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Catagodue is in accordance with the following legal texts:

Bulgarian norms: BDS EN 60204-1:2006/A1:2009 "Safety machinery-Electrical equipment of machines – Part 1:General requirements"
 BDS EN 14492-2:2006+A1:2009 "Cranes- |Power driven winches and hoists-Part 2:Power driven hoists"
 BDS EN 60034-1:2010 "Rotating electrical machines-Part 1: Rating and performance"
 BDS EN 60034-5:2007 "Rotating electrical machines-Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code)- Classification"

Germany norms:

DIN 15020-1-1974 "Lifting Appliances, Principles Relating to Rope Drives; Calculation and Construction"
 FEM 9.511 "Rules for the desin of series lifting equipment; Classification of mechanisms"
 FEM 9.661 "Rules for the design of series lifting equipment; Dimensions and design of rope reeving components"
 FEM 9.681 "Rules for the design of series lifting equipment; Selection of travelling motors"
 FEM 9.682 "Rules for the design of series lifting equipment; Selection of lifting motors"
 FEM 9.755 "Measure for achieving safe working periods for motorized serial hoist units (S.W.P.)"
 FEM 9.811 "Rules for the design of series lifting equipment; Specification of electric hoists"

Russian norms:TP TC 010/2011 технический регламент ТС о безопасности машин и оборудования

Each order must contain the following data:

1. Type, serial number, year of manufacture according to plate and working group.
2. Name and catalog number of spare part.
3. How many pieces.
4. For parts of electrical equipment:type, voltage and frequency according to plate.
5. Type of shipment.
6. Exact addres for delivery.

Pattern of order of spare parts is showing in Application1.

Produser can deliver coplete units of hoist

FOR SUPPLY WITH SPARE PARTS APPLY TO:

MW YANTRA PLC

10,Neofit Riski str., 5300 Gabrovo, Bulgaria

tel.: ++359 66 801306

fax: ++359 66 801292

e-mail: yantra@yantra.bg

INSTRUCTION FOR USE:

This catalogue includes all parts of hoist type MPM5.

In the tables are listed numbers of schemes and positions. Against them are names, pieces and catalog numbers for respective realization. The units with position is enclosed in square brackets [] are not sectional. They are supplied complete.

The units with position is enclosed in parentheses () are standart parts as bolt, nuts, lock ring and ets... They aren't supplied by produser as spare parts, but client can order. This parts can be replaced considering the class of strength.

NCB With trolley, normal headroom
HCB With trolley, low headroom
Vt Traveling speed
Hp Lifting height

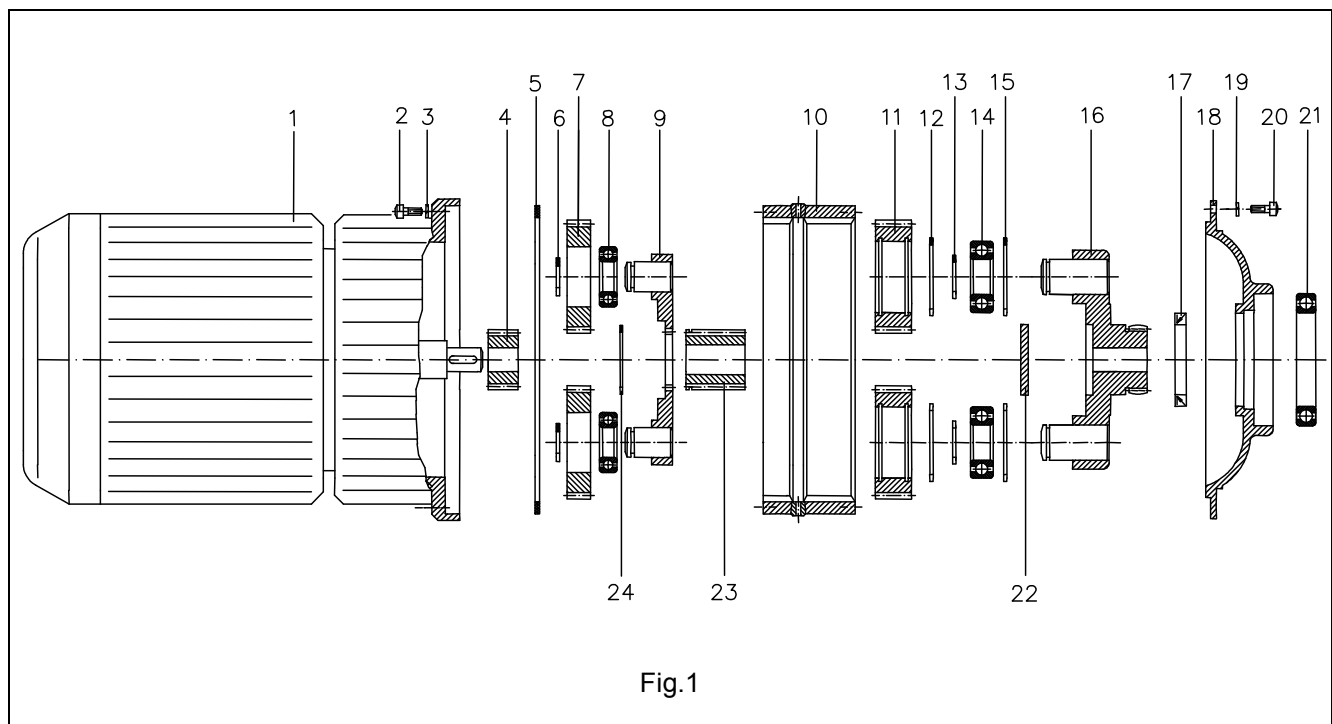
THE PRODUSER RESERVES THE RIGHT TO CHANGE THE CATALOGUE OF SPARE PARTS**1. GEARED MOTOR**

Table 1

Fig	Pos	Name	Pcs	Lifting height (m/min)	Catalog number
1	1-24	Geared motor	1	8	10009
	1-24	Geared motor	1	12	10010
	1-24	Geared motor	1	8/2	10011
	1-24	Geared motor	1	12/2	10012
	1	Electric motor	1	8	10029
	1	Electric motor	1	12	10030
	1	Electric motor	1	8/2	10031
	1	Electric motor	1	12/2	10032
	4-21	Reduction gear	1		10221
	(2)	Screw M8x25 – 6,5 BDS 2171-83	8		10132
	(3)	Spring washer – 8H BDS833-82	8		10139
	4	First drive gear	1		10069
	5	Seal	1		10057
	6-9;23;24	First gear transmission	1		10044
	(6)	Lock ring B30 BDS 2170-77	2		10148
	[7;8]	Planet gear wheel with bearing	2		10082
	7	Planet gear wheel	2		10086
	(8)	Bearing 6206 – 30x62x16 BDS 4843-85	2		10156
	[9]	Carrier with axis	1		10090

Table 1 – continued

Fig	Pos	Name	Pcs	Catalog number
1	23	Second drive gear	1	10078
	(24)	Lock ring B50 BDS 2171-83	1	10152
	10	Ring gear		10061
	11-16;22	Second gear transmission	1	10048
	11	Second planet gear wheel	3	10110
	(12)	Lock ring A80 BDS 2171-83	3	10145
	(13)	Lock ring	3	10148
	(14)	Ball bearing 6307 – 35x80x21 BDS 4843-84	3	10162
	(15)	Lock ring	3	10145
	[16]	Second carrier with axis	1	10114
	17	Seal	1	10142
	18	Flange	1	10065
	(19)	Spring washer 8H BDS 833-82	8	10139
	(20)	Screw M8x20 – 6,5 BDS 2171-83	8	10132
	(21)	Ball bearing 6016-Z –80x125x22 BDS 4884-85	1	10157
	22	Plug	1	10102

2. ROPE GUIDE

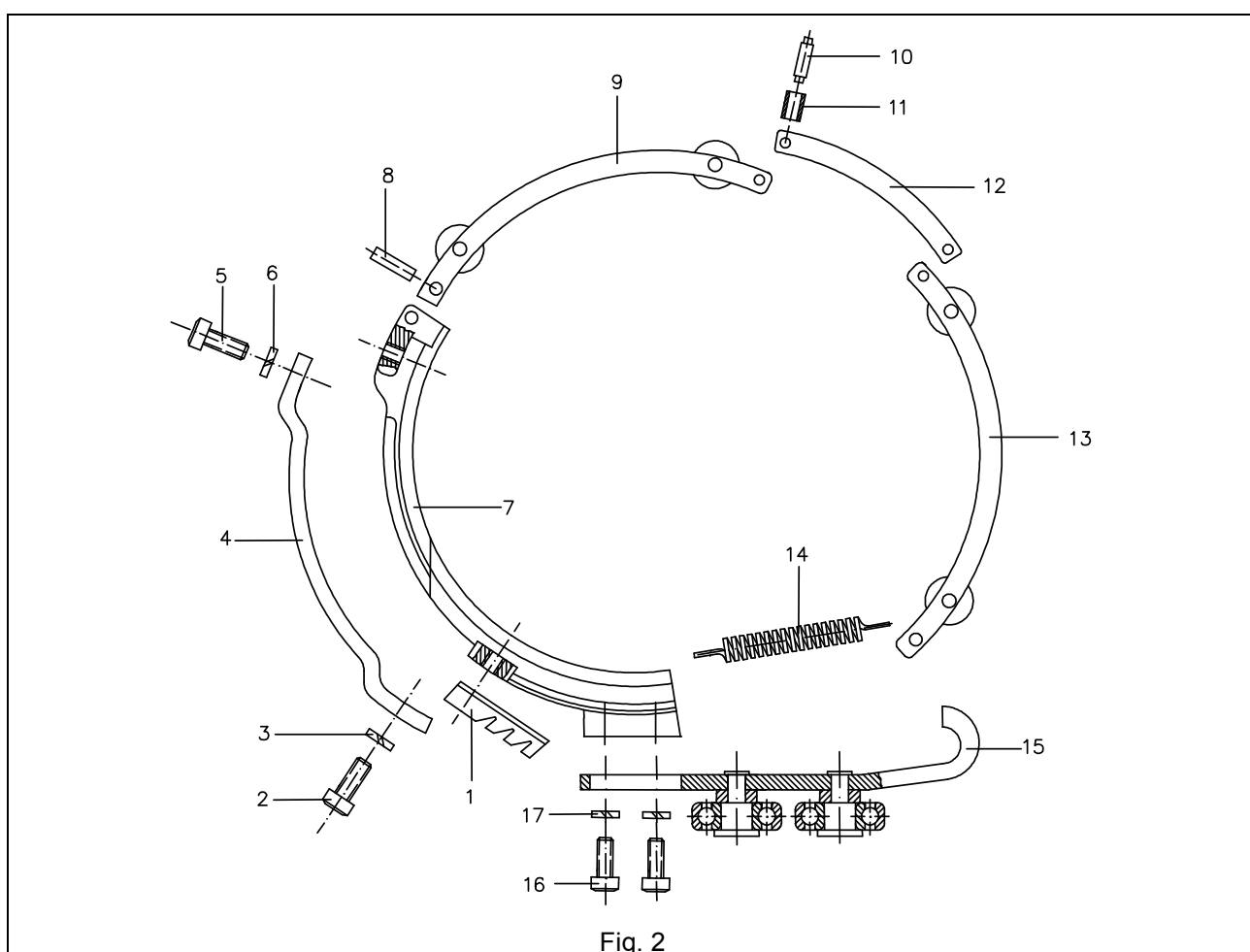


Table 2

Reeving				2/1 и 4/1	
Realization				NCB	HCB
Fig	Pos	Name	Pcs	Catalog number	
2	1-16	Rope guide	1	14002	
	1	Click	1	14007	
	(2)	Bolt washer I M10x20 – 6,8	2	14088	
	(3)	Spring washer – 10H	2	10140	
	4	Rope catcher	1	14015	

Table 2 – continued

Reeving				2/1 и 4/1	
Realization				NCB	HCB
Fig	Pos	Name	Pcs	Catalog number	
2	(5)	Bolt I M8x18 – 6,8	2	14087	
	(6)	Spring washer – 8H	2	10139	
	7	Sector supporting	1	14020	
	8	Spring pin	1	14025	
	9	Sector pressing	1	14059	
	10	Axis	2	14037	
	11	Distance bush	2	14029	
	12	Sector connectional	2	14033	
	13	Sector pressing	1	14060	
	14	Spring	1	14012	
	[15]	Guide	1	14041	
	(16)	Bolt M6x16 – 6,8	2	14085	
	(17)	Spring washer – 6H	2	10138	

Note: Details positions from 7 to 13 are assembled in a single unit. It is desirable that the customer orders this unit which will be assembled in a factory.

3. BODY, SWITCHING SYSTEM

Table 3

Fig	Pos	Name	Reeving	Pcs	Realization							
					Stationary							
					Lifting height (m)							
					6,3	9	12,5	15	18	25	30	36
3	1	Body	2/1	1	12015	12016	12017	-	12018	12019	12020	12021
	1;8;9;10	Body	4/1	1	12346	12347	12348	12349	12350	-	-	-
	With trolley											
	1	Body	2/1	1	12608	12609	12610	-	12611	12612	12613	12614
	1;8;9;10	Body	4/1	1	12698	12699	12700	12701	12702	-	-	-
	Low headroom											
	1	Body	2/1	1	12104	12105	12106	-	12107	12108	12109	12110
	1;8;9;10	Body	4/1	1	12384	12385	12386	12387	12388	-	-	-
	Details common to all performances											
	(2)	Bolt M6x20 – 5,6	2/1;4/1	2	20127	20127	20127	20127	20127	20127	20127	20127
	3	Ring	2/1;4/1	2	20004	20004	20004	20004	20004	20004	20004	20004
	(4)	Split	2/1;4/1	2	20126	20126	20126	20126	20126	20126	20126	20126

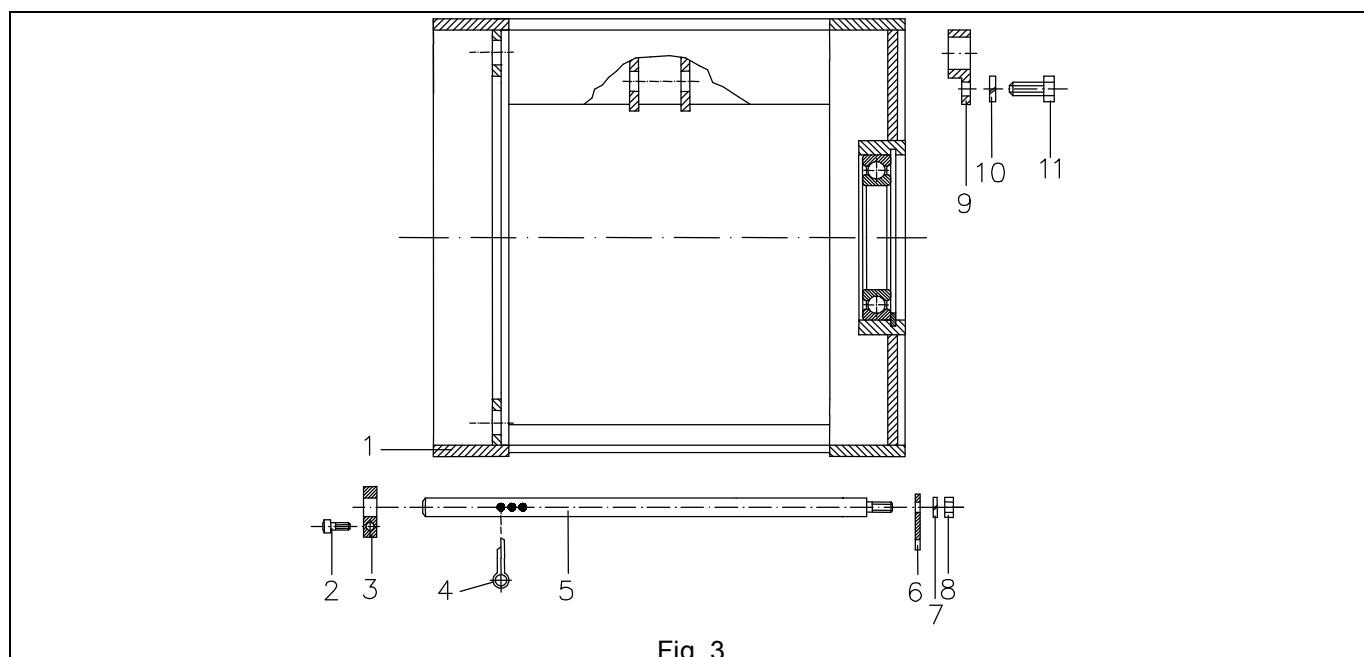


Fig. 3

Table 3 – continued

Fig	Pos	Name	Reeving	Pcs	Realization							
					Stationary							
					Lifting height (m)							
					6,3	9	12,5	15	18	25	30	36
3	5	Rod	2/1	1	20026	20027	20028	-	20029	20030	20031	20032
	5	Rod	4/1	1	20028	20029	20030	20031	20032	-	-	-
	6	Fork	2/1;4/1	1	20003	20003	20003	20003	20003	20003	20003	20003
	(7)	Spring washer 2 6H BDS 833-82	2/1;4/1	1	10138	10138	10138	10138	10138	10138	10138	10138
	(8)	Nut 1 M6 BDS 744-91	2/1;4/1	1	20125	20125	20125	20125	20125	20125	20125	20125
	9	Support	4/1	1	12410	12410	12410	12410	12410	-	-	-
	(10)	Spring washer 2-8H	4/1	2	10139	10139	10139	10139	10139	-	-	-
	(11)	Bolt 1 M8x18 - 6,8	4/1	2	14087	14087	14087	14087	14087	-	-	-

4. DRUM KIT, WIRE ROPE

Table 4

Fig	Pos	Reeving	Lifting height (m)		6,3	9	12,5	15	18	25	30	36
			Name	Pcs	Catalog number							
4	[1]	2/1	Dum kit	1	15015	15016	15017	-	15018	15019	15020	15021
	[1]	4/1	Drum kit	1	15017	15018	15019	15020	15021	-	-	-
	2	2/1;4/1	Strap	3	15073							
	(3)	2/1;4/1	Screw M10x25 – 8,8	6	15091							
	(4)	2/1;4/1	Spring washer 2 – 10H	6	10140							
5	1	2/1	Rope	1	20054	20055	20056	-	20057	20058	20059	20060
	1	4/1	Rope	1	20511	20512	20513	20514	20515	-	-	-

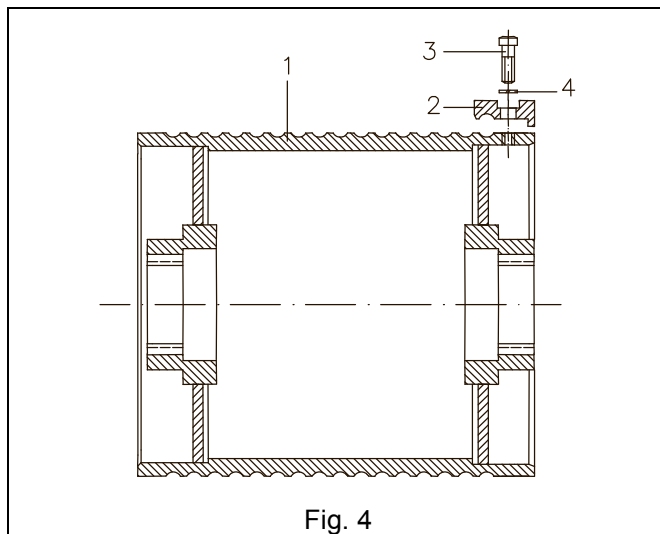


Fig. 4

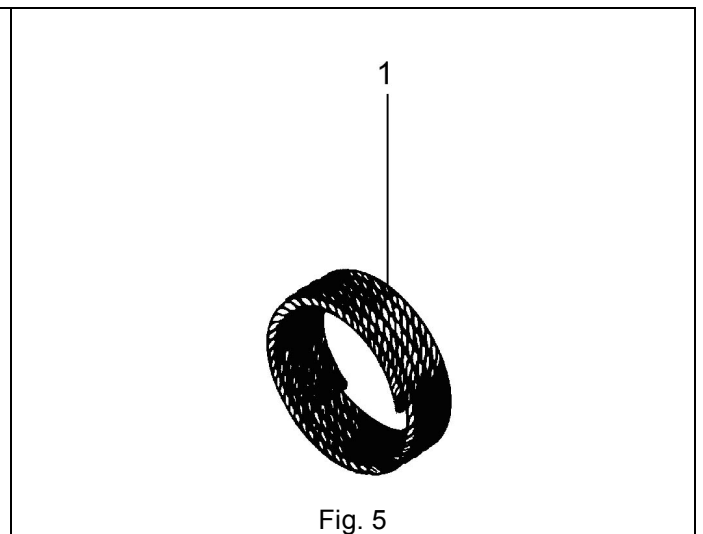


Fig. 5

5. TRAVERSE WITH ROLL KIT

Table 5

Reeving					4/1	
Realization					NCB	HCB
Fig	Pos	Name	Pcs	Catalog number		
6	1÷9	Traverse with roll	1	19003		
	(1)	Bolt 1 M8x16 – 6,6 BDS 1230-85	2	14086		
	(2)	Spring washer 2 – 8H BDS 833-82	2	10139		
	3	Strap for fixing	1	19011		
	4	Axis	1	19014		
	5	Traverse	1	19019		
	6	Bush	2	19008		
	(7)	Lock ring A110 BDS 2170-77	2	16062		
	(8)	Ball bearing 6212-2Z BDS 4884-85	1	16060		

Reeving 2/1

Table 6

Reeving				2/1
Capacity , (t) , working group			2m	5
Hook N DIN15400				2,5
Diameter of rope, mm				15
Fig	Pos	Name	Pcs	Catalog number
7	1÷19	Roller block	1	16001
	(1)	Lock ring B60 BDS 2170-77	2	10153
	2	Strap	2	16019
	3	Axis	1	16044
	4	Half-cover	2	16042
	5	Top band	1	16057
	6	Distance bush	2	16045
	(7)	Lock ring A110 BDS 2170-77	2	16062
	(8)	Ball bearing – 6212 – 2Z BDS 4843-84	1	16060
	9	Roll	1	16054
	(10)	Nut II M8 BDS 1250-77	4	16063
	(11)	Spring ring 2 8H BDS 833-82	4	10139
	12	Stud	2	16058
	13	Nut	1	16030
	14	Cap	1	16021
	15	Bearing 51107 BDS 4852-85	1	16059
	16	Traverse	1	16020
	17	Spring (catch)	1	16012
	18	Крюк однорогоий	1	16002
	19	Spring pin DIN1481	1	16061
	20	Bottom band	1	16040

Reeving 4/1

Table 6.1

Reeving				4/1
Capacity , t , working group			2m	10
Hook N DIN15400				6
Diameter of rope, mm				15
Fig	Pos	Name	Pcs	Catalog number
8	1÷21	Roller block	1	16524
	1	Lock ring B50	2	10152
	2	Half - cover	4	16043
	3	Top band	2	16057
	4	Distance bush	2	16051
	5	Ball bearing 6210 – Z BDS 4843 – 84	4	16531
	6	Roll	2	16055
	7	Lock ring A90 BDS 2170-77	2	10146
	8	Strap	2	16526
	9	Bolt M6x14 – 6,8 BDS 1234-85	4	14084
	10	Spring washer 2 – 6H BDS 833-82	4	10138
	11	Strap	2	16529
	12	Axis	1	16528
	13	Screw M6x12 BDS 15615-91	1	16082
	14	Strap	1	16110
	15	Nut	1	16031
	16	Cap	1	16023
	17	Bearing 51110 BDS 4852-85	1	16530
	18	Traverse	1	16525
	19	Spring	1	16013
	20	Hook	1	16003
	21	Bottom band	2	16040

Reeving 4/1

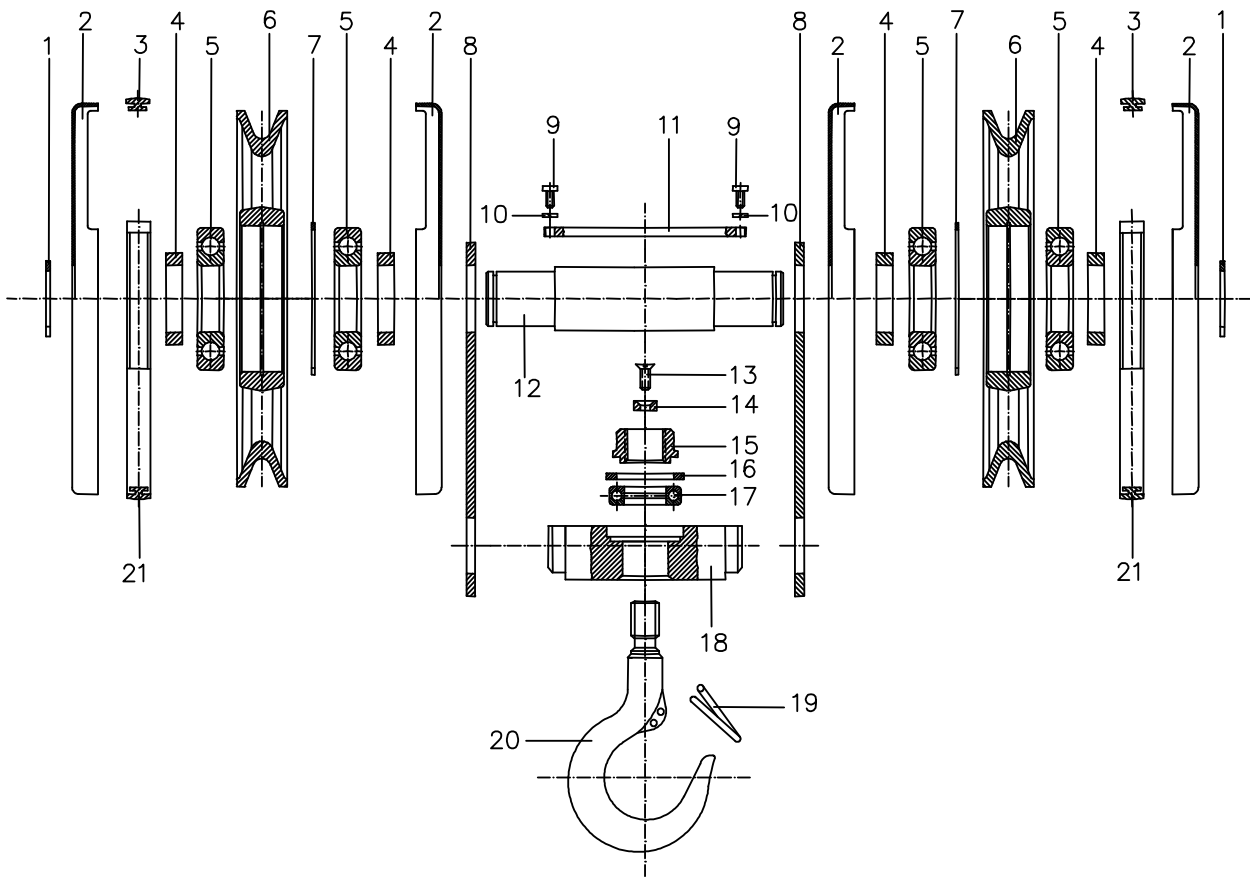


Fig. 8

7. LOAD LIMITER

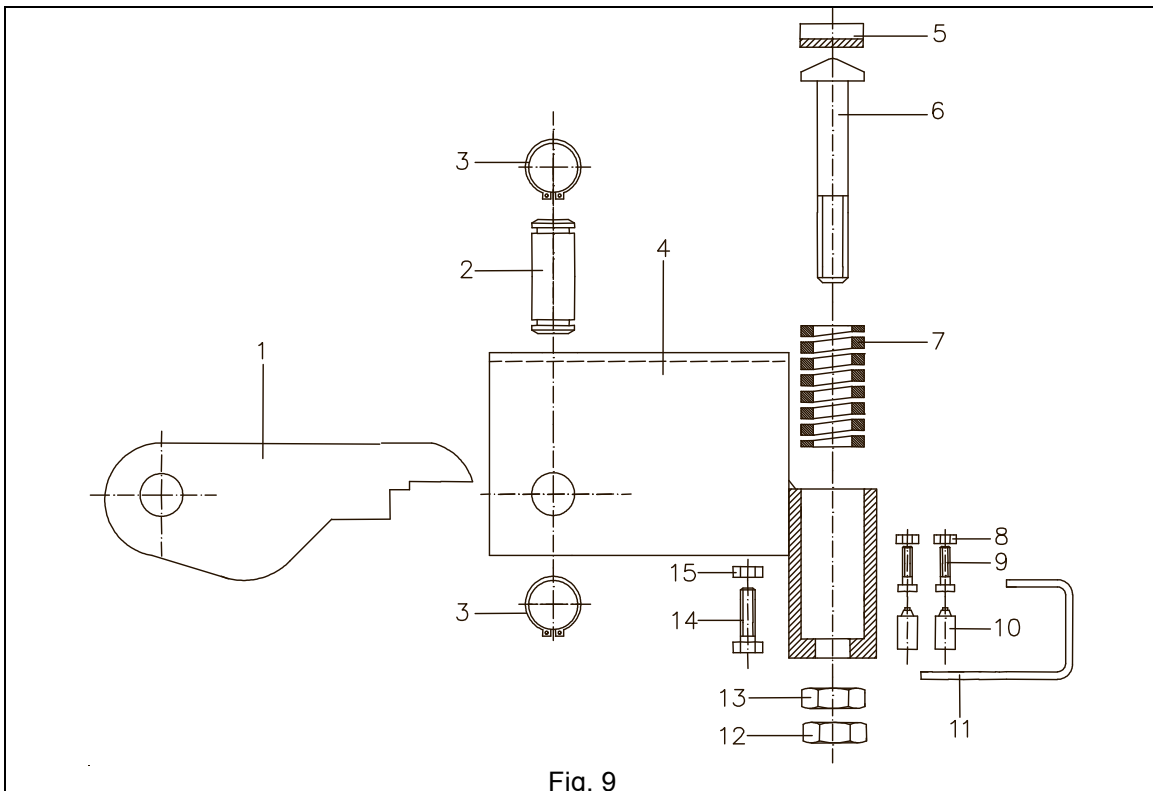


Fig. 9

Table 7

Reeving					2/1; 4/1	Note
Fig	Pos	Name		Pcs	Catalog number	
9	1÷12	Load limiter		1	13046	
	1	Rocker		1	13049	
	2	Axis		1	13047	
	(3)	Lock ring B18	BDS – 2170-77	2	13057	
	[4]	Frame		1	13053	
	5	Plate		1	13051	
	6	Special bolt		1	13050	
	7	Spring G32-038		1	13058	“TOME”
	(8)	Nut M6x0,75 – 6	BDS 744-91	2	13016	
	9	Adjuster bolt		2	13007	
	10	Breaker - Z – 15GK55		2	13017	“OMRON”
	11	Strap		1	13030	
	(12)	Nut M12 – 6	BDS 744-91	2	13039	
	(13)	Nut M12 – 6	BDS 744-91	2	13039	
	(14)	Bolt I M10x35 – 6,6	BDS 1234-85	1	13059	
(15)	Nut M10 – 6	BDS 744-91	1	13060		

8. SUSPENSION

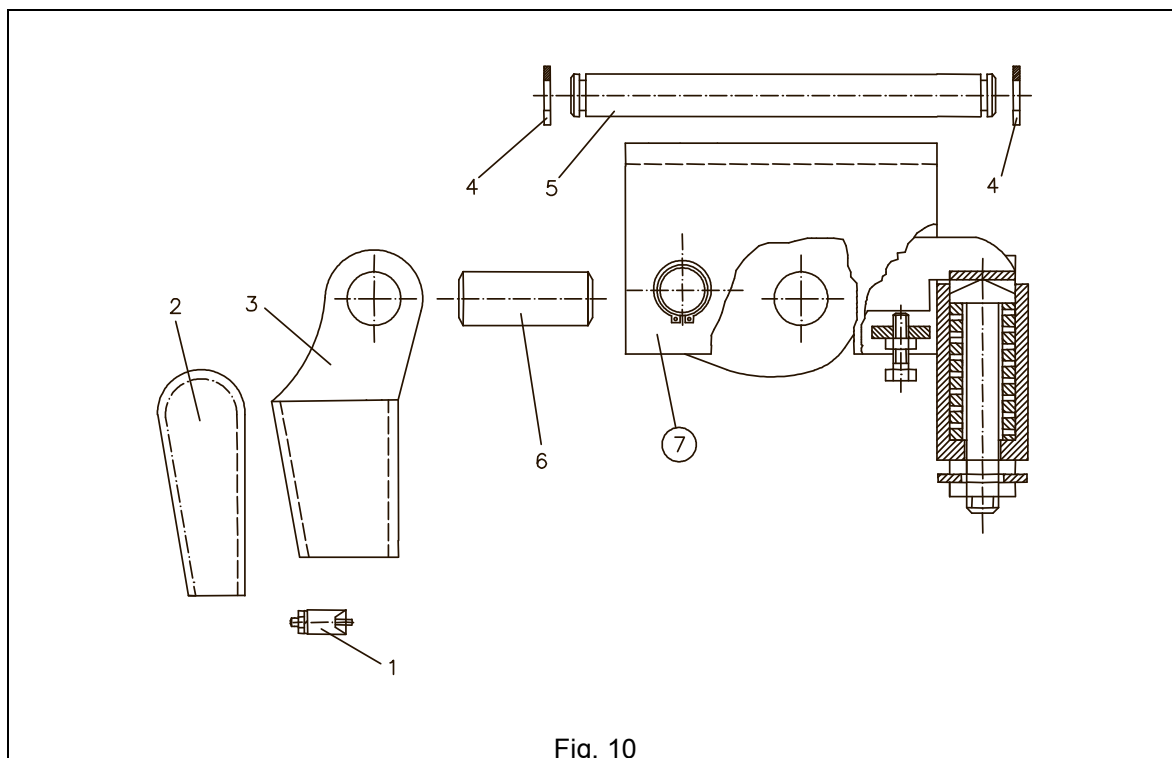


Table 8

Reeving				2/1; 4/1	Note
Fig	Pos	Name	Pcs	Catalog number	
10	1	Slamp 12 DIN1142	1	20138	
	2	Werge	1	260211	
	3	Bush wedge	1	260199	
	4	Lock ring B25 BDS 2170-77	2	13037	
	5	Axis	1	20077	
	6	Axis	1	13047	
	7	Load limiter	1	-	Table 7

9. TRAVELING MECHANISM – NORMAL HEADROOM

9.1 Traveling mechanism

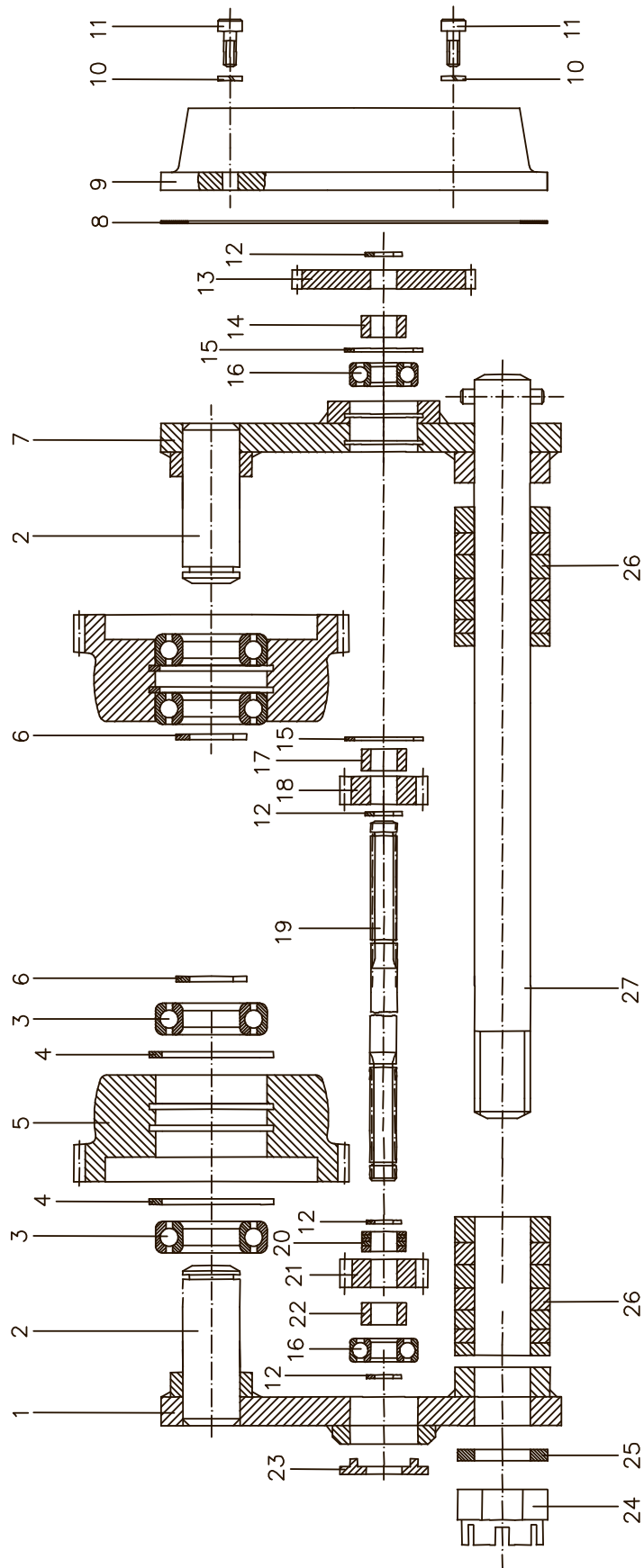


Fig. 11

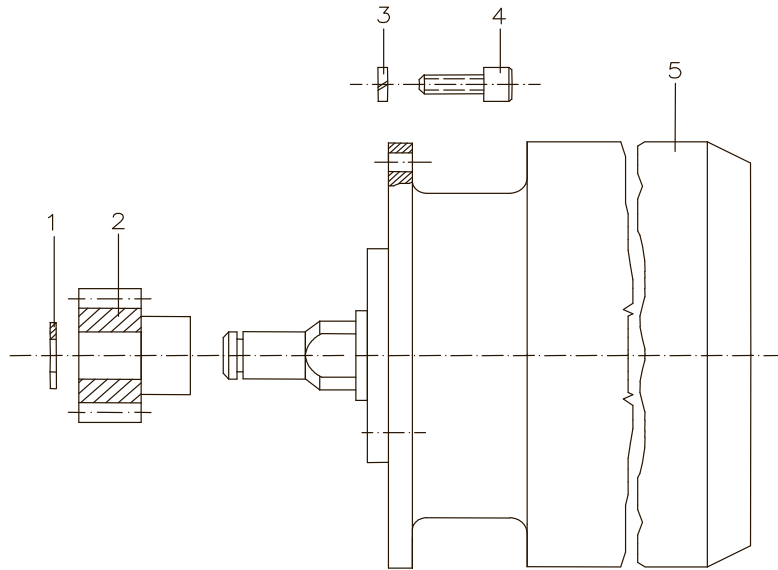


Fig. 12

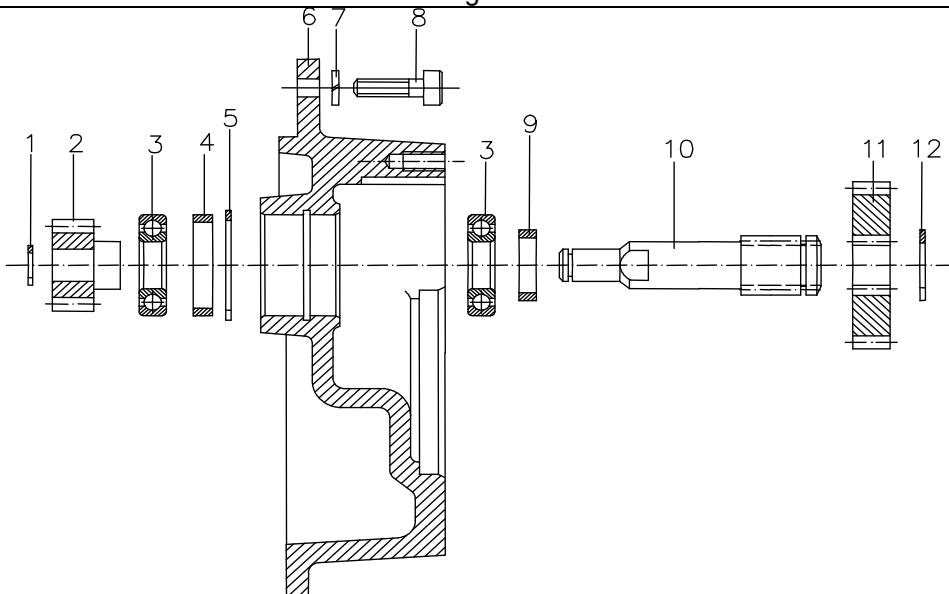


Fig. 13

Reeving 2/1

Table 9.1.1

Fig	Pos	B _r	V _t (m/min)	pcs	Name	Catalog number
		130	12	1	Traveling mechanism	17015
		130	15	1	Traveling mechanism	17016
		130	20	1	Traveling mechanism	17017
		130	26	1	Traveling mechanism	17018
		130	32	1	Traveling mechanism	17019
		130	38	1	Traveling mechanism	17020
		130	12/4	1	Traveling mechanism	17021
		130	17/5	1	Traveling mechanism	17022
		130	23/7	1	Traveling mechanism	17023
		130	33/10	1	Traveling mechanism	17024

Reeving 2/1

Table 9.1.1 – continued

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catalog number
		300	12	1	Traveling mechanism	17039
		300	15	1	Traveling mechanism	17040
		300	20	1	Traveling mechanism	17041
		300	26	1	Traveling mechanism	17042
		300	32	1	Traveling mechanism	17043
		300	38	1	Traveling mechanism	17044
		300	12/4	1	Traveling mechanism	17045
		300	17/5	1	Traveling mechanism	17046
		300	23/7	1	Traveling mechanism	17047
		300	33/10	1	Traveling mechanism	17048
		130+300	12	1	Traveling mechanism	17063
		130+300	15	1	Traveling mechanism	17064
		130+300	20	1	Traveling mechanism	17065
		130+300	26	1	Traveling mechanism	17066
		130+300	32	1	Traveling mechanism	17067
		130+300	38	1	Traveling mechanism	17068
		130+300	12/4	1	Traveling mechanism	17069
		130+300	17/5	1	Traveling mechanism	17070
12		130+300	23/7	1	Traveling mechanism	17071
		130+300	33/10	1	Traveling mechanism	17072
	1;2;5	130+300	12	1	Electric motor with pinion	17221
	1;2;5	130+300	15	1	Electric motor with pinion	17222
	1;2;5	130+300	20	1	Electric motor with pinion	17223
	1;2;5	130+300	26	1	Electric motor with pinion	17224
	1;2;5	130+300	32	1	Electric motor with pinion	17225
	1;2;5	130+300	38	1	Electric motor with pinion	17226
	1;2;5	130+300	12/4	1	Electric motor with pinion	17227
	1;2;5	130+300	17/5	1	Electric motor with pinion	17227
	1;2;5	130+300	23/7	1	Electric motor with pinion	17228
	1;2;5	130+300	33/10	1	Electric motor with pinion	17229
	5	130+300	12	1	Electric motor	17302
	5	130+300	15	1	Electric motor	17302
	5	130+300	20	1	Electric motor	17302
	5	130+300	26	1	Electric motor	17303
	5	130+300	32	1	Electric motor	17309
	5	130+300	38	1	Electric motor	17304
	5	130+300	12/4	1	Electric motor	17310
	5	130+300	17/5	1	Electric motor	17310
	5	130+300	23/7	1	Electric motor	17306
	5	130+300	33/10	1	Electric motor	17306
	2	130+300	12	1	Pinion	17241
	2	130+300	15	1	Pinion	17237
	2	130+300	20	1	Pinion	17238
	2	130+300	26	1	Pinion	17239
	2	130+300	32	1	Pinion	17238
	2	130+300	38	1	Pinion	17239
	2	130+300	12/4	1	Pinion	17241
	2	130+300	17/5	1	Pinion	17241
	2	130+300	23/7	1	Pinion	17237
	2	130+300	33/10	1	Pinion	17238
	1	130+300	+	1	Lock ring B12 BDS 2170-77	17313
13	1+12	130+300	12	1	Adaptor	17235
	1+12	130+300	12/4	1	Adaptor	17233
	1+12	130+300	17/5	1	Adaptor	17234
	1	130+300	+	1	Lock ring B12 BDS 2170-77	17313
	2	130+300	12	1	Pinion	17239
	2	130+300	12/4	1	Pinion	17237
	2	130+300	17/5	1	Pinion	17238
	3	130+300	+	2	Ball bearing 6203 – 17x40x12 BDS 4843-84	17317
	4	130+300	+	1	Distance bush	17157
	5	130+300	+	1	Lock ring A40 BDS 2170-77	17315
	6	130+300	+	1	Case	17242
	7	130+300	+	3	Lock ring 2 8H BDS 833-82	10139
	8	130+300	+	3	Screw 1 M8x18 – 8,8 BDS 2171-83	17324
	3	130+300	+	3	Spring washer 2 8H BDS 833-82	10139
	4	130+300	+	3	Screw 1 M8x18 – 8,8 BDS 2171-83	17324
	9	130+300	+	1	Distance bush	17158
	10	130+300	+	1	Shaft	17236
	11	130+300	+	1	Gear wheel	17166
	12	130+300	+	1	Lock ring B20 BDS 2170-77	17314

Reeving 2/1

Table 9.1.1 – continued

Fig	Pos	B _r	V _t (m/min)	pcs	Name	Catalog number
11	1	130+300	+	1	Hind carrier	17204
	2	130+300	+	2	Axis	17178
	3	130+300	+	4	Ball bearing 6208 - Z BDS 4884-85	17320
	4	130+300	+	4	Lock ring A80 BDS 2170-77	10145
	5	130+300	+	2	Moves wheel	17172
	6	130+300	+	2	Lock ring B40 BDS 2170-77	10150
	7	130+300	+	2	Hind carrier basic	17243
	8	130+300	+	1	Seal	17183
	9	130+300	+	1	Case	17182
	10	130+300	+	4	Spring washer 2 8H BDS 833-82	10139
	11	130+300	+	4	Screw 1 M8x18 – 8,8 BDS 2171-83	17324
	12	130+300	+	4	Lock ring B20 BDS 2171-83	17314
	13	130+300	15; 12/4; 23/7	1	Gear wheel	17162
	13	130+300	20; 32; 17/5;33/10	1	Gear wheel	17163
	13	130+300	12; 26; 38	1	Gear wheel	17164
	14;17; 22	130+300	+	3	Distance bush	17155
	15	130+300	+	2	Lock ring A47	17316
	16	130+300	+	2	Ball bearing 6204 – Z BDS 4884-85	17319
	18;21	130+300	+	2	Gear wheel	17160
	19	130+300	+	1	Drive shaft	17153
	19	130	+	1	Drive shaft	17141
	19	140	+	1	Drive shaft	17142
	19	150	+	1	Drive shaft	17143
	19	160	+	1	Drive shaft	17144
	19	180	+	1	Drive shaft	17145
	19	200	+	1	Drive shaft	17146
	19	220	+	1	Drive shaft	17147
	19	240	+	1	Drive shaft	17148
	19	260	+	1	Drive shaft	17149
	19	280	+	1	Drive shaft	17150
	19	300	+	1	Drive shaft	17151
	20	130+300	+	1	Composition of washers:	
				5	Washer	17170
				1	Washer	17184
	14;17; 22	130+300	+	3	Distance bush	17155
	23	130+300	+	1	Cap	17104
	24	130+300	+	2	Nut M20 BDS 1253-83	17322
	25	130+300	+	2	Chock bush	17096
	26	130+300	+	4	Composition of washers:	
				3	Washer	17099
				1	Washer	17102
				1	Addition bush	17119
	27	130	+	2	Stud	17084
	27	140	+	2	Stud	17085
	27	150	+	2	Stud	17086
	27	160	+	2	Stud	17087
	27	180	+	2	Stud	17088
	27	200	+	2	Stud	17089
	27	220	+	2	Stud	17090
	27	240	+	2	Stud	17091
	27	260	+	2	Stud	17092
	27	280	+	2	Stud	17093
	27	300	+	2	Stud	17094
	27	130+300	+	2	Stud	17094

Reeving 4/1

table 9.1.2

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catalog number
		130	7	1	Traveling mechanism	17001
		130	10	1	Traveling mechanism	17002
		130	12	1	Traveling mechanism	17003
		130	16	1	Traveling mechanism	17004
		130	20	1	Traveling mechanism	17005
		130	25	1	Traveling mechanism	17006
		130	29	1	Traveling mechanism	17007
		130	42	1	Traveling mechanism	17008
		130	12/3,5	1	Traveling mechanism	17009
		130	15/5	1	Traveling mechanism	17010
		130	21/7	1	Traveling mechanism	17011
		130	25/8	1	Traveling mechanism	17012
		300	7	1	Traveling mechanism	17025
		300	10	1	Traveling mechanism	17026
		300	12	1	Traveling mechanism	17027
		300	16	1	Traveling mechanism	17028
		300	20	1	Traveling mechanism	17029
		300	25	1	Traveling mechanism	17030
		300	29	1	Traveling mechanism	17031
		300	42	1	Traveling mechanism	17032
		300	12/3,5	1	Traveling mechanism	17033
		300	15/5	1	Traveling mechanism	17034
		300	21/7	1	Traveling mechanism	17035
		300	25/8	1	Traveling mechanism	17036
		130+300	7	1	Traveling mechanism	17049
		130+300	10	1	Traveling mechanism	17050
		130+300	12	1	Traveling mechanism	17051
		130+300	16	1	Traveling mechanism	17052
		130+300	20	1	Traveling mechanism	17053
		130+300	25	1	Traveling mechanism	17054
		130+300	29	1	Traveling mechanism	17055
		130+300	42	1	Traveling mechanism	17056
		130+300	12/3,5	1	Traveling mechanism	17057
		130+300	15/5	1	Traveling mechanism	17058
		130+300	21/7	1	Traveling mechanism	17059
		130+300	25/8	1	Traveling mechanism	17060
12	1;2;5	130+300	7;10;12	1	Electric motor with pinion	17212
	1;2;5	130+300	16	1	Electric motor with pinion	17213
	1;2;5	130+300	20	1	Electric motor with pinion	17214
	1;2;5	130+300	25	1	Electric motor with pinion	17215
	1;2;5	130+300	29	1	Electric motor with pinion	17216
	1;2;5	130+300	42	1	Electric motor with pinion	17217
	1;2;5	130+300	12/3,5	1	Electric motor with pinion	17218
	1;2;5	130+300	15/5	1	Electric motor with pinion	17218
	1;2;5	130+300	21/7	1	Electric motor with pinion	17219
	1;2;5	130+300	25/8	1	Electric motor with pinion	17219
	1;2;5	130+300	7;10;12	1	Electric motor	17302
	5	130+300	16 и 20	1	Electric motor	17303
	5	130+300	25 и 29	1	Electric motor	17304
	5	130+300	42	1	Electric motor	17305
	5	130+300	12/3,5	1	Electric motor	17306
	5	130+300	15/5	1	Electric motor	17306
	5	130+300	21/7	1	Electric motor	17307
	5	130+300	25/8	1	Electric motor	17307
	1;2;5	130+300	7;10;12	1	Pinion	17240
	2	130+300	16 и 25	1	Pinion	17241
	2	130+300	20 и 29	1	Pinion	17237
	2	130+300	42	1	Pinion	17238
	2	130+300	12/3,5	1	Pinion	17240
	2	130+300	15/5	1	Pinion	17240
	2	130+300	21/7	1	Pinion	17241
	2	130+300	25/8	1	Pinion	17241

Reeving 4/1

Table 9.1.2 – continued

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catalog number
12	1	130÷300	+	1	Lock ring B12	BDS 2170-77
	3	130÷300	+	7	Spring washer 2 8H	BDS 833-82
	4	130÷300	+	7	Screw I M8x18 – 8,8	BDS 2171-83
						17313
13	1÷12	130÷300	7 и 12/3,5	1	Adaptor	
	1÷12	130÷300	10 и 15/5	1	Adaptor	
	1÷12	130÷300	12	1	Adaptor	
	1÷12	130÷300	21/7	1	Adaptor	
	1÷12	130÷300	25/8	1	Adaptor	
	1	130÷300	+	1	Lock ring B12	BDS 2170-77
	2	130÷300	12	1	Pinion	
	2	130÷300	12/3,5	1	Pinion	
	2	130÷300	15/5	1	Pinion	
	2	130÷300	25/8	1	Pinion	
	3	130÷300	+	2	Ball bearing 6203– 17x40x12	BDS 4843-84
	4	130÷300	+	1	Distance bush	
	5	130÷300	+	1	Lock ring A40	BDS 2170-77
	6	130÷300	+	1	Case	
	7	130÷300	+	3	Spring washer 2 8H	BDS 833-82
	8	130÷300	+	3	Screw I M8x18 – 8,8	BDS 2171-83
	9	130÷300	+	1	Distance bush	
	10	130÷300	+	1	Shaft	
	11	130÷300	7 и 12/3,5	1	Gear wheel	
	11	130÷300	10 и 15/5	1	Gear wheel	
	11	130÷300	12	1	Gear wheel	
	11	130÷300	21/7	1	Gear wheel	
	11	130÷300	25/8	1	Gear wheel	
	12	130÷300	+	1	Lock ring B20	BDS 2170-77
	1	130÷300	+	1	Hind carrier	
11	2	130÷300	+	2	Axes	
	3	130÷300	+	4	Ball bearing 6308 - Z	BDS 4884-85
	4	130÷300	+	4	Lock ring A90	BDS 2170-77
	5	130÷300	+	2	Moves wheel	
	6	130÷300	+	2	Lock ring B40	BDS 2170-77
	7	130÷300	+	2	Front carrier basic	
	8	130÷300	+	1	Seal	
	9	130÷300	+	1	Case	
	10	130÷300	+	4	Spring washer 2 8H	BDS 833-82
	11	130÷300	+	4	Screw I M8x18 – 8,8	BDS 2171-83
	12	130÷300	+	4	Lock ring B20	BDS 2171-83
	13	130÷300	7;20; 29; 12/3,5	1	Gear wheel	
	13	130÷300	10;42;15/5 21/7	1	Gear wheel	
	13	130÷300	12;16;25; 25/8	1	Gear wheel	
	14;17;22	130÷300	+	3	Distance bush	
	15	130÷300	+	2	Lock ring A47	
	16	130÷300	+	2	Ball bearing 6204 – Z	BDS 4884-85
	18;21	130÷300	+	2	Gear wheel	
	19	130÷300	+	1	Drive shaft	
	19	130	+	1	Drive shaft	
	19	140	+	1	Drive shaft	
	19	150	+	1	Drive shaft	
	19	160	+	1	Drive shaft	
	19	180	+	1	Drive shaft	
	19	200	+	1	Drive shaft	
	19	220	+	1	Drive shaft	
	19	240	+	1	Drive shaft	
	19	260	+	1	Drive shaft	
	19	280	+	1	Drive shaft	
	19	300	+	1	Drive shaft	
	20	130÷300	+	1	Composition of washers:	
				5	Washer	
				1	Washer	
	14;17; 22	130÷300	+	3	Distance bush	
						17154

Reeving 4/1

Table 9.1.2 – continued

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catalog number
11	23	130+300	+	1	Cap	17104
	24	130+300	+	2	Nut M24 BDS 1253-83	17321
	25	130+300	+	2	Chock bush	17095
	26	130+300	+	-	Composition of washers:	
				6	Washer on one stud (2x3)	17098
				2	Washer on one stud (1x1)	17101
		130	+	1	Addition bush	17108
		140	+	1	Addition bush	17109
		150	+	1	Addition bush	17110
		160	+	1	Addition bush	17111
		180	+	1	Addition bush	17112
		200	+	1	Addition bush	17113
		220	+	1	Addition bush	17114
		240	+	1	Addition bush	17115
		260	+	1	Addition bush	17116
		280	+	1	Addition bush	17117
		300	+	1	Addition bush	17118
	27	130	+	2	Stud	17073
	27	140	+	2	Stud	17074
	27	150	+	2	Stud	170745
	27	160	+	2	Stud	17076
	27	180	+	2	Stud	17077
	27	200	+	2	Stud	17078
	27	220	+	2	Stud	17079
	27	240	+	2	Stud	17080
	27	260	+	2	Stud	17081
	27	280	+	2	Stud	17082
	27	300	+	2	Stud	17083
	27	130+300	+	2	Stud	17083

V_t – traveling speed;B_r – width of profile of reil way;

„+” – data refers to all realization

9.2 Traveling block

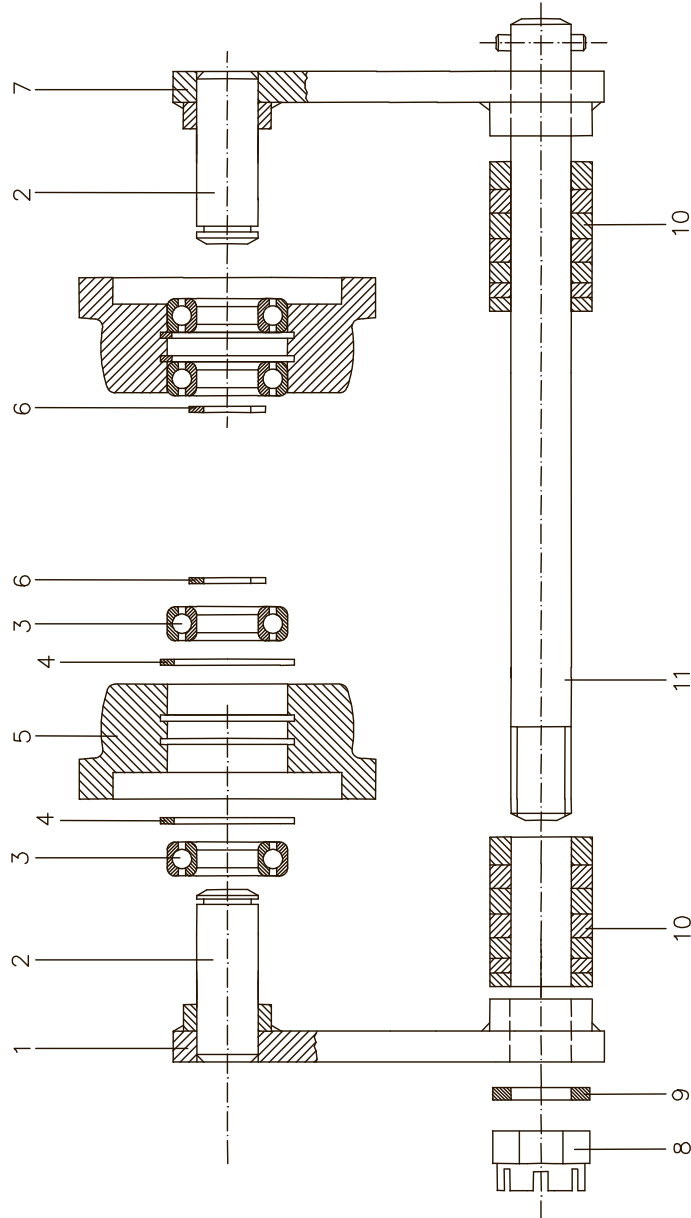


Fig. 14

9.2.1 Traveling block of hoist reeving 2/1 – capacity 3,2 t

Table 9.2.1

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catalog number	
14	1÷11	130	+	1	Traveling block		17277
	1÷11	140	+	1	Traveling block		17278
	1÷11	150	+	1	Traveling block		17279
	1÷11	160	+	1	Traveling block		17280
	1÷11	180	+	1	Traveling block		17281
	1÷11	200	+	1	Traveling block		17282
	1÷11	220	+	1	Traveling block		17283
	1÷11	240	+	1	Traveling block		17284
	1÷11	260	+	1	Traveling block		17285
	1÷11	280	+	1	Traveling block		17286
	1÷11	300	+	1	Traveling block		17287

Table 9.2.1 – continued

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catalog number
14	1+11	150+300*	+	1	Traveling block	17289
	1	150+300	+	1	Hind carrier	17290
	2	150+300	+	1	Axis	17178
	3	150+300	+	4	Ball bearing 6208–Z40x110x27 BDS 4884-85	17320
	4	150+300	+	4	Lock ring A80 BDS 2170-77	10145
	5	150+300	+	2	Moves wheel	17175
	6	150+300	+	2	Lock ring B40 BDS 2170-77	10150
	7	150+300	+	1	Front carrier	17296
	8	150+300	+	2	Nut M20 – 8,8 BDS 1253-83	17322
	9	150+300	+	2	Chock bush	17096
	10	150+300	+	4	Composition of washers	
		150+300	+	3	Washer	17098
		150+300	+	1	Washer	17101
		130	+	1	Addition bush	17108
		140	+	1	Addition bush	17109
		150	+	1	Addition bush	17110
		160	+	1	Addition bush	17111
		180	+	1	Addition bush	17112
		200	+	1	Addition bush	17113
		220	+	1	Addition bush	17114
		240	+	1	Addition bush	17115
		260	+	1	Addition bush	17116
		280	+	1	Addition bush	17117
		300	+	1	Addition bush	17118
		150+300*	+	1	Addition bush	17186
		150+300*	+	1	Addition bush	17187
		150+300*	+	1	Addition bush	17188
		150+300*	+	1	Addition bush	17189
	11	130	+	2	Stud	17073
	11	140	+	2	Stud	17074
	11	150	+	2	Stud	17075
	11	160	+	2	Stud	17076
	11	180	+	2	Stud	17077
	11	200	+	2	Stud	17078
	11	220	+	2	Stud	17079
	11	240	+	2	Stud	17080
	11	260	+	2	Stud	17081
	11	280	+	2	Stud	17082
	11	300	+	2	Stud	17083
	11	150+300*	+	2	Stud	17073

Note : The symbol „ 150 – 300 „ means that the traveling block is produced with stud for specific width of reil profil from 150 to 300 mm or the traveling block is produced with stud providing width control of reil profil from 150 to 300 mm

9.2.2 Traveling block of hoist reeving 4/1 – capacity 6,3 t

Table 9.2.2

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catalog number
14	1+11	130	+	1	Traveling block	17266
	1+11	140	+	1	Traveling block	17267
	1+11	150	+	1	Traveling block	17268
	1+11	160	+	1	Traveling block	17269
	1+11	180	+	1	Traveling block	17270
	1+11	200	+	1	Traveling block	17271
	1+11	220	+	1	Traveling block	17272
	1+11	240	+	1	Traveling block	17273
	1+11	260	+	1	Traveling block	17274
	1+11	280	+	1	Traveling block	17275
	1+11	300	+	1	Traveling block	17276

Table 9.2.2 – continued

Fig	Pos	B _r	V _t (m/min)	Pcs	Name	Catlog number
14	1÷11	150+300*	+	1	Traveling block	17288
	1	150+300	+	1	Hind carrier	17292
	2	150+300	+	1	Axis	17177
	3	150+300	+	4	Ball bearing 6308– Z40x110x27 BDS 4884-85	17318
	4	150+300	+	4	Lock ring A90 BDS 2170-77	10146
	5	150+300	+	2	Moves wheel	17174
	6	150+300	+	2	Lock ring B40 BDS 2170-77	10150
	7	150+300	+	1	Front carrier	17298
	8	150+300	+	2	Nut M24 – 8,8 BDS 1253-83	17321
	9	150+300	+	2	Chock bush	17095
	10	150+300	+	4	Composition of washers:	
		150+300	+	3	Washer	17098
		150+300	+	1	Washer	17101
		130	+	1	Addition bush	17108
		140	+	1	Addition bush	17109
		150	+	1	Addition bush	17110
		160	+	1	Addition bush	17111
		180	+	1	Addition bush	17112
		200	+	1	Addition bush	17113
		220	+	1	Addition bush	17114
		240	+	1	Addition bush	17115
		260	+	1	Addition bush	17116
		280	+	1	Addition bush	17117
		300	+	1	Addition bush	17118
		150+300*	+	1	Addition bush	17186
		150+300*	+	1	Addition bush	17187
		150+300*	+	1	Addition bush	17188
		150+300*	+	1	Addition bush	17189
	11	130	+	2	Stud	17073
	11	140	+	2	Stud	17074
	11	150	+	2	Stud	17075
	11	160	+	2	Stud	17076
	11	180	+	2	Stud	17077
	11	200	+	2	Stud	17078
	11	220	+	2	Stud	17079
	11	240	+	2	Stud	17080
	11	260	+	2	Stud	17081
	11	280	+	2	Stud	17082
	11	300	+	2	Stud	17083
	11	150+300*	+	2	Stud	17073

Note: The symbol „ 150 – 300 „ means that the traveling block is produced with stud for specific width of rail profil from 150 to 300 mm or the traveling block is produced with stud providing width control of rail profil from 150 to 300 mm

9.3 Hinged block

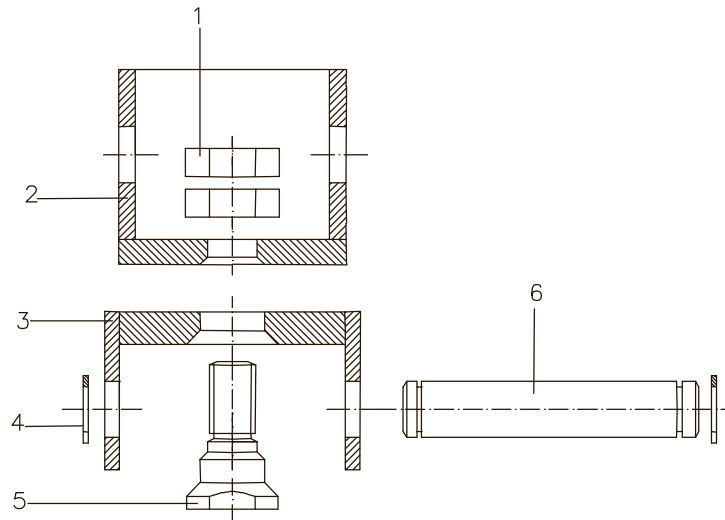


Fig. 15

Table 9.3

Fig	Pos	Pcs	Name	Catalod number	
				Reeving 2/1	Reeving 4/1
15	1 - 6	2	Hinget block	22001	22002
	1	2	Nut I 24 BDS 1251-83	22025	-
	1	2	Nut I 30 BDS 1251-83	-	22026
	2	1	Top carrier	22017	22018
	3	1	Bottom carrier	22007	22008
	4	4	Lock ring B25 BDS 2170-77	13037	-
	4	4	Lock ring B32 BDS 2170-77	-	22024
	5	1	Bolt	22005	22006
	6	2	Axis	22003	2200

10. TRAVELING MECHANISM – LOW HEADROOM DOUBLE SIDE DRIVEN

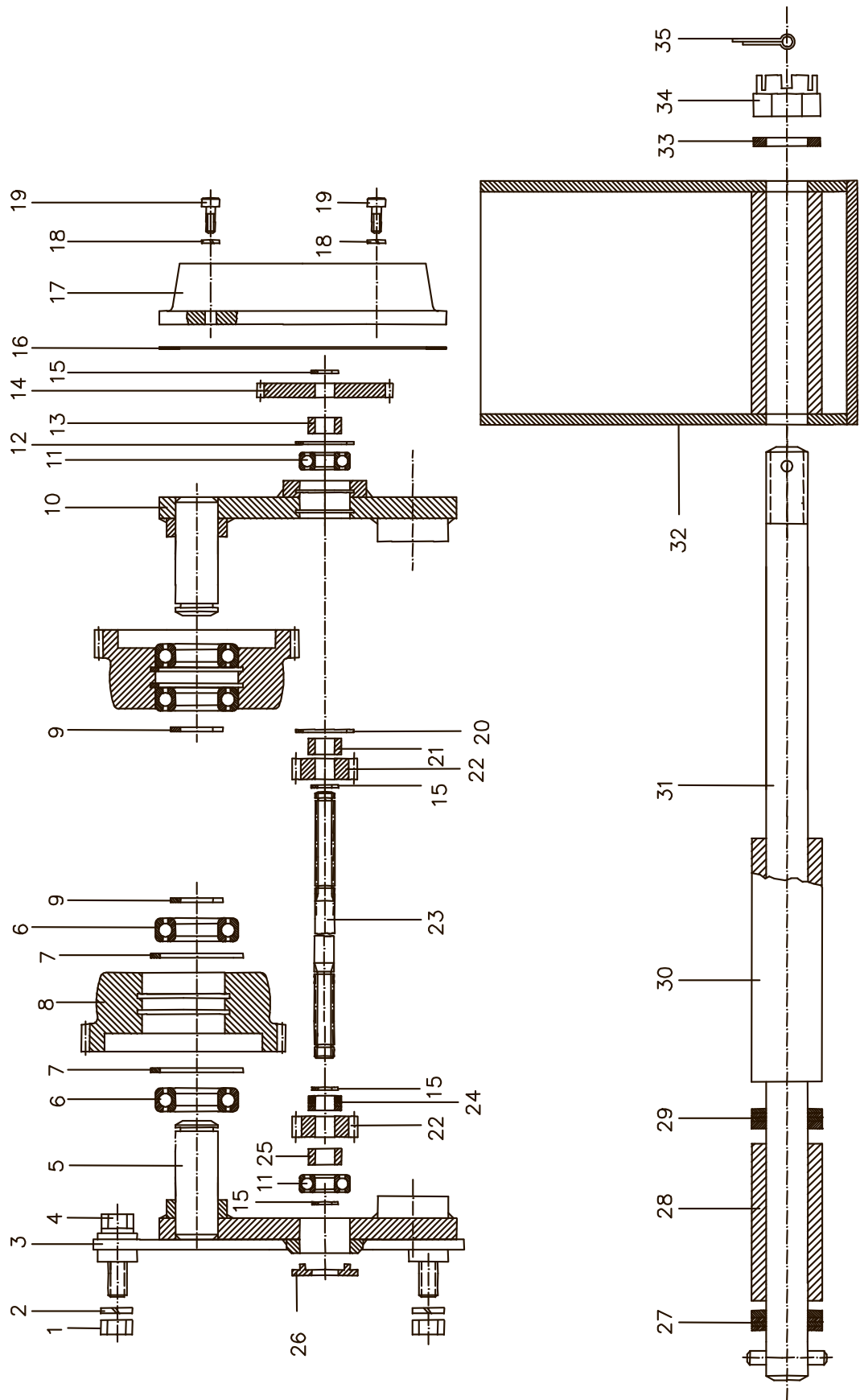


Fig. 16

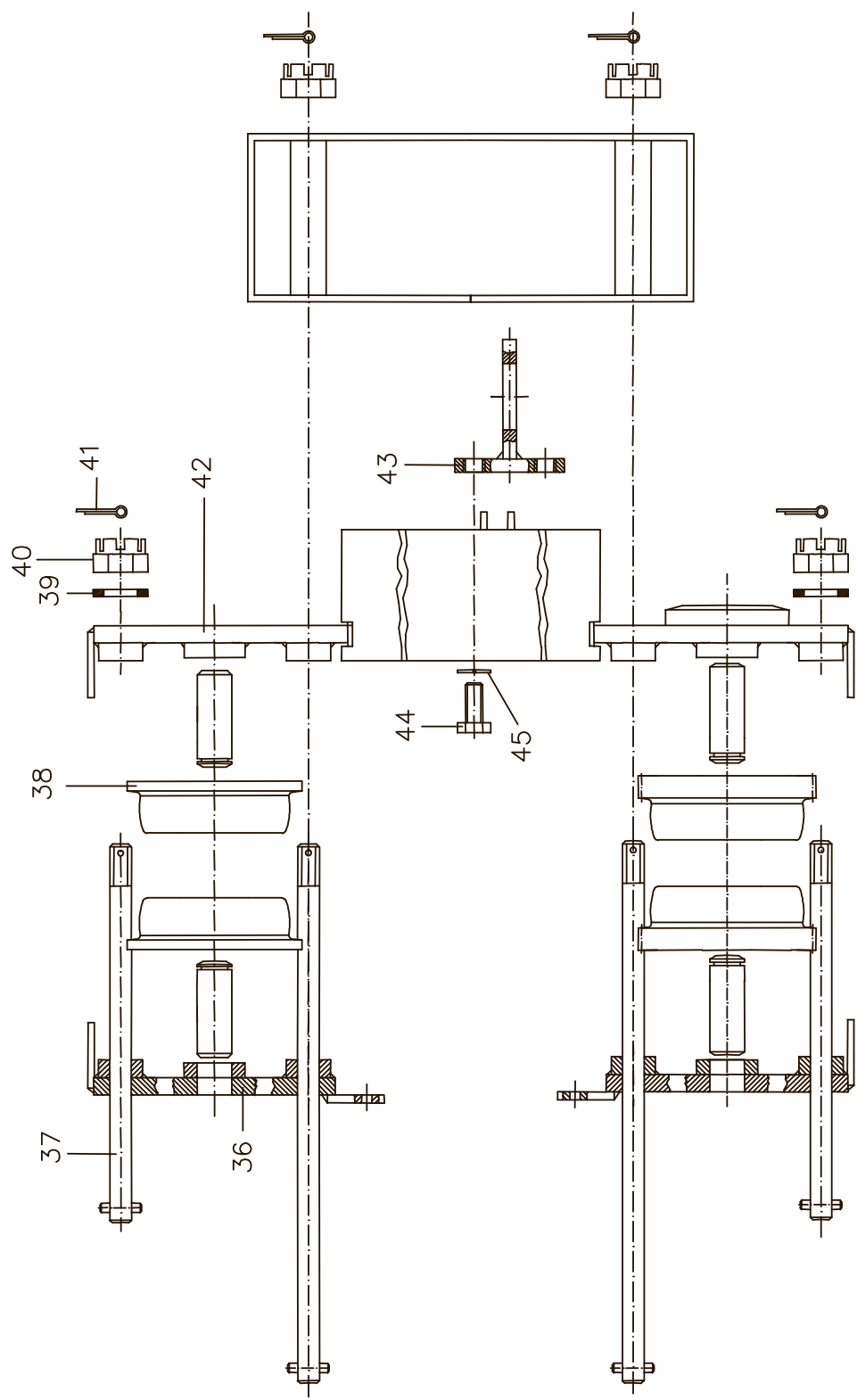


Fig. 17

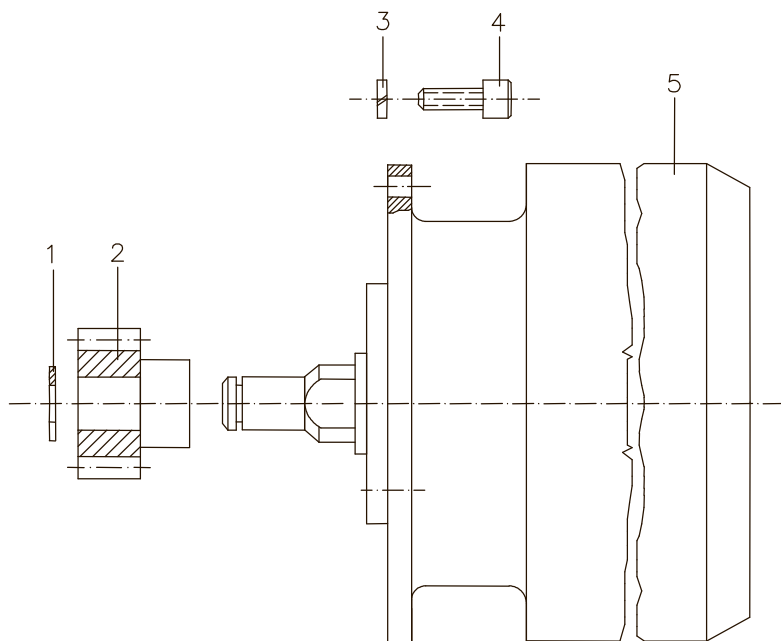


Fig. 18

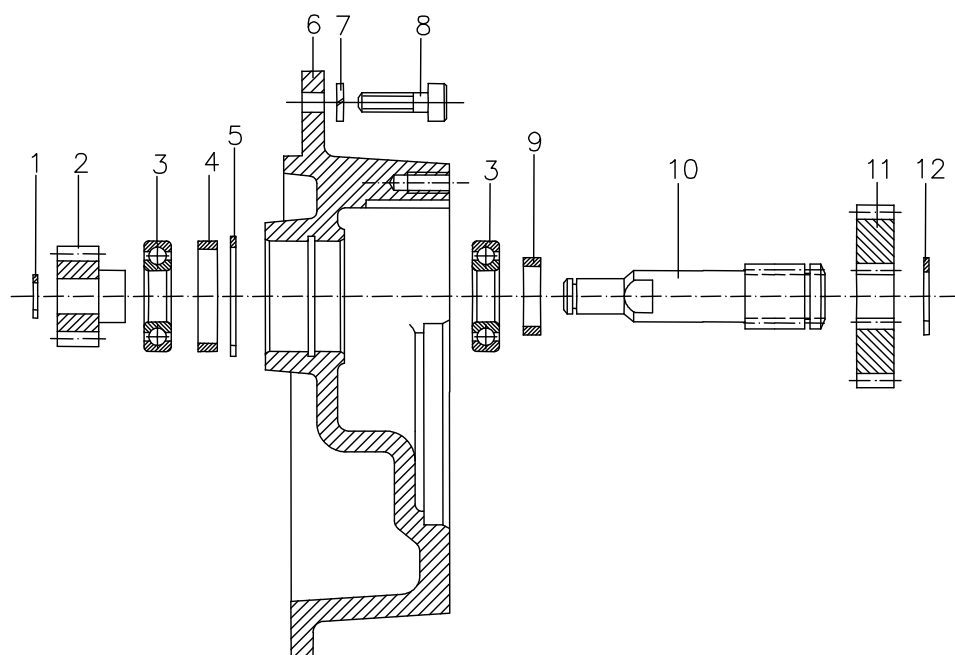


Fig.19

10.1 Reeving 2/1

Table 10.1

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pcs	Name	Catalog number
15	1-32	130	12	6,3	1	Traveling mechanism	21003
	1-32	130	15	6,3	1	Traveling mechanism	21004
	1-32	130	20	6,3	1	Traveling mechanism	21005
	1-32	130	26	6,3	1	Traveling mechanism	21006
	1-32	130	32	6,3	1	Traveling mechanism	21007
	1-32	130	38	6,3	1	Traveling mechanism	21008
	1-32	130	12/4	6,3	1	Traveling mechanism	21009
	1-32	130	17/5	6,3	1	Traveling mechanism	21010
	1-32	130	23/7	6,3	1	Traveling mechanism	21011
	1-32	130	33/10	6,3	1	Traveling mechanism	21012
	1-32	130	12	9	1	Traveling mechanism	21027
	1-32	130	15	9	1	Traveling mechanism	21028
	1-32	130	20	9	1	Traveling mechanism	21029
	1-32	130	26	9	1	Traveling mechanism	21030
	1-32	130	32	9	1	Traveling mechanism	21031
	1-32	130	38	9	1	Traveling mechanism	21032
	1-32	130	12/4	9	1	Traveling mechanism	21033
	1-32	130	17/5	9	1	Traveling mechanism	21034
	1-32	130	23/7	9	1	Traveling mechanism	21035
	1-32	130	33/10	9	1	Traveling mechanism	21036
	1-32	130	12	12,5	1	Traveling mechanism	21051
	1-32	130	15	12,5	1	Traveling mechanism	21052
	1-32	130	20	12,5	1	Traveling mechanism	21053
	1-32	130	26	12,5	1	Traveling mechanism	21054
	1-32	130	32	12,5	1	Traveling mechanism	21055
	1-32	130	38	12,5	1	Traveling mechanism	21056
	1-32	130	12/4	12,5	1	Traveling mechanism	21057
	1-32	130	17/5	12,5	1	Traveling mechanism	21058
	1-32	130	23/7	12,5	1	Traveling mechanism	21059
	1-32	130	33/10	12,5	1	Traveling mechanism	21060
	1-32	130	12	18	1	Traveling mechanism	21099
	1-32	130	15	18	1	Traveling mechanism	21100
	1-32	130	20	18	1	Traveling mechanism	21101
	1-32	130	26	18	1	Traveling mechanism	21102
	1-32	130	32	18	1	Traveling mechanism	21103
	1-32	130	38	18	1	Traveling mechanism	21104
	1-32	130	12/4	18	1	Traveling mechanism	21105
	1-32	130	17/5	18	1	Traveling mechanism	21106
	1-32	130	23/7	18	1	Traveling mechanism	21107
	1-32	130	33/10	18	1	Traveling mechanism	21108
	1-32	130	12	25	1	Traveling mechanism	21147
	1-32	130	15	25	1	Traveling mechanism	21148
	1-32	130	20	25	1	Traveling mechanism	21149
	1-32	130	26	25	1	Traveling mechanism	21150
	1-32	130	32	25	1	Traveling mechanism	21151
	1-32	130	38	25	1	Traveling mechanism	21152
	1-32	130	12/4	25	1	Traveling mechanism	21153
	1-32	130	17/5	25	1	Traveling mechanism	21154
	1-32	130	23/7	25	1	Traveling mechanism	21155
	1-32	130	33/10	25	1	Traveling mechanism	21156
17	5	+	12	+	1	Electric motor	17302
		+	15	+	1	Electric motor	17302
	5	+	20	+	1	Electric motor	17302
	5	+	26	+	1	Electric motor	17303
	5	+	32	+	1	Electric motor	17309
	5	+	38	+	1	Electric motor	17304
	5	+	12/4	+	1	Electric motor	17304
	5	+	17/5	+	1	Electric motor	17310
	5	+	23/7	+	1	Electric motor	17306
	5	+	33/10	+	1	Electric motor	17306
	2	+	12	+	1	Pinion	17241
	2	+	15	+	1	Pinion	17237
	2	+	20	+	1	Pinion	17238
	2	+	26	+	1	Pinion	17239
	2	+	32	+	1	Pinion	17238
	2	+	38	+	1	Pinion	17239
	2	+	12/4	+	1	Pinion	17239
	2	+	17/5	+	1	Pinion	17241

Table 10.1 – continued

Fig	Pos	B _r	V _t (m/min)	H _p (m)	Pce	Name	Catalog number	Note
17	2	+	23/7	+	1	Pinion	17237	
	2	+	33/10	+	1	Pinion	17238	
	1	+	+	+	1	Lock ring B12	BDS 2170-77	17313
	3	+	+	+	3	Spring washer 2 8H	BDS 833-82	10139
	4	+	+	+	3	Screw 1 M8x18 – 8,8	BDS 2171-83	17324
18	1÷12	+	12	+	1	Adapter		17235
	1÷12	+	12/4	+	1	Adapter		17233
	1÷12	+	17/5	+	1	Adapter		17234
	1	+	+	+	1	Lock ring B12	BDS 2170-77	17313
	2	+	12	+	1	Pinion		17239
	2	+	12/4	+	1	Pinion		17237
	2	+	17/5	+	1	Pinion		17238
	3	+	+	+	2	Ball bearing 6203 – 17x40x12	BDS 4843-84	17317
	4	+	+	+	1	Distance bush		17157
	5	+	+	+	1	Lock ring A40	BDS 2170-77	17315
	6	+	+	+	1	Case		17242
	7	+	+	+	3	Spring washer 2 8H	BDS 833-82	10139
	8	+	+	+	3	Screw 1 M8x18 – 8,8	BDS 2171-83	17324
	9	+	+	+	1	Distance bush		17158
	10	+	+	+	1	Shaft		17236
15	11	+	+	+	1	Gear wheel		17166
	12	+	+	+	1	Lock ring B20	BDS 2170-77	17314
	1	130	+	+	4	Nut M20 – 8	BDS 1234-85	21343
	2	130	+	+	4	Spring washer 2 20H	BDS 833-82	21341
	4	130	+	+	4	Bolt M20x40 – 8,8	BDS 1234-85	21340
	3	130	+	+	1	Hind plate basic		21246
	5	130	+	+	4	Axis		17178
	6	130	+	+	8	Ball bearing 6208-Z	BDS 4884-85	17319
	7	130	+	+	8	Lock ring A80	BDS 2170-77	10145
	8	130	+	+	2	Moves wheel		17172
	9	130	+	+	4	Lock ring B40	BDS 2170-77	10150
	10	130	+	6,3	1	Traverse with carriers		21248
	10	130	+	9	1	Traverse with carriers		21249
	10	130	+	12,5	1	Traverse with carriers		21250
	10	130	+	18	1	Traverse with carriers		21251
	10	130	+	25	1	Traverse with carriers		21252
	11	130	+	+	2	Ball bearing 6204-2Z	BDS 4884-85	17319
	12	+	+	+	1	Lock ring A47	BDS 2170-77	17316
	13	130-300	+	+	1	Distance bush		17155
	14	130	12	+	1	Gear wheel		17164
			15	+	+	Gear wheel		17162
			20	+	+	Gear wheel		17163
			26	+	+	Gear wheel		17164
			32	+	+	Gear wheel		17163
			38	+	+	Gear wheel		17164
			12/4	+	+	Gear wheel		17162
			17/5	+	+	Gear wheel		17163
			23/7	+	+	Gear wheel		17162
			33/10	+	+	Gear wheel		17163
	15	+	+	+	4	Lock ring B20	BDS 2170-77	17314
	16	+	+	+	1	Seal		17183
	17	+	+	+	1	Case		17182
	18	+	+	+	10	Spring washer 2 8H	BDS 833-82	10139
	19	+	+	+	10	Screw M8x18 – 8,8	BDS 2171-83	17324
	20	+	+	+	1	Lock ring A47	BDS 2170-77	17316
	21	130	+	+	1	Distance bush		17155
	22	+	+	+	2	Gear wheel		17160
	23	130	+	+	1	Drive shaft		17141
		140	+	+	1	Drive shaft		17142
		150	+	+	1	Drive shaft		17143
		160	+	+	1	Drive shaft		17144
		180	+	+	1	Drive shaft		17145
		200	+	+	1	Drive shaft		17146
		220	+	+	1	Drive shaft		17147
		240	+	+	1	Drive shaft		17148
		260	+	+	1	Drive shaft		17149
		280	+	+	1	Drive shaft		17150

Table - 10.1 – continued

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pce	Name	Catalog number
15		300	+	+	1	Drive shaft	17151
	24		+	+		Composition of washers	
		130-300	+	+	5	Washer	17170
					1	Washer	17184
	25	130-300	+	+	1	Distance bush	17155
	26	130-300	+	+	1	Cap	17104
	27,29	130-300	+	+	32	Composition of washers	
					6	Washer –on one stud	17099
					2	Washer –on one stud	17002
	28	130	+	+	4	Addition bush	21196
		140		+	4	Addition bush	21197
		150	+	+	4	Addition bush	21198
		160	+	+	4	Addition bush	21199
		180	+	+	4	Addition bush	21200
		200	+	+	4	Addition bush	21201
		220	+	+	4	Addition bush	21202
		240	+	+	4	Addition bush	21203
		260	+	+	4	Addition bush	21204
		280	+	+	4	Addition bush	21205
		300	+	+	4	Addition bush	21206
	30	130-300	+	+	2	bush	21218
	31	130	+	+	2	Stud	21222
		140	+	+	2	Stud	21223
		150	+	+	2	Stud	21224
		160	+	+	2	Stud	21225
		180	+	+	2	Stud	21226
		200	+	+	2	Stud	21227
		220	+	+	2	Stud	21228
		240	+	+	2	Stud	21229
		260	+	+	2	Stud	21230
		280	+	+	2	Stud	21231
		300	+	+	2	Stud	21232
	32	+	+	6,3	1	Box for countreweight	21292
		+	+	9	1	Box for countreweight	21293
		+	+	12,5	1	Box for countreweight	21294
	32	+	+	18	1	Box for countreweight	21395
		+	+	25	1	Box for countreweight	21396
	34	+	+	+	2	Nut M20-8 BDS 1253-83	17322
	35	+	+	+	2	Split 5x50 BDS 55-77	17323
	36	+	+	+	1	Hind plate	21246
16	37	130	+	+	2	Stud	17084
		140	+	+	2	Stud	17085
		150	+	+		Stud	17086
		160	+	+		Stud	17087
		180	+	+		Stud	17088
		200	+	+		Stud	17089
		220	+	+		Stud	17090
		240	+	+		Stud	17091
		260	+	+		Stud	17092
		280	+	+		Stud	17093
		300	+	+		Stud	17094
	38	+	+	+	2	Moves wheel	17175
	39	+	+	+	2	Chock bush	17096
	40	+	+	+	2	Nut M20-8 BDS 1253-83	17322
	41	+	+	+	2	Split 5x50 BDS 55-77	17323

10.2 Reeving 4/1

Table 10.2

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pce	Name	Catalog number
15	1-32	130	12	6,3	1	Traveling mechanism	21075
	1-32	130	16	6,3	1	Traveling mechanism	21076
	1-32	130	20	6,3	1	Traveling mechanism	21077
	1-32	130	25	6,3	1	Traveling mechanism	21078
	1-32	130	29	6,3	1	Traveling mechanism	21079
	1-32	130	42	6,3	1	Traveling mechanism	21080
	1-32	130	12/3,5	6,3	1	Traveling mechanism	21081
	1-32	130	15/5	6,3	1	Traveling mechanism	21082
	1-32	130	21/7	6,3	1	Traveling mechanism	21083
	1-32	130	25/8	6,3	1	Traveling mechanism	21084
	1-32	130	12	9	1	Traveling mechanism	21123
	1-32	130	16	9	1	Traveling mechanism	21124
	1-32	130	20	9	1	Traveling mechanism	21125
	1-32	130	25	9	1	Traveling mechanism	21126
	1-32	130	29	9	1	Traveling mechanism	21127
	1-32	130	42	9	1	Traveling mechanism	21128
	1-32	130	12/3,5	9	1	Traveling mechanism	21129
	1-32	130	15/5	9	1	Traveling mechanism	21130
	1-32	130	21/7	9	1	Traveling mechanism	21131
	1-32	130	25/8	9	1	Traveling mechanism	21132
	1-32	130	12	12,5	1	Traveling mechanism	21171
	1-32	130	16	12,5	1	Traveling mechanism	21172
	1-32	130	20	12,5	1	Traveling mechanism	21173
	1-32	130	25	12,5	1	Traveling mechanism	21174
	1-32	130	29	12,5	1	Traveling mechanism	21175
	1-32	130	42	12,5	1	Traveling mechanism	21176
	1-32	130	12/3,5	12,5	1	Traveling mechanism	21177
	1-32	130	15/5	12,5	1	Traveling mechanism	21178
	1-32	130	21/7	12,5	1	Traveling mechanism	21179
	1-32	130	25/8	12,5	1	Traveling mechanism	21180
17	5	+	12	+	1	Electric motor	17302
		+	16 и 20	+	1	Electric motor	17303
	5	+	25 и 29	+	1	Electric motor	17304
	5	+	42	+	1	Electric motor	17305
	5	+	12/3,5	+	1	Electric motor	17306
	5	+	15/5	+	1	Electric motor	17306
	5	+	21/7	+	1	Electric motor	17307
	5	+	25/8	+	1	Electric motor	17307
	2	+	12	+	1	Pinion	17240
	2	+	16 и 25	+	1	Pinion	17241
	2	+	20 и 29	+	1	Pinion	17237
	2	+	42	+	1	Pinion	17238
	2	+	12/3,5	+	1	Pinion	17240
	2	+	15/5	+	1	Pinion	17240
	2	+	21/7	+	1	Pinion	17241
	2	+	25/8	+	1	Pinion	17241
	1	+	+	+	1	Lock ring B12 BDS 2170-77	17313
	3	+	+	+	3	Spring washer 2 8H BDS 833-82	10139
	4	+	+	+	3	Screw I M8x18 – 8,8 BDS 2171-83	17324
18	1+12	+	12	+	1	Adapter	17232
	1+12	+	16; 25	+	1	Adapter	17235
	1+12	+	12/3,5	+	1	Adapter	17230
	1+12	+	15/5	+	1	Adapter	17231
	1+12	+	21/7	+	1	Adapter	17234
	1	+	+	+	1	Lock ring B12 BDS 2170-77	17313
	2	+	12	+	1	Pinion	17239
	2	+	16; 25	+	1	Pinion	17239
	2	+	12/3,5	+	1	Pinion	17237
	2	+	15/5	+	1	Pinion	17238
	2	+	21/7	+	1	Pinion	17238
	3	+	+	+	2	Ball bearing 6203 – 17x40x12 BDS 4843-84	17317
	4	+	+	+	1	Distance bush	17157
	5	+	+	+	1	Lock ring A40 BDS 2170-77	17315
	6	+	+	+	1	Case	17242
	7	+	+	+	3	Spring washer 2 8H BDS 833-82	10139
	8	+	+	+	3	Screw I M8x18 – 8,8 BDS 2171-83	17324

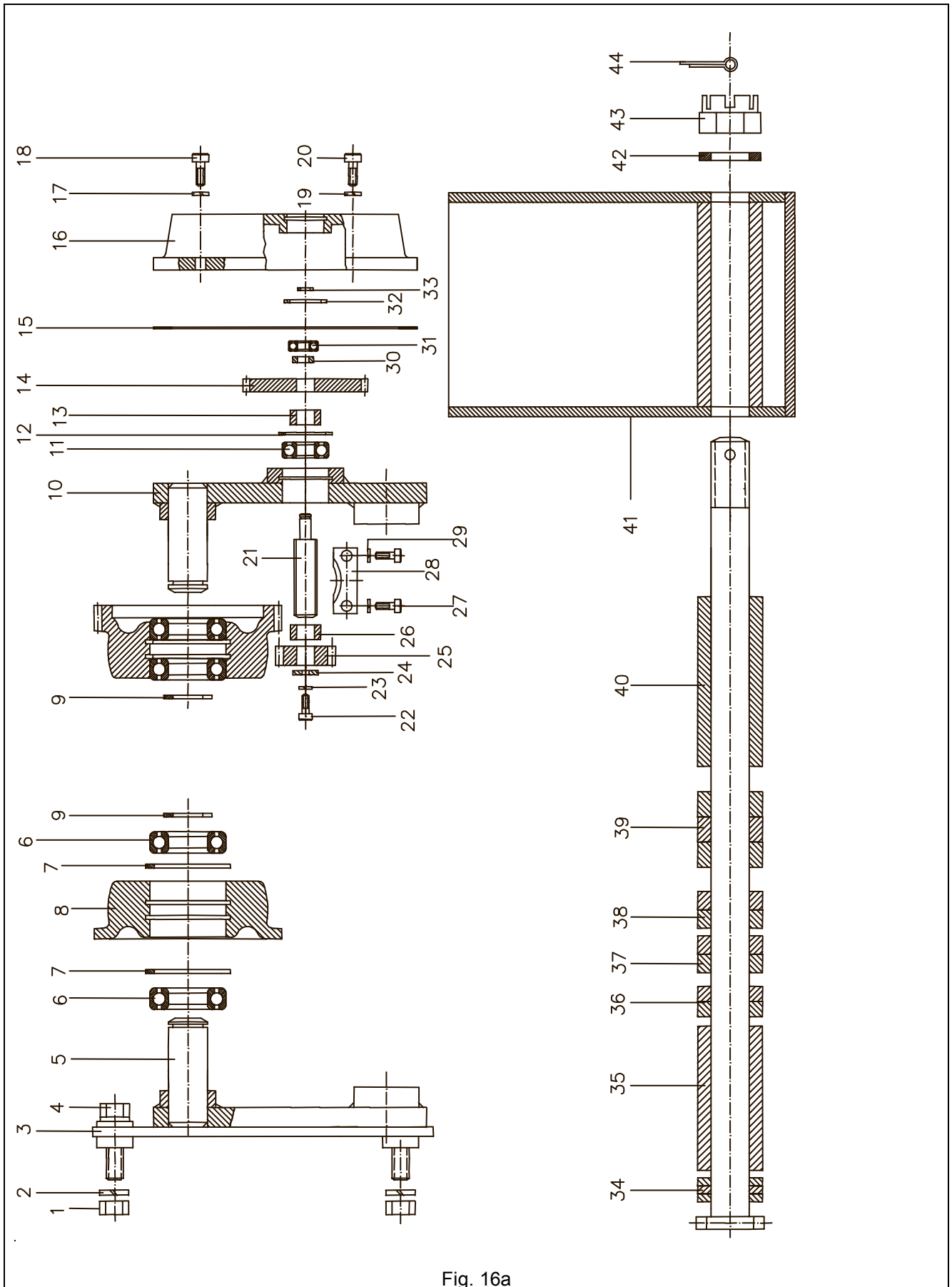
Table 10.2 – continued

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pce	Name	Catalog number	Note
18	9	+	+	+	1	Distance bush	17158	
	10	+	+	+	1	Shaft	17236	
	11	+	12	+	1	Gear wheel	17165	
	11	+	12/3,5	+	1	Gear wheel	17165	
	11	+	15/5	+	1	Gear wheel	17165	
	11	+	21/7	+	1	Gear wheel	17166	
	11	+	25/8	+	1	Gear wheel	17166	
	11	+	16; 25	+	1	Gear wheel	17166	
15	12	+	+	+	1	Lock ring B20	BDS 2170-77 17314	
	1	+	+	+	4	Nut M20 – 8	BDS 1234-85 21343	
	2	+	+	+	4	Spring washer 2 20H	BDS 833-82 21341	
	4	+	+	+	4	Bolt M20x70 – 8,8	BDS 1234-85 21340	
	3	+	+	+	1	Hind plate basic	21245	
	5	+	+	+	4	Axis	17177	
	6	+	+	+	8	Ball bearing 6308-Z	BDS 4884-85 17318	
	7	+	+	+	8	Lock ring A90	BDS 2170-77 10145	
	8	+	+	+	2	Moves wheel	17171	
	9	+	+	+	4	Lock ring B40	BDS 2170-77 10150	
	10	130	+	6,3	1	Traverse with carrier	21258	Поз.42,рис.16
	10	130	+	9	1	Traverse with carrier	21259	Поз.42,рис.16
	10	130	+	12,5	1	Traverse with carrier	21260	Поз.42,рис.16
	11	+	+	+	2	Ball bearing 6204 – 2Z	17319	
	12	+	+	+	1	Lock ring A47	BDS 2170-77 17316	
	13	+	+	+	1	Distance bush	17154	
	14	+	12	+	1	Gear wheel	17164	
		+	16	+	+	Gear wheel	17164	
		+	20	+	+	Gear wheel	17162	
		+	25	+	+	Gear wheel	17164	
		+	29	+	+	Gear wheel	17162	
		+	42	+	+	Gear wheel	17163	
		+	12/3,5	+	+	Gear wheel	17162	
		+	15/5	+	+	Gear wheel	17163	
		+	21/7	+	+	Gear wheel	17163	
		+	25/8	+	+	Gear wheel	17164	
	15	+	+	+	4	Lock ring B20	BDS 2170-77 17314	
	16	+	+	+	1	Seal	17183	
	17	+	+	+	1	Case	17182	
	18	+	+	+	10	Spring washer 2 8H	BDS 833-82 10139	
	19	+	+	+	10	Screw M8x18 – 8,8	BDS 2171-83 17324	
	20	+	+	+	1	Lock ring A47	BDS 2170-77 17316	
	21	+	+	+	1	Distance bush	17154	
	22	+	+	+	2	Gear wheel	17159	
	23	130	+	+	1	Drive shaft	17130	
		140	+	+	1	Drive shaft	17131	
		150	+	+	1	Drive shaft	17132	
		160	+	+	1	Drive shaft	17133	
		180	+	+	1	Drive shaft	17134	
		200	+	+	1	Drive shaft	17135	
		220	+	+	1	Drive shaft	17136	
		240	+	+	1	Drive shaft	17137	
		260	+	+	1	Drive shaft	17138	
		280	+	+	1	Drive shaft	17139	
		300	+	+	1	Drive shaft	17140	
	24		+	+		Composition of washers		
		130-300	+	+	5	Washer	17170	
					1	Washer	17184	
	25	130-300	+	+	1	Distance bush	17154	
	26	130-300	+	+	1	Cap	17104	
	27,29	130-300	+	+	32	Composition of washers:		
					6	Washer – on one stud	17098	
					2	Washer – on one stud	17101	
	28	130	+	+	4	Addition bush	21207	
		140		+	4	Addition bush	21208	
		150	+	+	4	Addition bush	21209	
		160	+	+	4	Addition bush	21210	
		180	+	+	4	Addition bush	21211	
		300	+	+	4	Addition bush	21217	
	30	130-300	+	+	2	Bush	21219	

Table 10.2 – continued

Fig	Pos	B _r	V _t (m/min)	H _p (m)	Pce	Name	Catalog number
15		200	+	+	4	Addition bush	21212
		220	+	+	4	Addition bush	21213
		240	+	+	4	Addition bush	21214
		260	+	+	4	Addition bush	21215
		280	+	+	4	Addition bush	21216
	31	130	+	+	2	Stud	21233
	31	140	+	+	2	Stud	21234
		150	+	+	2	Stud	21235
		160	+	+	2	Stud	21236
		180	+	+	2	Stud	21237
		200	+	+	2	Stud	21238
		220	+	+	2	Stud	21239
		240	+	+	2	Stud	21240
		260	+	+	2	Stud	21241
		280	+	+	2	Stud	21242
		300	+	+	2	Stud	21243
	32	+	+	6,3	1	Box for countreweight	21302
		+	+	9	1	Box for countreweight	21303
		+	+	12,5	1	Box for countreweight	21304
	34	+	+	+	2	Nut M24-8 BDS 1253-83	17321
	35	+	+	+	2	Split 5x50 BDS 55-77	17323
	36	+	+	+	1	Hind plate	21247
	37	130	+	+	2	Stud	17073
		140	+	+	2	Stud	17074
		150	+	+		Stud	17075
		160	+	+		Stud	17076
		180	+	+		Stud	17077
		200	+	+		Stud	17078
		220	+	+		Stud	17079
		240	+	+		Stud	17080
		260	+	+		Stud	17081
		280	+	+		Stud	17082
		300	+	+		Stud	17083
	38	+	+	+	2	Moves wheel	17174
	39	+	+	+	2	Chock bush	17095
	40	+	+	+	2	Nut M24-8 BDS 1253-83	17322
	41	+	+	+	2	Split 5x50 BDS 55-77	17323
	43	+	+	+	1	Carrier	21289
	44	+	+	+	4	Bolt 1 M10x16 – 6,8 BDS 1234-85	21339
	45	+	+	+	4	Spring washer 2 10H BDS 833-82	10140

11. TRAVELING MECHANISM – LOW HEADROOM ONE-SIDE DRIVEN



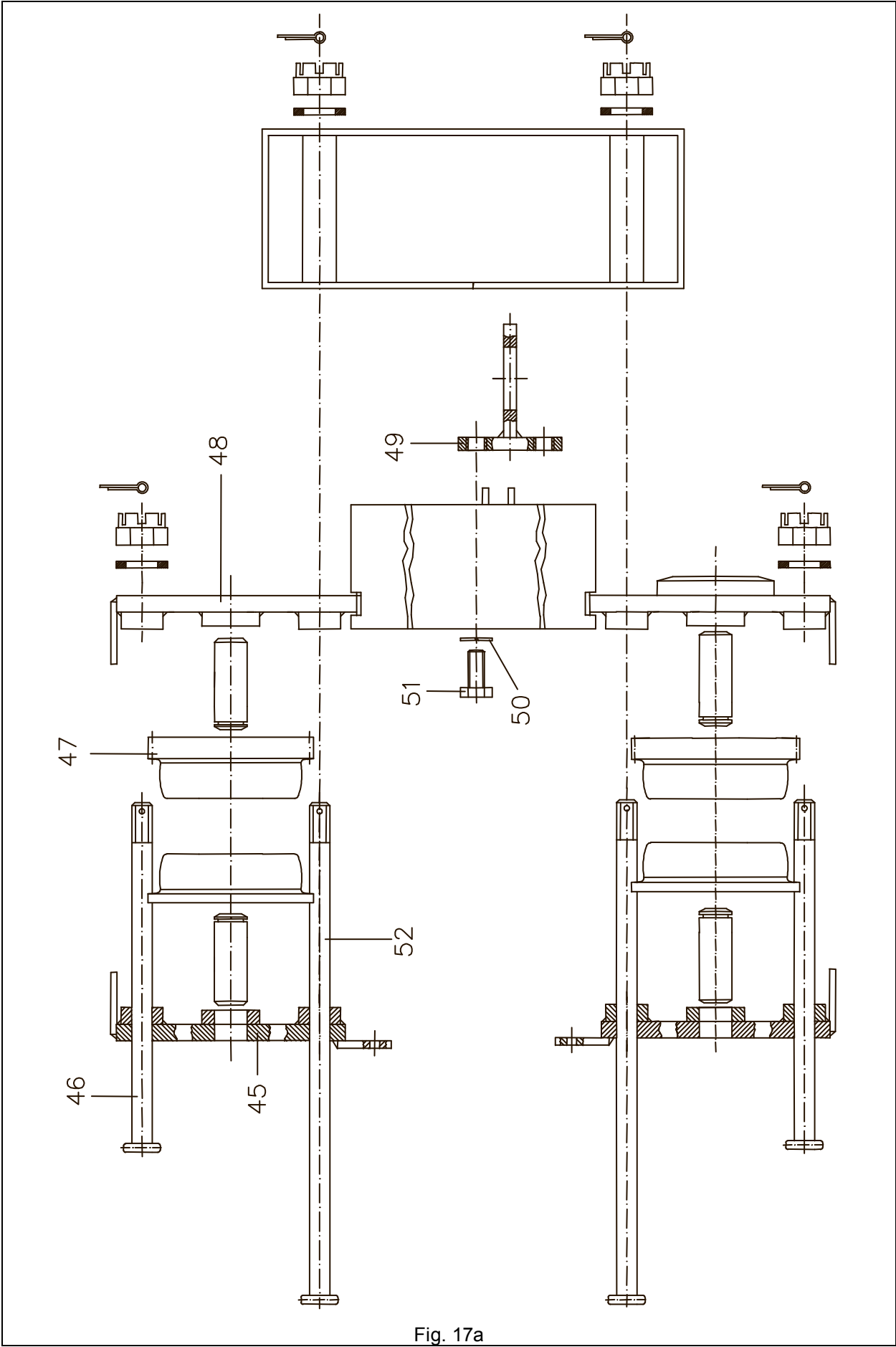
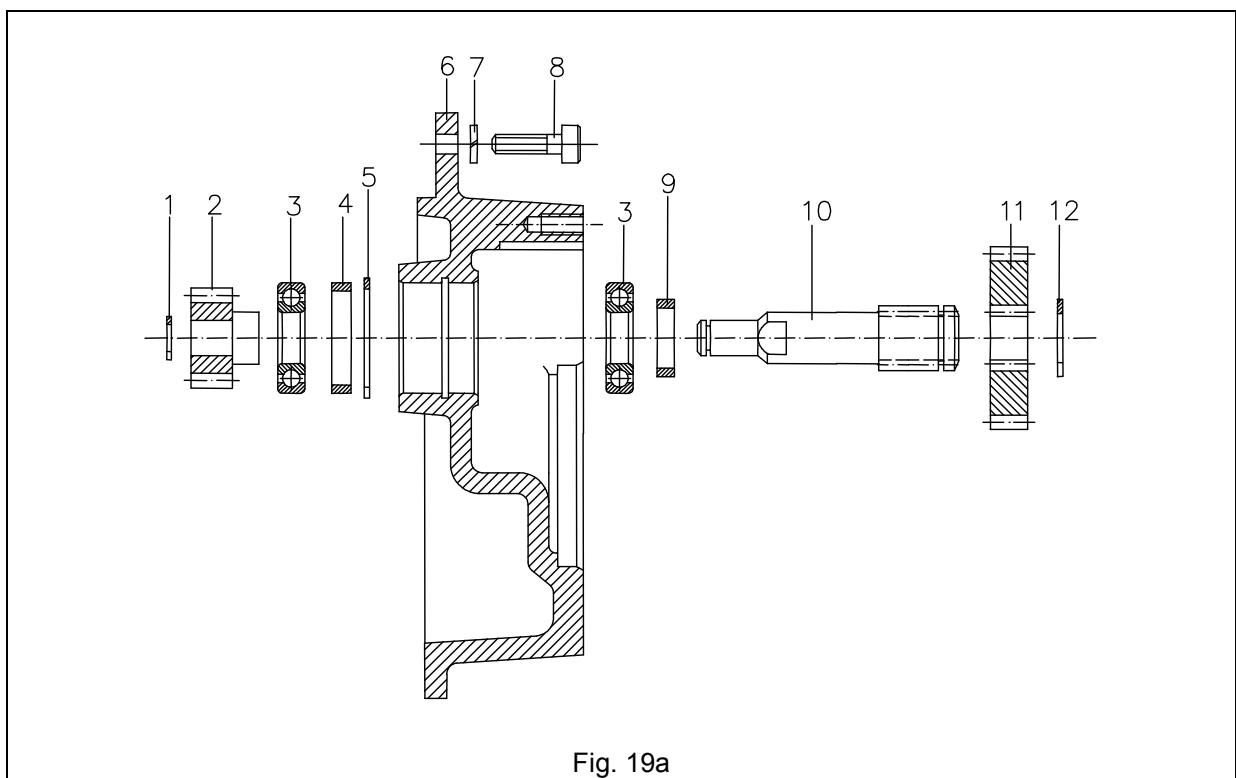
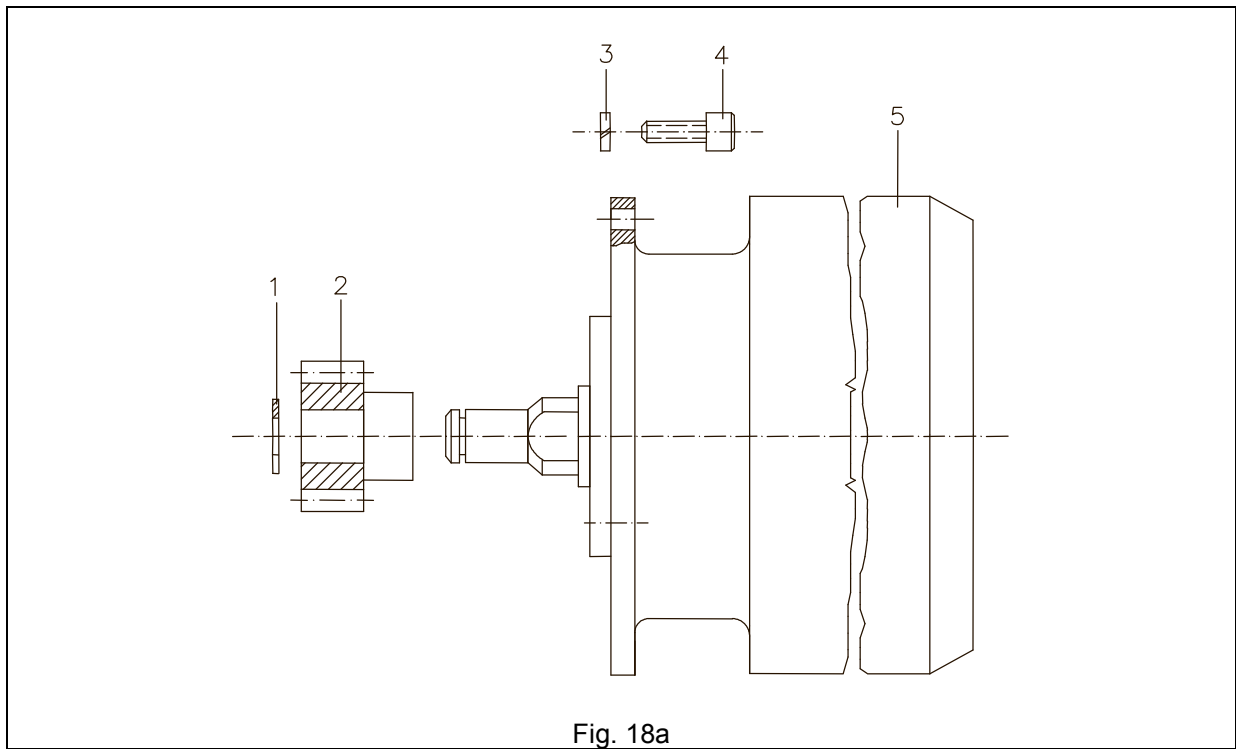


Fig. 17a



11.1 reeving 2/1

Table 11.1

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pcs	Name	Catalog number
16a; 17a; 18a; 19a	1-44 45-52 1-5 1-12	+	12	6,3	1	Traveling mechanism	21879
		+	15	6,3	1	Traveling mechanism	21880
		+	20	6,3	1	Traveling mechanism	21881
		+	26	6,3	1	Traveling mechanism	21882
		+	32	6,3	1	Traveling mechanism	21883
		+	38	6,3	1	Traveling mechanism	21884
		+	12/4	6,3	1	Traveling mechanism	21885
		+	17/5	6,3	1	Traveling mechanism	21886
		+	23/7	6,3	1	Traveling mechanism	21887
		+	33/10	6,3	1	Traveling mechanism	21888
		+	12	9	1	Traveling mechanism	21903
		+	15	9	1	Traveling mechanism	21904
		+	20	9	1	Traveling mechanism	21905
		+	26	9	1	Traveling mechanism	21906
		+	32	9	1	Traveling mechanism	21907
		+	38	9	1	Traveling mechanism	21908
		+	12/4	9	1	Traveling mechanism	21909
		+	17/5	9	1	Traveling mechanism	21910
		+	23/7	9	1	Traveling mechanism	21911
		+	33/10	9	1	Traveling mechanism	21912
		+	12	12,5	1	Traveling mechanism	21927
		+	15	12,5	1	Traveling mechanism	21928
		+	20	12,5	1	Traveling mechanism	21929
		+	26	12,5	1	Traveling mechanism	21930
		+	32	12,5	1	Traveling mechanism	21931
		+	38	12,5	1	Traveling mechanism	21932
		+	12/4	12,5	1	Traveling mechanism	21933
		+	17/5	12,5	1	Traveling mechanism	21934
		+	23/7	12,5	1	Traveling mechanism	21935
		+	33/10	12,5	1	Traveling mechanism	21936
		+	12	18	1	Traveling mechanism	21951
		+	15	18	1	Traveling mechanism	21952
		+	20	18	1	Traveling mechanism	21953
		+	26	18	1	Traveling mechanism	21954
		+	32	18	1	Traveling mechanism	21955
		+	38	18	1	Traveling mechanism	21956
		+	12/4	18	1	Traveling mechanism	21957
		+	17/5	18	1	Traveling mechanism	21958
		+	23/7	18	1	Traveling mechanism	21959
		+	33/10	18	1	Traveling mechanism	21960
		+	12	25	1	Traveling mechanism	21975
		+	15	25	1	Traveling mechanism	21976
		+	20	25	1	Traveling mechanism	21977
		+	26	25	1	Traveling mechanism	21978
		+	32	25	1	Traveling mechanism	21979
		+	38	25	1	Traveling mechanism	21980
		+	12/4	25	1	Traveling mechanism	21981
		+	17/5	25	1	Traveling mechanism	21982
		+	23/7	25	1	Traveling mechanism	21983
		+	33/10	25	1	Traveling mechanism	21984
18a	5	+	12	+	2	Electric motor	17302
		+	15	+	2	Electric motor	17302
		+	20	+	2	Electric motor	17302
		+	26	+	2	Electric motor	17302
		+	32	+	2	Electric motor	17309
		+	38	+	2	Electric motor	17309
		+	12/4	+	2	Electric motor	17304
		+	17/5	+	2	Electric motor	17310
		+	23/7	+	2	Electric motor	17306
		+	33/10	+	2	Electric motor	17306
		+	12	+	2	Pinion	17241
		+	15	+	2	Pinion	17237
		+	20	+	2	Pinion	17238
		+	26	+	2	Pinion	17239
		+	32	+	2	Pinion	17238
		+	38	+	2	Pinion	17239
		+	12/4	+	2	Pinion	17239
		+	17/5	+	2	Pinion	17241

Table 11.1 – continued

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pcs	Name	Catalog number
18a	2	+	23/7	+	2	Pinion	17237
	2	+	33/10	+	2	Pinion	17238
	1	+	+	+	1	Lock ring B12	17313
	3	+	+	+	3	Spring washer 2 8H	10139
	4	+	+	+	3	Screw 1 M8x18 – 8,8	17324
19a	1÷12	+	12	+	1	Adapter	17235
	1÷12	+	12/4	+	1	Adapter	17233
	1÷12	+	17/5	+	1	Adapter	17234
	1	+	+	+	1	Lock ring B12	17313
	2	+	12	+	1	Pinion	17239
	2	+	12/4	+	1	Pinion	17237
	2	+	17/5	+	1	Pinion	17238
	3	+	+	+	2	Ball bearing 6203 – 17x40x12	17317
	4	+	+	+	1	Distance bush	17157
	5	+	+	+	1	Lock ring A40	17315
	6	+	+	+	1	Case	17242
	7	+	+	+	3	Spring washer 2 8H	10139
	8	+	+	+	3	Screw 1 M8x18 – 8,8	17324
	9	+	+	+	1	Distance bush	17158
	10	+	+	+	1	Shaft	17236
16a	11	+	+	+	1	Gear wheel	17166
	12	+	+	+	1	Lock ring B20	17314
	1	+	+	+	4	Nut M20 – 8	21343
	2	+	+	+	4	Spring washer 2 20H	21341
	3	+	+	+	1	Hind plate basic	21820
	4	+	+	+	4	Bolt M20x40 – 8,8	21340
	5	+	+	+	4	Axis	17178
	6	+	+	+	8	Ball bearing 6208-Z	17320
	7	+	+	+	8	Lock ring A80	10145
	8	+	+	+	2	Moves wheel	17175
	9	+	+	+	4	Lock ring B40	10150
	10	+	+	6,3	1	Traverse with carrier	23248
	10	+	+	9	1	Traverse with carrier	23249
	10	+	+	12,5	1	Traverse with carrier	23250
	10	+	+	18	1	Traverse with carrier	23251
	10	+	+	25	1	Traverse with carrier	23252
	11	+	+	+	2	Ball bearing 6304-Z	23237
	12	+	+	+	1	Lock ring A52	23236
	13	+	+	+	1	Distance bush	17200
	14	+	12	+	2	Gear wheel	17164
		+	15	+	2	Gear wheel	17162
		+	20	+	2	Gear wheel	17163
		+	26	+	2	Gear wheel	17164
		+	32	+	2	Gear wheel	17163
		+	38	+	2	Gear wheel	17164
		+	12/4	+	2	Gear wheel	17162
		+	17/5	+	2	Gear wheel	17163
		+	23/7	+	2	Gear wheel	17162
		+	33/10	+	2	Gear wheel	17163
	15	+	+	+	2	Seal	17183
	16	+	+	+	2	Case	21847
	17,19	+	+	+	10	Spring washer 2 8H	10139
	18,20	+	+	+	10	Screw M8x20 – 8,8	17324
	21	+	+	+	2	Drive shaft	23232
	23	+	+	+	2	Spring washer 2 6H	10139
	22	+	+	+	2	Screw M6x12 – 6,8	17324
	24	+	+	+	2	Washer	23238
	25	+	12	+	2	Gear wheel	23229
	26	+	+	+	2	Distance bush	21859
	27	+	+	+	4	Screw M6x14 – 6,8	16520
	28	+	+	+	2	Fixsing strap	21852
	29	+	+	+	2	Spring washer 2 6H	10138
	30	+	+	+	2	Distance bush	21856
	31	+	+	+	2	Ball bearing 6202	23235
	32	-	-	-	-	-	-
	33	+	+	+	2	Lock ring B15	17504
	34	+	+	+	24	Washer L=1	21706

Table 11.1 – continue

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pcs	Name	Catalog number
16a	35	+	+	+	4	Addition bush L=100	21874
	36	+	+	+	12	Addition bush L=40	21871
	37	+	+	+	4	Addition bush L= 20	21868
	38	+	+	+	4	Addition bush L=10	21865
	39	+	+	+	8	Washer L=5	21709
	40	+	+	+	2	Bush L=380	21218
	41	+	+	6,3	1	Box for countweight	21292
	41	+	+	9	1	Box for countweight	21293
	41	+	+	12,5	1	Box for countweight	21294
	41	+	+	18	1	Box for countweight	21295
	41	+	+	25	1	Box for countweight	21296
16	42	+	+	+	4	Box for countweight	21614
	43	+	+	+	4	Nut M24-8 BDS 1253-83	17321
	44	+	+	+	4	Split 5x45 BDS 55-77	21765
	45	+	+	+	1	Hind plate	21246
	46	+	+	+	2	Stud	21631
	47	+	+	+	2	Moves wheel	17172
	52	+	+	+		Stud	21687

11.2 Reeving 4/1

Table 11.2

Fig	Pos	B _r	V _t (m/min)	Hp (m)	Pcs	Name	Catalog number
16a; 17a; 18a; 19a	1-44 45-52 1-5 1-12		12	6,3	1	Traveling mechanism	23122
			16	6,3	1	Traveling mechanism	23123
			20	6,3	1	Traveling mechanism	23124
			25	6,3	1	Traveling mechanism	23125
			29	6,3	1	Traveling mechanism	23126
			42	6,3	1	Traveling mechanism	23127
			12/3,5	6,3	1	Traveling mechanism	23128
			15/5	6,3	1	Traveling mechanism	23129
			21/7	6,3	1	Traveling mechanism	23130
			25/8	6,3	1	Traveling mechanism	23131
			12	9	1	Traveling mechanism	23146
			16	9	1	Traveling mechanism	23147
			20	9	1	Traveling mechanism	23148
			25	9	1	Traveling mechanism	23149
			29	9	1	Traveling mechanism	23150
			42	9	1	Traveling mechanism	23151
			12/3,5	9	1	Traveling mechanism	23152
			15/5	9	1	Traveling mechanism	23153
			21/7	9	1	Traveling mechanism	23154
			25/8	9	1	Traveling mechanism	23155
			12	12,5	1	Traveling mechanism	23170
			16	12,5	1	Traveling mechanism	23171
			20	12,5	1	Traveling mechanism	23172
			25	12,5	1	Traveling mechanism	23173
			29	12,5	1	Traveling mechanism	23174
			42	12,5	1	Traveling mechanism	23175
			12/3,5	12,5	1	Traveling mechanism	23176
			15/5	12,5	1	Traveling mechanism	23177
			21/7	12,5	1	Traveling mechanism	23178
			25/8	12,5	1	Traveling mechanism	23179
18a	5	+	12	+	2	Electric motor	17302
		+	16 и 20	+	2	Electric motor	17302
	5	+	25 и 29	+	2	Electric motor	17309
	5	+	42	+	2	Electric motor	17304
	5	+	12/3,5	+	2	Electric motor	17306
	5	+	15/5	+	2	Electric motor	17306
	5	+	21/7	+	2	Electric motor	17307
	5	+	25/8	+	2	Electric motor	17307
	2	+	12 и 12/3,5	+	2	Pinion	17240
	2	+	16 и 25	+	2	Pinion	17241
	2	+	20 и 29	+	2	Pinion	17237
	2	+	42	+	2	Pinion	17238

Table 11.2 – continue

Fig	Pos	B _r	V _t (m/min)	H _p (m)	Pcs	Name	Catalog number
18a	2	+	12/3,5	+	2	Pinion	17240
	2	+	15/5	+	2	Pinion	17240
	2	+	21/7	+	2	Pinion	17241
	2	+	25/8	+	2	Pinion	17241
	1	+	+	+	1	Lock ring B12 BDS 2170-77	17313
	3	+	+	+	3	Spring washer 2 8H BDS 833-82	10139
	4	+	+	+	3	Screw I M8x18 8,8 BDS 2171-83	17324
19a	1+12	+	12	+	1	Adapter	17232
	1+12	+	16; 25	+	1	Adapter	17235
	1+12	+	12/3,5	+	1	Adapter	17230
	1+12	+	15/5	+	1	Adapter	17231
	1+12	+	21/7	+	1	Adapter	17234
	1	+	+	+	1	Lock ring B12 BDS 2170-77	17313
	2	+	12	+	1	Pinion	17239
	2	+	16; 25	+	1	Pinion	17239
	2	+	12/3,5	+	1	Pinion	17237
	2	+	15/5	+	1	Pinion	17238
	2	+	21/7	+	1	Pinion	17238
	3	+	+	+	2	Ball bearing 6203 BDS 4843-84	17317
	4	+	+	+	1	Distance bush	17157
	5	+	+	+	1	Lock ring A40 BDS 2170-77	17315
	6	+	+	+	1	Case	17242
	7	+	+	+	3	Lock ring 2 8H BDS 833-82	10139
	8	+	+	+	3	Screw I M8x18 – 8,8 BDS 2171-83	17324
	9	+	+	+	1	Distance bush	17158
	10	+	+	+	1	Shaft	17236
	11	+	12	+	1	Gear wheel	17165
	11	+	12/3,5	+	1	Gear wheel	17165
	11	+	15/5	+	1	Gear wheel	17165
	11	+	21/7	+	1	Gear wheel	17166
	11	+	25/8	+	1	Gear wheel	17166
	11	+	16; 25	+	1	Gear wheel	17166
	12	+	+	+	1	Lock ring B20 BDS 2170-77	17314
16a	1	+	+	+	4	Nut M20 – 8 BDS 1234-85	21343
	2	+	+	+	4	Spring washer 2 20H BDS 833-82	21341
	4	+	+	+	4	Bolt M20x65 – 8,8 BDS 1234-85	21340
	3	+	+	+	1	Hind plate left	21821
	5	+	+	+	4	Axis	17177
	6	+	+	+	8	Ball bearing 6308-Z BDS 4884-85	17318
	7	+	+	+	8	Lock ring A90 BDS 2170-77	10145
	8	+	+	+	2	Moves wheel	17174
	9	+	+	+	4	Lock ring B40 BDS 2170-77	10150
	10	130	+	6,3	1	Traverse with carrier	23268
	10	130	+	9	1	Traverse with carrier	23269
	10	130	+	12,5	1	Traverse with carrier	23270
	11	+	+	+	2	Ball bearing 6304 – Z	23237
	12	+	+	+	2	Lock ring A52 BDS 2170-77	23236
	13	+	+	+	2	Distance bush	21858
	14	+	12	+	2	Gear wheel	17164
		+	16	+	2	Gear wheel	17164
		+	20	+	2	Gear wheel	17162
		+	25	+	2	Gear wheel	17164
		+	29	+	2	Gear wheel	17162
		+	42	+	2	Gear wheel	17163
		+	12/3,5	+	2	Gear wheel	17162
		+	15/5	+	2	Gear wheel	17163
		+	21/7	+	2	Gear wheel	17163
		+	25/8	+	2	Gear wheel	17164
	15	+	+	+	2	Seal	17183
	16	+	+	+	2	Case	21847
	17;19	+	+	+	20	Spring washer 2 8H BDS 833-82	10139
	18;20	+	+	+	20	Screw M8x20 – 8,8 BDS 2171-83	17324
	21	+	+	+	2	Drive shaft	23233
	23	+	+	+	2	Spring washer 2 6H BDS 833-82	10139
	22	+	+	+	2	Screw M6x12 – 6,8 BDS 2171-83	17324
	24	+	+	+	2	Washer	23238
	25	+	12	+	2	Gear wheel	23228
	26	+	+	+	2	Distance bush	21860
	27	130	+	+	4	Screw M6x14 – 6,8 BDS 2171-83	16520

Table 11.2 – continue

Fig	Pos	B _r	V _t (m/min)	H _p (m)	Pcs	Name	Catalog number
16a	28	+	+	+	2	Fixsing strap	21850
	29	+	+	+	2	Spring washer 2 6H BDS 833-82	10138
	30	+	+	+	2	Distance bush	21856
	31	+	+	+	2	Ball bearing 6202 BDS 4883-85	23235
	33	+	+	+	2	Lock ringB15	17504
	34	+	+	+	24	Washer L=1	21707
	35	+	+	+	4	Addition bush	21875
	36	+	+	+	12	Addition bush	21872
	37	+	+	+	4	Addition bush	21869
	38	+	+	+	8	Addition bush	21866
	39	+	+	+	8	Addition bush	21709
	40	+	+	+	2	Bush L=400	21219
	41	+	+	6,3	1	Box for countreweight	21302
	41	+	+	9	1	Box for countreweight	21303
17a	41	+	+	12,5	1	Box for countreweight	21304
	42	+	+	+	4	Chock bush	21615
	43	+	+	+	4	Nut M27-8 BDS 1253-83	17321
	44	+	+	+	4	Split 5x50 BDS 55-77	17323
	45	+	+	+	1	Hind plate	21247
	46	+	+	+	2	Stud	21645
	47	+	+	+	2	Moves wheel	17171
	52	+	+	+		Stud	21701

12. CONTROL BLOCK

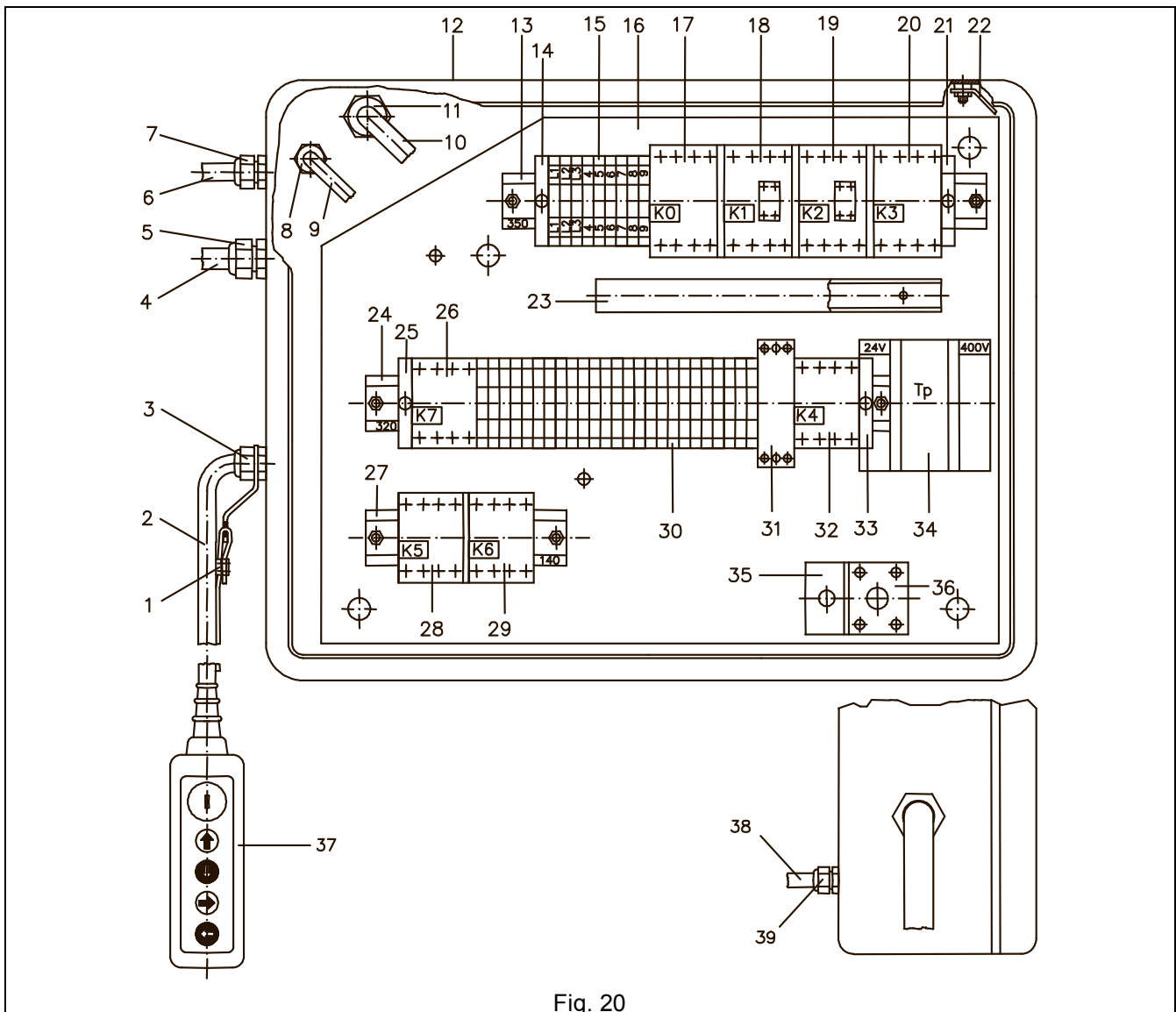


Fig. 20

12.1 CONTROL BLOCK

Fig	Position	Name	Pcs	Note
20	1 - 39	Control block	1	
	12	Box	1	
	13 - 36	Chassis with electric equipment	1	
	37	Control switch	1	Type is shown in passport
	2; 4; 6; 9; 9a; 9b; 10; 38	Cable set	1	

12.2 Control scheme

Number of scheme	Speed data for:				Note
	Lifting		Traveling		
	basic	reduced	basic	reduced	
1	●	●	●	●	Circuit diagram of hoist Is located inside the lid of the control board
2	●	●	●		
3	●		●	●	
4	●		●		
5	●	●			
6	●				

12.3 Electric equipment

Table 12.3

Fig	Pos	Hp (m)	Name	Pcs	Reeving 2/1	Reeving 4/1	Note
					Catalog number		
20	1	+	Slamp 5	2	60773	60773	
	2	6,3	Cable control switch	1	60520	60520	With trolley
		9	Cable control switch	1	60521	60521	With trolley
		12,5	Cable control switch	1	60522	60522	With trolley
		15	Cable control switch	1	-	60525	With trolley
		18	Cable control switch	1	60523	60523	With trolley
		25	Cable control switch	1	60524	-	With trolley
		30	Cable control switch	1	60525	-	With trolley
		36	Cable control switch	1	60526	-	With trolley
	2	6,3	Cable control switch	1	60527	60527	Wiithout trolley
		9	Cable control switch	1	60528	60528	Wiithout trolley
		12,5	Cable control switch	1	60529	60529	Wiithout trolley
		15	Cable control switch	1	-	60535	Wiithout trolley
		18	Cable control switch	1	60530	60530	Wiithout trolley
		25	Cable control switch	1	60531	-	Wiithout trolley
		30	Cable control switch	1	60532	-	Wiithout trolley
		36	Cable control switch	1	60533	-	Wiithout trolley
	3	+	Pipe – D22	1	60775	60775	
	4	+	Cable power	1	60555	60555	
	5	+	Pipe	1	60776	60776	ORTAC – PG 21
	6	+	Cable trolley	1	60559	60559	
	7	+	Pipe	1	60777	60777	ORTAC – PG 11
	8		Pipe	1	60777	60777	ORTAC – PG 11
	9	6,3	Cable microlifting	1	60582	60584	
		9	Cable microlifting	1	60583	60585	
		12,5	Cable microlifting	1	60584	60586	
		15	Cable microlifting	1	-	60587	
		18	Cable microlifting	1	60585	60588	
		25	Cable microlifting	1	60586	-	
		30	Cable microlifting	1	60587	-	
		36	Cable microlifting	1	60588	-	
	9a	6,3	Cable I thermal protection	1	60625	60627	Cable with microlifting
		9	Cable I thermal protection	1	60626	60628	
		12,5	Cable I thermal protection	1	60627	60629	
		15	Cable I thermal protection	1	-	60630	
		18	Cable I thermal protection	1	60628	60631	
		25	Cable I thermal protection	1	60629	-	
		30	Cable I thermal protection	1	60630	-	
		36	Cable I thermal protection	1	60631	-	
	9b	6,3	Cable II thermal protection	1	60800	60802	Cable without microlifting
		9	Cable II thermal protection	1	60801	60803	
		12,5	Cable II thermal protection	1	60802	60804	
		15	Cable II thermal protection	1	-	60805	
		18	Cable II thermal protection	1	60803	60806	
		25	Cable II thermal protection	1	60804	-	
		30	Cable II thermal protection	1	60805	-	
		36	Cable II thermal protection	1	60806	-	
	10	6,3	Cable lifting motor	1	60668	60670	
		9	Cable lifting motor	1	60669	60671	
		12,5	Cable lifting motor	1	60670	60672	
	15	Cable lifting motor	1	-	60673		
	18	Cable lifting motor	1	60671	60674		
	25	Cable lifting motor	1	60672	-		
	30	Cable lifting motor	1	60673	-		
	36	Cable lifting motor	1	60674	-		
11	+	Pipe	1	60776	60776	ORTAC – PG 21	
12	+	Box	1	60923	60923		
13	+	Profile strip 35mm	1	60715	60715	L=320mm	
14;21	+	End clamp	2	60716	60716		
15	+	Clamp 4mm	15	60722	60722		
15a	+	Clamp neutral	1	60723	60723		
16	+	Plate	1	60697	60697		

Table 12.3 – continued

Fig	Pos	Hp (m)	Name	Pcs	Reeving 2/1	Reeving 4/1	Note
					Catalog number		
20	17	+	Contactor 12A Ub=24V	1	60968	60968	ABB A12-30-01
	18	+	Contactor 17A Ub=24V	1	60967	60967	ABB A16-30-01
	19	+	Contactor 17A Ub=24V	1	60967	60967	ABB A16-30-01
	20	+	Contactor / 2NO+2NC / - Ub=24V	1	60966	60966	ABB A16-22-00
	22	+	Cable bridge -neutral	1	-	-	Basic -lid of the control board
	23	+	Profile	1	60714	60714	L=350mm
	24	+	Profile strip 35 mm	1	60724	60724	L=280mm
	25;3 3	+	End clamp	2	60716	60716	
	26	+	Contactor / 2NO+2NC / - Ub=24V	1	60725	60725	ABB K6-22Z
	27	+	Profile strip 35 mm	1	60706	60706	L=150mm
	28	+	Contactor 6A Ub=24V	1	60707	60707	ABB B6-30-01
	29	+	Contactor 6A Ub=24V	1	60707	60707	ABB B6-30-01
	30	+	Clamp 2,5mm	20	60711	60711	
	31	+	Timer 0-10s, 24VAC	1	60713	60713	RE8RA11B
	32	+	Contactor 6A Ub=24V	1	60707	60707	ABB B6-30-01
	34	+	Transformer – 400/24V	1	60969	60969	P=50VA
	35	+	Strap	1	60698	60698	
	36	+	End switch – КИ-Г1	1	60700	60700	
	37	+	Command button – XAC-A -4913	1	60774	60774	Control scheme №1
		+	Command button – XAC-A -4923	1	60780	60780	Control scheme №2
		+	Command button – XAC-A -4813	1	60781	60781	Control scheme №3
		+	Command button – XAC-A -4813	1	60782	60782	Control scheme №4
		+	Command button – XAC-A -2913	1	60784	60784	Control scheme №5
		+	Command button 2813	1	60930	60930	Control scheme №6
	38	6,3	Cable load limiter	1	60743	60745	
		9	Cable load limiter	1	60744	60746	
		12,5	Cable load limiter	1	60745	60747	
		15	Cable load limiter	1	-	607548	
		18	Cable load limiter	1	60746	60749	
		25	Cable load limiter	1	60747	-	
		30	Cable load limiter	1	60748	-	
		36	Cable load limiter	1	60749	-	
	39	+	Pipe	1	60778	60778	ORTAC – PG7

Note: Electrical equipment can be done also with elements of other companies.
Standard electrical elements can be offered from key diagram.

✂

Application № 1

ORDER

Spare parts of hoist type, serial number, year
, group FEM, power supply: voltage
, frequency request according to catalogue №

№	Name	Catalog number	Pcs
1			
2			
3			
4			
5			

Please send the spare parts to:
ADDRESS:.....

Delivery must be by:.....

Date :

Client :

YANTRA



CATALOGUE

OF SPARE PARTS
FOR HOIST TYPE **MPM5..**