



Manual # 99905403

10/72 Technical Specifications

Revision Date 20120202



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Printed on 7 February, 2012





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CHAPTER 1

Technical Data and Charts

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10/72 Specifications

10/72	1-HYDRAULIC	2-HYDRAULIC	3-HYDRAULIC	4-HYDRAULIC	5-HYDRAULIC
Crane Rating (Single Link)	72,330 ft-lb (10.0 tm)	70,160 ft-lb (9.7 tm)	67,990 ft-lb (9.4 tm)	66,545 ft-lb (9.2 tm)	65,100 ft-lb (9.0 tm)
Crane Rating (Double Link)	70,160 ft-lb (9.7 tm)	68,715 ft-lb (9.5 tm)	66,545 ft-lb (9.2 tm)	64,375 ft-lb (8.9 tm)	62,925 ft-lb (8.7 tm)
Maximum Horizontal Reach	18'-0" (5.5 m)	24'-7" (7.5 m)	31'-10" (9.7 m)	38'-9" (11.8 m)	45'-11" (14.0 m)
Maximum Vertical Reach	25'-7" (7.8 m)	32'-3" (9.8 m)	39'-4" (12.0 m)	46'-5" (14.1 m)	53'-4" (16.3 m)
Capacity - Single Link Cranes					
Maximum Capacity	9280 lb (4210 kg)	8710 lb (3950 kg)	8510 lb (3860 kg)	8005 lb (3630 kg)	7560 lb (3430 kg)
Max Capacity @ Max Reach	4055 lb (1840 kg)	2800 lb (1270 kg)	2005 lb (910 kg)	1475 lb (670 kg)	1100 lb (500 kg)
Capacity - Double Link Cranes					
Maximum Capacity	9945 lb (4510 kg)	9435 lb (4280 kg)	8795 lb (4070 kg)	8530 lb (3870 kg)	8135 lb (3690 kg)
Max Capacity @ Max Reach	3945 lb (1790 kg)	2710 lb (1230 kg)	1940 lb (880 kg)	1435 lb (650 kg)	1060 lb (480 kg)
Crane Weight**	2380 lb (1080 kg)	2615 lb (1185 kg)	2835 lb (1285 kg)	3030 lb (1375 kg)	3210 lb (1455 kg)
Hook Approach					
Vertical	9'-8" (2.94 m)	9'-4" (2.84 m)	9'-0" (2.74 m)	8'-8" (2.64 m)	8'-4" (2.54 m)
Horizontal	2'-7" (0.79 m)	2'-9" (0.84 m)	2'-11" (0.89 m)	3'-1" (0.94 m)	3'-3" (1.0 m)
Center of Gravity-Stored (Single Link)					
Vertical	24" (604 mm)	25" (633 mm)	26" (662 mm)	27" (688 mm)	27.7" (704 mm)
Horizontal (C/L Rotation to Bridge)	10.6" (270 mm)	10.5" (265 mm)	10" (255 mm)	9.3" (236 mm)	9" (228 mm)
Center of Gravity-Stored (Double Link)					
Vertical	25" (637 mm)	26" (665 mm)	27.4" (695 mm)	28" (714 mm)	28.7" (729 mm)
Horizontal (C/L Rotation to Bridge)	10" (256 mm)	10" (255 mm)	9.8" (250 mm)	9" (229 mm)	8.7" (221 mm)

* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from the centerline of rotation with all extensions retracted, and the inner and outer booms in a horizontal position, per ANSI B30.22.

** Crane weight is for standard single-link crane with tank & mounting kit. Does not include stabilizers, oil. Add 35 lb (15 kg) for double link.



Dimensions & Performance

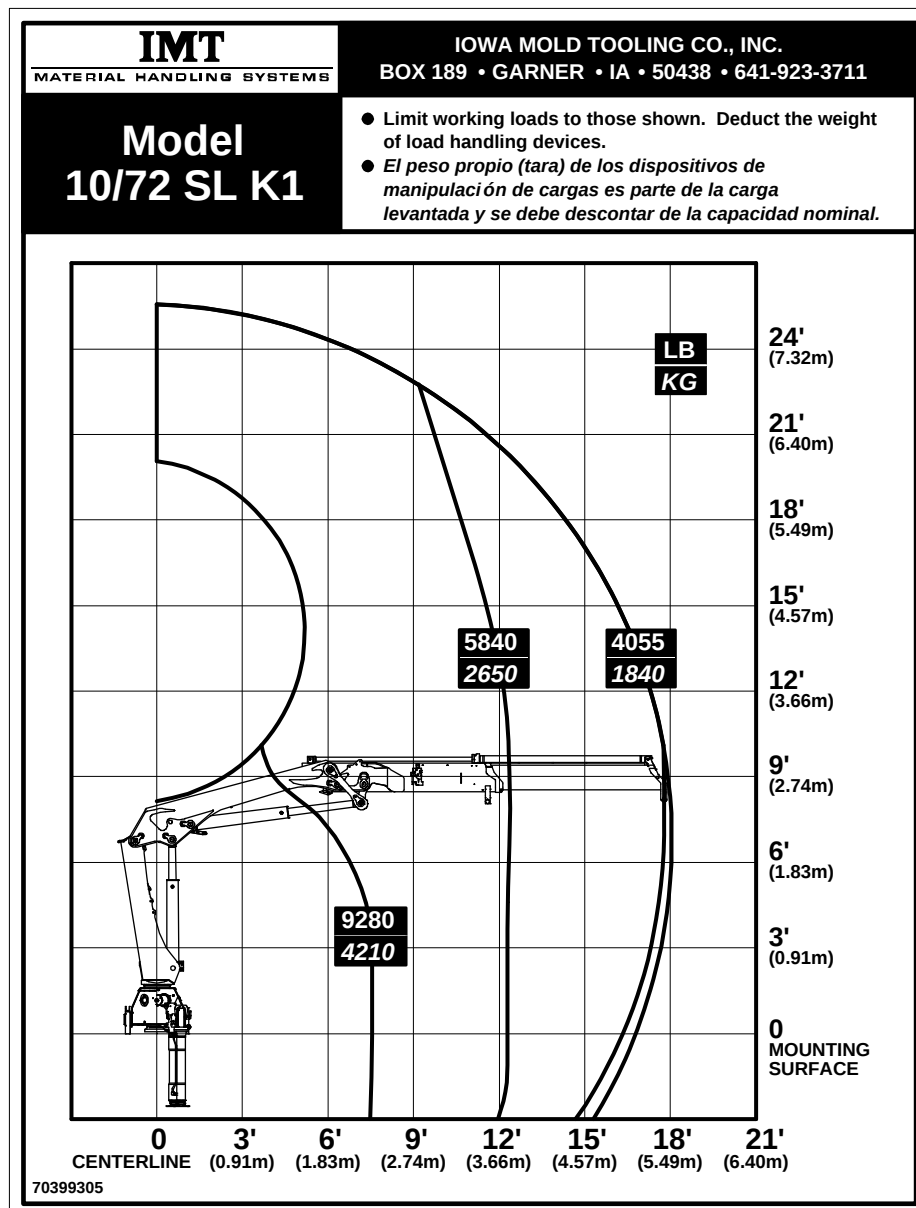
DIMENSIONS & PERFORMANCE	
Crane Storage Height	7'-0" (2135 mm)
Width	7'-9" (2350 mm)
Mounting Space	2'-5" (747 mm)
Maximum Swing Clearance (from top of chassis frame)	21.5" (545 mm) at 7'-5" (2251 mm) (Single) or 7'-6" (2276 mm) (Double)
Rotational Torque	9665 ft-lb (1.3 tm)
Rotation	420 degrees
Optimum Pump Performance	10.5 GPM (40 L/min)
System Pressure	4785 psi (330 bar)
Oil Reservoir Capacity	14.5 gal (55 L)

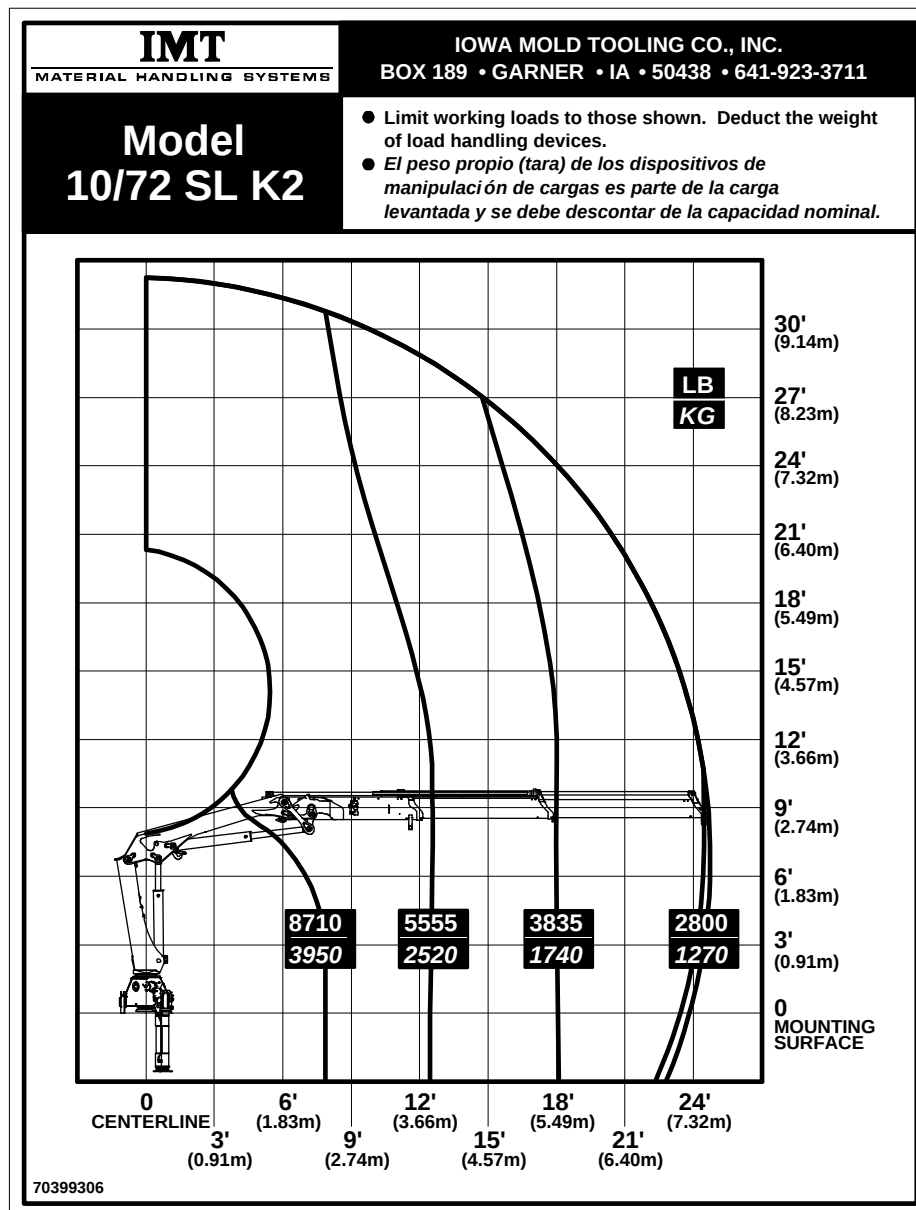
STABILIZERS	
Stabilizer Pad Diameter	6" (158 mm)
Stabilizer Weights	
Standard Man Out/Hyd Down, Fixed	355 lb (160 kg)
Standard Man Out/Hyd Down, Swing-Up	365 lb (165 kg)
Extended Reach Hyd Out/Down, Fixed	410 lb (185 kg)
Extended Reach Hyd Out/Down, Swing Up	420 lb (190 kg)
Stabilizer Spread, Standard	13'-8" (4165 mm)
Stabilizer Spread, Extended Reach	16'-10" (5140 mm)

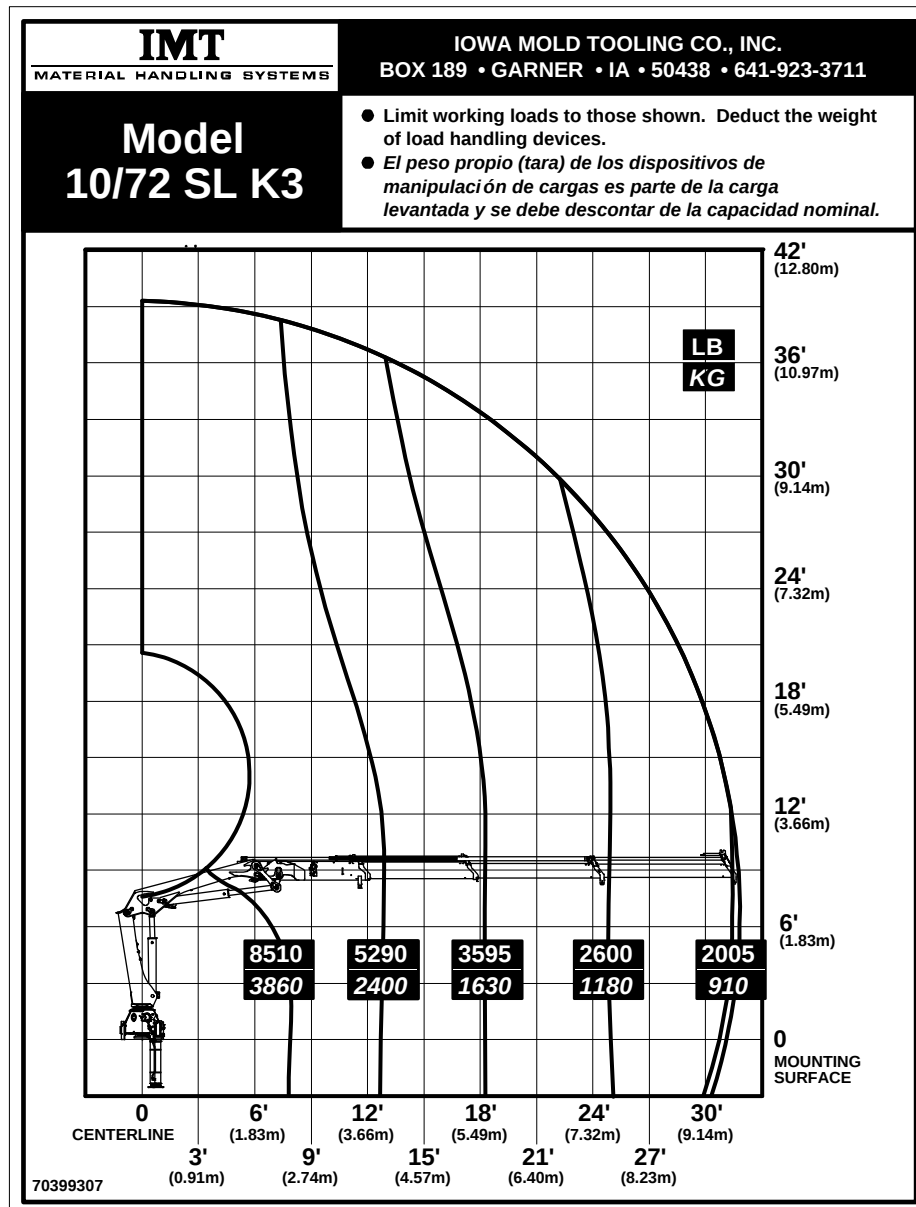
CHASSIS SPECIFICATIONS	
Front Axle Rating (GAWR)	8000 lb (3630 kg)
Rear Axle Rating (GAWR)	16,000 lb (7260 kg)
Resistance to Bending Moment	1,080,000 in-lb (124,430 kg-m)

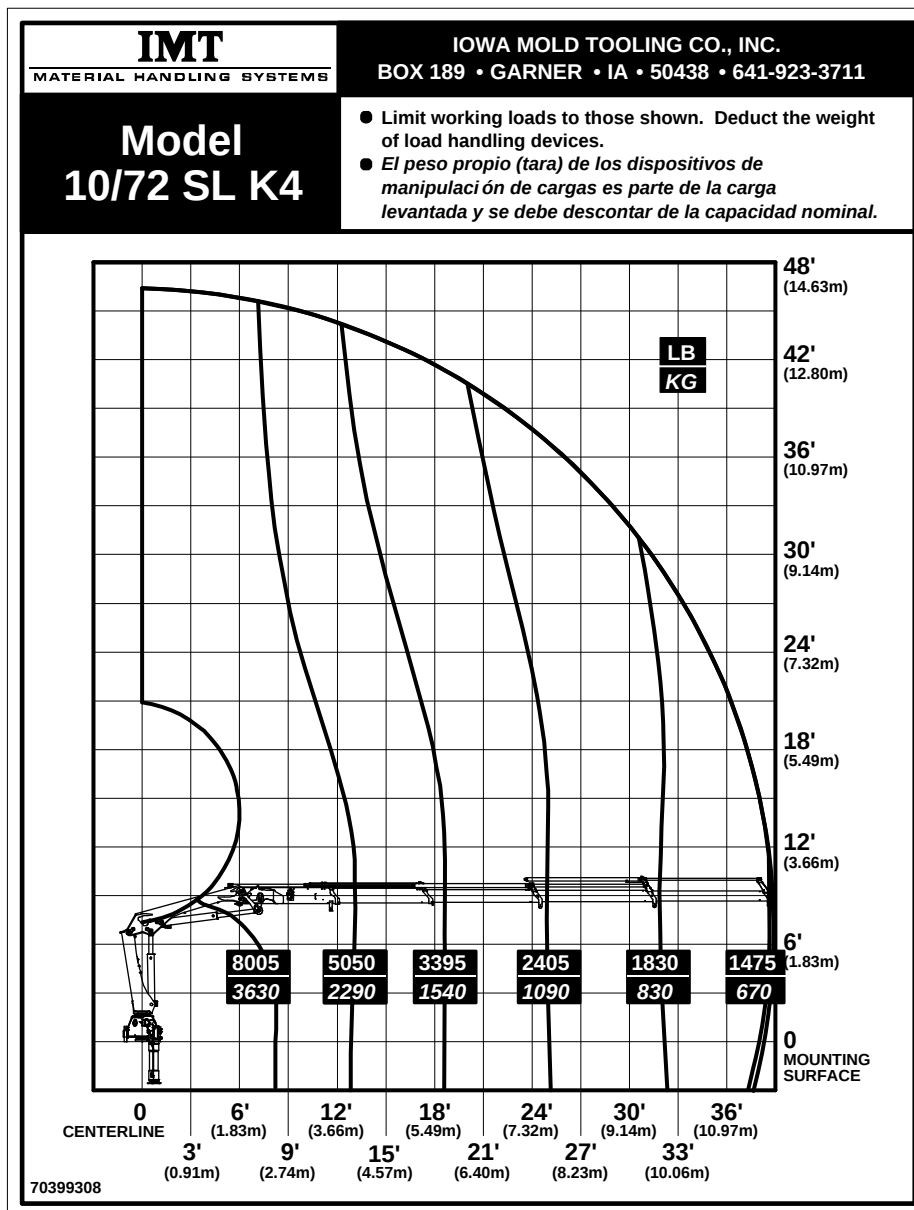


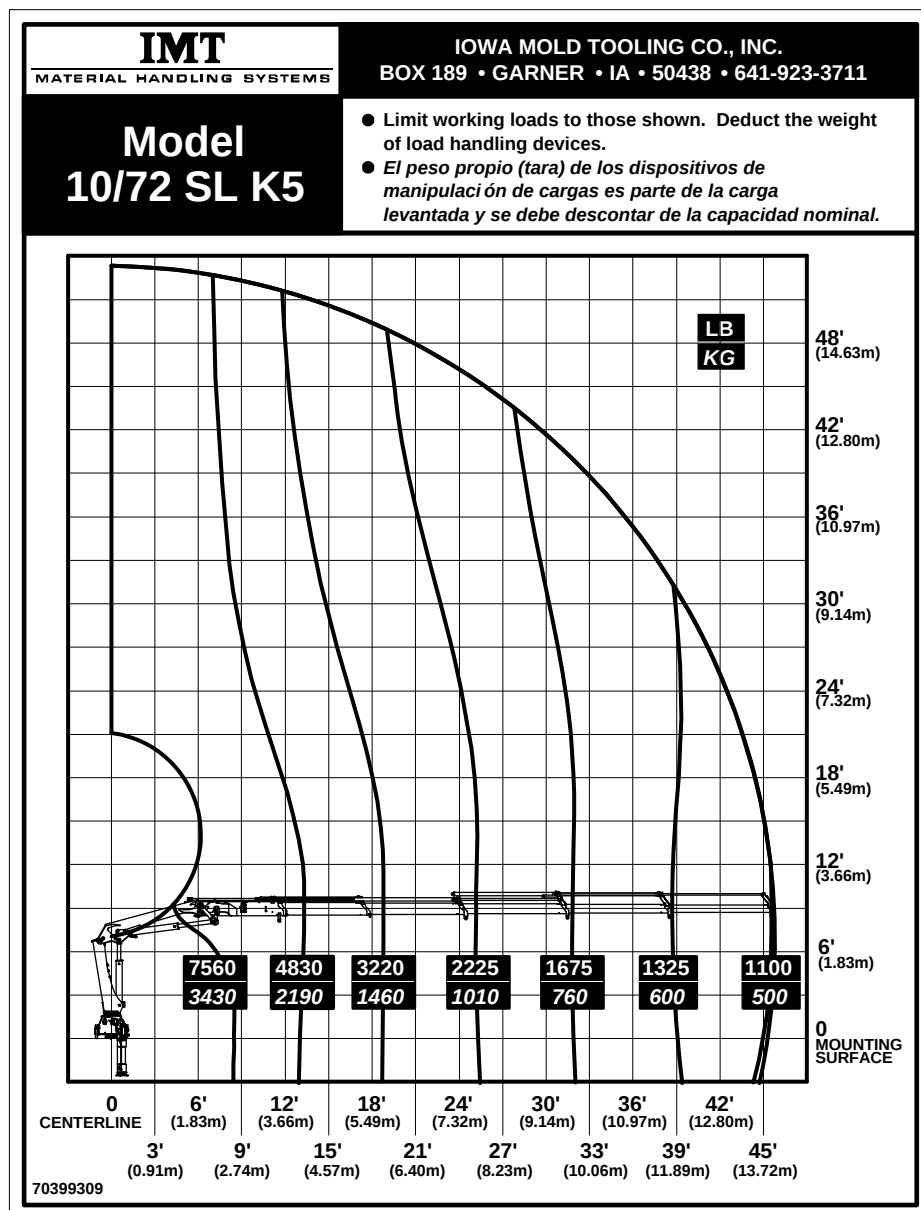
10/72 Series Single Link Capacity Charts





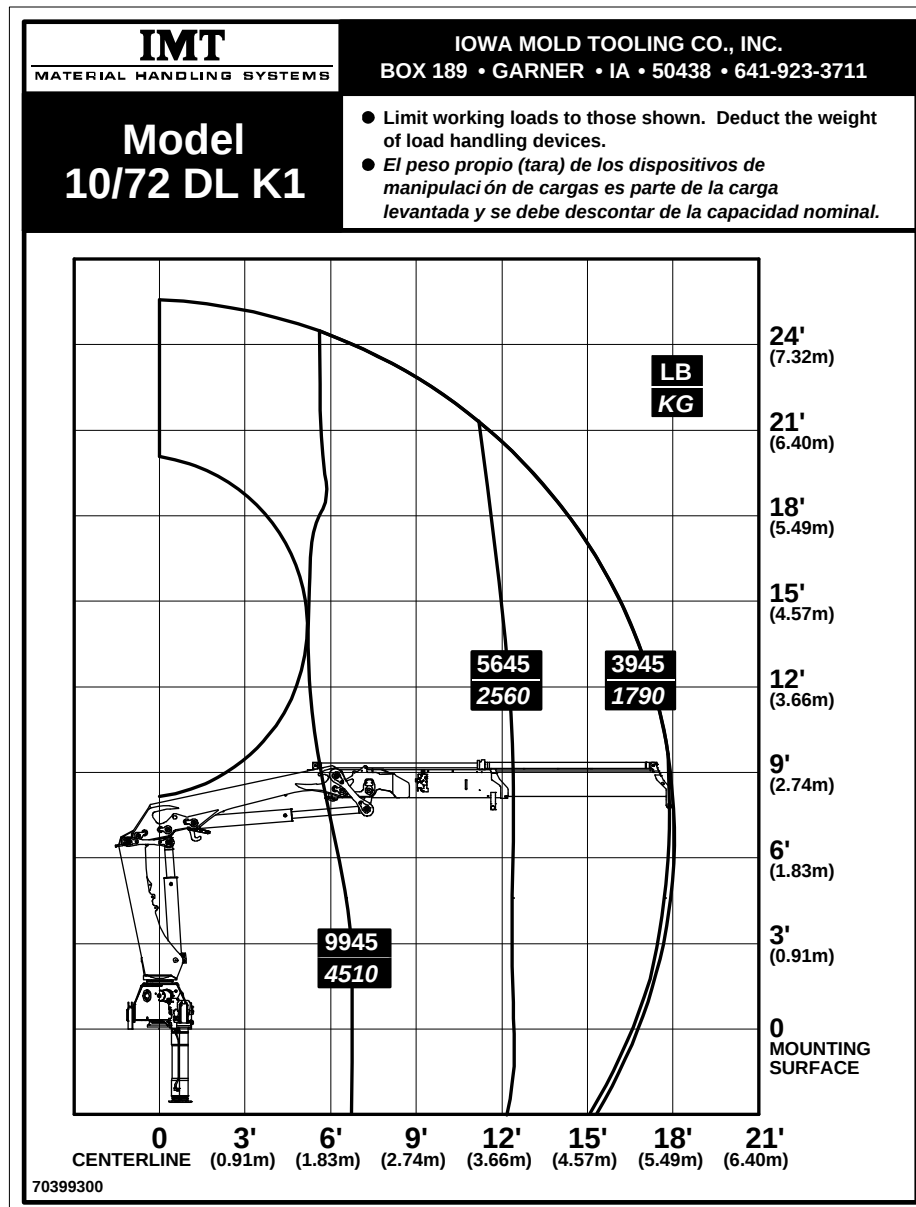


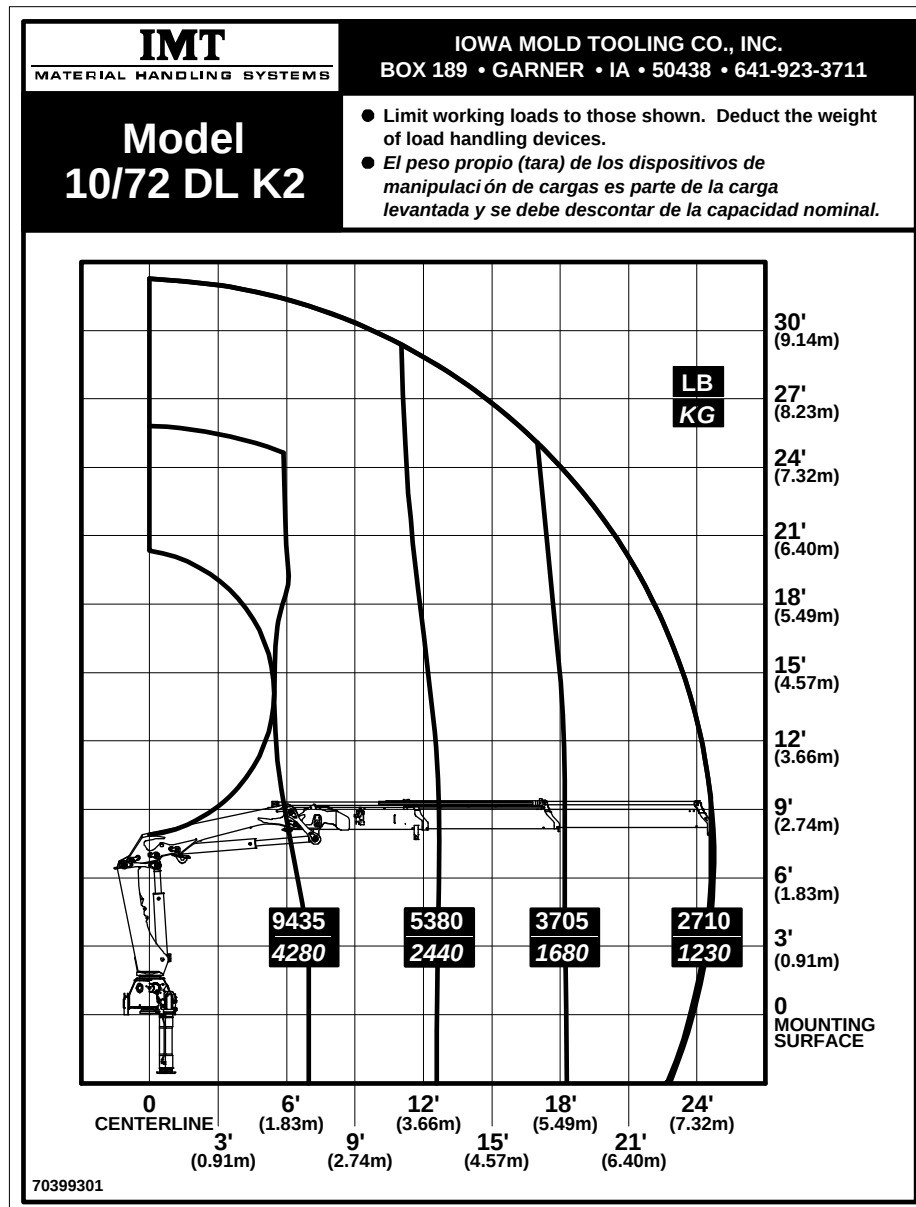


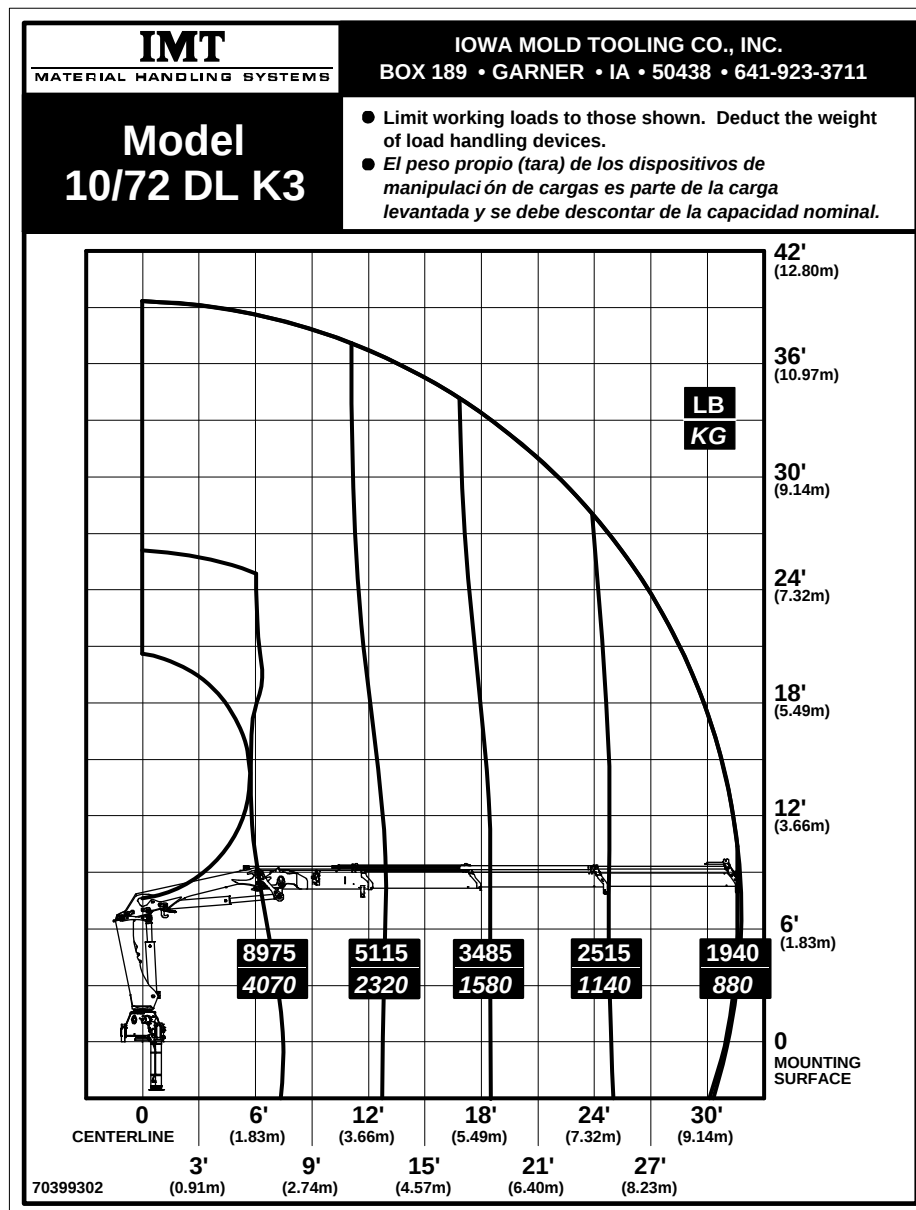


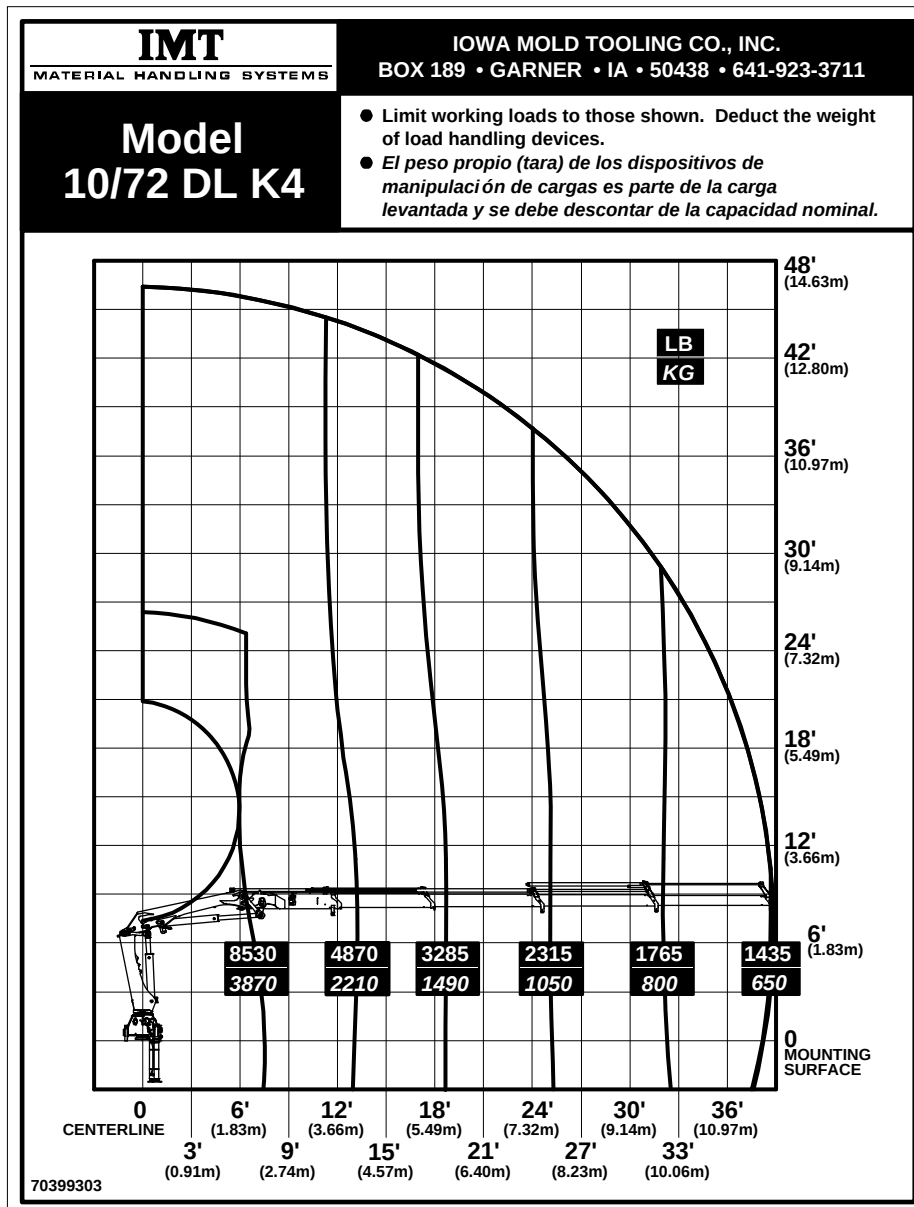


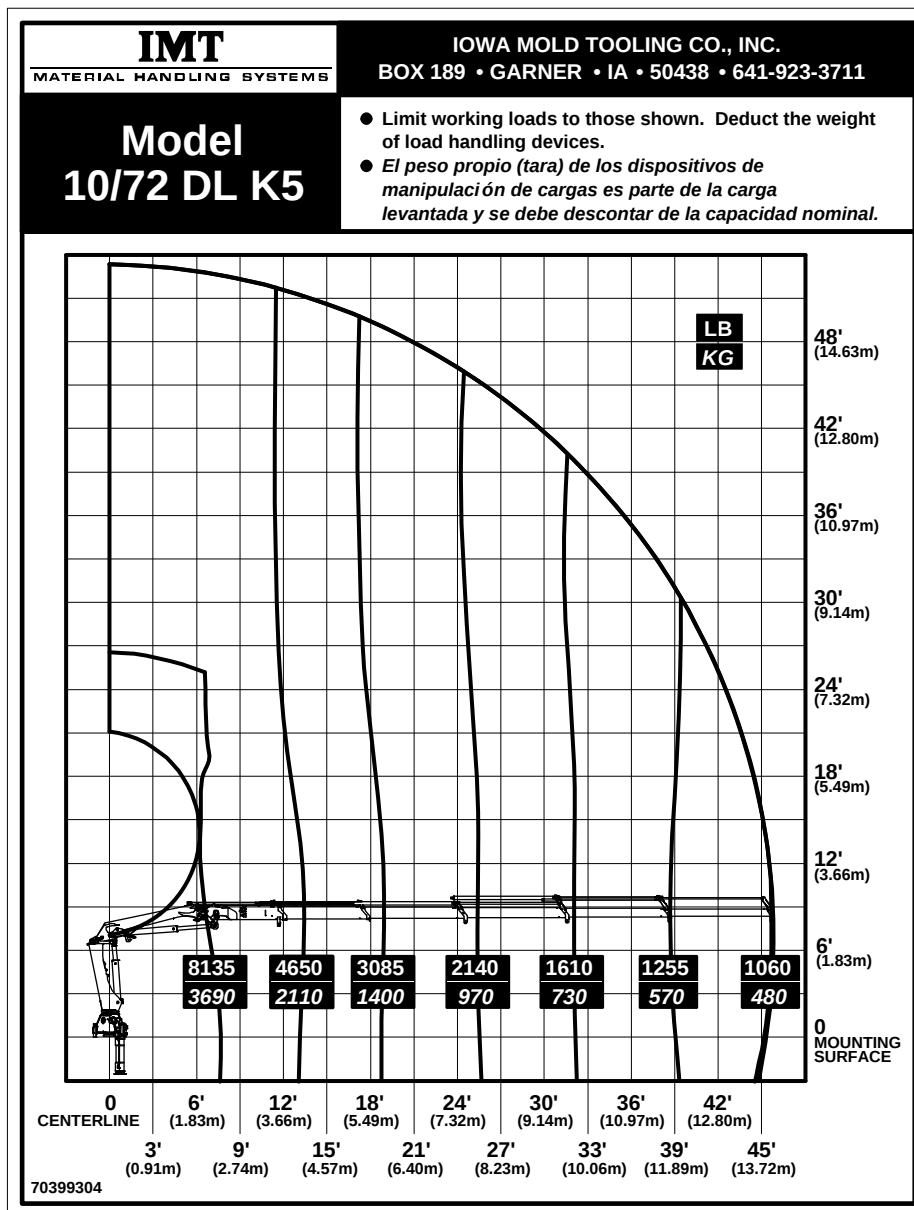
10/72 Series Double Link Capacity Charts





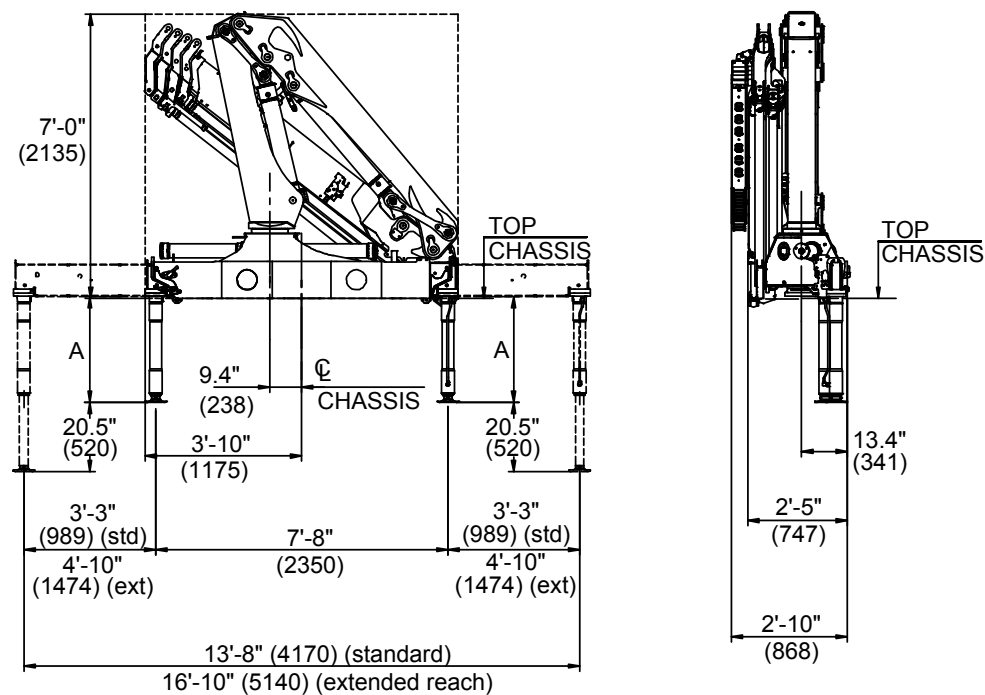
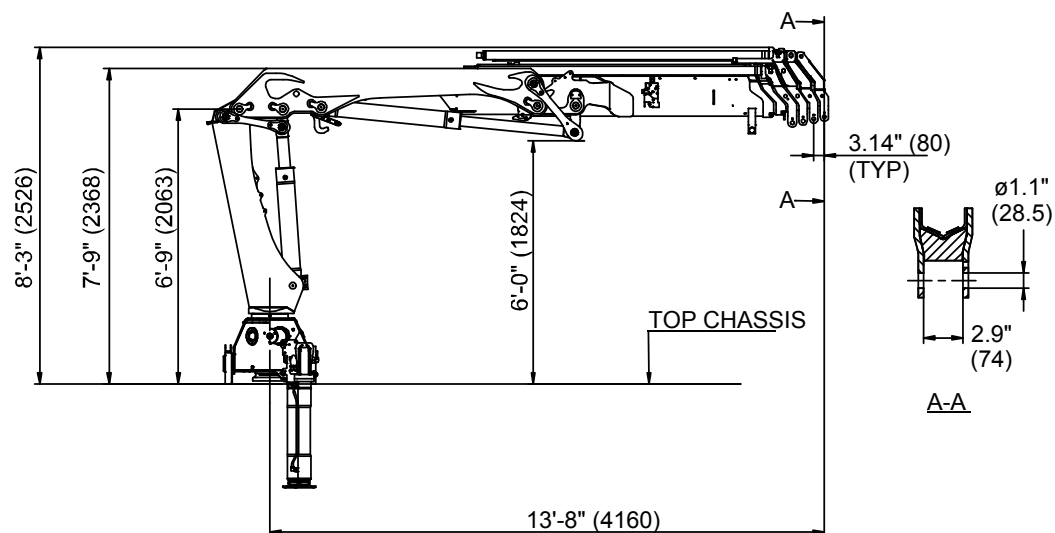








Dimensions

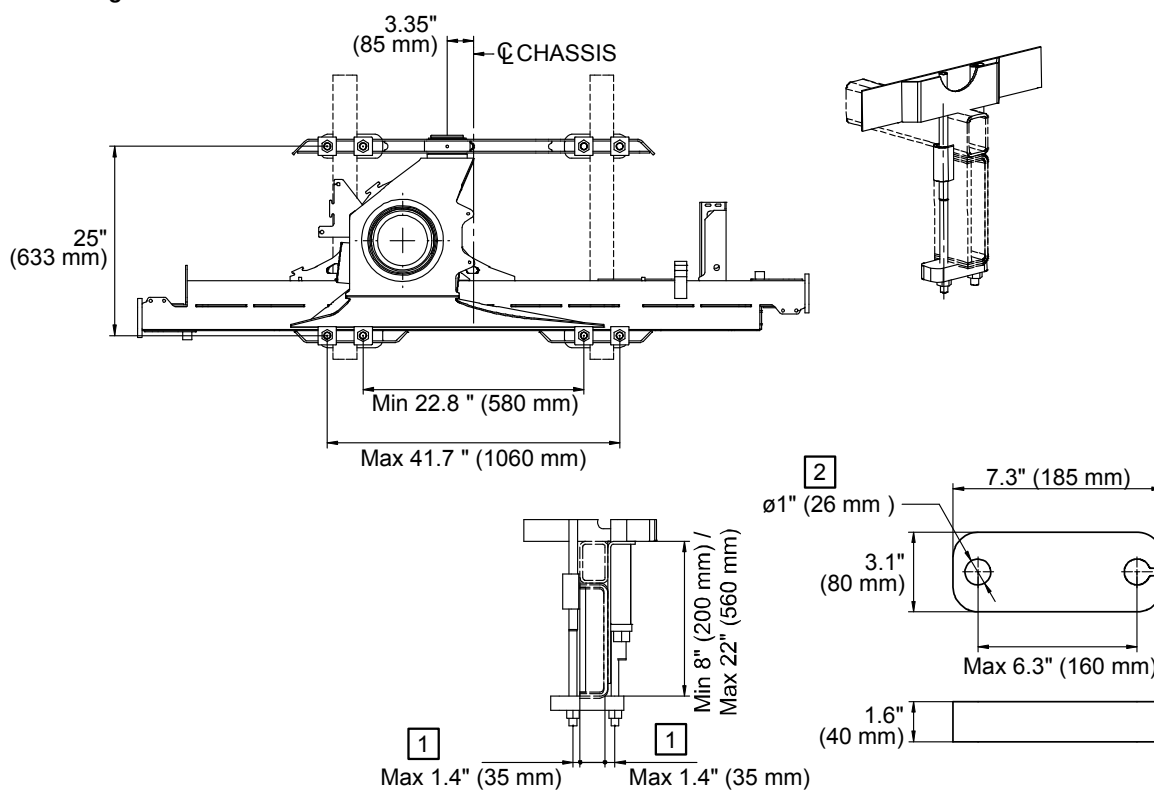


Double link crane shown. Single link dimensions are the same.
Dimensions shown in ft-in (mm).

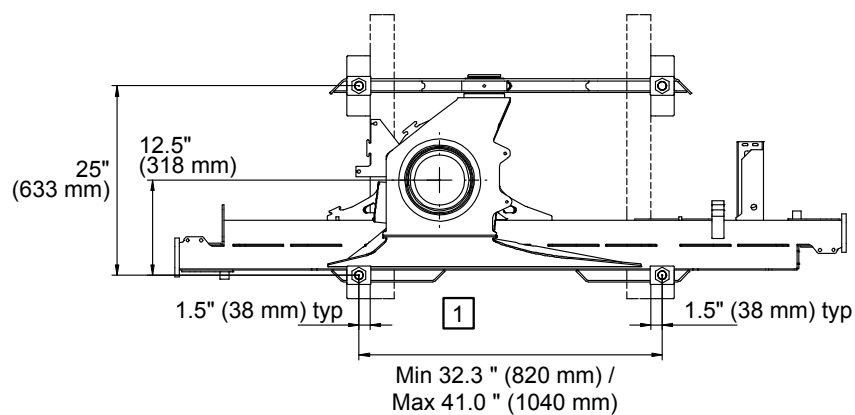


Mounting Dimensions

8 mounting holes - M24 x 2 bolt



4 mounting holes - M30 x 2 bolt

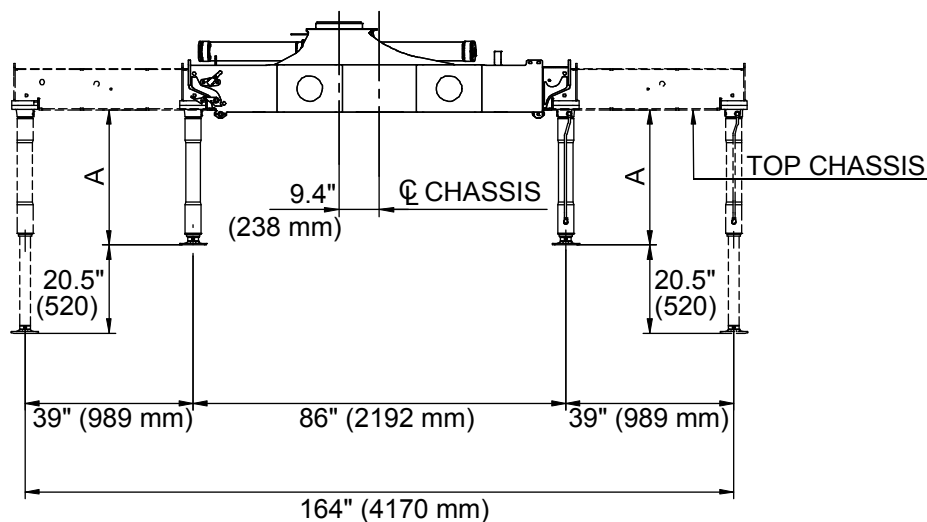
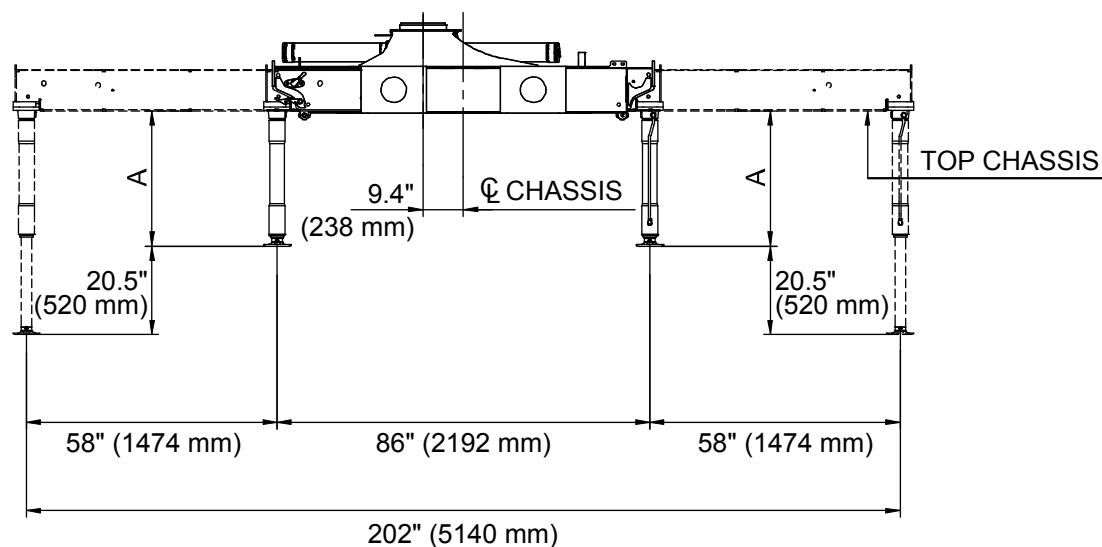


NOTES (SEE REFERENCE NUMBER IN BOX):

- 1 Value dictated by strength concerns.
- 2 Mounting hole diameter.



Dimensions, Fixed Stabilizer Legs

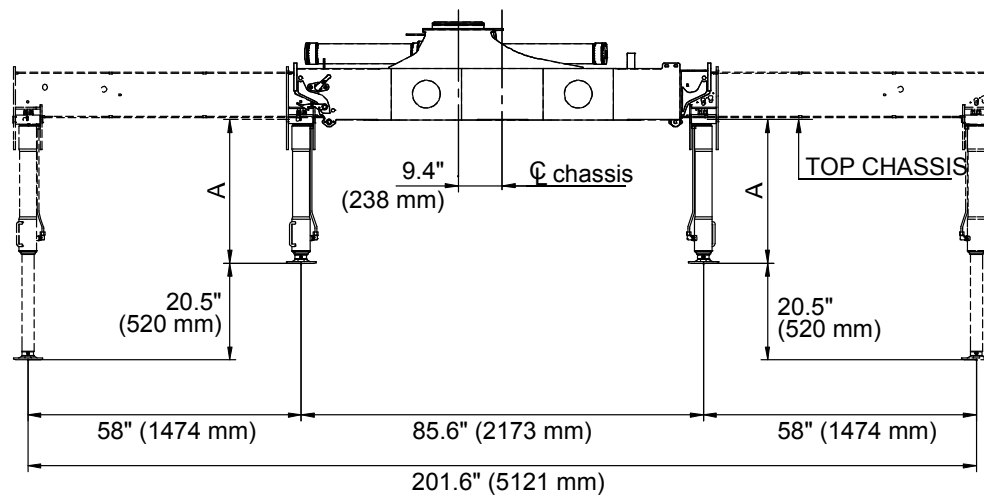
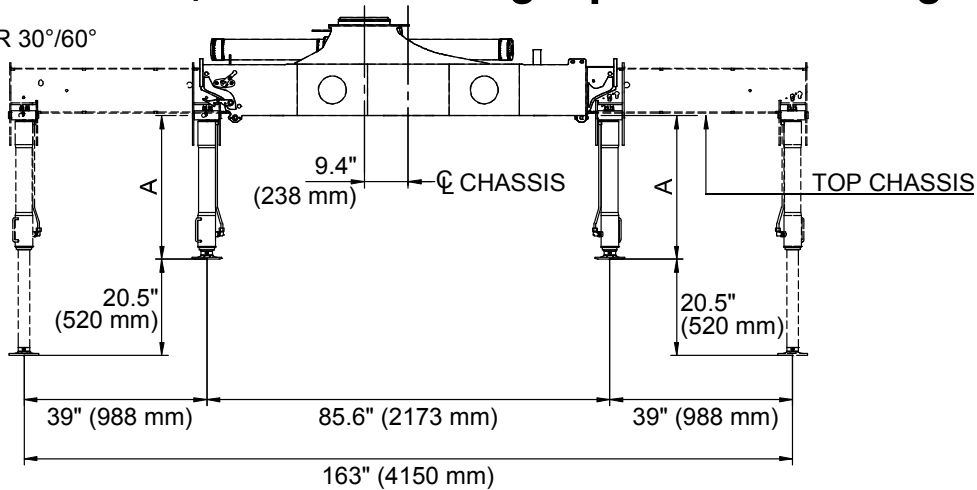


A	30.6" (777)	34.5" (877)	38.5" (977)

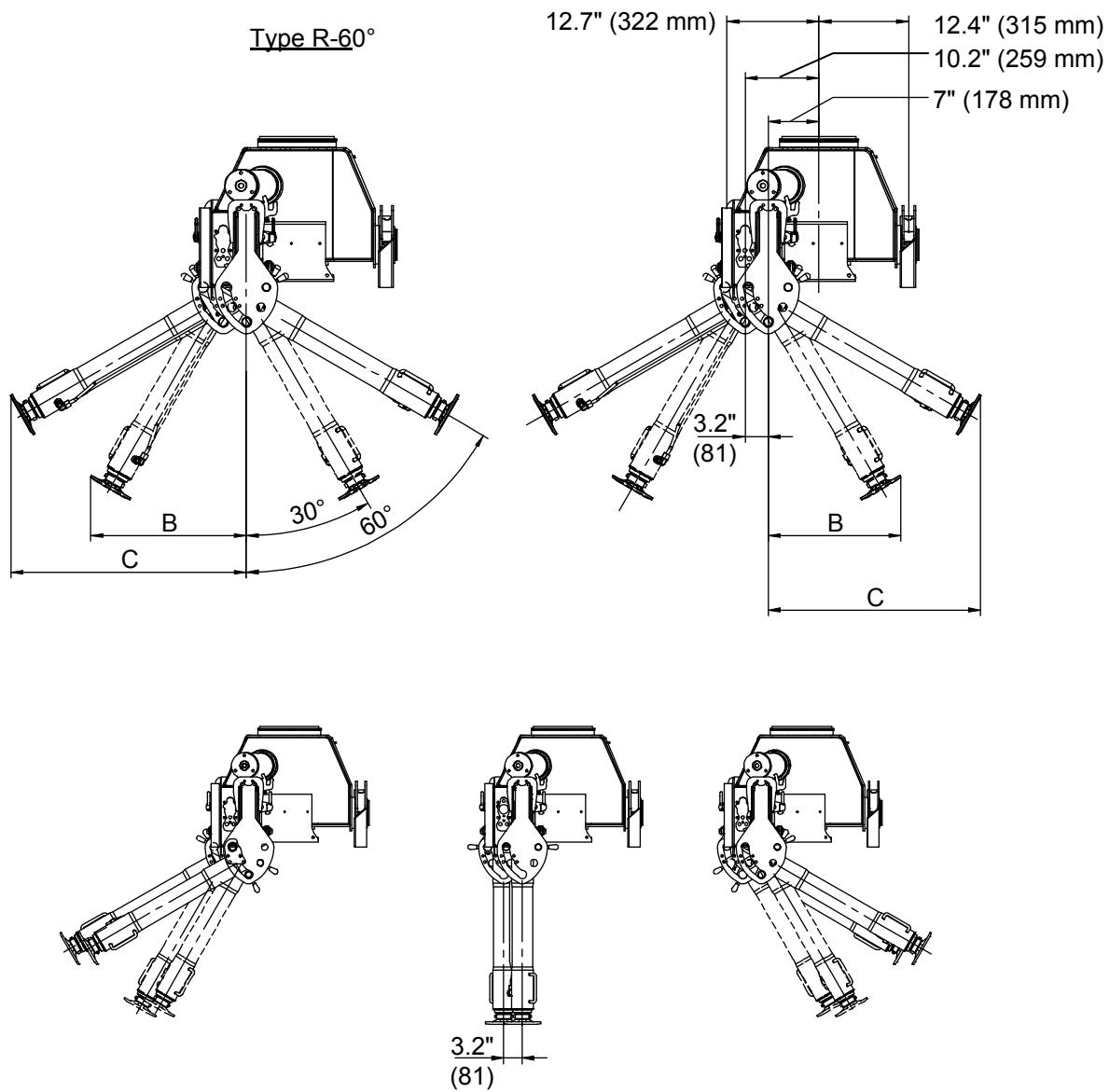


Dimensions, Manual Swing-Up Stabilizer Legs

Type SR 30°/60°



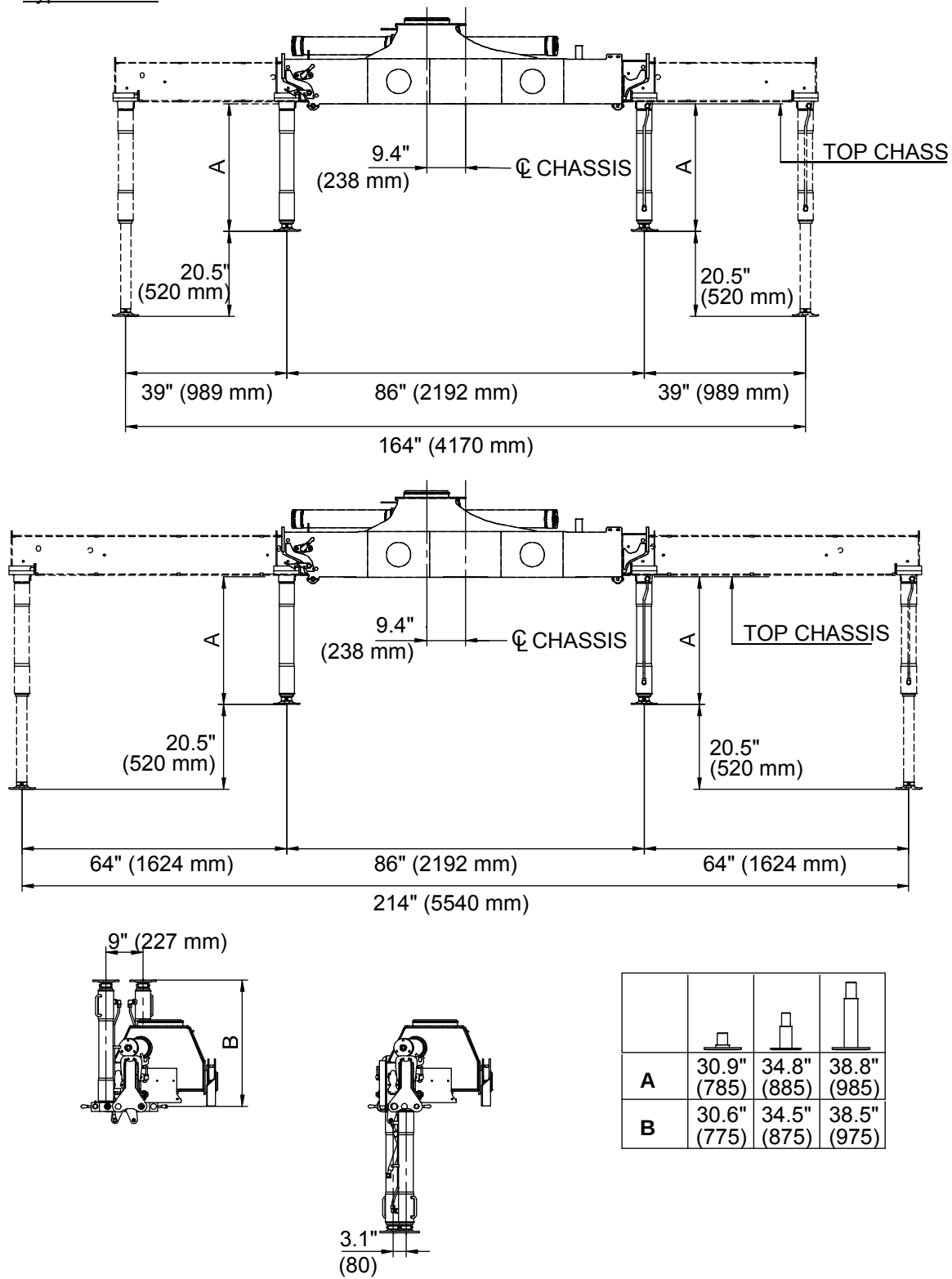
A	30.6" 775	34.5" 875	38.5" 975



B	18.3" (465)	20.3" (515)	22.2" (565)
C	29.3" (745)	32.7" (831)	36.1" (918)



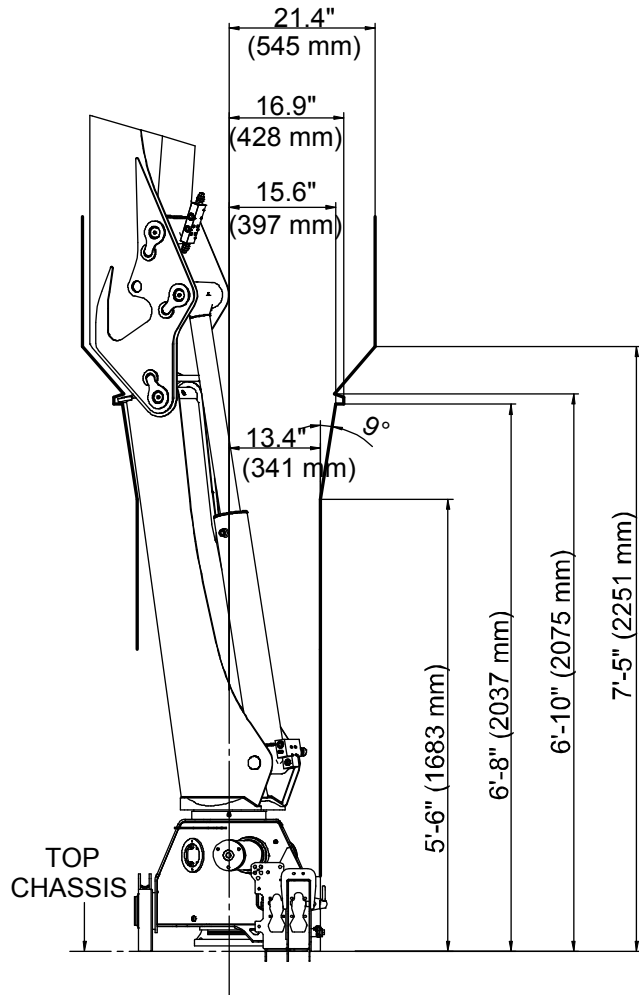
Type SV 180°





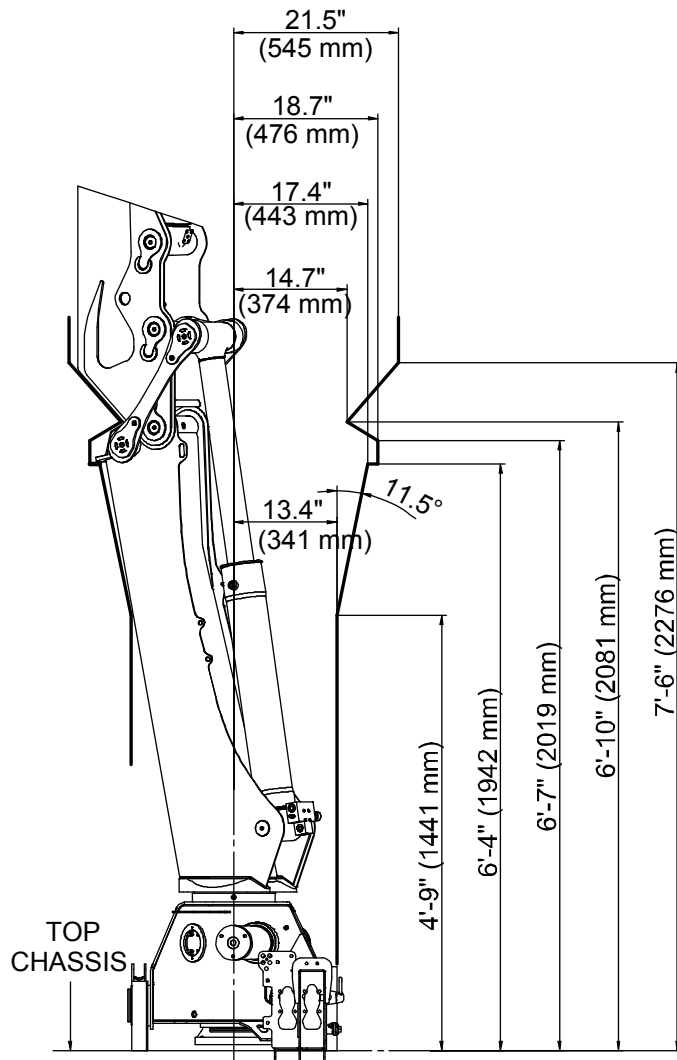
Swing Clearance Drawings

Single Link Swing Clearance





Double Link Swing Clearance







CHAPTER 2

Pressure Settings & Hydraulic Schematics

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10/72 Pressure Settings, Hydrocontrol Controls

Working Pressure on Main-Relief Valve & Port-Relief Valves			
Function	Direction	Port	10/72 Pressure psi (bar)
Main-relief valve			4785 (330)
Slewing system	Right	A	P
	Left	B	P
Boom cylinder	Down	A	1450 (100)
	Up	B	4930 (340)
Jib cylinder	Up	A	4930 (340)
	Down	B	2900 (200)
Extension cylinders	Extend	A	P
	Retract	B	P
Rotator	Right	A	2900 (200)
	Left	B	2900 (200)
Grab	Open	A	2900 (200)
	Close	B	2900 (200)
Separate stabilizer valve		All	2175 (150)



Working Pressure on Load-Holding Valves			
Function	Direction	Port	10/72 Opening Pressure psi (bar)
Boom cylinder			5075 (350)
Jib cylinder	Up	A	5075 (350)
	Down	B	
Slewing system			3045 (210)
Extension cylinders	Extend	A	3045 (210)
	Retract	B	6235 (430)

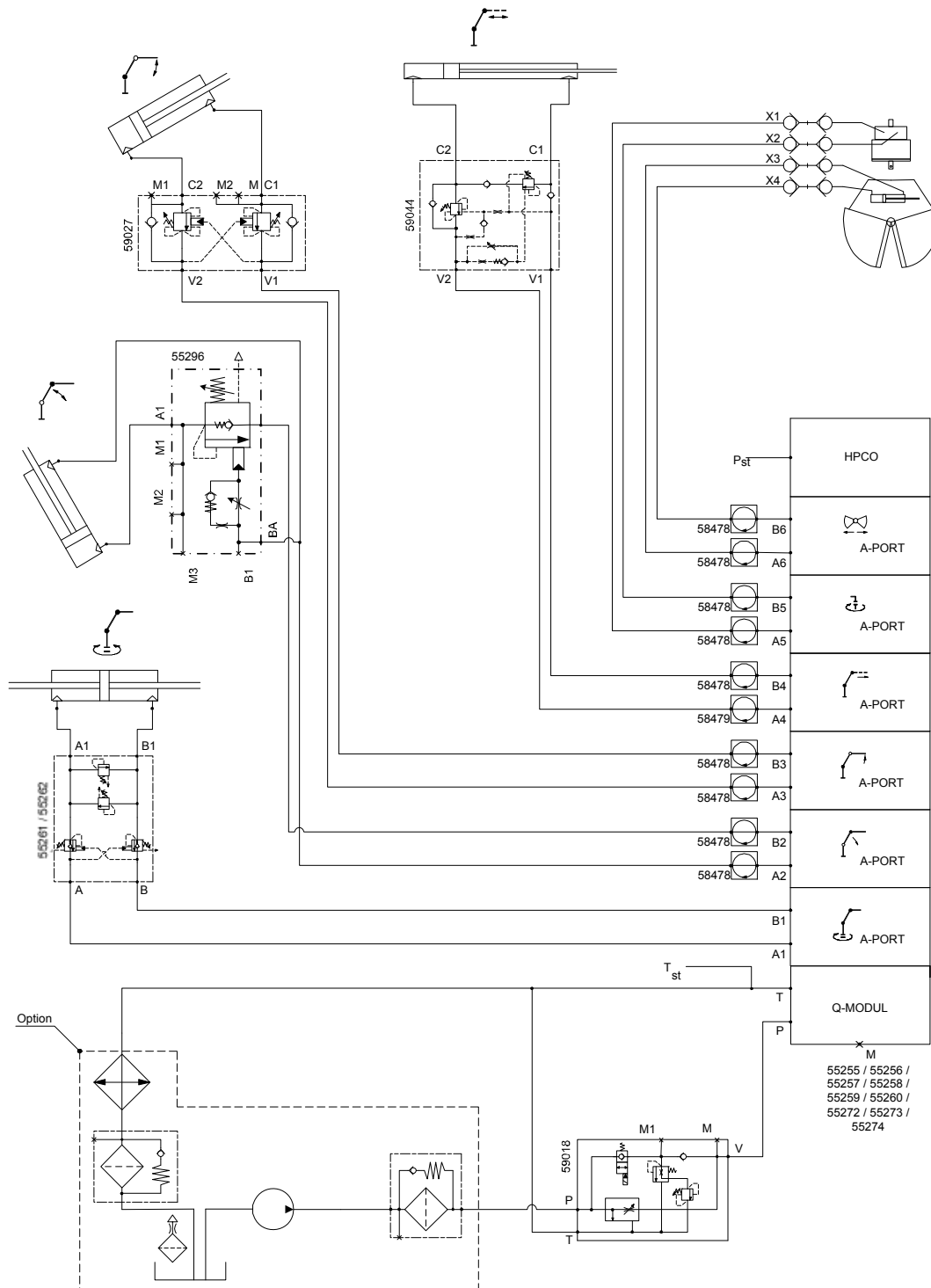
Pressure Setting for HDL Valve	
HDL	4640 (290)

Pressure Setting for Load Moment Limitation (LMB)	
Load moment limitation (LMB)	4205 (320)

Maximum Pump Performance	
Pump performance, 1-circuit	10.5 gpm (40 l/min)



10/72 Hydraulic Schematic, Hydrocontrol Controls





10/72 Pressure Settings, Danfoss Controls

Working Pressure on Main-Relief Valve & Port-Relief Valves				
Function	Direction	Port	Port-relief valves psi (bar)	LS-pressure adjustment psi (bar)
Main-relief valve			4785 (330)	4785 (330)
Slewing system	Right	A	P	2975 (205)
	Left	B	P	2975 (205)
Boom cylinder	Down	A	1815 (125)	1450 (100)
	Up	B	5075 (350)	5075 (350)
Jib cylinder	Up	A	5075 (350)	5075 (350)
	Down	B	3625 (250)	3335 (230)
Extension cylinders	Extend	A	P	-
	Retract	B	P	-
Rotator	Right	A	P	725 - 4350 (50-300)
	Left	B	P	725 - 4350 (50-300)
Grab	Open	A	P	725 - 4350 (50-300)
	Close	B	P	725 - 4350 (50-300)
Winch	Lift	A	P	2320 (160)
	Lower	B	P	2320 (160)
Separate stabilizer valve		All		2175 (150)

Working Pressure on Load-Holding Valves			
Function	Direction	Port	10/72 Opening Pressure psi (bar)
Slewing system	Right		3045 (210)
	Left		3045 (210)
Boom cylinder	Up		5075 (350)
	Down		-
Jib cylinder	Up		5075 (350)
	Down		3625 (250)
Extension cylinders	Extend		3045 (210)
	Retract		6235 (430)



Pressure Setting for Load Moment Limitation (LMB)	
Load moment limitation (LMB)	4570 (315)
HDL	4135 (285)

Maximum Pump Performance	
Pump performance	18.5 gpm (70 l/min)



10/72 Hydraulic Schematic, Danfoss Controls

