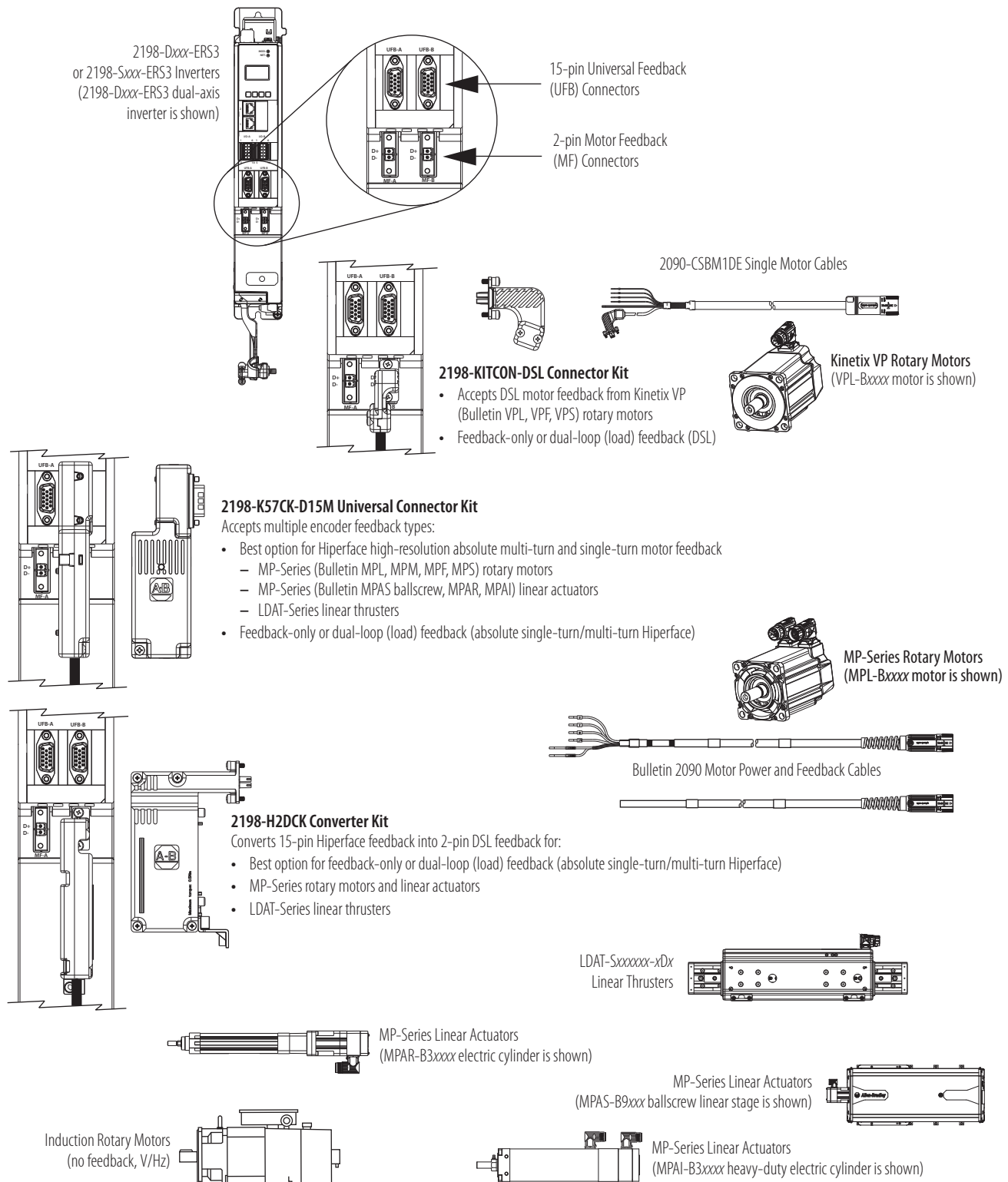


Motor and Auxiliary Feedback Configurations

Feedback connections are made at the 2-pin motor feedback (MF) connector and the 15-pin universal feedback (UFB) connector. These examples illustrate how you can use the Bulletin 2198 connector kits for making these connections.



Compatible Rotary Motors

Rotary Motion	Kinetix 5700	Kinetix 5500	Kinetix 6500	Kinetix 350	Kinetix 6000	Kinetix 6200	Kinetix 300	Kinetix 3
Kinetix VP (Bulletin VPL)	X	X	—	—	—	—	—	—
Kinetix VP (Bulletin VPF)	X	X	—	—	—	—	—	—
Kinetix VP (Bulletin VPS)	X	X	—	—	—	—	—	—
MP-Series (Bulletin MPL)	X ⁽¹⁾	X ⁽²⁾	X	X	X	X	X	—
MP-Series (Bulletin MPM)	X ⁽¹⁾	X ⁽²⁾	X	X	X	X	X	—
MP-Series (Bulletin MPF)	X ⁽¹⁾	X ⁽²⁾	X	X	X	X	X	—
MP-Series (Bulletin MPS)	X ⁽¹⁾	X ⁽²⁾	X	X	X	X	X	—
Kinetix 6000M (Bulletin MDF)	—	—	—	—	X	X	—	—
RDD-Series (Bulletin RDB)	—	—	X	—	X	X	—	—
TL-Series (Bulletin TLY)	—	—	—	X	X ⁽³⁾	X	X	X
TL-Series (Bulletin TL)	—	—	—	—	—	—	—	X ⁽⁴⁾

(1) Requires the 2198-K57CK-D15M universal feedback connector kit.

(2) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

(3) TLY-Axxxx-H rotary motors (incremental encoders) only.

(4) TL-Axxxx-B rotary motors (high-resolution encoders) only.

Compatible Linear Motors and Actuators

Linear Motion	Kinetix 5700	Kinetix 5500	Kinetix 6500	Kinetix 350	Kinetix 6000	Kinetix 6200	Kinetix 300	Kinetix 3
LDAT-Series	X ^{(1) (7)}	X ^{(1) (2)}	X ⁽³⁾	—	X ⁽³⁾	X ⁽³⁾	X ⁽⁴⁾	X ⁽³⁾
MP-Series (Bulletin MPAS)	X ⁽⁷⁾	X ^{(5) (2)}	X	X ⁽⁵⁾	X	X	X	X ⁽⁶⁾
MP-Series (Bulletin MPMA)	X ⁽⁷⁾	X ^{(5) (2)}	X	X ⁽⁵⁾	X	X	X	—
MP-Series (Bulletin MPAR)	X ⁽⁷⁾	X ⁽²⁾	X	X	X	X	X	—
MP-Series (Bulletin MPAL)	X ⁽⁷⁾	X ⁽²⁾	X	X	X	X	X	—
TL-Series (Bulletin TLAR)	—	—	—	X	—	—	X	X
LDC-Series Iron-core	—	—	X	—	X	X	X	X
LDL-Series Ironless	—	—	X	—	X	X	X	X

(1) LDAT-Sxxxxx-xDx linear thrusters (high-resolution absolute encoders) only.

(2) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

(3) LDAT-Sxxxxx-xBx linear thrusters (incremental encoders) only.

(4) LDAT-Sxxxxx-xBx (incremental) or LDAT-Sxxxxx-xDx (high-resolution absolute) linear thrusters.

(5) MP-Series (ballscrew) linear stages only.

(6) MP-Series (direct-drive) linear stages only.

(7) Requires the 2198-K57CK-D15M universal feedback connector kit.

MP-Series Servo Motors

Motor Features	MP-Series (Bulletin MPL) Low Inertia Motors	MP-Series (Bulletin MPM) Medium Inertia Motors	MP-Series (Bulletin MPF) Food Grade Motors	MP-Series (Bulletin MPS) Stainless Steel Motors
Main characteristics	- High torque to size ratio - Smart Motor Technology - Low rotor inertia	- High torque to size ratio - Smart Motor Technology - Medium rotor inertia - Easy migration from 1326AB motors	- Configurable winding options, brakes, and encoder feedback - Low rotor inertia	- Specifically designed for sanitary environments for use with high pressure, highly caustic washdown applications - Low rotor inertia
Features	230V and 460V windings - High-energy rare-earth magnets - Shaft end threaded hole - DIN connectors, rotates 180° - Standard IEC 72-1 mounting dimensions	230V and 460V windings - Multiple winding speed options - High-energy rare-earth magnets - Shaft end threaded hole - SpeedTec-ready DIN connectors, rotates 180° - Standard IEC 72-1 mounting dimensions	- Food-grade epoxy coating 230V and 460V windings - Shaft end threaded hole - SpeedTec-ready DIN connectors, rotates 180° - Standard IEC 72-1 mounting dimensions	- Smooth, passivated 300 series stainless-steel cylindrical exterior - Certified and listed to NSF/ANSI Standard 169 230V and 460V windings - Shaft end threaded hole - Cable extensions, 3 m (9.8 ft) - Standard IEC 72-1 mounting dimensions
Motor type	Brushless AC synchronous servo motors			
Environmental ratings	- IP50 minimum, without shaft seal (standard) - IP66 with optional shaft seal and use of environmentally sealed cable connectors.	- IP50 minimum, without shaft seal (standard). - IP67 with optional shaft seal and use of environmentally sealed cable connectors.	- IP66/IP67 with shaft seal (standard) and use of environmentally sealed cable connectors. - Food grade grease on shaft seal	- IP66/IP67 with shaft seal (standard) and use of environmentally sealed cable connectors. - IP69K for 1200 psi motor washdown
Continuous torque	0.26...163 N•m (2.3...1440 lb•in)	2.18...62.8 N•m (19.3...556 lb•in)	1.6...19.4 N•m (14...172 lb•in)	3.6...21.5 N•m (32...190 lb•in)
Peak torque	0.74...278 N•m (6.6...2460 lb•in)	6.6...154.2 N•m (58...1365 lb•in)	3.61...48.6 N•m (32...430 lb•in)	11.1...98 N•m (67.8...600 lb•in)
Speed	Up to 8000 rpm	Up to 7000 rpm	Up to 5000 rpm	3000 and 5000 rpm
Motor rated output	0.16...18.6 kW	0.75...7.50 kW	0.73...4.1 kW	1.3...3.5 kW
Feedback options	- Multi-turn, high-resolution absolute position - Single-turn, high-resolution absolute position	- Multi-turn, high-resolution absolute position - Single-turn, high-resolution absolute position - Resolver	- Multi-turn, high-resolution absolute position - Single-turn, high-resolution absolute position	
Motor options	24V DC brake - Shaft seal kit - Keyless shaft (limited frame sizes)	24V DC brake - Shaft seal kit - Positive air pressure kit	24V DC brake - Shaft seal kit - Positive air pressure kit	24V DC brake - Shaft seal kit with slinger - Positive air pressure kit
Compatible drives ^{(1) (2)}	- Kinetix 5700 ⁽³⁾ - Kinetix 5500 ⁽⁴⁾ - Kinetix 6200/Kinetix 6500 - Kinetix 6000 - Kinetix 7000 - Kinetix 300/350 - Kinetix 2000 - Ultra3000 - PowerFlex® 755		- Kinetix 5700 ⁽³⁾ - Kinetix 5500 ⁽⁴⁾ - Kinetix 6200/Kinetix 6500 - Kinetix 6000 - Kinetix 300/350 - Kinetix 2000 - Ultra3000	
Typical applications	- Packaging - Converting - Material handling - Electronic assembly - Automotive - Metal forming	- Printing - Web handling - Converting - Automotive - Metal forming	- Food packaging - Volumetric filling - Form, fill, seal - Food handling - For meat and poultry applications, the MP-Series Stainless Steel motors are recommended	- Meat and poultry - Food slicing and filling - Raw food handling - Processing - Life science - Consumer products

(1) For Kinetix 2000 and Ultra3000 drive specifications, refer to Additional Resources on [page 21](#) for links to the applicable technical data and design guide publications.(2) For PowerFlex 755 drive specifications, refer to the PowerFlex Low Voltage Drives Selection Guide, publication [PFLEX-SG002](#).

(3) Requires the 2198-K57CK-D15M universal feedback connector kit.

(4) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. MP-Series (200V-class) motors require the 2198-H2DCK (series B or later) converter kit.

Linear Actuators

Actuators are UL Recognized components to applicable UL and CSA standards and CE marked for all applicable directives. Refer to <http://www.ab.com> for more information.

Integrated Linear Actuators

Actuator Features	MP-Series (Bulletin MPAS) Integrated Linear Stages	MP-Series (Bulletin MPMA) Integrated Multi-axis Linear Stages	LDAT-Series Integrated Linear Thrusters
Main characteristics	- Rugged linear stages with integrated direct-drive linear motor or ballscrew with MP-Series servo motor - Available in three frame sizes (base widths) to accommodate a variety of load requirements for general automation - Smart Motor Technology (ballscrew) - Very high linear speeds (direct drive)	- Out of box alignment of 30 arc seconds - Field replaceable quick change cable management for ease of maintenance - Caged ball-type linear guides that retain lubrication for longer bearing life and provide lower noise levels - Absolute encoders on ballscrew axis and incremental encoders on direct-drive linear motor axis - MP-Series motor power and feedback connectors for connection to Allen-Bradley extension cables and drives - Access holes for easy lubrication	Precise, high-speed, iron-core linear actuators with a built-in linear guide. As a pre-engineered solution, the integrated linear thrusters can help: - Reduce engineering, design, and documentation time - Decrease the amount of mechanisms and components needed to build a custom solution - Reduce the time to install the axis into a machine - Increase reliability due to direct-drive technology with single linear guide, single wear item, caged-ball linear bearings, and elimination of wear items associated with rotary to linear motion conversion
Features	200/230V and 400/460V operation (only 230V operation for direct-drive 150 mm frame size) - High-energy (rare-earth) magnets - Heavy duty connectors - Operation without limit and home switches - Carriage and base mounting design allows 200 mm and 250 mm frame sizes to be stacked - Standard MP-Series motor power and feedback connectors - Optional air purge kit for added protection against ingress of foreign substances		- Integrated linear bearing provides the ability to carry a load without having to mount and align external bearings - Optimal strip cover for added bearing protection in harsh environments - Multiple mounting surfaces and methods for ease of mounting into your machine - Couples directly to the item that needs to be moved
Actuator type	- Direct-drive linear stage - Ballscrew-drive linear stage		- Direct-drive linear thrusters - Frame sizes 30, 50, 75, 100 and 150 mm
Environmental rating	Unique, long life strip seal system provides IP30 environmental rating to prevent debris, larger than 2.5 mm (0.1 in.) diameter, from entering the linear stage		IP30 (with strip cover option)
Continuous forces	83...521 N (19...117 lb)		81...1997 N (18...449 lb)
Peak forces	312...1212 N (70...273 lb)		168...5469 N (38...1229 lb)
Peak velocities	200...5000 mm/s (7.9...196.9 in/s)		Up to 5 m/s (16 ft/s), and acceleration, 49 m/s ² (160 ft/s ²) std.
Stroke lengths ⁽¹⁾	120...1940 mm (4.7...76.4 in.)		100...900 mm (4.0...35.0 in.)
Feedback options	- Multi-turn, high-resolution absolute position (ballscrew) 5 micron resolution incremental magnetic linear encoder (direct drive)		- Incremental, magnetic scale, 5 µm resolution - Absolute, magnetic scale, Hiperface, compatible with only Kinetix 300 servo drives
Field-installable accessories	- Cable track module replacement kit - Strip seal replacement kit - Top cover - Side cover - Coupling - T-nut kit (package of 10) - Toe-clip kit (package of 10) - Grease gun kit - Grease replacement cartridge	- Cable track module replacement kit - Strip seal replacement kits - Top cover kits (for only Y or Z-axis) - Side cover kits - Coupling kits (for only Y or Z-axis) - Tee-nut kit (package of 10) - Tee-nut bar kit - Grease gun kit - Grease replacement cartridge - Rotary servo motor (for only Y or Z-axis)	Mounting Attachments: - Foot mounting - Clevis (male) flange - Clevis (female) swivel flange Slider-end Attachments: - Rod-eye kit - Rod-clevis kit - Rod-coupler kit - Horizontal payload mounting bracket - Counterbalance kit
Compatible drives ⁽²⁾	- Kinetix 5700 (ball screw only) ⁽³⁾ - Kinetix 5500 (ball screw only) ⁽⁴⁾ - Kinetix 6000 and Kinetix 6200/6500 - Kinetix 300 (ball screw and direct-drive) - Kinetix 350 (ball screw only) - Kinetix 3 (direct-drive only) - Kinetix 2000 - Ultra3000	- Kinetix 5700 (ball screw only) ⁽³⁾ - Kinetix 5500 (ball screw only) ⁽⁴⁾ - Kinetix 6000 and Kinetix 6200/6500 - Kinetix 300 (ball screw and direct-drive) - Kinetix 350 (ball screw only) - Kinetix 2000 - Ultra3000	- Kinetix 5700 (ball screw only) ⁽³⁾ - Kinetix 5500 ⁽⁴⁾ - Kinetix 6000 and Kinetix 6200/6500 - Kinetix 300 - Kinetix 3 - Kinetix 2000 - Ultra3000
Typical applications	- Electronic assembly - Pick and place - Robots - Inspection - Labeling - Dispensing - Micro-arraying	- Material handling - Pick and place - Dispensing - Scanning - Contouring - Contoning - Flying shape cutting	Applications that currently use a custom-designed belt actuator or linkage device that converts rotary motion into linear, including cartoners, stackers, case packers, case and tray formers, in-out feeds, diverters, ejectors, drop gates, and horizontal conveyors.

(1) Applies to Bulletin MPAS linear stages. Not all Bulletin MPAS stroke lengths (travels) are available with Bulletin MPMA multi-axis linear stages.

(2) For Kinetix 2000 and Ultra3000 drive specifications, refer to Additional Resources on [page 21](#) for links to the applicable technical data and design guide publications.

(3) Requires the 2198-K57CK-D15M universal feedback connector kit.

(4) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters require the 2198-H2DCK (series B or later) converter kit.

MP-Series and TL-Series Electric Cylinders

Actuator Features	TL-Series (Bulletin TLAR) Electric Cylinders	MP-Series (Bulletin MPAR) Electric Cylinders	MP-Series (Bulletin MPAL) Heavy Duty Electric Cylinders
Main characteristics	State-of-the-art design features ball screw construction driven by TL-Series (Bulletin TLY) servo motors	State-of-the-art design features ball screw construction driven by MP-Series (Bulletin MPL) servo motors	- State-of-the-art design features ball screw and roller screw construction driven by MP-Series (Bulletin MPL) servo motors - Front flange-mount, front trunnion-mount, and rear clevis-mount cylinders - Food-grade (paint) option with epoxy coating and corrosion resistant stainless steel fasteners and accessories
	- Fully assembled and ready to mount cylinders contribute to reductions in mechanical design engineering, wiring, and commissioning time - Smart Motor Technology - Very high linear speeds		
Features	200/230V operation - Absolute, high-resolution feedback options consistent with TL-Series (Bulletin TLY) servo motors - Standard TL-Series motor power and feedback connectors	200/230V and 400/460V operation - Absolute, high-resolution feedback options consistent with MP-Series servo motors - Standard MP-Series motor power and feedback connectors	
	- Rated for 100% duty cycle and designed for repeatable, reproducible performance over the actuator's operating life - Absolute feedback allows operation without limit and home switches - No piping, valving, air, or oil supply required		
	ISO 15552 pneumatic-class frame sizes 32, 40, and 63 mm		Frame sizes 64, 83, 110, and 144 mm
Actuator type	Ball-screw driven electric cylinders		Ball screw and roller screw electric cylinders
Environmental rating	IP40 (complete unit) includes rod-end seal and breather port	- IP40 (complete unit) includes rod-end seal and breather port - IP66 for electronic components with the use of environmentally sealed (Bulletin 2090) cable connectors	IP66 and IP67 with the use of environmentally sealed (Bulletin 2090) cable connectors
Continuous stall force	240 ... 2000 N (54 ... 450 lb)		706 ... 13,122 N (159 ... 2950 lb)
Max feed force	300 ... 2500 N (67 ... 562 lb)		1446 ... 14,679 N (325 ... 3300 lb)
Peak velocities	0.15 ... 1.0 m/s (5.9 ... 39.4 in/s)		176 ... 610 mm/s (6.9 ... 24.0 in/s)
Stroke lengths ⁽¹⁾	100 ... 800 mm (4.0 ... 32.0 in.)		076, 150, 300, 450 mm (3.0, 6.0, 12.0, 18.0 in.)
Optional equipment	24V DC holding brakes		24V DC holding brakes
Field-installable accessories	- Foot mounting - Flange mounting - Trunnion mounting kit - Trunnion support - Mounting attachments (clevis foot, right-angle clevis foot) - Piston-rod attachments (rod eye, rod clevis, rod coupler, coupling piece) - Guide rod		- Mounting plates - Front flange mount - Rear clevis mount - Rod-end attachments (rod eye, rod clevis) - Anti-rotation option
Compatible drives ⁽²⁾	- Kinetix 300/350 - Kinetix 3 - Kinetix 2000	- Kinetix 5700 ⁽³⁾ - Kinetix 5500 ⁽⁴⁾ - Kinetix 6200/6500 - Kinetix 6000 - Kinetix 300/350 - Kinetix 2000 - Ultra3000	
Typical applications	- Material handling (loading, unloading, lifts, pick and place, diverters, transfers, gantries) - Volumetric filling and process control (web guides, valve, nozzle, van, and gate positioning) - Fabrication (adjustments for machine backstops and cutting tools, works alignment) - Push, pull, eject, press, or clamp parts - Packaging (consumer products, automotive, medical) - Electronic assembly - Insertion systems - Inspection and test equipment		

(1) Not all stroke lengths (travels) are available with all frame sizes.

(2) For Kinetix 2000 and Ultra3000 drive specifications, refer to Additional Resources on [page 21](#) for links to the applicable technical data and design guide publications.

(3) Requires the 2198-K57CK-D15M universal feedback connector kit.

(4) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. MP-Series (200V-class) electric cylinders require the 2198-H2DCK (series B or later) converter kit.

Servo Drives

Servo drives meet CE compliance and are UL Listed to U.S. and Canadian safety standards. Refer to <http://www.ab.com> for more information.

Integrated Motion on the EtherNet/IP Network Servo Drives

Drive Features	Kinetix 5700	Kinetix 5500
Main characteristics	- Designed for machines with high axis-counts, high-power requirements, and high-performance needs 200 A DC-bus sharing with DC-bus connector links - Single motor cable, SpeedTec connector, with DSL connector kit at drive end - Digital (DSL) feedback device and 15-pin (sine/cosine) Hiperface feedback - Capability to run servo and induction motors	- High performance in a smaller footprint and optimized power density - AC input power and 24V DC input power bus-sharing - Single motor cable, SpeedTec connector, with flying-leads at drive end - Digital (DSL) feedback device provides real-time motor performance information to the control circuitry - Capability to run servo and induction motors
	- Integrated motion on the EtherNet/IP network - Integrated safety on the EtherNet/IP network	
	- Safe torque-off (STO) control, TÜV certified - Hardwired STO, PLe, Cat 3; SIL CL3 - Integrated STO, PLe, Cat 3; SIL CL3	- Safe torque-off (STO) control, TÜV certified 2198-Hxxx-ERS: Hardwired STO, PLd, Cat 3; SIL CL2 2198-Hxxx-ERS2: Integrated STO, PLe, Cat 3; SIL CL3
Drive configuration	- Multi-axis bus-sharing configurations - DC-bus and extended DC-bus sharing	- Single-axis operation for low-cost simplicity - Multi-axis bus-sharing configurations (AC, DC, AC/DC, AC/DC hybrid)
Input voltage	324...528V AC, three-phase	195...264V AC, single-phase 195...264V AC, three-phase 324...528V AC, three-phase
Common-bus follower input voltage	458...747V DC	276...747V DC
Continuous output power (inverter)	1.7...60.1 kW	0.2...1.0 kW (195...264V, single-phase input) 0.3...7.2 kW (195...264V, three-phase input) 0.6...14.6 kW (324...528V, three-phase input)
Continuous output current (inverter)	2.5...85.0 A rms	1.0...23.0 A rms
Drive digital inputs	- DC-bus power supply: 2 configurable inputs (4 functions) - Single and dual-axis Inverters: 4 configurable inputs (10 functions)	- Home/Registration1 (dual function) - High speed registration (1)
Drive digital outputs	Motor brake relay output (with suppression)	
Programming	Logix Designer application	
	Version 26.00.00 or later	Version 21.00.00 or later
	Ladder logic, structured text, and sequential function charts	
Logix5000 module compatibility	1756-EN2T, 1756-EN2TR, 1756-EN3TR EtherNet/IP modules with ControlLogix or GuardLogix controllers - CompactLogix 5370 controllers	
I/O control	EtherNet/IP	
Feedback	- High-resolution absolute, multi-turn and single-turn encoder feedback - Hiperface encoder support with 2198-K57CK-D15M kit (UFB) connector - Feedback-only or load feedback support with 2198-H2DCK converter kit (MF) connector	- High-resolution absolute, multi-turn and single-turn encoder feedback - Hiperface encoder support with 2198-H2DCK converter kit
	Feedback-only axis with Bulletin 842E-CM encoders	
Rotary motors compatibility	- Kinetix VP (Bulletin VPL/VPF/VPS) - MP-Series (Bulletin MPL/MPM/MPF/MPS) ⁽¹⁾	- Kinetix VP (Bulletin VPL/VPF/VPS) - MP-Series (Bulletin MPL/MPM/MPF/MPS) ⁽²⁾
Linear motors compatibility	N/A	
Linear actuator compatibility	- LDAT-Sxxxxxx-xDx Integrated Linear Thrusters ⁽¹⁾ - MP-Series Electric Cylinders (Bulletin MPAR/MPAI) ⁽¹⁾ - MP-Series Linear Stages ⁽¹⁾ (Bulletin MPAS and MPMA ballscrew only)	- LDAT-Sxxxxxx-xDx Integrated Linear Thrusters ⁽²⁾ - MP-Series Electric Cylinders (Bulletin MPAR/MPAI) ⁽²⁾ - MP-Series Linear Stages ⁽²⁾ (Bulletin MPAS and MPMA ballscrew only)
Accessory compatibility	2198-CAPMOD-2240 capacitor module 2198-CAPMOD-DCBUS-IO extension module 2198 AC (EMC) line filters 2198 shared-bus connector kits 2198 external passive-shunt resistors 1321 line reactors	2198-CAPMOD-1300 capacitor module 2198 AC (EMC) line filters 2198 shared-bus connector kits 2097 external passive-shunt resistors

(1) Requires the 2198-K57CK-D15M universal feedback connector kit.

(2) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Kinetix 5500 Servo Drive Components

Kinetix 5500 servo drive systems consist of these required components:

- One 2198-Hxxx-ERS or 2198-Hxxx-ERS2 servo drive
- One Kinetix VP servo motor, induction motor, LDAT-Series linear thruster, or MP-Series rotary motor or linear actuator
 - MP-Series (400V-class) motors and actuators require 2198-H2DCK converter kits
 - LDAT-Series linear thrusters and MP-Series (200V-class) motors/actuators require 2198-H2DCK (series B or later) converter kits
- One 2090-CSxM1DF-xxAAxx (standard, non-flex) or 2090-CSBM1DF-xxAFxx (continuous-flex) cable for motor power, feedback, and brake connections
- One 1606-XLxxx 24V power supply for control and motor brake power
- 1585J-M8CBJM-x (shielded) Ethernet cable

Kinetix 5500 servo drive systems can also include any of these optional components:

- One 2198-CAPMOD-1300 capacitor module
- One 2198-DBxx-F AC line filter
- One 2097-Rx shunt resistor
- Bulletin 2198 shared-bus connection system

For detailed Kinetix 5500 drive system requirements, refer to the Kinetix 5500 Drive Systems Design Guide, publication [GMC-RM009](#).

Kinetix 5500 Servo Drive Selection

Drive Cat. No. (hardwired ST0)	Drive Cat. No. (integrated ST0)	Frame Size	Input Voltage	Continuous Output Power kW	Continuous Output Current A 0-pk
2198-H003-ERS	2198-H003-ERS2	1	195...264V rms, single-phase 195...264V rms, three-phase 324...528V rms, three-phase	0.2 kW 0.3 kW 0.6 kW	1.4
2198-H008-ERS	2198-H008-ERS2			0.5 kW 0.8 kW 1.6 kW	3.5
2198-H015-ERS	2198-H015-ERS2			1.0 kW 1.5 kW 3.2 kW	7.1
2198-H025-ERS	2198-H025-ERS2	2	195...264V rms, three-phase 324...528V rms, three-phase	2.4 kW 5.1 kW	11.3
2198-H040-ERS	2198-H040-ERS2			4.0 kW 8.3 kW	18.4
2198-H070-ERS	2198-H070-ERS2	3		7.0 kW 14.6 kW	32.5

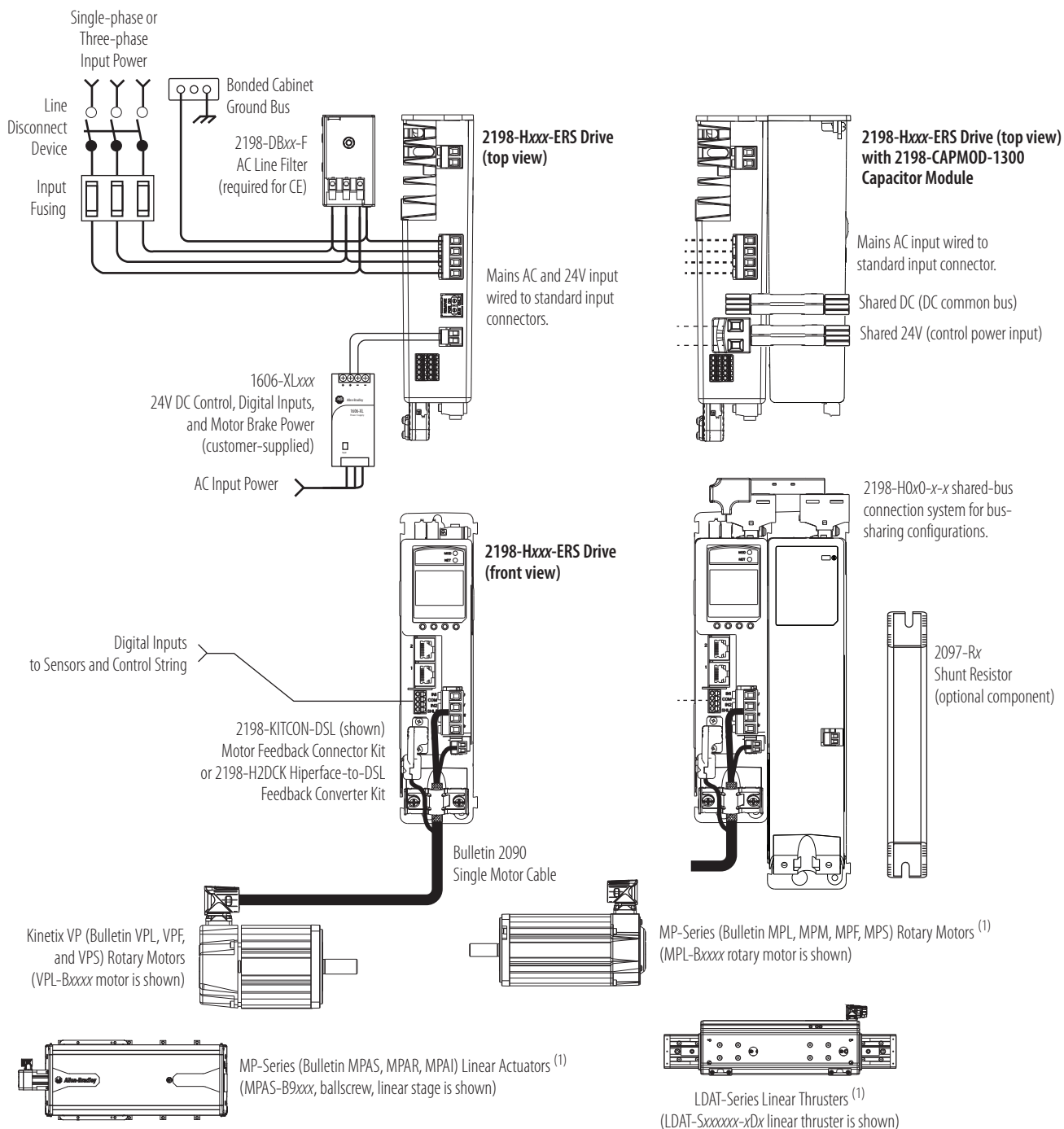
For Kinetix 5500 drive module specifications not included in this publication, refer to the Kinetix Servo Drives Technical Data, publication [GMC-TD003](#).

Typical Hardware Configurations

These typical hardware configurations illustrate the use of servo drives, motors, and motion accessories available for Kinetix 5500 drive systems.

Standalone Configurations

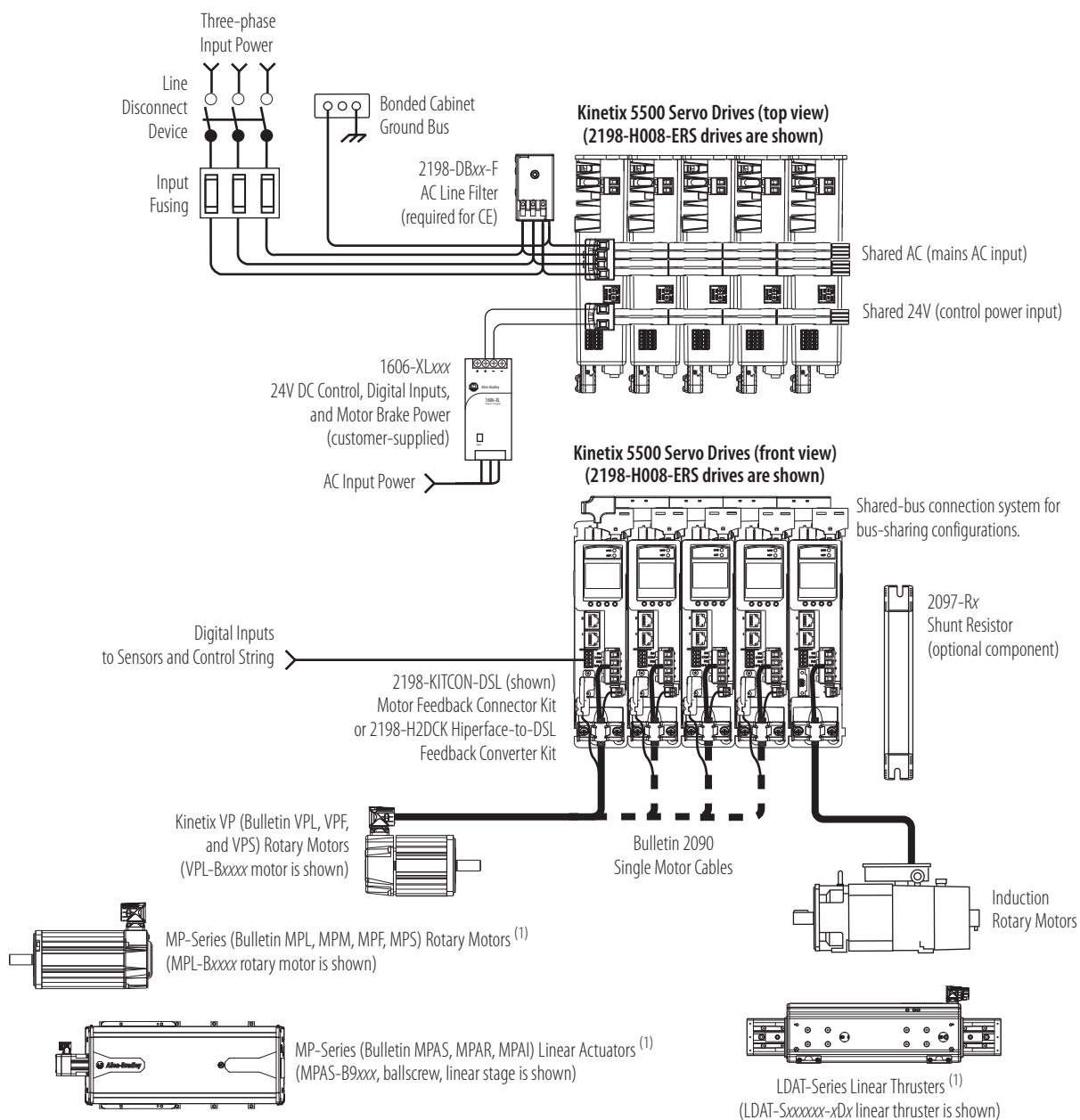
In these examples, a single standalone drive is shown with and without the Bulletin 2198 capacitor module.



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

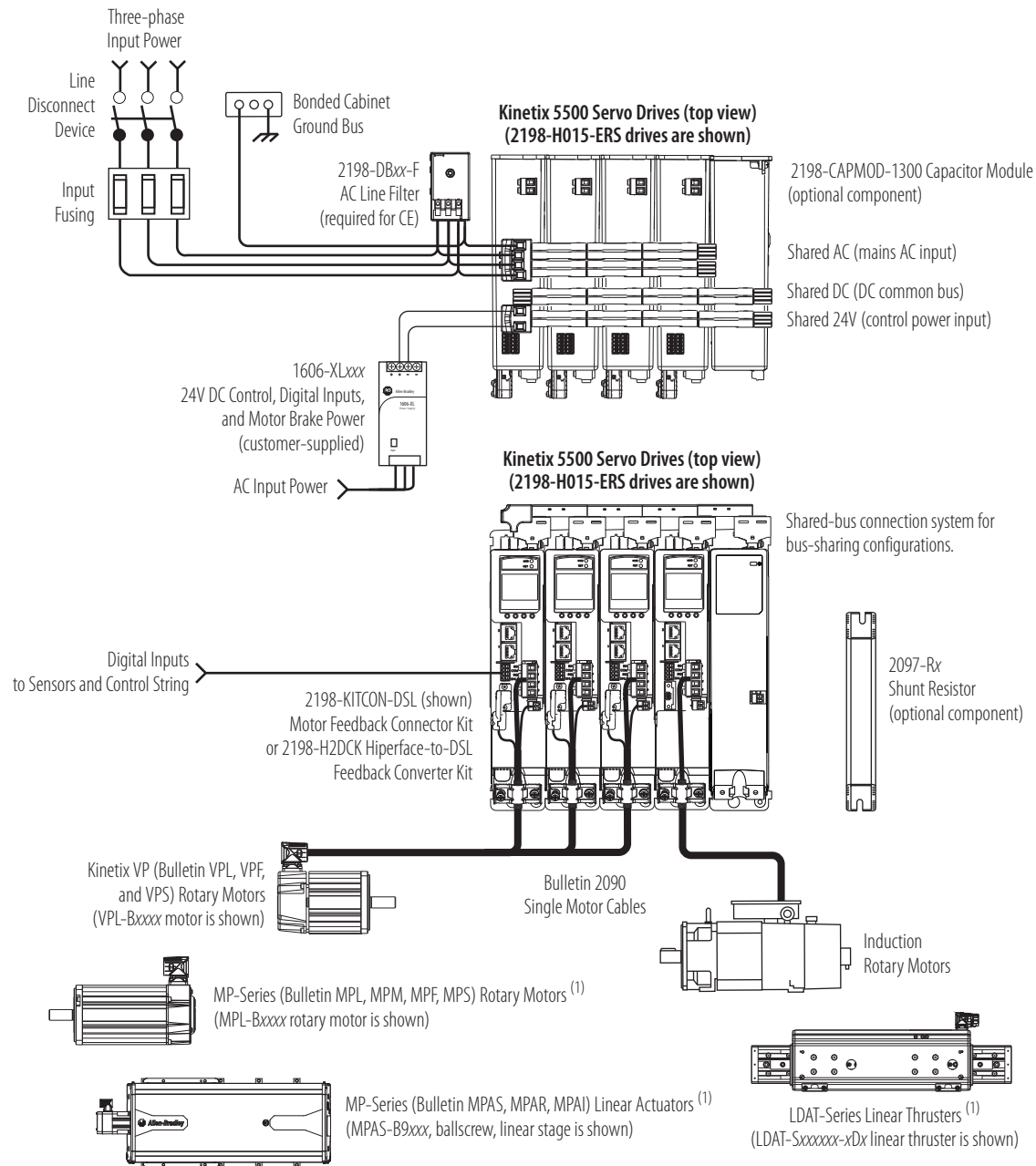
Shared AC Configurations

In this example, three-phase AC power and 24V control power is shared in a multi-axis configuration. All drives must have the same power rating (catalog number). Capacitor modules are not supported.



⁽¹⁾ Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

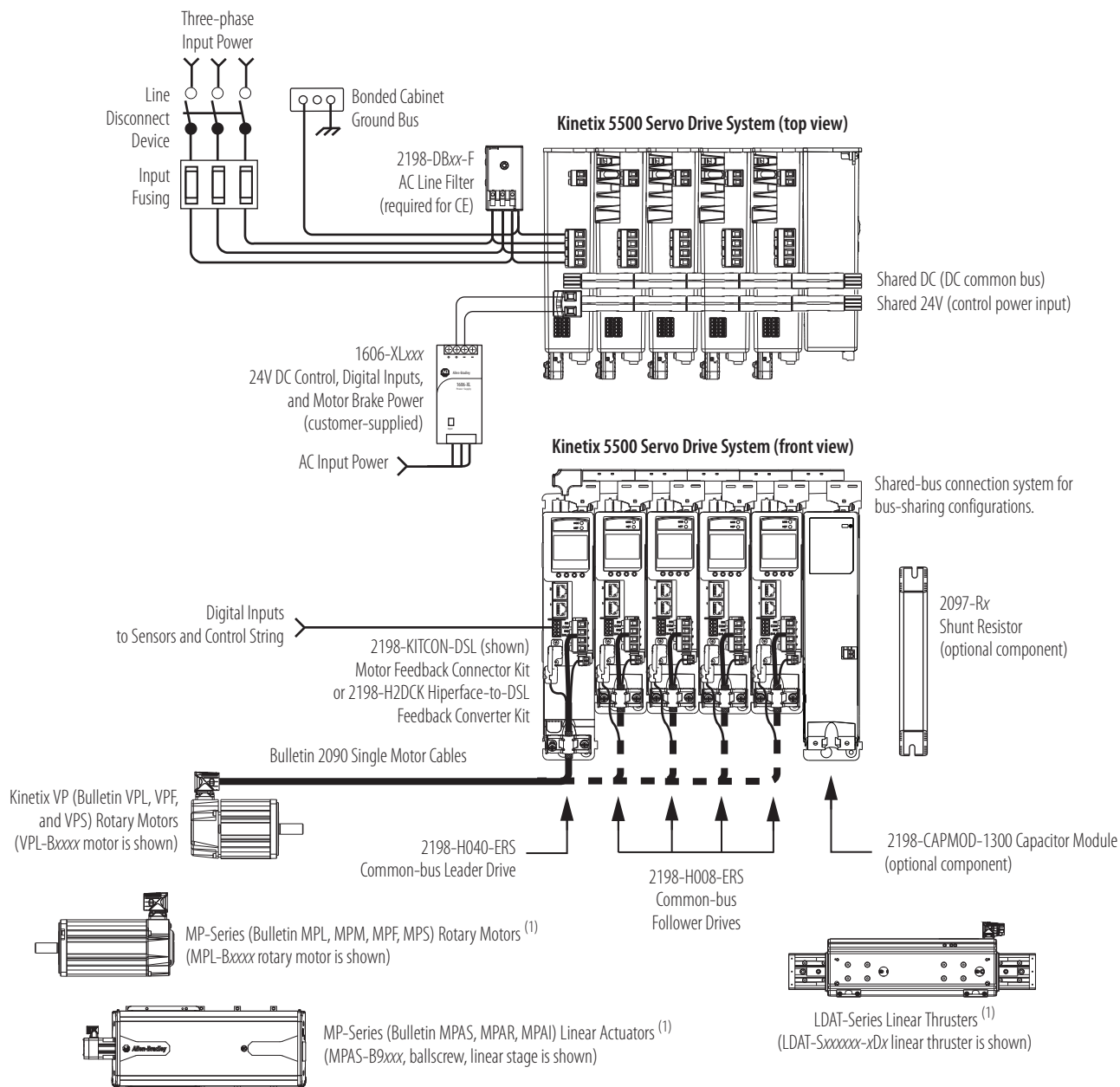
In this example, three-phase AC input power, 24V control power, and DC bus power are shared in a multi-axis configuration. All drives must be the same power rating (catalog number).



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Shared DC (common-bus) Configurations

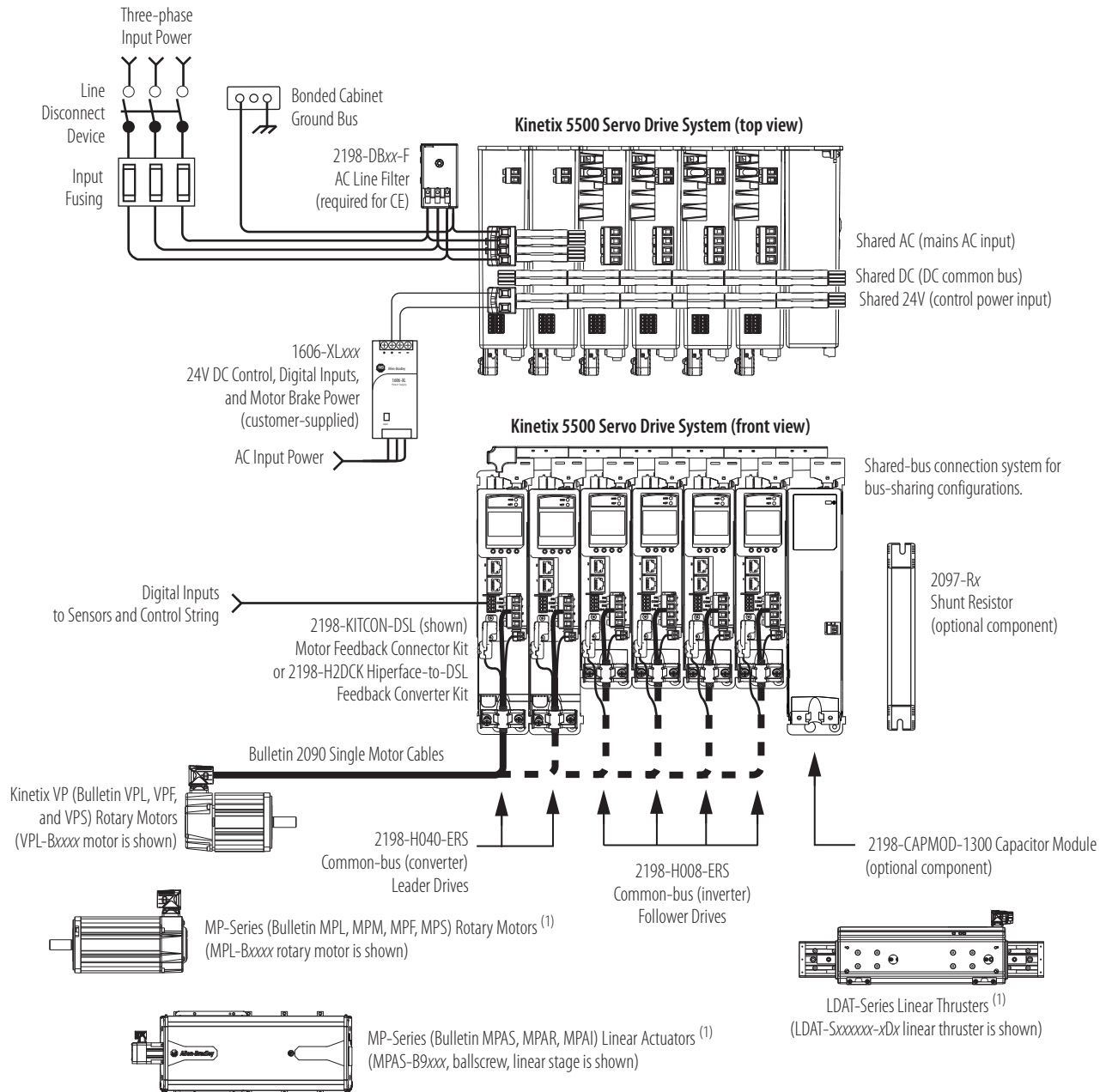
In this multi-axis example, the common-bus leader (sourcing) drive receives three-phase AC input power and supplies DC power to common-bus follower (sinking) drives. The common-bus leader drive power rating is greater than or equal to the power rating of each follower drive.



(1) Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Shared AC/DC Hybrid Configuration

In this multi-axis example, three-phase AC input power is supplied to two converter drives. The converter drive ratings must be the same, and greater than or equal to the power ratings of the inverter drives. This parallel converter configuration increases the DC power supplied to the inverter drives.



⁽¹⁾ Requires the 2198-H2DCK Hiperface-to-DSL feedback converter kit. LDAT-Series linear thrusters and MP-Series (200V-class) motors and actuators require the 2198-H2DCK (series B or later) converter kit.

Bulletin VPS Motor Performance Specifications with Kinetix 5500 Drives

Performance Specifications with Kinetix 5500 (400V-class operation) Drives

Motor Cat. No.	Rated 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 (Hp)	Speed at Motor Rated Output rpm	Kinetix 5500 Drives (480V AC input)
VPS-B1304D	3000	7.1	8.1 (72.0)	17.7	17.9 (158)	1.40 (1.9)	3000	2198-H015-ERSx
				26.0	27.1 (240)			2198-H025-ERSx
VPS-B1653D	3000	17.0	21.0 (186)	45.9	50.1 (443)	3.29 (4.4)	3000	2198-H040-ERSx
				68.0	67.8 (600)			2198-H070-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with the motor at 40 °C (104 °F) and the 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 5500 Drives

These motors require the 2198-H2DCK feedback converter kit. MP-Series (200V-class) motors require the 2198-H2DCK (series B or later) converter kit.

Performance Specifications with Kinetix 5500 (200V-class operation) Drives

Motor Cat. No.	Rated 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 5500 Drives (240V AC input)
MPL-A1510V	8000	1.05	0.26 (2.3)	3.40	0.77 (6.8)	0.16	2198-H003-ERSx
MPL-A1520U	7000	1.80	0.49 (4.3)	6.10	1.58 (13.9)	0.27	2198-H008-ERSx
MPL-A1530U	7000	2.82	0.90 (8.0)	10.1	2.82 (24.9)	0.39	2198-H015-ERSx
MPL-A210V	8000	3.09	0.55 (4.8)	10.2	1.52 (13.4)	0.37	2198-H015-ERSx
MPL-A220T	6000	4.54	1.61 (14.2)	15.5	4.74 (41.9)	0.62	2198-H015-ERSx
MPL-A230P	5000	5.40	2.10 (18.6)	23.0	8.2 (73.0)	0.86	2198-H025-ERSx
MPL-A310F	3000	3.24	1.58 (14.0)	8.80	3.44 (30.4)	0.46	2198-H008-ERSx
				9.30	3.61 (31.9)		2198-H015-ERSx
MPL-A310P	5000	4.91	1.58 (14.0)	14.0	3.61 (31.9)	0.73	2198-H015-ERSx
MPL-A320H	3500	6.10	3.05 (27.0)	19.3	7.91 (70.0)	1.0	2198-H025-ERSx
MPL-A320P	5000	9.00	3.05 (27.0)	28.3	7.60 (44.8)	1.3	2198-H025-ERSx
				29.5	7.91 (70.0)		2198-H040-ERSx
MPL-A330P	5000	12.0	4.18 (37.0)	38.0	11.1 (98.2)	1.8	2198-H040-ERSx
MPL-A420P	5000	12.9	4.79 (42.3)	46.0	13.6 (119)	2.0	2198-H040-ERSx
MPL-A430H	3500	12.2	6.21 (55.0)	45.0	19.8 (175)	1.8	2198-H040-ERSx
MPL-A430P	5000	16.80	5.99 (52.9)	67.0	19.8 (175)	2.2	2198-H070-ERSx
MPL-A4530F	2800	13.40	8.36 (74.0)	42.0	20.3 (179)	1.9	2198-H040-ERSx
MPL-A4530K	4000	19.50	8.13 (71.9)	62.0	20.3 (179)	2.5	2198-H070-ERSx
MPL-A4540C	1500	9.55	10.30 (91.1)	28.3	26.23 (232)	1.5	2198-H025-ERSx
				29.0	27.1 (239)		2198-H040-ERSx
MPL-A4540F	3000	18.40	10.19 (90.1)	45.9	22.09 (195)	2.6	2198-H040-ERSx
				58.0	27.1 (239)		2198-H070-ERSx
MPL-A4560F	3000	22.0	14.1 (125)	66.0	34.4 (305)	3.0	2198-H070-ERSx
MPL-A520K	4000	15.0	10.77 (95.2)	65.0	24.2 (214)	3.5	2198-H070-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 40 °C (104 °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 5500 Drives

These motors require the 2198-H2DCK feedback converter kit. MP-Series (200V-class) motors require the 2198-H2DCK (series B or later) converter kit.

Performance Specifications with Kinetix 5500 (200V-class operation) Drives

Motor Cat. No.	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 5500 Drives (240V AC input)
MPM-A1151M	4500	6000	7.65	2.3 (20.3)	28.3	6.2 (54.9)	0.90	2198-H025-ERSx
					30.5	6.6 (58.4)		2198-H040-ERSx
MPM-A1152F	3000	5000	11.30	4.4 (38.9)	28.3	9.4 (83.2)	1.40	2198-H025-ERSx
			11.93	4.7 (41.6)	44.8	13.5 (119)		2198-H040-ERSx
MPM-A1153F	3000	5000	16.18	6.5 (57.5)	45.9	15.3 (135)	1.45	2198-H040-ERSx
					64.5	19.8 (175)		2198-H070-ERSx
MPM-A1302F	3000	4500	17.28	6.6 (58.4)	45.9	12.7 (112)	1.65	2198-H040-ERSx
					50.2	13.5 (119)		2198-H070-ERSx
MPM-A1304F	3000	4000	19.65	9.3 (82.0)	45.9	18.6 (165)	2.20	2198-H040-ERSx
					48.3	19.3 (171)		2198-H070-ERSx
MPM-A1651F	3000	5000	30.96	10.7 (94.7)	73.8	20.5 (181)	2.50	2198-H070-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive 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 5500 (400V-class operation) Drives

Motor Cat. No.	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 5500 Drives (480V AC input)
MPM-B1151F	3000	5000	2.71	2.3 (20.3)	8.8	6.0 (53.1)	0.75	2198-H008-ERSx
					9.9	6.6 (58.0)		2198-H015-ERSx
MPM-B1151T	6000	7000	5.62	2.3 (20.3)	17.7	5.3 (46.9)	0.90	2198-H015-ERSx
					20.5	5.9 (52.2)		2198-H025-ERSx
MPM-B1152C	1500	3000	3.61	5.0 (44.2)	12.4	13.5 (119)	1.20	2198-H015-ERSx
MPM-B1152F	3000	5200	6.17	5.0 (44.2)	17.7	11.7 (103)	1.40	2198-H015-ERSx
					21.1	13.5 (119)		2198-H025-ERSx
MPM-B1152T	6000	7000	11.02	5.0 (44.2)	28.3	10.7 (94.7)	1.40	2198-H025-ERSx
					37.9	13.5 (119)		2198-H040-ERSx
MPM-B1153E	2250	3500	6.21	6.5 (57.5)	17.7	16.9 (149)	1.40	2198-H015-ERSx
					21.6	19.8 (175)		2198-H025-ERSx
MPM-B1153F	3000	5500	9.20	6.5 (57.5)	28.3	17.9 (158)	1.40	2198-H025-ERSx
					32.0	19.8 (175)		2198-H040-ERSx
MPM-B1153T	6000	7000	15.95	6.5 (57.5)	45.9	14.8 (131)	1.45	2198-H040-ERSx
					55.5	16.5 (146)		2198-H070-ERSx
MPM-B1302F	3000	4500	8.57	6.6 (58.4)	22.1	13.5 (119)	1.65	2198-H025-ERSx
MPM-B1302M	4500	6000	12.57	6.6 (58.4)	32.4	13.5 (119)	1.65	2198-H040-ERSx
MPM-B1302T	6000	7000	16.83	6.7 (59.3)	43.4	13.5 (119)	1.65	2198-H040-ERSx
MPM-B1304C	1500	2750	7.00	10.3 (91.1)	17.7	22.8 (202)	2.00	2198-H015-ERSx
					21.5	27.1 (240)		2198-H025-ERSx

Performance Specifications with Kinetix 5500 (400V-class operation) Drives (continued)

Motor Cat. No.	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 5500 Drives (480V AC input)
MPM-B1304E	2250	4000	10.75	10.2 (90.3)	28.3	23.4 (207)	2.20	2198-H025-ERSx
					34.2	27.1 (240)		2198-H040-ERSx
MPM-B1304M	4500	6000	19.02	10.4 (92.0)	60.6	27.1 (240)	2.20	2198-H070-ERSx
MPM-B1651C	1500	3500	10.21	11.4 (101)	28.3	22.7 (201)	2.50	2198-H025-ERSx
					29.2	23.2 (205)		2198-H040-ERSx
MPM-B1651F	3000	5000	17.75	11.4 (101)	45.9	21.9 (194)	2.50	2198-H040-ERSx
					50.9	23.2 (205)		2198-H070-ERSx
MPM-B1651M	4500	5000	22.46	11.4 (101)	56.8	23.2 (205)	2.50	2198-H070-ERSx
MPM-B1652C	1500	2500	11.51	16.0 (142)	33.6	40.0 (354)	3.80	2198-H040-ERSx
MPM-B1652E	2250	3500	20.94	21.1 (187)	60.5	48.0 (425)	4.30	2198-H070-ERSx
MPM-B1652F	3000	4500	28.74	21.1 (187)	84.1	48.0 (425)	4.30	2198-H070-ERSx
MPM-B1653C	1500	2500	20.05	26.7 (236)	59.2	67.8 (600)	4.60	2198-H070-ERSx
MPM-B1653E	2250	3500	27.00	26.8 (237)	72.9	62.0 (549)	5.10	2198-H070-ERSx
MPM-B2152C	1500	2500	27.40	36.7 (325)	55.4	72.3 (640)	5.60	2198-H070-ERSx
MPM-B2153B	1250	2000	24.06	48.0 (425)	60.0	101.1 (895)	6.80	2198-H070-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 40 °C (104 °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 5500 Drives

These motors require the 2198-H2DCK feedback converter kit. MP-Series (200V-class) motors require the 2198-H2DCK (series B or later) converter kit.

Performance Specifications with Kinetix 5500 (200V-class) Drives

Motor Cat. No.	Rated 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 5500 Drives (240V AC input)
MPF-A310P	5000	4.50	1.58 (14.0)	14.0	3.61 (31.9)	0.73	2198-H015-ERSx
MPF-A320H	3500	6.10	3.05 (27.0)	17.7	7.33 (64.9)	1.0	2198-H015-ERSx
				19.3	7.91 (70.0)		2198-H025-ERSx
MPF-A320P	5000	9.00	3.05 (27.0)	28.3	7.59 (67.2)	1.3	2198-H025-ERSx
				29.5	7.91 (70.0)		2198-H040-ERSx
MPF-A330P	5000	12.0	3.85 (34.0)	38.0	10.32 (91.2)	1.6	2198-H040-ERSx
MPF-A430H	3500	12.2	6.21 (55.0)	45.0	19.82 (175)	1.8	2198-H040-ERSx
MPF-A430P	5000	16.80	5.94 (52.5)	45.9	14.4 (127)	1.9	2198-H040-ERSx
				67.0	19.80 (175)		2198-H070-ERSx
MPF-A4530K	4000	19.50	8.08 (71.4)	62.0	20.30 (179)	2.3	2198-H070-ERSx
MPF-A4540F	3000	18.40	10.15 (89.7)	45.9	22.09 (195)	2.5	2198-H040-ERSx
				58.0	27.10 (239)		2198-H070-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive 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 5500 (400V-class operation) Drives

Motor Cat. No.	Rated 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 5500 Drives (480V AC input)
MPF-B310P	5000	2.30	1.60 (14)	7.10	3.6 (32)	0.77	2198-H008-ERSx
MPF-B320P	5000	4.24	3.10 (27)	14.0	7.8 (69)	1.5	2198-H015-ERSx
MPF-B330P	5000	5.70	4.18 (37)	17.7	10.4 (92.0)	1.6	2198-H015-ERSx
				19.0	11.1 (98)		2198-H025-ERSx
MPF-B430P	5000	9.20	6.55 (58)	28.3	17.6 (156)	2.0	2198-H025-ERSx
				32.0	19.8 (175)		2198-H040-ERSx
MPF-B4530K	4000	9.90	8.25 (73)	28.3	18.7 (165)	2.4	2198-H025-ERSx
				31.0	20.3 (179)		2198-H040-ERSx
MPF-B4540F	3000	9.10	10.20 (90)	28.3	26.2 (232)	2.5	2198-H025-ERSx
				29.0	27.1 (240)		2198-H040-ERSx
MPF-B540K	4000	20.5	19.4 (171)	60.0	48.6 (430)	4.1	2198-H070-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 40 °C (104 °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 5500 Drives

These motors require the 2198-H2DCK feedback converter kit. MP-Series (200V-class) motors require the 2198-H2DCK (series B or later) converter kit.

Bulletin MPS Motor Performance Specifications with Kinetix 5500 (200V-class operation) Drives

Motor Cat. No.	Rated 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 5500 Drives (240V AC input)
MPS-A330P	5000	9.80	3.60 (32.0)	28.3	8.79 (77.8)	1.3	2198-H025-ERSx
				38.0	11.10 (98.2)		2198-H040-ERSx
MPS-A4540F	3000	14.4	8.1 (72)	45.9	22.84 (202)	1.4	2198-H040-ERSx
				56.0	27.1 (240)		2198-H070-ERSx

Bulletin MPS Motor Performance Specifications with Kinetix 5500 (400V-class operation) Drives

Motor Cat. No.	Rated 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 5500 Drives (480V AC input)
MPS-B330P	5000	4.9	3.60 (32)	17.7	10.5 (92.9)	1.3	2198-H015-ERSx
				19.0	11.0 (97.2)		2198-H025-ERSx
MPS-B4540F	3000	7.1	8.1 (72)	17.7	19.2 (170)	1.4	2198-H015-ERSx
				26.0	27.1 (240)		2198-H025-ERSx
MPS-B560F	3000	17.0	21.5 (190)	45.9	49.7 (440)	3.5	2198-H040-ERSx
				68.0	67.8 (600)		2198-H070-ERSx

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

Linear Motion Performance Specifications

These linear motion families are compatible with Kinetix 5500 servo drives.

Linear Motion Family	Page
LDAT-Series integrated linear thrusters	85
MP-Series (Bulletin MPAS, ballscrew) integrated linear stages	92
MP-Series (Bulletin MPAR) electric cylinders	93
MP-Series (Bulletin MPAL) heavy-duty electric cylinders	94

For Kinetix 5500 drive system combinations that include cable catalog number selection and force/velocity curves, refer to the Kinetix 5500 Drive Systems Design Guide, publication [GMC-RM009](#).

IMPORTANT These system combinations do not include all possible actuator/drive combinations. Refer to Motion Analyzer software to verify compatibility. To access Motion Analyzer software, go to: <https://motionanalyzer.rockwellautomation.com>.

LDAT-Series Performance Specifications with Kinetix 5500 Drives

These actuators require the 2198-H2DCK (series B or later) feedback converter kit.

Performance Specifications with 200V-class Drive Operation and 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 5500 (240V AC input)
LDAT-S031010-DDx	2.4	4.8	81 (18)	12.2	168 (38)	0.20	2198-H015-ERSx
LDAT-S031020-DDx	3.1					0.25	
LDAT-S031030-DDx	3.5					0.29	
LDAT-S031040-DDx	3.8					0.31	
LDAT-S032010-DDx	3.1	7.4	126 (28)	24.3	336 (76)	0.44	2198-H025-ERSx
LDAT-S032020-DDx	4.1					0.52	
LDAT-S032030-DDx	4.7					0.59	
LDAT-S032040-DDx	5.0					0.63	
LDAT-S032010-EDx	3.1	3.7	126 (28)	12.2	336 (76)	0.40	2198-H015-ERSx
LDAT-S032020-EDx	4.1					0.47	
LDAT-S032030-EDx	4.7					0.52	
LDAT-S032040-EDx	5.0					0.55	
LDAT-S033010-DDx	3.5	11.1	190 (43)	36.5	504 (113)	0.67	2198-H040-ERSx
LDAT-S033020-DDx	4.7					0.88	
LDAT-S033030-DDx	5.0					0.95	
LDAT-S033040-DDx							
LDAT-S033010-EDx	3.5	3.7	190 (43)	12.2	504 (113)	0.55	2198-H015-ERSx
LDAT-S033020-EDx	4.4					0.65	
LDAT-S033030-EDx							
LDAT-S033040-EDx							

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive 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 400V-class Drive Operation and Frame 150 Linear Thrusters (continued)

Linear Thruster Cat. No.	Velocity, max 460V AC m/s	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Rated Output 460V AC kW	Kinetix 5500 (480V AC input)
LDAT-S154010-DDx ... LDAT-S154090-DDx	3.5	10.7	1306 (294)	39.1	3597 (809)	3.83	2198-H040-ERSx
LDAT-S154010-EDx ... LDAT-S154090-EDx	1.8	5.3		19.5		1.78	2198-H025-ERSx
LDAT-S156010-DDx ... LDAT-S156090-DDx	3.6	16.3	1997 (449)	59.4	5469 (1229)	5.85	2198-H070-ERSx
LDAT-S156010-EDx ... LDAT-S156090-EDx	1.8	8.1		19.8		2.71	2198-H025-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 40 °C (104 °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 5500 Drives

These actuators require the 2198-H2DCK feedback converter kit. MP-Series (200V-class) linear stages require the 2198-H2DCK (series B or later) converter kit.

Performance Specifications with Kinetix 5500 (200V-class operation) Drives

Linear Stage Cat. No.	Speed, max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Output Power Rating kW	Kinetix 5500 Drives (240V AC input)
MPAS-Axxxx1-V05SxA	200 (7.9) ⁽¹⁾	3.09	521 (117)	6.10	1212 (272)	0.37	2198-H008-ERSx
MPAS-Axxxx2-V20SxA	1124 (44.3) ⁽²⁾	4.54	462 (104)	9.10	968 (218)	0.62	2198-H015-ERSx

(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 Specifications with Kinetix 5500 (400V-class operation) Drives

Linear Stage Cat. No.	Speed, max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Output Power Rating kW	Kinetix 5500 Drives (480V AC input)
MPAS-Bxxxx1-V05SxA	200 (7.9) ⁽¹⁾	1.75	521 (117)	3.50	1212 (272)	0.37	2198-H008-ERSx
MPAS-Bxxxx2-V20SxA	1124 (44.3) ⁽²⁾	3.30	462 (104)	6.60	968 (218)	0.62	2198-H008-ERSx

(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 motor at 40 °C (104 °F) and drive at 40 °C (104 °F) ambient and rated line voltage. For additional information on ambient and line conditions, refer to Motion Analyzer software.

Bulletin MPAR Performance Specifications with Kinetix 5500 Drives

These actuators require the 2198-H2DCK feedback converter kit. MP-Series (200V-class) electric cylinders require the 2198-H2DCK (series B or later) converter kit.

Performance Specifications with Kinetix 5500 (200V-class operation) Drives

Electric Cylinder Cat. No.	Speed, max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Output Power Rating kW	Kinetix 5500 Drives (240V AC input)
MPAR-A1xxxB	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2198-H003-ERSx
MPAR-A1xxxE	500	2.16	280 (62.9)	2.48	350 (78.7)	0.140	2198-H008-ERSx
MPAR-A2xxxC	250	2.42	420 (94.4)	2.72	525 (118)	0.105	2198-H008-ERSx
MPAR-A2xxxF	640	4.54	640 (144)	5.41	800 (180)	0.410	2198-H015-ERSx
MPAR-A3xxxE	500	10.33	2000 (450)	12.34	2500 (562)	1.00	2198-H025-ERSx
MPAR-A3xxxH	1000	12.20	1300 (292)	16.40	1625 (365)	1.30	2198-H040-ERSx

Performance Specifications with Kinetix 5500 (400V-class operation) Drives

Electric Cylinder Cat. No.	Speed, max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)	System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Output Power Rating kW	Kinetix 5500 Drives (480V AC input)
MPAR-B1xxxB	150	1.15	240 (53.9)	1.35	300 (67.4)	0.036	2198-H003-ERSx
MPAR-B1xxxE	500	1.49	280 (62.9)	1.71	350 (78.7)	0.140	2198-H003-ERSx
MPAR-B2xxxC	250	1.67	420 (94.4)	1.90	525 (118)	0.105	2198-H003-ERSx
MPAR-B2xxxF	640	3.29	640 (144)	3.93	800 (180)	0.410	2198-H008-ERSx
MPAR-B3xxxE	500	5.16	2000 (450)	6.17	2500 (562)	1.00	2198-H015-ERSx
MPAR-B3xxxH	1000	6.13	1300 (292)	6.79	1625 (365)	1.30	2198-H015-ERSx

Performance specification data and curves reflect nominal system performance of a typical system with motor at 40 °C (104 °F) and drive at 40 °C (104 °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 5500 Drives

These actuators require the 2198-H2DCK feedback converter kit. MP-Series (200V-class) electric cylinders require the 2198-H2DCK (series B or later) converter kit.

Performance Specifications for (ball screw cylinders) and Kinetix 5500 (200V-class operation) Drives

Electric Cylinder Cat. No.	Speed, max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Output Power Rating kW	Kinetix 5500 Drives (240V AC input)
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-A2076CV1	305 (12)	1.80	890 (200)	706 (159)	4.50	1446 (325)	0.22	2198-H008-ERSx
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	2198-H008-ERSx
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	2198-H015-ERSx
MPAI-A3300CM3	188 (7.3)							
MPAI-A3450CM3								
MPAI-A3150EM3	559 (22)		2002 (450)	1588 (357)	14.14	4003 (900)		
MPAI-A3300EM3								
MPAI-A3450EM3								
MPAI-A4150CM3	279 (11)	10.89	7784 (1750)	6179 (1389)	17.07	8896 (2000)	0.43	2198-H025-ERSx
MPAI-A4300CM3	245 (9.5)							
MPAI-A4450CM3								
MPAI-A4150EM3	559 (22)		3892 (875)	3092 (695)	27.44	7784 (1750)		
MPAI-A4300EM3								
MPAI-A4450EM3								
MPAI-A5xxxCM3	200 (7.8)	13.25	13,123 (2950)	10,415 (2341)	16.70	13,345 (3000)	0.55	2198-H040-ERSx
MPAI-A5xxxEM3	400 (15.6)		6562 (1475)	5208 (1171)	33.40	13,122 (2950)		

Performance Specifications for (roller screw cylinders) and Kinetix 5500 (200V-class operation) Drives

Electric Cylinder Cat. No.	Speed, max mm/s (in/s)	System Continuous Stall Current Amps 0-pk	System Continuous Stall Force N (lb)		System Peak Stall Current Amps 0-pk	System Peak Stall Force N (lb)	Motor Output Power Rating kW	Kinetix 5500 Drives (240V AC input)
			25 °C (77 °F)	40 °C (104 °F)				
MPAI-A3076RM1	305 (12)	2.87	1557 (350)	1237 (278)	8.90	4862 (1093)	0.27	2198-H008-ERSx
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	2198-H015-ERSx
MPAI-A3300RM3								
MPAI-A3450RM3	176 (6.9)							
MPAI-A3150SM3	559 (22)		1891 (425)	1499 (337)		3781 (850)		
MPAI-A3300SM3								
MPAI-A3450SM3								
MPAI-A4150RM3	279 (11)	10.89	7340 (1650)	5827 (1310)	27.44	14,679 (3300)	0.43	2198-H025-ERSx
MPAI-A4300RM3								
MPAI-A4450RM3	196 (7.6)							
MPAI-A4150SM3	559 (22)		3670 (825)	2914 (655)		7340 (1650)		
MPAI-A4300SM3								
MPAI-A4450SM3								

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