D TECHNICAL SHEET

D.1 CRANE'S TECHNICAL DATA

Versions				2S	3S	4S	5S	6S	7S	8S
Max. net lifting moment			*t m* *kNm*	24.8 243	24.3 238	23.8 233	23.3 229	22.9 225	22.6 222	22.3 219
Max. dynamic moment			*daNm* *kNm*	28290 282.9						
Capacity at min. hydraulic outreach Max rated capacity	hook [S2]		*kg*	5795	5680	5455	5260	5070	4910	4755
	grab [S1]		*kg*	5795	5680	5455	5260	5070	4910	4755
	min. outreach		*m*	4.28	4.28	4.36	4.44	4.53	4.61	4.70
Capacity at max. hydraulic outreach	hook [S2]		*kg*	3015	2300	1775	1385	1085	855	670
	grab [S1]		*kg*	3015	2300	1775	1385	1085	855	670
	max. outreach		*m*	8.08	10.11	12.22	14.43	16.65	18.90	21.18
Capacity of 1st man. extension	capacity		*kg*	N/A	1845	1430	1145	910	715	580
	max. outreach		*m*	N/A	12.22	14.44	16.65	18.90	21.18	23.28
Max. load height above the base for the last extension	hydraulic		*m*	10.4	12.4	14.5	16.7	19.0	21.2	23.5
	manual		*m*	N/A	19.0	21.2	23.5	23.5	25.6	25.6
Weight of crane without stabilizers			*kg*	2460	2600	2740	2865	2970	3090	3180
Weight of stabilizers		EX-H	*kg*	355						
		SE-H	*kg*	510						
Weight of 1st man ext.			*kg*	N/A	80	85	65	63	43	32
Max. working pressure			*bar*	345						
Max. oil flow rate			*ℓ/min*	80						
Power needed			*kW*	59.8						
Oil tank capacity			*ℓ*	130						
Slewing angle			°	endless						
Gross slewing torque	1 gear motor		*daNm* *kNm*	2580 25.8						
Gross slewing torque	2 gear motors		*daNm* *kNm*	5160 51.6						
Max boom inclination for use with CE winch			°	75°						
Max. base inclination			°	4°						
			°	3°						
Max. stabilizer force on the ground with stabilizer fully extended		EX	*daN*	10880						
		SE	*daN*	7950						
Max. stabilizer pressure on the ground with stabilizer fully extended		EX	*MPa*	2.9						
		SE	*MPa*	2.1						
Lifting coversion factor, k			*kgm/bar*	85.10						
Distribution factor of dyn. moment on base, β			-	0.82						
Position of standard dead point (see D.6)			▲							

Versions				4SJ3	5SJ3	6SJ2
Max. net lifting moment			*t m* *kNm*	21.1 207	19.1 188	12.6 123
Max. dynamic moment			*daNm* *kNm*	28010 280.1	27160 271.6	26455 264.5
Capacity at min. hydraulic outreach Max rated capacity	hook [S2]		*kg*	2880	2640	1350
	grab [S1]		*kg*	N/A	N/A	N/A
	min. outreach		*m*	7.36	7.27	7.26
Capacity at max. hydraulic outreach	hook [S2]		*kg*	595	525	560
	grab [S1]		*kg*	N/A	N/A	N/A
	max. outreach		*m*	20.41	21.94	22.24
Capacity of 1st man. extension	capacity		*kg*	510	465	390
	max. outreach		*m*	22.08	23.60	23.80
Max. load height above the base for the last extension	hydraulic		*m*	22.7	24.2	24.5
	manual		*m*	26.5	27.7	26.1
Weight of crane without stabilizers			*kg*	3400	3355	3245
Weight of stabilizers		EX-H	*kg*	355		
		SE-H	*kg*	510		
Weight of 1st man ext.			*kg*	35	30	22
Max. working pressure			*bar*	355	350	
Max. oil flow rate			*ℓ/min*	80		
Power needed			*kW*	61.5	60.6	
Oil tank capacity			*ℓ*	130		
Slewing angle			°	endless		
Gross slewing torque	1 gear motor		*daNm* *kNm*	2580 25.8		
Gross slewing torque	2 gear motors		*daNm* *kNm*	5160 51.6		
Max boom inclination for use with CE winch			°	75°		
Max. base inclination			°	3°		
			°	N/A		
Max. stabilizer force on the ground with stabilizer fully extended		EX	*daN*	10780	10450	10180
		SE	*daN*	7870	7630	7440
Max. stabilizer pressure on the ground with stabilizer fully extended		EX	*MPa*	2.83	2.75	2.68
		SE	*MPa*	2.07	2.01	1.95
Lifting coversion factor, k			*kgm/bar*	85.10		
Distribution factor of dyn. moment on base, β			-	0.82		
Position of standard dead point (see D.6)			▲			

D.2 WINCH SETTINGS

TI1 - SINGLE LINE PULL

Versions		4SJ3	5SJ3	6SJ2
Max line pull	*kg*	1000	1000	1000
Start angle - pull% Final angle - pull%	%	-	-	-

TI2 - SINGLE LINE PULL

Versions		2S	3S	4S	5S	6S	7S	8S
Max line pull	*kg*	2000	2000	2000	2000 (*)	2000 (*)	2000 (*)	2000 (*)
Start angle - pull% Final angle - pull%	%	-	-	-	47°-97% 75°-86%	55°-93% 75°-86%	51°-59% 75°-53%	45°-45% 75°-38%

N/A: configuration not available
(*): configuration requiring pull derating: available only for CE/TOP cranes (PCS)
Pull%: pull derating percentage

When the crane is equipped with winch, the max. working pressure and the limiter setting pressure are increased by 10 bar with respect to the standard ones.

D.3 TOTAL WEIGHTS

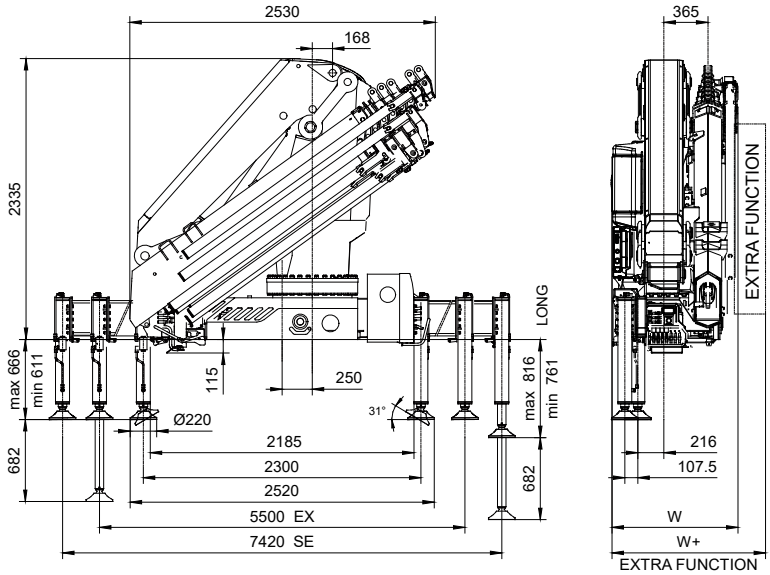
The table shows the total weights including oil inside the cylinders (fully retracted) and considering oil tank empty.

kg	Crane version									
Type of stabilizers	**2S**	**3S**	**4S**	**5S**	**6S**	**7S**	**8S**	**4SJ3**	**5SJ3**	**6SJ2**
EX-H	2815	2955	3095	3220	3325	3445	3535	3755	3710	3600
SE-H	2970	3110	3250	3375	3480	3600	3690	3910	3865	3755

The weights may vary by ± 3%
Additional weight for TI1 winch: 95 kg
Additional weight for TI2 winch: 150 kg
Additional weight of 1st extra function activated with slides: 8 kg pro hydraulic extension
Additional weight of 2nd extra function activated with slides: 2 kg pro hydraulic extension
Additional weight of 1st extra function activated with hose reel: 20 kg
Additional weight of 2nd extra function activated with hose reel: 10 kg

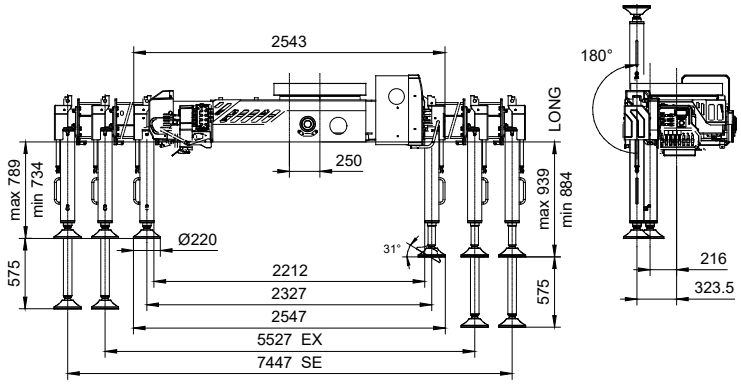
D.4 OVERALL DIMENSIONS

FIXED STABILIZERS LEGS



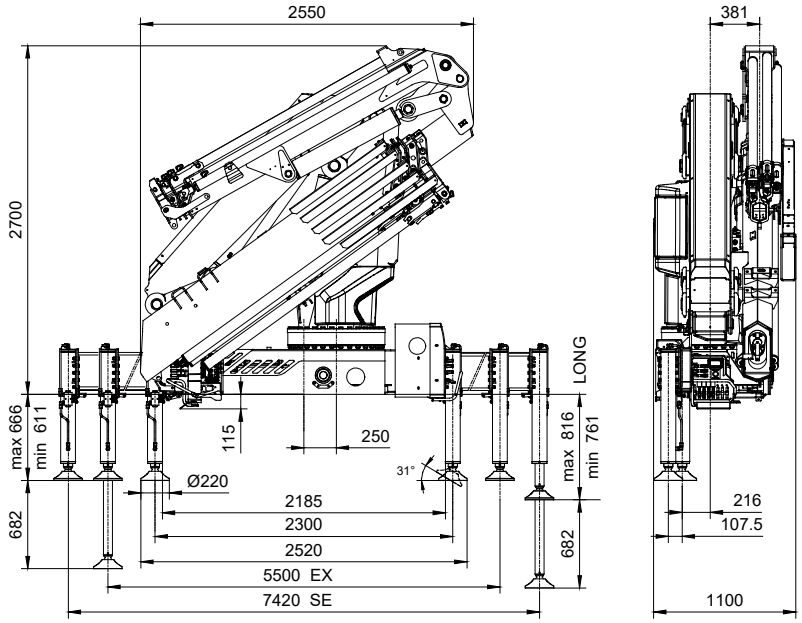
		2S	3S	4S	5S	6S	7S	8S
W (mm)		980	980	980	980	980	1055	1055
W+ (mm)	slides	1100	1100	1100	1100	1100	N/A	N/A
	hose reel	N/A	N/A	N/A	N/A	N/A	1130	1130

TURNING STABILIZERS LEGS

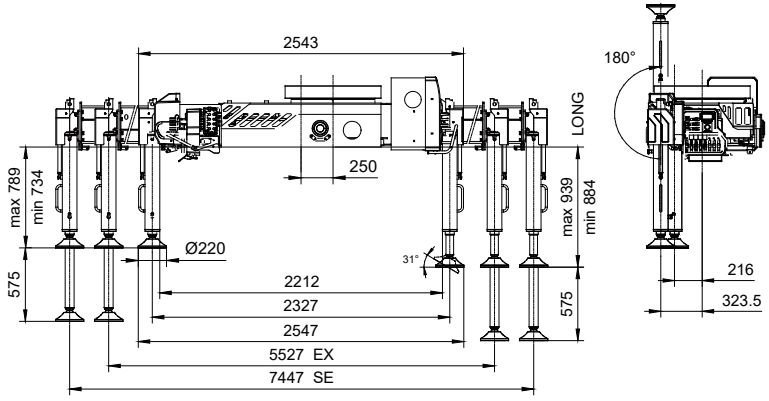


OVERALL DIMENSIONS
4SJ3

FIXED STABILIZERS LEGS

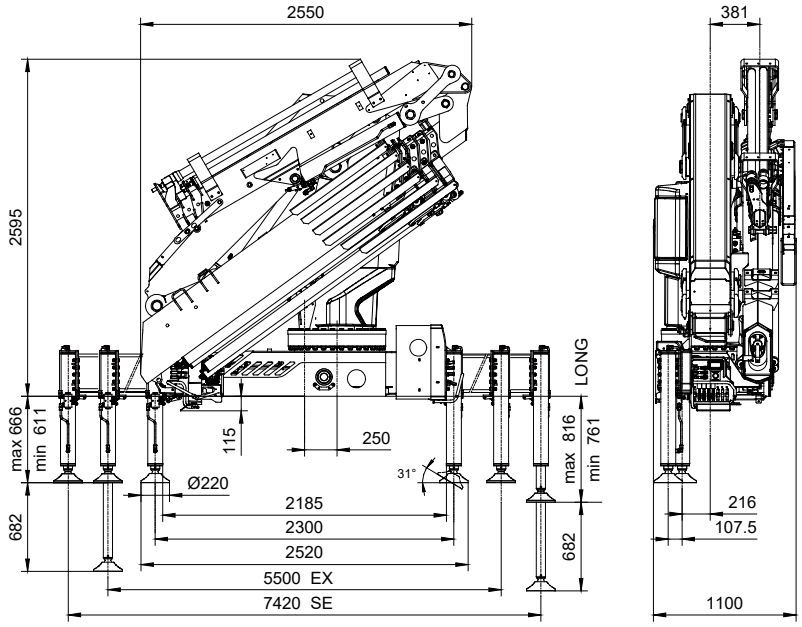


TURNING STABILIZERS LEGS

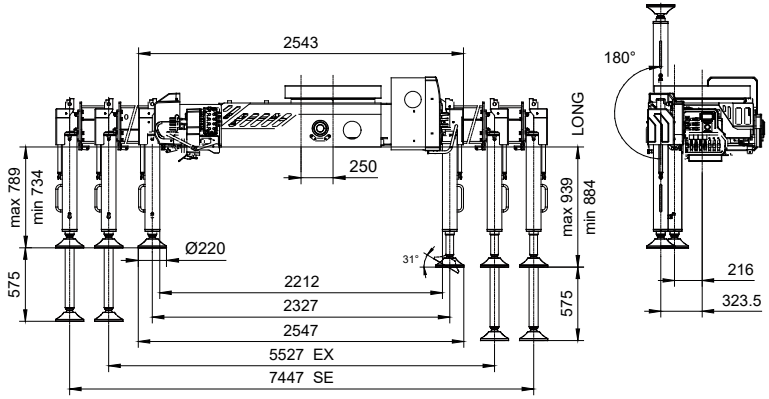


OVERALL DIMENSIONS
5SJ3

FIXED STABILIZERS LEGS

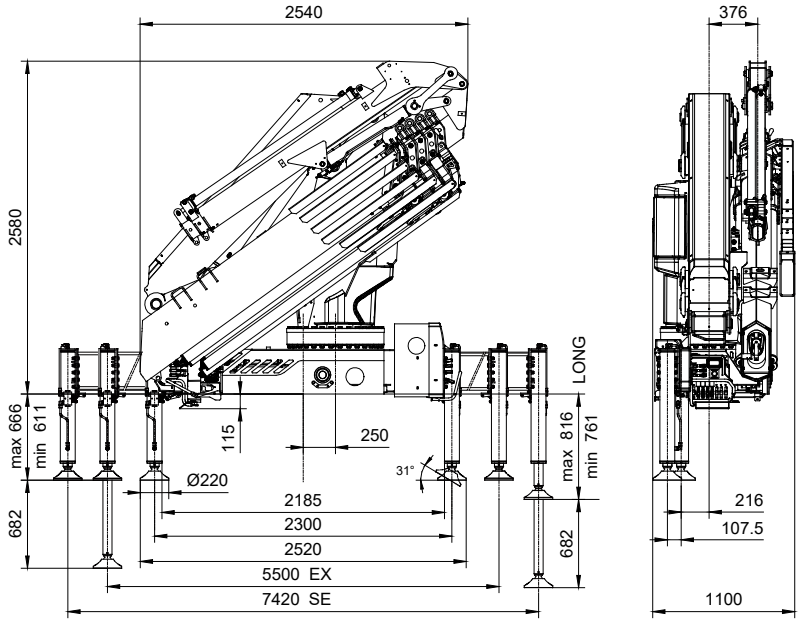


TURNING STABILIZERS LEGS

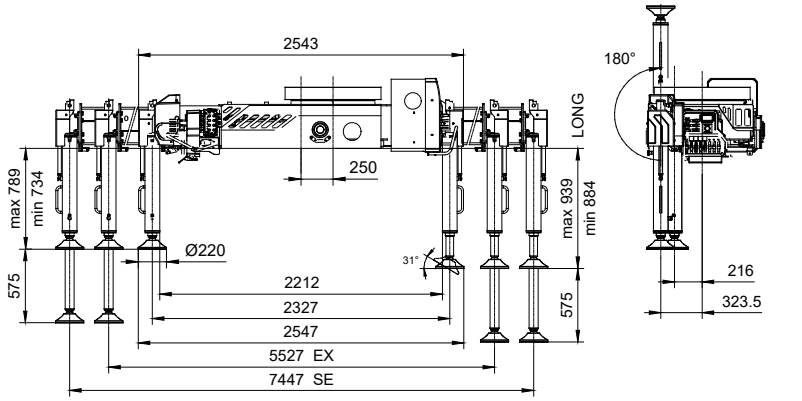


OVERALL DIMENSIONS
6SJ2

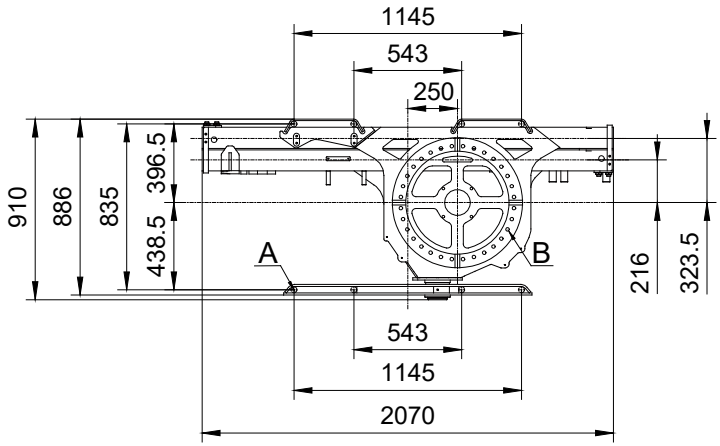
FIXED STABILIZERS LEGS



TURNING STABILIZERS LEGS



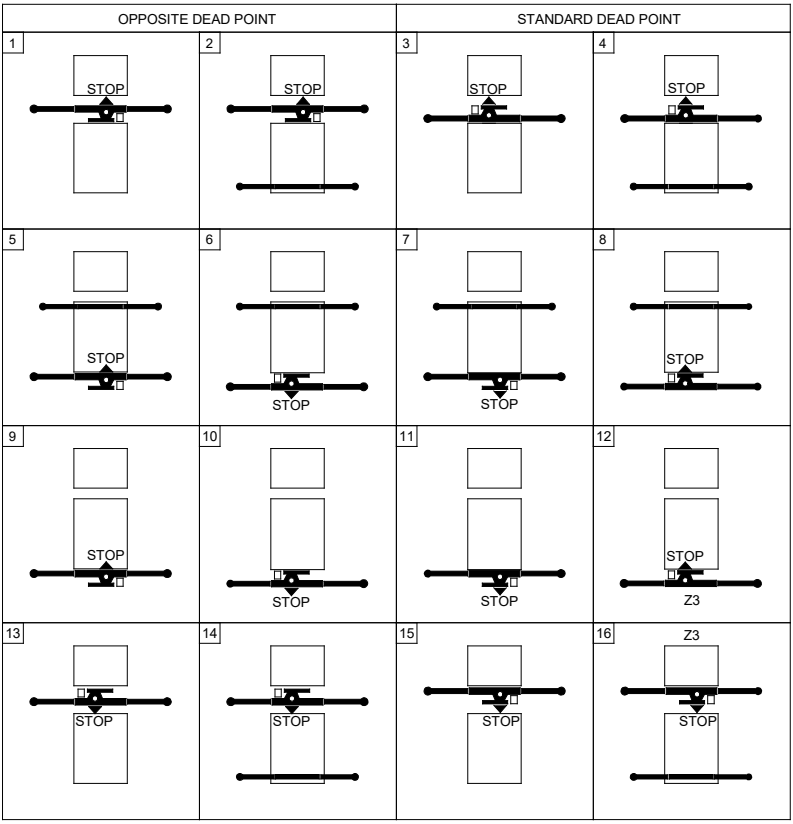
D.5 BASE DIMENSIONS AND MOUNTING BOLTS



Ref.	Description	Q.ty	Material Grade	Size (Q.ty)	Tightening torque
A	Kit with 8 crane mounting bolts	8	42CrMo4+QT EN 10083-3	M24x2 L=1100 (4) L=1015 (4)	400 Nm
	Kit with 4 crane mounting bolts	4	42CrMo4+QT EN 10083-3	M30x2 L=1000 (2) L=1100 (2)	700 Nm
B	Fixing bolts for slewing bearing	32	10.9	M20x2.5 L=150	484 Nm (570 Nm x 0.85) See E.4

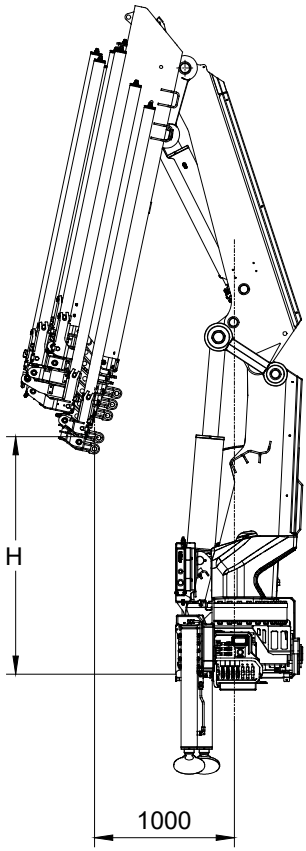
D.6 INSTALLATION TYPE NUMBER

Installation types numbers (ITN) for cranes with standard dead point (STOP) toward swivel bridge.



Legend:
▲ : position of dead point (STOP)
□ : position of main manual controls (on column side)

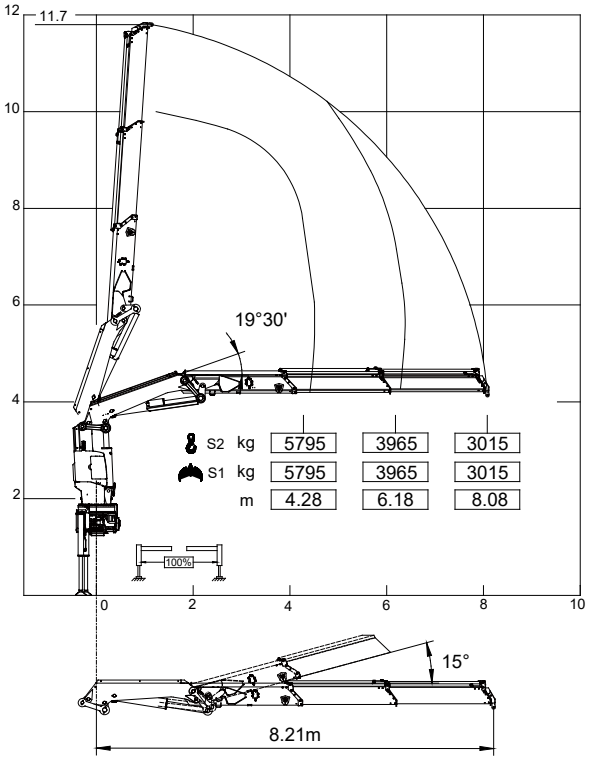
D.7 LIFTING HEIGHT CLOSE TO THE COLUMN



Version	H mm
2S	2040
3S	2040
4S	1952
5S	1865
6S	1778
7S	1696
8S	1609

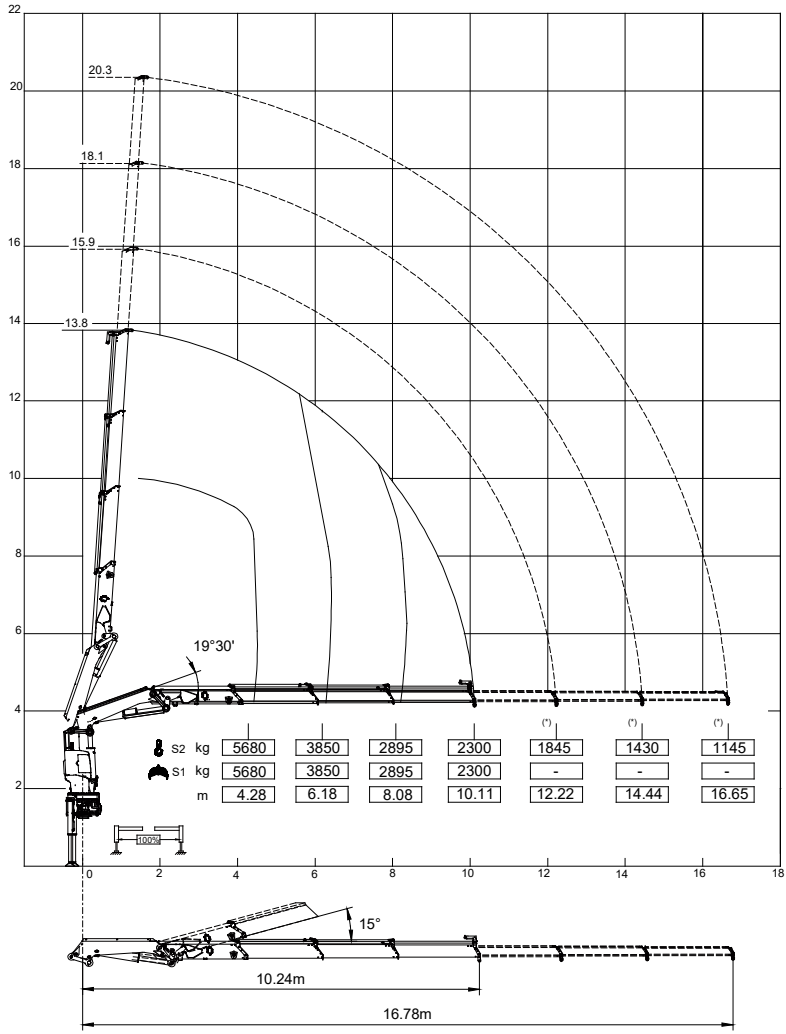
D.8 LOAD CHARTS FOR USE WITH HOOK/TOOL

VR26NG 2S



If an additional lifting tool is mounted, the rated capacities shall be reduced by the tool's weight

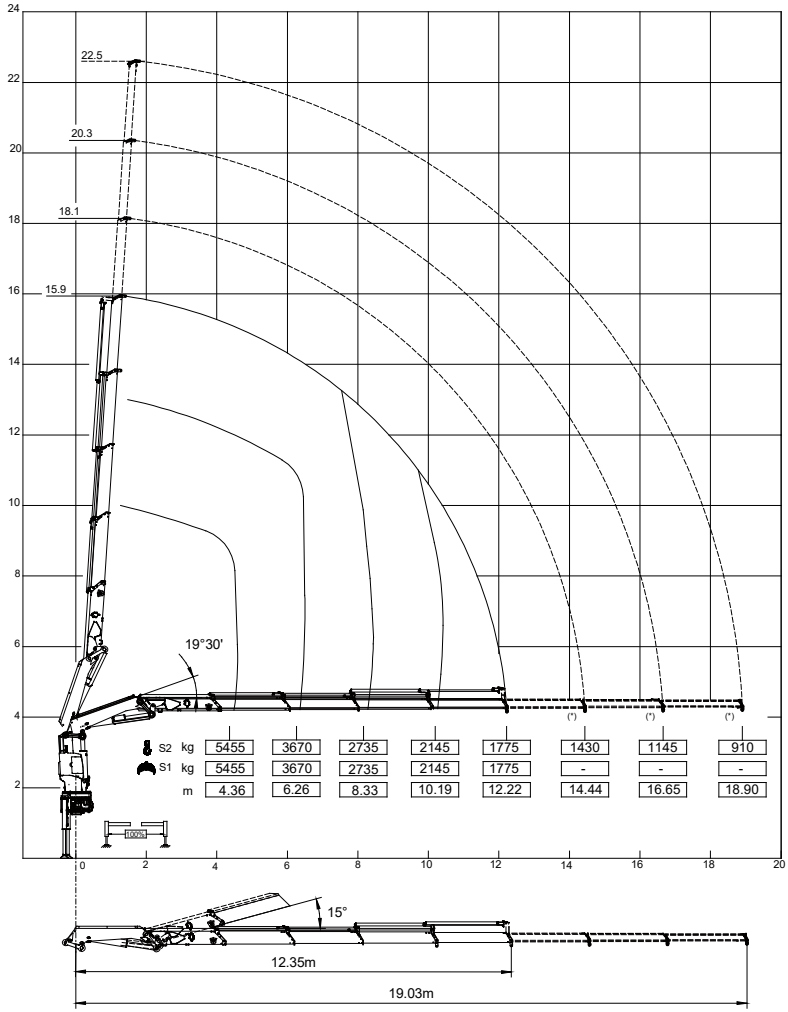
LOAD CHARTS FOR USE WITH HOOK/TOOL
VR26NG 3S



S2 kg	5680	3850	2895	2300	1845 (*)	1430 (*)	1145 (*)
S1 kg	5680	3850	2895	2300	-	-	-
m	4.28	6.18	8.08	10.11	12.22	14.44	16.65

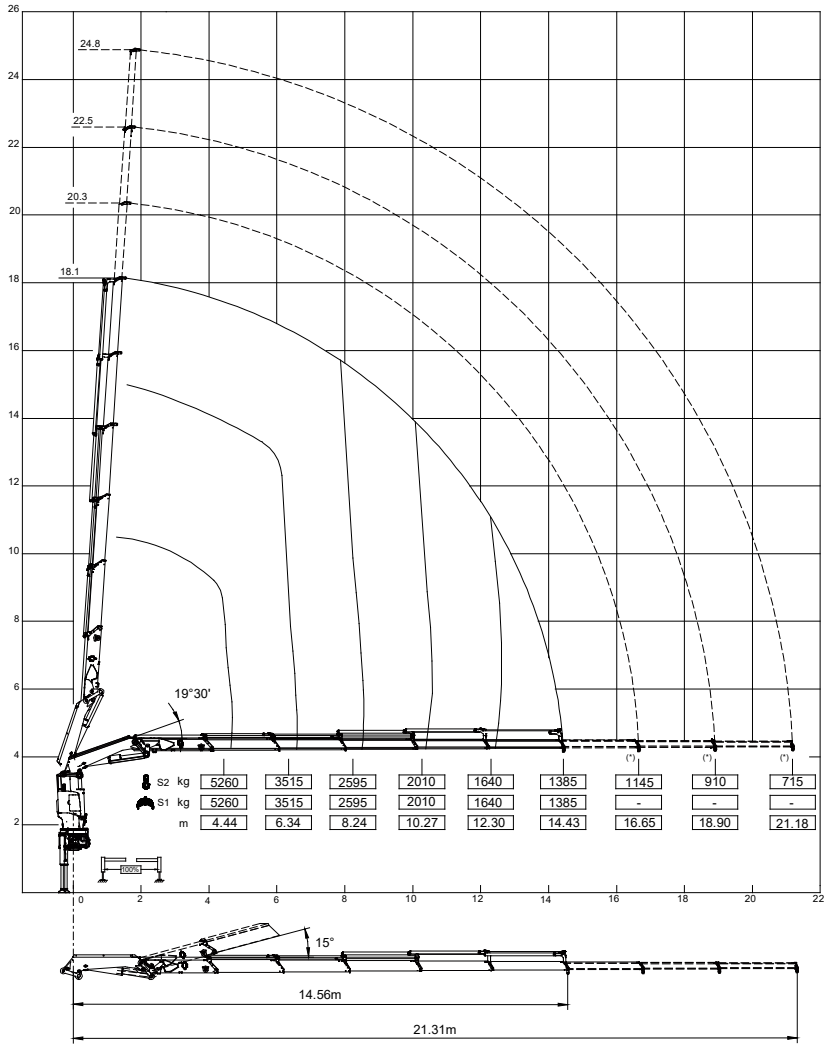
(*) Manual extensions (optional): these cannot lift additional hydraulic tools
If an additional lifting tool is mounted, the rated capacities shall be reduced by the tool's weight

LOAD CHARTS FOR USE WITH HOOK/TOOL
VR26NG 4S



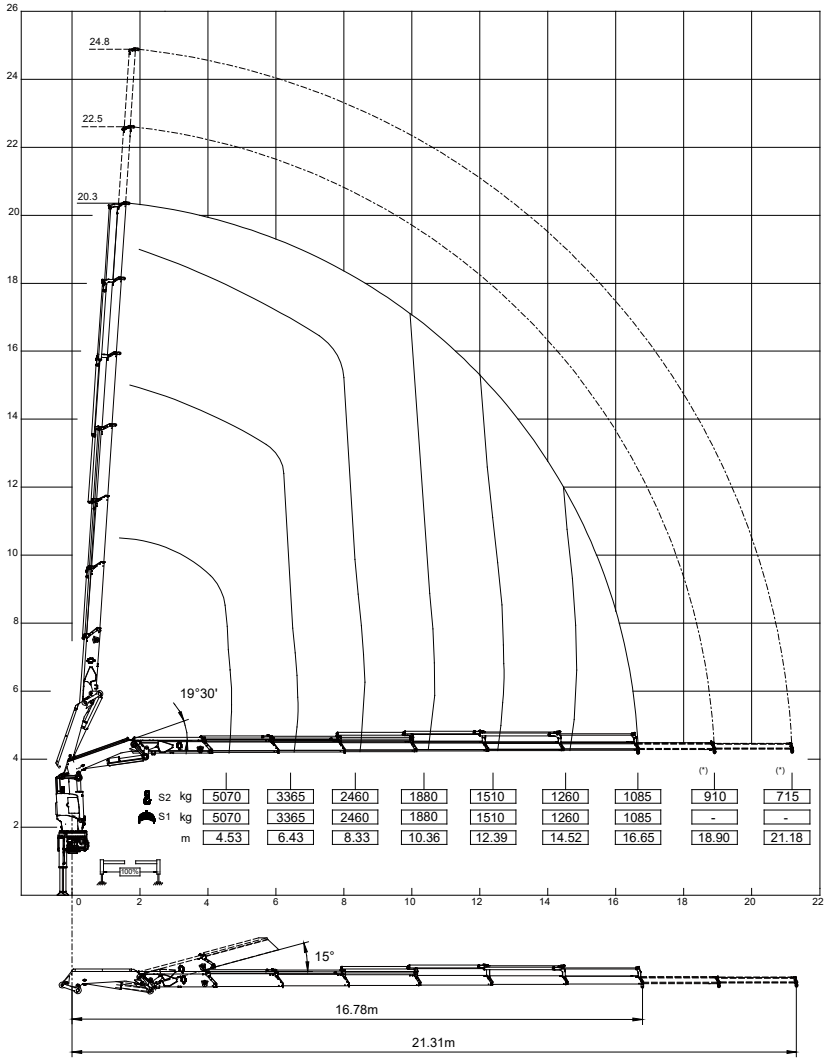
(*) Manual extensions (optional): these cannot lift additional hydraulic tools
If an additional lifting tool is mounted, the rated capacities shall be reduced by the tool's weight

LOAD CHARTS FOR USE WITH HOOK/TOOL
VR26NG 5S



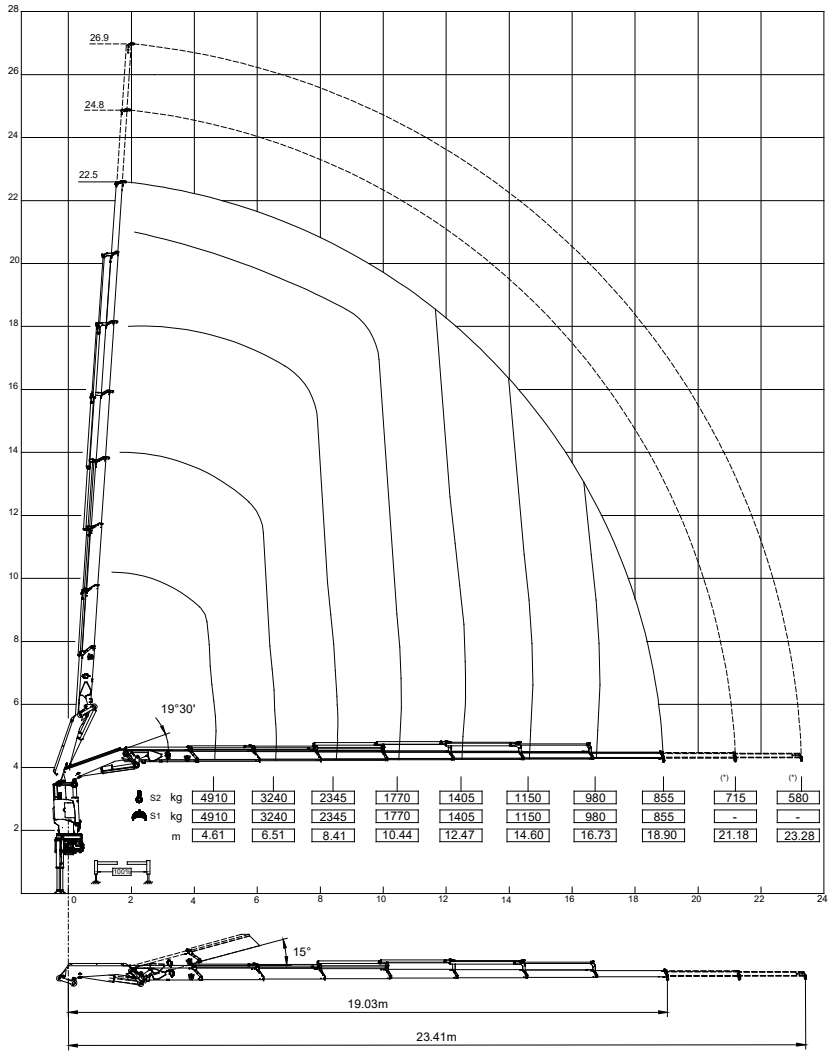
(*) Manual extensions (optional): these cannot lift additional hydraulic tools
If an additional lifting tool is mounted, the rated capacities shall be reduced by the tool's weight

LOAD CHARTS FOR USE WITH HOOK/TOOL
VR26NG 6S



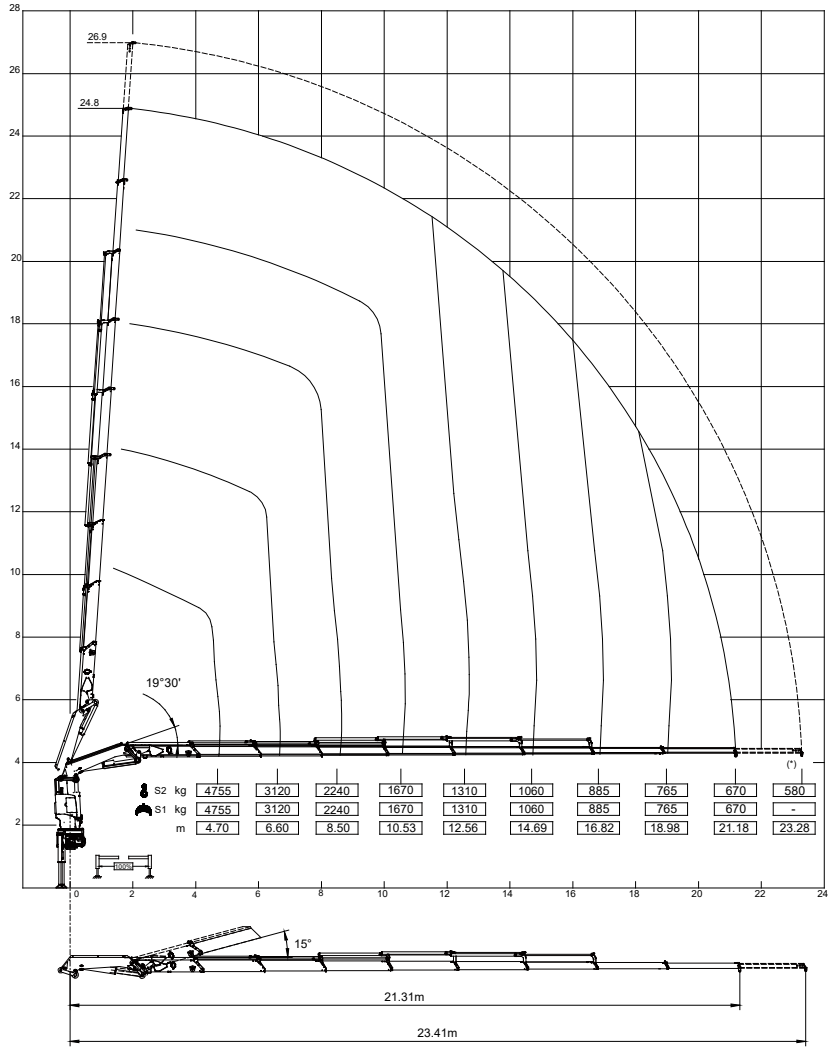
(*) Manual extensions (optional): these cannot lift additional hydraulic tools
If an additional lifting tool is mounted, the rated capacities shall be reduced by the tool's weight

LOAD CHARTS FOR USE WITH HOOK/TOOL
VR26NG 7S



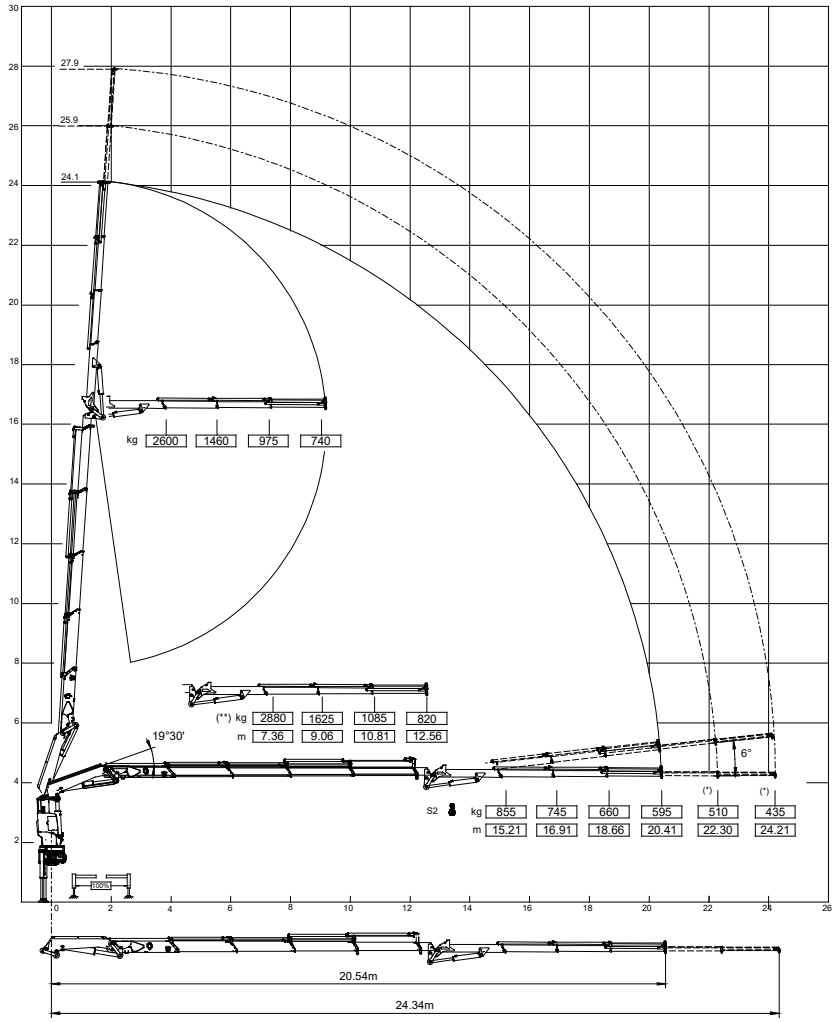
(*) Manual extensions (optional): these cannot lift additional hydraulic tools
If an additional lifting tool is mounted, the rated capacities shall be reduced by the tool's weight

LOAD CHARTS FOR USE WITH HOOK/TOOL
VR26NG 8S



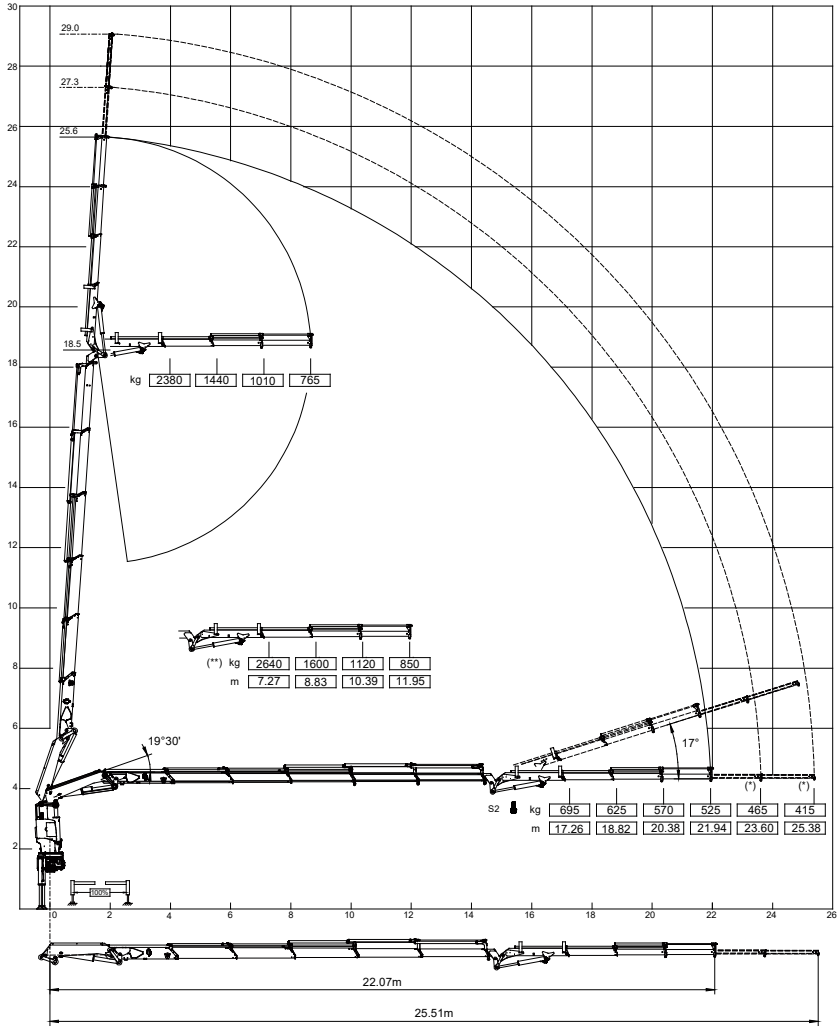
(*) Manual extensions (optional): these cannot lift additional hydraulic tools
If an additional lifting tool is mounted, the rated capacities shall be reduced by the tool's weight

LOAD CHARTS FOR USE WITH HOOK
HC265 4SJ3



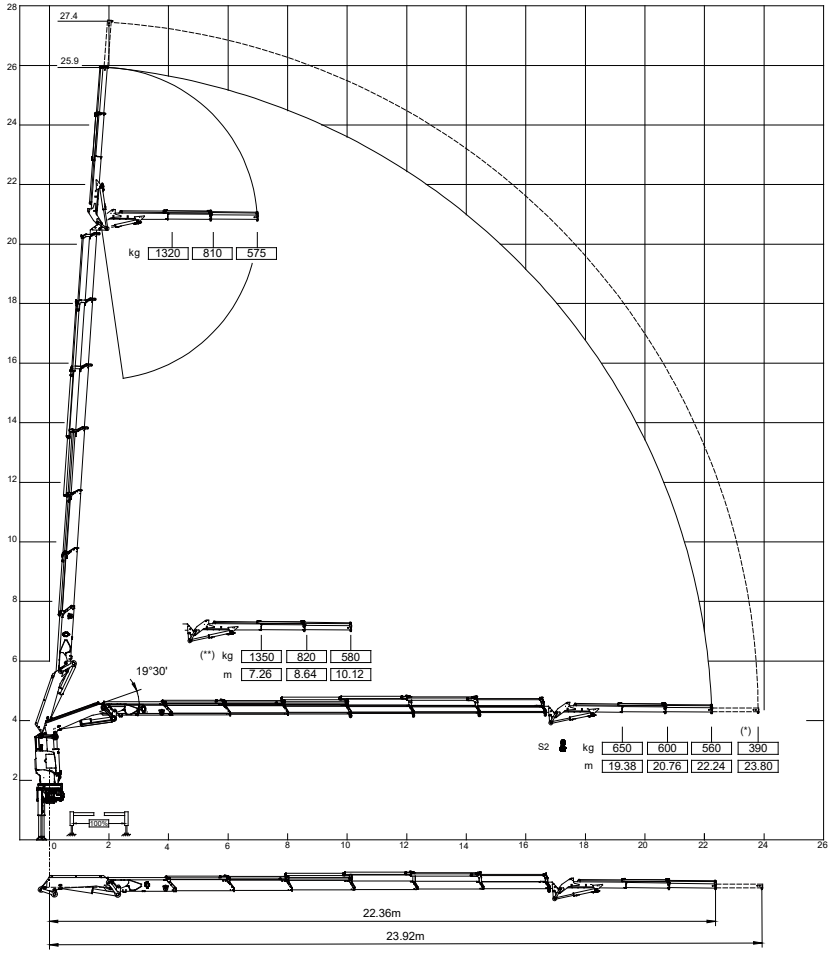
(*) Manual extensions (optional): these cannot lift additional hydraulic tools
(**) Max. lifting capacity of jib
The given rated capacities can be moved only by operating the jib.

LOAD CHARTS FOR USE WITH HOOK
HC265 5SJ3



(*) Manual extensions (optional): these cannot lift additional hydraulic tools
(**) Max. lifting capacity of jib
The given rated capacities can be moved only by operating the jib.

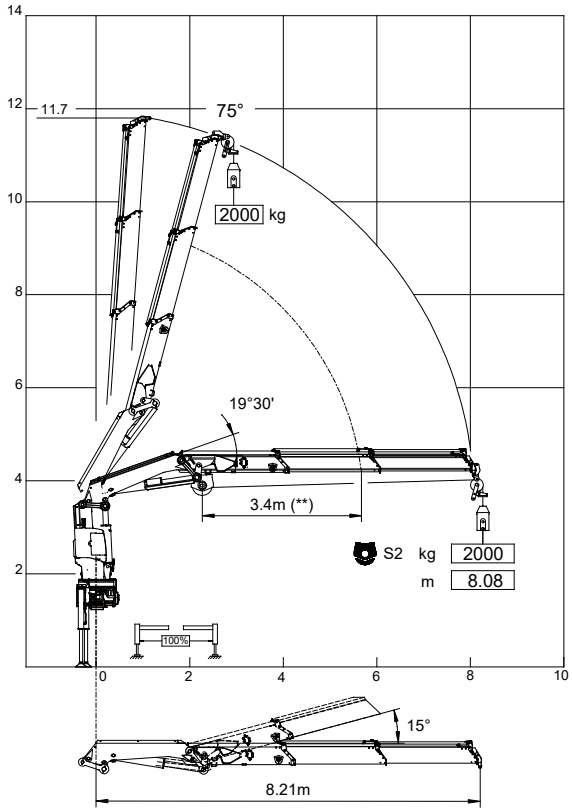
LOAD CHARTS FOR USE WITH HOOK
HC265 6SJ2



(*) Manual extensions (optional): these cannot lift additional hydraulic tools
(**) Max. lifting capacity of jib
The given rated capacities can be moved only by operating the jib.

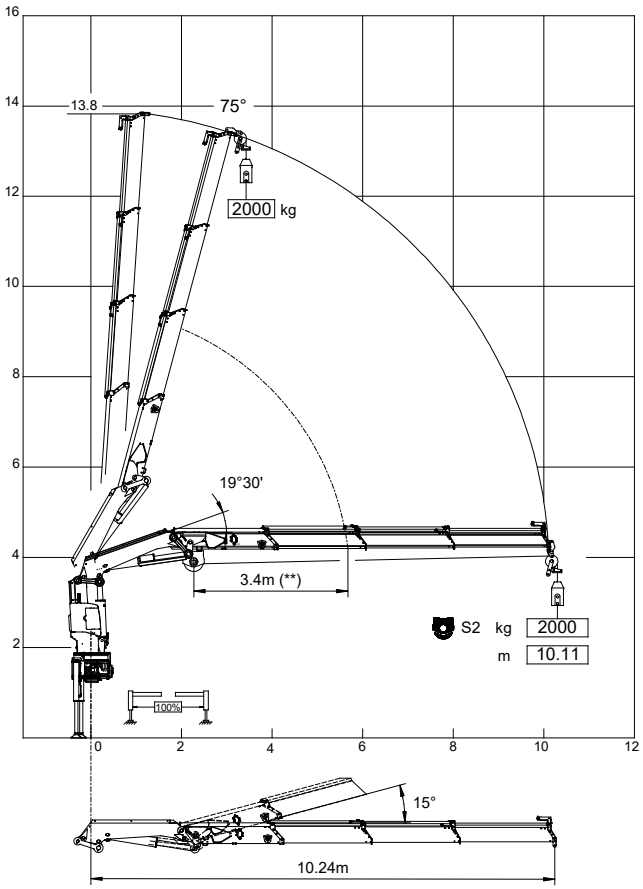
D.9 LOAD CHARTS FOR TI2 WINCH IN SINGLE LINE

VR26NG 2S + TI2 SINGLE LINE



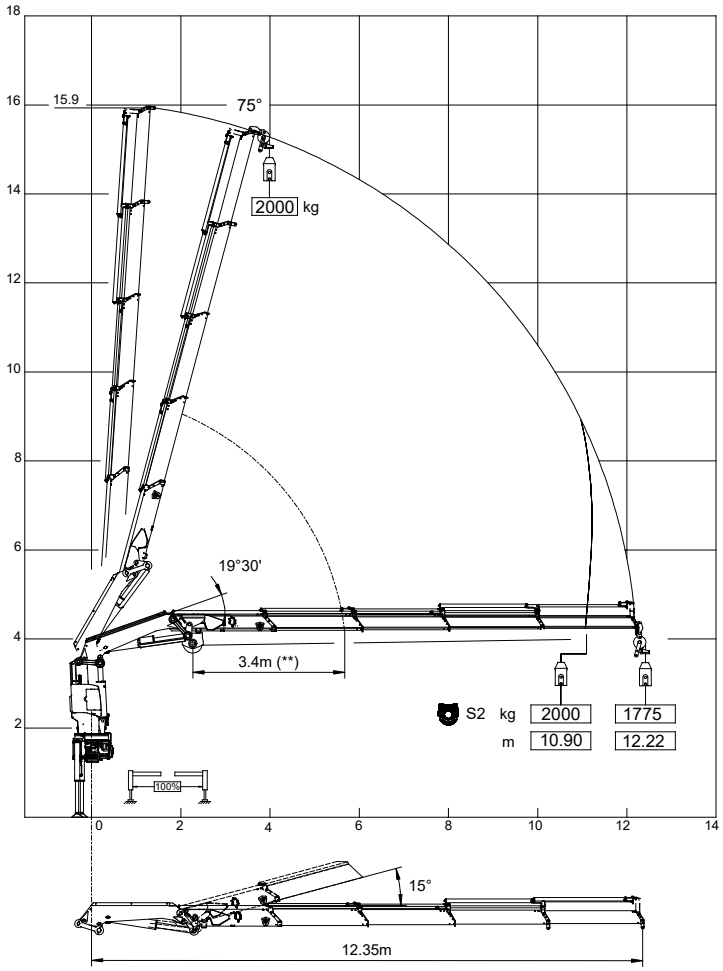
(**) Minimum distance winch - pulley
Winch max. pull: 2000 kg

LOAD CHART FOR WINCH TI2 IN SINGLE LINE
VR26NG 3S + TI2 SINGLE LINE



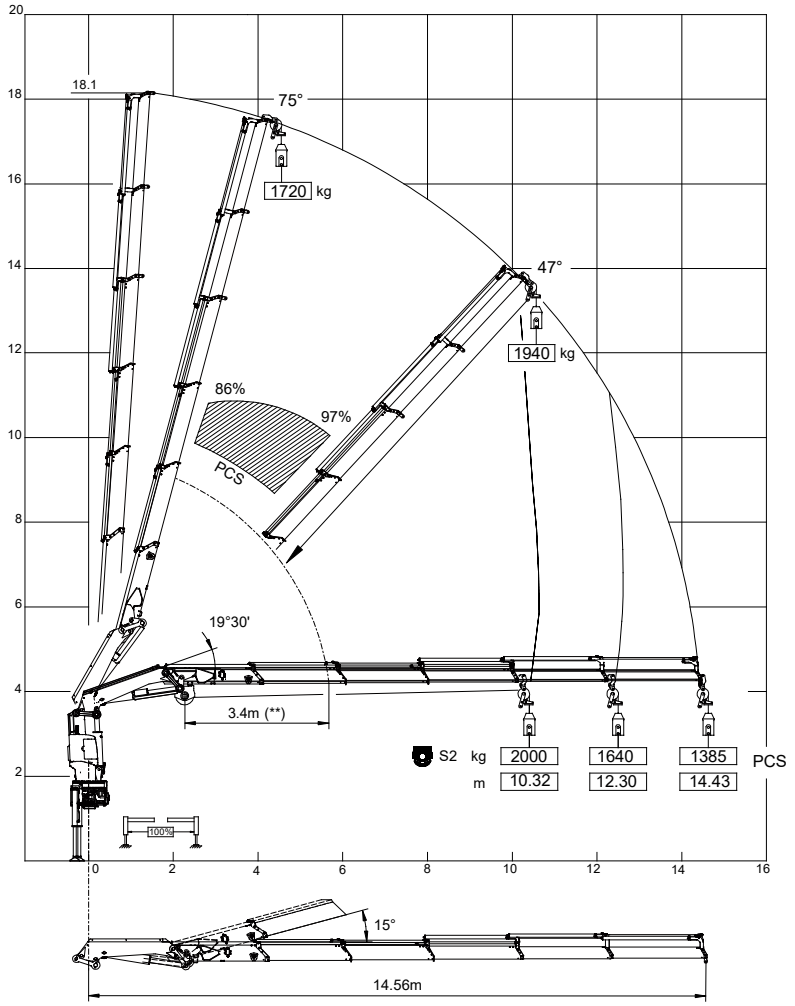
(**) Minimum distance winch - pulley
Winch max. pull: 2000 kg

LOAD CHART FOR WINCH TI2 IN SINGLE LINE
VR26NG 4S + TI2 SINGLE LINE



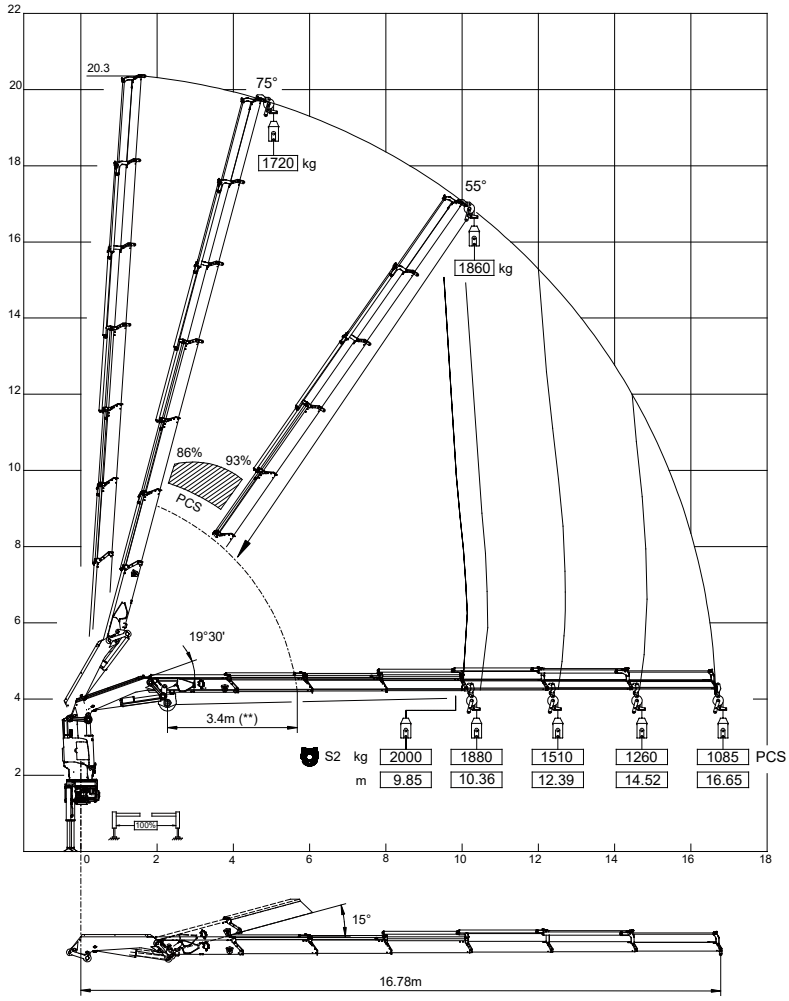
(**) Minimum distance winch - pulley
Winch max. pull: 2000 kg

LOAD CHART FOR WINCH TI2 IN SINGLE LINE
VR26NG 5S + TI2 SINGLE LINE



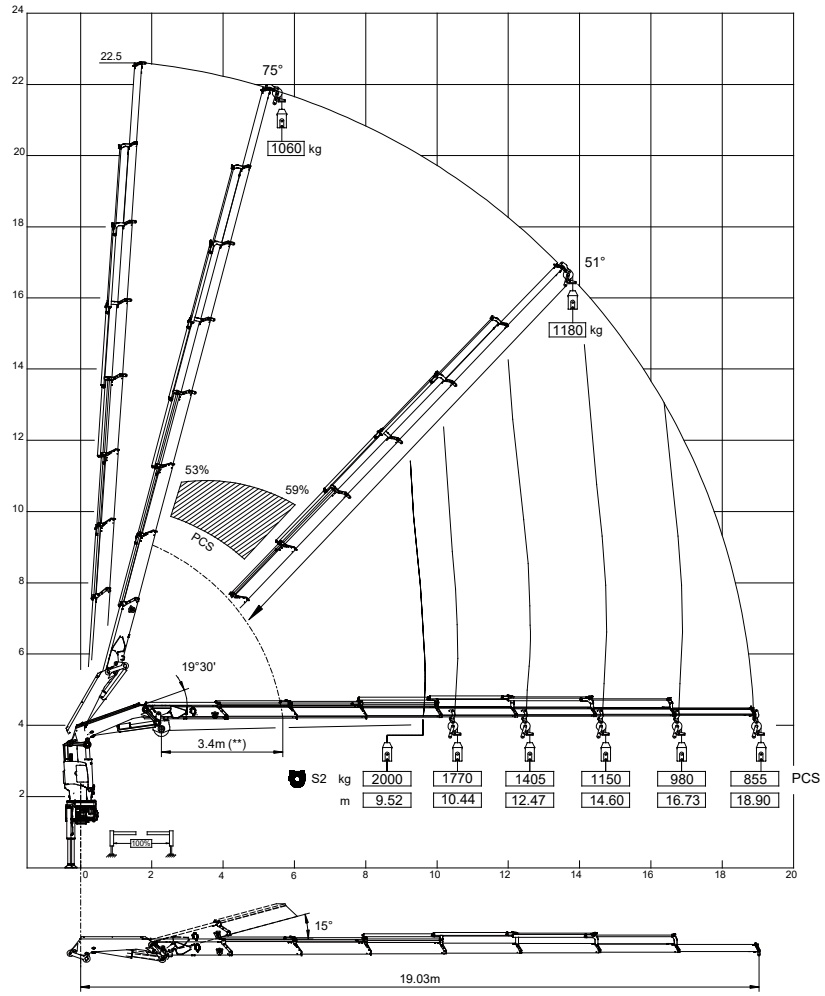
(**) Minimum distance winch - pulley
Winch max. pull with PCS: 2000 kg
PCS: Pull Control System, present on CE/TOP cranes

LOAD CHART FOR WINCH TI2 IN SINGLE LINE
VR26NG 6S + TI2 SINGLE LINE



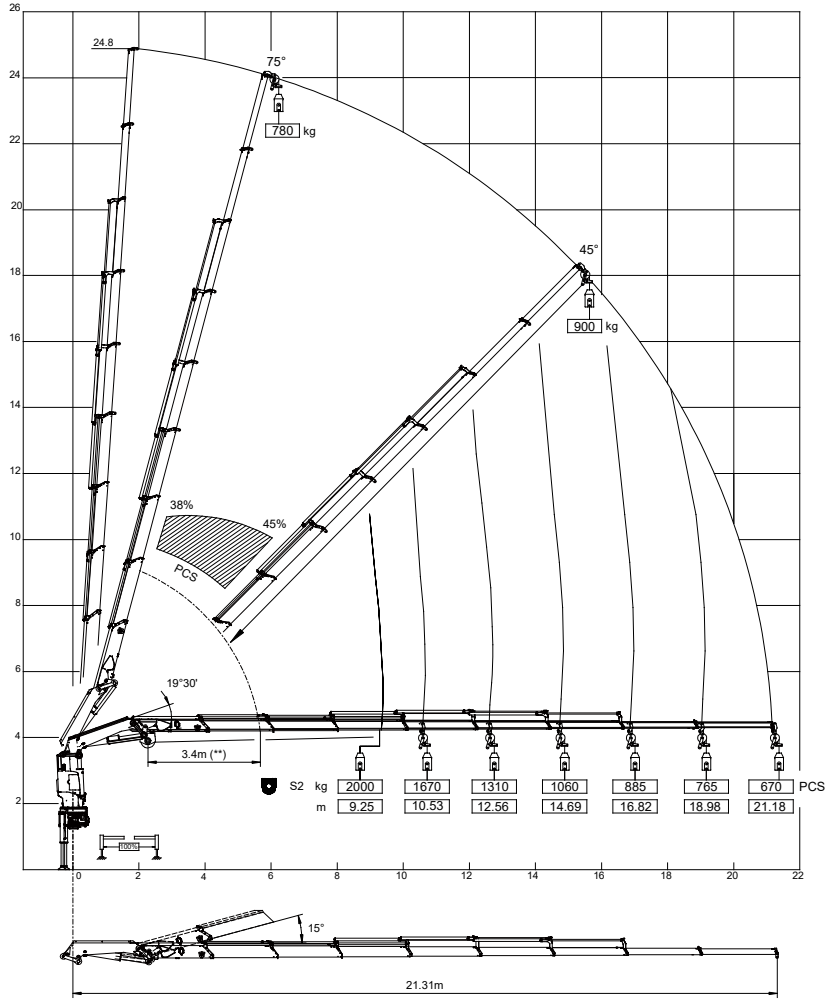
(**) Minimum distance winch - pulley
Winch max. pull with PCS: 2000 kg
PCS: Pull Control System, present on CE/TOP cranes

LOAD CHART FOR WINCH TI2 IN SINGLE LINE
VR26NG 7S + TI2 SINGLE LINE



(**) Minimum distance winch - pulley
Winch max. pull with PCS: 2000 kg
PCS: Pull Control System, present on CE/TOP cranes

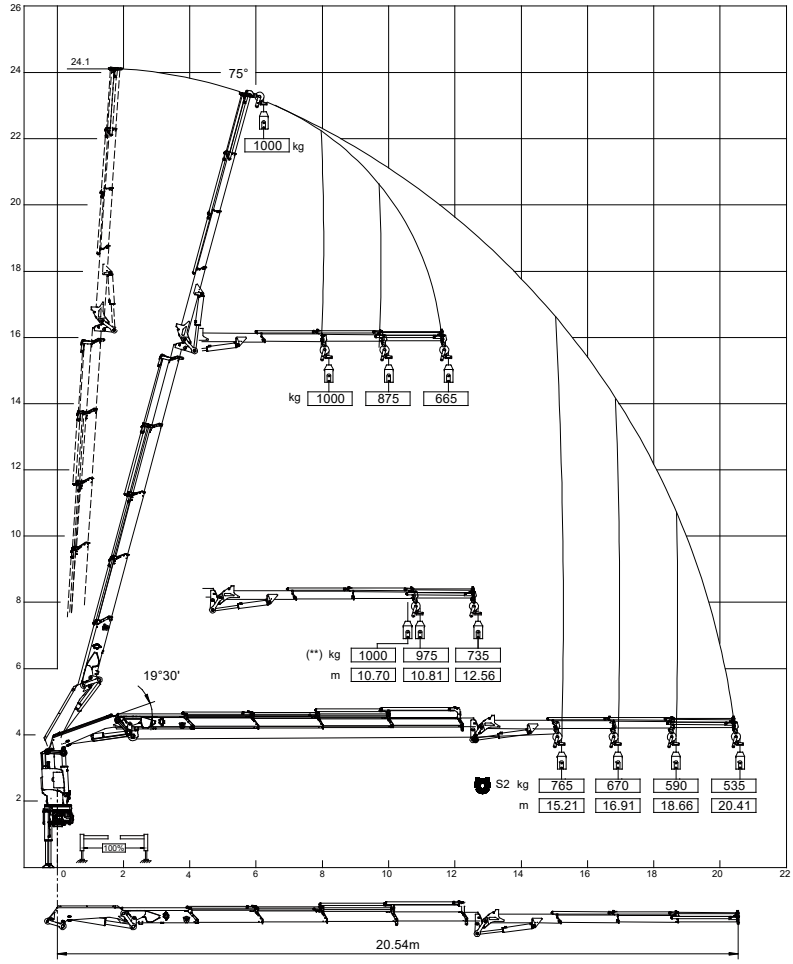
LOAD CHART FOR WINCH TI2 IN SINGLE LINE
VR26NG 8S + TI2 SINGLE LINE



(**) Minimum distance winch - pulley
Winch max. pull with PCS: 2000 kg
PCS: Pull Control System, present on CE/TOP cranes

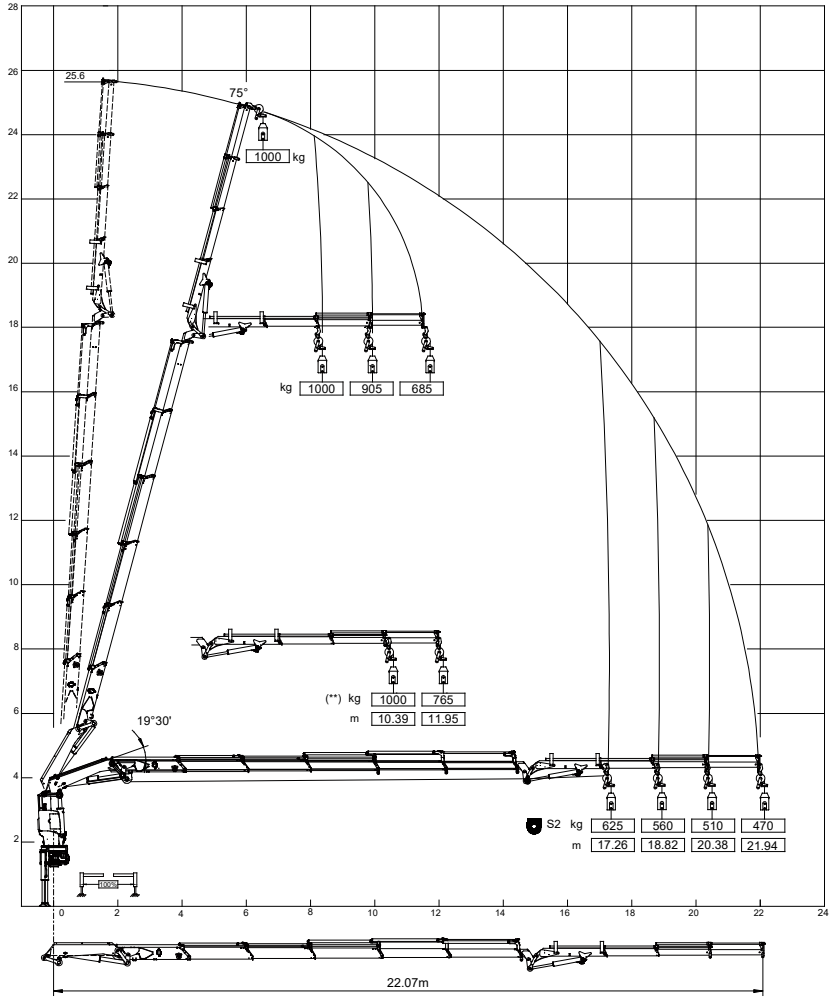
D.10 LOAD CHARTS FOR TI1 WINCH IN SINGLE LINE

VR26NG 4SJ3 + TI1 SINGLE LINE



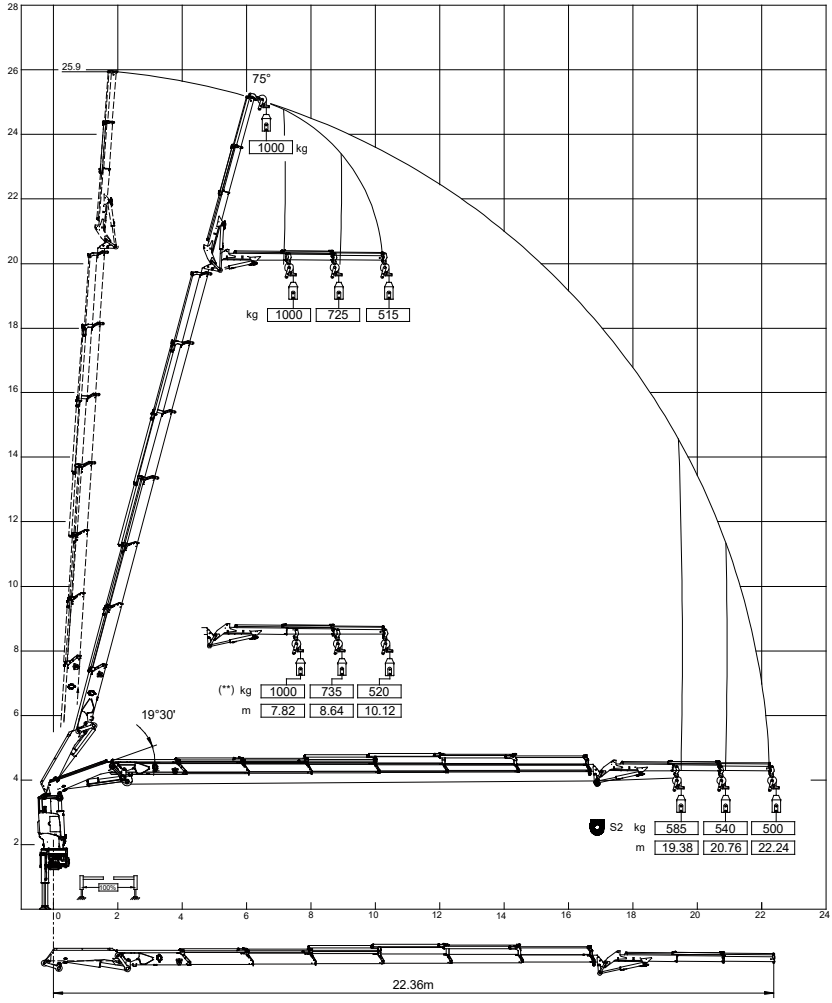
(**) Max. lifting capacity of jib
Winch max. pull: 1000 kg

LOAD CHART FOR WINCH TI1 IN SINGLE LINE
VR26NG 5SJ3 + TI1 SINGLE LINE



(**) Max. lifting capacity of jib
Winch max. pull: 1000 kg

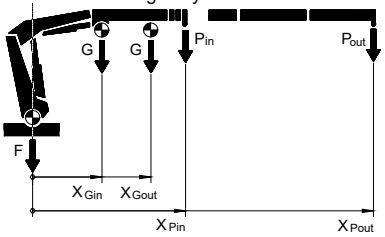
LOAD CHART FOR WINCH TI1 IN SINGLE LINE
VR26NG 6SJ2 + TI1 SINGLE LINE

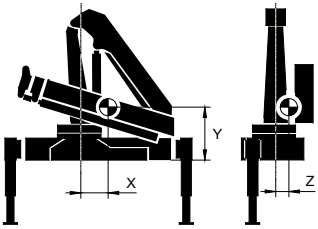


(**) Max. lifting capacity of jib
Winch max. pull: 1000 kg

D.11 CENTERS OF GRAVITY AND TEST LOADS

This annex contains the data needed for the stability test in accordance with EN 12999.
Loads and centers of gravity





Hooking point for the test load

Key:
F = weight of fixed parts (stabilizers, base, column, 1st boom cylinder)
G = weight of booms
X_G = distance between G and column axis
P = rated capacity
X_P = distance between P and column axis
TL = test load, to be hooked to the last hydraulic extension
TL2 - #S = additional test load, to be hooked to the hydraulic extension indicated in the table below
X, Y, Z = coordinates of center of gravity for whole crane folded in transport position (EX-H version)
in = configuration with all hydraulic extensions fully retracted
out = configuration with all hydraulic extensions fully extracted

WEIGHTS AND CENTERS OF GRAVITY

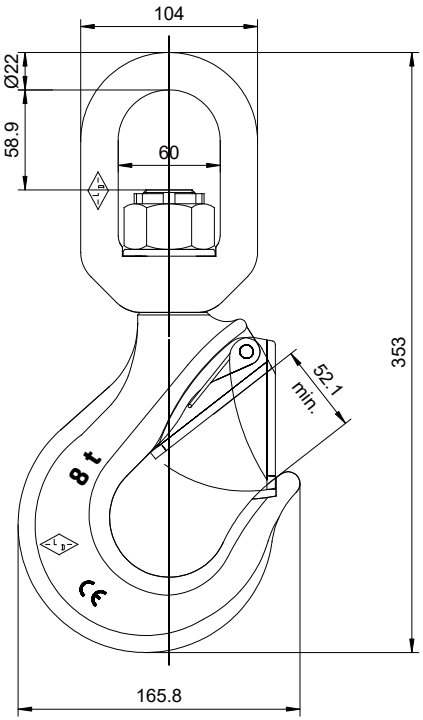
VR26NG	F kg	G kg	X_G in / out m	P in / out kg	X_P in / out m	TL (TL2 - #S) kg	X	Y	Z
								mm	
2S	EX-H : 1725 SE-H : 1880	1090	2.05 2.89	5795 3015	4.28 8.08	**3769**	279	820	7
3S		1230	2.17 3.51	5680 2300	4.28 10.11	**2875**	277	834	26
4S		1370	2.28 4.30	5455 1775	4.36 12.22	**2226**	269	848	44
5S		1495	2.38 5.09	5260 1385	4.44 14.43	**1767**	260	861	56
6S		1600	2.46 5.88	5070 1085	4.53 16.65	**1415**	257	871	63
7S		1720	2.52 6.63	4910 855	4.61 18.90	**1069** **(118 - 4S)**	243	890	78
8S		1810	2.58 7.29	4755 670	4.70 21.18	**838** **(154 - 4S)**	236	904	88
4SJ3		2030	9.13 9.39	855 595	15.21 20.41	**744** **(262 - 4S)**	228	1055	108
5SJ3		1985	9.38 9.56	695 525	17.26 21.94	**656** **(223 - 5S)**	229	1018	106
6SJ2		1875	9.13 9.17	650 560	19.38 22.24	**700** **(169 - 6S)**	236	961	93

The data are relating to crane configuration with horizontal booms.
For the jib version, the "in" data are relating to standard crane's extensions always fully extracted.

D.12 HOOK DATA

HOOK MOUNTED ON STANDARD BOOM
VERSIONS: 2S, 3S, 4S, 5S, 6S, 7S, 8S

DIMENSIONS

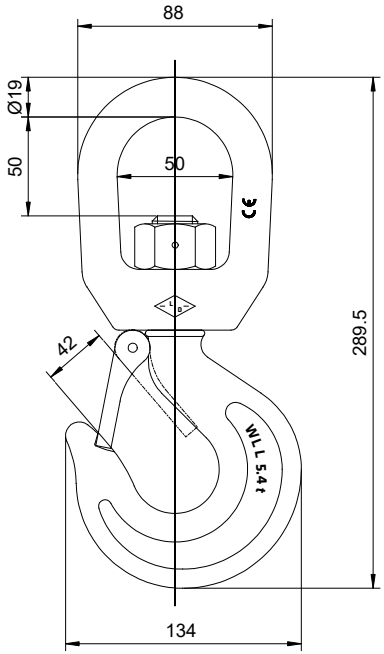


TECHNICAL PROPERTIES
Working load limit (WLL) : 8000 kg
Material: alloy steel
Weight: 6.2 kg
Swivel hook
Reference standard: DIN 15401

HOOK DATA

HOOK MOUNTED ON JIB BOOM
VERSION: 4SJ3, 5SJ3, 6SJ2

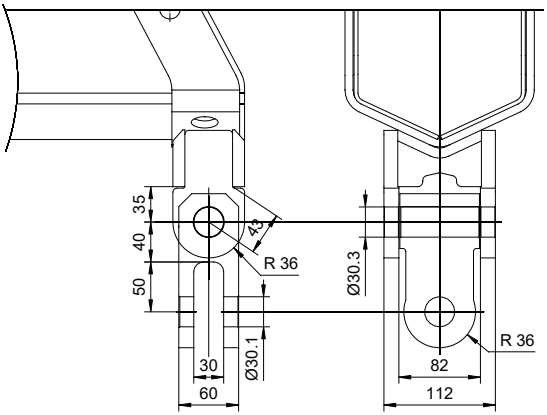
DIMENSIONS

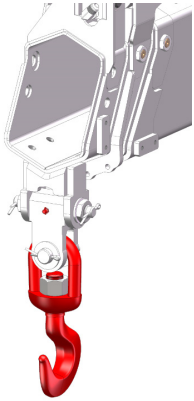


TECHNICAL PROPERTIES
Working load limit (WLL) : 5400 kg
Material: alloy steel
Weight: 3.2 kg
Swivel hook
Reference standard: DIN 15401

D.13 LOAD ATTACHMENT

ATTACHMENT FOR HOOK AND LIFTING TOOL





D.14 HYDRAULIC SYSTEM

FITTINGS FOR CONNECTION TO PUMP

VR26NG	RDC	
Control valve pressure line		M 3/4"-16 GAS
Tank suction line		M 1" 1/2 BSP

EXTENSION TIMES OF HYDRAULIC CYLINDERS

VR26NG	Extension time s	Retraction time s
Slewing with 1 gear motor (180°)	30	30
Slewing with 2 gear motors (180°)	44	44
1.boom cylinder	N/A	N/A
2.boom cylinder	N/A	N/A
boom extension 1S (SGS active)	N/A	N/A
boom extension 2S (SGS active)	N/A	N/A
boom extension 3S (SGS active)	N/A	N/A
boom extension 4S (SGS active)	N/A	N/A
boom extension 5S (SGS active)	N/A	N/A
boom extension 6S (SGS active)	N/A	N/A
boom extension 7S (SGS active)	N/A	N/A
boom extension 8S (SGS active)	N/A	N/A
jib articulation cylinder	N/A	N/A
jib extension 3S	N/A	N/A
jib extension 2S	N/A	N/A

Times are indicative and referring to the following operating conditions:
- unloaded crane operated with a single control lever
- oil flow rate recommended for RDC crane
- ISO VG 46 oil at a temperature of 50°C

MAX. ALLOWABLE SINK RATE FOR THE LOAD

The sink rate is the uncontrolled descent of the load in a given time interval due to internal leakage of hydraulic components. The table below shows the maximum permitted descent of the rated load, at the max. hydraulic outreach and in the given time interval.

VR26NG	Time interval min.	Max. load descent mm
2S	10	404
3S	10	506
4S	10	244
5S	10	289
6S	10	333
7S	10	378
8S	10	424
4SJ3	10	408
5SJ3	10	439
6SJ2	10	445

CAPACITY OF HYDRAULIC SYSTEM

VR26NG	Cylinders extended ℓ	Cylinders retracted ℓ
2S	74	47
3S	82	52
4S	90	56
5S	98	62
6S	106	67
7S	115	74
8S	123	81
4SJ3	106	66
5SJ3	107	72
6SJ2	116	73

Capacities do not include the oil tank.

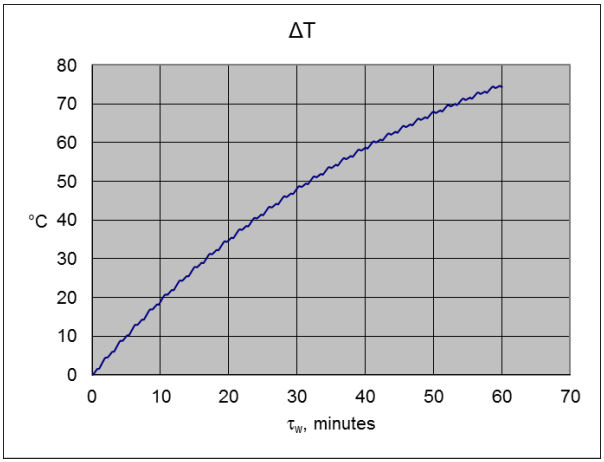
ADDITIONAL CAPACITY FOR HYDRAULICALLY OPERATED STABILIZER EXTENSIONS

EX-H	+4.0	+2.5
SE-H	+6.5	+3.5

D.15 OIL COOLER

TECHNICAL SPECIFICATIONS
Heat transfer coefficient: 235 W/K (oil flow rate of 40 ℓ/min)
Activation temperature: 48 °C
Weight: 13.5 kg
Capacity: 4 ℓ

For a crane without oil cooler performing a sequence of standard work cycles, the difference in temperature between the oil and the environment is shown in the graph below.



The oil cooler is recommended when

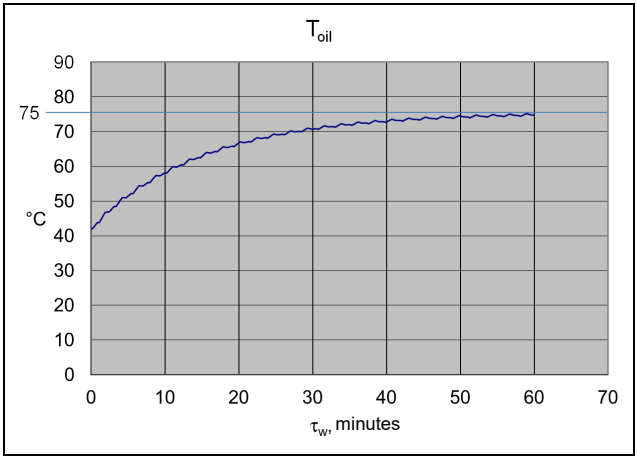
$$T_{env} + \tau_w > 57$$

where:
T_{env} : temperature of the environment (°C)
ΔT : difference in temperature between the oil and the environment (°C)
τ_w : working time (minutes)

However, when a crane equipped with oil cooler carries out a sequence of standard work cycles, the oil temperature exceeds 75 °C after the following working times:

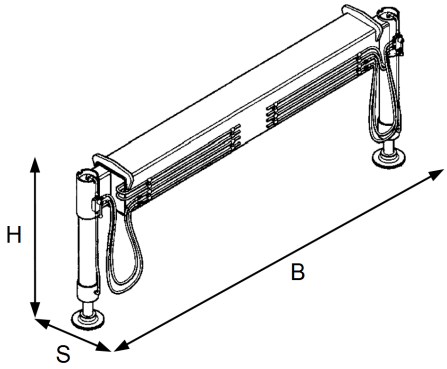
T_{env} (°C)	τ_w to exceed 75 °C (minutes)
42	no limit
45	35
48	25
50	21
52	18
54	15

The graph below shows the temperature trend (T_{oil}) with oil cooler when T_{env} = 45 °C.



Notes:
The max recommended oil temperature is 75°C (at 80°C you must stop working)
The calculation of the oil temperature is purely indicative and depending on several variables (e.g. working cycle, wind, humidity, weather, etc.)

D.16 ADDITIONAL STABILIZERS



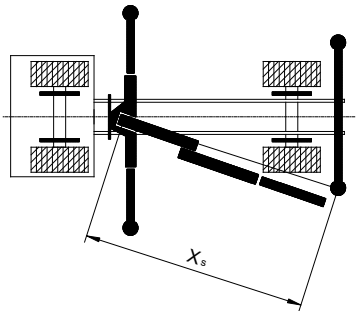
Additional stabilizers must be chosen so that:
- the installation is stable (see Installer Manual)
- the max. force acting on the additional stabilizers, F_s, is lower than the max. load allowed by the stabilizers itself, R_{max}.

$$F_s = M_{dyn} / X_s \qquad F_s \geq 0.6\ F_{sg}$$

where:
M_{dyn}: max. dynamic moment of the crane
X_s: distance between column axis - stab. cylinder
F_{sg}: max force on stabilizer leg

Check that: $F_s \leq R_{max}$

R_{max} is given in the technical specifications of the additional stabilizers.



- In addition, CE additional stabilizer must be equipped with safety devices integrated with the crane's stability control system. Therefore we recommend to install the following models designed by the crane's manufacturer:

Code	Spread (m)	Weight (kg)	R_{max} (kg)	Overall dimensions BxHxS (mm)
7850111	3.33	270	8200	2334x930x220
7850112	3.33	260	8200	2334x840x220
7850113	4.74	390	8250	2346x930x400
7850120	4.74	380	8250	2346x840x400
7850102	5.02	570	12700	2420x1095x430
7850099	5.02	540	12700	2420x970x430

For further information see the User Manual for outriggers.

D.17 RECOMMENDED ADDITIONAL LIFTING TOOLS

CLAMSHELL BUCKET

Crane version	Gross load kg (1)	Data of recommended tool				Payload kg (3)	Load ratio	
		HYVA model	weight kg	volume dm^3	capacity kg (2)		crane (4)	tool (5)
2S	3015	H605-650	410	650	975	**2605**	46%	100%
3S	2300	H605-650	410	650	975	**1890**	60%	100%
4S	1775	H605-650	410	650	975	**1365**	78%	100%
5S	1385	H605-450	340	450	675	**1045**	73%	100%
6S	1085	H604-250	220	250	375	**865**	55%	100%
7S	855	H604-200	195	200	300	**660**	58%	100%
8S	670	H604-200	195	200	300	**475**	74%	100%

Notes
(1) The gross load is the load capacity of crane at maximum hydraulic outreach
(2) The tool's load capacity is calculated multiplying the volume by a density of 1.5 kg/dm^3
(3) The payload is the gross load of crane minus the tool's weight
(4) The crane's load ratio is the percentage value of the liftable load with respect to the gross load
(5) The tool's load ratio is the percentage value of the liftable load with respect to tool's capacity

Stress history class: S1

RECOMMENDED ADDITIONAL LIFTING TOOLS
ORANGE PEEL GRAPPLE

Crane version	Gross load kg (1)	Data of recommended tool				Payload kg (3)	Load ratio	
		HYVA model	weight kg	volume dm^3	capacity kg (2)		crane (4)	tool (5)
2S	3015	H653-4 large	435	500	750	**2580**	39%	100%
3S	2300	H653-4 large	435	500	750	**1865**	52%	100%
4S	1775	H653-4 large	435	500	750	**1340**	67%	100%
5S	1385	H653-4 large	395	350	525	**990**	66%	100%
6S	1085	H653-4 small	235	180	270	**850**	47%	100%
7S	855	H653-4 small	235	180	270	**620**	59%	100%
8S	670	H653-4 small	235	180	270	**435**	75%	100%

Notes
(1) The gross load is the load capacity of crane at maximum hydraulic outreach
(2) The tool's load capacity is calculated multiplying the volume by a density of 1.5 kg/dm^3
(3) The payload is the crane's gross load minus the tool's weight
(4) The crane's load ratio is the percentage value of the liftable load with respect to the gross load
(5) The tool's load ratio is the percentage value of the liftable load with respect to tool's capacity

Stress history class: S1

RECOMMENDED ADDITIONAL LIFTING TOOLS
LOGGING GRAPPLE

Crane version	Gross load kg (1)	Data of recommended tool			Payload kg (2)	Load ratio	
		HYVA model	weight kg	capacity kg		crane (3)	tool (4)
2S	3015	H634-0,25	170	4000	2845	100%	71%
3S	2300	H634-0,25	170	4000	2130	100%	53%
4S	1775	H634-0,25	170	4000	1605	100%	40%
5S	1385	H634-0,25	170	4000	1215	100%	30%
6S	1085	H634-0,25	170	4000	915	100%	23%
7S	855	H634-0,25	170	4000	685	100%	17%
8S	670	H634-0,25	170	4000	**500**	100%	13%

Notes
(1) The gross load is the load capacity of crane at maximum hydraulic outreach
(2) The payload is the gross load of crane minus the tool's weight
(3) The crane's load ratio is the percentage value of the liftable load with respect to the gross load
(4) The tool's load ratio is the percentage value of the liftable load with respect to tool's capacity

Stress history class: S1

RECOMMENDED ADDITIONAL LIFTING TOOLS
BRICK STACK GRAPPLE

Crane version	Gross load kg (1)	Data of recommended tool			Payload kg (2)	Load ratio	
		HYVA model	weight kg	capacity kg		crane (3)	tool (4)
2S	3015	H332-850	245	2200	**2770**	81%	100%
3S	2300	H332-1000	265	1600	**2035**	81%	100%
4S	1775	H332-1000	265	1600	**1510**	100%	94%
5S	1385	H332-1000	265	1600	**1120**	100%	70%
6S	1085	H332-1000	265	1600	**820**	100%	51%
7S	855	H332-1000	265	1600	**590**	100%	37%
8S	670	H332-1000	265	1600	**405**	100%	25%

Notes
(1) The gross load is the load capacity of crane at maximum hydraulic outreach
(2) The payload is the gross load of crane minus the tool's weight
(3) The crane's load ratio is the percentage value of the liftable load with respect to the gross load
(4) The tool's load ratio is the percentage value of the liftable load with respect to tool's capacity

Stress history class: S2

RECOMMENDED ADDITIONAL LIFTING TOOLS
PALLET FORK

Crane version	Gross load kg (1)	Data of recommended tool			Payload kg (2)	Load ratio	
		HYVA model	weight kg	capacity kg		crane (3)	tool (4)
2S	3015	H415-2000 500	155	2000	**2860**	71%	100%
3S	2300	H415-1500 500	135	1500	**2165**	71%	100%
4S	1775	H415-1500 500	135	1500	**1640**	92%	100%
5S	1385	H415-1500 500	135	1500	**1250**	100%	83%
6S	1085	H415-1500 500	135	1500	**950**	100%	63%
7S	855	H415-1500 500	135	1500	**720**	100%	48%
8S	670	H415-1500 500	135	1500	**535**	100%	36%

Notes
(1) The gross load is the load capacity of crane at maximum hydraulic outreach
(2) The payload is the gross load of crane minus the tool's weight
(3) The crane's load ratio is the percentage value of the liftable load with respect to the gross load
(4) The tool's load ratio is the percentage value of the liftable load with respect to tool's capacity

Stress history class: S2