Technical Data

Original Instructions

Kinetix 5700, 5500, 5300, and 5100 Servo Drives Specifications

Kinetix 5700, Kinetix 5500, Kinetix 5300, and Kinetix 5100

This document provides catalog numbers and product specifications, including power, performance, environmental, certifications, dimension drawings, and accessories for Allen-Bradley® servo drives.

Use this publication with the Kinetix® Motion Control Selection Guide, publication KNX-SG001, to help make decisions selecting the motion control products that are best suited for your system requirements.

Power Dissipation Specifications

Use this table to size an enclosure and calculate required ventilation for your Kinetix 5500 drive system.

Kinetix 5500 Drive Cat. No.	Usage as % of Rated Power Output (watts)				
	20%	40%	60%	80%	100%
2198-H003-ERSx 2198-H008-ERSx	12	25	37	50	62
2198-H015-ERSx 2198-H025-ERSx 2198-H040-ERSx	40	80	120	160	200
2198-H070-ERSx	64	128	192	256	320

Weight Specifications

Kinetix 5500 Drive Cat. No.	Weight, approx kg (lb)
2198-H003-ERSx	1.4 (3.0)
2198-H008-ERSx	
2198-H015-ERSx	2.3 (5.0)
2198-H025-ERSx	
2198-H040-ERSx	
2198-H070-ERSx	4.1 (9.0)

Maximum Cable Lengths

The Kinetix 5500 drive maximum cable length depends on several factors, including the drive/motor combination and motor/cable combination (see Drive/Motor/Cable Considerations table below). The maximum cable length also depends on the AC input-power source used in the application, as shown on page 51. Use the shorter cable length specified between the two tables for your application.

Drive/Motor/Cable Considerations

Kinetix 5500 Servo Drive Cat. No.	Kinetix VP Servo Motors/Actuators m (ft)		Other Compatible Rotary Motors and Linear Actuators (1)
	Standard (non-flex) Cables Cat. No. 2090-CSxM1DF-xxAAxx Cat. No. 2090-CSxM1DG-xxxAxx Cat. No. 2090-CSxM1E1-xxVAxx	Continuous-flex Cables (2) Cat. No. 2090-CSxM1DF-xxAFxx Cat. No. 2090-CSxM1DG-xxxFxx Cat. No. 2090-CSxM1E1-xxxFxx	Kinetix 2090 Motor/Actuator Cables (3) Cat. No. 2090-CxxM7DF m (ft)
2198-H003-ERSx 2198-H008-ERSx	50 (164)	30 (98.4)	20 (65.6)
2198-H015-ERSx 2198-H025-ERSx 2198-H040-ERSx	50 (164)		
2198-H070-ERSx	50 (164)		

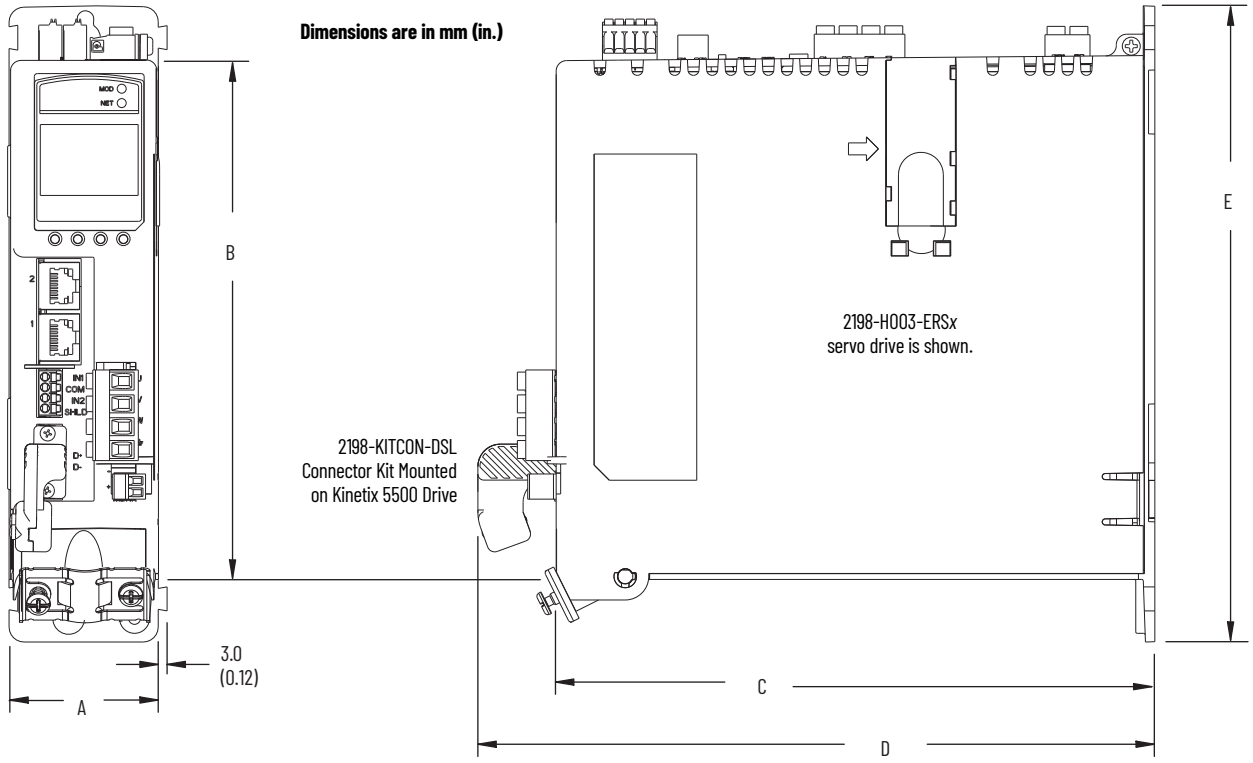
(1) Requires use of the 2198-H2DCK Hiperface-to-DSL feedback converter kit (series B or later).
(2) When using any continuous-flex cable (whether extension or flying-lead) in your application, the maximum cable length including any standard (non-flex) cable back to the drive, is 30 m (98.4 ft).
(3) The 20 m (65.6 ft) limitation is attributed to the 2090-CPxM7DF power/brake cable. In 2198-H2DCK converter kit applications, you can replace the 2090-CPxM7DF power/brake cable with a 2090-CSxM1DF or 2090-CSxM1DG single motor cable (and reuse the 2090-CFBM7DF feedback cable) to increase the maximum cable length to 50 m (164 ft). This applies to only 18 and 14 AWG single cables. 2090-CSBM1D*x*-10*xxxx* (10 AWG/M40 connector) single cables are not compatible with 2090-CPBM7DF-10A*xxx* (10 AWG/M40 connector) power/brake cables.

Refer to the Kinetix Rotary and Linear Motion Cable Specifications Technical Data, publication KNX-TD004, for cable specifications.

Dimensions - Kinetix 5500 Servo Drives

These drawings provide mounting dimensions for Kinetix 5500 servo drives. Also included are drawings showing the impact of compatible motor feedback connector kits on the mounting dimensions. Kinetix 5500 servo drives include the 2198-KITCON-DSL feedback connector kit for use with Kinetix VP motors. The 2198-H2DCK feedback converter kit, for Hiperface-to-DSL conversion, is used with Kinetix LDAT linear thrusters and Kinetix MP rotary motors and linear actuators. Refer to page 53 for dimensions when using the converter kit.

Kinetix 5500 Drives with 2198-KITCON-DSL Connector Kit



Kinetix 5500 Drive Cat. No.	Frame Size	A mm (in.)	B mm (in.)	C mm (in.)	D mm (in.)	E mm (in.)
2198-H003-ERSx	Frame 1	50 (1.97)	175 (6.89)	200 (7.87)	226 (8.90)	215 (8.46)
2198-H008-ERSx						
2198-H015-ERSx	Frame 2	55 (2.16)	225 (8.86)			265 (10.43)
2198-H025-ERSx						
2198-H040-ERSx						
2198-H070-ERSx	Frame 3	85.2 (3.35)	250 (9.84)			294 (11.57)