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1. Hoist

1.1. Hoist code

K	5	1	04	D	0200	M5	06	D	D05	B	40	N
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Pos.	Code	Description	Properties									
1	K	Production platform of WORLDHOISTS										
2	5	Hoist Serial Code	2~6	2~6 as Worldhoists serial code								
3	1	Ropes	1	Number of ropes from drum								
			2									
4	04	Rope Reeving	02	Number of rope falls per rope								
			04									
			06									
			08									
5	D	Trolley Type	D	Double girder trolley								
			L	Low headroom hoist								
			N	Normal headroom hoist								
			F	Fixed hoist								
6	0200	Safe Working Load	0032	1) 0032 = 32 × 100kg = 3,200kg								
			0200	2) 0200 = 200 × 100kg = 20,000kg								
7	M5	Duty Group	M5	ISO/GB M3~M7				FEM 1Am~4m				
8	06	Lifting Height (m)	00	1) 00 = Special height						00~99m		
			06	2) 06 = 6m								
			18	3) 18 = 18m								
9	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				
10	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	
				F20	35							
11	B	Travelling Speed (m/min)	B	0~20				C	0~25			
			D	0~32				S	Special speed			
12	40	Rail Gauge (mm)	Low Headroom/ Normal Headroom Flange width		40 = 400mm		Double Girder Rail gauge		40 = 4000mm			
13	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):

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

tAverage 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

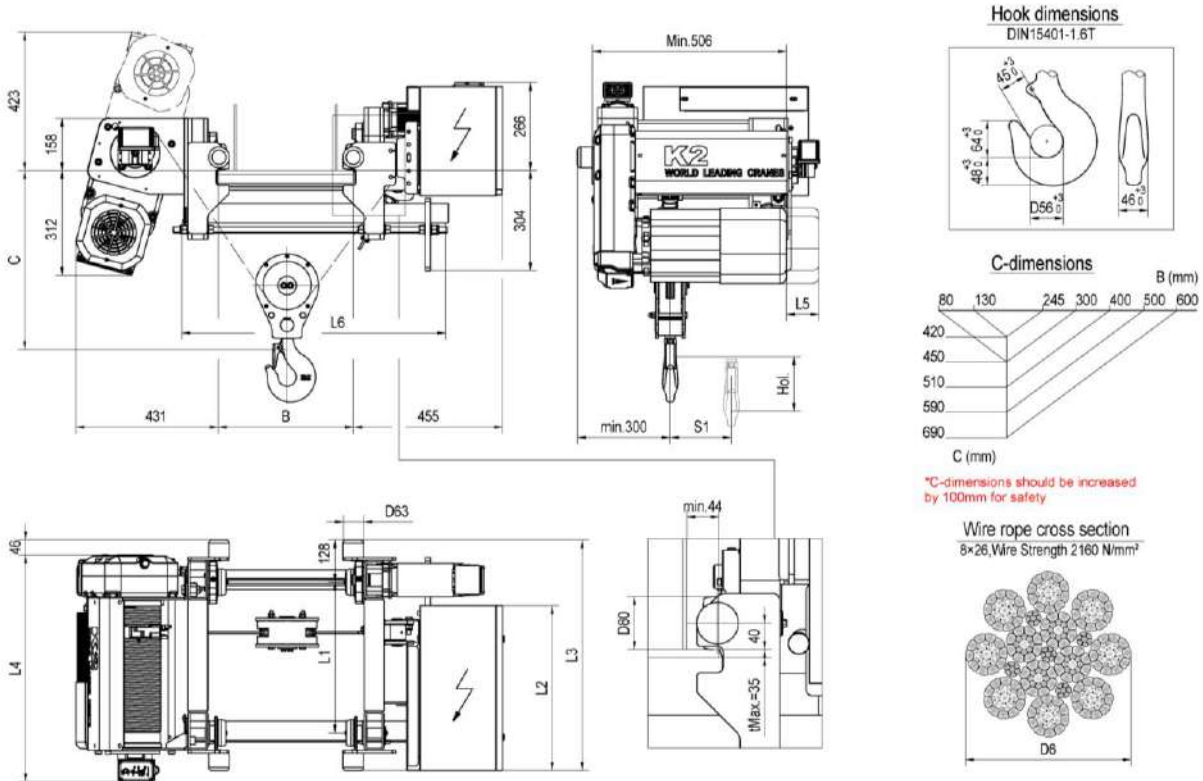
Hoist Type	Duty Group	Working Load t
K2	M5/M6	3.2
K3	M4/M5/M6	6.3
K4	M4/M5/M6	12.5
K5	M4/M5/M6	40
K6	M4/M5/M6	80

1.3. Low Headroom Hoist **K2102** (Reeving 1:2)

HOL (m)	B	L1	L2	L3	L4	S1	Weight (kg)
12	80~	457	500	699	688	52	238+W0
19	610	652	500	894	883	83	262+W0

motor	D01	F11	D02	F12
L5	0	47	89	136
W0	0	0	11	11

L6(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610



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 / 1xF01	0~32 / 1xF02
1600	2m/M5		1x D02		1x F12		

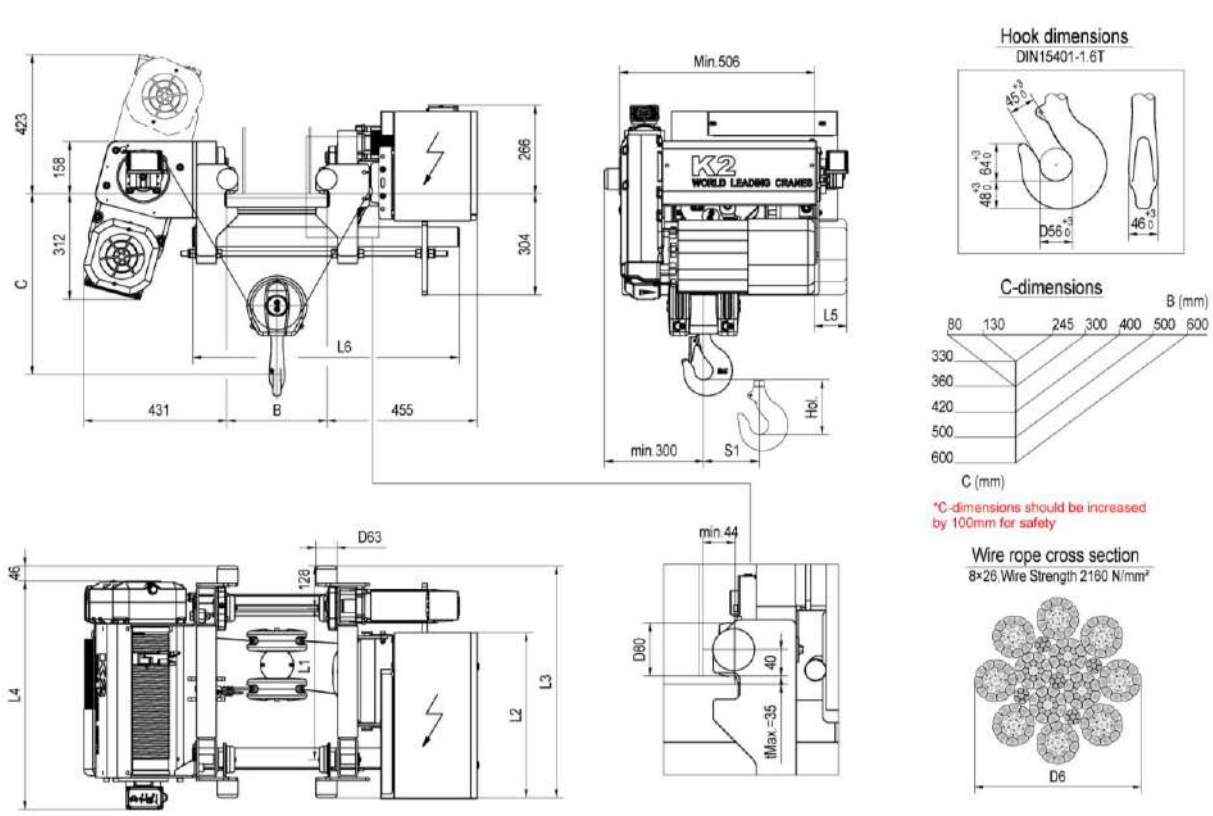
*Weight calculated with B in 410.

1.4. Low Headroom Hoist K2104 (Reeving 1:4)

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

motor	D01	F11	D02	F12	D03	F13
L5	0	47	89	136	89	136
W0	0	0	11	11	12	9

L6(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610



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)	
1600	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
2000	3m/M6														
2500	3m/M6														
3200	2m/M5														

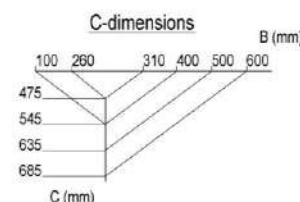
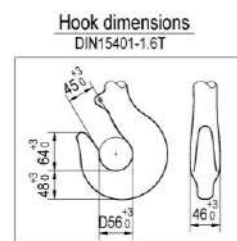
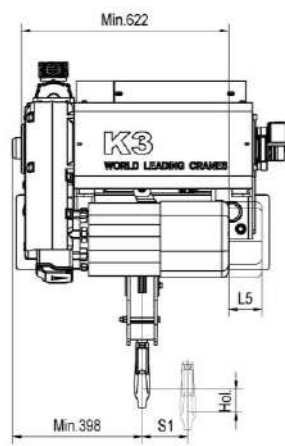
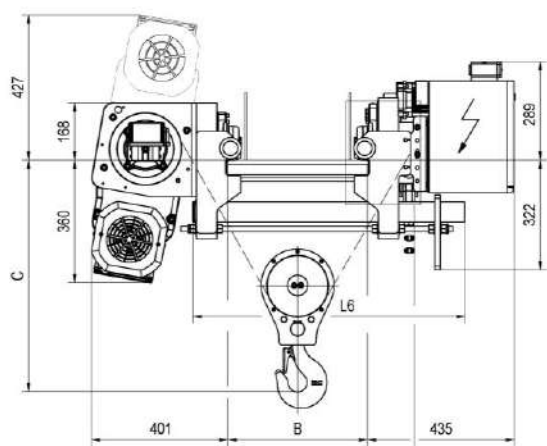
*Weight calculated with B in 410.

1.5. Low Headroom Hoist **K3102** (Reeving 1:2)

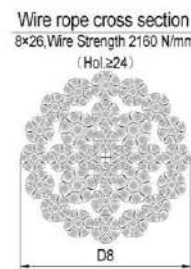
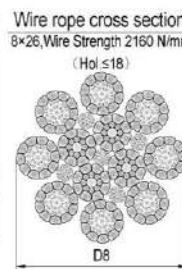
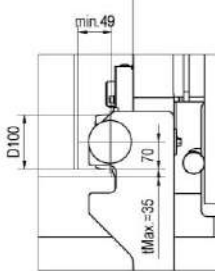
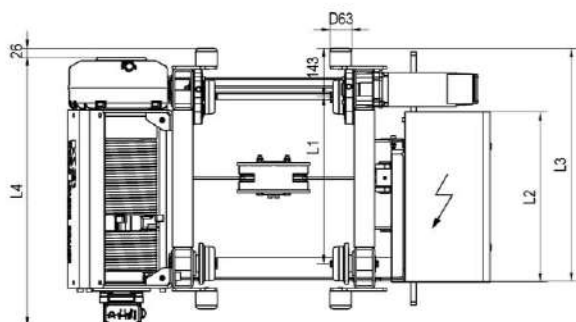
HOL (m)	B	L1	L2	L3	L4	S1	Weight (kg)
12	100~610	490	500	766	774	52	349+W0
18		640	500	916	924	83	364+W0
24		810	500	1086	1094	108	387+W0
30		970	500	1246	1254	125	416+W0

motor	D03	F13	motor	D03	F13
L5	0	47	W0	0	-3

L6(mm)	B(mm)
800	> 100-410
900	> 410-510
1000	> 510-610



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



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)	
1600	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
2000	3m/M6														
2500	2m/M5														
3200	1Am/M4														

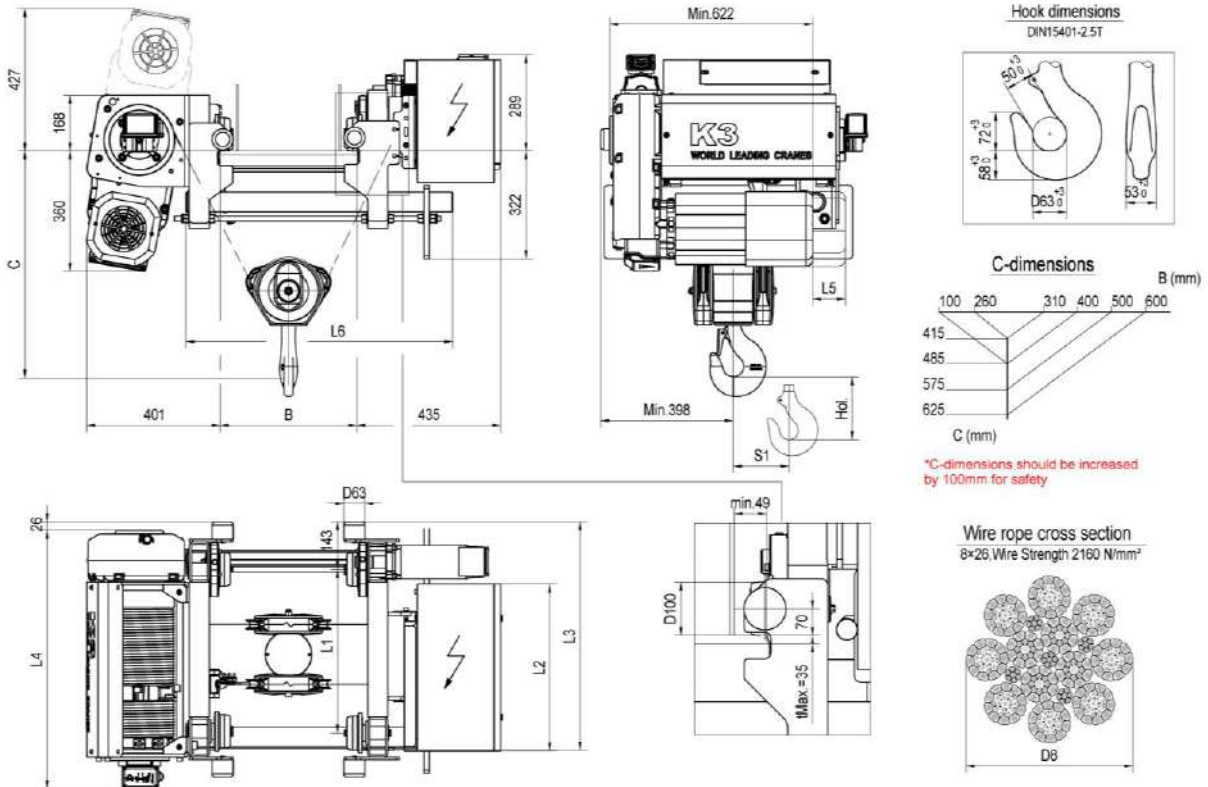
*Weight calculated with B in 410.

1.6. Low Headroom Hoist **K3104** (Reeving 1:4)

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

motor	D03	F13	D04	F14
L5	0	47	71	118
W0	0	-3	17	12

L6(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
4000	3m/M6													
5000	2m/M5													

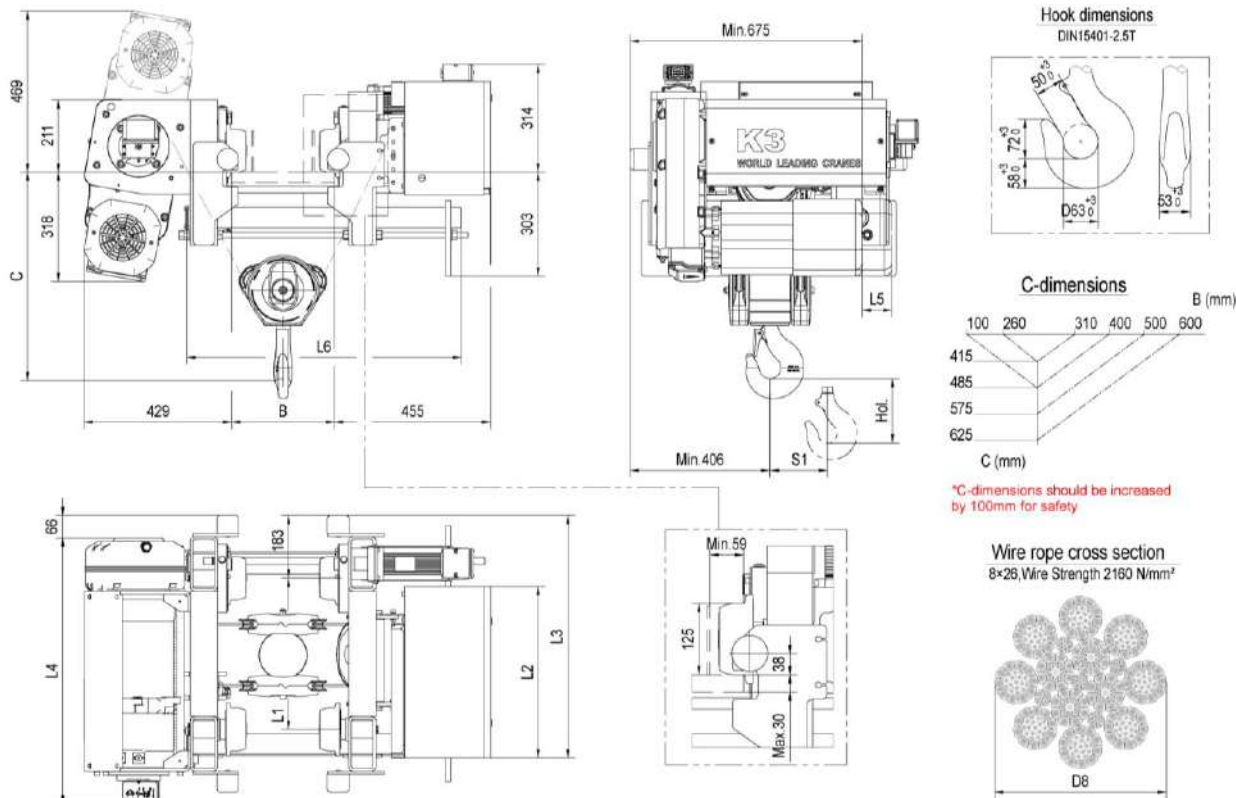
*Weight calculated with B in 410.

1.7. Low Headroom Hoist K3104 6.3t (Reeving 1:4)

HOL (m)	B	L1	L2	L3	L4	S1	Weight (kg)
6	100~610	440	500	806	774	52	349+W0
9		590	500	956	924	83	364+W0
12		760	500	1126	1094	108	387+W0
15		920	500	1286	1254	125	416+W0

motor	D03	F13	D04	F14
L5	0	47	71	118
W0	0	-3	17	12

L6(mm)	B(mm)
800	>100-410
900	>410-510
1000	>510-610



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

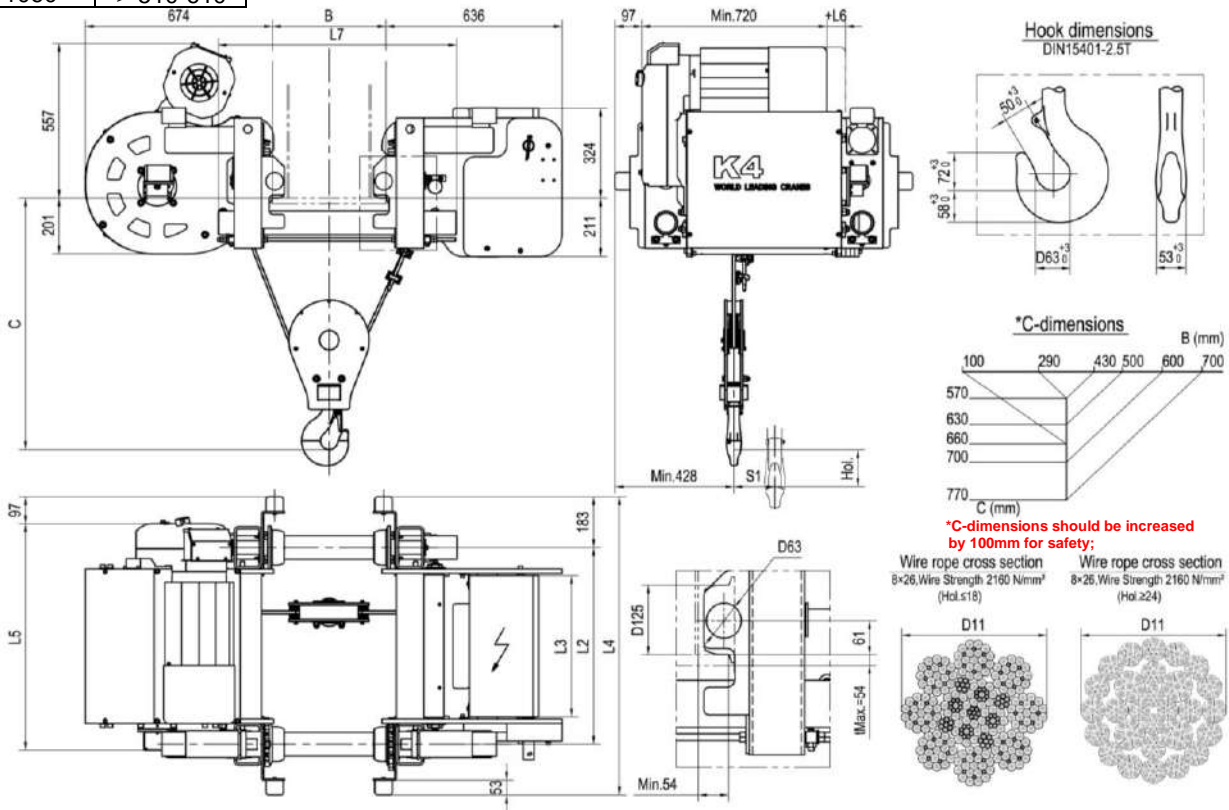
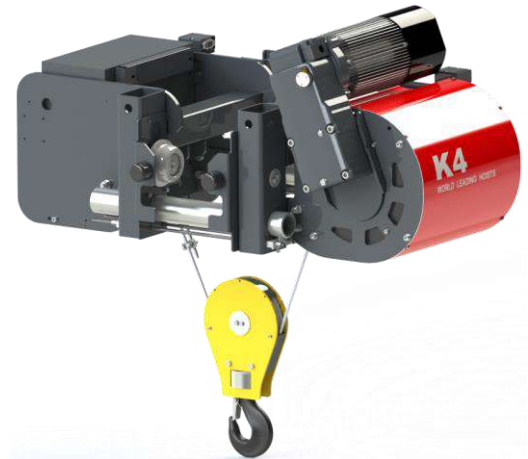
*Weight calculated with B in 410.

1.8. Low Headroom Hoist **K4102** (Reeving 1:2)

HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
18	100~710	708	510	1074	817	90	686+W0
24		838	650	1204	947	120	774+W0
32		1008	820	1374	1117	170	854+W0

motor	D05	F15	D06	F16
L6	0	12	-12	85
W0	0	-4	33	22

L7(mm)	B(mm)	L7(mm)	B(mm)
860	>100-410	1160	>610-710
960	>410-510		
1060	>510-610		



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

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

Wire rope cross section 8x26, Wire Strength 2160 N/mm² (Hol.≥24)

Load (kg)	Class FEM/ISO	Hoisting														Travelling			
		Gear ratio 229				Gear ratio 185				Gear ratio 114				Gear ratio 90				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 (m/min)	Motor	Speed / Motor Code (m/min)			
3200	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 / 2xF01	0-32 / 2xF02
4000	3m/M6																		
5000	2m/M5																		
6300	1Am/M4																		

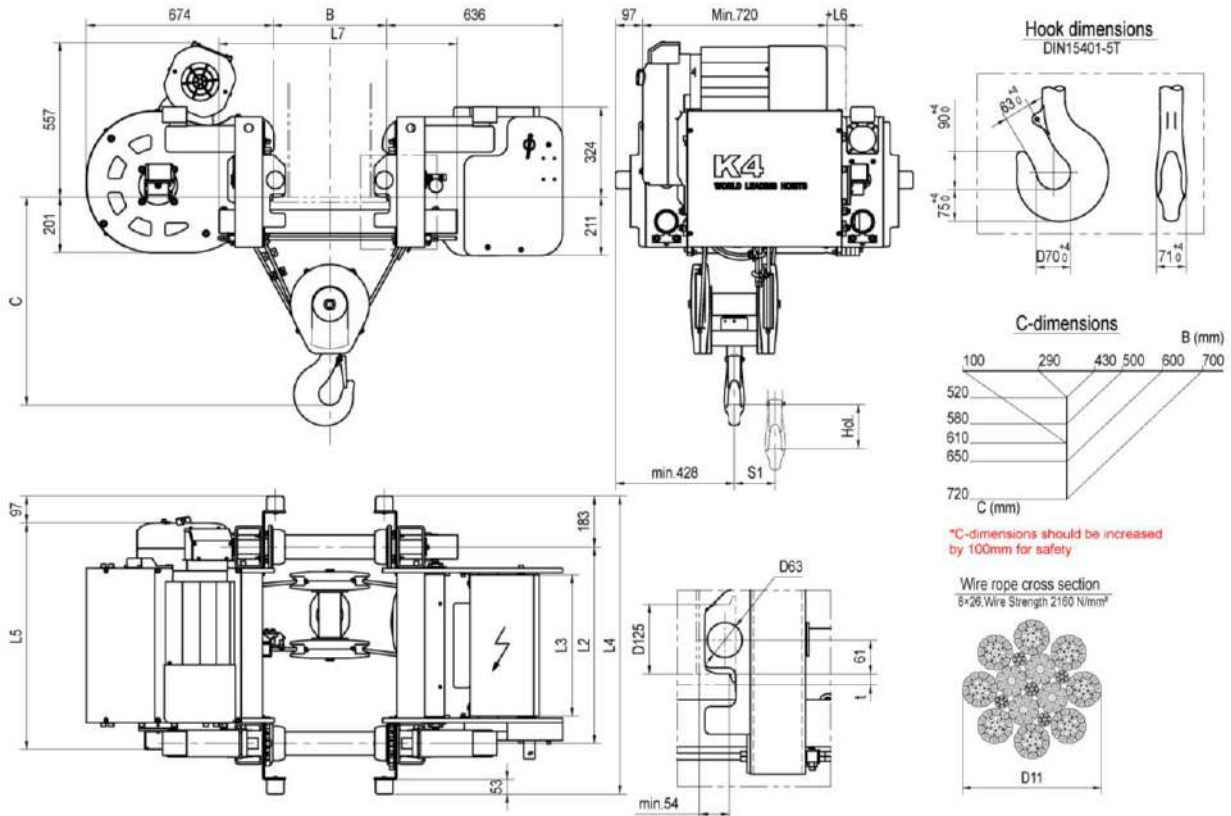
*Weight calculated with B in 410.

1.9. Low Headroom Hoist **K4104** (Reeving 1:4)

HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
9	100~710	708	510	1074	817	90	686+W0
12		838	650	1204	947	120	774+W0
16		1008	820	1374	1117	170	854+W0

motor	D05	F15	D06	F16
L6	0	12	-12	85
W0	0	-4	33	22

L7(mm)	B(mm)	L7(mm)	B(mm)
860	>100-410	1160	>610-710
960	>410-510		
1060	>510-610		



Load (kg)	Class FEM/ISO	Hoisting														Travelling			
		Gear ratio 229				Gear ratio 185				Gear ratio 114				Gear ratio 90				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 (m/min)	Motor	Speed / Motor Code (m/min)			
5000	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 / 2xF02	0~32 / 2xF02
6300	3m/M6																		
8000	3m/M6																		
10000	2m/M5																		

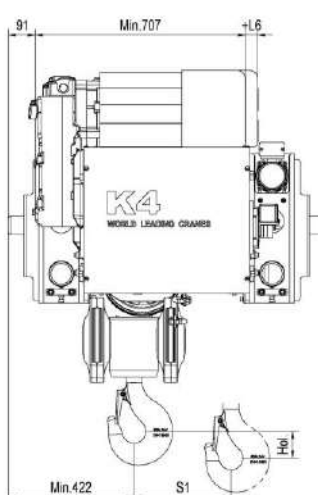
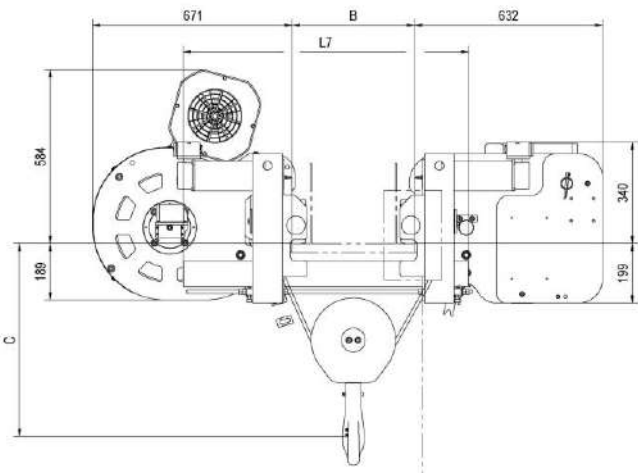
*Weight calculated with B in 410.

1.10. Low Headroom Hoist K4104 12.5t (Reeving 1:4)

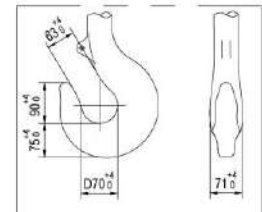
HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
9	100~710	708	510	1074	817	90	686+W0
12		838	650	1204	947	120	774+W0
16		1008	820	1374	1117	170	854+W0

motor	D05	F15	D06	F16
L6	0	12	-12	85
W0	0	-4	33	22

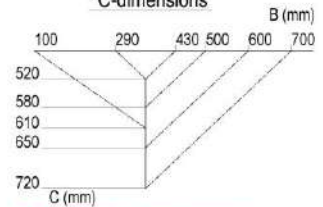
L7(mm)	B(mm)	L7(mm)	B(mm)
860	>100-410	1160	>610-710
960	>410-510		
1060	>510-610		



Hook dimensions
DIN15401-5V

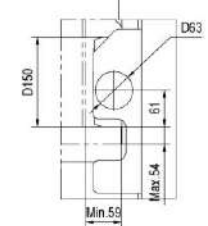
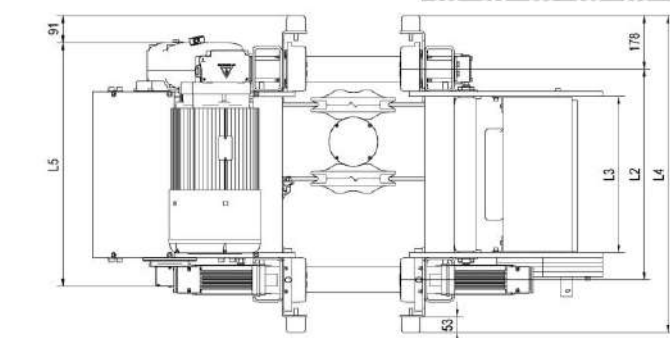
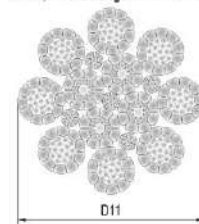


*C-dimensions



*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				Travelling	
		Gear ratio 229				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
12500	1Am/M4	4/0.7 2-speed	D05	0-4 Stepless	F15	0-20 / 2xF02	0-32 / 2xF02

*Weight calculated with B in 410.

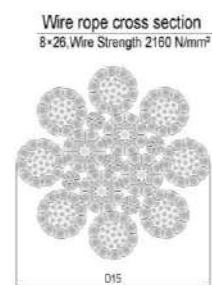
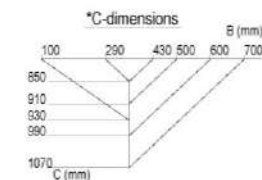
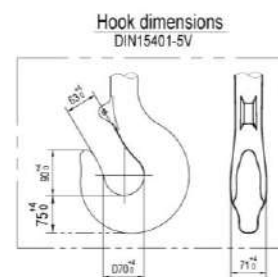
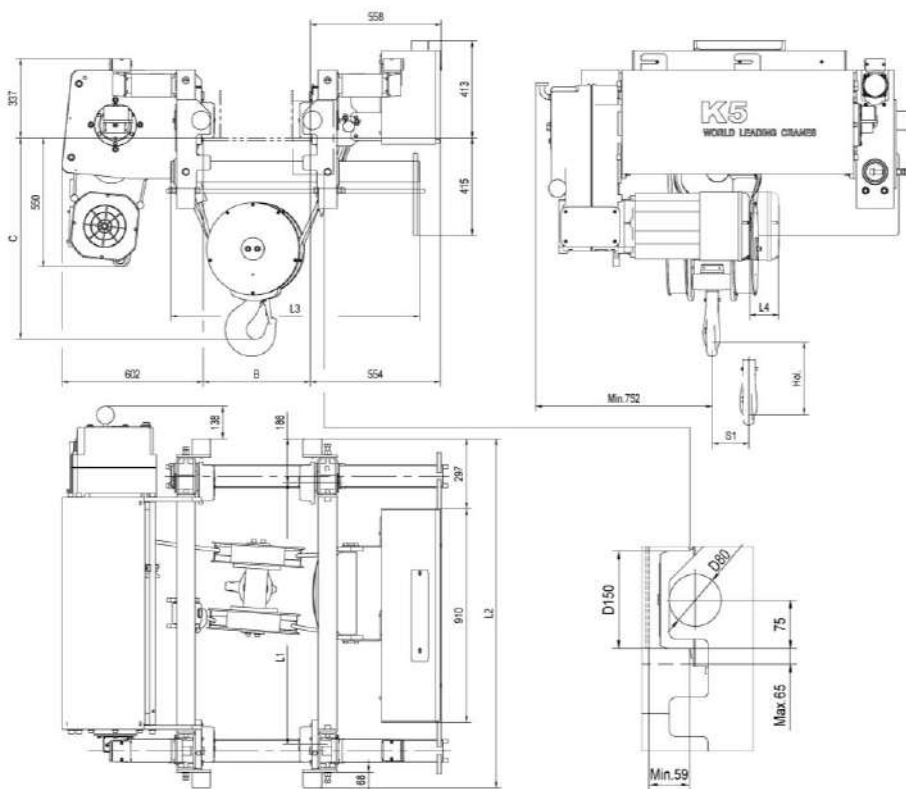
1.11. Low Headroom Hoist **K5104** (Reeving 1:4)



HOL (m)	B	L1	L2	S1	Weight (kg)
7.5	100~710	915	1287	90	1545+W0
9		1045	1417	120	1680+W0
12		1205	1577	170	1890+W0
18		1615	1987	330	2350+W0

motor	D06	F16	D07	F17
L4	0	12	-12	85
W0	0	-4	33	22

L3(mm)	B(mm)
1060	>300-410
1160	>410-610
1260	>610-710



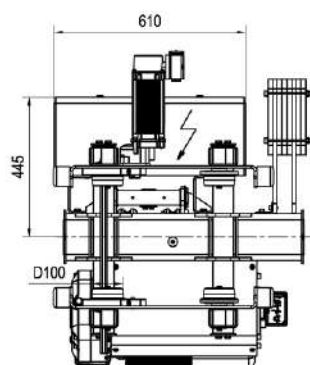
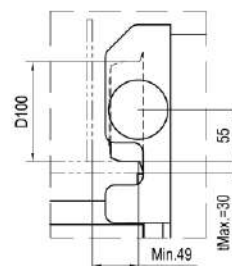
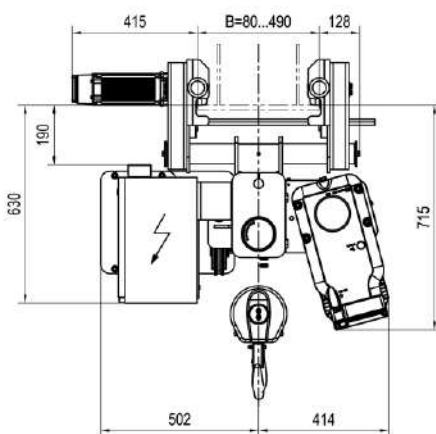
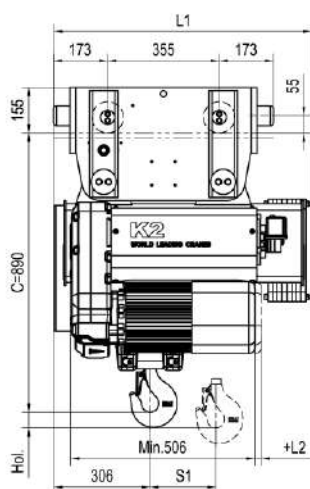
Load (kg)	Class FEM/ISO	Hoisting (m/min)				Travelling (m/min)
		Gear ratio 161				Gear ratio 6
		Speed (m/min)	Motor	Speed (m/min)	Motor	
12500	3m/M6	5/0.8 2-speed	1xD06	0-5 Stepless	1xF16	0~20 / 2xF03
16000	2m/M5		1xD07			
20000	2m/M5					

*Weight calculated with B in 410

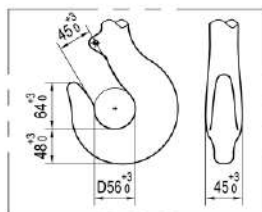
1.12. Normal Headroom Hoist **K2104** (Reeving 1:4)

HOL (m)	L1	S1	Weight (kg)
6	819	52	405+W0
9.5	885	83	435+W0

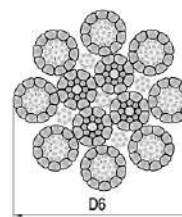
motor	D01	F11	D02	F12	D03	F13
L2	0	47	89	136	89	136
W0	0	0	11	11	12	9



Hook dimensions
DIN15401-1.6T



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

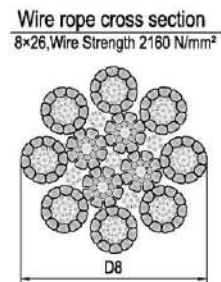
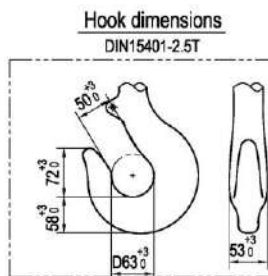
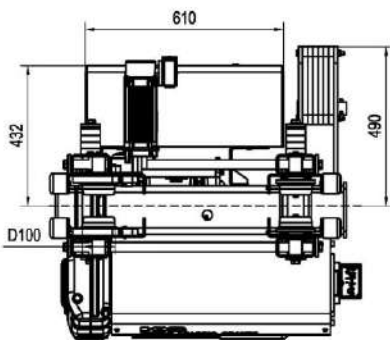
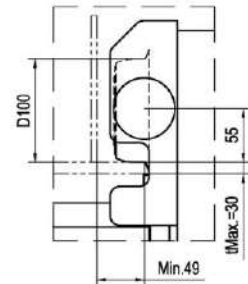
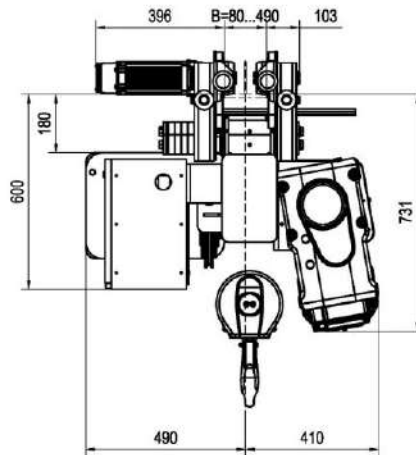
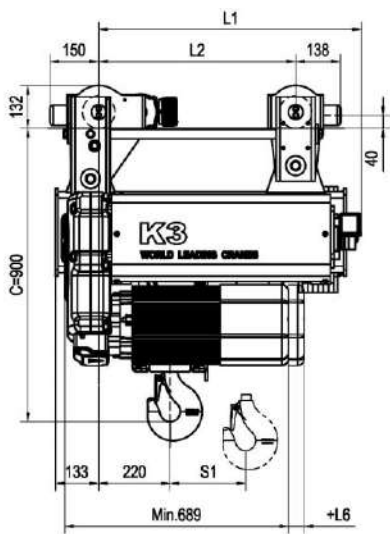


Load (kg)	Class FEM/ISO	Hoisting												Travelling					
		Gear Ratio 70				Gear Ratio 56				Gear Ratio 47				Gear Ratio 6					
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)					
1600	3m/M6	5/0.8 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					
2000	3m/M6		1x D02		1x F12		1xD02		1xF12		1xD03		1xF13						
2500	3m/M6																		
3200	2m/M5																		

1.13. Normal Headroom Hoist **K3104** (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

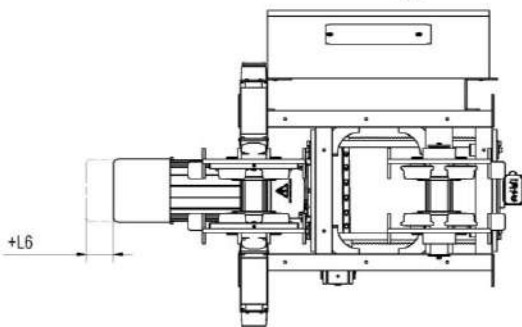
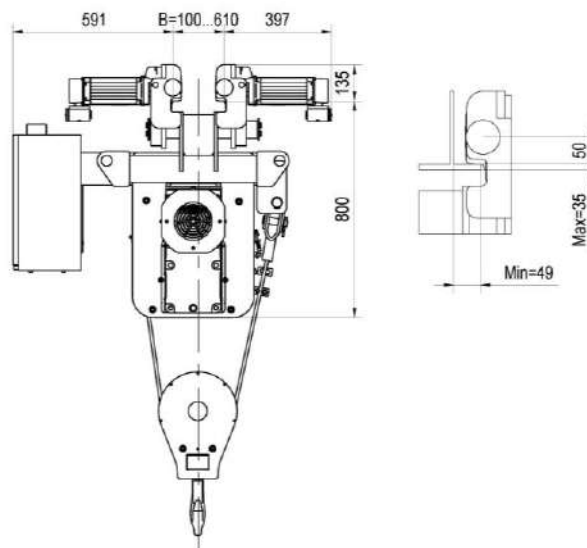
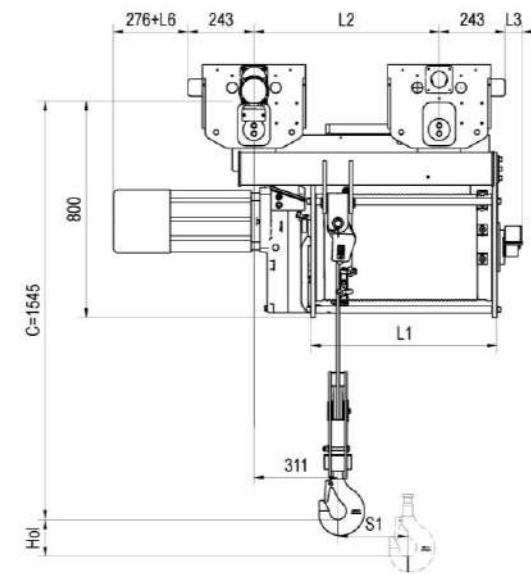


Load (kg)	Class FEM/IS O	Hoisting												Travelling	
		Gear Ratio 109				Gear Ratio 90				Gear Ratio 59				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
3200	3m/M6	4/0.7 2-speed	1xD03	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														
6300	1Am/M4														

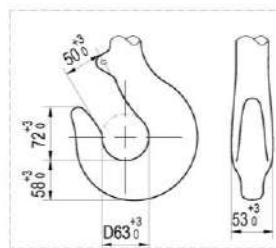
1.14. Hang Normal Headroom Hoist **K4102** (Reeving 1:2)

HOL (m)	L1	L2	L3	S1	Weight (kg)
18	557	685	65	90	575+W0
24	687	685	65	120	630+W0
32	857	685	235	170	665+W0
40	1017	1015	65	220	717+W0

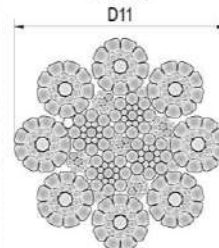
motor	D05	F15	D06	F16
L6	0	12	-12	85
W0	0	-4	33	22



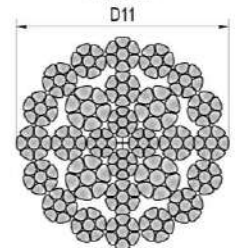
Hook dimensions
DIN15401-2.5T



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



Wire rope cross section
8×26, Wire Strength 2160 N/mm²
(Hol. ≥24)

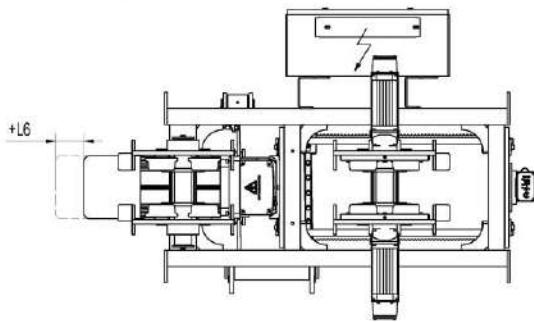
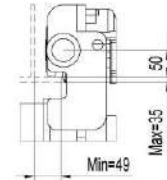
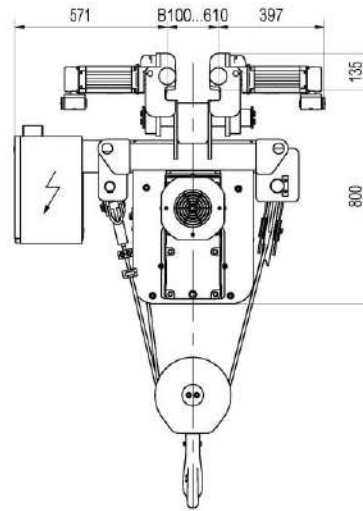
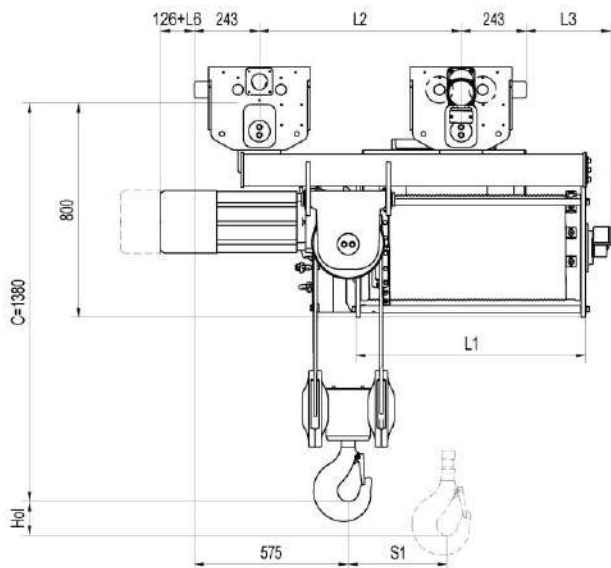


Load (kg)	Class FEM/ISO	Hoisting														Travelling			
		Gear ratio 229				Gear ratio 185				Gear ratio 114				Gear ratio 90				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)			
3200	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 / 2xF01	0-32 / 2xF02
4000	3m/M6																		
5000	2m/M5																		
6300	1Am/M4																		

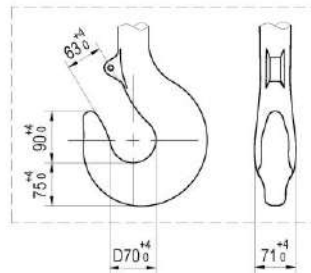
1.15. Hang Normal Headroom Hoist **K4104** (Reeving 1:2)

HOL (m)	L1	L2	L3	S1	Weight (kg)
9	557	610	10	90	614+W0
12	687	755	140	120	669+W0
16	857	753	317	170	703+W0
20	1017	853	377	220	756+W0
26	1287	913	587	280	818+W0

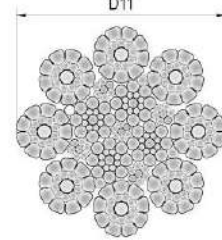
motor	D05	F15	D06	F16
L6	0	12	-12	85
W0	0	-4	33	22



Hook dimensions
DIN15401-5V



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

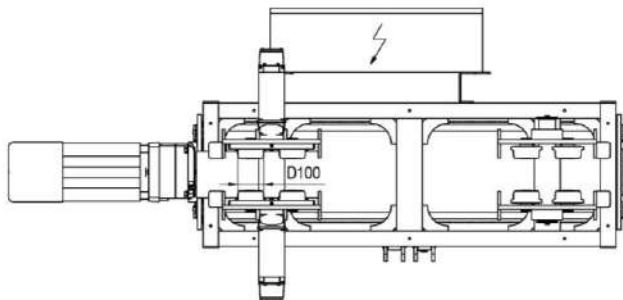
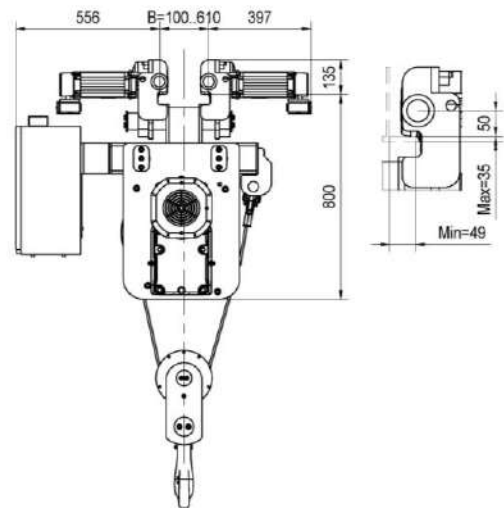
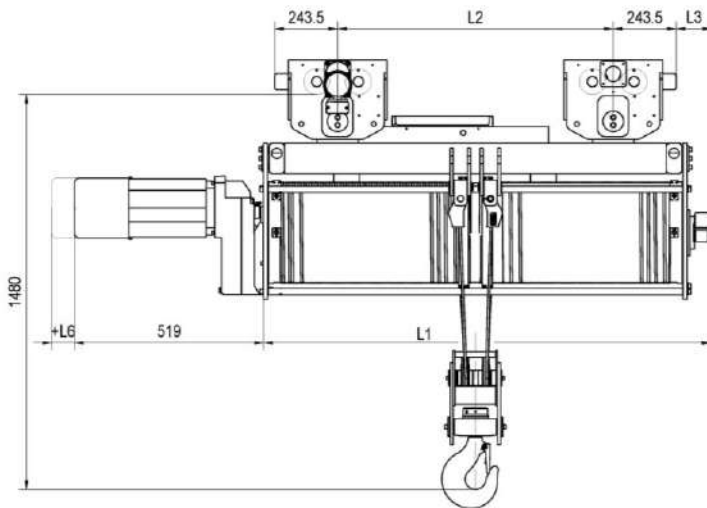


Load (kg)	Class FEM/ISO	Hoisting																Travelling	
		Gear ratio 229				Gear ratio 185				Gear ratio 114				Gear ratio 90				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
5000	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 / 2xF02	0~32 / 2xF02
6300	3m/M6																		
8000	3m/M6																		
10000	2m/M5																		
12500	1Am/M4																		
N/A																			

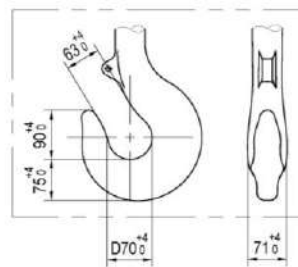
1.16. Hang Normal Headroom Hoist K4202 (Reeving 2:2)

HOL (m)	L1	L2	L3	Weight (kg)
9	784	430	0	570+W0
13.5	784	430	0	670+W0
19.5	954	530	60	730+W0
25	1114	650	46	775+W0
34.5	1384	915	49	820+W0
46.5	1734	1065	138	860+W0

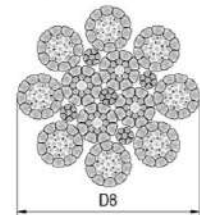
motor	F15	D06	F16	D07	F17
L6	12	-12	85	75	85
W0	-4	33	22	55	39



Hook dimensions
DIN15401-5V



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



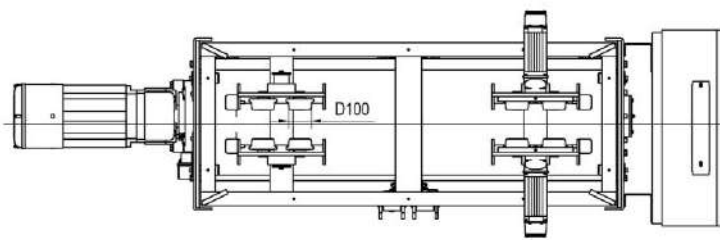
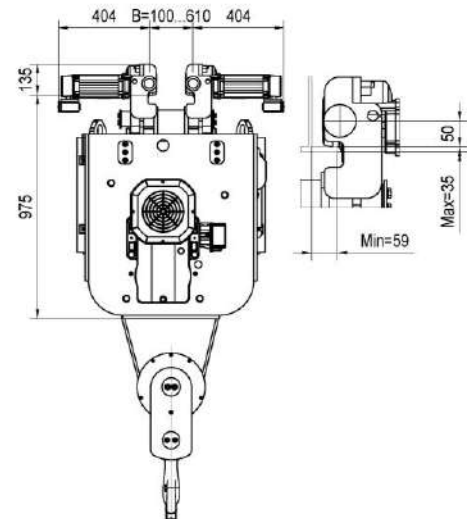
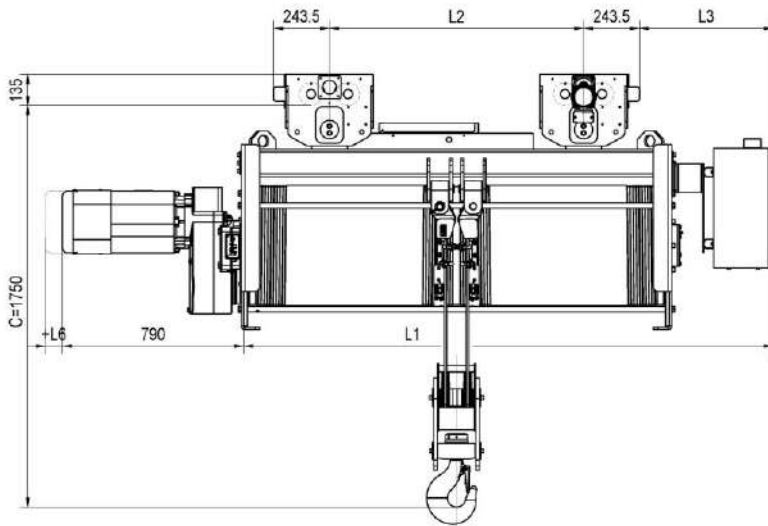
Load (kg)	Class FEM/IS O	Hoisting (m/min)																Travelling (m/min)
		Gear ratio 229				Gear ratio 186				Gear ratio 115				Gear ratio 90				Gear ratio 42
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code
4000	3m/M6	8/1.3 2-speed	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 /2xF01
5000	2m/M5																	

1.17. Hang Normal Headroom Hoist **K5202** (Reeving 2:2)

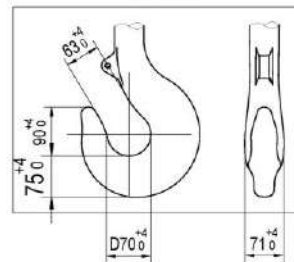
Hoist (m)	L1	L2	L3	Weight (kg)
15.5	1375	604	360	1360+W0
22	1375	604	360	1450+W0
28.5	1575	799	363	1481+W0
38	1875	807	509	1633+W0
50.5	2275	1107	559	1775+W0
61.5	2625	1107	734	1961+W0
77.5	3125	1600	738	2240+W0
87	3426	1900	738	2436+W0



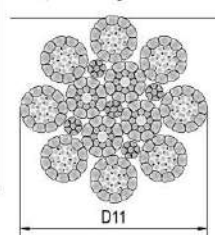
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



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



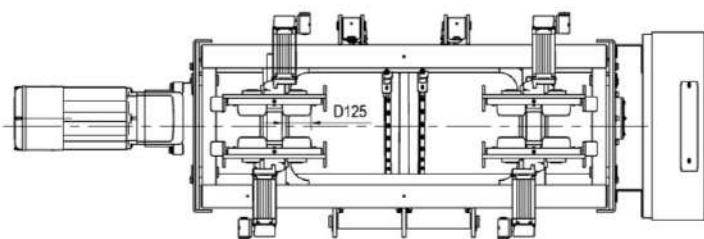
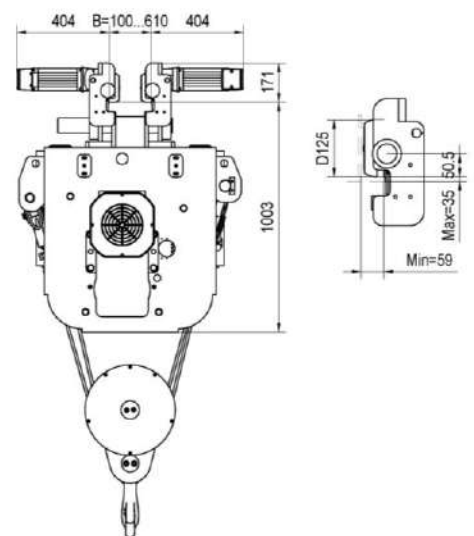
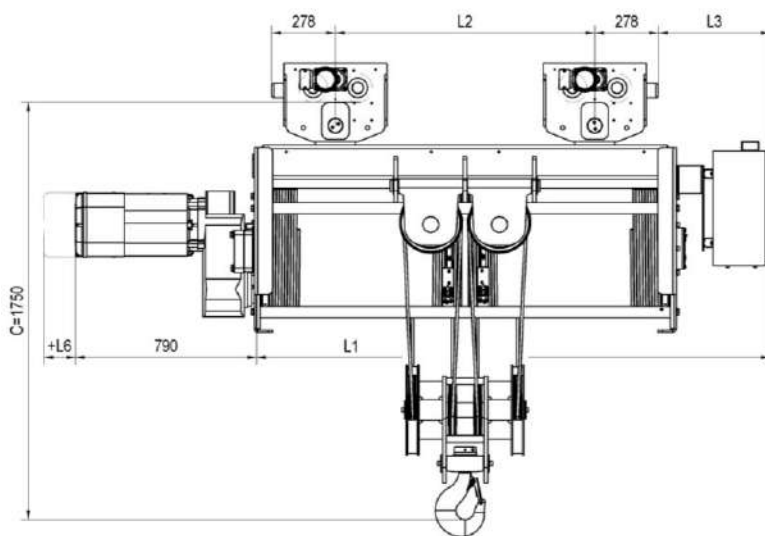
Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 32	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor			
6300	3m/M6	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD06	0-10 Stepless	1XF17 1xF16	12.5/2 2-speed	1xD07	0-12.5 Stepless	1xF17	0-16 Stepless	1xF18	0-20 Stepless	1xF19	N/A	0-25 / 2xF02	0-32 / 2xF02
8000	2m/M5																			
10000	1Am/M4																			

1.18. Hang Normal Headroom Hoist **K5204** (Reeving 2:4)

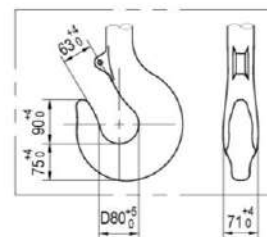
HoI (m)	L1	L2	L3	Weight (kg)
7.5	815	600	320	1496+W0
11	1015	600	363	1496+W0
14	1215	799	363	1527+W0
19	1515	807	509	1673+W0
25	1915	1107	559	1808+W0
30.5	2265	1107	734	1988+W0
38.5	2765	1307	884	2254+W0
43.5	3065	1307	1034	2444+W0



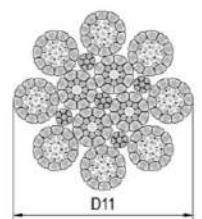
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



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

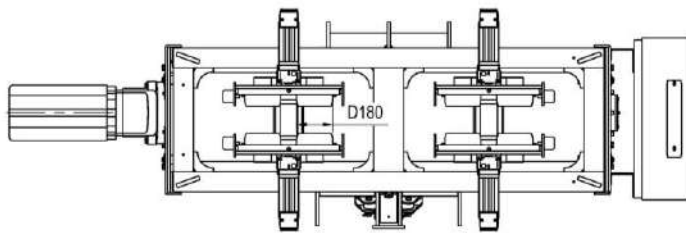
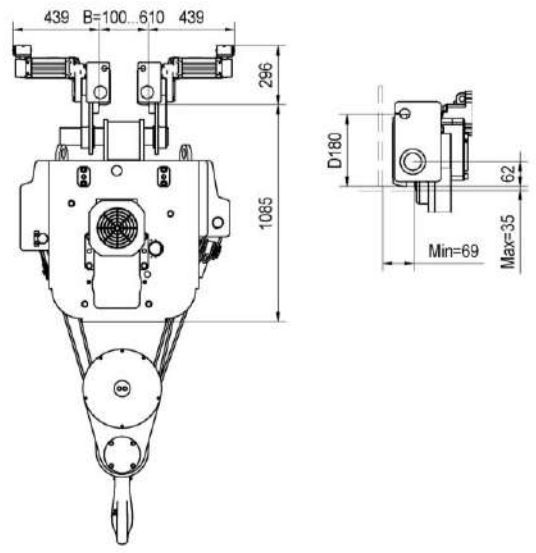
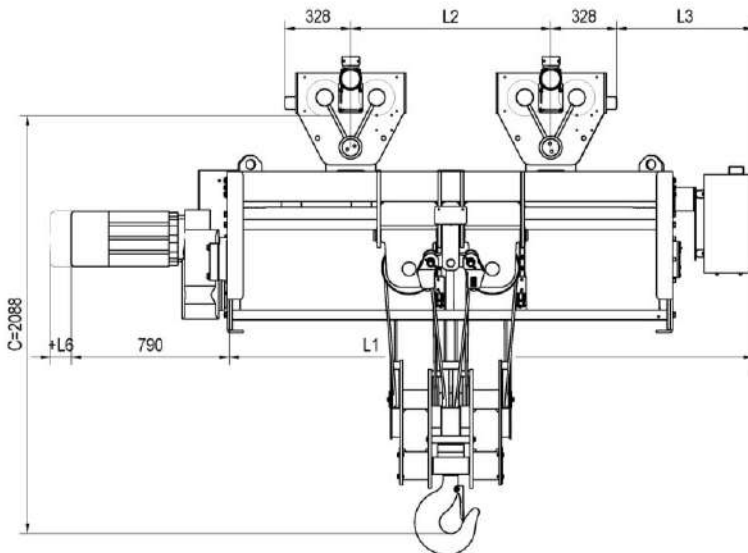


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 63	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code		
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	N/A	0~25/ 4xF02	0~32/ 4xF03
16000	2m/M5																			
20000	1Am/M4																			

1.19. Hang Normal Headroom Hoist **K5206** (Reeving 2:6)

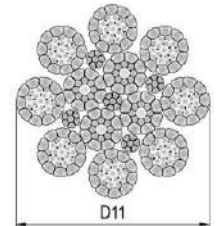
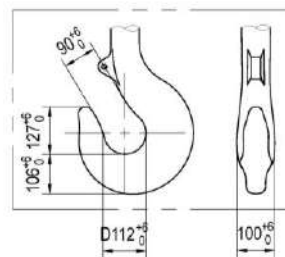
Hol (m)	L1	L2	L3	Weight (kg)
9.5	1635	600	430	1925+W0
12.5	1935	600	580	2083+W0
16.5	2335	800	680	2487+W0
20.5	2685	1000	755	2616+W0
25.5	3185	1000	1005	2813+W0
29	3485	1200	1055	2940+W0

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	1xD07	0~3.2 Stepless	1xF17	4/0.7 2-speed	1xD08	0~4 Stepless	1xF18	0~5 Stepless	1xF19	0~6.3 Stepless	1xF19	N/A	0~20 / 2xF02	0~32 / 2xF03
25000	2m/M5																			
30000	1Am/M4																			

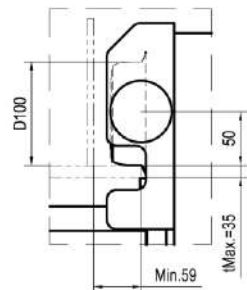
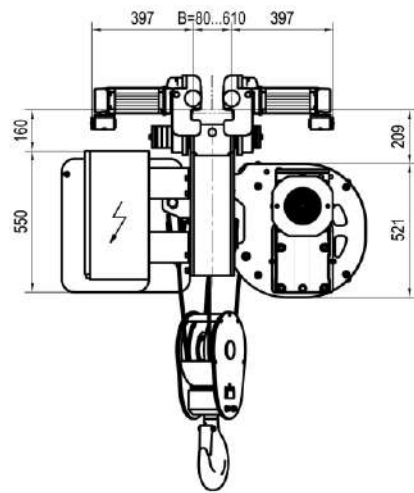
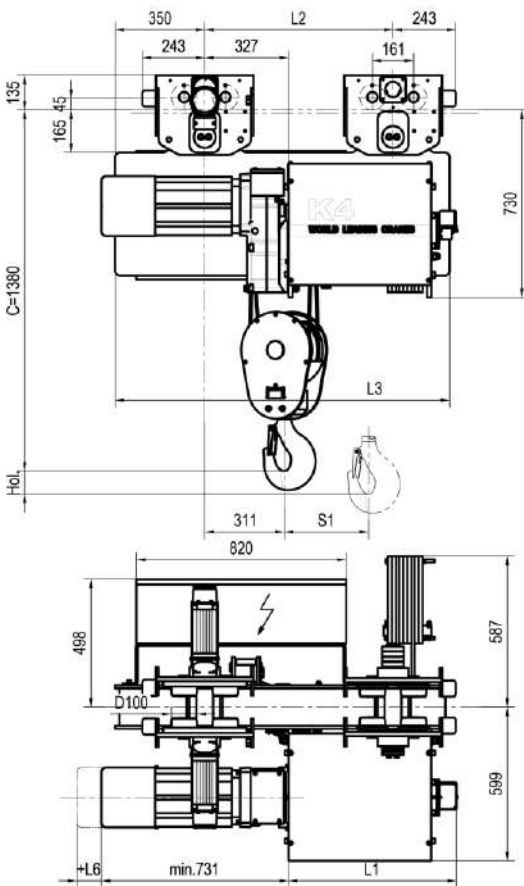
Sales Manual for Crane Kits

HTD032V20

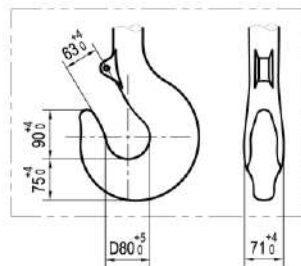
1.20. Normal Headroom Hoist K4104 (Reeving 1:4)

HOL (m)	L1	L2	L3	S1	Weight (kg)
9	654	735	1305	90	1022+W0
12	784	865	1435	120	1065+W0
16	954	915	1605	170	1099+W0
20	1114	915	1775	220	1140+W0
26	1384	1050	1910	280	1265+W0

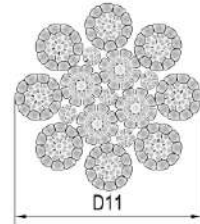
motor	D05	F15	D06	F16
L6	0	12	-12	85
W0	0	-4	33	22



Hook dimensions
DIN15401-5T



Wire rope cross section
6×26, Wire Strength 2160 N/mm²



Load (kg)	Class FEM/ISO	Hoisting														Travelling			
		Gear ratio 229				Gear ratio 185				Gear ratio 114				Gear ratio 90				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 (m/min)	Motor	Speed / Motor Code (m/min)			
5000	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 / 2xF02	0-32 / 2xF02
6300	3m/M6																		
8000	3m/M6																		
10000	2m/M5																		

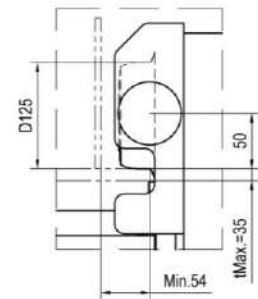
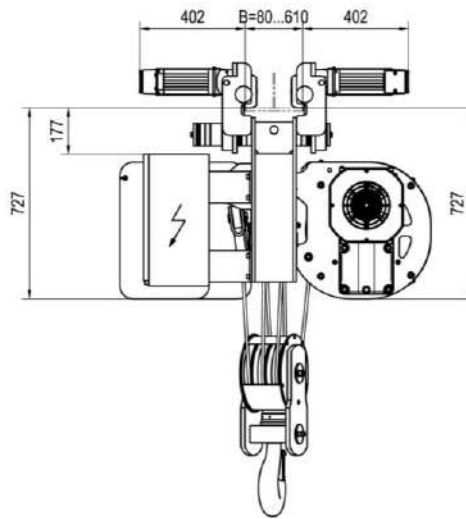
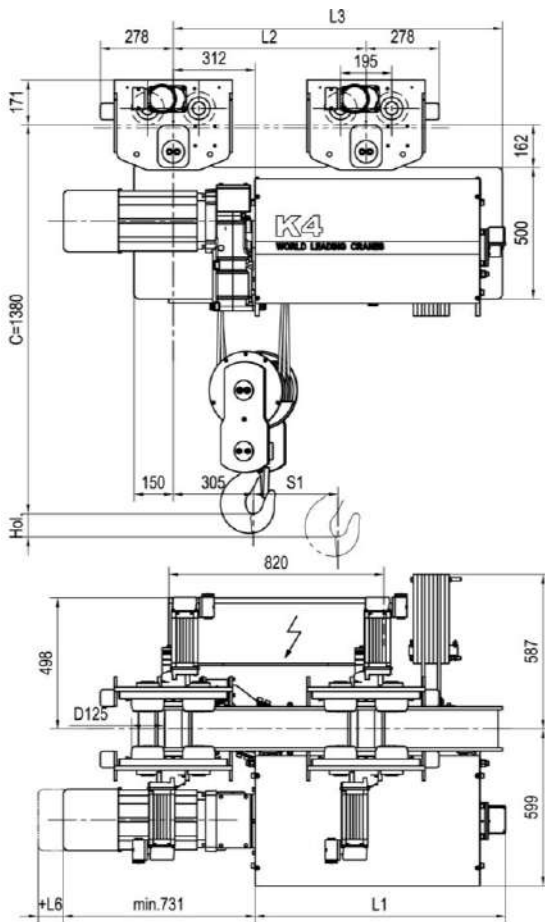
Sales Manual for Crane Kits

HTD032V20

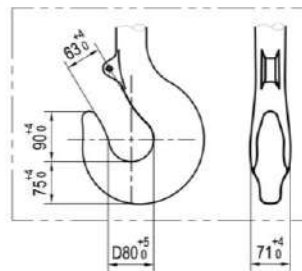
1.21. Normal Headroom Hoist K4106 (Reeving 1:6)

HOL (m)	L1	L2	L3	S1	Weight (kg)
6	654	735	955	99	1037+W0
8	784	865	1085	115	1080+W0
10	954	915	1255	131	1114+W0
13	1114	915	1425	169	1155+W0
17	1384	1050	1560	219	1226+W0

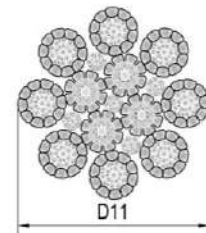
motor	D05	F15	D06	F16	D07	F17
L6	0	12	-12	85	75	85
W0	0	-4	33	22	55	39



Hook dimensions
DIN15401-5V



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

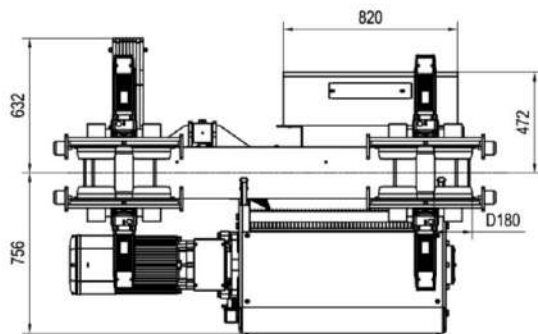
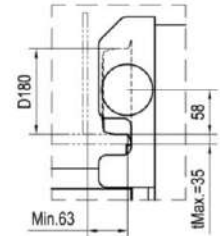
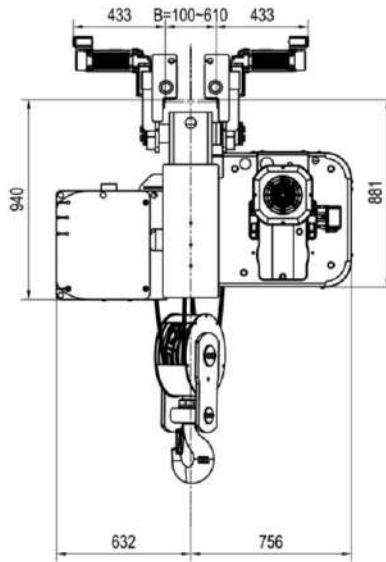
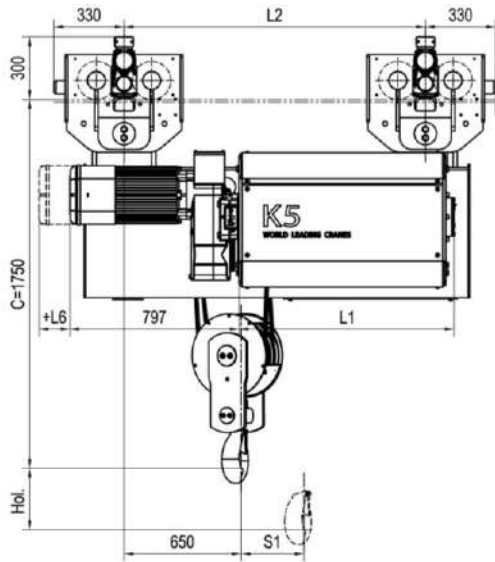


Load (kg)	Class FEM/ISO	Hoisting (m/min)											Travelling	
		Gear ratio 186				Gear ratio 115				Gear ratio 90			Gear ratio 42	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed / Motor Code (m/min)
12000	3m/M6	3.2/0.5 2-speed	1xD05	0~3.2 Stepless	1xF15	5/0.8 2-speed	1xD06	0~5 Stepless	1xF16	6.3/1.1 2-speed	1xD07	0~6.3 Stepless	1xF17	0~20 /4xF01
15000	2m/M5													

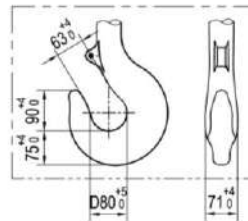
1.22. Normal Headroom Hoist **K5104** (Reeving 1:4)

Hol (m)	L1	L2	S1	Weight (kg)
7.5	565	1200	72	1520+W0
9	615	1200	86	1536+W0
10.5	685	1200	99	1560+W0
12	765	1200	115	1610+W0
14	815	1419	131	1640+W0
18	1015	1419	169	1740+W0
23.5	1215	1419	221	1950+W0
30.5	1515	1450	287	2100+W0
40	1915	1450	378	2400+W0
48.5	2265	1450	456	2750+W0

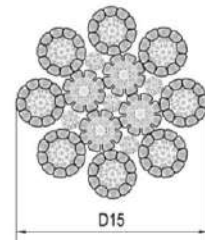
moto	D06	F16	D07	F17	D08	F18
L6	0	97	87	97	87	137
W0	0	-11	22	6	22	10



Hook dimensions
DIN15401-5V



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

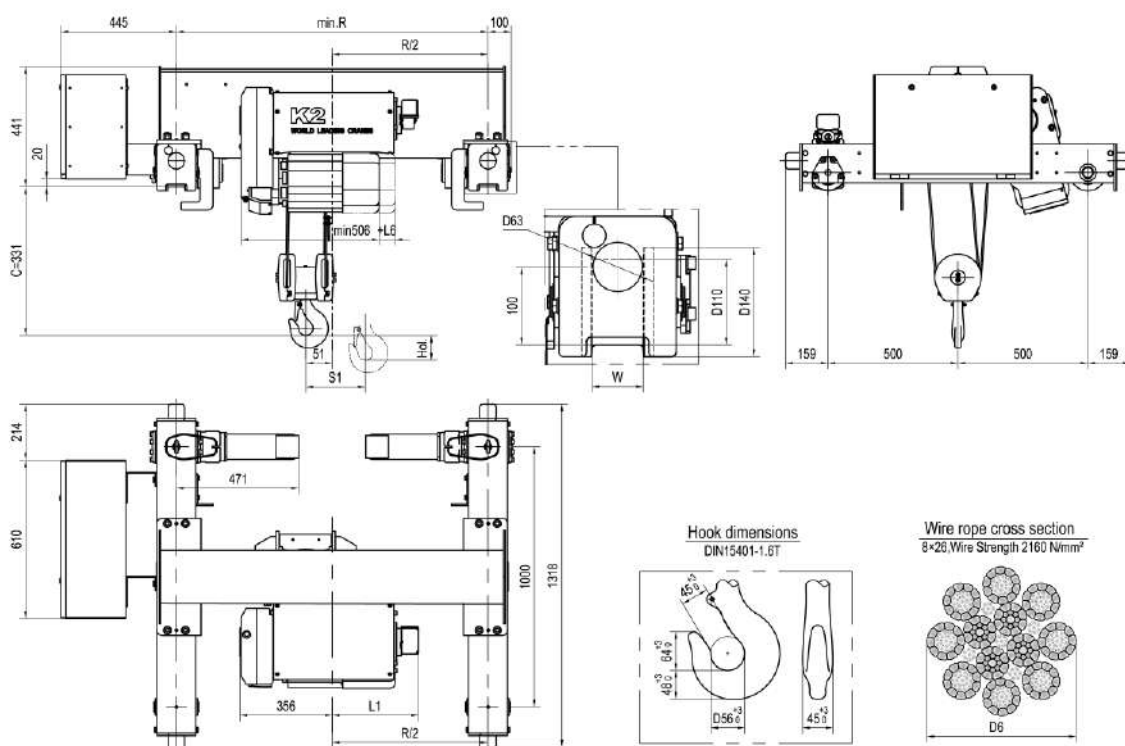


Load (kg)	Class FEM/ISO	Hoisting														Travelling						
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear Ratio 15				
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)				
12500	3m/M6	4/0.7 2-speed	1xD06	0~4 Stepless	1xF16	5/0.8 2-speed	1xD07	0~5 Stepless	1xF17	1xF16	6.3/1.1 2-speed	1xD08	0~6 Stepless	1xF18	1xF17	0~8 Stepless	1xF19	0~10 Stepless	N/A	1xF19	0-20 / 4xF02	0-32 / 4xF02
16000	2m/M5																					
20000	1Am/M4																					

1.23. Double Girder Hoist **K2104** (Reeving 1:4)

Hoist (m)	L1	S1	W	R	Weight (kg)
6	332	52	Default:75	1200	413+W0
9.5	527	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



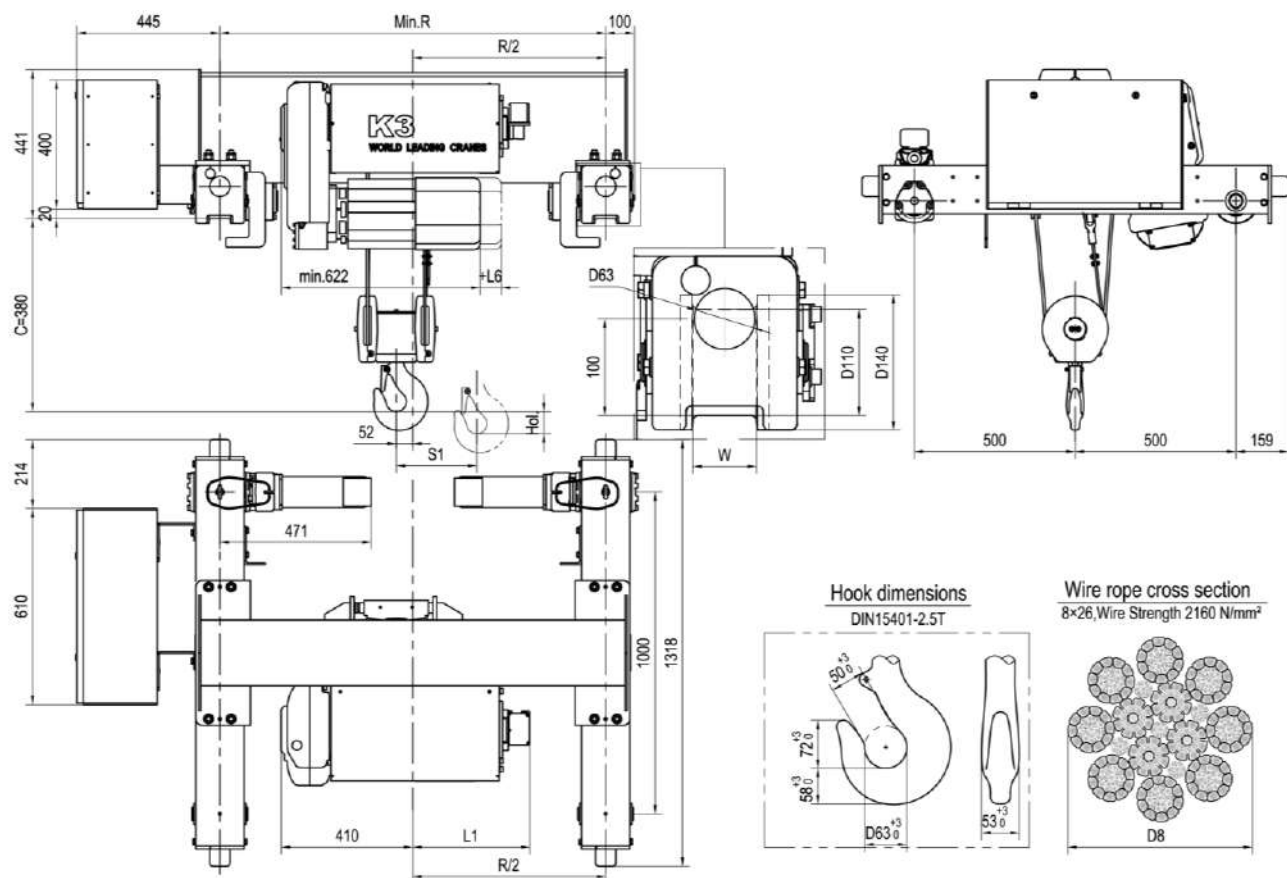
Load (kg)	Class FEM/ISO	Hoisting (m/min)												Travelling (m/min)	
		Gear Ratio 70				Gear ratio 56				Gear Ratio 47				Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
1600	3m/M6	5/0.8 2-speed	1xD01	0-5 Stepless	1xF11	6.3/1.1 2-speed	1xD02	0-6.3 Stepless	1xF12	8/1.3 2-speed	1xD03	0-8 Stepless	1xF13	0-25/ 2xF01	0-32/ 2xF01
2000	3m/M6														
2500	3m/M6														
3200	2m/M5														

1.24. Double Girder Hoist **K3104** (Reeving 1:4)

Hol (m)	L1	S1	W	R	Weight (kg)
6	364	52	Default:75	1200	474+W0
9	514	83		1200	488+W0
12	684	108		1700	537+W0
15	844	140		1700	552+W0



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

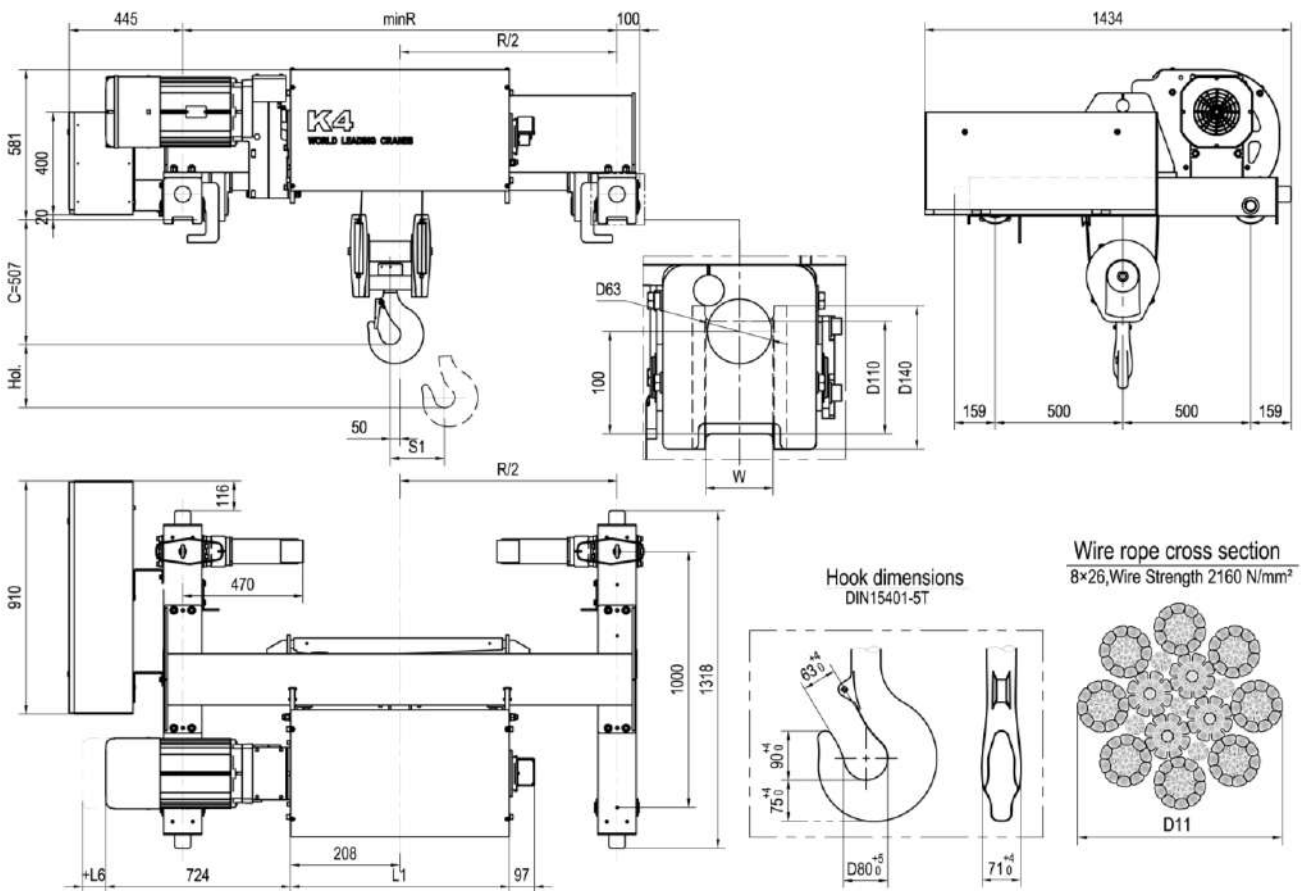


Load (kg)	Class FEM/ISO	Hoisting (m/min)												Travelling (m/min)	
		Gear ratio 109				Gear ratio 90				Gear ratio 59				Gear ratio 42	Gear ratio 32
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
4000	3m/M6	4/0.7 2-speed	1xD03	0~4 Stepless	1xF13	5/0.8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

1.25. Double Girder Hoist **K4104** (Reeving 1:4)

Hol (m)	L1	S1	W	R	Weight (kg)
9	654	55	Default:75	1200	744+W0
12	784	80		1400	802+W0
16	954	100		1700	860+W0
20	1114	135		2000	916+W0
26	1384	185		2700	988+W0

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

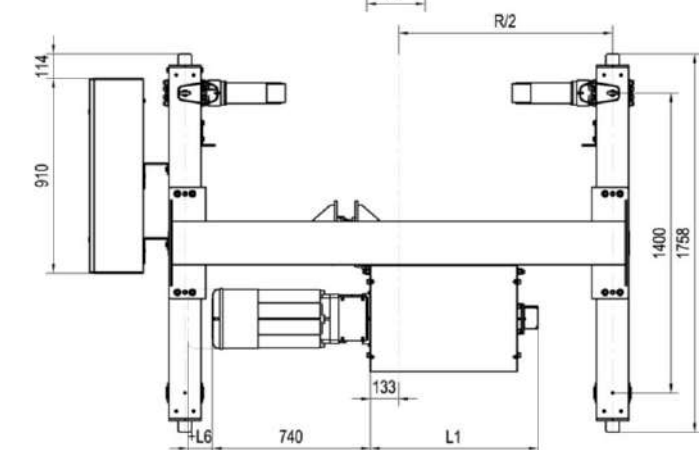
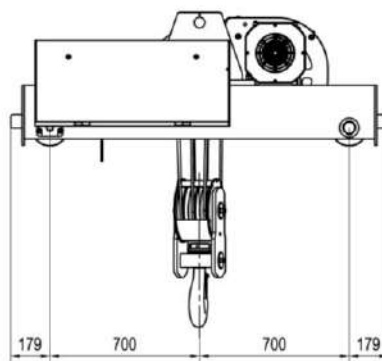
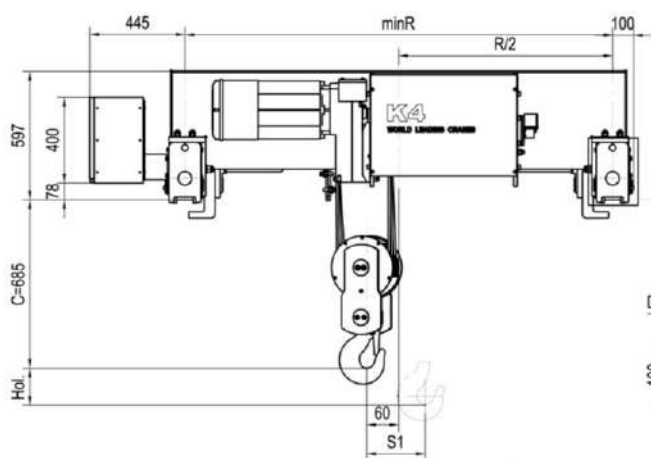


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)												
		Gear ratio 229				Gear ratio 185				Gear ratio 114				Gear ratio 92				Gear ratio 42	Gear ratio 32											
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code												
5000	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					
6300	3m/M6					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A	
8000	3m/M6					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A
10000	2m/M5					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A
12500	1Am/M4					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A

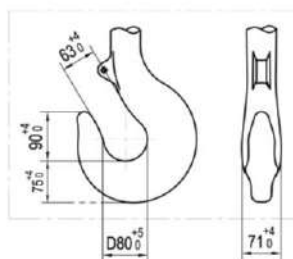
1.26. Double Girder Hoist **K4106** (Reeving 1:6)

Hol (m)	L1	S1	W	R	Weight (kg)
6	654	99	Default:75	1700	1000+W0
8	784	115		2000	1063+W0
10	954	131		2400	1148+W0
13	1114	169		2700	1218+W0
17	1384	219		3100	1293+W0

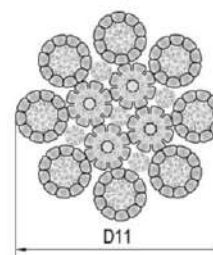
motor	D05	F15	D06	F16	D07	F17
L6	0	12	-12	85	75	85
W0	0	-4	33	22	55	39



Hook dimensions
DIN15401-5V



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

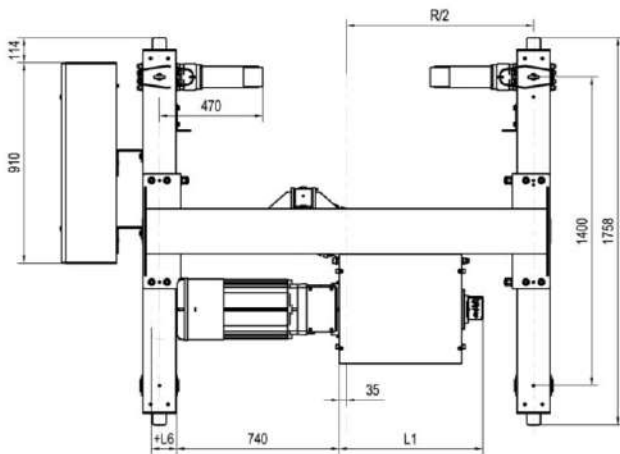
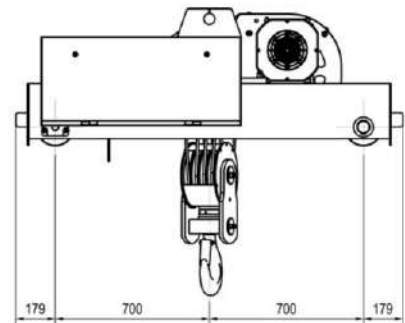
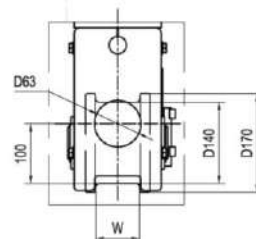
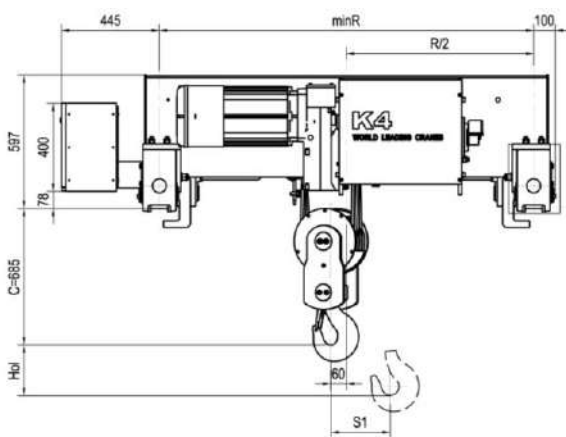


Load (kg)	Class FEM/ISO	Hoisting (m/min)												Travelling (m/min)
		Gear ratio 186				Gear ratio 115				Gear ratio 90				Gear ratio 42
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code
12000	3m/M6	3.2/0.5	1xD05	0~3.2	1xF15	5/0.8	1xD06	0~5	1xF16	6.3/1.1	1xD07	0~6.3	1xF17	0~20 /2xF02
15000	2m/M5	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	

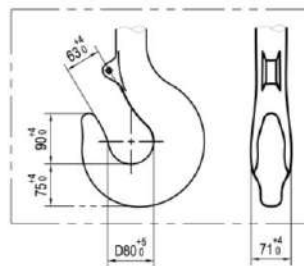
1.27. Double Girder Hoist **K4108** (Reeving 1:8)

Hol (m)	L1	S1	W	R	Weight (kg)
4.5	654	99	Default:75	1700	1055+W0
6	784	115		2000	1068+W0
8	954	131		2400	1153+W0
10	1114	169		2400	1187+W0
13	1384	265		3100	1298+W0

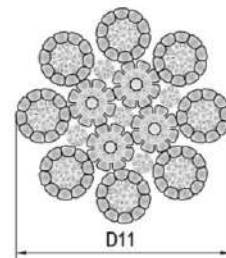
motor	D05	F15	D06	F16	D07	F17
L6	0	12	-12	85	75	85
W0	0	-4	33	22	55	39



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 186				Gear ratio 115				Gear ratio 90				Gear ratio 42	Gear* ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
16000	2m/M5	2.5/0.4 2-speed	1xD05	0~2.5 Stepless	1xF15	4/0.7 2-speed	1xD06	0~4 Stepless	1xF16	5/0.8 2-speed	1xD07	0~5 Stepless	1xF17	0~20 /2xF02	0~32 /2xF03
20000	1Am/M4	2.5/0.4 2-speed	1xD05	0~2.5 Stepless	1xF15	4/0.7 2-speed	1xD06	0~4 Stepless	1xF16	5/0.8 2-speed	1xD07	0~5 Stepless	1xF17	0~20 /2xF02	0~32 /2xF03

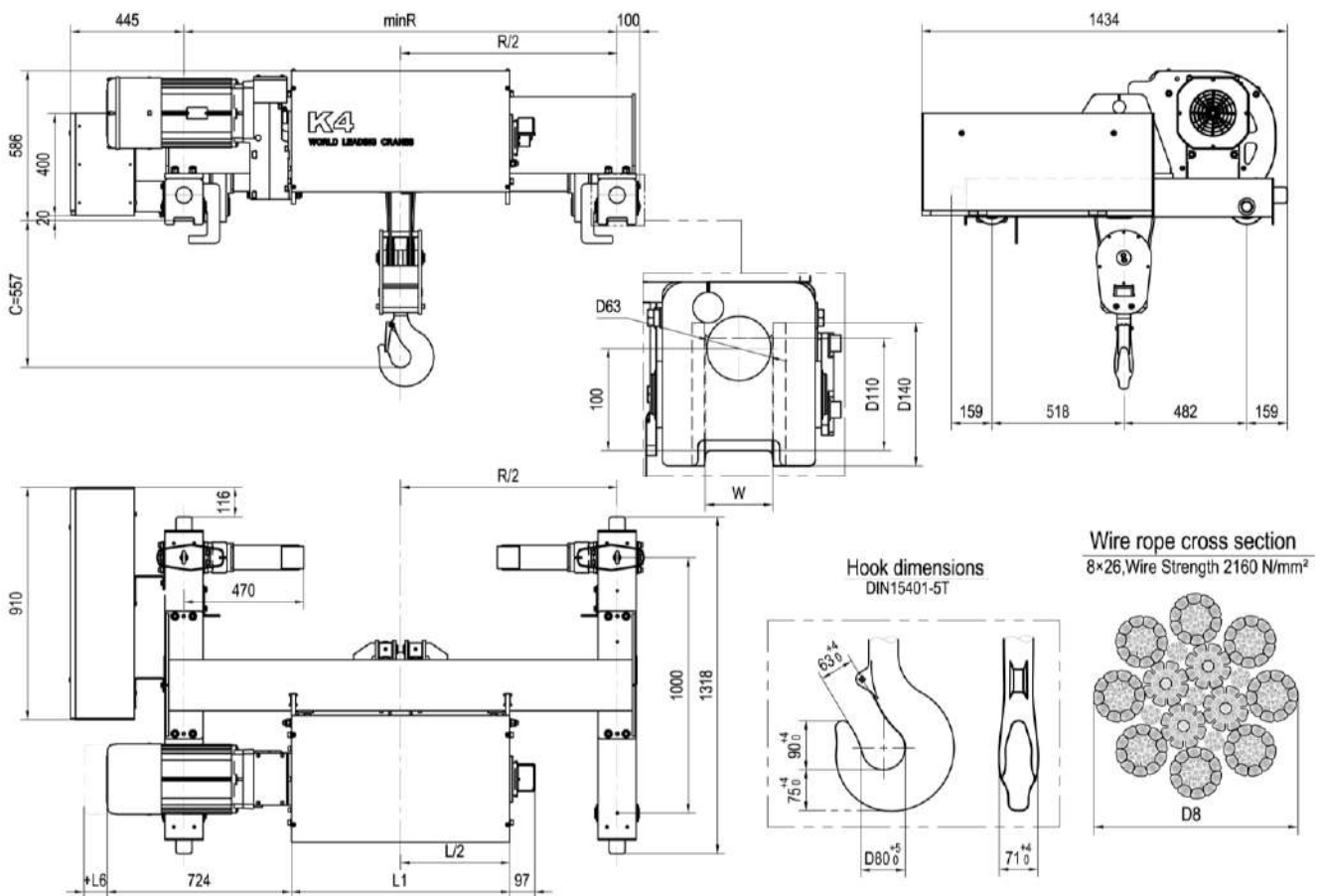
*Travelling speed 0~32 should be equipped with the wheel of 200mm;

1.28. Double Girder Hoist **K4202** (Reeving 2:2)

Hol (m)	L1	W	R	Weight (kg)
9	654	Default:75	1400	698+W0
13.5	784		1700	746+W0
19.5	954		1700	780+W0
25	1114		2000	834+W0
34.5	1384		2400	887+W0
46.5	1734		2700	986+W0



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

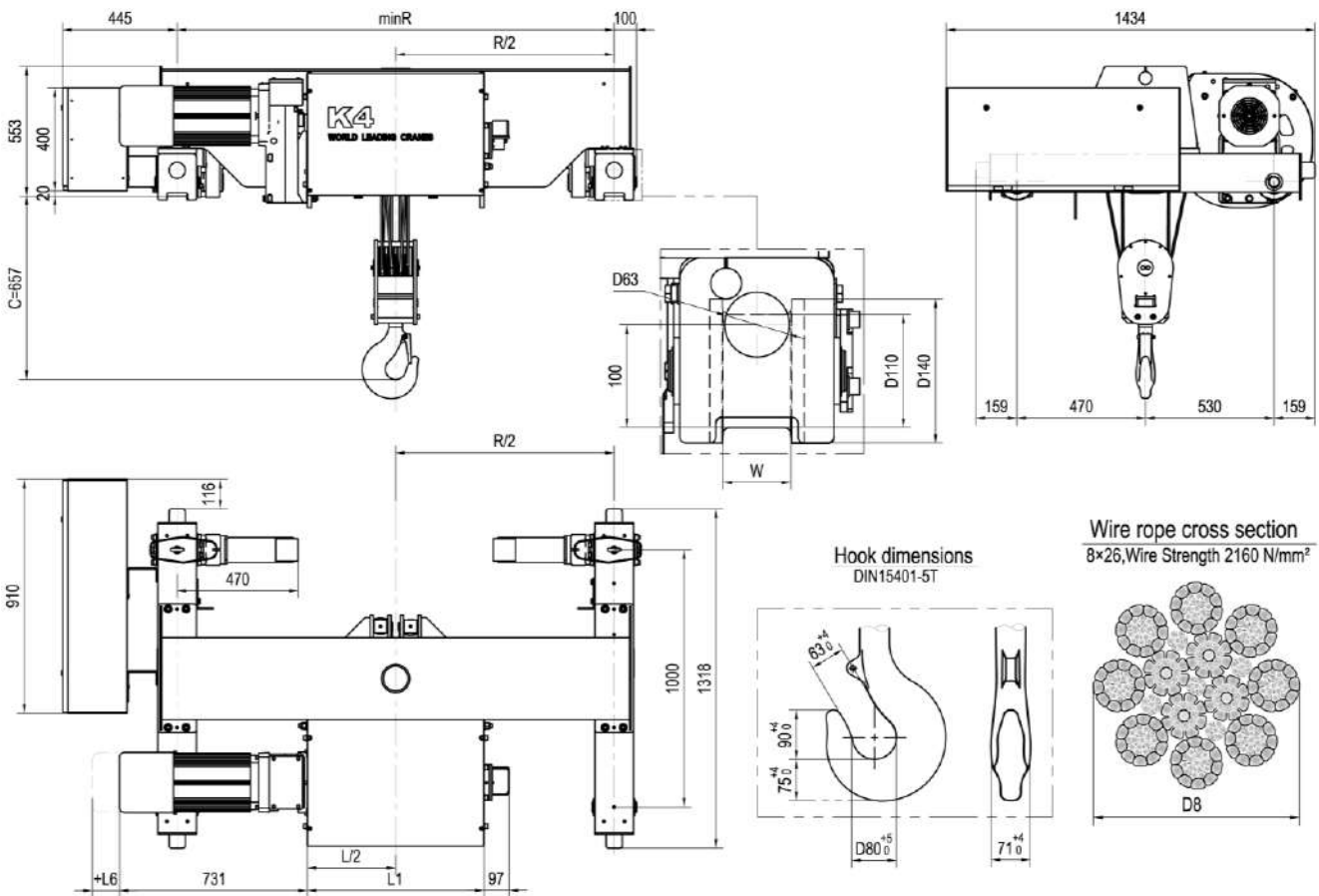


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)
		Gear ratio 229				Gear ratio 186				Gear ratio 115				Gear ratio 90				Gear ratio 42
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code
4000	3m/M6	8/1.3 2-speed	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 /2xF01
5000	2m/M5																	

1.29. Double Girder Hoist **K4204** (Reeving 2:4)

Hol (m)	L1	W	R	Weight (kg)
4.5	654	Default:75	1400	831+W0
6.5	784		1700	903+W0
9.5	954		1700	937+W0
12	1114		2000	1008+W0
17	1384		2400	1082+W0
23	1734		2700	1202+W0

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

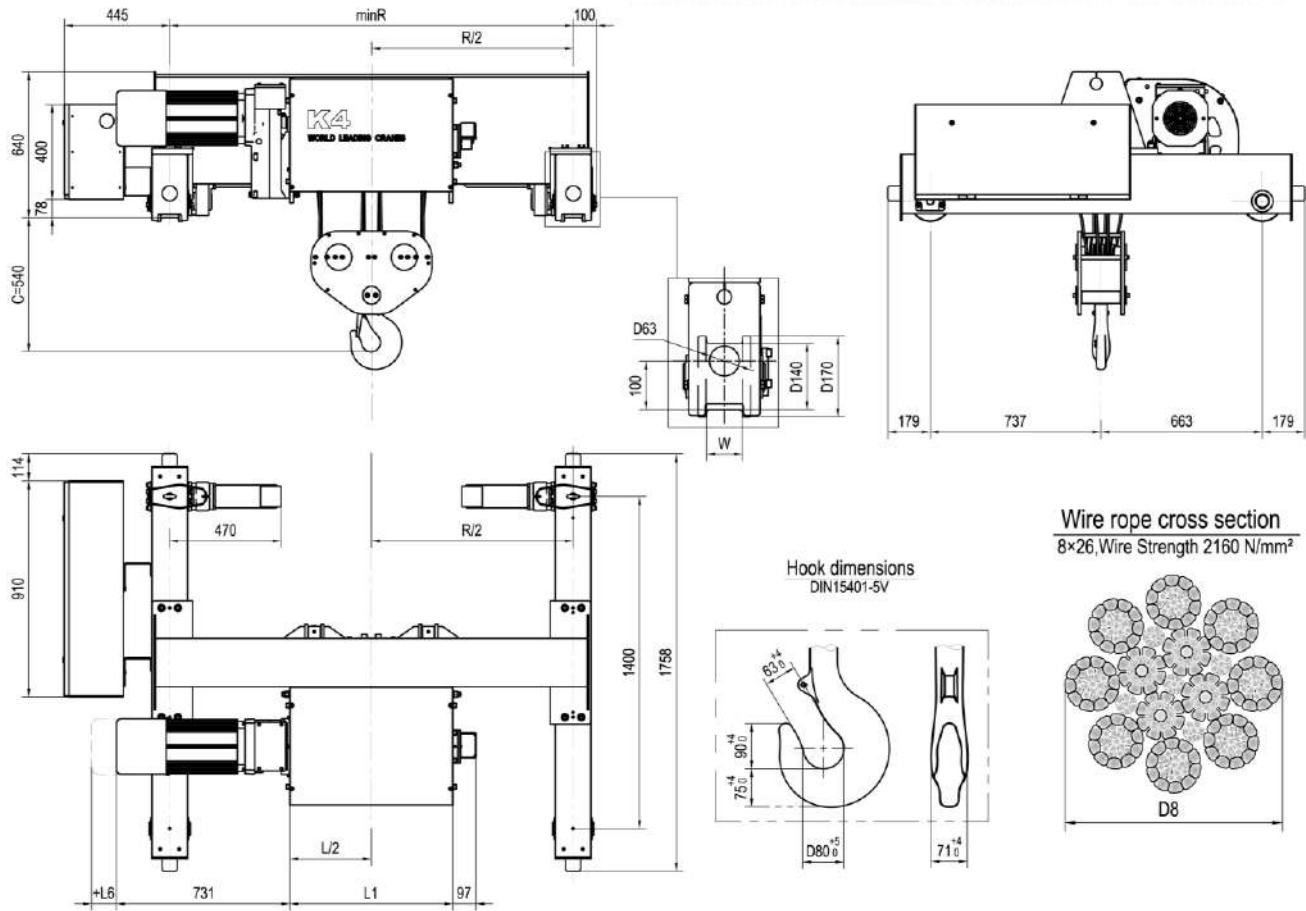


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)
		Gear ratio 229				Gear ratio 186				Gear ratio 115				Gear ratio 90				Gear ratio 42
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code
8000	3m/M6	4/0.7 2-speed	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	0~20/2xF02
10000	2m/M5																	

1.30. Double Girder Hoist **K4206** (Reeving 2:6)

Hol (m)	L1	W	R	Weight (kg)
4.3	784	Default:75	1700	1074+W0
6.3	954		1700	1108+W0
8	1114		2000	1183+W0
11.3	1384		2400	1263+W0
15.3	1734		2700	1384+W0

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

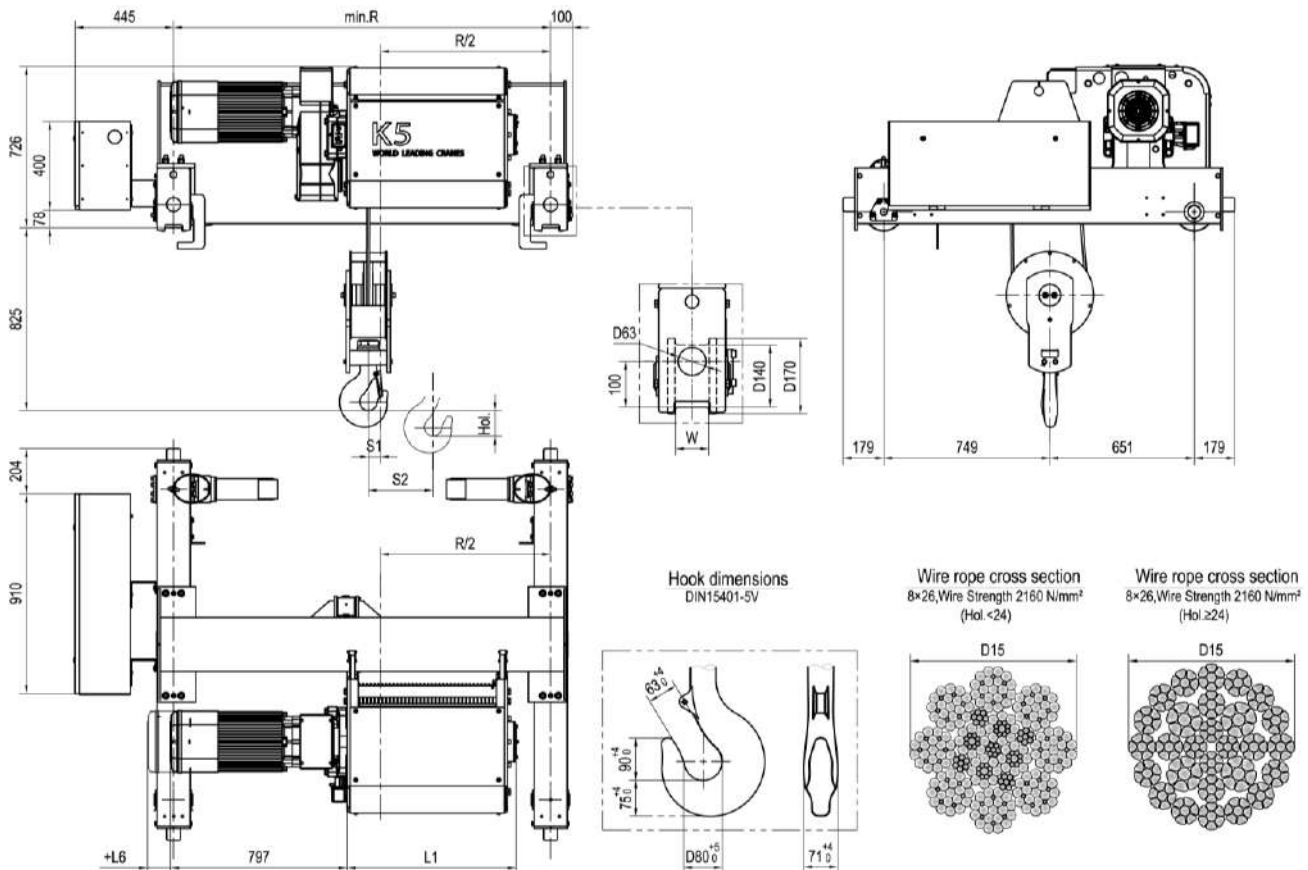


Load (kg)	Class FEM/ISO	Hoisting (m/min)												Travelling (m/min)
		Gear ratio 186				Gear ratio 115				Gear ratio 90				Gear ratio 42
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code
12000	3m/M6	3.2/0.5 2-speed	1xD05	0~3.2 Stepless	1xF15	5/0.8 2-speed	1xD06	0~5 Stepless	1xF16	6.3/1.1 2-speed	1xD07	0~6.3 Stepless	1xF17	0~20/2xF02
15000	2m/M5													

1.31. Double Girder Hoist **K5102** (Reeving 1:2)

HoI (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



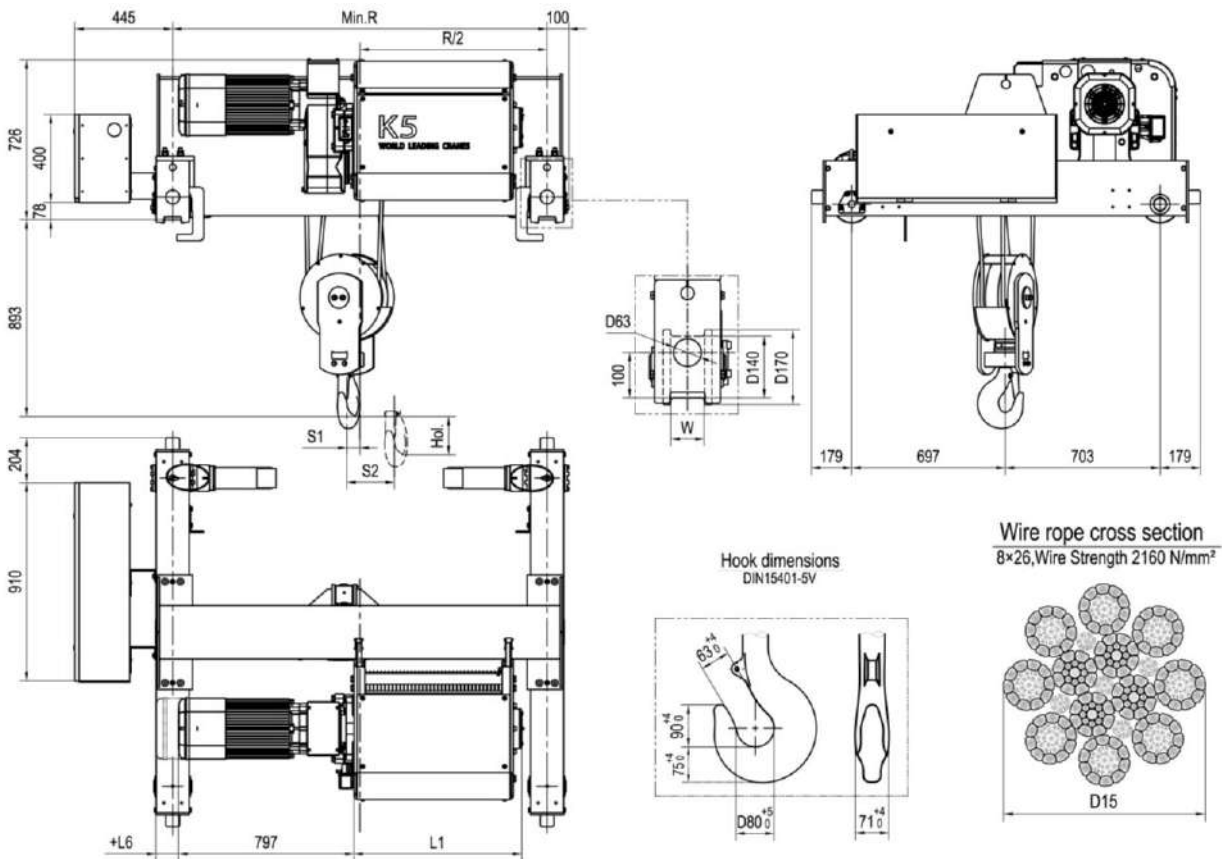
Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)				
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 32	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor			
6300	3m/M6	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	N/A	0-25 / 2xF02	0-32 / 2xF02
8000	2m/M5																			
10000	1Am/M4																			

1.32. Double Girder Hoist **K5104** (Reeving 1:4)

HoI (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



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	Speed/Motor Code	Speed/Motor Code	
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	N/A	0-25 / 2xF02	0-32 / 2xF03
16000	2m/M5																			
20000	1Am/M4																			

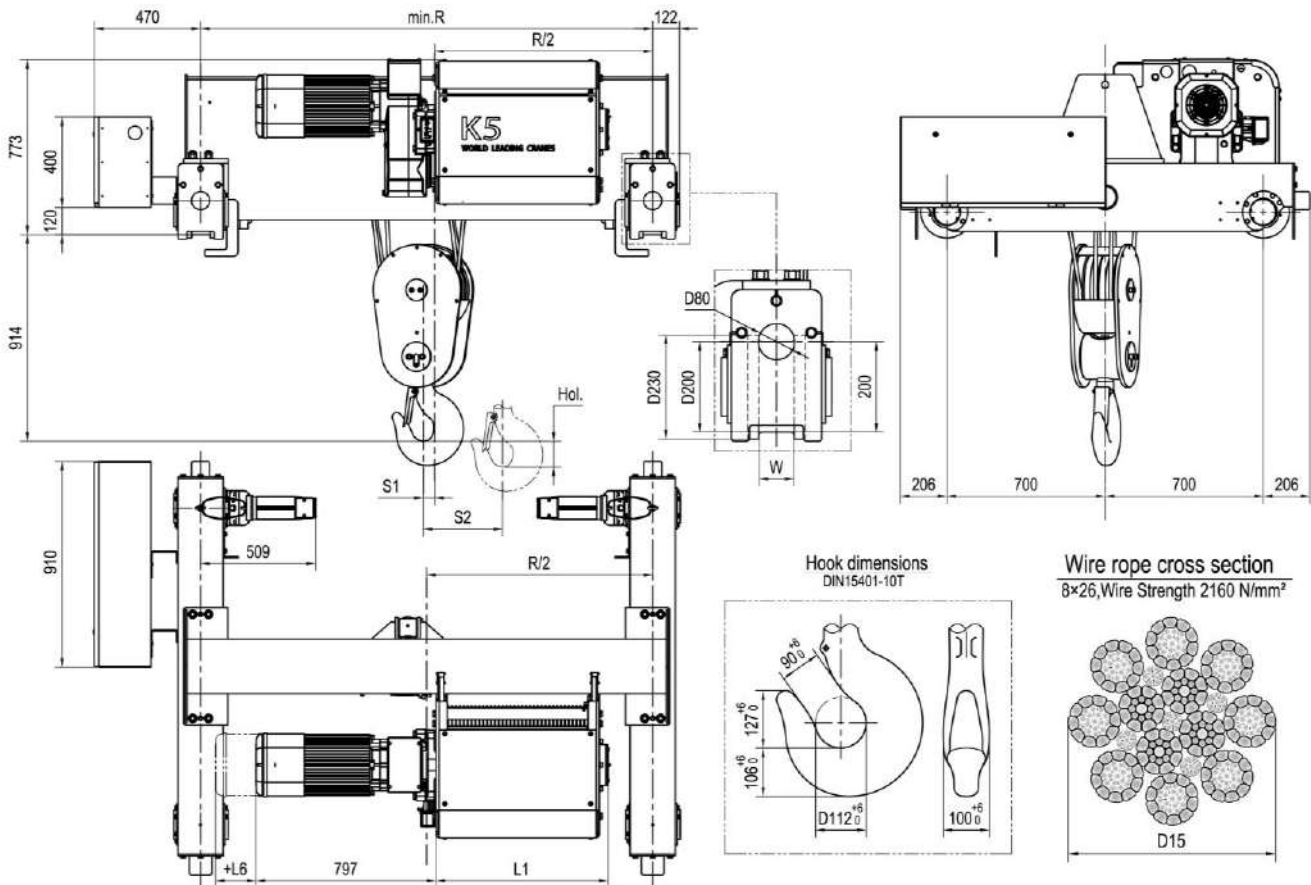
*Travelling speed 0~32 should be equipped with the wheel of 200mm;

1.33. Double Girder Hoist **K5106** (Reeving 1:6)

Hoist (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



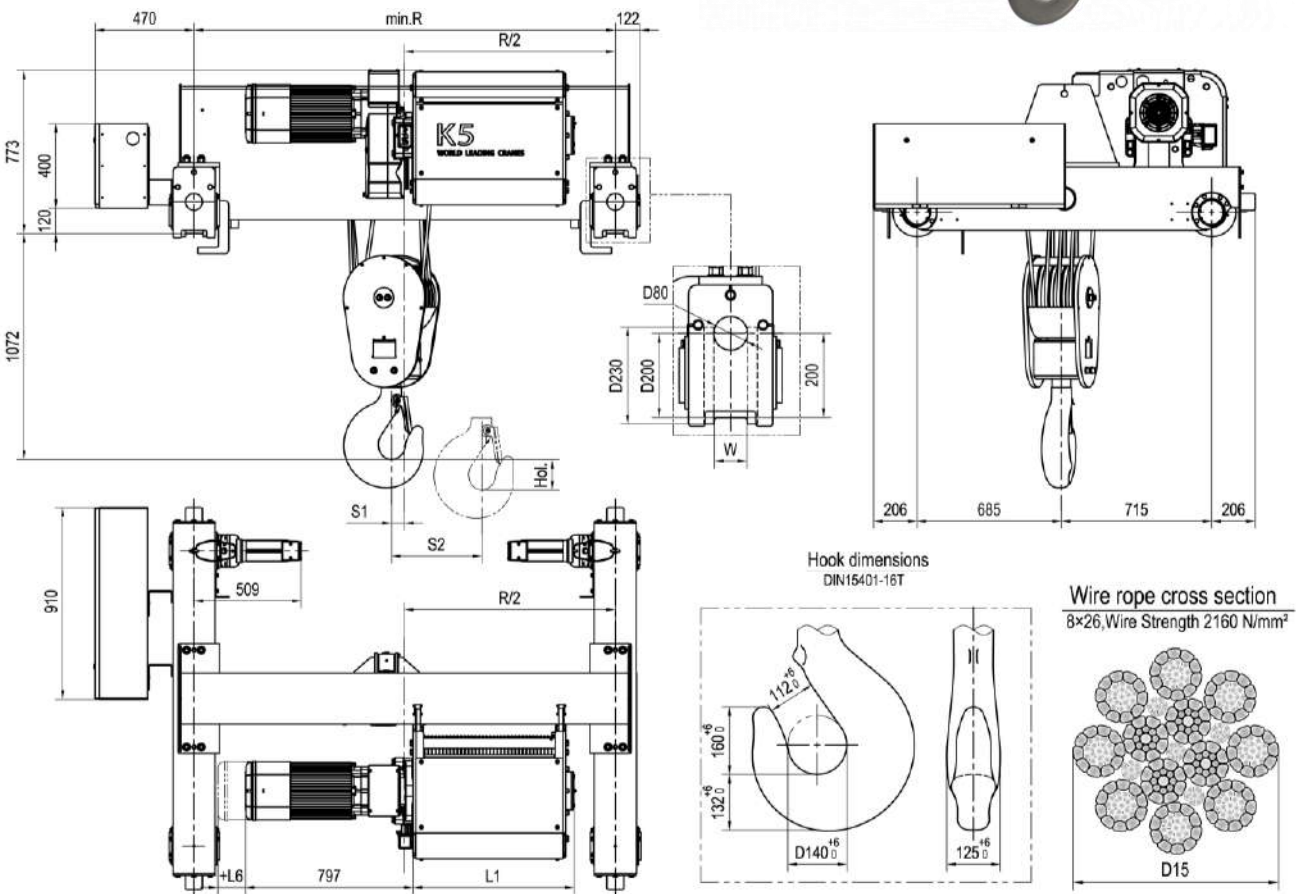
Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 90	Gear ratio 63	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor			
20000	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	N/A	0~20/ 2xF02	0~32/ 2xF03
25000	2m/M5																			
30000	1Am/M4																			

1.34. Double Girder Hoist **K5108** (Reeving 1:8)

HoI (m)	L1	S1	S2	W	R	Weight (kg)
7	815	22	66	Default:75	2000	1814+W0
9	1015	28	85		2400	1962+W0
12	1215	37	110		3100	2166+W0
15	1515	48	144		3400	2336+W0
20	1915	63	189		4200	2638+W0
24	2265	76	228		4800	2881+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



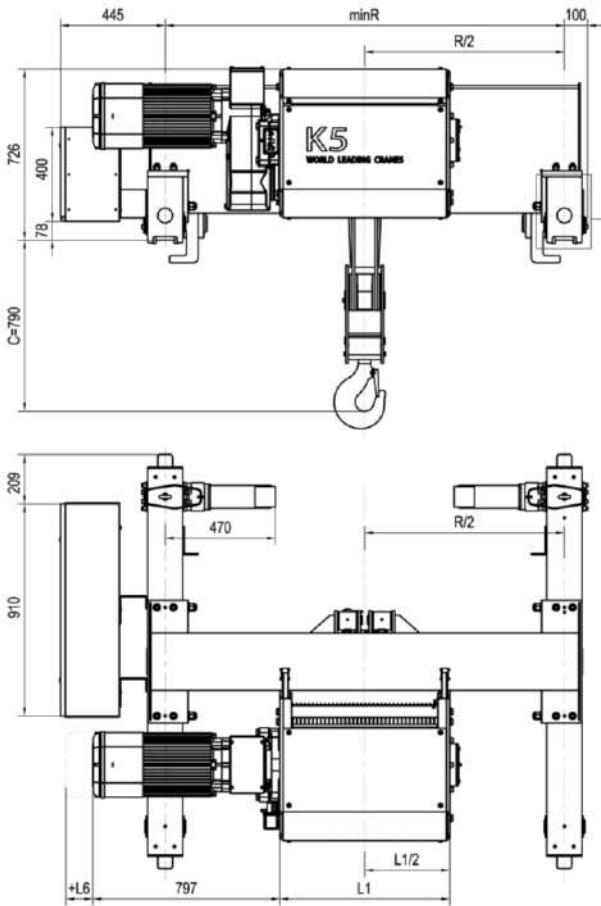
Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
25000	3m/M6	2/0.3 2-speed	1xD06	0-2 Stepless	1xF16	2.5/0.4 2-speed	1xD06	0-2.5 Stepless	1xF16	3.2/0.5 2-speed	1xD07	0-3.2 Stepless	1xF17	0-4 Stepless	1xF19	0-20 / 2xF03	0-32 / 2xF03
32000	2m/M5																
40000	1Am/M4																

1.35. Double Girder Hoist **K5202** (Reeving 2:2)

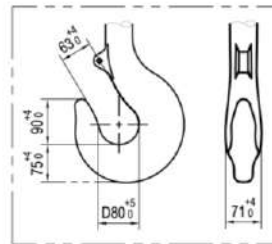
Hol (m)	L1	W	R	Weight (kg)
15.5	815	Default:75	1700	1360+W0
22	1015		2000	1450+W0
28.5	1215		2000	1481+W0
38	1515		2400	1633+W0
50.5	1915		2700	1775+W0
61.5	2265		3100	1961+W0
77.5	2765		3800	2240+W0
87	3065		4200	2436+W0



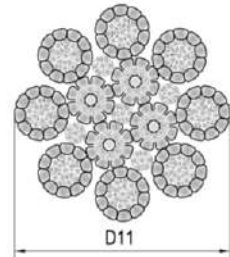
motor	D06	F16	D07	F17	D08	F18	F19
L6	0	97	87	97	87	137	137
W0	0	-11	22	6	22	10	16



Hook dimensions
DIN15401-5V



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



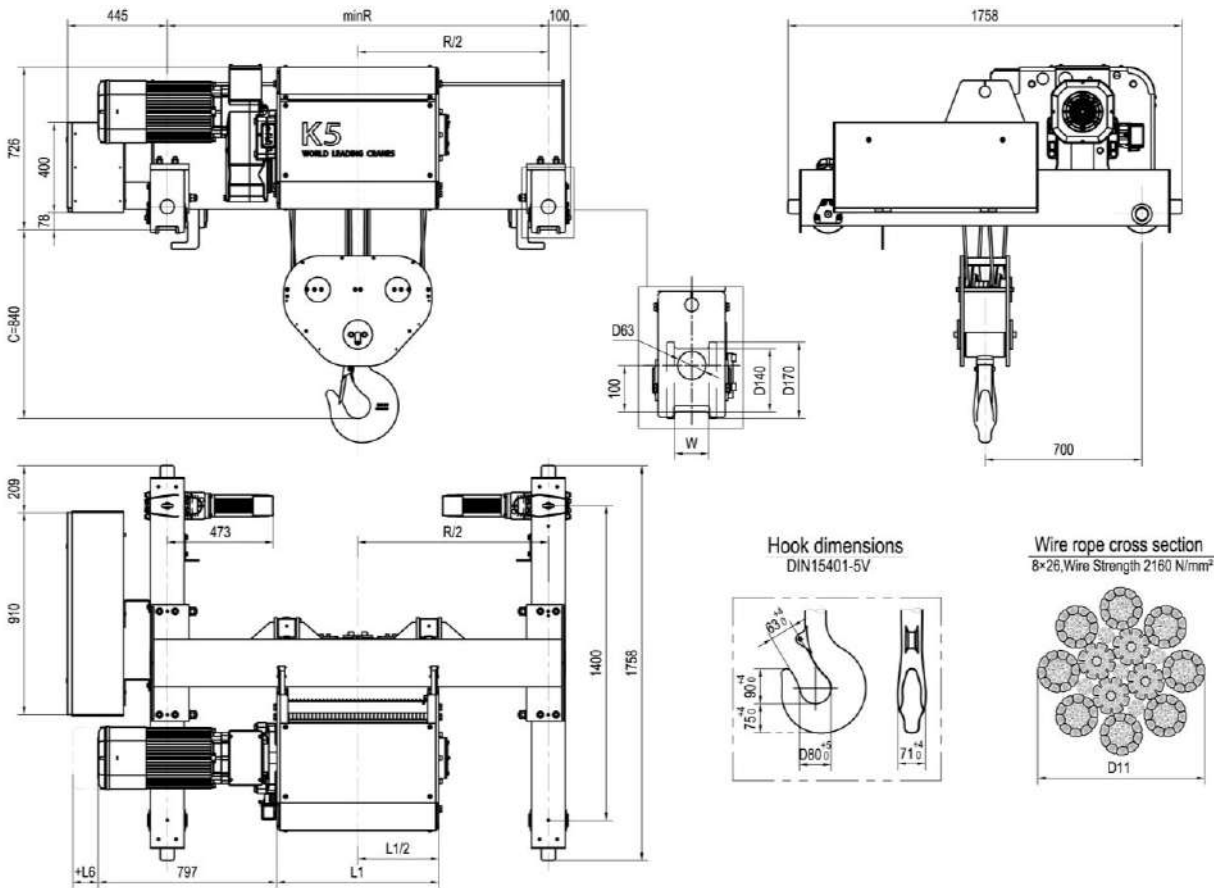
Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 42	Gear ratio 32	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	Speed/Motor Code	
6300	3m/M6	8/1.3 2-speed	1xD06	0-8 Stepless	1xF16	10/1.7 2-speed	1xD07	0-10 Stepless	1xF17	1xD08	12.5/2 2-speed	1xD09	0-12.5 Stepless	1xF18	0-16 Stepless	1xF19	0-20 Stepless			N/A
8000	2m/M5																			
10000	1Am/M4																			

1.36. Double Girder Hoist **K5204** (Reeving 2:4)

HoI (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



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	N/A	0-25/ 2xF02	0-32/ 2xF03
16000	2m/M5																			
20000	1Am/M4																			

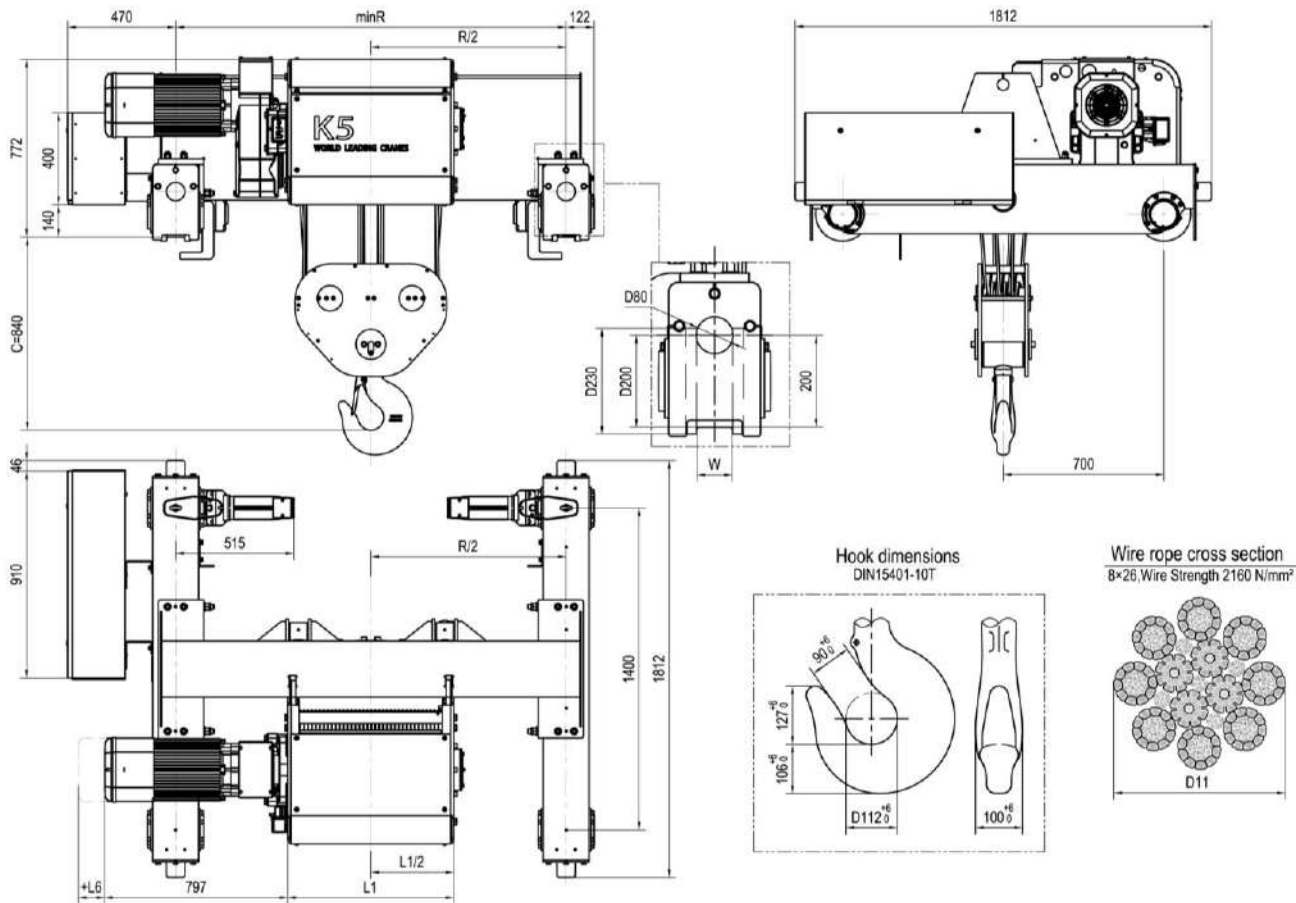
*Travelling speed 0~32 should be equipped with the wheel of 200mm;

1.37. Double Girder Hoist **K5206** (Reeving 2:6)

HoI (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

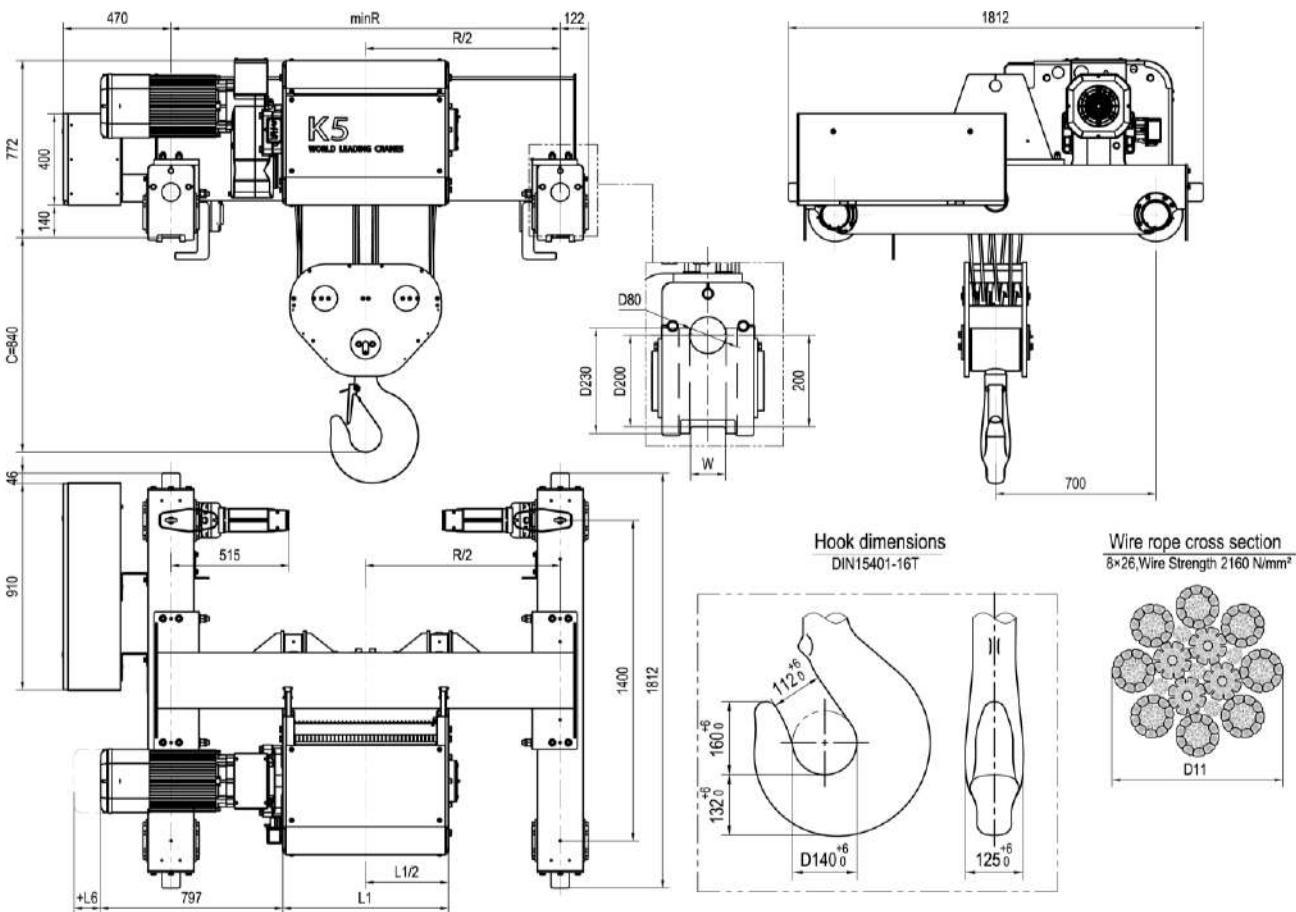


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 90	Gear ratio 63	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor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

1.38. Double Girder Hoist **K5208** (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



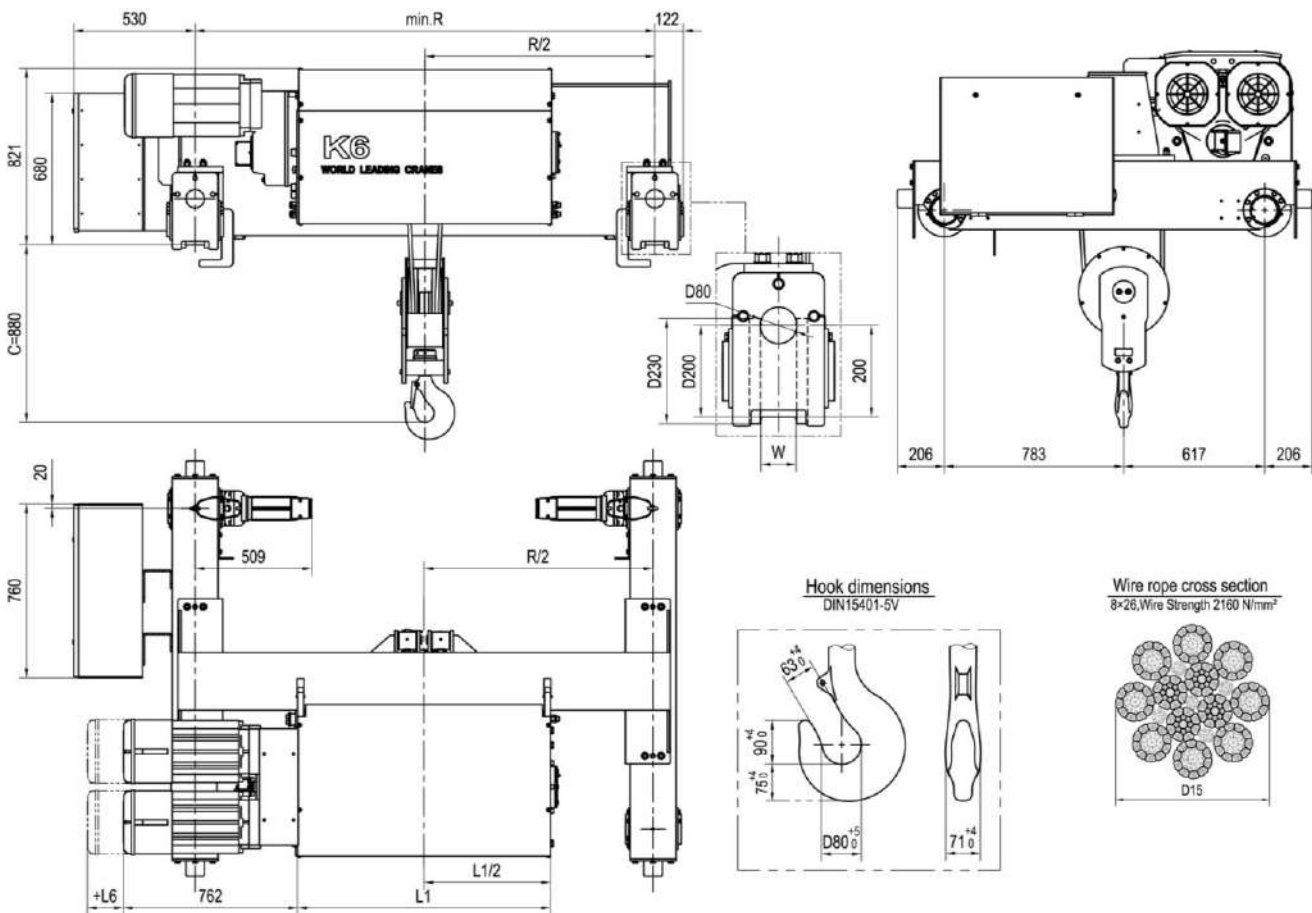
Load (kg)	Class FEM/ISO	Hoisting (m/min)														Travelling (m/min)	
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 90	Gear ratio 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
32000	2m/M5	2/0.3 2-speed	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																

1.39. Double Girder Hoist **K6202** (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



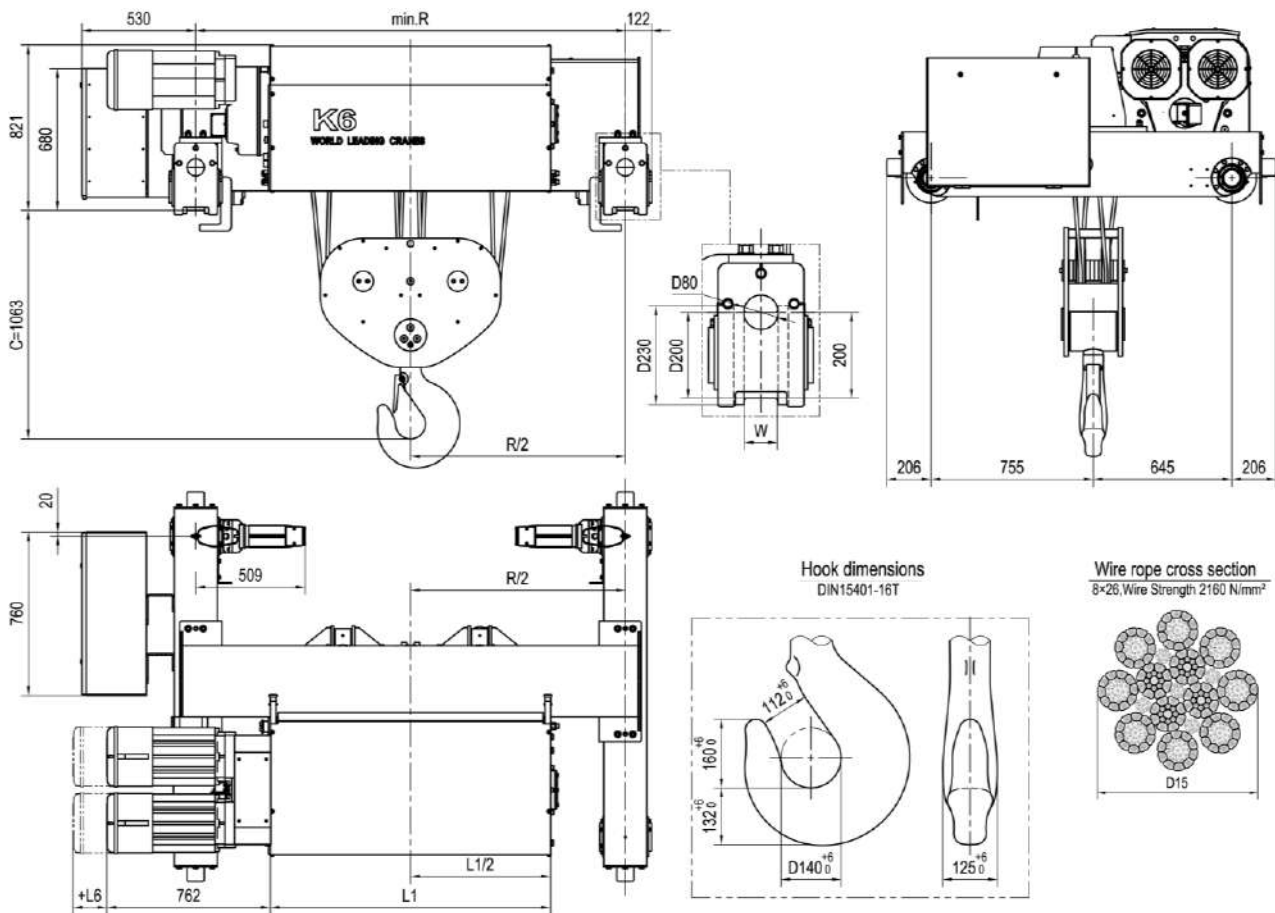
Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 90	Gear ratio 63	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code		
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	0-20 Stepless	2xF19	N/A	0-25 / 2xF02	0-32 / 2xF03
16000	2m/M5																			
20000	1Am/M4																			

1.40. Double Girder Hoist **K6204** (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

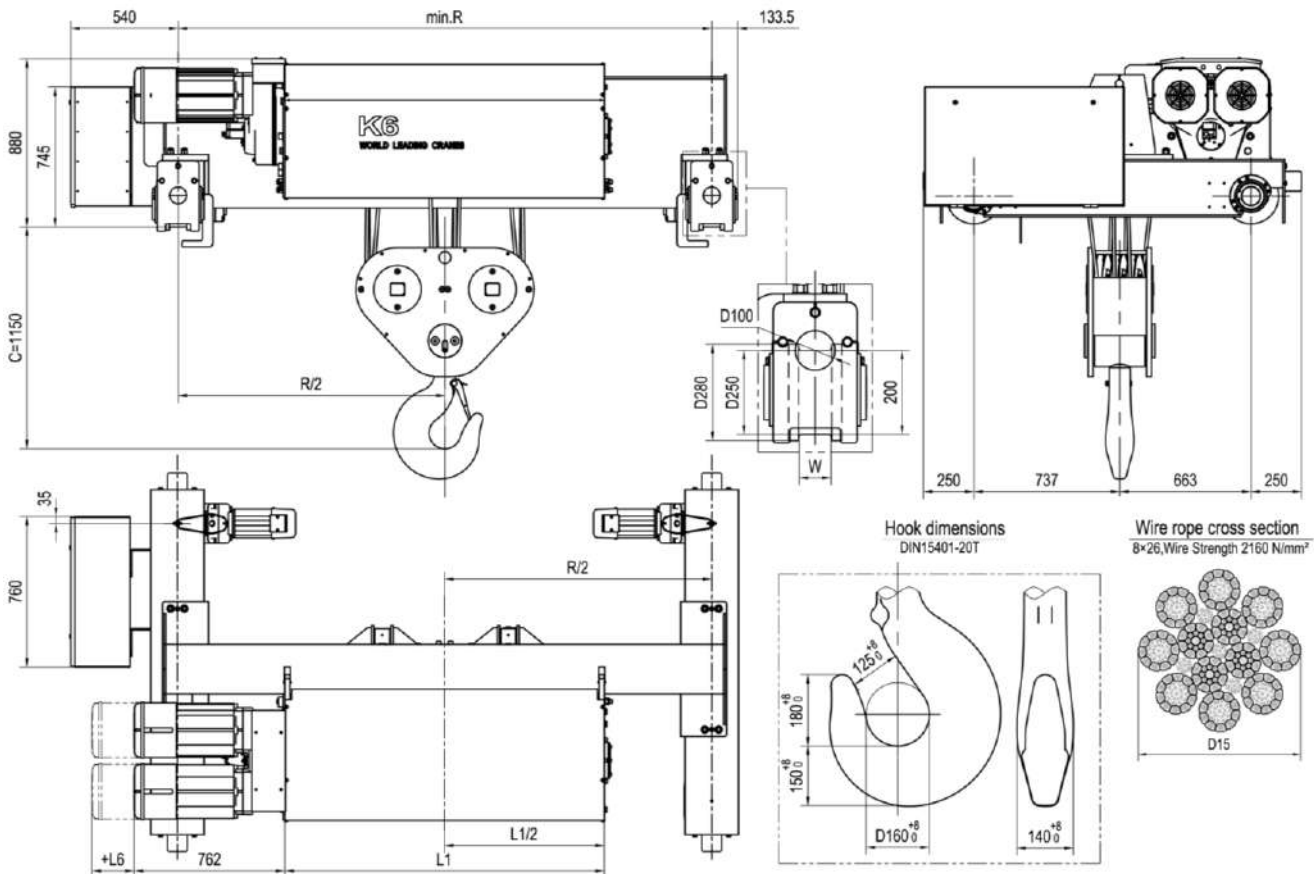


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 90	Gear ratio 63	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code		
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	0-10 Stepless	2xF19	N/A	0-25/ 2xF03	0-32/ 2xF03
32000	2m/M5																			
40000	1Am/M4																			

1.41. Double Girder Hoist **K6206** (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



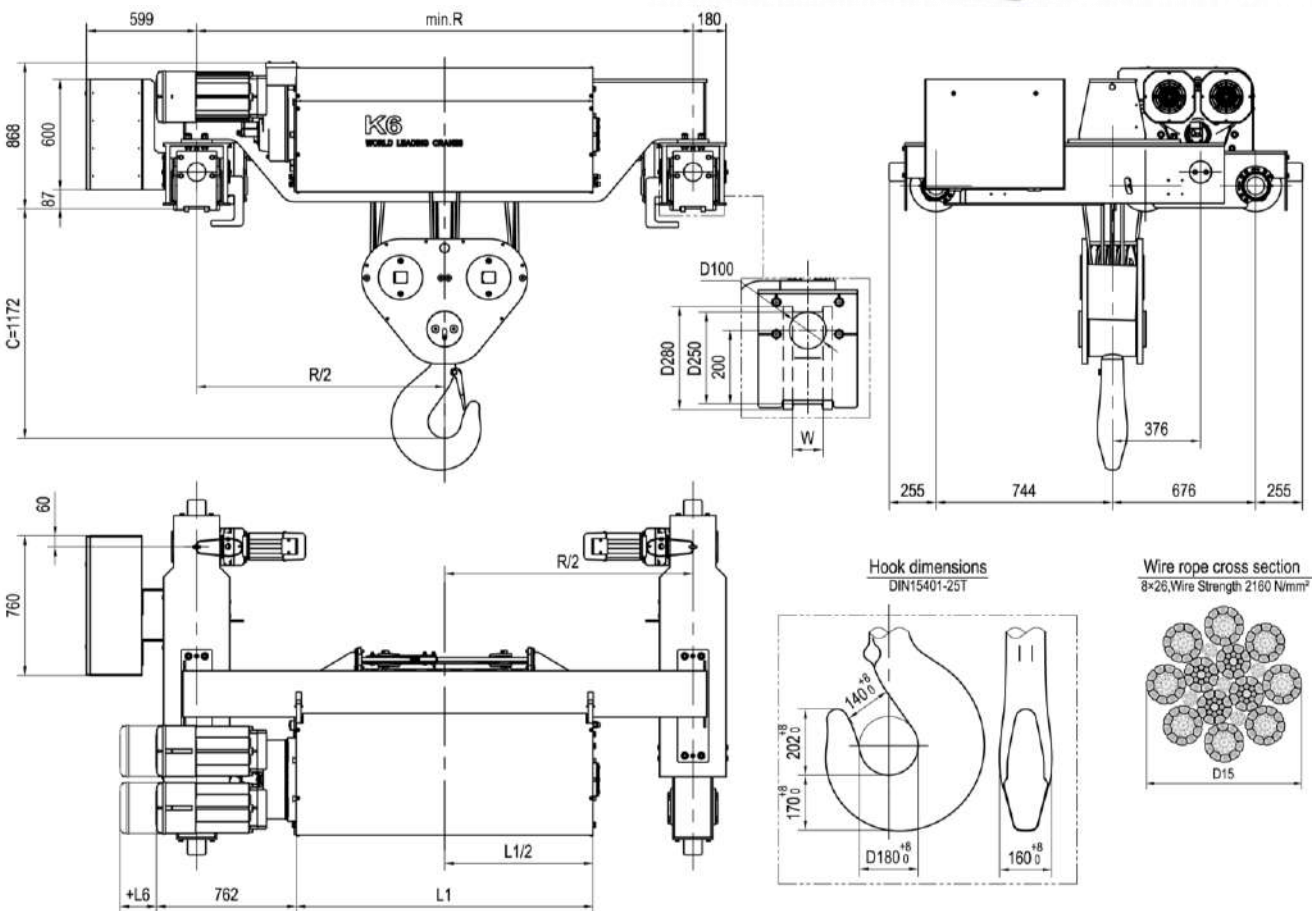
Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 115	Gear ratio 72	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor			
40000	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	N/A	0~6.3 Stepless	2xF19	0~25 / 2xF04	0~32 / 2xF04
50000	2m/M5																			
60000	1Am/M4																			

1.42. Double Girder Hoist **K6208** (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

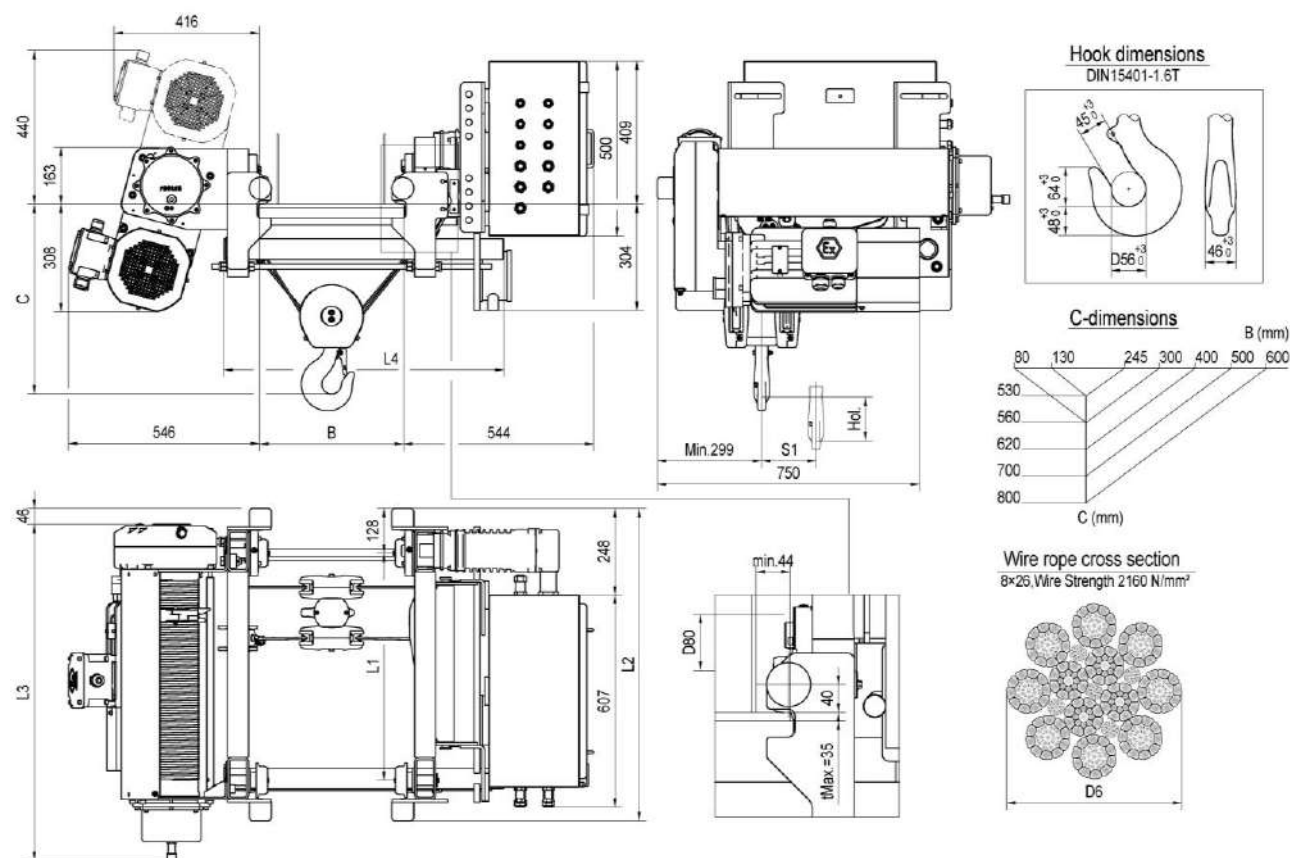


Load (kg)	Class FEM/ISO	Hoisting (m/min)																Travelling (m/min)		
		Gear ratio 289				Gear ratio 243				Gear ratio 191				Gear ratio 144		Gear ratio 114		Gear ratio 115	Gear ratio 72	
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor 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	0-5 Stepless	2xF19	N/A	0-25 / 2xF04	0-32 / 2xF04
63000	2m/M5																			
80000	1Am/M4																			

1.43. Low Headroom Ex Hoist **K2104-Ex** (Reeving 1:4)

HOL (m)	B	L2	L4	L5	S1	Weight (kg)
6	80~	457	699	688	52	415
9.5	610	652	894	883	83	439

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



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 C		II A / II B	
1600	3m/M6	5/0.8 2-speed	1xD03-Ex	6.3/1.1 2-speed	1xD03-Ex	16/4 2-speed / 1xFB04	0~16 Stepless/ 1xFB02	20/5 2-speed / 1xFB04	0~20 Stepless/ 1xFB02
2000	3m/M6								
2500	3m/M6								
3200	2m/M5								

*Weight calculated with B in 410.

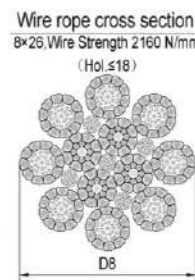
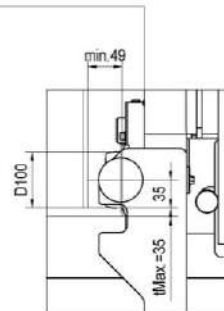
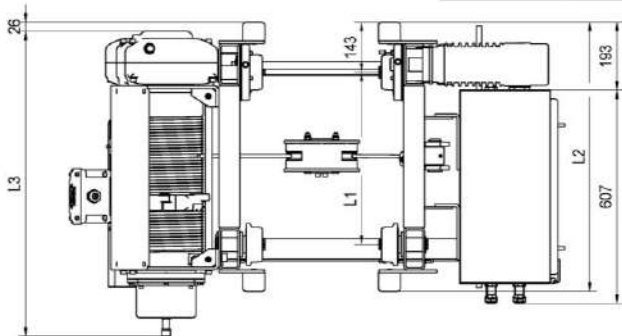
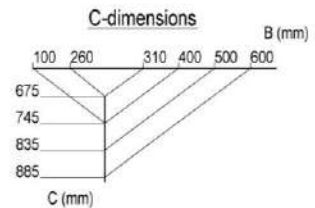
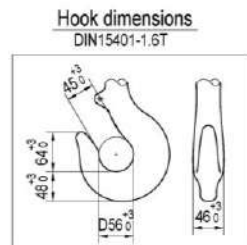
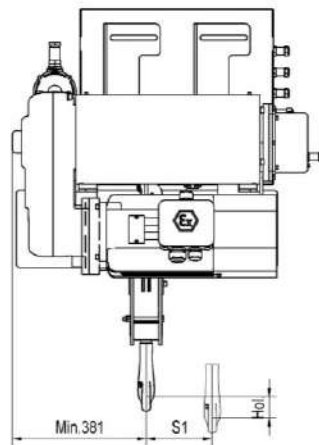
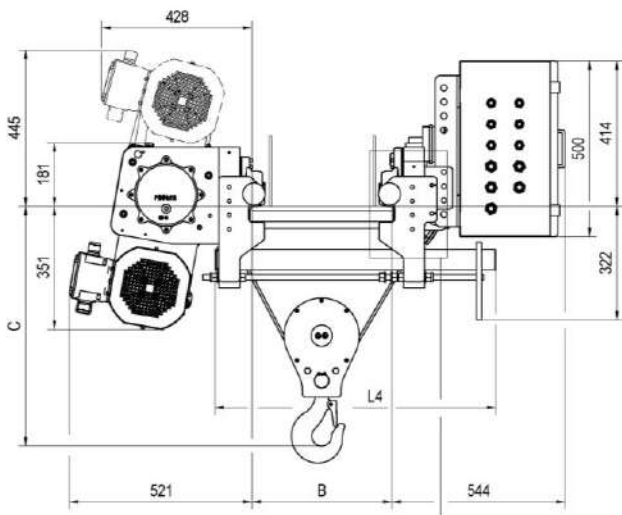
*Spark-proof (Bronze hook, Stainless steel wheel) is optional, shall be recommended for increased safety type e, IIC and IIIC.

1.44. Low Headroom Ex Hoist **K3102-Ex** (Reeving 1:2)

HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
12	100~610	490	860	766	870	52	473
18		640	860	916	1020	83	488
24		810	860	1086	1190	108	511
30		970	860	1246	1350	125	540



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 6			
		Speed (m/min)	Motor	Speed / Motor Code (m/min)			
				II C, III B/III C		II B	
1600	3m/M6	8/1.3 2-speed	1xD03-EX	16/4	0-16	20/5	0-20
2000	3m/M6			2-speed / 1xFB04	Stepless/ 1xFB02	2-speed / 1xFB02	Stepless/ 1xFB02
2500	2m/M5						
3200	1Am/M4						

*Weight calculated with B in 410.

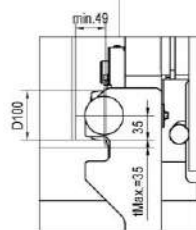
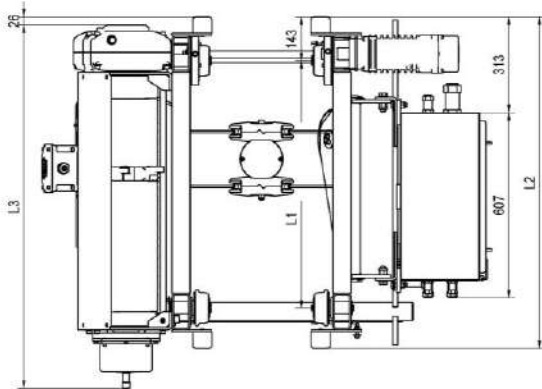
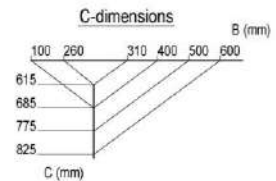
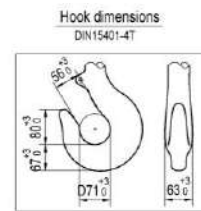
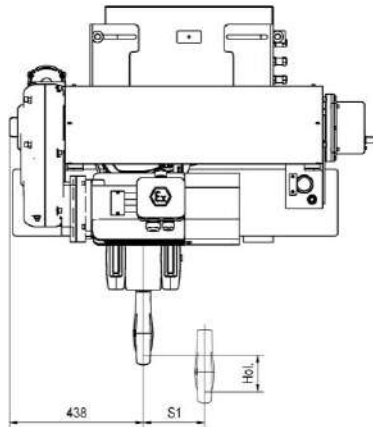
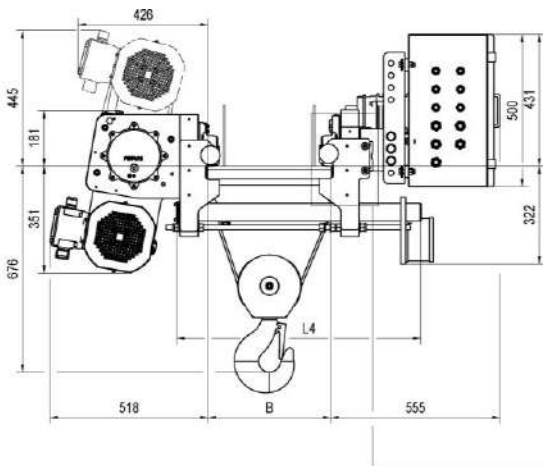
*Spark-proof (Bronze hook, stainless steel wheel) is optional, shall be recommended for increased safety type e, IIC and IIIC.

1.45. Low Headroom Ex Hoist **K3104-Ex** (Reeving 1:4)

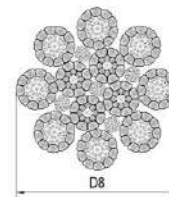
HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
6	100~610	490	892	766	870	52	488
9		640	892	916	1020	83	503
12		810	892	1086	1190	108	527
15		970	892	1246	1350	125	555



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



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



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 C		II B	
3200	3m/M6	4/0.7 2-speed	1xD03-Ex	5/0.8 2-speed	1xD03-Ex	16/4	0~16	20/5	0~20
4000	3m/M6					2-speed / 1xFB04	Stepless / 1xFB02	2-speed / 1xFB04	Stepless / 1xFB02
5000	2m/M5								

*Weight calculated with B in 410.

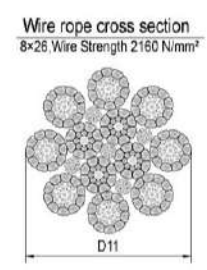
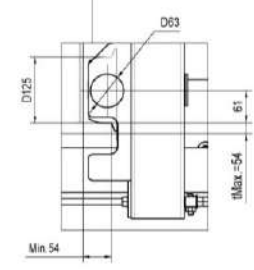
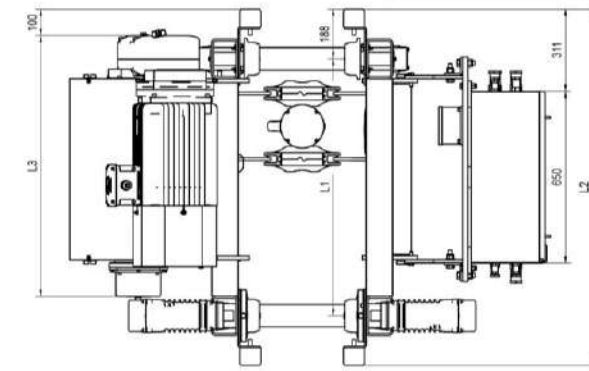
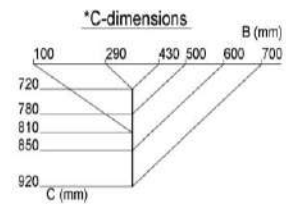
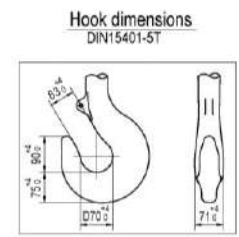
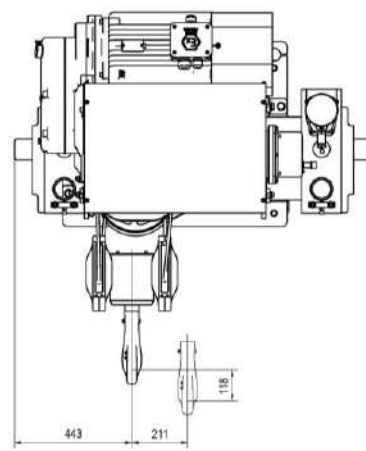
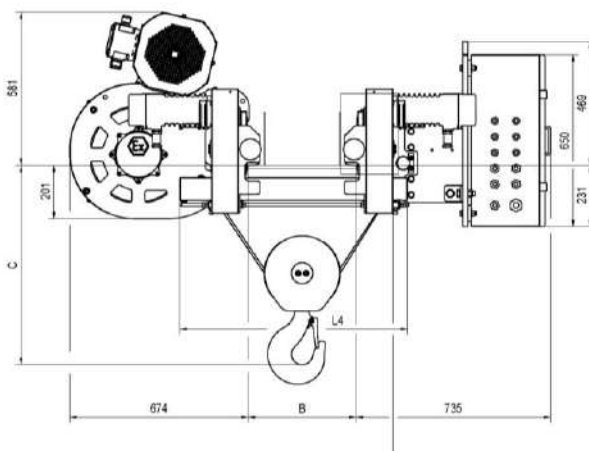
*Spark-proof (Bronze hook, stainless steel wheel) is optional, shall be recommended for increased safety type e, IIC and IIIC.

1.46. Low Headroom Ex Hoist **K4104-Ex** (Reeving 1:4)

HOL (m)	B	L2	L4	L5	S1	Weight (kg)
9	100~710	843	1189	850	90	961
12		973	1319	980	120	1049
16		1008	1489	1150	170	1129

L7(mm)	B(mm)
860	>100-410
960	>410-510
1060	>510-610

L7(mm)	B(mm)
1160	>610-710



Load (kg)	Class FEM/ISO	Hoisting				Travelling			
		Gear ratio 229		Gear ratio 185		Gear Ratio 6			
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)			
						IIC, III C		II B	
5000	3m/M6	4/0.7 2-speed	1xD06-EX	5/0.8 2-speed	1xD06-EX	16/4 2-speed / 2xFB04	0~16 Stepless/ 2xFB02	20/5 2-speed / 2xFB04	0~20 Stepless/ 2xF02
6300	3m/M6								
8000	3m/M6								
10000	2m/M5								

*Weight calculated with B in 410.

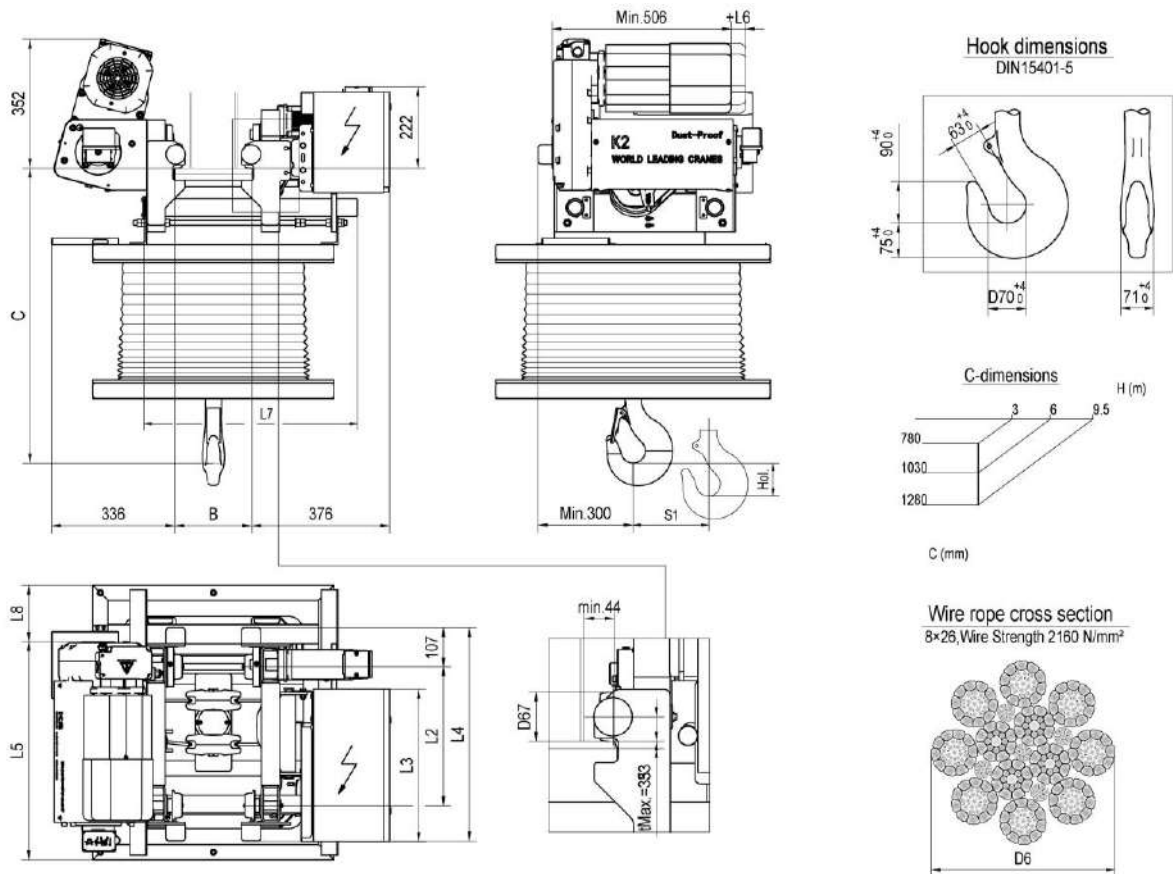
*Spark-proof (Bronze hook, stainless steel wheel) is optional, shall be recommended for increased safety type e, IIC and IIIC.

1.47. Low Headroom Dust-Proof Hoist **K2104** (Reeving 1:4)

HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
6	80~	457	500	699	715	52	288+W0
9.5	610	652	500	894	900	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)	L8(mm)	H(m)
800	>100-410	185	6
900	>410-510	380	9.5
1000	>510-610		



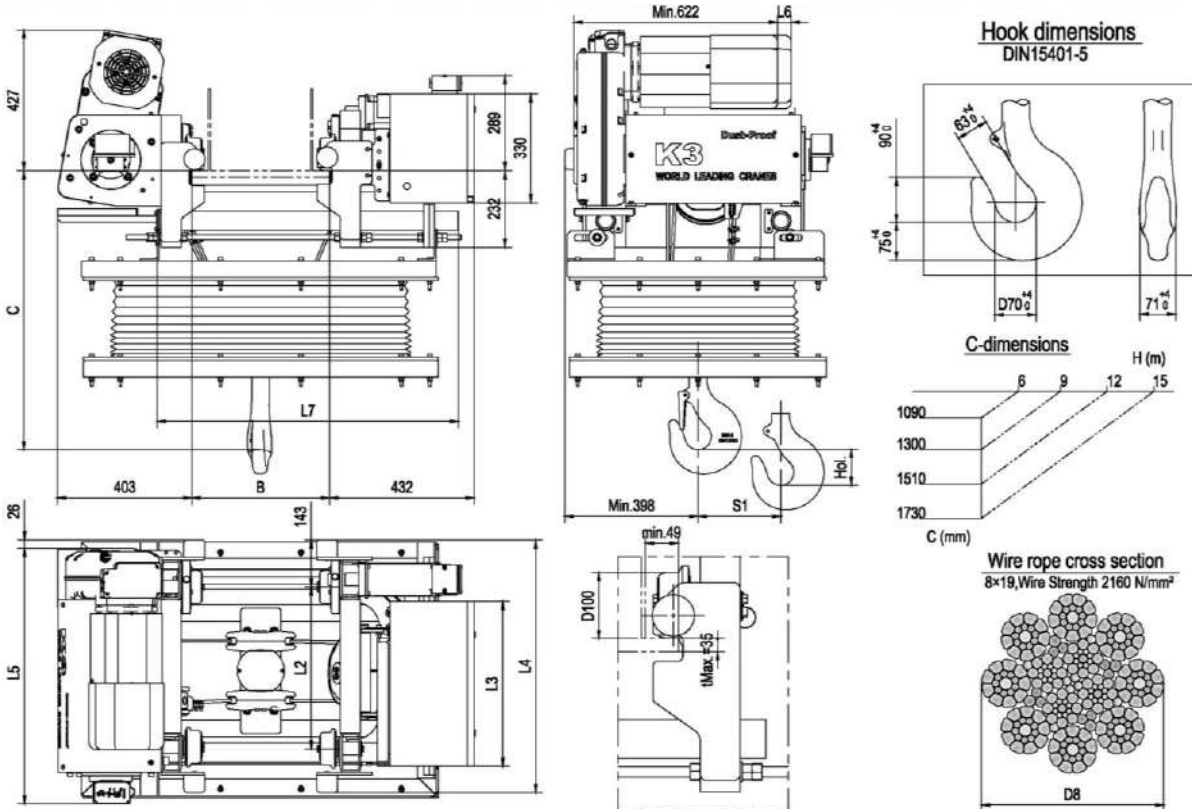
Load (kg)	Class FEM/ISO	Hoisting												Travelling	
		Gear Ratio 70				Gear Ratio 56				Gear Ratio 47				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
1600	3m/M6	5/0.8 2-speed	1x 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
2000	3m/M6														
2500	3m/M6														
3200	2m/M5														

1.48. Low Headroom Dust-Proof Hoist **K3104** (Reeving 1:4)

HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
6	100~610	490	500	766	774	52	399+W0
9		640	500	916	924	83	414+W0
12		810	500	1086	1094	108	437+W0
15		970	500	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



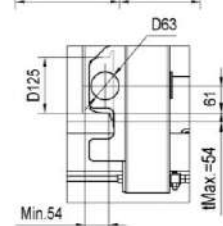
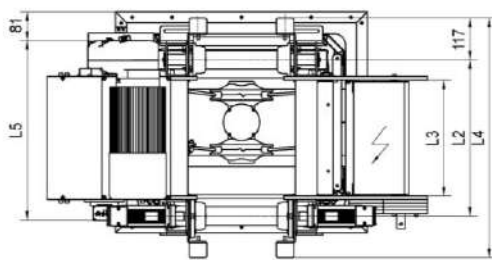
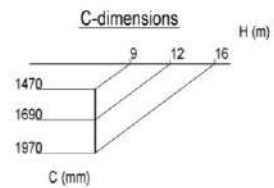
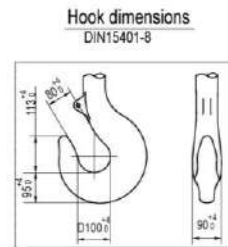
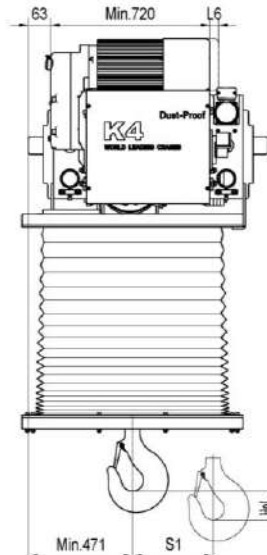
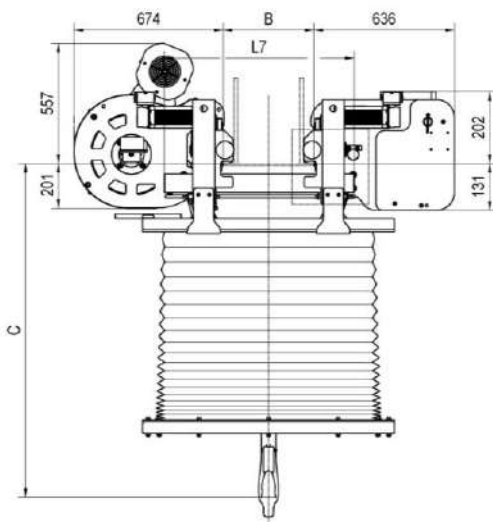
Load (kg)	Class FEM/IS O	Hoisting												Travelling	
		Gear Ratio 109				Gear Ratio 90				Gear Ratio 59				Gear Ratio 6	
		Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
3200	3m/M6	4/0.7 2-speed	1xD03	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														

1.49. Low Headroom Dust-Proof Hoist **K4104** (Reeving 1:4)

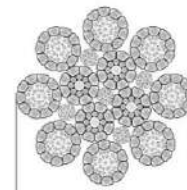
HOL (m)	B	L2	L3	L4	L5	S1	Weight (kg)
9	100~710	708	510	1074	817	90	716+W0
12		838	650	1204	947	120	824+W0
16		1008	820	1374	1117	170	904+W0

motor	D05	F15	D06	F16
L6	0	12	-12	85
W0	0	-4	33	22

L7(mm)	B(mm)	L7(mm)	B(mm)
860	> 100-410	1160	> 610-710
960	> 410-510		
1060	> 510-610		



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



Load (kg)	Class FEM/ISO	Hoisting																Travelling	
		Gear ratio 229				Gear ratio 185				Gear ratio 114				Gear ratio 90				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 (m/min)	Motor	Speed (m/min)	Motor	Speed / Motor Code (m/min)	
5000	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 / 2xFO 2	0-32 / 2xFO 2
6300	3m/M6																		
8000	3m/M6																		
10000	2m/M5																		

2. Winch

2.1. Winch code

A	2	2	04	D	0200	M5	17	D	D05	N
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Pos	Code	Description	Properties							
1	A	Production platform of WORLDHOISTS								
2	1	Hoist serial number	1	6.3t(M6)~30t(M5)						
			2	12.5t(M6)~60t(M4)						
3	2	Ropes	2	Number of ropes from drum						
4	04	Rope Reeving	02	Number of rope falls per rope						
			04							
			06							
5	D	Trolley type	D	Double girder trolley						
6	0200	Safe Working Load	0063	1) 0063 = 63 * 100kg = 6,300kg						
			0200	2) 0200 = 200* 100kg = 20,000kg						
7	M5	Duty Group	M5	ISO/GB/FEM (M3~M7)						
8	17	Lifting Height (m)	00	1) 00 = Special Height					00~68m	
			06	2) 06 = 6m						
			18	3) 18 = 18m						
8	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		
10	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
					F19	28				
11	N	Option	N	N= Normal (standard delivery)						
			E	E= Extensional (Tailor made)						

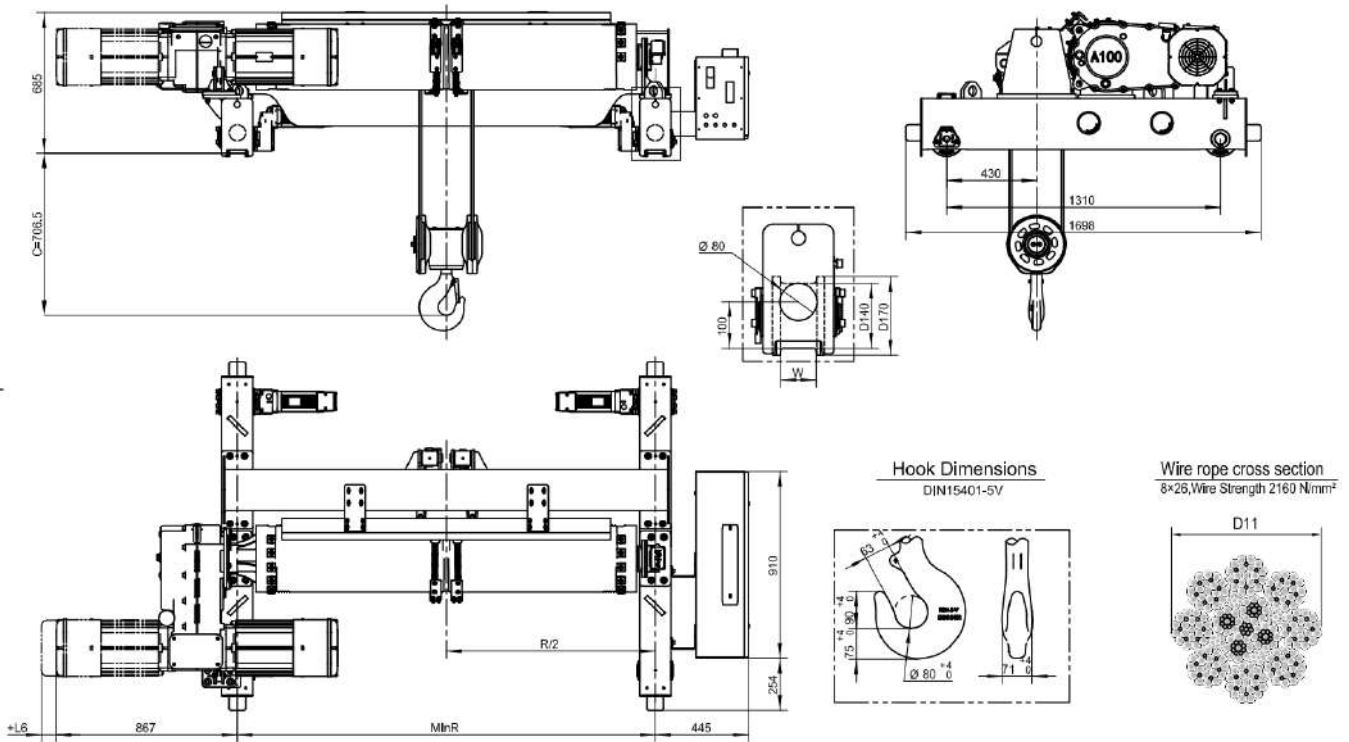
2.2. Double Girder Winch **A1202** (Reeving 2:2)

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		

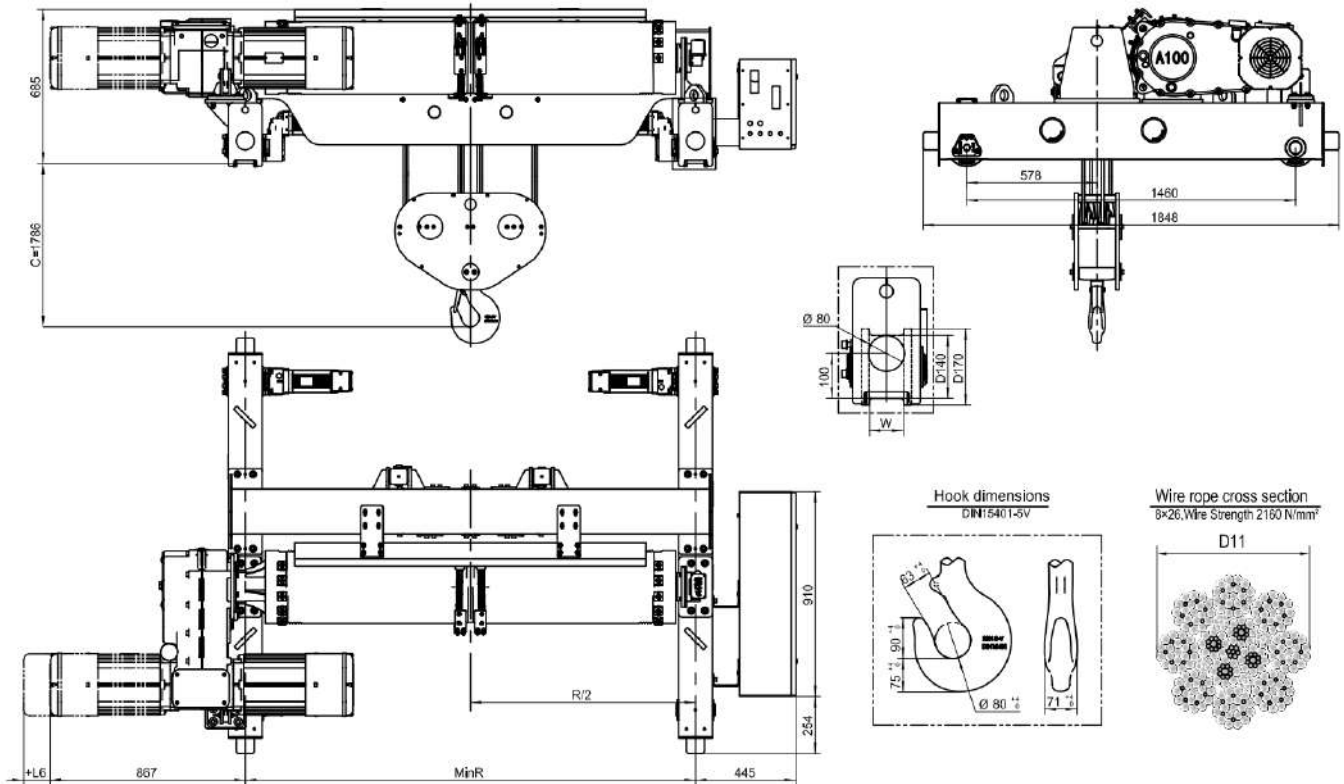
2.3. Double Girder Winch A1204 (Reeving 2:4)

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

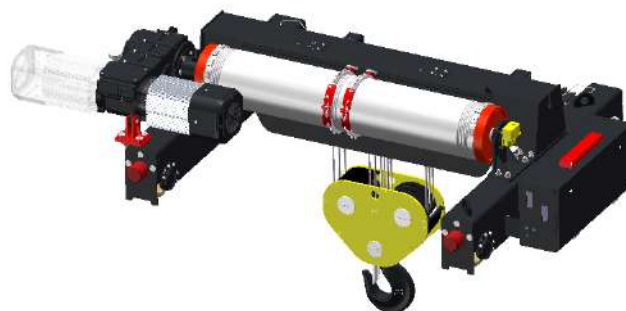


Load (kg)	Class FEM/ISO	Hoisting (m/min)								Travelling (m/min)	
		Gear ratio 161				Gear ratio 103				Gear ratio 90	Gear ratio* 63
		Speed	Motor	Speed	Motor	Speed	Motor	Speed	Motor	Speed/Motor Code	
12500	3m/M6	5/0.8 2-speed	1xD06	0-5 Stepless	1xF16	8/1.3 2-speed	2xD06	0-8 Stepless	2xF16	0~20 / 2xF02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

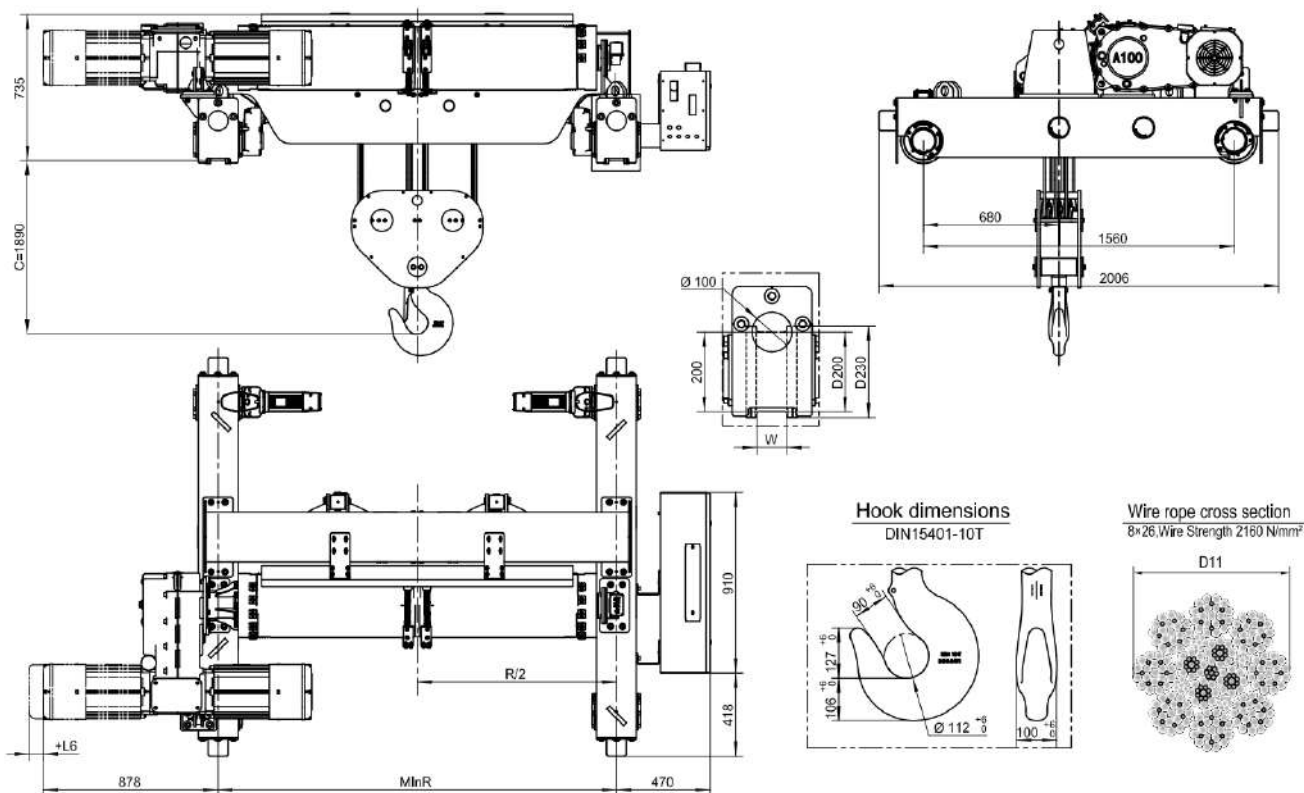
2.4. Double Girder Winch A1206 (Reeving 2:6)

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		

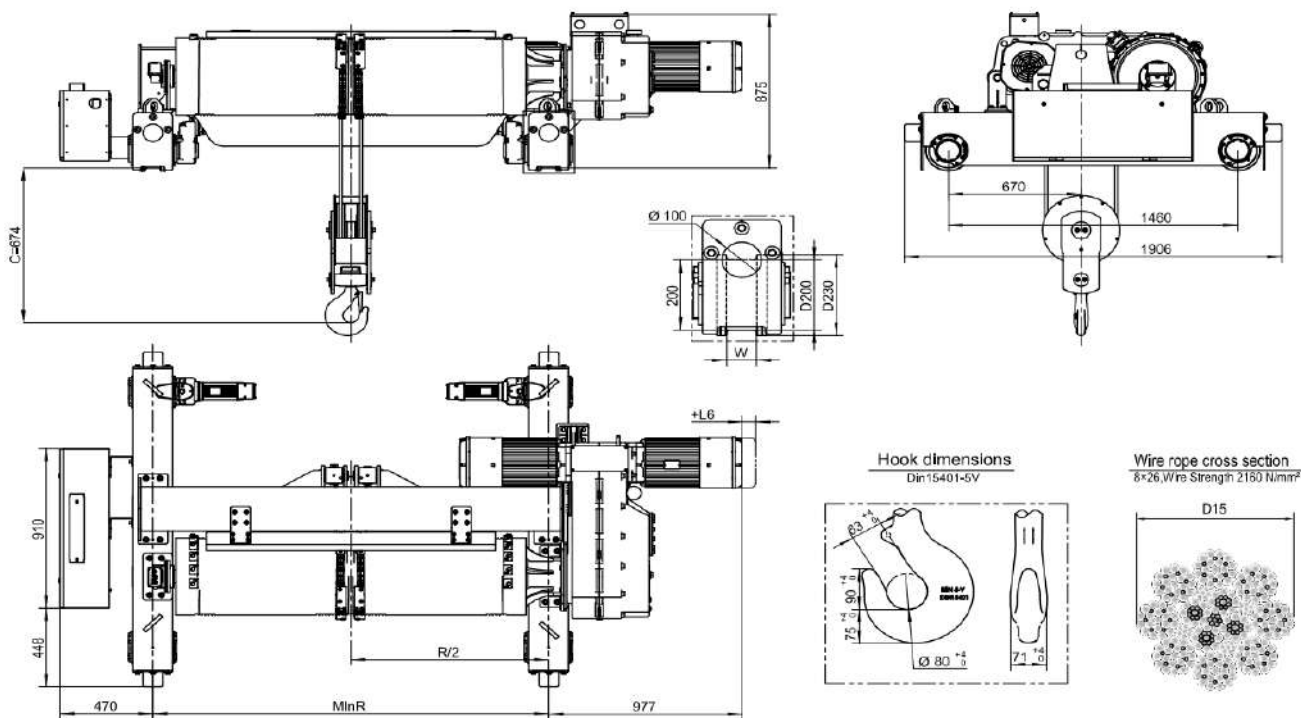
2.5. Double Girder Winch **A2202** (Reeving 2:2)

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;

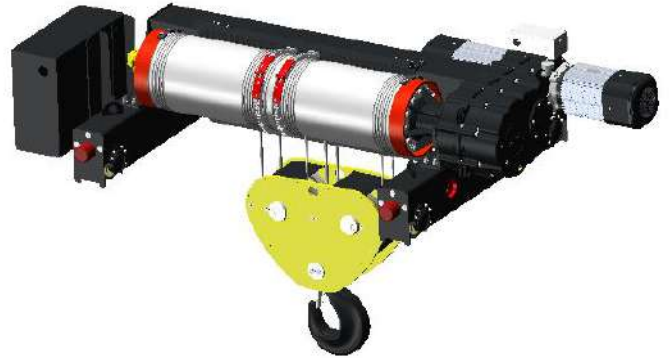
motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



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	2xF18
20000	1Am/M4													2xD08	2XF18	2xF19

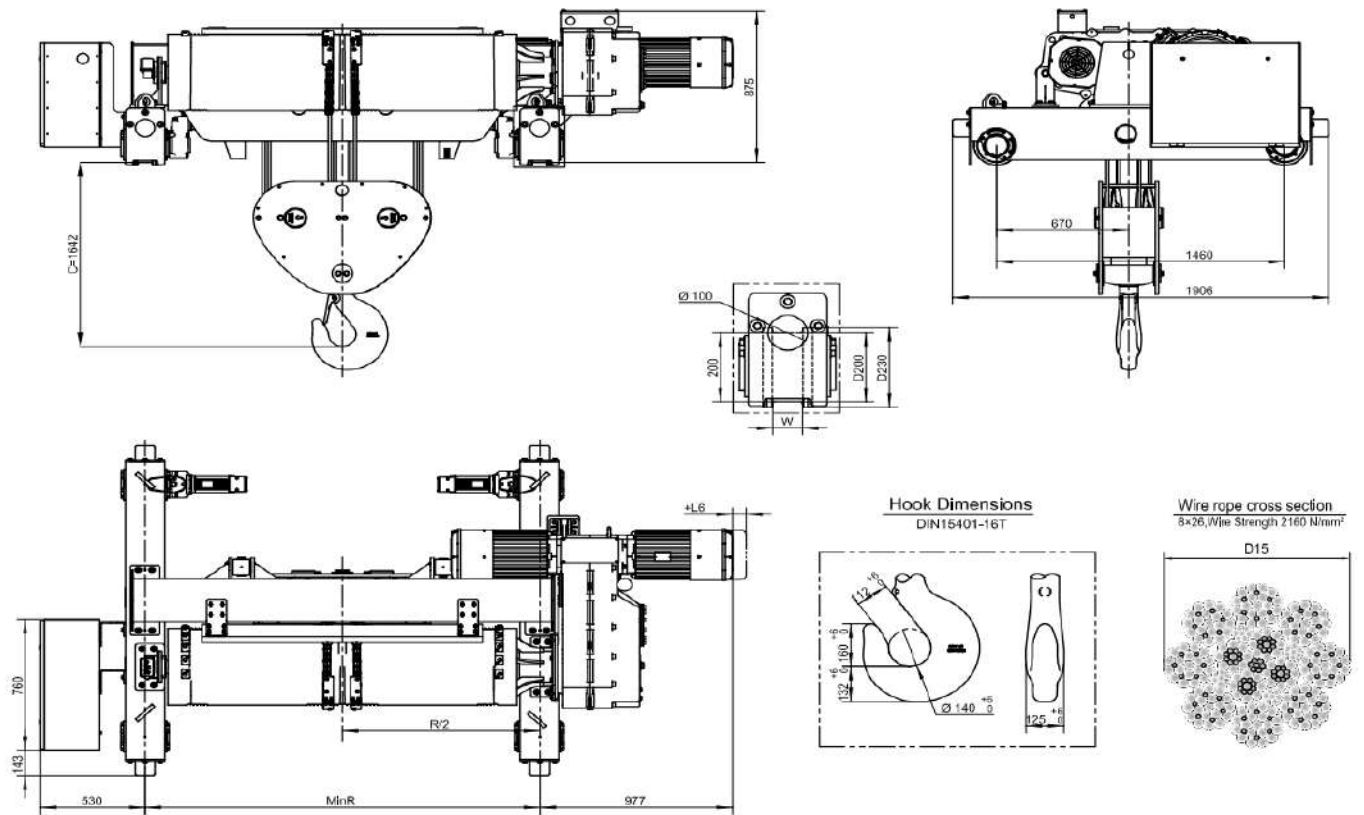
2.6. Double Girder Winch **A2204** (Reeving 2:4)

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;

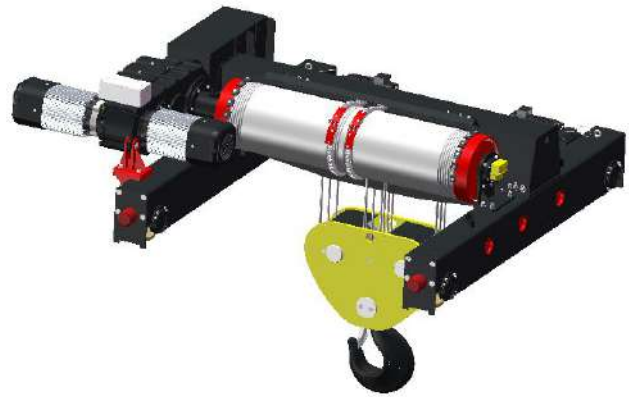
motor	D06	F16	D07	D08	F17	F18
L6	0	104	94	94	104	144



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
40000	1Am/M4																

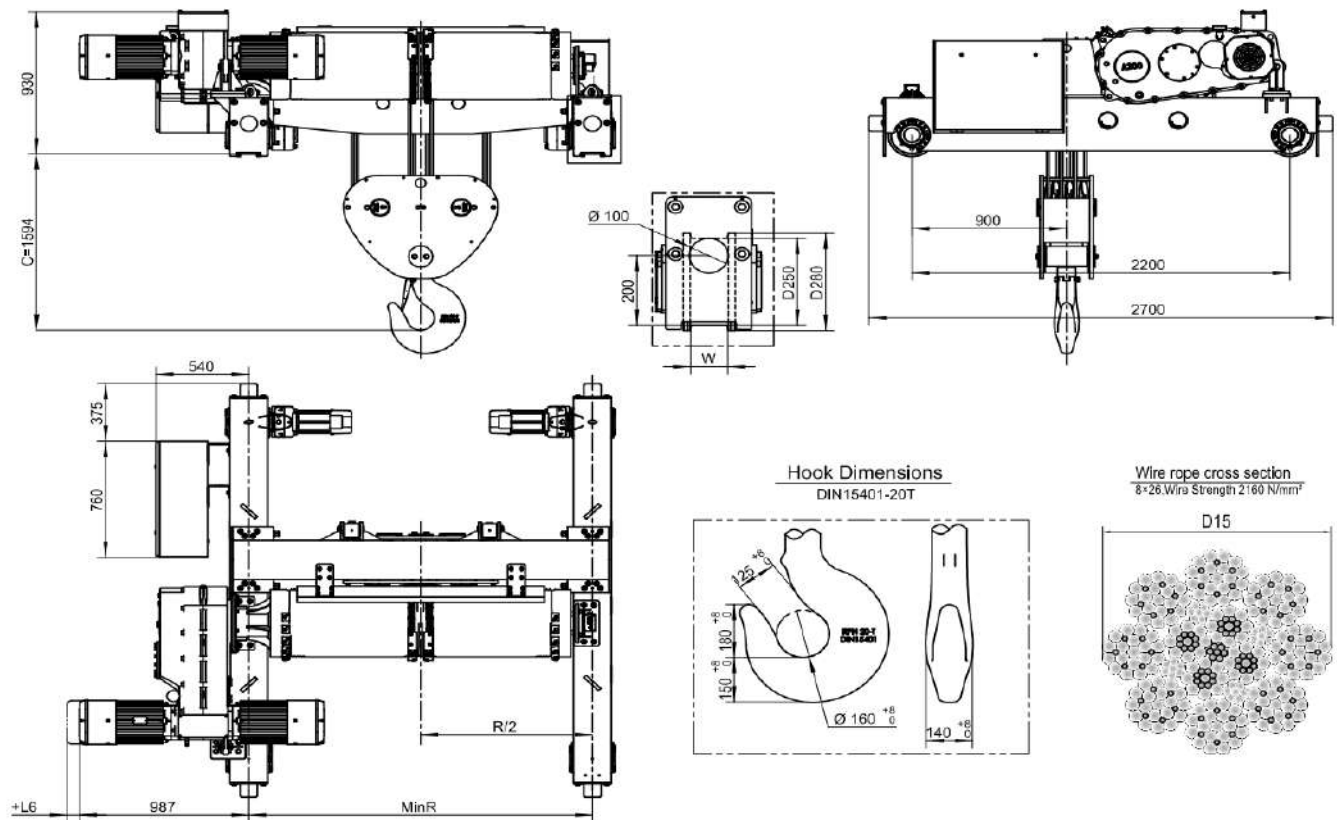
2.7. Double Girder Winch A2206 (Reeving 2:6)

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



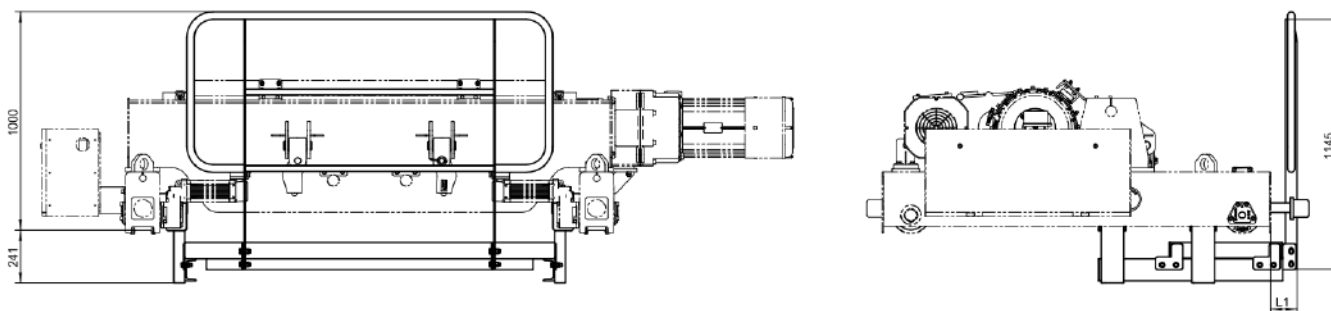
*Weight of the service platform is not included;

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		2xF18						
60000	1Am/M4		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
A1202	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
A1204	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
A1206	30	30	30	30	30	30	30	30	30
	94	104	115	129	142	156	166	180	194
	—	1700	2000	2400	2700	3100	3400	3800	4200
A2202	—	50	50	50	50	50	50	50	50
	—	104	115	129	142	156	166	180	194
	—	—	2000	2400	2700	3100	3400	3800	4200
A2204	—	—	50	50	50	50	50	50	50
	—	—	115	129	142	156	166	180	194
	—	—	2000	2400	2700	3100	3400	3800	4200
A2206	—	—	30	30	30	30	30	30	30
	—	—	126	142	154	170	182	201	216
	—	—	2000	2400	2700	3100	3400	3800	4200

*Option Service Platform is indicated by solid lines.

3. Motor

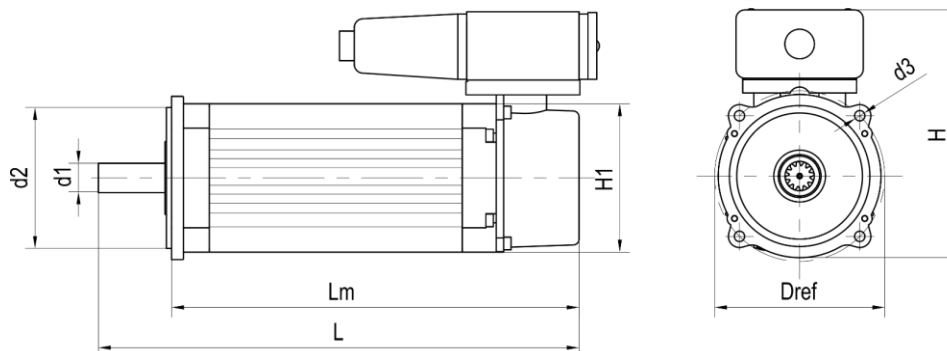
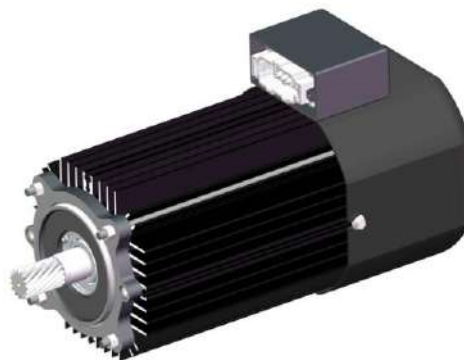
3.1. Motor code

A	D	168	L	2	23	N
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Pos.	Code	Description	Properties	
1	A	Motor Classes	A	Asynchronous motor
			S	Synchronous motor
2	D	Motor Type	D	Double speed
			F	Frequency
3	168	Frame Size	115	Mounting base Ø115
			130	Mounting base Ø130
			168	Mounting base Ø168
			195	Mounting base Ø195
			245	Mounting base Ø245
4	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
5	2	Pole Number	2	2 poles
			4	4 poles
6	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
7	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

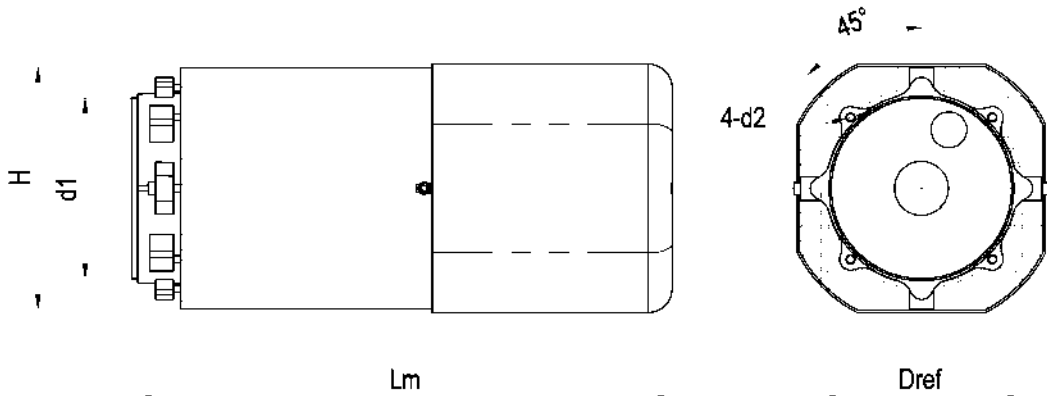


Motor code		AF115M411N		AF115L411N AF115L412N		AF115L211N AF115L212N		AF115X411N AF115X412N		AF130M412N AF130M415N		AF130L212N AF130L215N		AF130L412N AF130L415N	
		F01		F02		F02B		F03		F04		F05		F06	
Duty Type		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 240starts/h		S3-40%ED 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	400		
Frequency	Hz	100	120	100	120	80	100	120	100	120	80	100	100		
Brake type		DC		DC		DC	DC		DC		DC	DC	DC		
Brake torque	N.m	4		4		4	4		16		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

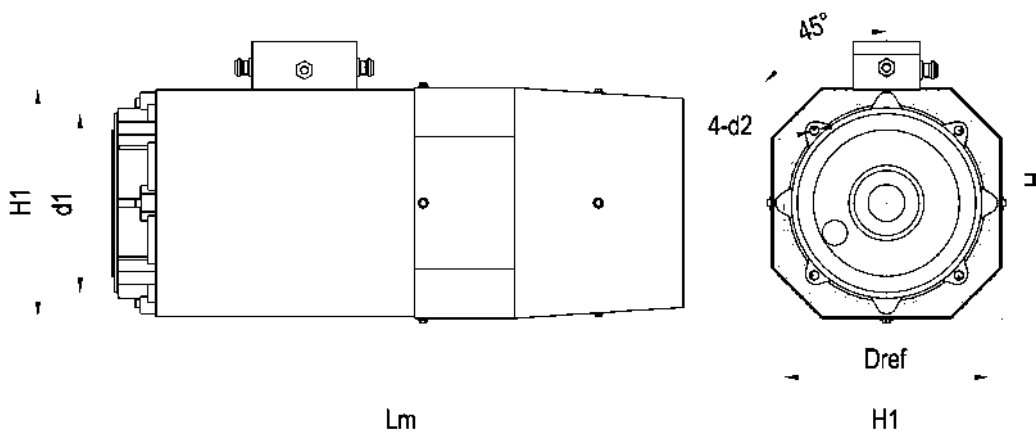
Motor code	AD168M223N		AD168L223N		AD168X223N		AD195L218N		AD195X218N		AD245M221N		AD245L221N		AD245X218N			
	D01		D02		D03		D04		D05		D06		D07		D08			
Duty type	S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 300starts/h		S3-60%ED 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	2665	420	2644	400	2620	415	2653	355	2773	335	2653	420	2818	425	2798	414
	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	4.5	2.8	8.3	4.1	10.2	5.5	16.3	9.5	18.6	11	32.5	14	34.9	18	48	20
	Torque	N.m	6.45	6.1	13	12.3	16.4	15.3	27	24	31	30	54	48	61	61	78.5	81
	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		AD168M223N D01		AD168L223N D02		AD168X223N D03		AD195L218N D04		AD195X218N D05		AD245M221N D06		AD245L221N D07		AD245X218N 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	3410	525	3400	500	3350	495	3230	450	3250	440	3320	515	3360	520	3430	530
	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	4.7	2.8	8.3	4	10	5.4	17	9.1	20	10	32	13	38	16	47	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		AF168M423E		AF168L423E		AF168X423E		AF195L418E		AF195X418E		AF245M421E		AF245L421E		AF245X418E		AF245XA418E		
		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	3420	2790	3370	2860	3340	2860	3440	2830	3410	2910	3500	2890	3480	2890	3470	2855	3470
	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	5.17	4.9	9.4	9.3	10.2	10.8	17.3	19	21	22	31	31	36	37	42	44	54	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	

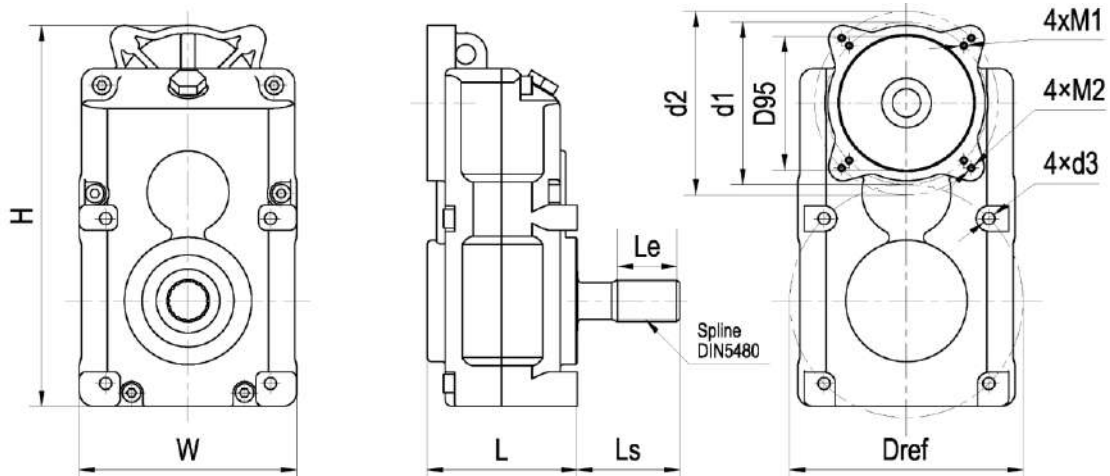
4. Travelling gearbox
4.1. Travelling gearbox code

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
				S	P	(S)3	(S)4	(P)5	
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

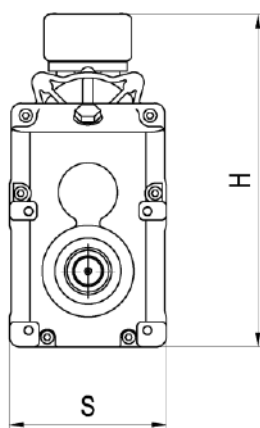
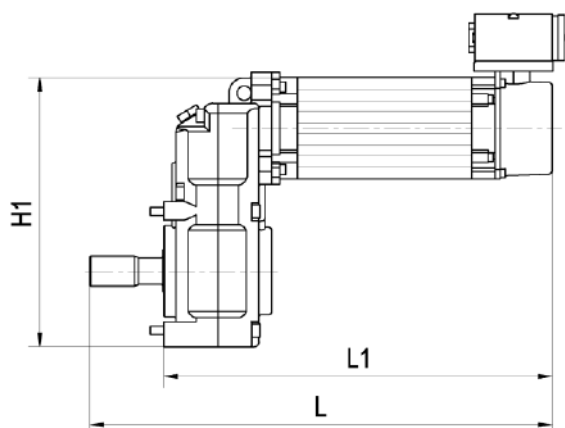
5.1. Gearmotor code

T	3	042	S	3	F	115	L	4	11	N
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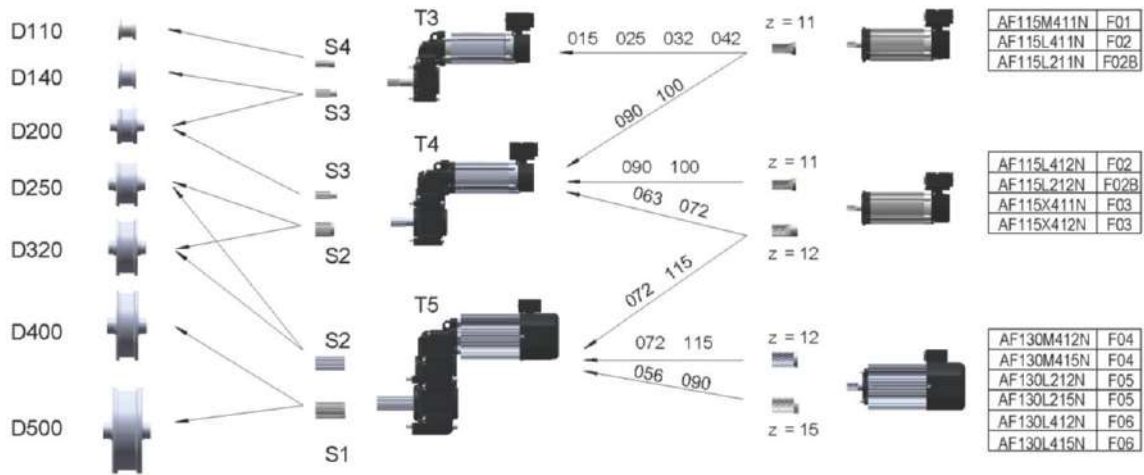
Pos.	Code	Description	Properties	
1	T	Transmission		
2	3	Gear Type	0	Future Reservation
			1、2	Trolley
			3、4、5	Trolley, Bridge
			6、7、8、9	Bridge, Gantry
3	042	Ratio Code	006、015、025、032、042、056、059、063、072、090、100、109、115	
4	S	Secondary Shaft Type	G	Gear Shaft
			H	Hollow Shaft + Keyway
			K	Keyway
			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. Dimension of gearmotor

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

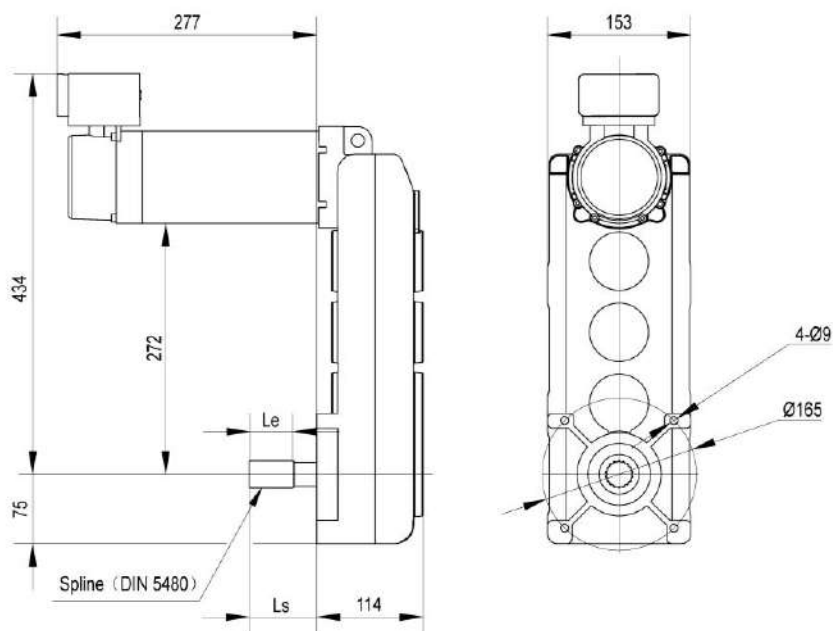


5.3. Compatibility of gearmotor & end carriage



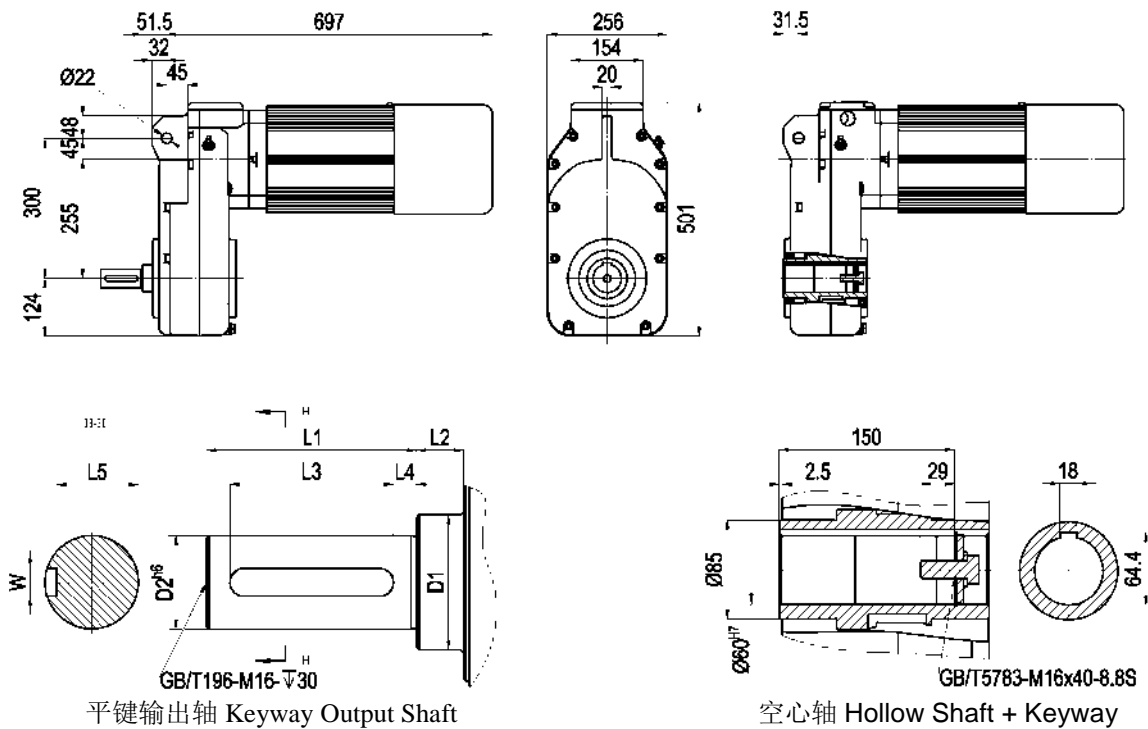
End carriage	DN11												DN14												DN20											
Wheel diameter (mm)	110												140												200											
Motor code	F01				F02				F02B				F01				F02				F02B				F01				F02							
Motor speed (rpm)	2855				2800				4490				2855				2800				4490				2855				2800							
Ratio	15	25	32	42	15	25	32	42	15	25	32	42	15	25	32	42	15	25	32	42	15	25	32	42	15	25	32	42	15	25	32	42	15	25	32	42
Bridge speed (m/min)	66	39	31	23	65	39	30	23	104	62	49	37	84	50	39	30	82	49	38	29	132	79	62	47	120	72	56	43	117	70	55	42				
End carriage	DN20												DN25																							
Wheel diameter (mm)	200												250																							
Motor code	F02				F02B				F02B				F03				F02				F02B				F03				F04							
Motor speed (rpm)	2800				4490				4490				2770				2800				4490				2770				2860							
Ratio	63	72	90	100	15	25	32	42	63	72	90	100	63	72	90	100	63	72	90	100	63	72	90	100	63	72	90	100	56	72	90	115	56	72	90	115
Bridge speed (m/min)	28	24	20	18	188	113	88	67	45	39	31	28	28	24	19	17	35	31	24	22	56	49	39	35	35	30	24	22	40	31	25	20				
End carriage	DN25												DN32																							
Wheel diameter (mm)	250												320																							
Motor code	F05				F06				F02				F02B				F03				F04				F05				F06							
Motor speed (rpm)	4460				2800				2800				4490				2770				2860				4460				2800							
Ratio	56	72	90	115	56	72	90	115	63	72	90	100	63	72	90	100	63	72	90	100	56	72	90	115	56	72	90	115	56	72	90	115	56	72	90	115
Bridge speed (m/min)	63	49	39	30	39	31	24	19	45	39	31	28	72	63	50	45	44	39	31	28	51	40	32	25	80	62	50	39	50	39	31	24				
End carriage	DN40												DN50																							
Wheel diameter (mm)	400												500																							
Motor code	F04				F05				F06				F04				F05				F06															
Motor speed (rpm)	2860				4460				2800				2860				4460				2800															
Ratio	56	72	90	115	56	72	90	115	56	72	90	115	56	72	90	115	56	72	90	115	56	72	90	115	56	72	90	115	56	72	90	115				
Bridge speed (m/min)	64	50	40	31	100	78	62	49	63	49	39	31	80	62	50	39	125	97	78	61	79	61	49	38												

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	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	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	250	320	400	500
L1 (mm)	90		110	
L2 (mm)	20		20	
L3 (mm)	70		80	
L4 (mm)	15		15	
L5 (mm)	35		53	
D1 (mm)	58		68	
D2 (mm)	40		60	
W (mm)	12		18	

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		1450		2840		1450		2840		1450		2840					
Ratio	90	59	109	90	59	90	59	109	90	59	90	59	109	90	59	90	59	109	90	59
Bridge speed (m/min)	13	19	20	25	38	16	25	26	32	48	20	31	33	40	60	25	39	41	50	76

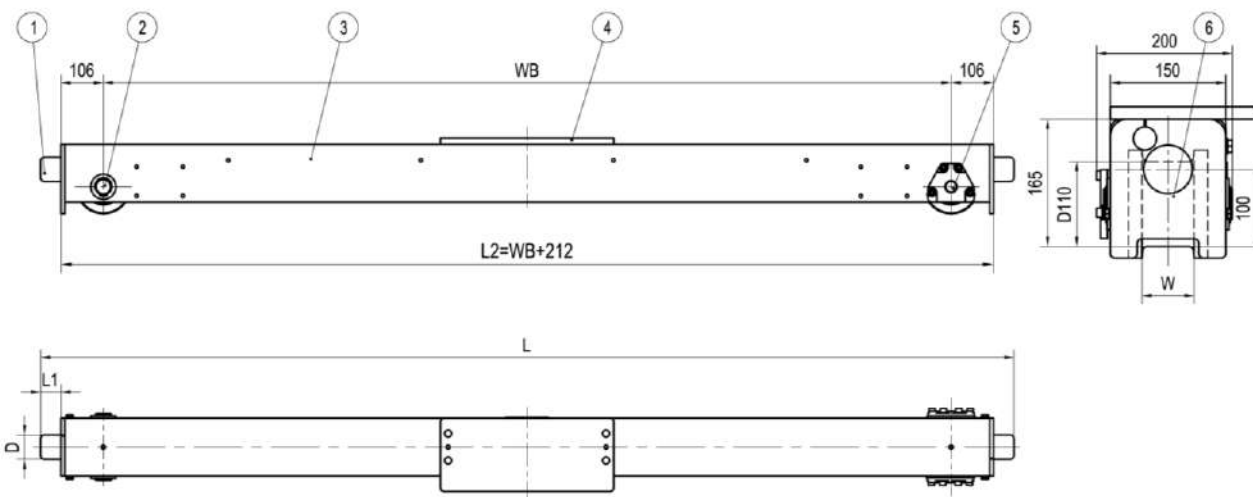
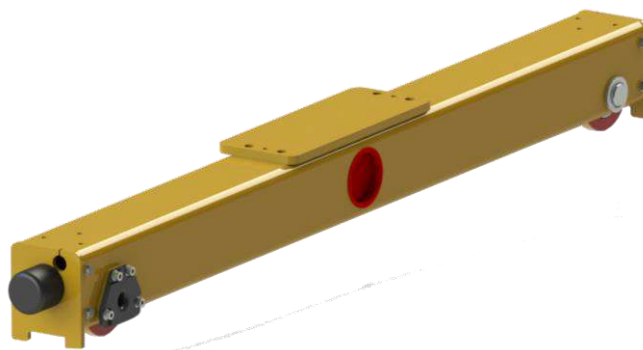
6. End carriage

6.1. End carriage code

DN20	B	WB	W	S	K4	Y1	C	Y2	M	N	
Pos.	Code	Description	Parameter								
1	DN20	End carriage type and 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



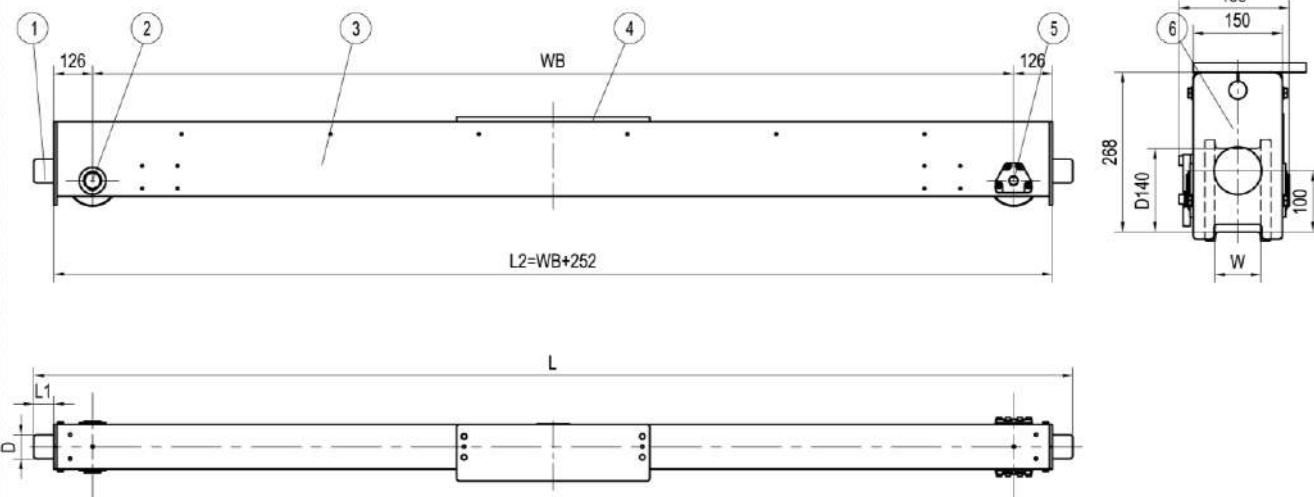
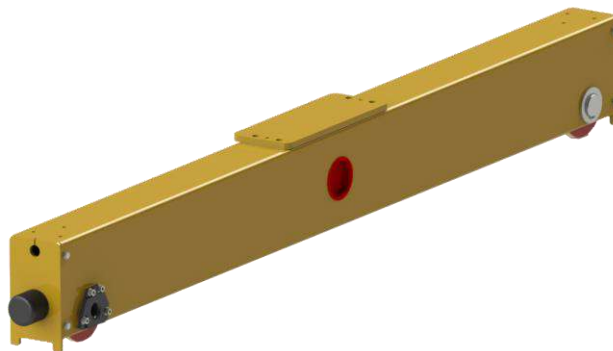
①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*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	



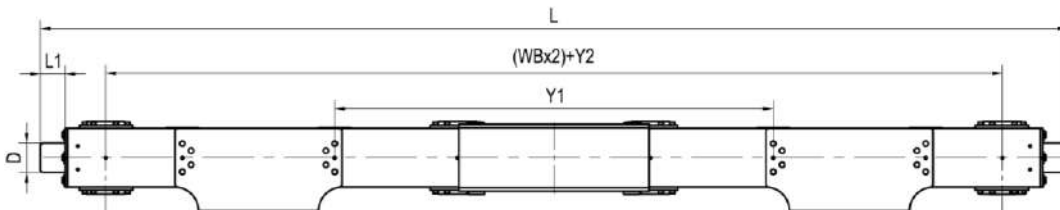
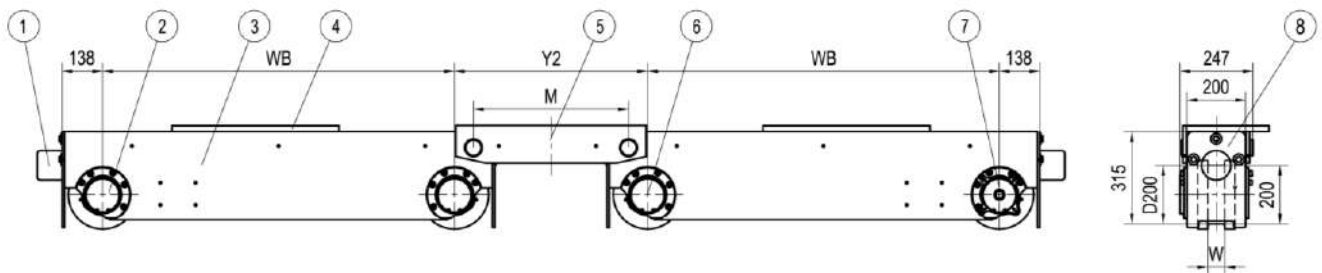
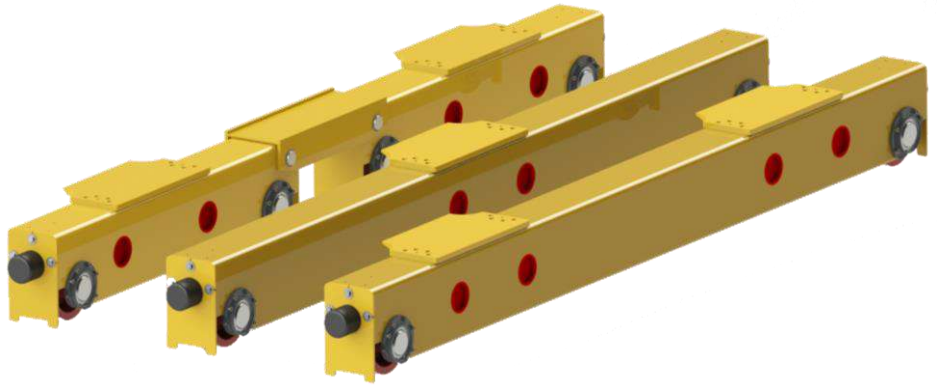
①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*W=75;

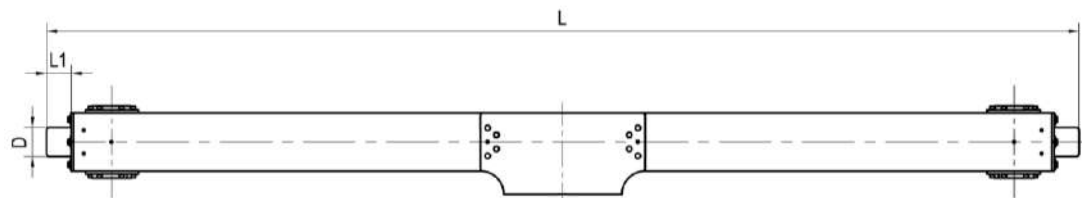
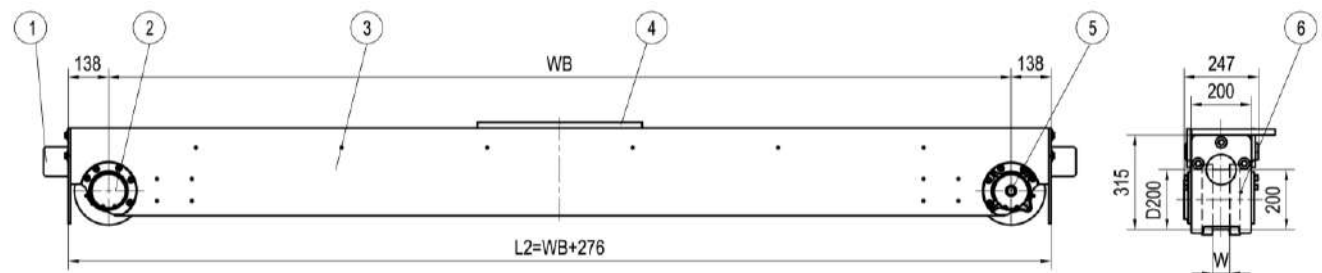
*Dimension L1, D see 6.1

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



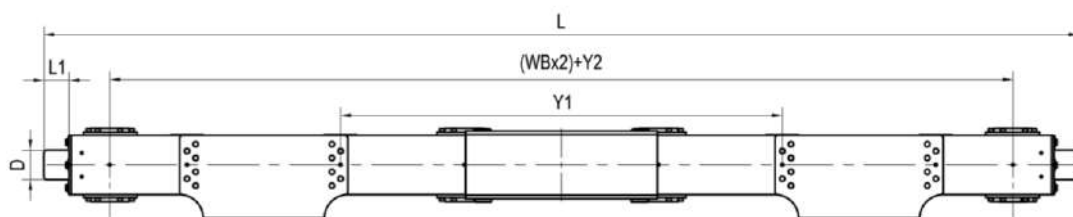
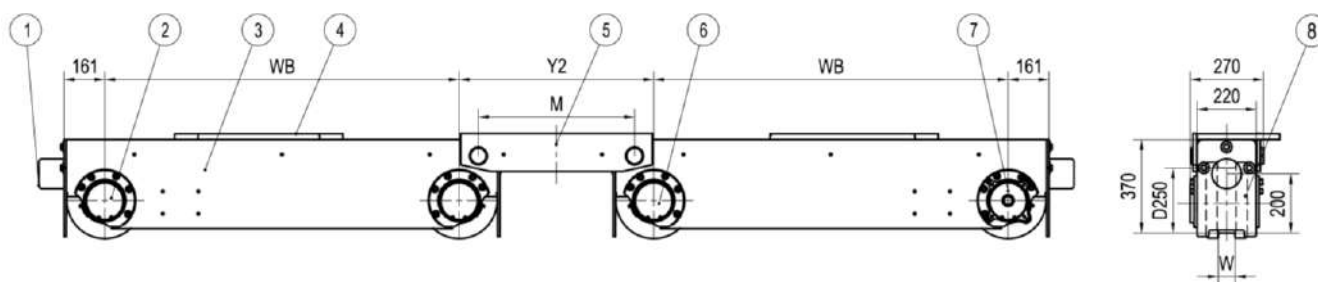
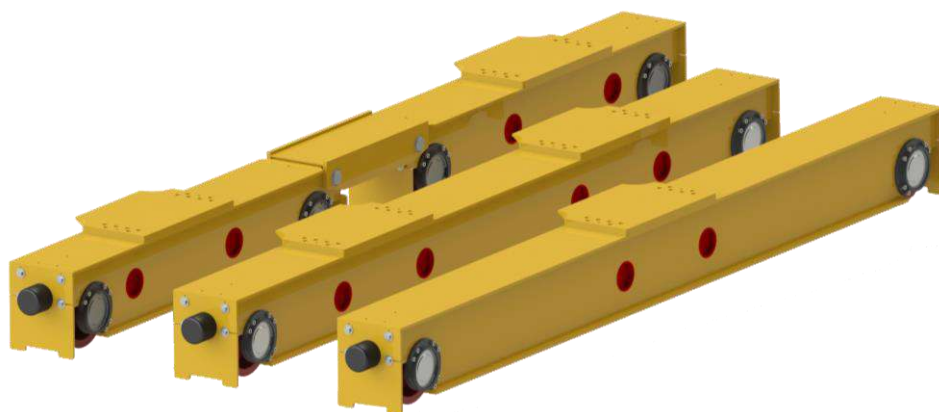
- ①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*W=75; 95;

*Dimension L1, D see 6.1

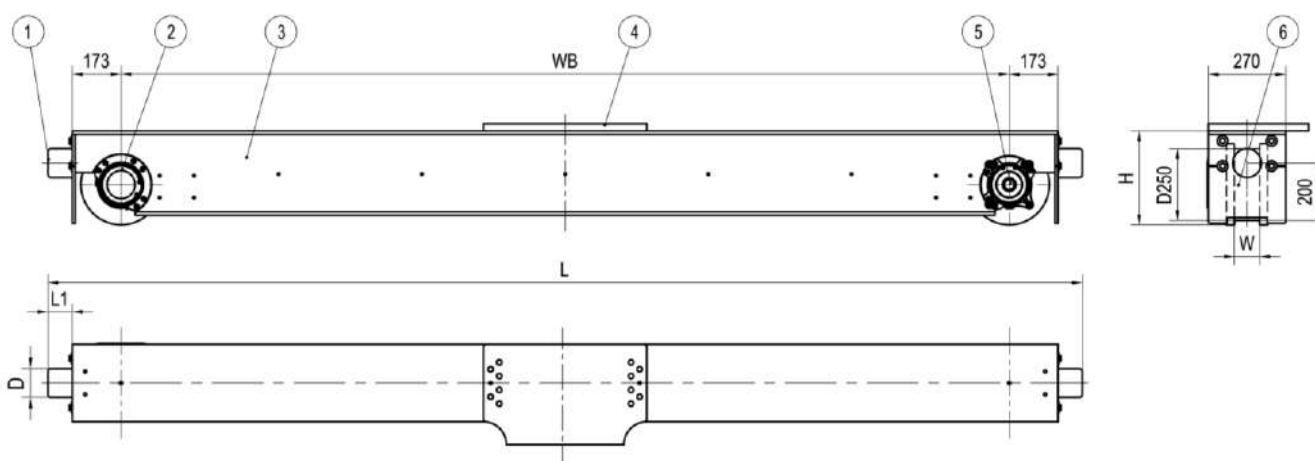
6.5. DN25 End carriage

DN25B End carriage	WB (100mm)	Weight (kg)	H (mm)
	14	311	370
	16	331	370
	18	357	370
DN25- End carriage	20	382	370
	22	408	310
	27	470	310
	31	520	312
	38	608	316
	45	675	416
	50	733	416
55	796	416	



- 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

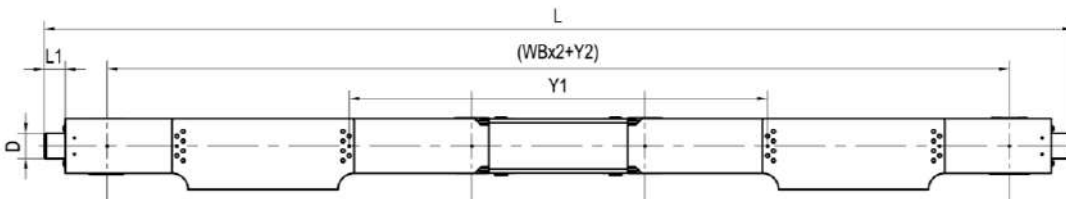
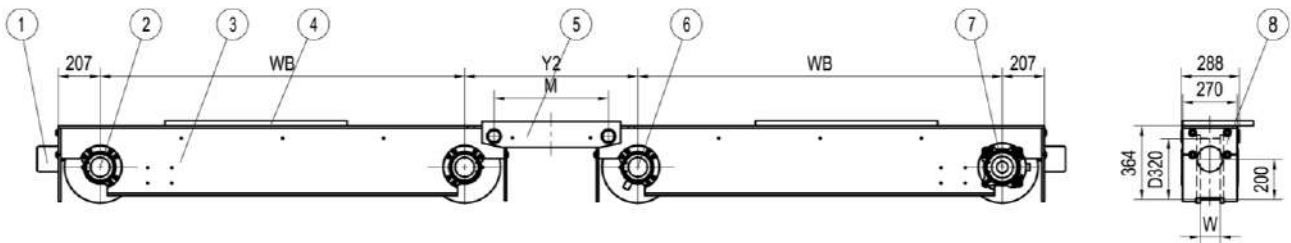
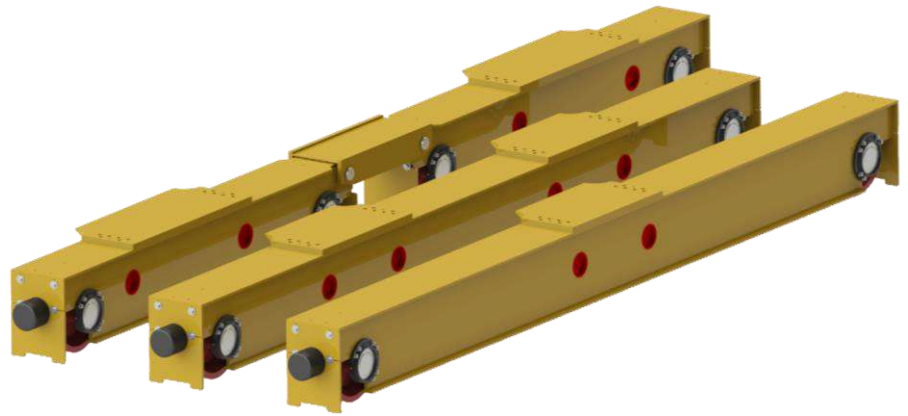
***Welding type;**

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

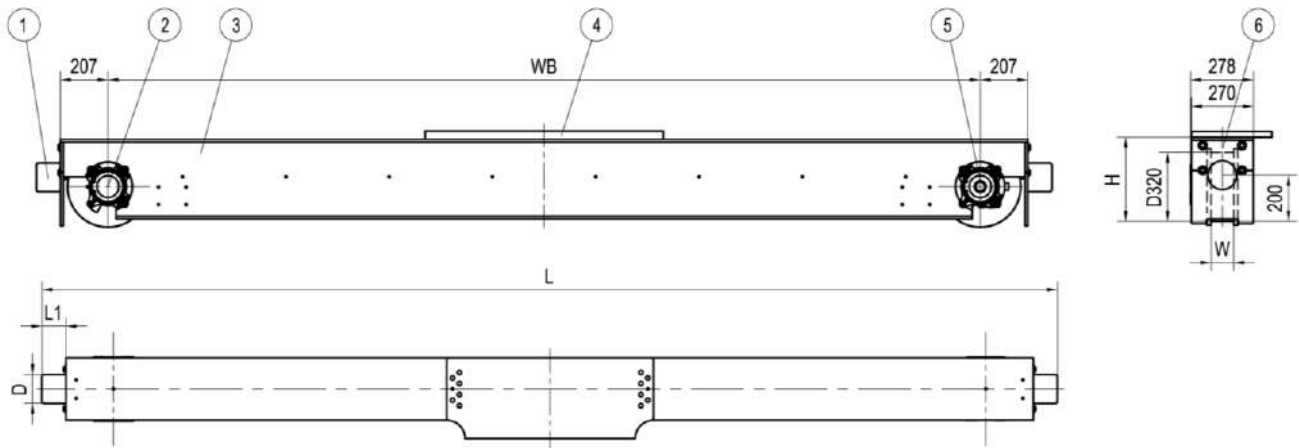
*Dimension L1, D see 6.1

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	534
	55	970	538



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



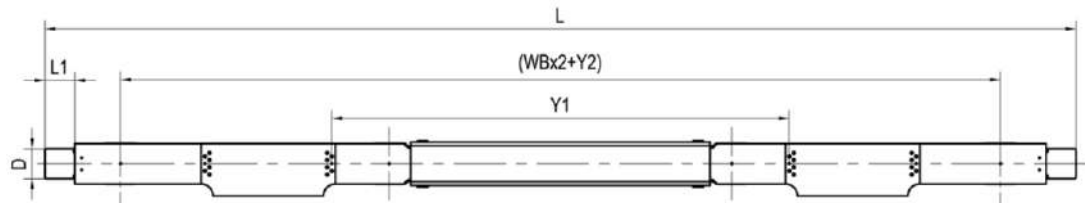
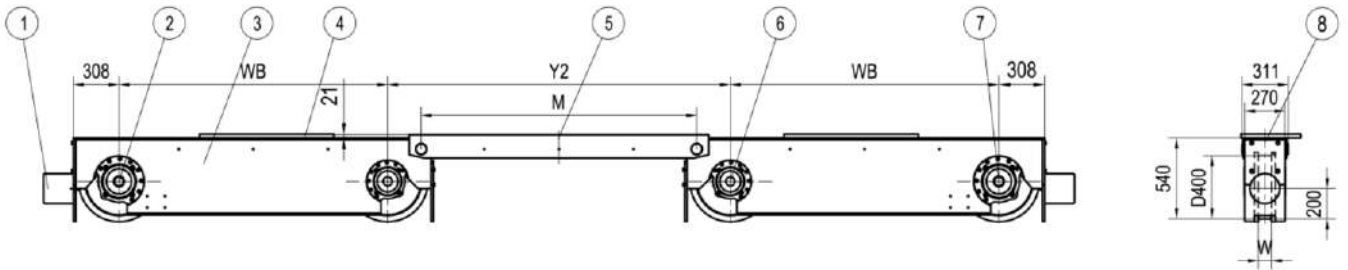
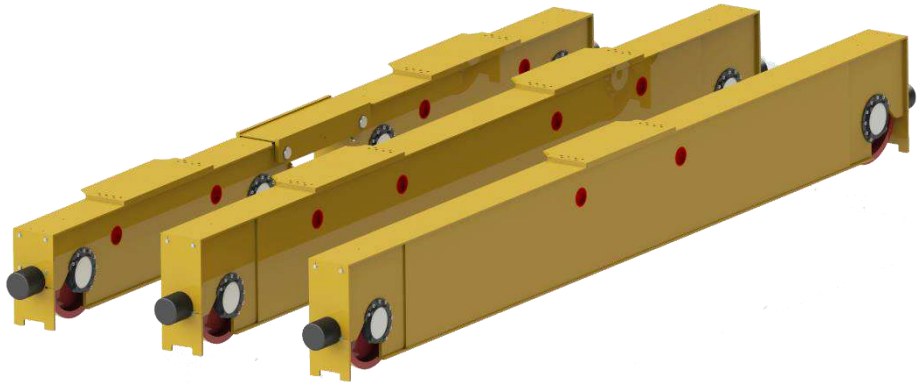
- ①Buffer; ②Wheel (idle); ③End carriage; ④Joint plate; ⑤Wheel (drive); ⑥Integrated derailment support

*W=75; 95;

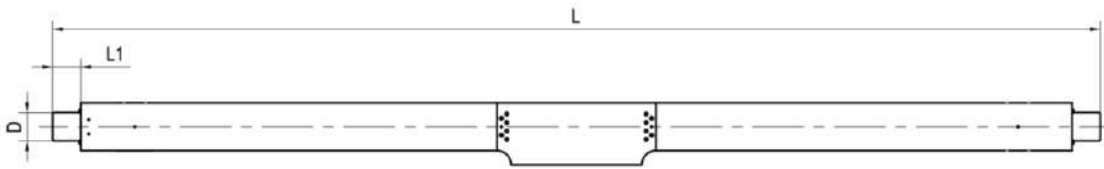
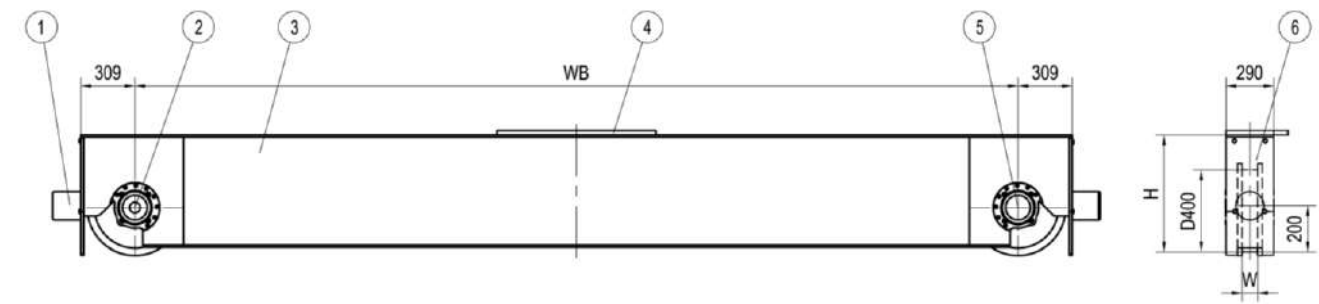
*Dimension L1, D see 6.1

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	664
50	1379	668	
55	1471	668	



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



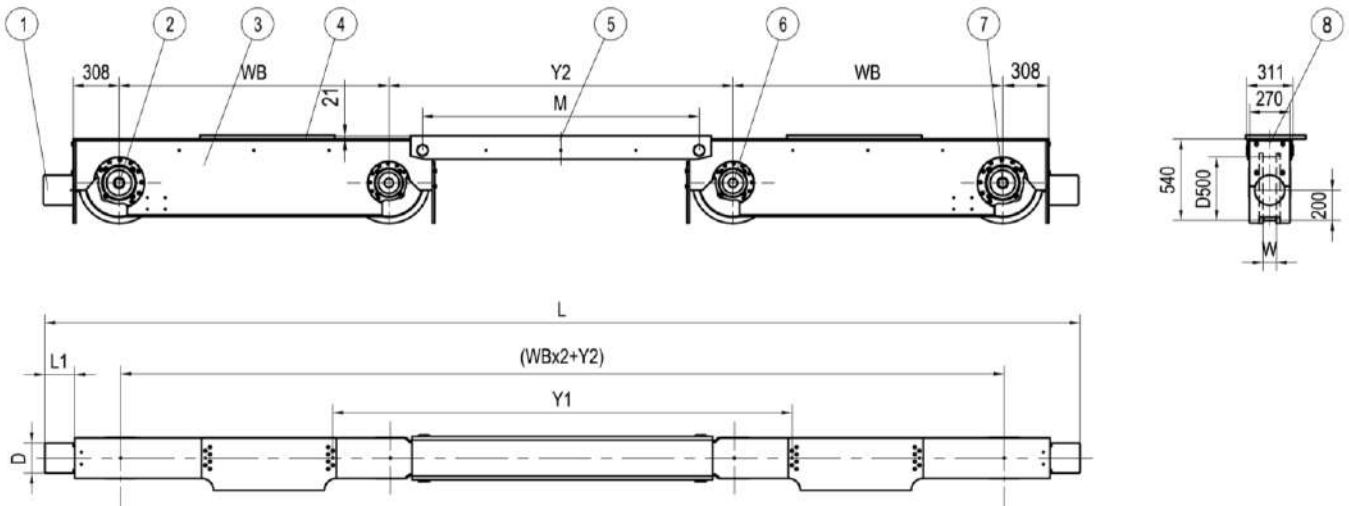
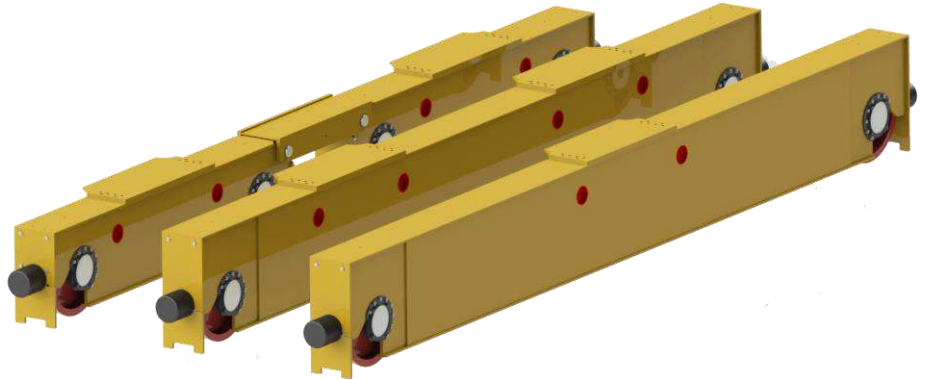
- ①Buffer; ②Wheel (drive); ③End carriage; ④Joint plate; ⑤Wheel (idle); ⑥Integrated derailment support

*W=75; 95;

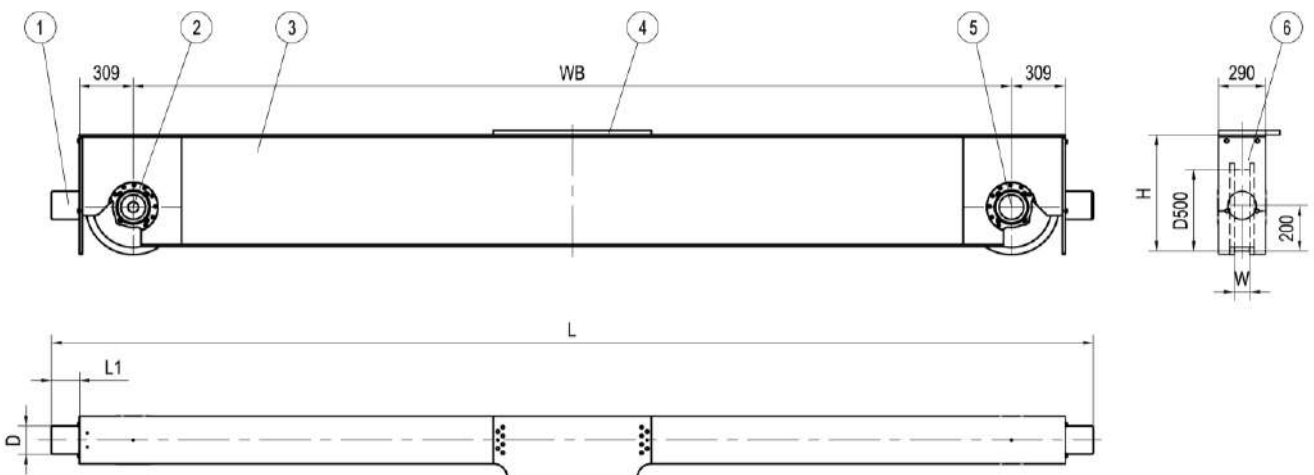
*Dimension L1, D see 6.1

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	664
	50	1459	668
	55	1551	668



- 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

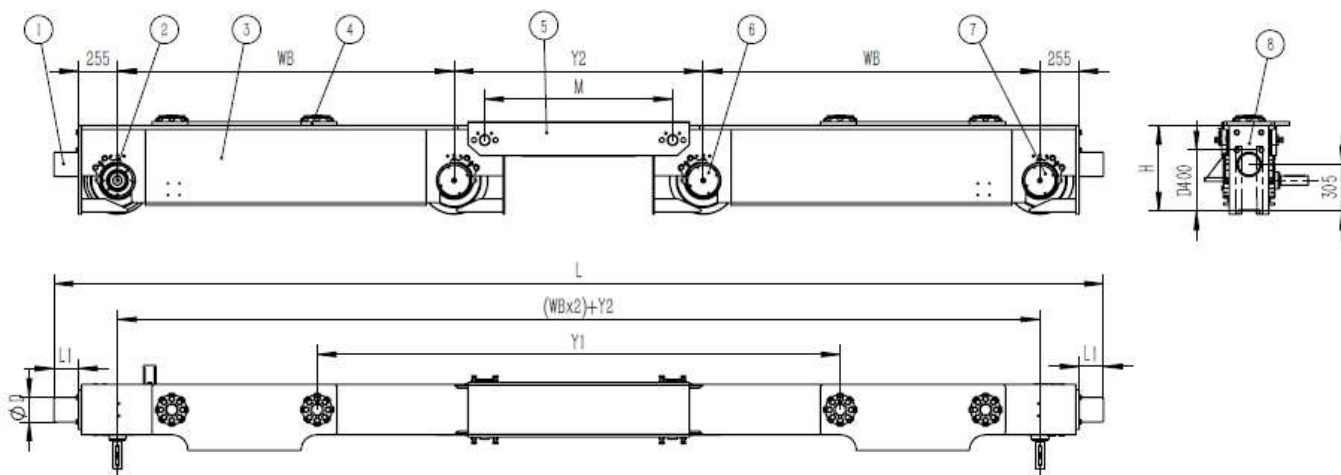
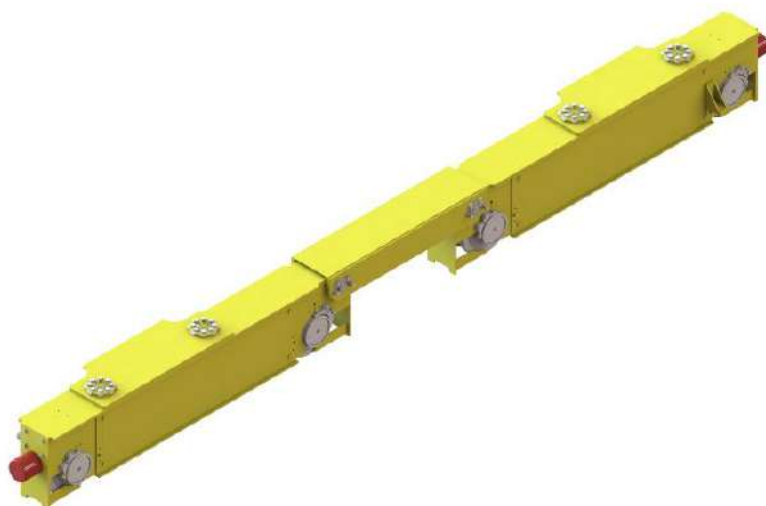
7.1. DH end carriage code

DH40	B	WB	W	S	D7	Y1	C	Y2	M	N
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Pos.	Code	Description	Parameter									
1	DH40	End carriage type and wheel diameter	Wheel diameter 40=400mm									
2	B	Description	-	Standard								
			B	Bogie(with DH40,DH50)								
			BB	Balancing beams								
3	WB	Wheel base(100mm)	DH40 13,16,18,20,22 DH50 13,16,18,20,22									
4	W	Groove width	DH40 75~140 DH50 75~140									
5	S	Number of driving wheels	S	One driving wheel								
			D	Two driving wheels								
6	D7	Joint type	Top joint	DH40B	D7,D8,D9					DH50B	E7,E8,E9	
			Top joint	DH40BB	M3,M4,M5					DH50BB	N3,N4,N5	
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)								

7.2. **DH40** end carriage

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



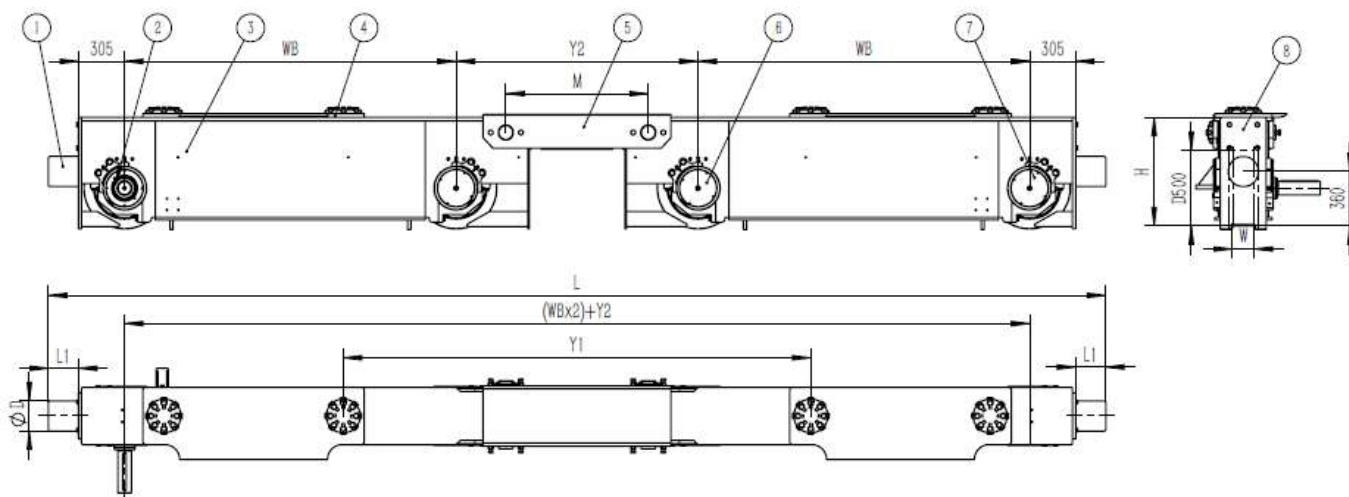
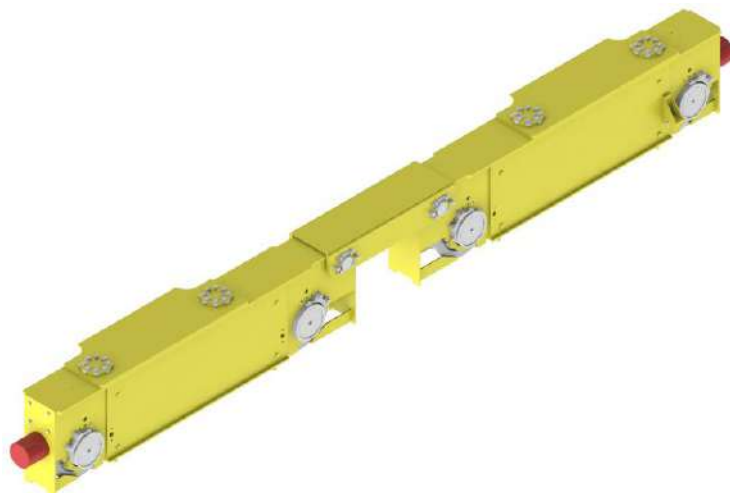
- ① Buffer; ② Wheel (idle or drive); ③ End carriage; ④ Joint plate ; ⑤ bogie; ⑥ Wheel(idle); ⑦ Wheel (drive);
- ⑧ Integrated derailment support

*W=75~140

*Dimension L1, D see 7.1

7.3. **DH50** end carriage

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

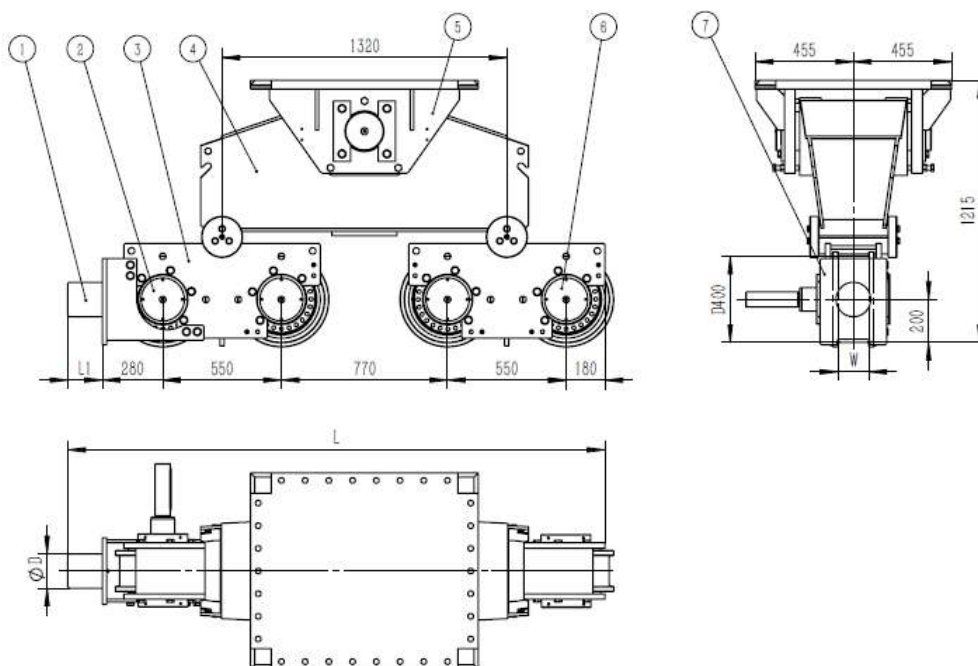
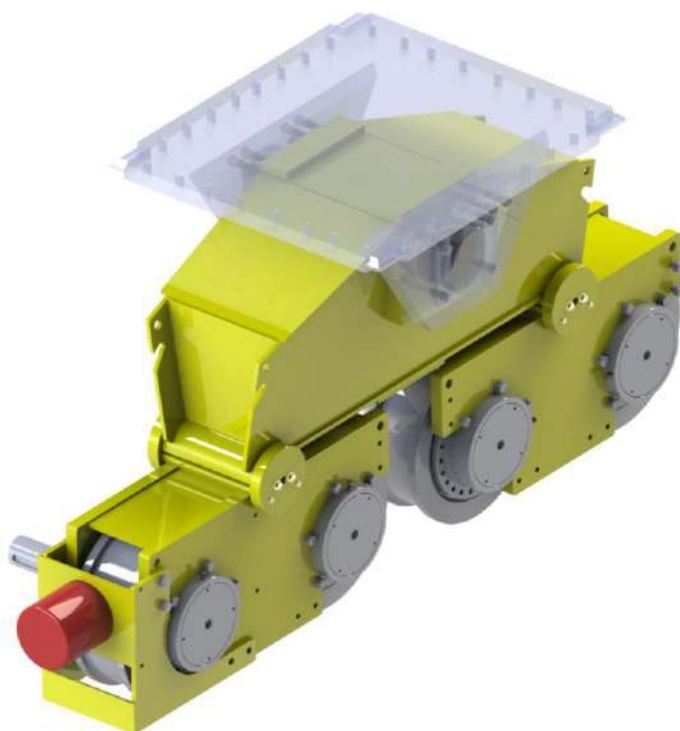


- ① Buffer; ② Wheel (idle or drive); ③ End carriage; ④ Joint plate ; ⑤ bogie; ⑥ Wheel(idle); ⑦ Wheel (drive);
- ⑧ Integrated derailment support

*W=75~140

*Dimension L1, D see 7.1

7.4. **DH40BB** end carriage

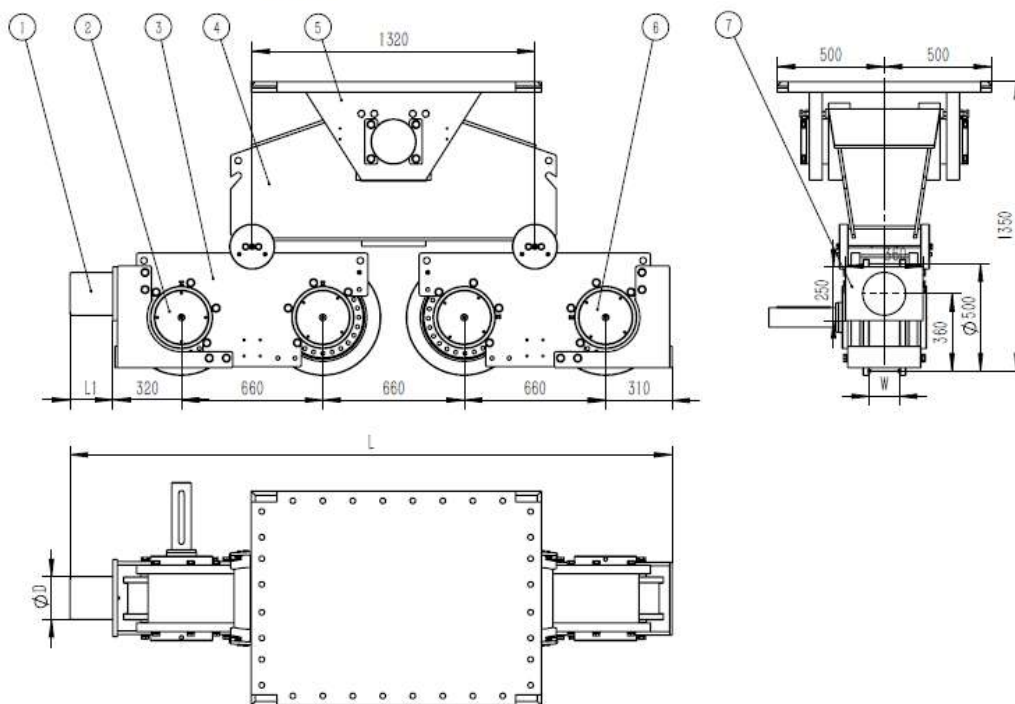
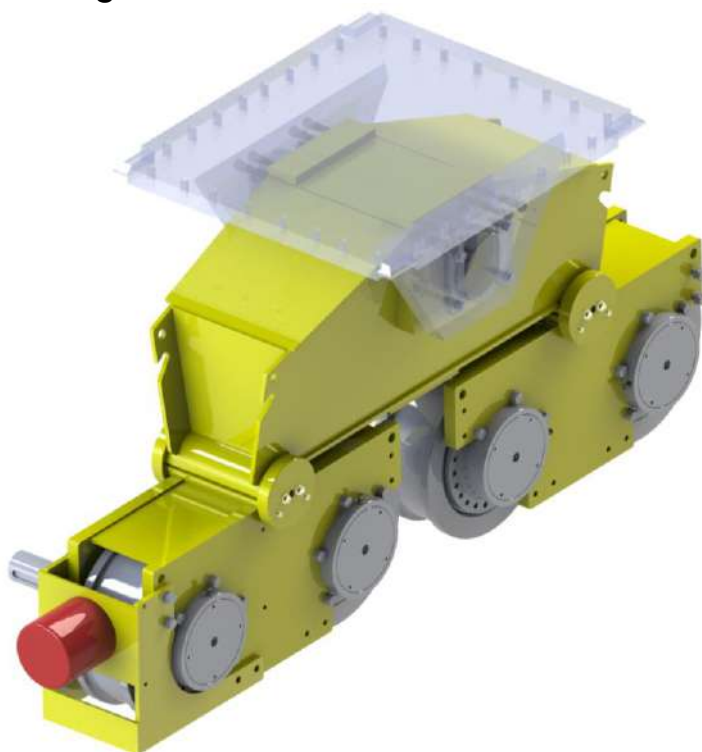


- ① Buffer; ② Wheel (idle or drive); ③ End carriage; ④ Walking beam ; ⑤ Connecting seat; ⑥ Wheel(idle);
- ⑦ Integrated derailment support

*W=75~140

*Dimension L1, D see 7.1

7.5. **DH50BB** end carriage



- 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

8. Underrunning end carriage

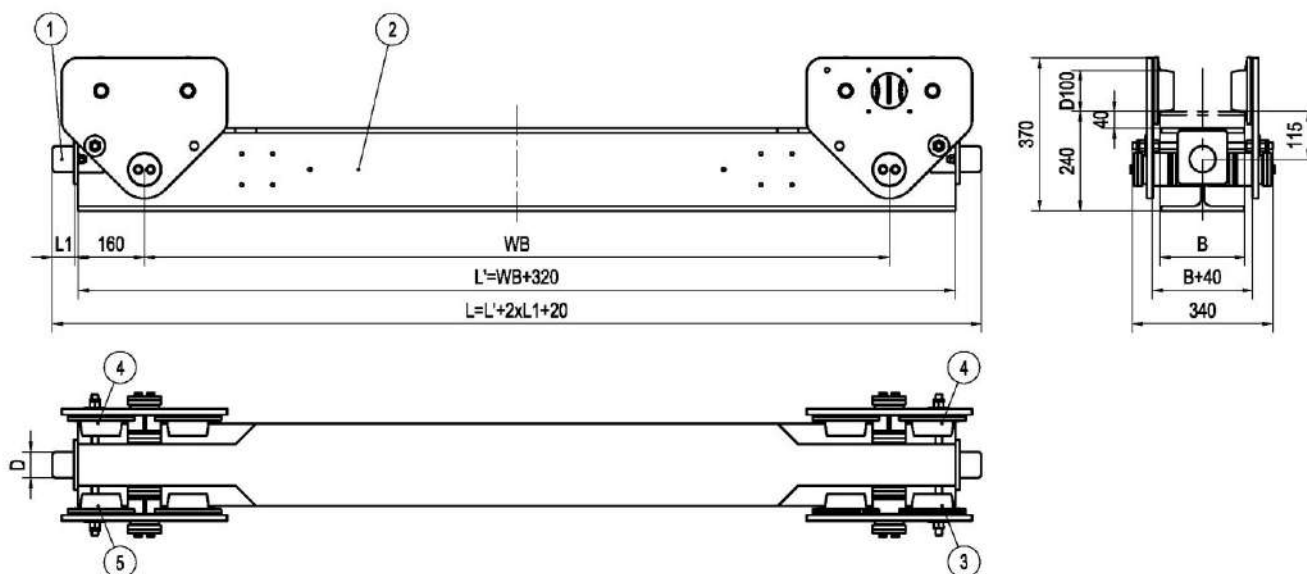
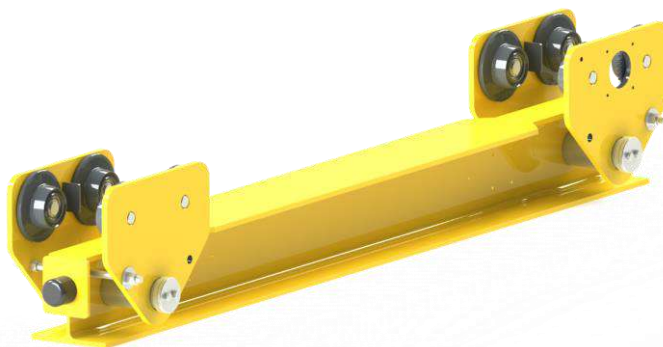
8.1. Underrunning end carriage code

DU10	-	WB	B	S	U4	C	L'	L	N	N
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Pos.	Code	Description	Parameter							
1	DU10	Underrunning end carriage type and wheel diameter	Wheel diameter 10=100mm							
2	-	Description	-	Standard						
3	WB	Wheel base(100mm)	DU10 12,14,18,22,25,28 DU13 12,14,18,22,25,28 DU16 18,22,25,28							
4	B	Track width(mm)	DU10 82~200 DU13 86~200 DU16 90~300							
5	S	Number of driving wheels	S	One driving wheel						
			D	Two driving wheels						
6	U4	Joint type	DU10,DU13 U4,U5,U6 DU16 XX							
7	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
8	L'	Section steel length	4 digits							
9	L	Underrunning end carriage length	4 digits							
10	N	Option	N	N= Normal (same colour with main girder)						
			E	E= Extensional (tailor made)						
11	N	Option	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

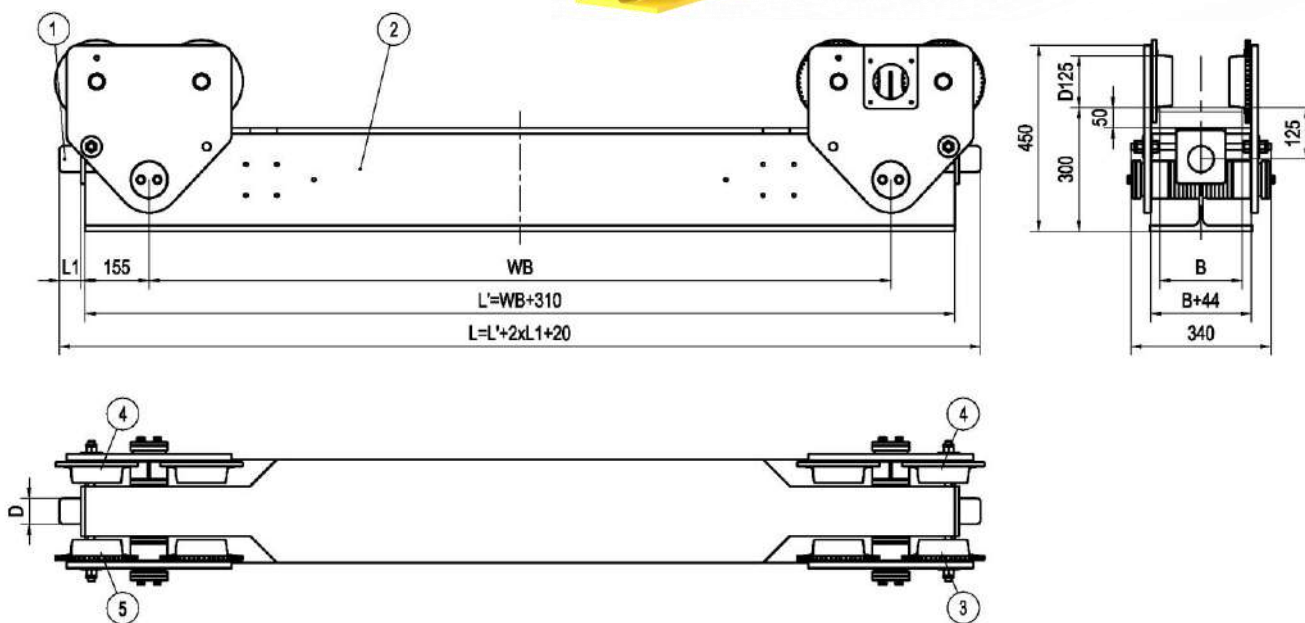


① Buffer; ② End carriage; ③ Wheel(drive); ④ Wheel (idle); ⑤ Wheel(idle or drive)

*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

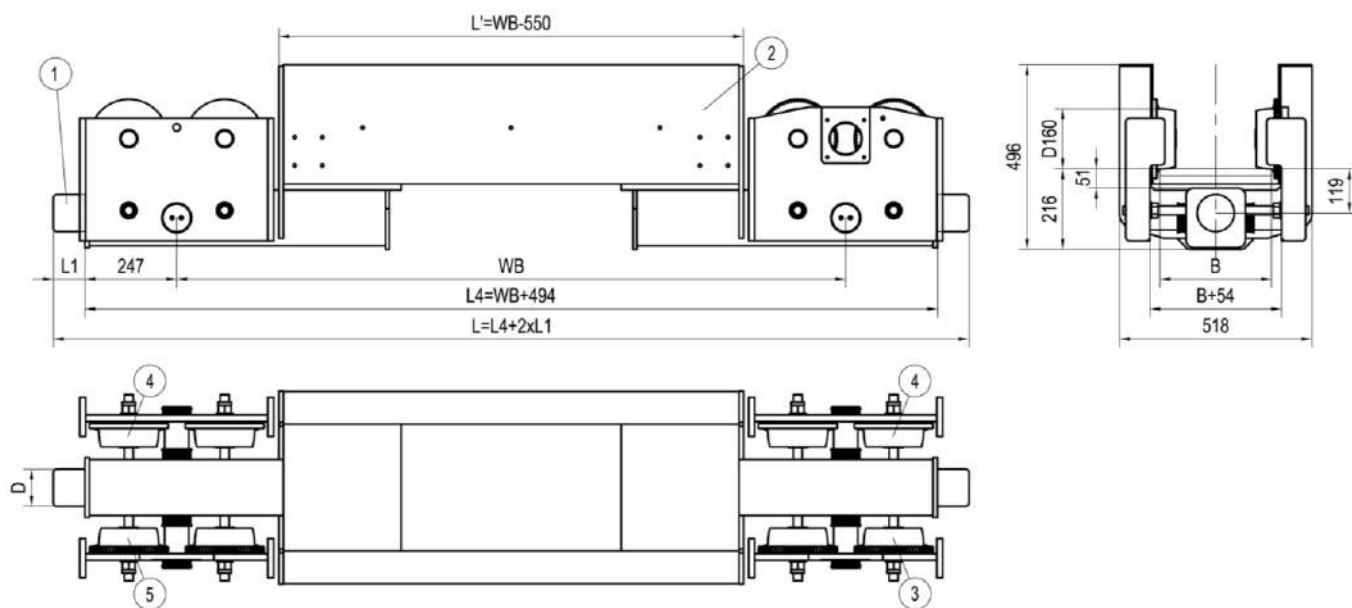


① Buffer; ② End carriage; ③ Wheel(drive); ④ Wheel (idle); ⑤ Wheel(idle or drive)

*Dimension L1, D, B see 8.1

8.4. DU16 Underrunning end carriage

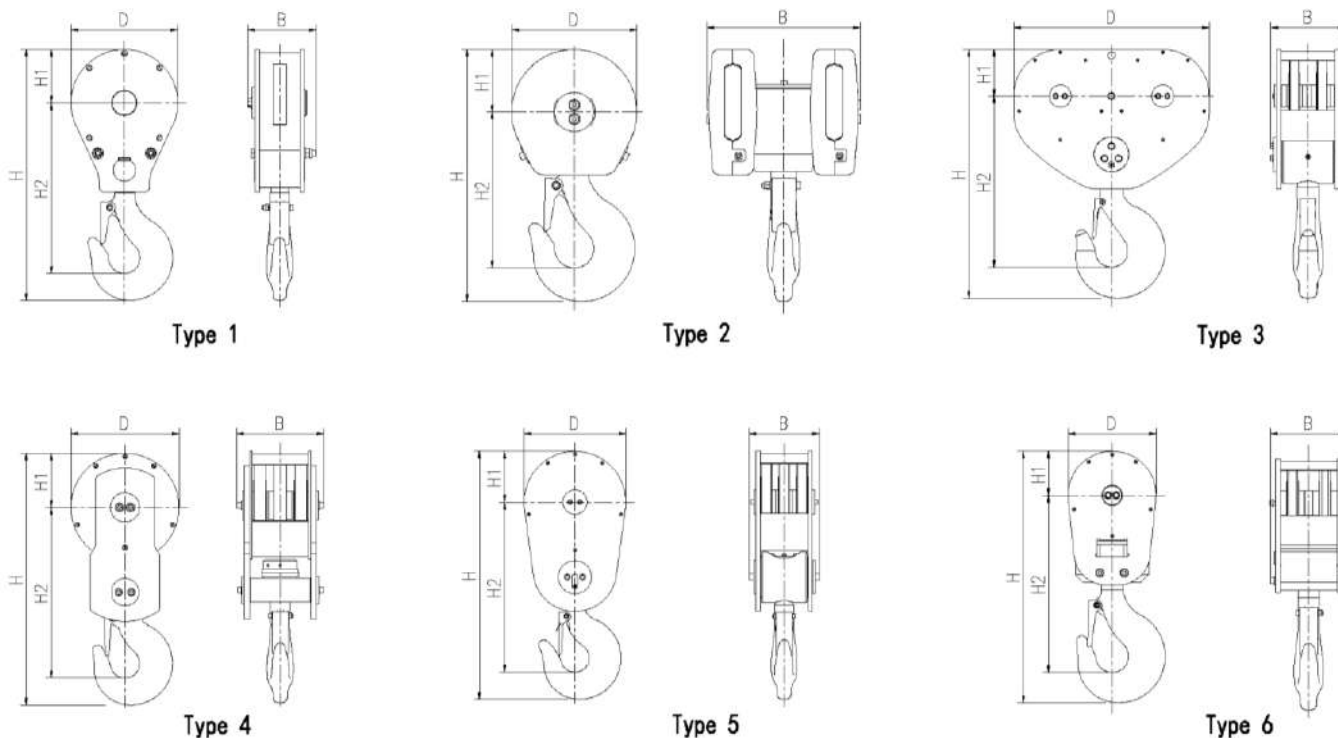
DU16- Underrunning end carriage	WB (100mm)	Weight (kg)
	18	441
	22	477
	25	506
	28	535



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



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