

KINOCRANES

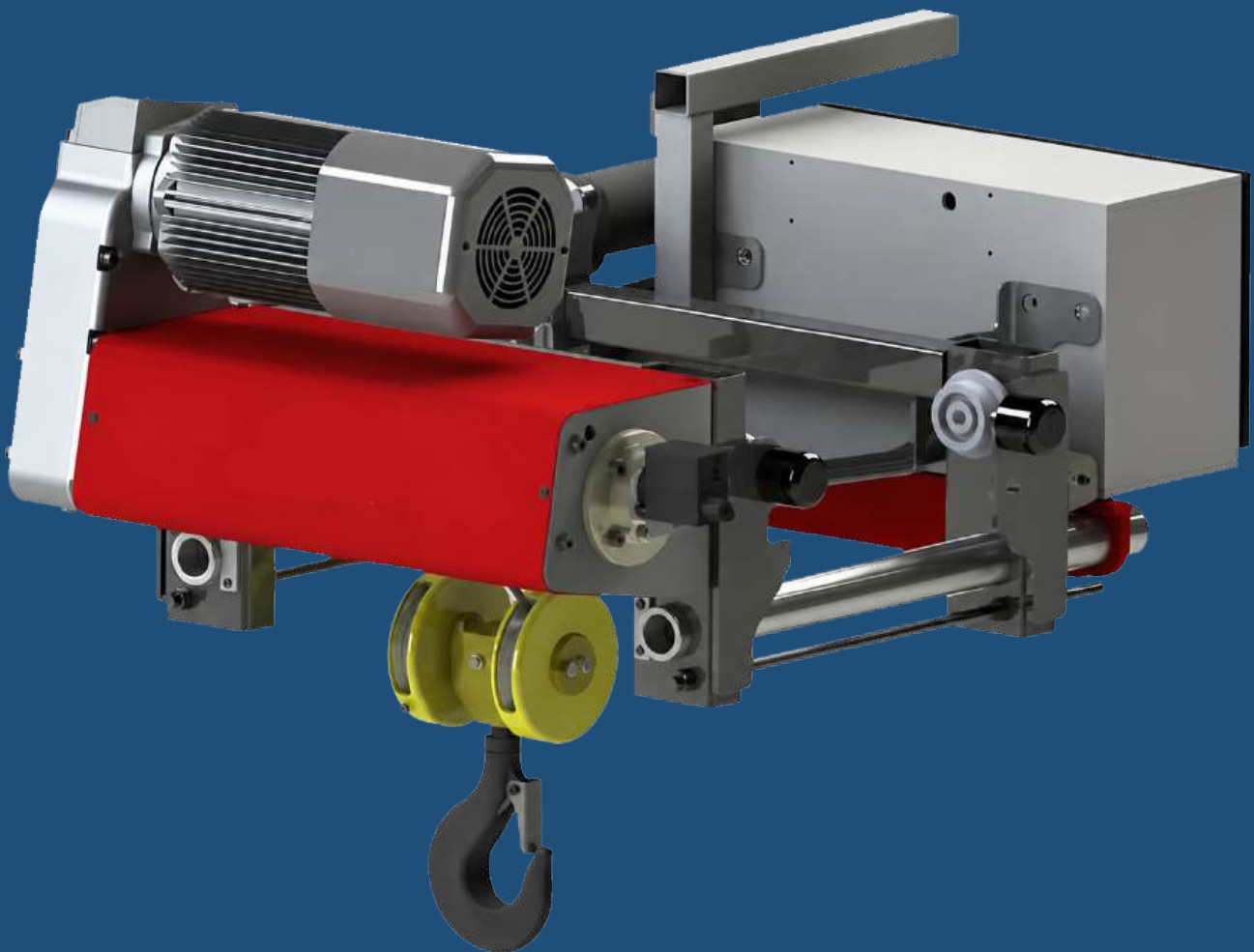
European Crane Technology | kinocranes.com



KN-Series European Wire Rope Hoist

Low-Headroom · Double-Girder Trolley · Suspension · 1 - 80 t

Product Guide - Technical Overview & Specifications



1-80 t

five frame platforms
KN2 - KN6

from 330 mm

low-headroom
C-dimension

CE · FEM · DIN · ISO

certification &
design codes

60 %ED

motor duty rating,
300 starts/h

WHY THE K-SERIES

The hoist your crane is built around.

The KN-series is one wire rope hoist platform for every crane in the plant - single and double girder overhead cranes, gantries and jibs. Five frame sizes cover 1-80 t in six configurations, CE certified and engineered to FEM and DIN codes, with a 19-digit type code that pins down every build exactly.

■ Low headroom, more hook path

The 4-in-1 module sets the motor beside an oversized drum: mounting heights start at ~330 mm on KN2. Under the same roof, the hook simply travels further.

■ Maintenance-free by design

HRC 60 hardened gears lubricated for life with data cast on the housing, adjustment-free disc brakes rated 1,000,000 cycles, galvanized 2,160 N/mm² rope with no re-greasing.

■ Built for hard duty

Class H insulated motors (180 C) at 60 %ED and 300 starts per hour, IP55, independently cooled, every rotor dynamically balanced - and rated in steps to FEM M4-M6 per model.

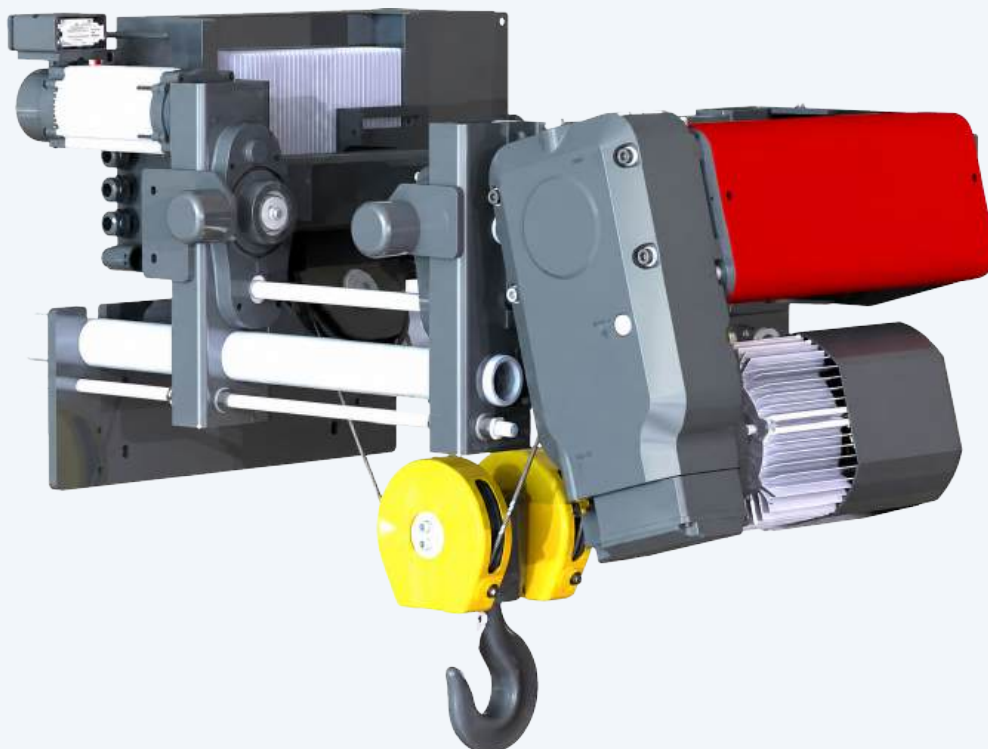
■ Monitored, not guessed

The patented iSS monitor watches 33 conditions, computes the remaining Safe Working Period and senses load to 2 % - alarm at 100 %, lift blocked at 110 %, stop at 125 %.

Five frame platforms

Platform	Max capacity	Duty classes	Rope dia.	Hook (DIN 15401)
KN2	3.2 t	M5 / M6	6 mm	1.6T
KN3	6.3 t	M4 - M6	8 mm	2.5T
KN4 (KNH frame)	12.5 t	M4 - M6	11 mm	5T
KN5	40 t	M4 - M6	15 mm	5V
KN6 (twin motor)	80 t	M4 - M6	15 mm	16T - 25T

Capacity steps within each model by duty: e.g. one KNK5104 hoist rates 12.5 t at M6, 16 t at M5 and 20 t at M4 - classified per FEM 9.511. Configurations: low-headroom, normal-headroom, double-girder trolley, suspension; explosion-proof and cleanroom variants available.



ENGINEERING DETAILS

What the platform is made of

4-in-1 hoisting module

Motor, gearbox, brake and drum integrate into one compact module—the geometry behind mounting heights from ~330 mm and a rigid, service-friendly build.



Class H hoist motor

Dual-winding 6:1 two-speed or inverter motors. Class H insulation, IP55, 60% ED, independent cooling fan, NSK bearings, aluminium frame—every rotor 100% balanced.



Cast-on-data gearbox

HRC 60 ground helical gears in a die-cast aluminium housing, lubricated for the life of the hoist. Oil grade and bolt torques are cast into the metal—not stickers that fall off.



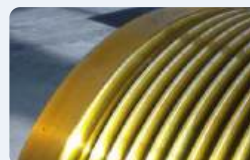
Delayed electronic braking

Inverter drives slow the motor to near zero speed before the disc brake closes, so the brake only holds. Torque at least 200% of rated; pads rated 1,000,000 normal cycles.



Oversized drum, $D/d \geq 40$

Single-layer winding on a drum at least 40× the rope diameter—less rope bending for longer life, and no hook drift while lifting.



Full-circle rope guides

Ductile-iron guides encircle the drum completely, preventing slack and derailed rope; KN5/KN6 use articulated nylon segments—replace only what wears.



iSS safety monitor

33 real-time protections, SWP remaining-life calculation, dual load sensing at 2% accuracy, full fault logs—standard on every hoist; 4G/app access optional.



EVER inverter controls

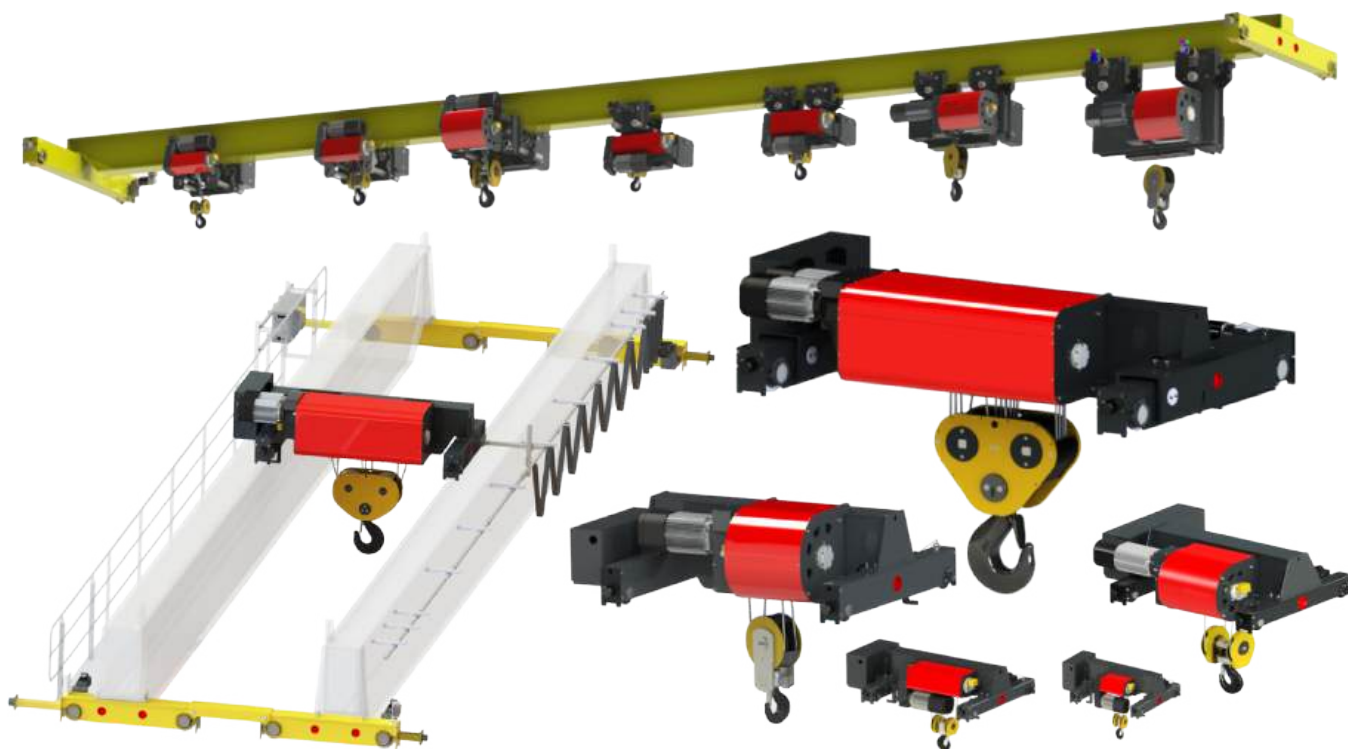
EVER drives from E050 to E560 matched to motor size; ESR light-load speed boost, anti-shock slowdown and anti-sway options; aircraft-plug wiring throughout.



TECHNICAL DATA I

Platform specifications

Capacity range	1 - 80 t across five frame platforms (KN2 - KN6), reeving 1:2 to 2:8
Configurations	Low-headroom · normal-headroom · double-girder trolley · suspension; Ex and cleanroom variants
Duty classes	ISO M4 - M6 / FEM 1Am - 3m, stepped capacity per model, classified per FEM 9.511
Hoisting speeds	Two-speed (6:1) from 2/0.3 to 10/1.7 m/min by model - or stepless inverter control
Lifting heights	Standard steps 6 - 48.5 m by model; custom heights supported by the type code (00-99 m)
Hoist motors	Two-speed D01-D08 (2/0.25 - 23/3.5 kW) or inverter F11-F19 (2.5 - 28 kW); S3-60 %ED, 300 starts/h
Brakes	DC disc, fail-safe, adjustment-free; torque 21 - 200 N·m per motor size (at least 200 % of rated)
Travel speeds	Inverter-controlled 0-20 / 0-25 / 0-32 m/min (travel motors F01-F06)
Power standards	Two-speed: 380-415 V / 50 Hz or 440-480 V / 60 Hz; inverter motors span 380-480 V in one winding
Protection / insulation	Motors IP55, Class H insulation (180 °C), independent cooling, NSK bearings
Wire rope	8x26 galvanized, 2,160 N/mm ² , dia. 6 / 8 / 11 / 15 mm by frame; no re-greasing (35x7 for long lifts)
Hooks	DIN 15401 forged, 1.6T - 25T by frame and capacity; 360° rotation with safety latch
Low-headroom C-dim	KN2 ~330-600 · KN3 ~415-625 · KN4 ~520-720 · KN5 ~850-1,070 mm by flange width (+100 mm margin)
Controls	EVER inverters E050 - E560; dual overload protection at 2 %; iSS monitor standard; IP54/55 panels
Certification	CE certified - current certificates available on request; FEM / DIN / ISO / IEC design regime



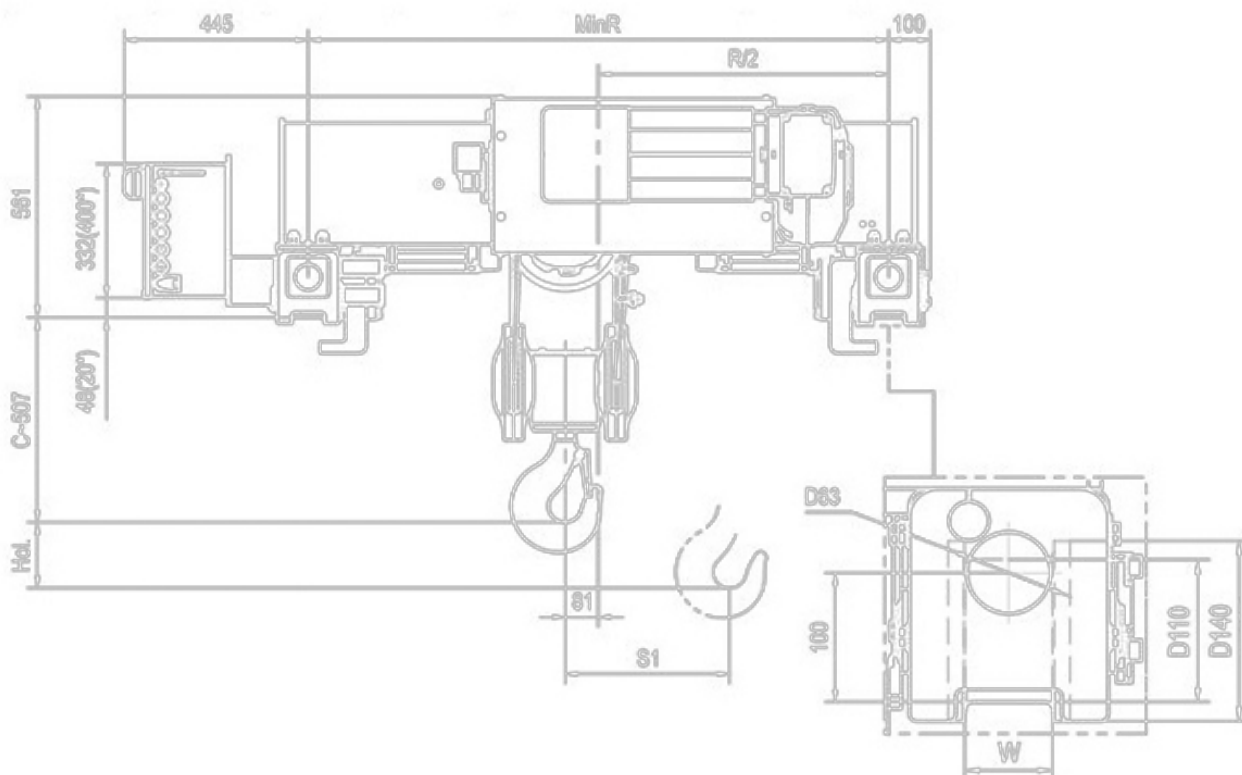
TECHNICAL DATA II

Typical models

Nine of 45 catalogued models - one low-headroom and one double-girder trolley per frame. Every model carries stepped ratings: the same hoist serves three capacities at three duty classes.

Model	Type	Reeving	Capacity @ duty	Hoisting speed (m/min)	HOL steps (m)	Mount / C-dim	Hook
KNK2104	Low-headroom	1:4	2 / 2.5 t @ M6 · 3.2 t @ M5	5/0.8 - 8/1.3 or 0-8	6 / 9.5	C ~330-600 mm	1.6T
KNK3104	Low-headroom	1:4	4 t @ M6 · 5 t @ M5	4/0.7 - 8/1.3 or 0-8	6 - 15	C ~415-625 mm	2.5T
KNH4104	Low-headroom	1:4	8 t @ M6 · 10 t @ M5	4/0.7 - 5/0.8 or 0-5	9 - 16	C ~520-720 mm	5T
KNK5104	Low-headroom	1:4	12.5 t @ M6 · 16 t @ M5 · 20 t @ M4	5/0.8 or 0-5	7.5 - 18	C ~850-1,070 mm	5V
KNK3104D	DG trolley	1:4	4 t @ M6 · 5 t @ M5 · 6.3 t @ M4	4/0.7 - 8/1.3 or 0-8	6 - 15	gauge 1,200-1,700	2.5T
KNH4104D	DG trolley	1:4	8 t @ M6 · 10 t @ M5 · 12.5 t @ M4	4/0.7 - 5/0.8 or 0-5	9 - 26	gauge 1,400-3,200	5T
KNK5104D	DG trolley	1:4	12.5 t @ M6 · 16 t @ M5 · 20 t @ M4	4/0.7 - 6.3 or 0-10	7.5 - 48.5	gauge 1,400-4,800	5V
KNK6204D	DG trolley	2:4	25 t @ M6 · 32 t @ M5 · 40 t @ M4	4/0.7 - 6.3/1.1 or 0-8	7.5 - 35.5	gauge 2,000-4,200	16T
KNK6208D	DG trolley	2:8	50 t @ M6 · 63 t @ M5 · 80 t @ M4	2/0.3 - 3.2/0.5 or 0-4	7 - 17.7	gauge 2,400-4,200	25T

Add 100 mm safety margin to low-headroom C-dimensions; hoist weights depend on motor choice (+W0). Full data for all 45 models - dimensions, weights, flange ranges, inverter pairings - in the selection manual, available on request.



QUALITY YOU CAN AUDIT

Manufacturing & testing

Every KN-series hoist ships from the same audited Henan plant that builds our complete cranes.

Tested component by component

14 factory test categories: 100 % dynamic balancing of every rotor, stator insulation / surge / withstand testing, motor dynamometer curves, gearbox pressure-tightness testing, CMM inspection of housings, full-life limit-switch testing, and hydraulic load calibration of every safety monitor. Every hoist passes a powered full-function test and load test before dispatch.

Certified and audited

Products carry **CE certification**, with current certificates available on request. The 15,000 m² plant was assessed by independent auditor V-Trust in a full supplier assessment; Schneider Electric components are standard and spare parts ship in 1-7 days. Products are exported to the EU, North and South America and Southeast Asia.

