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1. Hoist

1.1. Hoist code

K	N	K	5	1	04	D	0200	M5	06	D	D05	B	40	N
----------	----------	----------	----------	----------	-----------	----------	-------------	-----------	-----------	----------	------------	----------	-----------	----------

Pos.	Code	Description	Properties										
1	K	King lifting, Production platform of WORLDHOISTS											
2	N	Hoist Type	N	Non-explosion-proof hoist									
			E	Explosion-proof hoist									
3	K	Hoist Series	K	K series									
			H	H series									
4	5	Hoist Serial Code	2~6	2~6 as Worldhoists serials code									
5	1	Ropes	1	Number of ropes from drum									
			2										
6	04	Rope Reeving	02	Number of rope falls per rope									
			04										
			06										
			08										
7	D	Trolley Type	D	Double girder trolley									
			L	Low headroom hoist									
			N	Normal headroom hoist									
			F	Fixed hoist									
8	0200	Safe Working Load	0032	1) 0032 = 32 ×100kg = 3,200kg									
			0200	2) 0200 = 200 ×100kg = 20,000kg									
9	M5	Duty Group	M5	ISO/GB M4~M6					FEM 1Am~3m				
10	06	Lifting Height (m)	06	1) 00 = Special height				2) 06 = 6m			3) 18 = 18m		
11	D	Lifting Speed (m/min)	A	2.5/0.4				B		3.2/0.5			
			C	4/0.7				D		5/0.8			
			E	6.3/1.1				F		8/1.3			
			G	10/1.7				H		12.5/2.1			
			J	16/2.7				K		20/3.3			
12	D05	Lifting Motor (kW)	D = Pole change motor	D01	2/0.25		D02		3.7/0.5		D03	5/0.7	
				D04	7.5/1.2		D05		9/1.4		D06	15/2.5	
				D07	18.5/3		D08		23/3.5				
			F = Frequency convertor motor	F11	2.5		F12		3.7		F13	5	
				F14	7.5		F15		9		F16	15	
				F17	18.5		F18		23		F19	28	
13	B	Travelling Speed (m/min)	B	0~20				C		0~25			
			D	0~32				S		Special speed			
14	40	Rail Gauge (mm)	Low Headroom/ Normal Headroom Flange width			40=400mm		Double Girder Rail gauge			40 = 4000mm		
15	N	Special properties	N	Standard hoist without any options									
			F	Options selected from option list									
			S	Special hoist									

1.2. Service Classification of Hoist

Safe and effective operation of the hoist is dependent on correct classification of the hoist's operation group. According to FEM 9.511 and China standard the hoist's operating group can be determined from load spectrum and average Daily operating time.

1.2.1. Load Spectrum

Load state level	Load spectrum Km	Load diagram	Description
L1	$Km \leq 0.125$		Light Occasional full load Usually light load Small fixed load
L2	$0.125 \leq Km \leq 0.250$		Medium Occasional full load Usually light load Average fixed load
L3	$0.250 \leq Km \leq 0.500$		Heavy Repetitive full load Usually average load Heavy fixed load
L4	$0.500 \leq Km \leq 1.000$		Very Heavy Usually almost full load Very heavy fixed load

1.2.2. Average daily operating time

The average daily operating time of the hoist can be calculated from the running time of the hoisting machinery (Hours/day):

$$t = \frac{2 \times N \times H \times T}{V \times 60}$$

t..... Average daily operating time h
 H..... Average lifting height m
 N..... Cycles/h
 T..... Working hour/day
 V..... Hoisting Speed m/min

1.2.3. Determining the operating group of the hoist

When the load spectrum and the average daily operating time of the hoist are identified, the hoist's operating group is obtained from the table below:

Load state level	Average daily operating time ISO (GB) /FEM (hours per day)					
	≤0.5	≤1	≤2	≤4	≤8	≤16
L1			M3 1Bm	M4 1Am	M5 2m	M6 3m
L2		M3 1Bm	M4 1Am	M5 2m	M6 3m	M7 4m
L3	M3 1Bm	M4 1Am	M5 2m	M6 3m	M7 4m	
L4	M4 1Am	M5 2m	M6 3m	M7 4m		

1.2.4. WH Duty Group - Working Load Compare

Hoist Type	Duty Group	Working Load t
K2	M5/M6	3.2
K3	M4/M5/M6	6.3
K4	M4/M5/M6	12.5
K5	M4/M5/M6	40
K6	M4/M5/M6	80

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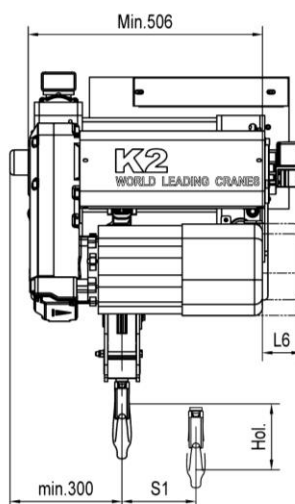
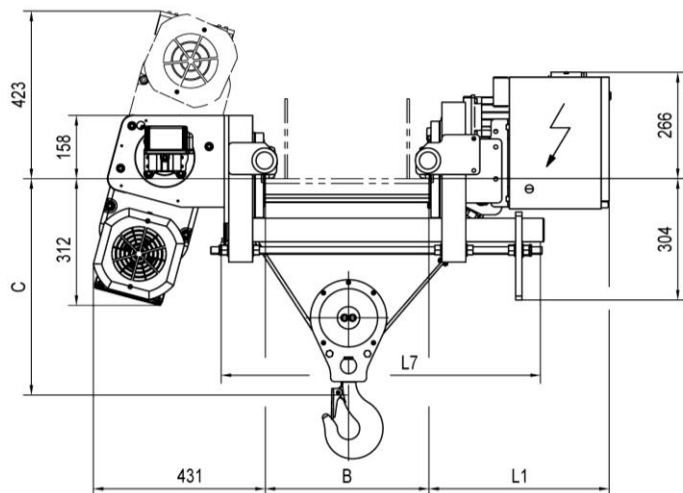
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1.3. Low Headroom Hoist **KNK2102** (Reeving 1:2)

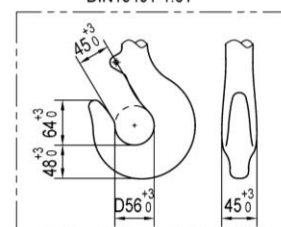
HOL (m)	B	L1	L2	L3	L4	L5	S1	Weight (kg)
12	80~	452	457	500	699	688	52	228+W0
19	610	452	652	500	894	883	83	254+W0

motor	D01	F11	D02	F12
L6	0	47	89	136
W0	0	0	11	11

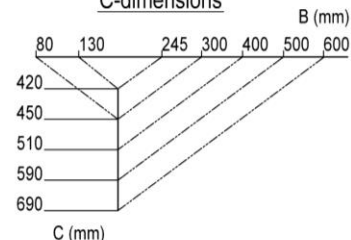
L7(mm)	B(mm)
800	>80-410
900	>410-510
1000	>510-610



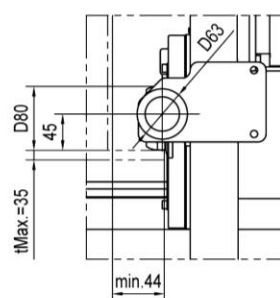
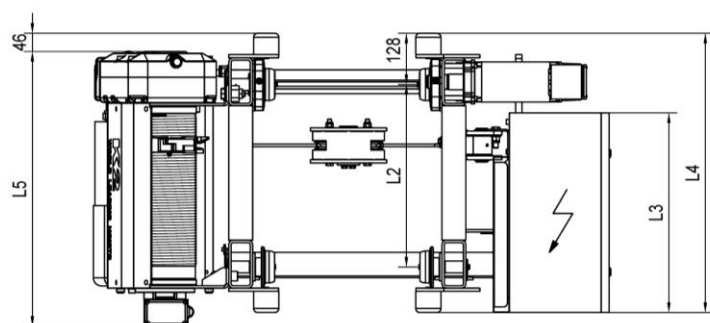
Hook dimensions
DIN15401-1.6T



C-dimensions

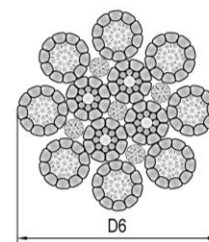


*C-dimensions should be increased by 100mm for safety.



Wire rope cross section

8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting				Travelling	
		Gear Ratio 70				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
1000	3m/M6	10/1.7 2-speed	1x D01	0-10 Stepless	1x F11	0-20 / 1xF02	0-32 / 1xF02
1600	2m/M5		1x D02		1x F12		

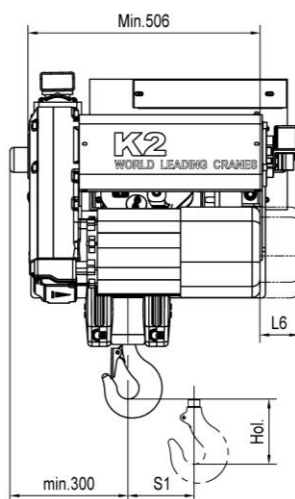
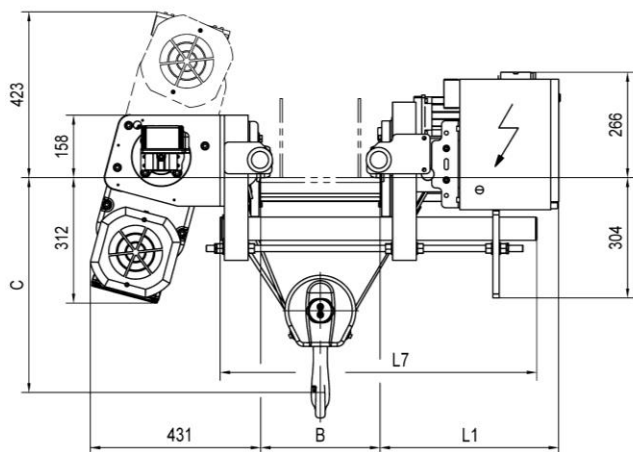
*Weight calculated with B ≥ 300.

1.4. Low Headroom Hoist **KNK2104** (Reeving 1:4)

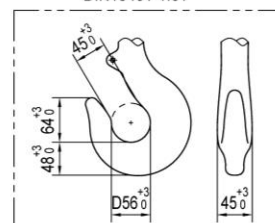
HOL (m)	B	L1	L2	L3	L4	L5	S1	Weight (kg)
6	80~610	452	457	500	699	688	52	238+W0
9.5		452	652	500	894	883	83	262+W0

motor	D01	F11	D02	F12	D03	F13
L6	0	47	89	136	89	136
W0	0	0	11	11	12	9

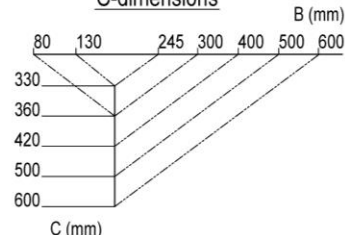
L7(mm)	B(mm)
800	>80-410
900	>410-510
1000	>510-610



Hook dimensions
DIN15401-1.6T

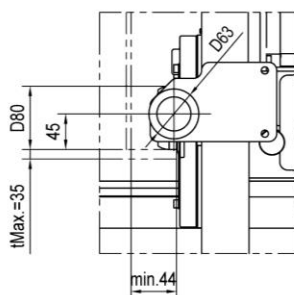
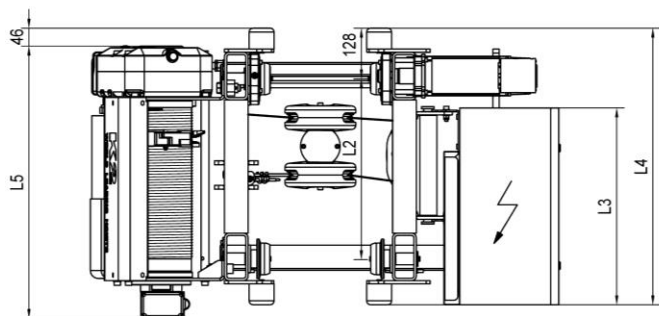
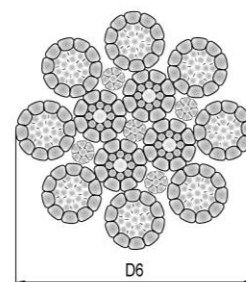


C-dimensions



*C-dimensions should be increased by 100mm for safety.

Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting												Travelling	
		Gear Ratio 70				Gear Ratio 56				Gear Ratio 47				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
2000	3m/M6	5/0.8 2-speed	1x D01	0-5 Stepless	1x F11	6.3/1.1 2-speed	1xD02	0-6.3 Stepless	1xF12	8/1.3 2-speed	1xD03	0-8 Stepless	1xF13	0-20 / 1xF02	0-32 / 1xF02
2500	3m/M6		1x D02		1x F12										
3200	2m/M5														

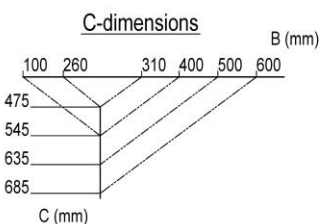
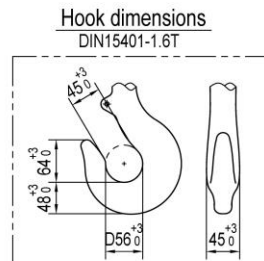
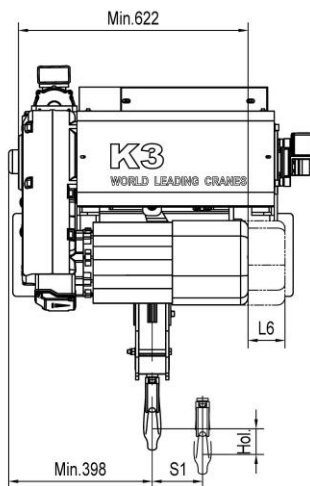
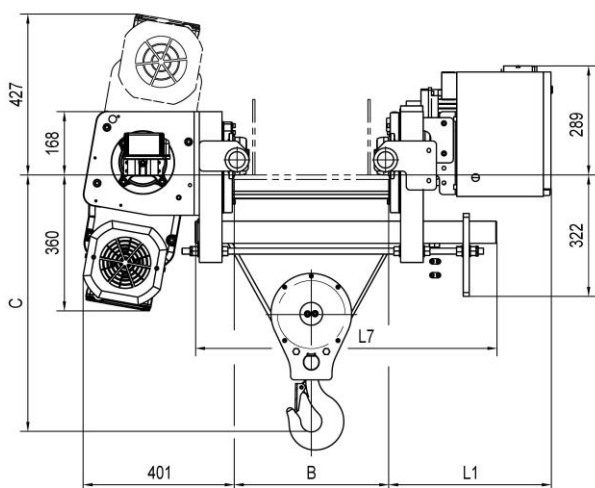
*Weight calculated with B ≥ 300.

1.5. Low Headroom Hoist **KNK3102** (Reeving 1:2)

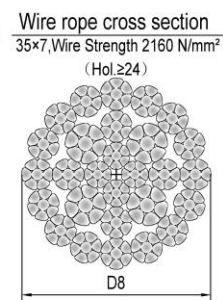
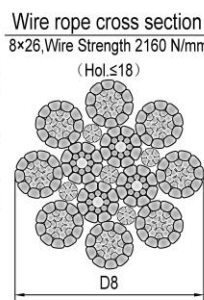
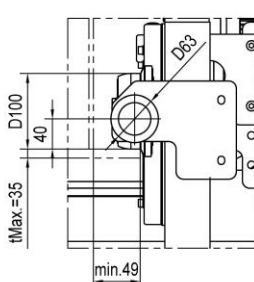
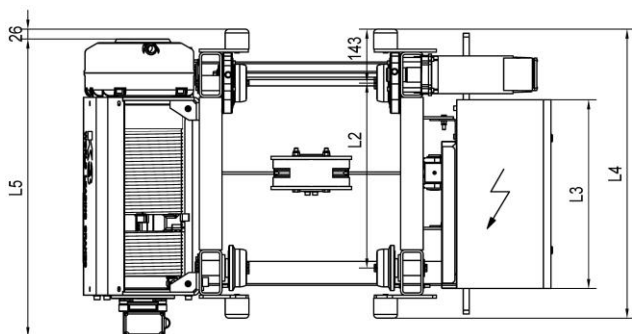
HOL (m)	B	L1	L2	L3	L4	L5	S1	Weight (kg)
12	100~610	432	490	500	766	774	52	319+W0
18		432	640	500	916	924	83	350+W0
24		432	810	500	1086	1094	108	383+W0
30		432	970	500	1246	1254	125	406+W0

motor	D03	F13	motor	D03	F13
L6	0	47	W0	0	-3

L7(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610



*C-dimensions should be increased by 100mm for safety.
*C-dimensions should be increased by 120mm (Hol.≥24m) .



Load (kg)	Class FEM/IS O	Hoisting												Travelling	
		Gear Ratio 109				Gear Ratio 90				Gear Ratio 59				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
2000	3m/M6	8/1.3 2-speed	1xD03	0-8 Stepless	1xF13	10/1.7 2-speed	1xD03	0-10 Stepless	1xF13	16/2.7 2-speed	1xD04	0-16 Stepless	1xF14	0-20 / 1xF02	0-32 / 1xF02
2500	2m/M5														
3200	1Am/M4						N/A		N/A		N/A		N/A		

*Weight calculated with B ≥ 300.

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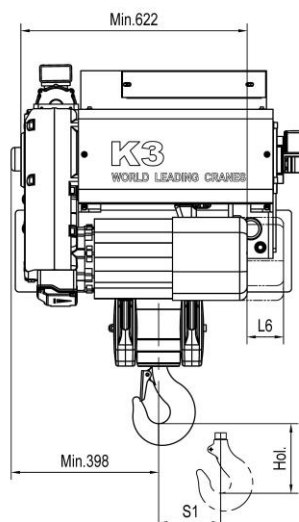
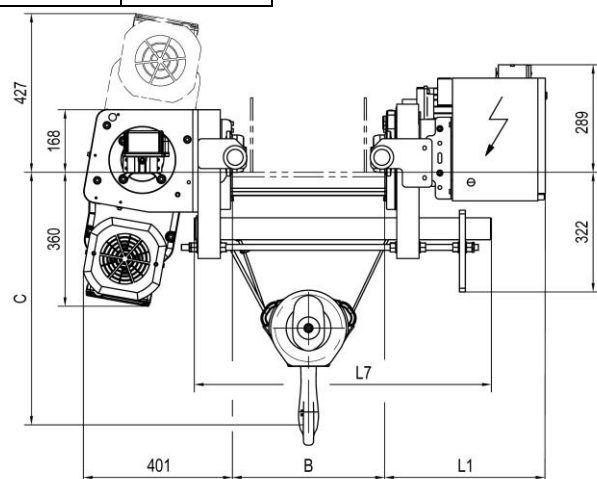
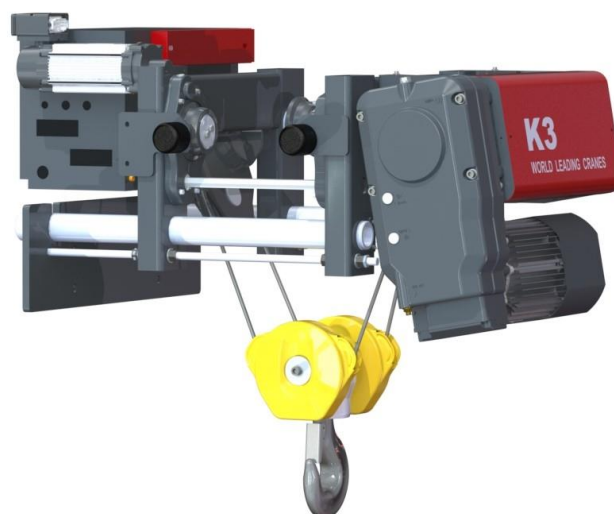
HTD032V21

1.6. Low Headroom Hoist **KNK3104** (Reeving 1:4)

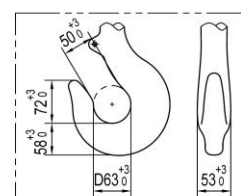
HOL (m)	B	L1	L2	L3	L4	L5	S1	Weight (kg)
6	100~610	432	490	500	766	774	52	349+W0
9		432	640	500	916	924	83	364+W0
12		432	810	500	1086	1094	108	387+W0
15		432	970	500	1246	1254	125	416+W0

motor	D03	F13	D04	F14
L6	0	47	71	118
W0	0	-3	17	12

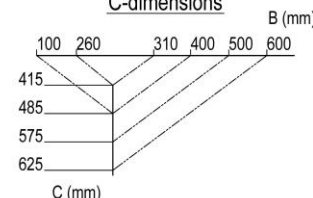
L7(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610



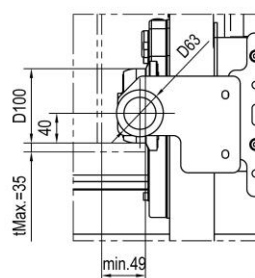
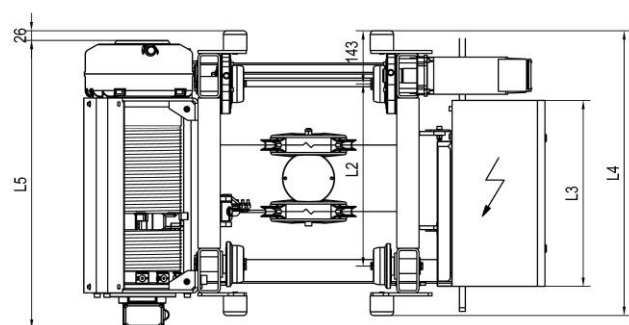
Hook dimensions
DIN15401-2.5T



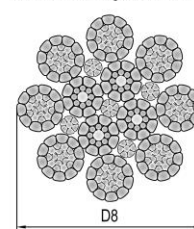
C-dimensions



*C-dimensions should be increased by 100mm for safety.



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting												Travelling	
		Gear Ratio 109				Gear Ratio 90				Gear Ratio 59				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
4000	3m/M6	4/0.7 2-speed	1xD03	0~4 Stepless	1xF13	5/0.8 2-speed	1xD03	0~5 Stepless	1xF13	8/1.3 2-speed	1xD04	0~8 Stepless	1xF14	0~20 / 1xF02	0~32 / 1xF02
5000	2m/M5														

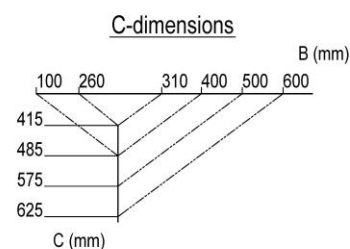
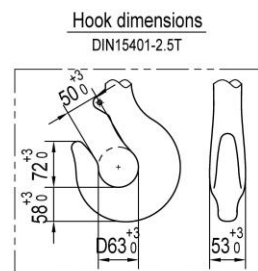
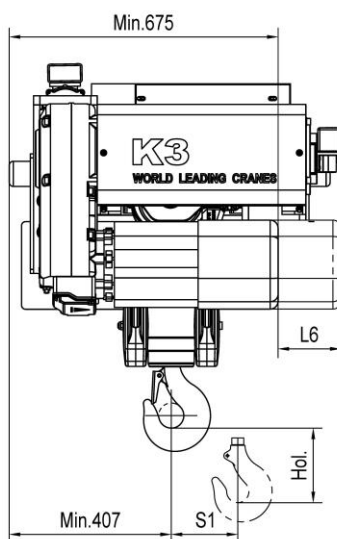
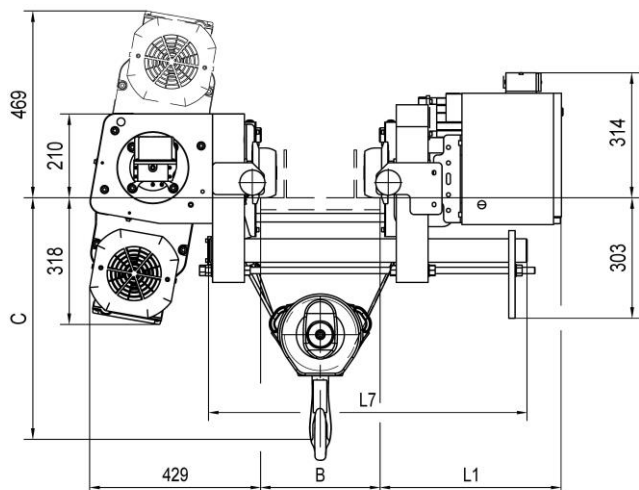
*Weight calculated with B ≥ 300.

1.7. Low Headroom Hoist **KNK3104-6.3t** (Reeving 1:4)

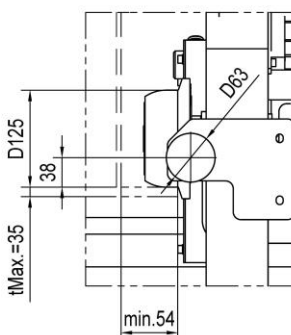
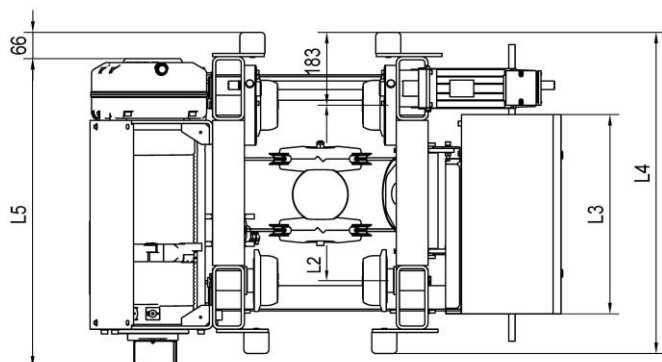
HOL (m)	B	L1	L2	L3	L4	L5	S1	Weight (kg)
6	100~610	452	440	500	806	774	52	368+W0
9		452	590	500	956	924	83	399+W0
12		452	760	500	1126	1094	108	431+W0
15		452	920	500	1286	1254	125	454+W0

motor	D03	F13
L6	0	47
W0	0	-3

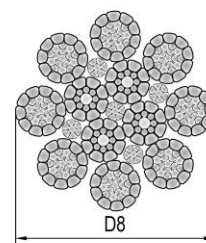
L7(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610



*C-dimensions should be increased by 100mm for safety.



Wire rope cross section
8×26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting				Travelling	
		Gear Ratio 109				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
6300	1Am/M4	4/0.7 2-speed	1xD03	0~4 Stepless	1xF13	0~20/1XF02	

*Weight calculated with B ≥ 300.

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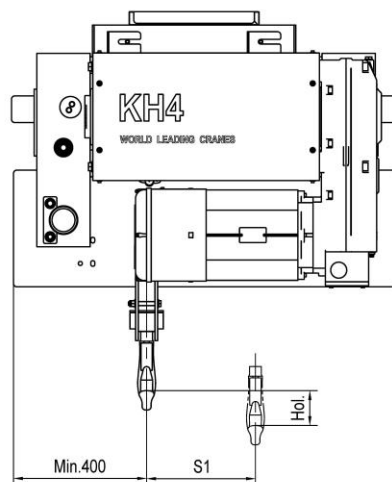
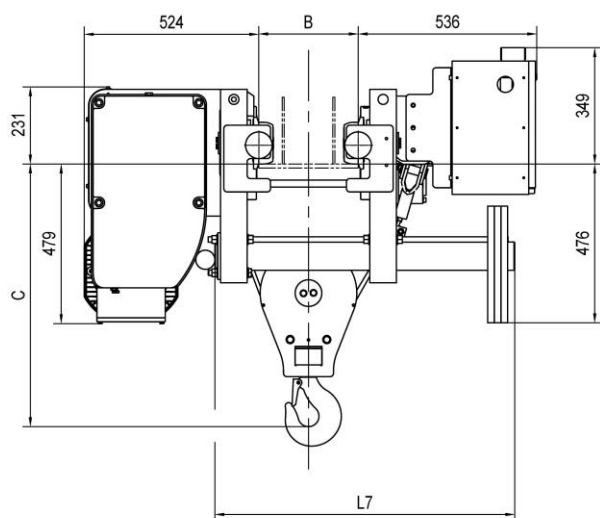
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1.8. Low Headroom Hoist **KNH4102** (Reeving 1:2)

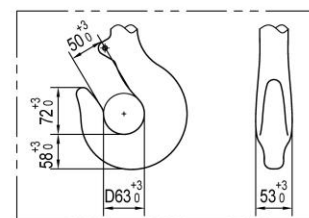
HOL (m)	B	L1	L2	S1	Weight (kg)
18	100~610	957	814	80	675+W0
24		1127	984	110	718+W0
32		1357	1214	130	777+W0

motor	D05	F15	D06	F16	D07	F17
W0	0	-4	33	22	55	39

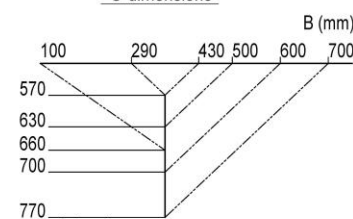
L7(mm)	B(mm)	L7(mm)	B(mm)
900	>100-300	1100	>410-510
1000	>300-410	1200	>510-610



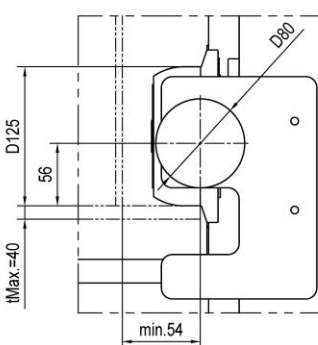
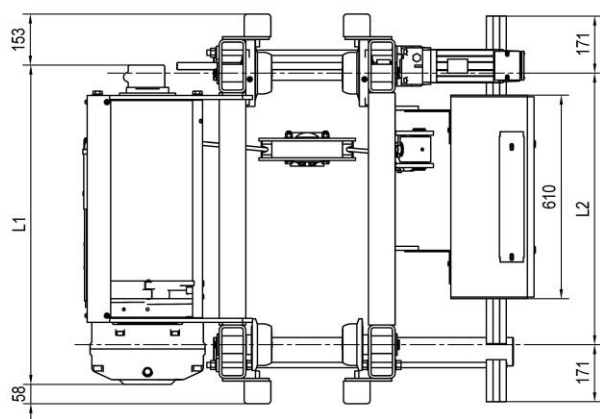
Hook dimensions
DIN15401-2.5T



*C-dimensions

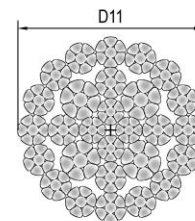
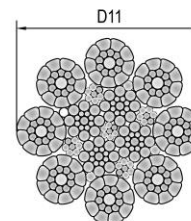


*C-dimensions should be increased by 100mm for safety.
*C-dimensions should be increased by 140mm (Hol. ≥ 24m).



Wire rope cross section
8×26, Wire Strength 2160 N/mm² (Hol. ≤ 18)

Wire rope cross section
35×7, Wire Strength 2160 N/mm² (Hol. ≥ 24)



Load (kg)	Class FEM/ISO	Hoisting																Travelling	
		Gear ratio 160				Gear ratio 133				Gear ratio 82				Gear ratio 69				Gear Ratio 15	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
4000	3m/M6	8/1.3 2-speed	1xD05	0-8 Stepless	1xF15	10/1.7 2-speed	1xD05	0-10 Stepless	1xF15	16/2.7 2-speed	1xD06	0-16 Stepless	1xF16	20/3.3 2-speed	1xD07	0-20 Stepless	1xF17	0-20 / 1xF03	0-32 / 1xF03
5000	2m/M5																		

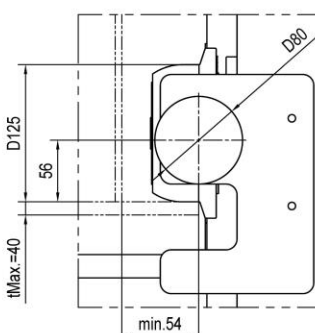
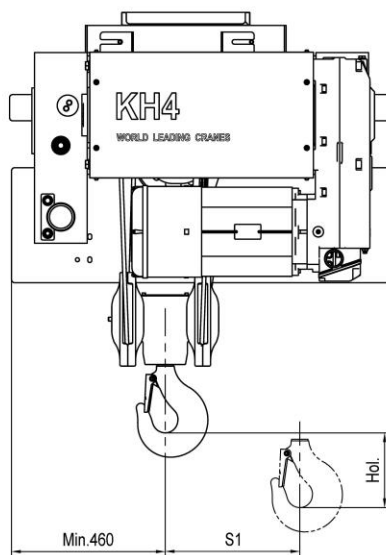
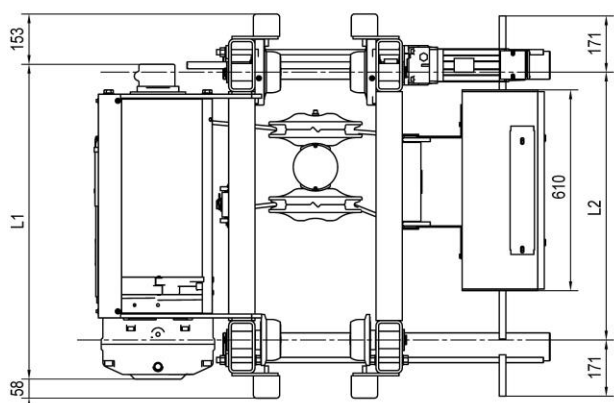
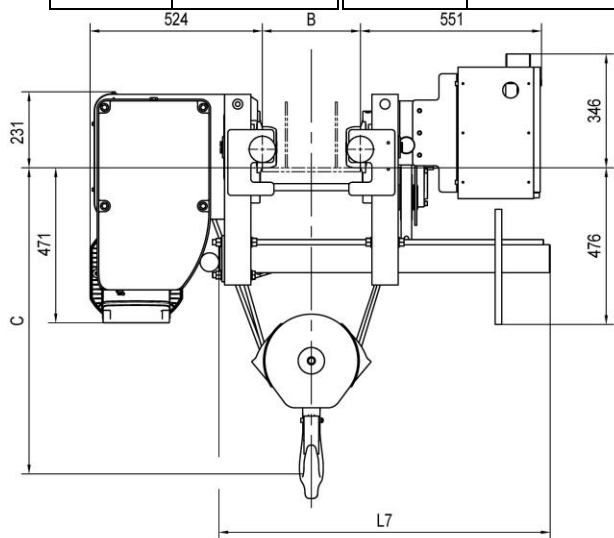
*Weight calculated with B ≥ 410.

1.9. Low Headroom Hoist **KNH4104** (Reeving 1:4)

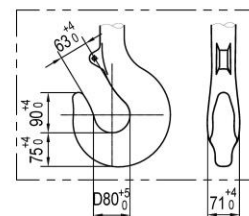
HOL (m)	B	L1	L2	S1	Weight (kg)
9	100~610	957	814	80	680+W0
12		1127	984	110	740+W0
16		1357	1214	130	790+W0

motor	D05	F15	D06	F16	D07	F17
W0	0	-4	33	22	55	39

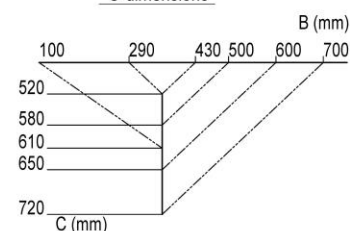
L7(mm)	B(mm)	L7(mm)	B(mm)
900	>100-300	1100	>410-510
1000	>300-410	1200	>510-610



Hook dimensions
DIN15401-5T

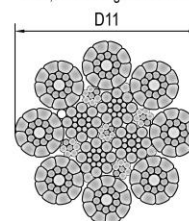


*C-dimensions



*C-dimensions should be increased by 100mm for safety.

Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting																Travelling	
		Gear ratio 160				Gear ratio 133				Gear ratio 82				Gear ratio 69				Gear Ratio 15	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
8000	3m/M6	4/0.7 2-speed	1xD05	0~4 Steplless	1xF15	5/0.8 2-speed	1xD05	0~5 Steplless	1xF15	8/1.3 2-speed	1xD06	0~8 Steplless	1xF16	10/1.7 2-speed	1xD07	0~10 Steplless	1xF17	0~20 / 1xF03	0~32 / 1xF03
10000	2m/M5																		

*Weight calculated with B ≥ 410.

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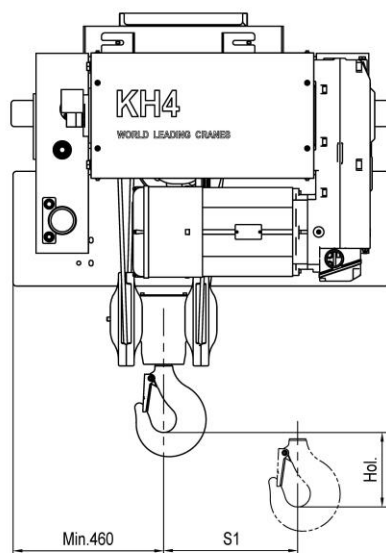
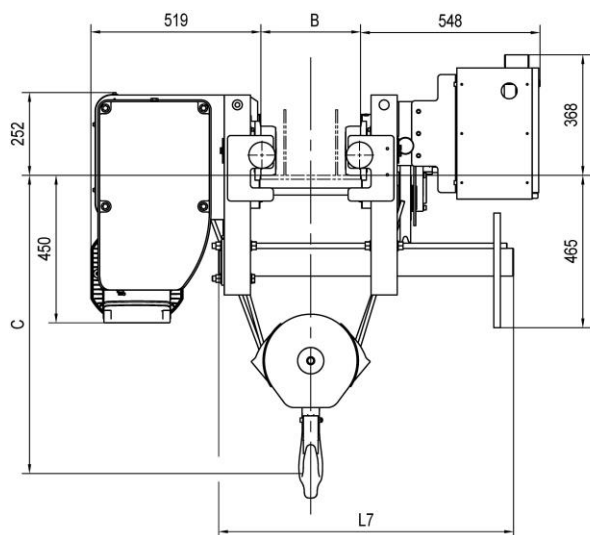
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1.10. Low Headroom Hoist KNH4104-12.5t (Reeving 1:4)

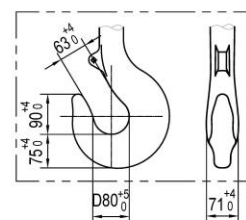
HOL (m)	B	L1	L2	S1	Weight (kg)
9	100~610	957	794	80	700+W0
12		1127	964	110	760+W0
16		1357	1194	130	810+W0

motor	D05	F15
W0	0	-4

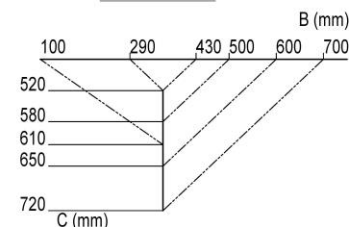
L7(mm)	B(mm)	L7(mm)	B(mm)
900	>100-300	1100	>410-510
1000	>300-410	1200	>510-610



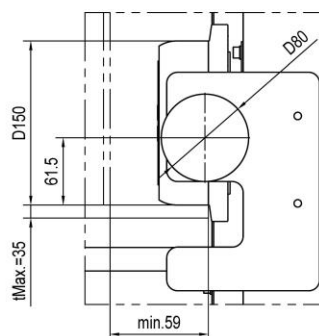
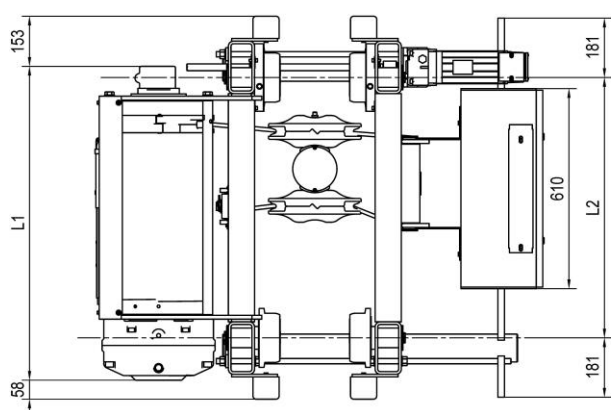
Hook dimensions
DIN15401-5T



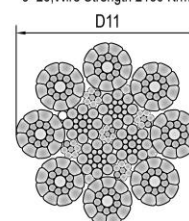
*C-dimensions



*C-dimensions should be increased by 100mm for safety.



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting				Travelling	
		Gear Ratio 160				Gear Ratio 15	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
12500	1Am/M4	4/0.7 2-speed	1xD05	0-4 Stepless	1xF15	0~20/1XF03	0~32/1XF03

*Weight calculated with B ≥ 410.

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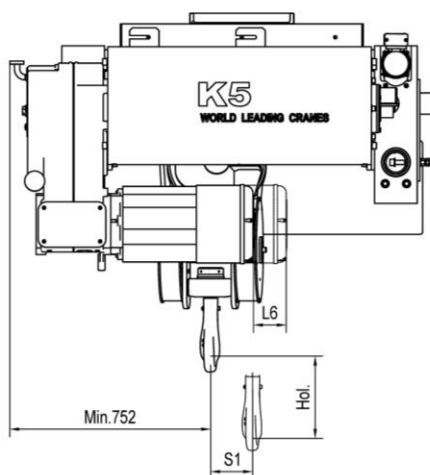
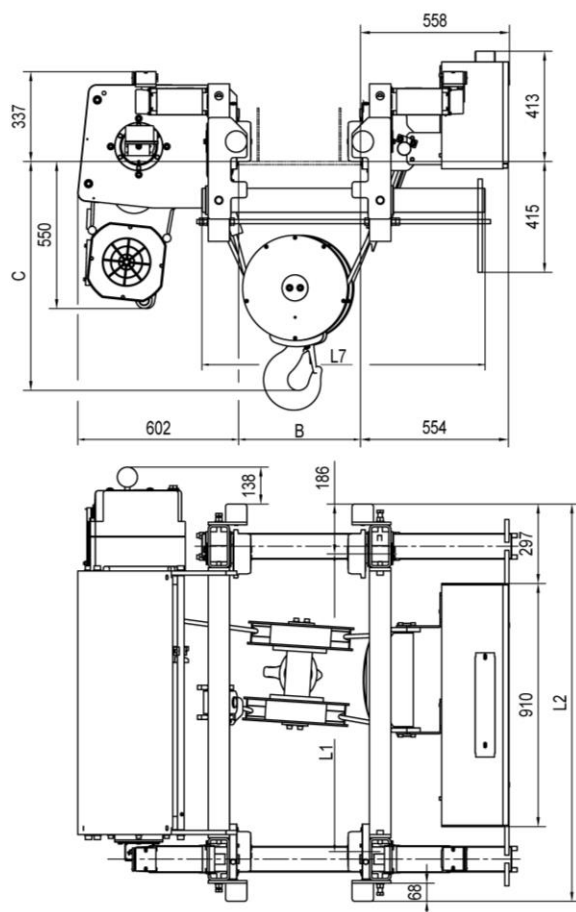
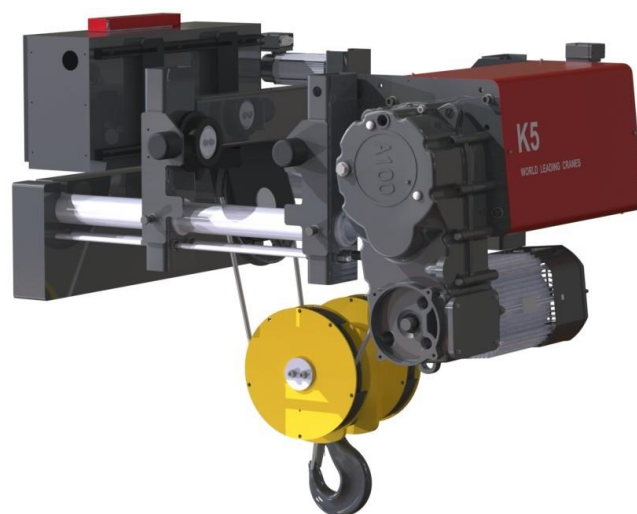
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1.11. Low Headroom Hoist **KNK5104** (Reeving 1:4)

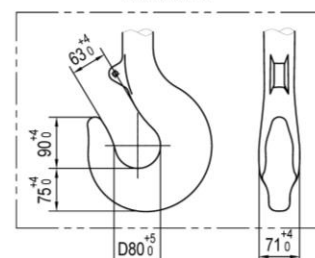
HOL (m)	B	L1	L2	S1	Weight (kg)
7.5	300~710	915	1287	90	1672+W0
9		1045	1417	120	1641+W0
12		1205	1577	170	1727+W0
18		1615	1987	330	1938+W0

L7(mm)	B(mm)
1060	>300-410
1160	>410-610
1260	>610-710

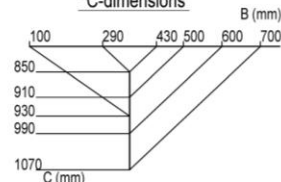
motor	D06	F16	D07	F17
L6	0	12	-12	85
W0	0	-4	33	22



Hook dimensions
DIN15401-5V

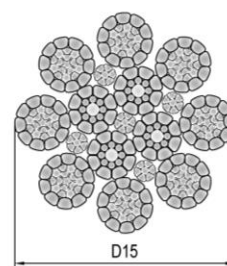


*C-dimensions



*C-dimensions should be increased by 100mm for safety.

Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)				Travelling (m/min)
		Gear ratio 161				Gear ratio 6
		Speed	Motor	Speed	Motor	Speed/Motor Code
12500	3m/M6	5/0.8 2-speed	1xD06	0-5 Stepless	1xF16	0-20 / 2xF03
16000	2m/M5		1xD07		1xF17	
20000	1Am/M4					

*Weight calculated with B ≥ 410.

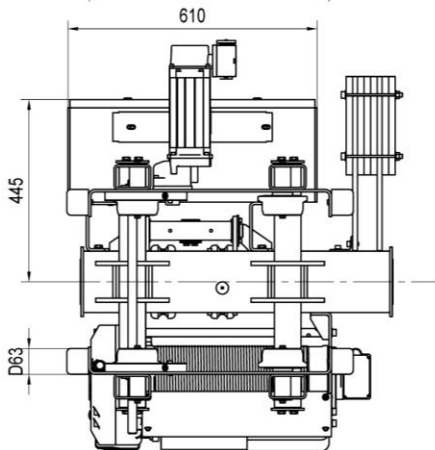
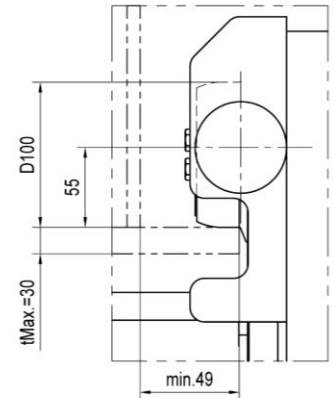
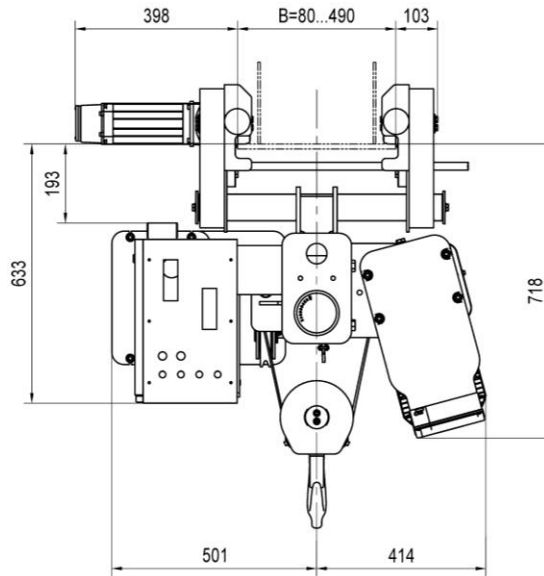
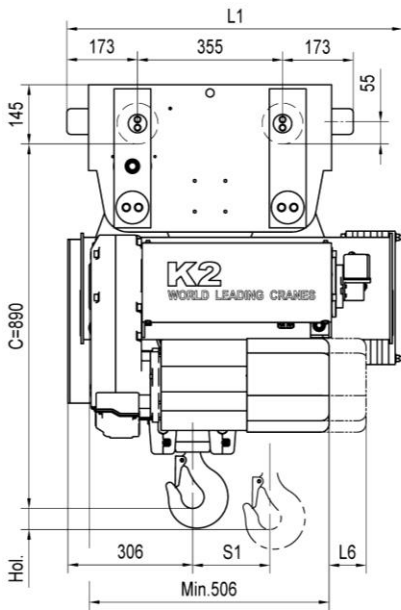
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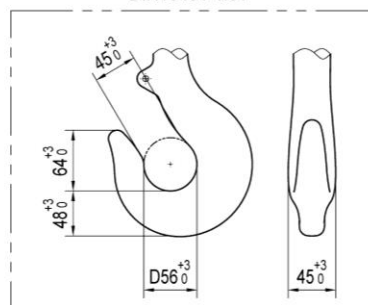
1.12. Normal Headroom Hoist K2104 (Reeving 1:4)

HOL (m)	L1	S1	Weight (kg)
6	819	52	405+W0
9.5	938	83	435+W0

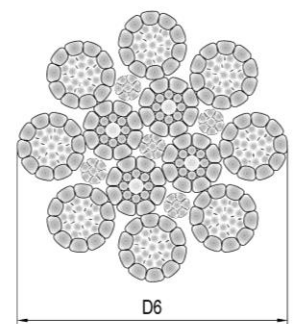
motor	D01	F11	D02	F12	D03	F13
L6	0	47	89	136	89	136
W0	0	0	11	11	12	9



Hook dimensions
DIN15401-1.6T



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



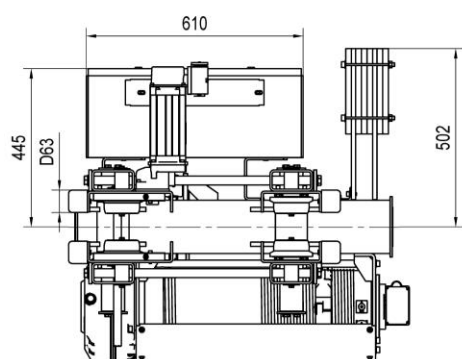
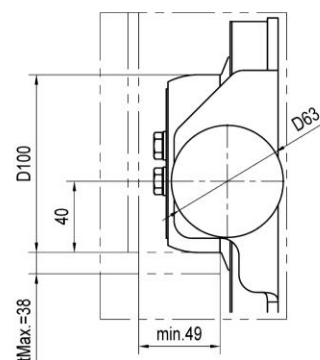
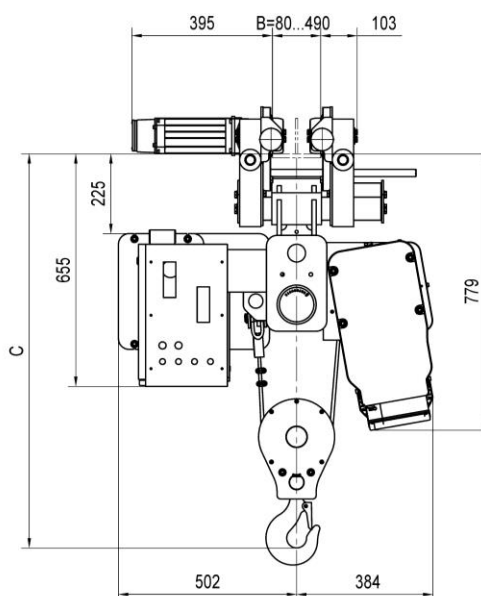
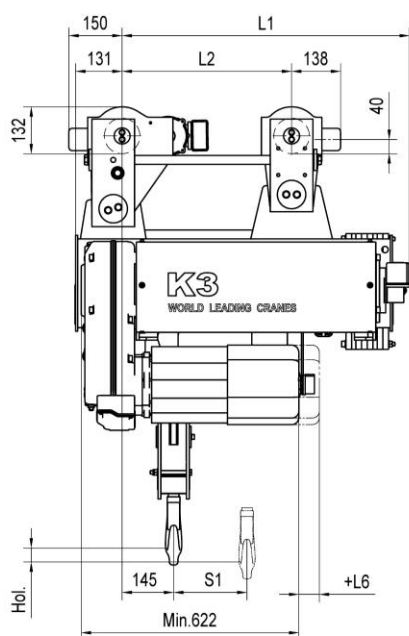
Load (kg)	Class FEM/ISO	Hoisting												Travelling
		Gear Ratio 70				Gear Ratio 56				Gear Ratio 47				Gear Ratio 6
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	
2000	3m/M6	5/0.8 2-speed	1x D01	0-5 Stepless	1x F11	6.3/1.1 2-speed	1xD02	0-6.3 Stepless	1xF12	8/1.3 2-speed	1xD03	0-8 Stepless	1xF13	0-20 /1xF02
2500	3m/M6		1x D02		1x F12									
3200	2m/M5													

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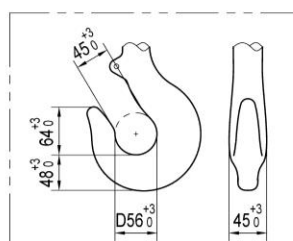
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1.13. Normal Headroom Hoist K3102 (Reeving 1:2)

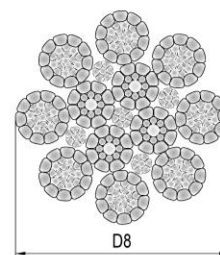
HOL (m)	L1	L2	S1	C	Weight (kg)
12	659	477	52	1110	435+W0
18	809	477	83	1110	447+W0
24	979	807	108	1230	475+W0
30	1139	807	125	1230	493+W0
motor	D03	F13	motor	D03	F13
L6	0	47	W0	0	-3



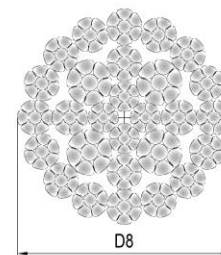
Hook dimensions
DIN15401-1.6T



Wire rope cross section
8x26, Wire Strength 2160 N/mm²
(Hol.≤18)



Wire rope cross section
35x7, Wire Strength 2160 N/mm²
(Hol.≥24)



Load (kg)	Class FEM/ISO	Hoisting												Travelling	
		Gear Ratio 109				Gear Ratio 90				Gear Ratio 59				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
2000	3m/M6	8/1.3 2-speed	1xD03	0-8 Stepless	1xF13	10/1.7 2-speed	1xD03	0-10 Stepless	1xF13	16/2.7 2-speed	1xD04	0-16 Stepless	1xF14	0-20 / 1xF02	0-32 / 1xF02
2500	2m/M5						N/A								
3200	1Am/M4						N/A								

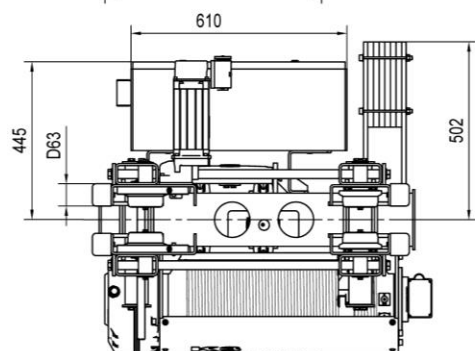
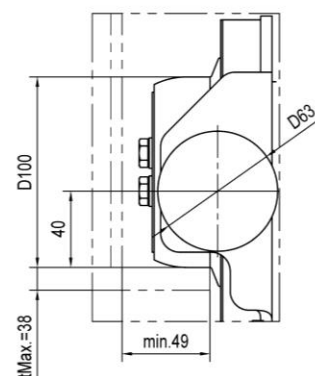
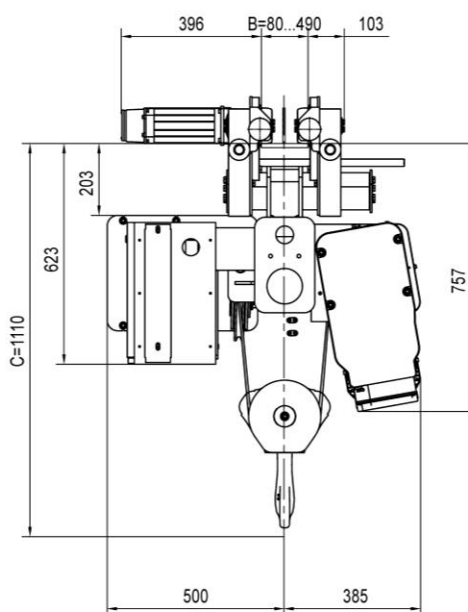
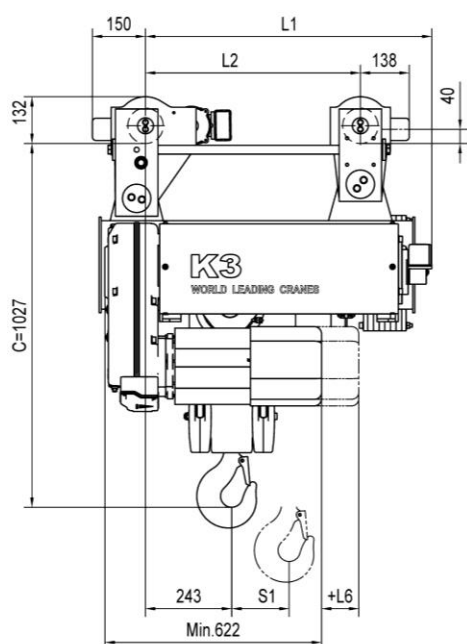
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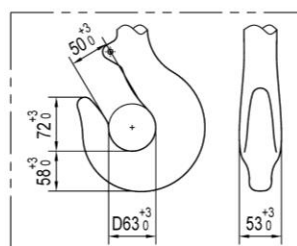
1.14. Normal Headroom Hoist KNK3104 (Reeving 1:4)

HOL (m)	L1	L2	S1	Weight (kg)
6	659	477	52	500+W0
9	809	607	83	515+W0
12	979	607	108	555+W0
15	1139	807	140	595+W0

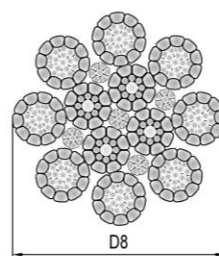
motor	D03	F13	D04	F14
L6	0	47	71	118
W0	0	-3	17	12



Hook dimensions
DIN15401-2.5T



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting												Travelling
		Gear Ratio 109			Gear Ratio 90			Gear Ratio 59			Gear Ratio 6			Speed / Motor Code (m/min)
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	
4000	3m/M6	4/0.7 2-speed	1xD03	0~4 Stepless	1xF13	5/0.8 2-speed	1xD03	0~5 Stepless	1xF13	8/1.3 2-speed	1xD04	0~8 Stepless	1xF14	0~20 /1xF02
5000	2m/M5													

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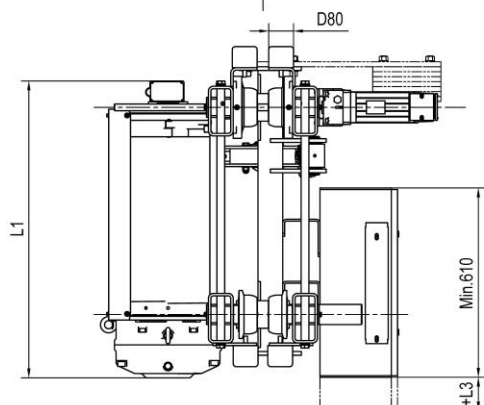
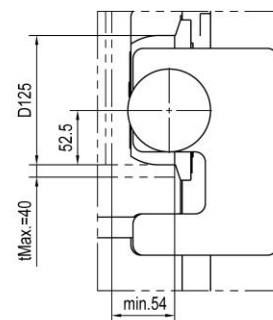
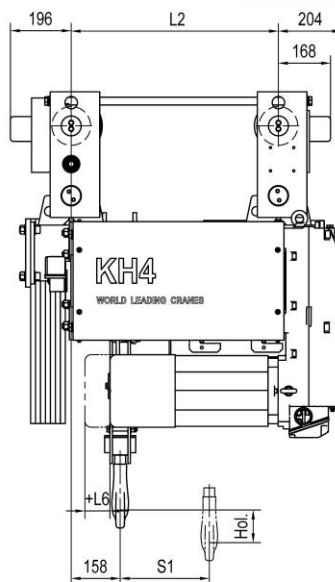
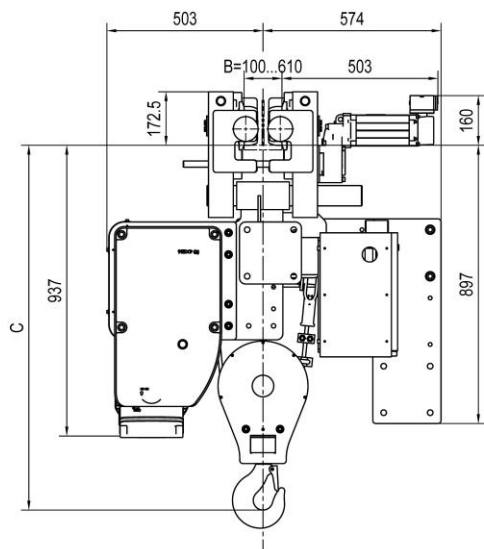
HTD032V21

1.15. Normal Headroom Hoist

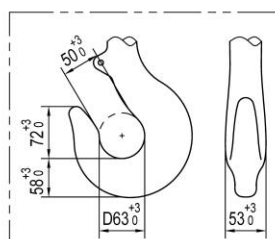
KNH4102 (Reeving 1:2)

HOL (m)	L1	L2	S1	C	Weight (kg)
18	957	668	90	1176	723+W0
24	1127	838	120	1316	812+W0
32	1357	1068	170	1316	932+W0
40	1587	1298	220	1316	1052+W0
52	1907	1618	280	1316	1220+W0

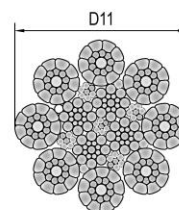
motor	D05	F15	D06	F16	D17	F17
L6	0	12	-12	85	75	85
W0	0	-4	33	22	55	39



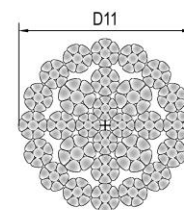
Hook dimensions
DIN15401-2.5T



Wire rope cross section
8x26, Wire Strength 2160 N/mm²
(Hol.≤18)



Wire rope cross section
35x7, Wire Strength 2160 N/mm²
(Hol.≥24)

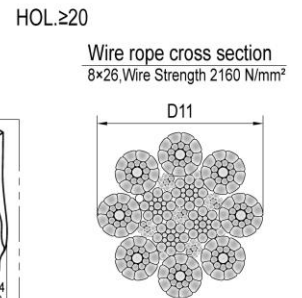
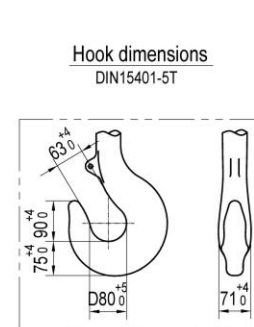
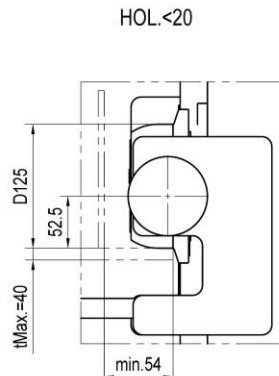
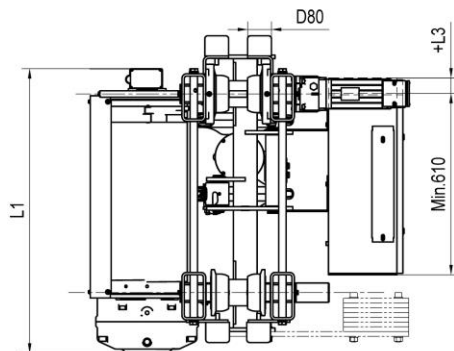
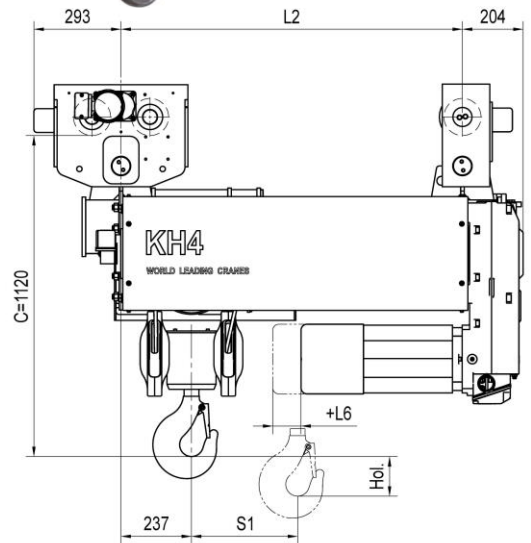
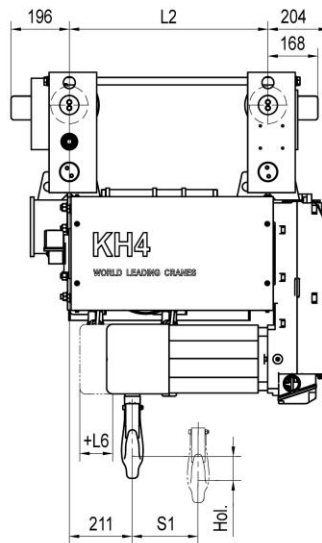
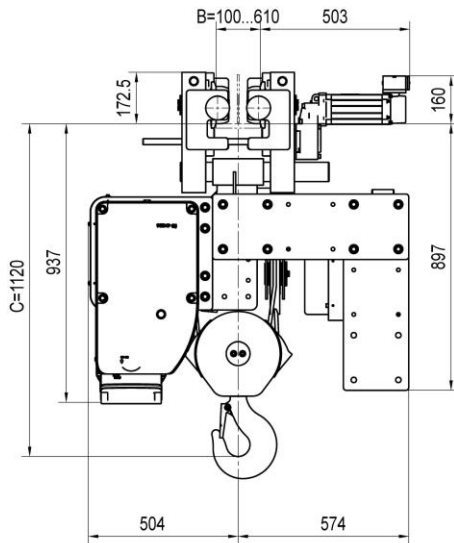


Load (kg)	Class FEM/ISO	Hoisting																Travelling	
		Gear ratio 160				Gear ratio 133				Gear ratio 82				Gear ratio 69				Gear Ratio 15	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
4000	3m/M6	8/1.3	1xD05	0-8	1xF15	10/1.7	1xD05	0-10	1xF15	16/2.7	1xD06	0-16	1xF16	20/3.3	1xD07	0-20	1xF17	0-20 / 1xF03	0-32 / 1xF03
5000	2m/M5	8/1.3	1xD05	0-8	1xF15	10/1.7	1xD05	0-10	1xF15	16/2.7	1xD06	0-16	1xF16	20/3.3	1xD07	0-20	1xF17	0-20 / 1xF03	0-32 / 1xF03

1.16. Normal Headroom Hoist KNH4104 (Reeving 1:4)

HOL (m)	L1	L2	S1	Weight (kg)
9	957	668	90	766+W0
12	1127	838	120	802+W0
16	1357	1068	170	850+W0
20	1587	1298	220	898+W0
26	1907	1618	280	1101+W0

motor	D05	F15	D06	F16	D07	F17
L6	0	12	-12	85	75	85
W0	0	-4	33	22	55	39



Load (kg)	Class FEM/ISO	Hoisting																Travelling	
		Gear ratio 160				Gear ratio 133				Gear ratio 82				Gear ratio 69				Gear Ratio 15	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	Speed / Motor Code (m/min)
8000	3m/M6	4/0.7 2-speed	1xD05	0-4 Stepless	1xF15	5/0.8 2-speed	1xD05	0-5 Stepless	1xF15	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD07	0-10 Stepless	1xF17	0-20 / 1xF03 (Hol. <20)	0-32 / 1xF03 (Hol. <20)
10000	2m/M5																	0-20 / 2xF02 (Hol. ≥20)	0-32 / 2xF02 (Hol. ≥20)

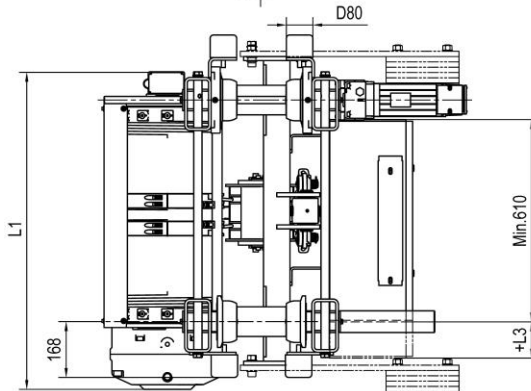
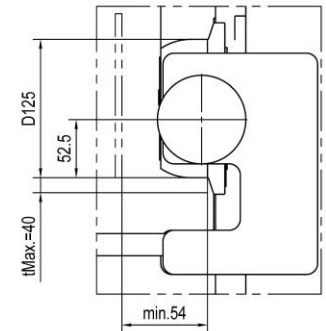
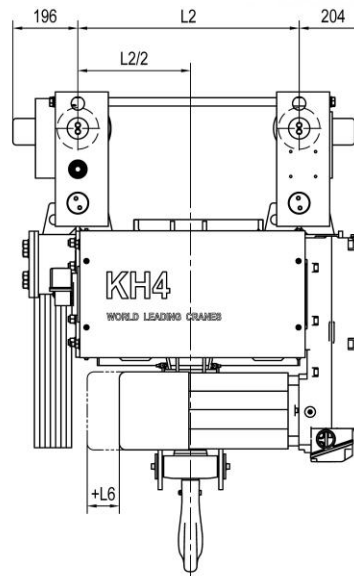
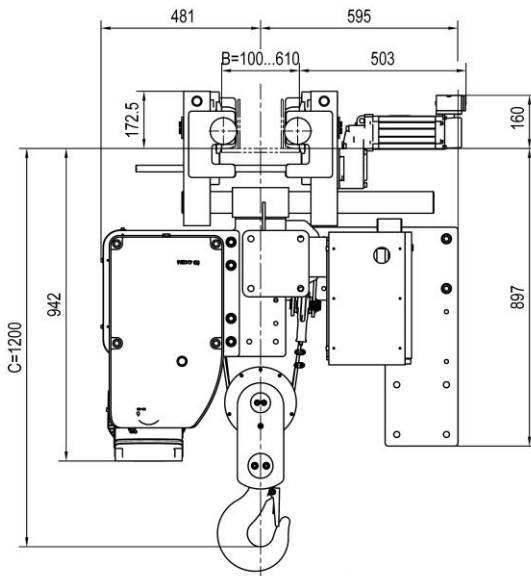
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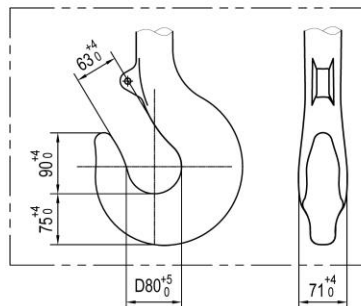
1.17. Normal Headroom Hoist KNH4202 (Reeving 2:2)

HOL (m)	L1	L2	C	Weight (kg)
10	957	668	1200	741+W0
14	1127	838	1200	792+W0
20	1357	1068	1340	860+W0
26	1587	1298	1340	928+W0
34	1907	1618	1340	1024+W0
46	2367	2078	1340	1160+W0

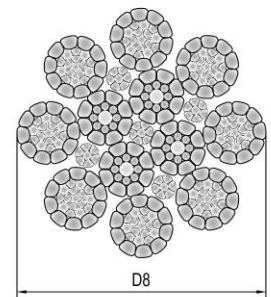
motor	D05	F15	D06	F16	D07	F17
L6	0	12	-12	85	75	85
W0	0	-4	33	22	55	39



Hook dimensions
DIN15401-5V



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)
		Gear ratio 160				Gear ratio 133				Gear ratio 82				Gear ratio 69				Speed/Motor Code
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	
4000	3m/M6	8/1.3 2-speed	1xD05	0-8 Stepless	1xF15	10/1.7 2-speed	1xD05	0-10 Stepless	1xF15	16/2.7 2-speed	1xD06	0-16 Stepless	1xF16	20/3.3 2-speed	1xD07	0-20 Stepless	1xF17	0-20 /1xF03
5000	2m/M5																	

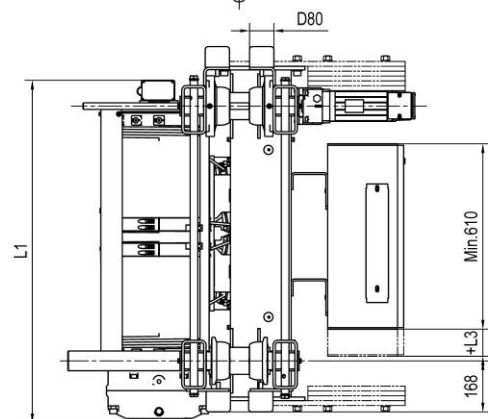
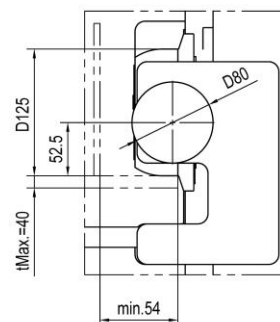
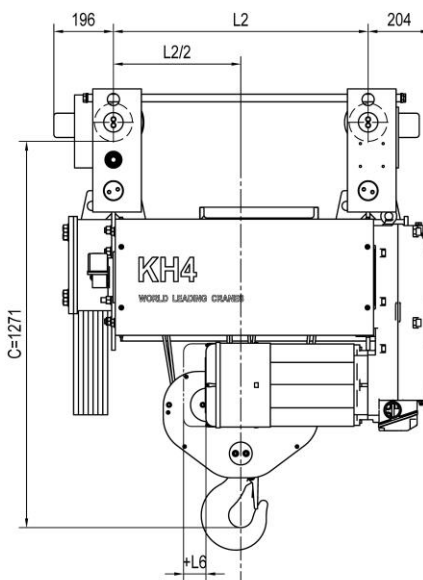
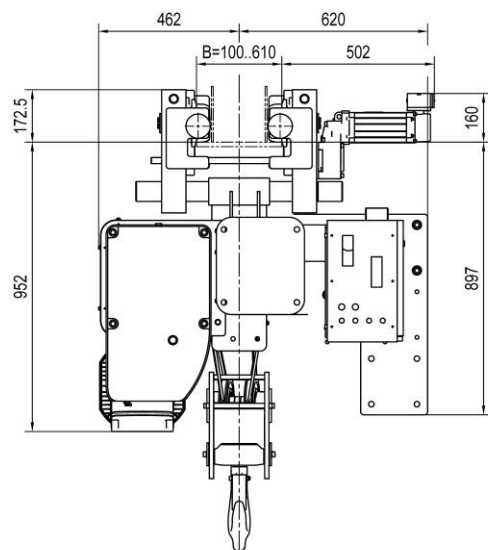
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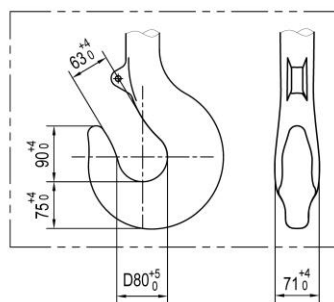
1.18. Normal Headroom Hoist KNH4204 (Reeving 2:4)

HOL (m)	L1	L2	Weight (kg)
5	957	668	933+W0
7	1127	838	972+W0
10	1357	1068	1026+W0
13	1587	1298	1080+W0
17	1907	1618	1155+W0
23	2367	2078	1262+W0

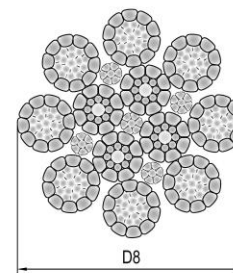
motor	D05	F15	D06	F16	D07	F17
L6	0	12	-12	85	75	85
W0	0	-4	33	22	55	39



Hook dimensions
DIN15401-5V



Wire rope cross section
8x26, Wire Strength 2160 N/mm²

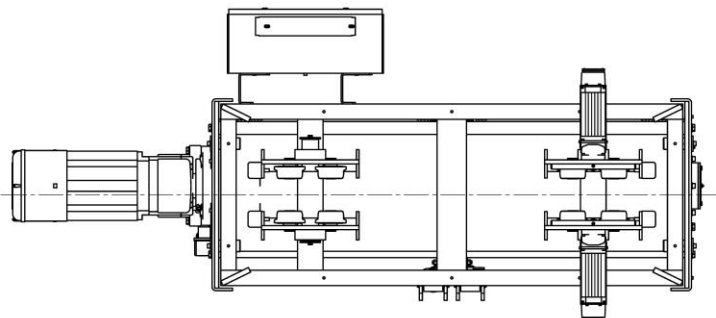
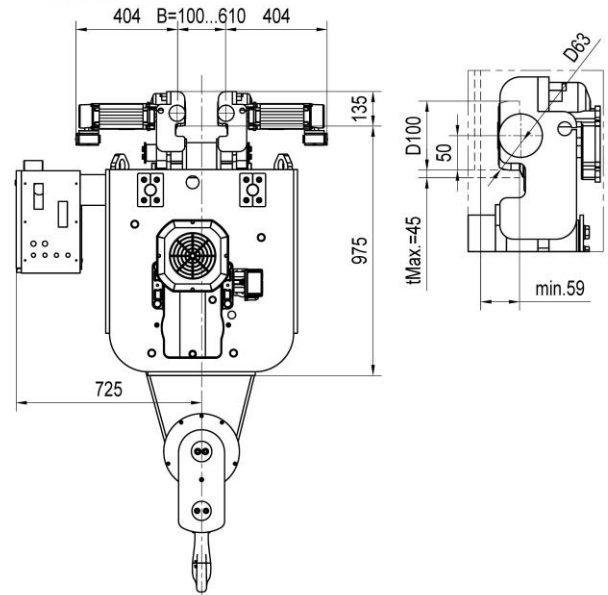
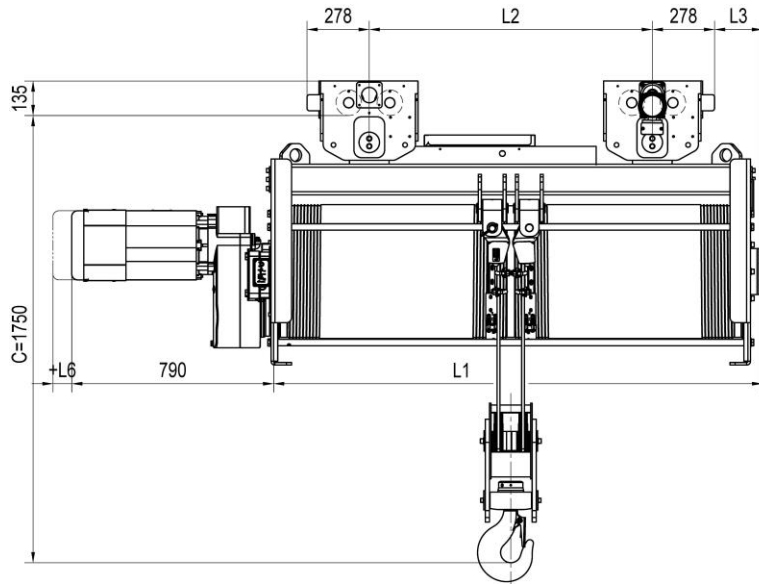


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)
		Gear ratio 160				Gear ratio 133				Gear ratio 82				Gear ratio 69				Gear ratio 15
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	
8000	3m/M6	4/0.7 2-speed	1xD05	0-4 Stepless	1xF15	5/0.8 2-speed	1xD05	0-5 Stepless	1xF15	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD07	0-10 Stepless	1xF17	0-20/1xF03
10000	2m/M5																	

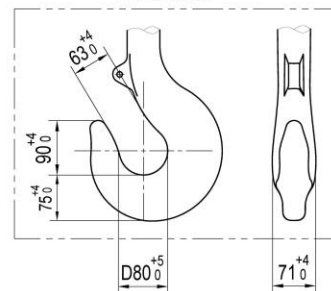
1.20. Hang Normal Headroom Hoist **KNK5202** (Reeving 2:2)

Hol (m)	L1	L2	L3	Weight (kg)
22	1022	600	-43	1450+W0
28.5	1222	800	-43	1481+W0
38	1522	807	104	1633+W0
50.5	1922	1107	154	1775+W0
61.5	2272	1107	329	1961+W0
77.5	2772	1600	332	2240+W0
87	3072	1900	332	2436+W0

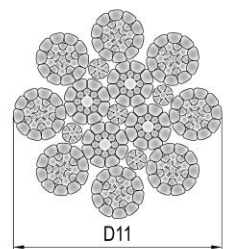
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



Wire rope cross section
8x26, Wire Strength 2160 N/mm²

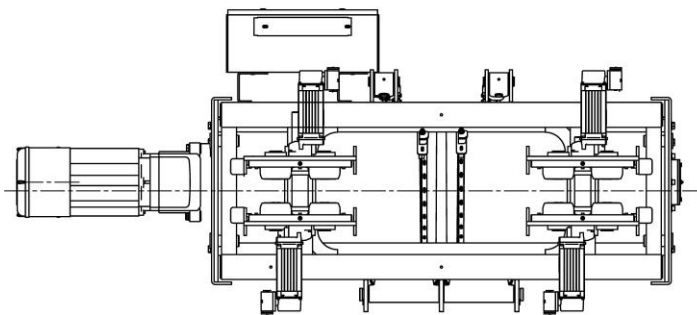
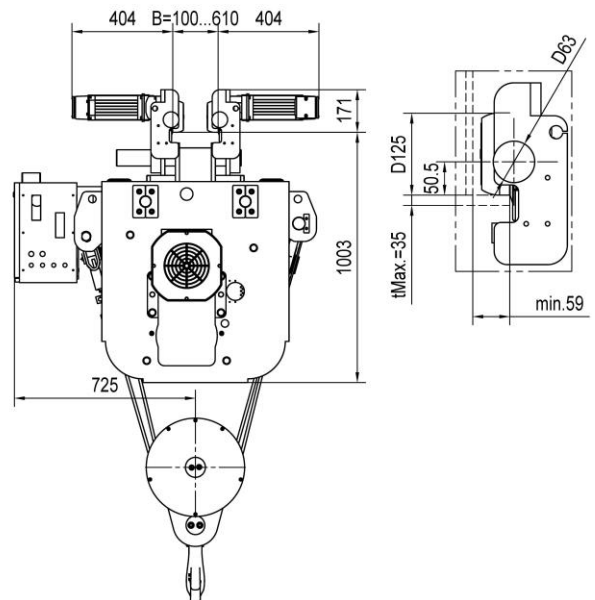
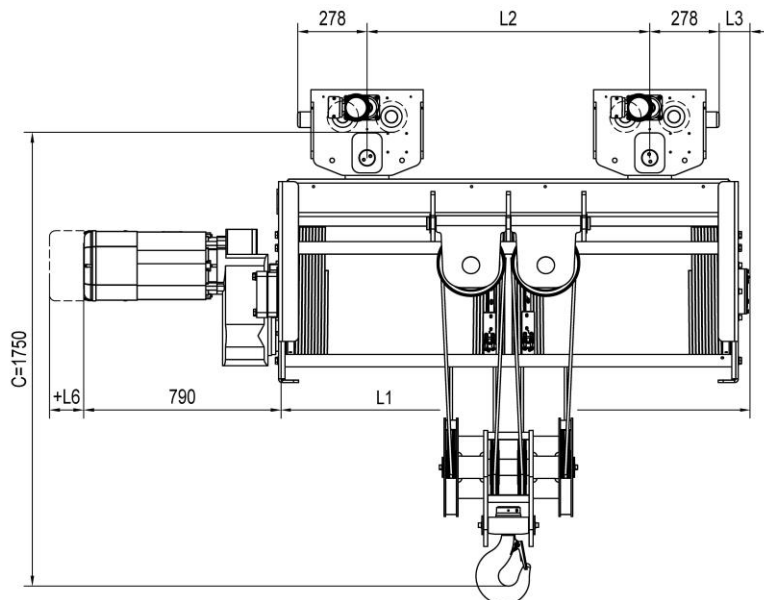


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
6300	3m/M6	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD06	0-10 Stepless	1xF16	12.5/2 2-speed	1xD07	0-12.5 Stepless	1xF17	0-16 Stepless	1xF18	0-20 Stepless	1xF19	0-25 / 2xF02	0-32 / 2xF02
8000	2m/M5																		
10000	1Am/M4						1xD07		1xF17		1xD08		1xF18		1xF19		N/A		

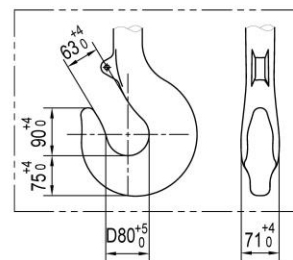
1.21. Hang Normal Headroom Hoist **KNK5204** (Reeving 2:4)

HoI (m)	L1	L2	L3	Weight (kg)
11	1022	600	-43	1496+W0
14	1222	800	-43	1527+W0
19	1522	807	104	1673+W0
25	1922	1107	154	1808+W0
30.5	2272	1107	329	1988+W0
38.5	2772	1307	479	2254+W0
43.5	3072	1307	629	2444+W0

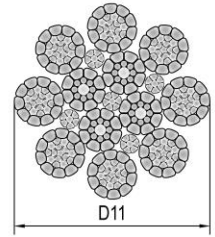
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor		
12500	3m/M6	4/0.7 2-speed	1xD06	0-4 Stepless	1xF16	5/0.8 2-speed	1xD06	0-5 Stepless	1xF16	6.3/1.1 2-speed	1xD07	0-6.3 Stepless	1xF17	0-8 Stepless	1xF18	0-10 Stepless	1xF19	0-25/ 4xF02	0-32/ 4xF03
16000	2m/M5																		
20000	1Am/M4						1xD07		1xF17		N/A		1xF18		1xF19		N/A		

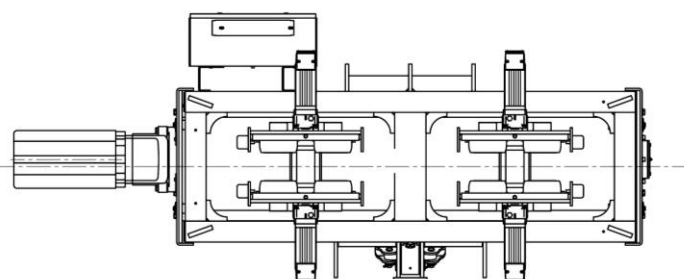
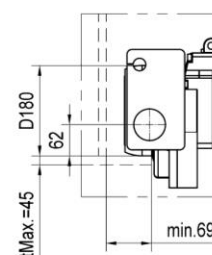
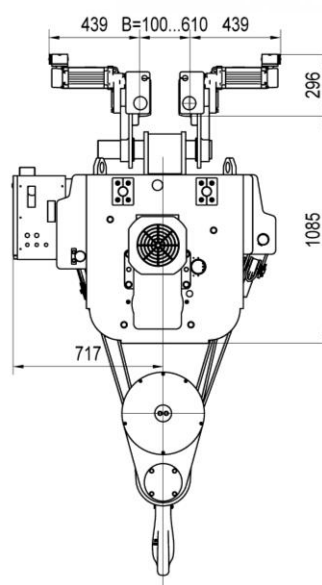
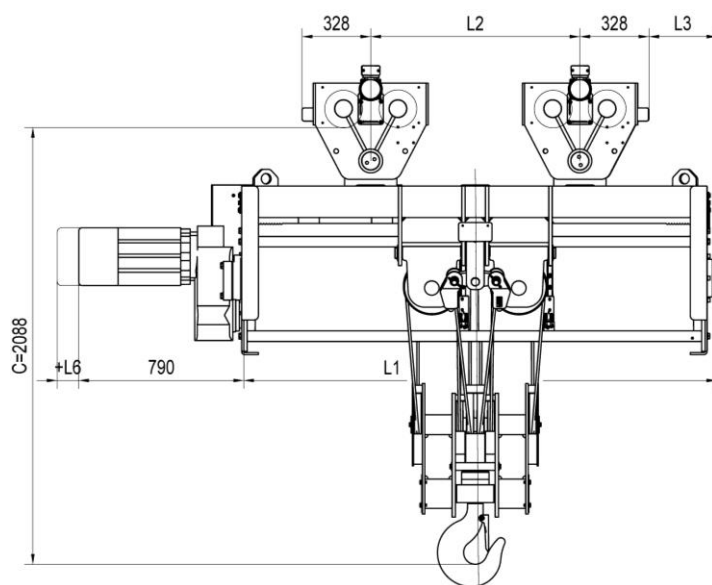
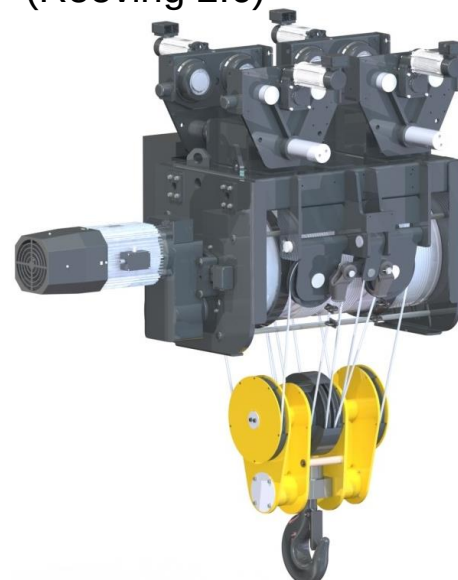
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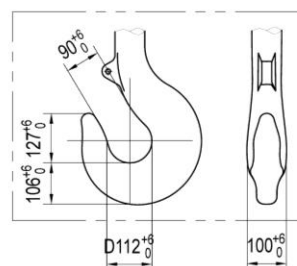
1.22. Hang Normal Headroom Hoist KNK5206 (Reeving 2:6)

Hol (m)	L1	L2	L3	Weight (kg)
9.5	1222	600	7	1925+W0
12.5	1522	600	157	2083+W0
16.5	1922	800	257	2487+W0
20.5	2272	1000	332	2616+W0
25.5	2772	1000	582	2813+W0
29	3072	1200	632	2940+W0

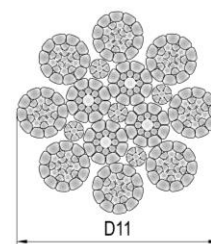
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-10T



Wire rope cross section
8x26 Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)												
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 90	Gear ratio 63									
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code										
20000	3m/M6	2.5/0.4 2-speed	1xD06	0-2.5 Stepless	1xF16	3.2/0.5 2-speed	1xD06	0-3.2 Stepless	1xF16	4/0.7 2-speed	1xD07	0-4 Stepless	1xF17	0-5 Stepless	1xF18	0-6.3 Stepless	1xF19	0-20 / 4xF02	0-32 / 4xF03									
25000	2m/M5																											
30000	1Am/M4						1xD07		1xF17		1xD08		1xF18		N/A													

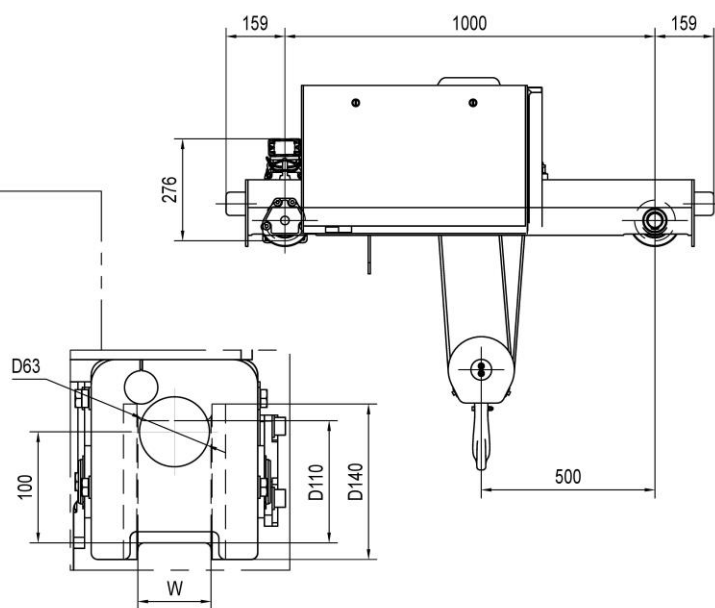
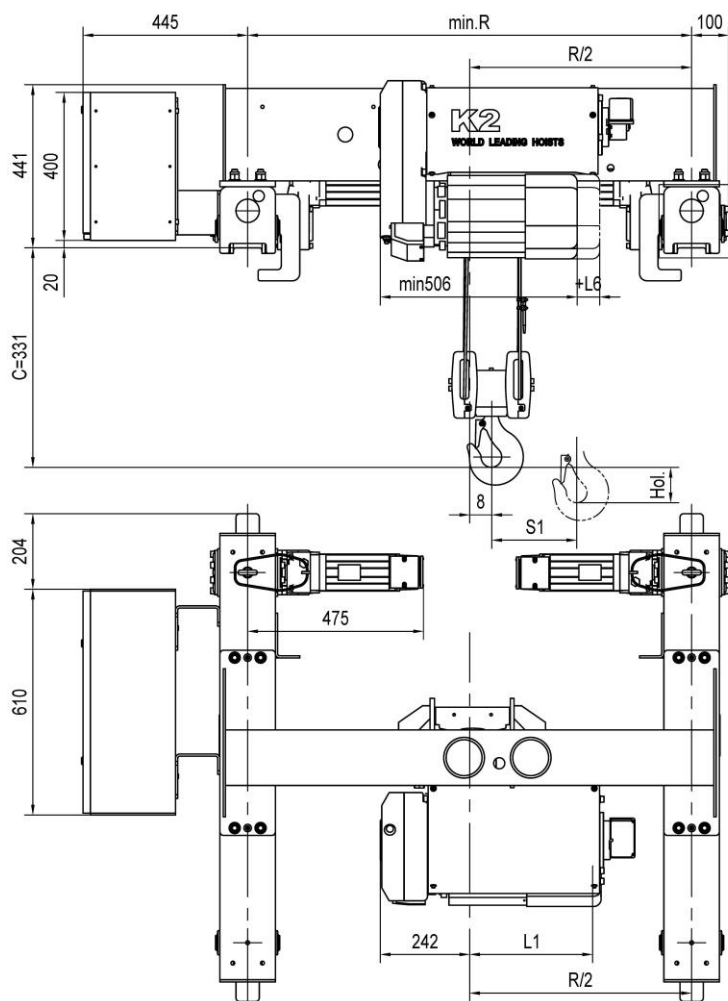
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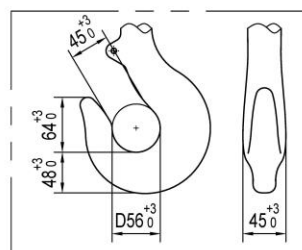
1.23. Double Girder Hoist **KNK2104** (Reeving 1:4)

Hol (m)	L1	S1	W	R	Weight (kg)
6	447	52	Default: 75	1200	413+W0
9.5	642	83		1400	452+W0

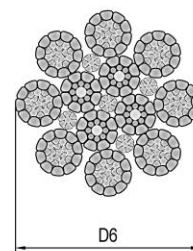
motor	D01	F11	D02	F12	D03	F13
L6	0	47	89	136	89	136
W0	0	0	11	11	12	9



Hook dimensions
DIN15401-1.6T



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)												Travelling (m/min)	
		Gear Ratio 70				Gear ratio 56				Gear Ratio 47				Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
2000	3m/M6	5/0.8 2-speed	1xD01	0-5 Stepless	1xF11	6.3/1.1 2-speed	1xD02	0-6.3 Stepless	1xF12	8/1.3 2-speed	1xD03	0-8 Stepless	1xF13	0-25/ 2xF01	0-32/ 2xF01
2500	3m/M6		1xD02		1xF12										
3200	2m/M5														

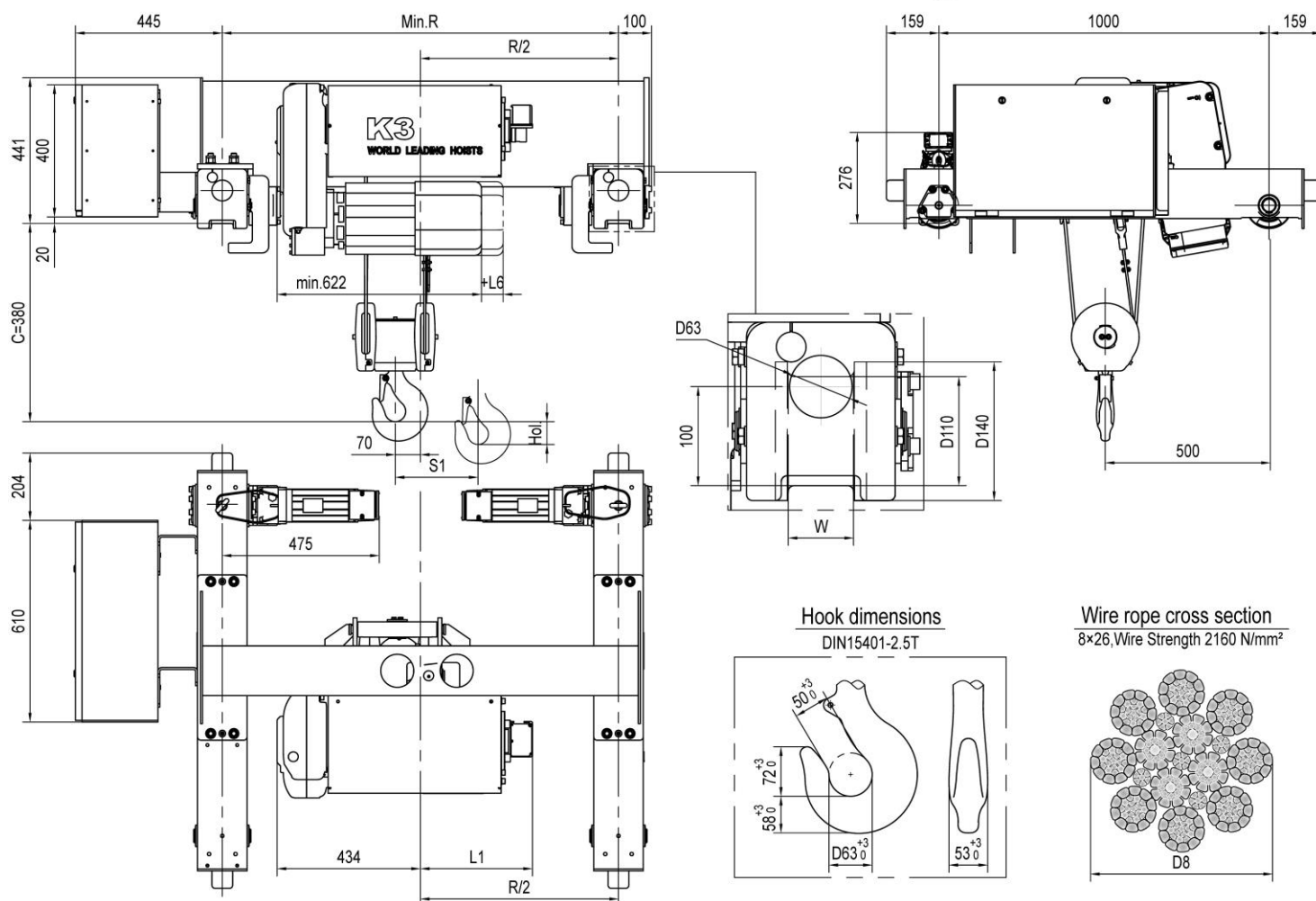
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1.24. Double Girder Hoist **KNK3104** (Reeving 1:4)

Hol (m)	L1	S1	W	R	Weight (kg)
6	340	52	Default: 75	1200	474+W0
9	490	83		1200	488+W0
12	660	108		1700	537+W0
15	820	140		1700	552+W0

motor	D03	F13	D04	F14
L6	0	47	71	118
W0	0	-3	17	12



Load (kg)	Class FEM/ISO	Hoisting (m/min)												Travelling (m/min)	
		Gear ratio 109				Gear ratio 90				Gear ratio 59				Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
4000	3m/M6	4/0.7 2-speed	1xD03	0-4 Stepless	1xF13	5/0.8 2-speed	1xD03	0-5 Stepless	1xF13	8/1.3 2-speed	1xD04	0-8 Stepless	1xF14	0-25/ 2xF01	0-32/ 2xF01
5000	2m/M5					N/A									
6300	1Am/M4														

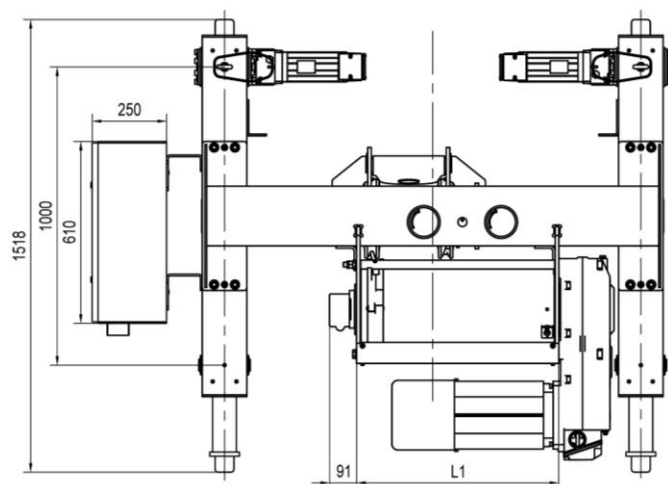
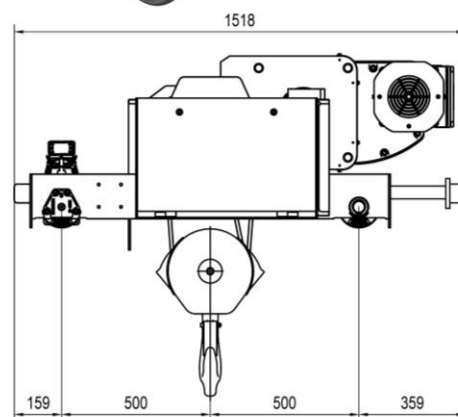
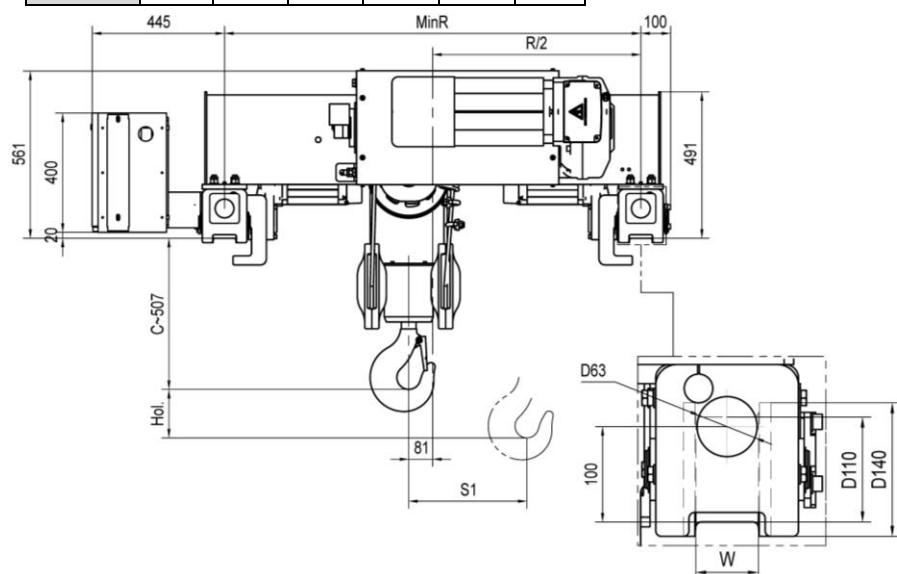
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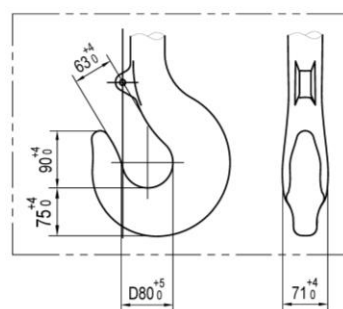
1.25. Double Girder Hoist KNH4104 (Reeving 1:4)

Hol (m)	L1	S1	W	R	Weight (kg)
9	680	55	Default:75	1400	791+W0
12	850	80		1700	840+W0
16	1080	100		2200	919+W0
20	1310	135		2700	1000+W0
26	1630	185		3200	1120+W0

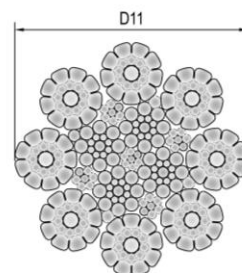
motor	D05	F15	D06	F16	D07	F17
W0	0	-4	33	22	55	39



Hook dimensions
DIN15401-5T



Wire rope cross section
8×26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)			
		Gear ratio 160				Gear ratio 133				Gear ratio 82				Gear ratio 69				Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
8000	3m/M6	4/0.7 2-speed	1xD05	0-4 Stepless	1xF15	5/0.8 2-speed	1xD05	0-5 Stepless	1xF15	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD07	0-10 Stepless	1xF17	0-25 / 2xF02	0-32 / 2xF02
10000	2m/M5					N/A													
12500	1Am/M4																		

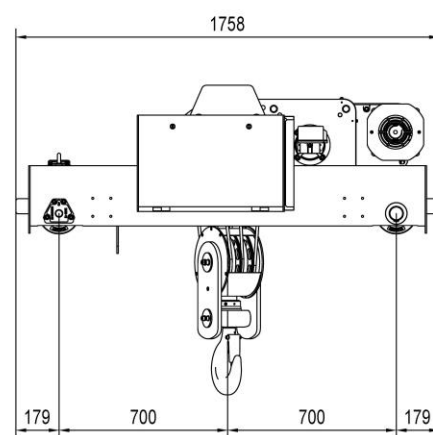
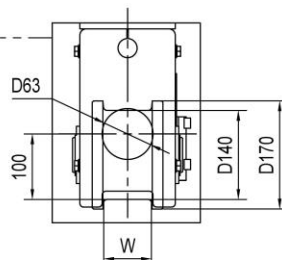
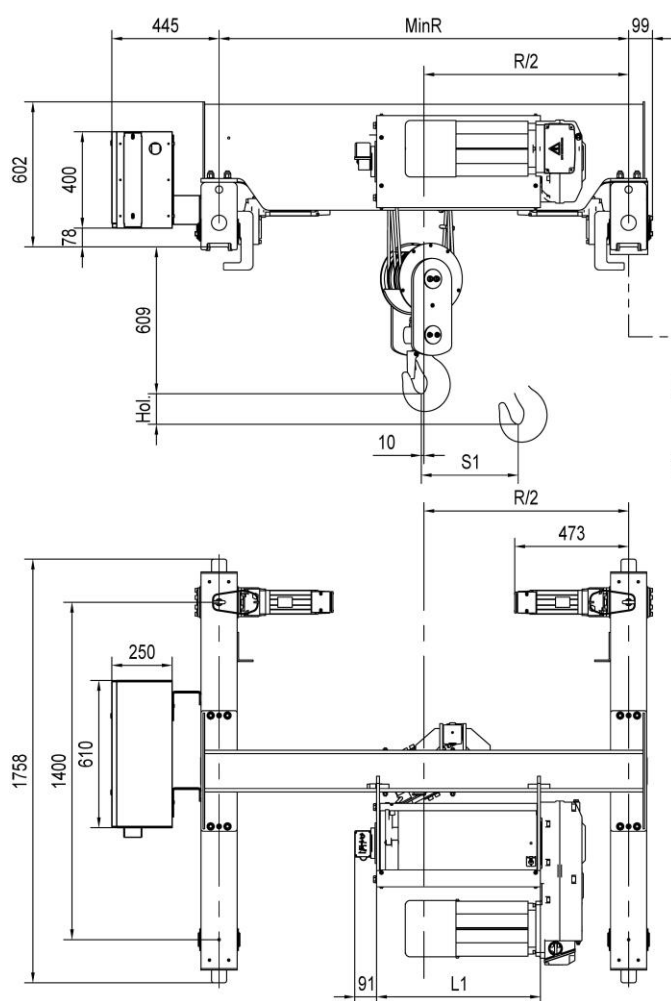
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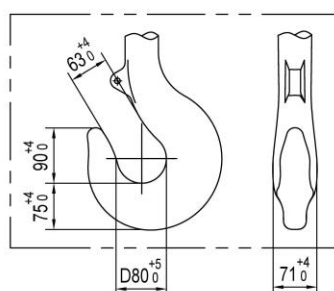
1.26. Double Girder Hoist KNH4106 (Reeving 1:6)

Hol (m)	L1	S1	W	R	Weight (kg)
6	680	99	Default:75	1700	1000+W0
8	850	115		2000	1060+W0
10	1080	131		2400	1145+W0
13	1310	169		3100	1255+W0
17	1630	219		3800	1343+W0

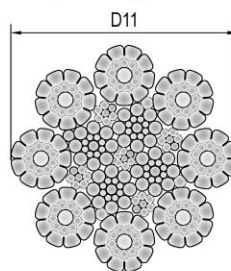
motor	D05	F15	D06	F16	D07	F17
W0	0	-4	33	22	55	39



Hook dimensions
DIN15401-5V



Wire rope cross section
8x26, Wire Strength 2160 N/mm²

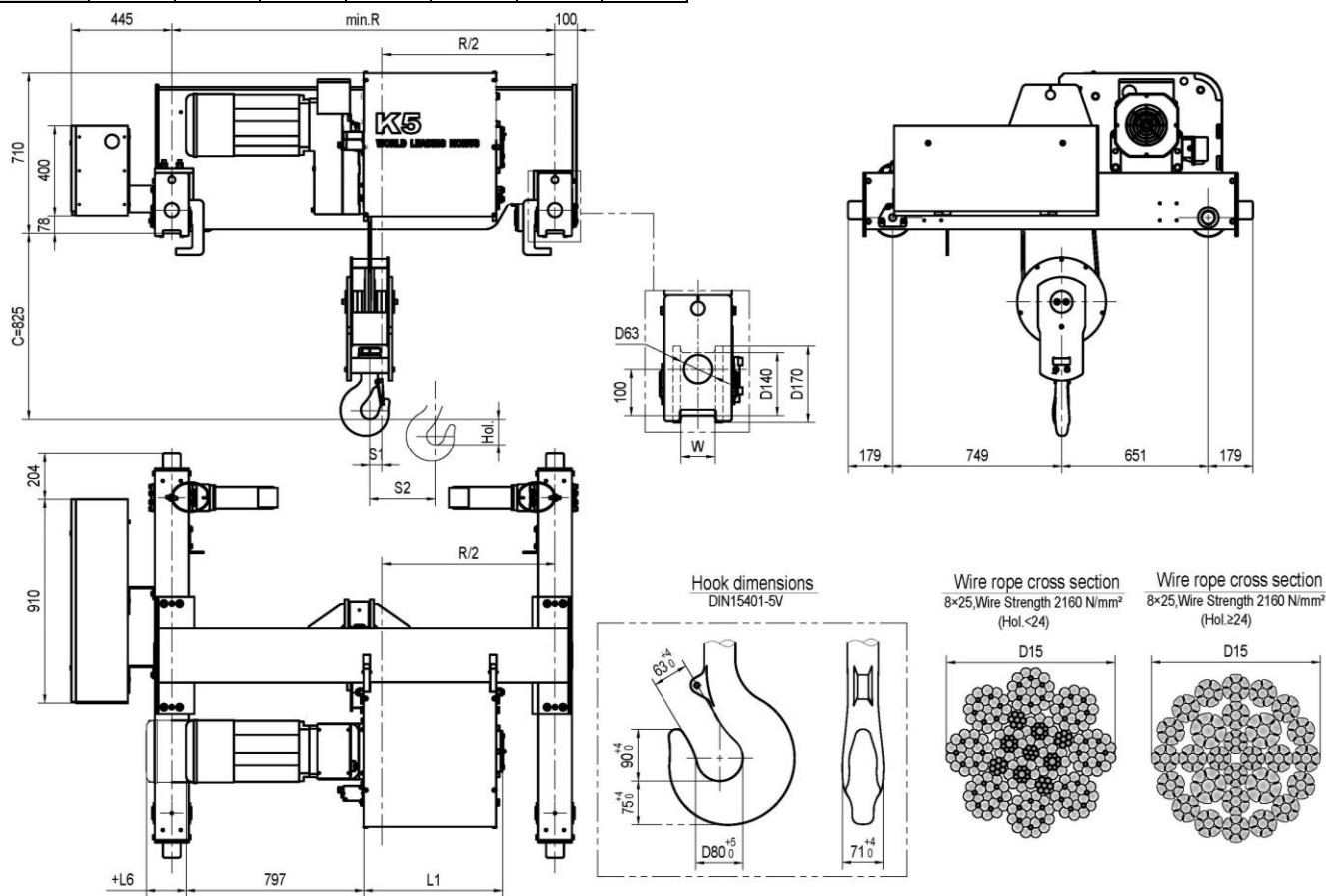


Load (kg)	Class FEM/ISO	Hoisting (m/min)												Travelling (m/min)
		Gear ratio 133				Gear ratio 82				Gear ratio 69				Speed/Motor Code
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	
12000	3m/M6	3.2/0.5	1xD05	0-3.2	1xF15	5/0.8	1xD06	0-5	1xF16	6.3/1.1	1xD07	0-6.3	1xF17	0~20 /2xF02
15000	2m/M5	2-speed		Stepless		2-speed		Stepless		2-speed		Stepless		

1.27. Double Girder Hoist **KNK5102** (Reeving 1:2)

Ho (m)	L1	S1	S2	W	R	Weight (kg)
15.5	565	44	145	Default:75	1700	1326+W0
18	615	51	170		1700	1348+W0
21.5	685	60	197		2000	1427+W0
25	765	70	234		2000	1460+W0
28	815	79	264		2000	1482+W0
36.5	1015	101	338		2400	1630+W0
47	1215	133	442		3100	1832+W0
61	1515	172	573		3400	2007+W0
80	1915	227	758		4200	2306+W0
97.5	2265	274	912		4800	2551+W0

motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
6300	3m/M6	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD06	0-10 Stepless	1xF16	12.5/2 2-speed	1xD07	0-12.5 Stepless	1xF17	0-16 Stepless	1xF18	0-20 Stepless	1xF19	0-25 / 2xF02	0-32 / 2xF02
8000	2m/M5																		
10000	1Am/M4																		

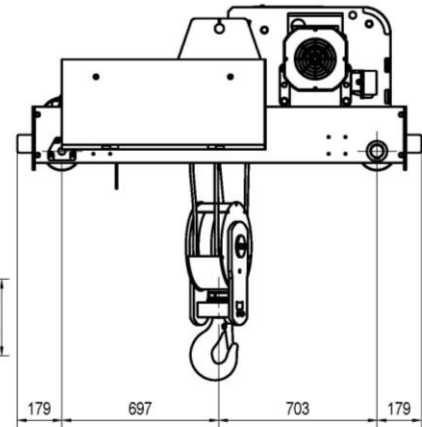
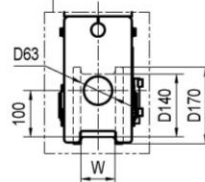
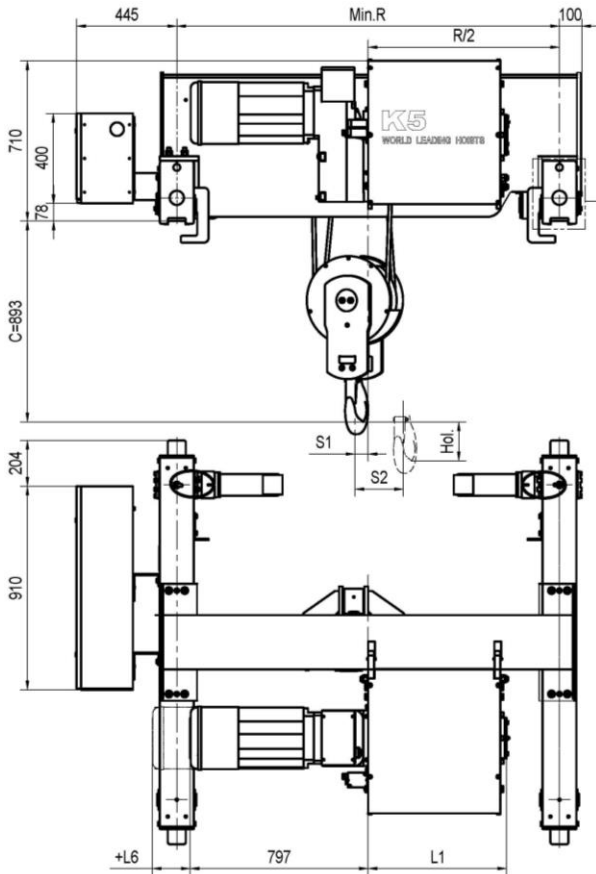
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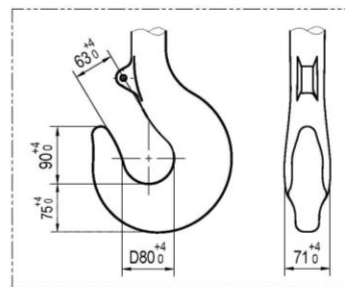
1.28. Double Girder Hoist **KNK5104** (Reeving 1:4)

Hol (m)	L1	S1	S2	W	R	Weight (kg)
7.5	565	24	72	Default:75	1400	1319+W0
9	615	29	86		1700	1389+W0
10.5	685	33	99		1700	1417+W0
12	765	38	115		2000	1499+W0
14	815	44	131		2000	1523+W0
18	1015	56	169		2400	1671+W0
23.5	1215	74	221		3100	1873+W0
30.5	1515	96	287		3400	2046+W0
40	1915	126	378		4200	2346+W0
48.5	2265	152	456		4800	2592+W0

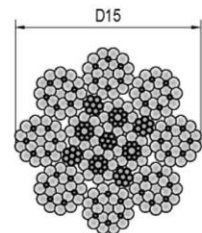
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



Wire rope cross section
8x25, Wire Strength 2160 N/mm²



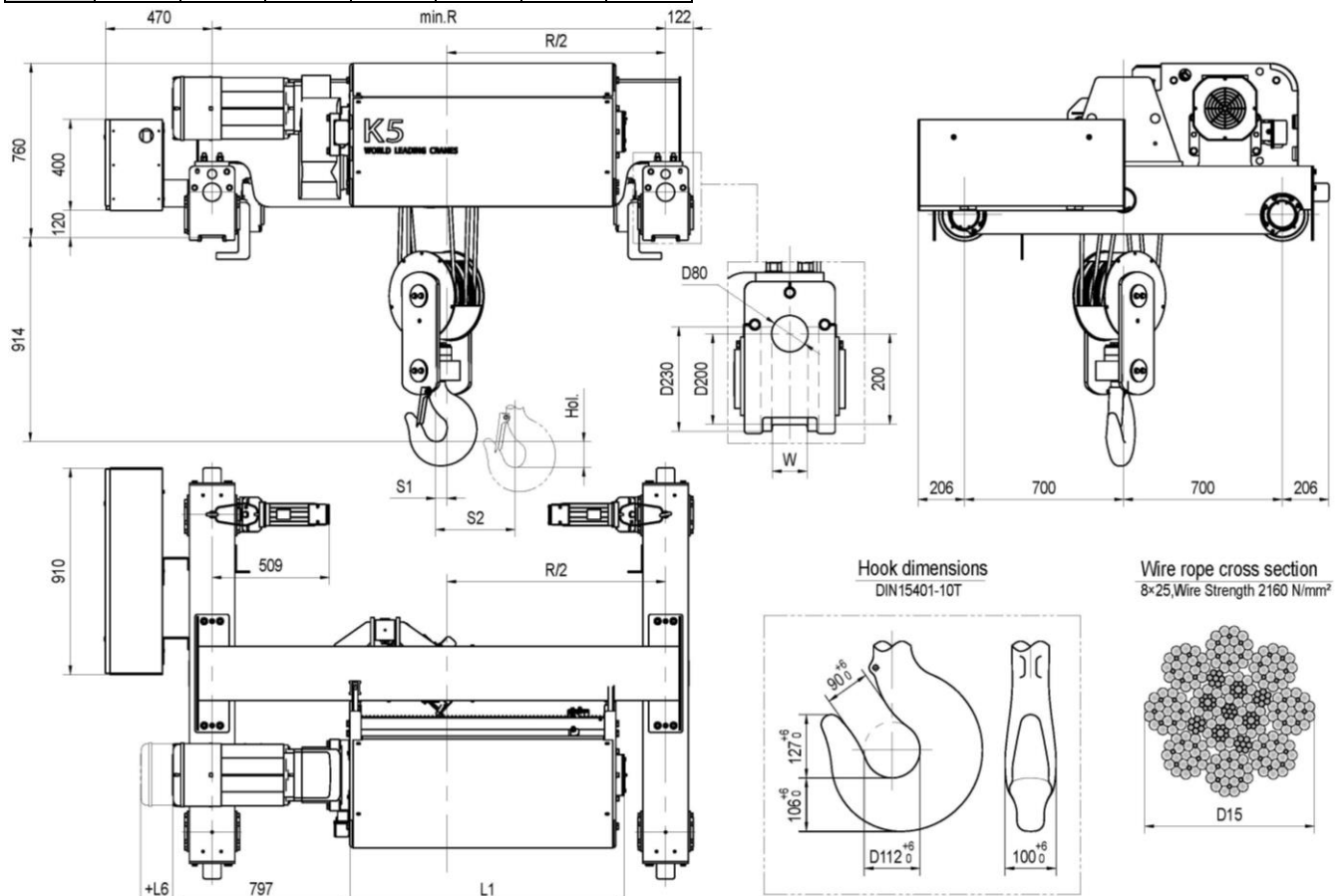
Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor		
12500	3m/M6	4/0.7 2-speed	1xD06	0-4 Stepless	1xF16	5/0.8 2-speed	1xD06	0-5 Stepless	1xF16	6.3/1 2-speed	1xD07	0-6.3 Stepless	1xF17	0-8 Stepless	1xF18	0-10 Stepless	1xF19	0-25 / 2xF02	0-32 / 2xF03
16000	2m/M5																		
20000	1Am/M4																		

*Travelling speed 0~32 should be equipped with the wheel of 200mm;

1.29. Double Girder Hoist **KNK5106** (Reeving 1:6)

Hol (m)	L1	S1	S2	W	R	Weight (kg)
5	565	16	48	Default:75	1700	1593+W0
6	615	19	57		1700	1615+W0
7	685	22	66		2000	1694+W0
8	765	26	77		2000	1725+W0
9	815	29	88		2000	1746+W0
12	1015	37	112		2400	1897+W0
15.5	1215	49	147		3100	2098+W0
20	1515	64	191		3400	2271+W0
26.5	1915	84	252		4200	2571+W0
32	2265	101	303		4800	2816+W0

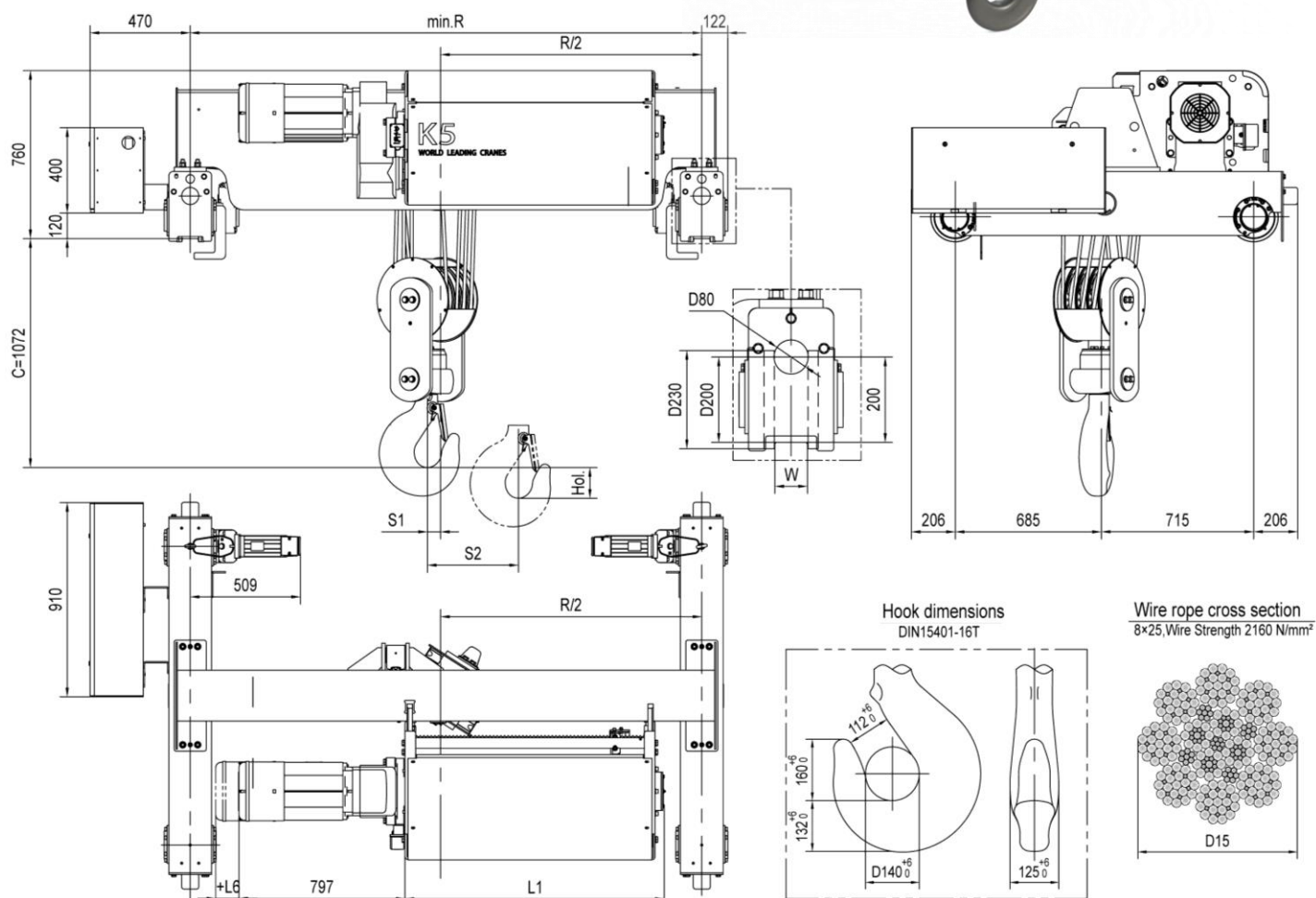
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Speed/Motor Code	Speed/Motor Code
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor		
20000	3m/M6	2.5/0.4 2-speed	1xD06	0~2.5 Stepless	1xF16	3.2/0.5 2-speed	1xD06	0~3.2 Stepless	1xF16	4/0.7 2-speed	1xD07	0~4 Stepless	1xF17	0~5 Stepless	1xF18	0~6.3 Stepless	1xF19	0~20/ 2xF02	0~32/ 2xF03
25000	2m/M5																		
30000	1Am/M4																		

KNK5108 (Reeving 1:8)

motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



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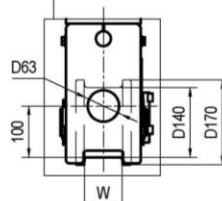
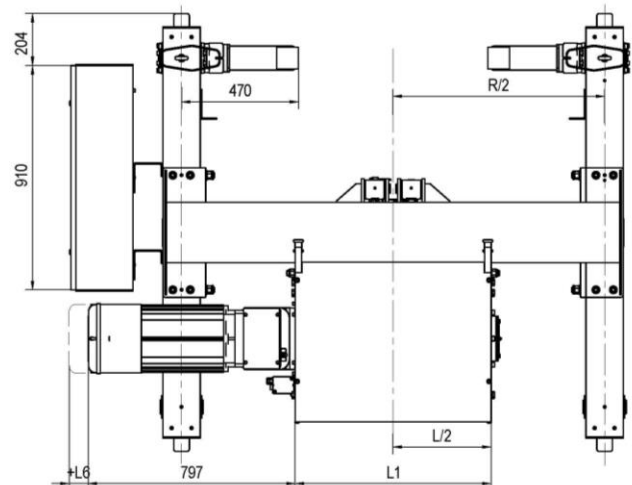
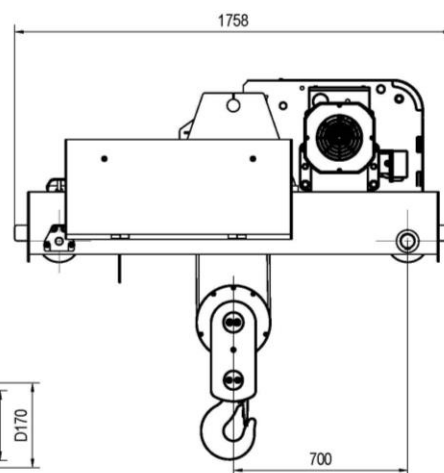
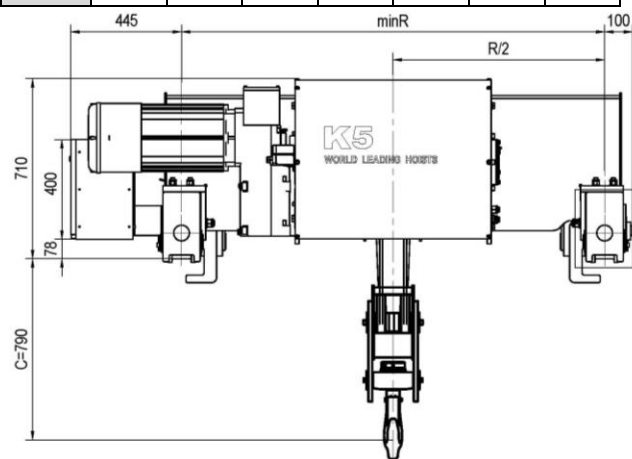
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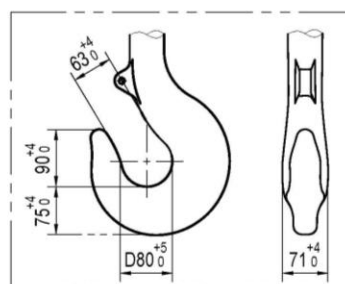
1.31. Double Girder Hoist **KNK5202** (Reeving 2:2)

Hol (m)	L1	W	R	Weight (kg)
15.5	815	Default:75	1700	1360+W0
22	1015		2000	1450+W0
28.5	1215		2000	1481+W0
38	1515		2400	1633+W0
50.5	1915		2700	1775+W0
61.5	2265		3100	1961+W0
77.5	2765		3800	2240+W0
87	3065		4200	2436+W0

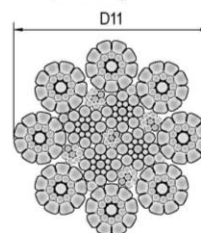
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



Wire rope cross section
8x19, Wire Strength 2160 N/mm²

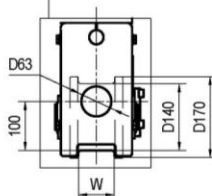
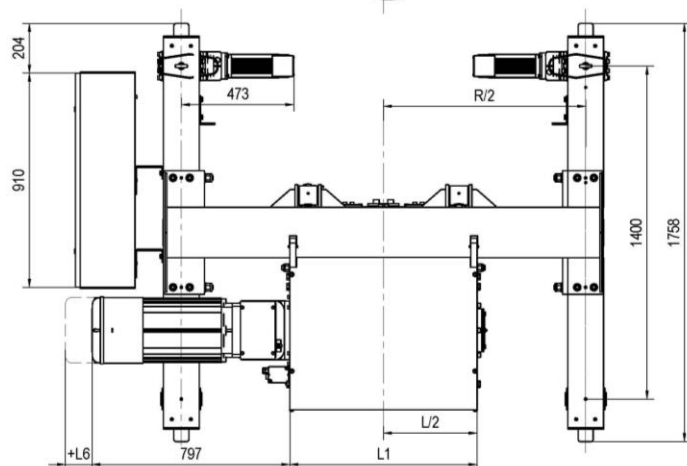
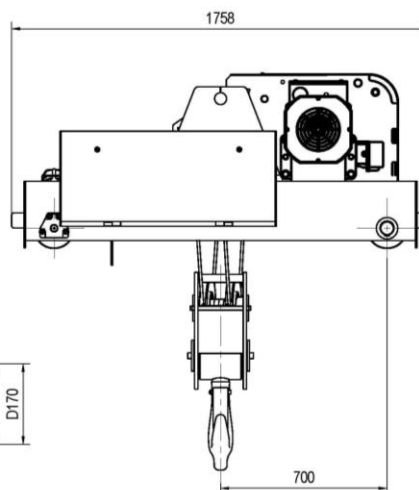
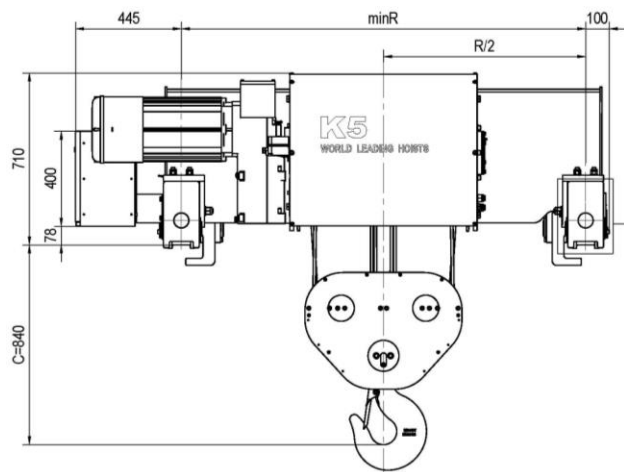


Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)			
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
6300	3m/M6	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD06	0-10 Stepless	1xF16	12.5/2 2-speed	1xD07	0-12.5 Stepless	1xF17	0-16 Stepless	1xF18	0-20 Stepless	1xF19	0-25 / 2xF02	0-32 / 2xF02
8000	2m/M5																		
10000	1Am/M4						1xD07		1xF17		1xD08		1xF18		N/A				

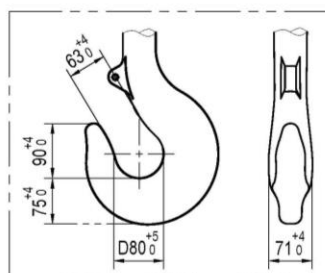
1.32. Double Girder Hoist **KNK5204** (Reeving 2:4)

Hol (m)	L1	W	R	Weight (kg)
7.5	815	Default:75	1700	1411+W0
11	1015		2000	1496+W0
14	1215		2000	1527+W0
19	1515		2400	1673+W0
25	1915		2700	1808+W0
30.5	2265		3100	1988+W0
38.5	2765		3800	2254+W0
43.5	3065		4200	2444+W0

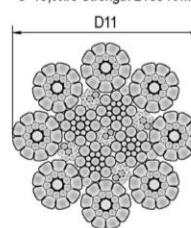
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



Wire rope cross section
8×19, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor		
12500	3m/M6	4/0.7 2-speed	1xD06	0-4 Stepless	1xF16	5/0.8 2-speed	1xD06	0-5 Stepless	1xF16	6.3/1.1 2-speed	1xD07	0-6.3 Stepless	1xF17	0-8 Stepless	1xF18	0-10 Stepless	1xF19	0-25/ 2xF02	0-32/ 2xF03
16000	2m/M5																		
20000	1Am/M4																		

*Travelling speed 0~32 should be equipped with the wheel of 200mm;

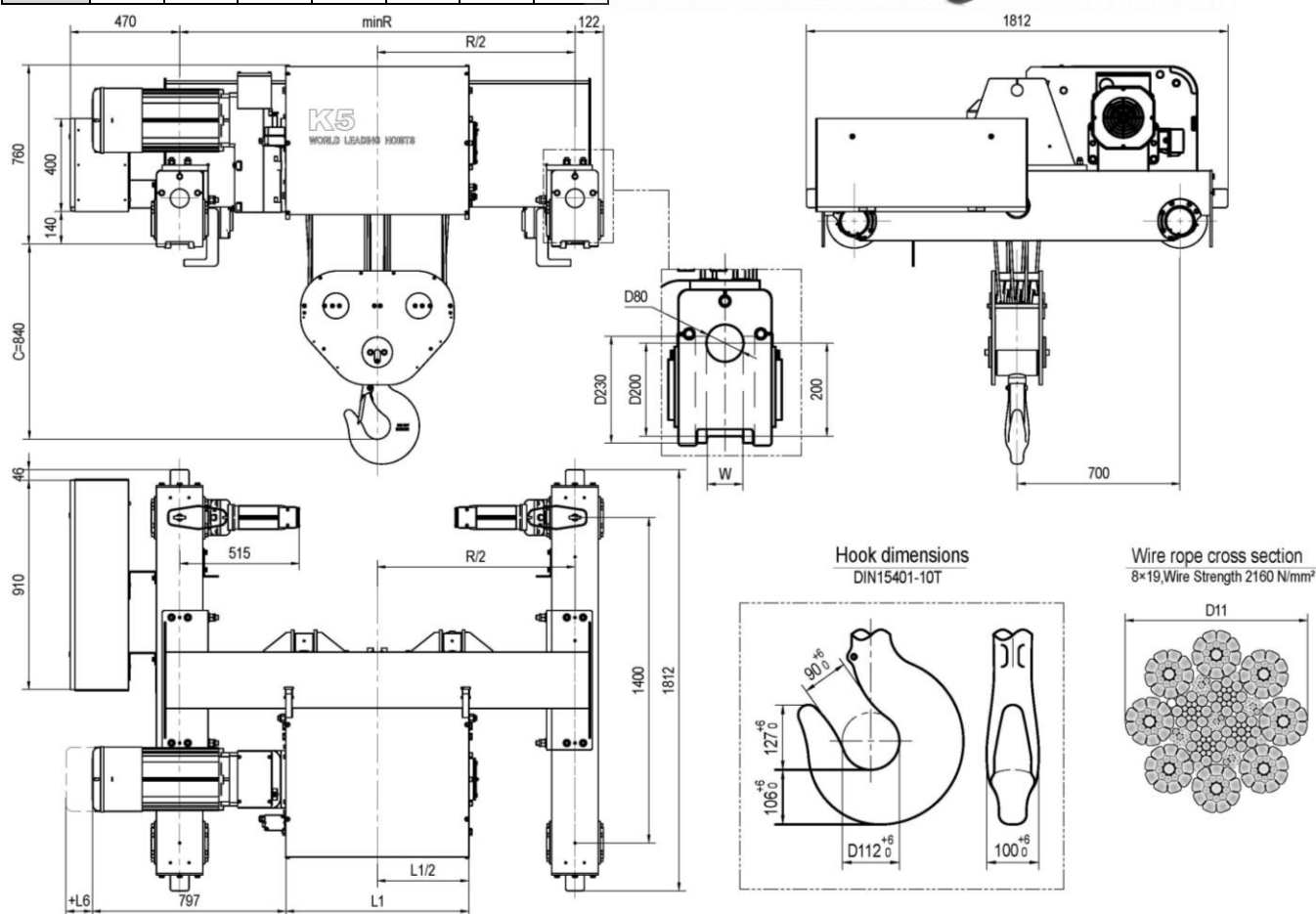
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1.33. Double Girder Hoist **KNK5206** (Reeving 2:6)

Hol (m)	L1	W	R	Weight (kg)
5	815	Default:75	1700	1664+W0
7	1015		2000	1756+W0
9.5	1215		2000	1786+W0
12.5	1515		2400	1940+W0
16.5	1915		2700	2081+W0
20.5	2265		3100	2269+W0
25.5	2765		3800	2549+W0
29	3065		4200	2747+W0

motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
20000	3m/M6	2.5/0.4 2-speed	1xD06	0~2.5 Stepless	1xF16	3.2/0.5 2-speed	1xD06	0~3.2 Stepless	1xF16	4/0.7 2-speed	1xD07	0~4 Stepless	1xF17	0~5 Stepless	1xF18	0~6.3 Stepless	1xF19	0~20 / 2xF02	0~32 / 2xF03
25000	2m/M5																		
30000	1Am/M4						1xD07		1xF17		1xD08		1xF18		1xF19		N/A		

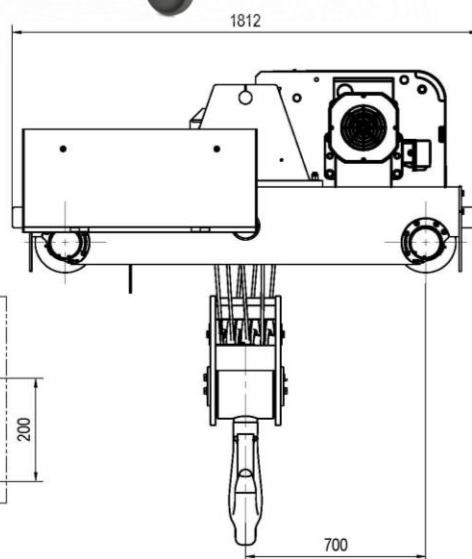
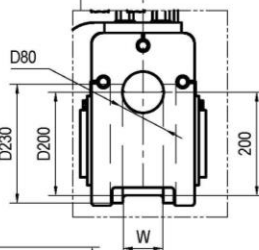
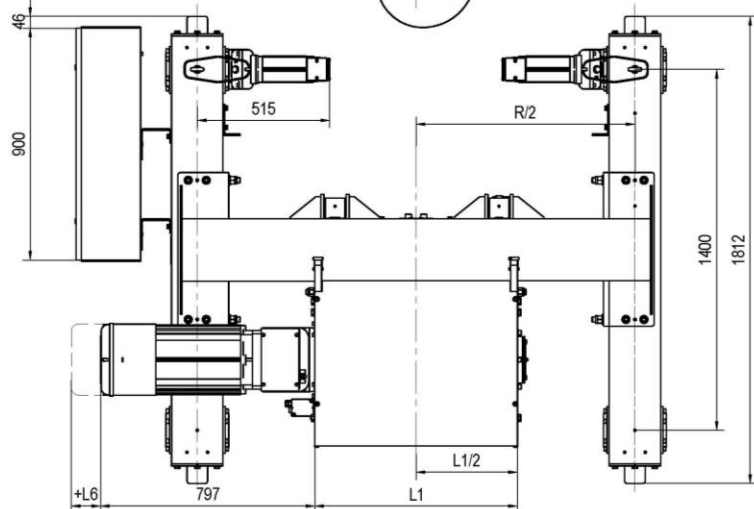
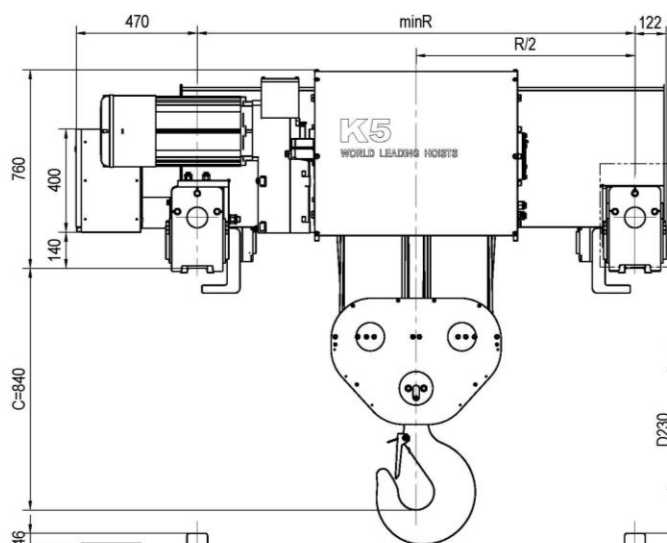
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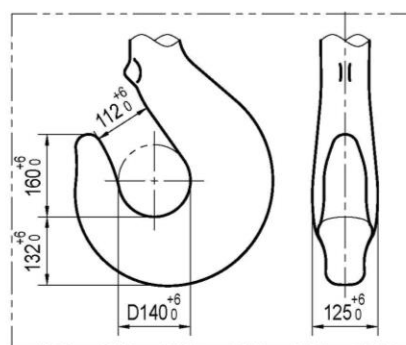
1.34. Double Girder Hoist **KNK5208** (Reeving 2:8)

Hol (m)	L1	W	R	Weight (kg)
7	1215	Default: 75	2000	1965+W0
9.5	1515		2400	2114+W0
12.5	1915		2700	2252+W0
15	2265		3100	2435+W0
19	2765		3800	2706+W0
21.5	3065		4200	2898+W0

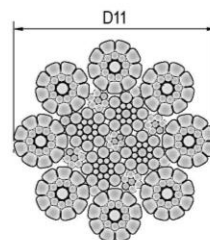
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-16T



Wire rope cross section
8x19, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Speed/Motor Code	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor		
32000	2m/M5	2/0.3 2-speed	1xD06	0-2 Stepless	1xF16	2.5/0.4 2-speed	1xD07	0-2.5 Stepless	1xF17	3.2/0.5 2-speed	1xD08	0-3.2 Stepless	1xF18	0-4 Stepless	1xF19	0-20 / 2xF03	0-32 / 2xF03
40000	1Am/M4																

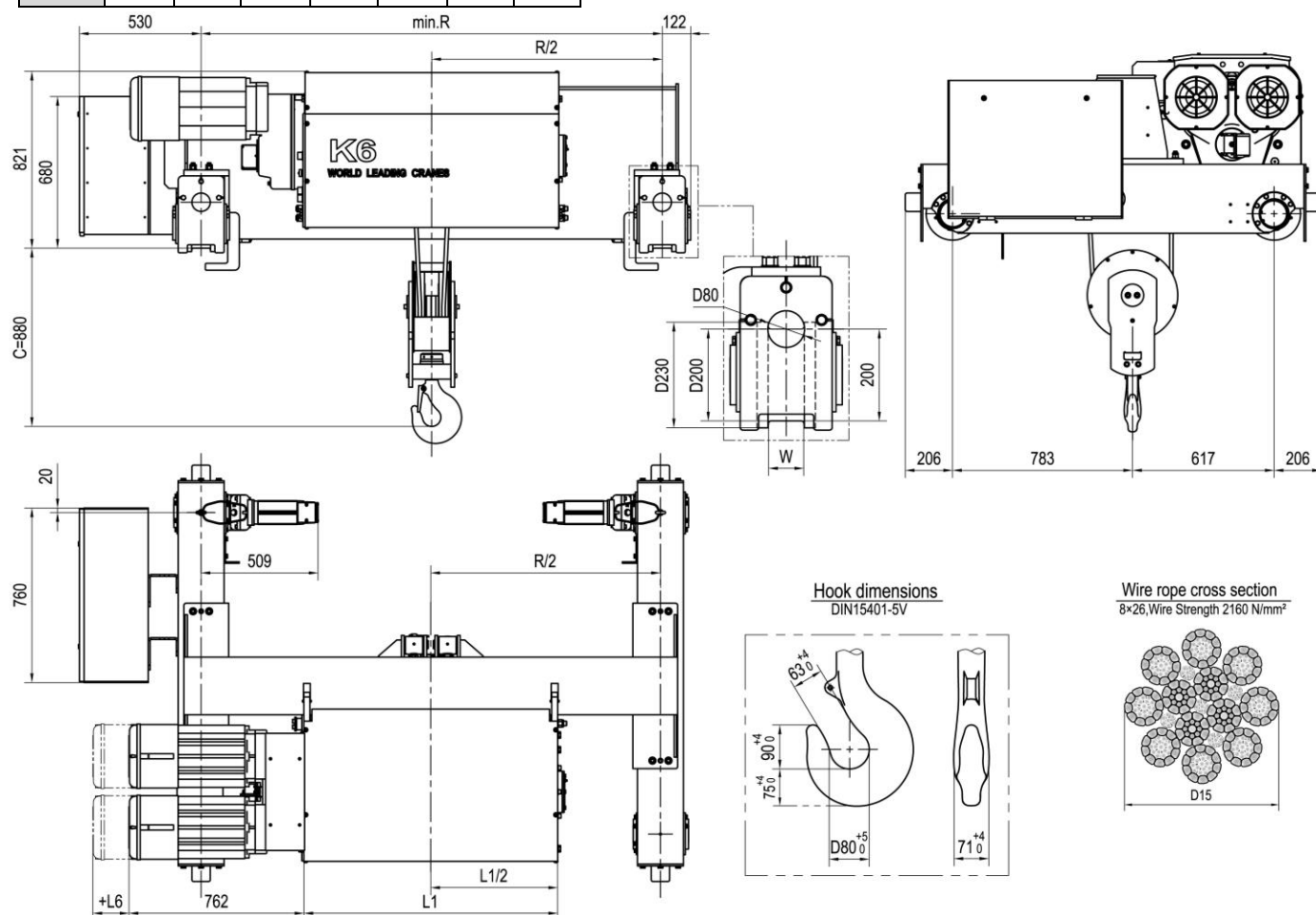
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1.35. Double Girder Hoist **KNK6202** (Reeving 2:2)

Hol (m)	L1	W	R	Weight (kg)
15.6	1105	Default: 75	2000	2204+W0
20.6	1305		2400	2360+W0
28	1615		2400	2489+W0
38	2025		3100	2788+W0
46.2	2375		3400	3068+W0
56.1	2785		3800	3328+W0
62.7	3065		4200	3518+W0
71	3405		4200	3679+W0

motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-22	44	12	44	20	32



Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)	
		Gear ratio 296.6				Gear ratio 234.6				Gear ratio 191.2				Gear ratio 147.8		Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
12500	3m/M6	8/1.3 2-speed	2xD06	0-8 Stepless	2xF16	10/1.7 2-speed	2xD06	0-10 Stepless	2xF16	12.5/2 2-speed	2xD07	0-12.5 Stepless	2xF17	0-16 Stepless	2xF18	0-25 / 2xF02	0-32 / 2xF03
16000	2m/M5																
20000	1Am/M4																

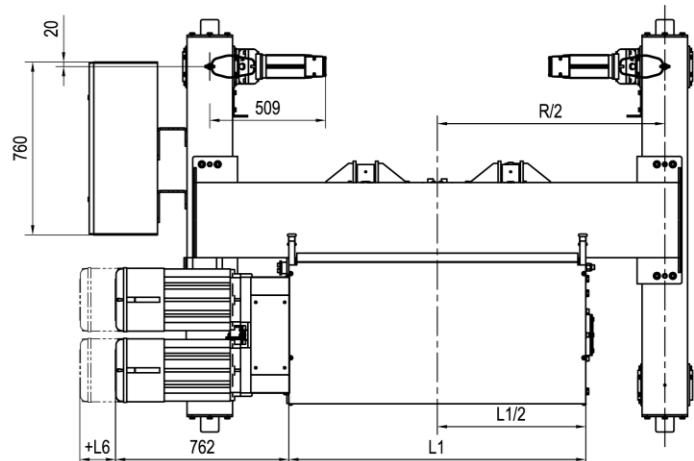
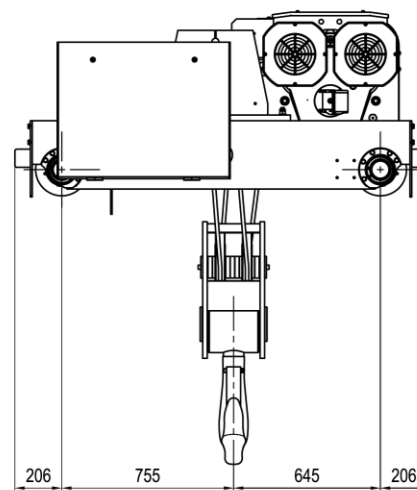
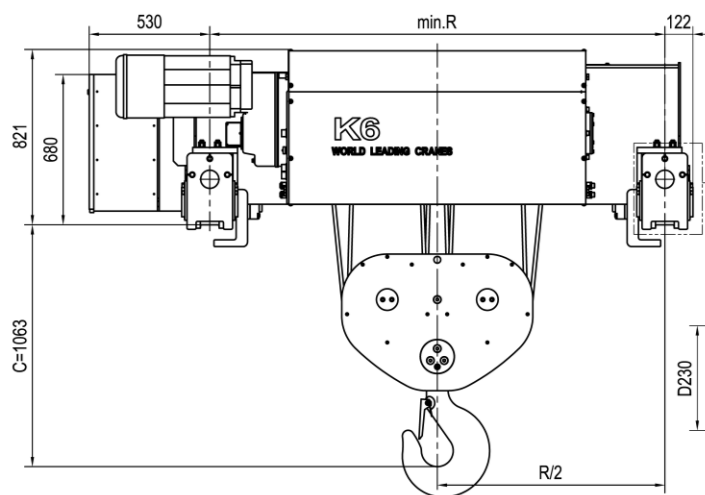
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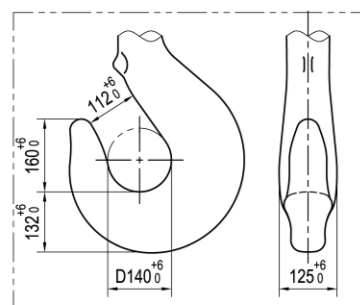
1.36. Double Girder Hoist **KNK6204** (Reeving 2:4)

Hol (m)	L1	W	R	Weight (kg)
7.5	1105	Default:75	2000	2542+W0
10	1305		2000	2624+W0
14	1615		2400	2823+W0
19	2025		2700	3051+W0
23	2375		3100	3355+W0
28	2785		3400	3600+W0
31	3065		3800	3793+W0
35.5	3405		4200	4034+W0

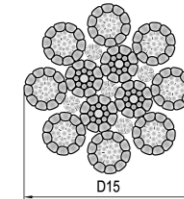
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-22	44	12	44	20	32



Hook dimensions
DIN15401-16T



Wire rope cross section
8x26, Wire Strength 2160 N/mm²

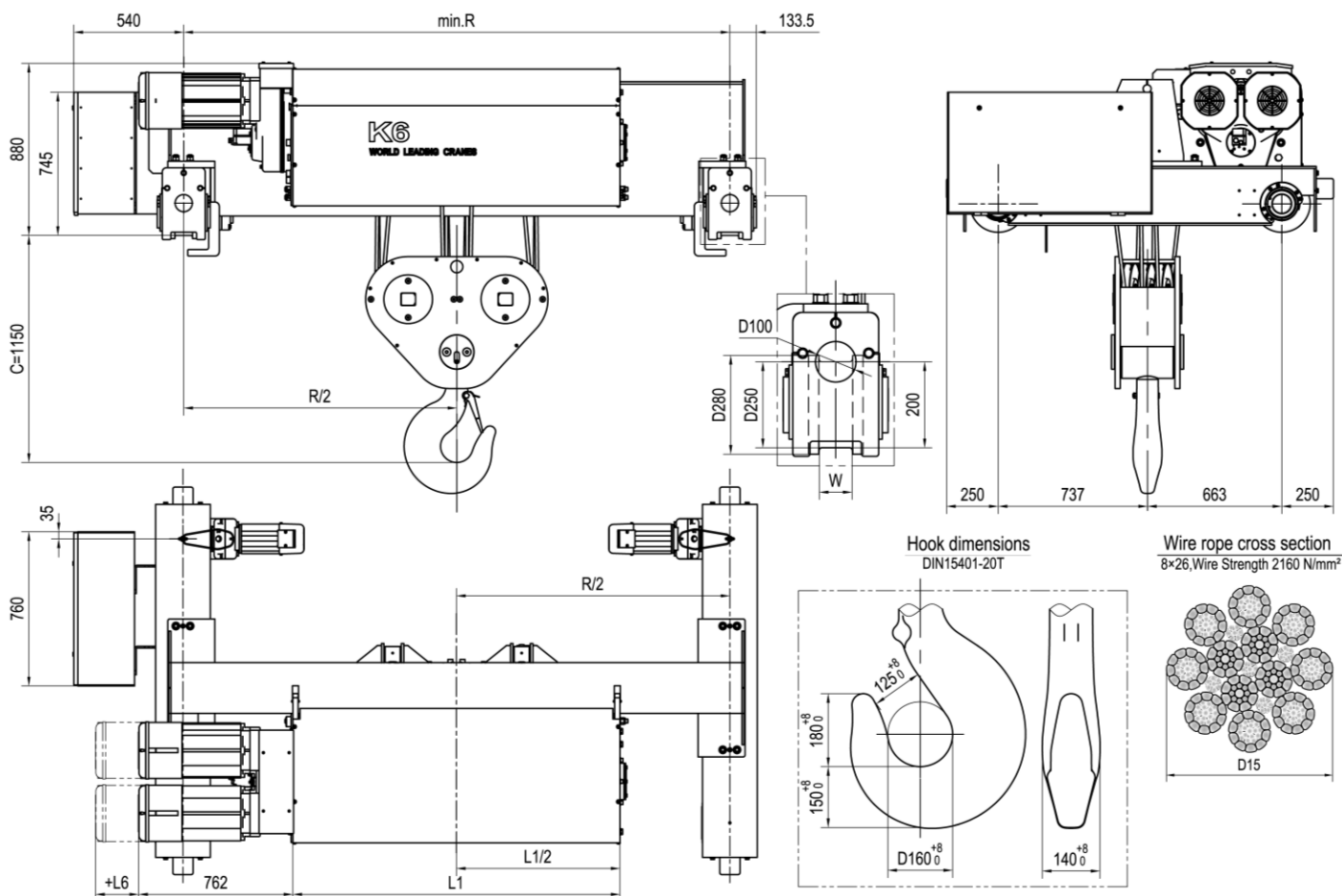


Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)	
		Gear ratio 296.6				Gear ratio 234.6				Gear ratio 191.2				Gear ratio 147.8		Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
25000	3m/M6	4/0.7 2-speed	2xD06	0-4 Stepless	2xF16	5/0.8 2-speed	2xD06	0-5 Stepless	2xF16	6.3/1.1 2-speed	2xD07	0-6.3 Stepless	2xF17	0-8 Stepless	2xF18	0-25/ 2xF03	0-32/ 2xF03
32000	2m/M5																
40000	1Am/M4																

1.37. Double Girder Hoist **KNK6206** (Reeving 2:6)

Hol (m)	L1	W	R	Weight (kg)
5.2	1105	Default:75	2000	2810+W0
6.8	1305		2000	2890+W0
9.3	1615		2400	3098+W0
12.6	2025		2700	3327+W0
15.4	2375		3100	3633+W0
18.7	2785		3800	3957+W0
20.9	3065		3800	4073+W0
23.6	3405		4200	4310+W0

motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-22	44	12	44	20	32



Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)	
		Gear ratio 296.6				Gear ratio 234.6				Gear ratio 191.2				Gear ratio 147.8		Gear ratio 115	Gear ratio 72
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
40000	3m/M6	2.5/0.4 2-speed	2xD06	0-2.5 Stepless	2xF16	3.2/0.5 2-speed	2xD06	0-3.2 Stepless	2xF16	4/0.7 2-speed	2xD07	0-4 Stepless	2xF17	0-5 Stepless	2xF18	0-25 / 2xF04	0-32 / 2xF04
50000	2m/M5																
60000	1Am/M4						2xD07		2xF17		2xD08		2xF18		N/A		

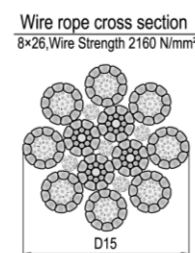
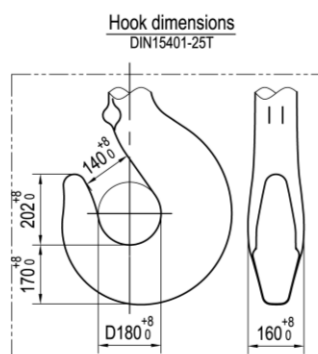
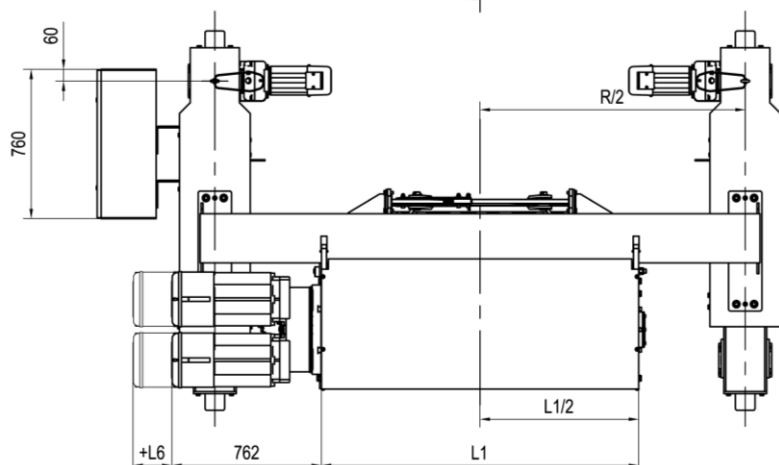
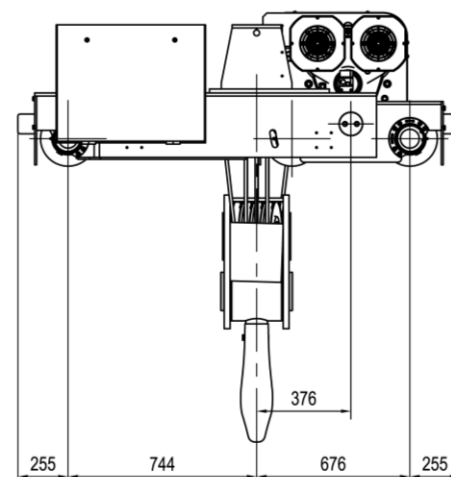
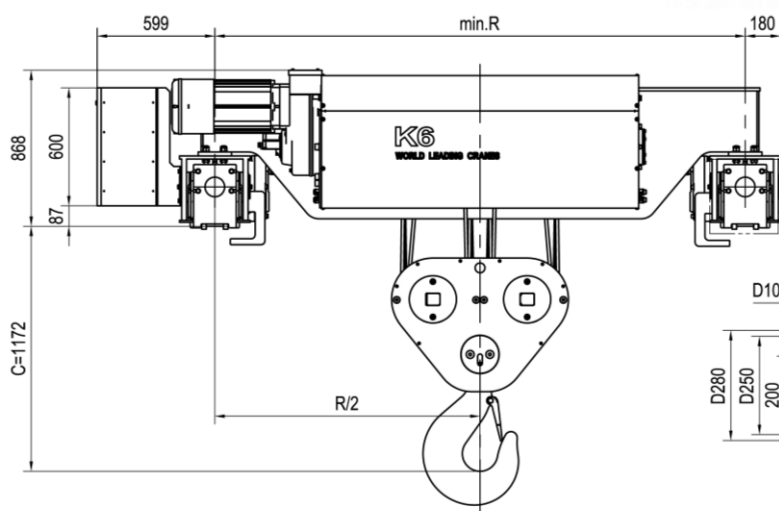
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1.38. Double Girder Hoist **KNK6208** (Reeving 2:8)

Hol (m)	L1	W	R	Weight (kg)
7	1615	Default:75	2400	3549+W0
9.5	2025		3100	3948+W0
11.5	2375		3100	3985+W0
14	2785		3800	4309+W0
15.6	3065		4200	4524+W0
17.7	3405		4200	4684+W0

motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-22	44	12	44	20	32



Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)	
		Gear ratio 296.6				Gear ratio 234.6				Gear ratio 191.2				Gear ratio 147.8		Gear ratio 115	Gear ratio 72
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
50000	3m/M6	2/0.3 2-speed	2xD06	0-2 Stepless	1xF16	2.5/0.4 2-speed	2xD06	0-2.5 Stepless	2xF16	3.2/0.5 2-speed	2xD07	0-3.2 Stepless	2xF17	0-4 Stepless	2xF18	0-25 / 2xF04	0-32 / 2xF04
63000	2m/M5																
80000	1Am/M4						2xD07		2xF17		2xD08		2xF18		2xF19		

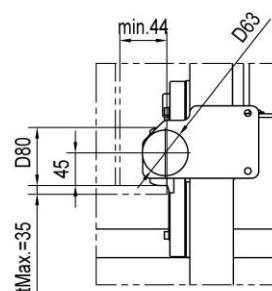
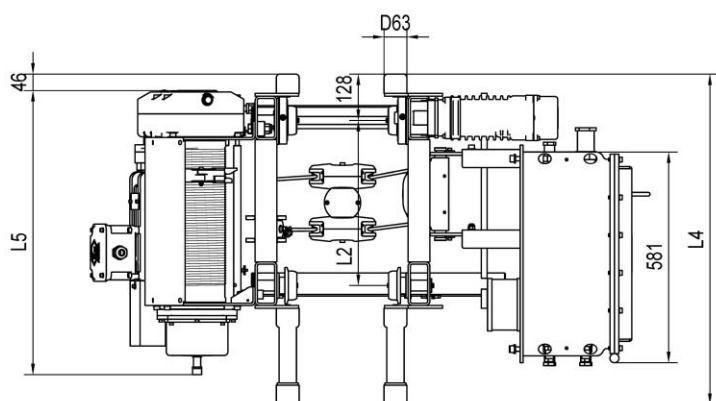
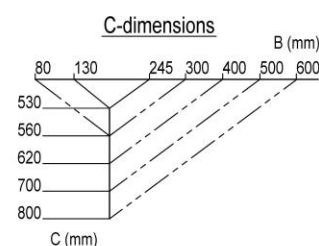
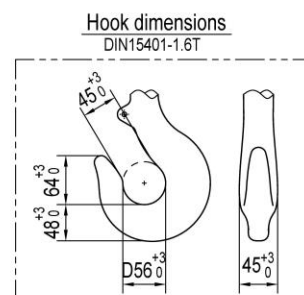
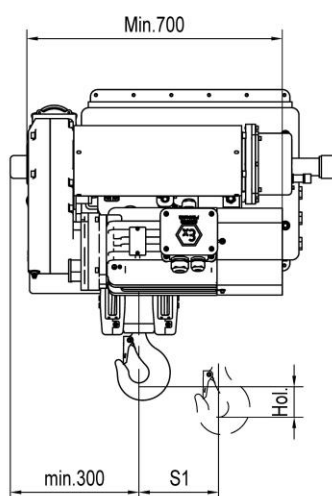
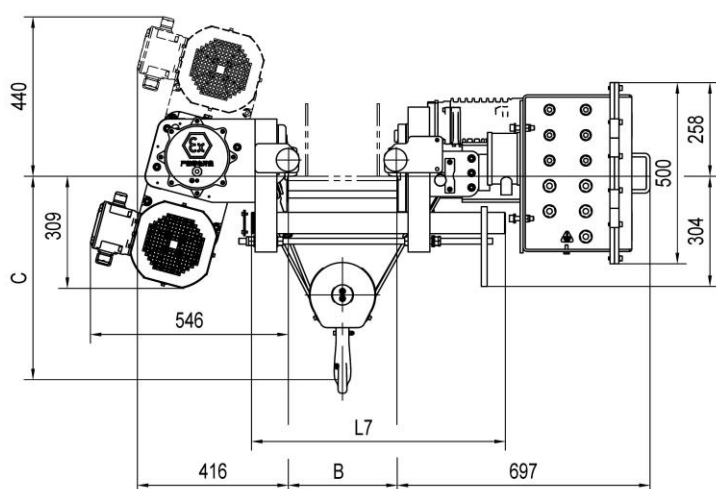
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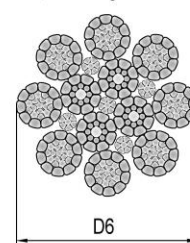
1.39. Low Headroom Ex Hoist KEK2104 (Reeving 1:4)

HOL (m)	B	L2	L4	L5	S1	Weight (kg)
6	150~610	457	911	688	52	415
9.5		652	894	883	83	439

L7(mm)	B(mm)
800	>150-410
900	>410-510
100	>510-610



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting				Travelling			
		Gear ratio 70		Gear ratio 56		Gear Ratio 6			
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)			
						II C、III B、IIIC		II B	
2000	3m/M6	5/0.8 2-speed	1xD03-Ex	6.3/1.1 2-speed	1xD03-Ex	16/4 2-speed / 1xFOB4	0~16 Stepless/ 1xFOB2	20/5 2-speed / 1xFOB4	0~20 Stepless/ 1xFOB2
2500	2m/M5								
3200	1Am/M4								

*Spark-proof (Bronze-coated hook, stainless steel wheel) is optional, shall be recommended for IIC/IIIB/IIIC.

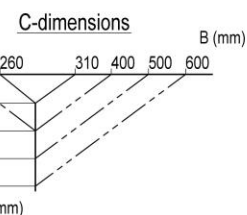
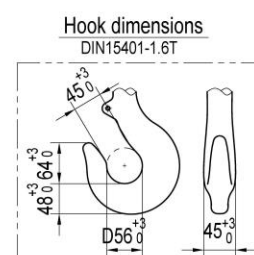
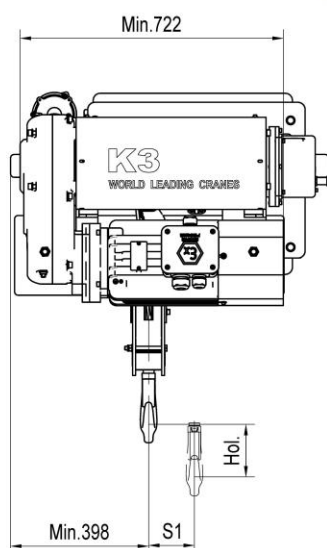
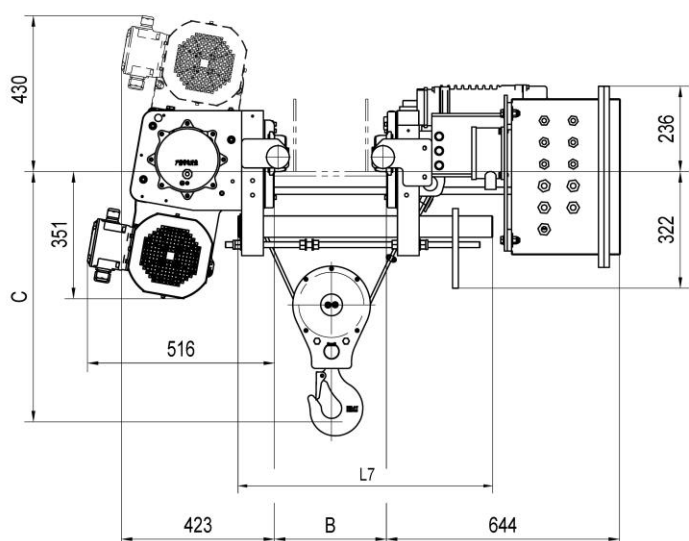
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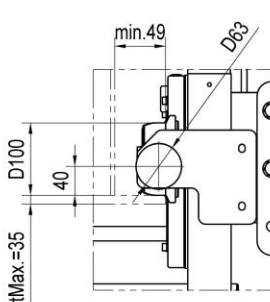
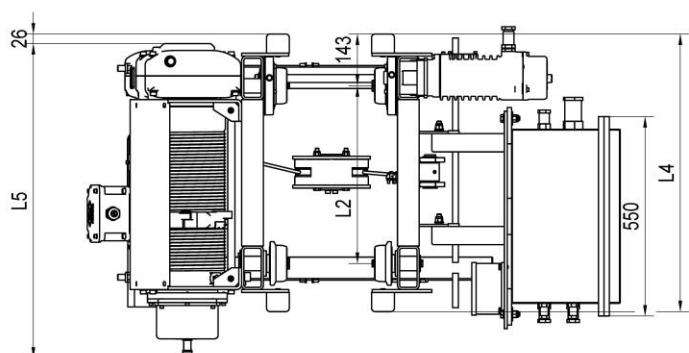
1.40. Low Headroom Ex Hoist KEK3102 (Reeving 1:2)

HOL (m)	B	L2	L4	L5	S1	Weight (kg)
12	150~610	490	766	870	52	473
18		640	916	1020	83	488
24		810	1086	1190	108	511
30		970	1246	1350	125	540

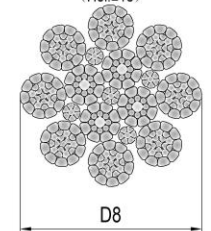
L7(mm)	B(mm)
800	> 150-410
900	> 410-510
1000	> 510-610



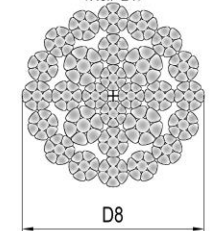
*C-dimensions should be increased by 100mm (Hol. ≥ 24m).



Wire rope cross section
8×26, Wire Strength 2160 N/mm²
(Hol ≤ 18)



Wire rope cross section
35×7, Wire Strength 2160 N/mm²
(Hol ≥ 24)



Load (kg)	Class FEM/ISO	Hoisting		Travelling			
		Gear ratio 109		Gear Ratio 6			
		Speed (m/min)	Motor	Speed / Motor Code (m/min)			
				II C、III B、IIIC		II B	
2000	3m/M6	8/1.3 2-speed	1xD03-Ex	16/4	0~16	20/5	0~20
2500	2m/M5			2-speed / 1xPB04	Stepless/ 1xPB02	2-speed / 1xPB02	Stepless/ 1xPB02
3200	1Am/M4						

*Spark-proof (Bronze-coated hook, stainless steel wheel) is optional, shall be recommended for IIC/IIIB/IIIC.

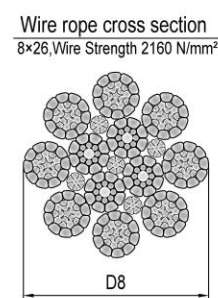
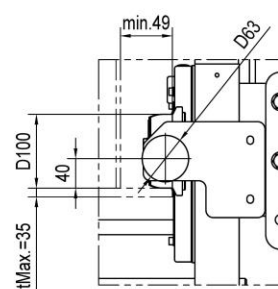
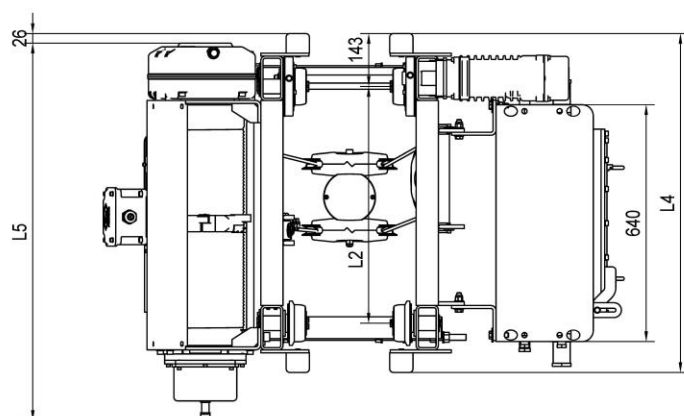
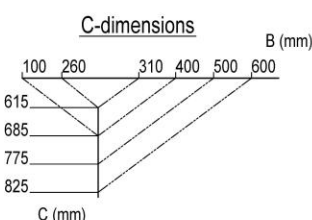
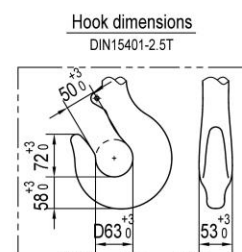
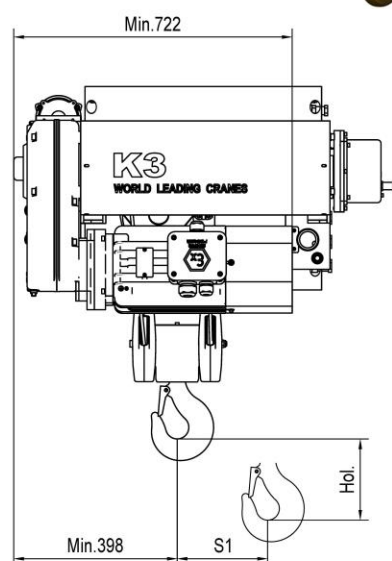
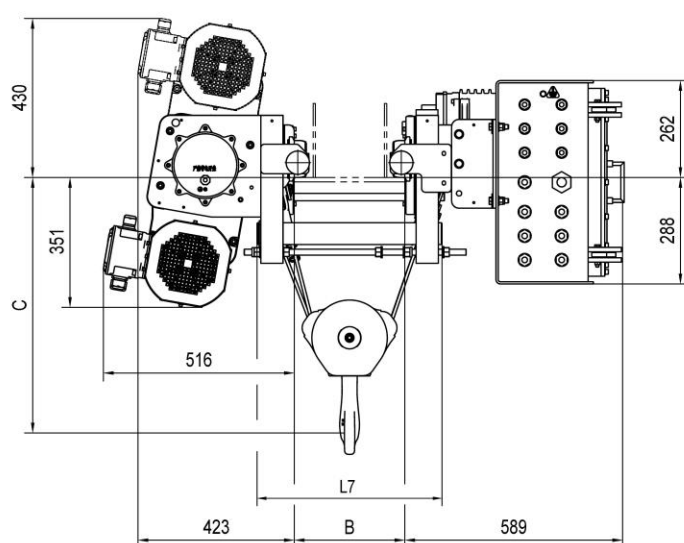
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1.41. Low Headroom Ex Hoist KEK3104 (Reeving 1:4)

HOL (m)	B	L2	L4	L5	S1	Weight (kg)
6	150~610	490	766	870	52	488
9		640	916	1020	83	503
12		810	1086	1190	108	527
15		970	1246	1350	125	555

L7(mm)	B(mm)
800	>150-410
900	>410-510
1000	>510-610



Load (kg)	Class FEM/ISO	Hoisting				Travelling			
		Gear ratio 109		Gear ratio 90		Gear Ratio 6			
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)			
						II C, III B, IIIC		II B	
4000	3m/M6	4/0.7 2-speed	1xD03-Ex	5/0.8 2-speed	1xD03-Ex	16/4	0~16	20/5	0~20
5000	2m/M5					2-speed / 1xPB04	Stepless / 1xPB02	2-speed / 1xPB04	Stepless / 1xPB02

*Spark-proof (Bronze-coated hook, stainless steel wheel) is optional, shall be recommended for IIC/IIIB/IIIC.

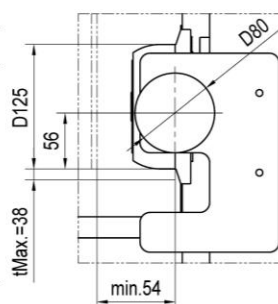
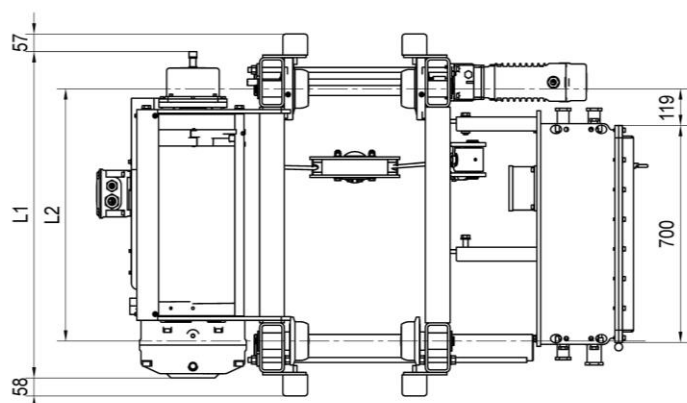
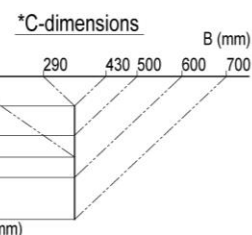
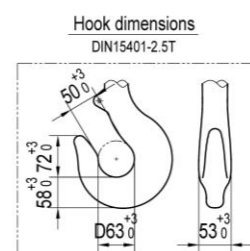
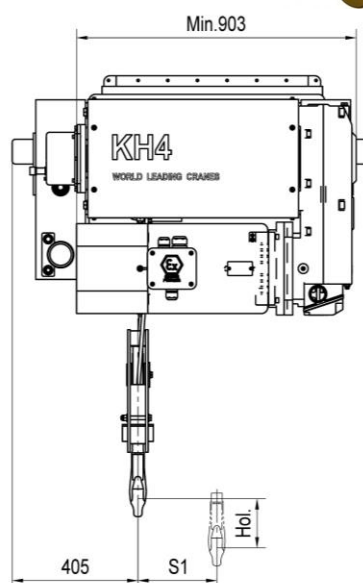
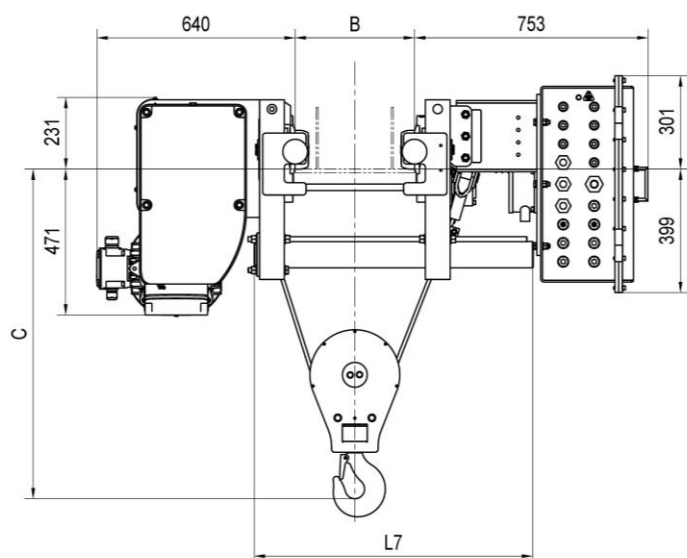
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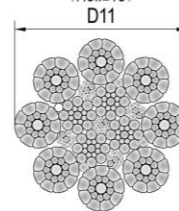
1.42. Low Headroom Ex Hoist KEH4102 (Reeving 1:2)

HOL (m)	B	L1	L2	S1	Weight (kg)
24	150~610	1223	984	120	836
32		1453	1214	170	888

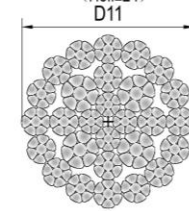
L7(mm)	B(mm)	L7(mm)	B(mm)
900	>150-300	1100	>410-510
1000	>300-410	1200	>510-610



Wire rope cross section 8x26, Wire Strength 2160 N/mm² (Hol.≤18) D11



Wire rope cross section 35x7, Wire Strength 2160 N/mm² (Hol.≥24) D11



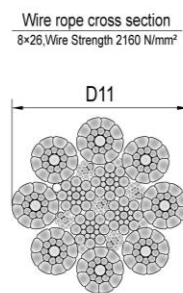
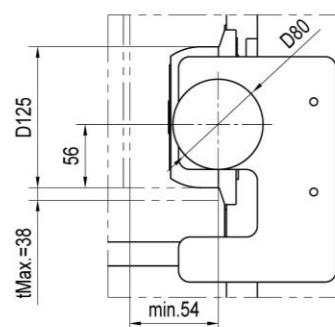
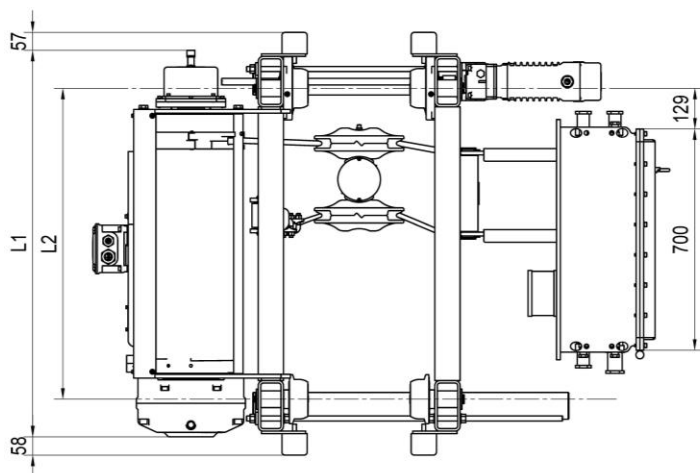
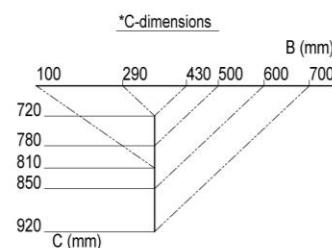
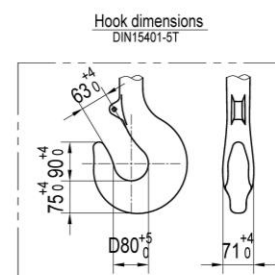
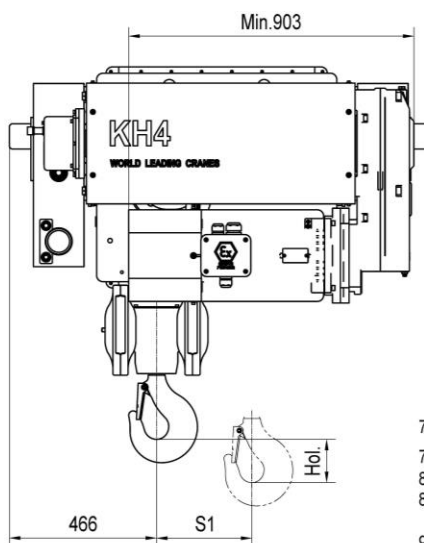
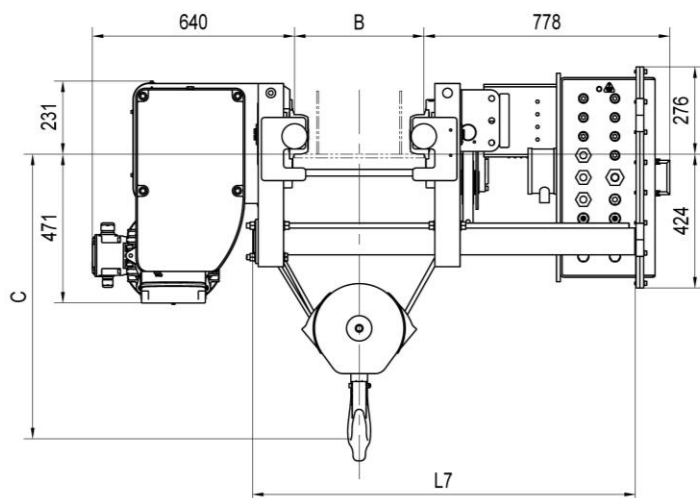
Load (kg)	Class FEM/ISO	Hoisting				Travelling			
		Gear ratio 160		Gear ratio 133		Gear Ratio 15			
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)			
						IIC, III B, IIIC		II B	
4000	3m/M6	4/0.7 2-speed	1xD06-Ex	5/0.8 2-speed	1xD06-Ex	16/4 2-speed / 1xPB04	0~16 Stepless/ 1xPB03	20/5 2-speed / 1xPB04	0~20 Stepless/ 1xPB03
5000	2m/M5								

*Spark-proof (Bronze-coated hook, stainless steel wheel) is optional, shall be recommended for IIC/IIIB/IIIC.

1.43. Low Headroom Ex Hoist KEH4104 (Reeving 1:4)

HOL (m)	B	L1	L2	S1	Weight (kg)
12	150~610	1223	984	120	882
16		1453	1214	170	932

L7(mm)	B(mm)	L7(mm)	B(mm)
900	>150-300	1100	>410-510
1000	>300-410	1200	>510-610



Load (kg)	Class FEM/ISO	Hoisting				Travelling			
		Gear ratio 160		Gear ratio 133		Gear Ratio 15			
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)			
						II C, III B, IIIC		II B	
6300	3m/M6	4/0.7 2-speed	1xD06-Ex	5/0.8 2-speed	1xD06-Ex	16/4 2-speed / 1xPB04	0~16 Stepless/ 1xPB03	20/5 2-speed / 1xPB04	0~20 Stepless/ 1xPB03
8000	2m/M5								
10000	1Am/M4								

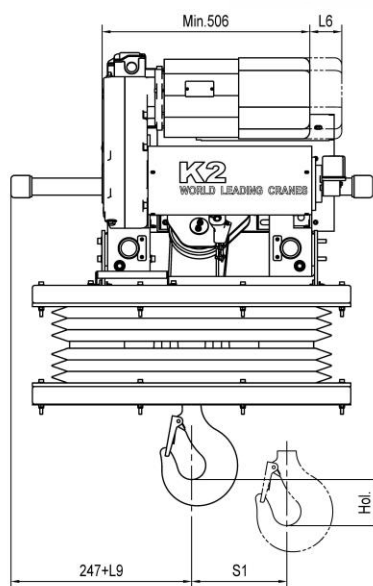
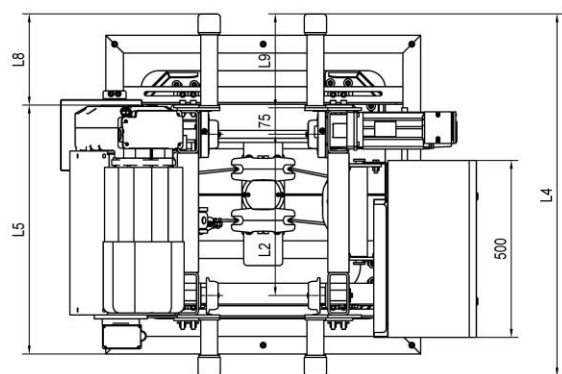
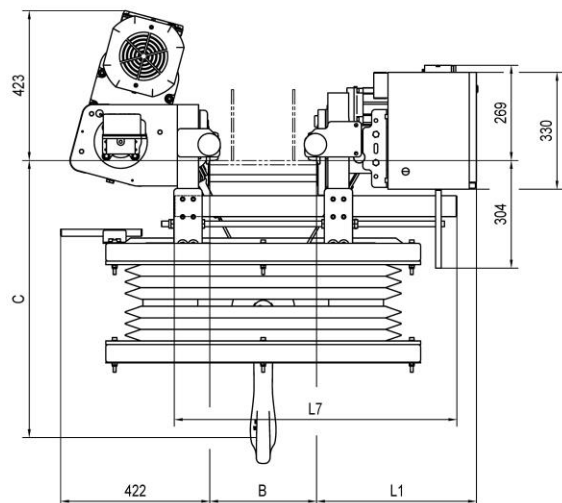
*Spark-proof (Bronze-coated hook, stainless steel wheel) is optional, shall be recommended for IIC/IIIB/IIIC.

1.44. Low Headroom Cleanroom Hoist K2104 (Reeving 1:4)

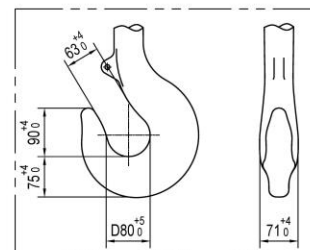
HOL (m)	B	L1	L2	L4	L5	L8	L9	S1	Weight (kg)
6	80~	452	457	1023	715	258	265	52	288+W0
9.5	610	452	652	1206	900	358	365	83	312+W0

motor	D01	F11	D02	F12	D03	F13
L6	0	47	89	136	89	136
W0	0	0	11	11	12	9

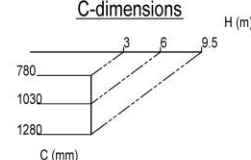
L7(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610



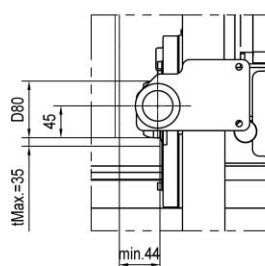
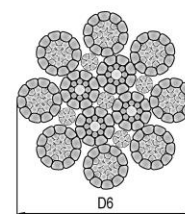
Hook dimensions
DIN15401-5V



C-dimensions



Wire rope cross section
8x26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting												Travelling	
		Gear Ratio 70				Gear Ratio 56				Gear Ratio 47				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
2000	3m/M6	5/0.8 2-speed	1x D01	0-5 Stepless	1x F11	6.3/1.1 2-speed	1xD02	0-6.3 Stepless	1xF12	8/1.3 2-speed	1xD03	0-8 Stepless	1xF13	0-20 / 1xF02	0-32 / 1xF02
2500	3m/M6		1x D02		1x F12										
3200	2m/M5														

*Weight calculated with B ≥ 300.

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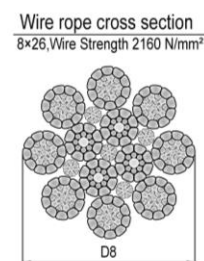
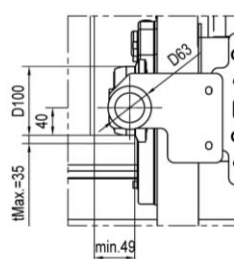
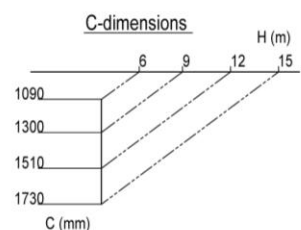
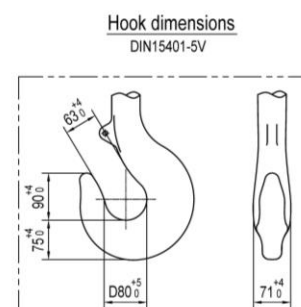
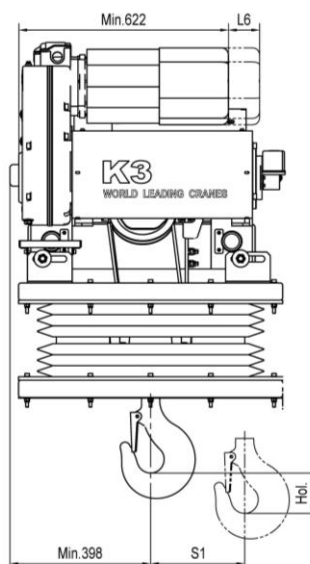
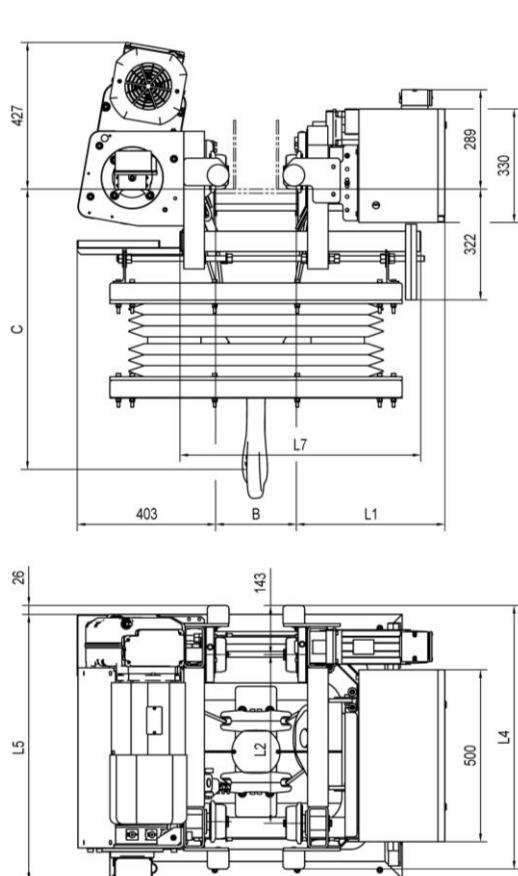
HTD032V21

1.45. Low Headroom Cleanroom Hoist K3104 (Reeving 1:4)

HOL (m)	B	L1	L2	L4	L5	S1	Weight (kg)
6	100~610	432	490	766	774	52	399+W0
9		432	640	916	924	83	414+W0
12		432	810	1086	1094	108	437+W0
15		432	970	1246	1254	125	466+W0

motor	D03	F13	D04	F14
L6	0	47	71	118
W0	0	-3	17	12

L7(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610

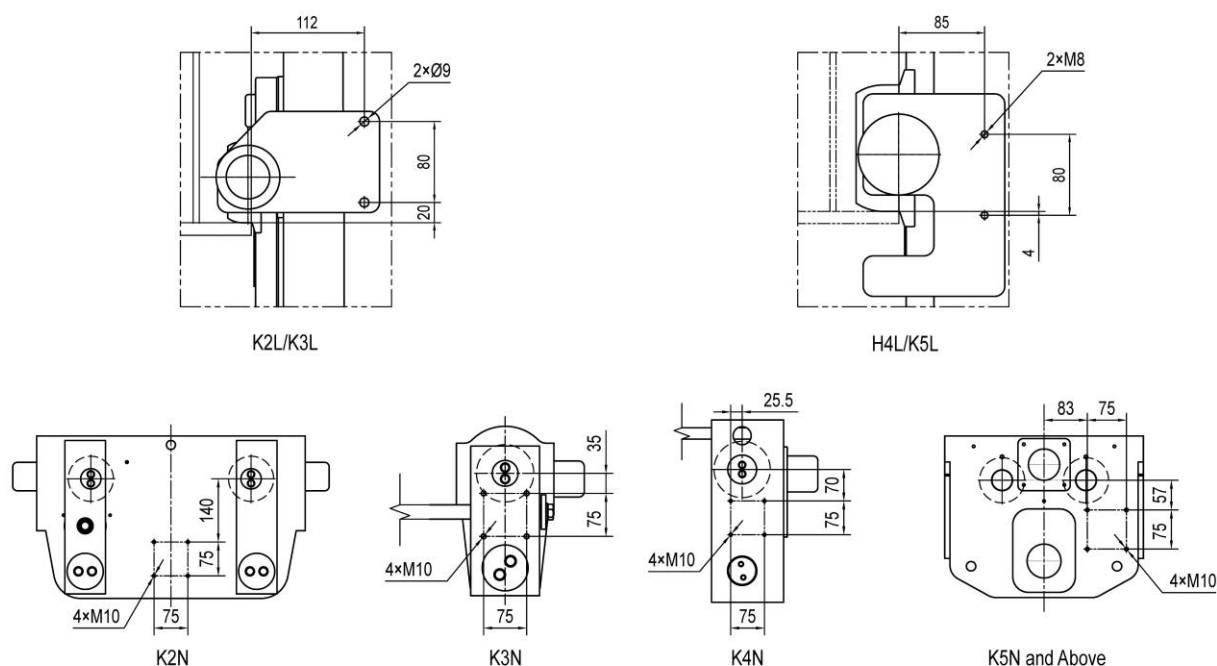


Load (kg)	Class FEM/ISO	Hoisting												Travelling	
		Gear Ratio 109				Gear Ratio 90				Gear Ratio 59				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
3200	3m/M6	4/0.7 2-speed	1xD03	0~4 Stepless	1xF13	5/0.8 2-speed	1xD03	0~5 Stepless	1xF13	8/1.3 2-speed	1xD04	0~8 Stepless	1xF14	0~20 / 1xF02	0~32 / 1xF02
4000	3m/M6														
5000	2m/M5														

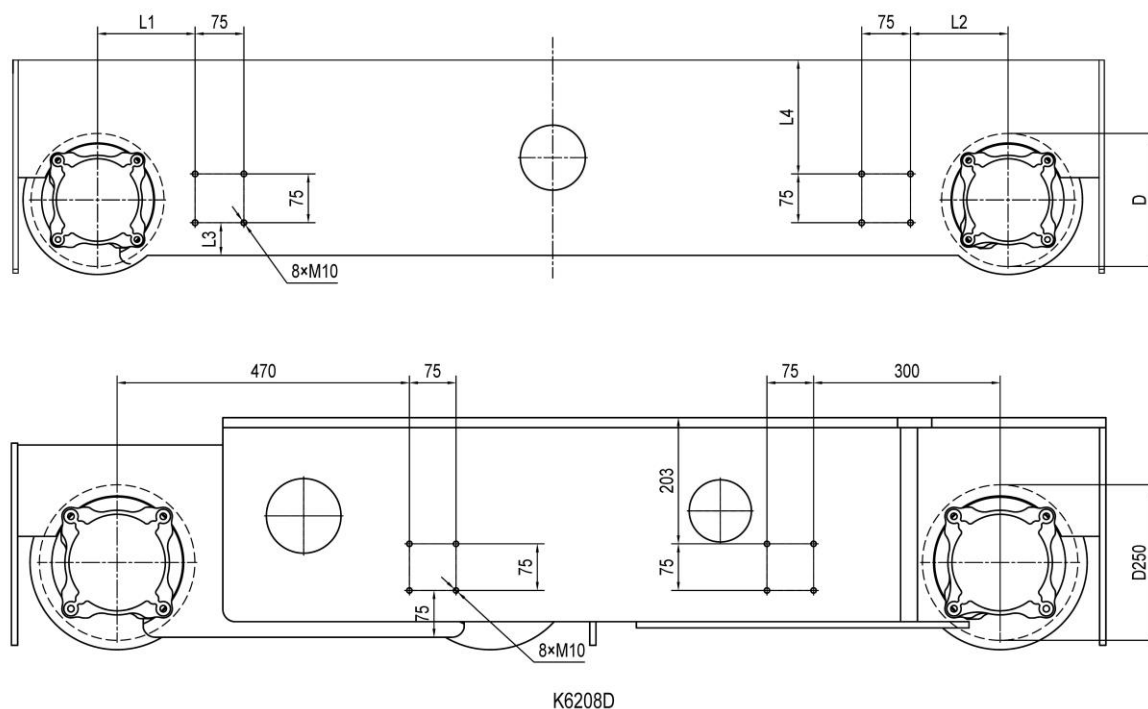
*Weight calculated with B ≥ 300.

1.46. The Installation of Power Supply Bracket

Single Girder Hoist



Double Girder Hoist



Double Girder Hoist				
D	L1	L2	L3	L4
110	125	125	40	35
140	140	140	40	135
200	150	150	50	175
250	180	180	50	225

2. Winch

2.1. Winch code

K	A	2	2	04	D	0200	M5	17	D	D05	N
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Pos.	Code	Description		Properties							
1	K	King lifting, Production platform of WORLDHOISTS									
2	A	Production platform of WORLDHOISTS									
3	1	Hoist serial number		1	6.3t(M6)~30t(M5)						
				2	12.5t(M6)~60t(M4)						
4	2	Ropes		2	Number of ropes from drum						
5	04	Rope Reeving		02	Number of rope falls per rope						
				04							
				06							
6	D	Trolley type		D	Double girder trolley						
7	0200	Safe Working Load		0063	1) 0063 = 63 * 100kg = 6,300kg						
				0200	2) 0200 = 200* 100kg = 20,000kg						
8	M5	Duty Group		M5	ISO/GB/FEM (M3~M7)						
9	17	Lifting Height (m)		00	1) 00 = Special Height					00~68m	
				06	2) 06 = 6m						
				18	3) 18 = 18m						
10	D	Lifting Speed (m/min)		A	3.2/0.5			B	4.0/0.7		
				C	5.0/0.8			D	6.3/1.1		
				E	8.0/1.3			F	10.0/1.7		
				G	12.5/2.1			H	16.0/2.7		
11	D05	Lifting Motor (kW)	D=Double speed (Pole change)		D06	15.0/2.5	D07	18.5/3.2	D08	23.0/3.5	
					F=Frequency Stepless (Inverter)	F16	15.0	F17	18.5	F18	23.0
					F20	35.0					
12	N	Option		N	N= Normal (standard delivery)						
				E	E= Extensional (Tailor made)						

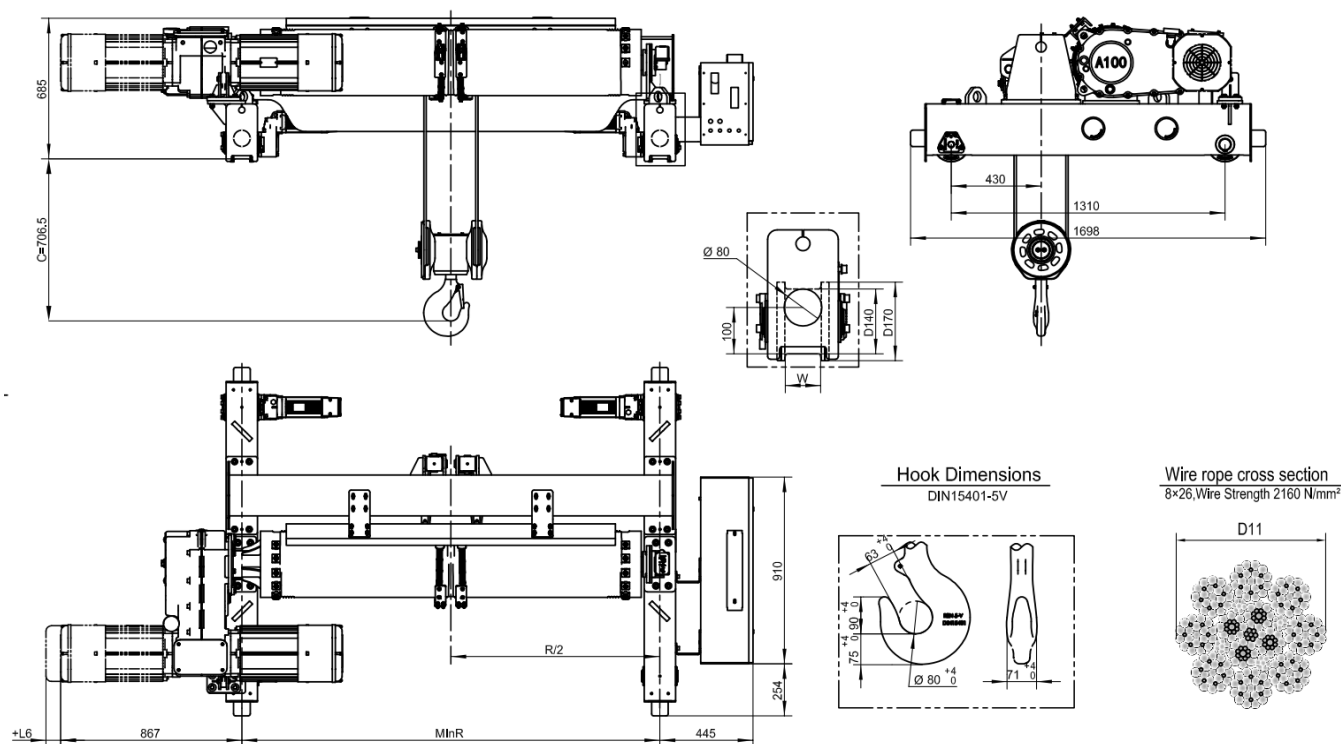
2.2. Double Girder Winch KA1202 (Reeving 2:2)

Hol (m)	W	R	Weight* (kg)
14.9	Default:75	1400	1567.0
20.7		1700	1660.1
26.5		2000	1753.4
34.2		2400	1876.8
40.0		2700	1972.7
47.8		3100	2096.8
53.6		3400	2189.8
61.3		3800	2313.9
69.0		4200	2437.8



*Weight of the service platform is not included;

motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



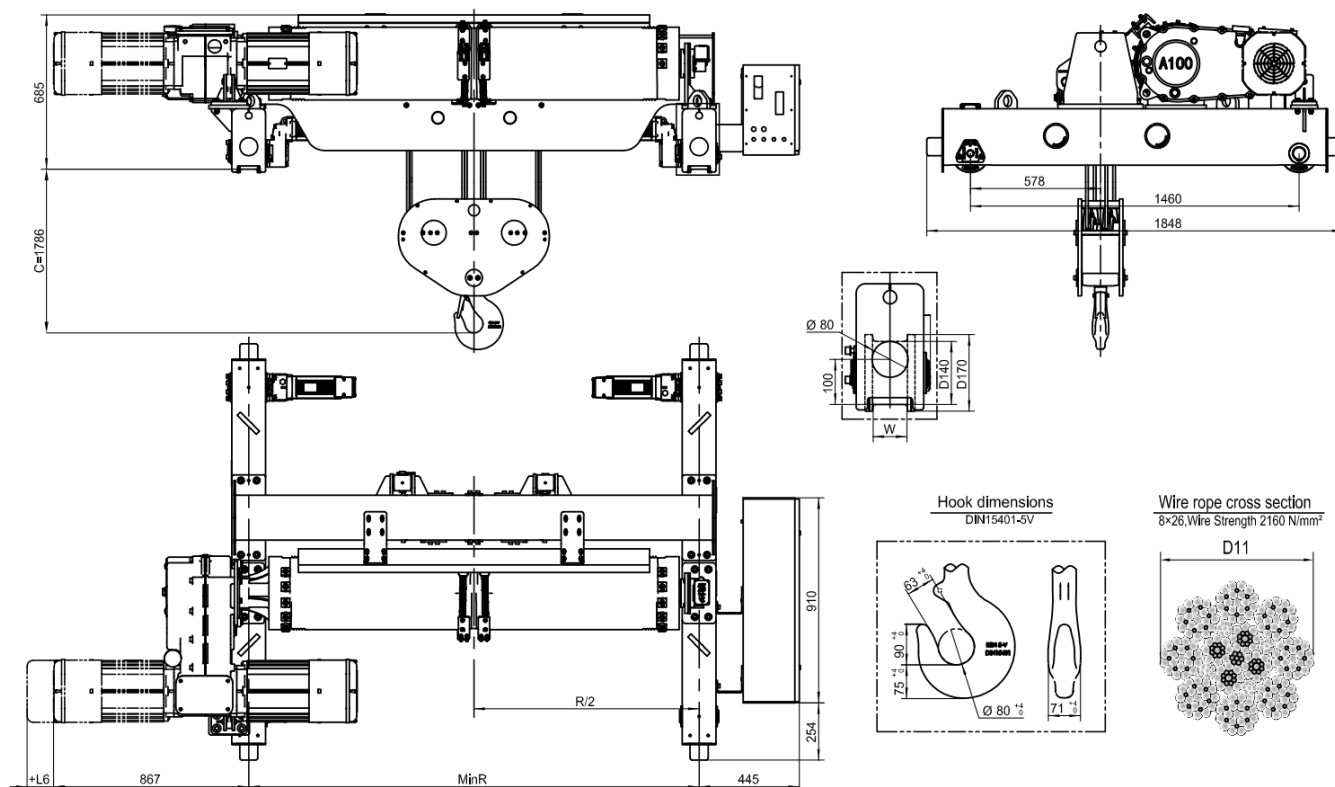
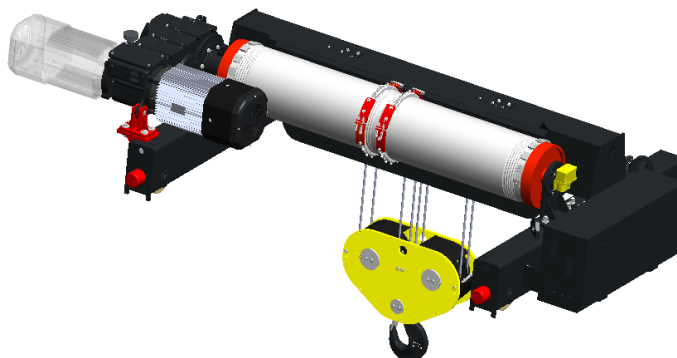
Load (kg)	Class FEM/ISO	Hoisting (m/min)								Travelling (m/min)	
		Gear ratio 161				Gear ratio 103				Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
6300	3m/M6	10/1.7 2-speed	1xD06	0-10 Stepless	1xF16	16/2.7 2-speed	2xD06	0-16 Stepless	2xF16	0~20 / 2xF02	0~32 / 2xF02
8000	2m/M5		1xD06		1xF16		2xD06		2xF16		
10000	2m/M5		1xD07		1xF17		2xD07		2xF17		

2.3. Double Girder Winch KA1204 (Reeving 2:4)

Hol (m)	W	R	Weight* (kg)
7.4	Default: 75	1400	1683.8
10.3		1700	1779.7
13.2		2000	1876.2
17.1		2400	2003.5
20.0		2700	2101.9
23.9		3100	2229.9
26.8		3400	2325.8
30.6		3800	2453.5
34.5		4200	2581.3

*Weight of the service platform is not included;

motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



Load (kg)	Class FEM/ISO	Hoisting (m/min)								Travelling (m/min)	
		Gear ratio 161				Gear ratio 103				Gear ratio 90	Gear ratio* 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
12500	3m/M6	5/0.8 2-speed	1xD06	0-5 Stepless	1xF16	8/1.3 2-speed	2xD06	0-8 Stepless	2xF16	0~20 / 2xF02	0~32 / 2xF03
20000*	2m/M5		1xD07		1xF17		2xD07		2xF17		

*Travelling speed 0~32 should be equipped with the wheel of 200mm;

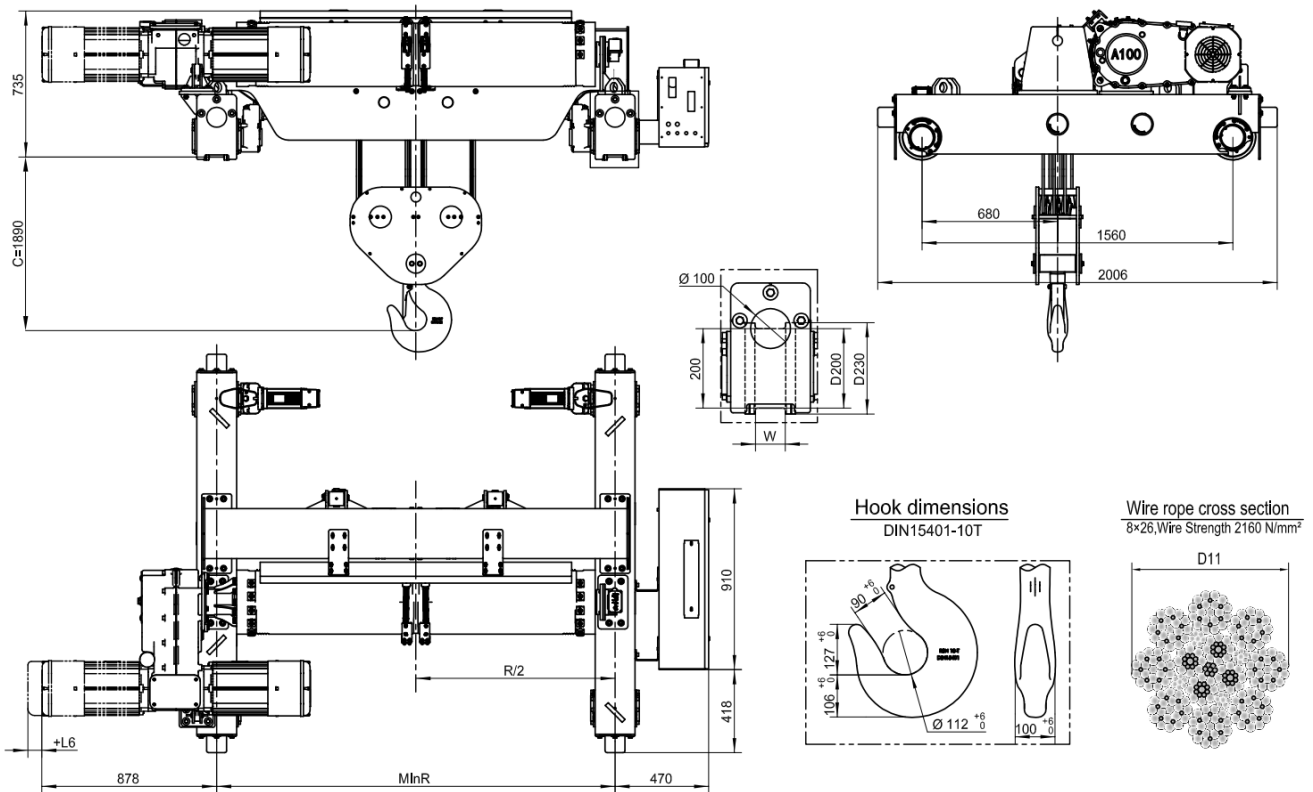
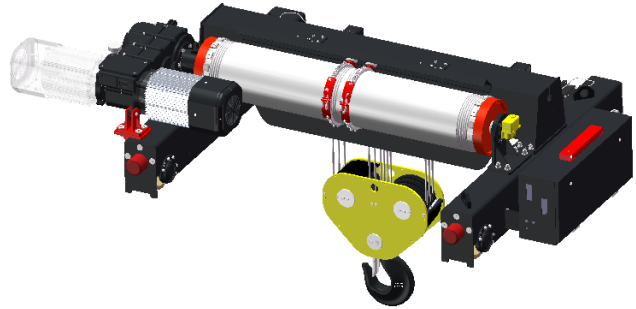
*Load 20t should be equipped with the hook DIN15401-10T;

2.4. Double Girder Winch KA1206 (Reeving 2:6)

Hol (m)	W	R	Weight* (kg)
5.0	Default:75	1400	1993.4
6.9		1700	2107.5
8.8		2000	2215.3
11.4		2400	2362.8
13.3		2700	2481.8
15.9		3100	2629.7
17.9		3400	2740.5
20.4		3800	2890.0
23.0		4200	3037.8

*Weight of the service platform is not included;

motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



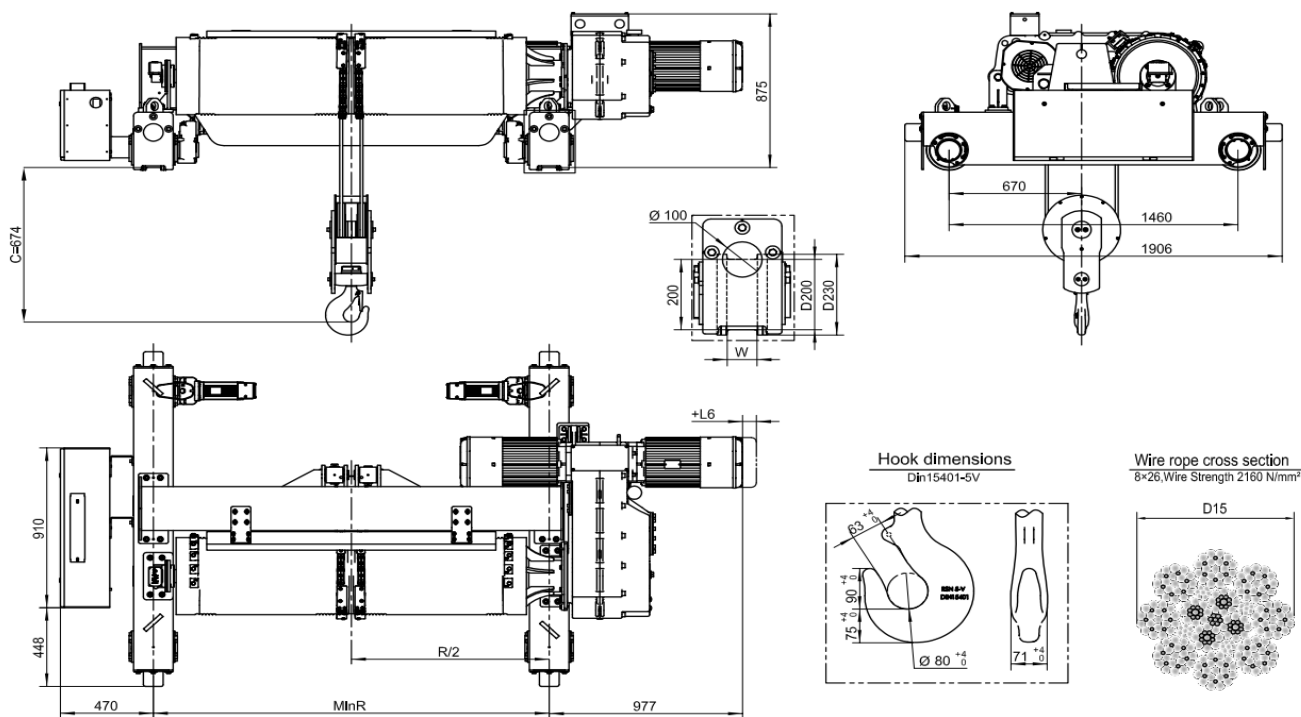
Load (kg)	Class FEM/IS O	Hoisting (m/min)								Travelling (m/min)	
		Gear ratio 161				Gear ratio 103				Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
20000	3m/M6	3.2/0.5 2-speed	1xD06	0-3.2 Stepless	1xF16	5/0.8 2-speed	2xD06	0-5 Stepless	2xF16	0-20 / 2xF02	0-32 / 2xF03
30000	2m/M5		1xD07		1xF17		2xD07		2xF17		

2.5. Double Girder Winch KA2202 (Reeving 2:2)

Hol (m)	W	R	Weight* (kg)
18.6	Default:75	1700	2392.6
24.7		2000	2533.6
32.8		2400	2719.9
38.8		2700	2867.4
47.0		3100	3052.4
53.0		3400	3193.3
61.1		3800	3381.1
69.3		4200	3568.9

*Weight of the service platform is not included;

motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



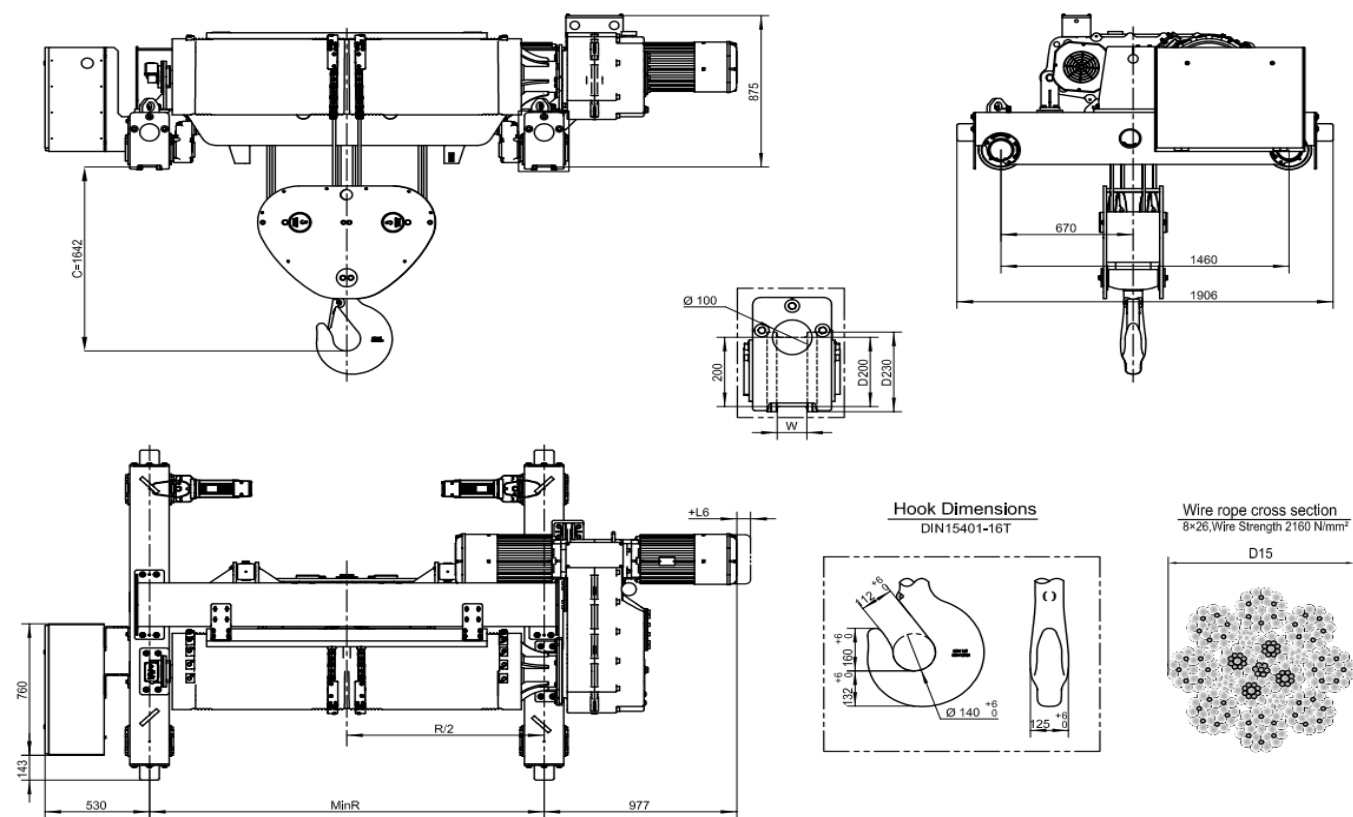
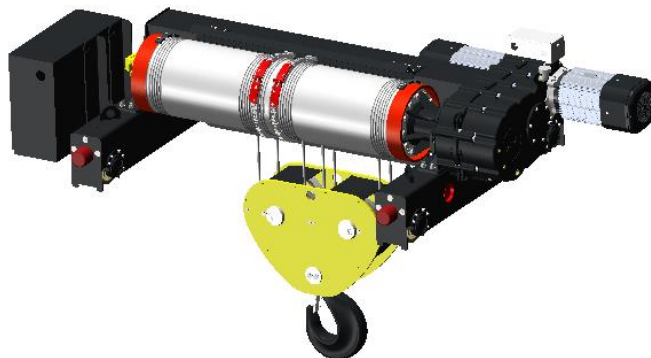
Load (kg)	Class FEM/ISO	Hoisting (m/min)										Travelling (m/min)	
		Gear ratio 204				Gear ratio 166				Gear ratio 135		Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
12500	3m/M6	10/1.7 2-speed	2xD06	0-10 Stepless	2xF16	12.5/2.1 2-speed	2xD07	0-12.5 Stepless	2xF17	0-16 Stepless	2xF18	0-20 / 2xF02	0-32 / 2xF03
16000	2m/M5		2xD07		2xF17		2xD08		2xF18		2xF19		
20000	1Am/M4		2xD07		2xF17		2xD08		2xF18		2xF19		

2.6. Double Girder Winch KA2204 (Reeving 2:4)

Hol (m)	W	R	Weight* (kg)
12.3	Default: 75	2000	2783.9
16.4		2400	2962.1
19.4		2700	3198.8
23.5		3100	3501.7
26.5		3400	3662.7
30.6		3800	3917.3
34.6		4200	4205.2

*Weight of the service platform is not included;

motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



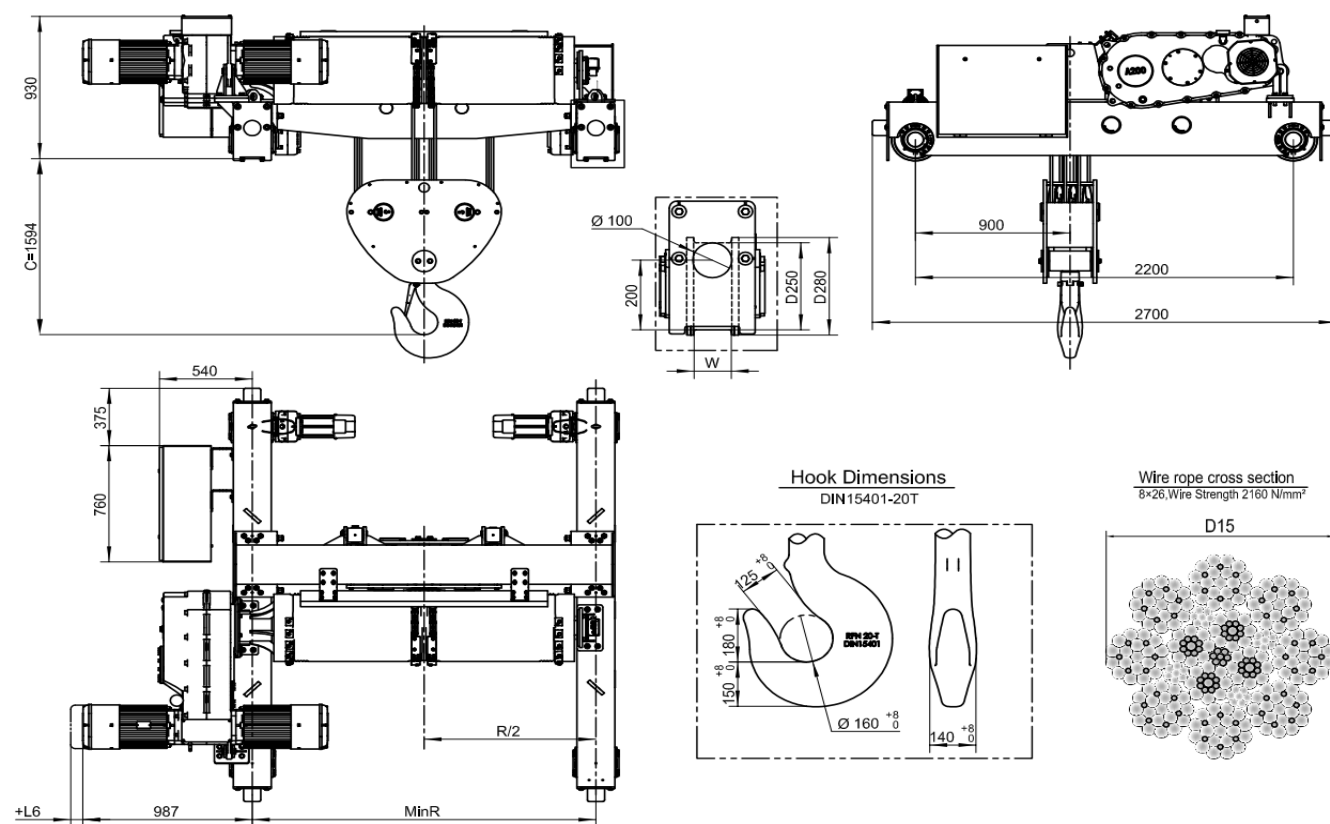
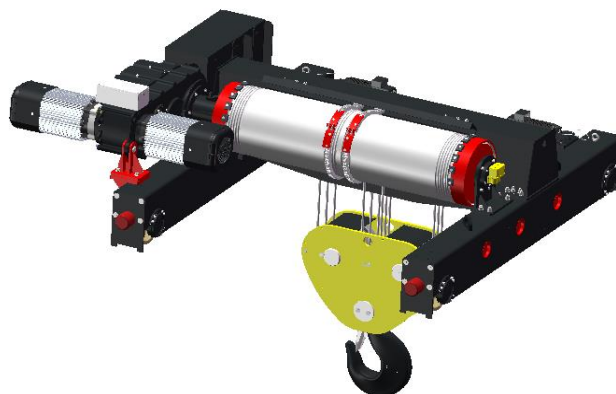
Load (kg)	Class FEM/ISO	Hoisting (m/min)										Travelling (m/min)	
		Gear ratio 204				Gear ratio 166				Gear ratio 135		Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
25000	3m/M6	5/0.8 2-speed	2xD06	0-5 Stepless	2xF16	6.3/1.1 2-speed	2xD07	0-6.3 Stepless	2xF17	0-8 Stepless	2xF18	0-20 / 2xF03	0-32 / 2xF03
32000	2m/M5		2xD07		2xF17		2xD08		2xF18		2xF19		
40000	1Am/M4												

2.7. Double Girder Winch KA2206 (Reeving 2:6)

Hol (m)	W	R	Weight* (kg)
8.2	Default:75	2000	3428.9
10.9		2400	3628.2
12.9		2700	3801.7
15.7		3100	4056.7
17.7		3400	4263.5
20.4		3800	4531.7
23.1		4200	4748.8

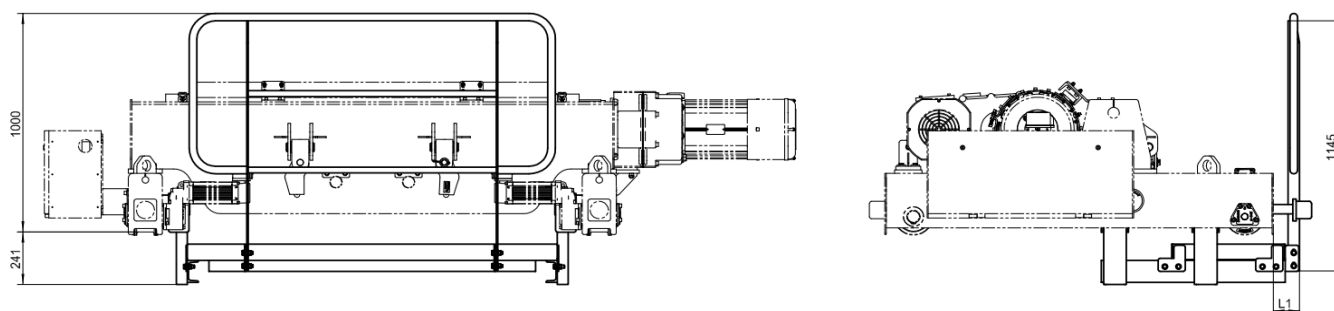
*Weight of the service platform is not included;

motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



Load (kg)	Class FEM/ISO	Hoisting (m/min)										Travelling (m/min)	
		Gear ratio 208				Gear ratio 166				Gear ratio 135		Gear ratio 115	Gear ratio 72
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
40000	3m/M6	3.2/0.4 2-speed	2xD06	0-3.2 Stepless	2xF16	4/0.7 2-speed	2xD07	0-4 Stepless	2xF17	0-5 Stepless	2xF18	0-20 / 2xF04	0-32 / 2xF04
50000	2m/M5		2xD07		2xF17		2xD08		2xF18		2xF19		
60000	1Am/M4		2xD07		2xF17		2xD08		2xF18		2xF19		

2.8. Optional Service Platform



Hoist Trolley Type	Rail Gauge Code/L1/Weight [mm]/[mm]/[kg]								
	1400	1700	2000	2400	2700	3100	3400	3800	4200
KA1202	265	265	265	265	265	265	265	265	265
	97	108	118	132	142	156	166	180	194
	1400	1700	2000	2400	2700	3100	3400	3800	4200
KA1204	115	115	115	115	115	115	115	115	115
	94	104	114	128	138	152	162	176	190
	1400	1700	2000	2400	2700	3100	3400	3800	4200
KA1206	30	30	30	30	30	30	30	30	30
	94	104	115	129	142	156	166	180	194
	1400	1700	2000	2400	2700	3100	3400	3800	4200
KA2202	—	1700	2000	2400	2700	3100	3400	3800	4200
	—	50	50	50	50	50	50	50	50
	—	104	115	129	142	156	166	180	194
KA2204	—	—	2000	2400	2700	3100	3400	3800	4200
	—	—	50	50	50	50	50	50	50
	—	—	115	129	142	156	166	180	194
KA2206	—	—	2000	2400	2700	3100	3400	3800	4200
	—	—	30	30	30	30	30	30	30
	—	—	126	142	154	170	182	201	216

*Option Service Platform is indicated by solid lines.

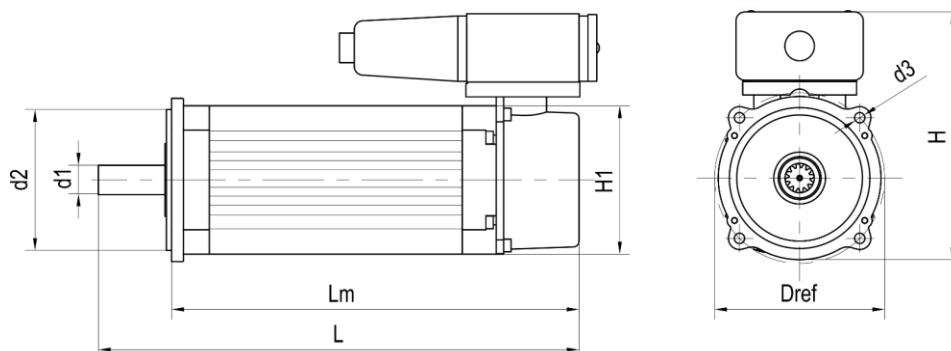
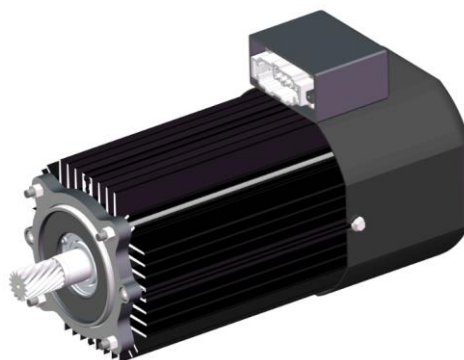
3. 3.Motor

3.1. Motor code

M	N	D	168	L	2	23	N
Pos.	Code	Description	Properties				
1	M	Motor of WORLDHOISTS					
2	N	Motor Type	N	Non-explosion-proof motor			
			E	Explosion-proof motor			
3	D	Motor Series	D	Double speed			
			F	Frequency			
			S	Servo			
4	168	Frame Size	115	Mounting base Ø115			
			130	Mounting base Ø130			
			168	Mounting base Ø168			
			195	Mounting base Ø195			
			245	Mounting base Ø245			
5	L	Frame Length	S	Short frame			
			M	Medium frame			
			L	Long frame			
			X	Expanding frame			
			XA	Expanding A frame			
			XB	Expanding B frame			
			XC	Expanding C frame			
6	2	Pole Number	2	2 poles			
			4	4 poles			
7	23	Output Shaft Teeth	11	11 teeth			
			12	12 teeth			
			15	15 teeth			
			18	18 teeth			
			22	22 teeth			
			23	23 teeth			
			26	26 teeth			
8	N	Special Properties	E	Encode included			
			H	Heating included			
			P	Pulse included			
			N	Normal (no additional)			

3.2. Travelling Motor

Motor Type	L	Lm	H1	Dref	d1	d2	d3	H
F01~F03	325	275	100	115	20	95	7	162
F04~F06	375	320	145	130	25	95	7.2	190

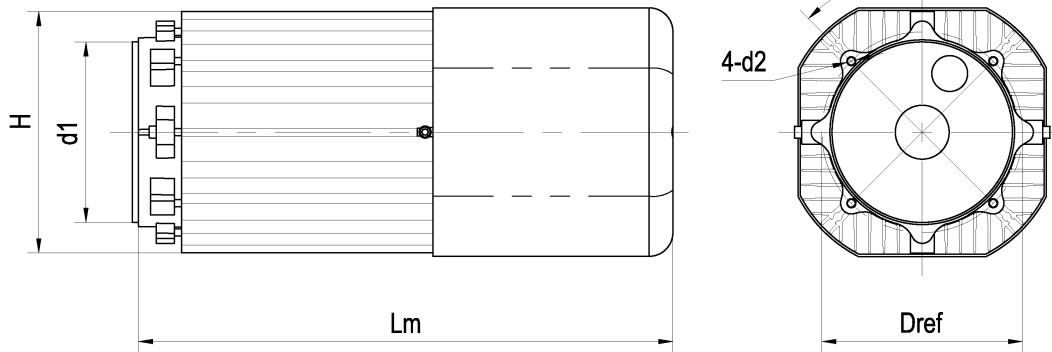
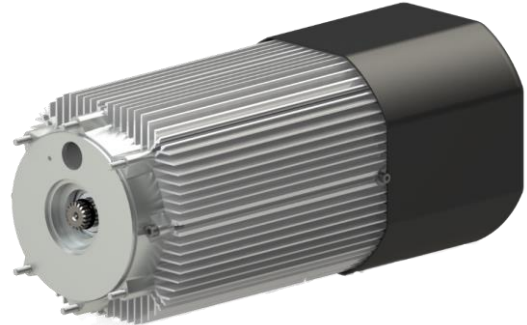


Motor code		MNF115M411N		MNF115L411N MNF115L412N		MNF115L211N MNF115L212N		MNF115X411N MNF115X412N		MNF130M412N MNF130M415N		MNF130L212N MNF130L215N		MNF130L412N MNF130L415N	
		F01		F02		F02B		F03		F04		F05		F06	
Duty Type		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 240starts/h	
Inverter supply voltage	V	380~480		380~480		380~415		380~480		380~480		380~415		380~480	
Motor voltage	V	400	480	400	480	400		400	480	400	480	400		400	
Frequency	Hz	100	120	100	120	80		100	120	100	120	80		100	
Brake type		DC		DC		DC		DC		DC		DC		DC	
Brake torque	N.m	4		4		4		4		16		16		16	
Synchronous speed	r/min	3000	3600	3000	3600	4800		3000	3600	3000	3600	4800		3000	
Starting torque	N.m	3.0	2.9	7.2	7.1	5.8		10.5	10.4	23.5	21.6	16.5		\	
Starting current	A	4.2	4.3	8.2	8.5	10		12.9	12.6	35	34	32		\	
Maximum torque	N.m	3.0	2.9	7.2	7.1	5.8		11	10.8	25	23	17		24	
No-load current	A	1.0	1.0	1.6	1.6	0.8		2.2	2.0	5.4	4.9	6.0		6.0	
Inertia	kgm ²	0.0004		0.0007		0.0007		0.0006		0.0012		0.0012		0.0012	
Weight	kg	5		6.8		7		7.8		13		13		13	
Speed	r/min	2855	3430	2800	3360	4490		2770	3370	2860	3460	4460		2800	
Power	kW	0.3	0.37	0.65	0.75	0.65		1.1	1.1	2.2	2.5	3.0		3.0	
Torque	N.m	1.0	1.0	2.6	2.6	1.4		3.8	3.1	7.3	7.3	6.4		10.3	
Current	A	1.2	1.2	2.1	2.1	1.5		3	2.9	6.9	6.5	7.9		8.1	
Power factor	cosφ	0.57	0.59	0.61	0.61	0.73		0.73	0.74	0.66	0.68	0.78		0.77	
Efficiency	η	0.65	0.65	0.73	0.74	0.77		0.74	0.76	0.73	0.75	0.74		0.73	

Speed control: Inverter

3.3. Pole Changed Hoisting Motor (Double speed)

Motor code	Lm	H	Dref	d1	d2
D01	358	202	168	151	7.5
D02	448	202	168	151	7.5
D03	448	202	168	151	7.5
D04	518.5	228	195	176	9
D05	548.5	228	195	176	9
D06	532.5	271	245	214	11
D07	627.5	271	245	214	11
D08	627.5	271	245	214	11



380~415V 50Hz 3000/500r/min

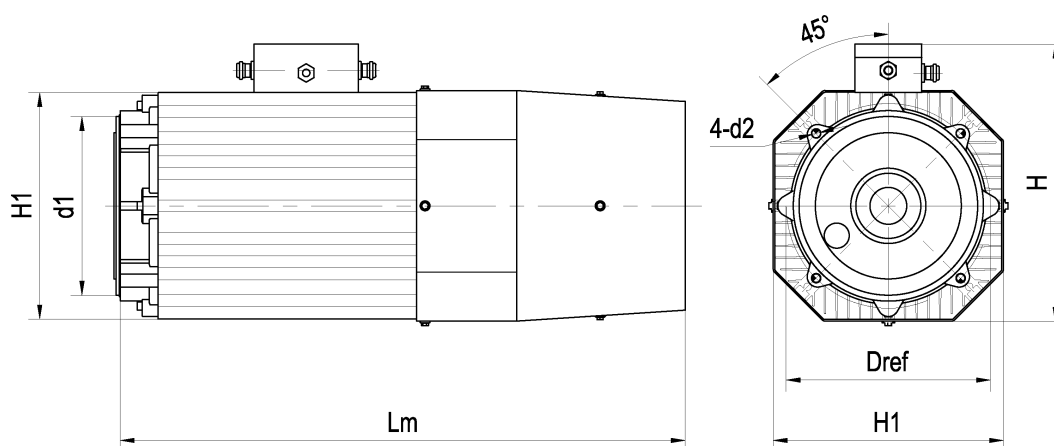
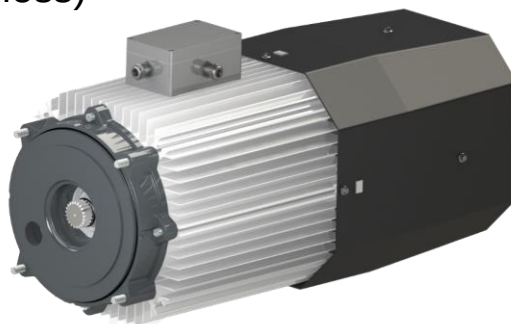
Motor code			MND168M223N D01		MND168L223N D02		MND168X223N D03		MND195L218N D04		MND195X218N D05		MND245M221N D06		MND245L221N D07		MND245X218N D08	
Duty type			S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-50%ED 300starts/h	
Synchronous speed		r/min	3000	500	3000	500	3000	500	3000	500	3000	500	3000	500	3000	500	3000	500
Starting torque		N.m	13.1	10.7	31	22	33.8	27.6	43	43.7	51.4	49.5	103	82	117	111	121	111
Starting current		A	19	3.6	42	6.7	46.9	7.78	79	13.3	94	15.6	134	21	161	32	212	37
Maximum torque		N.m	17.6	12.2	34	24.6	42.6	30.6	63	48	83.7	60	145.8	82	137	111	182	130
Brake torque		N.m	21		21		42		60		60		100		130		200	
No-load current		A	2.5	2.8	3	4.3	3.6	5.5	4.6	9.2	5.2	10	10.9	13	9.2	10	20	19
Inertia		kgm ²	0.0027		0.0049		0.0059		0.0101		0.0116		0.036		0.043		0.043	
Weight		kg	21.6		34		36		52.6		56		90		115		115	
2m/M5 S3-40%ED 240starts/h	Speed	r/min	2775	410	2800	400	2725	400	2810	400	2800	385	2700	402	2700	400	2700	400
	Power	kW	2	0.25	3.7	0.5	5	0.7	7.5	1.2	9	1.4	15	2.5	18.5	3	23	3.5
	Current	A	5	2.7	8.5	4.5	10.2	5.2	17.5	9.5	18.5	11	30.5	13	35	16	50	23
	Torque	N.m	6.15	6.1	12.3	12.3	15.3	15.3	24	24	31	30	54	48	61	61	78.5	76.5
	Power factor	cosφ	0.88	0.67	0.92	0.63	0.93	0.61	0.94	0.56	0.93	0.61	0.91	0.59	0.92	0.56	0.88	0.63
	Efficiency	η	0.68	0.24	0.72	0.3	0.72	0.3	0.75	0.28	0.79	0.28	0.77	0.45	0.86	0.47	0.83	0.42
3m/M6 S3-50%ED 300starts/h	Speed	r/min	2830	435	2850	420	2830	430	2730	390	2760	370	2810	440	2820	440	2870	440
	Power	kW	1.5	0.2	2.9	0.4	3.6	0.5	6	1	7.5	1.2	12	2	15	2.5	18	3
	Current	A	4.3	2.5	7	3.8	8.4	5	13.7	8.6	16	9	25	12	28	15	42	20
	Torque	N.m	4.9	4.9	9.8	9.8	12.3	12.3	19.2	19.2	24	24	38	38	48	48	62	62
	Power factor	cosφ	0.78	0.64	0.84	0.58	0.89	0.56	0.87	0.52	0.87	0.56	0.82	0.52	0.89	0.47	0.79	0.51
	Efficiency	η	0.64	0.22	0.76	0.29	0.74	0.29	0.74	0.27	0.79	0.28	0.8	0.43	0.82	0.43	0.84	0.42

440~480V 60Hz 3600/600r/min

Motor code		MND168M223N D01		MND168L223N D02		MND168X223N D03		MND195L218N D04		MND195X218N D05		MND245M221N D06		MND245L221N D07		MND245X218N D08		
Duty type		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-50%ED 300starts/h		
Synchronous speed	r/min	3600	600	3600	600	3600	600	3600	600	3600	600	3600	600	3600	600	3600	600	
Starting torque	N.m	12.4	10.7	24.6	21.7	34	28	54	44	63	51	102	82	114	101	160	140	
Starting current	A	23	4.7	43	7.3	49	8.4	70	14	80	15	149	25	207	35	220	35	
Maximum torque	N.m	17.6	12.2	34	24.6	42.6	30.6	63	48	83.7	60	145.8	82	137	111	182	130	
Brake torque	N.m	21		21		42		60		60		100		130		200		
No-load current	A	2.5	2.8	3.8	4.1	4	5.4	6	8.8	6.7	9.5	13	12	10	16	19	20	
Inertia	kgm ²	0.0027		0.0049		0.0059		0.0101		0.0116		0.036		0.043		0.043		
Weight	kg	21.6		34		36		52.6		56		90		115		115		
2m/M5 S3-40%ED240starts/h	Speed	r/min	3300	525	3400	500	3350	500	3300	450	3300	450	3250	480	3250	500	3250	500
	Power	kW	2.2	0.3	4.3	0.7	5.4	0.9	9	1.4	11	1.6	18	3	21	3.5	25	3.8
	Current	A	5	2.8	8.3	4.2	10	5.1	17	9.1	18	10	30	13	35	16	49	22
	Torque	N.m	6.1	6.1	12.3	12.3	15.3	15.3	24	24	30	30	48	48	62	62	69	69
	Power factor	cosφ	0.83	0.65	0.89	0.61	0.93	0.6	0.91	0.54	0.91	0.57	0.88	0.59	0.92	0.55	0.87	0.54
	Efficiency	η	0.71	0.28	0.75	0.38	0.74	0.36	0.74	0.34	0.75	0.35	0.8	0.5	0.81	0.52	0.86	0.49
3m/M6 S3-50%ED300starts/h	Speed	r/min	3450	540	3450	520	3410	530	3315	490	3320	470	3390	540	3410	540		
	Power	kW	1.8	0.25	3.5	0.5	4.3	0.7	7.2	1.2	9	1.4	14	2.3	18	3		
	Current	A	4.2	2.5	7.3	3.9	8.5	4.9	13	8.3	16	8.7	26	13	28	14		
	Torque	N.m	4.9	4.9	9.8	9.8	12.3	12.3	19.2	19.2	24	24	38	38	48	48		
	Power factor	cosφ	0.8	0.58	0.87	0.54	0.91	0.53	0.88	0.49	0.9	0.53	0.85	0.52	0.9	0.47		
	Efficiency	η	0.71	0.25	0.75	0.36	0.75	0.34	0.76	0.33	0.77	0.35	0.82	0.48	0.83	0.49		

3.4. Frequency control hoisting motor (Stepless)

Motor code	Lm	H1	H	Dref	d1	d2
F11	358	202	260	168	151	7.5
F12	448	202	260	168	151	7.5
F13	448	202	260	168	151	7.5
F14	518.5	228	286	195	176	9
F15	518.5	228	286	195	176	9
F16	637.5	271	329	245	214	11
F17	637.5	271	329	245	214	11
F18	677.5	271	329	245	214	11
F19	677.5	271	329	245	214	11



380~480V 3000r/min(100Hz) & 3600r/min(120Hz)

Motor code		MNF168M423E		MNF168L423E		MNF168X423E		MNF195L418E		MNF195X418E		MNF245M421E		MNF245L421E		MNF245X418E		MNF245XA418E		
		F11		F12		F13		F14		F15		F16		F17		F18		F19		
Duty group		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		
Motor voltage	V	380 ~415	440 ~480	380 ~415	440 ~480	380 ~415	440 ~480	380 ~415	440 ~480	380 ~415	440 ~480	380 ~415	440 ~480	380 ~415	440 ~480	380 ~415	440 ~480	380 ~415	440 ~480	
Frequency	Hz	100	120	100	120	100	120	100	120	100	120	100	120	100	120	100	120	100	120	
Synchronous speed	r/min	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	
Maximum torque	N.m	14	14	28	28	40	40	57	57	69	69	113	113	143	143	172	172	248	248	
Brake torque	N.m	21		21		42		60		60		100		130		200		200		
No-load current	A	1	3	1.5	5.7	1.2	5.9	1.5	11	1.9	11	8.3	14	15	14	17	16	2.4	2.9	
Inertia	kgm ²	0.0027		0.0027		0.0027		0.0075		0.0075		0.024		0.024		0.03		0.036		
Weight	kg	23		33		41		50.5		54.9		80		102		106		106		
2m/M5 S3-40%ED 240starts/h	Speed	r/min	2830	3400	2750	3340	2820	3300	2820	3400	2830	3410	2850	3450	2850	3450	2860	3420	2880	3420
	Power	kW	2	2.2	3.7	4.3	5	5.4	7.5	9	9	11	15	18	18.5	21	23	27	28	34
	Current	A	5.2	4.9	9.4	9.5	10.5	10.8	17.5	19	21	22	28	29	34	35	42	44	56	56
	Torque	N.m	6.75	6.14	12.7	12.2	16.7	15.5	25	25	30	30	48	48	62	62	76	76	92	92
	Power factor	cosφ	0.7	0.75	0.71	0.77	0.75	0.8	0.78	0.75	0.78	0.78	0.85	0.85	0.87	0.87	0.88	0.88	0.89	0.89
	Efficiency	η	0.73	0.71	0.75	0.76	0.77	0.77	0.81	0.78	0.81	0.81	0.86	0.86	0.87	0.87	0.89	0.89	0.87	0.87
3m/M6 S3-50%ED 300starts/h	Speed	r/min	2860	3450	2830	3415	2830	3390	2900	3485	2860	3440	2925	3520	2910	3500	2910	3500	2920	3500
	Power	kW	1.5	1.8	2.9	3.5	3.6	4.3	6	7.2	7.5	9	12	14	15	18	18	21	23	27
	Current	A	4.4	4.6	8.3	8.2	9.3	9.3	15.5	17	18	19	25	26	31	31	34	36	45	46
	Torque	N.m	5	4.98	9.79	9.79	12.1	12.1	19.8	19.7	24	24	38	38	48	48	62	62	76	76
	Power factor	cosφ	0.69	0.72	0.69	0.7	0.72	0.76	0.67	0.69	0.74	0.75	0.79	0.81	0.85	0.85	0.86	0.86	0.84	0.86
	Efficiency	η	0.71	0.69	0.74	0.75	0.77	0.77	0.8	0.78	0.81	0.78	0.86	0.85	0.86	0.86	0.89	0.89	0.89	0.89

4. Travelling gearbox

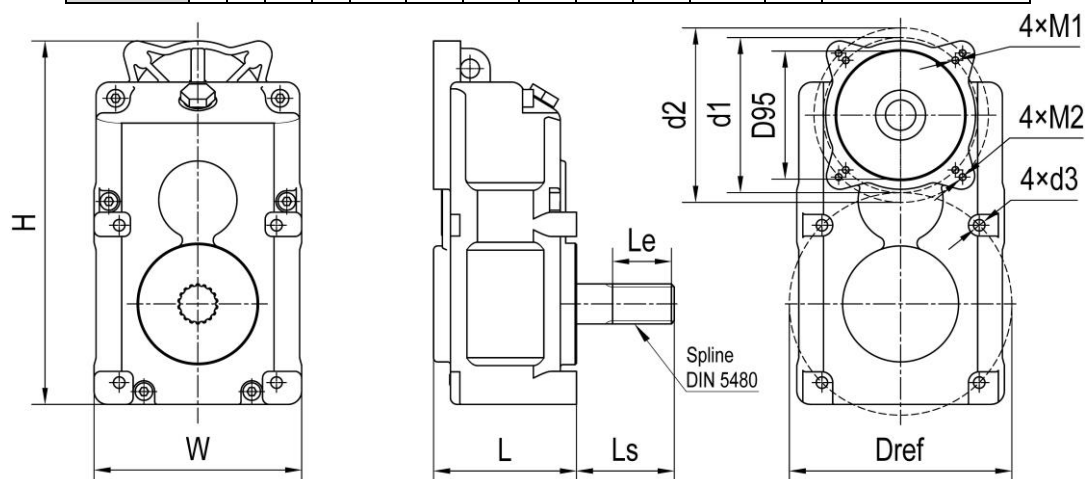
4.1. Travelling gearbox code

T		3	042	S	3
Pos.	Code	Description	Properties		
1	T	Transmission			
2	3	Gear Type	0	Future Reservation	
			1、 2	Trolley	
			3、 4、 5	Trolley, Bridge	
			6、 7、 8、 9	Bridge, Gantry	
3	042	Ratio Code		006、 015、 025、 032、 042、 056、 059、 063、 072、 090、 100、 109、 115	
4	S	Secondary Shaft Type	G	Gear Shaft	
			H	Hollow Shaft + Keyway	
			K	Keyway	
			P	Shaft + Pinion	
			S	Spline Shaft	
5	3	Secondary Shaft Size	1	D55	
			2	D45	
			3	D30	
			4	D22	
			5	D25	
			6	D40	
			7	D60	

4.2. Dimension of travelling gearbox



Size Gearbox	Le	Ls	L	S	H	W	Dref	d1	d2	d3	M1	M2	Spline type (DIN 5480)
T3...S4	32	82	93	15	216	120	140	115	N/A	8.5	M6	N/A	W22x1.25x16x8f
T3...S3	46	86	93	15	216	120	140	115	N/A	8.5	M6	N/A	W30x1.5x18x8f
T4...S3	48	72	106	11	265	154	165	115	130	8.5	M6	M6	W30x1.5x18x8f
T4...S2	48	72	106	11	265	154	165	115	130	8.5	M6	M6	W45x2x21x8f
T5...S2	96	111	143	16	362	200	210	115	130	13	M6	M6	W45x2x21x8f
T5...S1	86	91	143	16	362	200	210	115	130	13	M6	M6	W55x2x26x8f
T6...S3	48	72	113.5	11	452	152	165	115	N/A	8.5	M6	N/A	W30x1.5x18x8f
T6...S2	48	72	108	11	527	152	165	115	130	8.5	M6	M6	W45x2x21x8f



Gearbox code	Ratio code	Ratio	Output Shaft Teeth of motor	Secondary Shaft Type		Secondary Shaft Size			Output Torque Nm
T2	6	6.18	11	G		3			24
T3	15	15.05	11	S	P	(S)3	(S)4	(P)5	60
	25	24.89	11	S	P	(S)3	(S)4	(P)5	100
	32	30.47	11	S	P	(S)3	(S)4	(P)5	120
	42	41.92	11	S	P	(S)3	(S)4	(P)5	165
T4	63	60.13	12	S		2	3		550
	72	72.8	12	S		2	3		570
	90	89.03	11	S		2	3		650
	100	107.8	11	S		2	3		680
T5	56	54.04	15	S		1	2		1350
	72	70.66	12	S		1	2		1450
	90	87.44	15	S		1	2		1900
	115	114.3	12	S		1	2		2030
T6	63	60.13	12	S		2	2		550
	72	72.8	12	S		2	2		570
	90	89.03	11	S		2	2		650
	100	107.8	11	S		2	2		680

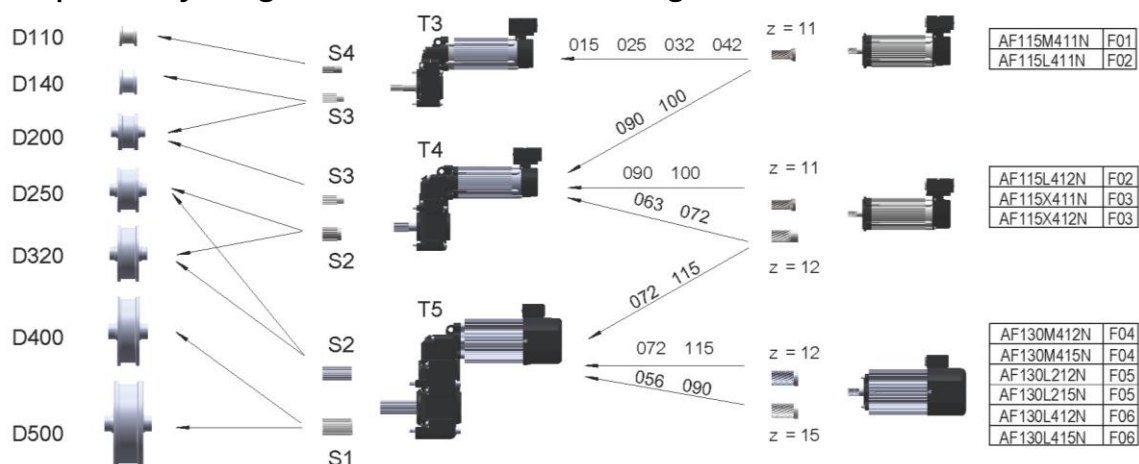
5. Gearmotor

5.1. Gearmotor code

T	3	042	S	3	F	115	L	4	11	N
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Pos.	Code	Description	Properties	
1	T	Transmission		
2	3	Gear Type	0	Future Reservation
			1、 2	Trolley
			3、 4、 5	Trolley, Bridge
			6、 7、 8、 9	Bridge, Gantry
3	042	Ratio Code		006、 015、 025、 032、 042、 056、 059、 063、 072、 090、 100、 109、 115
4	S	Secondary Shaft Type	G	Gear Shaft
			H	Hollow Shaft + Keyway
			K	Keyway
			P	Shaft + Pinion
			S	Spline Shaft
5	3	Secondary Shaft Size	1	D55
			2	D45
			3	D30
			4	D22
			5	D25
			6	D40
			7	D60
6	F	Motor Type	D	Double speed
			F	Frequency
7	115	Frame Size	115	Mounting base Ø115
8	L	Frame Length	S	Short frame
			M	Medium frame
			L	Long frame
			X	Expanding frame
			XA	Expanding A frame
			XB	Expanding B frame
			XC	Expanding C frame
9	4	Pole Number	2	2 poles
			4	4 poles
10	11	Output Shaft Teeth of motor	11	11 teeth
11	N	Special Properties	E	Encode included
			H	Heating included
			P	Pulse included
			N	Normal (no additional)

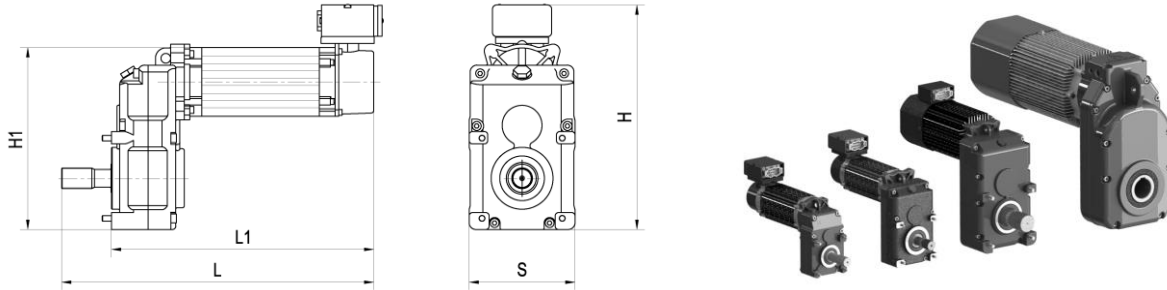
5.2. Compatibility of gearmotor & end carriage



End carriage	DN11				DN14				DN20			
Wheel diameter (mm)	110				140				200			
Motor code	F01		F02		F01		F02		F01		F02	
Motor speed (rpm)	2855		2800		2855		2800		2855		2800	
Ratio	15	25	32	42	15	25	32	42	15	25	32	42
Bridge speed (m/min)	66	39	31	23	65	39	30	23	84	50	39	30
End carriage	DN20				DN25				DN32			
Wheel diameter (mm)	200				250				320			
Motor code	F03		F02		F03		F04		F05		F06	
Motor speed (rpm)	2770		2800		2770		2860		4460		2800	
Ratio	63	72	90	100	63	72	90	100	56	72	90	115
Bridge speed (m/min)	28	24	19	17	35	31	24	22	40	31	25	20
End carriage	DN32				DN50				DN50			
Wheel diameter (mm)	320				500				500			
Motor code	F03		F04		F05		F06		F04		F05	
Motor speed (rpm)	2770		2860		4460		2800		2860		4460	
Ratio	63	72	90	100	56	72	90	115	56	72	90	115
Bridge speed (m/min)	44	39	31	28	51	40	32	25	80	62	50	39

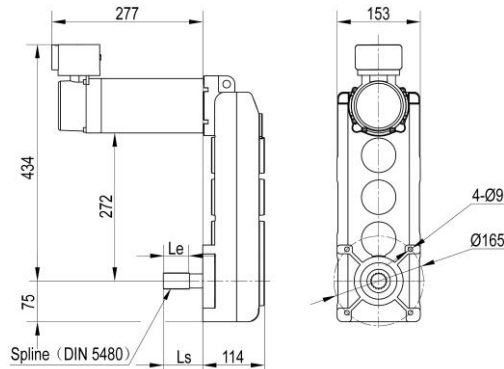
5.3. Dimension of gearmotor

Gearmotor code	L	L1	S	H	H1	Gearmotor code	L	L1	S	H	H1
T3...F115...	455	368	120	280	158	T5...F130...	553.5	463	200	427	282.5
T4...F115...	454	381.5	154	326.5	190	T6...F115...	455.5	383.5	152	583	521
T5...F115...	509.5	419	200	422	260	T7...F195...	—	759	256	501	—

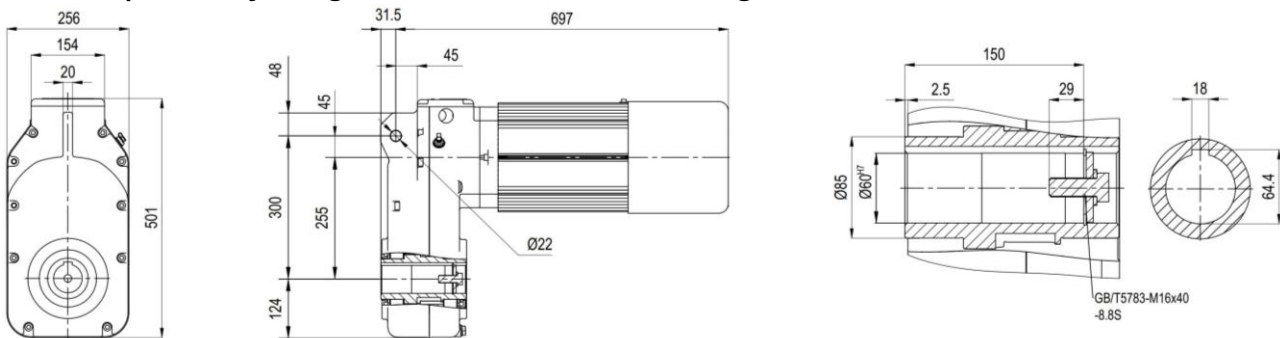


5.4. Compatibility of gearmotor & end carriage T6

End carriage	DN20B					DN20-					DN25B				DN25-				DN32B				DN32--			
Wheel base (100mm)	12	14	16	18	20	18	22	27	31	38	14	16	18	20	22	27	31	38	14	16	18	20	22	27	32	38
Wheel diameter (mm)	200										250								320							
Spline type (DIN 5480)	W30x1.5x18x8f										W45x2x21x8f								W45x2x21x8f							
Ls	72										72								72							
Le	48										48								48							
Motor code	F02					F03					F02				F03				F02				F03			
Motor speed (rpm)	2800					2770					2800				2770				2800				2770			
Ratio	63	72	90	100		63	72	90	100		63	72	90	100	63	72	90	100	63	72	90	100	63	72	90	100
Bridge speed (m/min)	28	24	20	18		28	24	19	17		35	31	24	22	35	30	24	22	45	39	31	28	44	39	31	28



5.5. Compatibility of gearmotor & end carriage T7



Wheel diameter (mm)	250				320				400				500			
Motor power	4.5	5.5	7.5	9	4.5	5.5	7.5	9	4.5	5.5	7.5	9	4.5	5.5	7.5	9
Motor speed (rpm)	1450	2840	2840	2840	1450	2840	2840	2840	1450	2840	2840	2840	1450	2840	2840	2840
Ratio	90	59	109	90	90	59	109	90	90	59	109	90	90	59	109	90
Bridge speed (m/min)	13	19	20	25	16	25	26	32	20	31	33	40	25	39	41	50

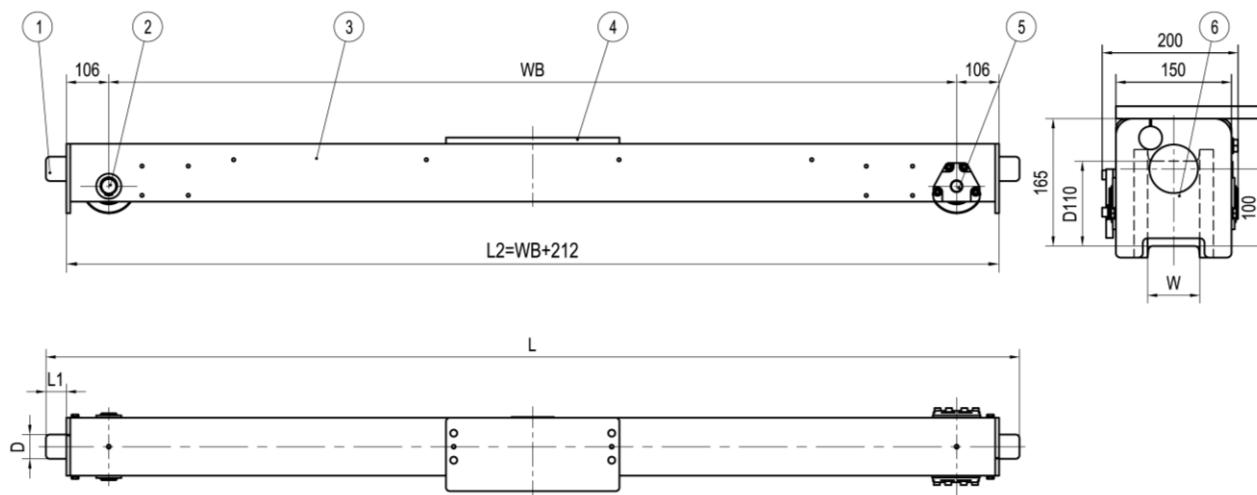
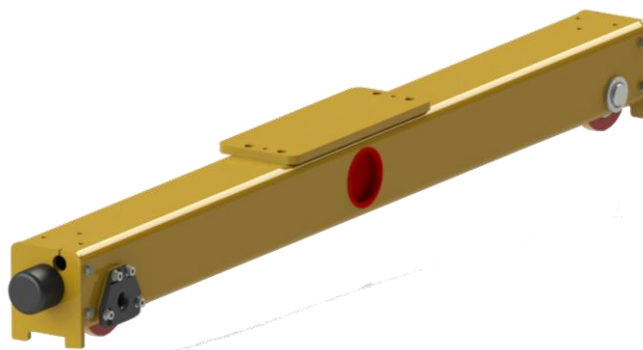
6. End carriage

6.1. End carriage code

D	N	20	B	WB	W	S	K4	Y1	C	Y2	M	N
Pos.	Code	Description			Parameter							
1	D	Endcarriage of WORLDHOISTS										
2	N	Normal endcarriage										
3	20	Wheel diameter			Wheel diameter 20=200mm							
2	B	Description	-	Standard								
			B	Bogie(with DN20,DN25,DN32,DN50)								
			C	Asymmetrical joint with single girder								
3	WB	Wheel base(100mm)	DN11 14,18,22,27 DN14 14,18,22,27,31,38 DN20 12,14,16,18,20,22,27,31,38 DN25 14,16,18,20,22,27,31,38,45,50,55 DN32 14,16,18,20,22,27,31,38,45,50,55 DN40 16,18,20,22,27,31,38,45,50,55 DN50 16,18,20,22,27,31,38,45,50,55									
4	W	Groove width	DN11 75 DN14 75 DN20 75,95 DN25 55~100(100 is 99 in code),101~125(special design) DN32 55~100(100 is 99 in code) DN40 55~100(100 is 99 in code) DN50 55~100(100 is 99 in code),101~125(special design)									
5	S	Number of driving wheels	S	One driving wheel								
			D	Two driving wheels								
6	K4	Joint type	Top joint	DN11,DN14 DN20 DN25,DN32,DN40,DN50					A4,A6 B3,B4,B5 C4,C5,C7,F4,F5,F7			
			Side joint	DN20 DN25,DN32,DN40,DN50								
7	Y1	Bolt joint distance	4 digits									
8	C	Buffer type	Type	L1	D	Material	Type	L1	D	Material		
			A	53	63	Rubber	E	150	100	Polyurethane		
			B	68	80	Rubber	F	190	125	Polyurethane		
			C	85	100	Rubber	G	100	100	Polyurethane		
			D	105	125	Rubber	H	160	160	Polyurethane		
							I	200	200	Polyurethane		
9	Y2	Inner wheel distance	4 digits									
10	M	Bogie connection hole distance	4 digits									
11	N	Option	N	N= Normal (standard delivery)								
			E	E= Extensional (tailor made)								

6.2. DN11 End carriage

DN11- End carriage	WB (100mm)	Weight (kg)
	14	86
	18	103
	22	120
	27	141



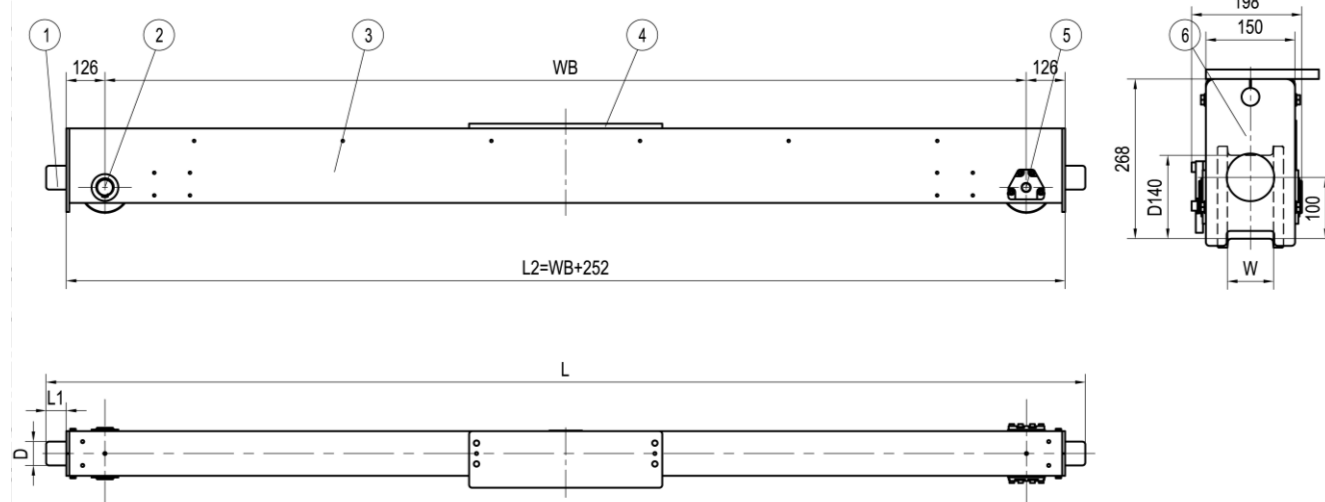
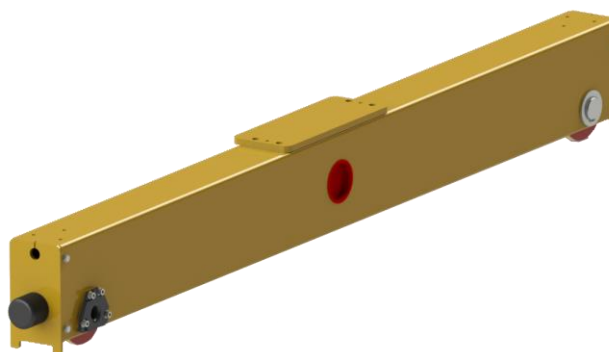
①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*W=75;

*Dimension L1, D see 6.1

6.3. DN14 End carriage

DN14- End carriage	WB (100mm)	Weight (kg)
	14	125
	18	157
	22	179
	27	208
	31	231
	38	272



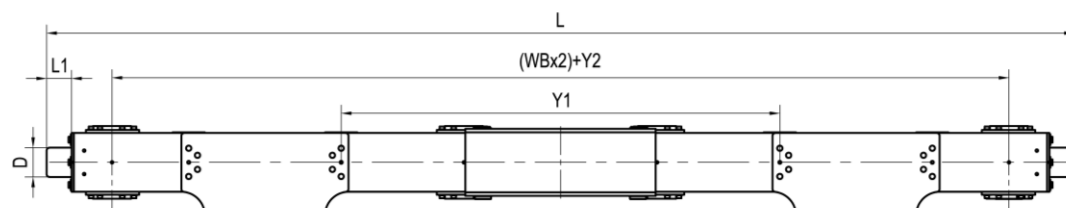
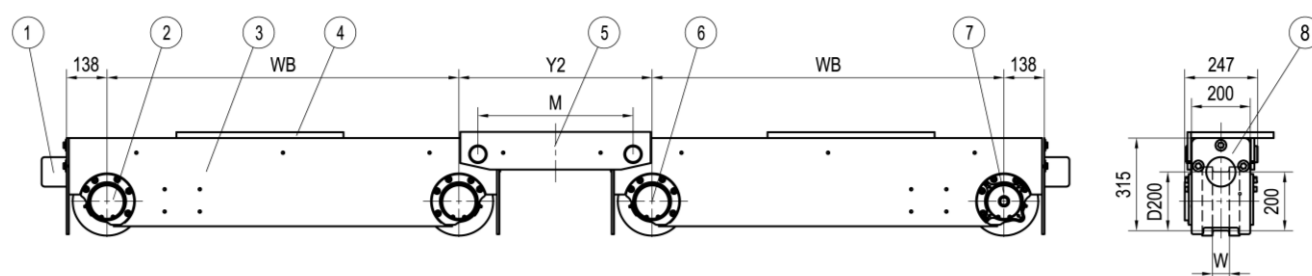
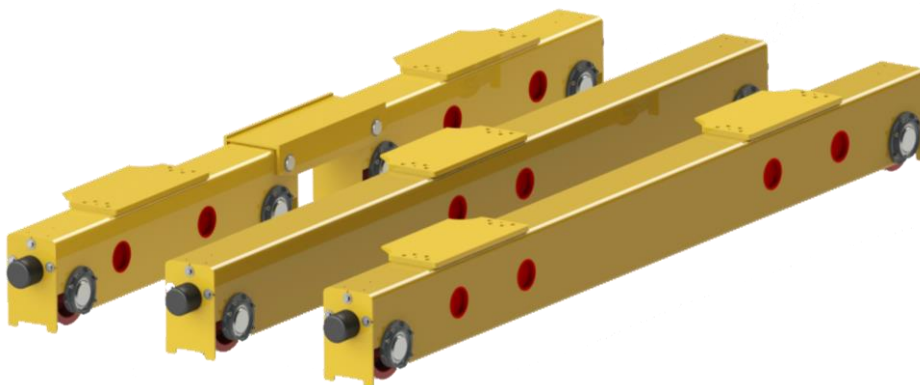
①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*W=75;

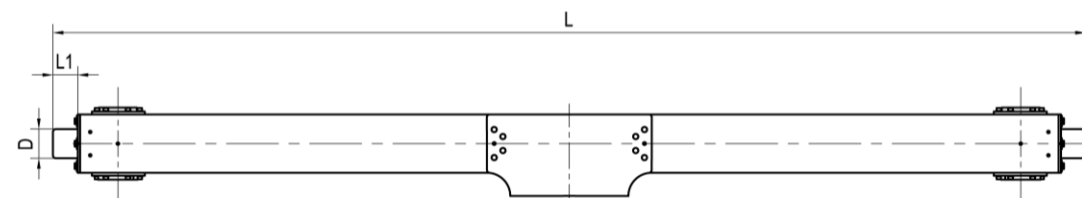
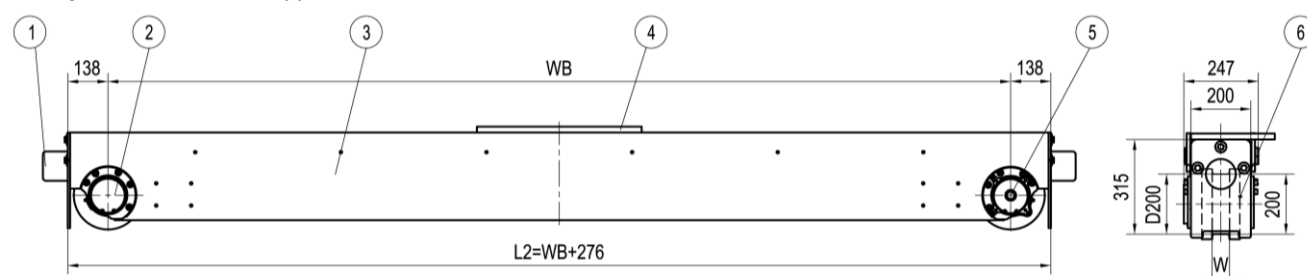
*Dimension L1, D see 6.1

6.4. DN20 End carriage

DN20B End carriage	WB (100mm)	Weight (kg)
	12	169
	14	185
	16	198
	18	213
DN20- End carriage	18	213
	22	242
	27	285
	31	315
	38	351



- ①Buffer; ②Wheel (idle or drive); ③End carriage; ④Joint plate; ⑤Bogie; ⑥Wheel (idle); ⑦Wheel (drive);
⑧Integrated derailment support



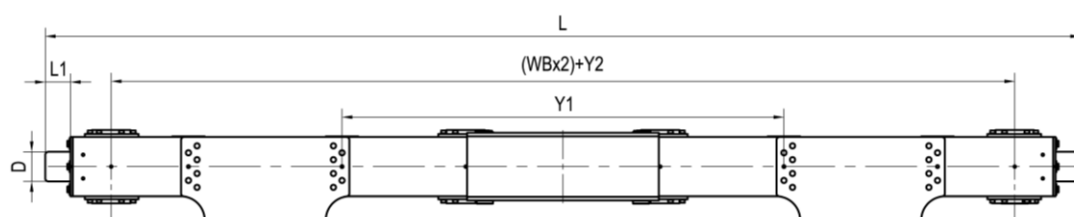
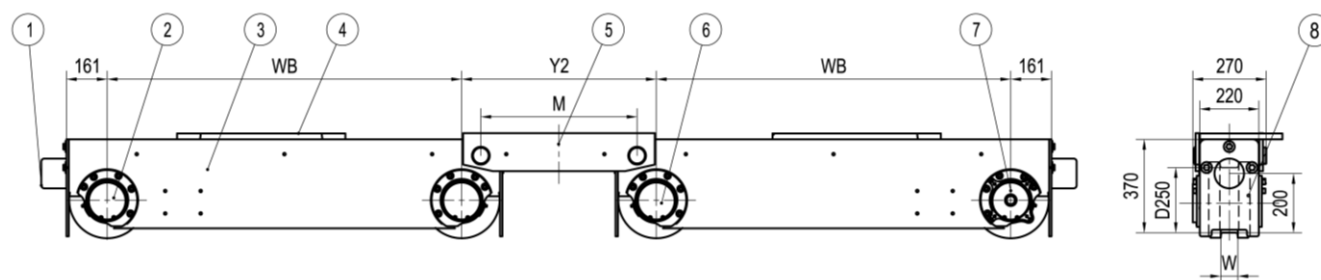
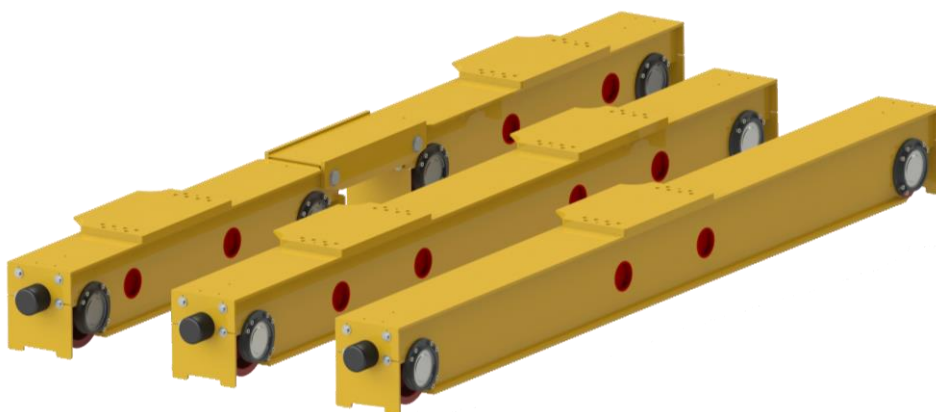
- ①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*W=75; 95;

*Dimension L1, D see 6.1

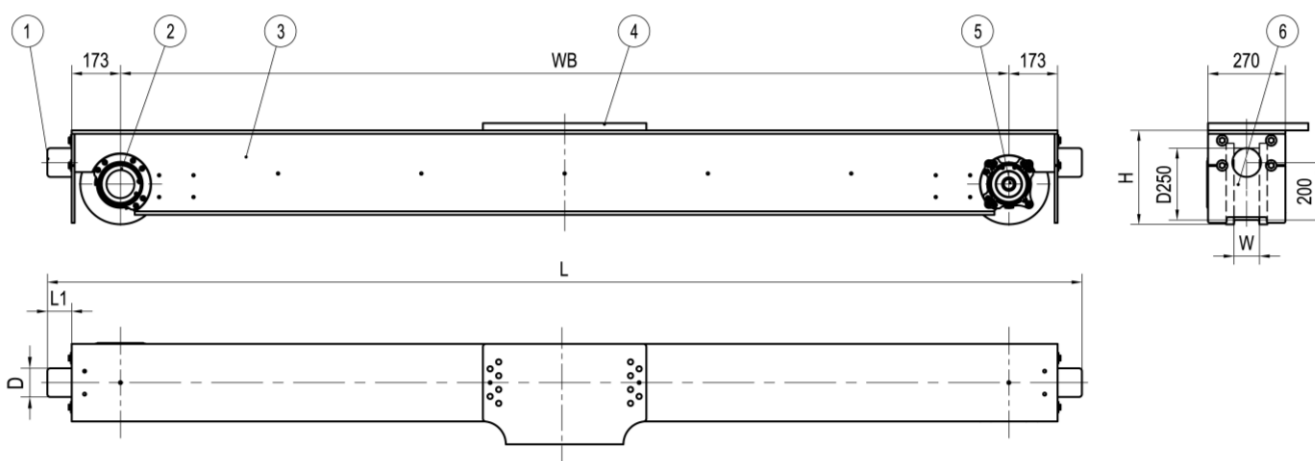
6.5. DN25 End carriage

DN25B End carriage	WB (100mm)	Wight (kg)	H (mm)
	14	311	370
	16	331	370
	18	357	370
	20	382	370
DN25- End carriage	22	408	310
	27	470	310
	31	520	312
	38	608	316
	45	675	446
	50	733	446
	55	796	446



- ①Buffer; ②Wheel (idle or drive); ③End carriage; ④Joint plate; ⑤Bogie; ⑥Wheel (idle); ⑦Wheel (drive);
⑧Integrated derailment support

*Rectangular type.



- ①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

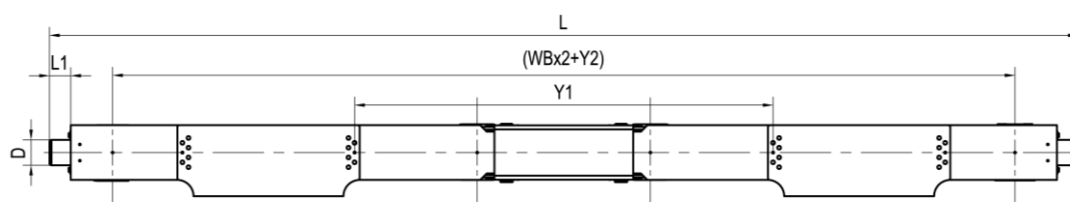
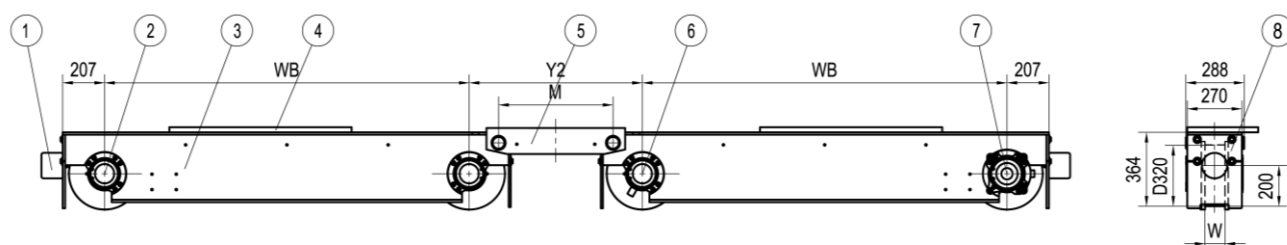
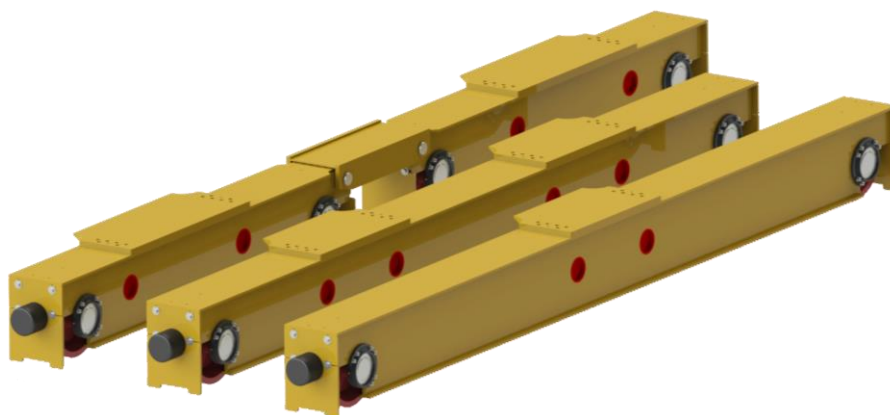
*Welding type;

*W=55~100 (100 is 99 in code);

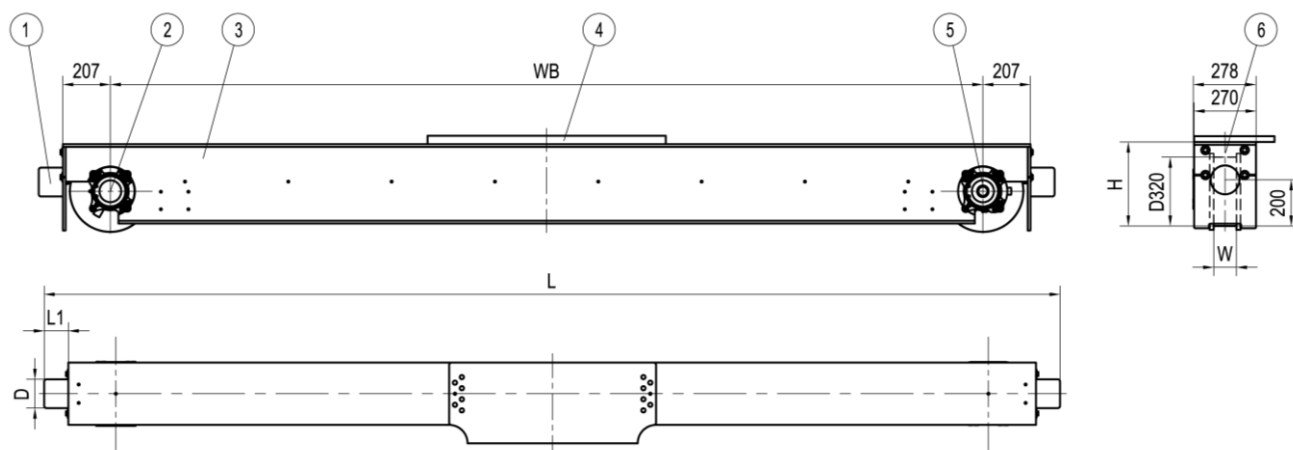
*Dimension L1, D see 6.1

6.6. DN32 End carriage

DN32B End carriage	WB (100mm)	Weight (kg)	H (mm)
	14	388	364
	16	415	364
	18	443	364
DN32- End carriage	20	470	364
	22	498	364
	27	567	364
	31	622	364
	38	719	366
	45	763	559
	50	906	563
	55	970	563



- ①Buffer; ②Wheel (idle or drive); ③End carriage; ④Joint plate; ⑤Bogie; ⑥Wheel (idle); ⑦Wheel (drive);
⑧Integrated derailment support



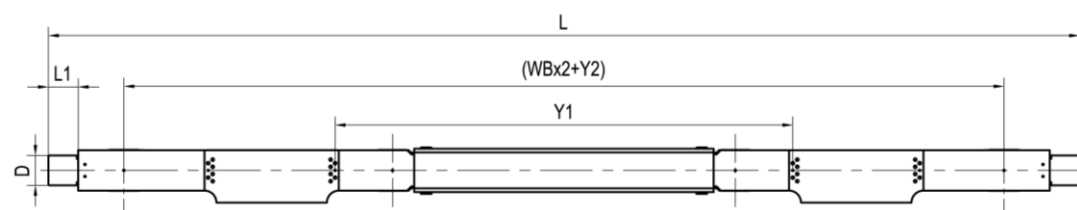
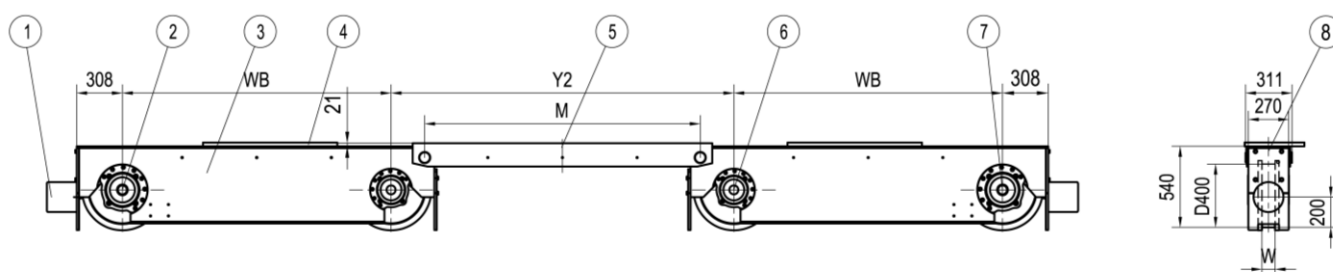
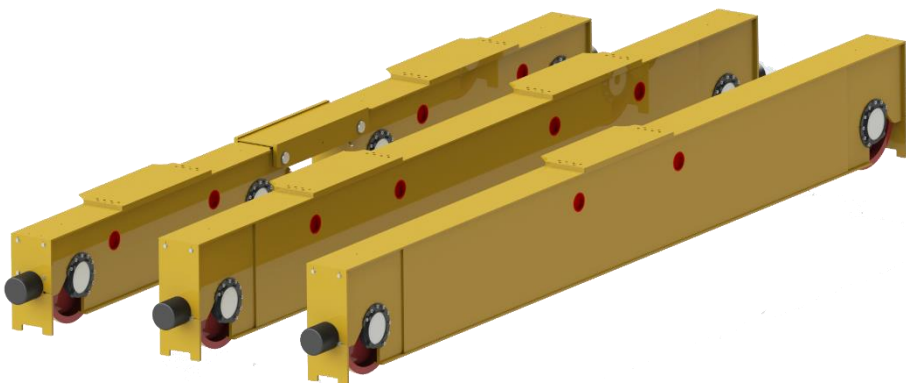
- ①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*W=75; 95;

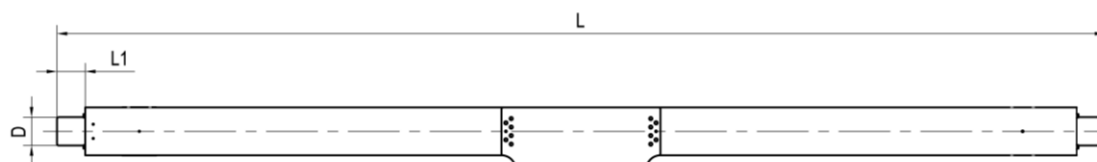
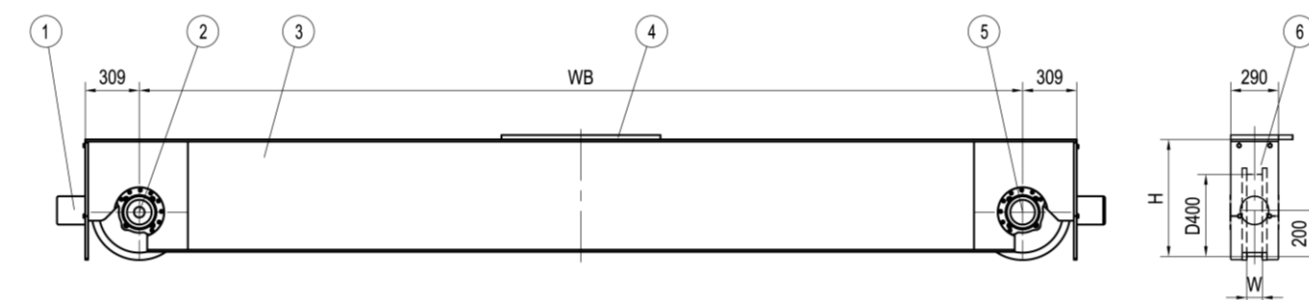
*Dimension L1, D see 6.1

6.7. DN40 End carriage

DN40B End carriage	WB (100mm)	Weight (kg)	H (mm)
	16	645	540
	18	686	540
DN40- End carriage	20	727	540
	22	685	540
	27	804	544
	31	863	544
	38	1043	548
	45	1200	684
	50	1379	688
	55	1471	688



- ①Buffer; ②Wheel (idle or drive); ③End carriage; ④Joint plate; ⑤Bogie; ⑥Wheel (idle); ⑦Wheel (drive);
⑧Integrated derailment support



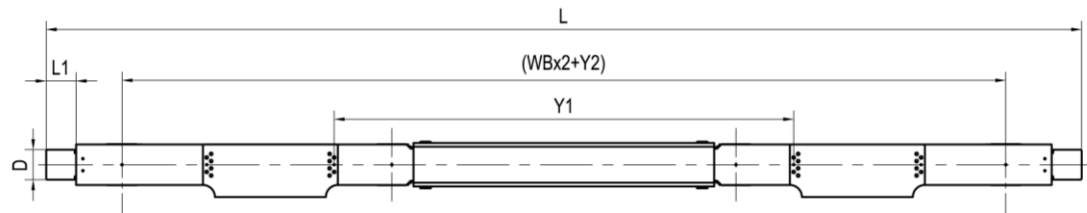
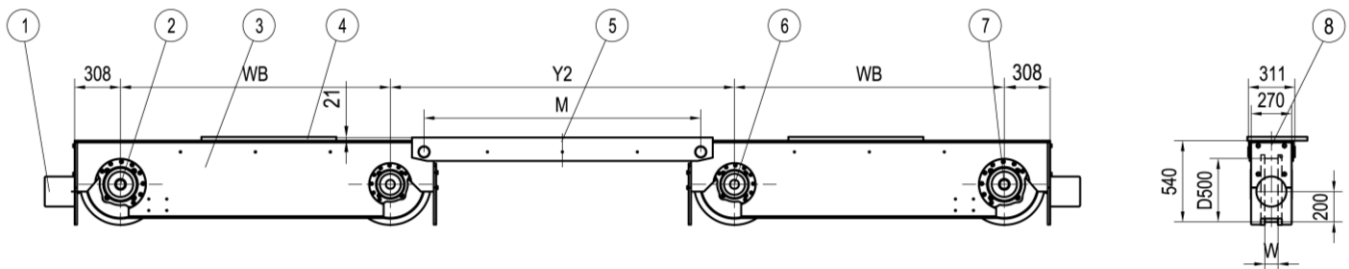
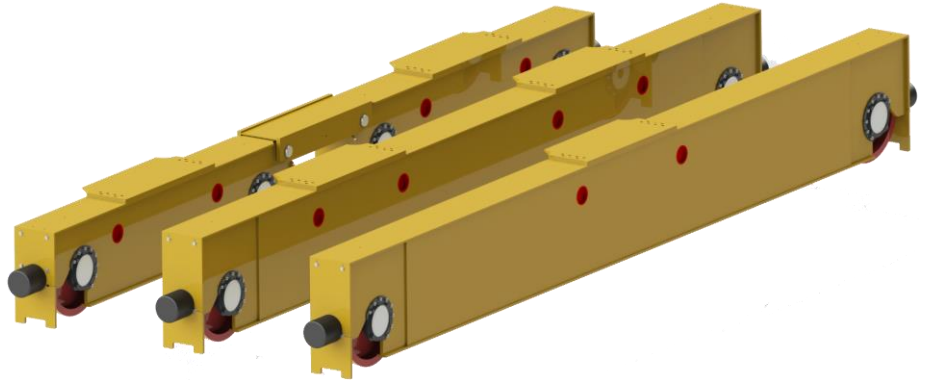
- ①Buffer; ②Wheel (drive); ③End carriage; ④Joint plate; ⑤Wheel (idle); ⑥Integrated derailment support

*W=75; 95;

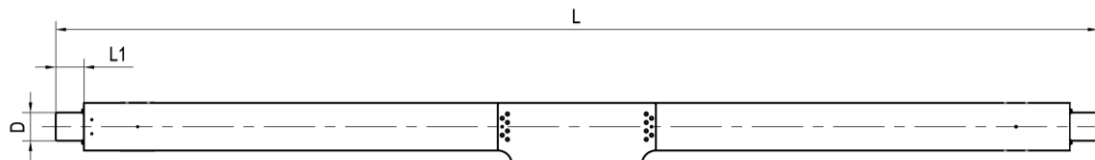
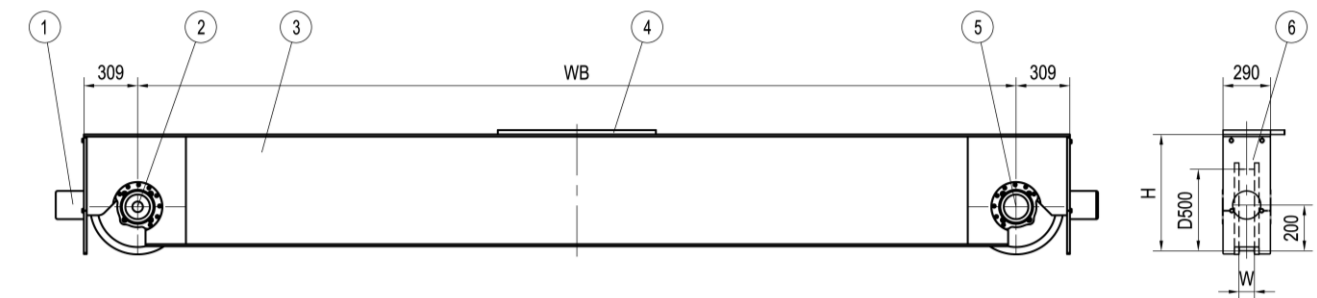
*Dimension L1, D see 6.1

6.8. DN50 End carriage

DN50B End carriage	WB (100mm)	Weight (kg)	H (mm)
	16	725	540
	18	766	540
DN50- End carriage	20	807	540
	22	765	540
	27	884	544
	31	943	544
	38	1123	548
	45	1280	684
	50	1459	688
	55	1551	688



- ①Buffer; ②Wheel (idle or drive); ③End carriage; ④Joint plate; ⑤Bogie; ⑥Wheel (idle); ⑦Wheel (drive);
⑧Integrated derailment support



- ①Buffer; ②Wheel (drive); ③End carriage; ④Joint plate; ⑤Wheel (idle); ⑥Integrated derailment support

*W=95;

*Dimension L1, D see 6.1

7.DH end carriage

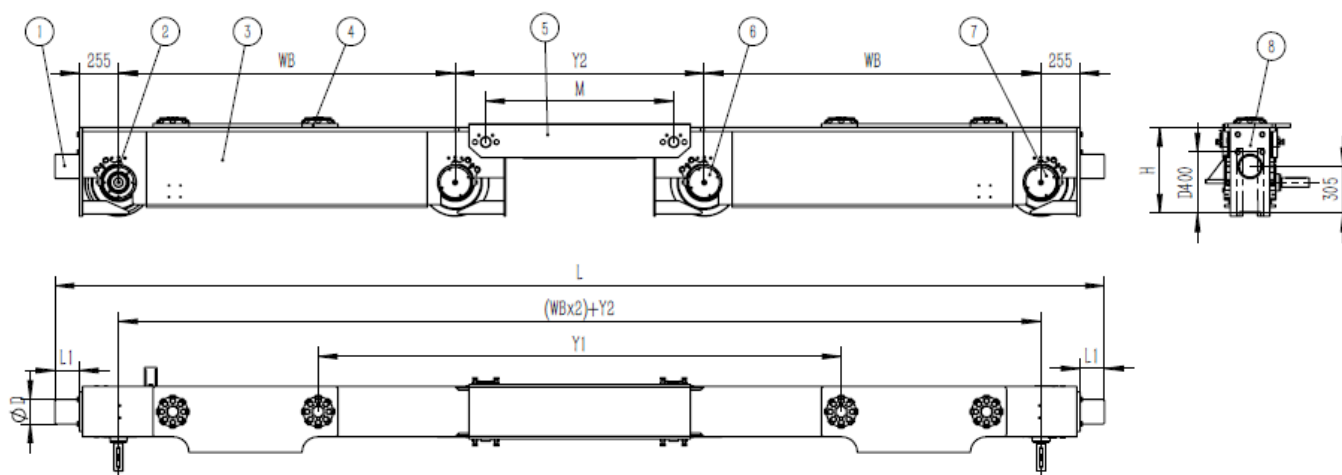
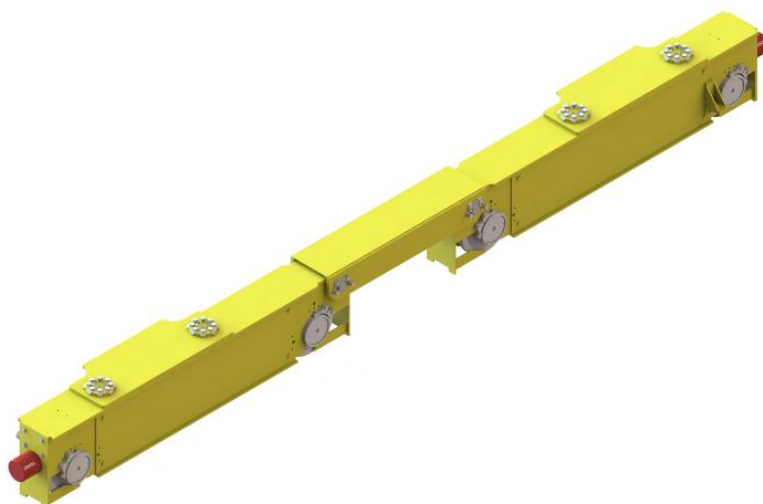
7.1. DH end carriage code

D	H	40	B	WB	W	S	D7	Y1	C	Y2	M	N
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Pos.	Code	Description	Parameter										
1	D	Endcarriage of WORLDHOISTS											
2	H	Heavy endcarriage											
3	40	Wheel diameter	Wheel diameter 40=400mm										
4	B	Description	-	Standard									
			B	Bogie(with DH40,DH50)									
			BB	Balancing beams									
5	WB	Wheel base(100mm)	DH40 13,16,18,20,22 DH50 13,16,18,20,22										
6	W	Groove width	DH40 75~140 DH50 75~140										
7	S	Number of driving wheels	S	One driving wheel									
			D	Two driving wheels									
8	D7	Joint type	Top joint	DH40B D7,D8,D9 DH50B E7,E8,E9									
			Top joint	DH40BB M3,M4,M5 DH50BB N3,N4,N5									
9	Y1	Bolt joint distance	4 digits										
10	C	Buffer type	Type	L1	D	Material	Type	L1	D	Material			
			A	53	63	Rubber	E	150	100	Polyurethane			
			B	68	80	Rubber	F	190	125	Polyurethane			
			C	85	100	Rubber	G	100	100	Polyurethane			
			D	105	125	Rubber	H	160	160	Polyurethane			
							I	200	200	Polyurethane			
11	Y2	Inner wheel distance	4 digits										
12	M	Bogie connection hole distance	4 digits										
13	N	Option	N	N= Normal (standard delivery)									
			E	E= Extensional (tailor made)									

7.2. DH40 end carriage

DH40B End carriage	WB (100mm)	Y2 min (mm)	H (mm)	Wight (kg)
	13	1100	525	2100
	16	1100	525	2210
	18	1100	559	2280
	20	1100	559	2360
	22	1100	559	2430



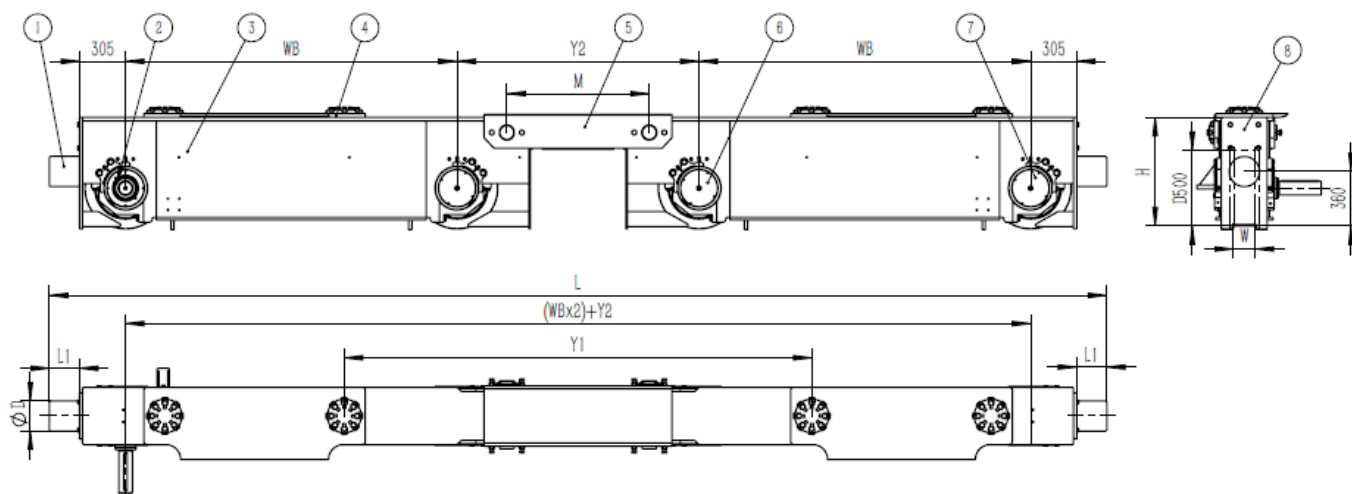
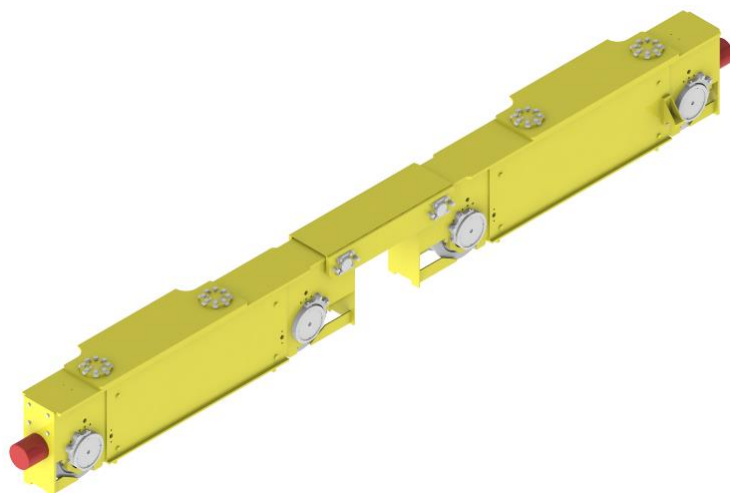
- ① Buffer; ② Wheel (idle or drive); ③ End carriage; ④ Joint plate; ⑤ bogie; ⑥ Wheel(idle); ⑦ Wheel (drive);
⑧ Integrated derailment support

*W=75~140

*Dimension L1, D see 7.1

7.3. DH50 end carriage

DH50B End carriage	WB (100mm)	Y2 min (mm)	H (mm)	Wight (kg)
	13	1505	639	3220
	16	1505	639	3360
	18	1505	719	3455
	20	1505	719	3560
	22	1505	719	3650

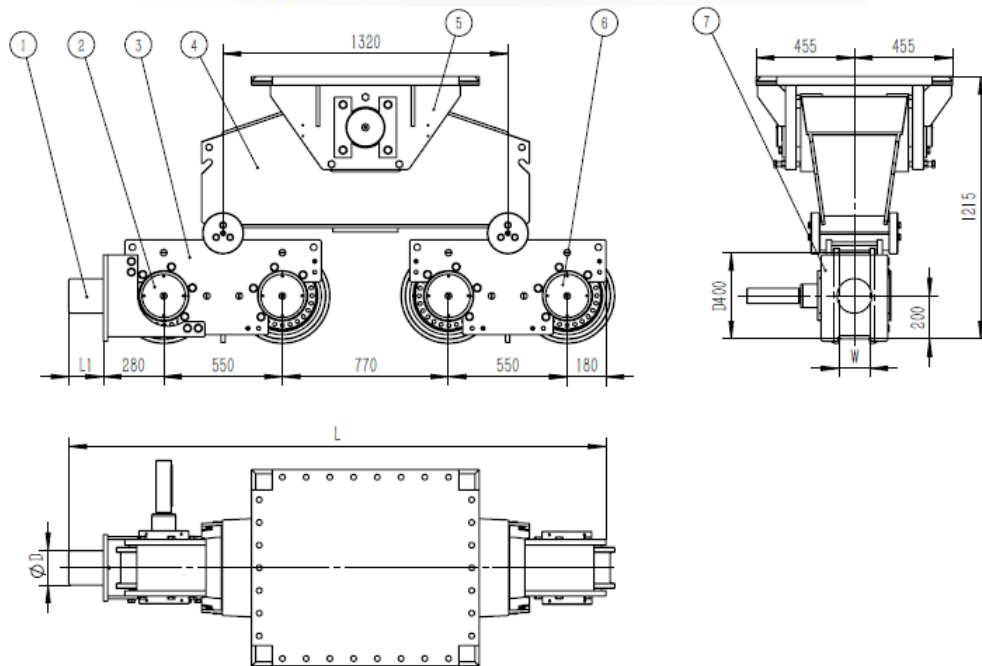
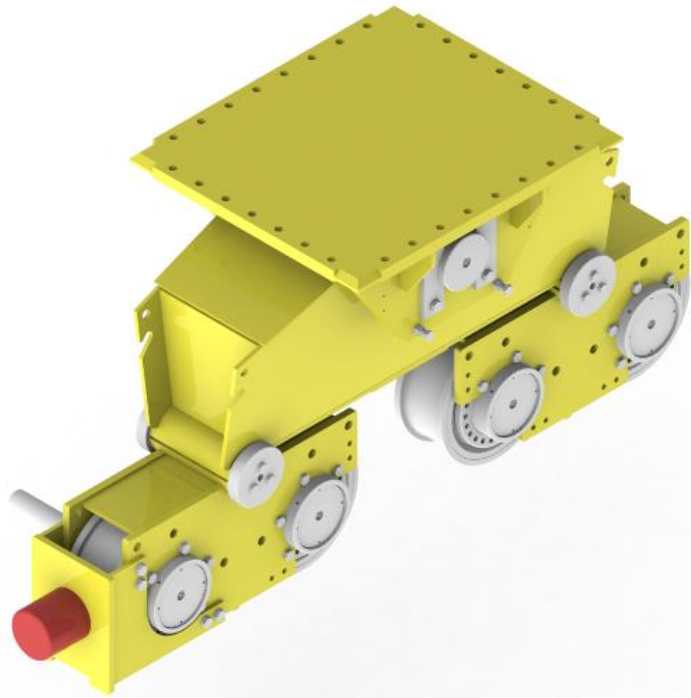


- ① Buffer; ② Wheel (idle or drive); ③ End carriage; ④ Joint plate; ⑤ bogie; ⑥ Wheel(idle); ⑦ Wheel (drive);
⑧ Integrated derailment support

*W=75~140

*Dimension L1, D see 7.1

7.4. DH40BB end carriage

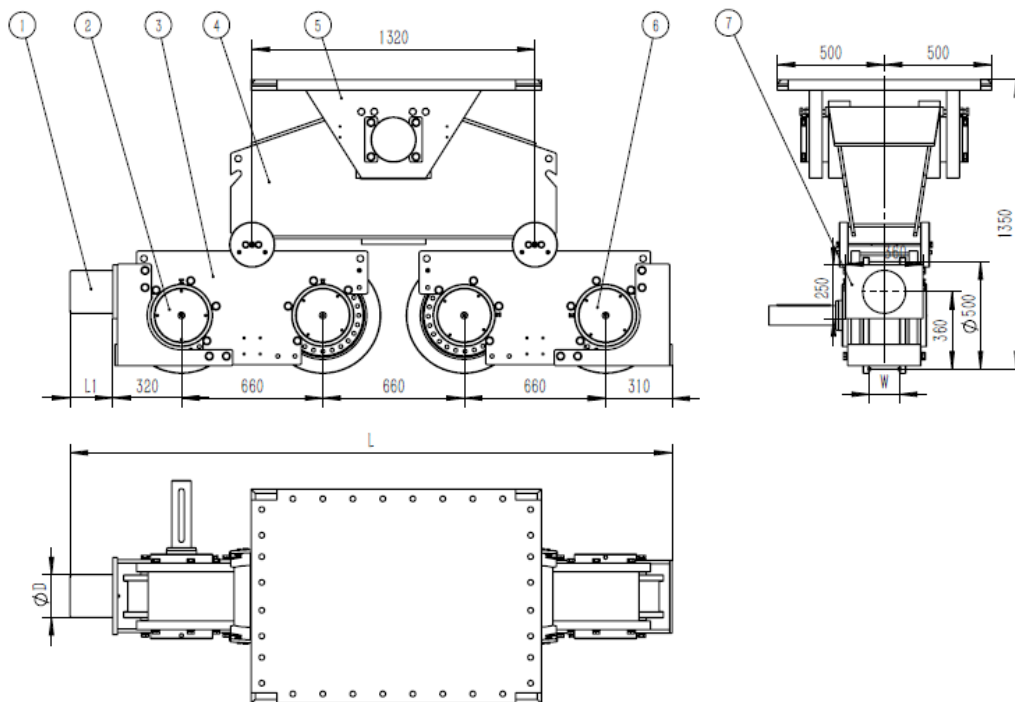
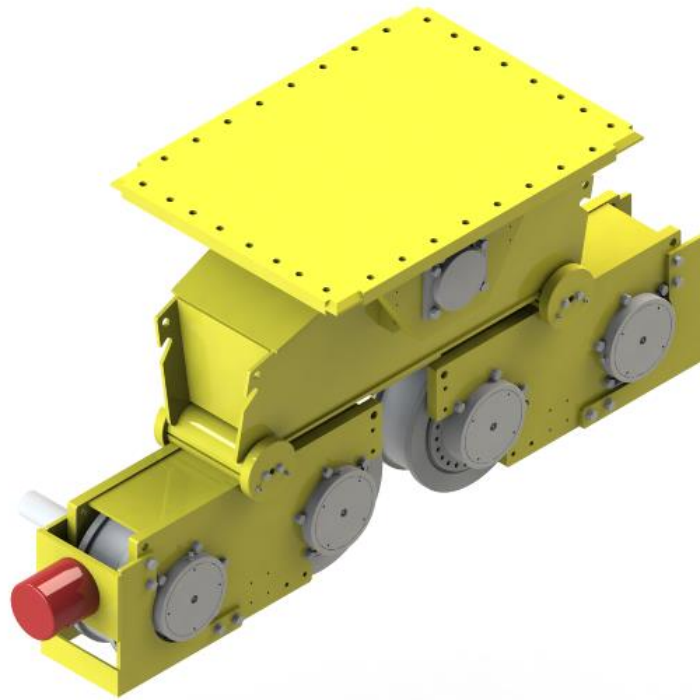


- ① Buffer; ② Wheel (idle or drive); ③ End carriage; ④ Walking beam ; ⑤ Connecting seat; ⑥ Wheel(idle);
⑦ Integrated derailment support

*W=75~140

*Dimension L1, D see 7.1

7.5. DH50BB end carriage



- ② Buffer; ② Wheel (idle or drive); ③ End carriage; ④ Walking beam; ⑤ Connecting seat; ⑥ Wheel(idle);
⑦ Integrated derailment support

*W=75~140

*Dimension L1, D see 7.1

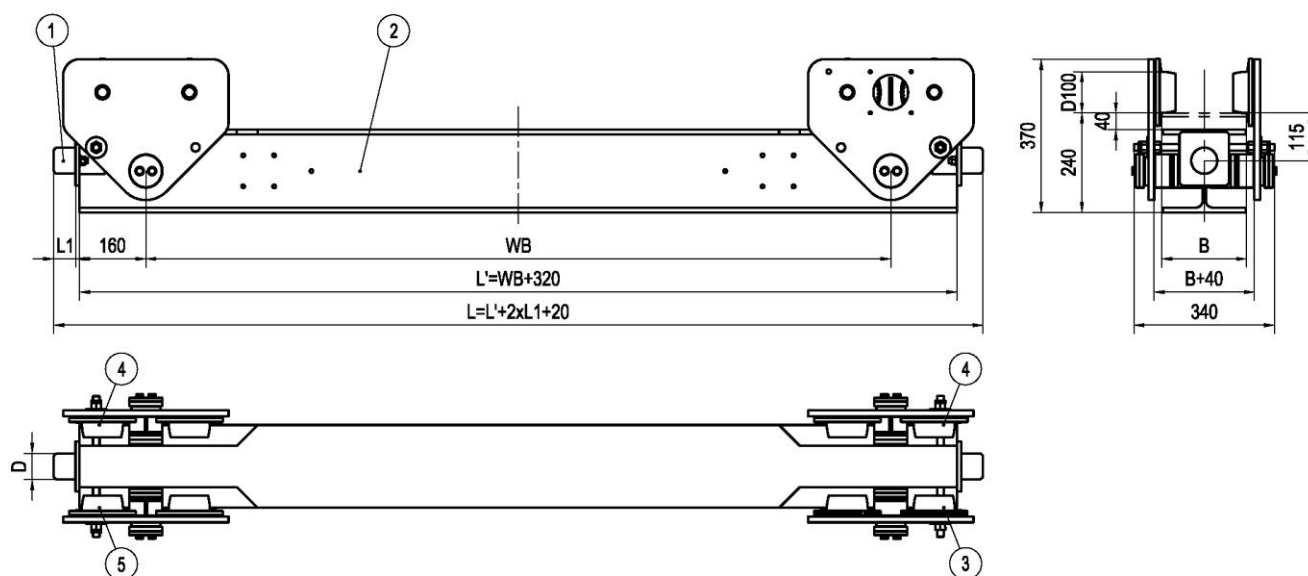
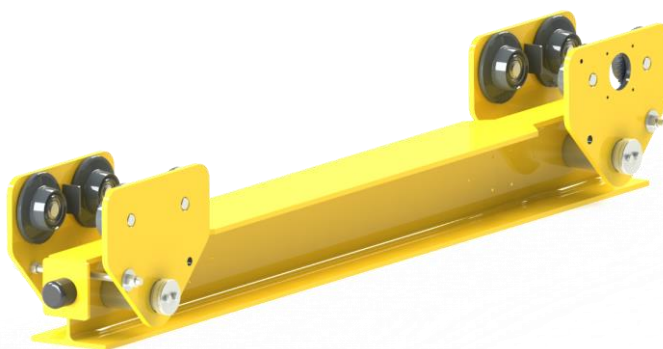
8.Underrunning end carriage

8.1. Underrunning end carriage code

D	U	10	-	WB	B	S	U4	C	L'	L	N	N
Pos.	Code	Description				Parameter						
1	D	Endcarriage of WORLDHOISTS										
2	U	Underrunning endcarriage										
3	10	Wheel diameter			Wheel diameter 10=100mm							
4	-	Description			-	Standard						
5	WB	Wheel base(100mm)			DU10 12,14,18,22,25,28 DU13 12,14,18,22,25,28 DU16 18,22,25,28							
6	B	Track width(mm)			DU10 82~200 DU13 86~200 DU16 90~300							
7	S	Number of driving wheels			S	One driving wheel						
					D	Two driving wheels						
8	U4	Joint type			DU10,DU13 U4,U5,U6 DU16 XX							
9	C	Buffer type			Type	L1	D	Material	Type	L1	D	Material
					A	53	63	Rubber	C	85	100	Rubber
					B	68	80	Rubber	D	105	125	Rubber
10	L'	Section steel length			4 digits							
11	L	Underrunning end carriage length			4 digits							
12	N	Option1			N	N= Normal (same colour with main girder)						
					E	E= Extensional (tailor made)						
13	N	Option2			N	N= Normal (standard delivery)						
					E	E= Extensional (tailor made)						

8.2. DU10 Underrunning end carriage

DU10- Underrunning end carriage	WB (100mm)	Weight (kg)
	12	167
	14	177
	18	197
	22	217
	25	232
	28	248

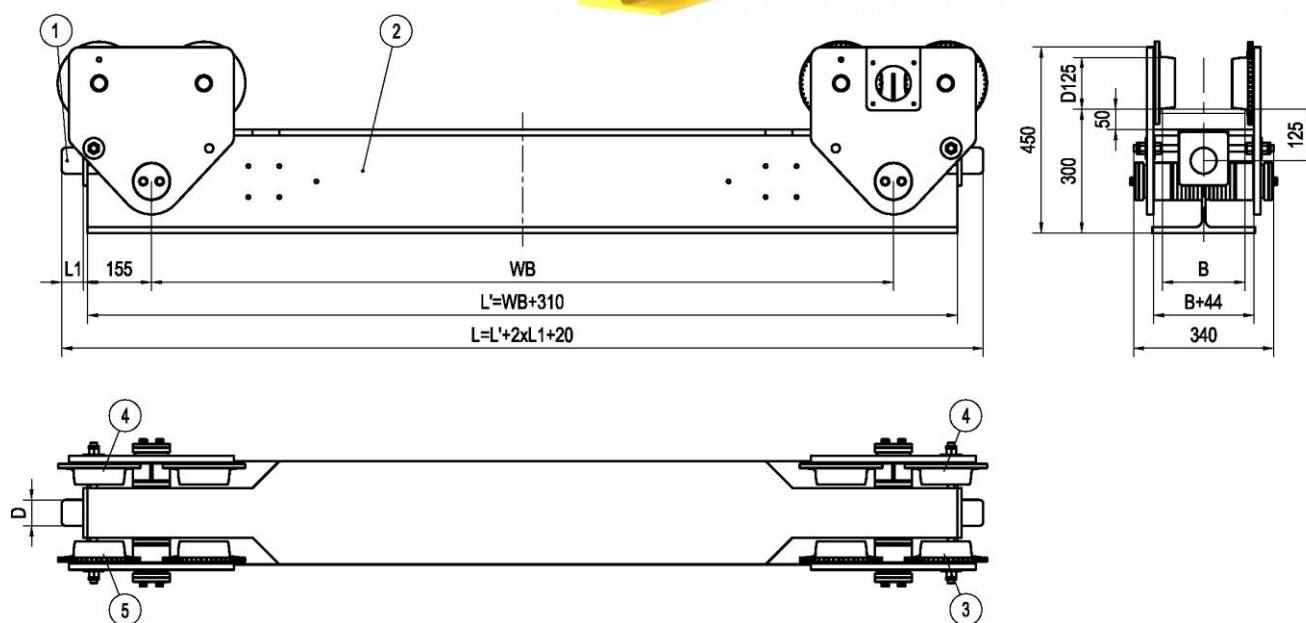
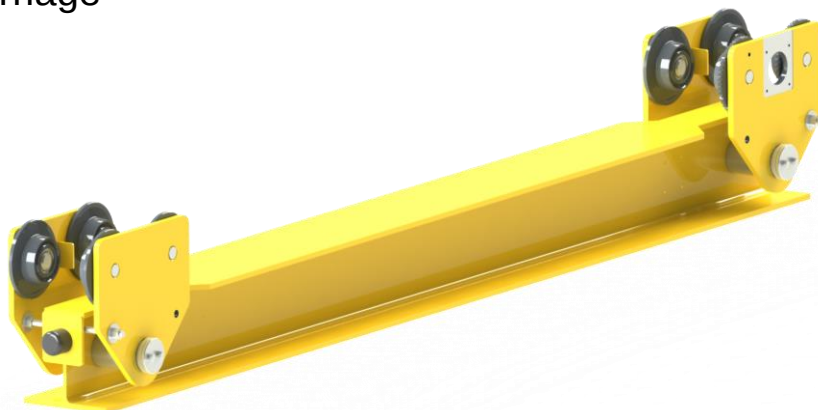


① Buffer; ② End carriage; ③ Wheel(drive); ④ Wheel (idle); ⑤ Wheel(idle or drive)

*Dimension L1, D, B see 8.1

8.3. DU13 Underrunning end carriage

DU13- Underrunning end carriage	WB (100mm)	Weight (kg)
	12	233
	14	247
	18	276
	22	305
	25	327
	28	348

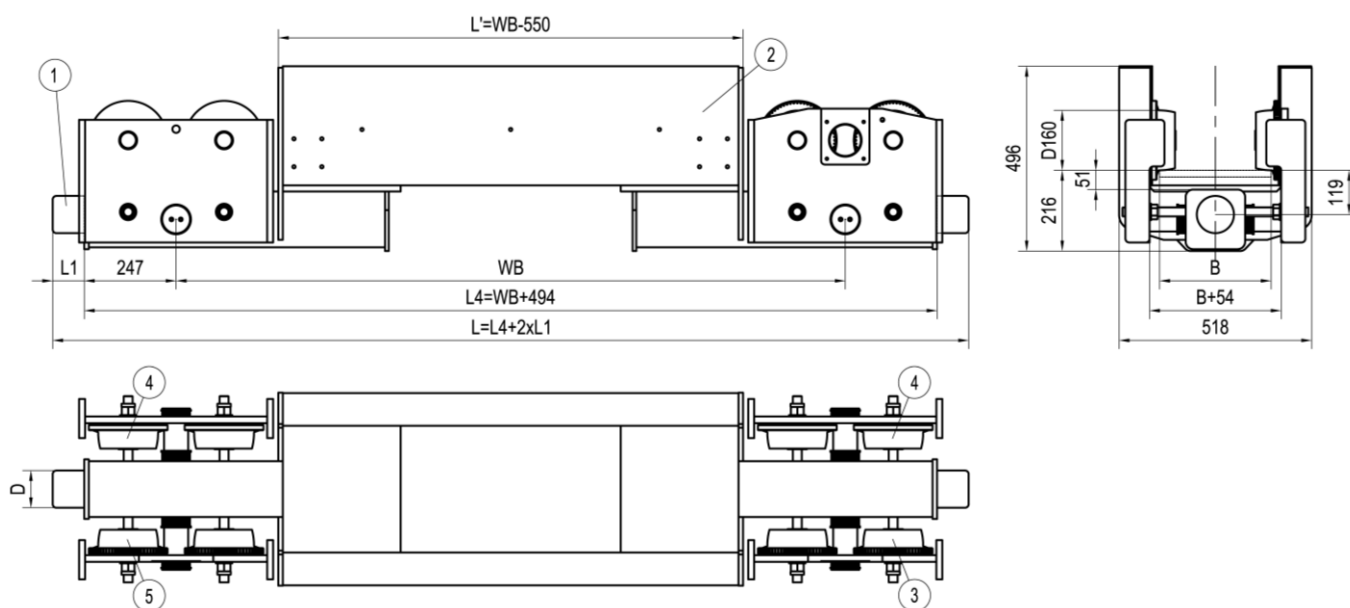


① Buffer; ② End carriage; ③ Wheel(drive); ④ Wheel (idle); ⑤Wheel(idle or drive)

*Dimension L1, D, B see 8.1

8.4. DU16 Underrunning end carriage

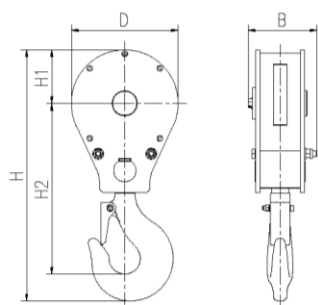
DU16- Underrunning end carriage	WB (100mm)	Weight (kg)
	18	441
	22	477
	25	506
	28	535



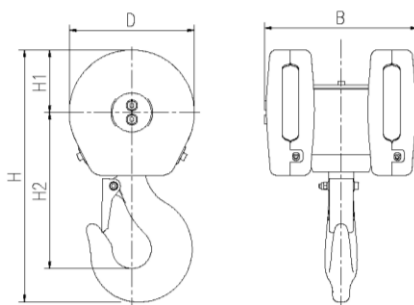
① Buffer; ② End carriage; ③ Wheel(drive); ④ Wheel (idle); ⑤ Wheel(idle or drive)

*Dimension $L1$, D , B see 8.1

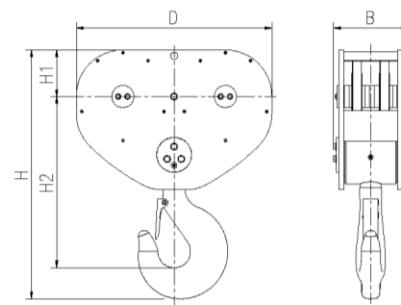
9. Hook block



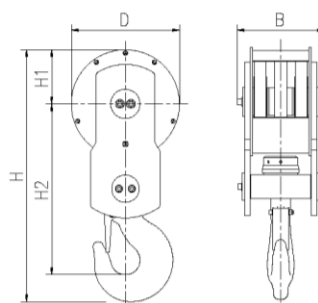
Type 1



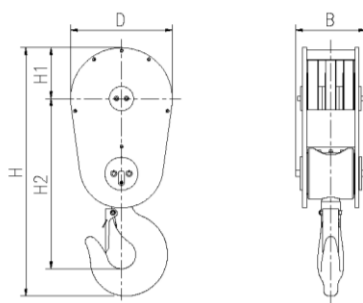
Type 2



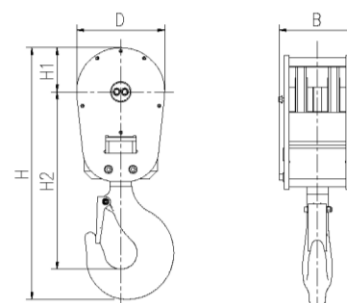
Type 3



Type 4



Type 5



Type 6

Hoist type	Rope	Hook forging	Hook type	Hook block dimensions (mm)					Weight(kg)
				H	H1	H2	D	B	
K21	02	RSN1.6T	1	449	96	306	191	123	12
	04	RSN1.6T	2	360	90	223	179	220	15
K31	02	RSN1.6T	1	468	107	303	214	123	16
	04	RSN2.5T	2	418	103	257	205	247	27
K41	02	RSN2.5T	1	604	145	400	290	107	23
	04	RSN5T	2	580	143	364	285	331	65
	06	RSN5V	4	689	148	467	296	238	72
	08	RSN5V	4	689	148	467	296	238	76
K42	02	RSN5V	6	616	108	434	216	188	45
	04	RSN5V	6	616	108	434	216	188	52
	06	RSN5V	3	583	110	399	510	232	85
K51	02	RSN5V	4	792	197	521	394	244	86
	04	RSN5V	4	792	197	521	394	244	102
	06	RSN10T	5	976	200	689	400	276	190
	08	RFN16T	5	1100	200	768	400	324	284
K52	02	RSN5V	2	580	143	364	285	331	65
	04	RSN5V	3	831	150	574	660	276	186
	06	RSN10T	3	831	150	574	660	276	198
K62	02	RSN5V	4	792	197	521	394	244	102
	04	RFN16T	3	1067	200	734	840	320	374
	06	RFN20T	3	1167	210	805	900	379	524
	08	RFN25T	3	1257	210	875	900	395	675