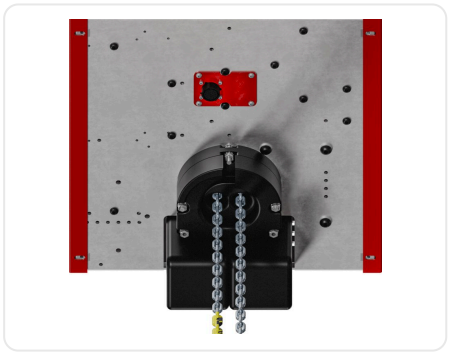
Safety Drop Stop “SDS”



Safety Drop Stop Servo "SDS"



SDS Servo Hoist



Hoist underside



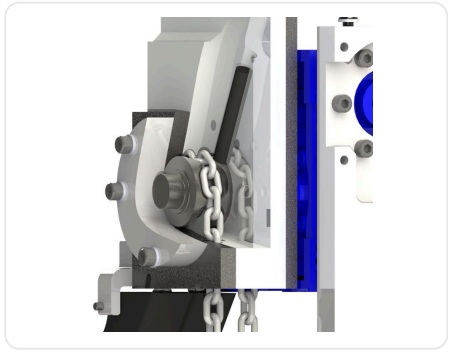
KSHS with trolley



Safety chain



KSHS with rotary union



Chain lube stick

Safety Drop Stop "SDS" Servo Hoist

Series: KSH250S / KSH350S / KSH500S / KSH750S / KSH1000S

Knight leads the industry with its next-generation **KSHS Safety Drop Stop Servo Hoist** (Patent No. 10,099,904) – the smartest and safest hoist in the world. The KSHS line features the exclusive "Safety Drop Stop" (SDS) function with a dual-chain design – one load chain and one redundant safety chain running alongside it.

The line adds advanced functionality for **Intelligent Assist Devices (IAD)**, allowing the operator to position and "float" the load precisely along the "Z" (vertical) axis.

The KSHS line supports a wide range of application solutions thanks to its programmable features and unlimited I/O. Unlike conventional push-button hoists, the SDS Servo Hoist lets the operator simply grip the handle and move the load naturally.

The hoist also includes a **graphite stick inside the gearbox** that lubricates the chain continuously. Replacement sticks can be ordered separately.

Product details

Mechanical

- Dual-chain safety design:
- Speed: up to **241 ft/min [60 m/min]**.
- **125%** safety factor.
- Fail-Safe Brake.
- Proprietary Knight chain – exceptional service life.
- Unlimited chain length (12–18 ft standard).
- Fully sealed worm-drive gearbox.
- **H5** rating (continuous duty cycle).
- Built-in graphite chain lube stick.

Software

- STO – Safe Torque Off.
- Enhanced user interface (UI).
- Ethernet connectivity.
- Programming and diagnostic port.
- Virtual Travel Limits.
- Speed Reduction Zones.
- Impact Limiting.
- Active Damping.
- Knight-exclusive **Float Mode**.
- Programmable overload capability.

Electrical

- Industry-standard **24 VDC, 2 AMP** power supply for custom tooling: grippers, vacuum cups, switches, position sensors, lights, etc.
- Illuminated Run/Stop button. Faster-response enable trigger.
- **240 VAC, single phase, 50/60 Hz.**
- Load sensing: Payload & Handle Load.
- I/O capability: (4) analog inputs/(4) analog outputs; (24) configurable I/O; (8) dedicated inputs; unlimited expansion via Ethernet.
- Status LEDs: blue/green button. Fault LED: red Run-Stop button lights up, twist to release.
- Optional wired pendant or wireless remote control.

SDS Servo Hoist specifications

Model	Capacity lbs [kg]	Max Speed fpm [mpm]	Voltage / Phase
KSH250S-2401	250 lbs [113 kg]	196.85 fpm [60.0 mpm]	240V / 1 phase
KSH350S-2401	350 lbs [158 kg]	241.00 fpm [73.5 mpm]	240V / 1 phase
KSH500S-2401	500 lbs [226 kg]	98.43 fpm [30.0 mpm]	240V / 1 phase
KSH750S-2401	750 lbs [340 kg]	123.03 fpm [37.5 mpm]	240V / 1 phase
KSH1000S-2401	1,000 lbs [453 kg]	82.02 fpm [25.0 mpm]	240V / 1 phase
KSH2000S-2401	2,000 lbs [907 kg]	37.50 fpm [11.43 mpm]	240V / 1 phase

Typical applications

When to use the SDS Servo Hoist

- Automotive and heavy equipment assembly lines requiring **precise, continuous lifting**.
- Applications that need to **hold the load suspended (Float Mode)** at a set position.
- Environments with **high safety standards** (CE, SEMI-S2).
- Integration into automation systems with I/O expandable via Ethernet.
- Replacing conventional hoists to raise productivity and reduce operator fatigue.

Choosing the right model

- **KSH250S / KSH500S:** Light components, electronics assembly stations, medical equipment.
- **KSH350S:** Highest speed (241 fpm) – fast-cycle lines.
- **KSH750S / KSH1000S:** Large parts: engines, gearboxes, housings.
- **KSH2000S:** Extra-heavy loads up to 907 kg – engineered per project.

***Note:** All models are compatible with Knight **RAD4110, RAD6110, RAD7510** aluminum rail systems and the full range of trolley, rotary union and handle accessories. Contact FULLSHARP for advice on the right configuration for your project.

Accessories – Servo controls



Inline handle with trigger KLCA1000 Max 2,000 lbs



Load sensing module + OCI KLCA1002 Programmable



LMM pass-through module KLCA1004 For use with a separate OCI



Electric-pneumatic rotary union KLCA1058 / KLCA1061 Max 400 lbs [181 kg]



Electric-pneumatic rotary union KLCA1059 / KLCA1062 Max 1,000 lbs [454 kg]



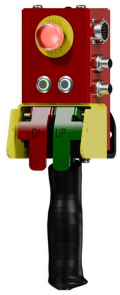
Electric rotary union KLCA1064 Max 400 lbs [181 kg]



Electric rotary union KLCA1065 Max 1,000 lbs [454 kg]



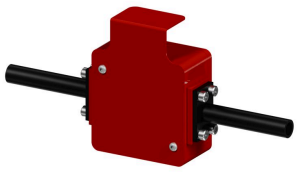
Wireless control KCA1004 / KCA1005 / KCA1006 Range 900 ft [300 m]



2-speed handle + OCI KCA1033 Remote control



Fixture-mounted OCI KCA1014 / KCA1015 Mounts directly to fixture



Load-sensing fixture handle KCA1071 Heavy-duty, high-cycle use

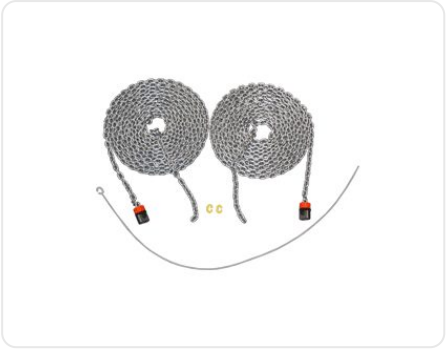


2-speed handle EPDA9600 Non-programmable

Accessories – Chain, trolleys & mechanical



Chain wear gauge KSAA1003 4mm & 5mm chain



Servo chain replacement kit KDSA1010 / KDSA1011 200 – 1,000 lbs



Rotary union adapter KSAA1073 / KSAA1075 Max 1,000 lbs [454 kg]



Quick-connect coupling KSAA1001 / KSAA1002 Max 2,000 lbs [907 kg]



Chain shackle KSAA1004 Max 1,000 lbs [453 kg]



Swivel hook shackle KSAA1007 Max 1,000 lbs [453 kg]



Servo rail brake KSAA1011 KSH250S – KSH1000S



Swivel eye hook KSAD1022 Max 3,200 lbs [1,451 kg]



Trolley – RAD7510 rail KSAA1050 Max 2,500 lbs [1,134 kg]



Trolley – RAD6110 rail KSAA1059 Max 1,600 lbs [725 kg]



Trolley – RAD4110 rail KSAA1048 Max 900 lbs [408 kg]



3KVA disconnect box KCA1018 480VAC → 240VAC

Technical documents

Catalogues

- Industry 4.0 Capabilities PDF
- Knight Rotary Union Brochure PDF
- Servo Systems Brochure PDF

Spec sheets

- KSHS Servo Hoist – Spec Sheet PDF

Manuals

- SDS Servo System – Operation Manual v02.2025 PDF
- SDS Servo System – Operation Manual (Spanish) PDF

Installation guides

- Eye Bolt Safety Cable Installation Instructions PDF
- Knight Rotary Union Guide – Installation PDF
- KSHS Configuration Guide – Configuration Diagram PDF
- Replacing Sieb & Meyer Servo Drive – Replacement Guide PDF
- Safety Cable Installation – End Trucks, Hangers, Trolleys PDF
- Servo System Inspection Checklist – Periodic Inspection PDF
- Knight Servo Configuration Software ZIP

FULL-SHARP AUTOMATIZED VN (FULLSHARP)
Authorized distributor of Knight Global servo hoists and lifting systems in Vietnam
For help selecting a model, configuring your system and receiving an official quotation, please contact a FULLSHARP representative.

Contact us for consultation and a quotation

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Taiwan factory: Zhongli District, Taoyuan City · +886 3-451-8806
Email: sales@fullsharp.com.vn · **Website:** www.fullsharp.com

Specifications may vary with the ordered configuration. Please contact FullSharp for exact details.