



IOWA MOLD TOOLING CO., INC.

P.O. Box 189  
Garner, IA 50438  
Tel: 641.923.3711  
Fax: 641.923.2424  
[www.imt.com](http://www.imt.com)

**Manual # 99904616**

# 20/138

## Technical

## Specifications

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## 20/138SL Technical Specifications

## Section - 1

## 20/138SL Specifications

<b>Performance</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Loading group (EN12999)		H1/B3						
Load moment	ft-lb	140748	137145	121391	118766	115485	112861	110892
Hydraulic reach	ft	27'2"	33'8"	41'0"	48'6"	56'1"	63'4"	70'10"
Hydraulic telescopic movement	ft	12'6"	19'1"	26'	33'2"	40'7"	47'7"	54'10"
Lifting capacity, hydraulic	lb-ft	9920 - 14'4"	9520 - 14'5"	9125 - 14'9"	8750 - 15'1"	8395 - 15'1"	8045 - 15'5"	7800 - 15'9"
		6830 - 20'4"	6480 - 20'8"	6150 - 20'11"	5820 - 20'11"	5530 - 21'4"	5225 - 21'8"	5025 - 22'0"
		5180 - 26'11"	4850 - 26'11"	4495 - 27'3"	4210 - 27'7"	3945 - 27'10"	3660 - 27'10"	3480- 28'3"
			3880 - 33'6"	3550 - 33'8"	3260 - 34'1"	2975 - 34'5"	2710 - 34'5"	2535 - 34'9"
				2910 - 40'8"	2625 - 41'0"	2360 - 41'4"	2095 - 41'4"	1915 - 41'8"
					2205 - 48'3"	1940 - 48'7"	1675 - 48'7"	1500 - 48'10"
						1655 - 55'9"	1390 - 56'1"	1235 - 56'5"
							1210 - 62'11"	1060 - 63'4"
								950 - 70'6"
Lifting capacity, manual extensions	lb-ft			2290 - 48'2"	1740 - 56'1"	1212 - 63'8"	935 - 70'10"	705 - 78'5"
				1850 - 56'1"	1365 - 63'8"	990 - 71'2"	705 - 78'5"	
				1455 - 63'8"	1100 - 71'2"	715 - 79'0"		
Slewing torque, gross	lb-ft	17553	17553	17553	17553	17553	17553	17553
Slewing angle	°	400	400	400	400	400	400	400
Max. heel at max. load moment	°	5	5	5	5	5	5	5
Slewing speed	°/s	24	24	24	24	24	24	24

## 20/138SL Specifications - Continued

<b>Dimensions</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Height above chassis	in	90	90	90	90	90	90	91
Width	in	98	98	98	98	98	98	98
Length, no extra valves	in	34	34	34	34	34	39	39
Length, with extra valves (hose guides)	in	39	39	39	39	39		
Length, with 1 extra valve (hose reels)	in						39	39
Length, with 2 extra valves (hose reels)	in						40	40
Length, with extra valves (int. hose routing)	in	34	34	34	34	34		
Stabilizer spread, S1 (standard)	ft	18'3"	18'3"	18'3"	18'3"	18'3"	18'3"	18'3"
Stabilizer spread, D	ft	21'2"	21'2"	21'2"	21'2"	21'2"	21'2"	21'2"

<b>Weights, basic loader</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Standard loader 1), excl. stabilizers	lbs	3902	4244	4586	4894	5170	5401	5589
Stabilizers, S1 fixed	lbs	606	606	606	606	606	606	606
Stabilizers, S1 swing-up	lbs	617	617	617	617	617	617	617
Stabilizers, S1 hydr. swing-up	lbs	628	628	628	628	628	628	628
Stabilizers, S2 fixed	lbs	783	783	783	783	783	783	783
Stabilizers, S2 swing-up	lbs	783	783	783	783	783	783	783
Stabilizers, S2 hydr. swing-up	lbs	805	805	805	805	805	805	805
Stabilizers, D fixed	lbs	143	143	143	143	143	143	143
Stabilizers, D swing-up	lbs	132	132	132	132	132	132	132
Stabilizers, D hydr. swing-up	lbs	99	99	99	99	99	99	99
Mounting kit, 4 bolts	lbs			176	154	132	99	77
Mounting kit, 8 bolts	lbs			154	132	99	77	
Tank, excl. oil (fitted on loader)	lbs			132	99	77		
Manual extensions	lbs	77	88	99	110	121	132	143
	lbs		165	143	99	88		
	lbs		143	99	88			
Oil in loader (stowing position)	lbs	66	77	88	99	110	110	

**1) Weights ± 5% because of tolerances for plate thickness**

## 20/138SL Specifications - Continued

<b>Weights, equipment</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Stand-up controls (HS), std.	lbs	132	132	132	132	132	132	132
Stand-up controls (HS), direct valve control	lbs	154	154	154	154	154	154	154
Top seat (TS)	lbs	198	198	198	198	198	198	198
Top seat, ladder	lbs	44	44	44	44	44	44	44
1 extra valve, hose guides	lbs	121	143	165	187	209		
1 extra valve, hose reels	lbs						209	209
1 extra valve, int. hose routing	lbs	165	165	176	176	187		
2 extra valves, hose guides	lbs	165	198	231	265	298		
2 extra valves, hose reels	lbs						408	408
2 extra valves, int. hose routing	lbs	287	287	309	320	331		
Winch (1.5 t), single snatch block	lbs	386	386	386	386	397	397	419
Winch (1.5 t), double snatch block	lbs	375	375	375	375	386	386	397
Winch (2.5 t), single snatch block	lbs	441	441	441	441	452	452	463
Winch (2.5 t), double snatch block	lbs	430	430	430	430	441	441	452
High-pressure filter	lbs	15	15	15	15	15	15	15
Oil cooler	lbs	55	55	55	55	55	55	55

<b>Max. Load on stabilizers (per stabilizer cylinder)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
S1, fixed	Lbf	24	24	24	24	24	24	24
S1, swing-up	Lbf	24	24	24	24	24	24	24
S1, hydr. swing-up	Lbf	24	24	24	24	24	24	24
D, fixed	Lbf	19	19	19	19	19	19	19
D, swing-up	Lbf	19	19	19	19	19	19	19
D, hydr. swing-up	Lbf	19	19	19	19	19	19	19

<b>Power consumption (oil capacity)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Working pressure	PSI	5003	5003	5003	5003	5003	5003	5003
Tank capacity (fitted on loader)	Gal	23	23	23	23	23	23	23
Max. pump performance, Hydrocontrol, 1-circuit	Gpm	14	14	14	14	14	14	14
Max. pump performance, Hydrocontrol, 2-circuit	Gpm	-	-	-	-	-	-	-
Max. pump performance, Danfoss fixed flow	Gpm	18	18	18	18	18	18	18
Max. pump performance, Danfoss variable	Gpm	26	26	26	26	26	26	26

## 20/138SL Metric Specifications

<b>Performance</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Loading group (EN12999)		H1/B3	H1/B3	H1/B3	H1/B3	H1/B3	H1/B3	H1/B3
Load moment	tm	19.5	19	18.5	18.1	17.6	17.2	16.9
Hydraulic reach	m	8.3	10.3	12.5	14.8	17.1	19.3	21.6
Hydraulic telescopic movement	mm	3830	5840	7930	10130	12370	14520	16720
Lifting capacity, hydraulic	kg-m	4500 - 4.3	4320 - 4.4	4140 - 4.5	3970 - 4.6	3810 - 4.6	3650 - 4.7	3540 - 4.8
		3100 - 6.2	2940 - 6.3	2790 - 6.4	2640 - 6.4	2510 - 6.5	2370 - 6.6	2280 - 6.7
		2350 - 8.2	2200 - 8.2	2040 - 8.3	1910 - 8.4	1790 - 8.5	1660 - 8.5	1580 - 8.6
			1760 - 10.2	1610 - 10.3	1480 - 10.4	1350 - 10.5	1230 - 10.5	1150 - 10.6
				1320 - 12.4	1190 - 12.5	1070 - 12.6	950 - 12.6	870 - 12.7
					1000 - 14.7	880 - 14.8	760 - 14.8	680 - 14.9
						750 - 17.0	630 - 17.1	560 - 17.2
							550 - 19.2	480 - 19.3
								430 - 21.5
Lifting capacity, manual extensions	kg-m			1040 - 14.7	790 - 17.1	550 - 19.4	425 - 21.6	320 - 23.9
				840 - 17.1	620 - 19.4	450 - 21.7	320 - 23.9	
				660 - 19.4	500 - 21.7	325 - 24.1		
Slewing torque, gross	kNm	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Slewing angle	°	400	400	400	400	400	400	400
Max. heel at max. load moment	°	5	5	5	5	5	5	5
Slewing speed	°/s	24	24	24	24	24	24	24

## 20/138SL Metric Specifications - Continued

<b>Dimensions</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Height above chassis	mm	2295	2295	2295	2295	2295	2295	2335
Width	mm	2500	2500	2500	2500	2500	2500	2500
Length, no extra valves	mm	885	885	885	885	885	995	995
Length, with extra valves (hose guides)	mm	1005	1005	1005	1005	1005		
Length, with 1 extra valve (hose reels)	mm						995	995
Length, with 2 extra valves (hose reels)	mm						1030	1030
Length, with extra valves (int. hose routing)	mm	885	885	885	885	885		
Stabilizer spread, S1 (standard)	mm	5575	5575	5575	5575	5575	5575	5575
Stabilizer spread, D	mm	6455	6455	6455	6455	6455	6455	6455

<b>Weights, basic loader</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Standard loader 1), excl. stabilizers	kg	1770	1925	2080	2220	2345	2450	2535
Stabilizers, S1 fixed	kg	275	275	275	275	275	275	275
Stabilizers, S1 swing-up	kg	280	280	280	280	280	280	280
Stabilizers, S1 hydr. swing-up	kg	285	285	285	285	285	285	285
Stabilizers, D fixed	kg	355	355	355	355	355	355	355
Stabilizers, D swing-up	kg	355	355	355	355	355	355	355
Stabilizers, D hydr. swing-up	kg	365	365	365	365	365	365	365
Mounting kit, 4-bolts	kg	65	65	65	65	65	65	65
Mounting kit, 8-bolts	kg	60	60	60	60	60	60	60
Tank, excl. oil (fitted on loader)	kg	45	45	45	45	45	45	45
Manual extensions	kg			80	70	60	45	35
	kg			70	60	45	35	
	kg			60	45	35		
Oil in loader (stowing position)	kg	35	40	45	50	55	60	65

**1) Weights ± 5% because of tolerances for plate thickness**

## 20/138SL Metric Specifications - Continued

<b>Weights, equipment</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Stand-up controls (HS), std.	kg	60	60	60	60	60	60	60
Stand-up controls (HS), direct valve control	kg	70	70	70	70	70	70	70
Top seat (TS)	kg	90	90	90	90	90	90	90
Top seat, ladder	kg	20	20	20	20	20	20	20
1 extra valve, hose guides	kg	55	65	75	85	95		
1 extra valve, hose reels	kg						95	95
1 extra valve, int. hose routing	kg	75	75	80	80	85		
2 extra valves, hose guides	kg	75	90	105	120	135		
2 extra valves, hose reels	kg						185	185
2 extra valves, int. hose routing	kg	130	130	140	145	150		
Winch (1.5 t), single snatch block	kg	175	175	175	175	180	180	190
Winch (1.5 t), double snatch block	kg	170	170	170	170	175	175	180
Winch (2.5 t), single snatch block	kg	200	200	200	200	205	205	210
Winch (2.5 t), double snatch block	kg	195	195	195	195	200	200	205
High-pressure filter		7	7	7	7	7	7	7
Oil cooler		25	25	25	25	25	25	25

<b>Max. Load on stabilizers (per stabilizer cylinder)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
S1, fixed	kN	110	110	110	110	110	110	110
S1, swing-up	kN	110	110	110	110	110	110	110
S1, hydr. swing-up	kN	110	110	110	110	110	110	110
D, fixed	kN	85	85	85	85	85	85	85
D, swing-up	kN	85	85	85	85	85	85	85
D, hydr. swing-up	kN	85	85	85	85	85	85	85

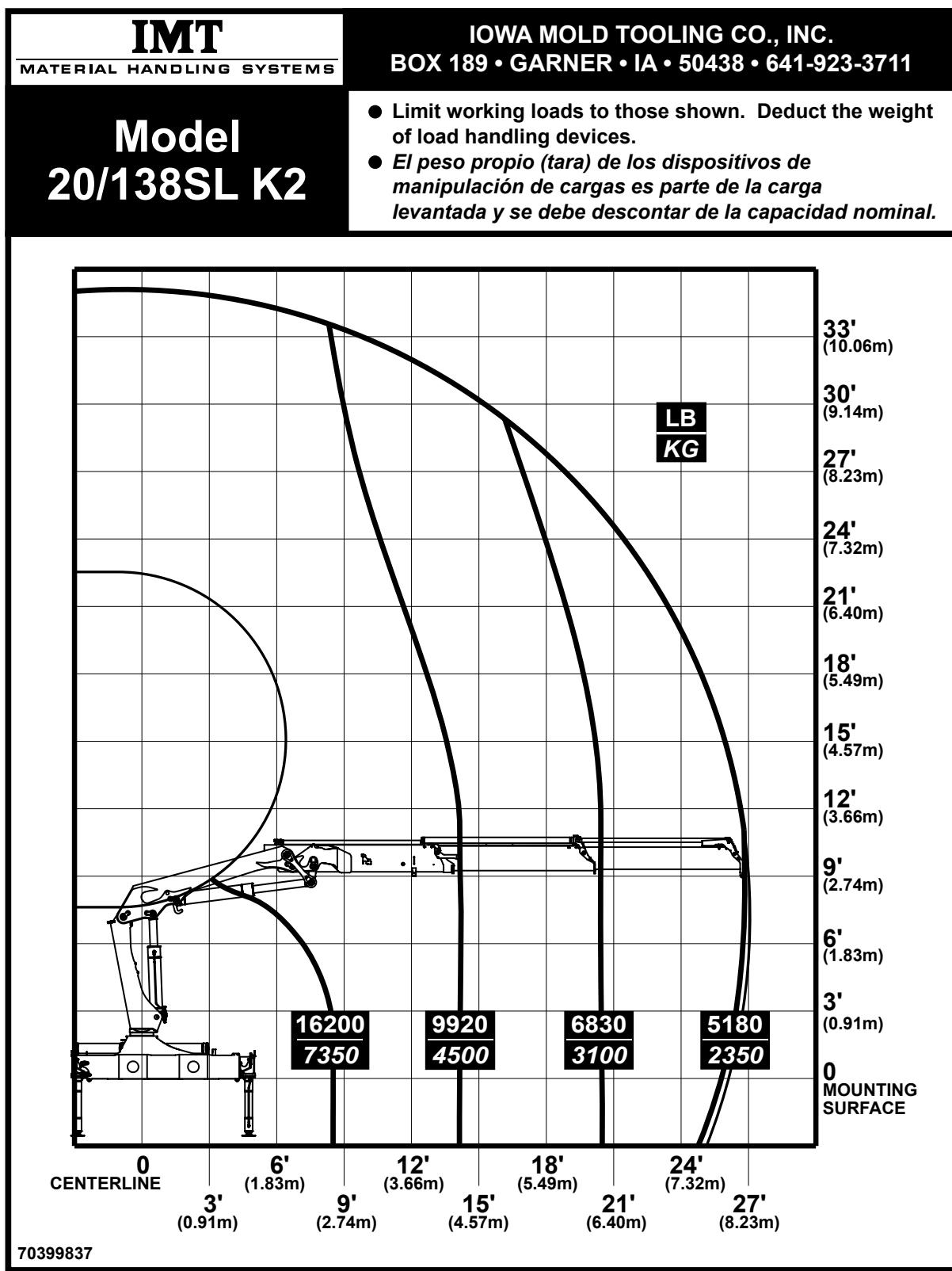
<b>Power consumption (oil capacity)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Working pressure	Bar	345	345	345	345	345	345	345
Tank capacity (fitted on loader)	L	90	90	90	90	90	90	90
Max. pump performance, Hydrocontrol, 1-circuit	L/min	55	55	55	55	55	55	55
Max. pump performance, Hydrocontrol, 2-circuit	L/min	-	-	-	-	-	-	-
Max. pump performance, Danfoss fixed flow	L/min	70	70	70	70	70	70	70
Max. pump performance, Danfoss variable	L/min	100	100	100	100	100	100	100

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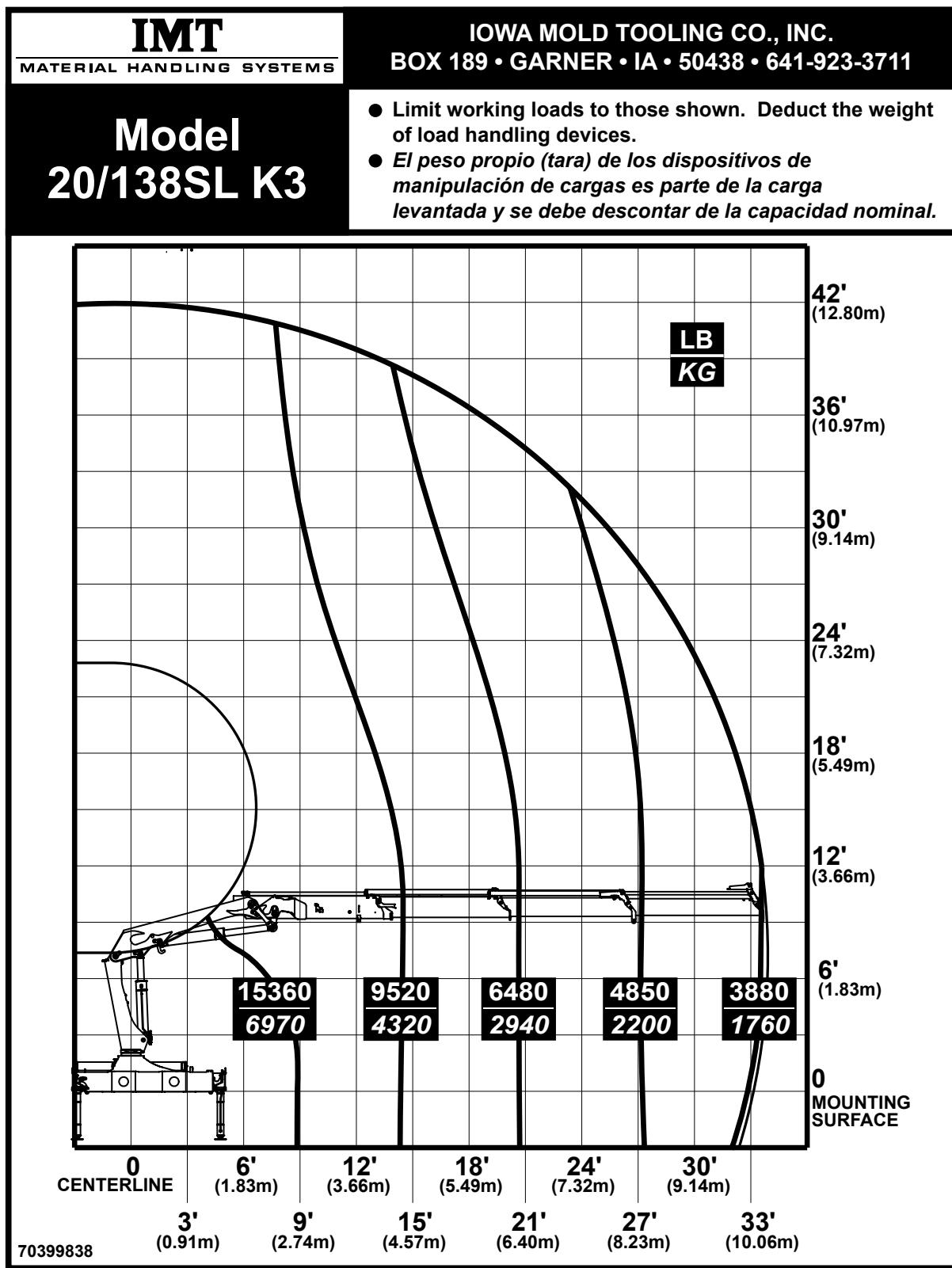
## 20/138SL Load Capacity Charts

## Section - 2

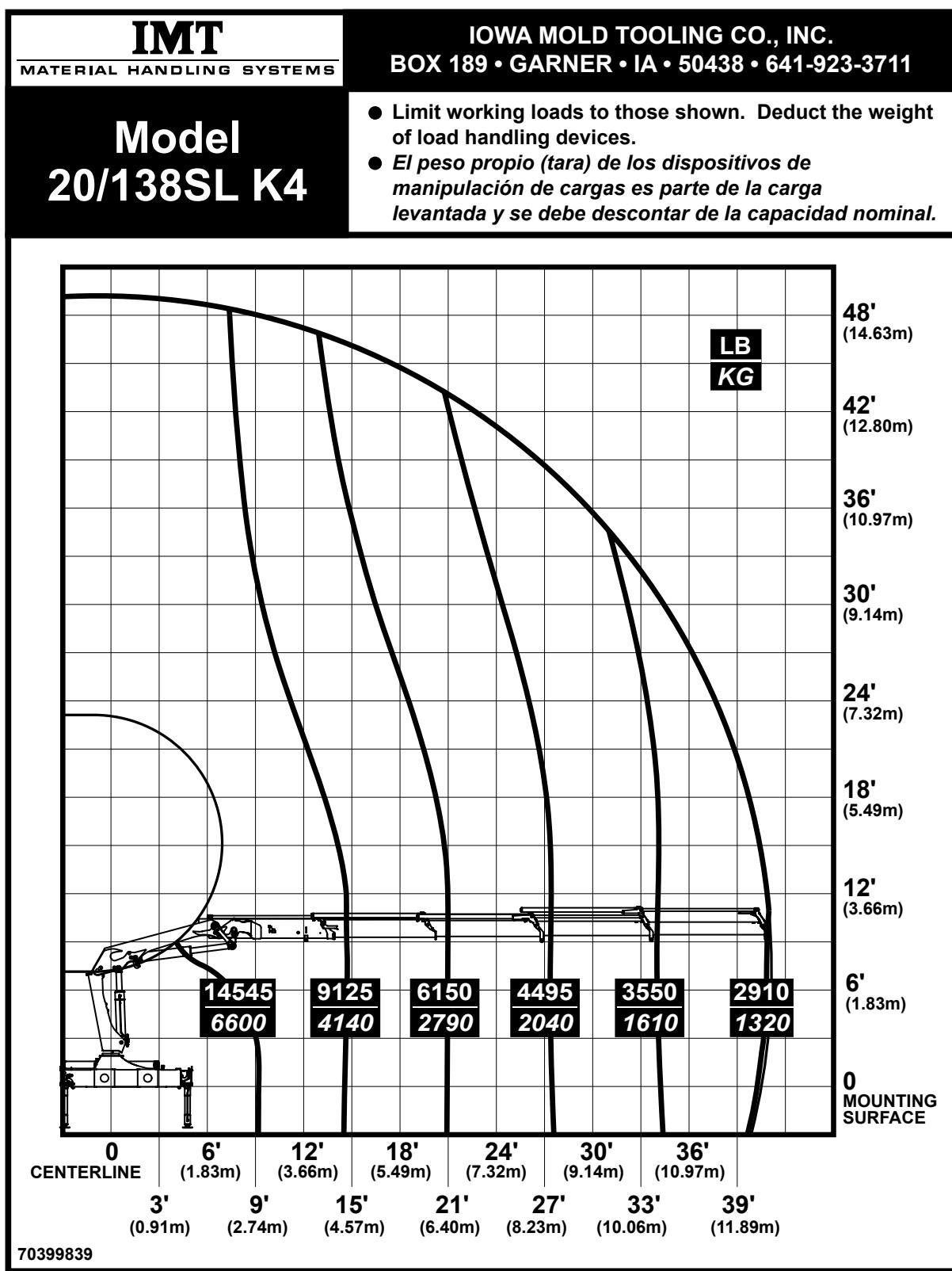
## 20/138SL Lifting Capacity Chart, K2



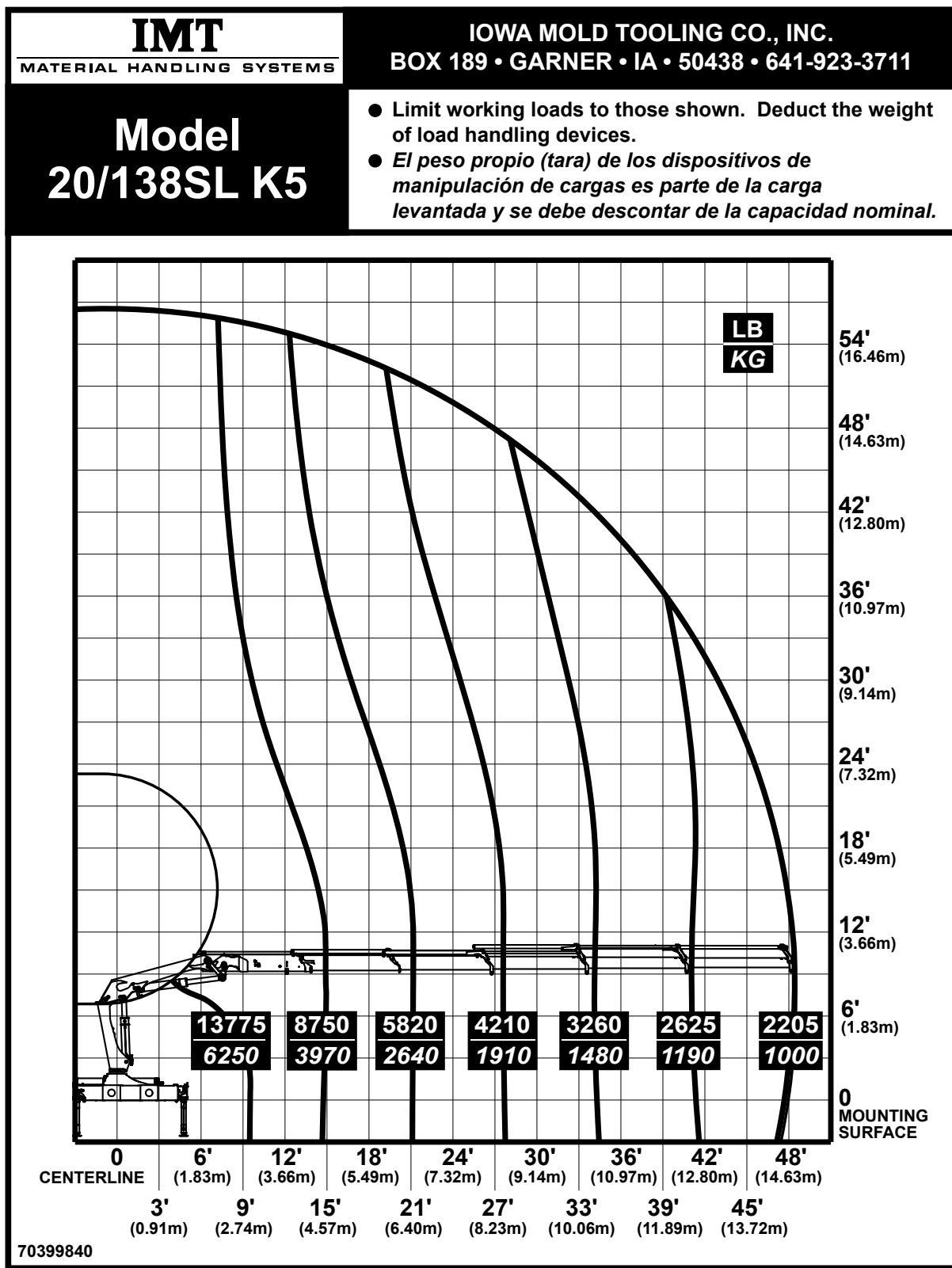
## 20/138SL Lifting Capacity Chart, K3



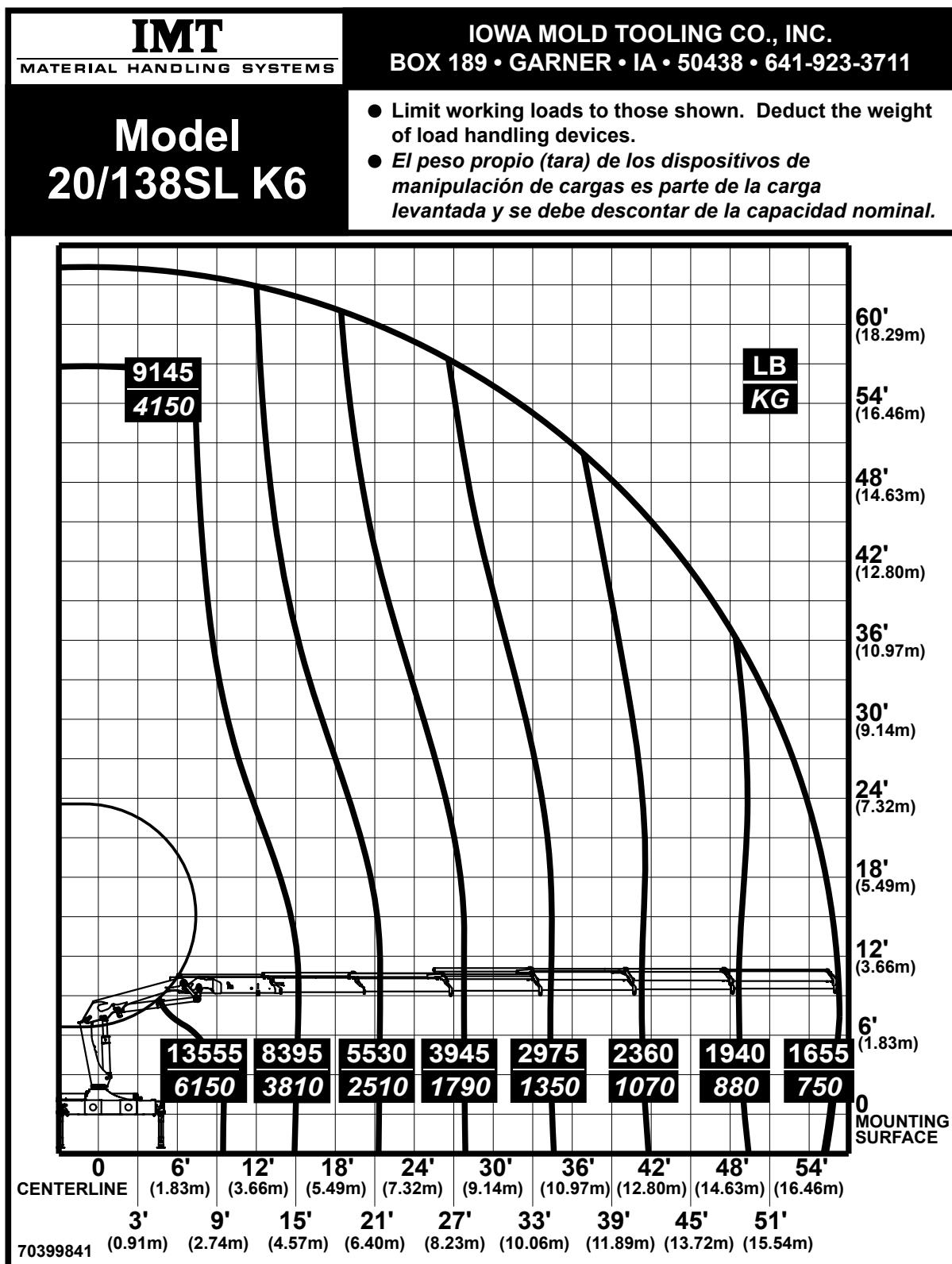
## 20/138SL Lifting Capacity Chart, K4



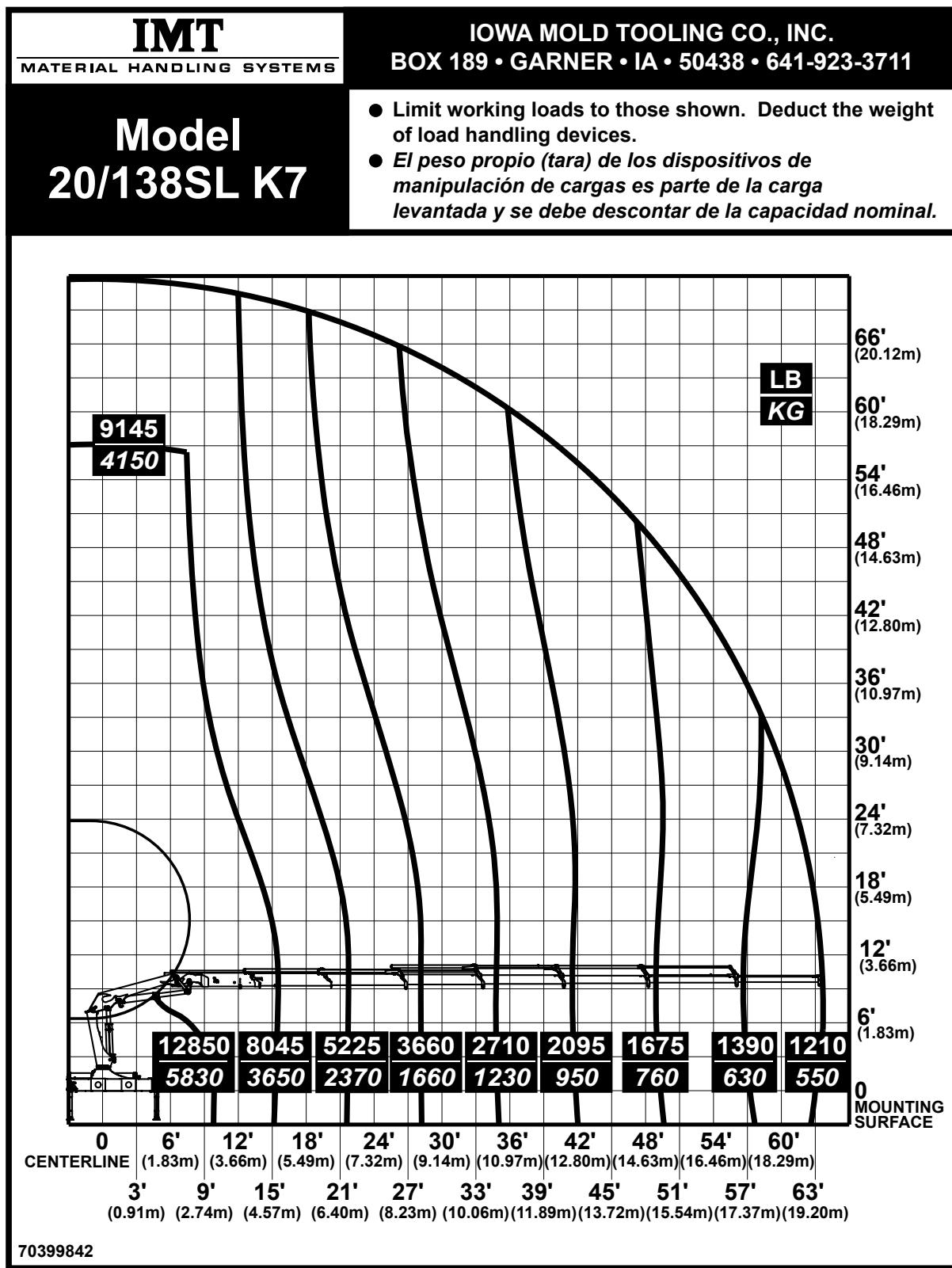
## 20/138SL Lifting Capacity Chart, K5



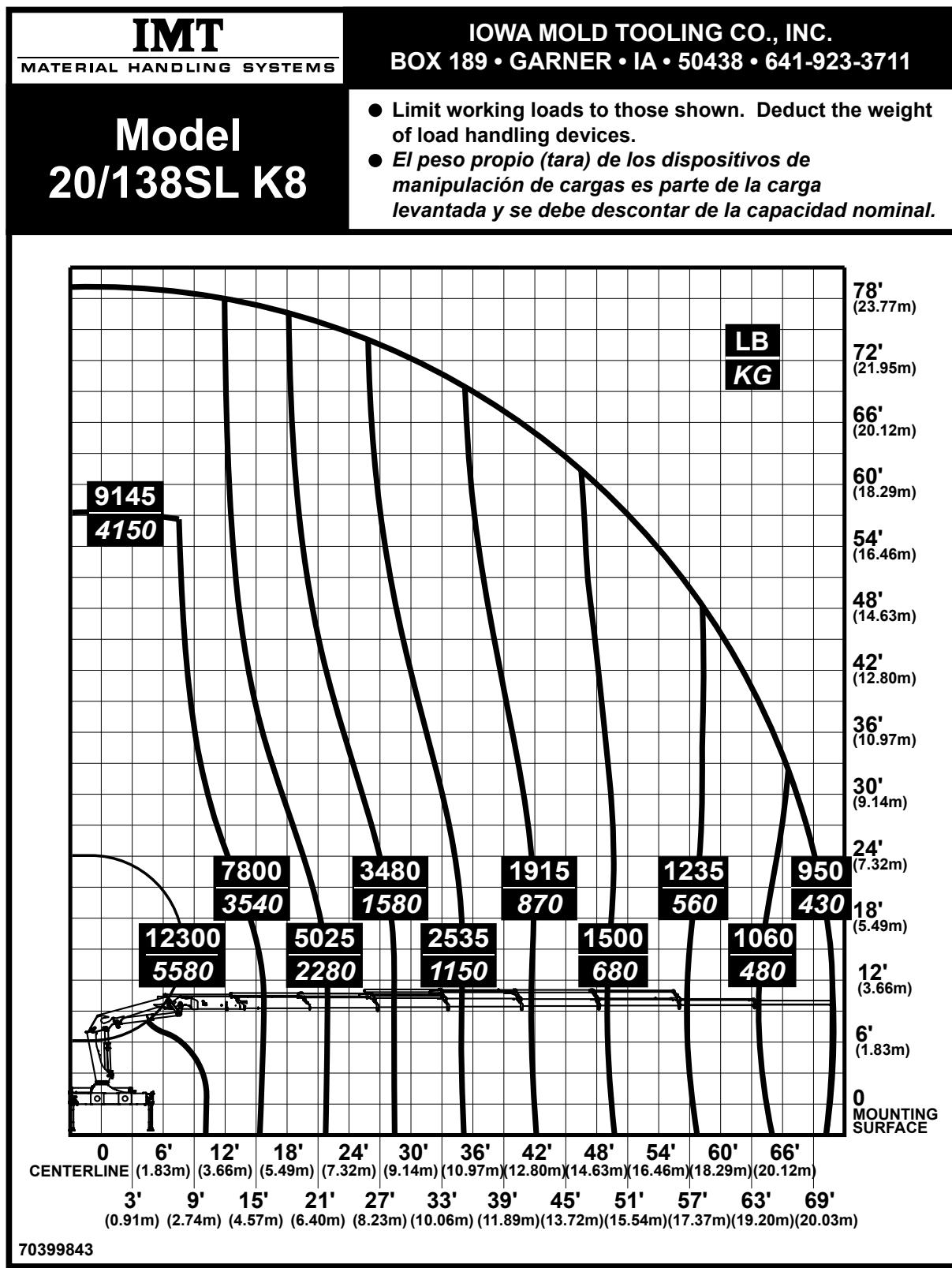
## 20/138SL Lifting Capacity Chart, K6



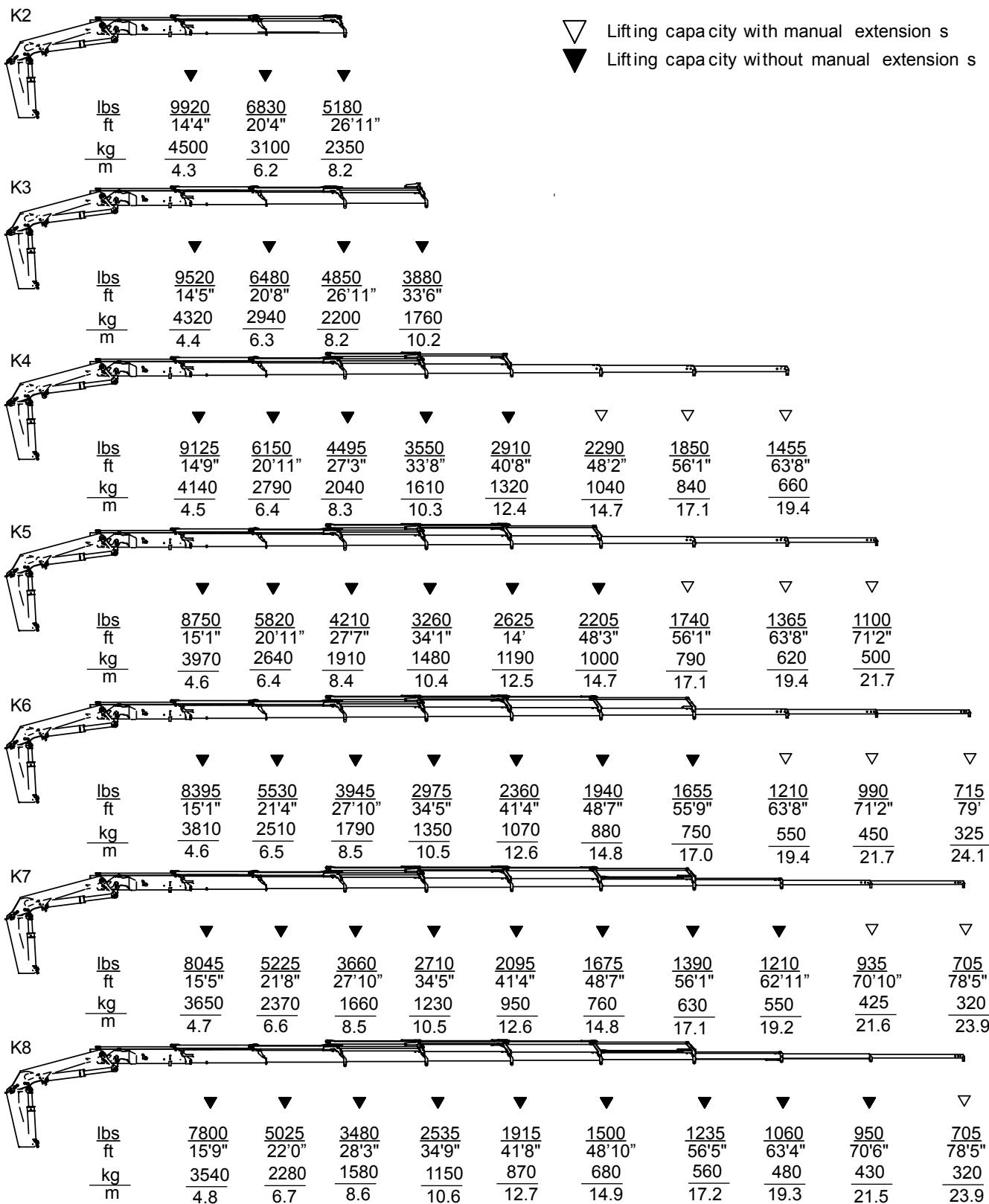
## 20/138SL Lifting Capacity Chart, K7



## 20/138SL Lifting Capacity Chart, K8



## 20/138SL Lifting Capacity Chart, K2 - K8



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**20/138SL Hydraulics**

**Section - 3**

## 20/138SL - Pressure setting diagram, fixed flow pump & Danfoss RC

Working Pressure on Main-Relief Valve & Port- Relief Valves						
Function	Direction	Port	Port-relief valves [bar]	LS-pressure adjustment [bar]	Port-relief valves [PSI]	LS-pressure adjustment [PSI]
Main-relief valve			345		5004	
Slewing system	Right	A	P	180	P	2611
	Left	B	P	180	P	2611
Boom cylinder	Down	A	125	100	1813	1450
	Up	B	350	380	5076	5511
Jib cylinder	Up	A	350	380	5076	5511
	Down	B	250	230	3626	3336
Extension cylinders	Extend	A	P	-	P	-
	Retract	B	P	-	P	-
Rotator	Right	A	P	50-300	P	725-4351
	Left	B	P	50-300	P	725-4351
Grab	Open	A	P	50-300	P	725-4351
	Close	B	P	50-300	P	725-4351
Winch 1,5T	Lift	A	P	160	P	2321
	Lower	B	P	160	P	2321
Winch 2,5T	Lift	A	P	185	P	2683
	Lower	B	P	185	P	2683
Separate stabilizer valve		All	150		2176	

Working Pressure on Load-holding Valves			
Function	Direction	Opening pressure [bar]	Opening pressure [PSI]
Slewing system	Right	185	2683
	Left	185	2683
Boom cylinder	Up	365	5294
	Down	-	-
Jib cylinder	Up	380	5511
	Down	300	4351
Extension cylinders	Retract	430	6237
	Extend	210	3046

Pressure setting for Load Moment Limitation (LMB)		
Load moment limitation (LMB)	330 [bar]	4786 [PSI]
HDL	285 [bar]	4134 [PSI]

Max. pump performance		
Choice of pump	1 x Fixed	1 x Fixed
Pump performance	70 L/min	18.5 gpm

## 20/138SL - Pressure setting diagram, variable flow pump & Danfoss RC

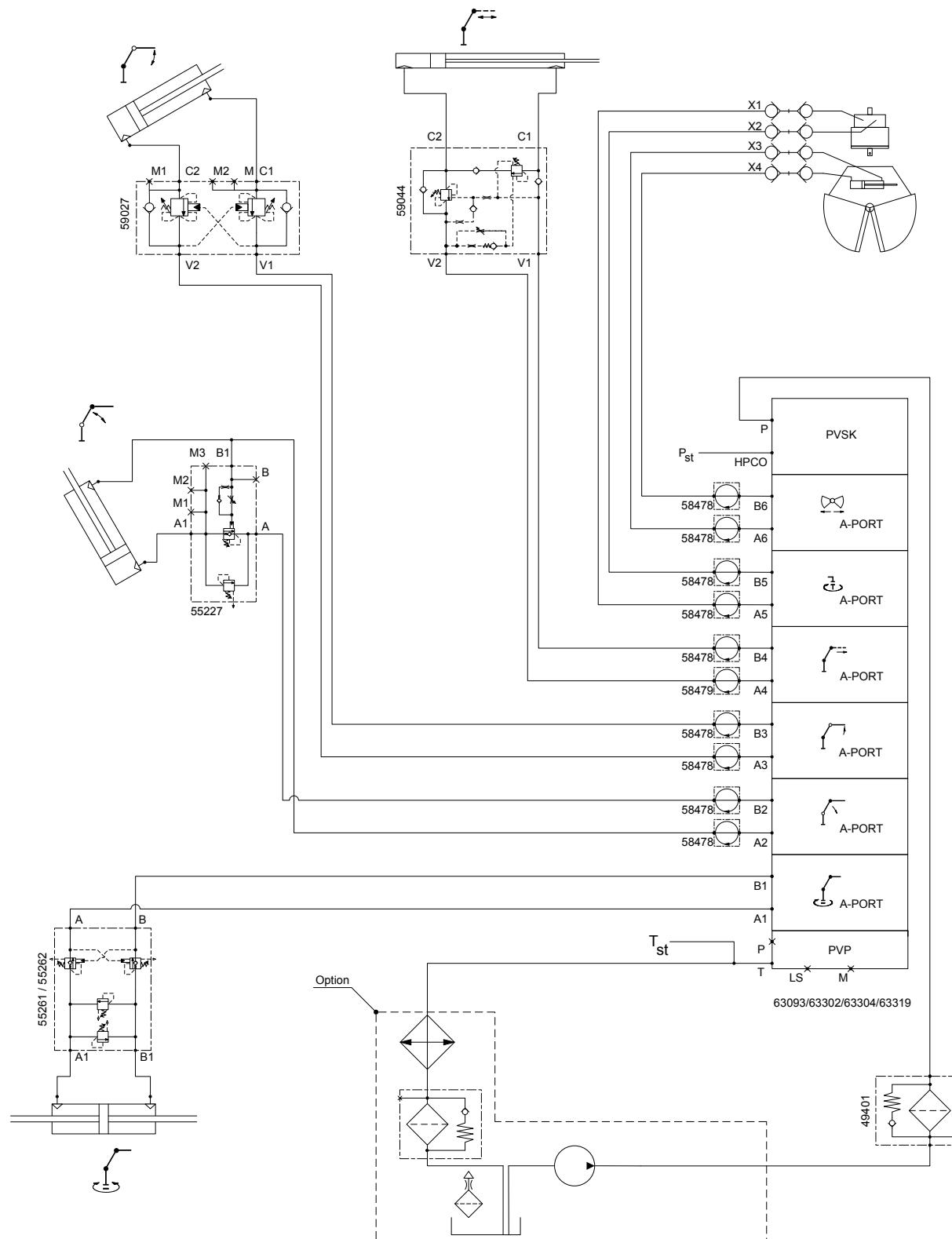
Working Pressure on Main-Relief Valve & Port- Relief Valves						
Function	Direction	Port	Port-relief valves [bar]	LS-pressure adjustment [bar]	Port-relief valves [PSI]	LS-pressure adjustment [PSI]
Main-relief valve			345		5004	
Slewing system	Right	A	P	180	P	2611
	Left	B	P	180	P	2611
Boom cylinder	Down	A	125	100	1813	1450
	Up	B	350	380	5076	5511
Jib cylinder	Up	A	350	380	5076	5511
	Down	B	250	230	3626	3336
Extension cylinders	Extend	A	P	300	P	4351
	Retract	B	P	300	P	4351
Rotator	Right	A	P	50-300	P	725-4351
	Left	B	P	50-300	P	725-4351
Grab	Open	A	P	50-300	P	725-4351
	Close	B	P	50-300	P	725-4351
Winch 1,5T	Lift	A	P	160	P	2321
	Lower	B	P	160	P	2321
Winch 2,5T	Lift	A	P	185	P	2683
	Lower	B	P	185	P	2683
Separate stabilizer valve		All	150		2176	

Working Pressure on Load-holding Valves			
Function	Direction	Opening pressure [bar]	Opening pressure [PSI]
Slewing system	Right	185	2683
	Left	185	2683
Boom cylinder	Up	365	5294
	Down	-	-
Jib cylinder	Up	380	5511
	Down	300	4351
Extension cylinders	Retract	430	6237
	Extend	210	3046

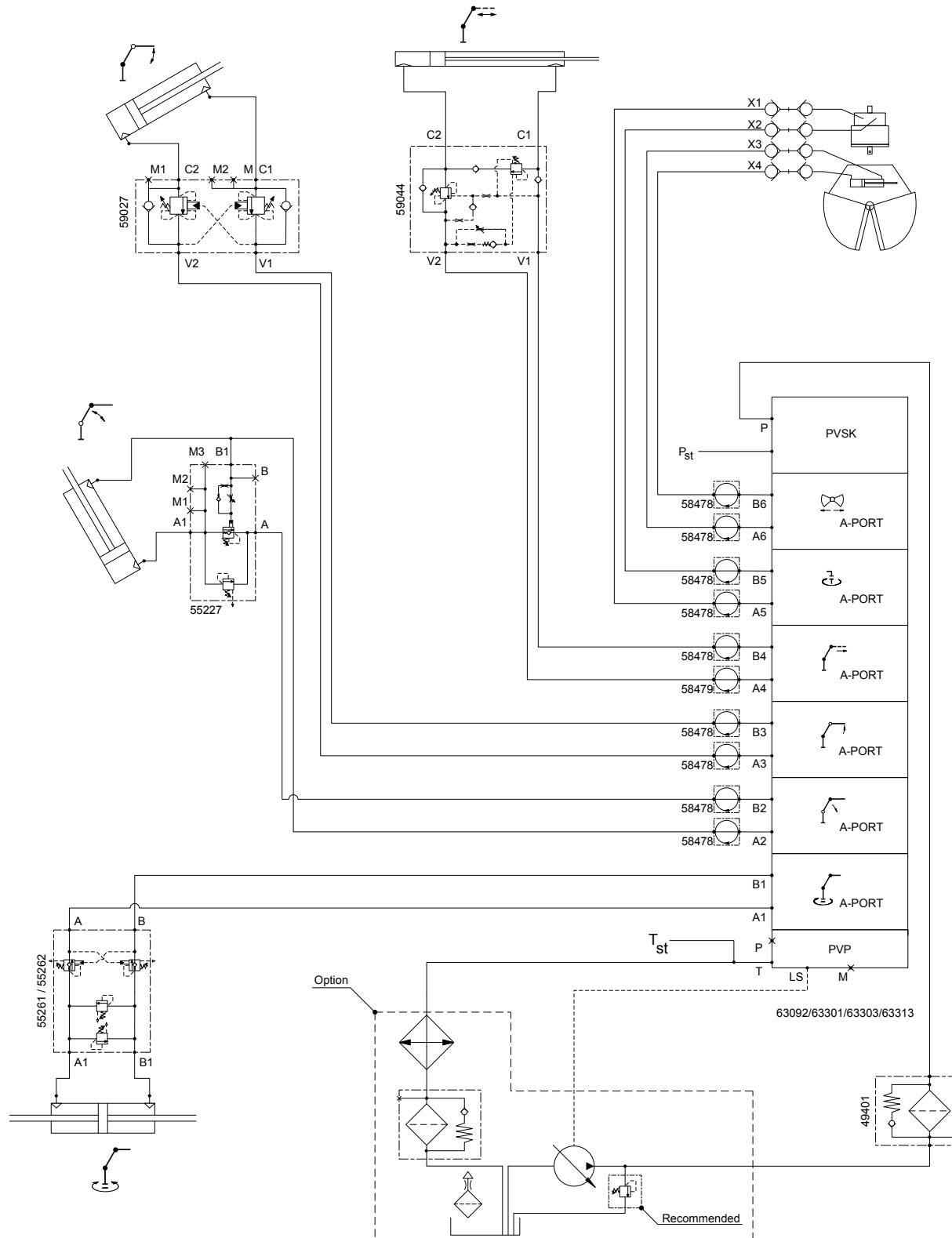
Pressure setting for Load Moment Limitation (LMB)		
Load moment limitation (LMB)	330 [bar]	4786 [PSI]
HDL	285 [bar]	4134 [PSI]

Max. pump performance		
Choice of pump	1 x Variable	1 x Variable
Pump performance	100 L/min	26.4 gpm

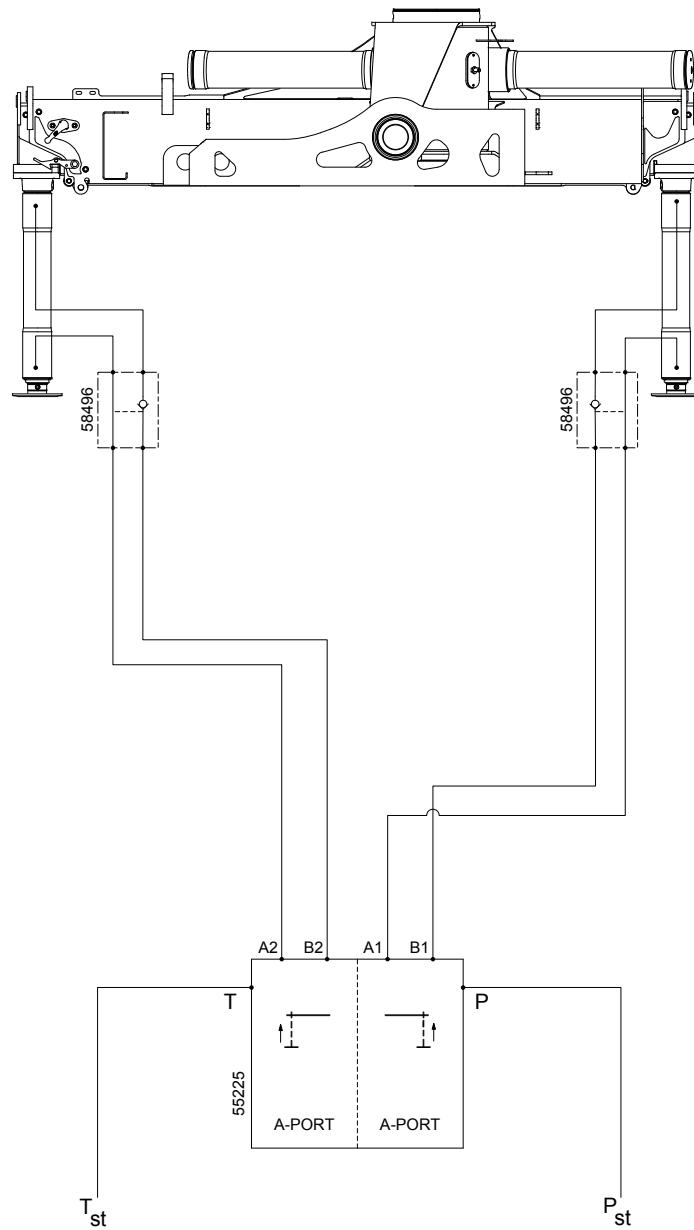
## Hydraulic Diagram - Danfoss, single-circuit fixed 6 fcts. RC (2 EXV: Grab + Rotator)



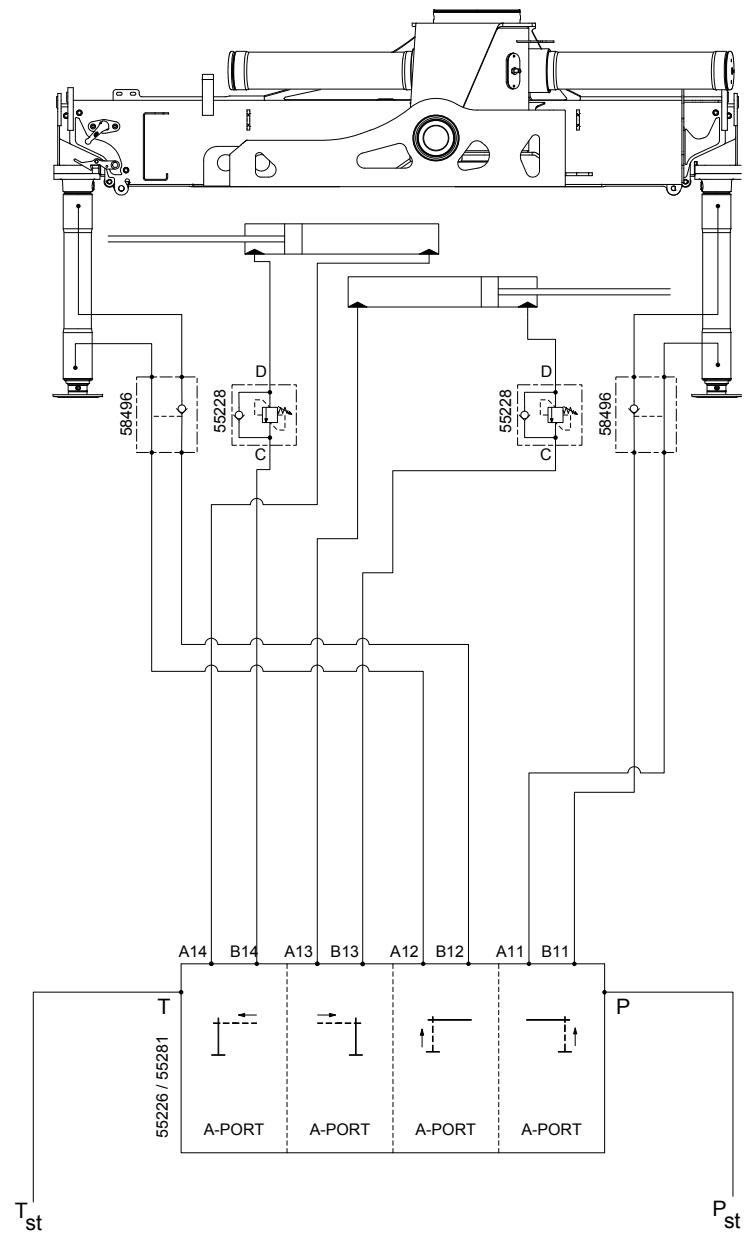
## Hydraulic Diagram - Danfoss, single-circuit variable 6 fcts. RC/HS dir. valve contr. (2 EXV: Grab + Rotator)



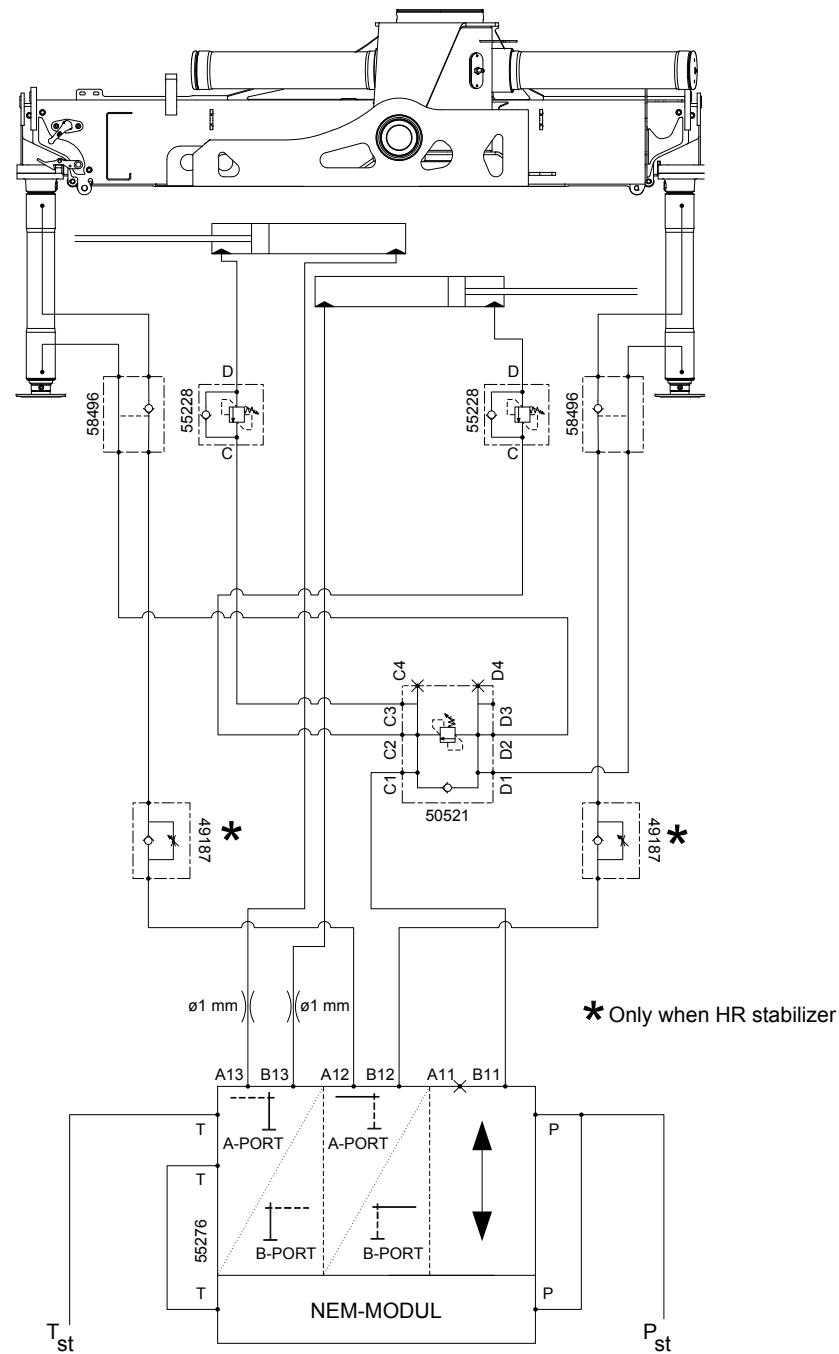
## Hydraulic Diagram - Stabilizer circuit – 2 fcts.



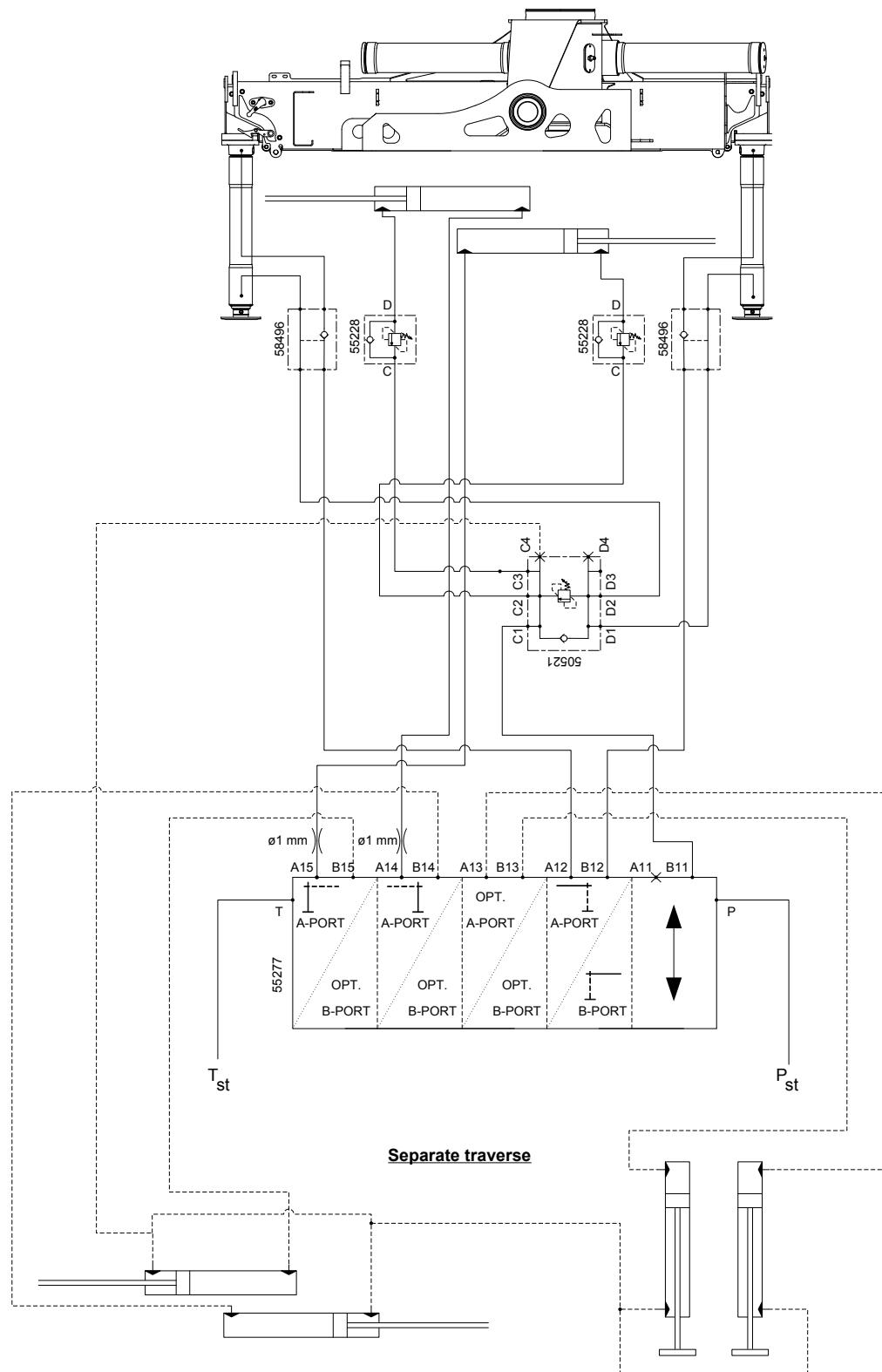
## Hydraulic Diagram - Stabilizer circuit – 4 fcts.



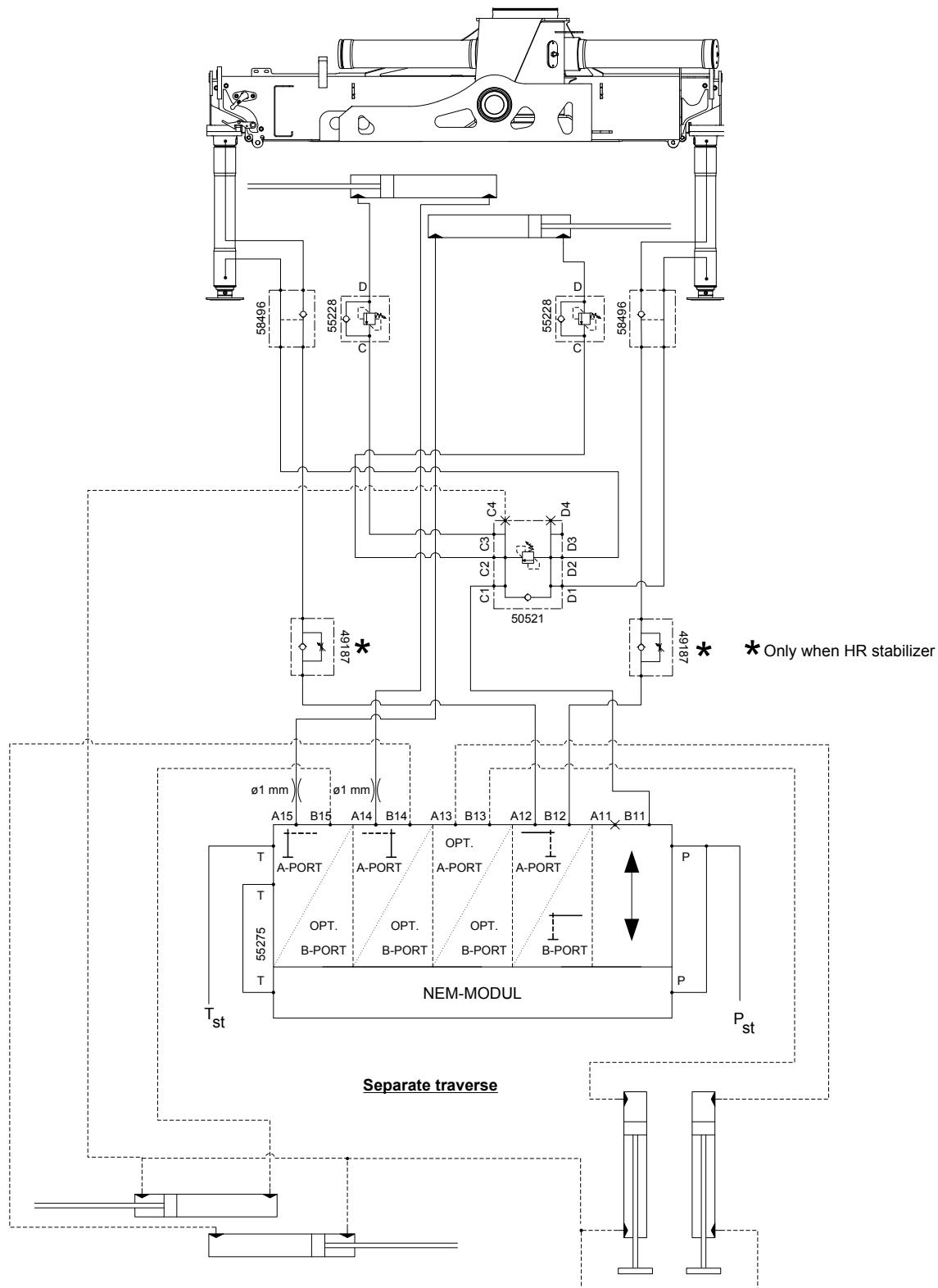
## Hydraulic Diagram - Stabilizer circuit – 4 fcts. RC



## Hydraulic Diagram - Stabilizer circuit – 4 fcts. + 4 available fcts.



## Hydraulic Diagram - Stabilizer circuit – 4 fcts. + 4 available fcts. RC



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## 20/138DL Technical Specifications

## Section - 4

## 20/138DL Specifications

<b>Performance</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Loading group (EN12999)		H1/B3						
Load moment	ft-lb	140748	137867	134258	130649	127762	124153	122709
Hydraulic reach	ft	27'2"	33'8"	41'0"	48'6"	56'1"	63'4"	70'10"
Hydraulic telescopic movement	ft	12'6"	19'2"	26'1"	33'2"	40'7"	47'7"	54'10"
Lifting capacity, hydraulic	lb-ft	9940 - 14'1"	9545 - 14'5"	9145 - 14'8"	8770 - 15'0"	8420 - 15'0"	8065 - 15'5"	7825 - 15'9"
		6855 - 20'4"	6500 - 20"8'	6150 - 20'11"	5840 - 20'11"	5530 - 21'4"	5245 - 21'8"	5045 - 21'11"
		5200 - 26'11"	4850 - 26'11"	4520 - 27'2"	4230 - 27'6"	3945 - 27'10"	3680 - 27'10"	3505 - 28'3"
			3880 - 33'5"	3550 - 33'8"	3260 - 34'1"	2995 - 34'5"	2710 - 34'5"	2555 - 34'8"
				2930 - 40'7"	2625 - 41'0"	2360 - 41'4"	2095 - 41'4"	1940 - 41'8"
					2205 - 48'2"	1940 - 48'6"	1675 - 48'6"	1520 - 48'10"
						1655 - 55'8"	1390 - 56'1"	1235 - 56'5"
							1210 - 62'11"	1060 - 63'4"
								950 - 70'6"
Lifting capacity, manual extensions	lb-ft			2290 - 48'2"	1740 - 56'1"	1210 - 63'7"	936 - 70'10"	705 - 78'5"
				1850 - 56'1"	1365 - 63'7"	990 - 71'1"	705 - 78'5"	
				1455 - 63'7"	1100 - 71'1"	715 - 79'0"		
Slewing torque, gross	lb-ft	17553	17553	17553	17553	17553	17553	17553
Slewing angle	°	400	400	400	400	400	400	400
Max. heel at max. load moment	°	5	5	5	5	5	5	5
Slewing speed	°/s	24	24	24	24	24	24	24

## 20/138DL Specifications - Continued

<b>Dimensions</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Height above chassis	in	90	90	90	90	90	90	91
Width	in	98	98	98	98	98	98	98
Length, no extra valves	in	34	34	34	34	34	39	39
Length, with extra valves (hose guides)	in	39	39	39	39	39		
Length, with 1 extra valve (hose reels)	in						39	39
Length, with 2 extra valves (hose reels)	in						40	40
Length, with extra valves (int. hose routing)	in	34	34	34	34	34		
Stabilizer spread, S1 (standard)	ft	18'3"	18'3"	18'3"	18'3"	18'3"	18'3"	18'3"
Stabilizer spread, D	ft	21'2"	21'2"	21'2"	21'2"	21'2"	21'2"	21'2"

<b>Weights, basic loader</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Standard loader 1), excl. stabilizers	lbs	4057	4398	4806	5115	5390	5622	5809
Stabilizers, S1 fixed	lbs	606	606	606	606	606	606	606
Stabilizers, S1 swing-up	lbs	617	617	617	617	617	617	617
Stabilizers, S1 hydr. swing-up	lbs	628	628	628	628	628	628	628
Stabilizers, D fixed	lbs	783	783	783	783	783	783	783
Stabilizers, D swing-up	lbs	783	783	783	783	783	783	783
Stabilizers, D hydr. swing-up	lbs	805	805	805	805	805	805	805
Mounting kit, 4 bolts	lbs	143	143	143	143	143	143	143
Mounting kit, 8 bolts	lbs	132	132	132	132	132	132	132
Tank, excl. oil (fitted on loader)	lbs	99	99	99	99	99	99	99
Manual extensions	lbs			176	154	132	77	77
	lbs			154	132	99	77	
	lbs			132	99	77		
Oil in loader (stowing position)	lbs	88	99	110	121	132	143	143
	lbs		165	143	99	88		
	lbs		143	99	88			
Oil in loader (stowing position)	lbs	66	77	88	99	110	110	

## 20/138DL Specifications - Continued

<b>Weights, equipment</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Stand-up controls (HS), std.	lbs	132	132	132	132	132	132	132
Stand-up controls (HS), direct valve control	lbs	154	154	154	154	154	154	154
Top seat (TS)	lbs	198	198	198	198	198	198	198
Top seat, ladder	lbs	44	44	44	44	44	44	44
1 extra valve, hose guides	lbs	121	143	165	187	209		
1 extra valve, hose reels	lbs						209	209
1 extra valve, int. hose routing	lbs	165	165	176	176	187		
2 extra valves, hose guides	lbs	165	198	231	265	298		
2 extra valves, hose reels	lbs						408	408
2 extra valves, int. hose routing	lbs	287	287	309	320	331		
Winch (1.5 t), single snatch block	lbs	386	386	386	386	397	397	419
Winch (1.5 t), double snatch block	lbs	375	375	375	375	386	386	397
Winch (2.5 t), single snatch block	lbs	441	441	441	441	452	452	463
Winch (2.5 t), double snatch block	lbs	430	430	430	430	441	441	452
High-pressure filter	lbs	15	15	15	15	15	15	15
Oil cooler	lbs	55	55	55	55	55	55	55

1) Weights ± 5% because of tolerances for plate thickness

<b>Max. Load on stabilizers (per stabilizer cylinder)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
S1, fixed	Lbf	24	24	24	24	24	24	24
S1, swing-up	Lbf	24	24	24	24	24	24	24
S1, hydr. swing-up	Lbf	24	24	24	24	24	24	24
D, fixed	Lbf	19	19	19	19	19	19	19
D, swing-up	Lbf	19	19	19	19	19	19	19
D, hydr. swing-up	Lbf	19	19	19	19	19	19	19

<b>Power consumption (oil capacity)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Working pressure	PSI	5003	5003	5003	5003	5003	5003	5003
Tank capacity (fitted on loader)	Gal	23	23	23	23	23	23	23
Max. pump performance, Hydrocontrol, 1-circuit	Gpm	14	14	14	14	14	14	14
Max. pump performance, Hydrocontrol, 2-circuit	Gpm	-	-	-	-	-	-	-
Max. pump performance, Danfoss fixed flow	Gpm	18	18	18	18	18	18	18
Max. pump performance, Danfoss variable	Gpm	26	26	26	26	26	26	26

## 20/138DL Metric Specifications

<b>Performance</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Loading group (EN12999)		H1/B3	H1/B3	H1/B3	H1/B3	H1/B3	H1/B3	H1/B3
Load moment	tm	19.5	19.1	18.6	18.1	17.7	17.2	17
Hydraulic reach	m	8.3	10.3	12.5	14.8	17.1	19.3	21.6
Hydraulic telescopic movement	mm	3830	5840	7930	10130	12370	14520	16720
Lifting capacity, hydraulic	kg-m	4510 - 4.3	4330 - 4.4	4150 - 4.5	3980 - 4.6	3820 - 4.6	3660 - 4.7	3550 - 4.8
		3110 - 6.2	2950 - 6.3	2790 - 6.4	2650 - 6.4	2510 - 6.5	2380 - 6.6	2290 - 6.7
		2360 - 8.2	2200 - 8.2	2050 - 8.3	1920 - 8.4	1790 - 8.5	1670 - 8.5	1590 - 8.6
			1760 - 10.2	1610 - 10.3	1480 - 10.4	1360 - 10.5	1230 - 10.5	1160 - 10.6
				1330 - 12.4	1190 - 12.5	1070 - 12.6	950 - 12.6	880 - 12.7
					1000 - 14.7	880 - 14.8	760 - 14.8	690 - 14.9
						750 - 17.0	630 - 17.1	560 - 17.2
							550 - 19.2	480 - 19.3
								430 - 21.5
Lifting capacity, manual extensions	kg-m			1040 - 14.9	790 - 17.1	550 - 19.4	425 - 21.6	320 - 23.9
				840 - 17.1	620 - 19.4	450 - 21.7	320 - 23.9	
				660 - 19.4	500 - 21.7	325 - 24.1		
Slewing torque, gross	kNm	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Slewing angle	°	400	400	400	400	400	400	400
Max. heel at max. load moment	°	5	5	5	5	5	5	5
Slewing speed	°/s	24	24	24	24	24	24	24

## 20/138DL Metric Specifications - Continued

<b>Dimensions</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Height above chassis	mm	2295	2295	2295	2295	2295	2295	2335
Width	mm	2500	2500	2500	2500	2500	2500	2500
Length, no extra valves	mm	885	885	885	885	885	995	995
Length, with extra valves (hose guides)	mm	1005	1005	1005	1005	1005		
Length, with 1 extra valve (hose reels)	mm						995	995
Length, with 2 extra valves (hose reels)	mm						1030	1030
Length, with extra valves (int. hose routing)	mm	885	885	885	885	885		
Stabilizer spread, S1 (standard)	mm	5575	5575	5575	5575	5575	5575	5575
Stabilizer spread, D	mm	6455	6455	6455	6455	6455	6455	6455

<b>Weights, basic loader</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Standard loader 1), excl. stabilizers	kg	1840	1995	2180	2320	2445	2550	2635
Stabilizers, S1 fixed	kg	275	275	275	275	275	275	275
Stabilizers, S1 swing-up	kg	280	280	280	280	280	280	280
Stabilizers, S1 hydr. swing-up	kg	285	285	285	285	285	285	285
Stabilizers, D fixed	kg	355	355	355	355	355	355	355
Stabilizers, D swing-up	kg	355	355	355	355	355	355	355
Stabilizers, D hydr. swing-up	kg	365	365	365	365	365	365	365
Mounting kit, 4 bolts	kg	65	65	65	65	65	65	65
Mounting kit, 8 bolts	kg	60	60	60	60	60	60	60
Tank, excl. oil (fitted on loader)	kg	45	45	45	45	45	45	45
Manual extensions	kg			80	70	60	35	35
	kg			70	60	45	35	
	kg			60	45	35		
Oil in loader (stowing position)	kg	40	45	50	55	60	65	65
	kg		75	65	45	40		
	kg		65	45	40			
Oil in loader (stowing position)	kg	30	35	40	45	50	50	

## 20/138DL Metric Specifications - Continued

<b>Weights, equipment</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Stand-up controls (HS), std.	kg	60	60	60	60	60	60	60
Stand-up controls (HS), direct valve control	kg	70	70	70	70	70	70	70
Top seat (TS)	kg	90	90	90	90	90	90	90
Top seat, ladder	kg	20	20	20	20	20	20	20
1 extra valve, hose guides	kg	55	65	75	85	95		
1 extra valve, hose reels	kg						95	95
1 extra valve, int. hose routing	kg	75	75	80	80	85		
2 extra valves, hose guides	kg	75	90	105	120	135		
2 extra valves, hose reels	kg						185	185
2 extra valves, int. hose routing	kg	130	130	140	145	150		
Winch (1.5 t), single snatch block	kg	175	175	175	175	180	180	190
Winch (1.5 t), double snatch block	kg	170	170	170	170	175	175	180
Winch (2.5 t), single snatch block	kg	200	200	200	200	205	205	210
Winch (2.5 t), double snatch block	kg	195	195	195	195	200	200	205
High-pressure filter	kg	7	7	7	7	7	7	7
Oil cooler	kg	25	25	25	25	25	25	25

1) Weights ± 5% because of tolerances for plate thickness

<b>Max. Load on stabilizers (per stabilizer cylinder)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
S1, fixed	kN	110	110	110	110	110	110	110
S1, swing-up	kN	110	110	110	110	110	110	110
S1, hydr. swing-up	kN	110	110	110	110	110	110	110
D, fixed	kN	85	85	85	85	85	85	85
D, swing-up	kN	85	85	85	85	85	85	85
D, hydr. swing-up	kN	85	85	85	85	85	85	85

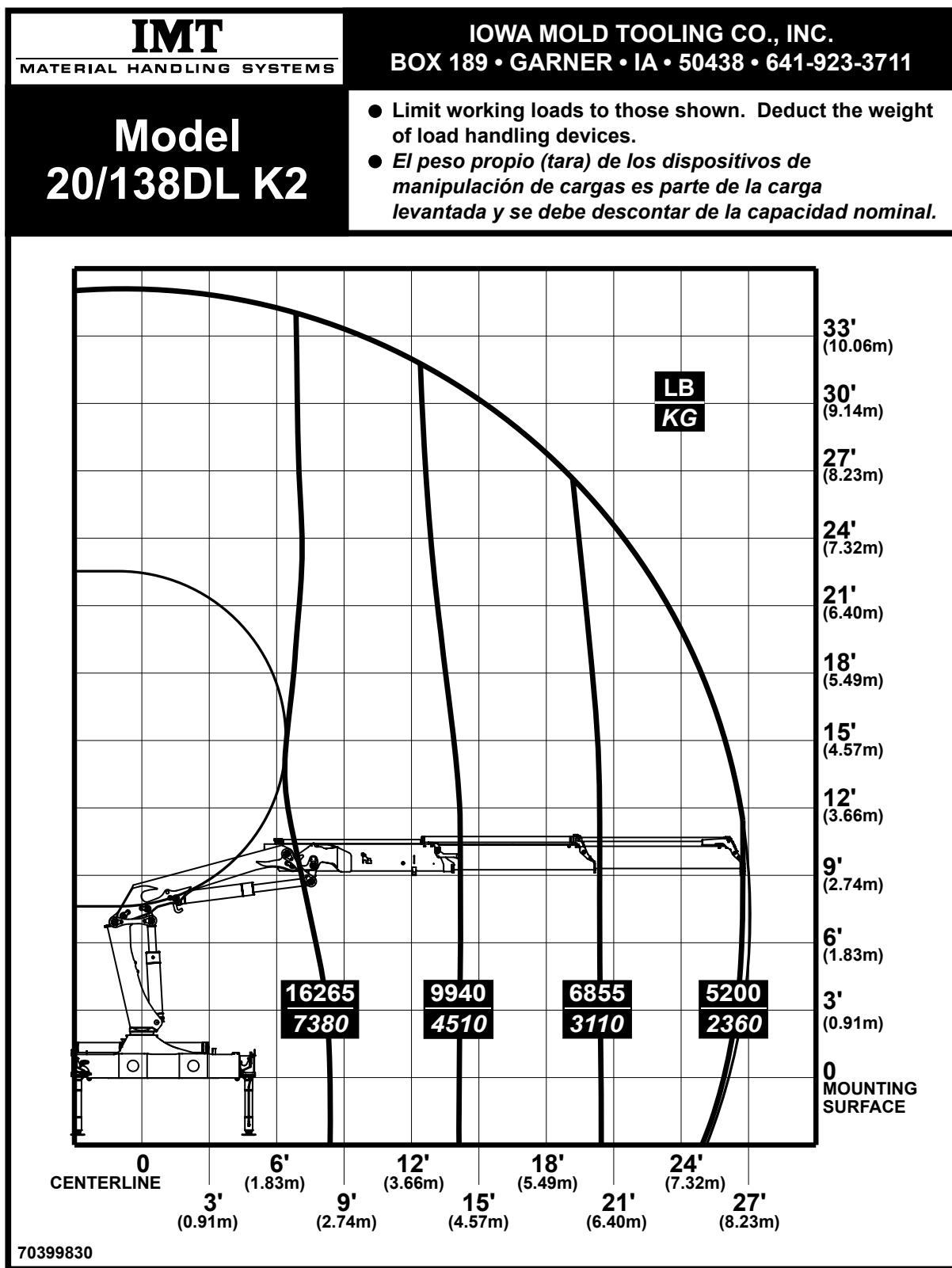
<b>Power consumption (oil capacity)</b>	<b>Unit</b>	<b>K2</b>	<b>K3</b>	<b>K4</b>	<b>K5</b>	<b>K6</b>	<b>K7</b>	<b>K8</b>
Working pressure	Bar	345	345	345	345	345	345	345
Tank capacity (fitted on loader)	L	90	90	90	90	90	90	90
Max. pump performance, Hydrocontrol, 1-circuit	L/min	55	55	55	55	55	55	55
Max. pump performance, Hydrocontrol, 2-circuit	L/min	-	-	-	-	-	-	-
Max. pump performance, Danfoss fixed flow	L/min	70	70	70	70	70	70	70
Max. pump performance, Danfoss variable	L/min	100	100	100	100	100	100	100

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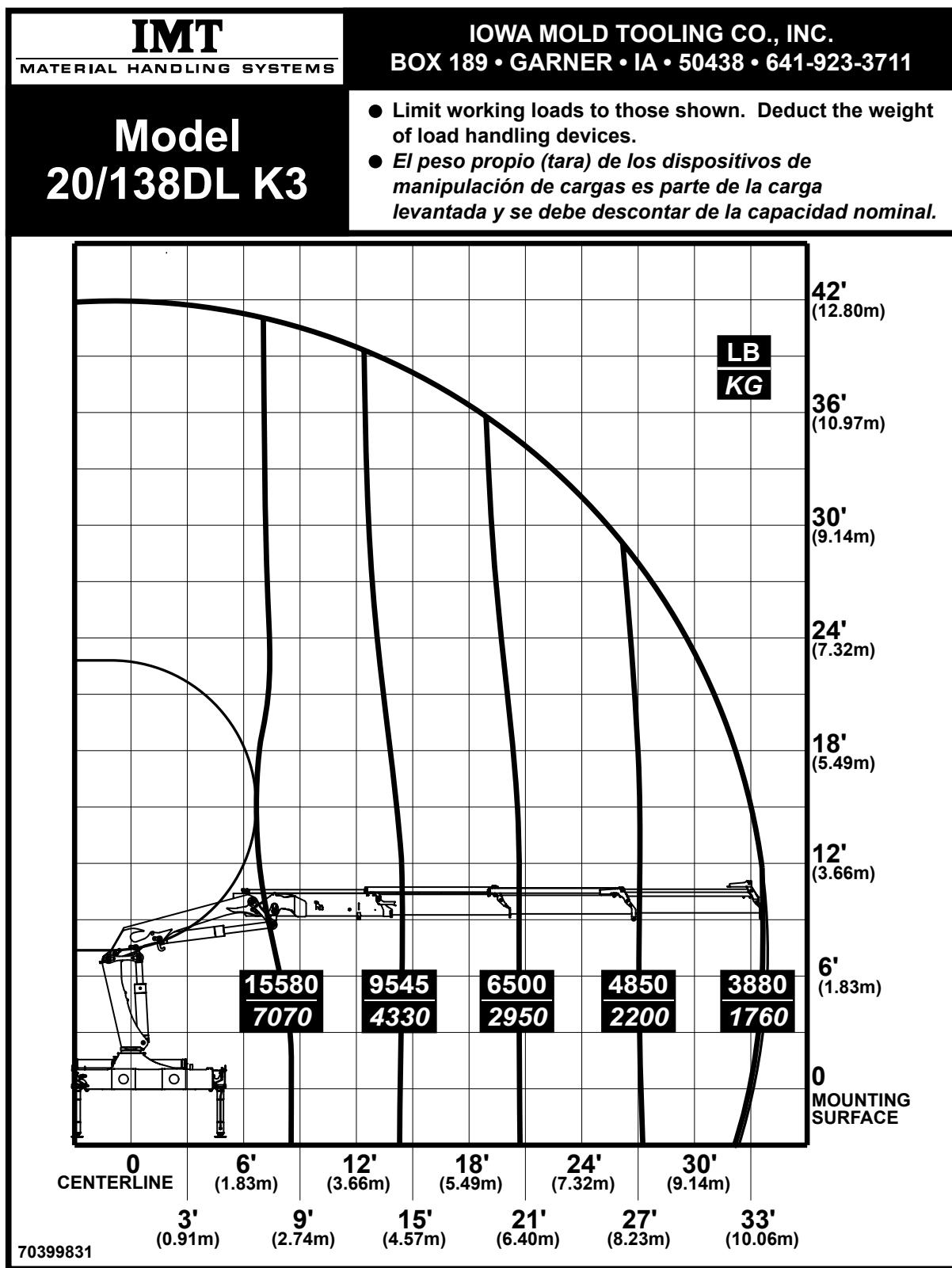
## 20/138DL Load Capacity Charts

## Section - 5

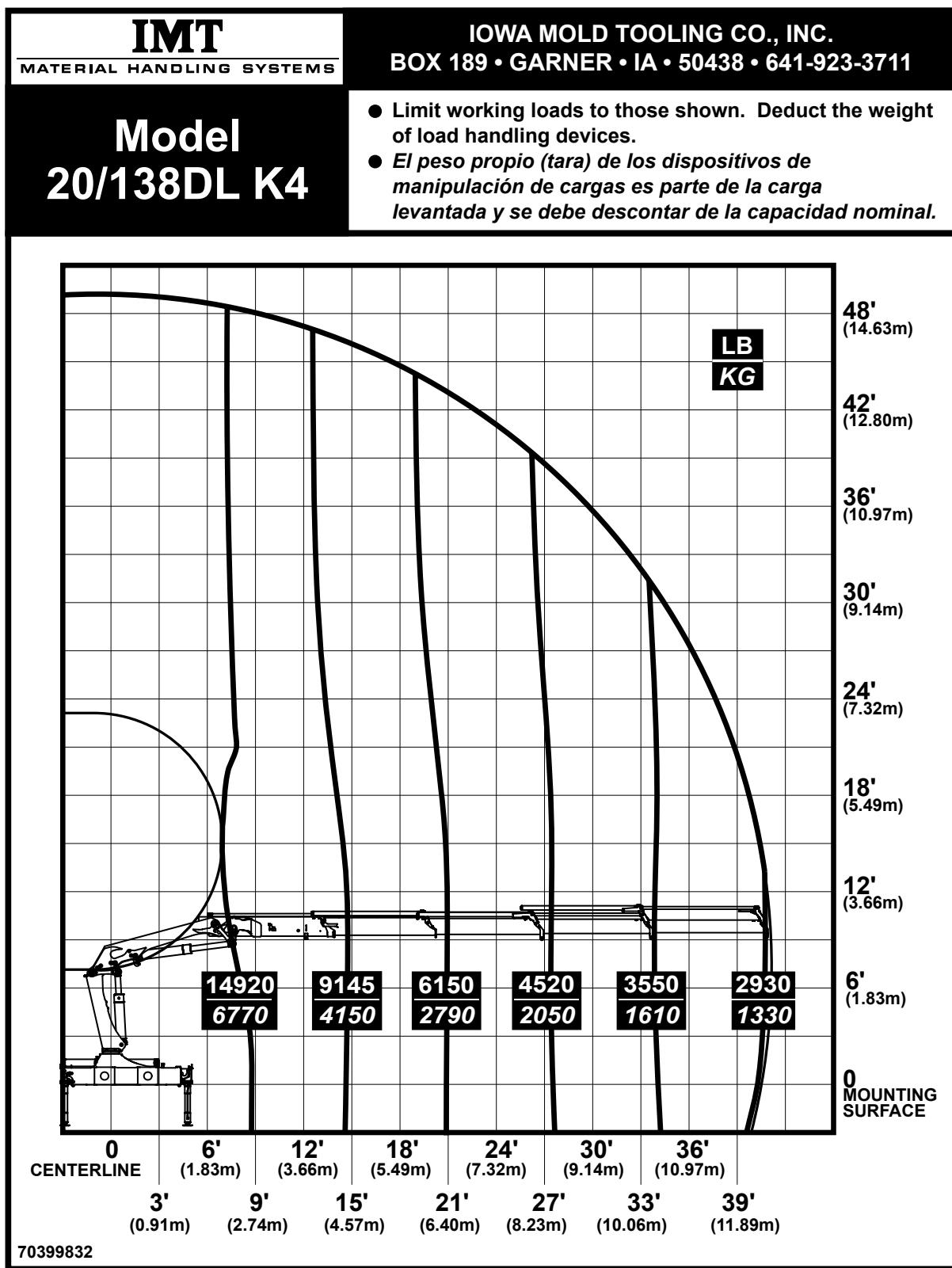
## 20/138DL Lifting Capacity Chart, K2



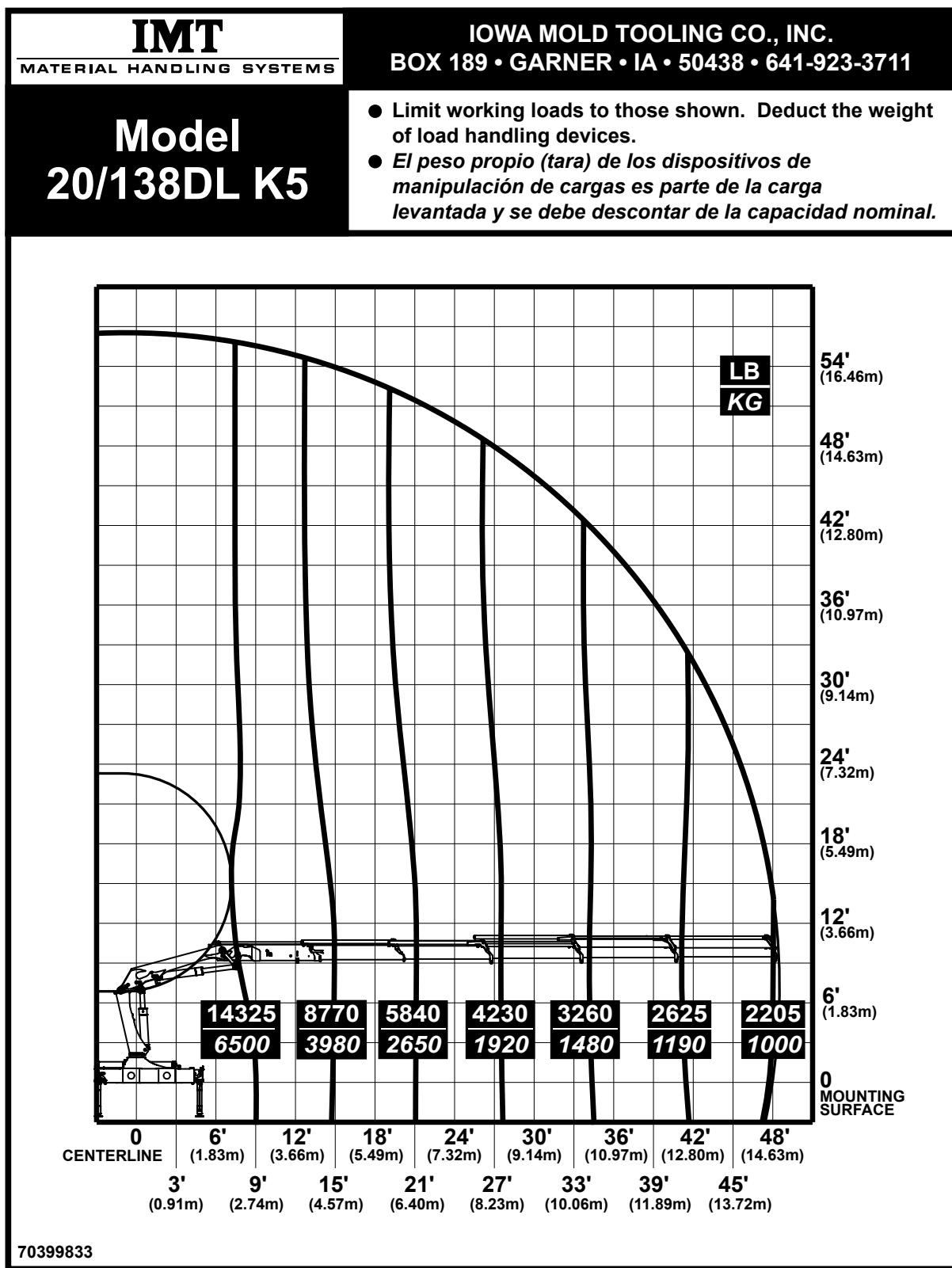
## 20/138DL Lifting Capacity Chart, K3



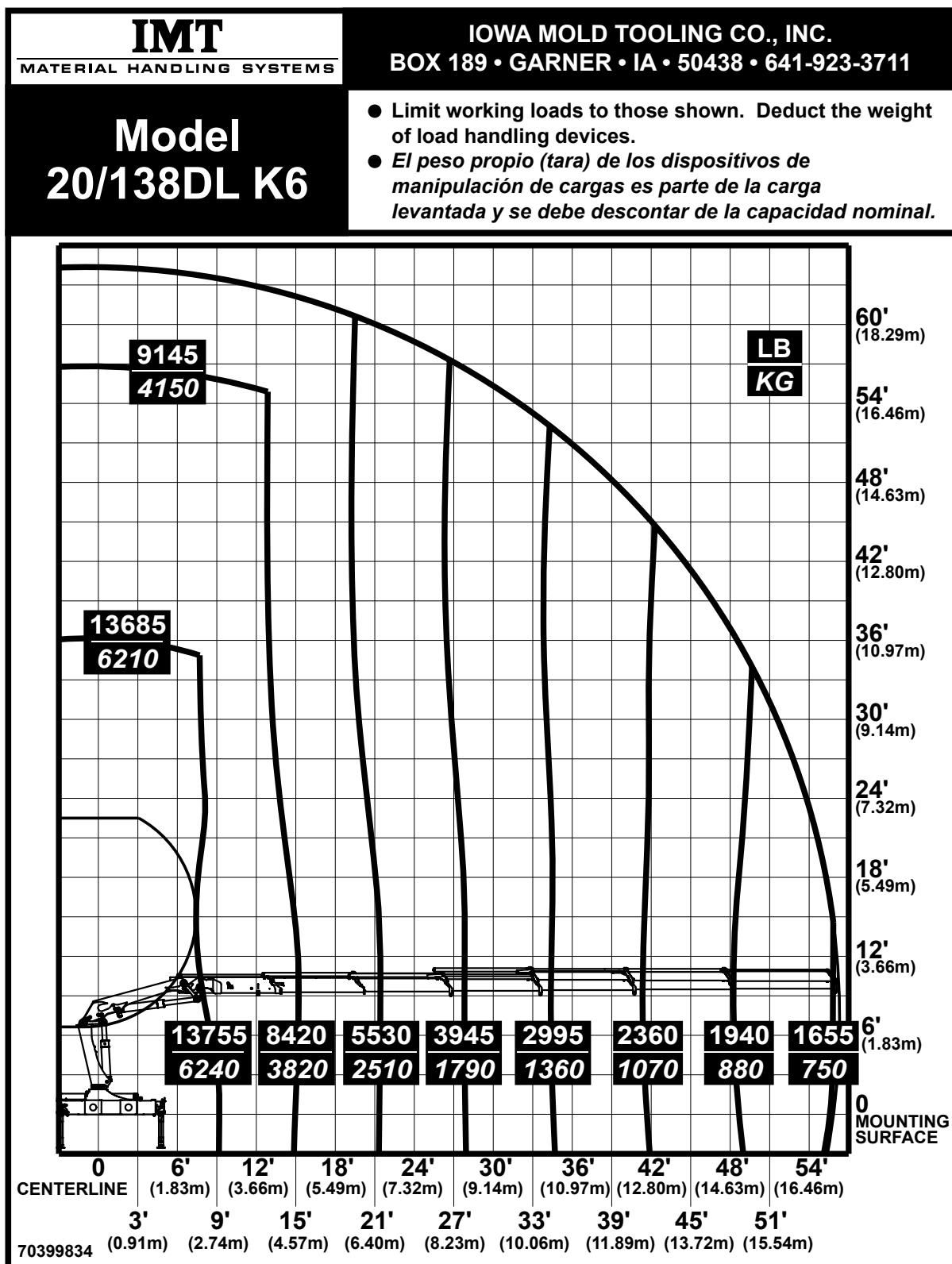
## **20/138DL Lifting Capacity Chart, K4**



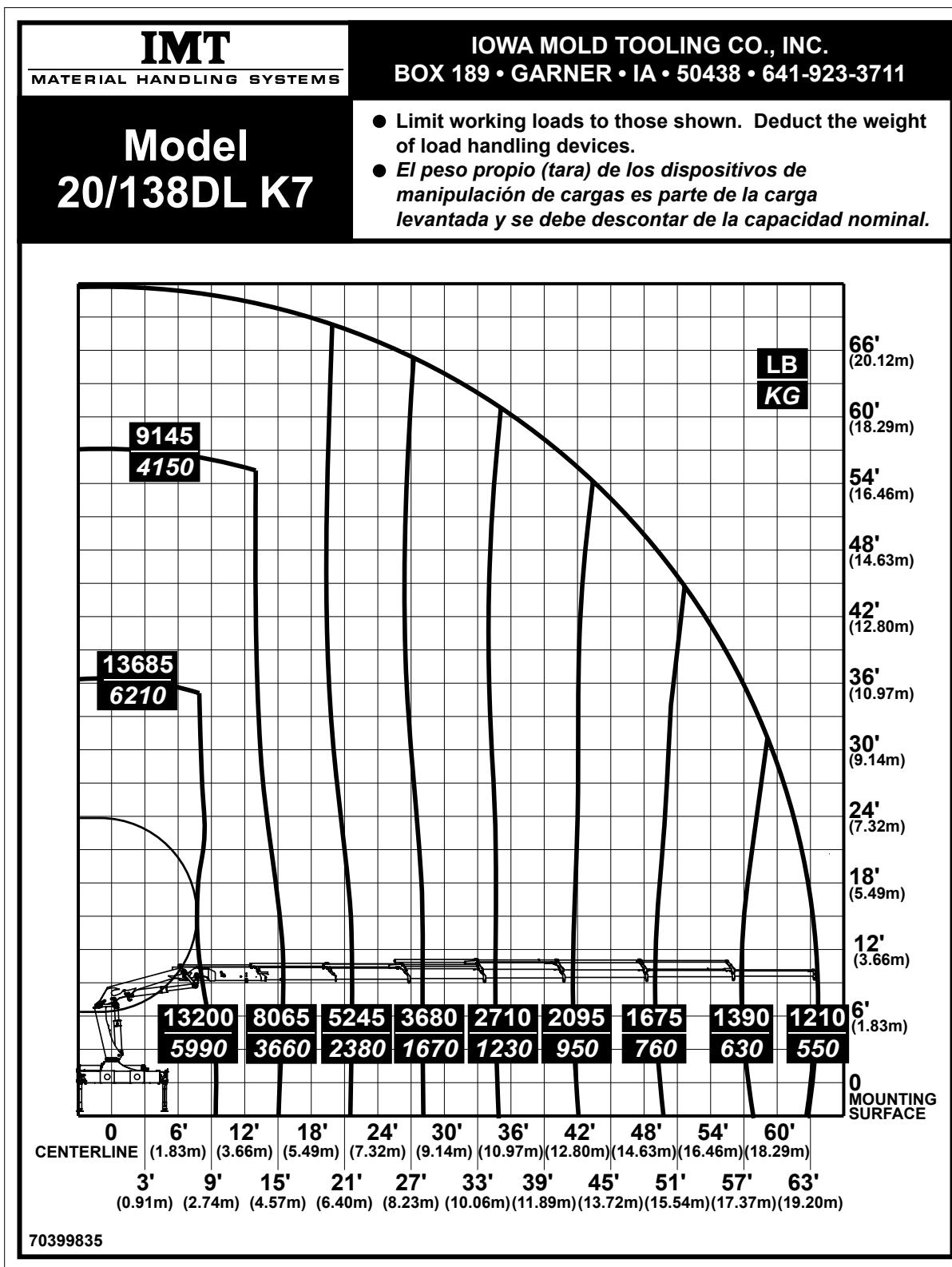
## 20/138DL Lifting Capacity Chart, K5



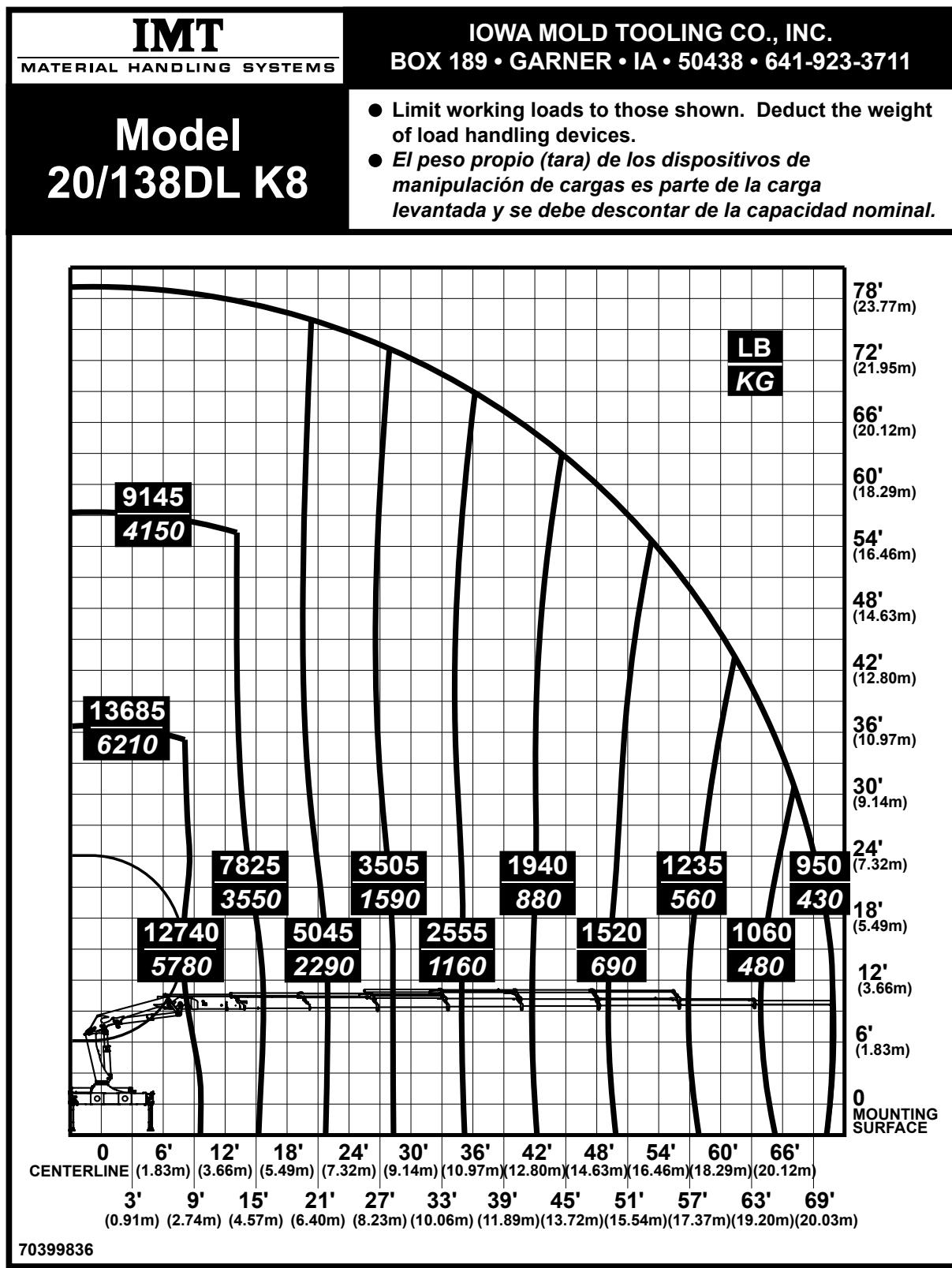
## 20/138DL Lifting Capacity Chart, K6



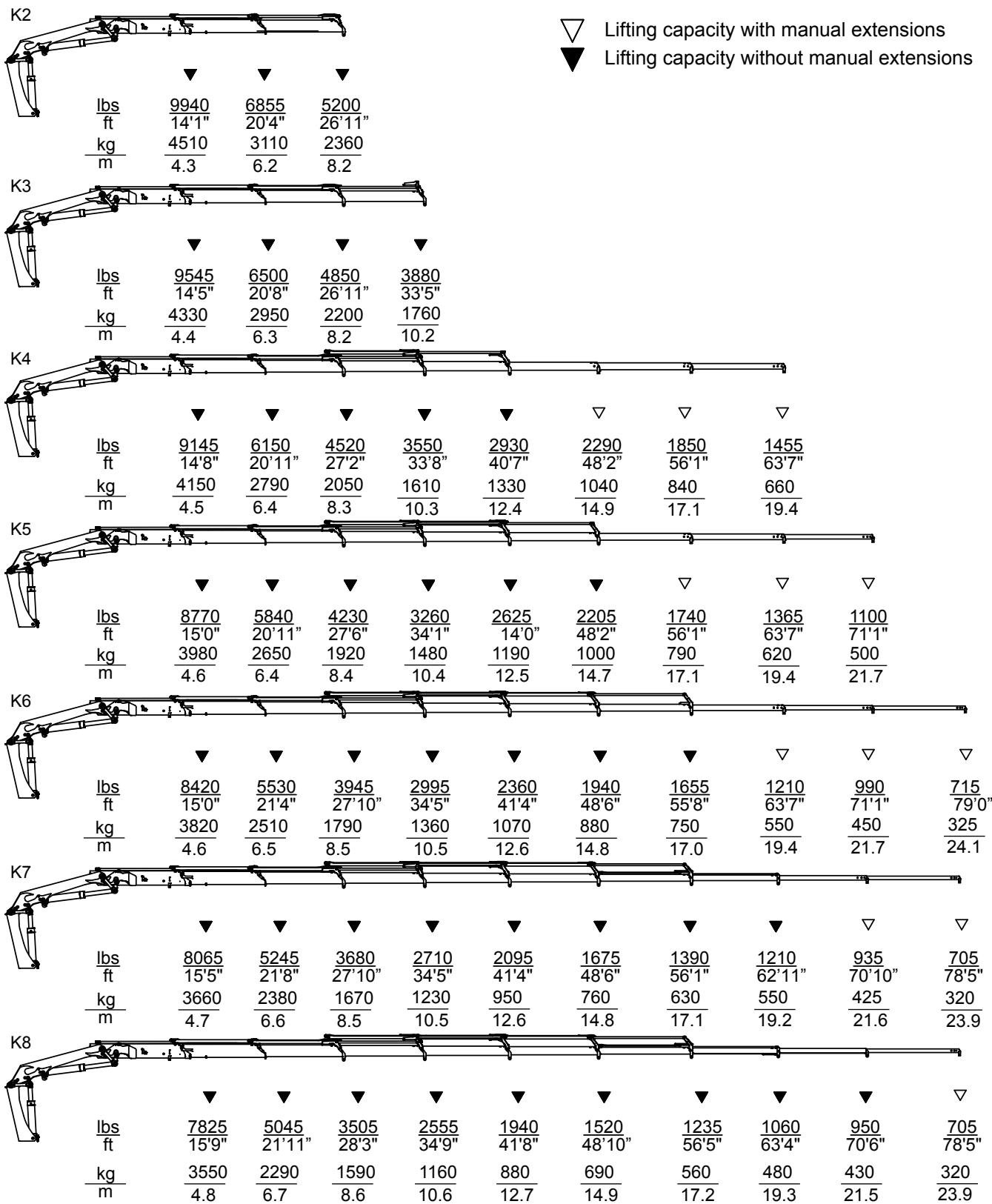
## 20/138DL Lifting Capacity Chart, K7



## 20/138DL Lifting Capacity Chart, K8



## 20/138DL Lifting Capacity Chart, K2 - K8



The chart displays lifting capacity for a 20/138DL crane across eight boom extension configurations (K2 through K8). Each configuration shows the crane's reach and capacity at different angles. Capacity is listed in lbs (top), ft (middle), and kg (bottom) for each of the four main lift ranges.

**Legend:**

- ▽ Lifting capacity with manual extensions
- ▼ Lifting capacity without manual extensions

**Configuration K2:**

	9940 14'1" 4510 4.3	6855 20'4" 3110 6.2	5200 26'11" 2360 8.2
--	------------------------------	------------------------------	-------------------------------

**Configuration K3:**

	9545 14'5" 4330 4.4	6500 20'8" 2950 6.3	4850 26'11" 2200 8.2	3880 33'5" 1760 10.2
--	------------------------------	------------------------------	-------------------------------	-------------------------------

**Configuration K4:**

	9145 14'8" 4150 4.5	6150 20'11" 2790 6.4	4520 27'2" 2050 8.3	3550 33'8" 1610 10.3	2930 40'7" 1330 12.4	2290 48'2" 1040 14.9	1850 56'1" 840 17.1	1455 63'7" 660 19.4
--	------------------------------	-------------------------------	------------------------------	-------------------------------	-------------------------------	-------------------------------	------------------------------	------------------------------

**Configuration K5:**

	8770 15'0" 3980 4.6	5840 20'11" 2650 6.4	4230 27'6" 1920 8.4	3260 34'1" 1480 10.4	2625 14'0" 1190 12.5	2205 48'2" 1000 14.7	1740 56'1" 790 17.1	1365 63'7" 620 19.4	1100 71'1" 500 21.7
--	------------------------------	-------------------------------	------------------------------	-------------------------------	-------------------------------	-------------------------------	------------------------------	------------------------------	------------------------------

**Configuration K6:**

	8420 15'0" 3820 4.6	5530 21'4" 2510 6.5	3945 27'10" 1790 8.5	2995 34'5" 1360 10.5	2360 41'4" 1070 12.6	1940 48'6" 880 14.8	1655 55'8" 750 17.0	1210 63'7" 550 19.4	990 71'1" 450 21.7	715 79'0" 325 24.1
--	------------------------------	------------------------------	-------------------------------	-------------------------------	-------------------------------	------------------------------	------------------------------	------------------------------	-----------------------------	-----------------------------

**Configuration K7:**

	8065 15'5" 3660 4.7	5245 21'8" 2380 6.6	3680 27'10" 1670 8.5	2710 34'5" 1230 10.5	2095 41'4" 950 12.6	1675 48'6" 760 14.8	1390 56'1" 630 17.1	1210 62'11" 550 19.2	935 70'10" 425 21.6	705 78'5" 320 23.9
--	------------------------------	------------------------------	-------------------------------	-------------------------------	------------------------------	------------------------------	------------------------------	-------------------------------	------------------------------	-----------------------------

**Configuration K8:**

	7825 15'9" 3550 4.8	5045 21'11" 2290 6.7	3505 28'3" 1590 8.6	2555 34'9" 1160 10.6	1940 41'8" 880 12.7	1520 48'10" 690 14.9	1235 56'5" 560 17.2	1060 63'4" 480 19.3	950 70'6" 430 21.5	705 78'5" 320 23.9
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**20/138DL Hydraulics**

**Section - 5**

## 20/138DL - Pressure setting diagram, fixed flow pump & Danfoss RC

Working Pressure on Main-Relief Valve & Port- Relief Valves						
Function	Direction	Port	Port-relief valves [bar]	LS-pressure adjustment [bar]	Port-relief valves [PSI]	LS-pressure adjustment [PSI]
Main-relief valve			345		5004	
Slewing system	Right	A	P	180	P	2611
	Left	B	P	180	P	2611
Boom cylinder	Down	A	125	100	1813	1450
	Up	B	350	380	5076	5511
Jib cylinder	Up	A	350	380	5076	5511
	Down	B	250	230	3626	3336
Extension cylinders	Extend	A	P	-	P	-
	Retract	B	P	-	P	-
Rotator	Right	A	P	50-300	P	725-4351
	Left	B	P	50-300	P	725-4351
Grab	Open	A	P	50-300	P	725-4351
	Close	B	P	50-300	P	725-4351
Winch 1,5T	Lift	A	P	160	P	2321
	Lower	B	P	160	P	2321
Winch 2,5T	Lift	A	P	185	P	2683
	Lower	B	P	185	P	2683
Separate stabilizer valve		All	150		2176	

Working Pressure on Load-holding Valves			
Function	Direction	Opening pressure [bar]	Opening pressure [PSI]
Slewing system	Right	185	2683
	Left	185	2683
Boom cylinder	Up	365	5294
	Down	-	-
Jib cylinder	Up	380	5511
	Down	300	4351
Extension cylinders	Retract	430	6237
	Extend	210	3046

Pressure setting for Load Moment Limitation (LMB)		
Load moment limitation (LMB)	330 [bar]	4786 [PSI]
HDL	285 [bar]	4134 [PSI]

Max. pump performance		
Choice of pump	1 x Fixed	1 x Fixed
Pump performance	70 L/min	18.5 gpm

## 20/138DL - Pressure setting diagram, variable flow pump & Danfoss RC

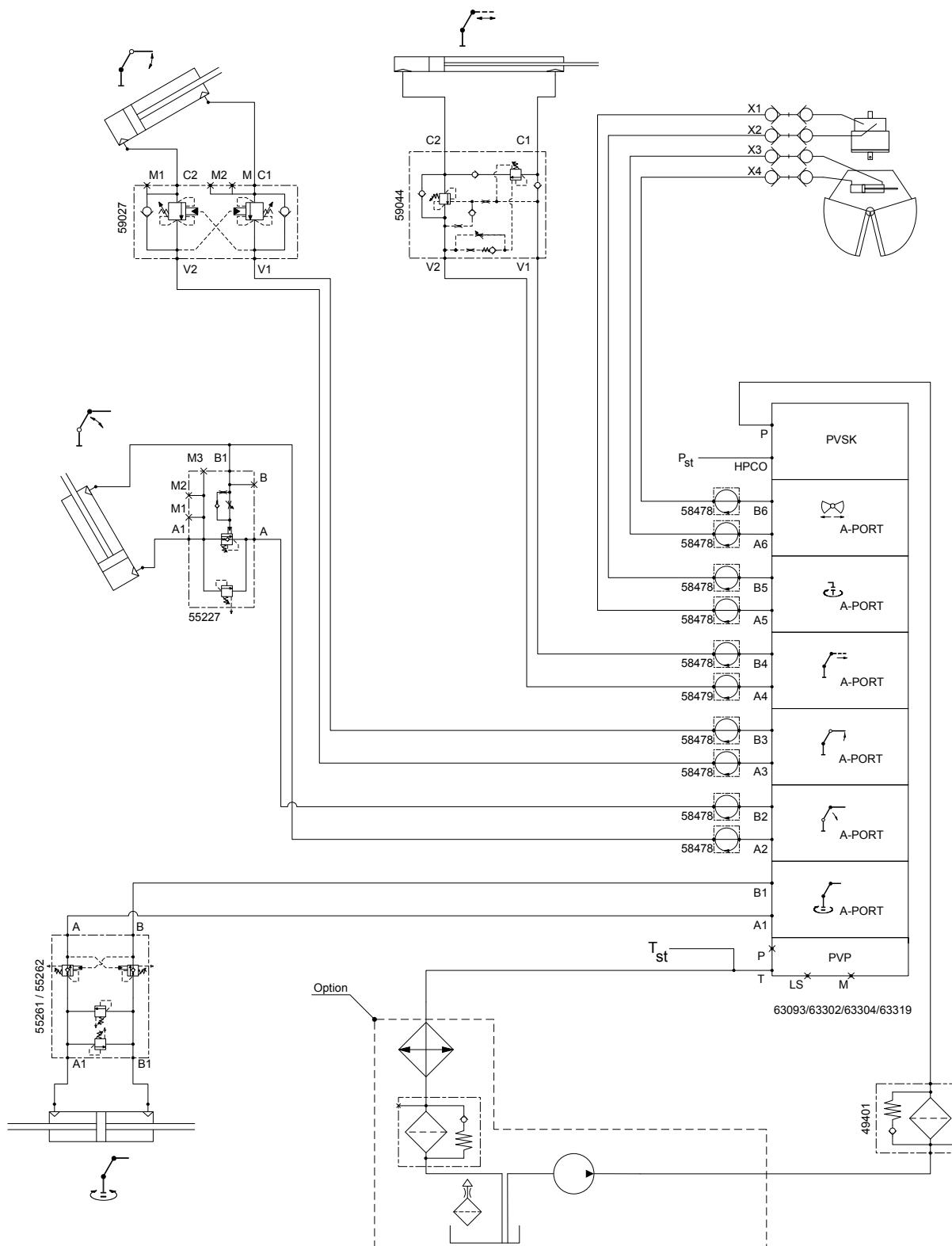
Working Pressure on Main-Relief Valve & Port- Relief Valves						
Function	Direction	Port	Port-relief valves [bar]	LS-pressure adjustment [bar]	Port-relief valves [PSI]	LS-pressure adjustment [PSI]
Main-relief valve			345		5004	
Slewing system	Right	A	P	180	P	2611
	Left	B	P	180	P	2611
Boom cylinder	Down	A	125	100	1813	1450
	Up	B	350	380	5076	5511
Jib cylinder	Up	A	350	380	5076	5511
	Down	B	250	230	3626	3336
Extension cylinders	Extend	A	P	300	P	4351
	Retract	B	P	300	P	4351
Rotator	Right	A	P	50-300	P	725-4351
	Left	B	P	50-300	P	725-4351
Grab	Open	A	P	50-300	P	725-4351
	Close	B	P	50-300	P	725-4351
Winch 1,5T	Lift	A	P	160	P	2321
	Lower	B	P	160	P	2321
Winch 2,5T	Lift	A	P	185	P	2683
	Lower	B	P	185	P	2683
Separate stabilizer valve		All	150		2176	

Working Pressure on Load-holding Valves			
Function	Direction	Opening pressure [bar]	Opening pressure [PSI]
Slewing system	Right	185	2683
	Left	185	2683
Boom cylinder	Up	365	5294
	Down	-	-
Jib cylinder	Up	380	5511
	Down	300	4351
Extension cylinders	Retract	430	6237
	Extend	210	3046

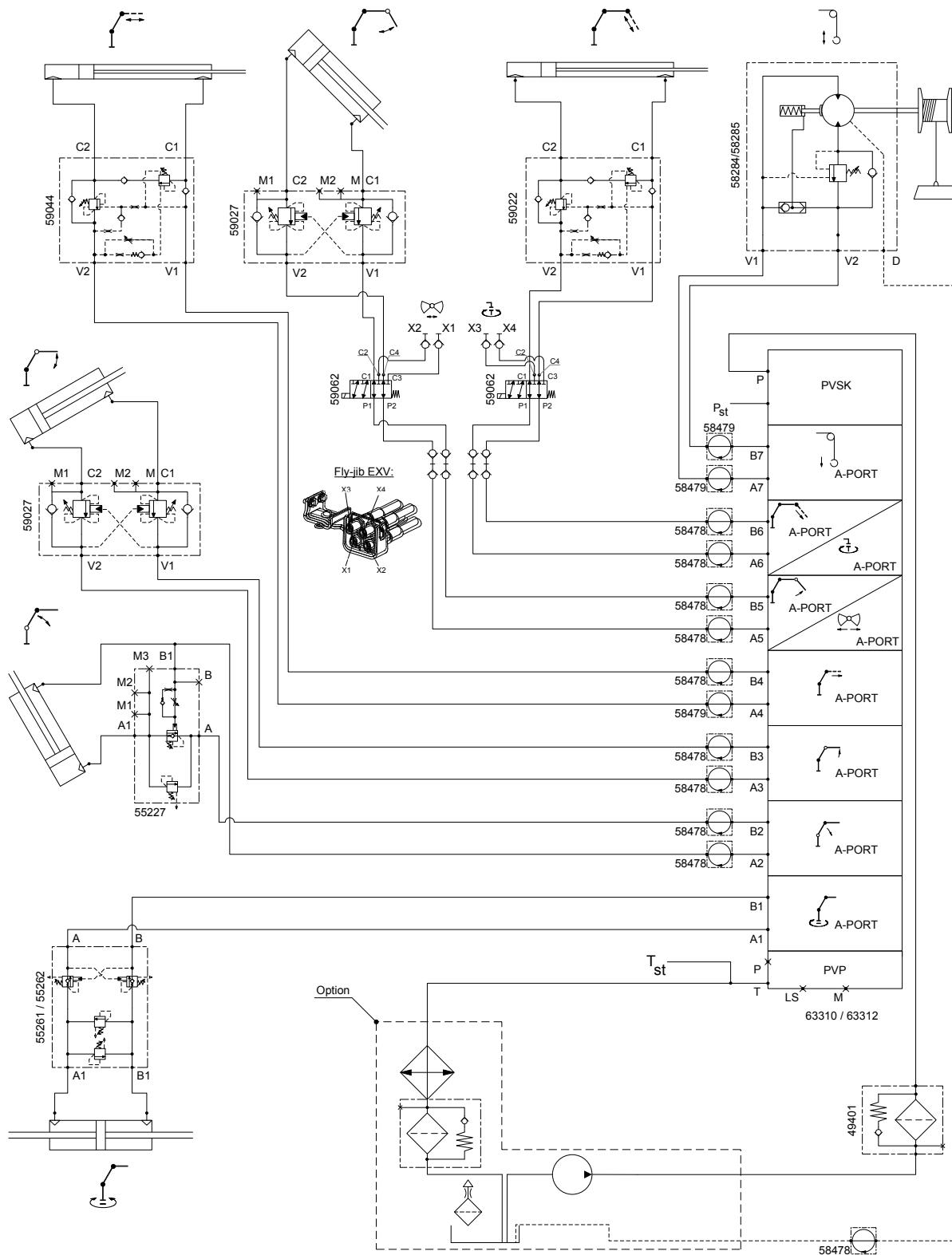
Pressure setting for Load Moment Limitation (LMB)		
Load moment limitation (LMB)	330 [bar]	4786 [PSI]
HDL	285 [bar]	4134 [PSI]

Max. pump performance		
Choice of pump	1 x Variable	1 x Variable
Pump performance	100 L/min	26.4 gpm

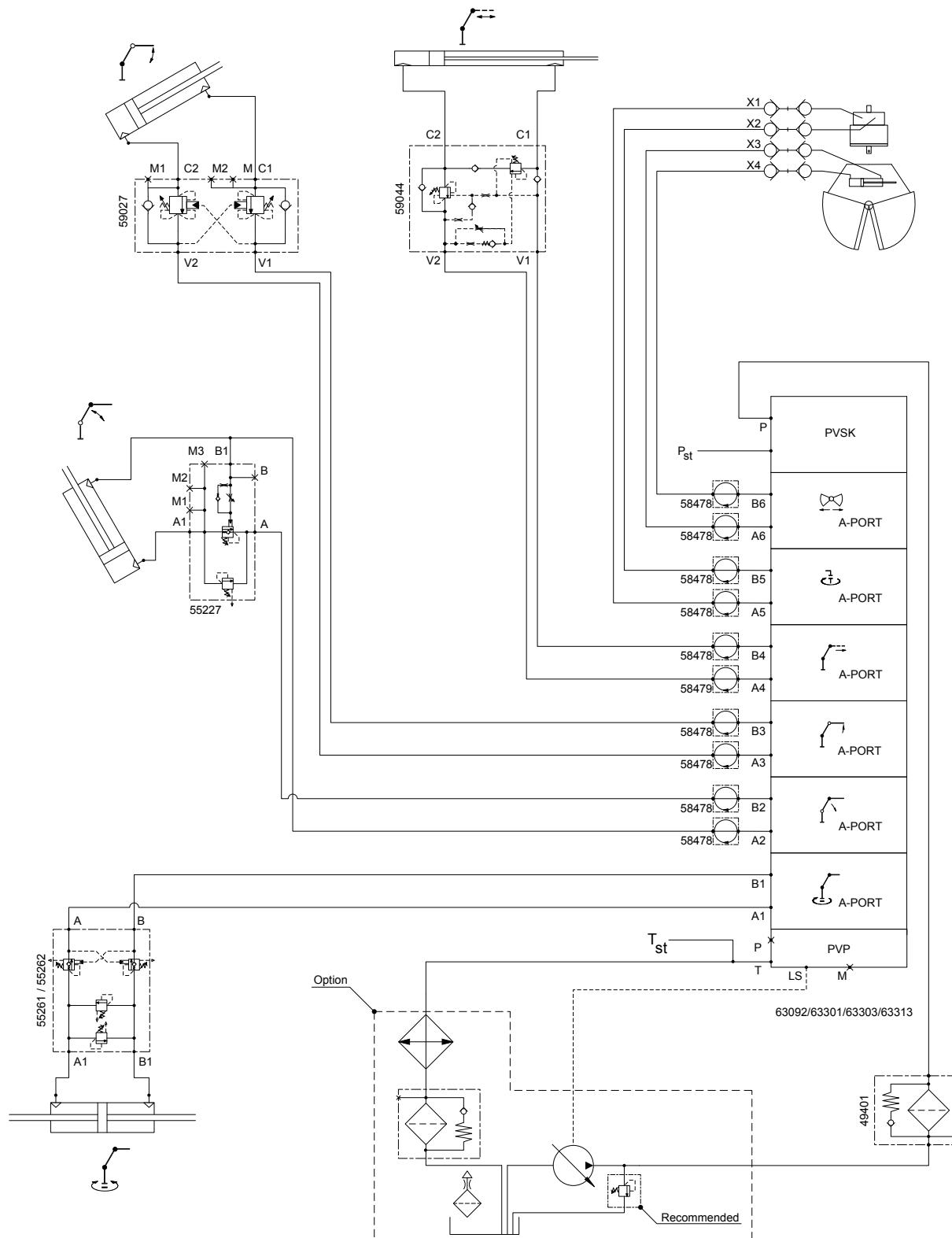
## Hydraulic Diagram - Danfoss, single-circuit fixed 6 fcts. RC (2 EXV: Grab + Rotator)



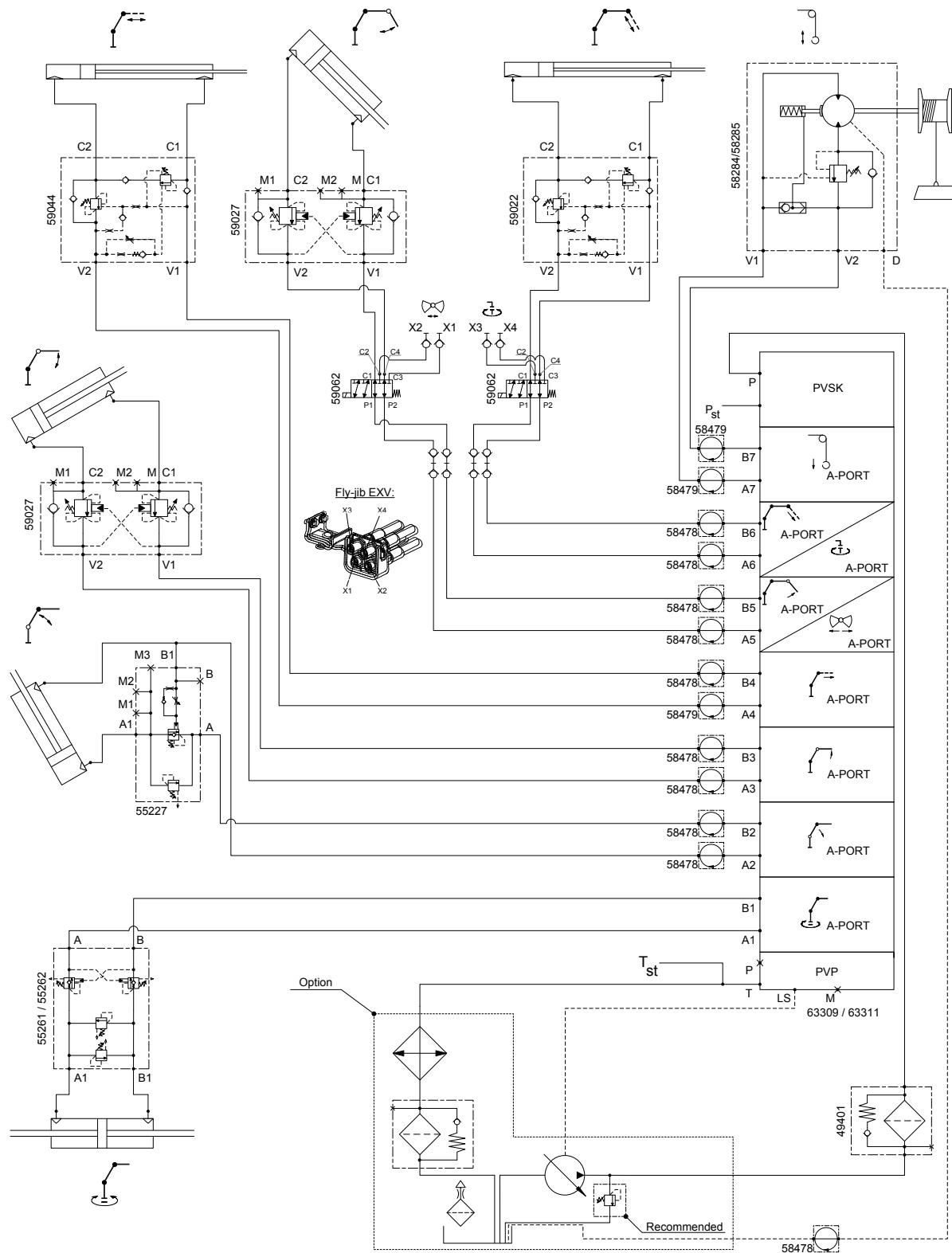
## Hydraulic Diagram - Danfoss, single-circuit variable 7 fcts. RC (3 EXV: FJ + 2 EXV, winch)



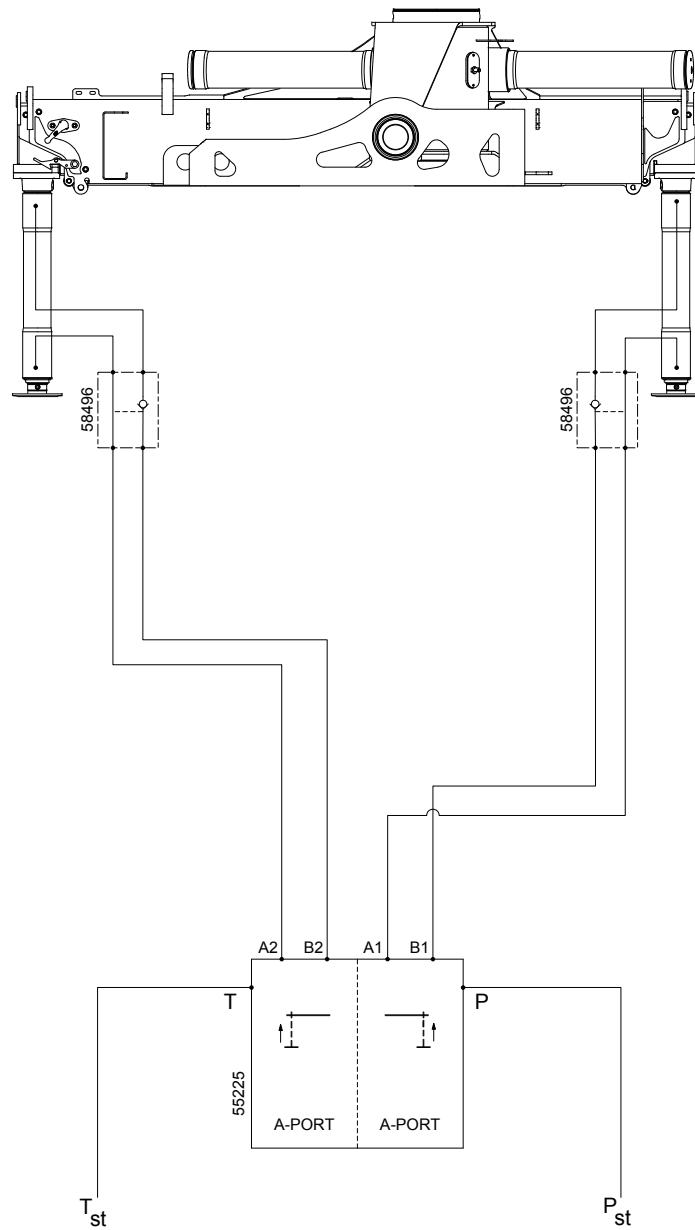
## Hydraulic Diagram - Danfoss, single-circuit variable 6 fcts. RC/HS dir. valve contr. (2 EXV: Grab + Rotator)



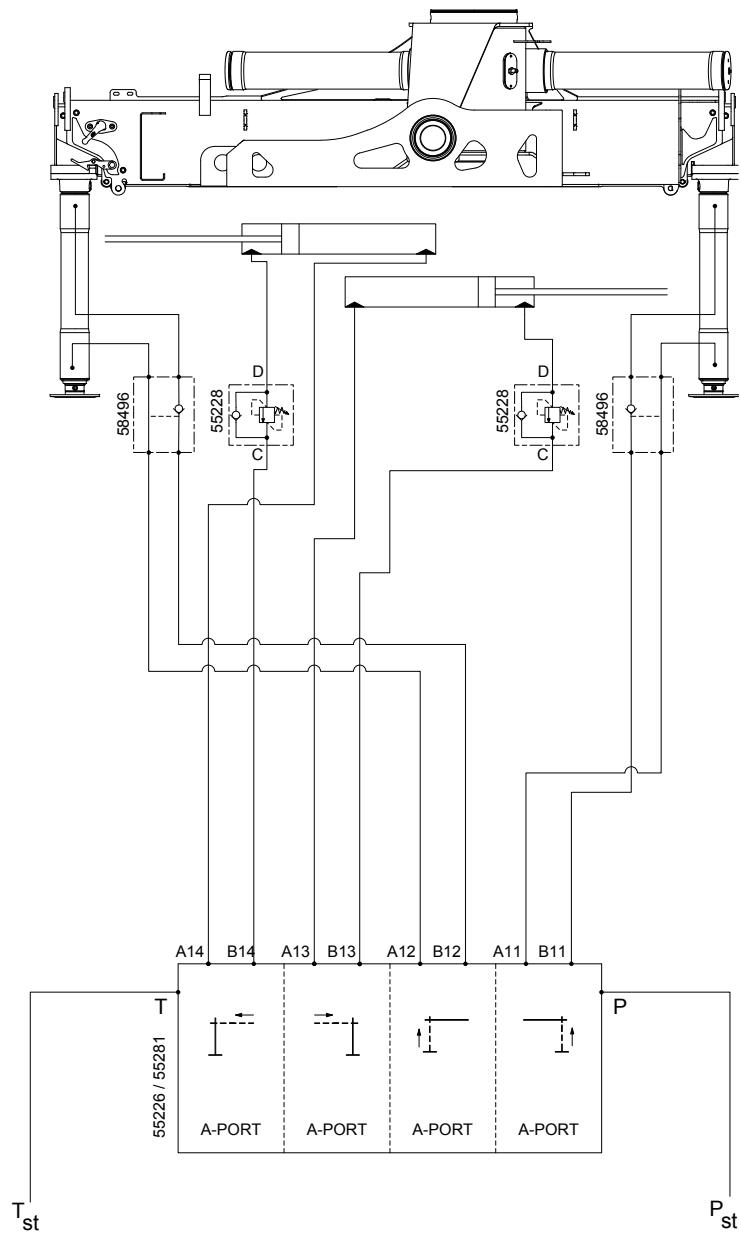
## Hydraulic Diagram - Danfoss, single-circuit variable 7 fcts. RC (3 EXV: FJ + 2 EXV, winch)



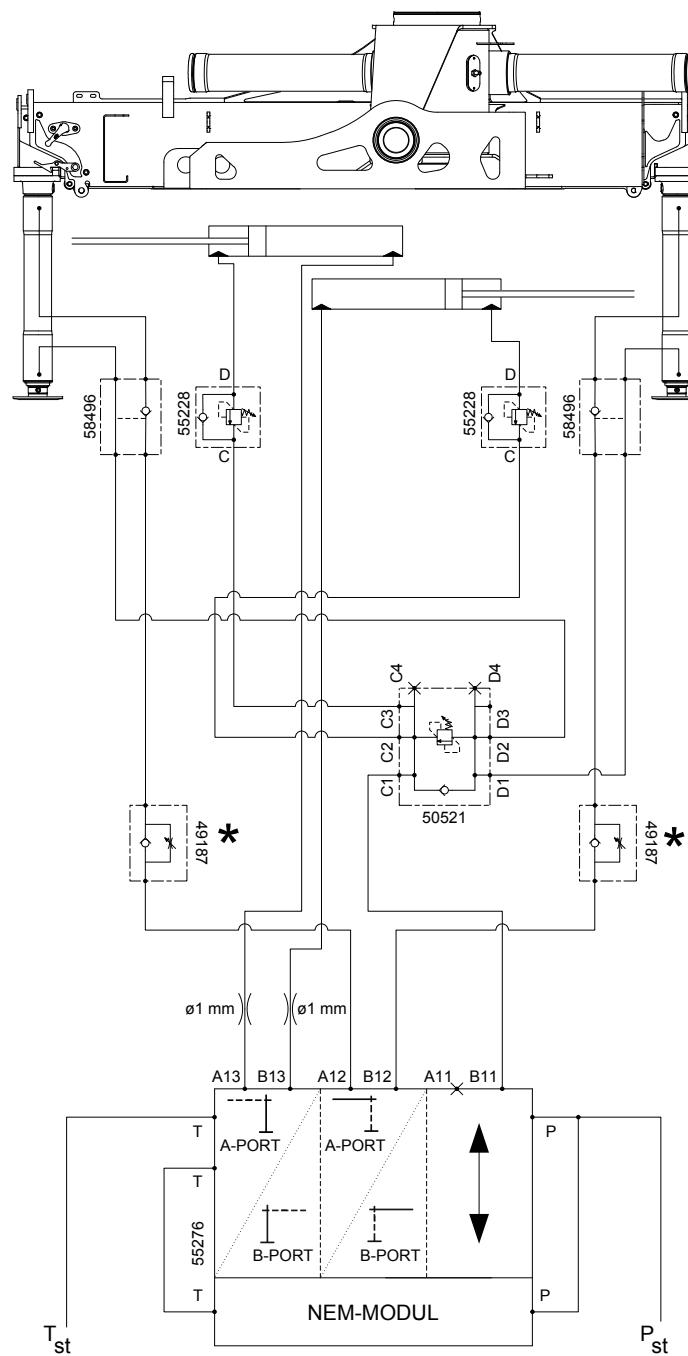
## Hydraulic Diagram - Stabilizer circuit – 2 fcts.



## Hydraulic Diagram - Stabilizer circuit – 4 fcts.

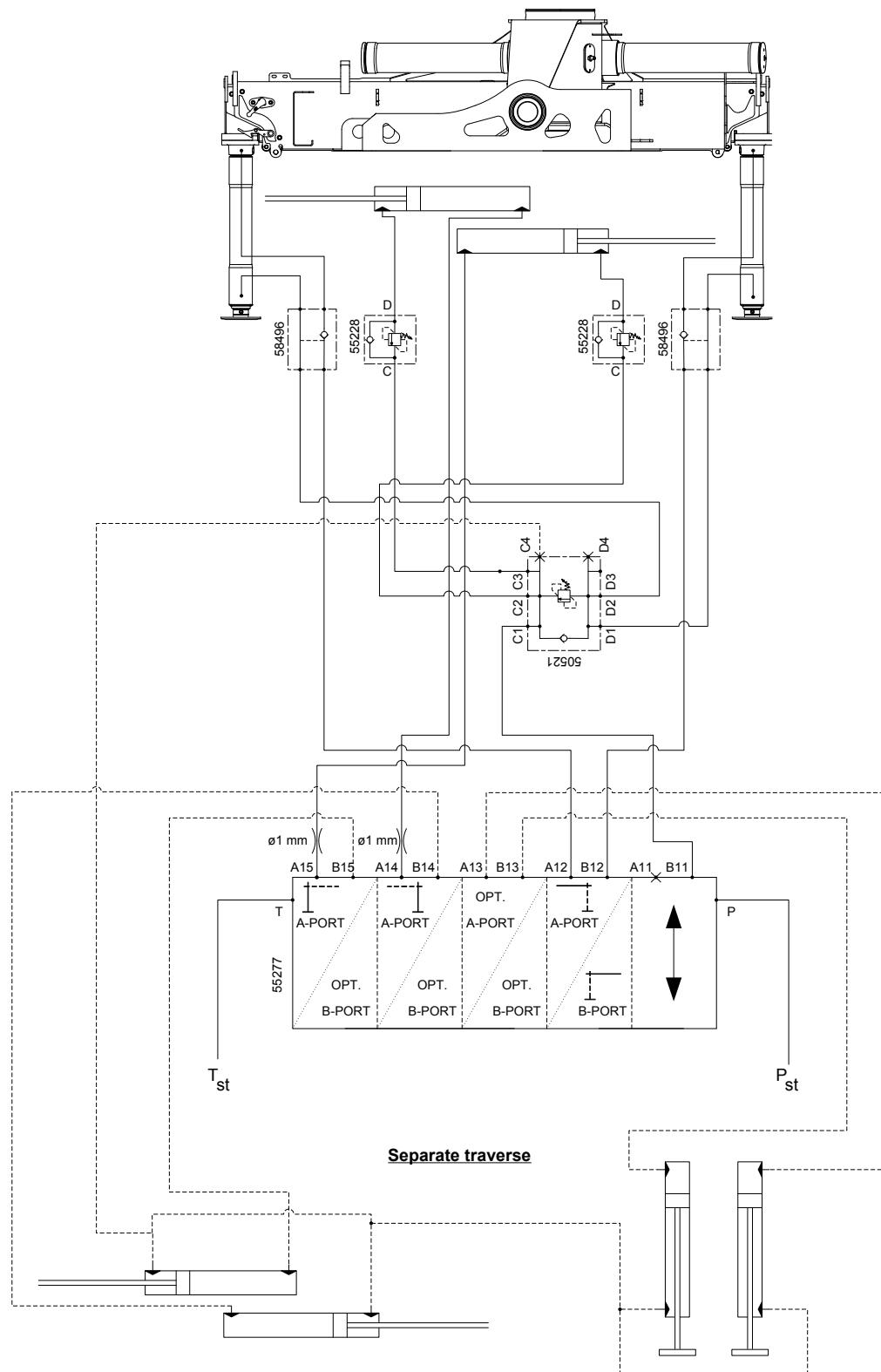


## Hydraulic Diagram - Stabilizer circuit – 4 fcts. RC

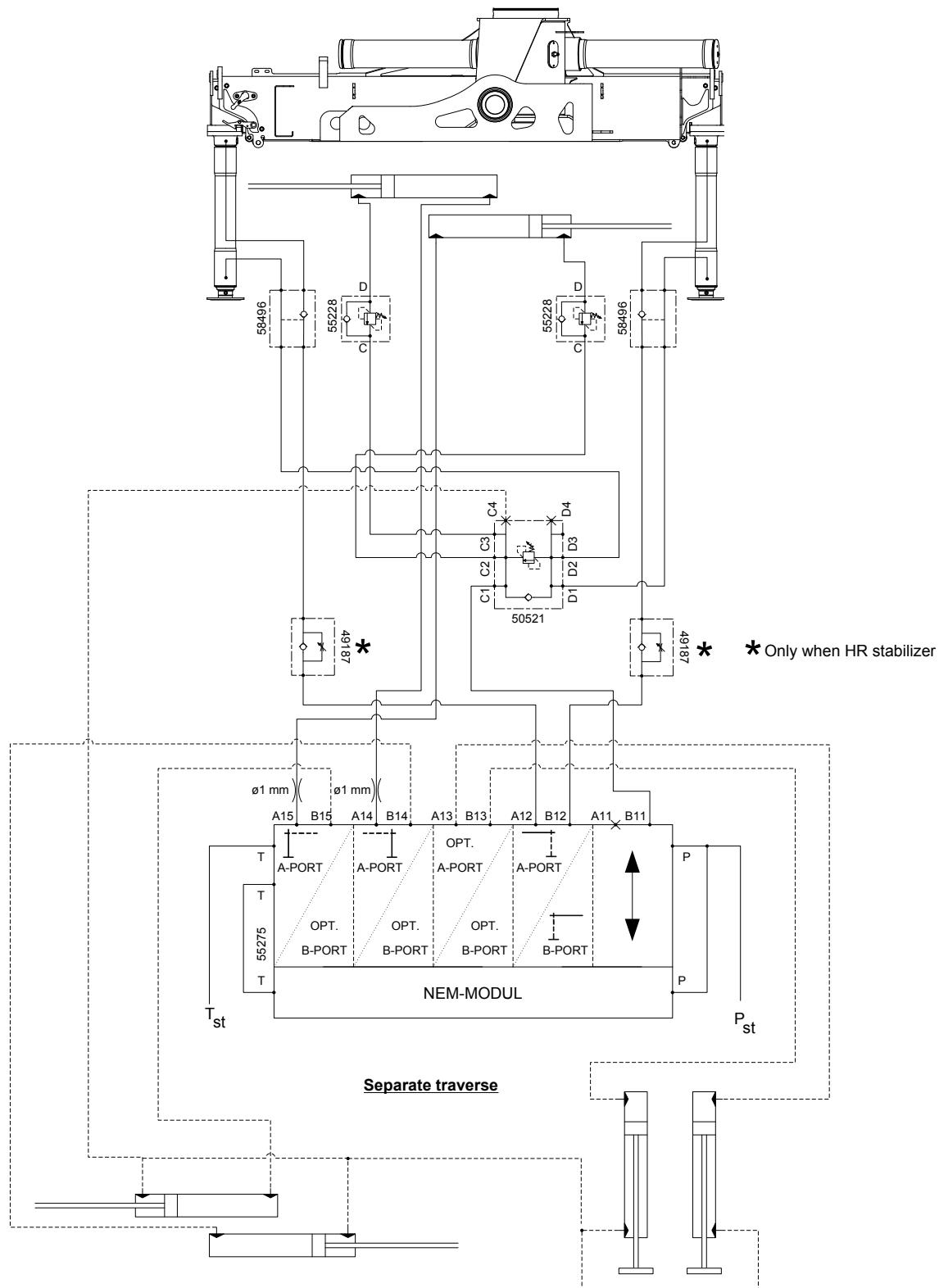


\* Only when HR stabilizer

## Hydraulic Diagram - Stabilizer circuit – 4 fcts. + 4 available fcts.



## Hydraulic Diagram - Stabilizer circuit – 4 fcts. + 4 available fcts. RC



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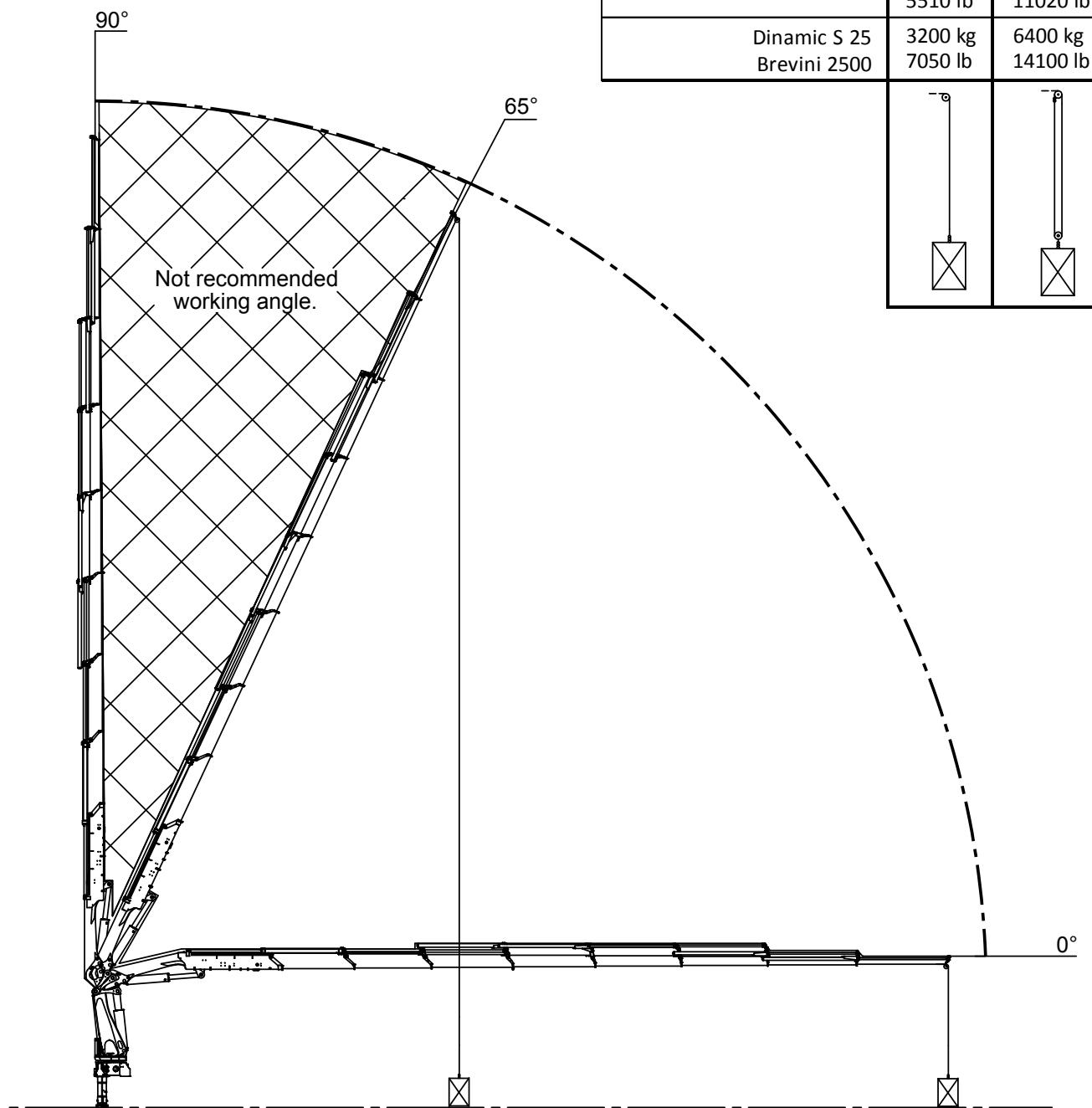
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**20/138SL - 20/138DL Dimension Drawings**

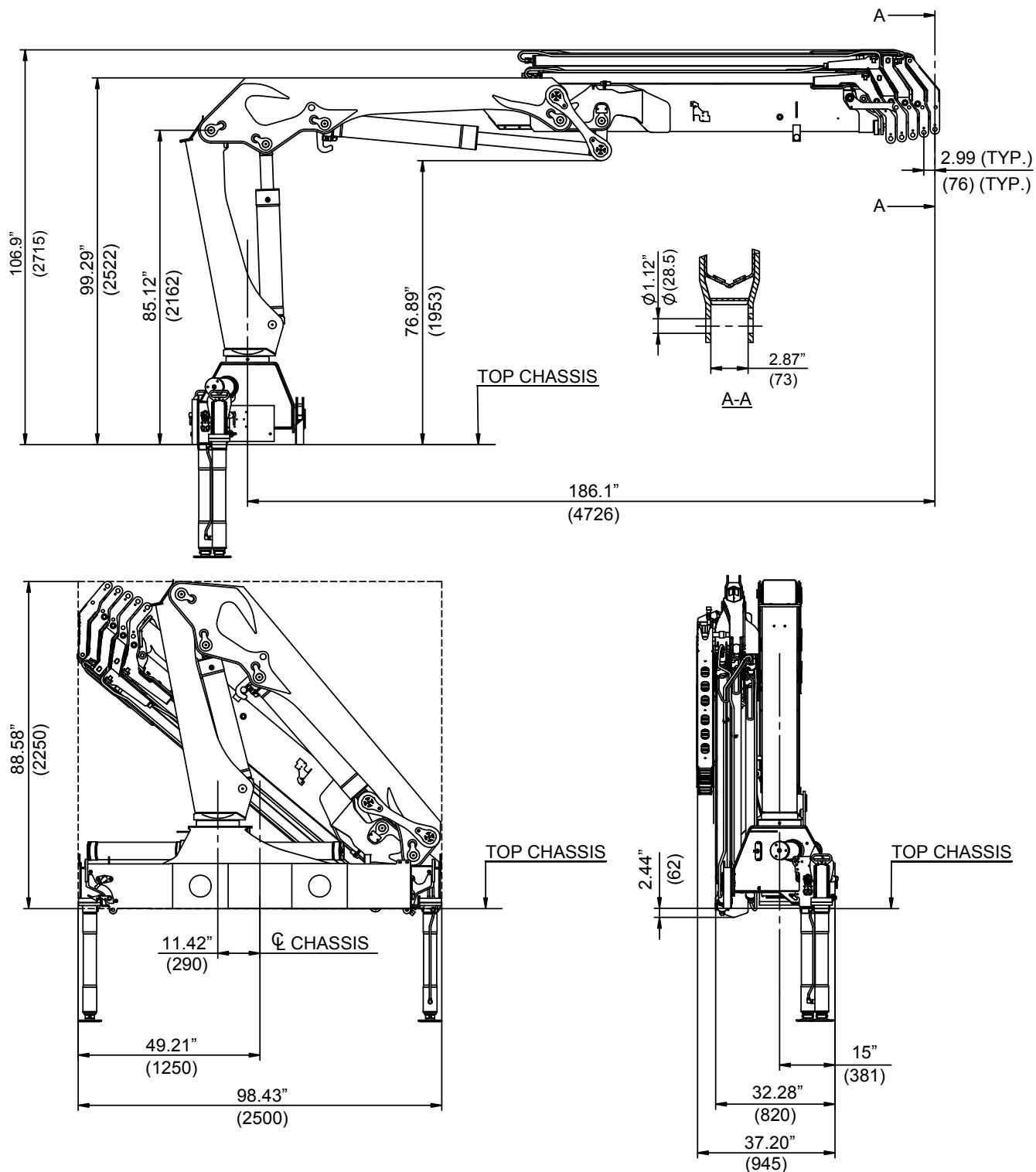
**Section - 6**

## Lifting capacity with winch

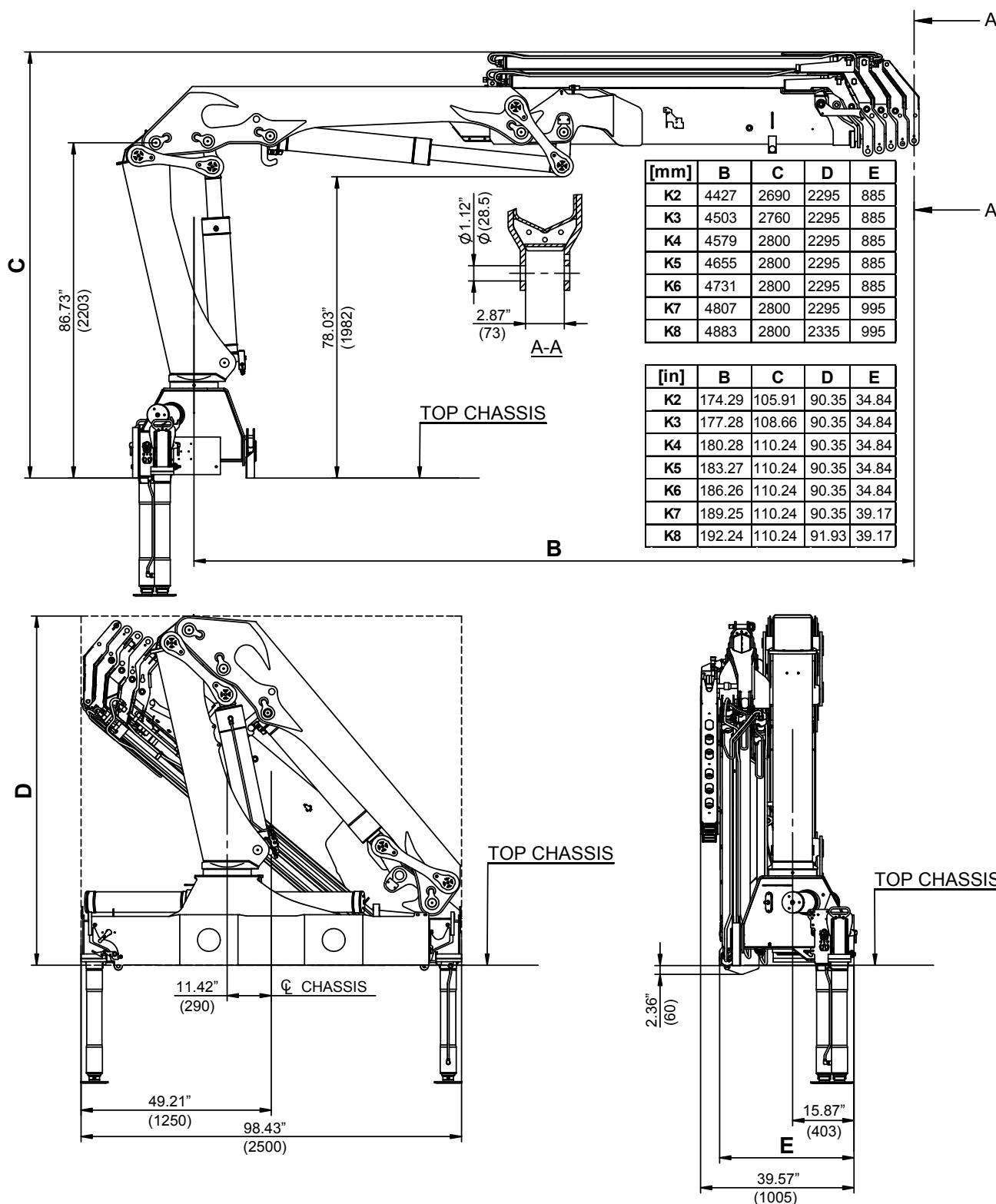
Hydraulic hoist type	MAXW	MAXWD
Dinamic P9E	1500 kg 3305 lb	3000 kg 6610 lb
Dinamic P15E	2500 kg 5510 lb	5000 kg 11020 lb
Dinamic S 25 Brevini 2500	3200 kg 7050 lb	6400 kg 14100 lb



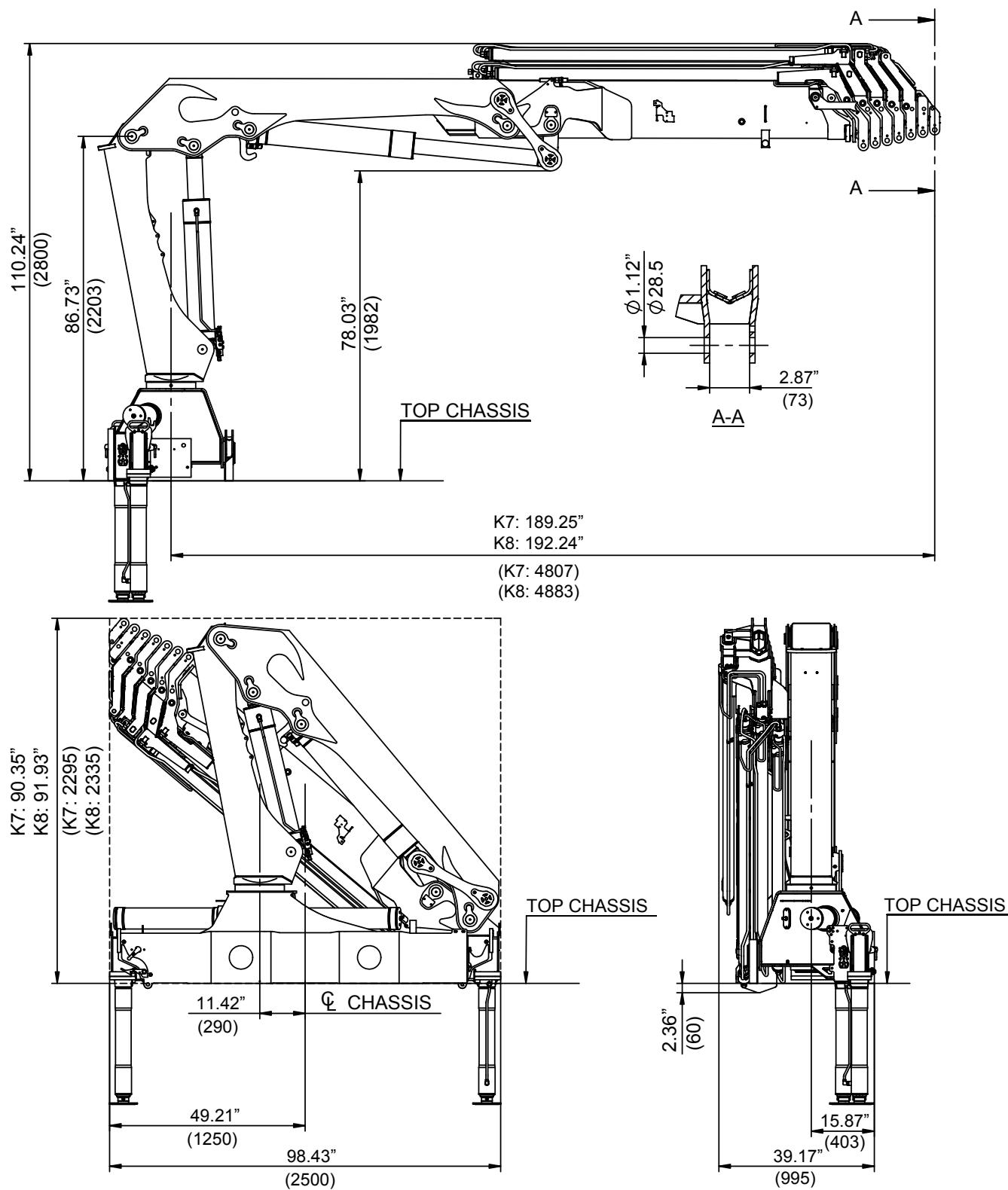
## 20/138SL- Dimension sketch K2 - K6

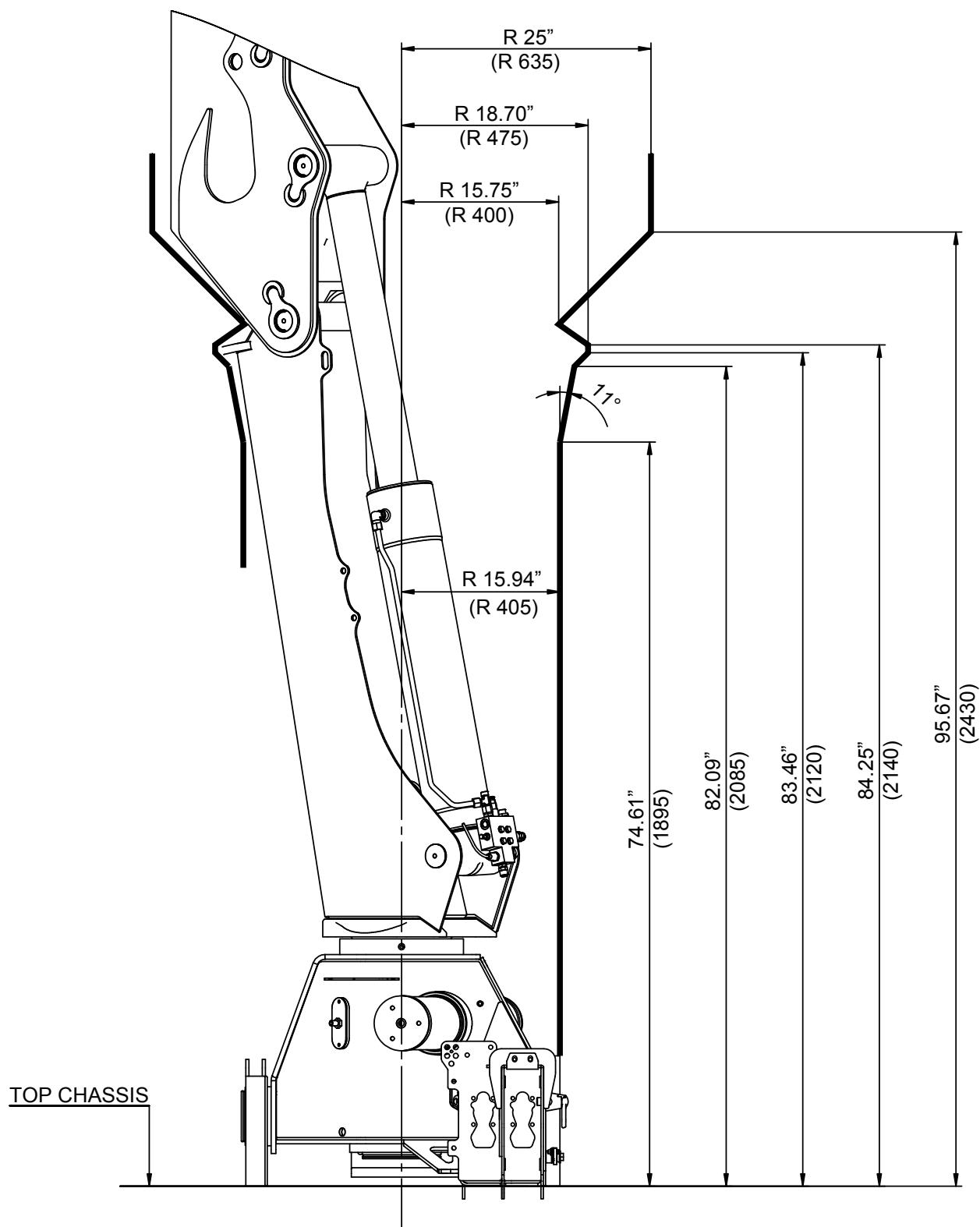


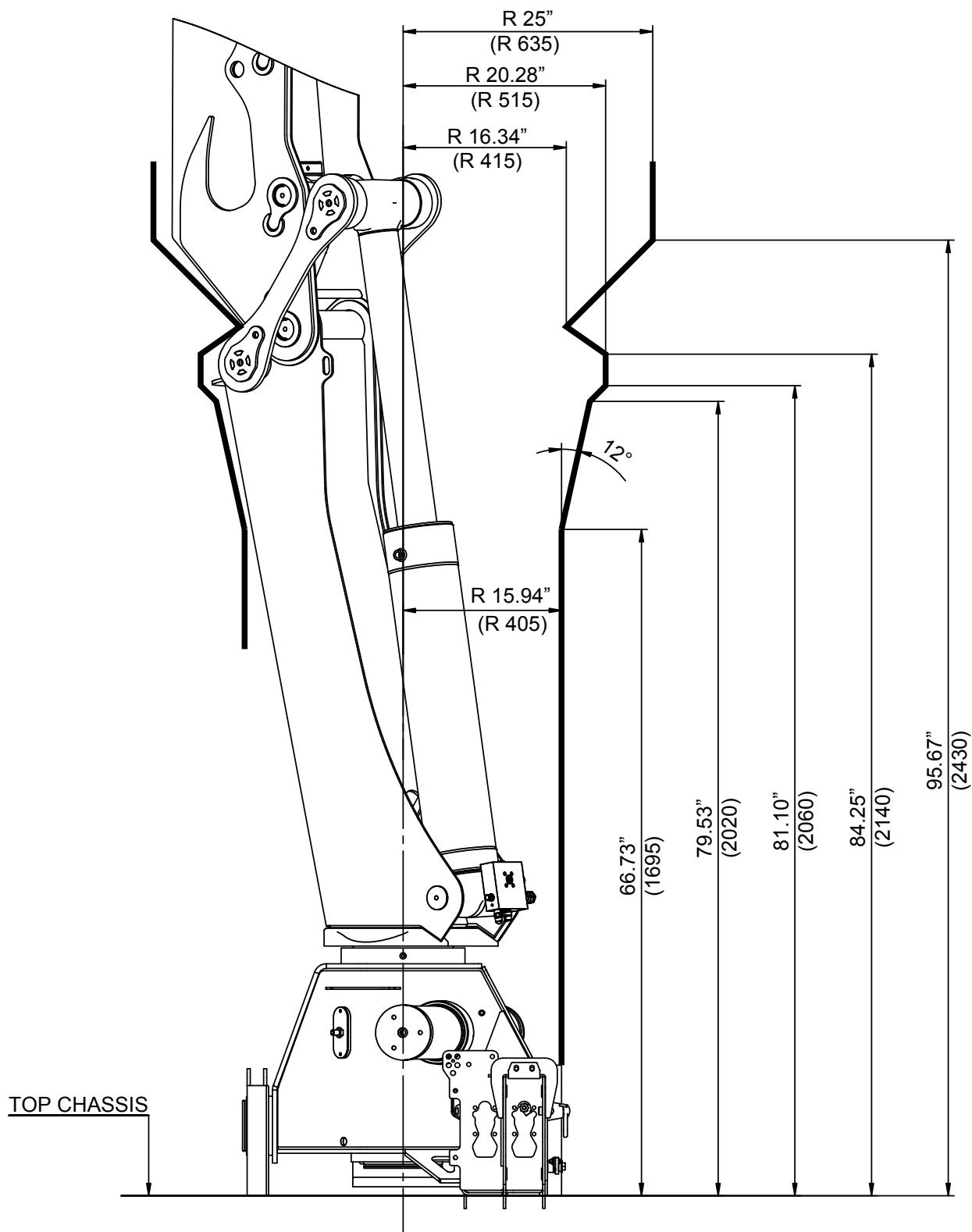
## 20/138DL- Dimension sketch K2 - K6



## Dimension sketch K7 - K8

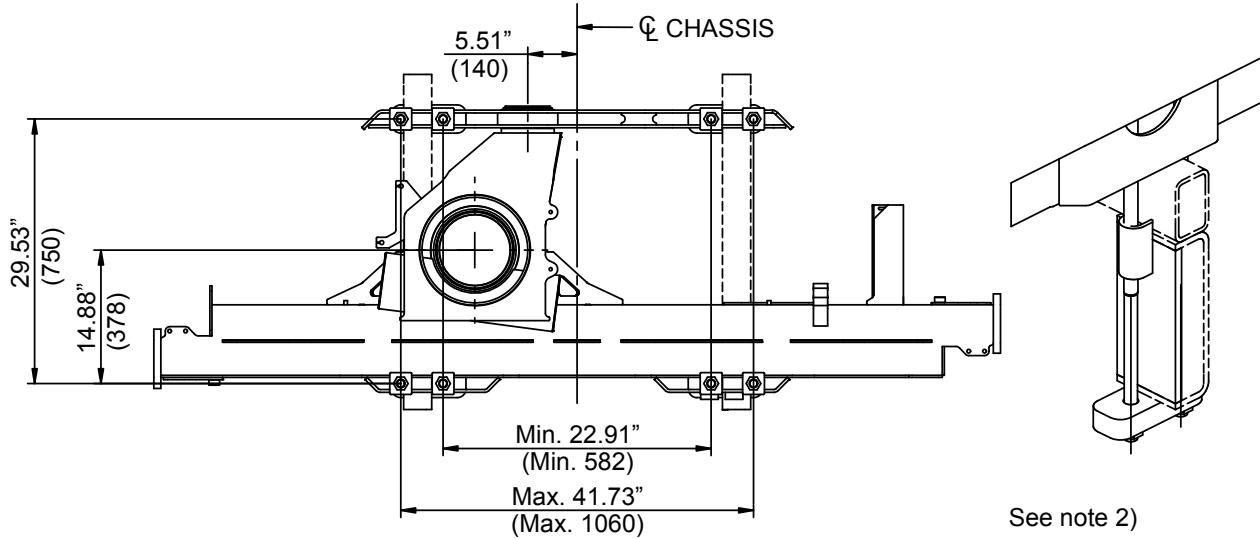


**20/138SL - Slewing Radius**

**20/138DL - Slewing Radius**

## Dimension sketch for truck-mounted loader

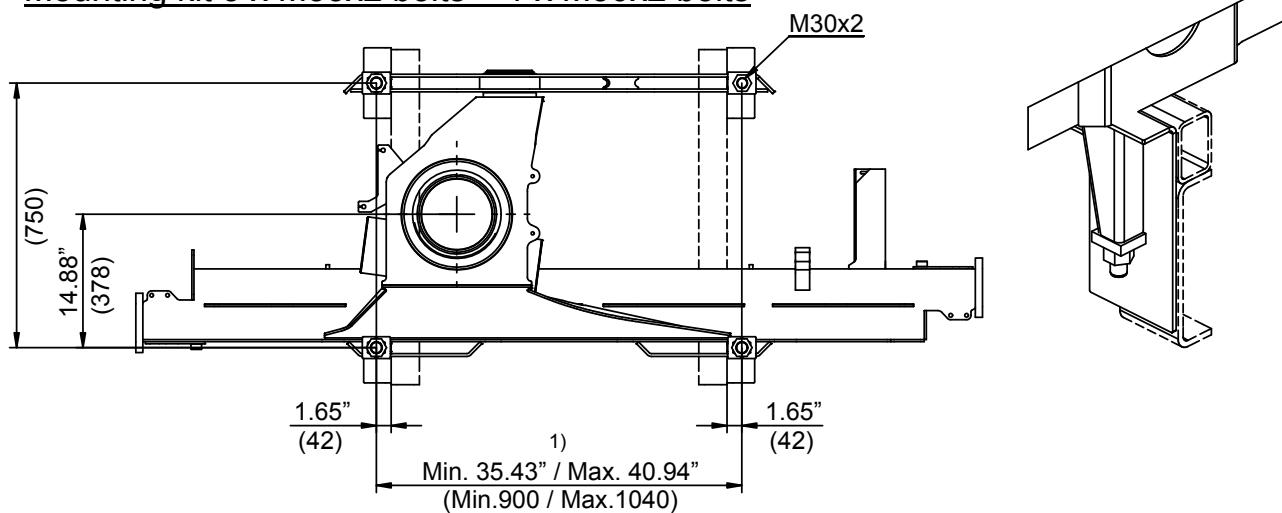
### Mounting kit 8 x M24x2 bolts

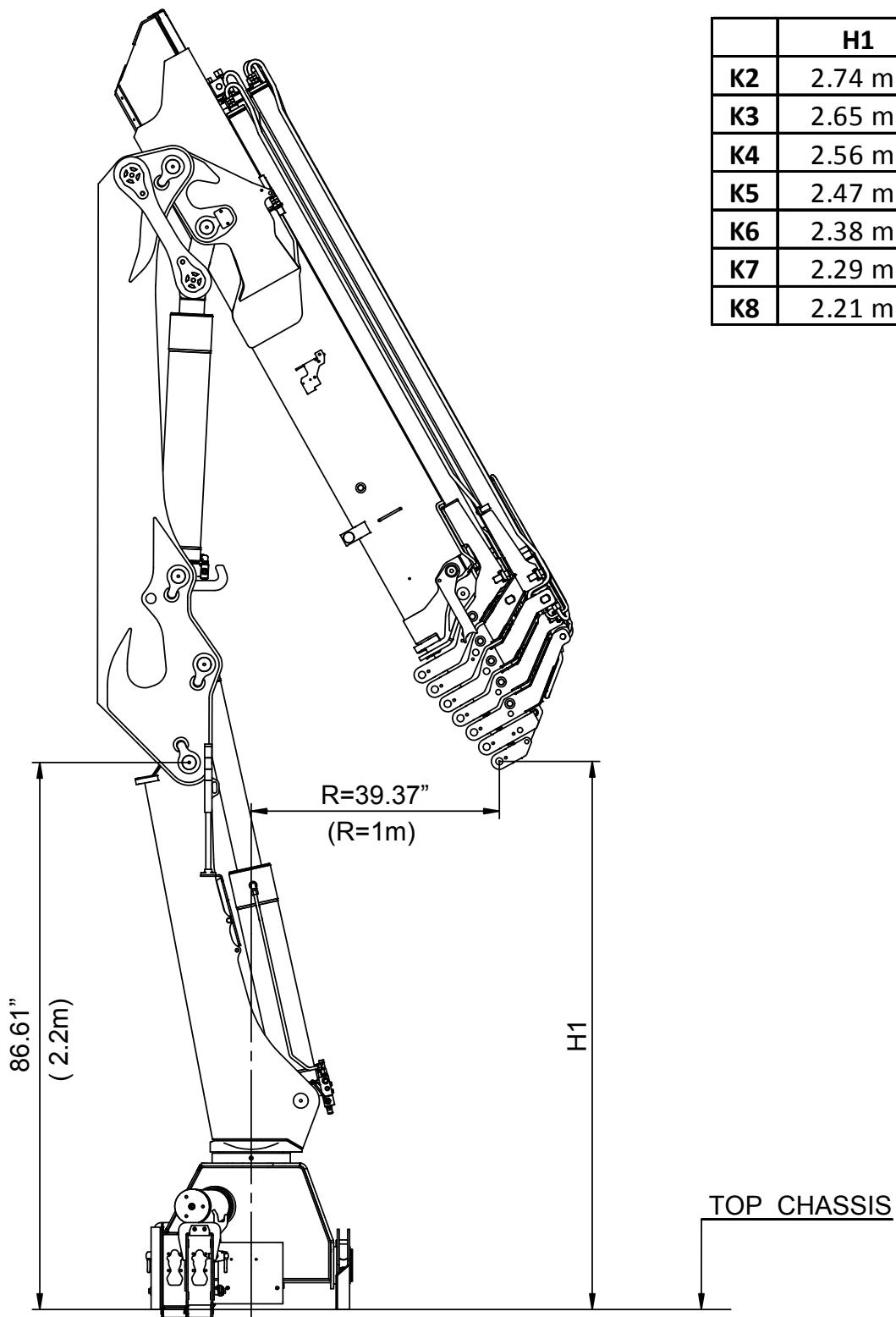


#### Notes:

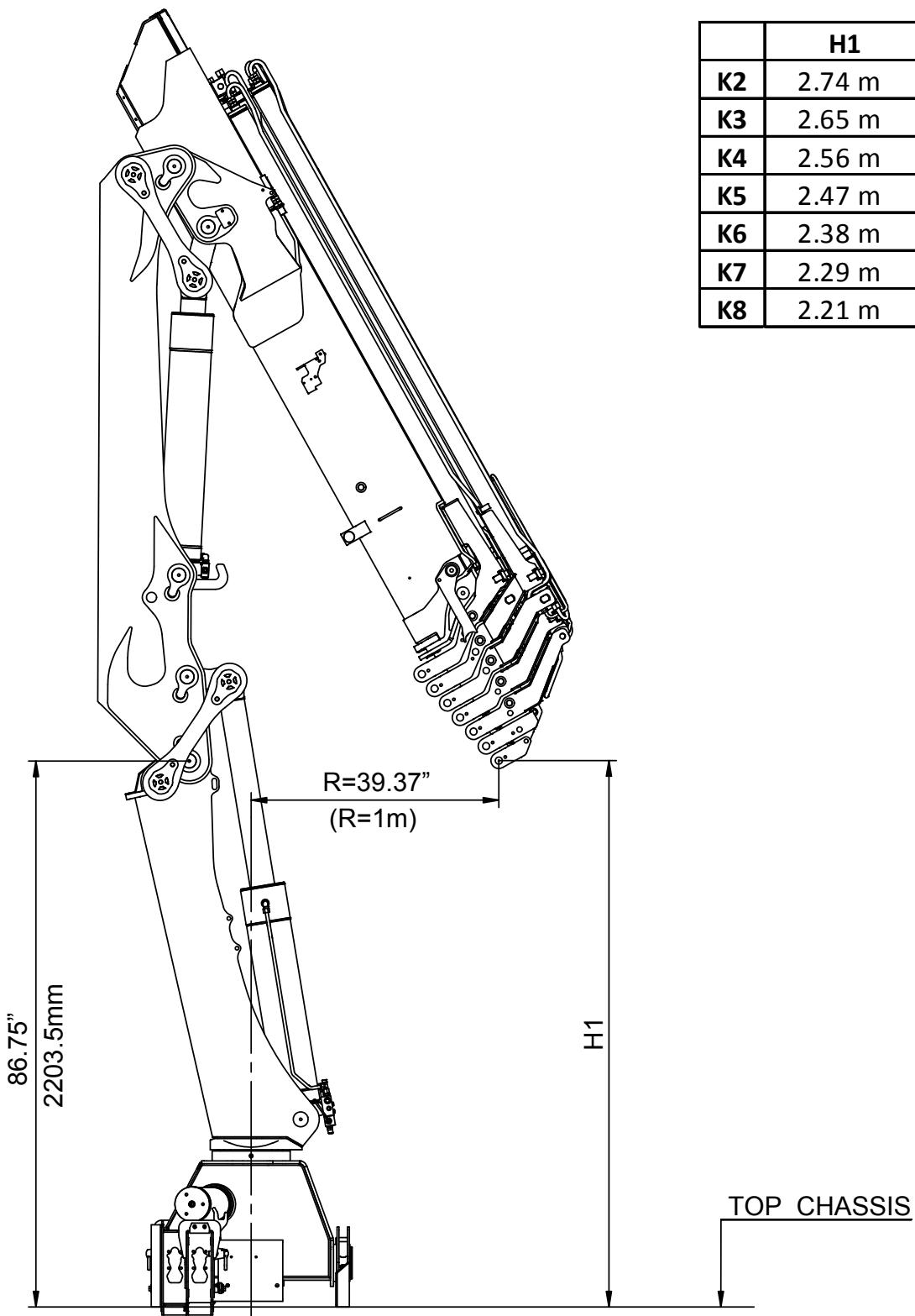
- 1) Values dictated by strength considerations.
- 2) Drill hole when assembling
- 3) As regards installation - please see IMT Installation Manual
- 4) Mounting kits or spare parts - please see the Spare Parts Catalogue of the individual loader

### Mounting kit 3 x M33x2 bolts + 1 x M30x2 bolts



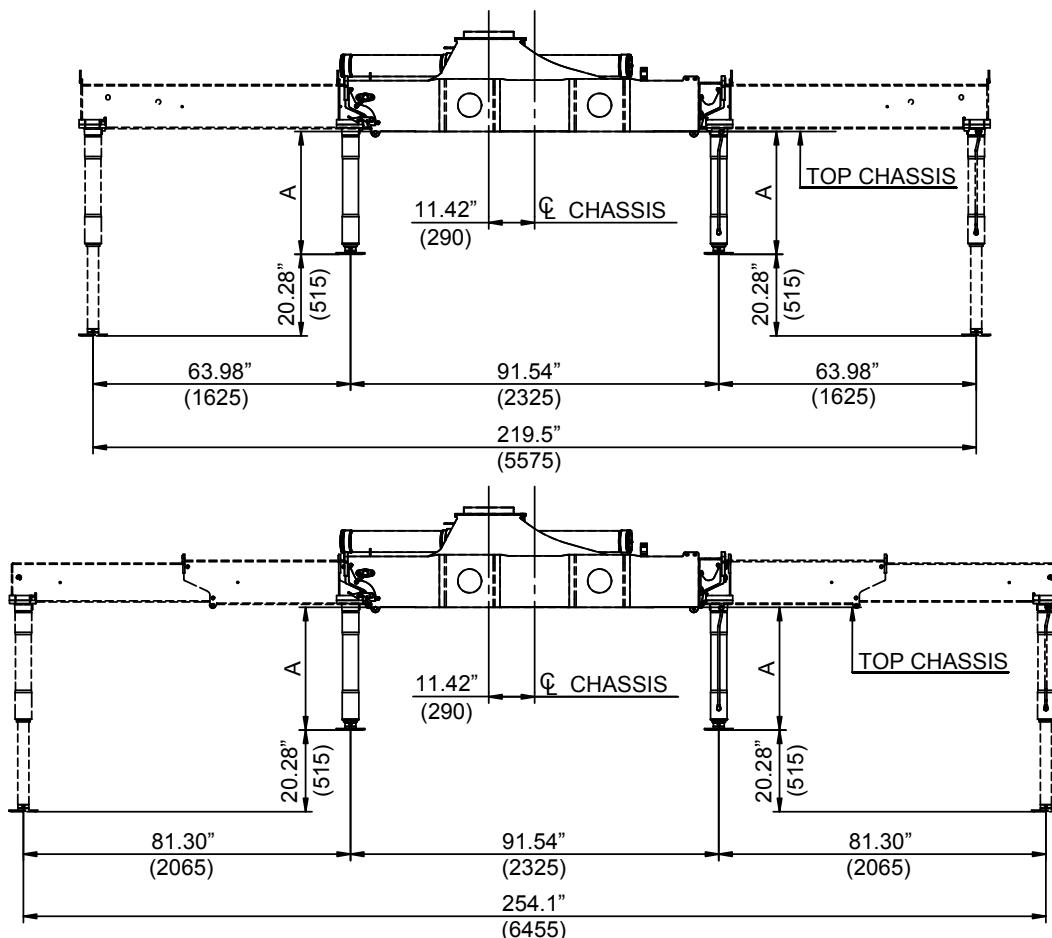
**20/138SL - Lifting Height at Column**

	H1	H1
K2	2.74 m	107.9 in
K3	2.65 m	104.3 in
K4	2.56 m	100.8 in
K5	2.47 m	97.24 in
K6	2.38 m	93.70 in
K7	2.29 m	90.16 in
K8	2.21 m	87.01 in

**20/138DL - Lifting Height at Column**

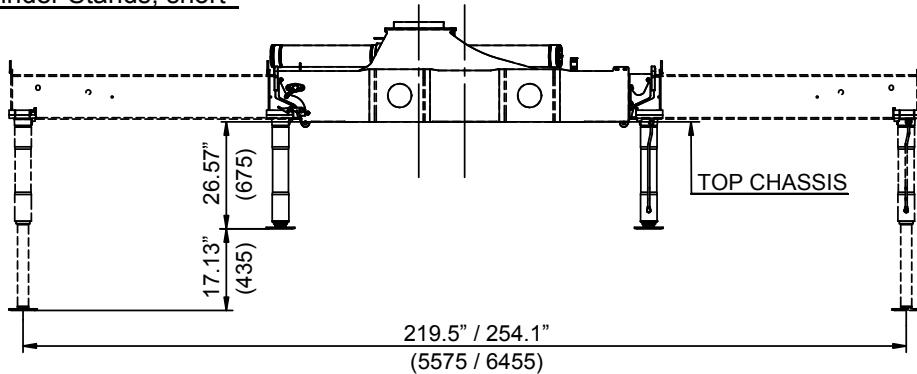
	<b>H1</b>	<b>H1</b>
<b>K2</b>	2.74 m	107.9 in
<b>K3</b>	2.65 m	104.3 in
<b>K4</b>	2.56 m	100.8 in
<b>K5</b>	2.47 m	97.24 in
<b>K6</b>	2.38 m	93.70 in
<b>K7</b>	2.29 m	90.16 in
<b>K8</b>	2.21 m	87.01 in

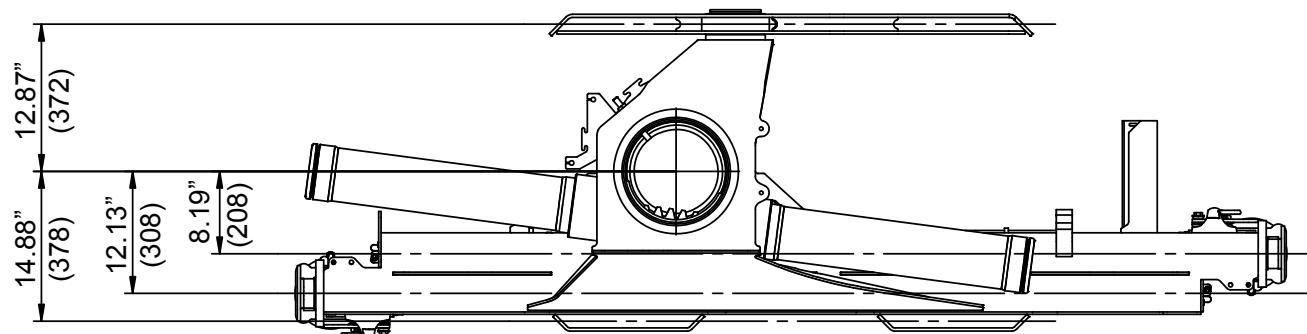
## Dimension sketch, fixed stabilizer legs



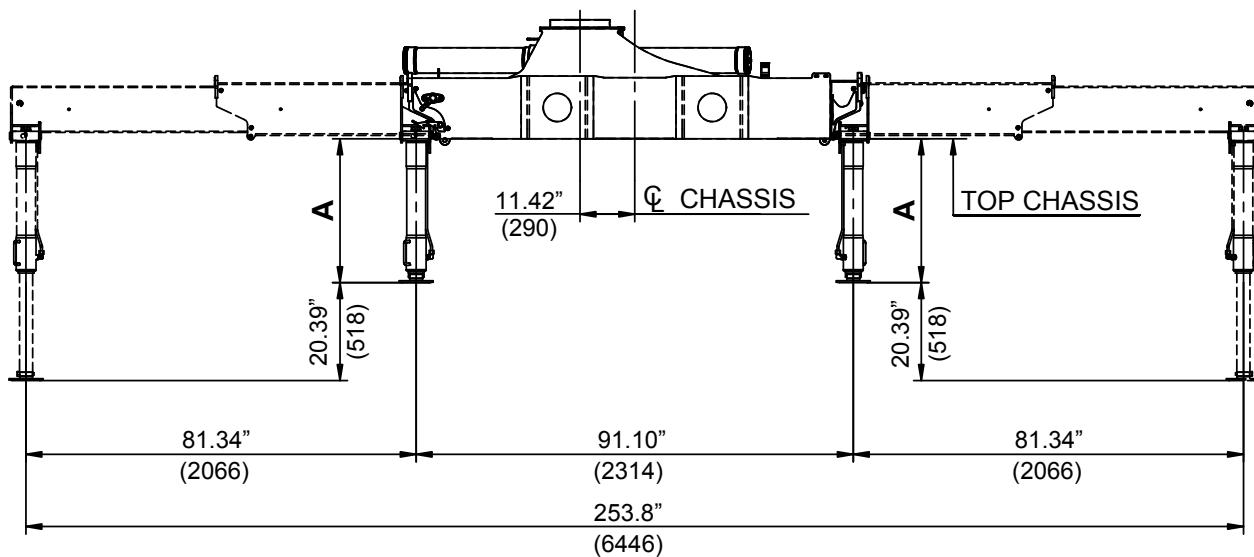
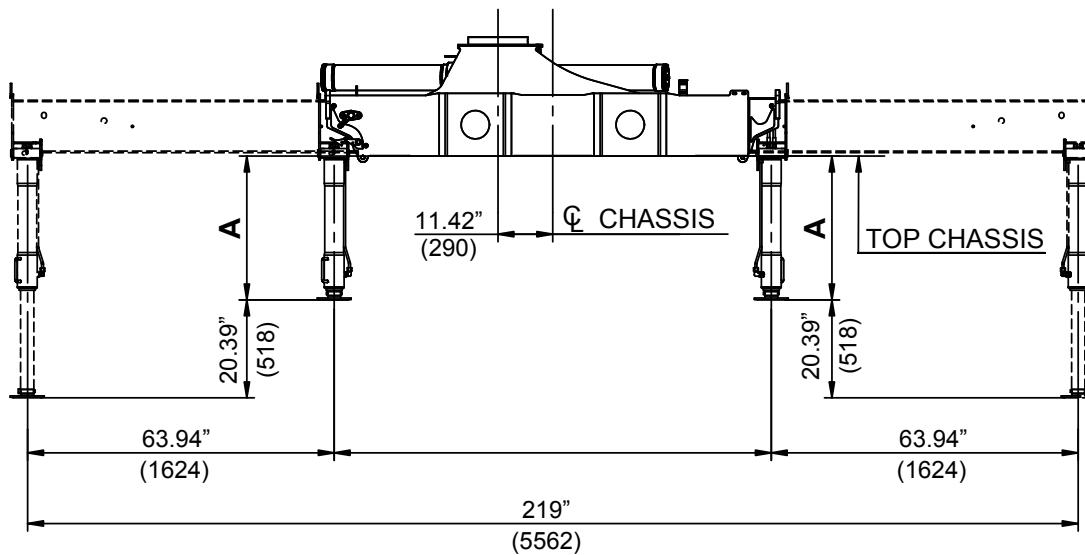
A	777mm	877mm	977mm
A	30.59"	34.53"	38.46"

Cylinder Stands, short



**Dimension sketch, fixed stabilizer legs**

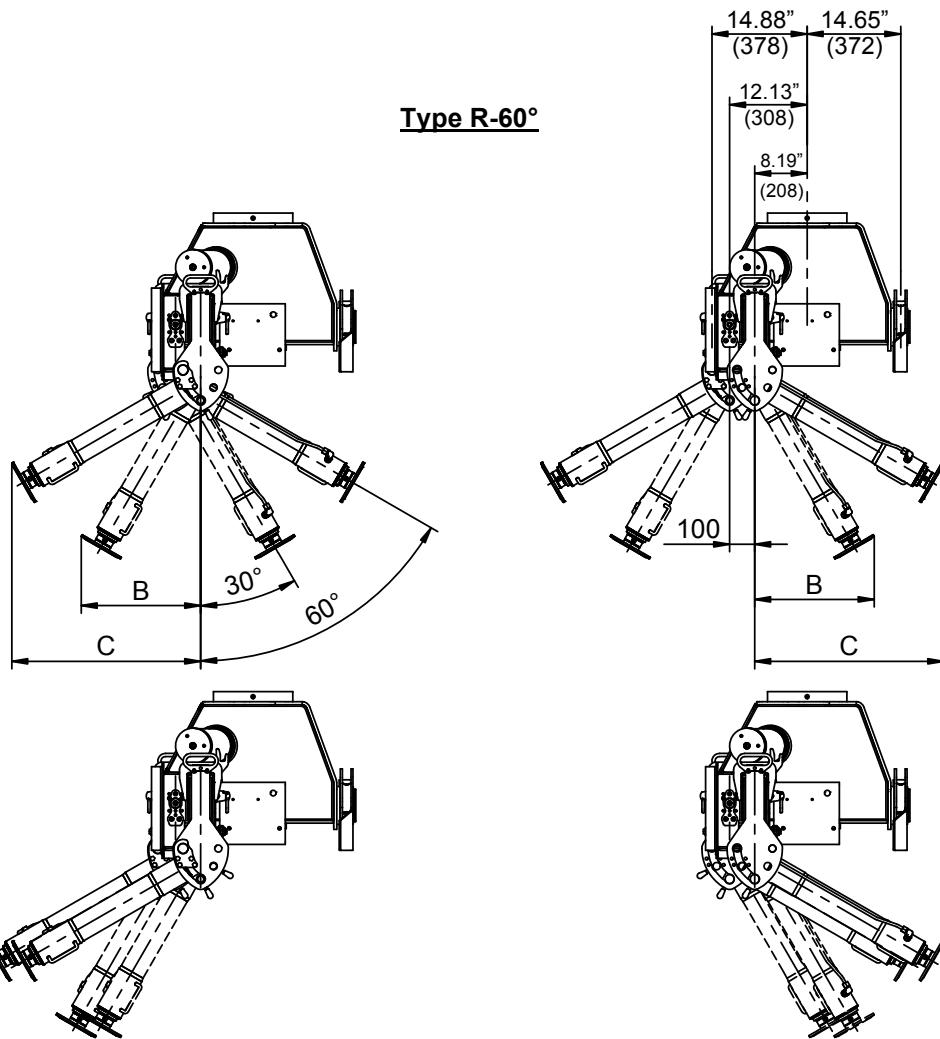
## Dimension sketch, swing-up stabilizer legs 20°- 60° (manual)



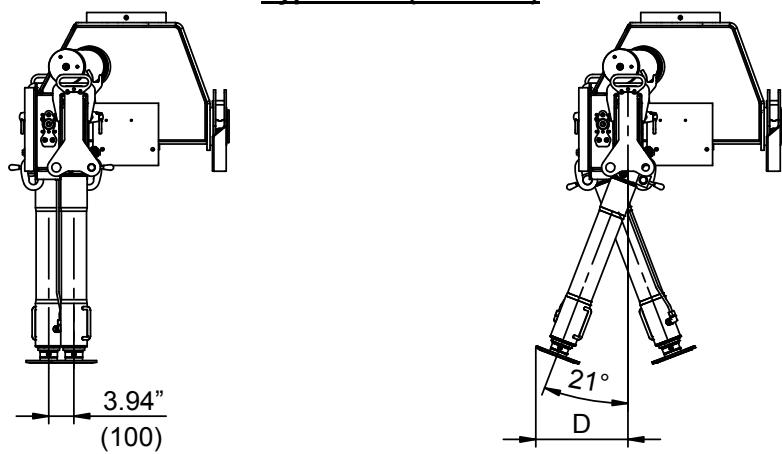
<b>A</b> Type R-60°	30.31"	34.25"	38.19"
<b>A</b> Type R-20° (Obsolete)	30.00"	33.94"	37.87"
<b>A</b> Type R-60°	770mm	870mm	970mm
<b>A</b> Type R-20° (Obsolete)	762mm	862mm	962mm

## Dimension sketch, swing-up stabilizer legs 20°- 60° (manual)

Type R-60°

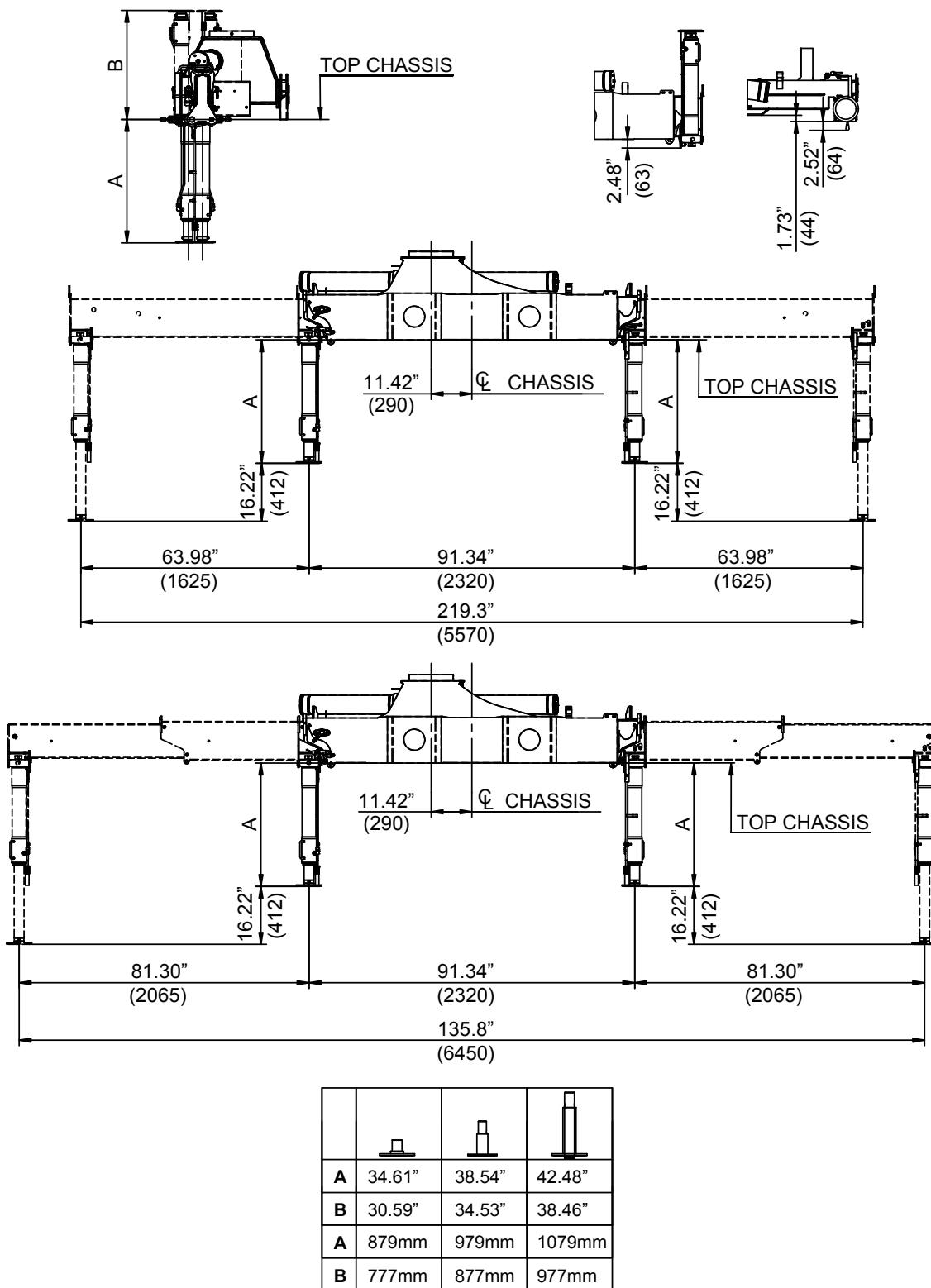


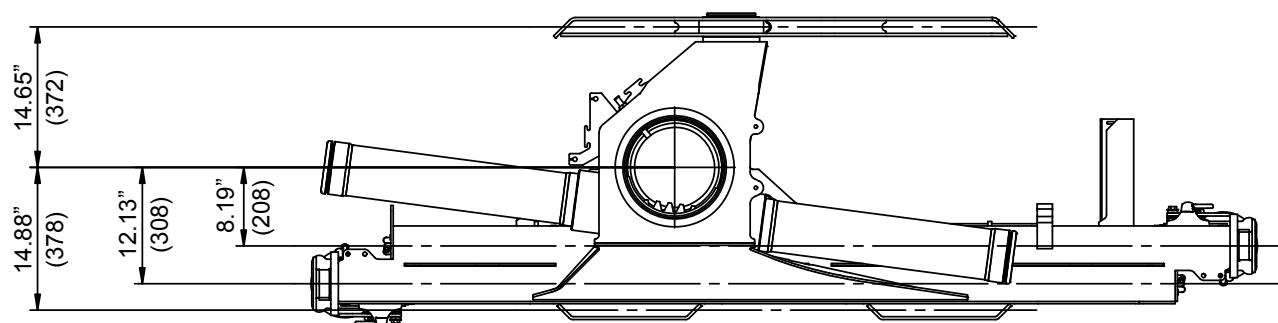
Type R-20° (Obsolete)

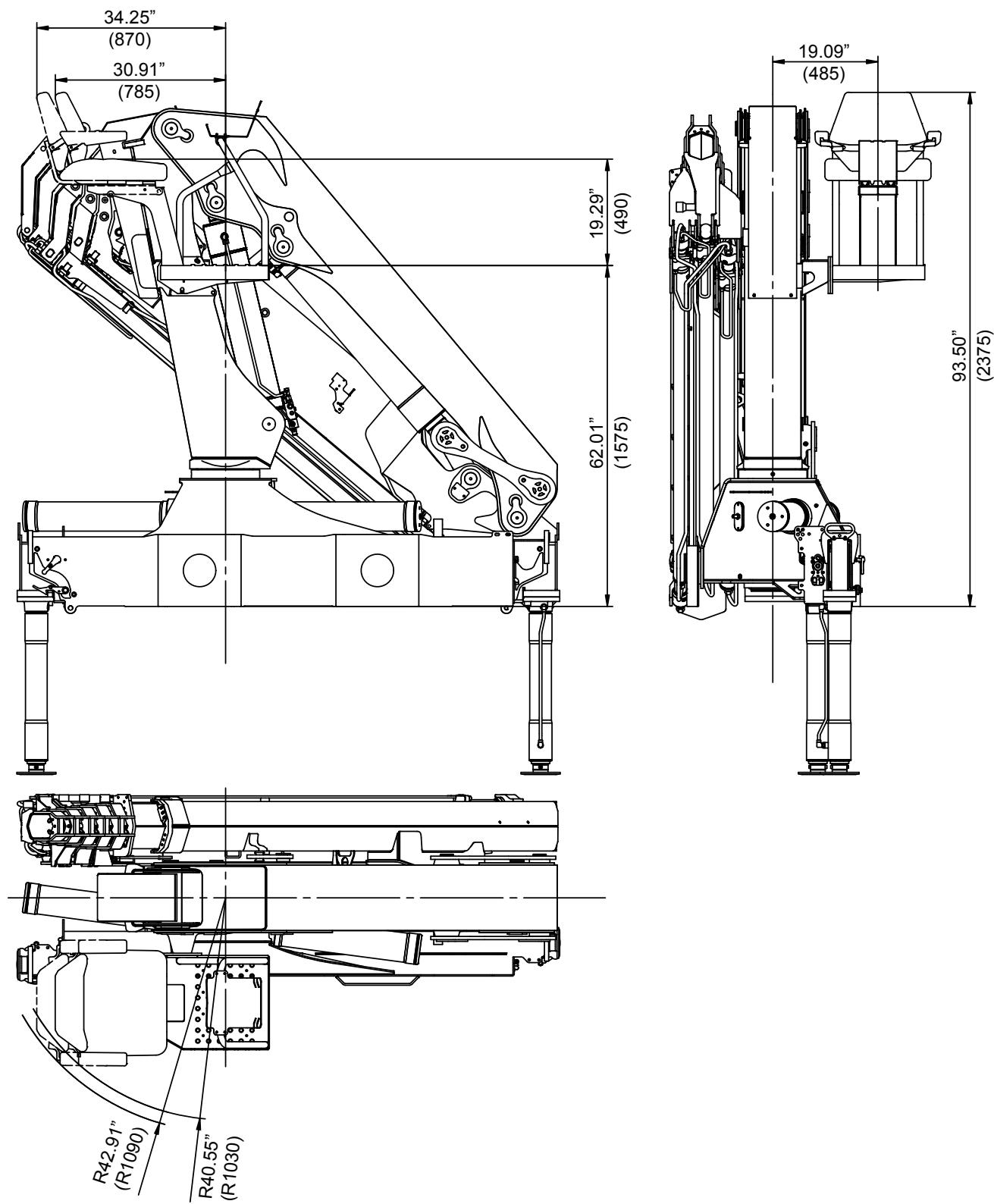


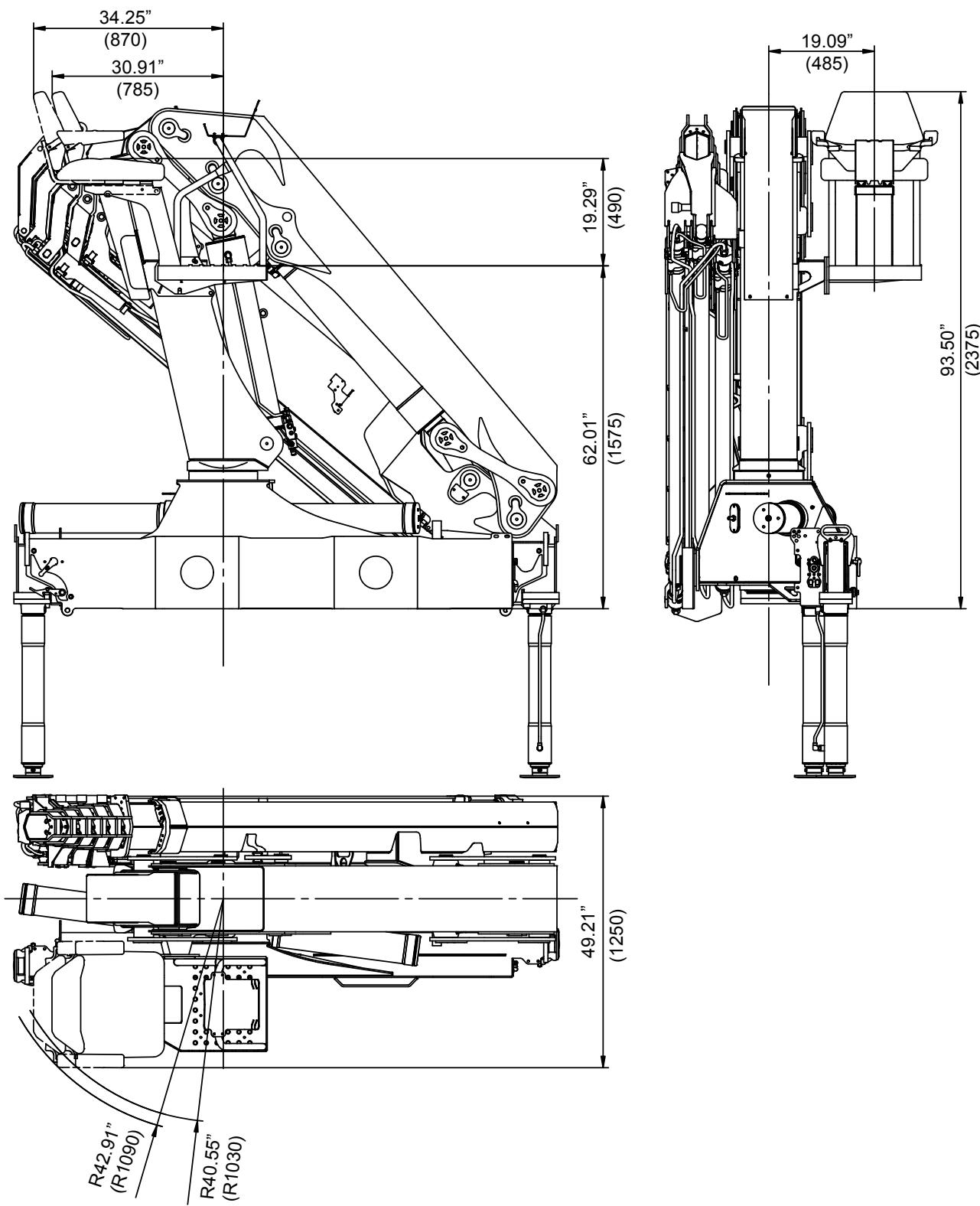
<b>B</b>	18.66"	20.63"	22.60"
<b>C</b>	29.53"	32.91"	36.34"
<b>D</b>	14.41"	15.83"	17.24"
<b>B</b>	474mm	524mm	574mm
<b>C</b>	750mm	836mm	923mm
<b>D</b>	366mm	402mm	438mm

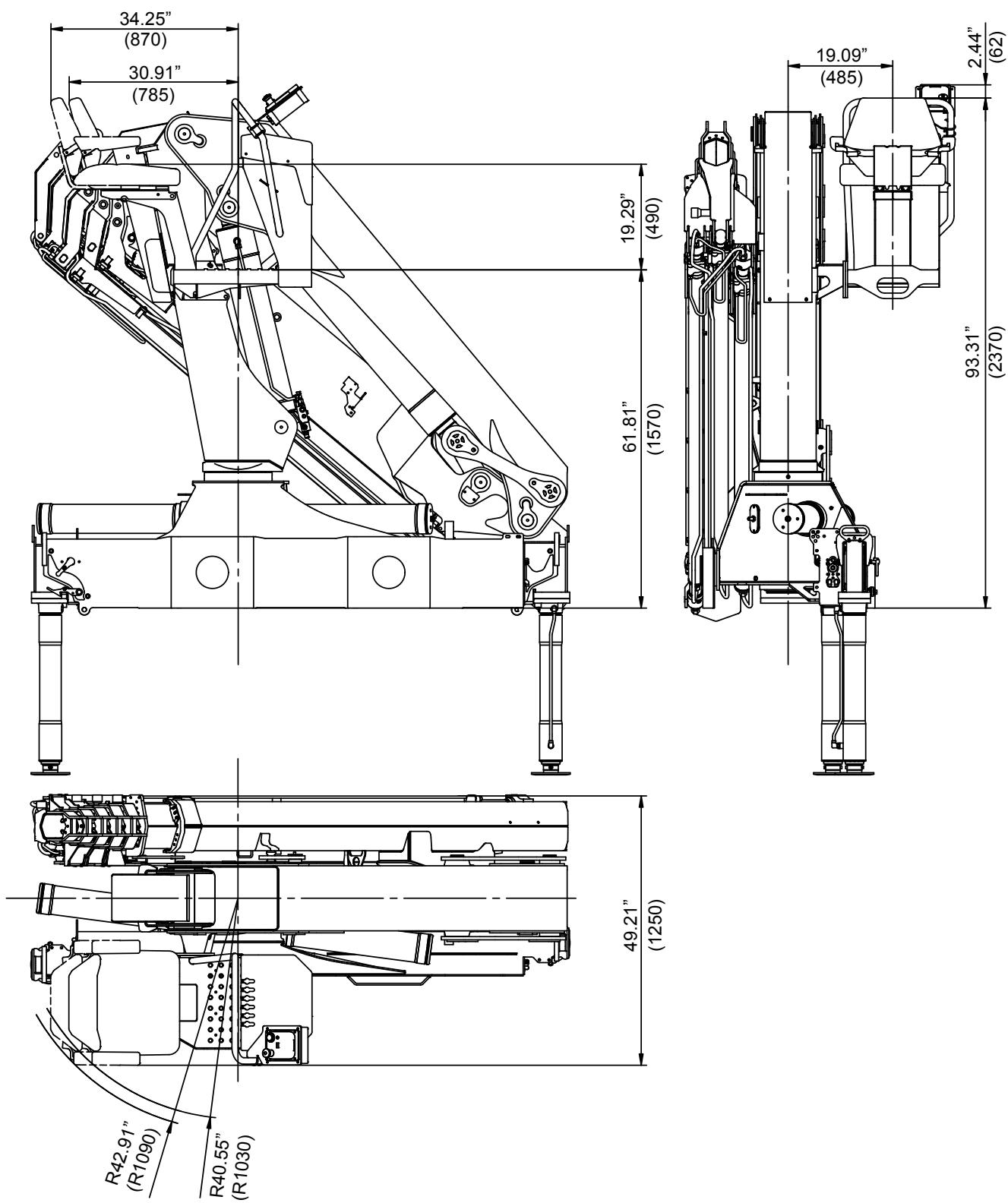
## Dimension sketch, swing-up stabilizer legs 180° (manual + hydraulic)

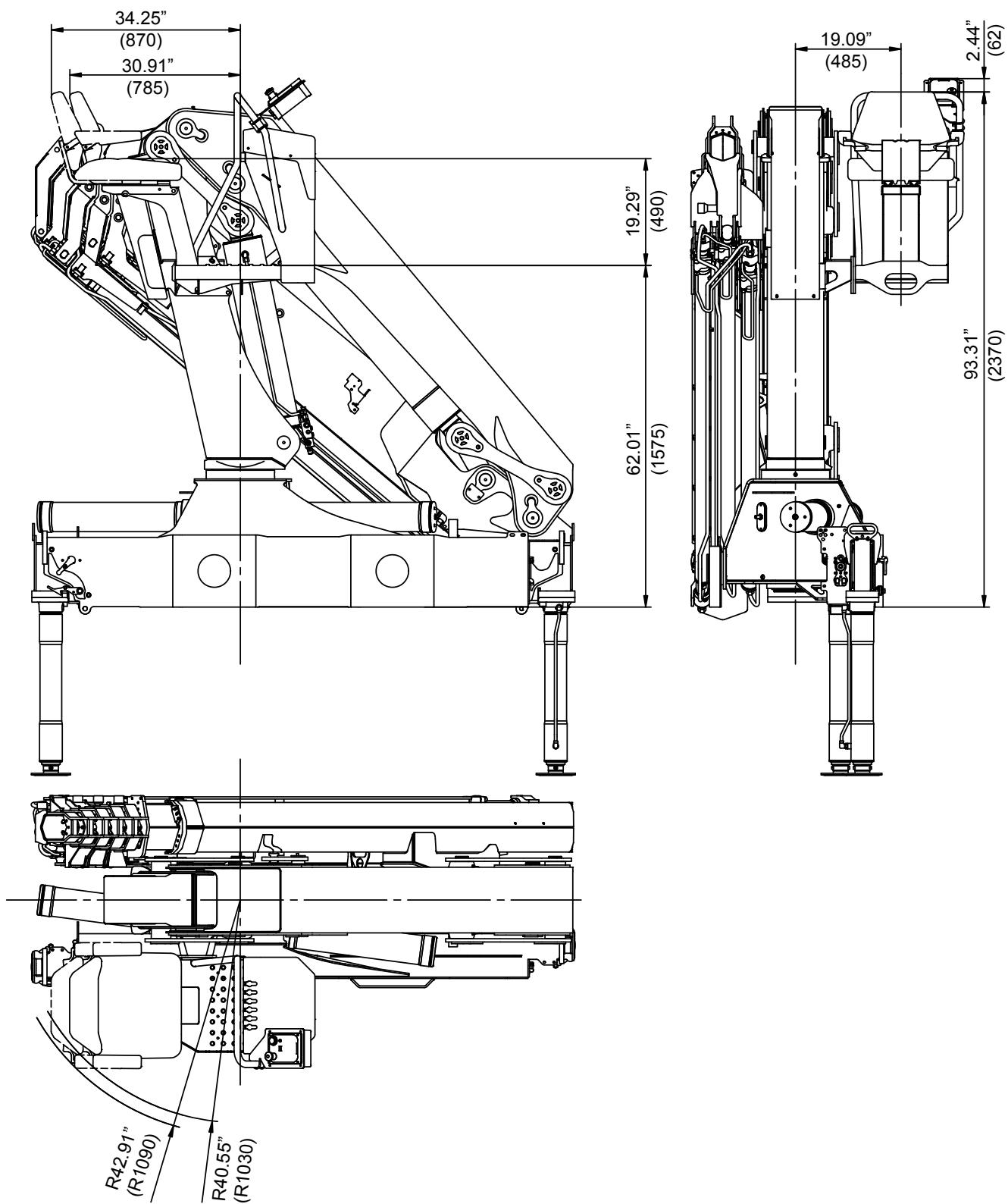


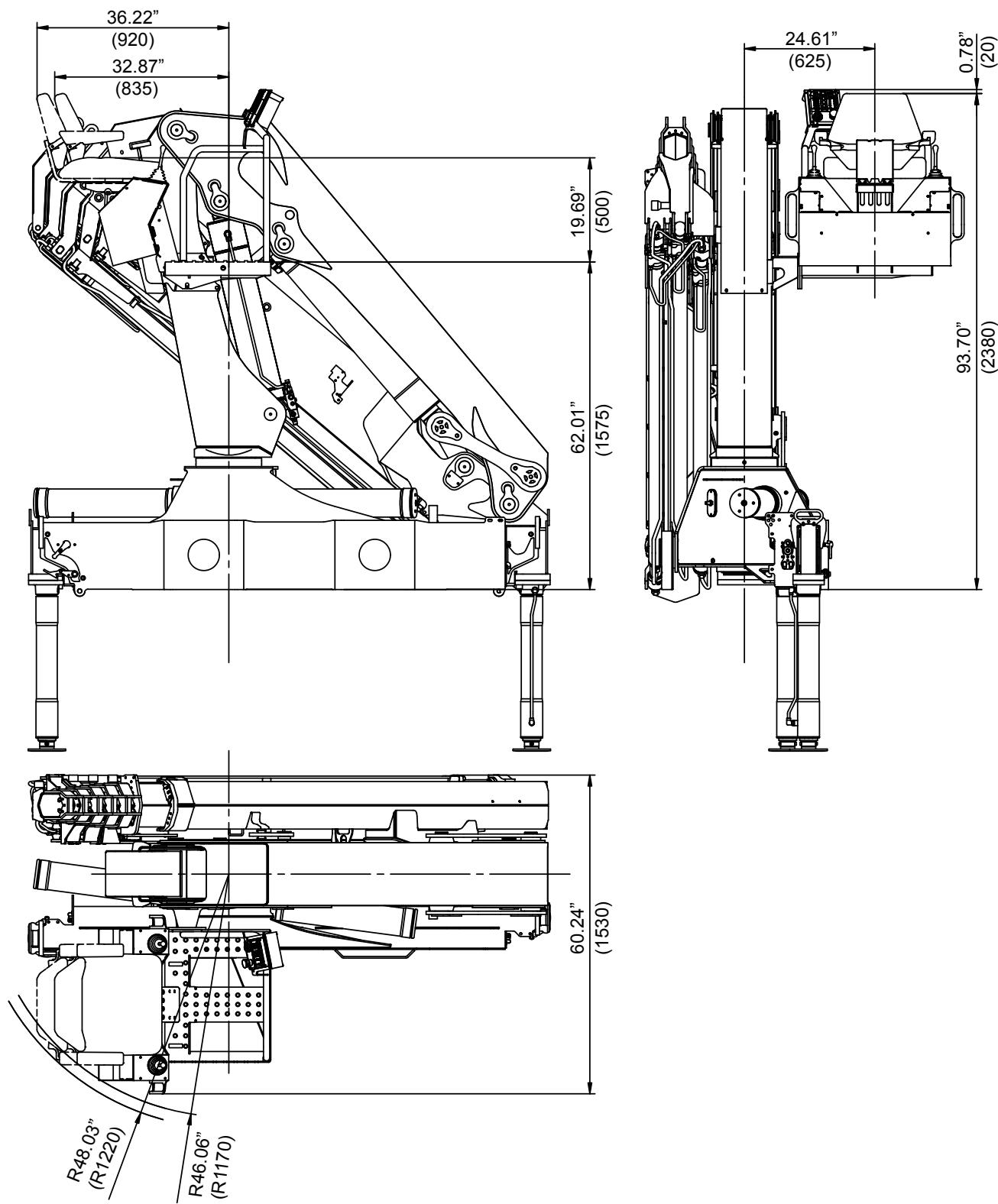
**Dimension sketch, swing-up stabilizer legs 180° (manual + hydraulic)**

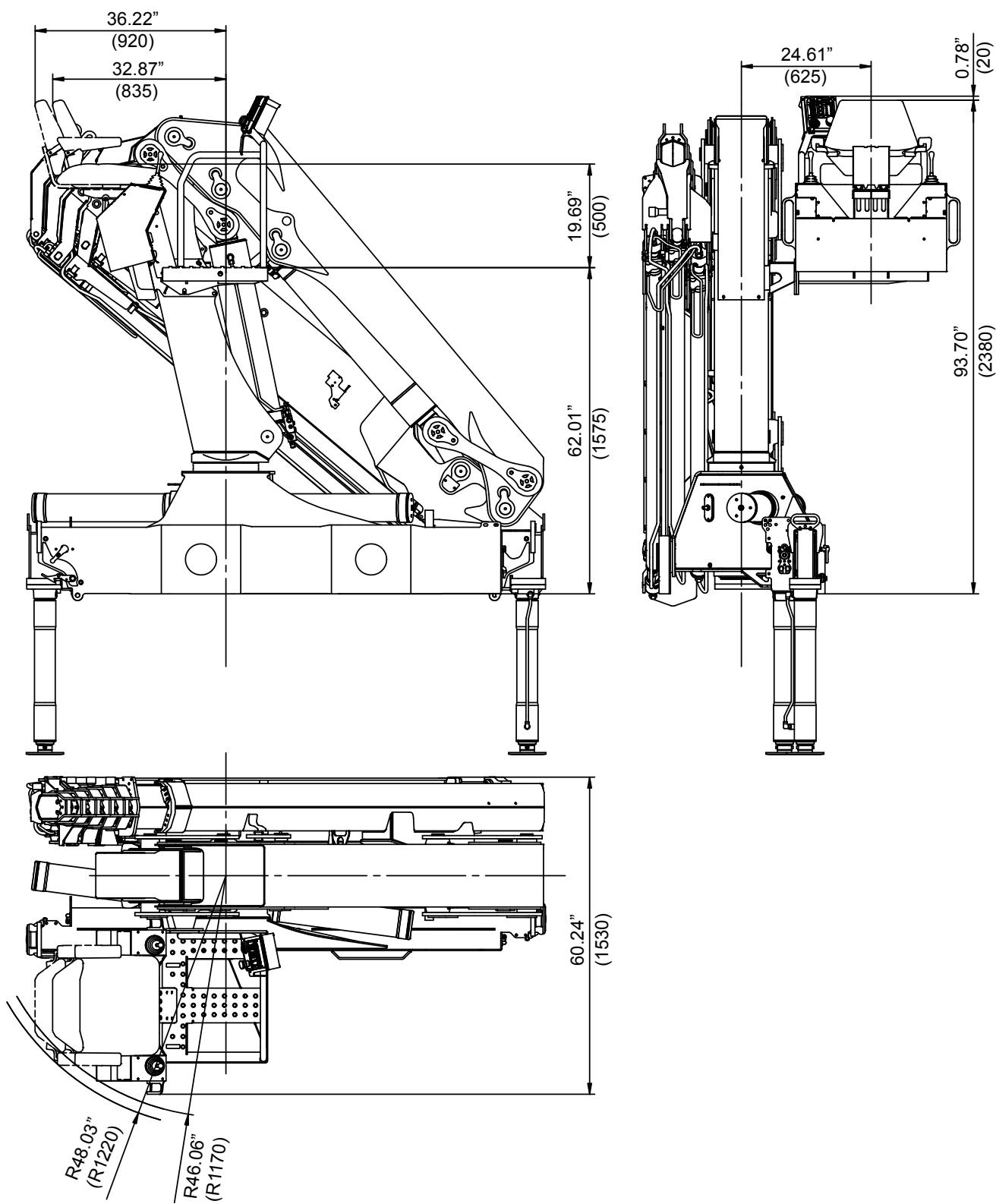
**20/138SL - Dimension sketch, TS Top Seat (RC)**

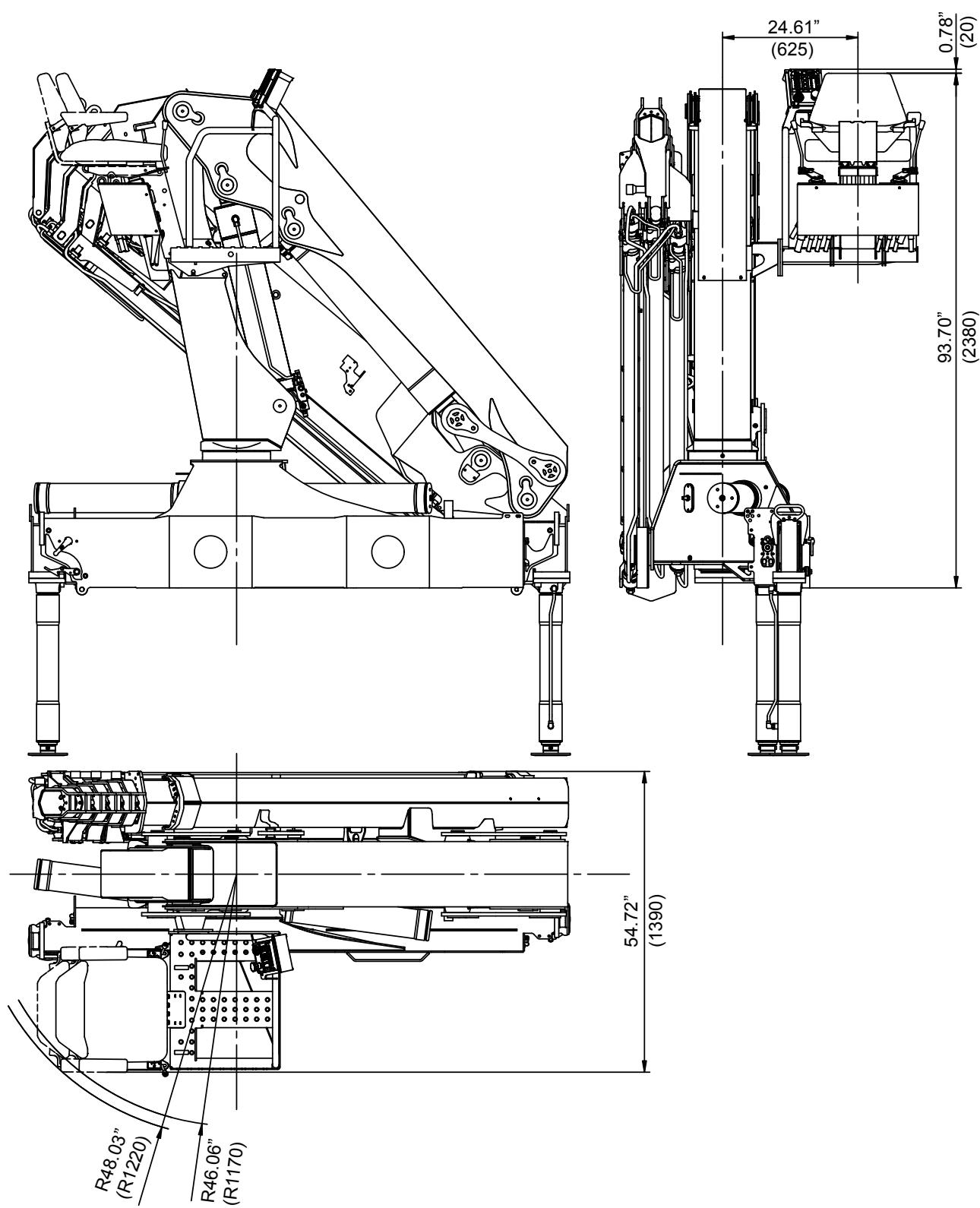
**20/138DL - Dimension sketch, TS Top Seat (RC)**

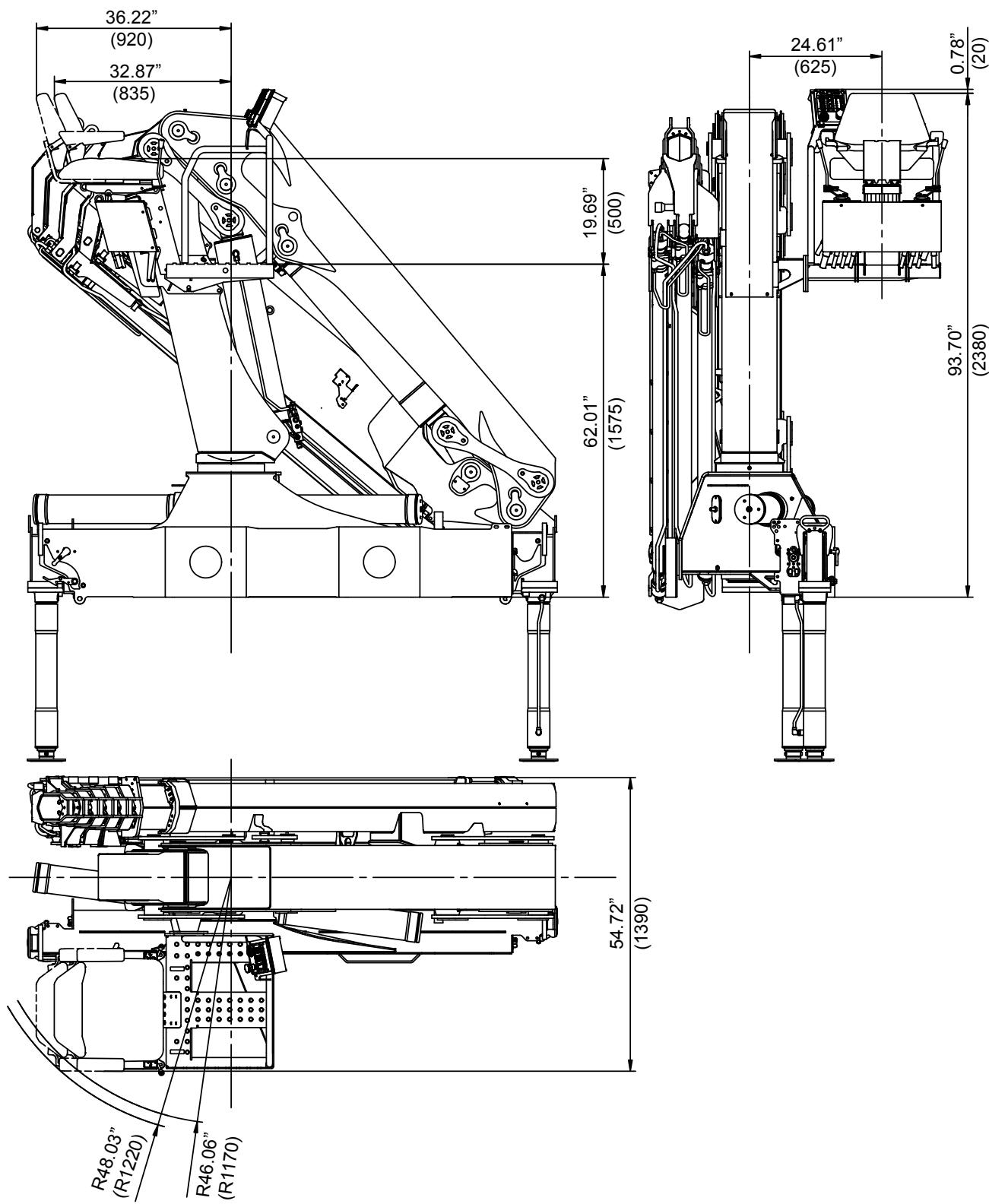
**20/138SL - Dimension sketch, TS Top Seat (HC linear)**

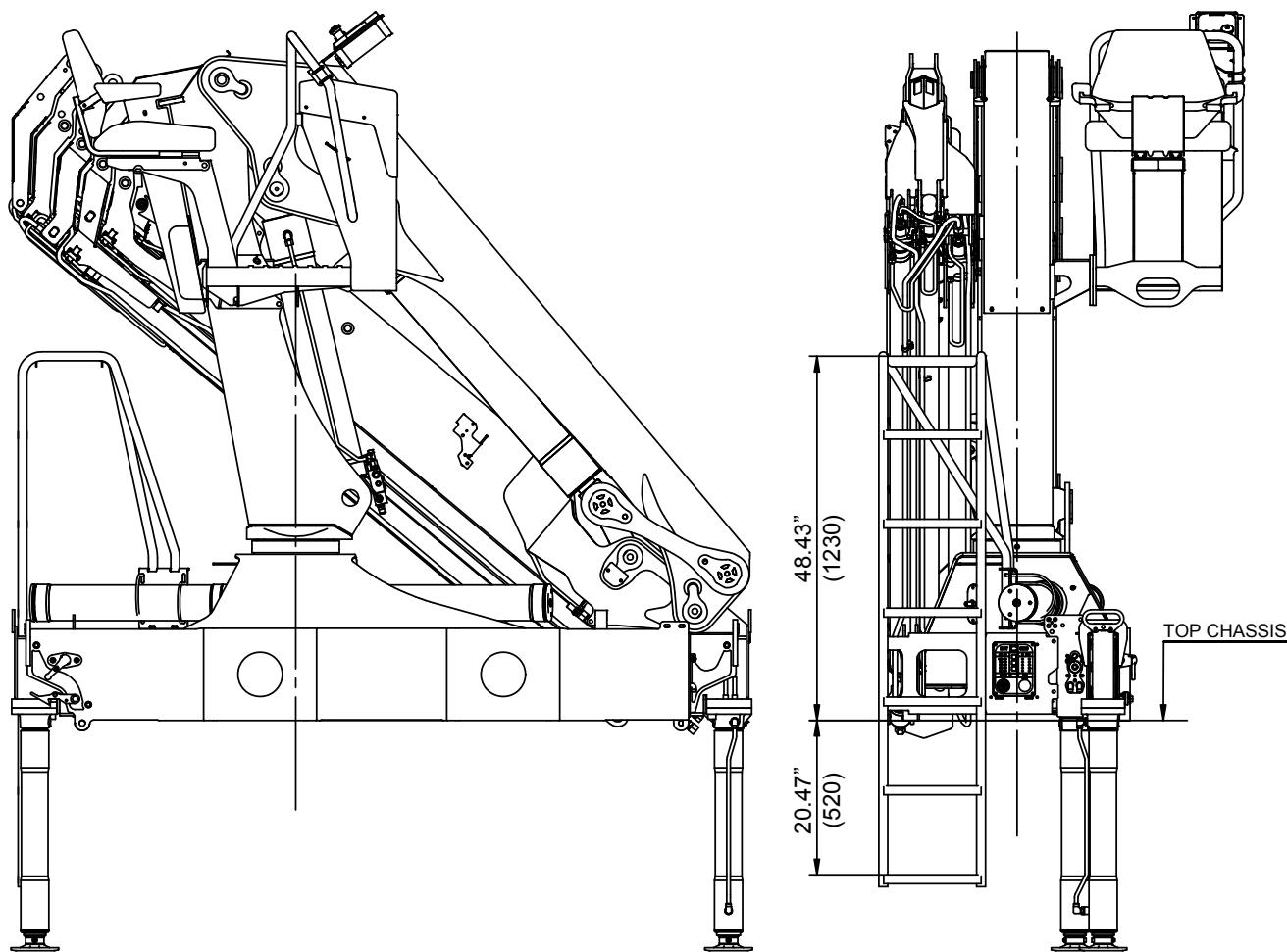
**20/138DL - Dimension sketch, TS Top Seat (HC linear)**

**20/138SL - Dimension sketch, TS Top Seat (Danfoss X)**

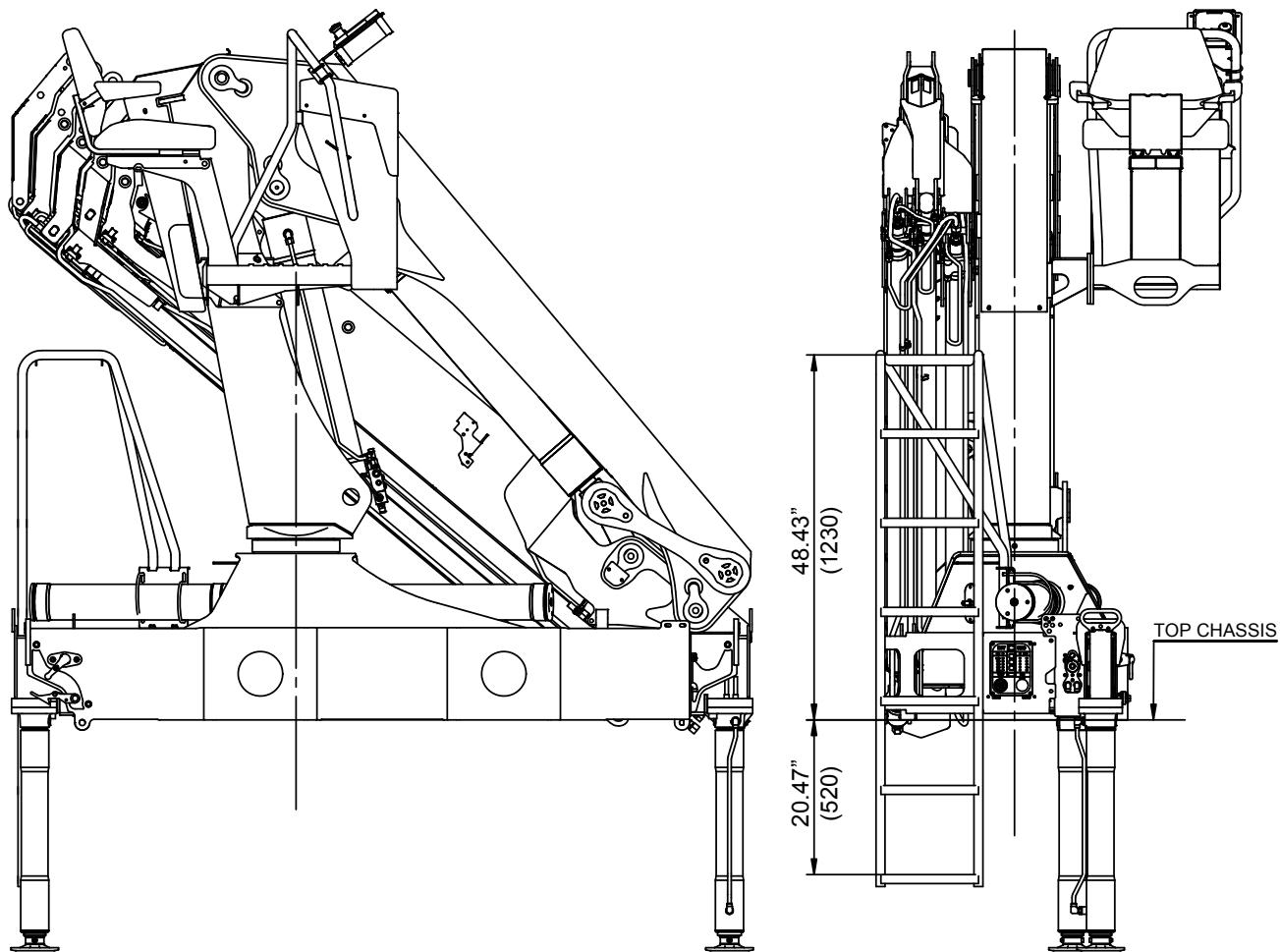
**20/138DL - Dimension sketch, TS Top Seat (Danfoss X)**

**20/138SL - Dimension sketch, TS Top Seat (HC X)**

**20/138DL - Dimension sketch, TS Top Seat (HC X)**

**20/138SL - Dimension sketch, ladder for TS****Notes:**

- 1) Ladder cannot be used for TS RC
- 2) There is no access to the top seat when the loader is in stowing position

**20/138DL - Dimension sketch, ladder for TS****Notes:**

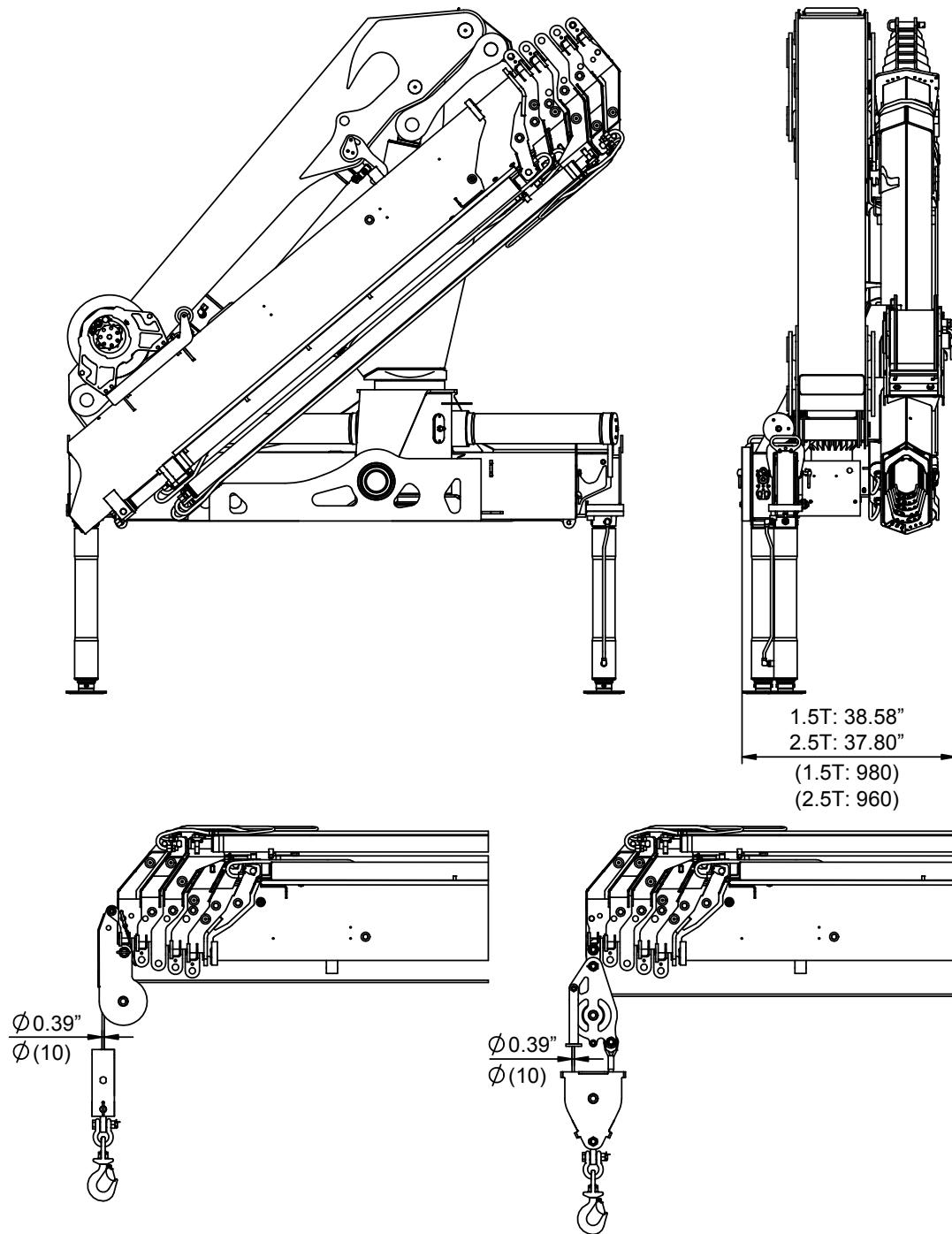
- 1) Ladder cannot be used for TS RC
- 2) There is no access to the top seat when the loader is in stowing position

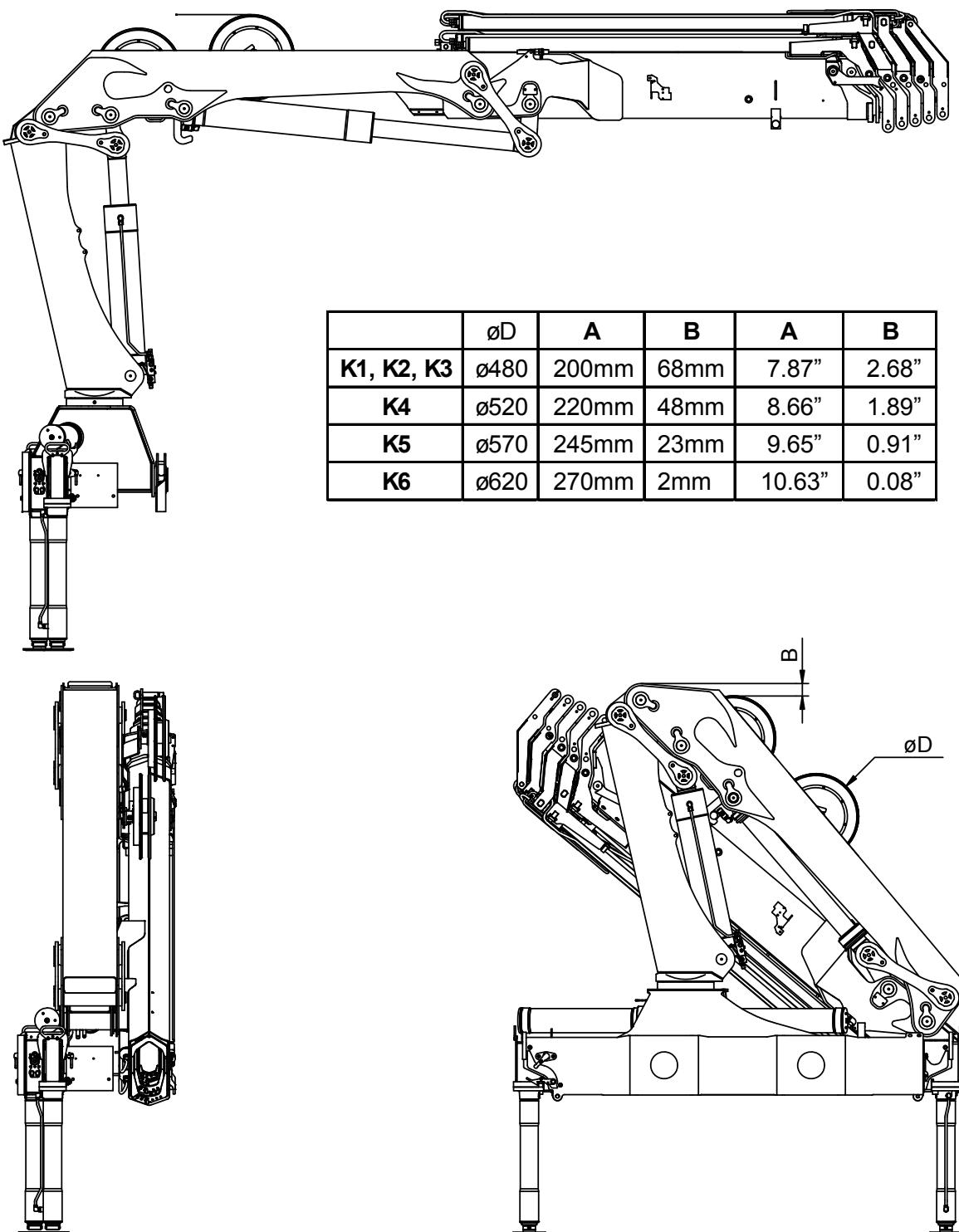
## Technical data, winch

<b>Performance (at 150 bar) 2176 psi:</b>	<b>1.5T winch</b>	<b>1.5T winch</b>	<b>2.5T winch</b>	<b>2.5T winch</b>
Max. wire pull – 1st layer	1500 kg	3307 lb	2500 kg	5512 lb
Max. wire pull – 2nd layer	1370 kg	3020 lb	2300 kg	5071 lb
Max. wire pull – 3rd layer	1260 kg	2778 lb	2100 kg	4630 lb
Max. wire pull – 4th layer	1170 kg	2579 lb	1950 kg	4299 lb

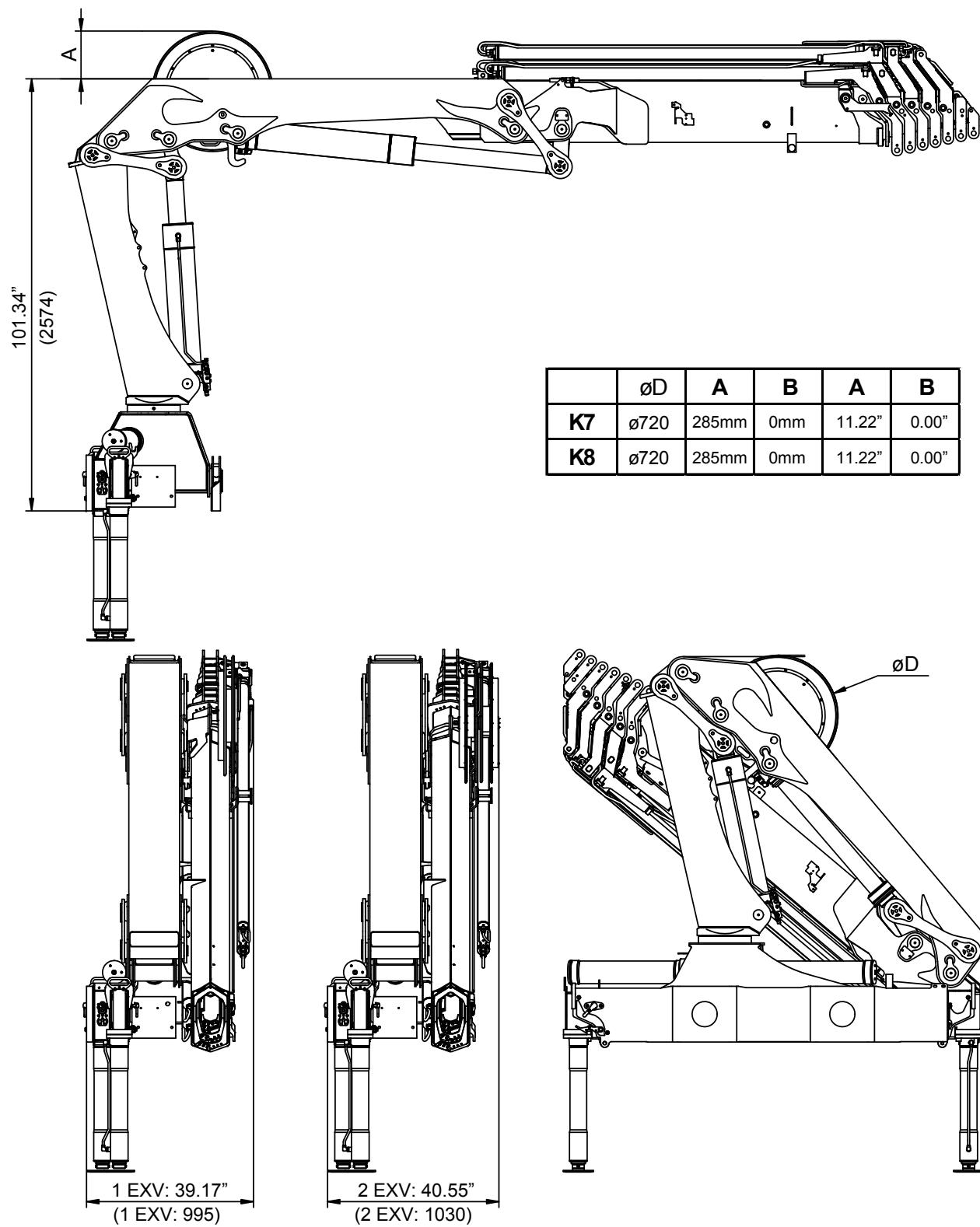
<b>Wire speed (at 40 l/min.) 10.57 gpm:</b>	<b>1.5T winch</b>	<b>1.5T winch</b>	<b>2.5T winch</b>	<b>2.5T winch</b>
Max. wire speed – 1st layer	22 m/min	72'2"/min	24 m/min	78'9"/min
Max. wire speed – 2nd layer	24 m/min	78'9"/min	26 m/min	85'4"/min
Max. wire speed – 3rd layer	26 m/min	85'4"/min	28 m/min	91'/min
Max. wire speed – 4th layer	28 m/min	91'10"/min	30 m/min	98'5"/min

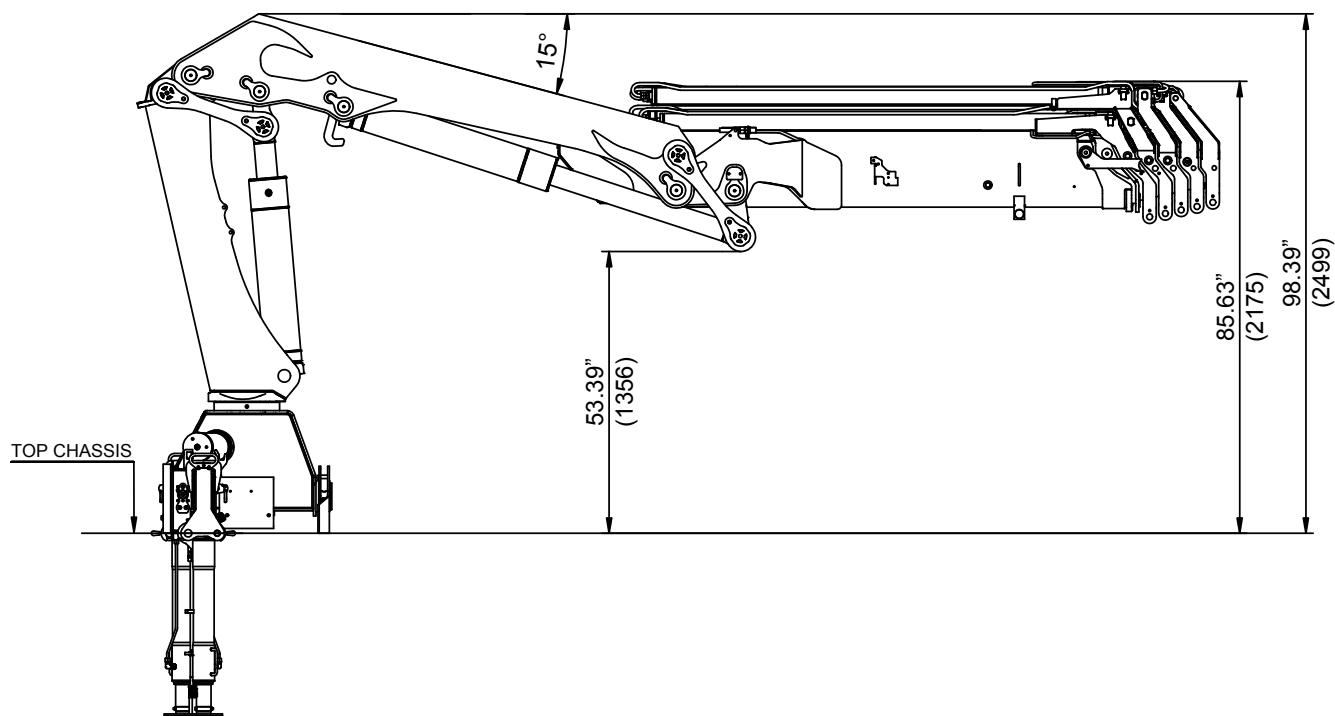
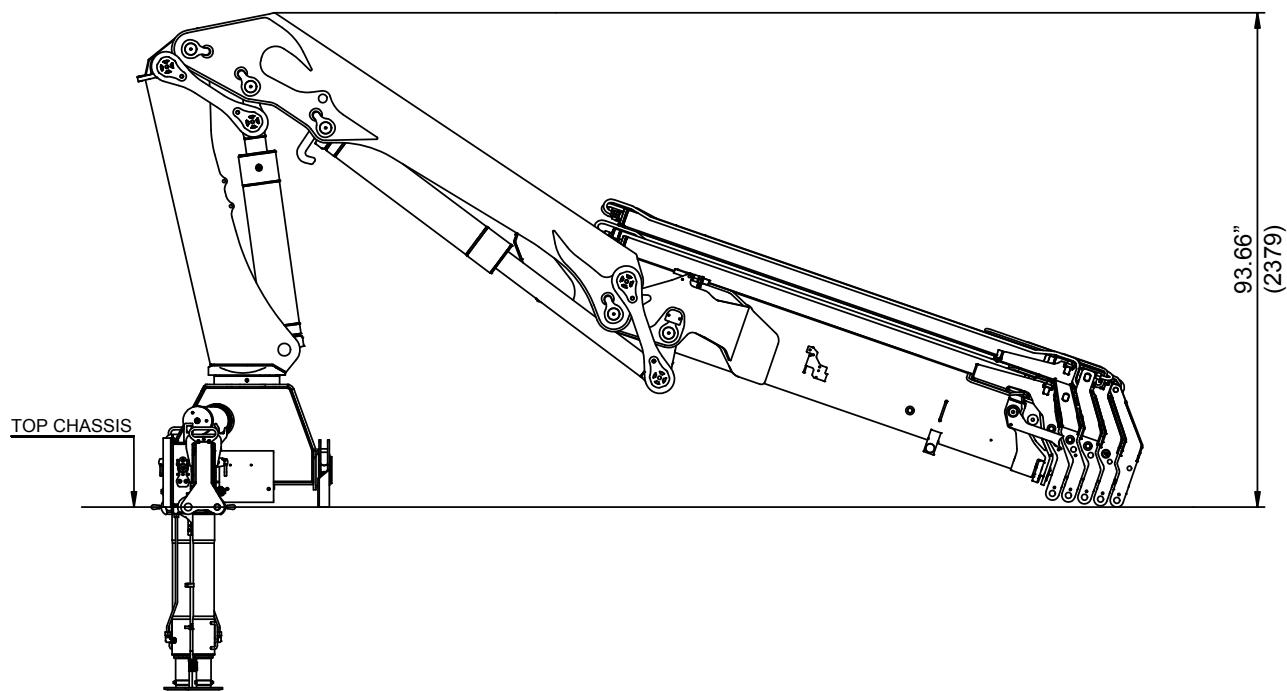
<b>Weights:</b>	<b>1.5T winch</b>	<b>1.5T winch</b>	<b>2.5T winch</b>	<b>2.5T winch</b>
Tare weight, winch (CE)	65 kg	143 lb	90 kg	198 lb
Fixed parts (valve section, brackets, hoses etc)	50 kg	110 lb	50 kg	110 lb
Wire Ø10 x 50 m	30 kg	66 lb	30 kg	66 lb
Spare parts, single snatch block	30 kg	66 lb	30 kg	66 lb
Spare parts, double snatch block	40 kg	88 lb	40 kg	88 lb

**Dimension sketch, winch**

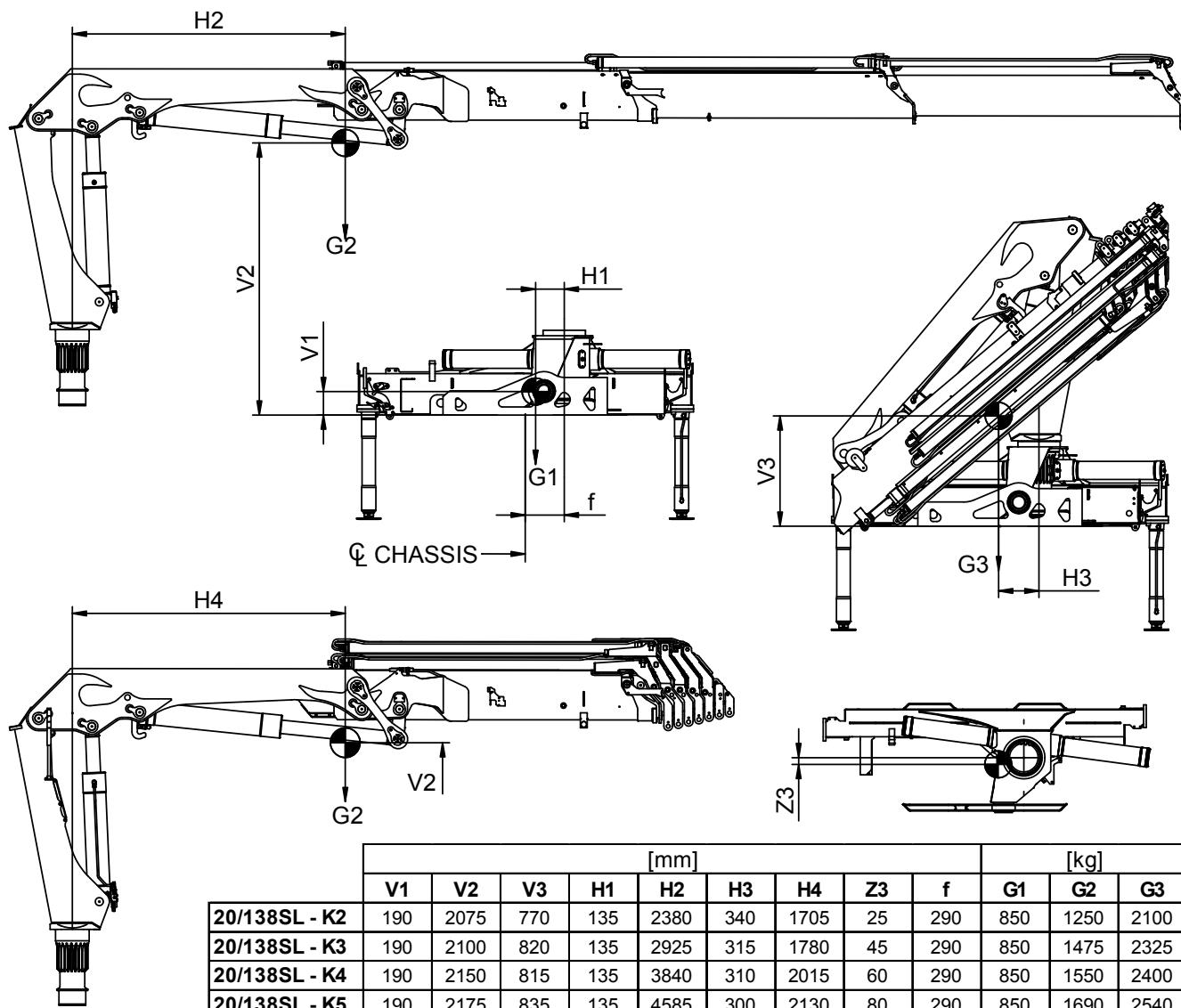
**Dimension sketch, stand-up platform (std.)**

## Dimension sketch, extra valves K7, K8



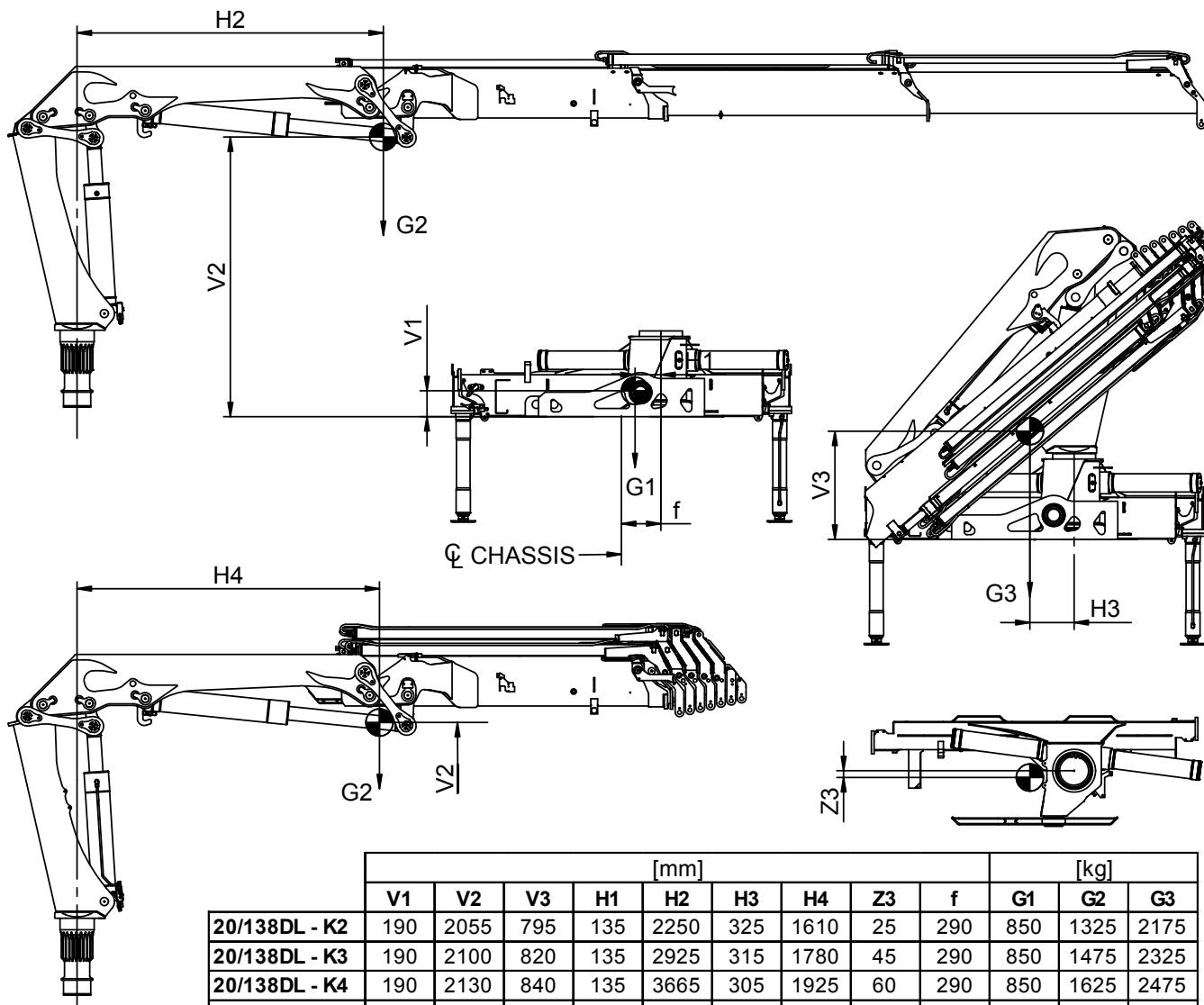
**Stowed in truck body**

## 20/138SL - Centers of Gravity



	[in]									[lbs]		
	V1	V2	V3	H1	H2	H3	H4	Z3	f	G1	G2	G3
<b>20/138SL - K2</b>	7.48	81.69	30.31	5.31	93.70	13.39	67.13	0.98	11.42	1874	2756	4630
<b>20/138SL - K3</b>	7.48	82.68	32.28	5.31	115.16	12.40	70.08	1.77	11.42	1874	3252	5126
<b>20/138SL - K4</b>	7.48	84.65	32.09	5.31	151.18	12.20	79.33	2.36	11.42	1874	3417	5291
<b>20/138SL - K5</b>	7.48	85.63	32.87	5.31	180.51	11.81	83.86	3.15	11.42	1874	3726	5600
<b>20/138SL - K6</b>	7.48	86.42	33.66	5.31	209.25	11.22	87.60	3.54	11.42	1874	4012	5886
<b>20/138SL - K7</b>	7.48	87.20	34.45	5.31	239.76	10.63	91.14	4.13	11.42	1874	4299	6173
<b>20/138SL - K8</b>	7.48	87.60	35.04	5.31	259.65	10.43	93.11	4.53	11.42	1874	4464	6338

## 20/138DL - Centers of Gravity



	[mm]										[kg]		
	V1	V2	V3	H1	H2	H3	H4	Z3	f	G1	G2	G3	
20/138DL - K2	190	2055	795	135	2250	325	1610	25	290	850	1325	2175	
20/138DL - K3	190	2100	820	135	2925	315	1780	45	290	850	1475	2325	
20/138DL - K4	190	2130	840	135	3665	305	1925	60	290	850	1625	2475	
20/138DL - K5	190	2160	855	135	4390	290	2045	80	290	850	1765	2615	
20/138DL - K6	190	2180	870	135	5105	275	2140	90	290	850	1895	2745	
20/138DL - K7	190	2195	890	135	5865	265	2230	105	290	850	2025	2875	
20/138DL - K8	190	2205	910	135	6360	255	2285	115	290	850	2100	2950	

	[in]										[lbs]		
	V1	V2	V3	H1	H2	H3	H4	Z3	f	G1	G2	G3	
20/138DL - K2	7.48	80.91	31.30	5.31	88.58	12.80	63.39	0.98	11.42	1874	2921	4795	
20/138DL - K3	7.48	82.68	32.28	5.31	115.16	12.40	70.08	1.77	11.42	1874	3252	5126	
20/138DL - K4	7.48	83.86	33.07	5.31	144.29	12.01	75.79	2.36	11.42	1874	3583	5456	
20/138DL - K5	7.48	85.04	33.66	5.31	172.83	11.42	80.51	3.15	11.42	1874	3891	5765	
20/138DL - K6	7.48	85.83	34.25	5.31	200.98	10.83	84.25	3.54	11.42	1874	4178	6052	
20/138DL - K7	7.48	86.42	35.04	5.31	230.91	10.43	87.80	4.13	11.42	1874	4464	6338	
20/138DL - K8	7.48	86.81	35.83	5.31	250.39	10.04	89.96	4.53	11.42	1874	4630	6504	



**IOWA MOLD TOOLING CO., INC.**

P.O. Box 189 Garner, IA 50438

Tel: 641.923.3711

Fax: 641.923.2424

[www.imt.com](http://www.imt.com)

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