

SPARE PARTS CATALOGUE

ELECTRIC WIRE ROPE HOISTS TYPE HVAT WITH MONORAIL TROLLEY

**EL
MOT**

ISO 9001:2000 Quality system

CE

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The present catalogue complies with the following standards:

БДС 2.601 – 82 Exploitation documents

DIN V 8418 Benutzerinformation

EN 292 – 2:1991 Sicherheit von Maschinen

DIN 24420, Teil 1 Ersatzteillisten, Aigemeines

DIN 24420, Teil 2 Ersatzteillisten, Form und Bau des Textteiles

ГОСТ 2.601 – 95 ЕСКД. Эксплуатационные документы

ISO 10973:1995(E) Cranes – Spare Parts manual

Each purchase order should contain the following data:

1. **Type, serial number, year of production** of the electric hoist written on the hoist nameplate and **group of operation**.
2. **Designation** and **catalogue number** of the requested spare part.
3. **Quantity** required for each spare part
4. **Catalog index**, written in the bottom right corner of each page.
5. **Shipment requirements**.
6. **Exact address for delivery**.

For spare parts supply please refer to the following address:

DISTRIBUTION PARTNER
Hydramach Overhead Crane Inc

7662 Industrial Way
Agassiz, BC CANADA V0M 1A2

TEL : 1 604-796-9221

EMAIL : integrity@hydramachcrane.com

HOW TO USE THE CATALOGUE

The present catalogue covers all the parts needed for manufacturing of electric hoists series VAT with monorail trolley KM- HVAT.

The tables contain figure number and parts position and in the opposite-the designation, quantity and catalogue number of the corresponding execution.

Customers can place orders for the whole assembled unit as well as separate parts of it. The assembled unit positions are marked with medium brackets. Undetachable units positions are marked with big brackets and delivered as a whole.

The numbers of the standardized items, such as bolts, nuts, safety rings etc., are marked with small brackets. Usually they are not delivered as spare parts by the manufacturer, but they could be ordered by the customer as an exception. They are drawn and depicted in order to benefit the easy functioning of the electric hoist. If some of them should be replaced, a special attention should be paid in keeping the strength class of the carrying details:

VAT series electric wire rope hoists with monorail trolley are designed for lifting heights as per Table 1.

Table 1

Size	Capacity [kg]	Reeving	Lifting height [m]								
			H1	H2	H3	H4	H5	H6	H7	H8	H9
VAT 10	1000	2/1	6,5	9	12	18	24	30	36	42	48
	2000	4/1	6	9	12	15	18	21	24		
VAT 20	2000	2/1	8,5	11,5	15	22	29	36	43	50	
	5000	4/1	7,5	11	14,5	18	21,5	25			
VAT 30	3200	2/1	7,5	10	13	19	25	31	37	43	49
	7000	4/1	6,5	9,5	12,5	15,5	18,5	21,5	24,5		
VAT 40	5000	2/1	6,5	9,5	12,5	18,5	25,5	31,5	36,5	42,5	48,5
	10000	4/1	6	9	12,5	15,5	18	21	24		
VAT 50	8000	2/1	-	9	12	18	24	36	48	60	72
	16000	4/1	6	9	12	18	21	24	27	30	36
VAT 60	12500	2/1	-	8,5	14	17	23	29	35,5	41,5	47,5
VAT 64	16000	2/1	6,5	11,5	14	19	24,5	29,5	35	40	

Designations used in the catalogue:

V – Travel speed

H – Lifting speed

a – Reeving

LIFTING SPEEDS SHOWN IN EUROPEAN 50Hz multiply by x 1.2 TO GET 60Hz FOR NORTH AMERICA

THE MANUFACTURER RESERVES THE RIGHT TO MAKE CHANGES IN THE PARTS CATALOGUE.

TRAVERSE FOR MONORAIL TROLLEY

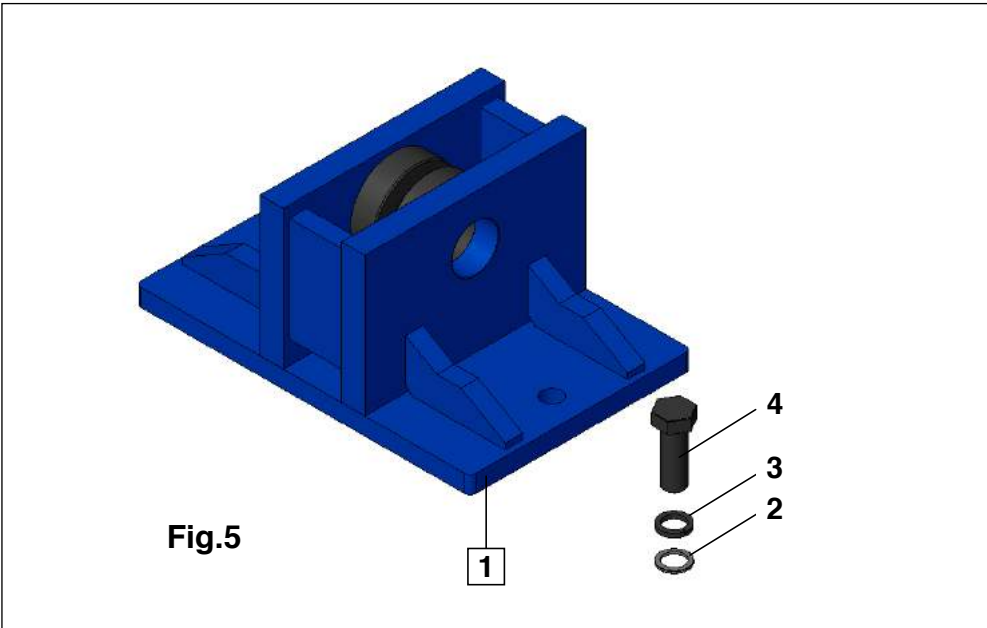
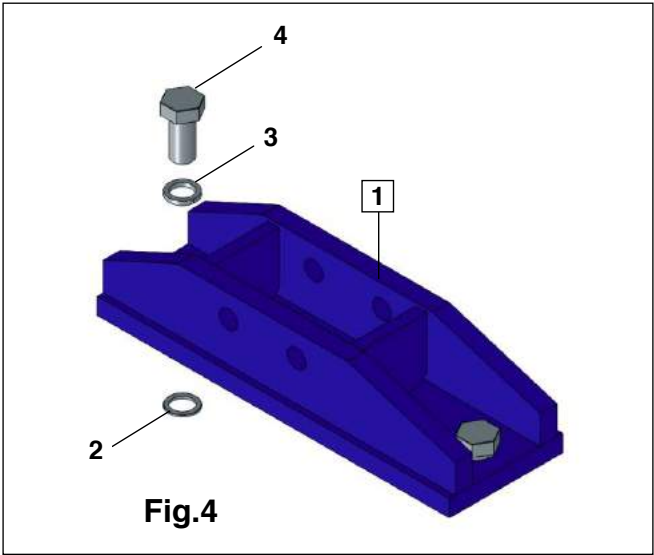
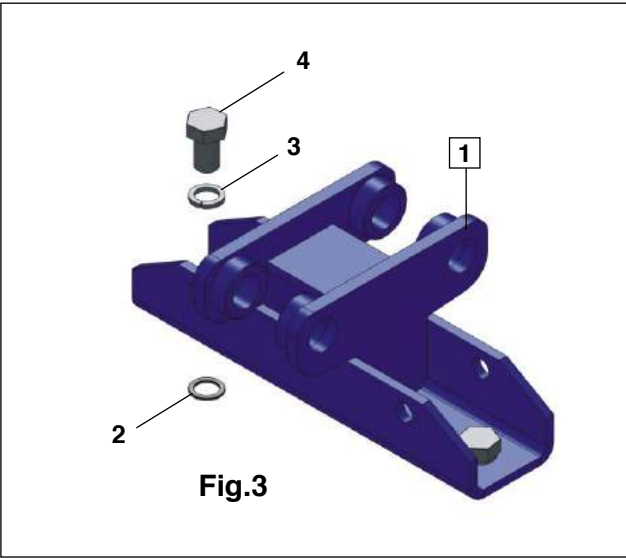
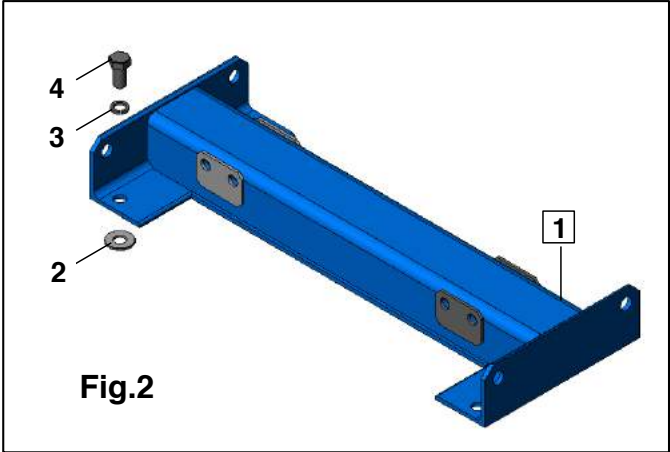
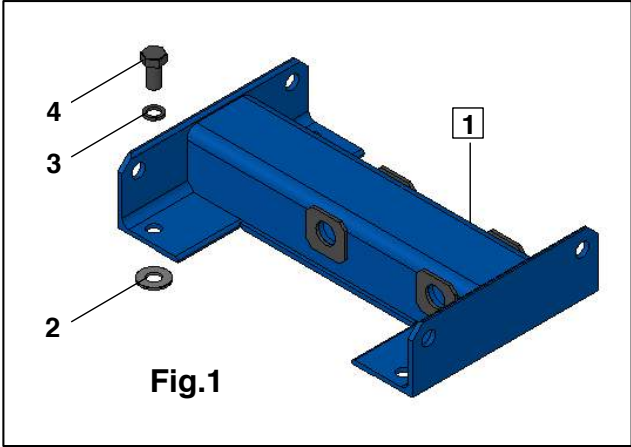


Table 2

VAT10																		
Capacity			1t									2t						
Reeving			2/1									4/1						
Number of trolleys			1	1	1	2	2	2	2	2	2	1	2	2	2	2	2	
Beam width			B = 90...300															
Lifting height [m]			H1	H2	H3	H4	H5	H6	H7	H8	H9	H1	H2	H3	H4	H5	H6	H7
Pos.	Name	Qty	Catalogue number															
{1}	Traverse Fig.1	1	1112815	1112862	1112878	1115685	1115690	1343009	1343014	1343023	1343035	1342932	1342948	1342953	1342969	1342974	1342989	1342995
{1}	Traverse /with NOT/ Fig.1	1	1116254	1116260	1116275	1116280	1116296	1343040	1343056	1343061	1343077	1342932	1342948	1342953	1342969	1342974	1342989	1342995
{1}	Traverse for articulated trolley Fig.2	1	-	-	-	1386173	1386189	1386194	1386206	1386215	1386220	-	1387381	1387397	1387402	1387418	1387423	1387439
{1}	Traverse for articulated trolley /with NOT/ Fig.2	1	-	-	-	1386262	1386278	1386283	1386299	1386304	1386310	-	1387381	1387397	1387402	1387418	1387423	1387439
2	Washer	4	2327213															
(3)	Spring washer DIN7980	4	2 16H															
(4)	Bolt DIN931 / 8.8	4	M16 x 28															

Table 2 contd.

VAT20																		
Capacity			2t									5t						
Reeving			2/1									4/1						
Number of trolleys			1	1	1	2	2	2	2	2	2	1	2	2	2	2	2	
Beam width			B = 130...300															
Lifting height [m]			H1	H2	H3	H4	H5	H6	H7	H8	H9	H1	H2	H3	H4	H5	H6	H7
Pos.	Name	Qty	Catalogue number															
{1}	Traverse Fig.1	1	1114206	1114215	1114220	1114236	1114241	1343260	1343276	1343281	1343297	1115140	1115151	1115161	1343501	1343517	1343522	-
{1}	Traverse /with NOT/ Fig.1	1	1114152	1114168	1114173	1114189	1114194	1343302	1343318	1343323	1343339	1115140	1115151	1115161	1343501	1343517	1343522	-
{1}	Traverse for articulated trolley Fig.2	1	-	-	-	1115266	1115271	1343344	1343354	1343365	1343370	-	1115287	1115292	1343538	1343543	1343559	-
{1}	Traverse for articulated trolley /with NOT/ Fig.2	1	-	-	-	1115596	1115601	1343386	1343391	1343407	1343412	-	1115287	1115292	1343538	1343543	1343559	-
2	Washer	4	2322917															
(3)	Spring washer DIN7980	4	2 20H															
(4)	Bolt DIN931 / 8.8	4	M20 x 40															

Table 2 contd.

VAT30																		
Capacity			3,2t									7t						
Reeving			2/1									4/1						
Number of trolleys			1	1	1	2	2	2	2	2	2	1	2	2	2	2	2	
Beam width			B = 130...300															
Lifting height [m]			H1	H2	H3	H4	H5	H6	H7	H8	H9	H1	H2	H3	H4	H5	H6	H7
Pos.	Name	Qty	Catalogue number															
{1}	Traverse Fig.1	1	1114206	1114215	1114220	1114236	1114241	1343260	1343276	1343281	1343297	1112747	1114660	1114676	1343468	1343475	1343480	1343496
{1}	Traverse /with NOT/ Fig.1	1	1114152	1114168	1114173	1114189	1114194	1343302	1343318	1343323	1343339	1112747	1114660	1114676	1343468	1343475	1343480	1343496
{1}	Traverse for articulated trolley Fig.2	1	-	-	-	1115266	1115271	1343344	1343354	1343365	1343370	-	1115245	1115250	1343428	1343433	1343449	1343454
{1}	Traverse for articulated trolley /with NOT/ Fig.2	1	-	-	-	1115596	1115601	1343386	1343391	1343407	1343412	-	1115245	1115250	1343428	1343433	1343449	1343454
2	Washer	4	2322917															
(3)	Spring washer DIN7980	4	2 20H															
(4)	Bolt DIN931 / 8.8	4	M20 x 40															

Table 2 contd.

VAT40																		
Capacity			5t									10t						
Reeving			2/1									4/1						
Number of trolleys			1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	
Beam width			B = 130...300															
Lifting height [m]			H1	H2	H3	H4	H5	H6	H7	H8	H9	H1	H2	H3	H4	H5	H6	H7
Pos.	Name	Qty	Catalogue number															
{1}	Traverse Fig.1	1	1112752	1112883	1112899	1115203	1115219	1343564	1343571	1343585	1343590	1115177	1115182	1115198	1342251	1343779	1343784	1343799
{1}	Traverse /with NOT/ Fig.1	1	1116034	1116043	1116055	1116060	1116076	1343606	1343611	1343627	1343632	1115177	1115182	1115198	1342251	1343779	1343784	1343799
{1}	Traverse for articulated trolley Fig.2	1	-	-	-	1115224	1115233	1343669	1343674	1343685	1343695	1115910	1115402	1115418	1342267	1343742	1343758	1343763
{1}	Traverse for articulated trolley /with NOT/ Fig.2	1	-	-	-	1116591	1116605	1343700	1343716	1343721	1343737	1115910	1115402	1115418	1342267	1343742	1343758	1343763
2	Washer	4	2325085															
(3)	Spring washer DIN7980	4	2 24H															
(4)	Bolt DIN931 / 8.8	4	M24 x 50															

Table 2 contd.

SIZE			VAT50								
Capacity			8t								
Reeving			2/1								
Number of trolleys			1	1	1	2	2	2	2	2	
Beam width			B = 130...300								
Lifting height [m]			H2	H3	H4	H5	H6	H7	H8	H9	
Pos.	Name	Qty	Catalogue number								
{1}	Traverse Fig.1	1	1343082	1343098	1115994	1343103	1343119	1343137	1343145	1343150	
{1}	Traverse /with NOT/ Fig.1	1	1343166	1343171	1343187	1343192	1343208	1343229	1343234	1343240	
{1}	Traverse for articulated trolley Fig.2	1	1343915	1343920	1343936	1343941	1343957	1343978	1343999	1386021	
{1}	Traverse for articulated trolley /with NOT/ Fig.2	1	1386037	1386042	1386058	1386063	1386079	1386099	1386110	1386131	
2	Washer	4	2330886								
(3)	Spring washer DIN7980	4	2 33H								
(4)	Bolt DIN931 / 8.8	4	M33 x 60								

SIZE			VAT50	VAT60	VAT64
Capacity			16t	12,5t	16t
Reeving			4/1	2/1	2/1
Number of trolleys			2	2	2
Beam width			B = 130...300	B = 130...300	B = 130...300
Lifting height [m]			All heights	All heights	All heights
Pos.	Name	Qty	Catalogue number		
1	Traverse Fig.3	1	1390132	1390076	1390076
1	Traverse /with NOT/ Fig.3	1	1390139	1390085	1390085
	Traverse for articulated trolley Fig.4		1388427	1389462	1389462
	Traverse for articulated trolley /with NOT/ Fig.4		1388427	1389622	1389622
2	Washer	4	2330886	2330886	2330886
3	Spring washer DIN7980	4	2 33H	2 33H	2 33H
4	Bolt DIN931 / 8.8	4	M33 x 60	M33 x 60	M33 x 60

SIZE			VAT50	VAT60
Capacity			20t	20t
Operation mode group FEM9.511			1Am	3m
Reeving			4/1	4/1
Number of trolleys			2	2
Beam width			B = 170...300	B = 170...300
Lifting height [m]			All heights	All heights
Pos.	Name	Qty	Catalogue number	
1	Traverse Fig.5	1	1386833	1390703
1	Traverse /with NOT/ Fig.5	1	1386833	1390719
2	Washer	4	2330886	2330886
3	Spring washer DIN7980	4	2 33H	2 33H
4	Bolt DIN931 / 8.8	4	M33 x 60	M33 x 60

MONORAIL TROLLEY – Fig.6

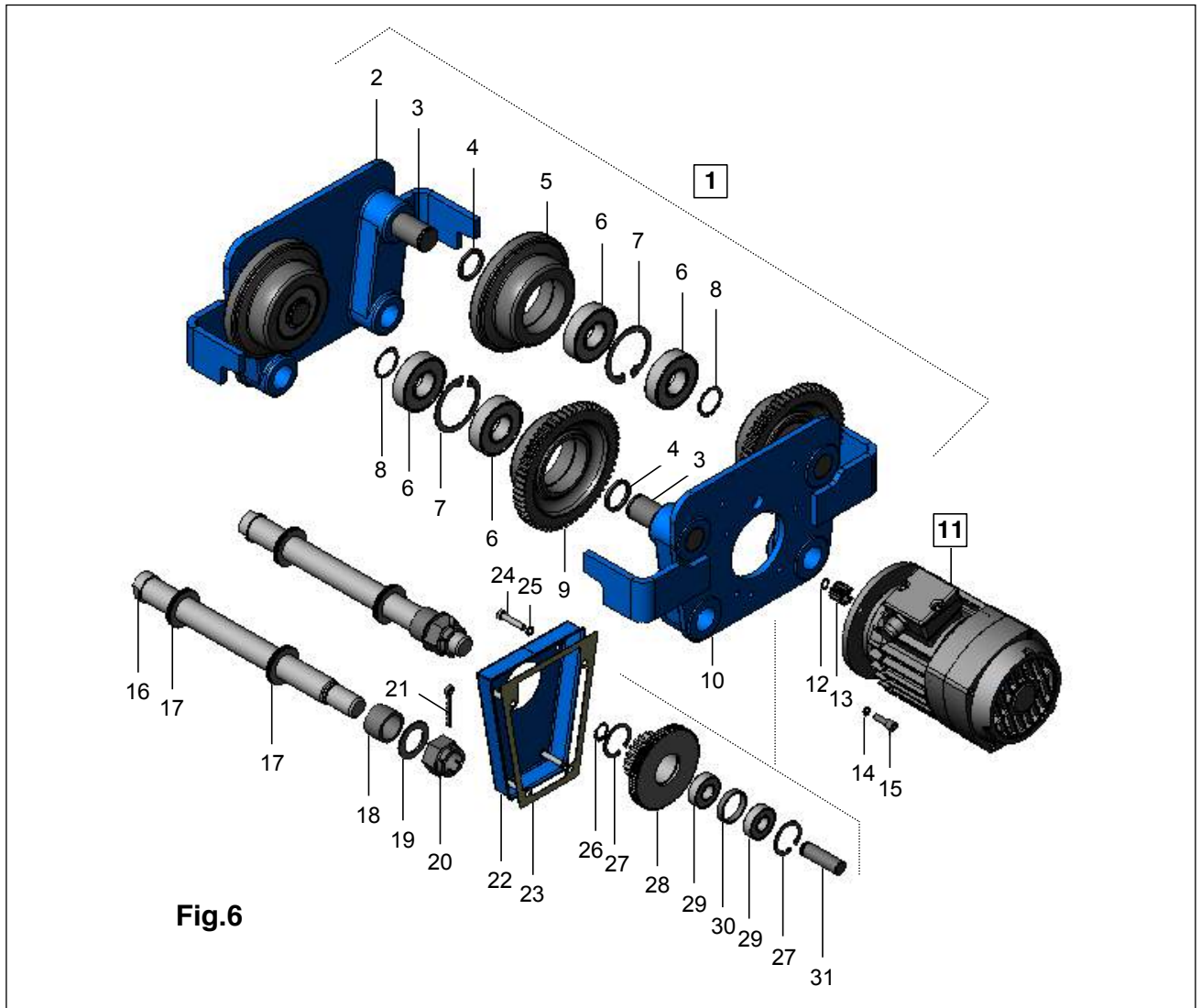


Fig.6

Table 3

Capacity			1t	3,2t	5t	8t
Pos.	Name	Qty.	Catalogue number			
[1]	Monorail trolley	-	1373625	1373618	1370928	1374346
{2}	Driven side plate	1	1360270	2692665	2692026	1360768
3	Axle	4	2566118	2566083	2565776	2567569
4	Washer	4	-	2625300	2625227	-
(4)	Ring БДC2170-77	8	-	-	-	A110
5	Idler trolley frame	2	2560935	2560893	2560626	2561787
(6)	Bearing SKF	8	6005 - 2z	6307-2z	6309-2z	6310-2z
(7)	Ring БДC2170-77	4	-	A80	A100	-
7	Space bush	4	-	-	-	2553425
(8)	Ring DIN471	4	25 x 1,2	35 x 1,5	45 x 1,75	50 x 2
9	Travel wheel (motorized)	2	2560914	2560872	2560605	2561771
10	Motorized trolley frame	1	1360265	2692654	2692010	2693133
16	Special bolt* /Axle/	4	2597074	2597064	2565760	2567511
17	Bush*	4	2551517	2551496	2551061	2553357
18	Bush*	2	2625316	2625300	2625211	2553416
(19)	Washer DIN125	2	AM240	AM30	AM42	AM42
(20)	Castle nut DIN935	2	M24	M30	M42	M42
(21)	Cotter pin DIN94	2	5 x 40	6 x 45	8 x 60	8 x 70
22	Cover	1	2585436	2585462	2585478	2585478

Table 3 contd.

Capacity			1t	3,2t	5t	8t
Pos.	Name	Qty.	Catalogue number			
23	Gasket	1	2545220	2545262	2545257	2545257
(24)	Bolt DIN931 / 8.8	4	6 x 30	8 x 40	8 x 40	8 x 40
(25)	Spring washer DIN7980	4	2 6H	2 8H	2 8H	2 8H
(26)	Ring DIN471	1	17 x 1	20 x 1,2	20 x 1,2	25 x 1,2
(27)	Ring БДC2170-77	2	40 x 1,75 DIN472	A 47	A 47	A 47
28	Gear wheel block	1	2560923	2560888	2560610	2560940
(29)	Bearing SKF	2	6203-2RS	6204-2z	6204-2z	6005-2z
30	Space bush	1	-	2551501	2551077	2551564
31	Axle	1	2566125	2566099	2565781	2567574

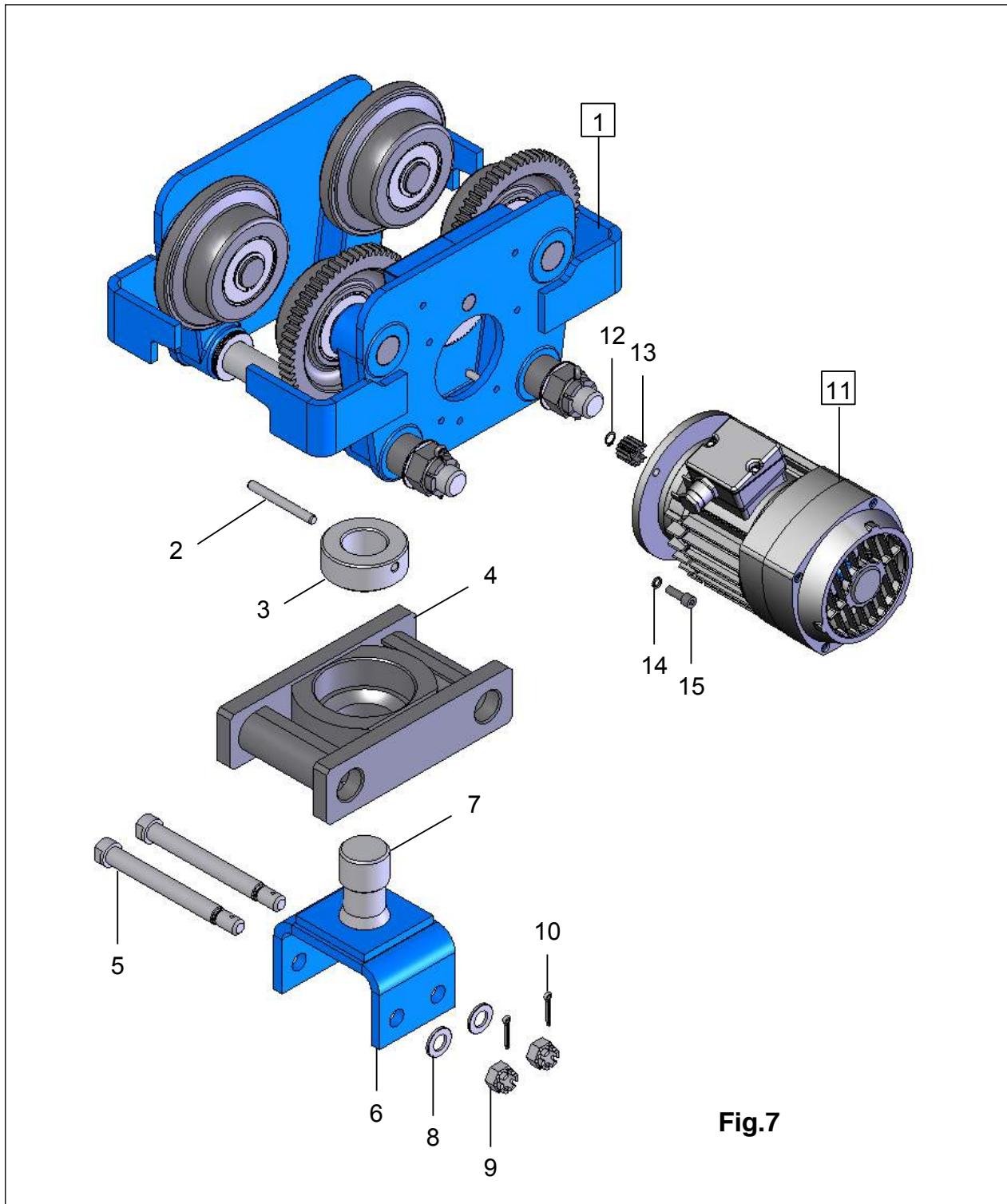


Fig.7

MONORAIL TROLLEY – ARTICULATED TROLLEY – Fig.7

Table 4

Capacity			1t	3,2t	5t	8t
Pos.	Name	Ep.	Catalogue number			
[1]	Monorail trolley	-	1373625	1373618	1370928	
(2)	Spring pin DIN1481	1	8 x 60	10 x 90	12 x 105	-
2	Pin	1	-	-	-	2545304
3	Nut	1	2580218	2580223	2326749	1363135
4	Traverse	1	1324286	1324578	2532138	1326245
5	Axle	2	2566004	2325991	2326767	2566900
6	Bracket	1	1363093	1363067	1115423	1363140
7	Bolt	1	2597022	2597038	2326733	2597085
(8)	Washer DIN125	2	AM12	AM18	AM24	AM30
(9)	Castle nut DIN935	2	M12	M18	M24	M30
(10)	Cotter pin DIN94	2	3,2 x 32	4 x 40	5 x 50	6,3 x 50

COMMON COMPONENTS FOR THE VARIOUS EXECUTIONS - fig.6 and fig.7

Table 5

Capacity			1t	3,2t	5t	8t	
Pos.	Name	Qty.	Catalogue number				
[11]	Electric motor	20 m/min	1	KKT63-6	KKT71-6	KKT80-6	KKT90-6
		32 m/min	1	KKT63-4	KKT71-4	KKT80-4	KKT90-4
		20/10 m/min	1	KKT180B12/6	KKT80-12/6	KKT80-12/6	KKT80P12/6
		32/10 m/min	1	KKT180B12/4	KKT80-12/4	KKT80-12/4	KKT80P12/4
(12)	Ring DIN471	1	10 x 1	12 x 1	12 x 1	12 x 1	
13	Gear wheel	1	2560909	2560599	2560599	2560599	
(14)	Spring washer DIN7980	3	2 6H	2 8H	2 8H	2 8H	
(15)	Screw DIN912 / 8.8	3	M6 x 18	M8 x 20	M8 x 20	M8 x 20	

ATTACHMENTS FOR MONORAIL TROLLEYS

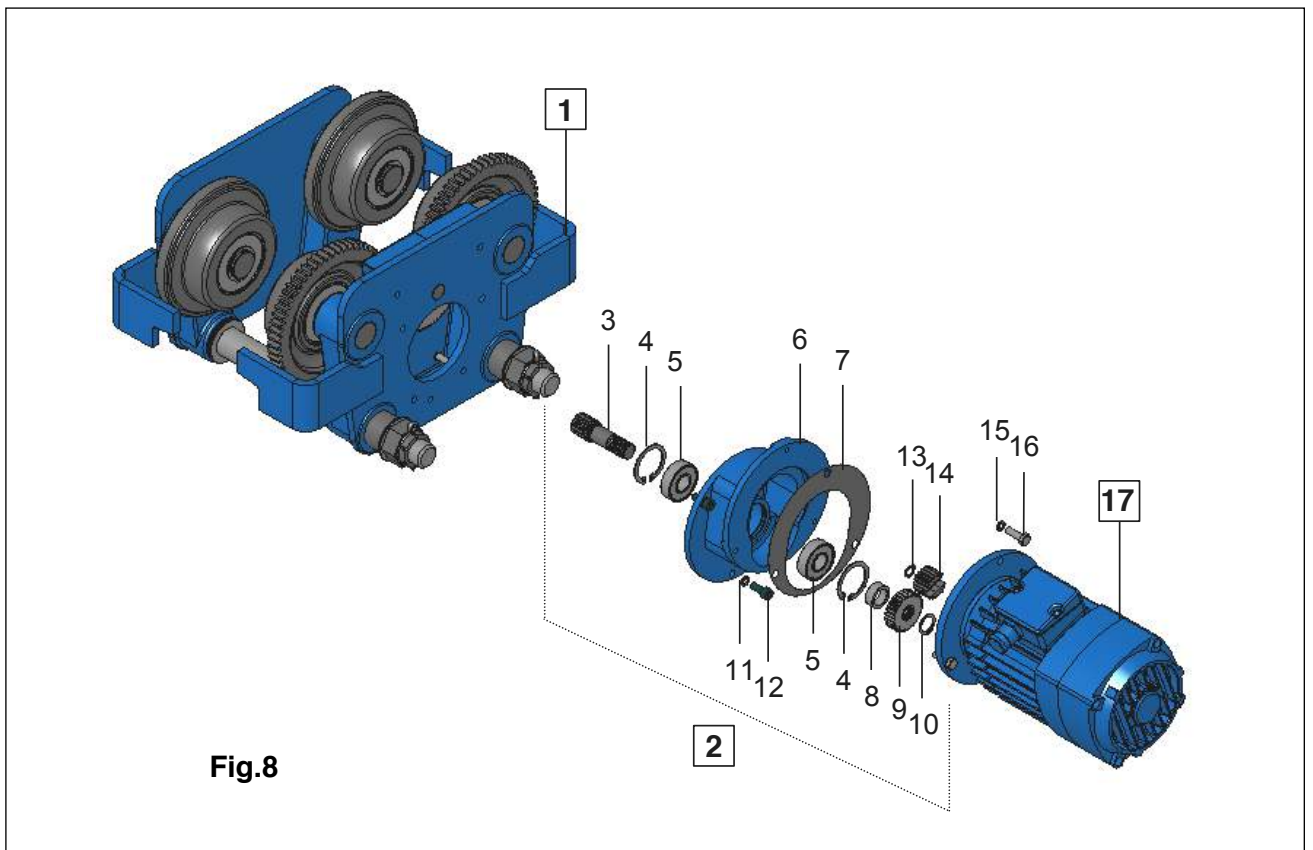


Table 6

1t			V [m/min]						
			8	10	12	15	12/4	15/5	20/6,5
Pos.	Name	Qty	Catalog number						
[1]	Monorail trolley	1	1373625						
	Attachment for monorail trolley	-	1380119	1380124	1380139	1380145	1380082	1380098	1380103
[2]	Attachment	1	1380187	1380192	1380208	1380192	1380187	1380192	1380208
3	Gear wheel shaft	1	2555642	2555642	2555642	2555642	2555642	2555642	2555642
(4)	Ring БДC2170-77	2	A 42	A 42	A 42	A 42	A 42	A 42	A 42
(5)	Bearing SKF	2	6004	6004	6004	6004	6004	6004	6004
6	Body	1	2540154	2540154	2540154	2540154	2540154	2540154	2540154
8	Space bush	1	2551255	2551255	2551255	2551255	2551255	2551255	2551255
9	Gear wheel	1	2560720	2560736	2560741	2560736	2560720	2560736	2560741
(10)	Ring БДC2170-77	1	B 20	B 20	B 20	B 20	B 20	B 20	B 20
7	Gasket	1	2545194	2545194	2545194	2545194	2545194	2545194	2545194
(11)	Screw DIN912 / 8.8	3	M6 x 20	M6 x 20	M6 x 20	M6 x 20	M6 x 20	M6 x 20	M6 x 20
(12)	Spring washer DIN7980	3	2 6H	2 6H	2 6H	2 6H	2 6H	2 6H	2 6H
(13)	Ring БДC2170-77	1	B 10	B 10	B 10	B 10	B 10	B 10	B 10
14	Gear wheel	1	2560668	2560673	2560689	2560673	2560668	2560673	2560689
(15)	Bolt DIN931 / 8	3	M6 x 25	M6 x 25	M6 x 25	M6 x 25	M6 x 25	M6 x 25	M6 x 25
(16)	Spring washer DIN7980	3	2 6H	2 6H	2 6H	2 6H	2 6H	2 6H	2 6H
[17]	Electric motor	1	KKT63-6	KKT63-6	KKT63-6	KKT63-4	KKT180B12/4	KKT180B12/4	KKT180B12/4

Table 6 contd.

3,2t ; 5t ; 8t			V [m/min]						
			8	10	12	15	12/4	15/5	20/6,5
Pos.	Name	Qty	Catalog number						
[1]	Monorail trolley	1	1373618 / 1370928						
	Attachment for monorail trolley	-	1380040	1380056	1380061	1380077	1380014	1380025	1380035
[2]	Attachment	1	1380150	1380166	1380171	1380166	1380150	1380166	1380171
3	Gear wheel shaft	1	2555637	2555637	2555637	2555637	2555637	2555637	2555637
(4)	Ring БДC2170-77	2	A 47	A 47	A 47	A 47	A 47	A 47	A 47
(5)	Bearing	2	6204	6204	6204	6204	6204	6204	6204
6	Body	1	2540149	2540149	2540149	2540149	2540149	2540149	2540149
8	Space bush	1	2551234	2551234	2551234	2551234	2551234	2551234	2551234
9	Gear wheel	1	2560694	2560706	2560715	2560706	2560694	2560706	2560715
(10)	Ring БДC2170-77	1	B 20	B 20	B 20	B 20	B 20	B 20	B 20
7	Gasket	1	2545189	2545189	2545189	2545189	2545189	2545189	2545189
(11)	Screw DIN912 / 8.8	3	M8 x 20	M8 x 20	M8 x 20	M8 x 20	M8 x 20	M8 x 20	M8 x 20
(12)	Spring washer DIN7980	3	2 8H	2 8H	2 8H	2 8H	2 8H	2 8H	2 8H
(13)	Ring БДC2170-77	1	B 12	B 12	B 12	B 12	B 12	B 12	B 12
(14)	Gear wheel	1	2560631	2560647	2560652	2560647	2560631	2560647	2560652
(15)	Bolt DIN931 / 8	3	M8 x 25	M8 x 25	M8 x 25	M8 x 25	M8 x 25	M8 x 25	M8 x 25
(16)	Spring washer DIN7980	3	2 8H	2 8H	2 8H	2 8H	2 8H	2 8H	2 8H
[17]	Electric motor	1	KKT71-6	KKT71-6	KKT71-6	KKT71-4	KKT80-12/4	KKT80-12/4	KKT80-12/4

MONORAIL TROLLEY 10t –Fig.9

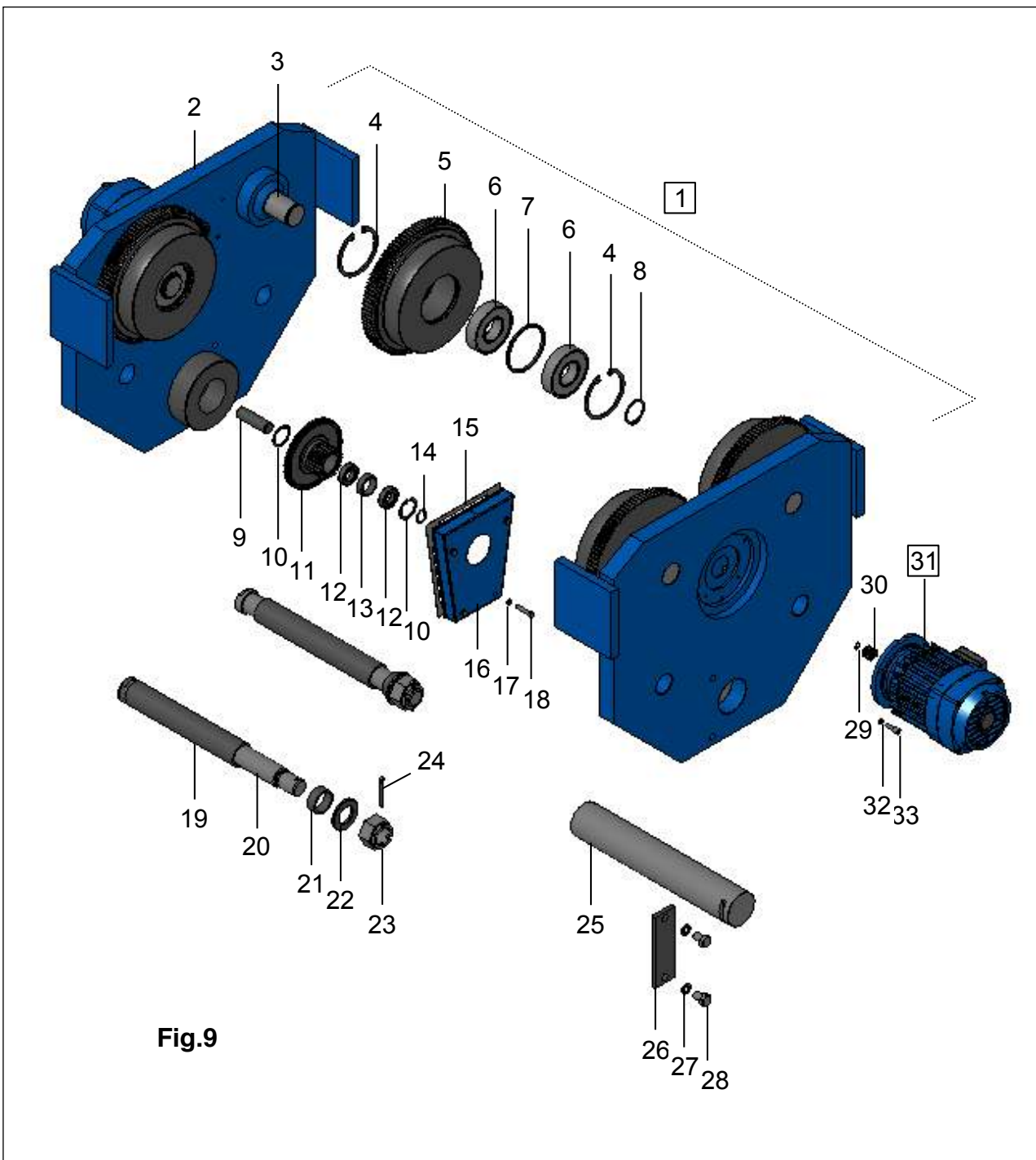


Fig.9

Table 7

Capacity		10t	
Pos.	Name	Qty.	Catalogue number
[1]	Monorail trolley	-	1373688
[2]	Plate	2	1360291
3	Axle	4	2566151
(4)	Ring r DIN472	8	110 x 4
5	Travel wheel (motorized)	4	2560778
(6)	Bearing SKF	8	6310z
7	Space bush	4	2551559
(8)	Ring DIN471	4	50 x 2
9	Axle	1	2566167

Table 7 contd.

Capacity			10t	
Pos.	Name	Qty.	Catalogue number	
(10)	Ring BDS2170-77	2	A47	
11	Gear wheel block	1	2560940	
(12)	Bearing SKF	2	6005z	
13	Space bush	1	2551564	
(14)	Ring DIN471	1	25 x 1,2	
15	Gasket	1	2545257	
16	Cover	1	2585478	
(17)	Spring washer DIN7980	4	2 8H	
(18)	Screw DIN912 / 5.8	4	M8 x 40	
19	Space bush	2	2551538	
20	Axle	2	2566130	
21	Space bush	2	2551543	
(22)	Washer DIN125	2	AM39	
(23)	Castle nut DIN935	2	M39	
(24)	Cotter pin DIN94	2	6,3 x 71	
25	Axle	1	2566146	
26	Safety plate	1	2518365	
(27)	Spring washer DIN7980	2	2 16H	
(28)	Bolt DIN931 / 8.8	2	M16 x 32	
(29)	Ring DIN471	2	12 x 1	
30	Gear wheel	2	2560599	
31	Electric motor	20 m/min	2	KKT80-6
		32 m/min	2	KKT80-4
		20/10 m/min	2	KKT80-12/6
		32/10 m/min	2	KKT80-12/4
(32)	Spring washer DIN7980	6	2 8H	
(33)	Screw DIN912 / 8.8	6	M8 x 40	

