
Manual # 99904623

12/78Z & ZC Technical Specifications

Revision Date 20111213



IOWA MOLD TOOLING CO., INC.

PO Box 189

Garner, IA 50438

Tel: 641-923-3711 FAX: 641-923-2424

Website: <http://www.imt.com>

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Contents

Revisions	ii
Technical Data and Charts	3
12/78Z & ZC Technical Specifications	4
12/78Z & ZC Pressure Settings	5
12/78Z K1 Capacity Chart	6
12/78Z K2 Capacity Chart	7
12-78Z Geometric Configuration	8
12-78ZC Geometric Configuration	9
12-78Z Swing Clearance	10
Hydraulic Diagram - Top Seat, Single Circuit, Fixed-Flow Pump	11

Revisions

DATE	LOCATION	DESCRIPTION
20090916	SPECS	UPDATED Z-LOADER SPECS TO INCLUDE OIL RES. CAPACITY, ALL STABILIZER STYLES. ADDED SWING CLEARANCE INFORMATION.
20111213	SPECS	ECN 11628 – UPDATED STABILIZER WORDING

CHAPTER 1

Technical Data and Charts

In This Chapter

12/78Z & ZC Technical Specifications	3
12/78Z & ZC Pressure Settings.....	5
12/78Z K1 Capacity Chart	6
12/78Z K2 Capacity Chart	7
12-78Z Geometric Configuration	8
12-78ZC Geometric Configuration	9
12-78Z Swing Clearance.....	10
Hydraulic Diagram - Top Seat, Single Circuit, Fixed-Flow Pump.....	11

12/78Z & ZC Technical Specifications

12/78Z & ZC	1-HYDRAULIC	2-HYDRAULIC
Crane Rating*	77,395 ft-lb (10.7 tm)	74,500 ft-lb (10.3 tm)
Maximum Horizontal Reach	22' 1" (6.72 m)	27' 3" (8.3 m)
Maximum Vertical Reach	29' 10" (9.1 m)	34' 8" (10.6 m)
Maximum Capacity	6615 lb (3000 kg)	6615 lb (3000 kg)
Max Cap @ Max Reach	3595 lb (1630 kg)	2690 lb (1220 kg)
Crane Weight **	3375 lb (1530 kg)	3615 lb (1640 kg)
Max. Swing Clearance Radius (crane only) (from CL of rotation) ***		
Vertical (from top of chassis frame)	7' 4" (2245 mm)	7' 4" (2245 mm)
Horizontal (from back of cab)	21" (540 mm)	21" (540 mm)
Max. Swing Clearance Radius (with top seat) (from CL of rotation) ***		
Vertical (from top of chassis frame)	26.4" (670 mm)	28.1" (715 mm)
Horizontal (Centerline of rotation to bridge)	15.4" (390 mm)	15.7" (400 mm)
Center of Gravity - Stored		
Z-Vertical	2' 2" (670 mm)	1' 3" (390 mm)
Z-Horizontal (C/L Rot to bridge)	2' 4" (715 mm)	1' 4" (400 mm)
ZC-Vertical	N/A	N/A
ZC-Horizontal (C/L Rot to bridge)	N/A	N/A
* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and the inner and outer booms in a horizontal position, per ANSI B30.22. ** Crane weight does not include stabilizers.		

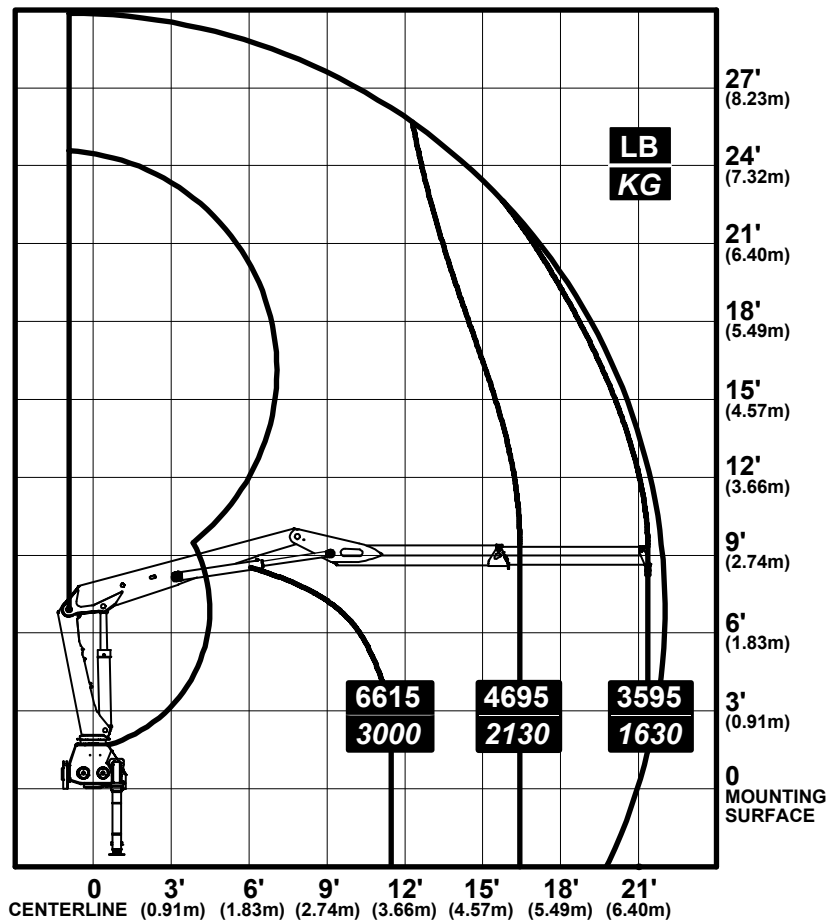
12/78Z & ZC SPECIFICATIONS	
Stabilizer Pad Diameter	
Crane Storage Height	7' 5" (2258 mm) (1-Hydraulic) 7' 6" (2290 mm) (2-Hydraulic)
Mounting Space***	2' 6" (750 mm)
Rotational Torque	17,360 ft-lb (2.4 tm)
Rotation	400°
Optimum Pump Performance (single pump)	15.9 gpm (60 L/min)
System Pressure	4,060 psi (280 bar)
Oil Reservoir Capacity	23.8 gal (90 L)
Stabilizer Extension Span	
Standard (manual out / manual down)	11' 6" (3,500 mm)
Weight	465 lb (210 kg)
Opt. 1 (manual out / power down)	11' 6" (3500 mm)
Weight	505 lb (230 kg)
Opt. 2 (extended manual out / power down)	15' 1" (4,600 mm)
Weight	505 lb (230 kg)
*** See swing clearance information in specifications chart.	

12/78Z & ZC Pressure Settings

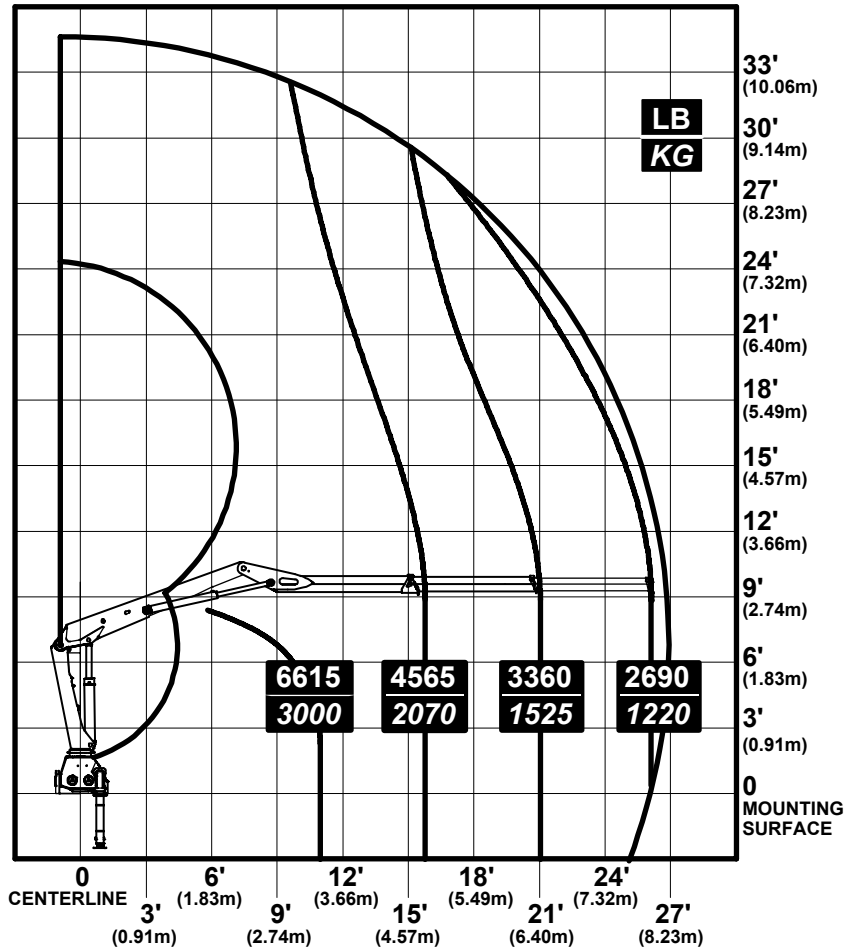
PRESSURE SETTINGS					
Function	Direction	Port Relief Valves		(LS)	Load holding valve
		Nordhydraulic	Danfoss		
Rotation system	Right	2540 psi (175 bar)	2755 psi (190 bar)	2540 psi (175 bar)	
	Left	2540 psi (175 bar)	2755 psi (190 bar)	2540 psi (175 bar)	
Boom cylinder	Down	1815 psi (125 bar)	1815 psi (125 bar)	1450 psi (100 bar)	
	Up	4715 psi (325 bar)	4640 psi (320 bar)	4060 psi (280 bar)	4640 psi (320 bar)
Jib cylinder	Up	4715 psi (325 bar)	4640 psi (320 bar)	4060 psi (280 bar)	4640 psi (320 bar)
	Down	2540 psi (175 bar)	3045 psi (210 bar)	2610 psi (180 bar)	3045 psi (210 bar)
Extension cylinders	Extend	-	-	4060 psi (280 bar)	4060 psi (280 bar)
	Retract	-	-	4060 psi (280 bar)	5075 psi (350 bar)
Rotator		2900 psi (200 bar)*		2900 psi (200 bar)*	
		2900 psi (200 bar)*		2900 psi (200 bar)*	
Grab		3625 psi (250 bar)*		2900 psi (200 bar)*	
		3625 psi (250 bar)*		2900 psi (200 bar)*	
Stabilizers	All	1815 psi (125 bar)			

Maximum working pressure (main relief valve)	4060 psi (280 bar)
Load moment limitation (LMB)	3915 psi (270 bar)

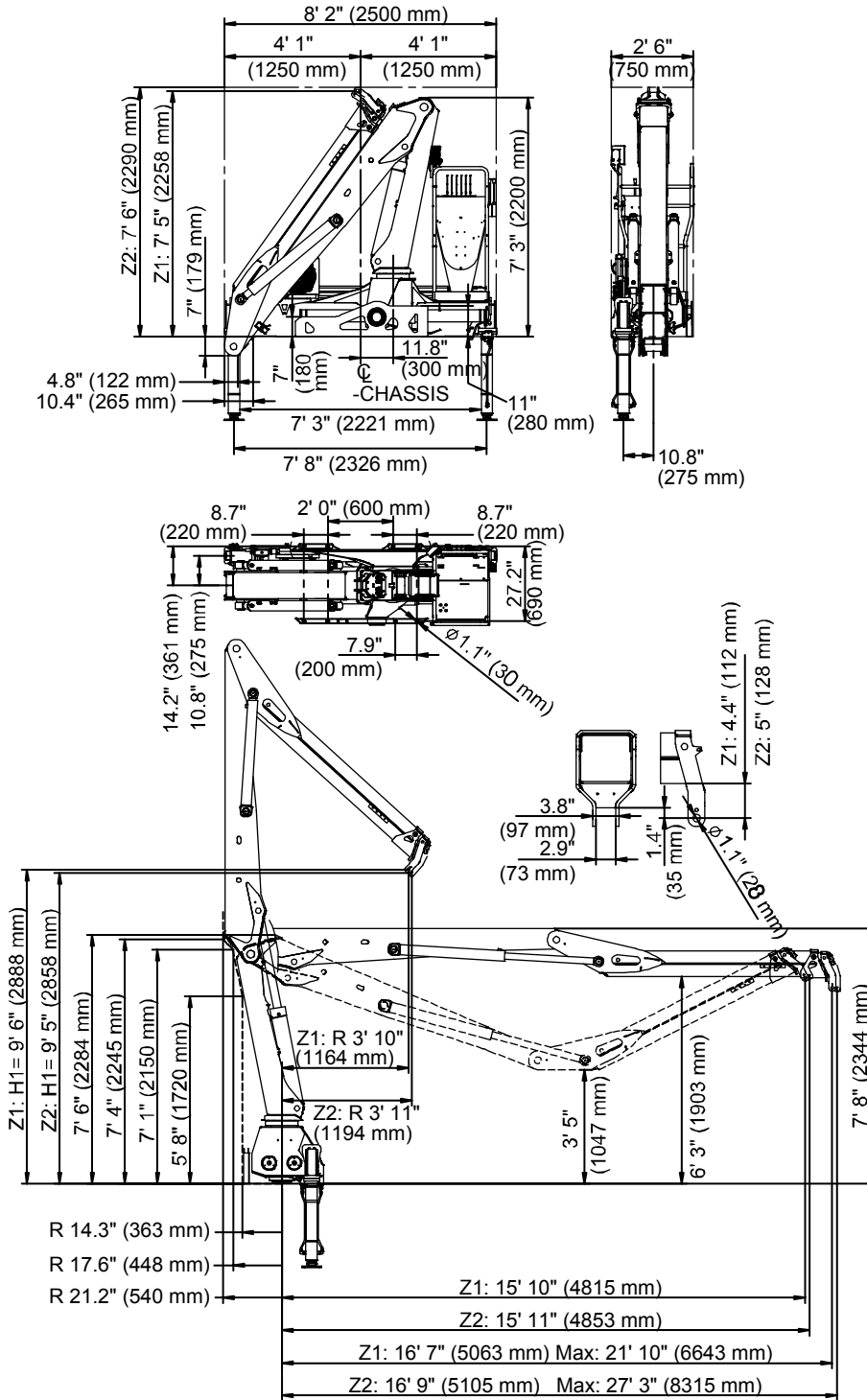
12/78Z K1 Capacity Chart



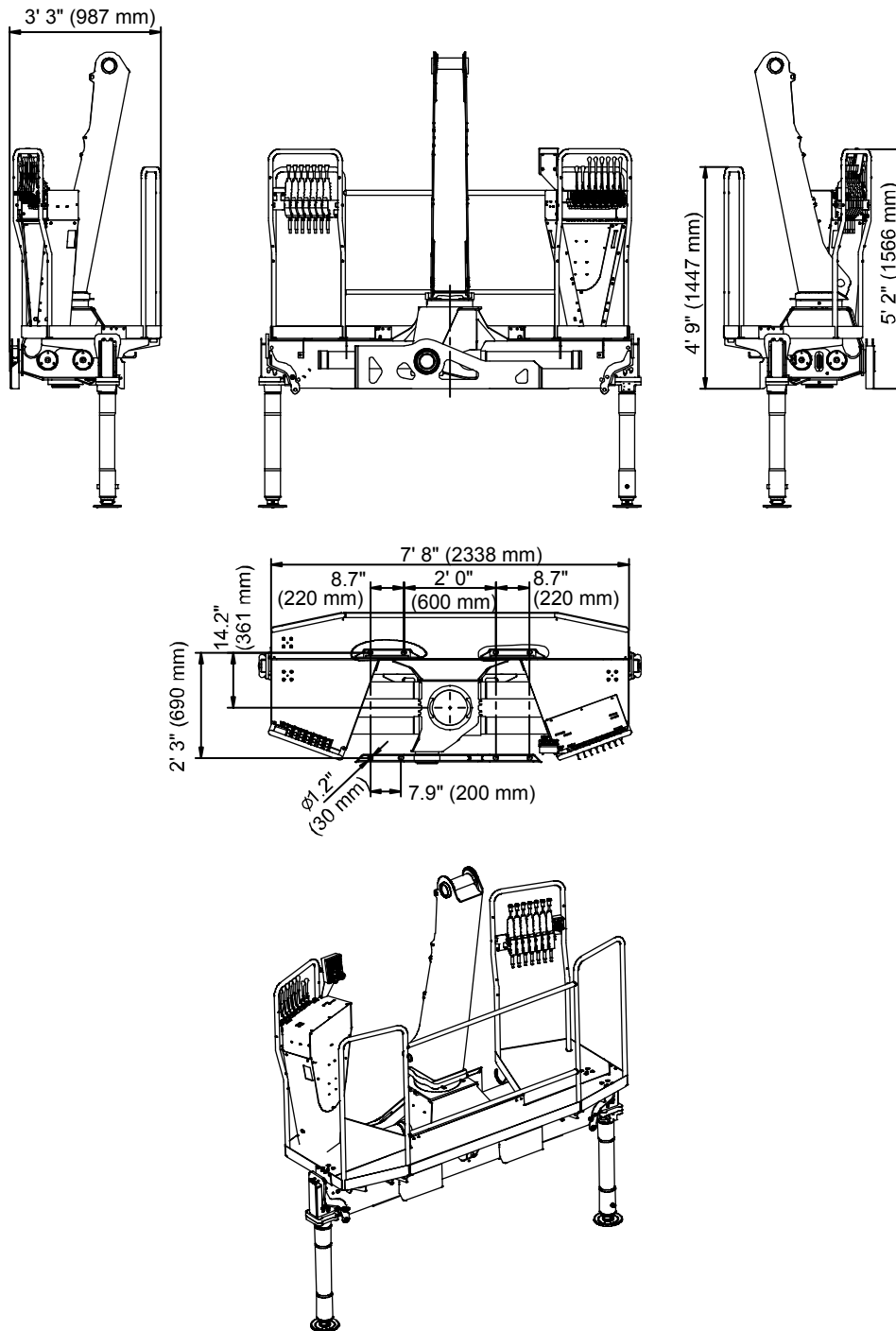
12/78Z K2 Capacity Chart



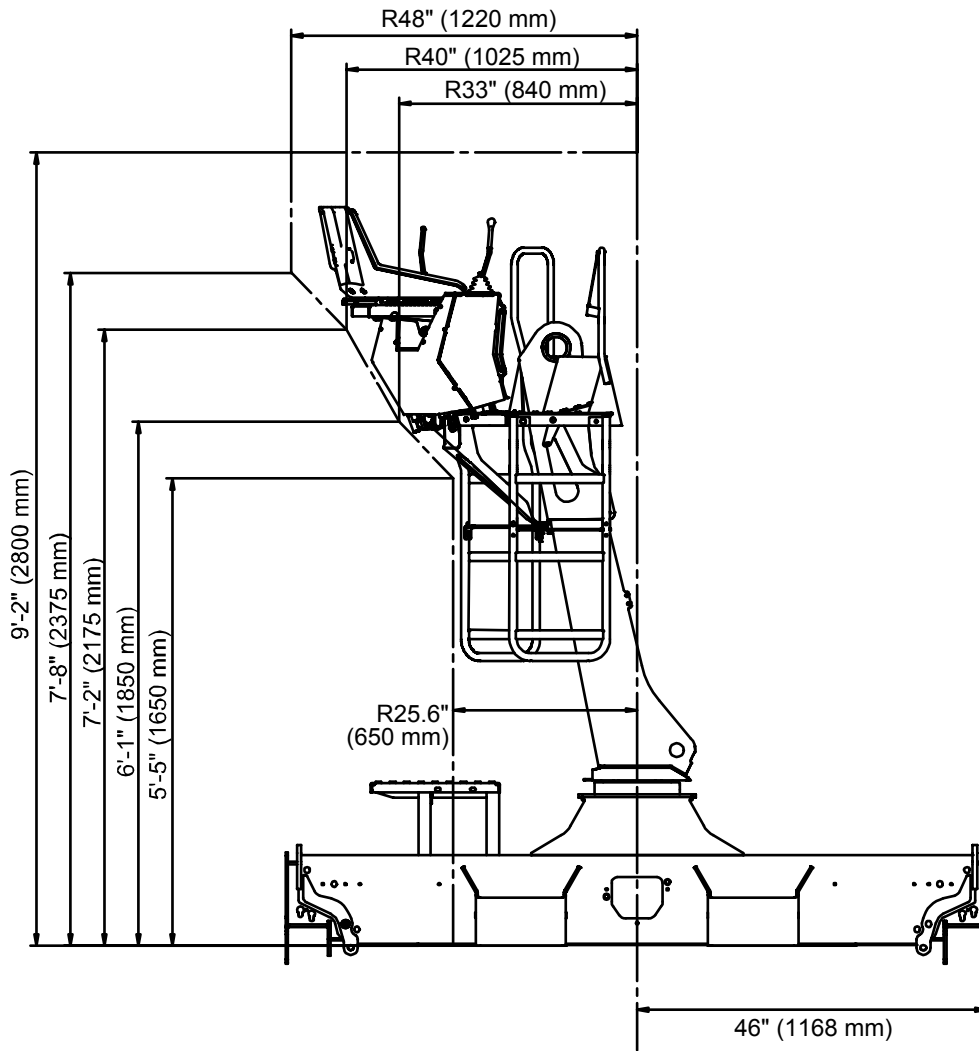
12-78Z Geometric Configuration



12-78ZC Geometric Configuration



12-78Z Swing Clearance



Hydraulic Diagram - Top Seat, Single Circuit, Fixed-Flow Pump

