

The new monorail trolley hoist

Yale YGK



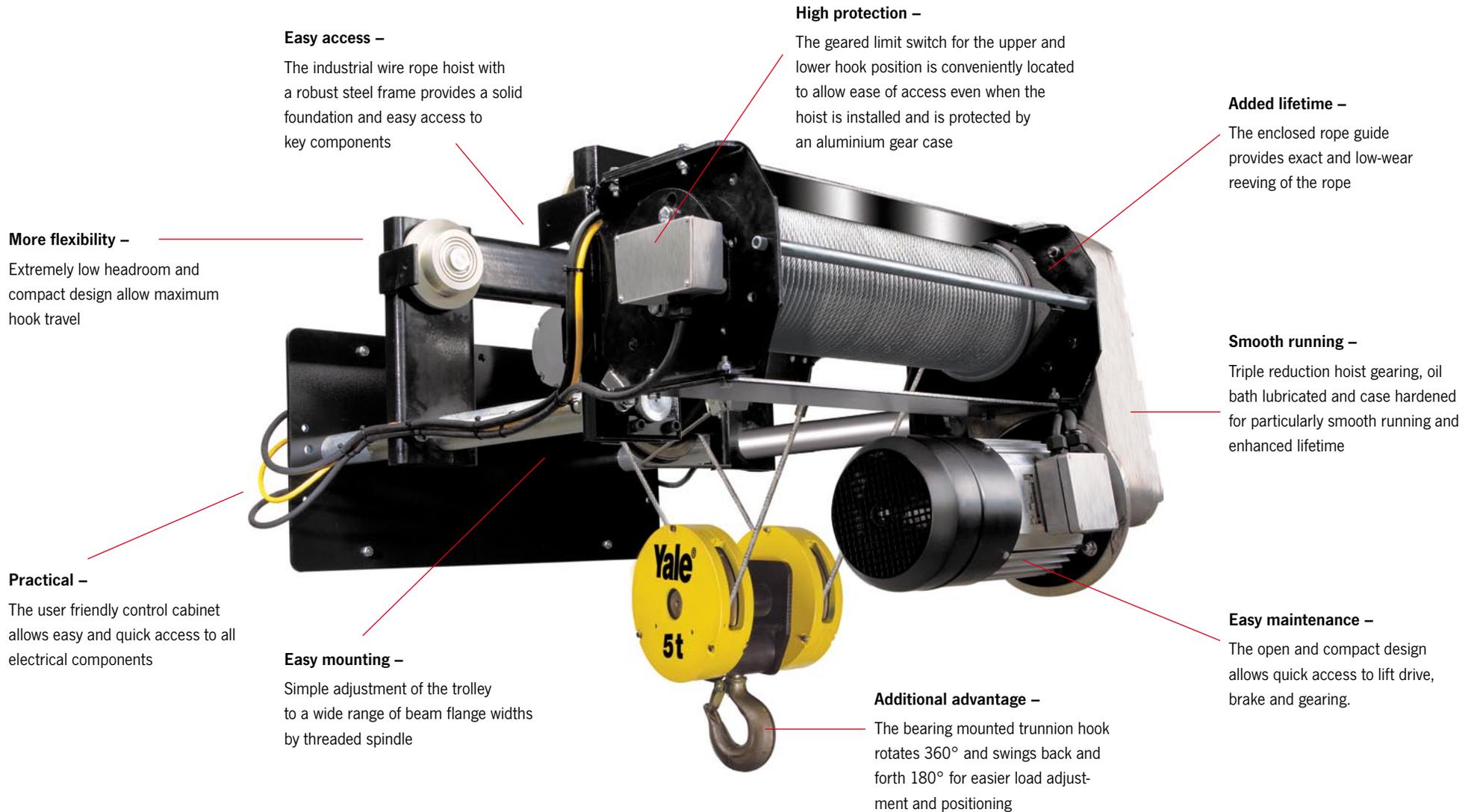
Yale Industrial
Products
GmbH



Yale

- 1877 Yale designs the first spur geared hand chain hoist incorporating the Weston screw-and-disc type load brake. The design principle is used today for almost all hand chain hoists.
- 1936 Start of hoist manufacture in Velbert with production of the world renowned Yale Pul-Lift® ratchet lever hoist. This robust and reliable tool was (and still is) the key product establishing Yale's reputation in hoisting technology in Europe and abroad. To date more than one million Yale Pul-Lift® units have been manufactured at the Velbert plant.
- 1985 A new era began with the formation of Yale Industrial Products GmbH. By continuous and innovative product development and expanding the international network through Yale sales organisations and distributors Yale Industrial Products GmbH has gained a leading position for hoisting equipment.
- 2002 Yale presents the Yalelift 360. Areas of operation as well as operator conditions have been improved considerably. Innovative thinking and design give additional flexibility, the operator is no longer forced to work in the danger zone near the load.
- 2008 Yale starts production for the new electric chain hoist model YaleVego model CPV.
- 2009 Yale presents the electric wire rope hoist model YGK and expands its product range to wire rope hoists with capacities up to 15 t.

The advantages at a glance



Wire rope hoist features



Hoist motor & brake

Motors designed and manufactured specifically for hoisting services acc. to FEM with high motor rating and duty cycles. Protected to IP 55, insulation class F.

The motor is located outside the rope drum permitting good cooling and serviceability.

Motor temperature control as standard.

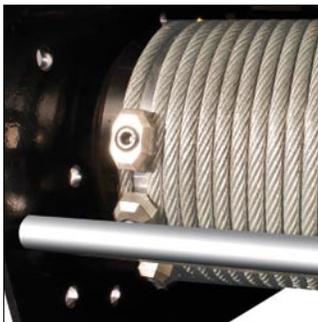
Low maintenance brake, no readjustment necessary, protected to IP 65.



Rope guide

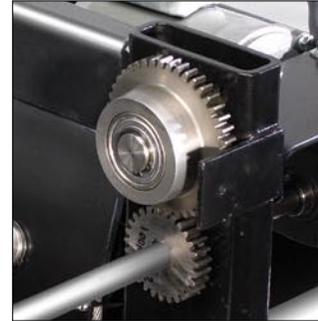
Proven enclosed low wear rope guide made of glass reinforced polyamide.

The rope guide ensures guiding and tensioning of the rope full 360° to avoid slack rope and subsequent damage to the rope.



Rope fixation & rope change

The rope can be exchanged and maintained quickly due to three screwed rope clamps and an asymmetrical wedge socket. The open design allows easy maintenance.



Traction drive

Ideal handling characteristics as two wheels are driven, one on each side of the frame. Trolley wheels are mounted on prelubricated, encapsulated ball bearings.

The cambered profile is suitable for parallel and inclined beam profiles.

Worm gear drive for smooth starting and stopping at two speeds.

Extremely low headroom trolley for maximum lifting height.



Rope drive & bottom block

Optimised proportion of drum and wheel diameter for low wear and tear of the rope.

Flexible and long-life steel rope.

Easily accessible rope drum for quick rope exchange.

Robust bottom block made of glass reinforced polyamide.

Rotating and tiltable load hook trunnion style for easier load adjustment and positioning.



The adjacent picture shows the bottom block for a 2/1 reeving

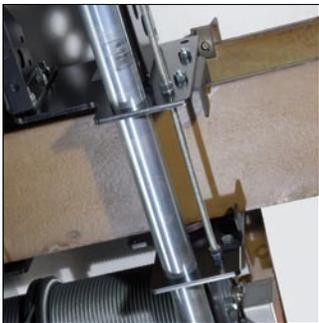
! Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose.

Safety features



Geared limit switches

The geared limit switch for the upper and lower hook position is conveniently located to allow ease of access even when the hoist is installed and is protected by an aluminium gear case



Adjustment to beam flange

Simple adjustment of the trolley to a wide range of beam flange widths by threaded spindle

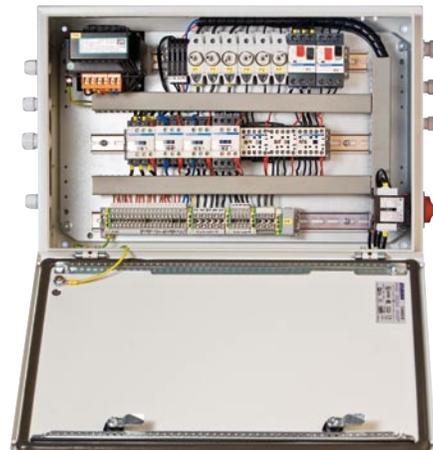


Overload prevention device

prevents lifting excessive loads

Features control cabinet

- Control cabinet (600 x 400 x 200 mm)
- Protected to IP 55 (acc. to EN 60 529)
- Temperature range -20° C up to +40° C
- Increased operating safety through 42V control voltage
- Master control relay/emergency stop contactor as standard for increased safety
- Main switch
- Motor protection switch for both trolley and hoist drives each
- Individual fuses for hoist, trolley (and crane)
- Control transformer with integrated power supply for constant current supply to the brake, input and output separately fused
- Easily accessible strip terminal
- Cable entry point by screwed cable glands.
- Additional space for terminal blocks, contactors, fuses and motor protection switch for crane control



Features

Scope of delivery

- Monorail trolley with extremely low headroom as standard
- FEM classification 2m. As required (with appropriate changes to lifting capacity resp. duty cycle) the model YGK can also be re-classified to 3 m.
- Motor protected to IP55 as standard.
- Standard operating voltage: 400V, 3-phase, 50Hz, alternatively 460V, 3-phase, 60Hz
- Control cabinet with contactors (42V control voltage)
- Phase and motor monitoring
- Two-speeds for lifting and traction drive each
- Hoist motor with thermal overload protection and limit switch
- Rubber buffers for trolley
- CE certified and „Tested Safety“ approval by the German BG (Berufsgenossenschaft)

Option

- Other operating voltages
- Two-speed pendant control for crane travelling, trolley and hoist control
- Remote control
- Control cabinet with contactors for crane control
- Other beam flange widths
- (Festooned) cable systems

Technical data model YGK

Model	Capacity in kg/reeving	FEM/ISO	Lifting height m	Rope diameter mm	Lifting speed m/min	Hoist motor kW	Hoist motor rpm
YGK-E 1.6-6/12	1600/2	2m/M5	12	6.4	6/1.5	2.2/0.56	3000/750
YGK-E 3.2-5/6	3200/4	2m/M5	6	6.4	5/1.3	3.7/0.93	3000/750
YGK-E 3.2-5/12	3200/4	2m/M5	12	6.4	5/1.3	3.7/0.93	3000/750
YGK-E 5-5/7	5000/4	2m/M5	7.5	9	5/1.3	5.6/1.4	3000/750
YGK-E 5-5/12	5000/4	2m/M5	12	9	5/1.3	5.6/1.4	3000/750
YGK-E 10-5/7	10000/4	2m/M5	7.5	12	5/1.3	11/2.8	3000/750
YGK-E 10-5/12	10000/4	2m/M5	12	12	5/1.3	11/2.8	3000/750
YGK-E 15-4/7	15000/4	2m/M5	7.5	15	4.5/1.0	15/3.7	3000/750
YGK-E 15-4/12	15000/4	2m/M5	12	15	4.5/1.0	15/3.7	3000/750

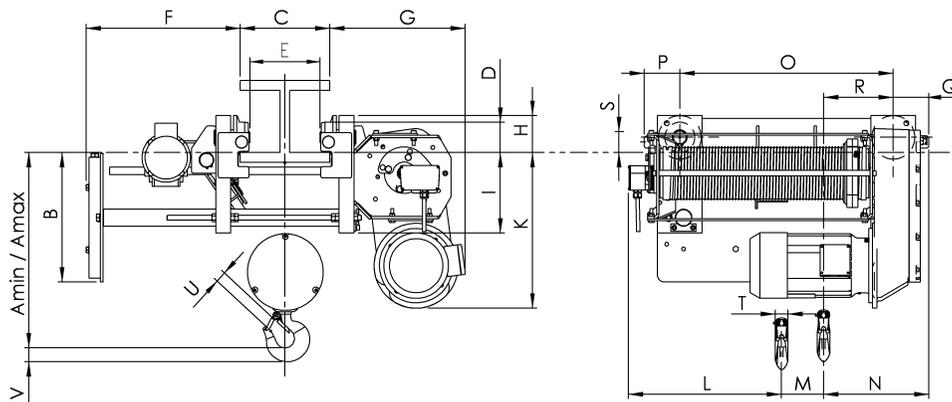
Technical data model YGK

Model	Capacity in kg/reeving	FEM/ISO	Electric trolley travel speed m/min at 50 Hz	Electric trolley motor kW at 50 Hz	Electric trolley motor U/min	Beam flange width mm	Weight kg
YGK-E 1.6-6/12	1600/2	2m/M5	12/4	0.20/0.06	1500/500	219 - 356	283
YGK-E 3.2-5/6	3200/4	2m/M5	12/4	0.37/0.17	1500/500	219 - 356	317
YGK-E 3.2-5/12	3200/4	2m/M5	12/4	0.37/0.17	1500/500	219 - 356	363
YGK-E 5-5/7	5000/4	2m/M5	14/4,5	0.37/0.17	1500/500	206 - 356	408
YGK-E 5-5/12	5000/4	2m/M5	14/4,5	0.37/0.17	1500/500	206 - 356	476
YGK-E 10-5/7	10000/4	2m/M5	12/4	0.56/0.19	1500/500	206 - 356	794
YGK-E 10-5/12	10000/4	2m/M5	12/4	0.56/0.19	1500/500	206 - 356	862
YGK-E 15-4/7	15000/4	2m/M5	12/4	0.75/0.25	1500/500	206 - 356	1284
YGK-E 15-4/12	15000/4	2m/M5	12/4	0.75/0.25	1500/500	206 - 356	1415

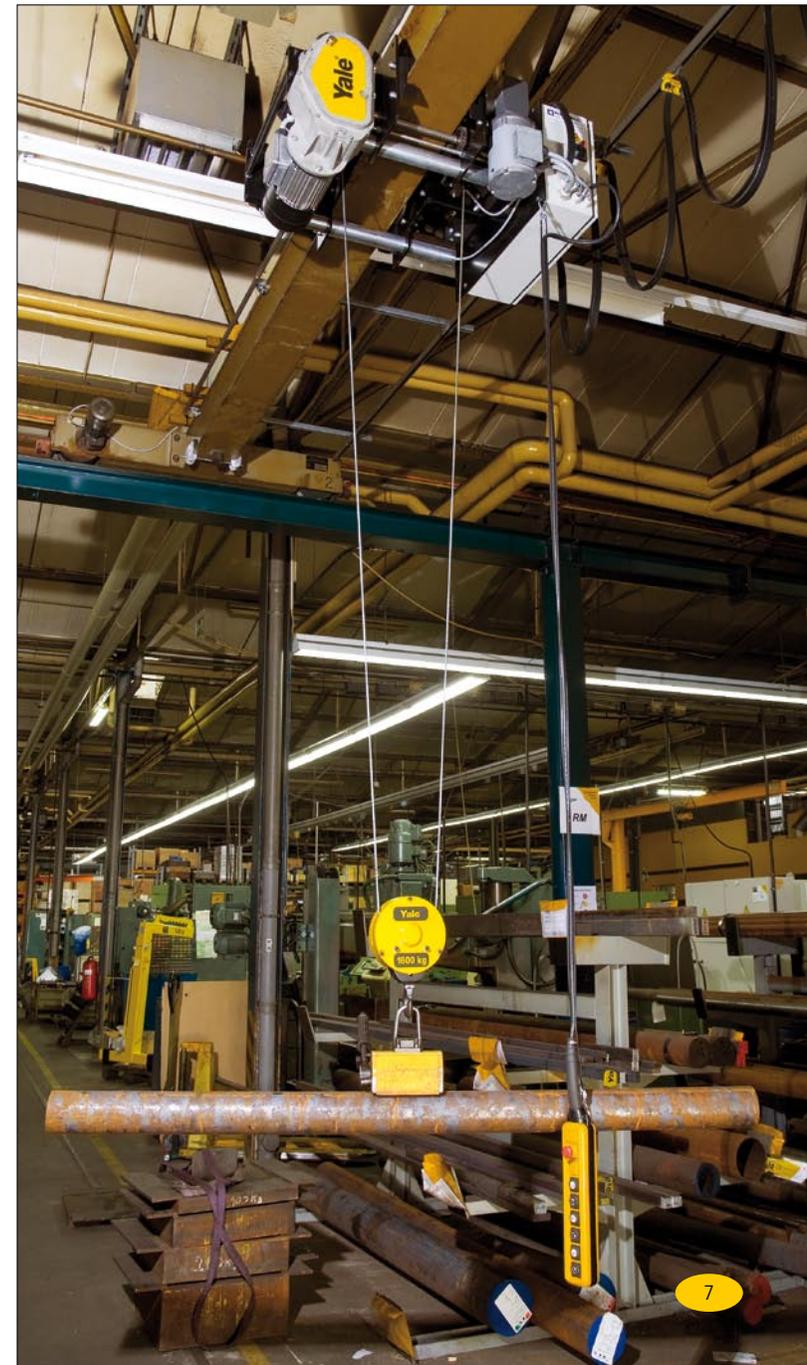
**Yale wire rope hoist YGK
with extremely low headroom trolley
capacities 1.6 - 15 t**

Dimensions model YGK

Model YGK-E	1.6-6/12	3.2-5/6	3.2-5/12	5-5/7	5-5/12	10-5/7	10-5/12	15-4/7	15-4/12
Amin., mm	400	406	406	508	508	616	616	753	753
Amax., mm	502	508	508	535	535	673	673	788	788
B, mm	270	270	270	476	476	540	540	514	514
Cmin., mm	219	219	219	206	206	206	206	359	359
Cmax., mm	356	356	356	356	356	356	356	508	508
D, mm	95	95	95	102	102	152	152	178	178
Emin., mm	160	160	160	140	140	114	114	256	256
Emax., mm	296	296	296	289	289	264	264	405	405
Fmin., mm	464	464	464	611	611	742	742	789	789
Fmax., mm	464	464	464	760	760	891	891	938	938
G, mm	368	375	375	454	454	575	575	611	611
H, mm	156	156	156	127	127	175	175	229	229
I, mm	165	165	165	270	270	359	359	356	356
K, mm	324	324	324	527	527	645	645	641	641
L, mm	365	375	635	524	778	532	791	597	870
M, mm	178	89	178	140	225	143	229	155	251
N, mm	327	406	406	359	359	460	460	548	548
O, mm	470	470	819	727	1060	765	1108	873	1241
P, mm	149	149	149	120	120	159	159	178	178
Q, mm	251	251	251	-	-	-	-	171	171
R, mm	76	156	156	238	238	302	302	368	368
S, mm	35	35	35	35	35	51	51	45	45
T, mm	23	34	34	43	43	55	55	69	69
U, mm	25	36	36	43	43	56	56	77	77
V, mm	27	37	37	46	46	66	66	76	76



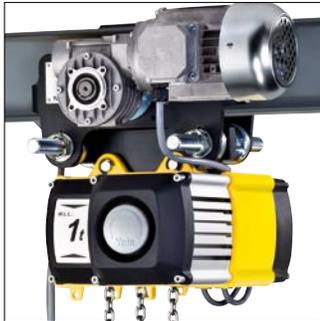
Other beam flange widths upon request!



The comprehensive
Yale product range also offers:



- Floor-mounted jib cranes
- Wall-mounted jib cranes
- Gantry cranes
- Workshop cranes



- Electric chain hoists
- Pneumatic chain hoists



- Hand chain hoists
- Hand chain hoists with integrated low headroom trolley
- Trolleys
- Hoists for operation in explosion endangered environments

Please contact your Yale distributor for questions
concerning crane components
and construction



Certified since November 1991

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