# D3 Intelligent Lifting Devices



## Product Description

The D3 intelligent lifting device features a lightweight, durable aluminum housing and proprietary technology. Its industrial processor-controlled servo drive provides stepless proportional lifting speed and precise positioning. By translating the operator's motion into responsive lifting assistance, it acts as an extension of the arm for effortless handling. The D3 helps maximize productivity, reduce physical strain, lower product damage, and prevent workplace injuries.

## Product Features

**01 Handle / Float Modes**

Handle mode enables precise one-hand vertical control. Float mode lets the operator guide the load directly with both hands; applied force determines lifting speed.

**02 Stepless Speed Control**

The servo drive accelerates or decelerates with the operator's force, eliminating drift and supporting both fast travel and fine positioning.

**03 Precision Positioning**

Accurate position control allows stable handling of valuable, delicate, or precision workpieces.

**04 Safe and Reliable**

Soft limits, overload protection, power-loss protection, photoelectric sensing, and anti-sway safeguards support safe operation.

## Compatible Handles

### B4 Coaxial Sliding Handle (Standard)

The lifting speed is determined by handle travel. Longer travel produces faster movement, giving a rapid response for frequent lifting and transfer work.

### B6 Coaxial Force Handle (Optional)

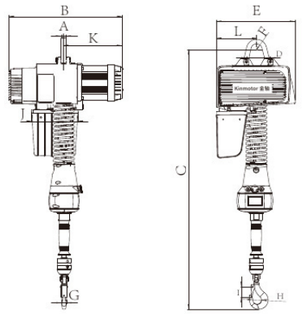
Pressure applied to the handle is converted into stepless lifting speed. The ergonomic design combines intuitive direct control with fine positioning for efficient, labor-saving handling.



## Product Specifications and Dimensions

| Item | D3L012 | D3L025 | D3L050 |
|---|---|---|---|
| Max. load (kg) | 125 | 250 | 500 |
| Lifting speed (m/min) | 0-16 | 0-16 | 0-10 |
| Rated power (kW) | 0.75 | 0.75 | 1.1 |
| Nominal stroke (m) | | 2.8 (custom) | |
| Control mode | | Coaxial sliding handle | |
| Net weight (kg) | 27 | 27 | 33 |
| Chain dia. (mm) | 5.0 | 5.0 | 5.0 |
| Power supply | | AC 380 V (AC 220 V opt.) | |
| Duty class | 3m/M6 | 3m/M6 | 3m/M6 |
| Ambient temp. (C) | | -10 to 55 | |

*Selection data only; final values are subject to the product nameplate.*

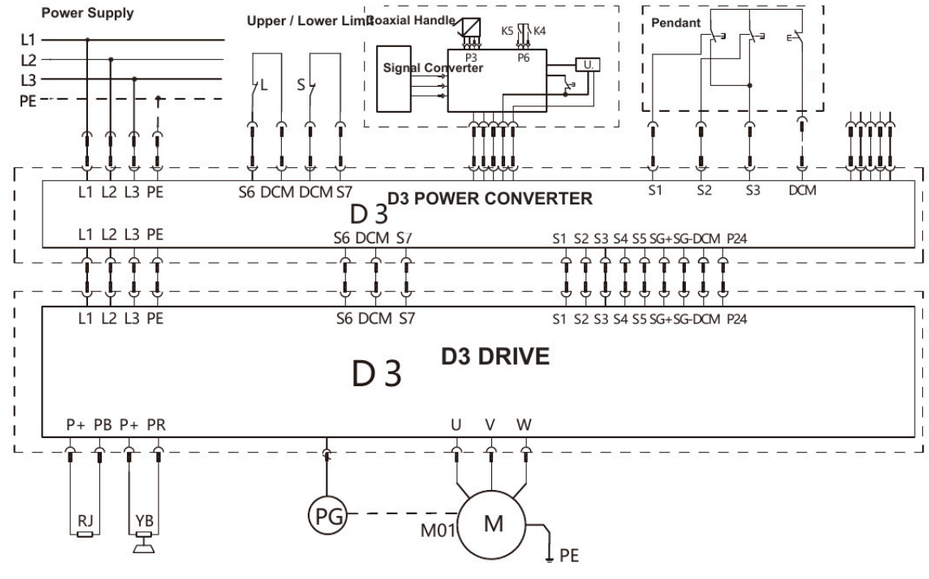



D3 Series Dimensions

### Overall Dimensions (mm)

| Model | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D3L012 | 18 | 424 | 990 | 90 | 296 | R21 | 19 | 32 | 38 | 174 | 205 | 151 |
| D3L025 | 18 | 424 | 990 | 90 | 296 | R21 | 19 | 32 | 38 | 174 | 205 | 151 |
| D3L050 | 18 | 468 | 1000 | 90 | 321 | R21 | 19 | 32 | 38 | 192 | 208 | 171 |

## Wiring Diagram




*Note: Wiring is for reference only. Follow the product manual.*

# Q5 Intelligent Lifting Devices

## Product Features

- Soft Limit
- Handle Mode
- Precision Positioning
- Overload Protection
- Photoelectric Sensing
- Float Mode
- Stepless Speed
- Power-off Protection



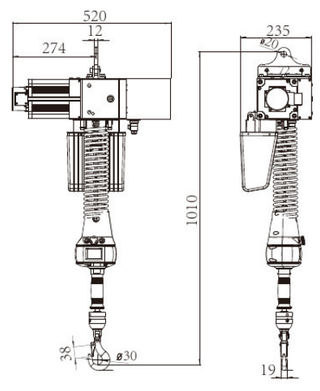
## Product Specifications and Dimensions

| Item | Q5L010 | Q5L020 | Q5L030 | Q5L050 | Q5L060 |
|---|---|---|---|---|---|
| Max. load (kg) | 100 | 200 | 300 | 500 | 600 |
| Lifting speed (m/min) | 0-16 | 0-13 | 0-11 | 0-10 | 0-8 |
| Rated power (kW) | 0.55 | 0.75 | 1.1 | 1.5 | 1.5 |
| Nominal stroke (m) | | | 2.8 (custom) | | |
| Control mode | | | Coaxial sliding handle | | |
| Net weight (kg) | 37 | 37 | 48 | 48 | 48 |
| Wire rope dia. (mm) | 5.0 | 5.0 | 6.3 | 6.3 | 6.3 |
| Power supply | | | AC 220 V (AC 380 V opt. | | |
| Duty class | | | 3m/M6 | | |
| Ambient temp. (C) | | | -10 to 55 | | |

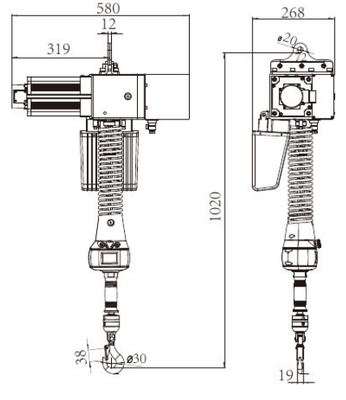
*Selection data only; final values are subject to the product nameplate.*



## Product Specifications and Dimensions

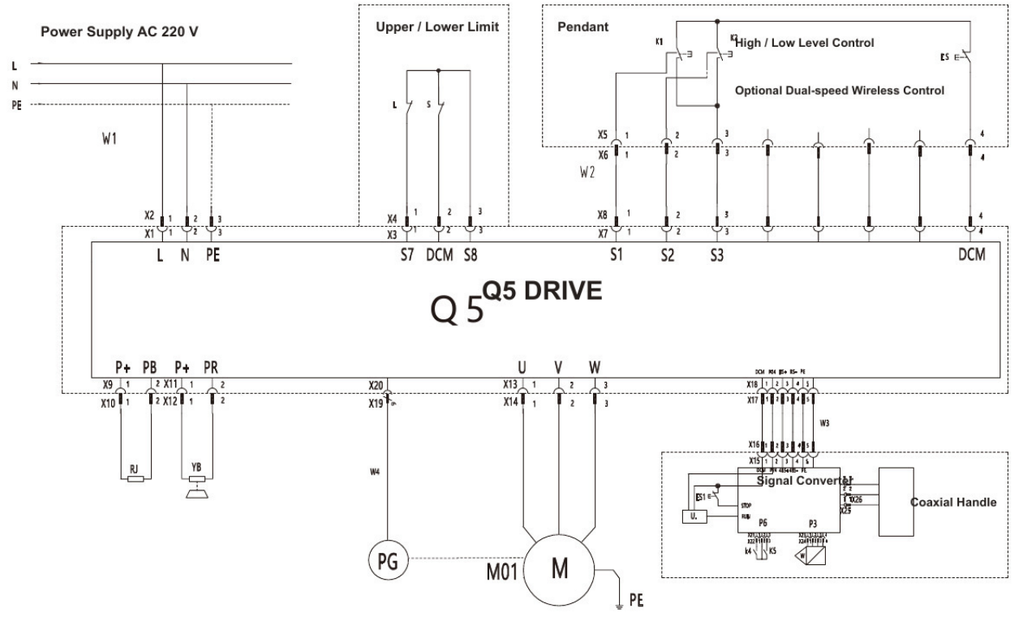



Q5L010 / Q5L020 Series Dimensions




Q5L030 / Q5L050 / Q5L060 Series Dimensions

## Wiring Diagram




*Note: Wiring is for reference only. Follow the product manual.*

# X5 Intelligent Lifting Devices



## Product Description

The X5 intelligent lifting device delivers advanced intelligent material handling through an integrated high-speed dual-core DSP, precision servo system, and ergonomic control algorithms. It combines biomechanics with accurate motion control so the operator can lift and position heavy loads with minimal effort. The system senses operating intent, adapts to load changes, maintains a stable control feel, and helps prevent overloads and operating errors. It remains efficient and dependable in complex, changing work environments.

## Product Features

### 01 Servo Control System

Closed-loop proportional servo control provides precise fine adjustment and smooth stepless speed transitions.

### 02 Innovative Structure

An integrated, serviceable wire-rope drum simplifies rope replacement. Anti-sway and rope-guidance features reduce twisting and tangling.

### 03 Multiple Control Modes

Handle, push-button, and pendant modes can be selected to suit the application and improve ergonomics.

### 04 Wide-range Stepless Speed

Travel speed ranges from 0.05 m/min for precision work to 30 m/min for high-throughput handling.

### 05 Multiple Safety Protections

Software limits, overload protection, power-loss protection, photoelectric sensing, and anti-sway protection support safe operation.

### Optional C1 Handle

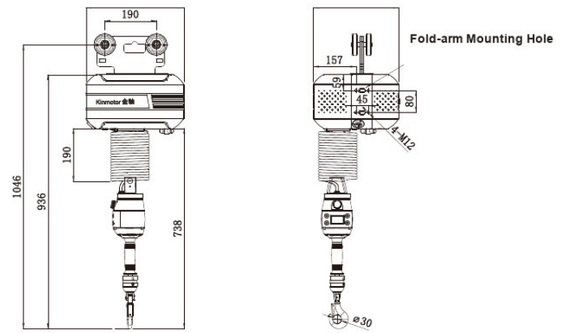
The C1 handle uses an air-fluid slide-valve design and rotates through 360 degrees. A pneumatic and electrical cable bundle ensures stable supply. Its dual-button ergonomic control can be operated overhead, and the standard lifting hook is removable for different tooling.



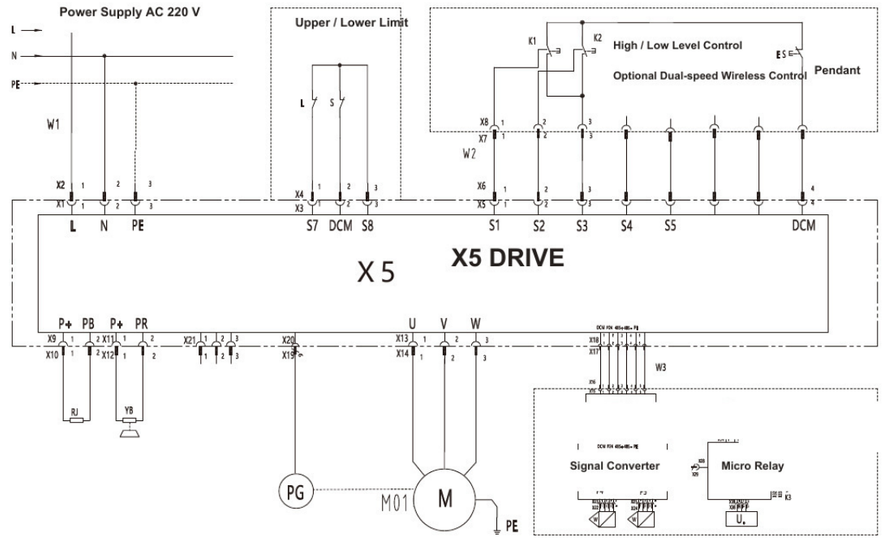
## Product Specifications and Dimensions

| Item | X5S010 | X5S020 | X5S030 | X5S037 | X5S075 |
|---|---|---|---|---|---|
| Max. load (kg) | 100 | 200 | 300 | 375 | 750 (2-fall) |
| Lifting speed (m/min) | 0-30 | 0-30 | 0-26 | 0-22 | 0-10 |
| Rated power (kW) | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| Nominal stroke (m) | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 |
| Control mode | | | Coaxial force handle | | |
| Power supply | | | AC 220 V (AC 380 V opt.) | | |
| Duty class | 3m/M6 | 3m/M6 | 3m/M6 | 3m/M6 | 3m/M6 |
| Ambient temp. (C) | | | -10 to 55 | | |

*Selection data only; final values are subject to the product nameplate.*




## Wiring Diagram




*Note: Wiring is for reference only. Follow the product manual.*

# X3 Intelligent Lifting Devices

## Product Features

- A high-precision steel wire-rope structure replaces the traditional link chain for faster travel and more accurate positioning.
- Soft-limit protection reduces impact risk while allowing a flexible working range.
- Speed ranges from 0.05 m/min for precision control to 35 m/min for rapid handling.
- Stable starting, travel, and landing; densely wound rope resists twisting, while the planetary reducer runs smoothly and quietly.

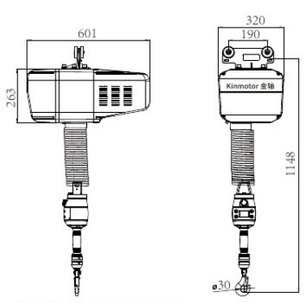


## Product Specifications and Dimensions

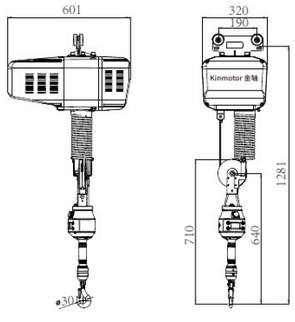
| Item | X3S010 | X3S020 | X3S030 | X3S060 |
|---|---|---|---|---|
| Max. load (kg) | 100 | 200 | 300 | 600 (2-fall) |
| Lifting speed (m/min) | 0-35 | 0-29 | 0-25 | 0-10 |
| Rated power (kW) | 0.8 | 0.8 | 1.1 | 1.1 |
| Nominal stroke (m) | 2.5 | 2.5 | 2.5 | 1.6 |
| Control mode | | | Coaxial force handle | |
| Net weight (kg) | 66 | 66 | 66 | 68 |
| Power supply | | | AC 220 V (AC 380 V opt.) | |
| Duty class | 3m/M6 | 3m/M6 | 3m/M6 | 2m/M5 |
| Ambient temp. (C) | | | -10 to 55 | |

** Lifting speed varies by model and ordered specification.*

*Note: Selection data only; final values are subject to the product nameplate.*




**X3S010 / X3S020 / X3S030 Dimensions**




**X3S060 Dimensions**

# CONFIGURATION DIAGRAM

## Available Handle Configurations



**B4 Coaxial Sliding Handle**

Handle travel directly determines lifting speed. Longer travel produces faster motion for quick response in repetitive handling.



**B6 Coaxial Force Handle**

Applied pressure is converted into stepless lifting speed for intuitive, precise, and efficient operation.



**E3 Remote Stepless Pressure Handle**

For limited overhead clearance or applications where the operator cannot approach the load. Provides extended control travel and helps compensate for inclined or irregular fixtures.



**B7 External Pendant**

Suitable for high lifts and larger loads while maintaining level, convenient control.



**E3 Remote Handle - Stand-alone**

Use where the control cable must remain a set distance from the lifting point or where a dedicated fixture is required.



**T1 Full-touch Handle**

Supports a custom control range for special fixtures. The pendant can be mounted at the required position for flexible up/down control.