

TAIT

Kinesys Apex Range

The complete solution
to high-end chain hoist
control applications.



03



**Kinesys
Apex
Hoist**

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Drive
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Kinesys Apex range is the complete solution to high-end chain hoist control applications.

It has all the features you would expect like SIL3 safety and standards compliance, sub millimetre precision and true zero speed. It also contains some you might not expect like silent brakes, intelligent duty cycle management and real-time data logging.

Kinesys Apex Hoist 500 & 1250

Kinesys Apex Hoist offers 500kg (1200lb), 1250kg (2750lb), and 500kg Servo options.



Kinesys Apex hoists achieve maximum speeds of 500mm/s (100ft/min), 200mm/s (40ft/min), and 610mm/s (120ft/min) in compact, safety-compliant packages suitable for overhead use in show environments.

With silent brakes and a hover capability, they excel in settings previously unsuited to chain hoists. Precision speed and position control allow smooth, complex movements, while extended duty cycles and intelligent temperature monitoring enable longer continuous use.

Real-time duty updates optimize usage without overheating, and detailed logging tracks runtime, max load, temperature, and brake activity to support maintenance and compliance.

FEATURES

400KG (1200LB) AT 10:1, UP TO 30M/MIN (100FT/MIN) WITH 7 X 22MM CHAIN

500KG (1200LB) AT 8:1, UP TO 30M/MIN (100FT/MIN) WITH 7 X 22MM CHAIN

1250KG (2750LB) AT 10:1, UP TO 12M/MIN (40FT/MIN) WITH 11 X 31MM CHAIN

500KG (1200LB) SERVO AT 8:1, UP TO 36.6M/MIN (120FT/MIN) WITH 11 X 31MM CHAIN

DUAL SILENT BRAKES

INTEGRAL SIL3 RATED LOADCELL

REAL-TIME DATA LOGGING OF ALL KEY MOTION AND MAINTENANCE RELATED PARAMETERS

FULL LOAD CAPACITY AT ANY SPEED DOWN TO AND INCLUDING ZERO

INTELLIGENT DUTY CYCLE MANAGEMENT FOR LONGER RUNNING PERIODS

HOIST ID TECHNOLOGY ENABLING THE DRIVE TO AUTOMATICALLY CONFIGURE FOR THE CORRECT HOIST TYPE

BLACK CHAIN

LOCKING CHAIN HOOK

208V OR 400V OPERATION, SETTABLE BY THE USER

CONTROL CONNECTIONS

1 X MULTI-FUNCTION HARTING CONNECTOR

Kinesys Apex Drive v2

Kinesys Apex range represents the state of the art in variable speed chain hoist control. Both the controller and hoists are built to exacting specification which allows for numerous features to be available to the operator.



Kinesys Apex offers essential features like SIL3 safety, standards compliance, sub-millimeter precision, and true zero speed, plus advanced options like silent brakes, intelligent duty cycle management, and real-time data logging.

It integrates seamlessly with all Kinesys software, while the Kinesys Mentor Series 4 interfaces support safety-over-data compatibility with other products.

Designed for ease, Kinesys Apex allows daisy-chaining of power and data through Ceeform, L21-30, and Ethercon cables, minimizing cabling. With built-in safety, it requires no custom power distribution, and when paired with Mentor 4, it enables SIL3-rated control of hoist groups for creative applications.

MAIN CONNECTIONS

5-PIN 32A 'CEEFORM' PLUG AND LINK THROUGH SOCKET TO IEC60309 (400V VERSION)

5-PIN 30A L21-30 PLUG AND LINK THROUGH SOCKET (208V VERSION)

FEATURES

SIL3 (EN61508) AND PLE (EN13849)

APEX DRIVE COMPLIES WITH EN17206, DIN56950 AND BS7905

APEX DRIVE V2 COMPLIES WITH DGUV (BGV C1) AND EN17206

MANUAL CONTROLS ON THE FRONT PANEL FOR EASE OF USE

TOUCHSCREEN DISPLAY FOR FEEDBACK AND DIAGNOSTICS

CAPABLE OF RUNNING BOTH 500 AND 1250 VERSIONS OF APEX CHAIN HOIST

AUTOMATIC RECOGNITION AND CONFIGURATION WHEN A HOIST IS PLUGGED IN

SAFETY OVER ETHERNET FOR FULLY NETWORKED SYSTEM USING STANDARD ETHERCON CABLES

POWER AND DATA DAISY CHAIN FOR SIMPLIFIED CABLING

INDUSTRY STANDARD POWER CONNECTORS

TRUSS MOUNTING PLATE OPTION WITH $\frac{1}{4}$ TURN DZUS FASTENERS TO FIX TO KINESYS APEX DRIVE

3U 19" RACK COMPATIBLE WITH RACK FIXING KIT

HOIST CONNECTIONS

1 X MULTI-FUNCTION HARTING CONNECTOR

CONTROL CONNECTIONS

NEUTRIK ETHERCON RJ45 IN AND LINK OUT

Kinesys Apex Hoist 500 Servo

Building on the popularity of the original, the Kinesys Apex Hoist 500 Servo is our variable speed electric chain hoist designed to meet the latest international safety standards, including DGUV 17 (BGV C1) and the European standard EN 17206.



The hoist is powered by a Kinesys Apex Drive v2 and can be operated by Kinesys and TAIT automation platforms, including Kinesys Vector and TAIT Navigator™. The hoist has an integrated SIL3 load cell, dual quiet brakes with brake monitoring and an SSI absolute encoder.

FEATURES

VARIABLE SPEED, ELECTRIC CHAIN HOIST

CAN BE OPERATED BY ALL KINESYS AND
TAIT AUTOMATION PLATFORMS

COMPATIBLE WITH EXISTING
KINESYS APEX HOIST PRODUCTS

COMPLIES WITH INTERNATIONAL SAFETY STANDARDS

CONNECTIONS

1 X MULTI-FUNCTION HARTING CONNECTOR

Kinesys Mentor M401

Kinesys Mentor Series 4 controllers add further features to the Mentor safety controller family. It has SIL3 safety over Ethernet at its core and can communicate with and safely control up to 100 devices at any one time.



Kinesys Mentor Series 4 uses the emergency stops and enable switches (dead man's handles) common across Kinesys Mentor products. It also includes Universal Device Interface (UDI) connections that allow Elevation, DigiHoist and other legacy systems to integrate into the Mentor infrastructure.

Safe groups are central to the Kinesys Mentor Series 4 capabilities. This feature allows devices to be grouped together with a SIL3 rating so that an error on any one of the grouped devices will stop the entire group. Groups can be created and deleted by the user from the touchscreen interface with any changes being confirmed via a key-switch to ensure these actions are only performed by authorised personnel.

The inclusion of a Console/Pendant connector allows the Dimension pendant to be connected directly to the Kinesys Mentor, making it quick and easy to get a system up and moving.



FEATURES

CONTROL UP TO 100 DEVICES FROM A SINGLE UNIT

EMERGENCY STOP AND ENABLE SWITCHES TO SIL3

SIL3 SAFETY DATA BOTH TO AND FROM COMPATIBLE DEVICES

SIL3 DEVICE GROUPING CAPABILITIES

7" TOUCHSCREEN FOR CONFIGURATION AND DIAGNOSTICS

OPTIONAL ETHERNET OVER FIBRE FOR LONG DISTANCE CONNECTIONS

UNIVERSAL DEVICE INTERFACE CONNECTIONS FOR NON-APEX SYSTEMS

4U 19" RACK FORMAT

MAIN CONNECTIONS

NEUTRIK POWERCON TRUE1 IN AND LINK OUT

MAIN CONNECTIONS

8 X APEX SAFETY OVER ETHERNET
- NEUTRIK ETHERCON RJ45

2 X APEX SAFETY OVER FIBRE ETHERNET (OPTIONAL)
- NEUTRIK OPTICALCON QUAD

2 X EVO V2 ETHERNET DATA - NEUTRIK ETHERCON RJ45

3 X MIL10 COMBINED EMERGENCY STOP AND DMH

3 X MIL10 EMERGENCY STOP
(3 X ESTOP & DMH, 3 X ESTOP ONLY)

1 X MIL19 CONSOLE/PENDANT INPUT

2 X UNIVERSAL DEVICE INTERFACE CONNECTIONS FOR NON-APEX DEVICES

SIL3 Rating



SIL or Safety Integrity Level is a rating for a safety function within a piece of equipment.

The safety function can be emergency stop, load monitoring, speed monitoring, brake control and so on. Each function can be assigned a different SIL depending on how it is implemented.

SIL ratings range from 1 to 4. 1 is the lowest and might relate to simple and low-risk activities like the emergency stop button for a basic conveyor belt. SIL4 is the highest rating and relates to activities where failure of safety systems could have catastrophic results such as aviation, nuclear power and so on. The SIL rating that any particular activity requires is determined by the completion of a risk assessment of the application. For flying people or for flying objects over people the most commonly assessed level is SIL3.

The Apex system implements all of its safety functions to a SIL3 level ensuring that an Apex Hoist and Drive will impose no limits on their creative use.

Learn more about the Kinesys family of TAIT Products.

Explore ranges



Kinesys
Libra
Range



Kinesys
DigiHoist
Range



Kinesys
Elevation
Range

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A TAIT PRODUCT

DESIGNED IN THE UK

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