

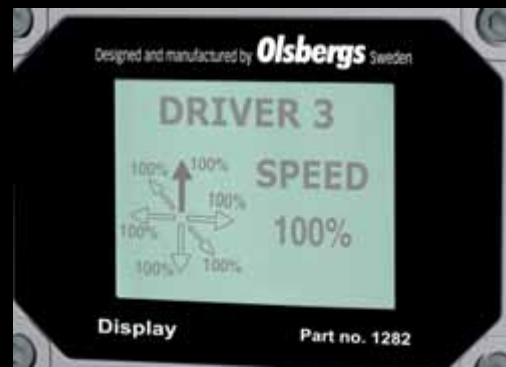


THE LATEST LOADER TECHNOLOGY

Kesla has almost 50 years of experience in the development and manufacturing of loader technology. Today the Kesla brand stands for high-quality timber loader expertise. Kesla's timber loader product family covers all the work stages of wood harvesting and processing.

Kesla timber loaders have been designed to withstand hard wear in even the most extreme climatic and operating conditions. Designed for professional use, the models combine up-to-date crane technology with state-of-the-art components and materials. Kesla's manufacturing processes comply with international quality criteria; every product passes through a rigorous quality control program, as well as practical performance and safety testing.



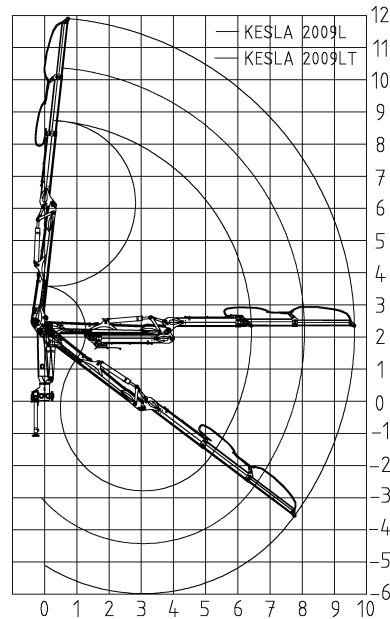
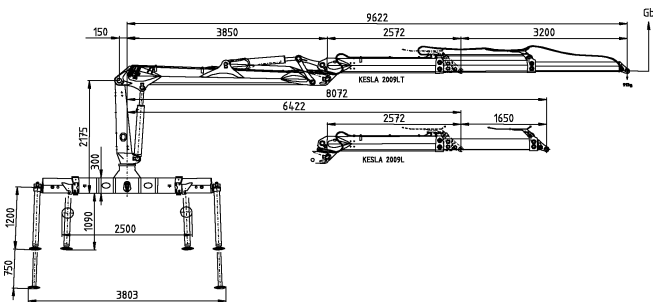




2009S 2009ST 2009L 2009LT



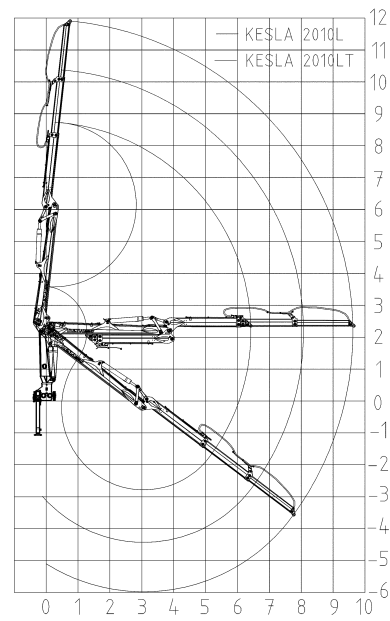
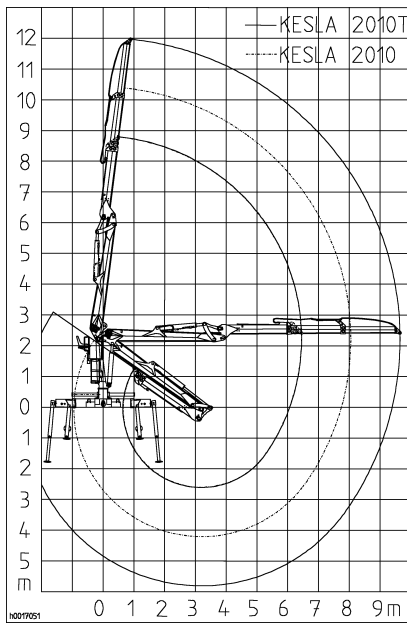
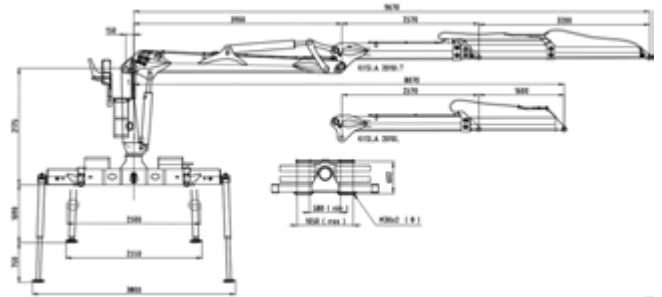
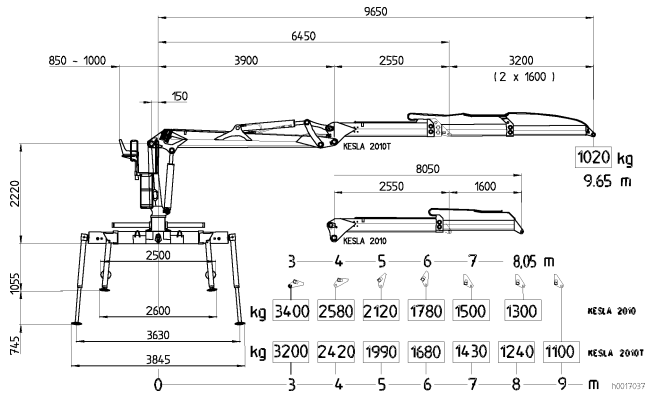
Kesla's line of loaders begins at 9 tonne-metres and ends at 24 tonne-metres. At the line's starting end there are plenty of alternatives that excellently suit the growing demand for the loading of short timber. The loaders feature a competitive power-to-weight ratio, unsurpassed durability and a wide range of accessories.



TECHNICAL SPECIFICATIONS		2009S	2009ST	2009L	2009LT
Lifting torque net	kNm	95 (101)	89 (94)	95	89
Outreach	mm	8050	9610	8020	9620
Stroke of boom extension	mm	1650	2x1600	1650	2x1600
Height: mounting level - top joint of column	mm	2175	2175	2175	2175
Slewing torque gross	kNm	22.0	22.0	23.0	23.0
Slewing angle	°	415	415	415	415
Weight with controls and stabilizers but without grapple and rotator	kg	1980	2140	1980	2100
Pump recommendation					
– working pressure	MPa	24 (26)	24 (26)	24	24
– flow fixed displacement single pump/double pump	l/min	90/2x70-80	90/2x70-80	90/2x70-80	90/2x70-80
– variable displacement	l/min	min. 160	min. 160	min. 160	min. 160
– power input	kW	41-70	41-70	41-70	41-70
Height	mm	2228	2228	2228	2228
Transport width	mm	2500	2500	2500	2500
i-model values in brackets					

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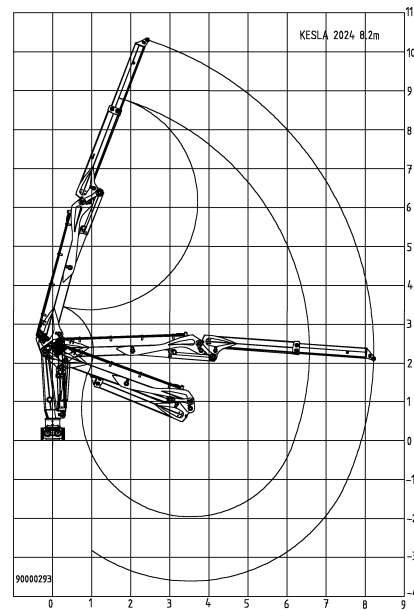
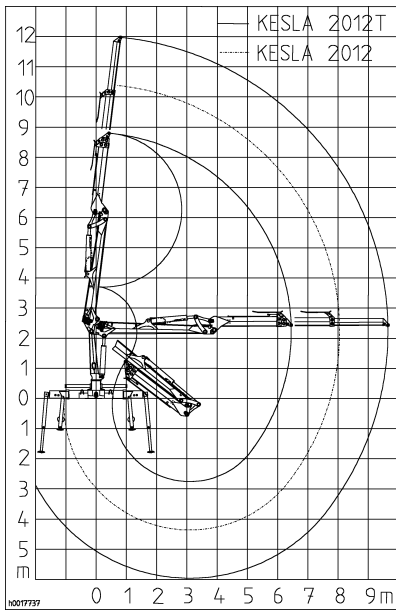
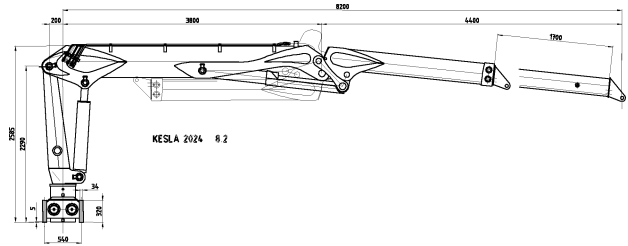
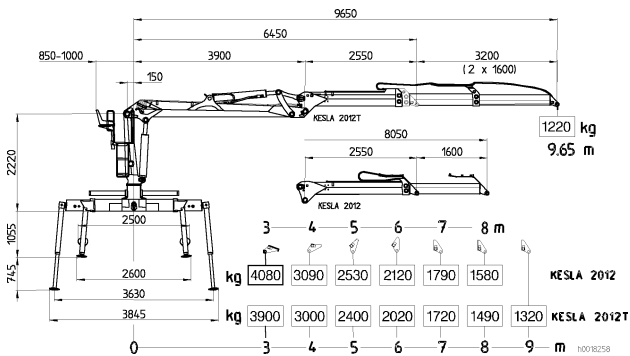
Kesla's cranes meet the loading needs of the forest and recycling industries. A wide range of cabin, boom, valve, grapple, stabilizer options and additional accessories are available for various functional purposes.



TECHNICAL SPECIFICATIONS			2010	2010T	2010L	2010LT
Lifting torque net		kNm	103 (112)	97 (105)	106	100
Outreach		mm	8050	9650	8070	9670
Stroke of boom extension		mm	1600	2x1600	1600	2x1600
Height: mounting level - top joint of column		mm	2220	2220	2175	2175
Slewing torque gross		kNm	25.0	25.0	23.0	23.0
Slewing angle		°	415	415	415	415
Weight with controls and stabilizers but without grapple and rotator		kg	2250	2350	2050	2180
Pump recommendation						
- working pressure		MPa	24 (26)	24 (26)	24	24
- flow, fixed displacement	single pump	l/min	80-110	80-110	90	90
	double pump	l/min	2x70-110	2x70-110	2x80-90	2x80-90
- flow, variable displacement		l/min	min. 160	min. 160	min. 160	min. 160
- power input		kW	32-88	32-88	64-88	64-88
Transport width		mm	2500	2500	2500	2500
i-model values in brackets						



At the upper end of Kesla's loader model line is the heavy-duty 24 tonne-metre crane excellently suited to the loading of long timber and fixed industrial installations. The model is a single-boom line with boom length alternatives between 8.2 m and 10.4 m.

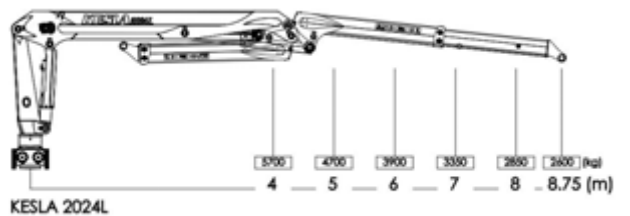
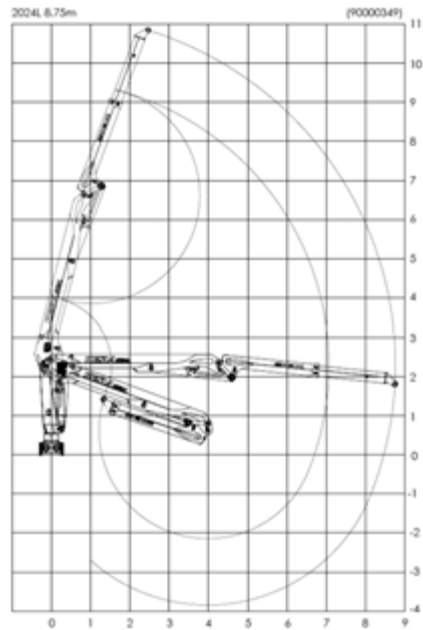
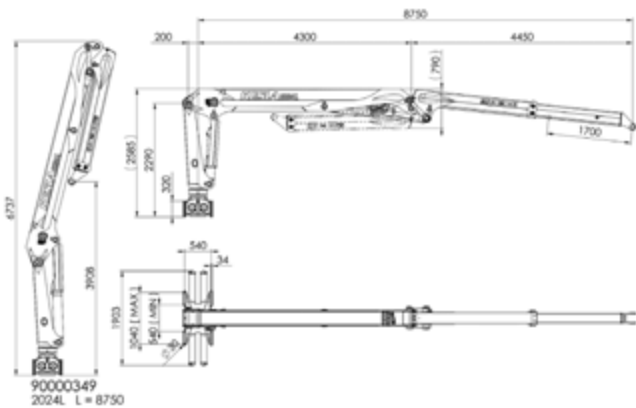
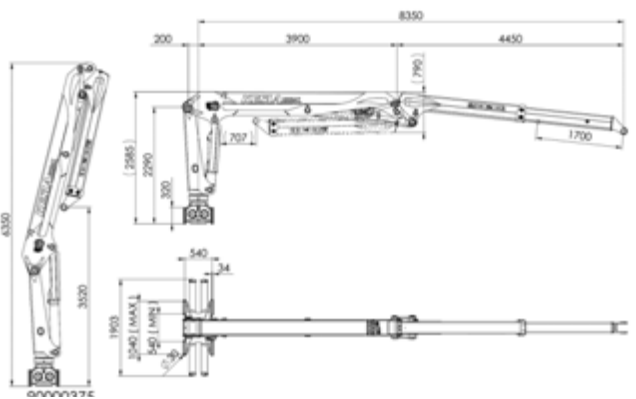


TECHNICAL SPECIFICATIONS		2012	2012T
Lifting torque net	kNm	125 (135)	119 (129)
Outreach	mm	8050	9650
Stroke of boom extension	mm	1600	2x1600
Height: mounting level - top joint of column	mm	2220	2220
Slewing torque gross	kNm	25.0	25.0
Slewing angle	°	415	415
Weight with controls and stabilizers but without grapple and rotator	kg	2440	2550
Pump recommendation			
- working pressure	MPa	24 (26)	24 (26)
- flow, fixed displacement double pump	l/min	2x70-110	2x70-110
- flow, variable displacement	l/min	min. 160	min. 160
- power input	kW	32-88	32-88
Transport width	mm	2500	2500

i-model values in brackets

TECHNICAL SPECIFICATIONS		2024 8.2m	9.4m	10.4m
Lifting torque net	kNm	240 (260)	220 (238)	210 (227)
Outreach	mm	8200	9400	10400
Stroke of boom extension	mm	1700	1700	1700
Slewing torque (p = 17,5 MPa)	kNm	42.0	42.0	42.0
Slewing angle	°	415	415	415
Weight without stabilizers	kg	2400	2500	2600
Weight of stabilizer beams	kg	450	450	450
Transport height	mm	2585	2585	2585
Transport width	mm	2174	2174	2174
Pump recommendation				
- working pressure	MPa	26 (28)	26 (28)	26 (28)
- flow	l/min	2x90-110	2x90-110	2x90-110
- power input	kW	41-95	41-95	41-95

i-model values in brackets

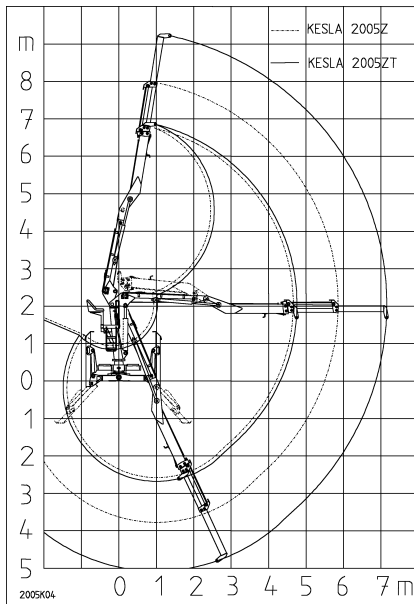
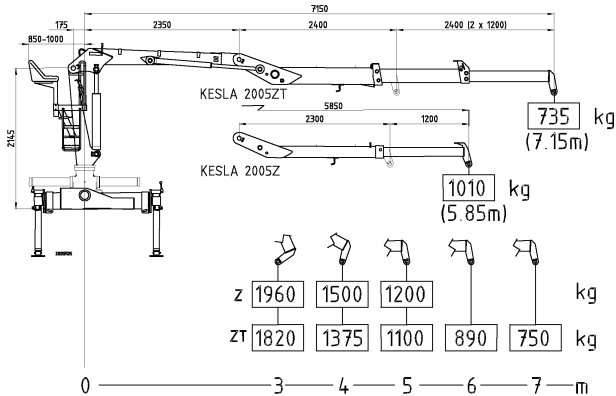


KESLA 2024L

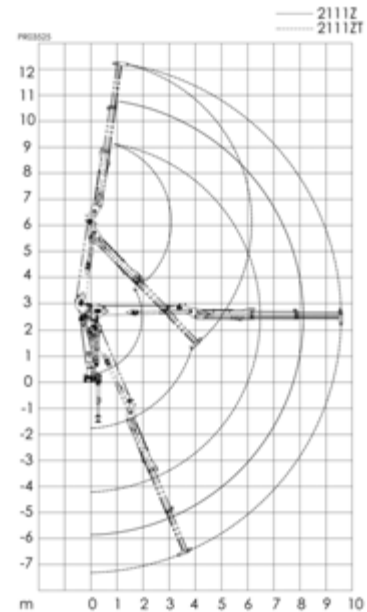
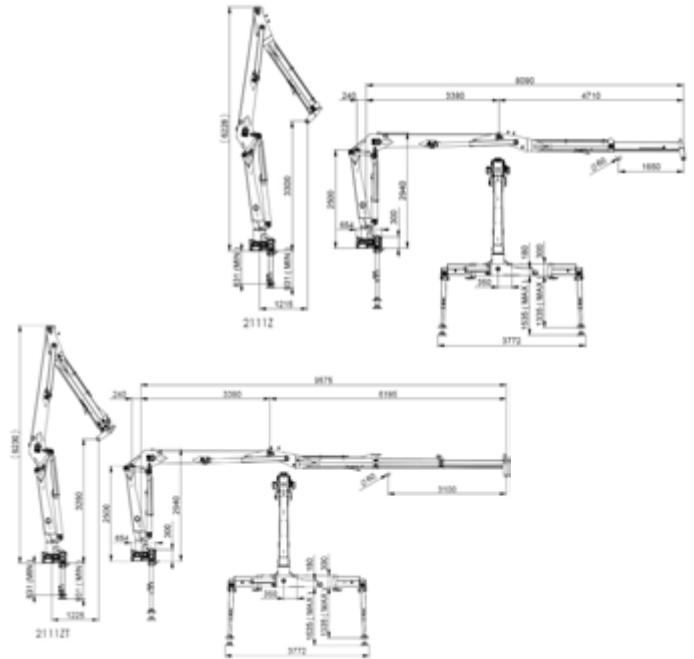
TECHNICAL SPECIFICATIONS		2024L-8.35	2024L-8.75
Lifting torque net	kNm	235	230
Outreach	mm	8350	8750
Stroke of boom extension	mm	1700	1700
Slewing torque gross	kNm	38	38
Slewing angle	°	415	415
Weight with controls and stabilizers but without grapple and rotator	kg	2415	2450
Pump recommendation,			
- working pressure	MPa	26.0	26.0
- flow	l/min	2x70-90	2x70-90
- power input	kW	61-78	61-78
Transport width	mm	2500	2500
Transport height	mm	2585	2585

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2005Z/T 2111Z/ZT



Kesla's Z-model loaders begin at 5 tonne-metres and end at 17 tonne-metres. In recent years Kesla has paid particular attention to the development of this line which - along with the number of optional accessories - is continuously being expanded. Besides timber loading, the Z-models suit the processing of recycled materials.



TECHNICAL SPECIFICATIONS		2005Z	2005ZT
Lifting torque net	kNm	59	54
Outreach	mm	5850	7150
Stroke of boom extension	mm	1200	2x1200
Slewing torque gross	kNm	12.7	12.7
Slewing angle	°	415	415
Weight with controls and stabilizers but without grapple and rotator	kg	1380	1520
Pump recommendation,			
- working pressure	MPa	21.0	21.0
- flow	l/min	45-70	45-70
- power input	kW	16-25	16-25
Height: mounting level - top joint of column	mm	2145	2145
Transport width	mm	2200	2200
Transport height	mm	2600	2600

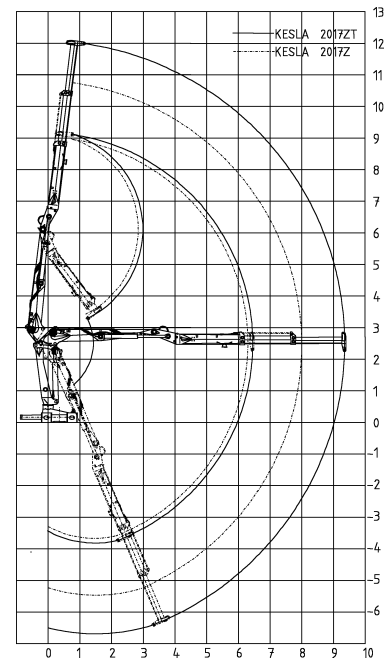
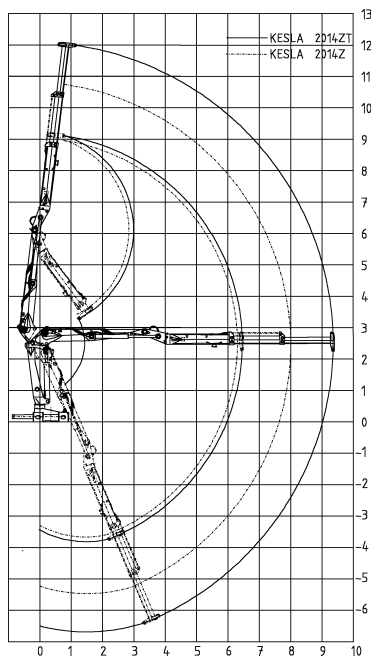
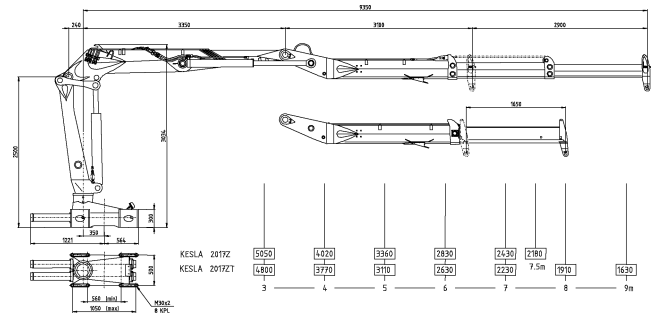
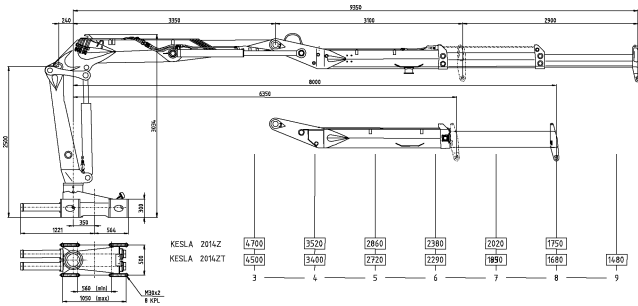
TECHNICAL SPECIFICATIONS		2111Z	2111ZT
Lifting torque net	kNm	110	105
Outreach	mm	8090	9575
Stroke of boom extension	mm	1650	2x1550
Height: mounting level - top joint of column	mm	2410	2410
Slewing torque gross	kNm	23	23
Slewing angle	°	415	415
Weight with controls and stabilizers but without grapple and rotator	kg	2350	2400
Pump recommendation			
- working pressure	MPa	26	26
- flow	single pump	l/min	70-90
	double pump	l/min	2x60-80
- power input	single pump	kW	28-36
	double pump	kW	48-64
Transport width and transport height	mm	2500	2500

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The 2014Z/T and 2017Z/T are Kesla's newest Z-models. The design has been carried out with users; the result is an extremely competitive line with respect to all its features.



TECHNICAL SPECIFICATIONS		2014Z	2014ZT
Lifting torque net	kNm	138	133
Outreach	mm	8000	9350
Stroke of boom extension	mm	1650	2x1450
Slewing torque (gross)	kNm	31	31
Slewing angle	°	425	425
Weight without stabilizers	kg	1980	2100
Weight of stabilizer beams	kg	410	410
Transport height	mm	2600	2600
Transport width	mm	2500	2500
Boom's pulling capacity	kN	31	32
Pump recommendation			
- working pressure	MPa	26	26
- flow	l/min	90-110/2x90-110	90-110/2x90-110
- power input	kW	41 - 88	41 - 88

TECHNICAL SPECIFICATIONS		2017Z	2017ZT
Lifting torque net	kNm	167	155
Outreach	mm	8000	9350
Stroke of boom extension	kNm	31	31
Slewing torque (gross)	°	425	425
Slewing angle	mm	1650	2x1450
Weight without stabilizers	kg	2050	2170
Weight of stabilizer beams	kg	410	410
Transport height	mm	2600	2600
Transport width	mm	2500	2500
Boom's pulling capacity	kN	31	32
Pump recommendation			
- working pressure	MPa	26	26
- flow	l/min	90-110 / 2x90-110	90-110 / 2x90-110
- power input	kW	41 - 88	41 - 88

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ACCESSORIES

ENG		2009S/ST	2009L/LT	2010/T	2010L/LT	2012/T	2024	2024L	2005Z/T	2111Z/T	2014Z/T	2017Z/T
• = standard ◊ = extra equipment Δ = select												
Boom type	S (L) Z	•	•	•	•	•	•	•				
i-model (2 Mpa higher working pressure)		◊		◊		◊	◊					
Longer main boom (+500mm)				◊		◊						
Hoses mounted on the front boom		•	•	•	•	•						
Side-mounted hoses at front boom		◊		◊		◊						
Internal hoses with front boom							•	•		•	•	•
Roller boom equipment		◊		◊		◊						
Mounting alternative												
Behind truck cabin		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Rear of truck		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Crane controls												
2-lever + 2-pedal		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
4-lever + 2-pedal		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
5-lever + 1-pedal		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
1-circuit hydraulics, standard output		Δ	Δ	Δ	Δ	Δ			Δ	Δ		
2-circuit hydraulics, standard output		Δ	Δ	Δ	Δ	•	•	•	Δ	Δ	•	•
LS-hydraulics												
mechanical		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊
electric		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊
Stabilizer control from the ground		•	•	•	•	•	•	•	•	•	•	•
Stabilizer control from the seat, mechanical		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Stabilizer control from the seat, electric		Δ	•	Δ	•	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Stabilizer legs rise automatically to transport position		•	•	•	•	•			•		•	•
High-rise stabilizer kit		◊	◊	◊	◊	◊		◊			◊	◊
Vertical transport position for stabilizers		◊	◊	◊	◊	◊						
Flap-down stabilizers									◊			
Stabilizer length alternatives		3	3	3	3	3	2	2	3	2	3	3
Extra-wide stabilizer beam		◊		◊		◊		◊				
Emergency stop mounted on stabilizer beam		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Kesla CE-kit (load control, boom height)		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Kesla CE Comfort package		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Load holding valve kit		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Dump valve equipment		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
POL-attachment (Prevent Over Load) with F130		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Cylinder damper		◊	◊	◊	◊	◊	◊	•	◊	◊	◊	◊
Heated seat		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
EHM weather shelter		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Working light set		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Main lift cylinder guard		◊	◊	◊	◊	◊	•	•	◊	•	•	•
Stem support							◊	◊				
Central lubrication		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Rotators		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Link kits		◊	◊	◊	◊	◊	◊	•	◊	•	◊	◊
Scale systems		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
RAL-special colors(RAL 9004 black as standard)		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Special lacquer		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
Crane cabin												
- mechanical controls		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊
- electric controls		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊
- special color for cabin (RAL 9007 standard)		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊
- Xenon-lights and / or beacon		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊
- heating: water or diesel		Δ	Δ	Δ	Δ	Δ	Δ	Δ		Δ	Δ	Δ
Kesla grapples												
F29		◊	◊	◊	◊	◊			◊	◊		
F38		◊	◊	◊	◊	◊			◊	◊		
F41		◊	◊	◊	◊	◊				◊		
F46		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊
F50		◊	◊	◊	◊	◊	◊	◊		◊	◊	◊

Comfort cabins

- Two doors
- RDS radio/CD
- 4X working lights
- Roll-up front windows cover
- Front window wiper and washer
- Heated seat
- Water or diesel heater
- Ceiling light
- Front light



Valve options



Kesla uses Parker and Olsberg valves. The customer can choose from between mechanical or electrically controlled valves; the selection is extremely wide and an alternative for every functional purpose can be found.

Rotators



The Kesla range contains a rotator option suitable for each size category and for all needs.

Centralized lubrication



A centralized factory-installed lubrication system for the lubrication of the entire loader - the only system on the market also lubricating the grapple - is available for Kesla loaders. A unique single-point lubrication system is also available for the grapple.



Weather guard

An easily installed and used Kesla weather guard protects against wind and rain.



Recycling

With respect to their characteristics and fittings, Kesla loaders can be equipped to process recycled scrap metal and bioenergy raw materials.

- cabin-equipped, also spacious XL versions
- reinforced stabilizers
- bioenergy and scrap metal grapples
- rotators
- scale

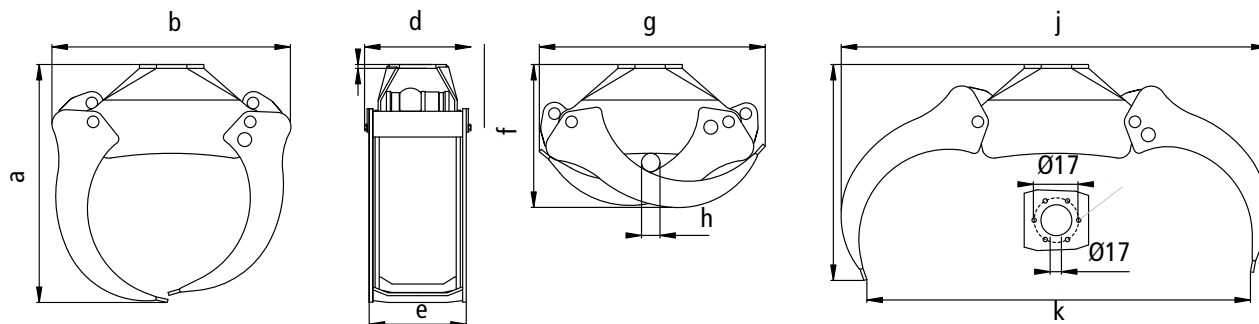




Kesla has a comprehensive line of timber grapples. Kesla manufactures over 1,500 timber grapples annually for loaders of different sizes. The grapple line was renewed in 2007 and is now extremely competitive with respect to all its features. A single-point lubrication system and galvanization is also available for timber grapples.

TECHNICAL SPECIFICATIONS		29	38	41	46	50
Grapple's area with tips touching	m ²	0,28	0,36	0,41	0,46	0,50
Working pressure	MPa	230	230	230	250	250
Jaw pressure with tips touching	kN	12,8	17,5	17,5	18,2	20,4
Opening time	s	1,3	2,0	2,1	2,1	2,1
Closing time	s	1,9	2,9	3,1	3,1	3,1
Weight	kg	165	224	250	245	303
Accessories: Jaws' galvanizing, automatic lubrication						

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GRAPPLE DIMENSIONS mm	a	b	c	d	e	f	g	h	i	j	k
F29	925	925	15	412	377	555	880	75	810	1655	1490
F38	1005	1045	20	515	480	620	970	120	885	1885	1715
F41	1040	1095	20	515	480	635	1025	120	980	1945	1740
F46	1076	1161	16	510	490	650	1063	140	918	2095	1941
F50	1112	1207	16	520	520	673	1154	130	914	2135	1962





KESLA

Kesla is a dynamically evolving machine engineering group with almost 50 years of experience as a developer and manufacturer of forest technology. Our technical know-how and continuous customer-oriented product development has enabled us to export our products to over 25 countries. Kesla controls the entire production chain by providing the best machines and equipment for wood harvesting, transport and chipping.

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