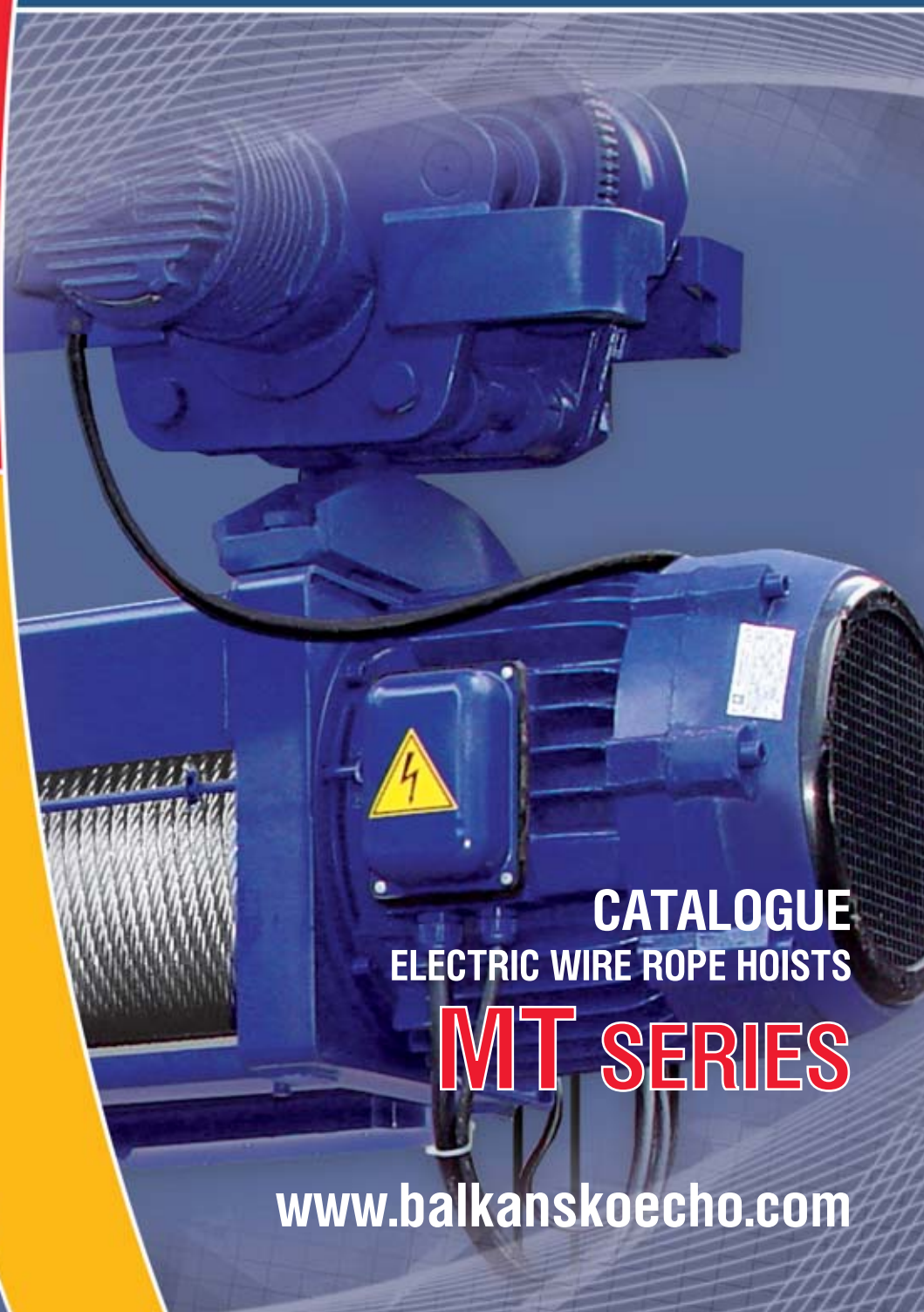




BALKANSKO BULGARIA ECHO

PRODUCTION OF
ELECTRIC HOISTS, ELECTRIC MOTORS,
CRANES AND CRANE COMPONENTS



CATALOGUE
ELECTRIC WIRE ROPE HOISTS

MT SERIES

www.balkanskoecho.com

CATALOGUE WIRE ROPE HOISTS



BALKANSKO ECHO

CERTIFICATES

Certificate

Standard: **ISO 9001:2008**

Certificate Registr. No: **75 100 40487**

TUV Rheinland InterCert Kft. certifies:

Certificate Holder: **BALKANSKO EHO EOOD**
BG - 5460 village of Kravenik
Sevlievo municipality, Gabrovo region
Bulgaria
Including production sites according to annex

Scope: **Design, production and sales of material handling equipment - electric hoists, crane components, induction motors, bridge and cantilever cranes and other unique material handling structures, also in explosion-proof modification.**

An audit was performed. Proof has been furnished that the requirements according to ISO 9001:2008 are fulfilled.

Validity: **The certificate is valid from 2010.11.19 until 2013.11.07**
First certification: 2007

Sofia, 2010.11.19

Accredited certification body
TUV Rheinland InterCert Kft.
H-1132 Budapest, Váci út 48/B-6
Certification branch office in Bulgaria
TUV Rheinland Bulgaria EOOD
BG-1000 Sofia, SA Tradeva Str.

ФЕДЕРАЛЬНАЯ СЛУЖБА
ПО ЭКОЛОГИЧЕСКОМУ, ТЕХНОЛОГИЧЕСКОМУ И АТОМНОМУ НАДЗОРУ

РАЗРЕШЕНИЕ № РРС 00-38580

На применение

Оборудование (техническое устройство, материал):
Тази электрические канатные типов Т и МТ
грузоподъемностью до 50 т.

Код ОКП (ТН ЕОД): 31 7400 (8425 11 900 0)

Изготовитель (поставщик): Фирма "БАЛКАНСКО ЕХО" ЕООД
(Република България).

Основание выдачи разрешения: Техническая документация, заключение
экспертизы промышленной безопасности АНО СП "АКАДЕММАШ"
№ 2/01-10 от 17.03.2010 г., сертификат соответствия ООО "СЕРКОНС"
№ РОСС ВГАВ28.В02876 от 14.10.2009 г.

Условия применения:

- Соблюдение требований "Правил устройства и безопасной
эксплуатации грузоподъемных кранов" (ПБ 10-382-00).
- Выполнение мероприятий, изложенных в заключении экспертизы
промышленной безопасности АНО СП "АКАДЕММАШ" № 2/01-10
от 17.03.2010 г.

Срок действия разрешения **до 27.05.2015**

Дата выдачи **27.05.2010**

Заместитель руководителя
Н.А. Фадеев

РОССИЙСКАЯ ФЕДЕРАЦИЯ
СЕРТИФИКАТ СООТВЕТСТВИЯ
(обязательный сертификат)

№ **С-ВГАВ28.В04658** ТР **1208603**

ЗАКАЗЧИК: «Балканско Ехо», ЕООД
Адрес: 5460 С. Кравеник, общ. Севлиево, обл. Габрово, България.

ИЗГОТОВИТЕЛЬ: «Балканско Ехо», ЕООД
Адрес: 5460 С. Кравеник, общ. Севлиево, обл. Габрово, България.

ОРГАН ПО СЕРТИФИКАЦИИ: ПРОДУКЦИОННОЕ ОБЩЕСТВО С ОГРАНИЧЕННОЙ ОТВЕТСТВЕННОСТЬЮ
«СЕРКОНС», ОГРН 107746279665, Адрес: р.г. Москва, ул. Дарьиновская, д.20, стр.16, код
по ОК 31.11.11: Федеральное агентство по техническому регулированию и метрологии,
ПОДТВЕРЖДАЕТ, ЧТО: Тази электрические канатные типов Т и МТ с/м до 50
т, их модификации, комплектующие изделия,
серийный выпуск.

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ: «О безопасности машин и оборудования»
ТЕХНИЧЕСКОГО РЕГЛАМЕНТА (Постановление Правительства
Российской Федерации от 15 сентября
2009 г. № 753),
ГОСТ 22584-96 (разд. 3-3)

ПРОВЕДЕННЫЕ ИССЛЕДОВАНИЯ: Протокол сертификационных испытаний № 151-22-09/12 от
испытаний в измерении: 25.09.2012 г. Испытательная лаборатория "ДСМ" ООО
"Трансисистема", рег. № РОСС RU.0001.21AB61, адрес: 117036 г. Москва, ул. Дарьиновская
Удлинки, д.9/11, корп. 2

ПРЕДСТАВЛЕННЫЕ ДОКУМЕНТЫ: Служба сертификации: №.

СРОК ДЕЙСТВИЯ СЕРТИФИКАТА СООТВЕТСТВИЯ: с **25.09.2012** по **24.09.2017**

Руководитель (подписатель руководителем)
сервиса по сертификации
И.Д. Тонког

Заместитель (подписатель)
сервиса по сертификации
К.П. Чумов

THE COMPANY

Dear customers, colleagues and friends,

In front of you is the catalogue which contains valuable and useful information about the manufacturing activity and high-quality production of one of the leading companies for travel and hoist systems worldwide.

“Balkansko Echo” company is unique with its three separate factories situated on a total manufacturing area of over 20 000 m², more than 600 metal-working machines and more than 550 dedicated and highly qualified specialists, as all this makes the company independent from outer subcontractors and cooperative deliveries.

The company is designing, constructing, manufacturing, assembling and servicing the following:

- electric wire rope hoists of “T” and “MT” series with a lifting capacity of up to 50 t and a lifting height of up to 120 m, which are to be known for their exceptional reliability and durability;
- electric chain hoists, with a lifting capacity from 0,125 t to 2 t;
- single and double girder electric traveling cranes with a control from the cabin and from the ground with a lifting capacity of up to 100 t;
- bracket electric cranes with a lifting capacity from 1t to 10 t and outrigger length of 10 m;
- induction cone hoist motors, single and double- speeded, with a built-in brake and a thermo-protection from 0,12 kW to 30 kW;
- induction, mono-phase and three-phase cylindrical electric motors from 0,55 kW to 37 kW;
- geared motors for setting in motion the running gears of travel and hoist systems;
- lifting capacity limiting devices for all kinds of hoists and crane travel and hoist systems;
- complete spare parts range for all products.

All company’s products are manufactured in a general-industry, fire-safe and explosion-proof execution, and they can operate in different climate zones, including chemically aggressive environment.

The company’s system for quality management and control has been certified according to ISO 9001:2008 by TÜV Rheinland.

The company’s production has been certified according to the requirements of the countries where it is used.

By the end of 2010, “Balkansko Echo” had manufactured and sold more than 20 000 electric hoists, including 5000 explosion-proof ones, more than 600 cranes and over 50 000 general-industry and explosion-proof electric motors.

The production of “Balkansko Echo” company proves every day its high-tech qualities, security and reliability in different countries, like Russia, Kazakhstan, Belarus, Ukraine, Czech Republic, Slovakia, Turkey, Iran, etc. We are proud to announce that our goods are the only ones in the world with a 36-month warranty.

The aim of this catalogue is to provoke your interest to the goods we manufacture with great responsibility.

By this catalogue we would like to turn to you, our customers, and declare our willingness to make the most suitable product for your manufacturing, and also to assure you that you’ll make the best choice.

Please use the following telephone numbers for a twenty-four-hour contact with us: +35967302220; +359885000555; +359888223344 or you can write to us at balkanskoecho@abv.bg

ELECTRIC WIRE ROPE HOISTS

The wire rope hoists of **MT series** are the inheritors of the world’s most popular series T of wire rope hoists. By keeping the basic technical features and thanks to the use of a new body construction, contemporary steel ropes, hooks, etc., we offer our customers a series of hoists with much extended opportunities like capacity, lifting speed and conveying speed. This expands new opportunities for a more efficient operation of our products.

CATALOGUE WIRE ROPE HOISTS

Technical data:

Voltage: 380- 400V (special executions- by request)

Frequency: 50 Hz (special executions- by request)

Operational voltage: 24V, (42V)

Class of protection IP54 (EN 60529)

Operational conditions *

- climate- normal, tropical or marine

- normal or chemically aggressive environment

- temperature of the environment

1) normal: from -25°C up to +40°C

2) low: from -40°C up to +40°C

- relative air humidity- 80% at 20°C

- in closed rooms or in the open air under a shelter by a normal fire-hazard

* special execution by a request

STRUCTURE

The hoists are based on a module construction consisting of the following elements:

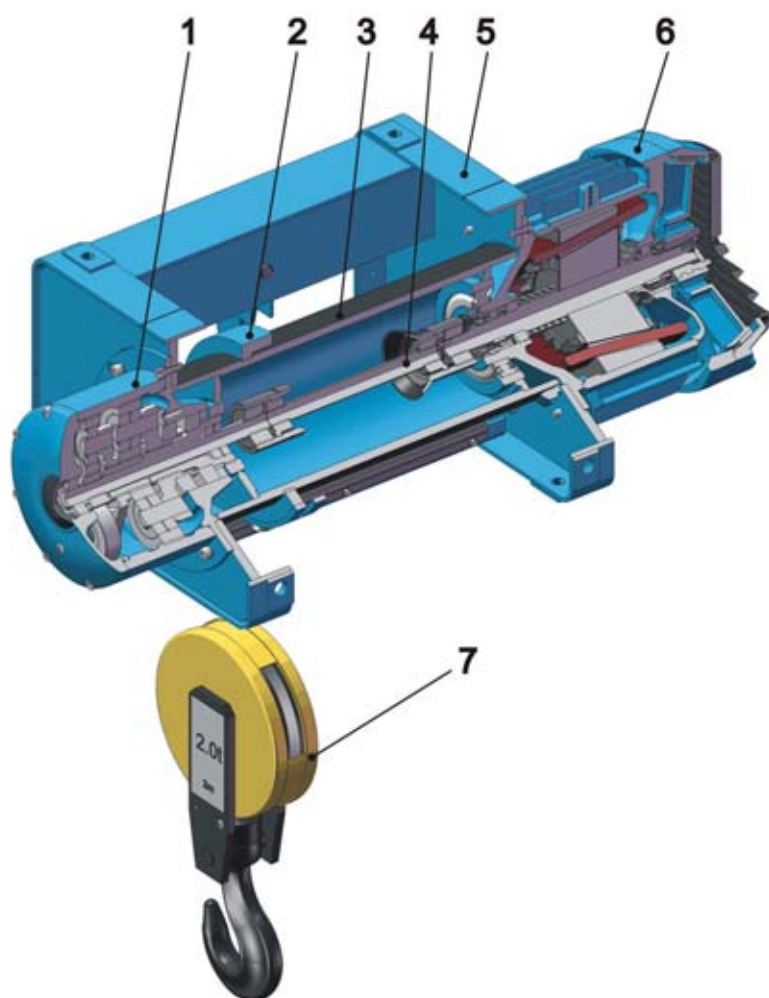
1. REDUCTION GEAR

The two-stepped planetary reduction gear is positioned out of the roll or the body of the hoist.

The solid construction allows a reliable torque transmission towards the roll of the machine. The use of high-quality materials during the manufacturing process of the reduction gear is a guarantee for its reliable performance. Its positioning allows an easy service during the period of use.

2. ROPE LEAD

The rope lead ensures the correct arrangement and lead of the rope in the screw channel of the roll, and also its normal going out of it. Apart this, it also functions for operating the cut-offs of the lifting mechanism, which are fixing the end up and end down position of the hook.



3. ROLL

The roll is positioned axle-like to the reduction gear and the electric motor. It has got ball bearings at the front guards of the electric motor and the reduction gear. It has also been designed with a screw channel for positioning the rope, according to DIN 15020.

4. TOOTHED CLUTCH

A construction that allows safe transmission of the motor torque to the reduction gear shaft, with sufficient possibility for axial and angle compensation- all this guarantees a normal and safe performance of the machine.

5. BODY

It's a steel-welded construction with a prism form made of bended profiles.

The construction has got a sufficient strength and allows different kinds of reeving systems to be realized, and also different kinds of suspensions and executions without the use of additional elements.

6. LIFTING ELECTRIC MOTOR

It's a three-phase induction motor with a cone rotor and a built-in brake. Typical for it is its simple construction giving it a great reliability and maintainability. The completely automatic brake allows safe hold of the load. It is simple in service and adjustment during the process of operation.

Class of protection IP54, IP22 (EN 60529) for the brake; class of insulation F (H- by agreement with the customer).

We can also offer double-speeded executions with a ratio of micro-speed : main-speed- 1:4; 1:6, or stepless ones by request. All electric motors are equipped with a coil overheating protection.

There is a stop of the end hook positions built-in in the electro motor's terminal box.

7. HOOK

The hook construction and the roller block of the reeving are performed according to the requirements of DIN 15400.

CONTROL BLOCK

The control block has been designed as a cabinet with electro appliances and it ensures all requirements for safety and elements protection. It is mainly based on circuit closer control of the electro motors, with an option for performing radio or frequency control. Class of protection IP54.

CONTROL DESK

Contemporary design, materials ensuring high level of safety, option for a stepless control, class of protection IP65.

MONORAIL RUNNING GEAR

Normal and reduced headroom execution. They are being driven by electric motors with cone rotor and an automatic cone brake, single and double-speeded (ratio 1:3, and step-less also by request), class of protection IP54, class of insulation F. These can be driven on rectilinear and curve sections, onto single girder roads with 90...300 mm in width.

DOUBLE-GIRDER CRANE TROLLEY

Executions in a variety of lifting capacity, driven by one or two gearmotor groups, equipped with electric motors with cone rotor and an automatic cone brake, single and double-speeded (ratio 1:3, and stepless also by request), class of protection IP54, class of insulation F. Great variety of wheel-gauge (1000 -2800 mm).

CATALOGUE WIRE ROPE HOISTS

STANDARD EXECUTIONS

Stationary

Lifting capacity: 160 – 32 000 kg

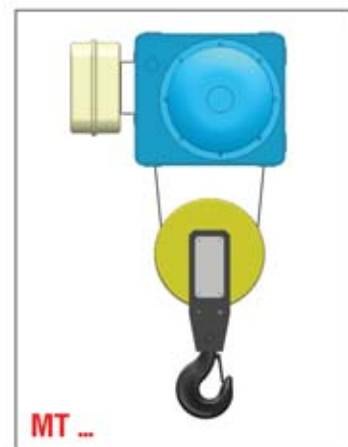
special executions- up to 63 000 kg

Reeving: 1/1; 2/1; 4/1; 2/2; 4/2

special executions- 6/1; 8/1; 2x2/1-1; 2x3/1-1; 2x4/1-1

Lift height: 4.5 – 104 m

Lift speed: 1- 32 m/min (by microscope at a rate of 1:4 and 1:6)



With a single-girder trolley (normal headroom height)

Lifting capacity: 160 – 20 000 kg

Reevin: 2/1; 4/1

special executions- 1/1; 2/2; 2x2/1-1

Lift height: 4.5 – 60 m

special executions- up to 120 m

Lift speed: 1- 32 m/min (by microscope at a rate of 1:4 and 1:6)

Conveying speed: 8; 10; 12; 15; 20; 32; 12/4; 15/5; 20/6; 32/10 m/min

With a single-girder trolley (reduced headroom height)

Lifting capacity: 320 – 16 000 kg

special executions- up to 20 000 kg

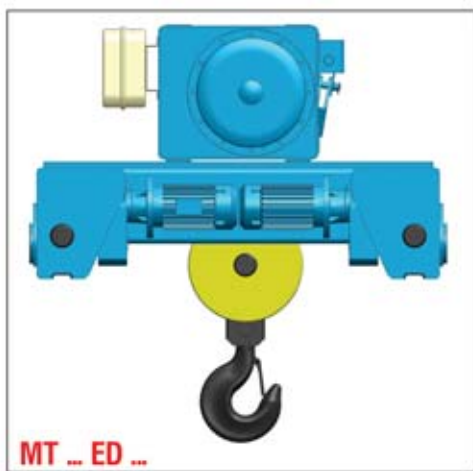
Reeving: 2/1; 4/1

special executions- 4/2

Lift height: 4.5 – 60 m

Lift speed: 1- 32 m/min (by microscope at a rate of 1:4 and 1:6)

Conveying speed: 8; 10; 12; 15; 20; 32; 12/4; 15/5; 20/6; 32/10 m/min



With a double-girder trolley

Lifting capacity: 1000 – 32 000 kg

special executions- up to 63 000 kg

Reeving: 1/1; 2/1; 4/1; 2/2; 4/2

special executions- 6/1; 8/1; 2x2/1-1; 2x3/1-1; 2x4/1-1

Lift height: 4.5 – 60 m

special executions- up to 120m

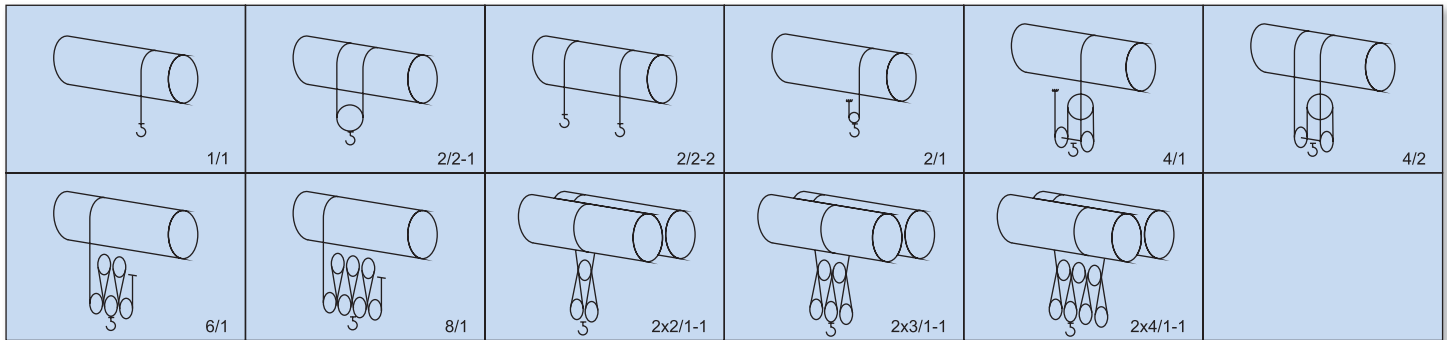
Lift speed: 1- 32 m/min (by microscope at a rate of 1:4)

Conveying speed: 8; 10; 12; 15; 20; 32; 40 m/min

(by microscope at a rate of 1:3)

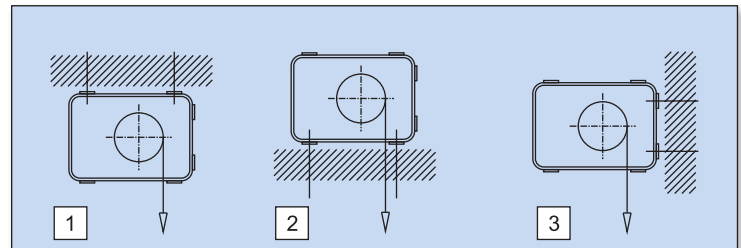
Gauge: 1 000- 2 800 mm

REEVING SYSTEM



MODE OF FIXTURE

1. Hung
2. Stand
3. Side-fixed



CRITERIA FOR THE CHOICE

In order to be able to make the right choice of a lifting device you need to know:

1. The maximum load that is going to be uplifted.
2. The maximum height of the lift.
3. The necessary speed of the lift.
4. The operational conditions.

After that you need to determine the operational rate group of the lifting device according to FEM 9.511, DIN 15020, ISO 4301 or ГOCT 25835.

With regard to this you need to define in advance:

- class of loading
- class of use

The class of loading can be determined by the loading factor K , using the formula:

$$K = \sum [(Q_i / Q_{nom})^3 \cdot t_i / \sum t_i], \text{ where:}$$

Q_i - load being lifted by the device for a definite time t_i

Q_{nom} - the nominal (maximum) capacity of the device

t_i - duration of operation with load Q_i

$\sum t_i$ - sum of time for device operation with load.

After that the average machine time T_m for a day is being defined:

$$T_m = 2 \cdot H \cdot N \cdot T / 60 \cdot V, \text{ where:}$$

H - average height of lift

N - number of cycles per hour (a cycle means: lift-pause-lift down-pause)

T - daily duration of operation

V - lift speed, m/min

The data received is used to define the operational rate group, and then you may continue with the choice of a lifting device.

EXAMPLE »

CATALOGUE WIRE ROPE HOISTS

EXAMPLE

Lifting capacity	-	2000 kg
Average height of lift	H	3m
Lift speed	V	8m/min
Reeving	-	2/1
Class of loading	-	medium
Number of cycles per hour	N	30
Daily duration of operation	T	8 h
Explosively hazard environment	-	acetylene

The average machine time per a day is calculated:

$T_M = 2 \cdot H \cdot N \cdot T / 60 \cdot V = 2 \cdot 2 \cdot 30 \cdot 8 / 60 \cdot 8 = 3 \text{ h}$

Using the table for operation range, for $T_M = 3\text{h}$ and class of loading “medium”, you can define the group of operation range for the lifting device- 2 m, according to FEM 9.511.

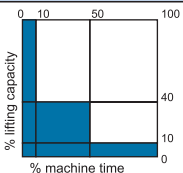
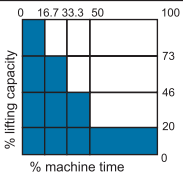
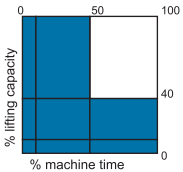
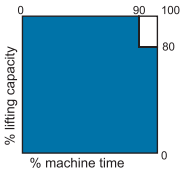
Knowing the needed capacity of 2000 kg and using the already defined group of operation range – 2m, and the type of reeving - 2/1, we can define the lifting device as type MT410.

NOTATION

52 MT K TII 516 H9 V1 2/1 M EN20/6 C S

	-	without special requirements to the execution
S	-	with special requirements to the execution
	-	without an additional brake of the lifting device
C	-	with an additional brake of the lifting device
	-	stationary hoist
		Conveying speed (value, m/min)
N	-	conveying- normal headroom
K	-	conveying- reduced headroom
D	-	conveying - with double-girder trolley
		E - electric trolley
		R - hand trolley
		S - free trolley
	-	single-speed lift
M	-	double-speed lift
		reeving
		lift speed (V1, V2, V3)
		lift height (H and a value, m)
		torque strength of the roll, kN
		dimensions (200-2; 300-3; 400-4; 500-5; 600-6; 700-7)
	-	normal climatic execution
TII	-	climatic execution – tropical
	-	climatic execution- for low temperatures
MP	-	marine execution
C	-	execution for operating in chemically aggressive environment
	-	normal execution
K	-	crane execution
		MT type (MT I and MT II are options for dimension 700)
50	-	with a load limiting device and an emergency stop
51	-	with a load limiting device, an emergency stop and a latch-key
52	-	with a load limiting device, an emergency stop and thermo-protection
53	-	with a load limiting device, an emergency stop, thermo-protection and a latch-key

CLASSIFICATION OF THE LIFTING DEVICES

Class of loading	Loading factor, K	Performance		Class of use			
LIGHT	< 0.125	Operation with loads less than the nominal ones		T _M , h 1)			
				2-4	4-8	8-16	>16
				T _{Mo} , h 2)			
				6 300	12 500	25 000	50 000
MEDIUM	0.125 - 0.25	Operation with medium and nominal loads		T _M , h			
				1-2	2-4	4-8	8-16
				T _{Mo} , h			
				3 200	6 300	12 500	25 000
HEAVY	0.25 - 0.5	Operation with nominal or close to nominal loads		T _M , h			
				0,5-1	1-2	2-4	4-8
				T _{Mo} , h			
				1 600	3 200	6 300	12 500
VERY HEAVY	0.5 - 1	Repeated operation with nominal or close to nominal loads		T _M , h			
				0,25-0,5	0,5-1	1-2	2-4
				T _{Mo} , h			
				800	1 600	3 200	6 300
duration of switching, %				30	40	50	60
frequency of switching, h ⁻¹				180	240	300	360
Operational rate group			FEM 9.511 / DIN15020	1Am	2m	3m	4m
			ISO 4301	M4	M5	M6	M7
			ГОСТ 25835	2M	3M	4M	5M
REEVING			DIMENSIONS	TYPE			
1/1 2/2	2/1 4/2	4/1					
LIFTING CAPACITY, kg							
160	320	-	MT200	-	-	-	MT200*
200	400	-		-	-	MT201	-
250	500	-		-	MT202	-	-
320	630	1250	MT300	-	-	-	MT303*
400	800	1600		-	-	MT304	-
500	1000	2000		-	MT305	-	-
630	1250	2500	MT400	-	-	-	MT406*
800	1600	3200		-	-	MT408	-
1000	2000	4000		-	MT410	-	MT510*
1250	2500	5000	MT500	-	-	MT512	-
1600	3200	6300		-	MT516	-	MT616*
2000	4000	8000		-	-	MT620	-
2500	5000	10000	MT600	-	MT625	-	MT725
3200	6300	12500		-	-	MT732	-
4000	8000	16000		-	MT740	MT740*	-
5000	10000	20000	MT700		MT750	MT750*	-
6300	12500	25000			MT763	MT763*	-
8000	16000	32000		MT780	-	-	-
* special execution by customer order				1) T _M – average machine time per day 2) T _{Mo} – total time for the complete operational period			

* special execution by customer order

1) T_M – average machine time per day

2) T_{MO} – total time for the complete operational period

CATALOGUE WIRE ROPE HOISTS

TECHNICAL DATA

LIFTING CAPACITY kg	REEVING 1/1 – 2/2 ¹⁾						
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m		LIFTING SPEED, m/min		
			1/1	2/2	V1	V2	V3
200	MT201	3m	12;20;28;42;56;74;84	-	16; 4/16	24; 4/24	32; 5/32
250	MT202	2m	12;20;28;42;56;74;84	-	16; 4/16	24; 4/24	32; 5/32
400	MT304	3m	12;20;26;40;54;76;84	8;12.5;22;31	16; 4/16	24; 4/24	32; 5/32
500	MT305	2m	12;20;26;40;54;76;84	8;12.5;22;31	16; 4/16	24; 4/24	32; 5/32
800	MT408	3m	11;18;24;40;52;68;78	5;12;18;26	16; 4/16	24; 4/24	32; 5/32
1 000	MT410	2m	11;18;24;40;52;68;78	5;12;18;26	16; 4/16	24; 4/24	32; 5/32
1 250	MT512	3m	11;18;24;36;50;64;76	10;17;24	16; 4/16	24; 4/24	32; 5/32
1 600	MT516	2m	11;18;24;36;50;64;76	10;17;24	16; 4/16	24; 4/24	32; 5/32
2 000	MT620	3m	9;16;22;34;46;60;70;80	7;15;22;32; 37;44	16; 4/16	24; 4/24	32; 5/32
2 500	MT625	2m	9;16;22;34;46;60;70;80	7;15;22;32; 37;44	16; 4/16	24; 4/24	32; 5/32
	MT725	4m	18.5;29;40;54;68;81;92; 108;120.5	13;20;27;34; 39;47;53	16; 4/16	24; 4/24	32; 5/32
		3m	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	16; 4/16	24; 4/24	32; 5/32
3 200	MT732	3m	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	16; 4/16	24; 4/24	32; 5/32
4 000	MT I 750	3m	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	16; 4/16	24; 4/24	-
4 000	MT740	2m	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	16; 4/16	24; 4/24	32; 5/32
5 000	MT II 750	3m	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	12; 3/12	8; 3/18	-
	MT I 750	2m	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	16; 4/16	24; 4/24	-
6 300	MT II 763	2m	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	12; 3/12	18; 3/18	-
8 000	MT780	1Am	16;24;34;46;58;70;80 94;104	13;20;27;34; 39;47;53	8; 2/8	12; 2/12	-

1) Refers only to stationary wire rope hoists, without any limit of load



MT SERIES

LIFTING CAPACITY kg	REEVING 2/1 – 4/2						
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m		LIFTING SPEED, m/min		
			2/1	4/2	V1	V2	V3
400	MT201	3m	6;10;14;21;28;37;42	-	8; 2/8	12; 2/12	16; 2.5/16
500	MT202	2m	6;10;14;21;28;37;42	-	8; 2/8	12; 2/12	16; 2.5/16
800	MT304	3m	6;10;13;20;27;38;42	6.5;11;15.5	8; 2/8	12; 2/12	16; 2.5/16
1 000	MT305	2m	6;10;13;20;27;38;42	6.5;11;15.5	8; 2/8	12; 2/12	16; 2.5/16
1 600	MT408	3m	5.5;9;12;20;26;34;39; 47;52;60	6;9;13	8; 2/8	12; 2/12	16; 2.5/16
2 000	MT410	2m	5.5;9;12;20;26;34;39; 47;52;60	6;9;13	8; 2/8	12; 2/12	16; 2.5/16
2 500	MT512	3m	5.5;9;12;18;25;32;38 43;49	5;8.5;12	8; 2/8	12; 2/12	16; 2.5/16
3 200	MT516	2m	5.5;9;12;18;25;32;38 43;49	5;8.5;12	8; 2/8	12; 2/12	16; 2.5/16
4 000	MT620	3m	4.5;8;11;17;23;30;35; 40;46;54;60	3.6;8.5;11; 16;18.5;22	8; 2/8	12; 2/12	16; 2.5/16
5 000	MT625	2m	4.5;8;11;17;23;30;35; 40;46;54;60	3.6;8.5;11; 16;18.5;22	8; 2/8	12; 2/12	16; 2.5/16
	MT725	4m	9;14.5;20;27;34;40.5; 46;54;60	6.5;10;13.5;17; 19.5; 23.5;26.5	8; 2/8	12; 2/12	16; 2.5/16
		3m	8;12;17;23;29;35;40; 47;52	6.5;10;13.5;17; 19.5; 23.5;26.5	8; 2/8	12; 2/12	16; 2.5/16
6 300	MT732	3m	8;12;17;23;29;35;40; 47;52	6.5;10;13.5;17; 19.5; 23.5;26.5	8; 2/8	12; 2/12	16; 2.5/16
8 000	MT I 740	3m	8;12;17;23;29;35;40; 47;52	6.5;10;13.5;17; 19.5; 23.5;26.5	8; 2/8	12; 2/12	-
8 000	MT740	2m	8;12;17;23;29;35;40; 47;52	6.5;10;13.5;17; 19.5; 23.5;26.5	8; 2/8	12; 2/12	16; 2.5/16
10 000	MT II 750	3m	8;12;17;23;29;35;40; 47;52	4.5;7.5;10.5 15.5;19.5; 22	6; 1.5/6	9; 1.5/9	-
	MT I 750	2m	8;12;17;23;29;35;40; 47;52	6.5;10;13.5;17; 19.5; 23.5;26.5	8; 2/8	12; 2/12	-
12 500	MT II 763	2m	8;12;17;23;29;35;40; 47;52	4.5;7.5;10.5 15.5;19.5; 22	6; 1.5/6	9; 1.5/9	-
16 000	MT780	1Am	8;12;17;23;29;35;40; 47;52	4.5;7.5;10.5 15.5;19.5; 22	4; 1/4	6; 1/6	-



CATALOGUE WIRE ROPE HOISTS

TECHNICAL DATA

LIFTING CAPACITY kg	REEVING 4/1					
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m	LIFTING SPEED, m/min		
				V1	V2	V3
1 600	MT304	3m	6.5;10;13.5	4; 1/4	6; 1/6	8; 1.25/8
2 000	MT305	2m	6.5;10;13.5	4; 1/4	6; 1/6	8; 1.25/8
3 200	MT408	3m	6;10;13	4; 1/4	6; 1/6	8; 1.25/8
4 000	MT410	2m	6;10;13	4; 1/4	6; 1/6	8; 1.25/8
5 000	MT512	3m	6;9;12.5	4; 1/4	6; 1/6	8; 1.25/8
6 300	MT516	2m	6;9;12.5	4; 1/4	6; 1/6	8; 1.25/8
8 000	MT620	3m	5.5;8.5;11.5;15;17.5;20	4; 1/4	6; 1/6	8; 1.25/8
10 000	MT625	2m	5.5;8.5;11.5;15;17.5;20	4; 1/4	6; 1/6	8; 1.25/8
	MT725	4m	10;13.5;17;20; 23; 27; 30	4; 1/4	6; 1/6	8; 1.25/8
		3m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	8; 1.25/8
12 500	MT732	3m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	8; 1.25/8
16 000	MT I 740	3m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	-
16 000	MT740	2m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	8; 1.25/8
20 000	MT II 750	3m	8.5;11.5;14.5;17.5; 20; 23.5; 26	3; 0.75/3	4.5; 1.25/4.5	-
20 000	MT I 750	2m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	-
25 000	MT II 763	2m	8.5;11.5;14.5;17.5; 20; 23.5; 26	3; 0.75/3	4.5; 1.25/4.5	-
32 000	MT780	1Am	8.5;11.5;14.5;17.5; 20; 23.5; 26	2; 0.5/2	3; 0.5/3	-

TECHNICAL DATA - SPECIAL EXECUTIONS

LIFTING CAPACITY kg	REEVING 6/1					
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m	LIFTING SPEED, m/min		
				V1	V2	V3
25 000	MT I 740	3m	5.5; 7.5; 9.5; 11.5; 13; 15.5; 17	2.5; 0.6/2.5	4; 0.6/4	-
32 000	MT II 750	3m	5.5; 7.5; 9.5; 11.5; 13; 15.5; 17	2; 0.5/2	3; 0.5/3	-
	MT I 750	2m	5.5; 7.5; 9.5; 11.5; 13; 15.5; 17	2.5; 0.6/2.5	4; 0.6/4	-
40 000	MT II 763	2m	5.5; 7.5; 9.5; 11.5; 13; 15.5; 17	2; 0.5/2	3; 0.5/3	-
50 000	MT780	1Am	5.5; 7.5; 9.5; 11.5; 13; 15.5; 17	1.3; 0.3/1.3	2; 0.3/2	-

TECHNICAL DATA - SPECIAL EXECUTIONS

LIFTING CAPACITY kg	REEVING 8/1					
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m	LIFTING SPEED, m/min		
				V1	V2	V3
32 000	MT I 740	3m	6; 7.5; 9; 10; 12; 13;	2.0; 0.5/2.0	3; 0.5/3	-
	MT 740	2m	6; 7.5; 9; 10; 12; 13;	2.0; 0.5/2.0	3; 0.5/3	4; 0.6/4
40 000	MT II 750	3m	6; 7.5; 9; 10; 12; 13;	1.5; 0.32/1.5	2.25; 0.32/2.25	-
	MT I 750	2m	6; 7.5; 9; 10; 12; 13;	2.0; 0.5/2.0	3; 0.5/3	-
50 000	MT II 763	2m	6; 7.5; 9; 10; 12; 13;	1.5; 0.32/1.5	2.25; 0.32/2.25	-
63 000	MT 780	1Am	6; 7.5; 9; 10; 12; 13;	1.0; 0.25/1.0	1.5; 0.25/1.5	-

LIFTING CAPACITY kg	REEVING 2X2/1-1					
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m	LIFTING SPEED, m/min		
				V1	V2	V3
16 000	MT I 740	3m	8;12;17;23;29;35;40; 47;52	8; 2/8	12; 2/12	-
	MT 740	2m	8;12;17;23;29;35;40; 47;52	8; 2/8	12; 2/12	16; 2.5/16
20 000	MT II 750	3m	8;12;17;23;29;35;40; 47;52	6; 1.5/6	9; 1.5/9	-
	MT I 750	2m	8;12;17;23;29;35;40; 47;52	8; 2/8	12; 2/12	-
25 000	MT II 763	2m	8;12;17;23;29;35;40; 47;52	6; 1.5/6	9; 1.5/9	-
32 000	MT 780	1Am	12;17;23;29;35;40; 47;52	4; 1/4	6; 1/6	-

LIFTING CAPACITY kg	REEVING 2X3/1-1					
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m	LIFTING SPEED, m/min		
				V1	V2	V3
25 000	MT I 740	3m	5.5; 8.5; 11.5; 13; 15.5; 19.5; 23.5; 26.5; 31; 35	5; 1.2/5	8; 1.2/8	-
32 000	MT II 750	3m	5.5; 8.5; 11.5; 13; 15.5; 19.5; 23.5; 26.5; 31; 35	4; 1/4	6; 1/6	-
	MT I 750	2m	5.5; 8.5; 11.5; 13; 15.5; 19.5; 23.5; 26.5; 31; 35	5; 1.2/5	8; 1.2/8	-
40 000	MT II 763	2m	5.5; 8.5; 11.5; 13; 15.5; 19.5; 23.5; 26.5; 31; 35	4; 1/4	6; 1/6	-
50 000	MT780	1Am	5.5; 8.5; 11.5; 13; 15.5; 19.5; 23.5; 26.5; 31; 35	2.6; 0.6/2.6	4; 0.6/4	-

LIFTING CAPACITY kg	REEVING 2X4/1-1					
	TYPE	DIN 15020 FEM 9.511	LIFTING HEIGHT, m	LIFTING SPEED, m/min		
				V1	V2	V3
32 000	MT I 740	3m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	-
	MT 740	2m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	8; 1.25/8
40 000	MT II 750	3m	8.5;11.5;14.5;17.5; 20; 23.5; 26	3; 0.75/3	4.5; 1.25/4.5	-
	MT I 750	2m	8.5;11.5;14.5;17.5; 20; 23.5; 26	4; 1/4	6; 1/6	-
50 000	MT II 763	2m	8.5;11.5;14.5;17.5; 20; 23.5; 26	3; 0.75/3	4.5; 1.25/4.5	-
63 000	MT 780	1Am	8.5;11.5;14.5;17.5; 20; 23.5; 26	2; 0.5/2	3; 0.5/3	-

CATALOGUE WIRE ROPE HOISTS

ELECTRIC MOTOR PARAMETERS

PARAMETERS OF THE LIFTING ELECTRIC MOTORS WITH A BUILT-IN BRAKE (400 V, 50 HZ)

Dimensions	Lifting capacity, kg	Group by FEM 9.511	Single- speed lift						Double-speed lift					
			V1		V2		V3		V1		V2		V3	
			P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A
MT202	500	2m	0.75	3.3	1.1	3.6	4.5	12.0	0.16/0.75	3.0/3.4	0.16/1.1	3.0/3.5	0.7/4.5	6.0/9.5
MT305	1000		1.5	5.8	2.3	6.0	4.5	12.0	0.33/1.5	3.7/5.0	0.33/2.2	3.7/6.2	0.7/4.5	6.0/9.5
MT410	2000		3.0	11.0	4.5	12.0	12.0	28.0	0.7/3.0	6.0/7.5	0.7/4.5	6.0/9.5	1.7/12.5	15.0/23.0
MT516	3200		4.5	12.3	7.5	17.0	12.0	28.0	1.0/4.8	11.0/12.0	1.0/7.5	11.0/15.0	1.7/12.5	15.0/23.0
MT625	5000		8.0	24.5	12.0	28.0	15.5	29.5	1.7/8.0	15.0/18.0	1.7/12.5	15.0/23.0	4.0/24.0	70.0/48.0
MT740	8000		12.5	36.0	22	49	22	49	3.0/13.0	40.0/30.0	4.0/24.0	70.0/48.0	4.0/24.0	70.0/48.0
MT750	10000		16	36	22	49	-	-	4.0/16	70/36	4.0/24.0	70.0/48.0	-	-
MT763	12500	1Am	16	36	22	49	-	-	4.0/16	70/36	4.0/24.0	70.0/48.0	-	-
MT780	16000		12.5	36	22	49	-	-	3.0/13.0	40.0/30.0	4.0/24.0	70.0/48.0	-	-

PARAMETERS OF THE ELECTRIC MOTORS WITH A BUILT-IN BRAKE FOR MONORAIL HOIST RUNNING GEARS (400 V, 50 HZ)

Dimensions	Lifting capacity, kg		Group by FEM 9.511	Lifting height, m		Conveying speed, m/min					
	8,10,12, 20					15, 32		4/12, 5/15, 6.5/20, 10/32*			
	2/1	4/1		2/1	4/1	P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A
MT202	500	-	2m	6,10,14	-	0.12	0.82	0.18	0.75	0.06/0.18	1.4/1.2
MT305	1000	-		6,10,13	-						
	-	2000		-	6.5	0.25	1.2	0.37	1.5	0.11/0.37	1.7/1.4
MT410	2000	4000		5.5,9,12	6						
MT516	3200	-		5.5,9,12	-	0.37	1.8	0.55	2.1	0.11/0.37	1.7/1.4
	-	6300		-	6						
MT625	5000	-		4.5,8,11	-						

* exceptional for MT 516 (4x1) and MT625

Dimensions	Lifting capacity, kg		Group by FEM 9.511	Lifting height, m		Conveying speed, m/min					
	2/1	4/1		2/1	4/1	8,10,12, 20		15, 32		4/12, 5/15, 6.5/20, 10/32*	
						P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A
MT202	500	-	2m	21,28,37,42	-	2x0.12	0.82	2x0.18	0.75	2x0.06/0.18	1.4/1.2
MT305	1000	-		20,27,38,42	-						
	-	2000		-	10,13.5						
MT410	2000	4000		20,26,34,39 47,52,60	10,13	2x0.25	1.2	2x0.37	1.5	2x0.11/0.37	1.7/1.4
MT516	3200	6300		18,25,32 38,43,49	9,12.5						
MT625	5000	-		17,23,30,35 40,46,54,60	-						
	-	10000		-	5.5,8.5,11.5 15,17.5,20	2x0.37	1.8	2x0.55	2.1	2x0.11/0.37	1.7/1.4
MT740	8000	-		8,12,17,23,29 35,40,47,52	-						
MT750	10000										
MT763	12500										

* exceptional for MT625 (4/1) and MT740, MT750 and MT763

ELECTRIC MOTOR PARAMETERS

Dimensions	Lifting capacity, kg	Group by FEM 9,511	Lifting height, m	Conveying speed, m/min									
				8, 10,12		15,18		4/12, 5/15		20		6.5/20	
	4/1		4/1	P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A	P _H , kW	I _H , A
MT740	16000	2m	8.5,11.5,14.5 17.5,20,23.5,26	2x0.37	1.8	2x0.55	2.1	2x0.11/0.37	1.7/1.4	4x0.37	1.8	4x0.11/0.37	1.7/1.4

WE ALSO MANUFACTURE

T- wire rope hoists

The electric wire rope hoists T series are the most famous and well-sold electric hoists worldwide. More than 1 800 000 pieces have already been produced and sold in more than 40 countries. Their main advantages are: high reliability, durability, simple maintenance. These advantages in combination with the broad range of weight lifting capacity, lift and convey speeds, construction executions, and ability to be used in different conditions, make the hoists of this series preferred to the other executions despite their 30-year-old history.

BT- explosion-proof electric wire rope hoists

Based on the basic construction decisions of electric wire rope hoists series T and keeping its technical features, series BT electric explosion-proof wire rope hoists is intended to operate in an explosion hazardous environment.

The electrical equipment included in these goods, such as: electric motors, electric appliances panel, control panel, overtravel limit switches, etc., is manufactured in the so called "explosion-proof" execution, and it is marked by: (Ex) d IIB T5 and (Ex) d IIC T5.

BMT- explosion-proof electric wire rope hoists

The electric wire rope hoists BMT series are based on the basic technical solutions being used in BT and MT series. Based on the higher technical parameters of MT series and the already proven technical decisions of BT series regarding explosion proof, we have created an electric explosion-proof wire rope hoist having much better operational features, such as lifting capacity, lift speed and conveying speed. The electrical equipment is identical to BT series, which presupposes the identical explosion-proof execution and marking: (Ex) d IIB T5 and (Ex) d IIC T5.

Induction electro-motors

1. With built-in brakes, for the main lift of electric chain and wire rope hoists and other running gears - from 0.75 kW up to 30 kW. Explosion-proof execution as an option.
2. With built-in brakes, for running gears of electric chain hoists and wire rope hoists and other lifting parts - from 0.12 kW to 3 kW. Explosion-proof execution as an option.
3. Electric motors for general purposes, executions of IM B3, IM B5, IM b35, IM B14, etc., with or without a built-in brake - from 0.55 kW to 37 kW.

Weight-lifting cranes

1. Single-girder underslung traveling cranes - lifting capacity from 1 to 16 t and a span from 3 to 25 m.
 2. Single-girder stationary traveling cranes - lifting capacity from 1 to 16 t and a span from 4.5 to 25.5 m.
 3. Double-girder stationary traveling cranes - lifting capacity from 5 to 100 t and a span from 10.5 to 50 m.
 4. Bracket stationary and wall-mounted cranes- lifting capacity from 1 to 10 t and an outrigger spread from 3 to 10 m.
- Ground and cabin control. Explosion-proof execution as an option.

Crane components

- 1.Reduction gears and geared motor groups - intended for driving the running gears of girder cranes and other lifting equipment. These are available in a great variety of output revolutions and torques. They are driven by electric motors with built-in cone brakes. Explosion-proof execution as an option.
- 2.Front girders for stationary traveling cranes - diameters of traveling wheels from 160 to 400 mm, load of the traveling wheel from 4000 to 19 500 kg, conveying speeds from 8 to 32 m/min. Explosion-proof execution as an option.
- 3.Cable trolleys - intended for carrying supply and operation cables of traveling cranes. Available in executions for traveling onto profile or straight steel rope. Explosion-proof execution as an option.



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