

# Crane Components

## Technical Catalogue

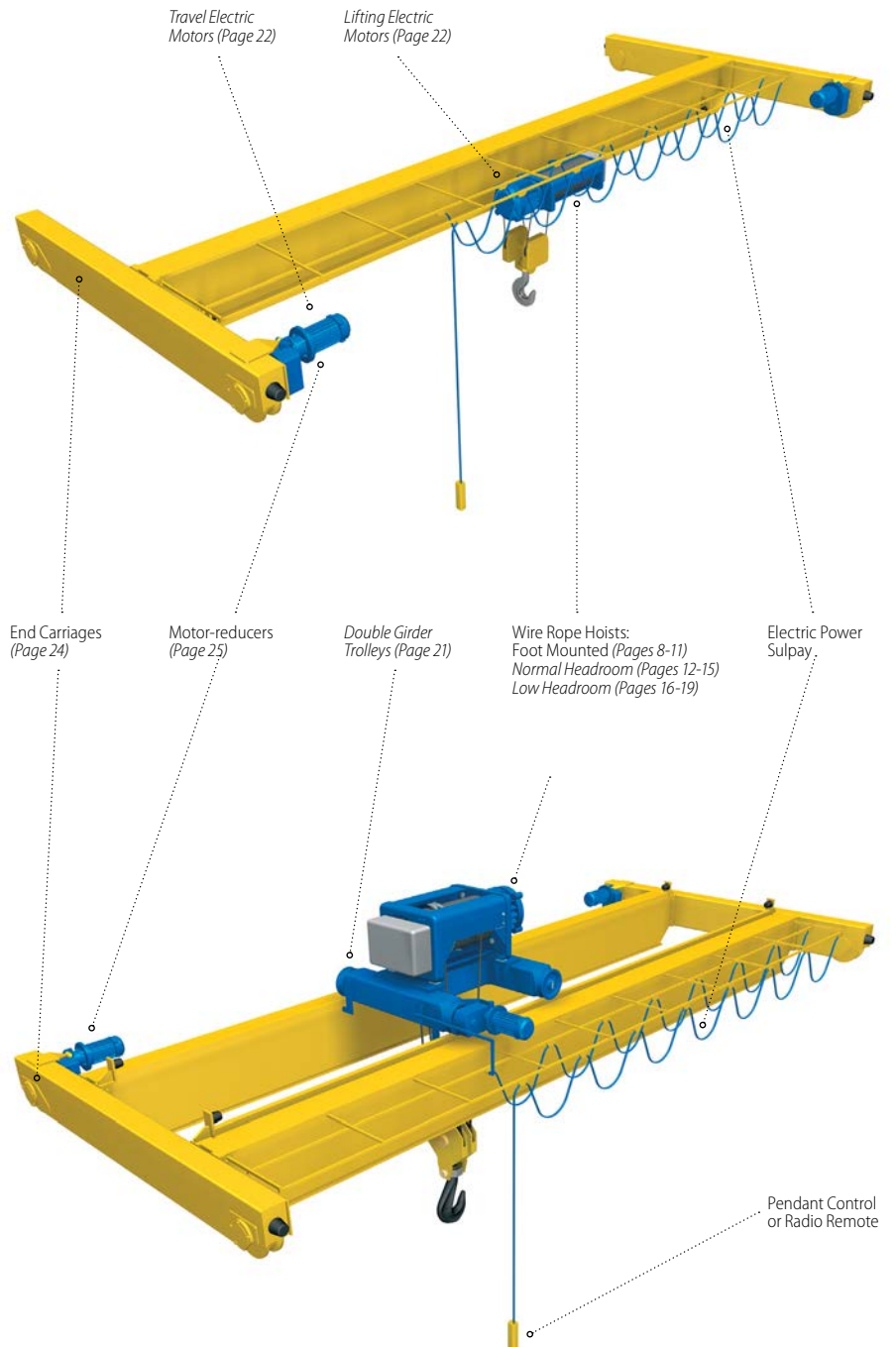


**50** YEARS  
**PODEM™**  
2011

**50 Years Experience in the Development  
and Production of Hoisting Equipment**

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### April 1, 1961

The official establishment of Podem.

The Bulgaria based state owned production company was created to supply the crane industries in all Eastern European countries and former Soviet Union with electrical wire rope hoists.



### 1981

Podem became the biggest hoists manufacturer worldwide. Production capacity reached 100,000 wire rope hoists per year (102 505 units / 1981). Podem created distributions in more than 70 countries around the world represented by its commercial structures Balkancar-Podem and other Podem brand names.

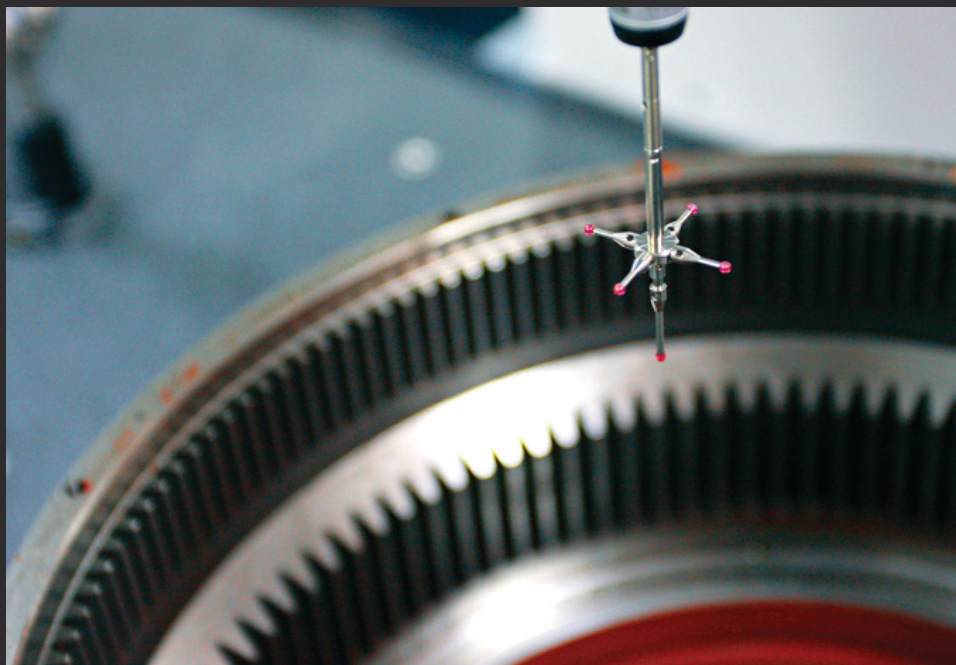
Podemcrane AD aim is to be recognized as a leading crane components supplier worldwide for crane manufacturers and end users.

Our qualified engineering staff, modern production equipment and 50 years experience provide reliable products for all kind of industries.



### 2001

The former state owned company was fully privatized. The new company Podemcrane AD – the successor of Podem, started operation and continued to promote the Podem brand along with the new one Podemcrane.



### April 1, 2011

The total number of produced hoists in Podem factory – 1 923 462 units.

Podemcrane is clearly the biggest hoist manufacturer in Central and Eastern Europe and has remained one of the most progressive companies in the industry. We are designing reliable products reflecting our customers individual needs. We have experienced engineers who make sure our production is efficient and well controlled. Product testing and quality control remain of great importance. Our production factory spreads on a territory of 30 000 sq.m.

# Podem

## A Progressive European Crane Components Supplier

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By using Podem's products you will get:



### Quality products:

- All products meet the European Standards and the Machinery Directive 2006/42/EC
- The components of the hoist comply with the requirements of the Directive and CE mark confirms the conformity of the whole equipment
- The quality of the products is assured by the Integrated Management Systems ISO 9001:2008 and BS OHSAS 18001:2007
- Carefully selected suppliers and Incoming control of raw materials

Continuous monitoring and regular control:

- Spectroscopic analysis
- DetInvolute control machine
- 3D Coordinate Measuring Machine

### Reliable products:

Product testing on each product (from 0.8 to 50 t) sold from the factory. Test towers – up to 5, 10 and 50 t.

Highest possible reliability level offered in the industry as a result of very big experience in product design, modern production organization and strict quality control.

Up-to-day technical characteristics of the products thanks to our close connection with our distributors and knowledge of the market.

### Reduced delivery time thanks to flexible production organization:

- 30 000 sq.m production facility located in European Union (Gabrovo, Bulgaria) using high-tech processes technology and manufacturing systems and offers the fast manufacturing times in serial and non serial production:
  - CNC Plasma cutting machine to cut precisely steel using a plasma torch
  - CNC multi-spindle turning centres
  - CNC Twin-spindle production turning centres
  - CNC automatic lathes
  - CNC Vertical lathes
  - Vacuum furnace and Ion carbonitriding Furnace
  - Gear-cutting machines
  - Painting camera



**Sales and product support:**

- Well placed logistic stores – closed to all Europe and easy connections to Middle East, Africa and Asia
- 24 hour sales support and order process. Marketing and advertising support
- Distribution network in Europe, Middle East, Africa and Asia
- Full range of spare parts not only for the existing model but also for all models produced in the past (series T, M and MT)
- Different engineering solutions for Products matching your individual needs thanks to experienced team of mechanical and electrical engineers and flexible organization



# Electric Wire Rope Hoists

## Features

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Podem's wire rope hoist range provides solutions for cranes and replacement applications. There are two series M and MT from 0.8 to 50 t, covering the light, medium and heavy operation modes. A wide range of lifting speeds and lifting heights is available.



### Lifting reducer

Planetary gearboxes (2 or 3 stages) developed specially for lifting mechanism offers high reliability and compact size, many options for lifting speeds and low noise level (79-82dB). Lubricated for life for minimum maintenance.

### Advantages of Podem's electric wire rope hoists:

- Excellent price/performance ratio
- Long life
- Highest possible reliability levels offered in the industry (after a comprehensive tests to other leading world brands)
- Operational safety
- Easy maintenance
- Low service costs
- Perfect for tougher working conditions
- Outstanding value for money
- Simple classic design



### Self braking lifting motor

The three-phase asynchronous electric motors with cylindrical rotor and build-in DC disc brake are available for single or dual speed option.

The single polarity motor allows inverter control for smooth acceleration and deceleration of lifting speed.

Thermal protection and insulation class F are standard features for Podem's motors.

Conical rotor motors are available for special application.



### Wire rope guide

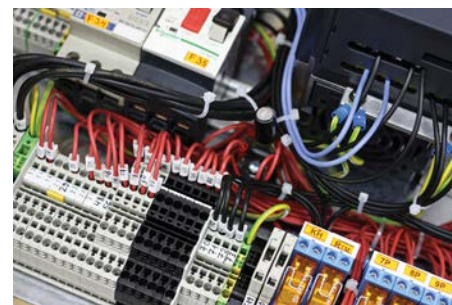
Rope guide made of tough plastic and metal – reliable operation even in critical environments.

The rope guide consists of three parts: the guide ring, pressure spring and rollers. The pressure spring ensures that the rope sits correctly into the drum groove whilst the guide ring always maintains the rope in the correct position preventing the rope from coming off the drum groove.

Movement of the guide ring across the drum activates the up/down limit switch.

Rollers mounted on anti-friction bearings allows smooth rope lead and prolongs the life of the rope.

Ropes are galvanized and high endurance class.



## Over-load limiter

All hoists are endowed with overload limiter are with 2 reaction thresholds:

- **1st Stop:** Activating a Warning
- **2nd Stop:** Stopping both lifting and travel actions
- Secure system for switching-off when overload
- Smooth descent of the load after overload
- Intelligent system for detection of dynamic overloads
- Fine adjustment
- Construction meeting the strongest requirements in the industry

Dynamometric pin overload limiter. It is optional with many extra features: Load spectrum/ measuring device, lifting calculation etc.

## Body

Stable construction provides reliable and precise operation of the whole mechanism. Precision body component assembling and high quality and controlled welding. Processing of the body on one place.

## Control panel

Every hoist is equipped with high quality full-set control panel. Any special requirement (wireless push button, inverters) can be included under request.



# Electric Wire Rope Hoists

## Standard Products Table

Electric wire rope hoists – Standard products										
Capacity (kg)	Groups		Hoist type	Rope falls	Lifting speed (m/min)*		Hook travel (m)			
	FEM	ISO			V1	V2	H0	H1	H2	H3
1000	2 m	M5	MT205 / MT305	2/1	8/2,6	12/4	10	14	20	26
1250	3 m	M6	MT306	2/1	8/2,6	12/4	10	14	20	–
1600	3 m	M6	MT304	4/1	4/1,3	6/2	–	7	10	13
	2 m	M5	MT308	2/1	8/2,6	12/4	10	14	20	–
2000	3 m	M6	MT310	2/1	8/2,6	12/4	10	14	20	–
	2 m	M5	MT305	4/1	4/1,3	6/2	–	7	10	13
2500	3 m	M6	MT313	2/1	8/2,6	12/4	10	14	20	–
	3 m	M6	MT306	4/1	4/1,3	6/2	–	7	10	13
	2 m	M5	MT312	2/1	8/2,6	12/4	10	14	20	–
3200	2 m	M5	MT316	2/1	8/2,6	12/4	10	14	20	–
	2 m	M5	MT308	4/1	4/1,3	6/2	–	7	10	13
4000	3 m	M6	MT310	4/1	4/1,3	6/2	–	7	10	13
	3 m	M6	MT520	2/1	8/2,6	12/4	10	14	20	–
5000	3 m	M6	MT313	4/1	4/1,3	6/2	–	7	10	13
	2 m	M5	MT312	4/1	4/1,3	6/2	–	7	10	13
	2 m	M5	MT525	2/1	8/2,6	12/4	10	14	20	26
	3 m	M6	M732	2/1	8/2,6	12/1,8	14	19	26	–
6300	2 m	M5	MT316	4/1	4/1,3	6/2	–	7	10	13
	3 m	M6	MT520	4/1	4/1,3	6/2	–	7	10	13
8000	2 m	M5	M740	2/1	8/2,6	12/1,8	13	18	25	32
	2 m	M5	MT525	4/1	4/1,3	6/2	–	7	10	13
	1Am	M4	M750	2/1	5,5/1,3	8,3/2,7	13	18	25	–
10000	2 m	M5	M950	2/1	5/1,2	10/1,5	–	20	32	–
	3m	M6	M732	4/1	4/1,3	6/0,9	6,5	9	12,5	16
12500	2 m	M5	M740	4/1	4/1,3	6/0,9	6,5	9	12,5	16
	3 m	M6	M940	4/1	2,5/0,6	5/0,75	–	10	16	24
16000	1Am	M4	M750	4/1	2,8/0,7	4,1/1,3	6,5	9	12,5	16
	2 m	M5	M950	4/1	2,5/0,6	5/0,75	–	10	16	24
	2 m	M5	M1100	2/1	3/0,7	5/0,7	20	24	30	–
20000	1 Am	M4	M963	4/1	2,5/0,6	5/0,75	–	10	16	24
	1 Am	M4	M1125	2/1	3/0,7	5/0,7	20	24	30	–
25000	1 Am	M4	M980	4/1	2,5/0,6	3,7/0,6	–	10	16	24
	1 Am	M4	M980*	4/1	3,7/1	0,5–5,0	–	10	16	24
32000	2 m	M5	M1100	4/1	1,5/0,35	2,5/0,35	10	12	15	22
	2 m	M5	M1100*	4/1	2,5/0,8	0,4–4,0	10	12	15	22
40000	1 Am	M4	M1125	4/1	1,5/0,35	2,5/0,35	10	12	15	22
	1Am	M4	M1125*	4/1	2/0,6	0,3–3,0	10	12	15	22

\* Optional with cylindrical lifting motor  
 \*\* Single speed hoists are available under request

Type	Hoist travel speed (m/min), capacity to 16000 kg
Hoist with monorail electric trolley for standard headroom	20/6,5
Hoist with monorail electric trolley for low headroom	20/5
Hoist with double rail trolley	20/6 (up to 16 t), 16/5 (above 16 t)

Standard product means	Optional
Dual speed motors	Inverter control
Speeds – according to the standard table: V1, V2	Other speeds
Lifting height: 7-26 m	Up to 80 m (related to the capacity)
Three-phase AC power supply, 400 V / 50 Hz	415 V, 480 V, 500 V, 60 Hz
Control panel / Pendant control 6 buttons	Without control panel / Other pendants, Radio control
48V	24 V, 42 V, 110 V, 220 V, etc
Temperature range: min. -20 °C ... max +40 °C /	-40 °C, +50 °C, +60 °C
Relevant humidity: < 80%	> 80%
IP54	IP65, IP66
	Curve monorail (Radius min 1.5 m)
Reeving 2/1, 4/1	True vertical lifting (4/2)



# Electric Wire Rope Hoists

## Selection Criteria

Old description: 52 MT312 H10 V1 4/1 M E K 20/5

### New trade description

5 MT312 H10 V4 4/1 M LC 52 20/5 F

- 5** Load capacity in tones (5 t)
- MT** Hoist type (MT, M, MEx series)
- 312** Hoist size (3) and drum hoisting force (12 kN)
- H10** Hook travel in meters (10 m)
- V4** Lifting speed in meters per minute (4 m/min), 50Hz
- 4/1** Reeving (Rope falls 4/1)
- M** Speed type (M – Micro, D – Double, S – Single, I – Inverter control)
- L** Hoist Type (F – Foot Mounted, N – Normal Headroom, NR – Normal headroom (curve), LC – Low headroom (counter-weight), LB – Low headroom (balance wheel), DU – Double rail trolley (parallel), DX – Double rail trolley (perpendicular)
- 52** Electrical equipment code (20 – Emergency stop and thermal protection, 21 – Emergency stop, thermal protection and latch key, 52 – Load limiter, emergency stop and thermal protection, 53 – Load limiter, emergency stop, thermal protection and latch key)
- 20/5** Trolley speed in meters per minute (20/5 m/min)
- Extras as: C – Second brake, M – Manual realize, TM – Tandem, etc
- F** Special climate execution (– – Standard (-20 ... +40 °C), F – Cold, G – High Temp. (-15 ... +50 °C), T – Tropical, X – Chemical)

### Selection criteria

When choosing the proper hoist take into account the following considerations:

1. The maximum load (capacity)
2. The maximum hook travel
3. The lifting speed needed (optional micro speed)
4. The trolley speed needed
5. The operating conditions

The general hoist model is defined in accordance with the load spectrum, the average daily operating time, the capacity and the reeving.

### Selection example

Capacity – 6300 kg  
 Hook travel (H) – 7 m  
 Lifting speed (V) – 6 m/min  
 Reeving – 4/1  
 Load spectrum – Medium  
 Cycles per hour (N) – 10  
 Daily working time (T) – 8 h

The average daily operating time is determined by the equation:

$$T_m = \frac{2 \cdot H \cdot N \cdot T}{60 \cdot V} = \frac{2 \cdot 7 \cdot 10 \cdot 8}{60 \cdot 6} = 3.1h$$

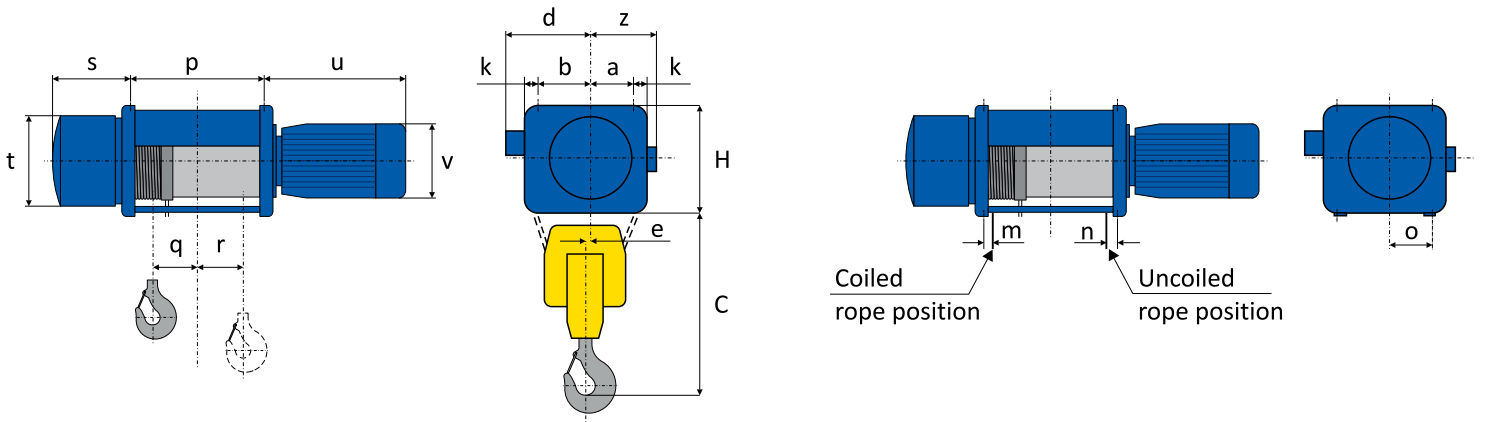
To the "medium" load spectrum and 3,1 average daily operating time the 2m (M5) duty mode corresponds as shown in the Load Spectrum/Duty Mode Table. Basing on the given values of capacity – 6 300 kg and reeving – 4/1, the Type Selection Table exhibits the MT316 hoist models group.

Selection criteria						
Load Spectrum (Operation Mode)			Working TimeClass (Average daily Operating Time) – Tm (h)			
<b>Light</b> Mechanisms, usually subject to very light loads and in exceptional cases only to maximum loads		2-4	4-8	8-16		
	<b>Medium</b> Mechanisms, usually subject to light loads but more often to maximum loads		1-2	2-4	4-8	
			0,5-1	1-2	2-4	
	<b>Very Heavy</b> Mechanisms usually subject to maximum or almost maximum loads		0,25-0,5	0,5-1	1-2	
<b>Duty Mode</b>	FEM 9.511 / DIN 15 020	1 Am	2 m	3 m		
	ISO 4301	M4	M5	M6		
		Light/Medium duty work shop crane, single shift operation, medium average loads. Occasional lifting of max load.	Medium/Heavy duty work shop crane, 1 or 2 shift operation. Regular, medium and heavy loads.	Heavy duty crane, 2 shift operation. Nominal load regularly lifted Traverse or other dead loads below the hook.		

# Foot Mounted Hoist

## MT Series, 2 rope falls (reeving 2/1)

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Foot mounted hoist – MT series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)										Variable dimensions (mm)										Weight (kg)	
				C	H	a	b	k	d	e	m	n	o	p	q	r	s	t	u (V1)	v (V1)	z (V1)	u (V2)	v (V2)		z (V2)
MT305	1	ø 7	10	500	321	105	190	50	300	53	45	48	84	395	91	61	200	218	376	220	150	376	220	150	150
	1	ø 7	14	500	321	105	190	50	300	53	45	48	84	520	154	61	200	218	376	220	150	376	220	150	160
	1	ø 7	20	500	321	105	190	50	300	53	45	48	84	700	244	61	200	218	376	220	150	376	220	150	180
MT308	1.6	ø 7	10	600	321	105	190	50	300	53	45	48	84	395	91	61	200	218	376	220	150	483	257	181	170
	1.6	ø 7	14	600	321	105	190	50	300	53	45	48	84	520	154	61	200	218	376	220	150	483	257	181	187
	1.6	ø 7	20	600	321	105	190	50	300	53	45	48	84	700	244	61	200	218	376	220	150	483	257	181	207
MT312	2.5	ø 10	10	670	321	105	190	50	300	40	48	56	110	440	90	77	246	292	483	257	181	483	257	181	225
	2.5	ø 10	14	670	321	105	190	50	300	40	48	56	110	570	155	77	246	292	483	257	181	483	257	181	255
	2.5	ø 10	20	670	321	105	190	50	300	40	48	56	110	775	258	77	246	292	483	257	181	483	257	181	285
MT316	3.2	ø 10	10	670	321	105	190	50	300	40	48	56	110	440	90	77	246	292	483	257	181	607	310	240	220
	3.2	ø 10	14	670	321	105	190	50	300	40	48	56	110	570	155	77	246	292	483	257	181	607	310	240	252
	3.2	ø 10	20	670	321	105	190	50	300	40	48	56	110	775	258	77	246	292	483	257	181	607	310	240	296
MT525	5	ø 12	10	770	378	133	212	53	325	41	60	61	133	455	90	78	266	360	616	310	251	661	310	251	480
	5	ø 12	14	770	378	133	212	53	325	41	60	61	133	590	157	78	266	360	616	310	251	661	310	251	510
	5	ø 12	20	770	378	133	212	53	325	41	60	61	133	795	260	78	266	360	616	310	251	661	310	251	540
	5	ø 12	26	770	378	133	212	53	325	41	60	61	133	995	360	78	266	360	616	310	251	661	310	251	560

Dimensions are for hoists with FEM 2m/ISO M5, for 3m/M6 see table MT2-3m.  
All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

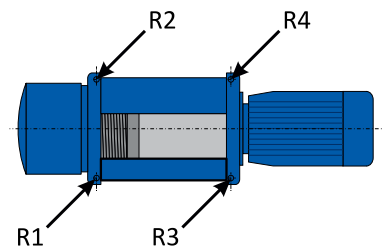
Foot mounted hoist – MT series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Hook position	Reactions (kg)															
			Hook travel (m)															
			10				14				20				26			
R1	R2	R3	R4	R1	R2	R3	R4	R1	R2	R3	R4	R1	R2	R3	R4			
MT305	1	uep	351	404	114	131	378	435	87	100	400	461	65	74	-	-	-	-
	1	dep	169	195	295	341	187	215	277	321	198	228	267	307	-	-	-	-
MT308	1.6	uep	561	647	182	210	604	697	139	160	640	738	103	119	-	-	-	-
	1.6	dep	271	312	472	545	299	344	444	513	316	365	427	492	-	-	-	-
MT312	2.5	uep	916	885	355	344	997	964	274	265	1069	1034	202	195	-	-	-	-
	2.5	dep	433	419	838	810	475	459	796	770	522	504	749	725	-	-	-	-
MT316	3.2	uep	1172	1133	455	440	1276	1233	351	340	1369	1323	258	250	-	-	-	-
	3.2	dep	555	536	1072	1037	608	588	1019	985	668	645	959	928	-	-	-	-
MT525	5	uep	1729	1760	749	762	1899	1932	579	590	2050	2085	429	436	2136	2173	342	349
	5	dep	814	829	1664	1693	912	927	1567	1594	996	1013	1482	1509	1045	1063	1433	1459

uep – Upper end position of the hook.  
dep – Down end position of the hook.

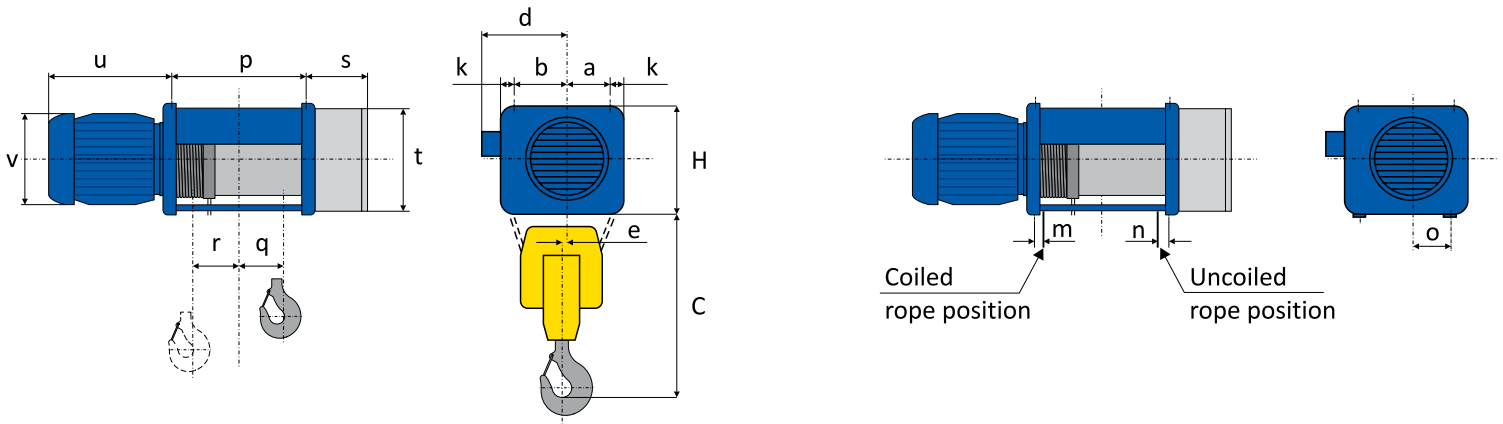
MT2-3m

Hoist type	FEM	ISO	Dimensions
MT304	3m	M6	see MT305
MT306	3m	M6	see MT308
MT310	3m	M6	see MT312
MT313	3m	M6	see MT316
MT520	3m	M6	see MT525



# Foot Mounted Hoist

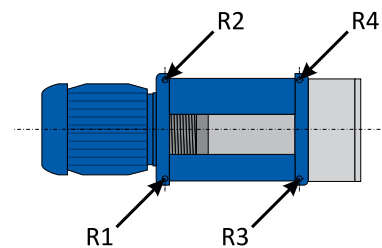
## M Series, 2 rope falls (reeving 2/1)



Foot mounted hoist – M series, 2 rope falls (reeving 2/1)																							
Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)										Variable dimensions (mm)								Weight (kg)	
				C	H	a	b2	k	d	e	m	n	o	p	q	r	s	t	u (V1)	v (V1)	u (V2)		v (V2)
M740	8	ø 15	14	850	530	167.5	307.5	80.5	470	64	50	75	178	553	148	78	299	400	674	311	512	410	600
	8	ø 15	19	850	530	167.5	307.5	80.5	470	64	50	75	178	713	178	128	299	400	674	311	512	410	654
	8	ø 15	26	850	530	167.5	307.5	80.5	470	64	50	75	178	928	285	128	299	400	674	311	512	410	713
M750	10	ø 15	14	850	530	167.5	307.5	84.5	465	64	50	75	178	553	148	78	250	400	453	440	750	330	640
	10	ø 15	19	850	530	167.5	307.5	84.5	465	64	50	75	178	713	178	128	250	400	453	440	750	330	685
	10	ø 15	26	850	530	167.5	307.5	84.5	465	64	50	75	178	928	285	128	250	400	453	440	750	330	760
M950	10	ø 20	20	1030	624	200	340	92	515	66.5	55	90	210	840	228	118	314	400	517	470	523	470	1140
	10	ø 20	32	1030	624	200	340	92	515	66.5	55	90	210	1255	435	118	314	400	517	470	523	470	1280
M1125	25	ø 30	20	1325	804	232.5	452.5	137.5	705	89	75	120	276.5	977	305	105	415	400	589	470	589	470	2350
	25	ø 30	24	1325	804	232.5	452.5	137.5	705	89	75	120	276.5	1162	400	100	415	400	589	470	589	470	2430
	25	ø 30	30	1325	804	232.5	452.5	137.5	705	89	75	120	276.5	1402	520	100	415	400	589	470	589	470	2690

Foot mounted hoist – M series, 2 rope falls (reeving 2/1)							
Hoist type	Capacity (t)	Hook travel (m)	Hook position	Reactions (kg)			
				R1	R2	R3	R4
M740	8	14	uep	2993	3148	906	953
	8	14	dep	1400	1472	2499	2629
	8	19	uep	2923	3074	976	1027
	8	19	dep	1250	1314	2649	2787
	8	26	uep	3147	3310	752	791
	8	26	dep	1412	1485	2487	2616
M750	10	14	uep	3741	3936	1132	1191
	10	14	dep	1750	1840	3124	3286
	10	19	uep	3654	3842	1220	1284
	10	19	dep	1563	1642	3311	3484
	10	26	uep	3933	4137	940	990
	10	26	dep	1765	1856	3109	3270
M950	10	20	uep	3807	3907	1128	1158
	10	20	dep	1774	1821	3161	3244
	10	32	uep	4178	4288	757	777
	10	32	dep	2004	2056	2931	3009
M1125	25	20	uep	9530	10775	2204	2491
	25	20	dep	4606	5207	7128	8059
	25	24	uep	9906	11200	1828	2066
	25	24	dep	4857	5492	6876	7775
	25	30	uep	10219	11553	1515	1713
	25	30	dep	5030	5687	6704	7579

All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

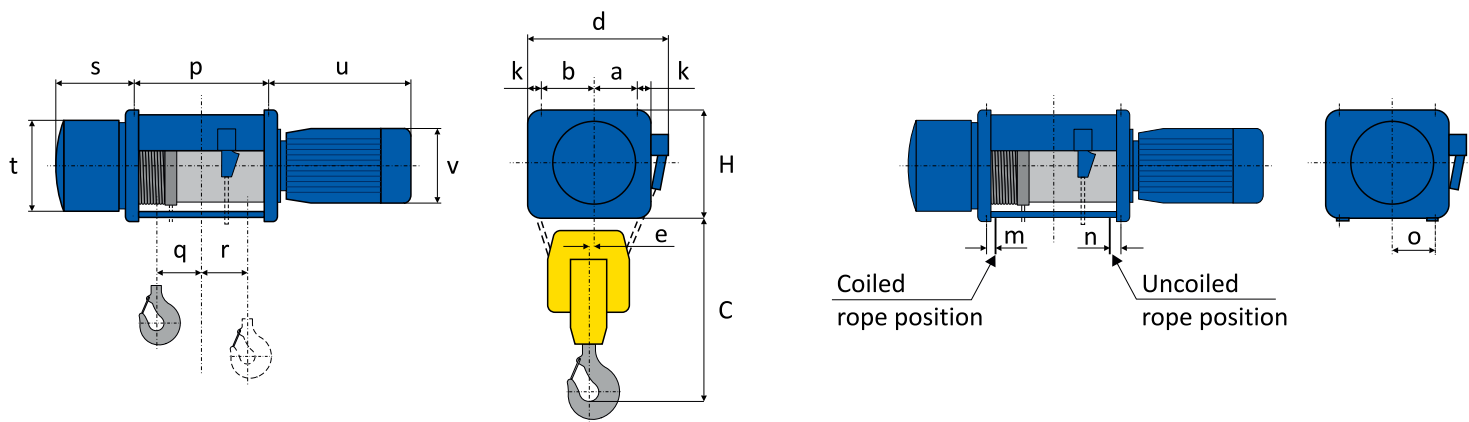


uep – Upper end position of the hook.  
dep – Down end position of the hook.

# Foot Mounted Hoist

## MT Series, 4 rope falls (reeving 4/1)

10



Foot mounted hoist – MT series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)										Variable dimensions (mm)								Weight (kg)	
				C	H	a	b	k	d	e	m	n	o	p	q	r	s	t	u (V1)	v (V1)	u (V2)		v (V2)
MT305	2	ø 7	7	500	321	105	190	50	469	27	45	48	84	520	132	-25	200	218	376	220	376	220	197
	2	ø 7	10	500	321	105	190	50	469	27	45	48	84	700	222	-69	200	218	376	220	376	220	215
	2	ø 7	13	500	321	105	190	50	469	27	45	48	84	885	314	-115	200	218	376	220	376	220	228
MT308	3.2	ø 7	7	535	321	105	190	50	469	27	45	48	84	520	132	-25	200	218	376	220	483	257	206
	3.2	ø 7	10	535	321	105	190	50	469	27	45	48	84	700	222	-69	200	218	376	220	483	257	240
	3.2	ø 7	13	535	321	105	190	50	469	27	45	48	84	885	314	-115	200	218	376	220	483	257	350
MT312	5	ø 10	7	600	321	105	190	50	469	21	48	56	110	570	137	-19	246	292	483	257	483	257	298
	5	ø 10	10	600	321	105	190	50	469	21	48	56	110	775	240	-72	246	292	483	257	483	257	310
	5	ø 10	13	600	321	105	190	50	469	21	48	56	110	975	340	-122	246	292	483	257	483	257	325
MT316	6.3	ø 10	7	620	321	105	190	50	469	21	48	56	110	570	137	-19	246	292	483	257	607	310	298
	6.3	ø 10	10	620	321	105	190	50	469	21	48	56	110	775	240	-72	246	292	483	257	607	310	310
	6.3	ø 10	13	620	321	105	190	50	469	21	48	56	110	975	340	-122	246	292	483	257	607	310	355
MT525	10	ø 12	7	675	378	133	212	53	544	17	60	61	133	590	133	-15	266	360	616	310	661	310	460
	10	ø 12	10	675	378	133	212	53	544	17	60	61	133	795	236	-67	266	360	616	310	661	310	485
	10	ø 12	13	675	378	133	212	53	544	17	60	61	133	995	336	-117	266	360	616	310	661	310	540

Dimensions are for hoists with FEM 2m/ISO M5, for 3m/M6 see table MT2-3m.  
All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

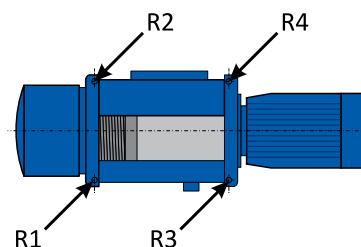
Foot mounted hoist – MT series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Hook position	Reactions (kg)											
			Hook travel (m)											
			7				10				13			
			R1	R2	R3	R4	R1	R2	R3	R4	R1	R2	R3	R4
MT305	2	uep	838	669	274	219	908	726	203	163	951	759	161	129
	2	dep	609	487	503	401	666	531	446	357	700	559	412	329
MT308	3.2	uep	1341	1071	438	350	1454	1161	325	260	1522	1215	257	206
	3.2	dep	975	779	804	642	1065	850	714	571	1120	894	659	527
MT312	5	uep	2058	1644	722	576	2249	1796	531	424	2358	1883	422	337
	5	dep	1483	1184	1297	1036	1645	1315	1134	906	1738	1388	1042	832
MT316	6.3	uep	2592	2071	910	727	2834	2263	669	534	2971	2372	532	425
	6.3	dep	1868	1492	1634	1306	2074	1657	1428	1141	2189	1749	1313	1049
MT525	10	uep	4100	3154	1552	1194	4504	3465	1148	883	4735	3642	917	706
	10	dep	2970	2284	2683	2063	3303	2540	2350	1807	3491	2685	2161	1663

uep – Upper end position of the hook.  
dep – Down end position of the hook.

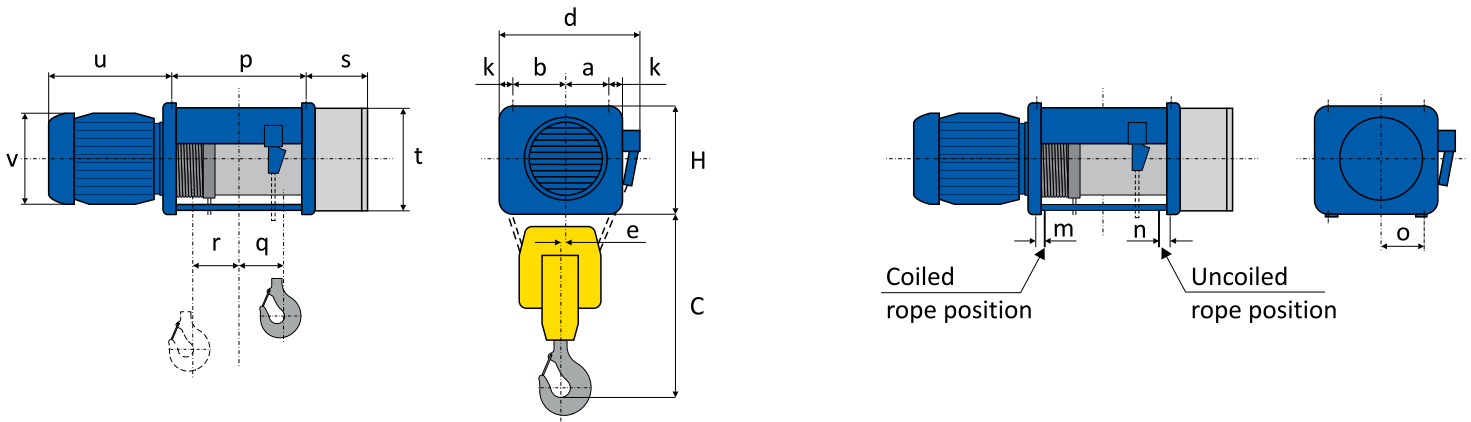
MT4-3m

Hoist type	FEM	ISO	Dimensions
MT304	3m	M6	see MT305
MT306	3m	M6	see MT308
MT310	3m	M6	see MT312
MT313	3m	M6	see MT316
MT520	3m	M6	see MT525



# Foot Mounted Hoist

## M Series, 4 rope falls (reeving 4/1)



Foot mounted hoist – M series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)										Variable dimensions (mm)								Weight (kg)		
				B	C	H	a	b	k	d	e	m	n	o	p	q	r	s	t	u (V1)	v (V1)		u (V2)	v (V2)
M740	16	ø 15	7	71	826	530	167,5	307,5	80,5	768	29,5	50	75	178	553	37	76	299	400	674	311	512	410	650
	16	ø 15	9	71	826	530	167,5	307,5	80,5	768	29,5	50	75	178	713	117	36	299	400	674	311	512	410	700
	16	ø 15	13	71	826	530	167,5	307,5	80,5	768	29,5	50	75	178	928	225	-18	299	400	674	311	512	410	850
	16	ø 15	16	71	826	530	167,5	307,5	80,5	768	29,5	50	75	178	1143	332	-72	299	400	674	311	512	410	1036
M750	20	ø 15	7	71	826	526	167,5	307,5	86,5	770	29,5	50	75	178	553	37	76	299	400	453	440	720	350	750
	20	ø 15	9	71	826	526	167,5	307,5	86,5	770	29,5	50	75	178	713	117	36	299	400	453	440	720	350	800
	20	ø 15	13	71	826	526	167,5	307,5	86,5	770	29,5	50	75	178	928	225	-18	299	400	453	440	720	350	930
M963	25	ø 20	10	90	920	624	200	340	92	856	20	55	90	210	840	130	43	314	400	517	470	523	470	1290
	25	ø 20	16	90	920	624	200	340	92	856	20	55	90	210	1255	337	-61	314	400	517	470	523	470	1430
	25	ø 20	24	90	920	624	200	340	92	856	20	55	90	210	1755	587	-186	314	400	517	470	523	470	1760
M980	32	ø 20	10	112	1100	624	200	340	92	856	20	55	90	210	840	130	43	314	400	517	470	523	470	1680
	32	ø 20	16	112	1100	624	200	340	92	856	20	55	90	210	1255	337	-61	314	400	517	470	523	470	1840
	32	ø 20	24	112	1100	624	200	340	92	856	20	55	90	210	1755	587	-186	314	400	517	470	523	470	2170
M1125	50	ø 30	10	112	1170	804	232,5	452,5	137,5	1135	54	75	120	276,5	977	193	12	415	400	589	470	589	470	2700
	50	ø 30	12	112	1170	804	232,5	452,5	137,5	1135	54	75	120	276,5	1162	285	-35	415	400	589	470	589	470	2790
	50	ø 30	15	112	1170	804	232,5	452,5	137,5	1135	54	75	120	276,5	1402	405	-95	415	400	589	470	589	470	3060
	50	ø 30	22	112	1170	804	232,5	452,5	137,5	1135	54	75	120	276,5	1912	660	-222	415	400	589	470	589	470	3690

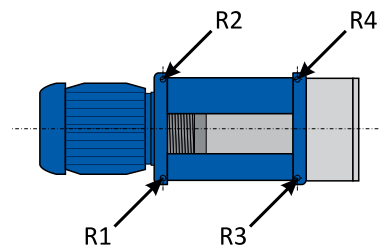
All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Foot mounted hoist – M series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Hook travel (m)	Hook position	Reactions (kg)			
				R1	R2	R3	R4
M740	16	7	uep	5309	3762	4055	2874
	16	7	dep	3395	2406	5969	4230
	16	9	uep	6218	4407	3146	2229
	16	9	dep	4209	2983	5155	3653
	16	13	uep	6948	4923	2417	1712
	16	13	dep	4864	3446	4501	3189
	16	16	uep	7402	5245	1962	1391
	16	16	dep	5272	3736	4092	2900
M750	20	7	uep	6636	4703	5069	3592
	20	7	dep	4244	3008	7460	5288
	20	9,5	uep	7773	5509	3932	2786
	20	9,5	dep	5261	3729	6444	4566
	20	13	uep	8685	6154	3021	2140
	20	13	dep	6080	4308	5626	3986
M963	25	10	uep	9700	6669	5115	3516
	25	10	dep	6658	4577	8157	5608
	25	16	uep	11385	7826	3429	2360
	25	16	dep	6687	4598	8127	5588
	25	24	uep	12363	8499	2452	1686
	25	24	dep	8978	6172	5837	4013

Foot mounted hoist – M series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Hook travel (m)	Hook position	Reactions (kg)			
				R1	R2	R3	R4
M980	32	10	uep	12416	8536	6548	4500
	32	10	dep	8522	5859	10441	7178
	32	16	uep	14573	10017	4389	3021
	32	16	dep	8559	5885	10401	7155
	32	24	uep	15824	10879	3139	2158
	32	24	dep	11491	7900	7471	5138
M1125	50	10	uep	20290	14587	8798	6325
	50	10	dep	14187	10199	14901	10713
	50	12	uep	21678	15585	7410	5327
	50	12	dep	15420	11086	13668	9826
	50	15	uep	22947	16497	6141	4415
	50	15	dep	16515	11873	12573	9039
	50	22	uep	24584	17675	4503	3238
	50	22	dep	17921	12884	11167	8028



uep – Upper end position of the hook.  
dep – Down end position of the hook.

# Normal Headroom Hoist

## MT Series, 2 rope falls (reeving 2/1)

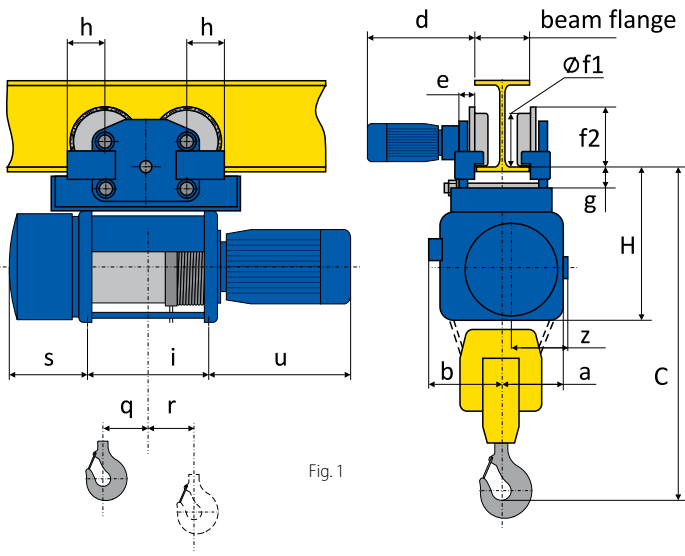


Fig. 1

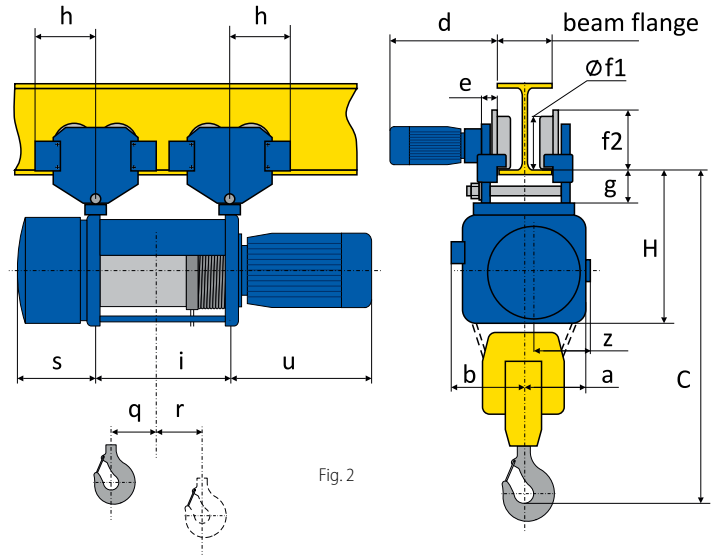


Fig. 2

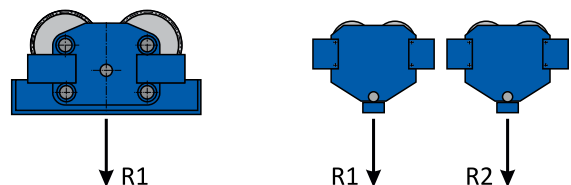
Normal headroom hoist – MT series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Rope (mm)	Fig.	Hook travel (m)	Fixed dimensions (mm)										Variable dimensions (mm)								Beam flange		Weight (kg)		
					C	H	a	b	d	e	f1	f2	g	h	i	q	r	s	u (V1)	z (V1)	u (V2)	z (V2)	x	y		max	min
MT305	1	ø 7	1	10	939	439	208	247	325	87	120	140	33	93	395	91	61	200	376	150	376	150	20	40	300	130	270
	1	ø 7	1	14	939	439	208	247	325	87	120	140	33	93	520	154	61	200	376	150	376	150	20	40	300	130	282
	1	ø 7	2	20	939	496	208	247	380	53	120	142	30	190	700	244	61	200	376	150	376	150	17	35	300	130	290
MT308	1.6	ø 7	1	10	1073	473	208	247	325	115	175	200	37	125	395	91	61	200	376	150	483	181	22	45	300	150	280
	1.6	ø 7	1	14	1073	473	208	247	325	115	175	200	37	125	520	154	61	200	376	150	483	181	22	45	300	150	297
	1.6	ø 7	2	20	1073	496	208	247	380	53	120	142	30	190	700	244	61	200	376	150	483	181	17	35	300	130	317
MT312	2.5	ø 10	1	10	1140	473	195	260	325	115	175	200	37	125	440	90	77	246	483	181	483	181	22	45	300	150	330
	2.5	ø 10	1	14	1140	473	195	260	325	115	175	200	37	125	570	155	77	246	483	181	483	181	22	45	300	150	370
	2.5	ø 10	2	20	1140	496	195	260	380	53	120	142	30	190	775	258	77	246	483	181	483	181	17	35	300	130	400
MT316	3.2	ø 10	1	10	1140	473	195	260	335	115	175	200	37	125	440	90	77	246	483	181	607	240	22	45	300	150	370
	3.2	ø 10	1	14	1140	473	195	260	335	115	175	200	37	125	570	155	77	246	483	181	607	240	22	45	300	150	398
	3.2	ø 10	2	20	1140	496	195	260	380	53	120	142	30	190	775	258	77	246	483	181	607	240	17	35	300	130	420
MT525	5	ø 12	1	10	1180	496	227	284	365	120	210	230	33	140	455	90	78	266	616	251	661	251	22	45	300	150	525
	5	ø 12	1	14	1180	496	227	284	365	120	210	230	33	140	590	157	78	266	616	251	661	251	22	45	300	150	565
	5	ø 12	2	20	1180	586	227	284	415	53	120	164	30	215	795	260	78	266	616	251	661	251	17	35	300	130	590
	5	ø 12	2	26	1180	586	227	284	415	53	120	164	30	215	995	360	78	266	616	251	661	251	17	35	300	130	618

Dimensions are for hoists with FEM 2m/ISO M5, for 3m/M6 see table MT2-3m.  
All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Normal headroom hoist – MT series, 2 rope falls (reeving 2/1)								
Hoist type	Capacity (t)	Hook position	Reactions (kg)					
			Hook travel (m)					
			10	14	20	26		
			R1	R1	R1	R2	R1	R2
MT305	1	uep	1000	1000	842	158	–	–
	1	dep	1000	1000	406	594	–	–
MT308	1.6	uep	1600	1600	1356	254	–	–
	1.6	dep	1600	1600	650	950	–	–
MT312	2.5	uep	2500	2500	2110	390	–	–
	2.5	dep	2500	2500	1034	1466	–	–
MT316	3.2	uep	3200	3200	2700	500	–	–
	3.2	dep	3200	3200	1324	1876	–	–
MT525	5	uep	5000	5000	4100	900	428	702
	5	dep	5000	5000	1990	3010	2088	2912

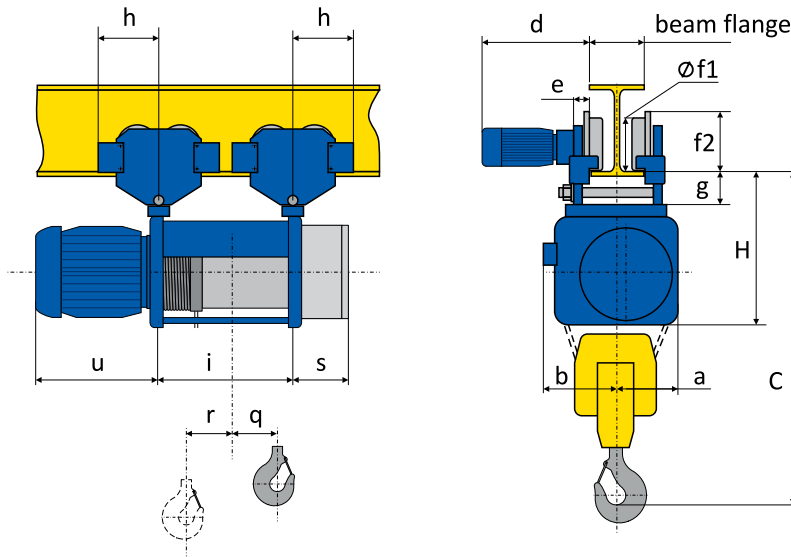
MT2-3m			
Hoist type	FEM	ISO	Dimensions
MT304	3m	M6	see MT305
MT306	3m	M6	see MT308
MT310	3m	M6	see MT312
MT313	3m	M6	see MT316
MT520	3m	M6	see MT525



uep – Upper end position of the hook.  
dep – Down end position of the hook.  
Note: Load on the single wheel – R1/4, R2/4

# Normal Headroom Hoist

## M Series, 2 rope falls (reeving 2/1)



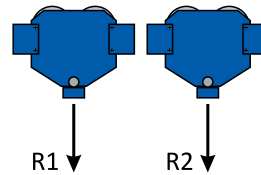
Normal headroom hoist – M series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)									Variable dimensions (mm)								Beam flange		Weight (kg)		
				B	C	H	a	b	d	e	f1	f2	g	h	i	q	r	s	u (V1)	u (V2)	x	y		max	min
M740	8	ø 15	14	56	1566	716	308	410	365	120	210	230	33	140	553	148	78	299	674	512	22	45	300	150	975
	8	ø 15	19	56	1566	716	308	410	365	120	210	230	33	140	713	178	128	299	674	512	22	45	300	150	1143
	8	ø 15	26	56	1566	716	308	410	365	120	210	230	33	140	928	285	128	299	674	512	22	45	300	150	1193
M750	10	ø 15	14	56	1625	735	316	401	415	63	140	164	25	215	553	148	78	299	453	720	20	40	300	150	1050
	10	ø 15	19	56	1625	735	316	401	415	63	140	164	25	215	713	178	128	299	453	720	20	40	300	150	1220
	10	ø 15	26	56	1625	735	316	401	415	63	140	164	25	215	928	285	128	299	453	720	20	40	300	150	1300

All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Normal headroom hoist – M series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Hook travel (m)	Hook position	Reactions (kg)	
				R1	R2
M740	8	14	uep	1860	6140
	8	14	dep	5128	2872
	8	19	uep	2004	5996
	8	19	dep	5436	2564
	8	26	uep	1544	6456
	8	26	dep	5102	2898
M750	10	14	uep	2325	7675
	10	14	dep	6410	3590
	10	19	uep	2505	7495
	10	19	dep	6795	3205
	10	26	uep	1930	8070
	10	26	dep	6377	3623



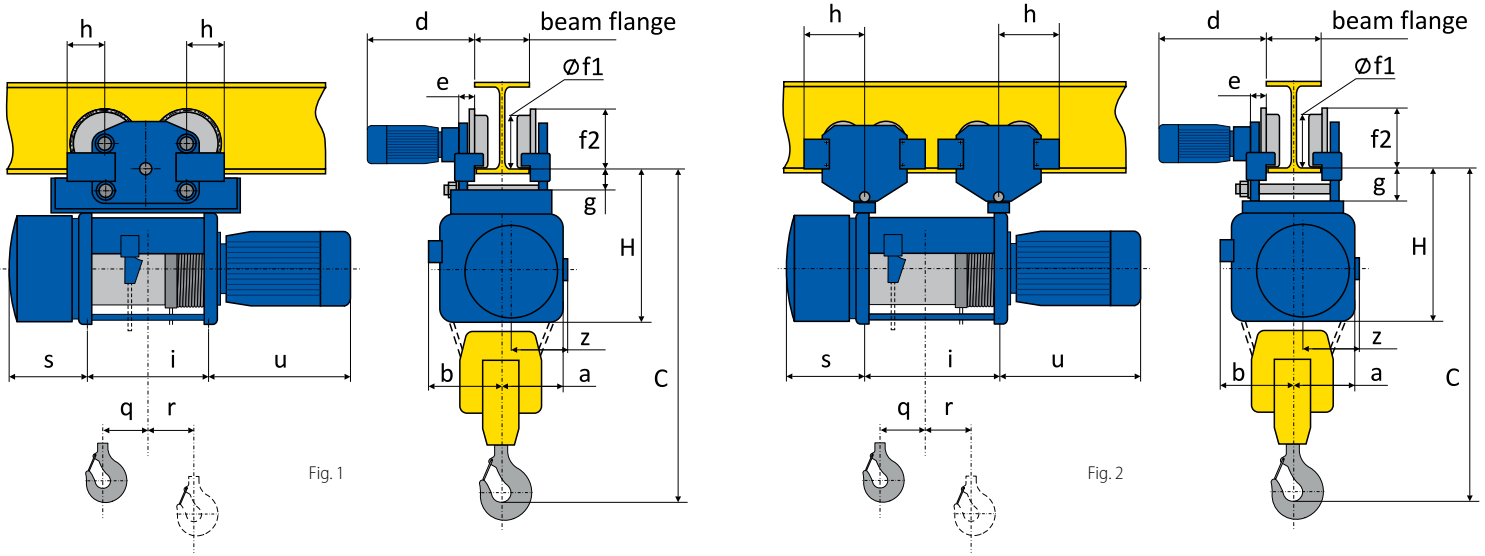
uep – Upper end position of the hook.

dep – Down end position of the hook.

Note: Load on the single wheel – R1/4, R2/4

# Normal Headroom Hoist

## MT Series, 4 rope falls (reeving 4/1)



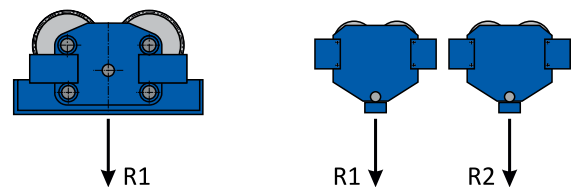
Normal headroom hoist – MT series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Rope (mm)	Fig.	Hook travel (m)	Fixed dimensions (mm)										Variable dimensions (mm)						Beam flange		Weight (kg)		
					C	H	a	b	d	e	f1	f2	g	h	i	q	r	s	u (V1)	u (V2)	x	y		max	min
MT305	2	ø7	1	7	1000	473	256	413	335	115	175	200	37	125	520	132	-25	200	376	376	22	45	300	150	306
	2	ø7	2	10	1000	496	256	213	380	53	120	142	30	190	700	222	-69	200	376	376	17	35	300	130	328
	2	ø7	2	13	1000	496	256	213	380	53	120	142	30	190	885	314	-115	200	376	376	17	35	300	130	335
MT308	3.2	ø7	1	7	1080	473	256	413	335	115	175	200	37	125	520	132	-25	200	376	483	22	45	300	150	324
	3.2	ø7	2	10	1080	496	256	213	380	53	120	142	30	190	700	222	-69	200	376	483	17	35	300	130	334
	3.2	ø7	2	13	1080	496	256	213	380	53	120	142	30	190	885	314	-115	200	376	483	17	35	300	130	350
MT312	5	ø10	1	7	1140	486	256	418	365	120	210	230	33	140	570	137	-19	246	483	483	20	40	300	150	430
	5	ø10	2	10	1140	469	251	218	380	53	120	142	30	190	775	240	-72	246	483	483	17	35	300	130	452
	5	ø10	2	13	1140	469	251	218	380	53	120	142	30	190	975	340	-122	246	483	483	17	35	300	130	495
MT316	6.3	ø10	1	7	1140	486	256	418	365	120	210	230	33	140	570	137	-19	246	483	607	20	40	300	150	486
	6.3	ø10	2	10	1140	583	251	218	415	63	140	164	30	215	775	240	-72	246	483	607	20	40	300	150	495
	6.3	ø10	2	13	1140	583	251	218	415	63	140	164	30	215	975	340	-122	246	483	607	20	40	300	150	532
MT525	10	ø12	2	7	1180	586	296	448	415	63	140	164	30	215	590	133	-15	266	616	661	20	40	300	150	620
	10	ø12	2	10	1180	586	296	248	415	63	140	164	30	215	795	236	-67	266	616	661	20	40	300	150	700
	10	ø12	2	13	1180	586	296	248	415	63	140	164	30	215	995	336	-117	266	616	661	20	40	300	150	765

Dimensions are for hoists with FEM 2m/ISO M5, for 3m/M6 see table MT2-3m.  
All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Normal headroom hoist – MT series, 4 rope falls (reeving 4/1)									
Hoist type	Capacity (t)	Hook position	Reactions (kg)						
			Hook travel (m)						
			7		10		13		
R1	R2	R1	R2	R1	R2	R1	R2		
MT305	2	uep	2000	2000	1634	366	1710	290	
	2	dep	2000	2000	1196	804	1258	742	
MT308	3.2	uep	3200	3200	2614	586	2736	464	
	3.2	dep	3200	3200	1914	1286	2014	1186	
MT312	5	uep	5000	5000	4044	956	4240	760	
	5	dep	5000	5000	2960	2040	3126	1874	
MT316	6.3	uep	6300	6300	5096	1204	5344	956	
	6.3	dep	6300	6300	3730	2570	3938	2362	
MT525	10	uep	7254	2746	7968	2032	8376	1624	
	10	dep	5254	4746	5842	4158	6176	3824	

MT4-3m			
Hoist type	FEM	ISO	Dimensions
MT304	3m	M6	see MT305
MT306	3m	M6	see MT308
MT310	3m	M6	see MT312
MT313	3m	M6	see MT316
MT520	3m	M6	see MT525

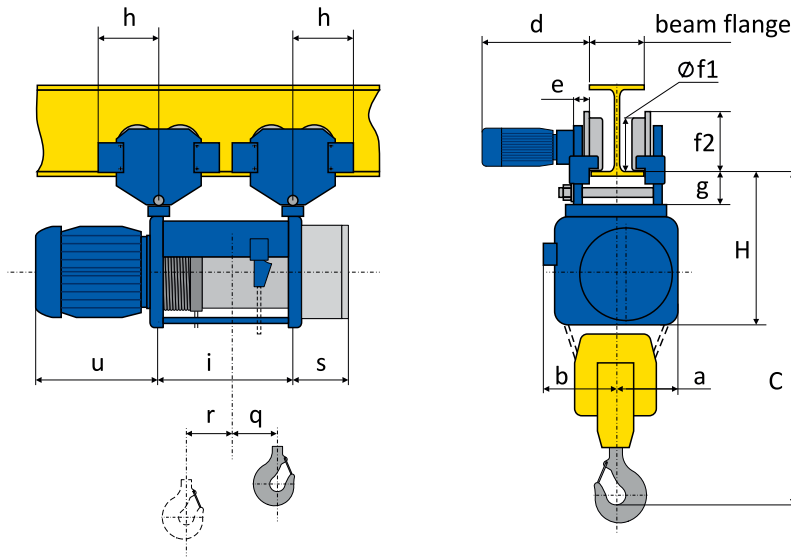


uep – Upper end position of the hook.  
dep – Down end position of the hook.  
Note: Load on the single wheel – R1/4, R2/4



# Normal Headroom Hoist

## M Series, 4 rope falls (reeving 4/1)



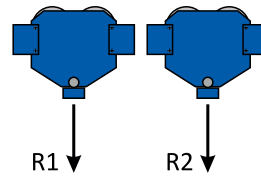
Normal headroom hoist – M series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)										Variable dimensions (mm)						Beam flange		Weight (kg)			
				B	C	H	a	b	d	e	f1	f2	g	h	i	q	r	s	u (V1)	u (V2)	x		y	max	min
M740	16	ø 15	7	71	1600	771	410	358	550	122	250	282	50	176	553	37	70	299	674	512	22	45	300	150	990
	16	ø 15	9	71	1600	771	410	358	550	122	250	282	50	176	713	117	36	299	674	512	22	45	300	150	1160
	16	ø 15	13	71	1600	771	410	358	550	122	250	282	50	176	928	224	-18	299	674	512	22	45	300	150	1330
	16	ø 15	16	71	1600	771	410	358	550	122	250	282	50	176	1143	332	-72	299	674	512	22	45	300	150	1515

All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Normal headroom hoist – M series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Hook travel (m)	Hook position	Reactions (kg)	
				R1	R2
M740	16	7	uep	6930	9070
	16	7	dep	10024	5976
	16	9	uep	5374	10626
	16	9	dep	8808	7192
	16	13	uep	4138	11862
	16	13	dep	7690	8310
	16	16	uep	3354	12646
	16	16	dep	6992	9008



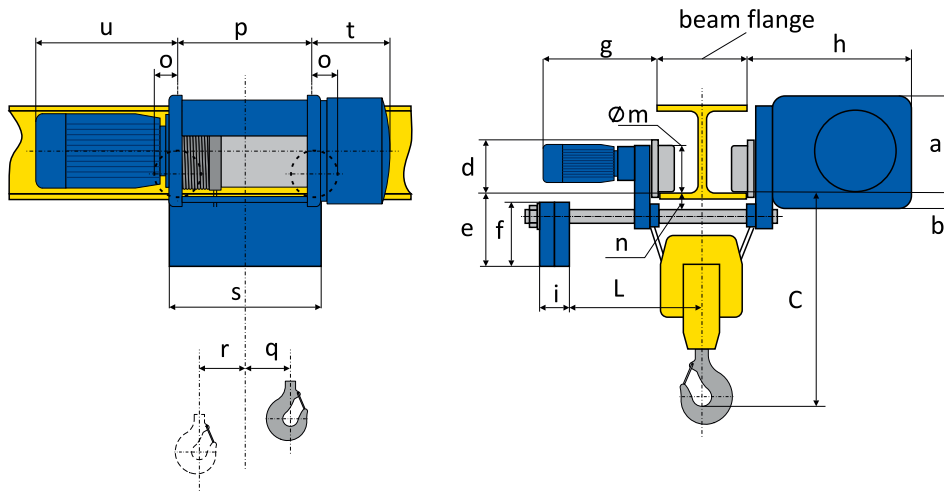
uep – Upper end position of the hook.

dep – Down end position of the hook.

Note: Load on the single wheel – R1/4, R2/4

# Low Headroom Hoist

## MT Series, 2 rope falls (reeving 2/1)



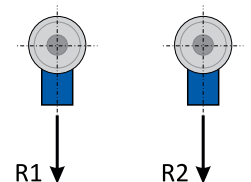
Low headroom hoist – MT series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)											Variable dimensions (mm)								Beam flange		Weight (kg)			
				C	a	b	d	e	f	g	h	i	L	m	n	o	p	q	r	s	t	u (V1)	u (V2)	x		y	max	min
MT305	1	ø 7	10	640	240	69	140	359	300	420	476	24	538..453	122	81	102	395	88	65	700	200	376	376	20	40	300	130	305
	1	ø 7	14	640	240	69	140	359	300	420	476	24	538..453	122	81	102	520	149	65	700	200	376	376	20	40	300	130	312
	1	ø 7	20	640	240	69	140	359	300	420	476	24	538..453	122	81	102	700	239	65	800	200	376	376	20	40	300	130	330
MT308	1.6	ø 7	10	700	240	69	140	359	300	420	476	24	538..453	122	81	102	395	88	65	700	200	376	483	20	40	300	130	310
	1.6	ø 7	14	700	240	69	140	359	300	420	476	24	538..453	122	81	102	520	149	65	700	200	376	483	20	40	300	130	328
	1.6	ø 7	20	700	240	69	140	359	300	420	476	24	538..453	122	81	102	700	239	65	800	200	376	483	20	40	300	130	341
MT312	2.5	ø 10	10	800	240	69	140	349	300	426	476	40	596..511	122	81	95	440	99.5	68	700	246	483	483	20	40	300	130	361
	2.5	ø 10	14	800	240	69	140	349	300	426	476	40	596..511	122	81	95	570	164.5	68	700	246	483	483	20	40	300	130	396
	2.5	ø 10	20	800	240	69	140	349	300	426	476	40	596..511	122	81	95	775	267	68	900	246	483	483	20	40	300	130	421
MT316	3.2	ø 10	10	800	240	69	140	349	300	426	476	40	596..511	122	81	95	440	99.5	68	700	246	483	607	20	40	300	130	440
	3.2	ø 10	14	800	240	69	140	349	300	426	476	40	596..511	122	81	95	570	164.5	68	700	246	483	607	20	40	300	130	470
	3.2	ø 10	20	800	240	69	140	349	300	426	476	40	596..511	122	81	95	775	267	68	900	246	483	607	20	40	300	130	508
MT525	5	ø 12	10	920	283	71	146	471	310	483	482	200	471..386	122	76	95	455	85	82	700	266	616	661	20	40	300	130	535
	5	ø 12	14	920	283	71	146	471	310	483	482	200	471..386	122	76	95	590	152.5	82	700	266	616	661	20	40	300	130	546
	5	ø 12	20	920	283	71	146	471	310	483	482	200	471..386	122	76	95	795	255	82	900	266	616	661	20	40	300	130	560
	5	ø 12	26	920	283	71	146	471	310	483	482	200	471..386	122	76	95	995	355	82	1100	266	616	661	20	40	300	130	572

Dimensions are for hoists with FEM 2m/ISO M5, for 3m/M6 see table MT2-3m.  
All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Low headroom hoist – MT series, 2 rope falls (reeving 2/1)										
Hoist type	Capacity (t)	Hook position	Reactions (kg)							
			Hook travel (m)							
			10		14		20		26	
			R1	R2	R1	R2	R1	R2	R1	R2
MT305	1	uep	361	139	393	107	421	79	-	-
	1	dep	168	332	189	311	203	297	-	-
MT308	1.6	uep	577	223	629	171	673	127	-	-
	1.6	dep	268	532	302	498	325	475	-	-
MT312	2.5	uep	906	344	985	265	1055	195	-	-
	2.5	dep	432	818	472	778	517	733	-	-
MT316	3.2	uep	1160	440	1260	340	1350	250	-	-
	3.2	dep	553	1047	604	996	662	938	-	-
MT525	5	uep	1714	786	1894	606	2050	450	2141	359
	5	dep	794	1706	898	1602	995	1505	1044	1456

MT2-3m			
Hoist type	FEM	ISO	Dimensions
MT304	3m	M6	see MT305
MT306	3m	M6	see MT308
MT310	3m	M6	see MT312
MT313	3m	M6	see MT316
MT520	3m	M6	see MT525



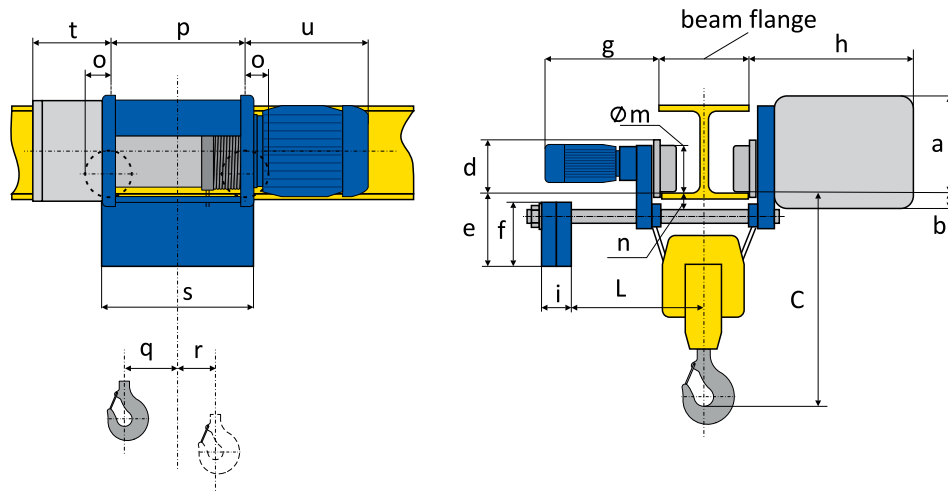
\* For wider beam flanges, as specified, the measure "C" (space required by the hook) increases of 12 mm every 10 mm beam flange width.

uep – Upper end position of the hook.

dep – Down end position of the hook.

# Low Headroom Hoist

## M Series, 2 rope falls (reeving 2/1)



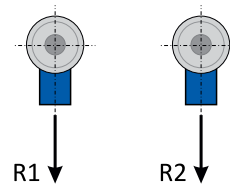
Low headroom hoist – M series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)											Variable dimensions (mm)								Beam flange		Weight (kg)				
				B	C	a	b	d	e	f	g	h	i	L	m	n	o	p	q	r	s	t	u(V1)	u(V2)		x	y	max	min
M740	8	ø 15	14	56	925	454,5	75,5	218	395	365	430	762	230	650...565	200	42,5	145	553	130	83	673	299	674	512	22	45	300	130	870
	8	ø 15	19	56	925	454,5	75,5	218	395	365	430	762	230	650...565	200	42,5	145	713	160	133	833	299	674	512	22	45	300	130	1000
	8	ø 15	26	56	925	454,5	75,5	218	395	365	430	762	230	650...565	200	42,5	145	928	268	133	1048	299	674	512	22	45	300	130	1080
M750	10	ø 15	14	56	1040	468	62	218	395	365	430	762	230	650...565	200	45	140	553	130	83	673	299	453	720	22	45	300	130	910
	10	ø 15	19	56	1040	468	62	218	395	365	430	762	230	650...565	200	45	140	713	160	133	833	299	453	720	22	45	300	130	1050
	10	ø 15	26	56	1040	468	62	218	395	365	430	762	230	650...565	200	45	140	928	268	133	1048	299	453	720	22	45	300	130	1110

All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Low headroom hoist – M series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Hook travel (m)	Hook position	Reactions (kg)	
				R1	R2
M740	8	14	uep	1060	2940
	8	14	dep	2600	1400
	8	19	uep	1103	2897
	8	19	dep	2746	1254
	8	26	uep	845	3155
	8	26	dep	2573	1427
M750	10	14	uep	2650	7350
	10	14	dep	6500	3500
	10	19	uep	2758	7242
	10	19	dep	6865	3135
	10	26	uep	2113	7887
	10	26	dep	6432	3568



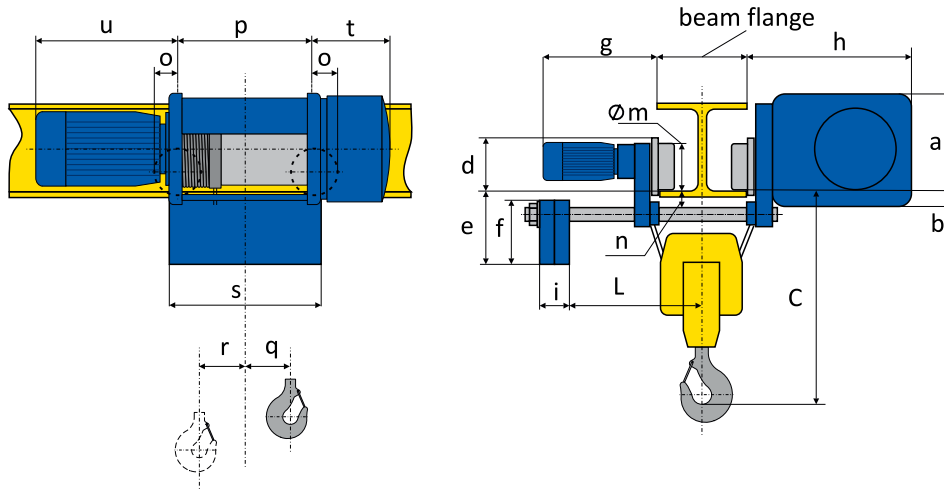
\* For wider beam flanges, as specified, the measure "C" (space required by the hook) increases of 12 mm every 10 mm beam flange width.

**uep** – Upper end position of the hook.

**dep** – Down end position of the hook.

# Low Headroom Hoist

## MT Series, 4 rope falls (reeving 4/1)



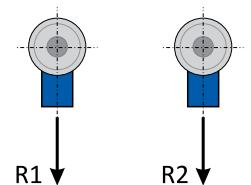
Low headroom hoist – MT series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)											Variable dimensions (mm)								Beam flange		Weight (kg)			
				C	a	b	d	e	f	g	h	i	L	m	n	o	p	q	r	s	t	u (V1)	u (V2)	x		y	max	min
MT305	2	ø 7	7	649	240	69	140	359	300	417	476	24	612...527	122	82	102	520	64	43	700	200	376	376	20	40	300	130	298
	2	ø 7	10	649	240	69	140	359	300	417	476	24	612...527	122	82	102	700	154	-2	800	200	376	376	20	40	300	130	315
	2	ø 7	13	649	240	69	140	359	300	417	476	24	612...527	122	82	102	885	247	-47	1000	200	376	376	20	40	300	130	328
MT308	3.2	ø 7	7	680	240	69	140	359	300	417	476	24	612...527	122	82	102	520	64	43	700	200	376	483	20	40	300	130	320
	3.2	ø 7	10	680	240	69	140	359	300	417	476	24	612...527	122	82	102	700	154	-2	800	200	376	483	20	40	300	130	340
	3.2	ø 7	13	680	240	69	140	359	300	417	476	24	612...527	122	82	102	885	247	-47	1000	200	376	483	20	40	300	130	370
MT312	5	ø 10	7	750	245	64	140	349	300	473	476	40	631...546	122	77	95	570	24	94	700	246	483	483	20	40	300	130	490
	5	ø 10	10	750	245	64	140	349	300	473	476	40	631...546	122	77	95	775	127	41	900	246	483	483	20	40	300	130	515
	5	ø 10	13	750	245	64	140	349	300	473	476	40	631...546	122	77	95	975	227	-9	1100	246	483	483	20	40	300	130	540
MT316	6.3	ø 10	7	770	245	64	140	349	300	526	476	40	631...546	122	77	95	570	24	94	700	246	483	607	20	40	300	150	460
	6.3	ø 10	10	770	245	64	140	349	300	526	476	40	631...546	122	77	95	775	127	41	900	246	483	607	20	40	300	150	482
	6.3	ø 10	13	770	245	64	140	349	300	526	476	40	631...546	122	77	95	975	227	-9	1100	246	483	607	20	40	300	150	513
MT525	10	ø 12	7	810	304	50	174	343	310	536	551	200	556...481	155	60	122	590	60	58	700	266	616	661	20	40	300	150	530
	10	ø 12	10	810	304	50	174	343	310	536	551	200	556...481	155	60	122	795	163	6	900	266	616	661	20	40	300	150	555
	10	ø 12	13	810	304	50	174	343	310	536	551	200	556...481	155	60	122	995	263	-43	1100	266	616	661	20	40	300	150	590

Dimensions are for hoists with FEM 2m/ISO M5, for 3m/M6 see table MT2-3m.  
All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Low headroom hoist – MT series, 4 rope falls (reeving 4/1)								
Hoist type	Capacity (t)	Hook position	Reactions (kg)					
			Hook travel (m)					
			7		10		13	
			R1	R2	R1	R2	R1	R2
MT305	2	uep	622	378	720	280	778	222
	2	dep	583	417	502	498	553	447
MT308	3.2	uep	997	603	1152	448	1246	354
	3.2	dep	933	667	804	796	885	715
MT312	5	uep	1356	1144	1658	842	1831	669
	5	dep	838	1662	1118	1382	1273	1227
MT316	6.3	uep	1708	1442	2089	1061	2307	843
	6.3	dep	1056	2094	1409	1741	1604	1546
MT525	10	uep	3009	1991	3522	1478	3819	1181
	10	dep	2009	2991	2463	2537	2716	2284

MT4-3m			
Hoist type	FEM	ISO	Dimensions
MT304	3m	M6	see MT305
MT306	3m	M6	see MT308
MT310	3m	M6	see MT312
MT313	3m	M6	see MT316
MT520	3m	M6	see MT525



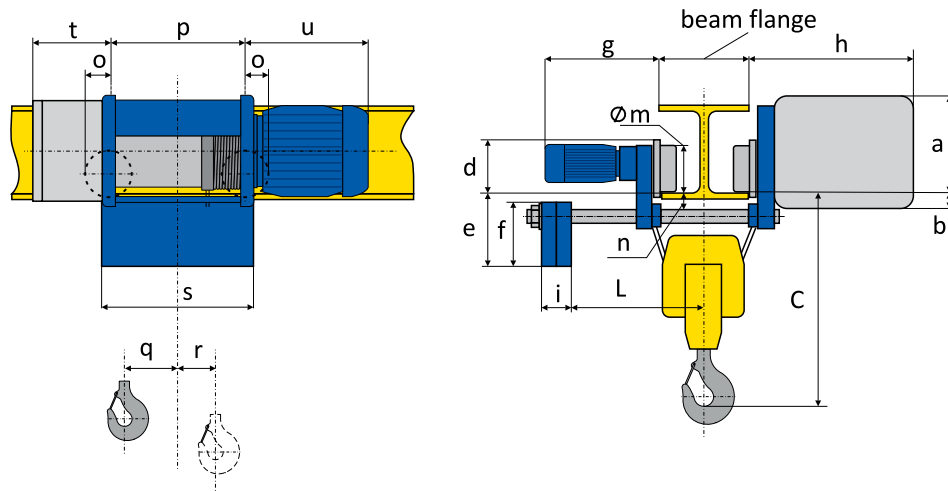
\* For wider beam flanges, as specified, the measure "C" (space required by the hook) increases of 12 mm every 10 mm beam flange width.

uep – Upper end position of the hook.

dep – Down end position of the hook.

# Low Headroom Hoist

## M Series, 4 rope falls (reeving 4/1)



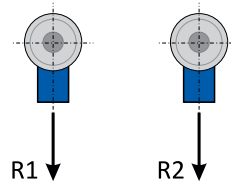
Low headroom hoist – M series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Rope (mm)	Hook travel (m)	Fixed dimensions (mm)											Variable dimensions (mm)								Beam flange		Weight (kg)				
				B	C	a	b	d	e	f	g	h	i	L	m	n	o	p	q	r	s	t	u(V1)	u(V2)		x	y	max	min
M740	16	ø 15	9	71	910	454,5	75,5	273	395	365	522	772	230	640...555	250	42,5	178	713	65	75	833	299	674	512	22	45	300	130	1275
	16	ø 15	13	71	910	454,5	75,5	273	395	365	522	772	230	640...555	250	42,5	178	928	156	45	1048	299	674	512	22	45	300	130	1505
	16	ø 15	16	71	910	454,5	75,5	273	395	365	522	772	230	640...555	250	42,5	178	1143	264	-17	1263	299	674	512	22	45	300	130	1725

All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

Low headroom hoist – M series, 4 rope falls (reeving 4/1)

Hoist type	Capacity (t)	Hook travel (m)	Hook position	Reactions (kg)	
				R1	R2
M740	16	9	uep	3277	4723
	16	9	dep	4836	3164
	16	13	uep	2655	5345
	16	13	dep	4151	3849
	16	16	uep	2156	5844
	16	16	dep	3883	4117



\* For wider beam flanges, as specified, the measure "C" (space required by the hook) increases of 12 mm every 10 mm beam flange width.

**uep** – Upper end position of the hook.

**dep** – Down end position of the hook.

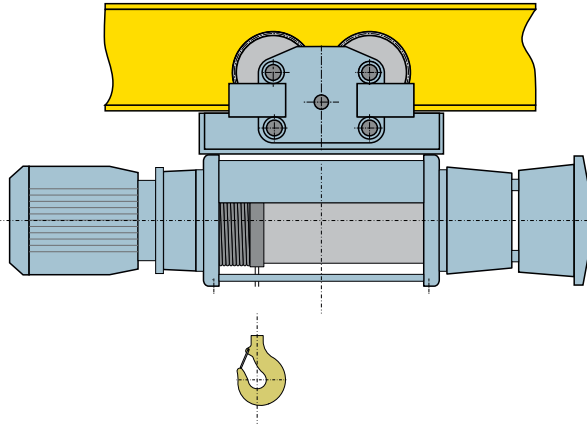
# Explosion-proof Electric Wire Rope Hoist

## MTMEx Series

20

Podem's explosion proof crane components (hoists and end-carriages) are reliable and easy for maintenance.

Certificates: ATEX and GOST



The electric equipment, completing these hoists - electric motors of the lifting and travelling mechanism, electrical panel with electric devices and a control button, are in the so-called "explosion-proof" version, thus giving the opportunity to be used, as well as the whole hoist, in hazardous environment.

The active part of the cylindrical/conical lifting motor and the brake are placed in an explosion-proof casing.

Hook-complete answers the up-to-date requirements for reliability and safety at exploitation (FEM, ISO). The actuation of travel wheels by a two-stage gear is realized by cylindrical/conical electric motor. All electric elements are installed in the explosion-proof casing of the electrical panel.

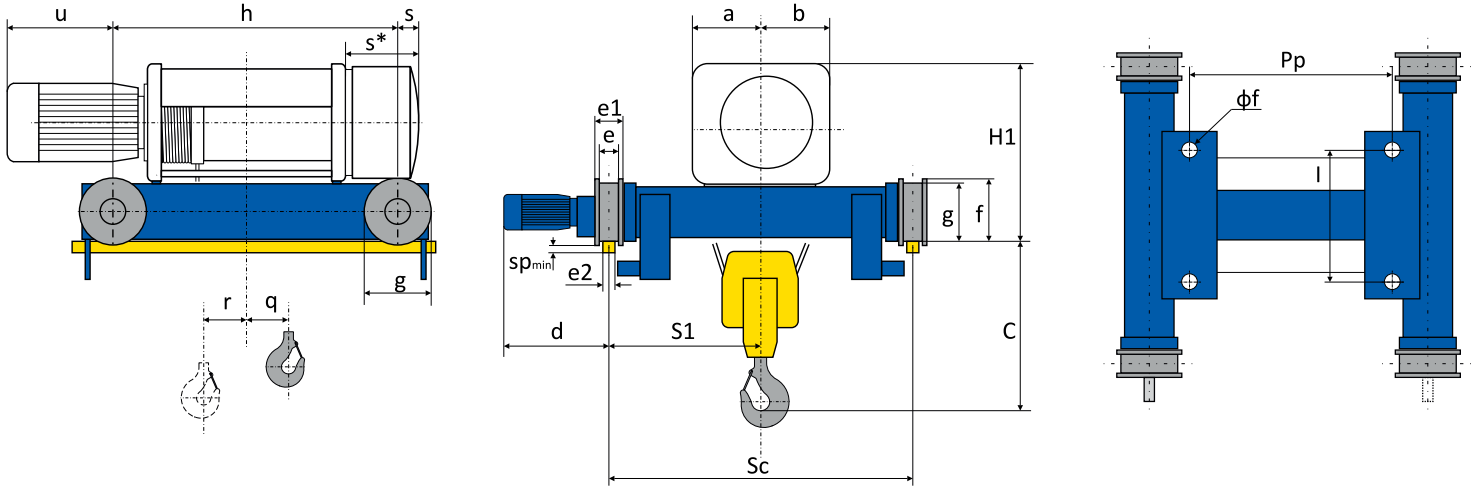
Explosion-proof electric wire rope hoist

Capacity (kg)	Groups		Hoist type	Rope falls	Lifting Speed (m/min)		Power lifting motor (kW)		Hook travel (m)			
	FEM	ISO			Single Speed	Dual Speed	Single Speed	Dual Speed	H0	H1	H2	H3
2 000	3m	M6	MTMEx 310	2/1	8	8/2	4,5	5	10	14	20	26
3200	2m	M5	MTMEx 316	2/1	8	8/2	4,5	5	10	14	20	26
5 000	2m	M5	MTMEx 525	2/1	8	8/2	8	7,5	10	14	20	26
	3m	M6	MTMEx 313	4/1	4	4/1	4,5	5	7	10	13	-
6 300	2m	M5	MTMEx 316	4/1	4	4/1	4,5	5	7	10	13	-
8 000	3m	M6	MTMEx 520	4/1	4	4/1	8	7,5	7	10	13	-
10 000	2m	M5	MTMEx 525	4/1	4	-	8	-	7	10	13	-

# Double Girder Trolleys

## Standard Products Table

Podem produces double rail trolleys with capacity from 2 to 50 t and various other characteristics. Non standard double rail trolleys on request.



Double girder trolley																												
Hoist type	Capacity (t)	Hook travel (m)	Dimensions (mm)																	Weight (kg)	Q-ty	kW	Amp	CT speed* (m/min)				
			C1	Sc	S1	H1	a	b	d	e	e1	e2	f	g	sp	h	q	r	s						u (V1)	u (V2)	Pp	φf
MT3051	2	7	500	1000	484	476	229	240	465	50	75	40	173	160	30	720	132	-25	99,5	276	276	520	16	374	1	0,12/0,37	1,2/1,2	20/6
MT3052	2	10	500	1000	484	476	229	240	465	50	75	40	173	160	30	900	222	-69	99,5	276	276	700	16	394	1	0,12/0,37	1,2/1,2	20/6
MT3053	2	13	500	1000	484	476	229	240	465	50	75	40	173	160	30	1085	314	-115	99,5	276	276	885	16	422	1	0,12/0,37	1,2/1,2	20/6
MT3081	3.2	7	535	1000	484	476	229	240	465	50	75	40	173	160	30	720	132	-25	99,5	276	383	520	16	378	1	0,12/0,37	1,2/1,2	20/6
MT3082	3.2	10	535	1000	484	476	229	240	465	50	75	40	173	160	30	900	222	-69	99,5	276	383	700	16	398	1	0,12/0,37	1,2/1,2	20/6
MT3083	3.2	13	535	1000	484	476	229	240	465	50	75	40	173	160	30	1085	314	-115	99,5	276	383	885	16	426	1	0,12/0,37	1,2/1,2	20/6
MT3121	5	7	600	1000	478	476	229	240	500	50	75	40	173	160	30	770	137	-19	146	383	383	570	22	512	1	0,18/0,55	2/1,7	20/6
MT3122	5	10	600	1000	478	476	229	240	500	50	75	40	173	160	30	975	240	-72	146	383	383	775	22	544	1	0,18/0,55	2/1,7	20/6
MT3123	5	13	600	1000	478	476	229	240	500	50	75	40	173	160	30	1175	340	-122	146	383	383	975	22	576	1	0,18/0,55	2/1,7	20/6
MT3161	6.3	7	620	1000	478	476	229	240	500	50	75	40	173	160	30	770	137	-19	146	383	507	570	22	524	1	0,18/0,55	2/1,7	20/6
MT3162	6.3	10	620	1000	478	476	229	240	500	50	75	40	173	160	30	975	240	-72	146	383	507	775	22	556	1	0,18/0,55	2/1,7	20/6
MT3163	6.3	13	620	1000	478	476	229	240	500	50	75	40	173	160	30	1175	340	-122	146	383	507	975	22	588	1	0,18/0,55	2/1,7	20/6
MT5251	10	7	670	1000	477	543	279	265	575	50	75	40	173	160	30	790	133	-15	166	516	561	590	25	670	1	0,37/1,1	3,2/3	20/6
MT5252	10	10	670	1000	477	543	279	265	575	50	75	40	173	160	30	995	236	-67	166	516	561	795	25	710	1	0,37/1,1	3,2/3	20/6
MT5253	10	13	670	1000	477	543	279	265	575	50	75	40	173	160	30	1195	336	-117	166	516	561	995	25	750	1	0,37/1,1	3,2/3	20/6
M7401	16	7	826	1200	640	735	410	358	610	60	90	50	220	200	40	833	37	76	159	534	372	553	29	1343	1	0,55/1,5	3,8/3,8	5...16
M7402	16	9	826	1200	640	735	410	358	610	60	90	50	220	200	40	993	117	36	159	534	372	713	29	1390	1	0,55/1,5	3,8/3,8	5...16
M7403	16	13	826	1200	640	735	410	358	610	60	90	50	220	200	40	1208	225	-18	159	534	372	928	29	1555	1	0,55/1,5	3,8/3,8	5...16
M9501	20	10	920	1400	750	865	412	312	655	60	90	50	270	250	50 (30)	1160	130	43	-	357	363	840	38	2050	1	0,75/2,2	5,4/5,3	5...16
M9502	20	16	920	1400	750	865	412	312	655	60	90	50	270	250	50 (30)	1575	337	-61	-	357	363	1255	38	2190	1	0,75/2,2	5,4/5,3	5...16
M9503	20	24	920	1400	750	865	412	312	655	60	90	50	270	250	50 (30)	2075	587	-186	-	357	363	1755	38	2550	1	0,75/2,2	5,4/5,3	5...16
M9631	25	10	920	1400	750	865	412	312	655	60	90	50	270	250	50 (30)	1160	130	43	-	357	363	840	38	2050	1	0,75/2,2	5,4/5,3	5...16
M9632	25	16	920	1400	750	865	412	312	655	60	90	50	270	250	50 (30)	1575	337	-61	-	357	363	1255	38	2190	1	0,75/2,2	5,4/5,3	5...16
M9633	25	24	920	1400	750	865	412	312	655	60	90	50	270	250	50 (30)	2075	587	-186	-	357	363	1755	38	2550	1	0,75/2,2	5,4/5,3	5...16
M9801	32	10	1100	1450	775	915	412	312	665	70	100	60	345	320	60 (40)	1180	130	43	-	347	353	840	38	2720	2	0,55/1,5	3,8/3,8	5...16
M9802	32	16	1100	1450	775	915	412	312	665	70	100	60	345	320	60 (40)	1595	337	-61	-	347	353	1255	38	2880	2	0,55/1,5	3,8/3,8	5...16
M9803	32	24	1100	1450	775	915	412	312	665	70	100	60	345	320	60 (40)	2095	587	-186	-	347	353	1755	38	3210	2	0,55/1,5	3,8/3,8	5...16
M11001	40	10	1170	2000*	1056	1140	536	424	675	90	120	70	345	320	70	1437	193	12	-	359	359	977	38	4380	2	0,75/2,2	5,4/5,3	5...16
M11002	40	12	1170	2000*	1056	1140	536	424	675	90	120	70	345	320	70	1622	285	-35	-	359	359	1622	38	4470	2	0,75/2,2	5,4/5,3	5...16
M11003	40	15	1170	2000*	1056	1140	536	424	675	90	120	70	345	320	70	1862	405	-95	-	359	359	1862	38	4740	2	0,75/2,2	5,4/5,3	5...16
M11004	40	22	1170	2000*	1056	1140	536	424	675	90	120	70	345	320	70	2372	660	-222	-	359	359	2372	38	5370	2	0,75/2,2	5,4/5,3	5...16

All dimensions are referred to "Standard Products", for all other products please contact Podem for GA drawing.

\* Dimension "d" is referred to standard cross travel speeds

\* Dimension Sc is variable depending of the project

\* Dual speed or ready for inverter

# Lifting & Travel Electric Motors

## Standard Podem's Usage

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### Podem's standard hoists' lifting motors usage – Double speed

Hoist type	Reeving	Motor type normal lift. sp. V1	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)	Motor type normal lift. sp. V2	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)
MT304, MT305	2/1, 4/1	CT112M-12/4-240Tp1	1	0,83/2,5	5,8/6	430/1400	CT112M-12/4-240Tp1	1	0,83/2,5	5,8/6	430/1400
MT306, MT308	2/1, 4/1	CT112M-12/4-240Tp1	1	0,83/2,5	5,8/6	430/1400	CT132MA-12/4-240Tp1	1	1,33/4	7,6/9	450/1400
MT310, MT312	2/1, 4/1	CT132MA-12/4-240Tp1	1	1,33/4	7,6/9	450/1400	CT132MB-12/4-240-6Tp1	1	2/6	10/13	440/1400
MT313, MT316	2/1, 4/1	CT132MB-12/4-240-5Tp1	1	1,66/5	8,4/10,8	460/1430	DM16-55-16/4 OBE-240Th	1	1,9/7,8	10/18	350/1440
MT520, MT525	2/1, 4/1	DM16-55-16/4 OBE-290Th	1	1,9/7,8	10/18	435/1440	MB160LB-12/4 FDB23 Th A2	1	3,9/11,8	29/29,7	465/1465
M740	2/1, 4/1	MB160LB-12/4 FDB23 Th A3	1	3,9/11,8	29/29,7	465/1465	MB180L-12/4 FDB26 B14	1	6,4/19,2	33,2/40,5	468/1470
M750	2/1, 4/1	K3517A-24/6 Tp1*	1	3/13	30/40	220/960	MB160LB-12/4 FDB23 A3	1	5/15	24,1/30,2	370/1400
M950, M963	2/1, 4/1	K3517-24/6 Tp1*	1	3/13	30/40	220/960	K3518-24/4 Tp1*	1	3,7/22	48/71	210/1400
M980, M1100, M1125	2/1, 4/1	K3518-24/6 Tp1*	1	4/16	36/70	210/950	K3518-24/4 Tp1*	1	3,7/22	48/71	210/1400

### Optional cylindrical motors for standard heavy hoists (double speed)

M950	2/1, 4/1	MB160LB-12/4 FDB23 B5	1	5/15	24,1/30,2	370/1400	MB180L-12/4 FDB26 B14	1	6,4/19,2	33,2/40,5	468/1470
M963	4/1	MB180L-12/4 FDB26 B14	1	6,4/19,2	33,2/40,5	468/1470	–	–	–	–	–
M1100	4/1	MB180L-12/4 FDB26 B14	1	7,2/21,6	40,7/43,2	435/1465	–	–	–	–	–
M1125	4/1	MB180L-12/4 FDB26 B14	1	7,2/21,6	40,7/43,2	435/1465	–	–	–	–	–

\* Electric motors – conical type, brake – mechanical.

### Podem's standard hoists' lifting motors usage – Single speed

Hoist type	Reeving	Motor type normal lift. sp. V1	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)	Motor type normal lift. sp. V2	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)
MT304, MT305	2/1, 4/1	CT100LA-4-240Tp1	1	2,5	5,4	1410	CT100LA-4-240Tp1	1	2,5	5,4	1410
MT306, MT308	2/1, 4/1	CT100LA-4-240Tp1	1	2,5	5,4	1410	CT112M-4-240Tp1	1	4	9,1	1420
MT310, MT312	2/1, 4/1	CT112M-4-240Tp1	1	4	9,1	1420	CT132S-4-240-6Tp1	1	6	11,7	1440
MT313, MT316	2/1, 4/1	CT132S-4-240-5Tp1	1	5	11,5	1440	MT160MB-4-240Tp1	1	8	16,8	1430
MT520, MT525	2/1, 4/1	DM13-55-4 OBE-290Th	1	8	18	1440	MT160LB-4 A2	1	12	24	1425
M740	2/1, 4/1	MT160LB-4 A3	1	12	24	1425	MT160L-4 A3	1	18	38,1	1470
M750	2/1, 4/1	KE2714A-6 Tp1*	1	12,5	36	920	MT160L-4 A3	1	16	34,9	1476
M950, M963	2/1, 4/1	K2714-6 Tp1*	1	12,5	36	920	K3518-4 Tp1*	1	30	49	1400
M980, M1100, M1125	2/1, 4/1	K3517-6 Tp1*	1	22	42	950	MT180L-4	1	20	42	1470

### Optional cylindrical motors for standard heavy hoists (single speed, ready for inverter)

M950	2/1, 4/1	MB160L-4 FDB23	1	15	32,5	1480	MT180L-4 FDB26	1	20	42	1470
M963	2/1, 4/1	MB160L-4 FDB23	1	18	38,1	1470	MT180L-4 FDB26	1	24	50,1	1470
M1100, M1125	2/1, 4/1	MB160L-4 FDB26	1	16	35	1470	MT180L-4 FDB26	1	22	47	1470
M1125	2/1, 4/1	MB180M-4 FDB26	1	22	47	1470	MT200L-4 FDR26	1	39	70	1470

\* Electric motors – conical type, brake – mechanical.



Podem's standard hoists' travel motors usage – Normal headroom

Hoist type	Reeving	Fig.	Motor type: Double speed	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)	Motor type: Single speed	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)
MT304, MT305	2/1	1	KT80A-12/4 BR-35	1	0,08/0,25	1,2/1,3	450/1440	KT63B-6 BR-35	1	0,12	0,63	880
	2/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,5/1,8	450/1440	KT63B-6 BR-35	1	0,12	0,63	880
	4/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	KT71B-6 BR-35	1	0,25	1,0	880
	4/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,5/1,8	450/1440	KT71B-6 BR-35	1	0,25	1,0	880
MT306, MT308	2/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	KT71B-6 BR-35	1	0,25	1,0	880
	2/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,5/1,8	450/1440	KT71B-6 BR-35	1	0,25	1,0	880
	4/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	KT80A-6 BR-35	1	0,37	1,4	925
MT310, MT312	4/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,5/1,8	450/1440	KT80A-6 BR-35	1	0,37	1,4	925
	2/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	KT80A-6 BR-35	1	0,37	1,4	925
	2/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,5/1,8	450/1440	KT80A-6 BR-35	1	0,37	1,4	925
	4/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	KT80A-6 BR-35	1	0,37	1,4	925
MT313, MT316	4/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,5/1,8	450/1440	KT80A-6 BR-35	1	0,37	1,4	925
	2/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	T80A-4 BR-42	1	0,55	1,75	1400
	2/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,5/1,8	450/1440	KT80B-6 BR-35	1	0,55	2,1	890
	4/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	T80A-4 BR-42	1	0,55	1,75	1400
MT520, MT525	4/1	2	T90S-12/4 BR-42	1	0,18/0,55	1,71/2	450/1440	KT80B-6 BR-35	1	0,55	2,1	890
	2/1	1	KT80B-12/4 BR-35	1	0,12/0,37	1,5/1,8	450/1440	T80A-4 BR-42	1	0,55	1,75	1400
	2/1	2	T80B-12/4 BR-42	1	0,12/0,37	1,2/1,2	450/1440	T80A-4 BR-42	1	0,55	1,75	1400
M740	4/1	-	T90S-12/4 BR-42	2	0,18/0,55	1,71/2	450/1440	T80A-4 BR-42	2	0,55	1,75	1400
	2/1	-	T80B-12/4 BR-42	2	0,12/0,37	1,2/1,2	450/1440	T80A-4 BR-42	2	0,55	1,75	1400
M750	4/1	-	KT90S-8/2	2	0,18/0,75	1,4/1,9	680/2800	KT80A-2	2	0,75	2,0	2820
	2/1	-	T90S-12/4 BR-42	2	0,18/0,55	1,71/2	450/1440	T80A-4 BR-42	2	0,55	1,75	1400

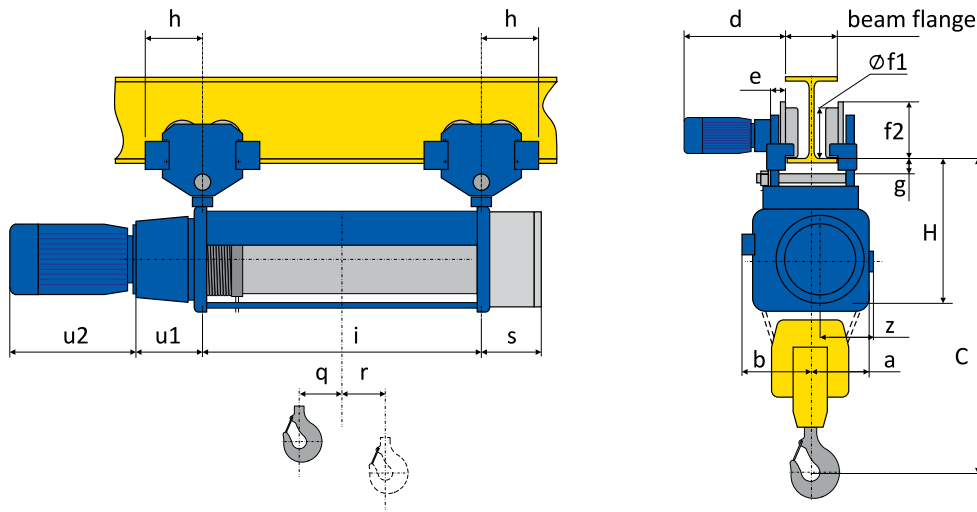
Podem's standard hoists' travel motors usage – Low headroom

Hoist type	Reeving	Motor type normal Double speed	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)	Motor type normal Single speed	Q-ty, pc	Power (kW)	I, A	Nom. RPM (1/min)
MT304, MT305	2/1	KT71B-8/2	2	0,06/0,24	0,71/0,78	690/2820	KT63B-2	2	0,25	0,68	2770
	4/1	KT71B-8/2	2	0,06/0,24	0,71/0,78	690/2820	KT63B-2	2	0,25	0,68	2770
MT306, MT308	2/1	KT71B-8/2	2	0,06/0,24	0,71/0,78	690/2820	KT63B-2	2	0,25	0,68	2770
	4/1	KT71B-8/2	2	0,06/0,24	0,71/0,78	690/2820	KT63B-2	2	0,25	0,68	2770
MT310, MT312	2/1	KT71B-8/2	2	0,06/0,24	0,71/0,78	690/2820	KT63B-2	2	0,25	0,68	2770
	4/1	KT80B-8/2-53	2	0,13/0,55	1,4/1,6	710/2890	KT71B-2-53	2	0,55	1,4	2790
MT313, MT316	2/1	KT71B-8/2	2	0,06/0,24	0,71/0,78	690/2820	KT63B-2	2	0,25	0,68	2770
	4/1	KT80B-8/2-53	2	0,13/0,55	1,4/1,6	710/2890	KT71B-2-53	2	0,55	1,4	2790
MT520, MT525	2/1	KT80B-8/2-53	2	0,13/0,55	1,4/1,6	710/2890	KT71B-2-53	2	0,55	1,4	2790
	4/1	KT80B-8/2-53	2	0,13/0,55	1,4/1,6	710/2890	KT71B-2-53	2	0,55	1,4	2790
M740	2/1	KT80B-8/2-53	2	0,13/0,55	1,4/1,6	710/2890	KT71B-2-53	2	0,55	1,4	2790
	4/1	KT90S-8/2	2	0,18/0,75	1,4/1,9	680/2800	KT80A-2	2	0,75	2,0	2820
M750	2/1	KT80B-8/2-53	2	0,13/0,55	1,4/1,6	710/2890	KT71B-2-53	2	0,55	1,4	2790

All characteristics are referred to "Standard Products" and "Standard applications". For all other applications please contact Podem.

# Hoist for High Lifting Heights

## MTL Series, 2 rope falls (reeving 2/1)



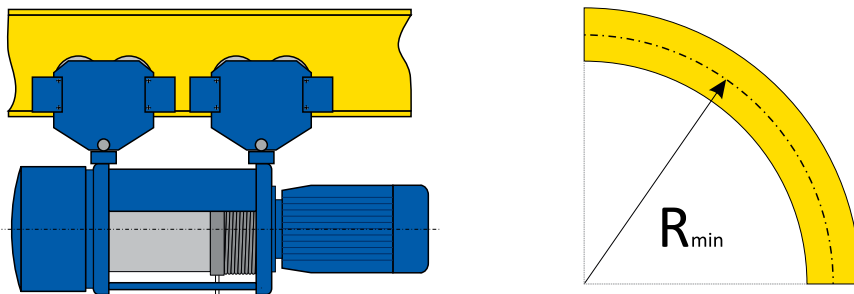
Normal headroom hoist – MTL series, 2 rope falls (reeving 2/1)

Hoist type	Capacity (t)	Groups		Rope (mm)	Hook travel (m)	Lifting speed (m/min)	Dimensions (mm)														Beam flange (mm)		Lifting motor (kW)	Travel motor (kW)	
		FEM	ISO				C	H	a	b	Øf1	f2	e	g	h1	i	s	u1	u2	q	r	max			min
MTL312	2,5	2m	M5	Ø10	32	12/4	1210	540	218	300	120	135	55	30	200	1175	275	202	465	457	77	300	130	8,5/2,7	2 x 0,37/0,12
	2,5	2m	M5	Ø10	40	12/4	1210	540	218	300	120	135	55	30	200	1445	275	202	465	592	77	300	130	8,5/2,7	2 x 0,37/0,12
	2,5	2m	M5	Ø10	48	12/4	1210	540	218	300	120	135	55	30	200	1710	275	202	465	725	77	300	130	8,5/2,7	2 x 0,37/0,12
MTL316	2,5	2m	M5	Ø10	56	12/4	1210	540	218	300	120	135	55	30	200	1980	275	202	465	860	77	300	130	8,5/2,7	2 x 0,37/0,12
	3,2	2m	M5	Ø10	32	12/4	1210	540	218	300	120	135	55	30	200	1175	275	202	465	457	77	300	130	8,5/2,7	2 x 0,37/0,12
	3,2	2m	M5	Ø10	40	12/4	1210	540	218	300	120	135	55	30	200	1445	275	202	465	592	77	300	130	8,5/2,7	2 x 0,37/0,12
	3,2	2m	M5	Ø10	48	12/4	1210	540	218	300	120	135	55	30	200	1710	275	202	465	725	77	300	130	8,5/2,7	2 x 0,37/0,12
MTL525	3,2	2m	M5	Ø10	56	12/4	1210	540	218	300	120	135	55	30	200	1980	275	202	465	860	77	300	130	8,5/2,7	2 x 0,37/0,12
	5	2m	M5	Ø12	32	12/4	1363	603	248	323	120	135	55	30	200	1200	306	225	585	463	75	300	130	12/4	2 x 0,37/0,12
	5	2m	M5	Ø12	40	12/4	1363	603	248	323	120	135	55	30	200	1470	306	225	585	598	75	300	130	12/4	2 x 0,37/0,12
	5	2m	M5	Ø12	48	12/4	1363	603	248	323	120	135	55	30	200	1740	306	225	585	733	75	300	130	12/4	2 x 0,37/0,12
	5	2m	M5	Ø12	56	12/4	1363	603	248	323	120	135	55	30	200	2010	306	225	585	868	75	300	130	12/4	2 x 0,37/0,12

MTL is developed based on the imposed on the market MT electric hoists series.  
The aim is to offer customers cost-optimized solution for a lifting height to 56 m (and above).

Podemcrane offers advanced engineering for custom made solutions in various industries. The in-house design capabilities give us the opportunity to develop solutions targeted at bringing value to our customers.

## Curved monorail hoist



Curved monorail hoists	
Hoist capacity	Curve radius (min)
800 to 5000 kg	1500 mm
6300 to 16000 kg	2000 mm
20-25000 kg	3500 mm

The minimum radius of the hoists is not fixed. It's referred to load capacity, lifting height and beam flange.

### Possible technical features:

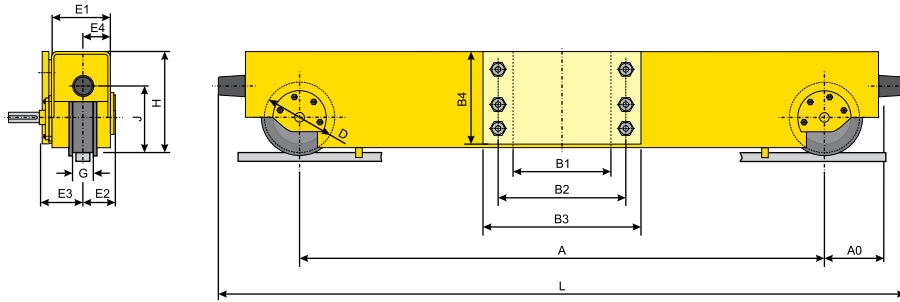
- Hoist and end-carriages up to 400 t
- Various power supply
- Ability to operate in various environmental conditions and climatic zones:
  - Cold (up to  $-40\text{ }^{\circ}\text{C}$ ). GOST Certificate.
  - Tropical (up to  $+52\text{ }^{\circ}\text{C}$ )
- Curved monorail trolley
- Radio control
- Frequency controlled speed
- Double rail trolleys up to 100 t. Beside the standard trolley type the trolley can be designed for 2 hoists with same or different capacity. These solutions are suitable for modernization and reorganizing of existing cranes
- Other custom made solutions for different applications
- Tandem
- Products for nuclear power stations



# End-carriages

## Single & Double Girder

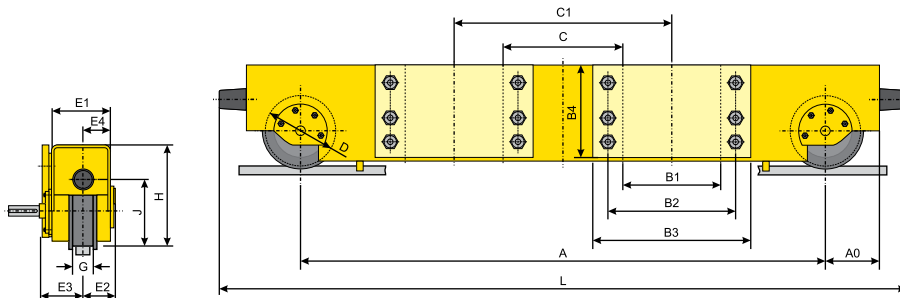
Podemcrane manufactures motorized end carriages for single or double girder cranes. The design is done according to the span of the crane. The standard types are given in the bottom tables.



### Technical features:

- Standard speed - 30/10 m/min, dual speed (optional 40 m/min, other speed and inverter control)
- End carriage profile: Rectangular tube or welded structure
- Cranes girder connection: High-tensile bolt connection (other options on request)
- Ambient temperature: -20 °C to +40 °C (other ambient temperatures on request)
- Suspension end-carriages as option

Single girder end carriages																							
№	Type	Capacity (t)	Group FEM/ISO	Max Span (m)	Dimensions (mm)															LT Motor-gearboxes		Max. wheel load (kg)	Weight (kg)
					D	G	A	Ao	L	H	E1	E2	E3	E4	B1	B2	B3	B4	J	Q-ty	Power (kW)		
1	GO 1160-1500-V1	5	2m/M5	12	160	60	1500	120	1860	280	150	93	105	75	130	220	320	250	180	2	0,18/0,55	3300	350
2	GO 1160-2200-V1	5	2m/M5	15	160	70	2200	120	2560	280	150	93	105	75	130	220	320	250	180	2	0,18/0,55	3550	420
3	GO 1200-3650-V1	5	2m/M5	24	200	70	3650	150	4120	420	200	134	130	100	296	380	460	400	220	2	0,37/1,1	4500	1050
4	GO 1200-2350-V1	6,3	2m/M5	16	200	70	2350	150	2770	320	200	134	130	100	130	220	320	300	220	2	0,37/1,1	4350	710
5	GO 1200-2650-V1	6,3	2m/M5	18	200	70	2650	150	3120	320	200	134	130	100	296	380	460	300	220	2	0,37/1,1	4650	760
6	GO 1250-1800-V1	10	2m/M5	12	250	70	1800	165	2250	425	200	134	144	100	296	380	460	400	280	2	0,37/1,1	6000	810
7	GO 1250-2650-V1	10	2m/M5	18	250	70	2650	165	3150	425	200	134	144	100	296	380	460	400	280	2	0,37/1,1	6650	950
8	GO 1250-3650-V1	10	2m/M5	25	250	70	3650	165	4150	425	200	134	144	100	296	380	460	400	280	2	0,55/1,5	7800	1560
9	GO 1315-2600-V1	16	2m/M5	18	315	80	2600	190	3140	475	250	165	169	125	296	380	460	450	280	2	0,55/1,5	10500	1250

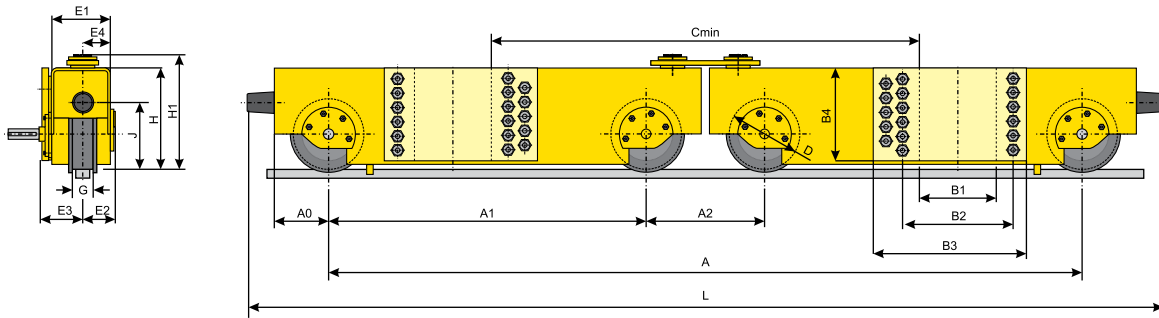


Double girder end carriages																								
№	Type	Capacity (t)	Group FEM/ISO	Max Span (m)	Dimensions (mm)															LT Motor-gearboxes		Max. wheel load (kg)	Weight (kg)	
					D	G	A	Ao	L	H	E1	E2	E3	E4	B1	B2	B3	B4	C	J	Q-ty			Power (kW)
1	GO 2160-2000-V1	5	2m/M5	12	160	70	2000	120	2360	280	150	100	105	75	130	220	320	250	*1000	180	2	0,18/0,55	3750	440
2	GO 2200-3150-V1	5	2m/M5	21	200	70	3150	150	3570	320	200	135	130	100	260	380	460	300	1000	220	2	0,37/1,1	4840	890
3	GO 2250-3700-T-V1	5	1Am/M4	25	250	70	3700	200	4245	375	210	115	165	80	370	455	535	250	1000	220	2	1,5	8800	1025
4	GO 2250-4600-T-V1	5	1Am/M4	32	250	70	4600	200	5145	385	210	115	165	80	460	540	620	250	1000	220	2	1,5	6800	1235
5	GO 2200-2500-V1	6,3	2m/M5	17	200	70	2500	150	2920	320	200	135	130	100	130	220	320	300	*1000	220	2	0,37/1,1	5210	770
6	GO 2250-3700-T-V1	6,3	1Am/M4	25	250	70	3700	200	4245	375	210	115	165	80	370	455	535	250	1000	220	2	1,5	8800	1025
7	GO 2315-4600-T-V1	6,3	1Am/M4	32	315	80	4600	240	5328	493	230	130	180	90	460	540	620	310	1000	280	2	1,5	10600	1650
8	GO 2250-2500-V1	10	2m/M5	17	250	70	2500	165	2950	425	200	135	144	100	260	380	460	400	*1000	280	2	0,55/1,5	7020	1030
9	GO 2250-3150-V1	10	2m/M5	21	250	70	3150	165	3600	425	200	135	144	100	460	540	620	400	1000	280	2	0,55/1,5	7680	1210
10	GO 2250-3650-V1	10	2m/M5	25	250	70	3650	165	4100	425	200	135	144	100	460	540	620	400	1000	280	2	0,55/1,5	8400	1290
11	GO 2315-4600-T-V1	10	1Am/M4	32	315	80	4600	240	5328	493	230	130	180	90	460	540	620	310	1000	280	2	1,5	10600	1650
12	GO 2315-3150-V1	16	2m/M5	18	315	80	3150	190	3680	475	250	168	169	125	460	540	620	450	1200	280	2	0,75/2,2	10700	1520
13	GO 2315-3600-V1	16	2m/M5	25	315	80	3600	190	4130	475	250	168	169	125	460	540	620	450	1200	280	2	0,75/2,2	11830	1610
14	GO 2400-4600-T-V1	16	1Am/M4	32	400	90	4600	300	5440	580	224	165	165	112	510	590	670	350	1200	280	2	2,2	18000	2290
15	GO 2315-3150-V1	20	2m/M5	18	315	80	3150	190	3680	475	250	168	169	125	460	540	620	450	1450	280	2	0,75/2,2	12940	1520
16	GO 2315-3700-T-V1	20	1Am/M4	24	315	80	3700	240	4428	483	230	130	180	90	420	505	585	310	1450	280	2	1,5	14800	1400
17	GO 2400-4600-T-V1	20	1Am/M4	32	400	90	4600	300	5440	640	228	165	165	114	510	590	670	350	1450	280	2	2,2	21200	2730
18	GO 2400-3500-V1	25	2m/M5	22	400	90	3500	240	4240	525	300	190	196	150	462	540	620	500	1450	220	2	4	17950	3050
19	GO 2400-4600-T-V1	25	1Am/M4	32	400	90	4600	300	5440	640	228	165	165	114	510	590	670	350	1450	280	2	2,2	21200	2730

\* Dimension C1 – for I-beam girders the max.  
 Wheel loads are calculated based on:  
 – LT speed 30 m/min  
 – On rail width of 50 mm / wheels up to 250 mm, a rail 60 mm width / up to 315 mm, a rail 70 mm width / up to 500 mm  
 Weight is for 2 end-carriages with gearmotors

# End-carriages

## Double Girder End-carriages – Bogie type

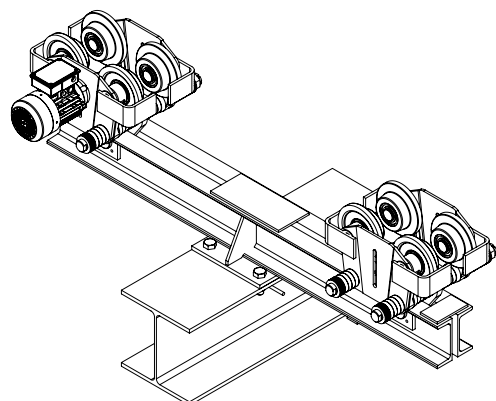
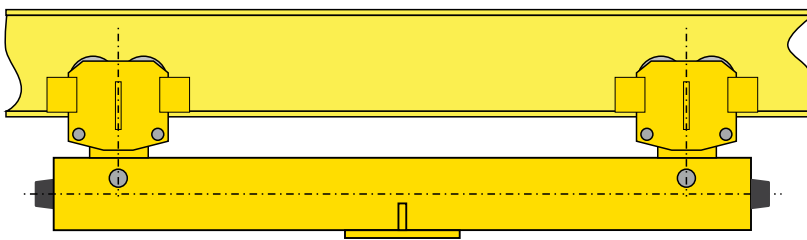


Double Girder End-carriages – Bogie type

№	Type	Capacity (t)	Group FEM/ISO	Max Span (m)	Dimensions (mm)																	LT Motor-gearboxes		Max. wheel load (kg)	Weight (kg)		
					D	G	A	A0	A1	A2	L	H	H1	E1	E2	E3	E4	B1	B2	B3	B4	J	Cmin, mm			Q-ty	Power (kW)
1	GB 2315-3500-V1	32	2m/M5	26	315	80	3500	190	1550	400	4110	475	550	250	170	169	125	460	540	680	450	280	1900	4	2,2	12500	2500
2	GB 2400-3500-V1	40	2m/M5	28	400	90	4000	240	1750	500	4740	525	600	300	190	196	150	666	770	910	500	280	1900	4	3	18500	3400

The max. wheel load are calculated based on:  
 – LT speed 30 m/min  
 – On rail 60 mm width/up to 315 mm, a rail 70 mm width/ up to 400 mm  
 Weight is for kit (end-carriages with gearmotors)

Standard **Underslung End-carriages** are designed for load capacities up to 10 t and spans up to 16 m. Efficient crane solutions in tight spaces with difficult design conditions and with minimum side approach dimension and cantilevers to use the full space available.



# End-carriages

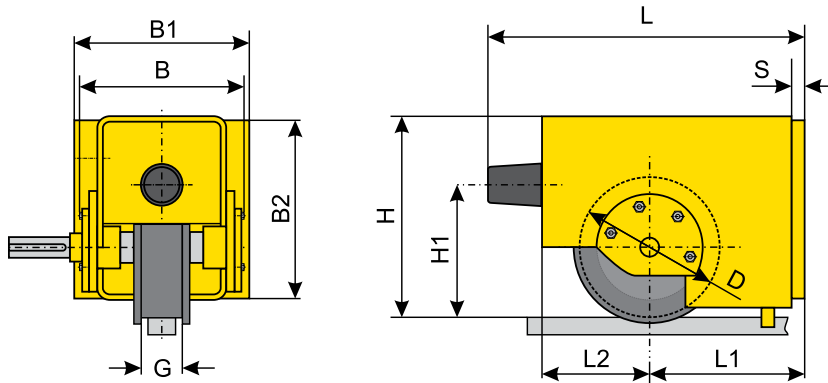
## Wheel Blocks

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**Wheel Blocks** are flexible and cost-effective solution for connecting to customers' structural steelwork. The potential applications for these reliable wheel blocks are in very wide range: new EOT and gantry cranes, modernization of the old cranes, any transport machine, stadium roofs, door/gates, etc.

### Technical features:

- Standard speed - 30/10 m/min, dual speed (optional 40 m/min, other speed and inverter control)
- Four wheel diameters: 160, 200, 250, 315 mm
- Wheel block's connection: Welding (High-tensile bolt connection or other options on request)



Wheel blocks																	
№	Type	Driven mode	Dimensions (mm)										Motor q-ty	Power (kW)	Max. wheel load (kg)	Weight* (kg)	
			G	D	L	L1	L2	H	H1	B	B1	B2					S
1	BC160-60	idle	60	160	380	200	120	280	180	190	260	234	20	-	-	3800	85
2	BD160-60	drive	60	160	380	200	120	280	180	190	260	234	20	1	0,18/0,55	3800	165
3	BC160-70	idle	70	160	380	200	120	280	180	190	260	234	20	-	-	3800	85
4	BD160-70	drive	70	160	380	200	120	280	180	190	260	234	20	1	0,18/0,55	3800	165
5	BC160-85	idle	85	160	380	200	120	280	180	190	260	234	20	-	-	3800	120
6	BD160-85	drive	85	160	380	200	120	280	180	190	260	234	20	1	0,18/0,55	3800	200
7	BC200-70	idle	70	200	480	270	150	320	220	270	310	290	20	-	-	5200	180
8	BD200-70	drive	70	200	480	270	150	320	220	270	310	290	20	1	0,37/1,1	5200	280
9	BC200-85	idle	85	200	480	270	150	320	220	270	310	290	20	-	-	5200	190
10	BD200-85	drive	85	200	480	270	150	320	220	270	310	290	20	1	0,37/1,1	5200	290
11	BC250-70	idle	70	250	530	305	165	425	280	270	310	390	20	-	-	8400	230
12	BD250-70	drive	70	250	530	305	165	425	280	270	310	390	20	1	0,55/1,5	8400	350
13	BC250-85	idle	85	250	530	305	165	425	280	270	310	390	20	-	-	8400	250
14	BD250-85	drive	85	250	530	305	165	425	280	270	310	390	20	1	0,55/1,5	8400	370
15	BC315-80	idle	80	315	580	330	190	475	280	330	360	440	20	-	-	12200	310
16	BD315-80	drive	80	315	580	330	190	475	280	330	360	440	20	1	0,75/2,2	12200	470
17	BC315-85	idle	85	315	580	330	190	475	280	330	360	440	20	-	-	12200	370
18	BD315-85	drive	85	315	580	330	190	475	280	330	360	440	20	1	0,75/2,2	12200	530
19	BC315-95	idle	95	315	580	330	190	475	280	330	360	440	20	-	-	12200	380
20	BD315-95	drive	95	315	580	330	190	475	280	330	360	440	20	1	0,75/2,2	12200	540

\* Weight is per kit (2 units Drive or Idle Block Wheels). Weight of the Drive Wheel Block includes motor-reducer for travel speed 30 m/min.

Podemcrane crane kits (industrial cranes) follow the latest innovations in the field of crane manufacturing. Developments are based on the engineering experience in designing mechanical and electrical elements for cranes and feed-back from thousands installations in Europe, Middle East/Gulf Area, ASEAN and Africa.



## Crane Components

April 2014



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