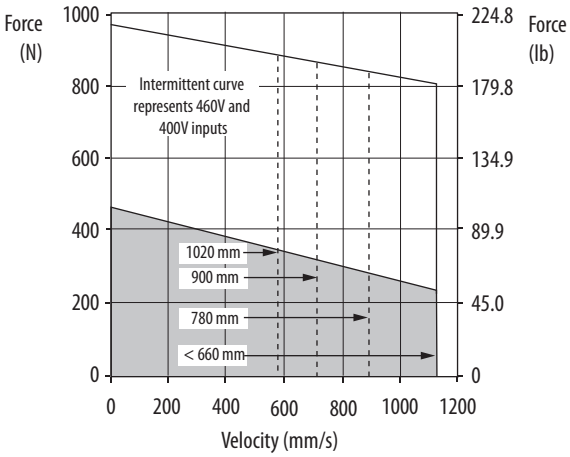
= Intermittent operating region
= Continuous operating region
= System operation with 400V AC rms input voltage
= System operation for specified stroke length

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

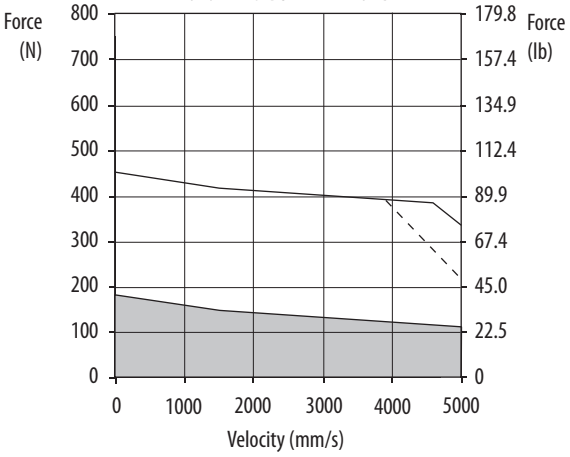
2094-BMP5-S @ 150% or 2094-BMP5-M and MPAS-B8*xxx*1-V05S*x*A



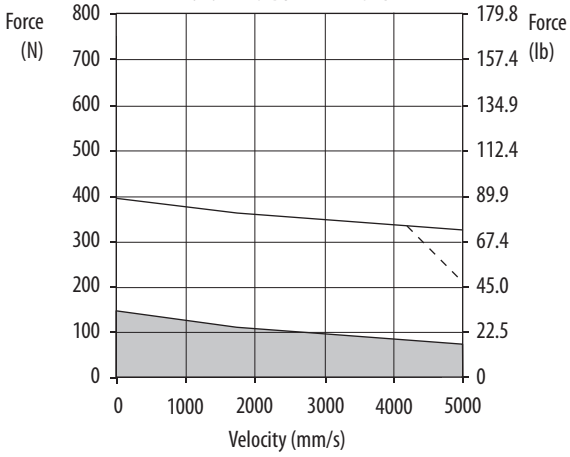
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAS-B8*xxx*2-V20S*x*A



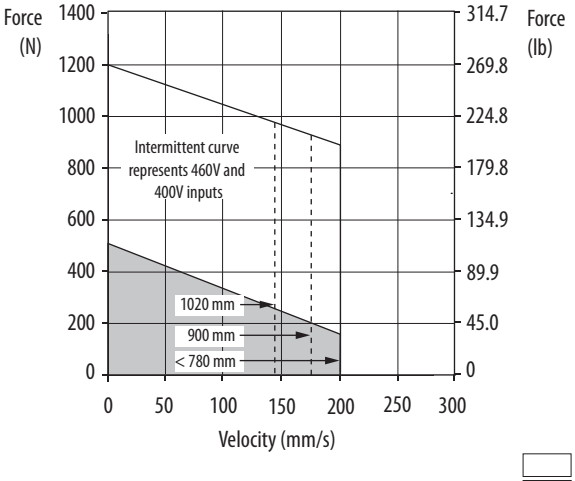
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAS-B8*xxx*F-ALM02C



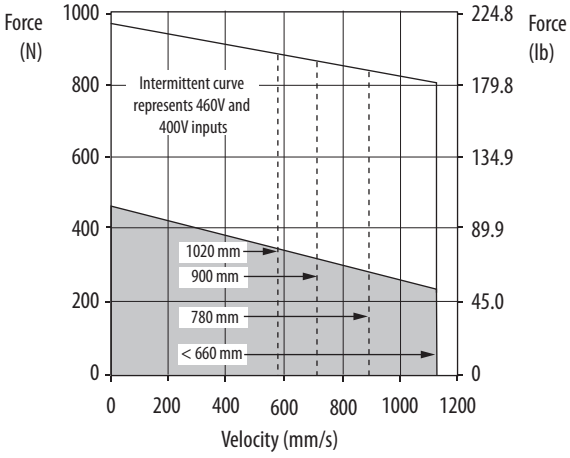
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAS-B8*xxx*F-ALMS2C



2094-BMP5-S @ 150% or 2094-BMP5-M and MPAS-B9*xxx*1-V05S*x*A



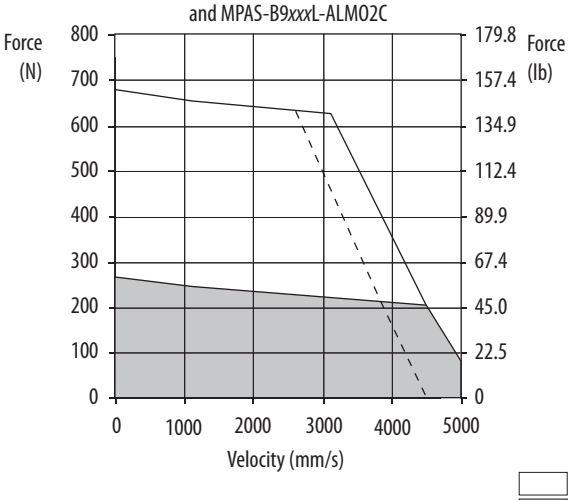
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAS-B9*xxx*2-V20S*x*A



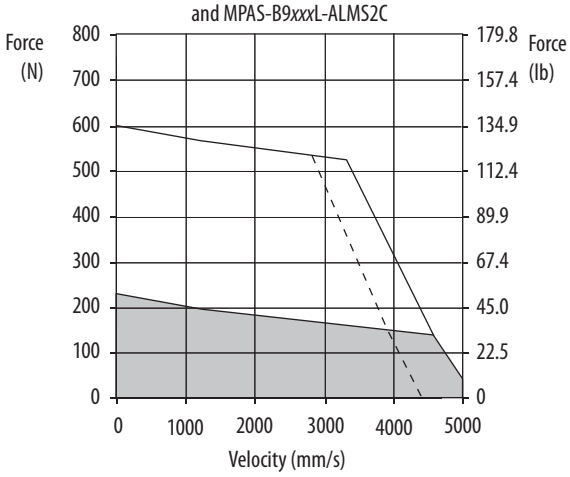
= Intermittent operating region
= Continuous operating region
= System operation with 400V AC rms input voltage
= System operation for specified stroke length

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

2094-BMP5-S @ 250% or 2094-BMP5-M and MPAS-B9*xxx*L-ALM02C



2094-BMP5-S @ 250% or 2094-BMP5-M and MPAS-B9*xxx*L-ALMS2C



= 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 MP-Series Electric Cylinders

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

Bulletin MPAR Cable Combinations

Electric Cylinder	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPAR-A/B1*xxx*B MPAR-A/B1*xxx*E MPAR-A/B2*xxx*C MPAR-A/B2*xxx*F MPAR-A/B3*xxx*E MPAR-A/B3*xxx*H	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (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. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

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

Electric Cylinder	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-B1*xxx*B	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2094-BMP5-M
MPAR-B1*xxx*E	500	1.49	280 (62.9)	1.71	350 (78.7)	0.140	2094-BMP5-M
MPAR-B2*xxx*C	250	1.67	420 (94.4)	1.90	525 (118)	0.105	2094-BMP5-M
MPAR-B2*xxx*F	640	3.29	640 (144)	3.93	800 (180)	0.410	2094-BMP5-M
MPAR-B3*xxx*E	500	5.16	2000 (450)	6.17	2500 (562)	1.00	2094-BM01-M
MPAR-B3*xxx*H	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, refer to Motion Analyzer software.

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

Electric Cylinder	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-A1*xxx*B	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2094-AMP5-S
MPAR-A1*xxx*E	500	2.16	280 (62.9)	2.48	350 (78.7)	0.140	2094-AMP5-S
MPAR-A2*xxx*C	250	2.42	420 (94.4)	2.72	525 (118)	0.105	2094-AMP5-S
MPAR-A2*xxx*F	640	4.54	640 (144)	5.41	800 (180)	0.410	2094-AM01-S
MPAR-A3*xxx*E	500	10.33	2000 (450)	12.34	2500 (562)	1.00	2094-AM02-S
MPAR-A3*xxx*H	1000	12.20	1300 (292)	16.40	1625 (365)	1.30	2094-AM02-S

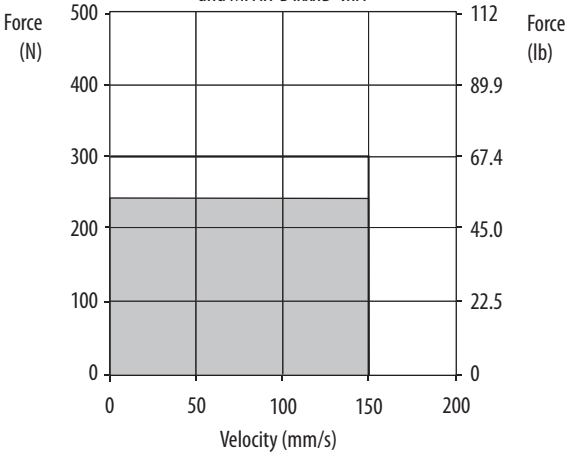
Performance Specifications with Kinetix 6000 (400V-class) Drives

Electric Cylinder	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-B1*xxx*B	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2094-BMP5-S @ 150%
MPAR-B1*xxx*E	500	1.49	280 (62.9)	1.71	350 (78.7)	0.140	2094-BMP5-S @ 150%
MPAR-B2*xxx*C	250	1.67	420 (94.4)	1.90	525 (118)	0.105	2094-BMP5-S @ 150%
MPAR-B2*xxx*F	640	3.29	640 (144)	3.93	800 (180)	0.410	2094-BMP5-S @ 150%
MPAR-B3*xxx*E	500	5.16	2000 (450)	6.17	2500 (562)	1.00	2094-BM01-S @ 150%
MPAR-B3*xxx*H	1000	6.13	1300 (292)	6.79	1625 (365)	1.30	2094-BM01-S @ 150%

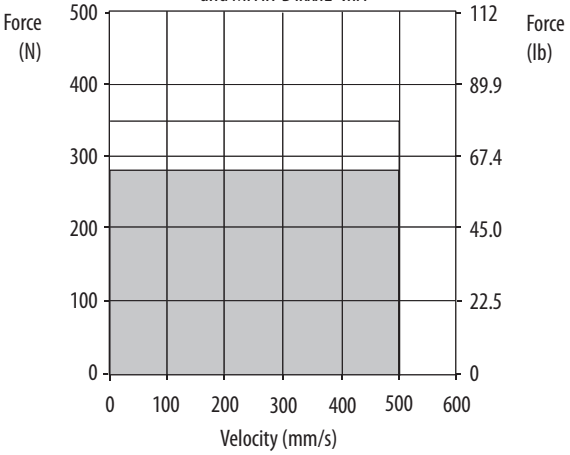
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 and Kinetix 6200/6500 Drives/MP-Series Electric Cylinder Curves

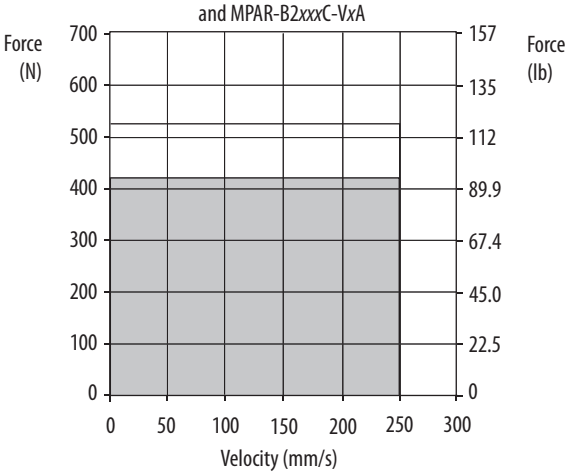
2094-AMP5-S and MPAR-A1*xxx*B-V*x*A
2094-BMP5-S @ 150% or 2094-BMP5-M
and MPAR-B1*xxx*B-V*x*A



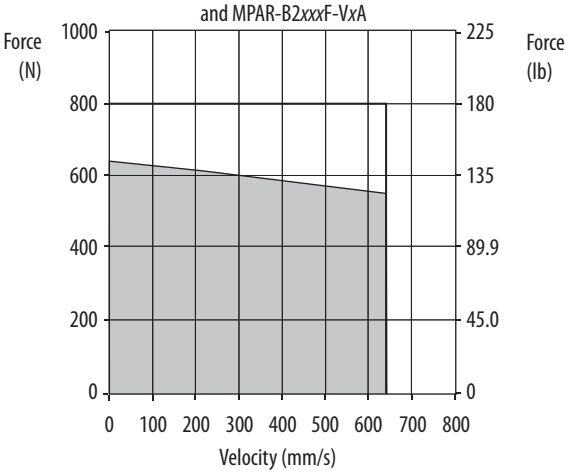
2094-AMP5-S and MPAR-A1*xxx*E-V*x*A
2094-BMP5-S @ 150% or 2094-BMP5-M
and MPAR-B1*xxx*E-V*x*A



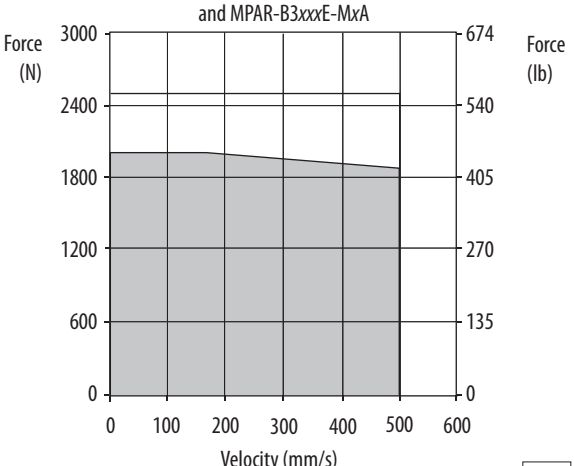
2094-AMP5-S and MPAR-A2*xxx*C-V*x*A
2094-BMP5-S @ 150% or 2094-BMP5-M
and MPAR-B2*xxx*C-V*x*A



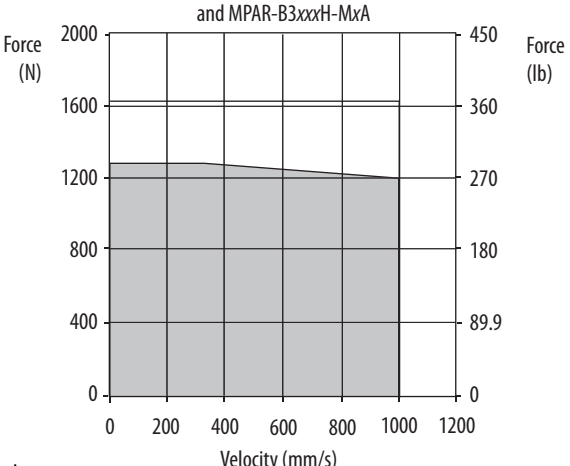
2094-AM01-S and MPAR-A2*xxx*F-V*x*A
2094-BMP5-S @ 150% or 2094-BMP5-M
and MPAR-B2*xxx*F-V*x*A



2094-AM02-S and MPAR-A3*xxx*E-M*x*A
2094-BM01-S @ 150% or 2094-BM01-M
and MPAR-B3*xxx*E-M*x*A



2094-AM02-S and MPAR-A3*xxx*H-M*x*A
2094-BM01-S @ 150% or 2094-BM01-M
and MPAR-B3*xxx*H-M*x*A



= Intermittent operating region
= Continuous operating region

Kinetix 6000 and Kinetix 6200/6500 Drives with MP-Series Heavy Duty Electric Cylinders

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

Bulletin MPAI Cable Combinations

Electric Cylinder	Motor Power/Brake Cable	Motor Feedback Cable (1)
MPAI-A/B2*xxx*C	2090-CP*x*M7DF-16AA*xx* (standard, non-flex) 2090-CP*x*M7DF-16AF*xx* (continuous-flex)	2090-CFBM7DF-CEAA*xx* or 2090-CFBM7DD-CEAA*xx* (standard, non-flex) 2090-CFBM7DF-CEAF*xx* or 2090-CFBM7DD-CEAF*xx* (continuous-flex) Absolute High-resolution Feedback
MPAI-A/B3*xxx*C, MPAI-A/B3*xxx*E MPAI-A/B3*xxx*R, MPAI-A/B3*xxx*S		
MPAI-A/B4*xxx*C, MPAI-A/B4*xxx*E MPAI-A/B4*xxx*R, MPAI-A/B4*xxx*S		
MPAI-B5*xxx*C, MPAI-B5*xxx*E		
MPAI-A5*xxx*C, MPAI-A5*xxx*E	2090-CP*x*M7DF-14AA*xx* (standard, non-flex) 2090-CP*x*M7DF-14AF*xx* (continuous-flex)	

(1) Use low-profile connector kit (catalog number 2090-K6CK-D15M) with flying-lead cables on the drive end. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.

Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.

Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Performance Specifications with Ball Screw Electric Cylinders

Electric Cylinder	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		0.25	
MPAI-B2300CV3								
MPAI-B3076CM1	305 (12)	1.35	1624 (365)	1290 (290)	4.57	4448 (1000)	0.27	2094-BMP5-M
MPAI-B3076EM1	610 (24)		814 (183)	645 (145)		2570 (578)		
MPAI-B3150CM3	279 (11)	2.81	4003 (900)	3176 (714)	4.30	4448 (1000)	0.39	2094-BMP5-M
MPAI-B3300CM3								
MPAI-B3450CM3	188 (7.3)							
MPAI-B3150EM3	559 (22)		2002 (450)	1588 (357)	7.07	4003 (900)		
MPAI-B3300EM3								
MPAI-B3450EM3	376 (15)							
MPAI-B4150CM3	279 (11)	5.61	7784 (1750)	6179 (1389)	8.68	8896 (2000)	0.43	2094-BM01-M
MPAI-B4300CM3								
MPAI-B4450CM3	245 (9.5)							
MPAI-B4150EM3	559 (22)		3892 (875)	3092 (695)	14.14	7784 (1750)		2094-BM01-M
MPAI-B4300EM3								
MPAI-B4450EM3	491 (19)							
MPAI-B5*xxx*CM3	200 (7.8)	6.62	13,123 (2950)	10,415 (2341)	8.48	13,345 (3000)	0.55	2094-BM01-M
MPAI-B5*xxx*EM3	400 (15.6)		6562 (1475)	5208 (1171)	16.70	13,122 (2950)		

Performance Specifications with Roller Screw Electric Cylinders

Electric Cylinder	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								
MPAI-B3450RM3	176 (6.9)							
MPAI-B3150SM3	559 (22)		1891 (425)	1499 (337)		3781 (850)		
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-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, refer to Motion Analyzer software.

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

Performance Specifications with Ball Screw Electric Cylinders

Electric Cylinder	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-A2076CV1	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		0.25	
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-A5*xxx*CM3	200 (7.8)	13.25	13,123 (2950)	10,415 (2341)	16.70	13,345 (3000)	0.55	2094-AM03-S
MPAI-A5*xxx*EM3	400 (15.6)		6562 (1475)	5208 (1171)	33.40	13,122 (2950)		

Performance Specifications with Roller Screw Electric Cylinders

Electric Cylinder	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, refer to Motion Analyzer software.

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

Performance Specifications with Ball Screw Electric Cylinders

Electric Cylinder	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		0.25	
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)							
MPAI-B3150EM3	559 (22)		2002 (450)	1588 (357)	7.07	4003 (900)		2094-BMP5-S @ 250%
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)							
MPAI-B4150EM3	559 (22)		3892 (875)	3092 (695)	14.14	7784 (1750)		2094-BM01-S @ 250%
MPAI-B4300EM3								
MPAI-B4450EM3	491 (19)							
MPAI-B5*xxx*CM3	200 (7.8)	6.62	13,123 (2950)	10,415 (2341)	8.48	13,345 (3000)	0.55	2094-BM01-S @ 150%
MPAI-B5*xxx*EM3	400 (15.6)		6562 (1475)	5208 (1171)	16.70	13,122 (2950)		2094-BM01-S @ 250%

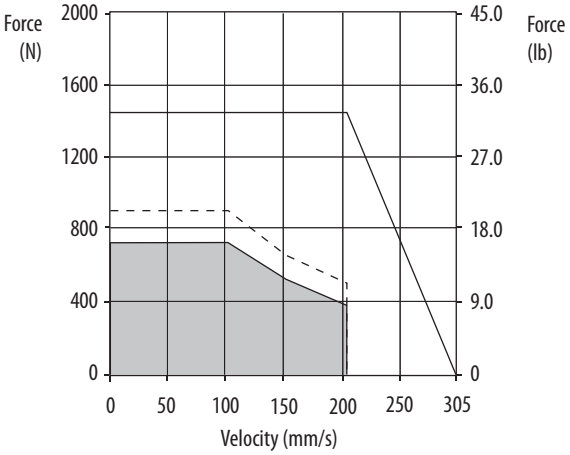
Performance Specifications with Roller Screw Electric Cylinders

Electric Cylinder	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)							
MPAI-B3150SM3	559 (22)		1891 (425)	1499 (337)		3781 (850)		
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)							
MPAI-B4150SM3	559 (22)		3670 (825)	2914 (655)		7340 (1650)		
MPAI-B4300SM3								
MPAI-B4450SM3	393 (15)							

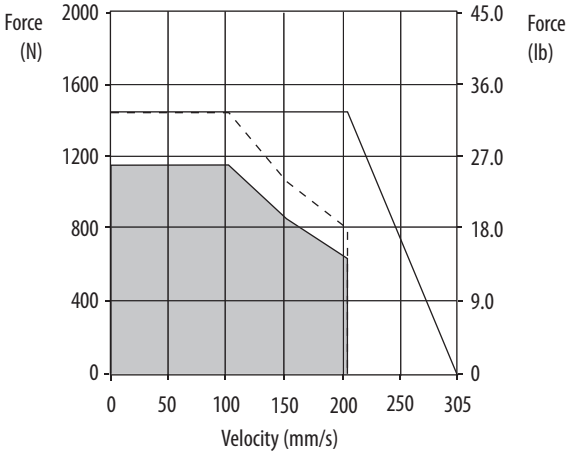
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Kinetix 6000 and Kinetix 6200/6500 Drives/MP-Series (ball screw) Electric Cylinder Curves

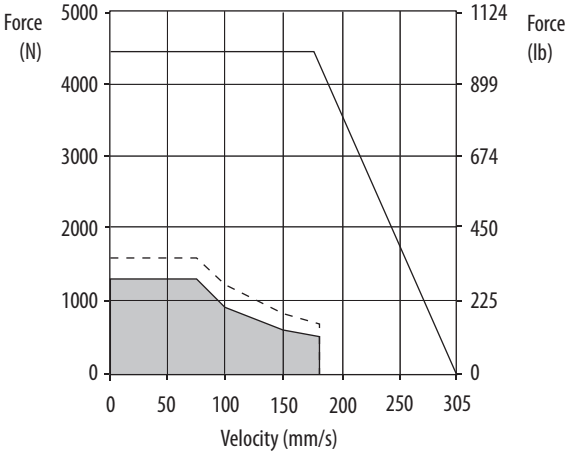
2094-AMP5-S and MPAI-A2076CV1
2094-BMP5-S @ 150% or 2094-BMP5-M and MPAI-B2076CV1



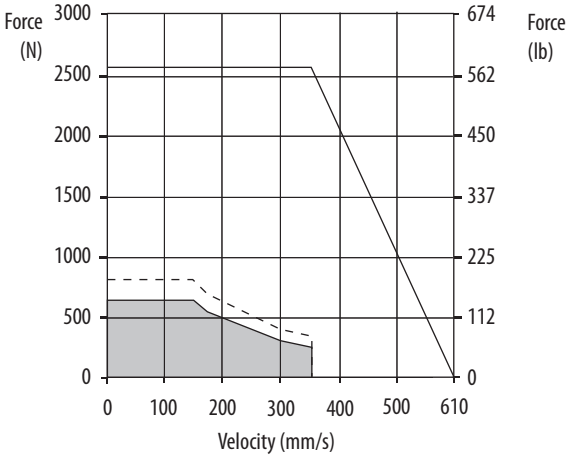
2094-AMP5-S and MPAI-A2*xxx*CV3
2094-BMP5-S @ 150% or 2094-BMP5-M and MPAI-B2*xxx*CV3



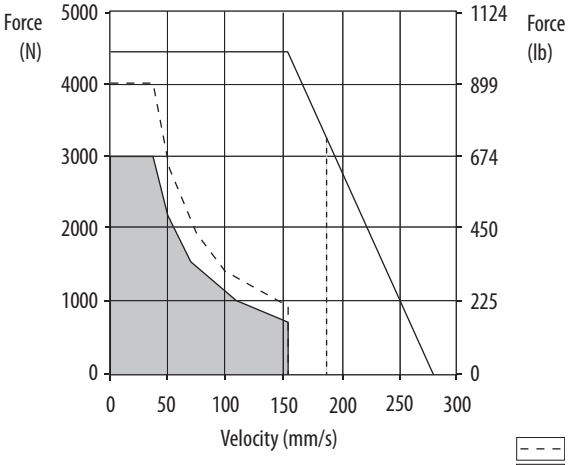
2094-AM01-S and MPAI-A3076CM1
2094-BMP5-S @ 150% or 2094-BMP5-M and MPAI-B3076CM1



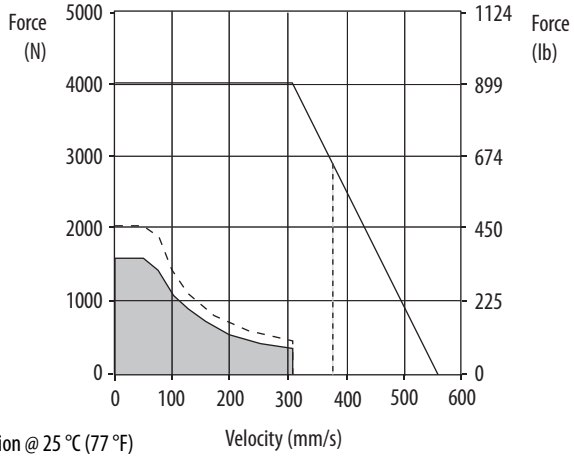
2094-AM01-S and MPAI-A3076EM1
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAI-B3076EM1



2094-AM01-S and MPAI-A3*xxx*CM3
2094-BMP5-S @ 150% or 2094-BMP5-M and MPAI-B3*xxx*CM3



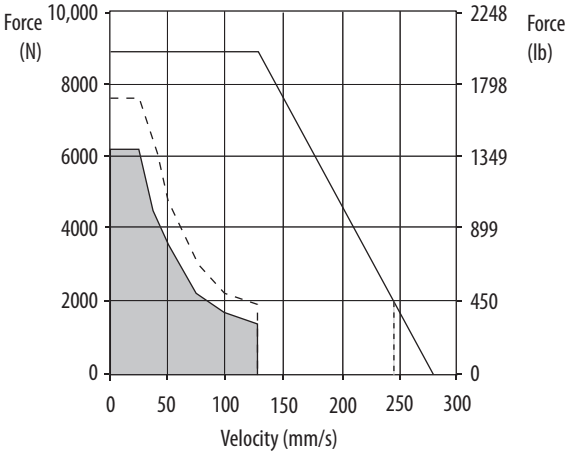
2094-AM01-S and MPAI-A3*xxx*EM3
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAI-B3*xxx*EM3



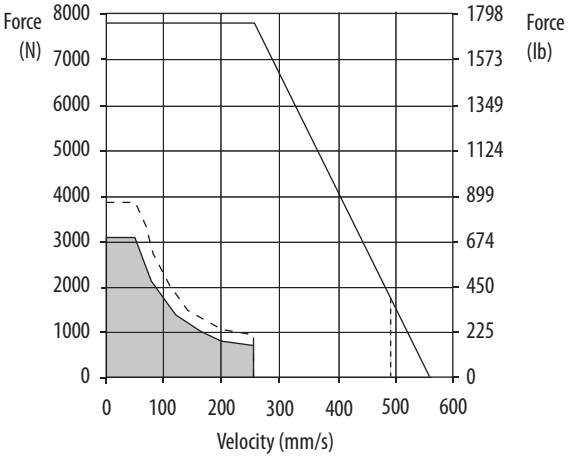
= Continuous operating region @ 25 °C (77 °F)
= Continuous operating region @ 40 °C (104 °F)
= Intermittent operating region, 450 mm (18 in.) stroke length only
= Intermittent operating region, 076…300 mm (3…12 in.) stroke lengths

Kinetix 6000 and Kinetix 6200/6500 Drives/MP-Series (ball screw) Electric Cylinder Curves (continued)

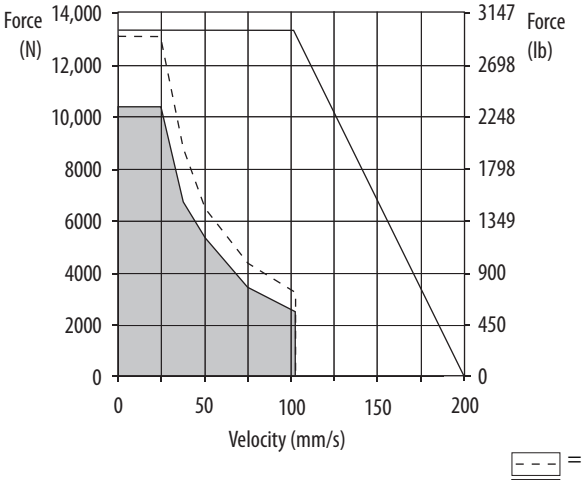
2094-AM02-S and MPAI-A4*xxx*CM3
2094-BM01-S @ 150% or 2094-BM01-M
and MPAI-B4*xxx*CM3



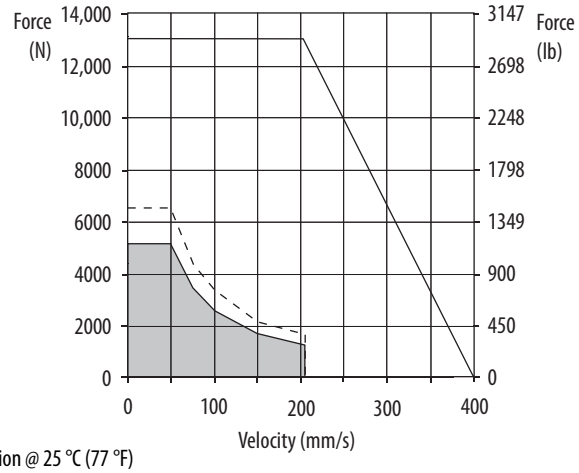
2094-AM02-S and MPAI-A4*xxx*EM3
2094-BM01-S @ 250% or 2094-BM01-M
and MPAI-B4*xxx*EM3



2094-AM03-S and MPAI-A5*xxx*CM3
2094-BM01-S @ 150% or 2094-BM01-M
and MPAI-B5*xxx*CM3



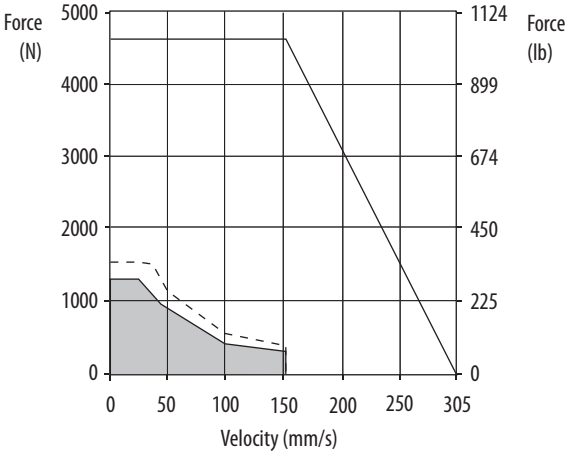
2094-AM03-S and MPAI-A5*xxx*EM3
2094-BM01-S @ 250% or 2094-BM01-M
and MPAI-B5*xxx*EM3



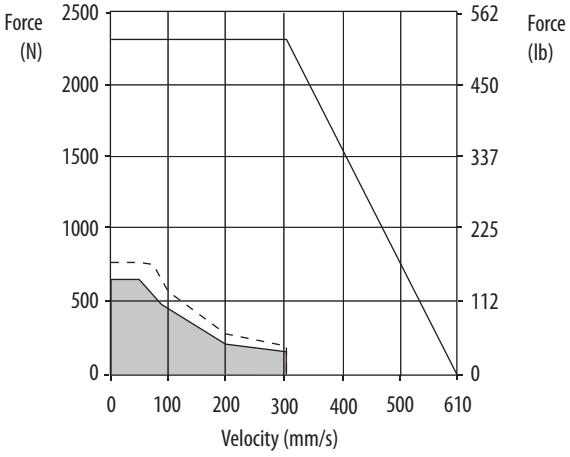
= Continuous operating region @ 25 °C (77 °F)
= Continuous operating region @ 40 °C (104 °F)
= Intermittent operating region, 450 mm (18 in.) stroke length only
= Intermittent operating region, 076…300 mm (3…12 in.) stroke lengths

Kinetix 6000 and Kinetix 6200/6500 Drives/MP-Series (roller screw) Electric Cylinder Curves

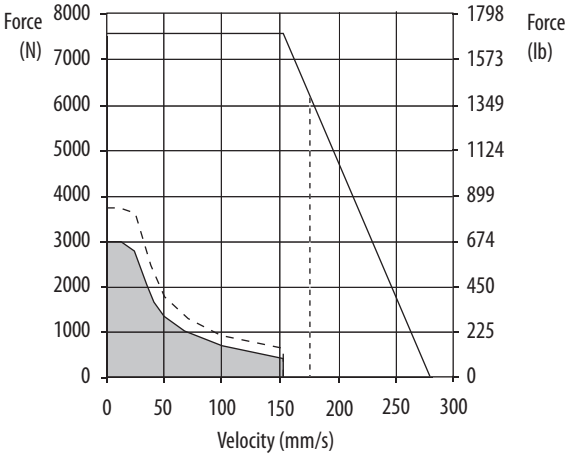
2094-AM01-S and MPAI-A3076RM1
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAI-B3076RM1



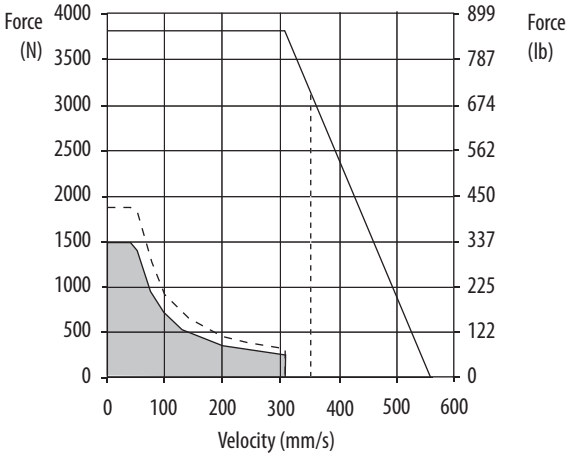
2094-AM01-S and MPAI-A3076SM1
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAI-B3076SM1



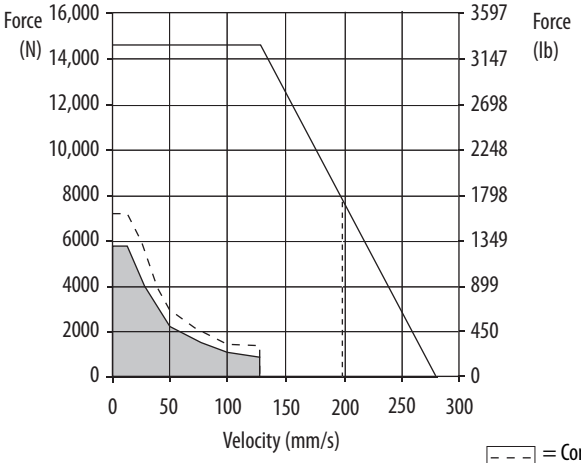
2094-AM01-S and MPAI-A3*xxx*RM3
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAI-B3*xxx*RM3



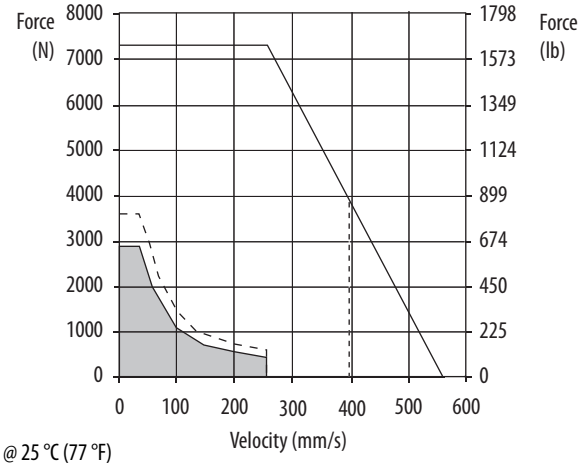
2094-AM01-S and MPAI-A3*xxx*SM3
2094-BMP5-S @ 250% or 2094-BMP5-M and MPAI-B3*xxx*SM3



2094-AM02-S and MPAI-A4*xxx*RM3
2094-BM01-S @ 250% or 2094-BM01-M and MPAI-B4*xxx*RM3



2094-AM02-S and MPAI-A4*xxx*SM3
2094-BM01-S @ 250% or 2094-BM01-M and MPAI-B4*xxx*SM3



= 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 LDC-Series Linear Motors

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

LDC-Series Cable Combinations

Linear Motor	Motor Power Cable	Motor Feedback Cable (1)
LDC-C030100-DHT, LDC-C030200-DHT, LDC-C030200-EHT	2090-CPWM7DF-16AA*xx* (standard, non-flex) 2090-CPWM7DF-16AF*xx* (continuous-flex)	2090-XXNFMF-S*xx* (standard, non-flex) 2090-CFBM7DF-CDAF*xx* (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. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Linear Motor	Speed, max m/s (ft/s)	System Continuous Stall Current (1) Amps 0-pk	System Continuous Stall Force (1) 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, refer to Motion Analyzer software.

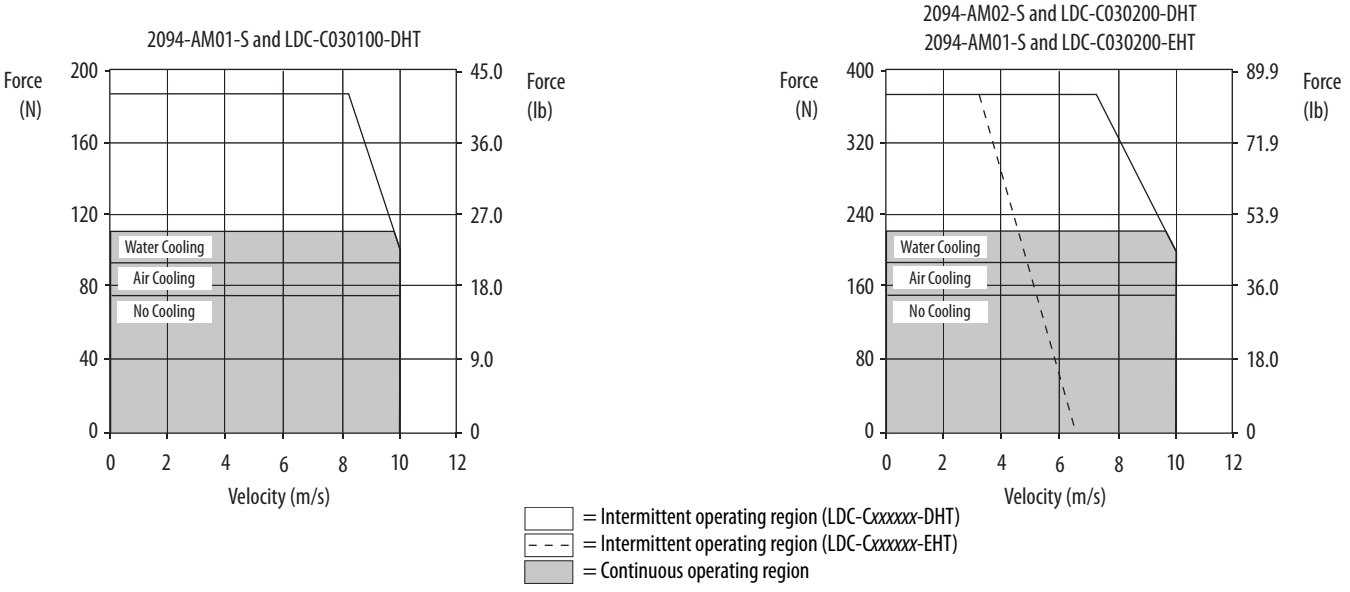
LDC-Series Performance Specifications with Kinetix 6000 (200V-class) Drives (continued)

Linear Motor	Speed, max m/s (ft/s)	System Continuous Stall Current (1) Amps 0-pk	System Continuous Stall Force (1) 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		22.2…33.3	1349…2023 (303…455)	68.5	3534 (794)	6.74…10.11	2094-AM05-S
LDC-C150400-DHT	10.0 (32.8)	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).

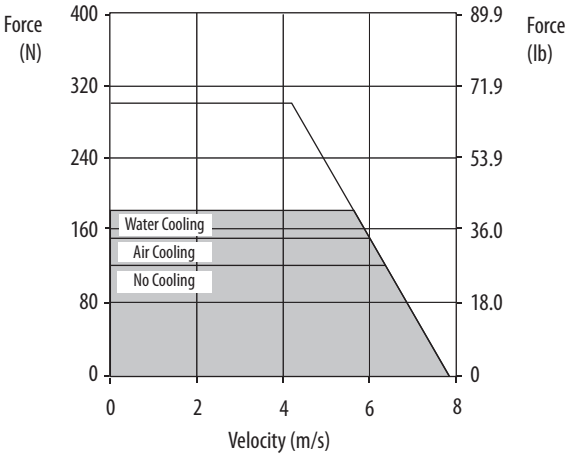
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

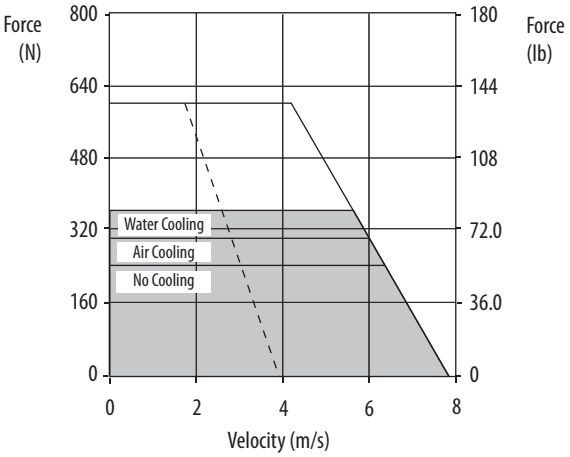


Kinetix 6000 (200V-class) Drives/LDC-Series Linear Motor Curves (continued)

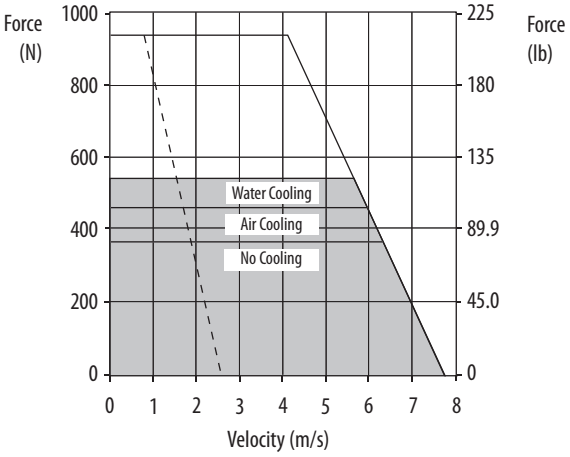
2094-AM01-S and LDC-C050100-DHT



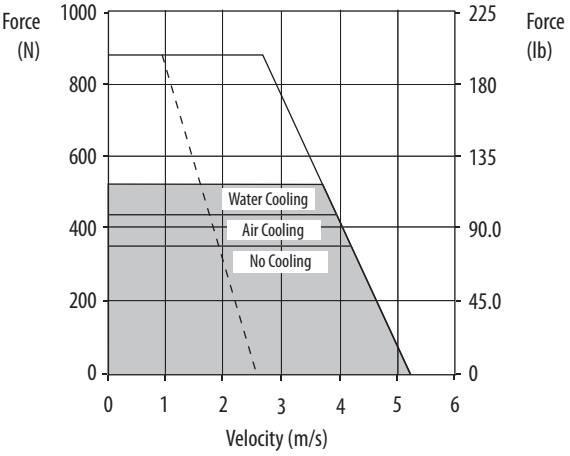
2094-AM02-S and LDC-C050200-DHT
2094-AMP5-S and LDC-C050200-EHT



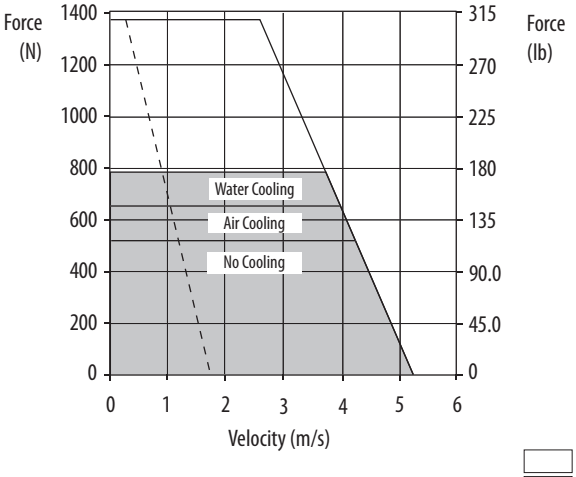
2094-AM03-S and LDC-C050300-DHT
2094-AMP5-S and LDC-C050300-EHT



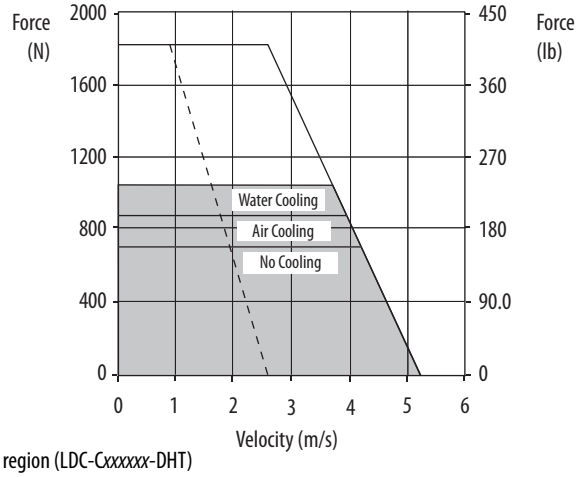
2094-AM02-S and LDC-C075200-DHT
2094-AMP5-S and LDC-C075200-EHT



2094-AM03-S and LDC-C075300-DHT
2094-AM01-S and LDC-C075300-EHT



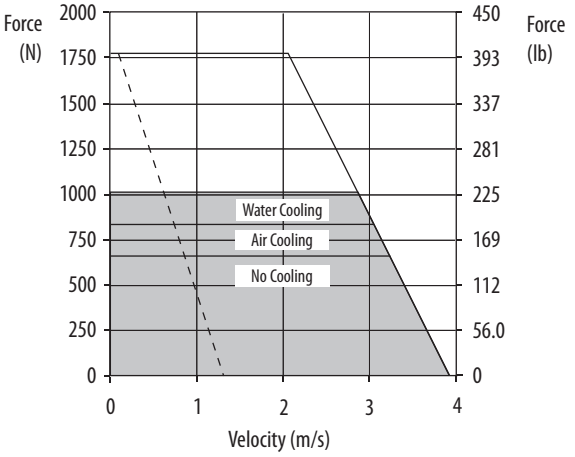
2094-AM03-S and LDC-C075400-DHT
2094-AM02-S and LDC-C075400-EHT



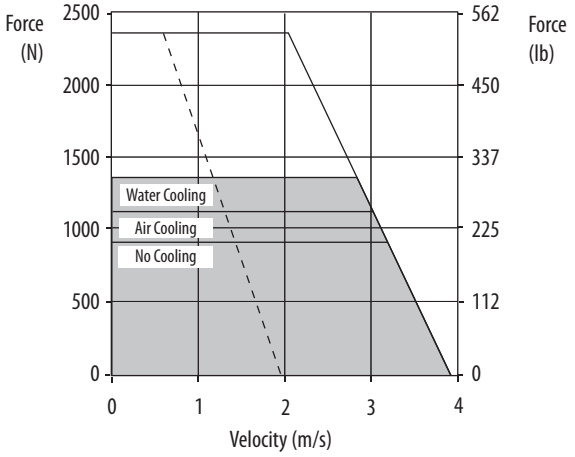
= Intermittent operating region (LDC-C*xxxxxx*-DHT)
= Intermittent operating region (LDC-C*xxxxxx*-EHT)
= Continuous operating region

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

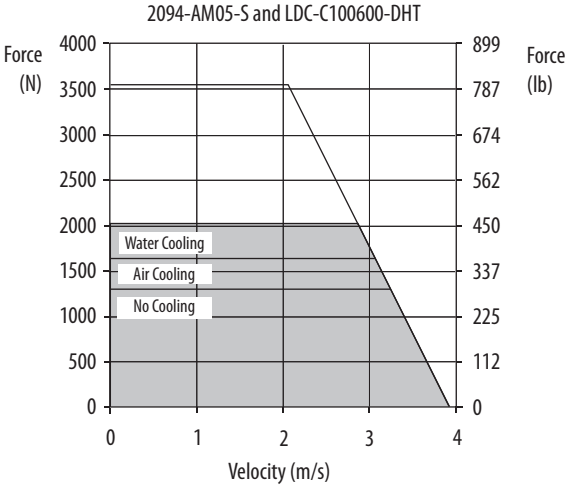
2094-AM03-S and LDC-C100300-DHT
2094-AM01-S and LDC-C100300-EHT



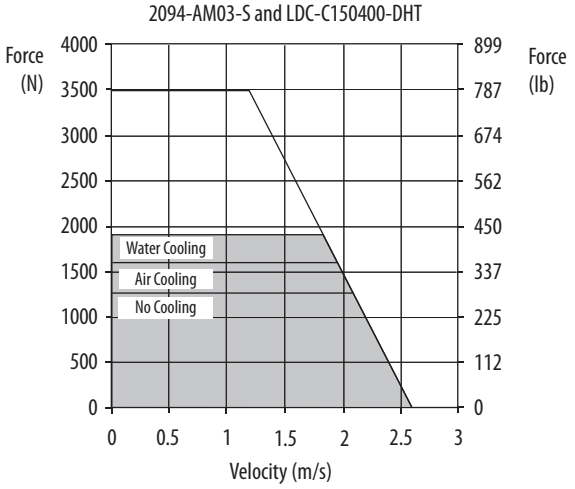
2094-AM03-S and LDC-C100400-DHT
2094-AM02-S and LDC-C100400-EHT



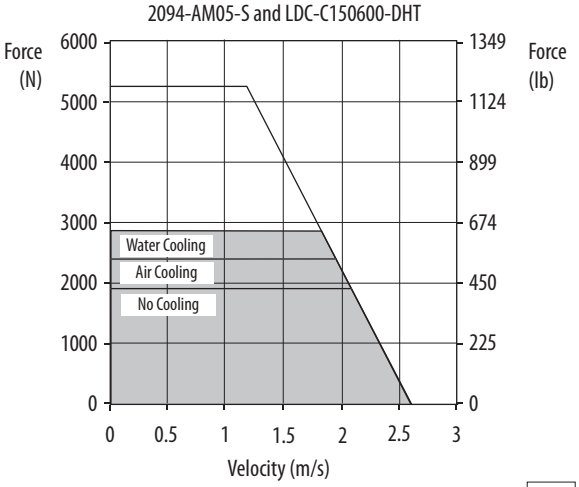
2094-AM05-S and LDC-C100600-DHT



2094-AM03-S and LDC-C150400-DHT



2094-AM05-S and LDC-C150600-DHT



= Intermittent operating region (LDC-C*xxxxxx*-DHT)
= Intermittent operating region (LDC-C*xxxxxx*-EHT)
= Continuous operating region

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

This section provides system combination information for the Kinetix 6000 and Kinetix 6200/6500 (400V-class) drives when matched with LDC-Series 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 or C) drives, 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 or C) drives configured for enhanced peak performance.

Refer to Kinetix Servo Drives Specifications Technical Data, publication GMC-TD003, for more information.

LDC-Series Cable Combinations

Linear Motor	Motor Power Cable	Motor Feedback Cable (1)
LDC-C030100-DHT, LDC-C030200-DHT, LDC-C030200-EHT	2090-CPWM7DF-16AA*xx* (standard, non-flex) 2090-CPWM7DF-16AF*xx* (continuous-flex)	2090-XXNFMF-S*xx* (standard, non-flex) 2090-CFBM7DF-CDAF*xx* (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. Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Linear Motor	Speed, max m/s (ft/s)	System Continuous Stall Current [1] Amps 0-pk	System Continuous Stall Force [1] 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)	1.81…2.72	2094-BM02-M
LDC-C050300-EHT		3.9…5.9		12.0			2094-BM01-M
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, refer to Motion Analyzer software.

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

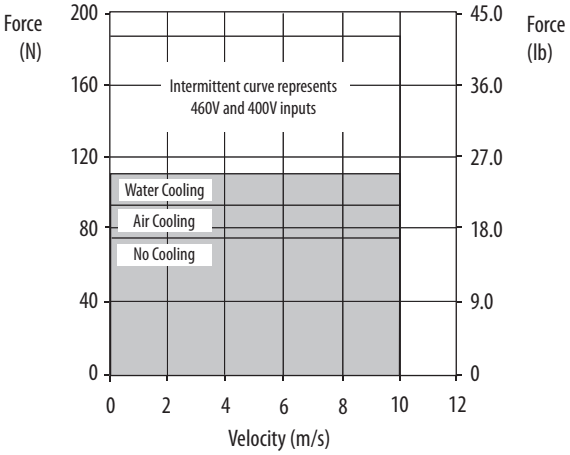
Linear Motor	Speed, max m/s (ft/s)	System Continuous Stall Current (1) Amps 0-pk	System Continuous Stall Force (1) N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Linear Motor Rated Output kW	Kinetix 6000 400V-class Drives
LDC-C030100-DHT	10.0 (32.8)	4.1…6.1	74…111 (17…25)	12.1	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	240…359 (54…81)	23.3	600 (135)	1.20…1.79	2094-BM02-S @ 250%
LDC-C050200-EHT		3.9…5.9		11.6			2094-BM01-S @ 150%
LDC-C050300-DHT		11.8…17.7	363…544 (82…122)	35.9	941 (212)	1.81…2.72	2094-BM02-S @ 250%
LDC-C050300-EHT		3.9…5.9		12.0			2094-BM01-S @ 150%
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-S @ 250%
LDC-C075200-EHT		3.8…5.7		11.5			2094-BM01-S @ 150%
LDC-C075300-DHT		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	
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).

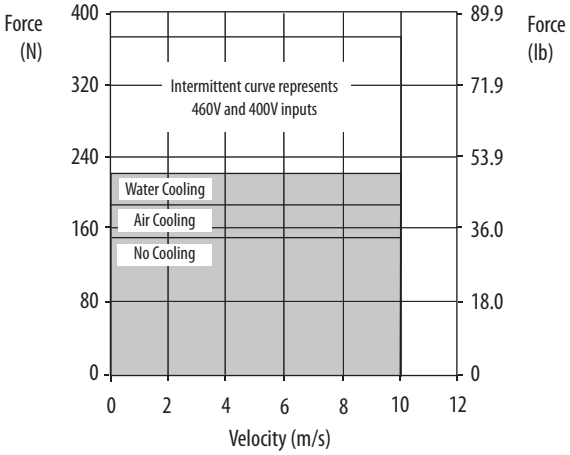
Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

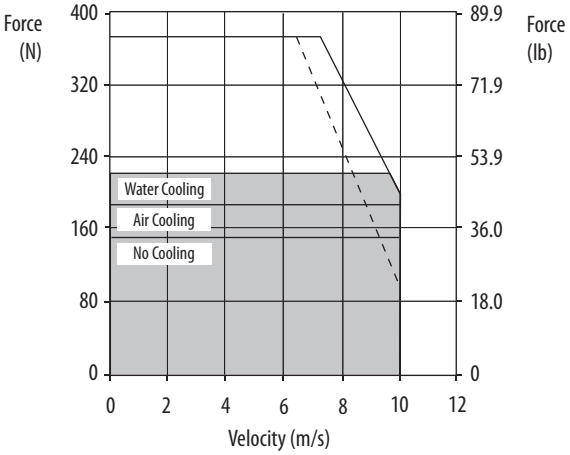
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C030100-DHT



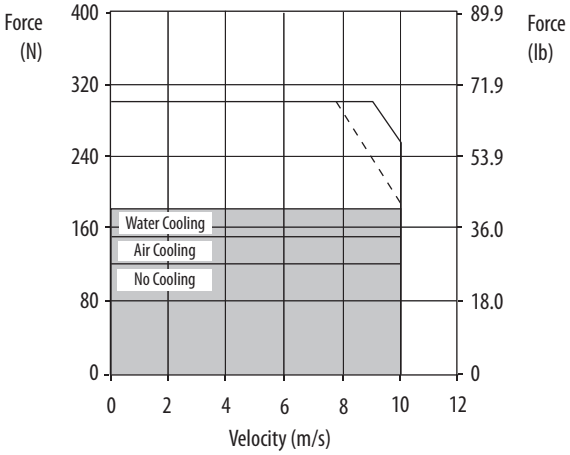
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C030200-DHT



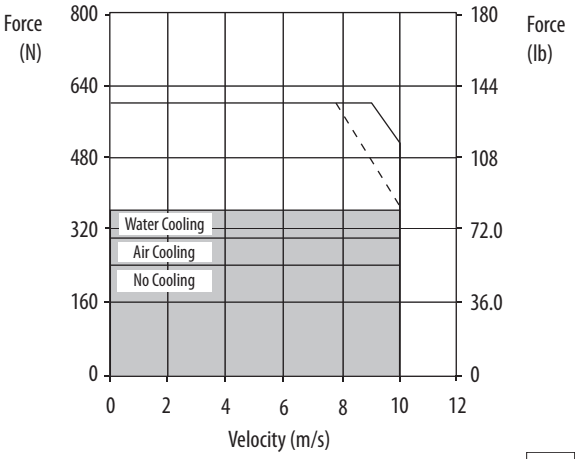
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C030200-EHT



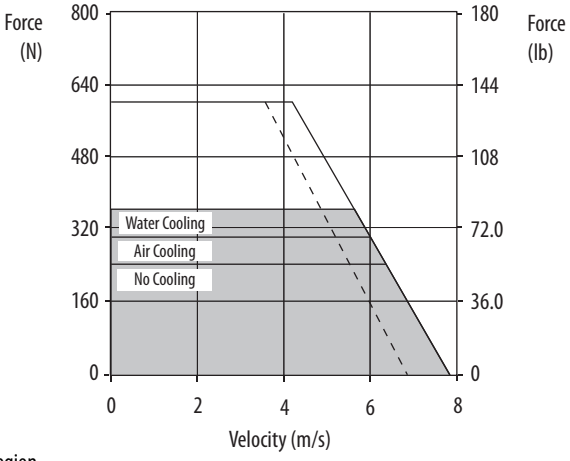
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C050100-DHT



2094-BM02-S @ 250% or 2094-BM02-M and LDC-C050200-DHT



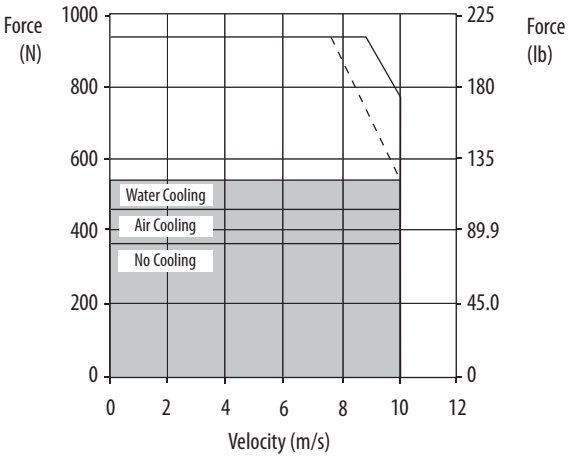
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C050200-EHT



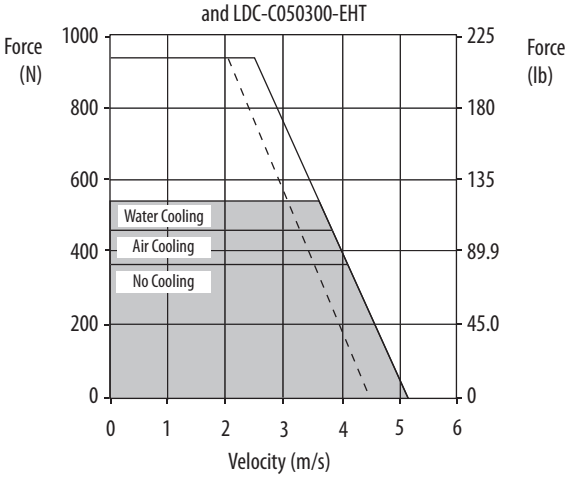
= Intermittent operating region
= Intermittent operating region with 400V AC rms input voltage
= Continuous operating region

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

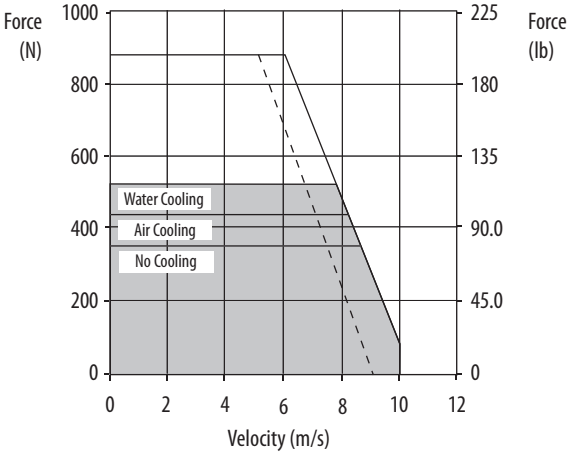
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C050300-DHT



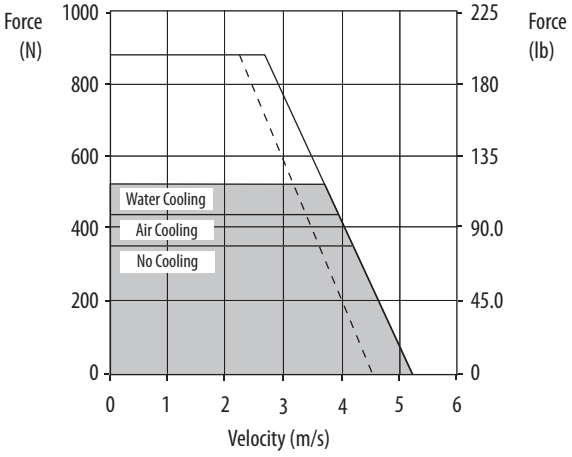
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C050300-EHT



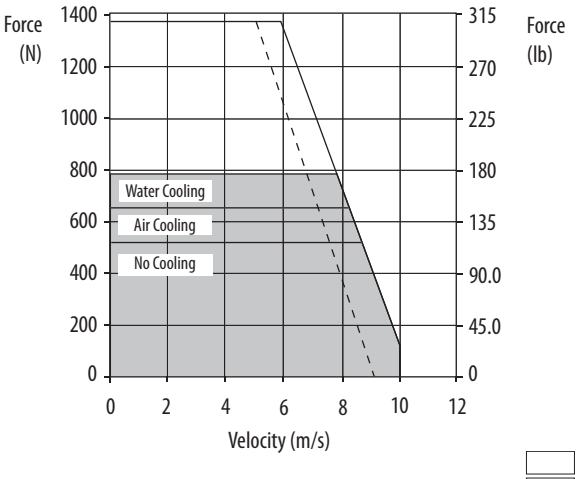
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C075200-DHT



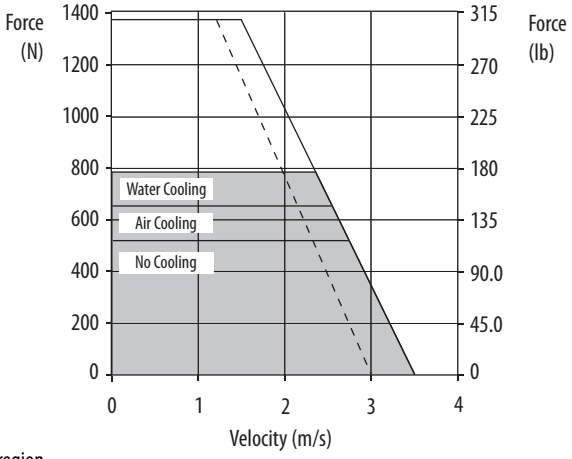
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C075200-EHT



2094-BM02-S @ 250% or 2094-BM02-M and LDC-C075300-DHT



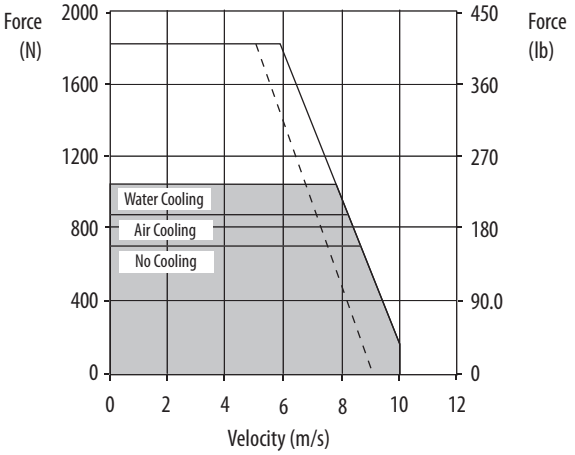
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C075300-EHT



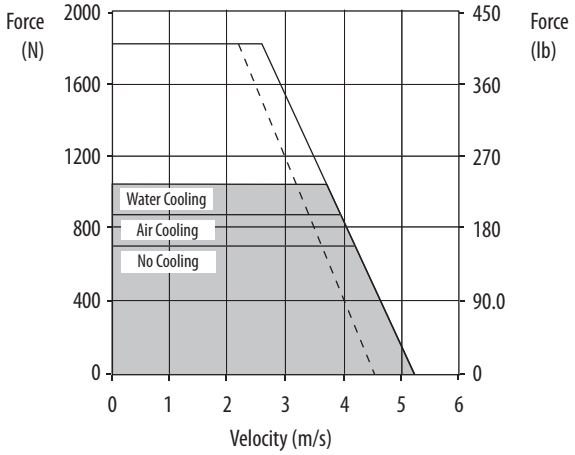
= Intermittent operating region
= Intermittent operating region with 400V AC rms input voltage
= Continuous operating region

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

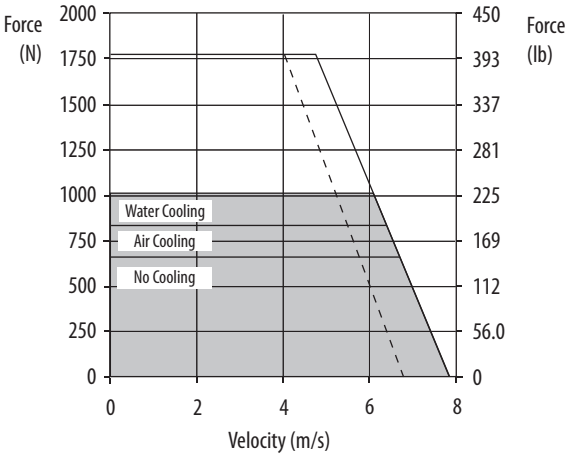
2094-BM03-S @ 250% or 2094-BM03-M and LDC-C075400-DHT



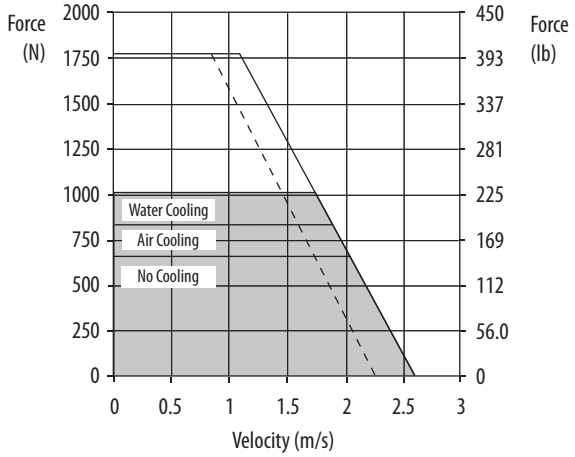
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C075400-EHT



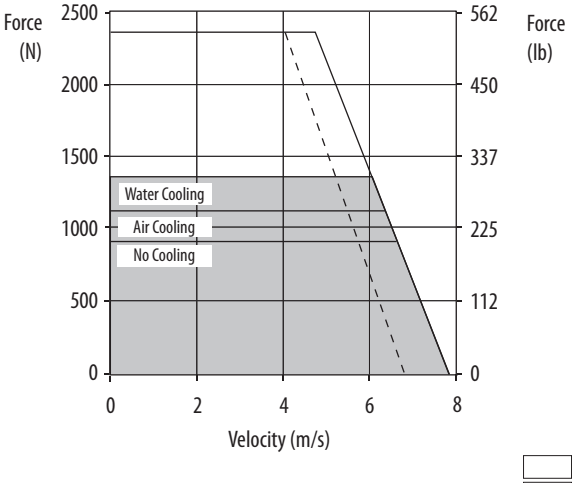
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C100300-DHT



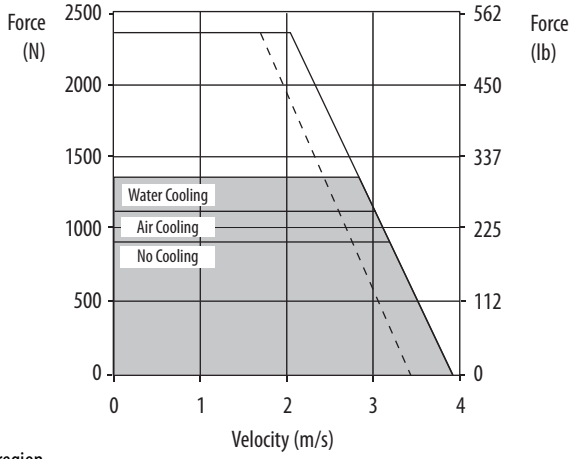
2094-BM01-S @ 150% or 2094-BM01-M and LDC-C100300-EHT



2094-BM03-S @ 250% or 2094-BM03-M and LDC-C100400-DHT



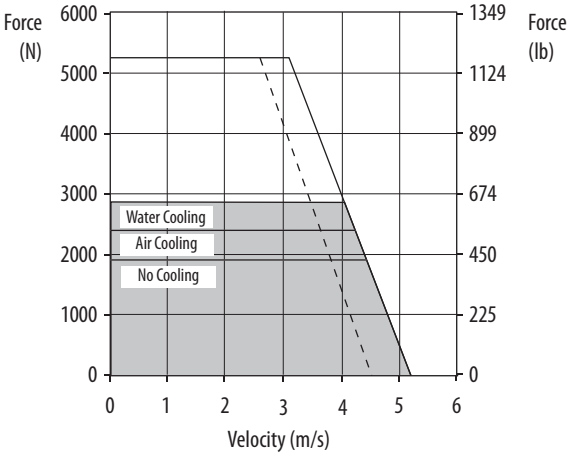
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C100400-EHT



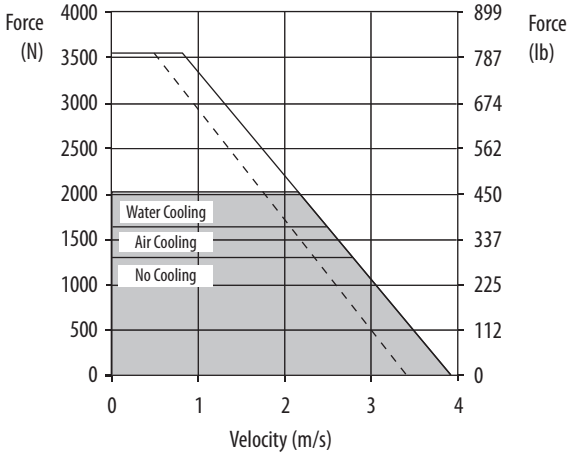
= Intermittent operating region
= Intermittent operating region with 400V AC rms input voltage
= Continuous operating region

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

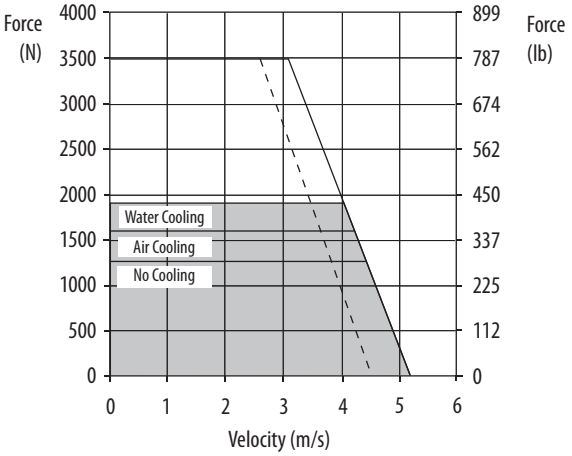
2094-BM03-S @ 250% or 2094-BM03-M and LDC-C150600-DHT



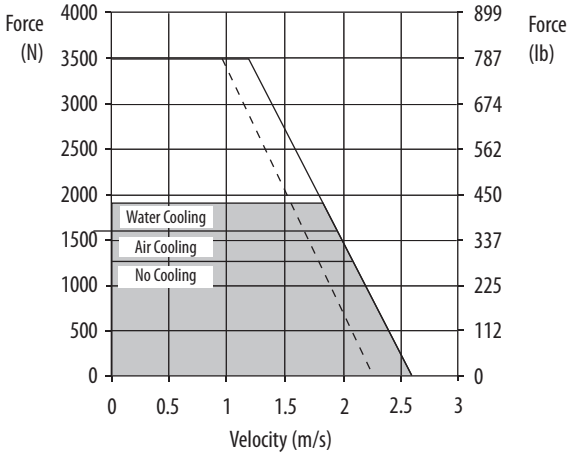
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C100600-EHT



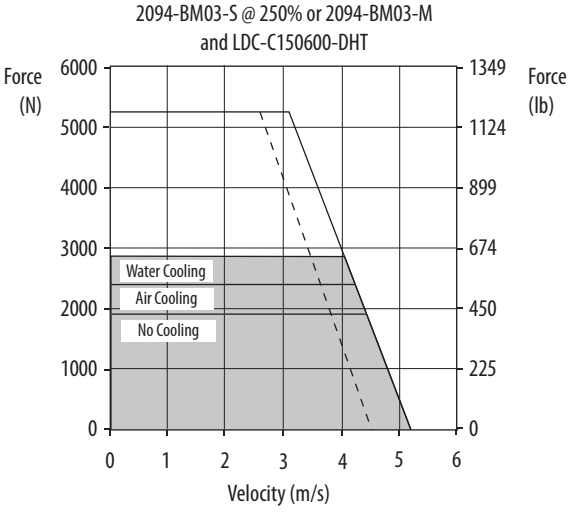
2094-BM03-S @ 150% or 2094-BM03-M and LDC-C150400-DHT



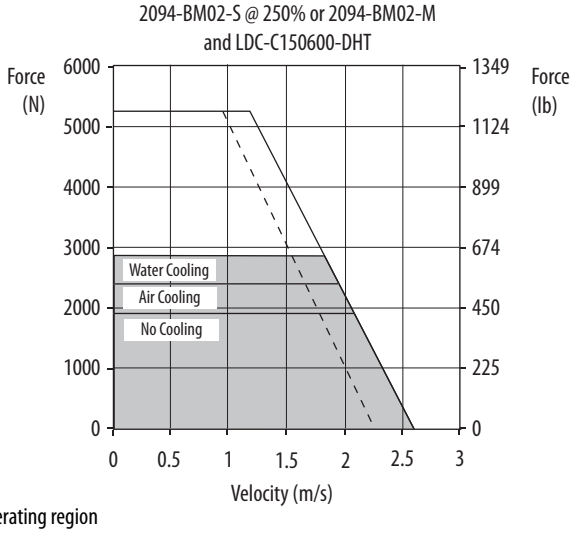
2094-BM02-S @ 250% or 2094-BM02-M and LDC-C150400-EHT



2094-BM03-S @ 250% or 2094-BM03-M and LDC-C150600-DHT



2094-BM02-S @ 250% or 2094-BM02-M and LDC-C150600-DHT



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

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

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

LDL-Series Cable Combinations

Linear Motors	Motor Power Cable	Motor Feedback Cable (1)
LDL-N030120-DHT, LDL-N030240-DHT, LDL-N030240-EHT	2090-CPWM7DF-16AA*xx* (standard, non-flex) 2090-CPWM7DF-16AF*xx* (continuous-flex)	2090-XXNFMF-S*xx* (standard, non-flex) 2090-CFBM7DF-CDAF*xx* (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. Refer to Refer to Required Drive Accessories on page 4.

For cable configuration illustrations and feature descriptions, by catalog number, refer to 2090-Series Motor/Actuator Cables Overview beginning on page 7.
Motor-end connector kits, and panel-mounted breakout components (drive end), are available for motor power/brake and feedback cables. Refer to Optional Drive Accessories on page 6.
Cable length *xx* is in meters. Refer to the Kinetix Motion Accessories Technical Data, publication GMC-TD004, for standard cable lengths.

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

Linear Motor	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			2094-AMP5-S
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			2094-AMP5-S

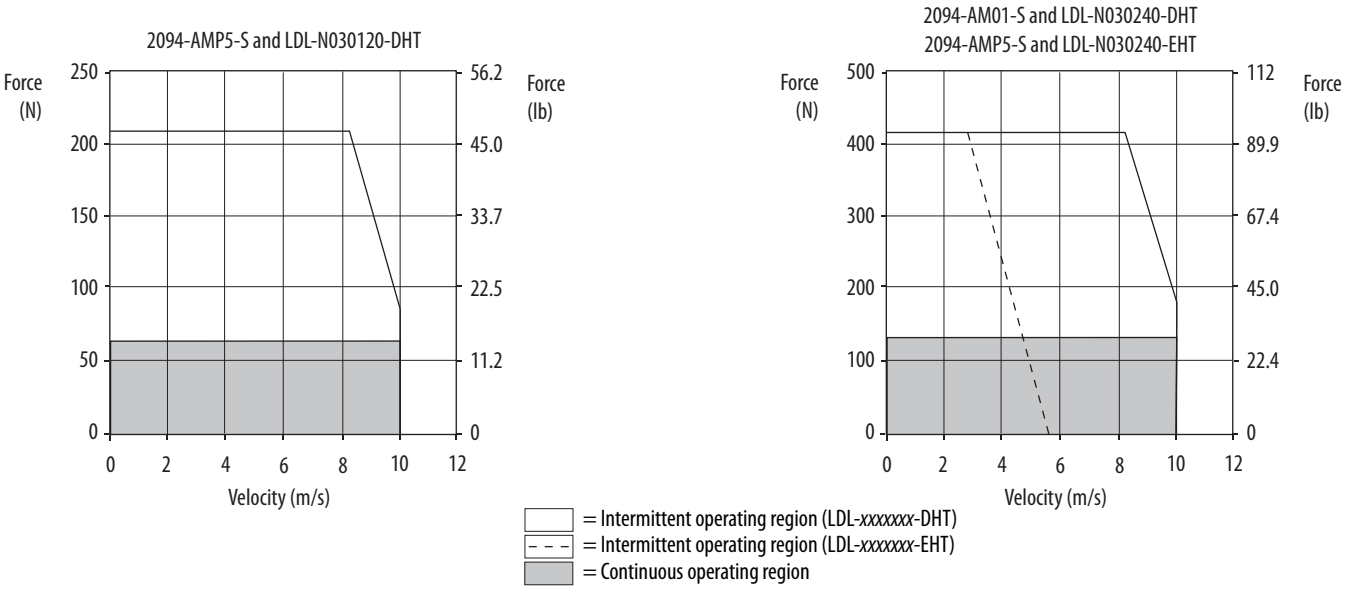
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

Linear Motor	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			2094-AMP5-S
LDL-N050360-DHT		8.2	287 (65)	27.2	952 (214)	1.43	2094-AM02-S
LDL-N050360-EHT		2.7		9.1			2094-AMP5-S
LDL-N050480-DHT		10.9	383 (86)	36.3	1269 (285)	1.91	2094-AM03-S
LDL-N050480-EHT		5.5		18.1			2094-AM01-S
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			2094-AMP5-S
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			2094-AM01-S
LDL-N075480-DHT	10.0 (32.8)	9.9	519 (117)	32.8	1723 (387)	2.59	2094-AM03-S
LDL-N075480-EHT		4.9		16.4			2094-AM01-S
LDL-T075480-DHT		9.9	596 (134)	32.8	1977 (444)	2.98	2094-AM03-S
LDL-T075480-EHT		4.9		16.4			2094-AM01-S

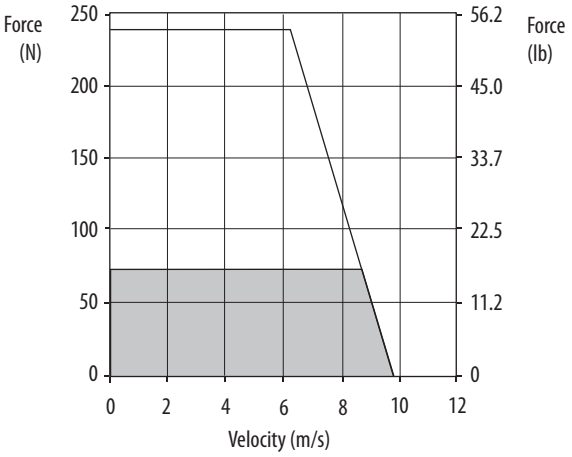
Performance specification data and curves reflect nominal system performance of a typical system with actuator at 40 °C (104 °F) and drive at 50 °C (122 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

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

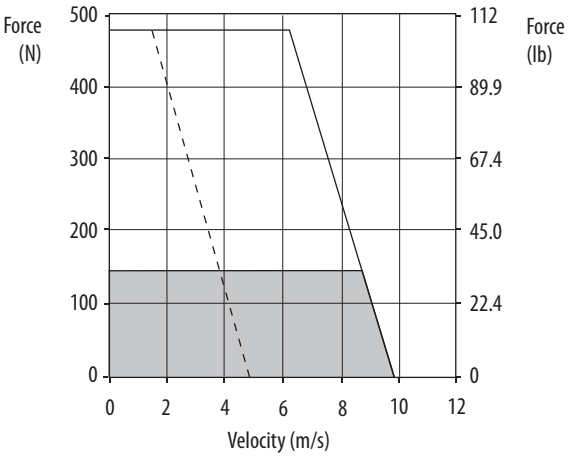


Kinetix 6000 (200V-class) Drives/LDL-Series Linear Motor Curves (continued)

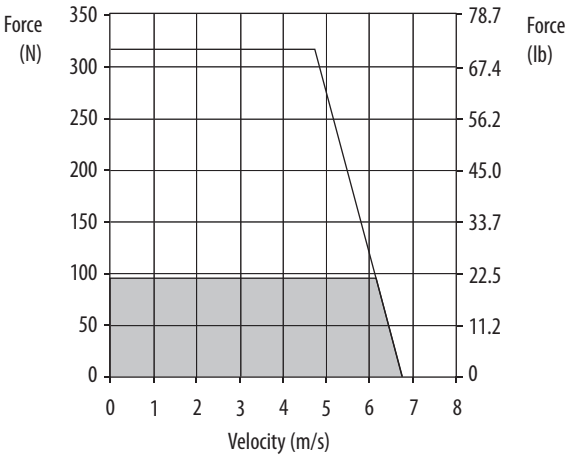
2094-AMP5-S and LDL-T030120-DHT



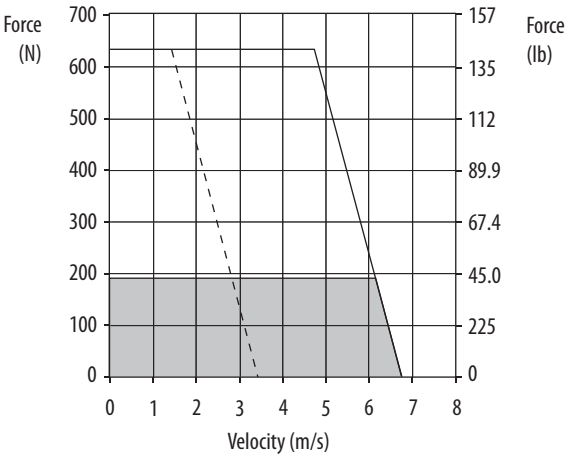
2094-AM01-S and LDL-T030240-DHT
2094-AMP5-S and LDL-T030240-EHT



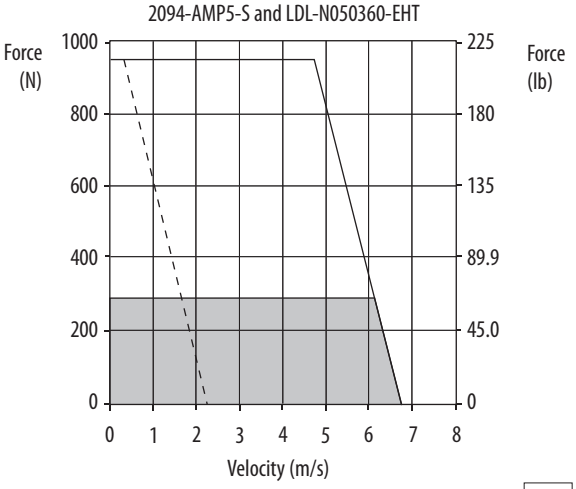
2094-AMP5-S and LDL-N050120-DHT



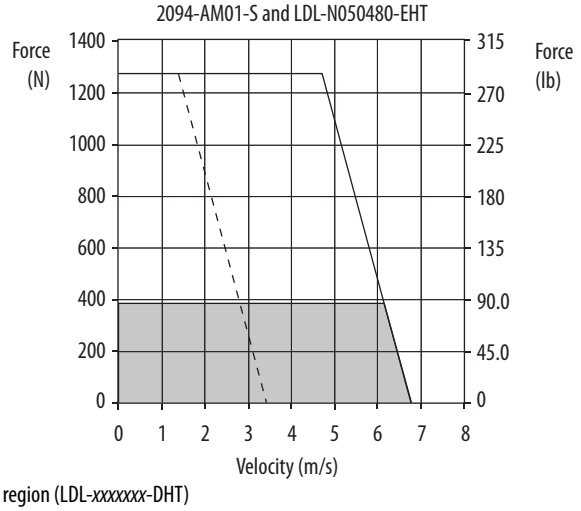
2094-AM01-S and LDL-N050240-DHT,
2094-AMP5-S and LDL-N050240-EHT



2094-AM02-S and LDL-N050360-DHT
2094-AMP5-S and LDL-N050360-EHT



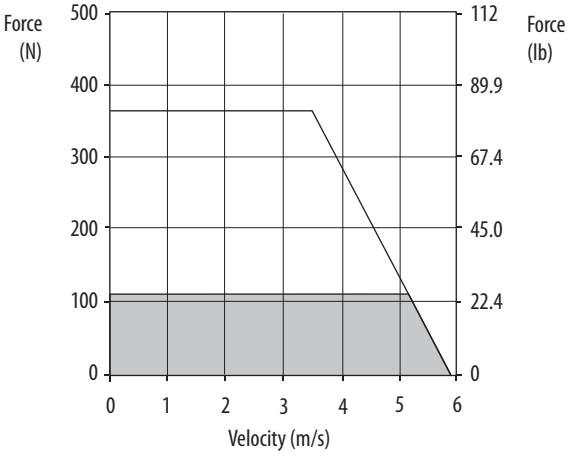
2094-AM03-S and LDL-N050480-DHT
2094-AM01-S and LDL-N050480-EHT



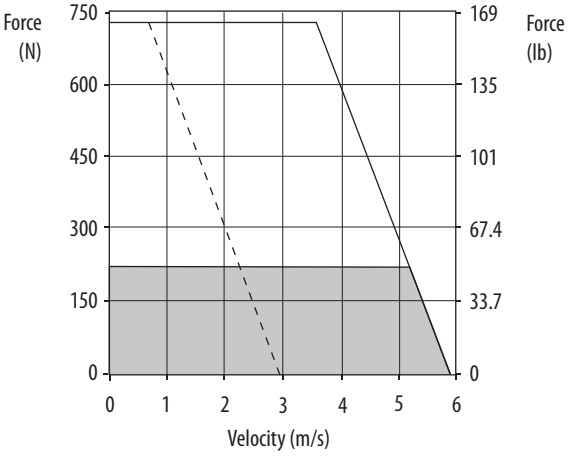
= Intermittent operating region (LDL-*xxxxxxx*-DHT)
= Intermittent operating region (LDL-*xxxxxxx*-EHT)
= Continuous operating region

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

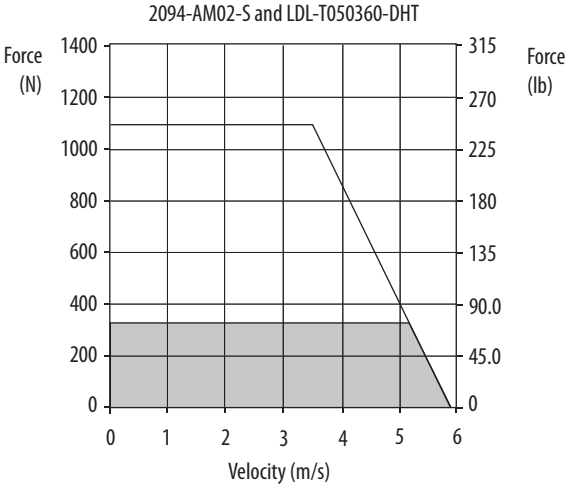
2094-AMP5-S and LDL-T050120-DHT



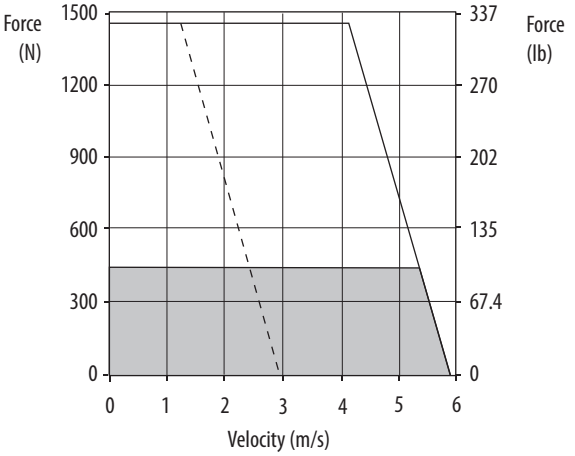
2094-AM01-S and LDL-T050240-DHT
2094-AMP5-S and LDL-T050240-EHT



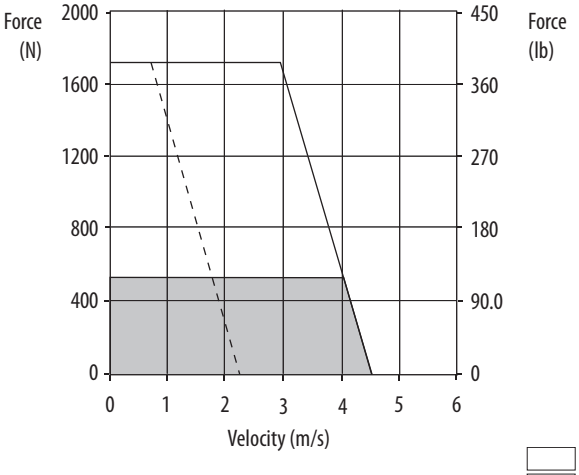
2094-AM02-S and LDL-T050360-DHT



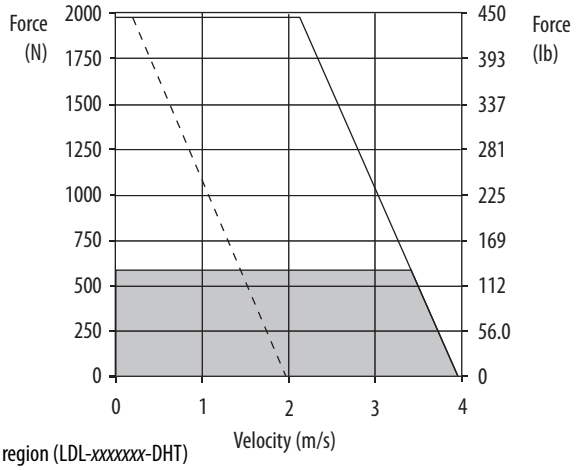
2094-AM03-S and LDL-T050480-DHT
2094-AM01-S and LDL-T050480-EHT



2094-AM03-S and LDL-N075480-DHT
2094-AM01-S and LDL-N075480-EHT



2094-AM03-S and LDL-T075480-DHT
2094-AM01-S and LDL-T075480-EHT



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

Additional Resources

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

Resource	Description
Kinetix Motion Control Selection Guide, publication GMC-SG001	Provides an overview of Kinetix servo drives, motors, actuators, and motion accessories designed to help make initial decisions for the motion control products best suited for your system requirements.
Kinetix Rotary Motion Specifications, publication GMC-TD001	Provides product specifications for MP-Series (Bulletin MPL, MPM, MPF, MPS), Kinetix 6000M (Bulletin MDF), TL-Series, RDD-Series, and HPK-Series™ rotary motors.
Kinetix Linear Motion Specifications, publication GMC-TD002	Provides product specifications for Bulletin MPAS and MPMA linear stages, Bulletin MPAR, MPAI, and TLAR electric cylinders, and LDC-Series and LDL-Series linear motors.
Kinetix Servo Drives Specifications, publication GMC-TD003	Provides product specifications for Kinetix Integrated Motion over the EtherNet/IP network, Integrated Motion over sercos interface, EtherNet/IP networking, and component servo drive families.
Kinetix Motion Accessories Specifications, publication GMC-TD004	Provides product specifications for Bulletin 2090 motor and interface cables, low-profile connector kits, drive power components, and other servo drive accessory items.
Kinetix 5500 Drive Systems Design Guide, publication GMC-RM009	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 300/350 Drive Systems Design Guide, publication GMC-RM004	
Kinetix 3 Drive Systems Design Guide, publication GMC-RM005	
Kinetix 2000 Drive Systems Design Guide, publication GMC-RM006	
Kinetix 7000 Drive Systems Design Guide, publication GMC-RM007	
Ultra™ 3000 Drive Systems Design Guide, publication GMC-RM008	
Kinetix 6000 Multi-axis Servo Drives User Manual, publication 2094-UM001	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 2094-UM002	
Kinetix 6200 and Kinetix 6500 Safe Speed Monitoring Servo Drives Safety Reference Manual, publication 2094-RM001	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 2094-RM002	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 GMC-RM002	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 GMC-RM001	Provides information, examples, and techniques designed to minimize system failures caused by electrical noise.
EMC Noise Management DVD, publication GMC-SP004	
ControlLogix Selection Guide, publication 1756-SG001	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 1769-SG001	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.
Integrated Architecture Recommended Literature Reference Manual, publication IASIMP-RM001	Provides lists of technical publications for Integrated Architecture™ products. These lists are not all-inclusive, but they do include the most-commonly accessed publications for the related products.
Download Motion Analyzer software from: http://www.ab.rockwellautomation.com/motion-control/motion-analyzer-software	Comprehensive motion application sizing tool used for analysis, optimization, selection, and validation of your Kinetix Motion Control system.
Rockwell Automation Configuration and Selection Tools, website http://www.ab.com	Provides online product selection and system configuration tools, including AutoCad (DXF) drawings.

You can view or download publications at http://www.rockwellautomation.com/literature/. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

Important Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this publication are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

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Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

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