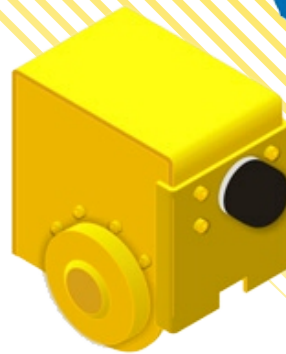
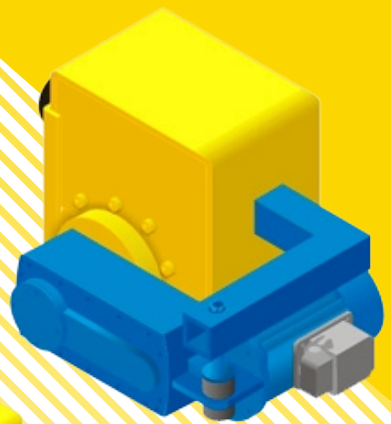


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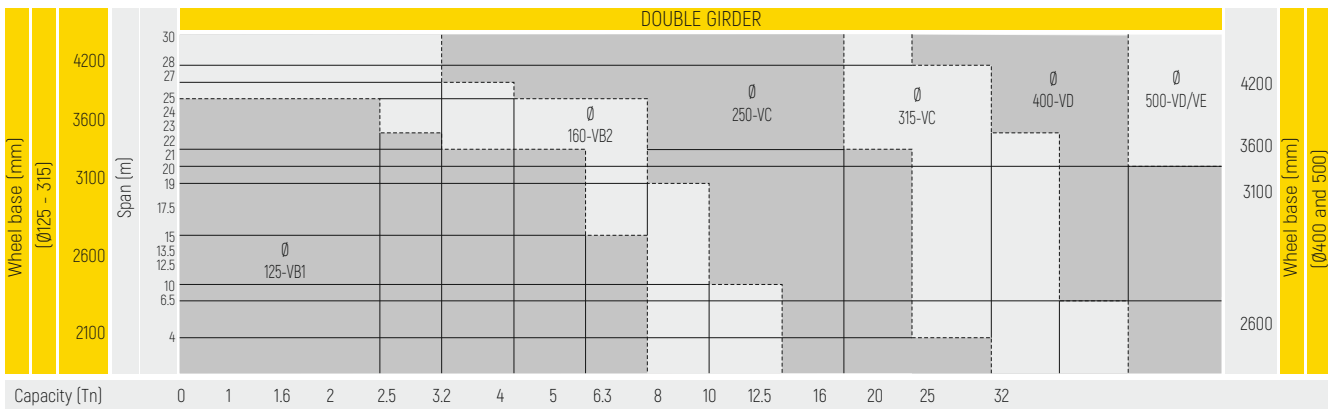
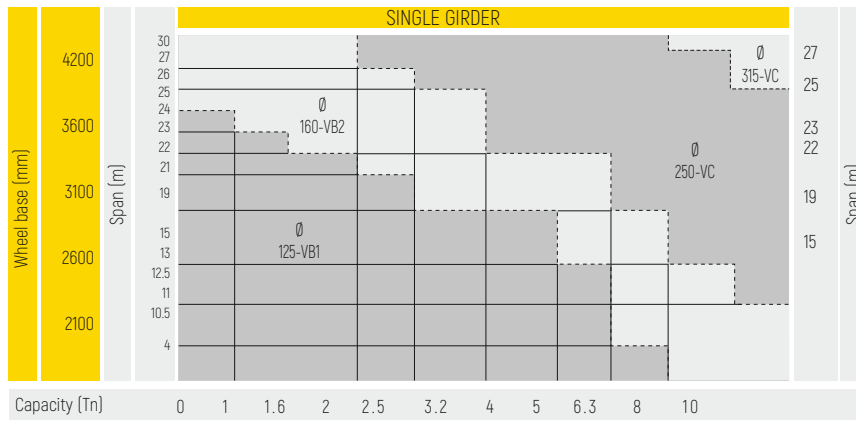
CRANES & COMPONENTS



END CARRIAGES

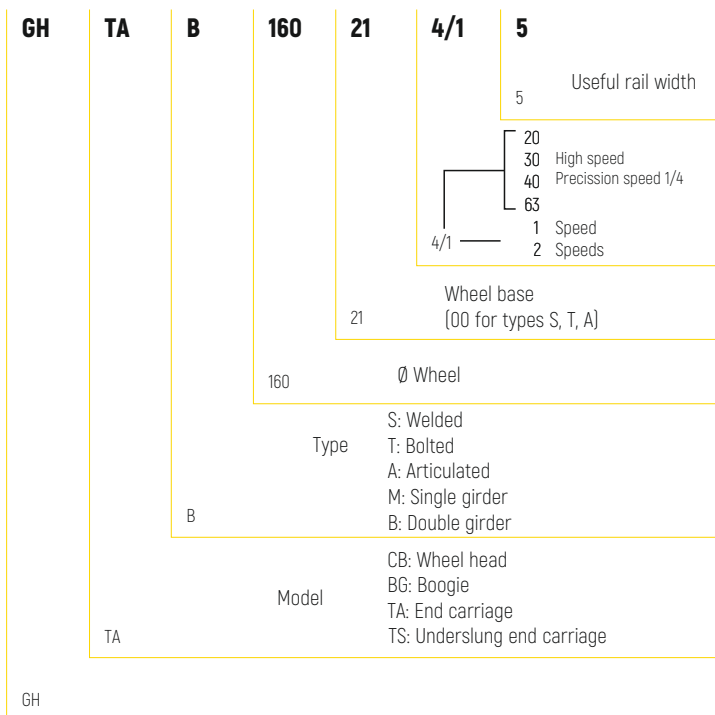
—
CRANE
COMPONENTS

WHEEL SELECTION CHART *



* Given information is approximate. Final wheel diameter depends on speed, duty and rail width.

LONG TRAVEL COMPONENTS



STANDARD END CARRIAGES

Ø Wheel	Gear box Type	Possible speeds in m/min.						
		10	15	20	25	30	40	60
125	RFS/125	✗	✗	✗				
160	RFS/160							
250	RFS/250							3T
315	RFS/315							
400	RFS/400							
500	RFS/500	✗						4T
630	RFS/630	✗						

UNDERSLUNG END CARRIAGES

Ø Wheel	Gear box Type	Possible speeds in m/min.					
		10	15	20	25	30	40
125	RFS/125						✗
160	RFS/160						✗
200	RFS/250						✗
250							✗

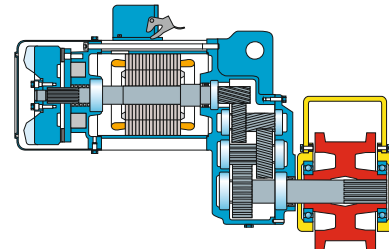
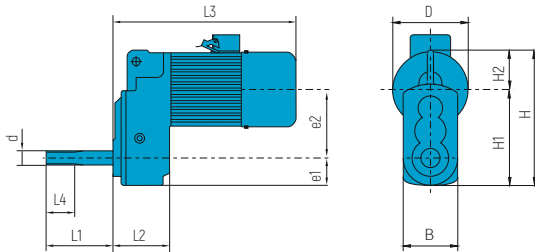
TRAVEL GEAREDMOTORS

Specially designed by GH for use on cross travel and long travel motions.

Gradual acceleration, smooth brakes, all with minimum noise.

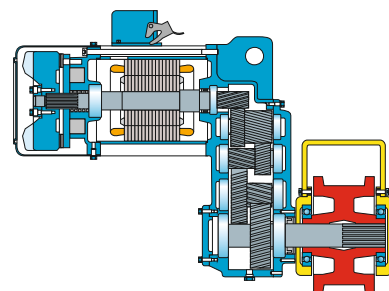
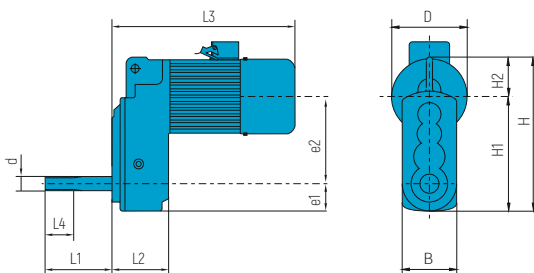
Travel wheels with double flanges with mounted bearings. Drive to the wheels is direct via splined shaft.

THREE STAGE MOTOR-GEARBOXES



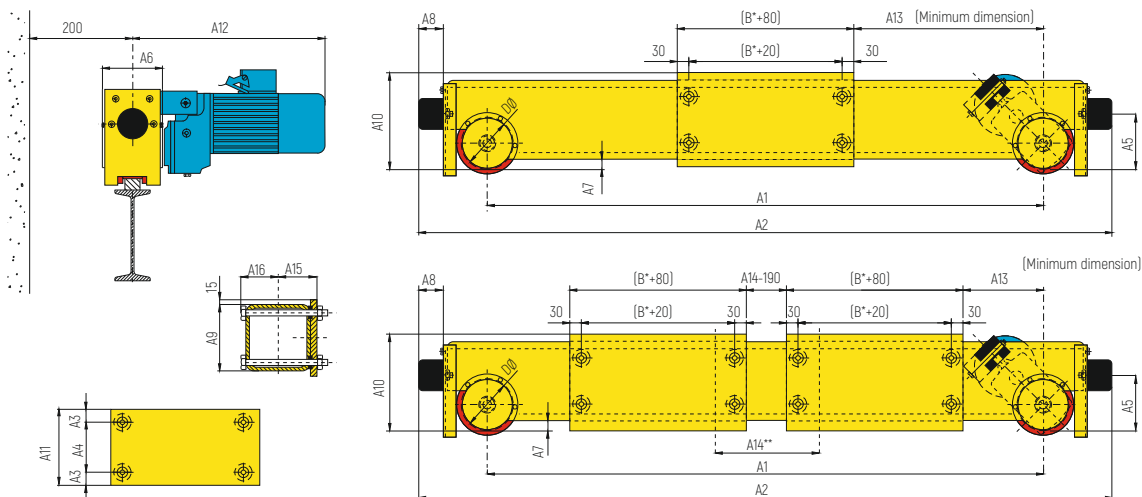
Weight Kg	Motor type	Gearbox type	Motor Power (Kw) F=50 Hz		Ø d mm.	L1 mm.	L2 mm.	L3 mm.	L4 mm.	e1 mm.	e2 mm.	B mm.	Ø D mm.	H1 mm.	H2 mm.	H mm.
			3000 Var	3000/750												
24	VB1-60	RFS / 125-3T	0,85	0.40/0.10	34.9	152	112	389	60	60	134.2	120	157.5	194.2	78	273.2
32	VB2-60	RFS / 160-3T	0,85	0.75/0.18	34.9	166	134	448.5	70	67	168.25	134	157.5	235.25	90	325.25
34	VB2-100															
50	VC-85	RFS / 250-3T	1.5	1.5/0.37	49.9	240	146	492	60	90	218.05	180	218	308.05	109	417.05
54	VC-110															
50	VC-85	RFS / 315-3T	1.5	1.5/0.37	49.9	250	146	492	60	90	218.05	180	218	308.05	109	417.05
54	VC-110															
150	VD-110	RFS / 400-3T	5	3/0.75	64.9	316	235	592	65	130	323.7	250	265	453.7	135	588.7
150	VD-110	RFS / 500-3T	5	3/0.75	79.9	332	235	592	65	130	323.7	250	265	453.7	135	588.7
205	VE-110	RFS / 500-3T	7.5	5.1/1.3	79.9	332	235	672	65	130	323.7	250	327	453.7	135	617
320	VE-110	RFS / 630-3T	7.5	5.1/1.3	89.9	399	262	700	55	200	440.9	400	327	640.9	166	806.9

FOUR STAGE MOTOR-GEARBOXES



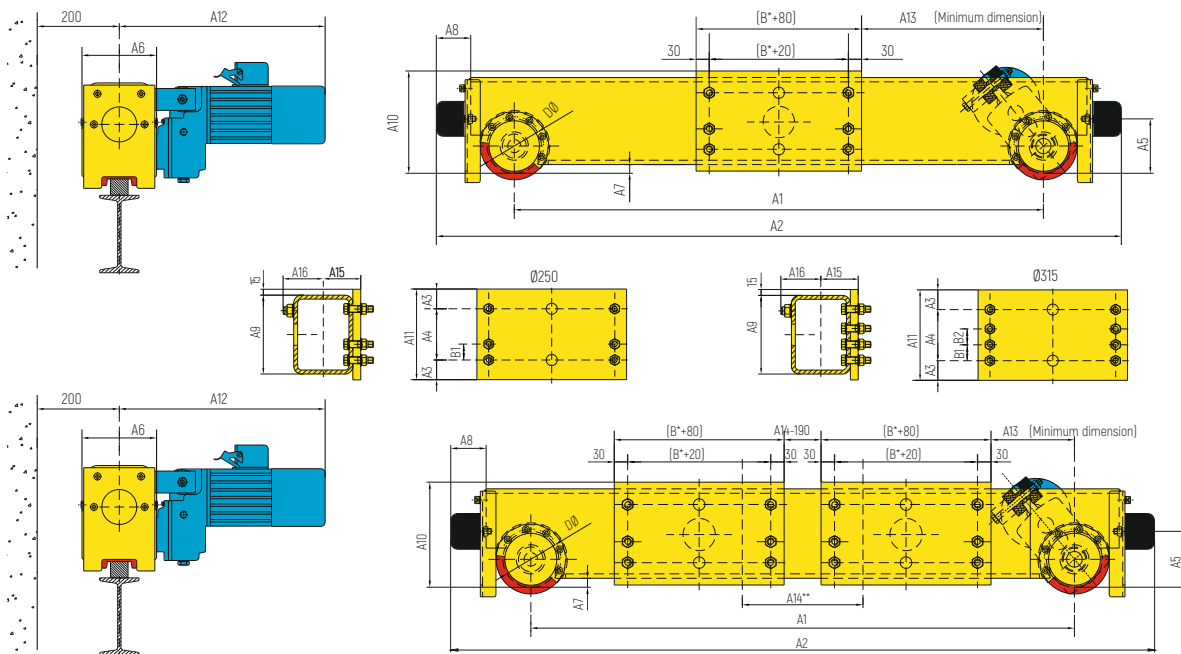
Weight Kg	Motor type	Gearbox type	Motor Power (Kw) F=50 Hz		Ø d mm.	L1 mm.	L2 mm.	L3 mm.	L4 mm.	e1 mm.	e2 mm.	B mm.	Ø D mm.	H1 mm.	H2 mm.	H mm.
			3000 Var	3000/750												
36	VB2-60	RFS / 160-4T	0,85	0.75/0.18	34.9	166	154	463	70	75	240.8	150	157.5	315.8	90	405.8
38	VB2-100															
56	VC-85	RFS / 250-4T	1.5	1.5/0.37	49.9	240	160.5	495	60	100	289	200	218	389	109	498
60	VC-110															
56	VC-85	RFS / 315-4T	1.5	1.5/0.37	49.9	250	160.5	495	60	100	289	200	218	389	109	498
60	VC-110															
160	VD-110	RFS / 400-4T	5	3/0.75	64.9	316	235	592	65	145	447.7	290	265	592.7	135	727.7
160	VD-110	RFS / 500-4T	5	3/0.75	79.9	332	235	592	65	145	447.7	290	265	592.7	135	727.7
215	VE-110	RFS / 500-4T	7.5	5.1/1.3	79.9	332	235	672	65	145	447.7	290	327	592.7	135	756

END CARRIAGES FOR SINGLE AND DOUBLE GIRDER CRANES



DØ	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	Single Girder A15	Double Girder A15	A16	Single Girder Weight (Kg)	Double Girder Weight (Kg)
100	1600	1932	50	130	118	152	13	58	200	228	230	469	185	330	80	80	---	96	113
	2100	2432			118									115				132	
	2600	2932			118									134				151	
	3100	3432			160									153				170	
	3600	3932			160									172				189	
125	1600	1960	50	130	125	171	20	80	200	235	230	475	185	900	97 [20] 107 [30]	97	103	135	--
	2100	2460			125									160				160	
	2600	2960			125									185				185	
	3100	3460			125									210				210	
	3600	3960			125									235				235	
160	1600	2035	50	180	160	175	37.5	97	250	302.5	280	536	205 (3T) 295 (4T)	107	97	103	175	--	
	2100	2535			160												205	205	
	2600	3035			160												235	235	
	3100	3535			160												265	265	
	3600	4035			160												295	295	
	4200	4635			160												330	330	

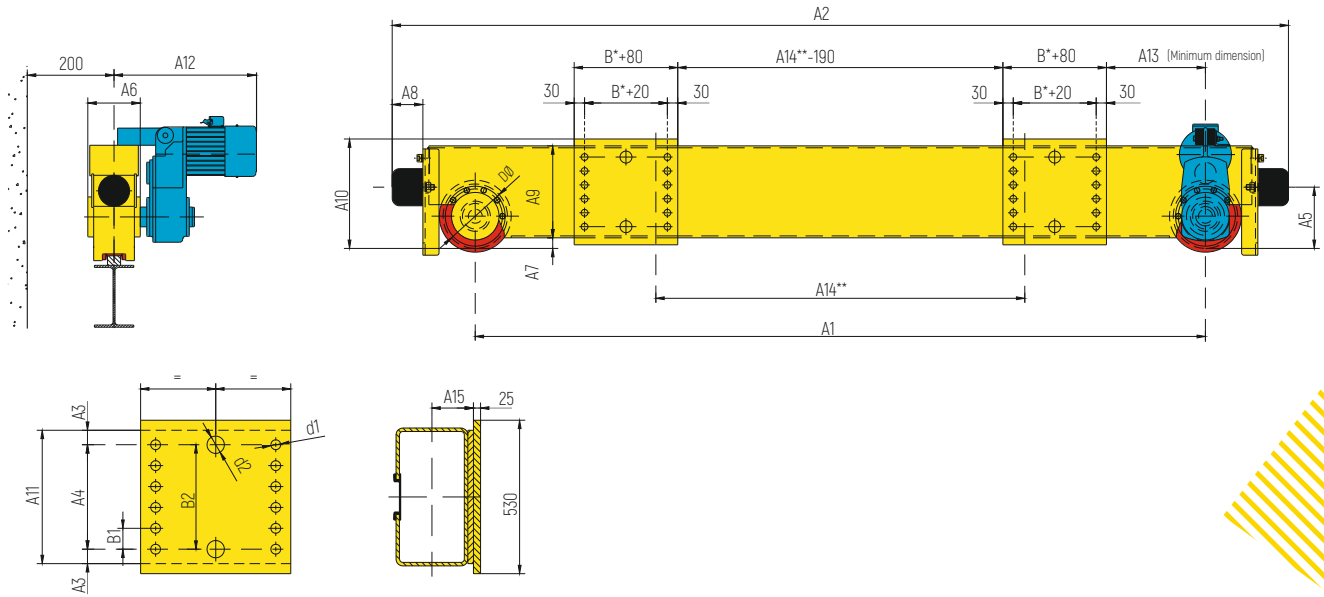
* Dimension "B" corresponds to the measurement of the base of the girder. ** Dimension A14 corresponds to the span of the trolley.



DØ	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	Single Girder A15	Double Girder A15	A16	B1	B2	Single Girder Weight (Kg)	Double Girder Weight (Kg)
250	2100	2665	65	200	250	258	30	117	300	345	330	621	295 (3T) 375 (4T)	900	120 [20] 130 [30]	120	128	60	--	335	335
	2600	3165												900						380	380
	3100	3665												900						425	425
	3600	4165												900						470	470
	4200	4765												900						525	525
315	2100	2725	70	290	315	268	62.5	117	400	477.5	430	626	205 (3T) 310 (4T)	900	130	120	128	65	65	505	505
	2600	3225												900						565	565
	3100	3725												900						625	625
	3600	4225												900						685	685
	4200	4825												900						760	760

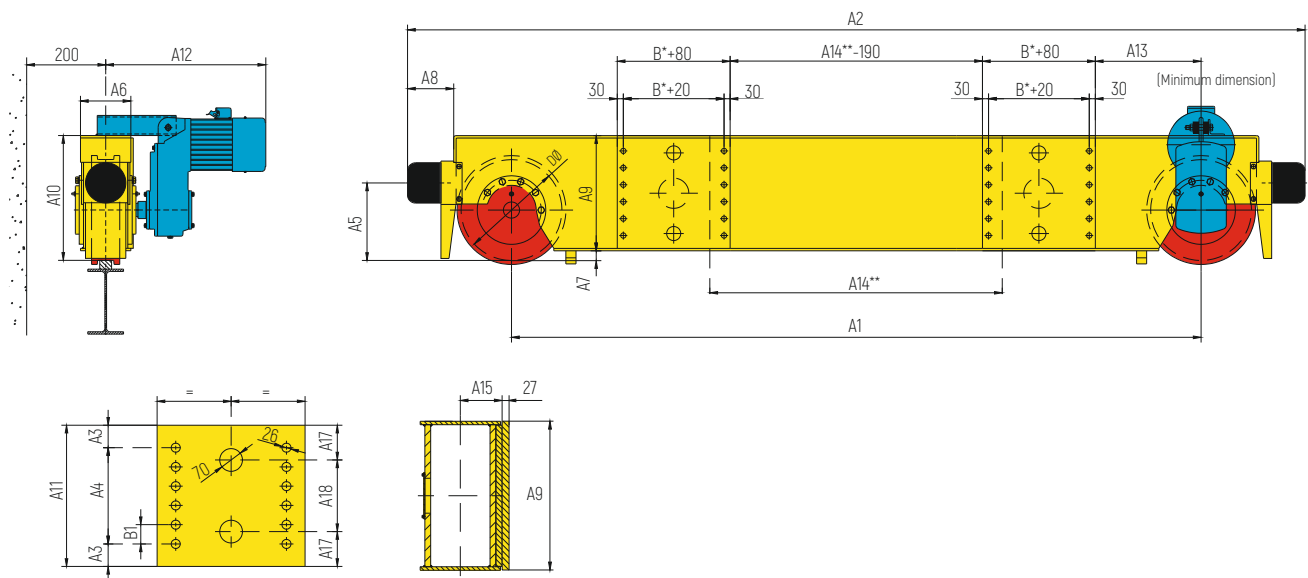
* Dimension "B" corresponds to the measurement of the base of the girder. ** Dimension A14 corresponds to the span of the trolley.

END CARRIAGES FOR DOUBLE GIRDER CRANES



DØ	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	B1	B2	Ød1	Ød2	Weight (Kg)
400	3100	3900	50	390	335	285	50	130	500	565	490	785	275	1500	120	78	390	24	40	930
	3600	4400												1500						990
	4200	5000												1800						1065
500	3100	4070	40	410	385	301	100	165	500	615	490	795	320	1500	120	82	380	26	70	1220
	3600	4570												1500						1290
	4200	5170												1800						1395

* Dimension "B" corresponds to the measurement of the base of the girder. ** Dimension A14 corresponds to the span of the trolley.

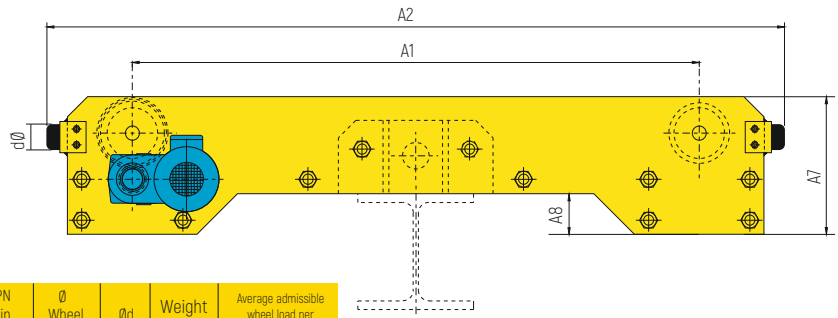


DØ	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A17	A18	B1	Weight (Kg)
500	3100	3900	66,5	410	385	301	48	230	571	619	543	795	320	1500	137	81,5	380	82	1490
	3600	4400												1500					1590
	4200	5000												1800					1700
630	3100	4070	33	540	495	383	45	268	640	685	606	930	390	1500	180	133	340	90	2435
	3600	4570												1500					2595
	4200	5170												1800					2790

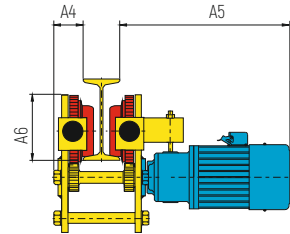
* Dimension "B" corresponds to the measurement of the base of the girder. ** Dimension A14 corresponds to the span of the trolley.

END CARRIAGES FOR UNDERSLUNG CRANES

SINGLE GIRDER MODEL TS - M

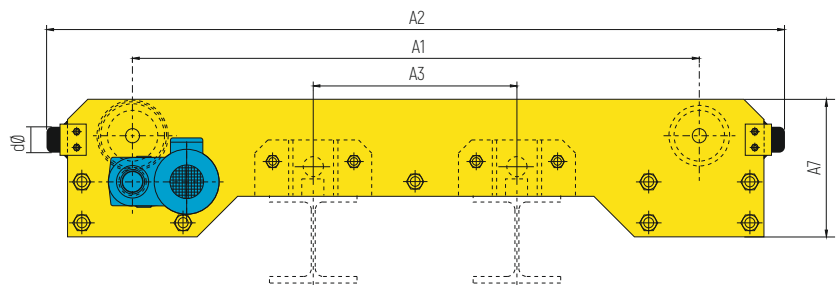


Span m	A1 mm.	A2 mm.	A4 mm.	A5 mm.	A6 min. mm.	A7 mm.	A8 mm.	IPN min. mm.	Ø Wheel mm	Ød mm	Weight Kg	Average admissible wheel load per 2 wheels (daN)
9 15	1200 2100	1600 2500	66	472	160	340	100	180	125	63	205 260	3600
9 15	1200 2100	1640 2540	71	522	198	390	105	220	160	63	275 360	5300
15 22	2100 3100	2630 3630	85	595	245	440	110	260	200	100	460 565	9300
15 22	2100 3100	2710 3710	95	595	287	540	130	320	250	100	730 885	13300

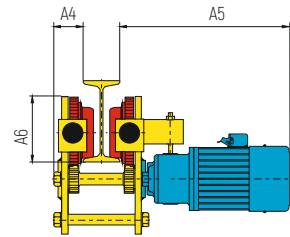


Note: End carriages with dimension A1 less than 2100 are only available as loose item.

DOUBLE GIRDER MODEL TS - B

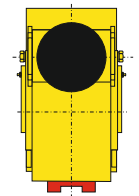
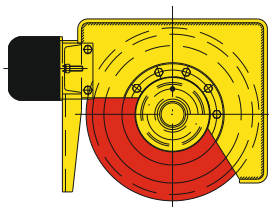
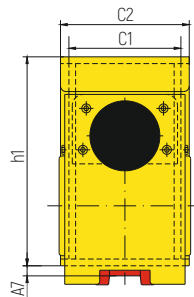
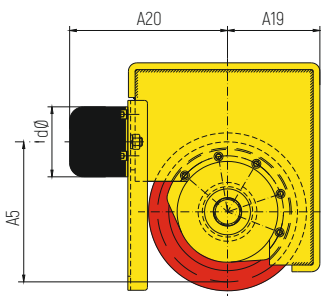


Span m	A1 mm.	A2 mm.	A3 mm.	A4 mm.	A5 mm.	A6 min. mm.	A7 mm.	A8 mm.	IPN min. mm.	Ø Wheel mm	Ød mm	Weight Kg	Average admissible wheel load per 2 wheels (daN)
9 15	1600 2100	2000 2500	900 900	66	472	160	340	100	180	125	63	230 260	3600
9 15	1600 2100	2040 2540	900 900	71	522	198	390	105	220	160	63	310 360	5300
15 22	2100 3100	2630 3630	900 1200	85	595	245	440	110	260	200	100	460 565	9300
15 22	2100 3100	2710 3710	900 1200	95	595	287	540	130	320	250	100	730 885	13300



Note: End carriages with dimension A1 less than 2100 are only available as loose item.

WHEEL HEADS



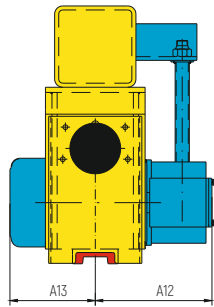
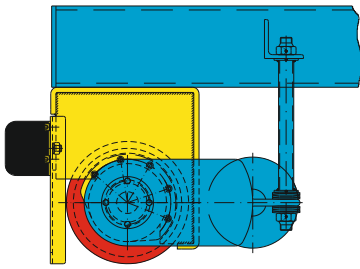
Weld-on wheel head

Ø125 Ø160 Ø250 Ø315 Ø400 Ø500

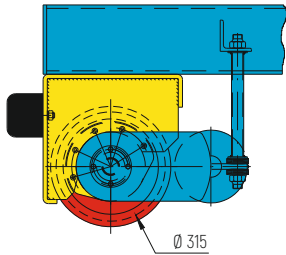
Welded wheel-head	Ø Wheel	Dimensions							Ød
		C1	C2	H1	A5	A7	A19	A20	
	125	150	180	205	125	10	100	179	80
	160	150	180	255	160	27.5	120	217	100
	250	200	230	373	250	18	165	282	125
	315	200	230	373	305	50.5	195	312	125
	400	225	250	506	335	38	262	400	160
	500	220	250	546	385	48	312	486	200
	630	305	345	645	495	45	373	645	250

Weld-on wheel head Ø 630

WHEEL HEADS FOR GANTRY CRANES



Ø Wheel	Gearbox type	Motor type	Dimensions	
			A12	A13
160	RFS/160-4T	VB2	234	222
250	RFS/250-4T	VC	282	215
315	RFS/315-4T	VC	287	210
400	RFS/400-4T	VD	420	172
500	RFS/500-4T	VD	428	165
630	RFS/630-3T	VE	928	192

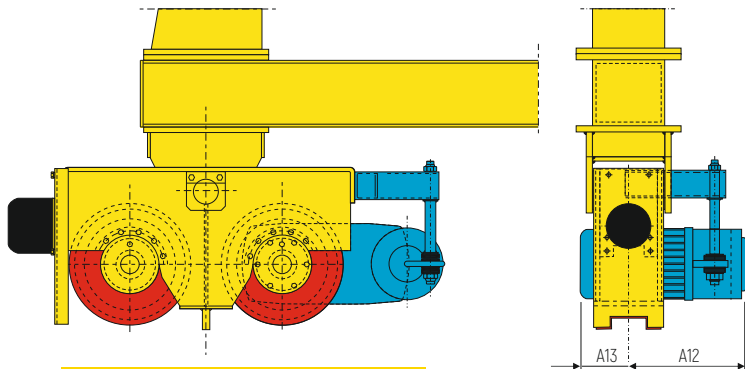


Maximum admissible wheel loads GGG70 (daN) Acc. with FEM/UNE M4 group						
Ø Wheel	Cross travel speed in m/min	Rail width in K (mm)				
		40	50	60	70	80
125	20	4500	5000			
	40	3600	4000			
	63	3200	3400			
160	20	5900	7000	8300		
	40	5000	6200	7400		
	63	4400	5400	6400		
250	20	9800	12200	14400		
	40	8900	11100	13400		
	63	8000	10000	12000		
315	20	12700	15800	18600	18600	
	40	11600	14500	17400	18600	
	63	10900	13500	16200	17600	
400	20	16500	20700	24800	28900	30000
	40	15200	18900	22700	26500	30000
	63	14200	17800	21400	24900	27800
500	20		26200	31500	36800	40000
	40		24400	29300	34200	39000
	63		23000	27600	32200	36800
630	20			40500	47200	52800
	40			38000	44300	50600
	63			35800	41800	47700

Loads for ratio $R_{min} / R_{max} = 0.35$
Rolling track minimum quality S355 (St52)

BOOGIES FOR GANTRY CRANES

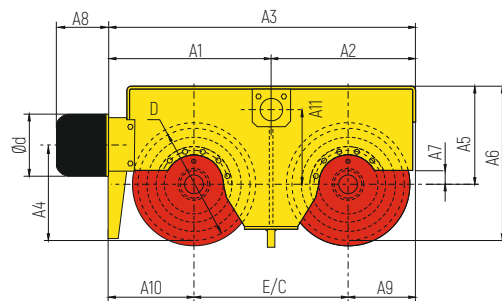
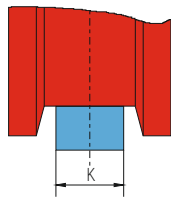
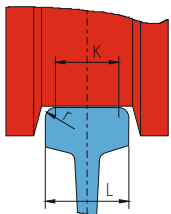
DIN	Rail Type	Dimensions	
		L	K
536	A 45	45	37
	A 55	55	45
	A 65	65	53
	A 75	75	59
	A 100	100	80
	A 120	120	100



Boogie Ø 315 - 400

Burbach rail:
Curved rail wheel head:
Square rail:

$k = L - 2r$
 $k = L - 4 / 3r$
 $k = L$



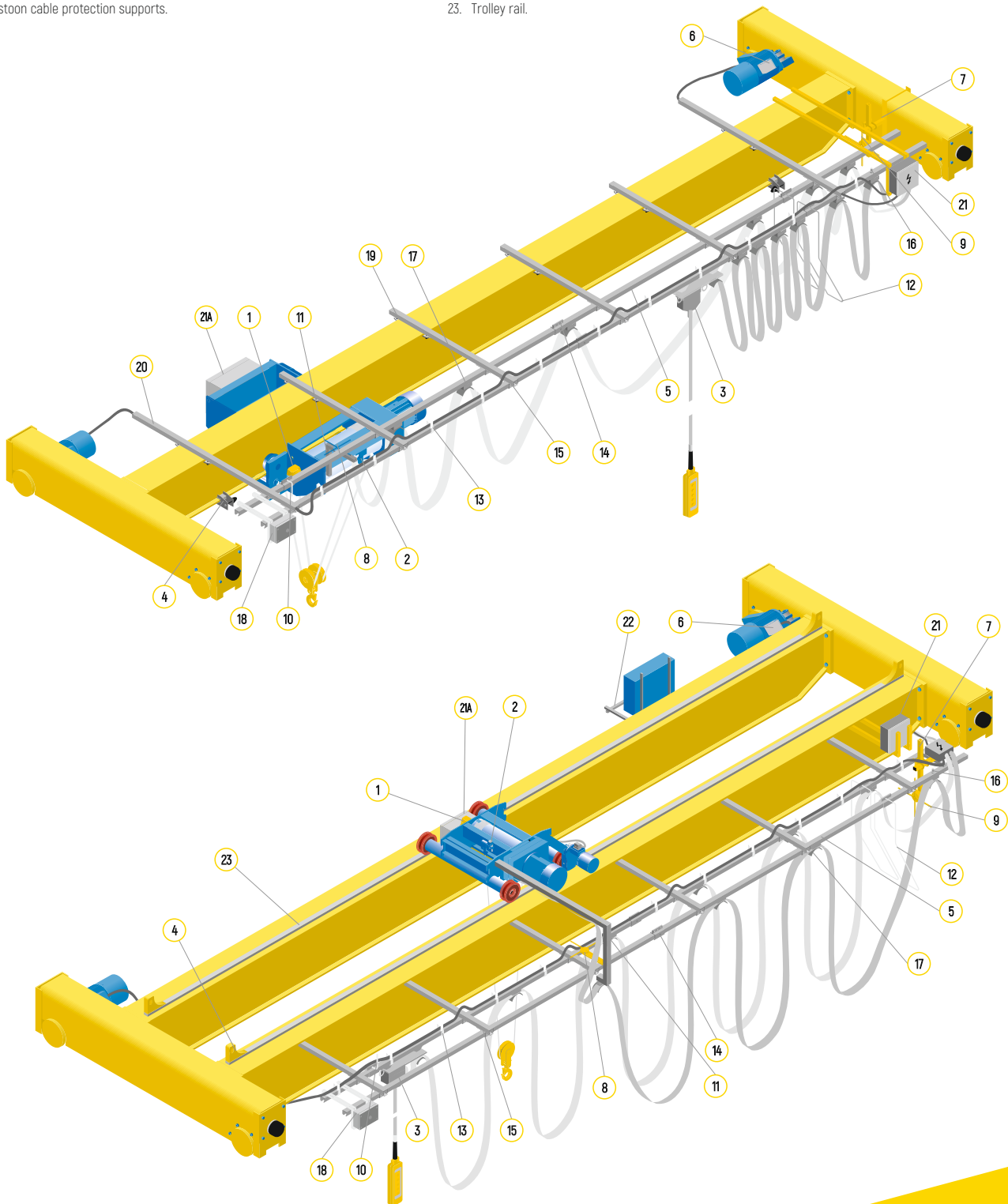
Boogie Ø 500 - 630

Wheel Ø	E/C	D	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	Ød
315	500	315	458	457	915	315	266	423,5	42,5	131	207	208	184	287	210	160
400	550	400	545	537	1082	335	344	544	50	166	262	270	262	420	172	200
500	650	500	675	612	1287	385	369	619	30	208	287	350	277	428	165	250
630	800	630	848	773	1621	495	385	700	65	265	373	448	278	928	192	250

ELECTRICAL COMPONENTS

1. Hoist limit switch.
2. Load limit device.
3. Pendant plug-in connector.
4. Cross travel limit switch actuator.
5. Supports for cross travel and pendant power feed systems.
6. Motor plug-in connectors.
7. Towing arm.
8. Cross travel limit switch.
9. Long travel limit switch.
10. Long travel limit switch actuator.
11. Current collector arm.
12. Festoon cable protection supports.

13. Cable clips.
14. Profile connection.
15. Sliding support.
16. End limit.
17. Cable trolleys.
18. Remote control.
19. Girder support.
20. Profile support.
21. Long travel cabinet.
- 21A. Hoist cabinet.
22. Ladder support.
23. Trolley rail.



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 CRANES & COMPONENTS