
Manual # 99905498

40/275 Technical Specifications

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CHAPTER 1

Technical Data

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40/275 Technical Specifications

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|-------------------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Crane Rating* | 274,855 ft lb (38 tm) | 267,620 ft lb (37 tm) | 259,665 ft lb (35.9 tm) | 252,430 ft lb (34.9 tm) | 250,985 ft lb (34.7 tm) | 245,200 ft lb (33.9 tm) | 243,750 ft lb (33.7 tm) |
| Maximum Horizontal Reach | 26' 3" (8.0 m) | 33' 2" (10.1 m) | 40' 0" (12.2 m) | 47' 3" (14.4 m) | 54' 6" (16.6 m) | 62' 4" (19.0 m) | 69' 11" (21.3 m) |
| Maximum Vertical Reach | 35' 4" (10.8 m) | 42'-3" (12.9 m) | 49' (15 m) | 56' 3" (17.1 m) | 63' 3" (19.3 m) | 71' 1" (21.7 m) | 79' (24.1 m) |
| Maximum Capacity | 19,025 lb (8630 kg) | 18,145 lb (8230 kg) | 17,570 lb (7970 kg) | 17,065 lb (7740 kg) | 16,665 lb (7560 kg) | 16,225 lb (7360 kg) | 15,830 lb (7180 kg) |
| Max Cap @ Max Reach | 10,230 lb (4640 kg) | 7630 lb (3460 kg) | 5885 lb (2670 kg) | 4585 lb (2080 kg) | 3615 lb (1640 kg) | 2845 lb (1290 kg) | 2225 lb (1010 kg) |
| Crane Weight ** | 7165 lb (3250 kg) | 7740 lb (3510 kg) | 8290 lb (3760 kg) | 8820 lb (4000 kg) | 9215 lb (4180 kg) | 9570 lb (4340 kg) | 9920 lb (4500 kg) |
| Hook Approach | | | | | | | |
| Vertical | 9' 4" (2.84 m) | 9' 0" (2.74 m) | 8' 10" (2.68 m) | 8' 8" (2.63 m) | 8' 5" (2.57 m) | 8' 3" (2.52 m) | 8' 1" (2.47 m) |
| Horizontal | 3' 11" (1.19 m) | 4' 1" (1.24 m) | 4' 3" (1.29 m) | 4' 5" (1.35 m) | 4' 7" (1.40 m) | 4' 9" (1.45 m) | 4' 11" (1.5 m) |
| Center of Gravity - Stored | | | | | | | |
| Vertical | 2' 10" (870 mm) | 2' 11" (890 mm) | 3' 0" (910 mm) | 3' 0" (925 mm) | 3' 1" (940 mm) | 3' 2" (955 mm) | 3' 2" (970 mm) |
| Horizontal (C/L RotTo Bridge) | 12.6" (320 mm) | 12.6" (320 mm) | 12.2" (310 mm) | 11.8" (300 mm) | 11.6" (295 mm) | 11.4" (290 mm) | 11.2" (285 mm) |

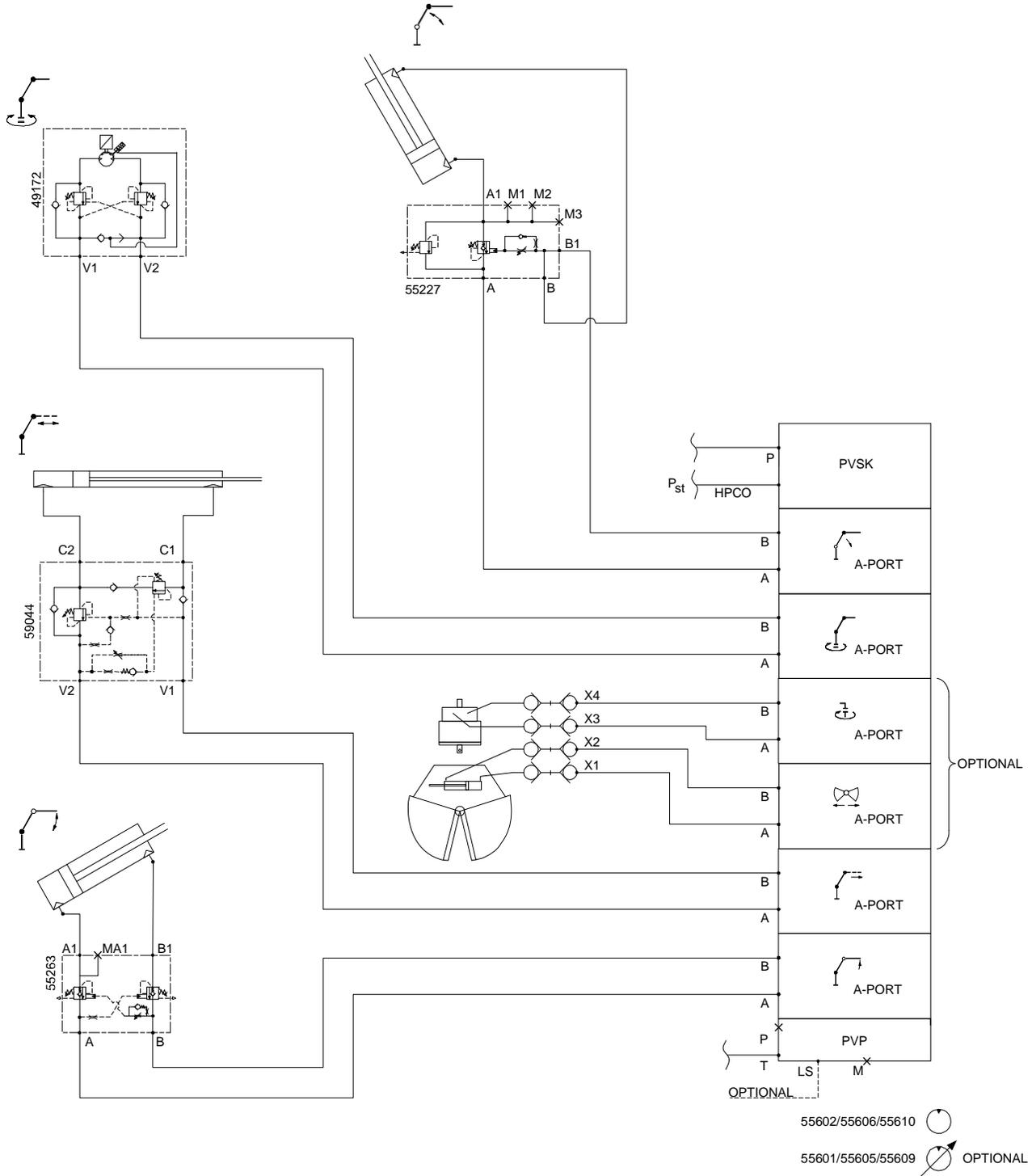
* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and the inner and outer booms in a horizontal position, per ANSI B30.22. ** Crane weight is for standard crane with tank & 8-bolt long mounting kit. Does not include stabilizers, tank, or oil.

| 40/275 Specifications | |
|---|--------------------------------|
| Stabilizer Pad Diameter | 8" (200 mm) |
| Crane Storage Height | 7' 10" (2384 mm) |
| Mounting Space *** | 3' 9" (1148 mm) |
| Rotational Torque | 29,500 ft lb (4.1 tm) |
| Rotation | Infinite |
| Optimum Pump Performance | 21.1 gpm (80 L/min) |
| System Pressure | 5295 psi (365 Bar) |
| Stabilizer Extension Span | |
| Minimum (2 beams - 64" (1625 mm) long) | 18' 3" (5550 mm) |
| Maximum (2 beams - 108" (2735 mm) long) | 25' 6" (7770 mm) |
| Stabilizer Weights | |
| Stabilizer Beam 64" (1625 mm) | 375 lb (170 kg) |
| Stabilizer Beam 81" (2065 mm) | 585 lb (265 kg) |
| Stabilizer Beam 108" (2735 mm) | 640 lb (290 kg) |
| Stabilizer Cylinder, 1x swing-up | 145 lb (65 kg) |
| Stabilizer Cylinder, 1x hydr swing-up | 160 lb (72 kg) |
| *** Maximum swing clearance radius required is 29" (737 mm) at 8' 6" (2582 mm) from top of chassis frame. | |
| Minimum Chassis Specifications | |
| Front Axle Rating (GAWR) | 16,000 lb (7260 kg) |
| Rear Axle Rating (GAWR) | 40,000 lb (18,145 kg) |
| Resistance To Bending Moment | 4,125,000 in-lb (475,250 kg-m) |

40/275 Pressure Settings

| WORKING PRESSURE ON MAIN-RELIEF VALVE & PORT RELIEF VALVES | | | | |
|---|------------------|-------------|---------------------------|-------------------------------|
| Main-relief valve | | | | 5655 psi (390 bar) |
| FUNCTION | DIRECTION | PORT | PORT-RELIEF VALVES | LS-PRESSURE ADJUSTMENT |
| Slewing system | Right | A | P | 2175 psi (150 bar) |
| | Left | B | P | 2175 psi (150 bar) |
| Boom cylinder | Up | A | 5510 psi (380 bar) | 5295 psi (365 bar) |
| | Down | B | 1815 psi (125 bar) | 1450 psi (100 bar) |
| Jib cylinder | Up | A | 5510 psi (380 bar) | 5295 psi (365 bar) |
| | Down | B | 2900 psi (200 bar) | 2540 psi (175 bar) |
| Extension cylinders | Extend | A | P | 4350 psi (300 bar) |
| | Retract | B | P | 4350 psi (300 bar) |
| Rotator | Right | A | P | 725-4350 psi (50-300 bar) |
| | Left | B | P | 725-4350 psi (50-300 bar) |
| Grab | Open | A | 4350 psi (300 bar) | 725-4350 psi (50-300 bar) |
| | Close | B | 4350 psi (300 bar) | 725-4350 psi (50-300 bar) |
| Winch 3.2T | Lift | A | P | 3045 psi (210 bar) |
| | Lower | B | P | 3045 psi (210 bar) |
| Winch 2.5T | Lift | A | P | 2685 psi (185 bar) |
| | Lower | B | P | 2685 psi (185 bar) |
| Separate stabilizer valve | | All | 2175 psi (150 bar) | 2175 psi (150 bar) |
| WORKING PRESSURE ON LOAD-HOLDING VALVES | | | | |
| Function | Direction | Port | Opening Pressure | |
| Slewing system | Right | | 2320 psi (160 bar) | |
| | Left | | 2320 psi (160 bar) | |
| Boom cylinder | Up | | 5510 psi (380 bar) | |
| | Down | | - | |
| Jib cylinder | Up | | 5510 psi (380 bar) | |
| | Down | | 3045 psi (210 bar) | |
| Extension cylinders | Retract | | 6235 psi (430 bar) | |
| | Extend | | 3045 psi (210 bar) | |
| PRESSURE SETTING FOR LOAD MOMENT LIMITATION (LMB) | | | | |
| Load moment limitation (LMB) | | | 5075 psi (350 bar) | |
| HDL | | | 4060 psi (280 bar) | |
| MAXIMUM PUMP PERFORMANCE | | | | |
| Pump performance (1 x fixed) | | | 21.1 gpm (80 l/min) | |

Hydraulic Diagram



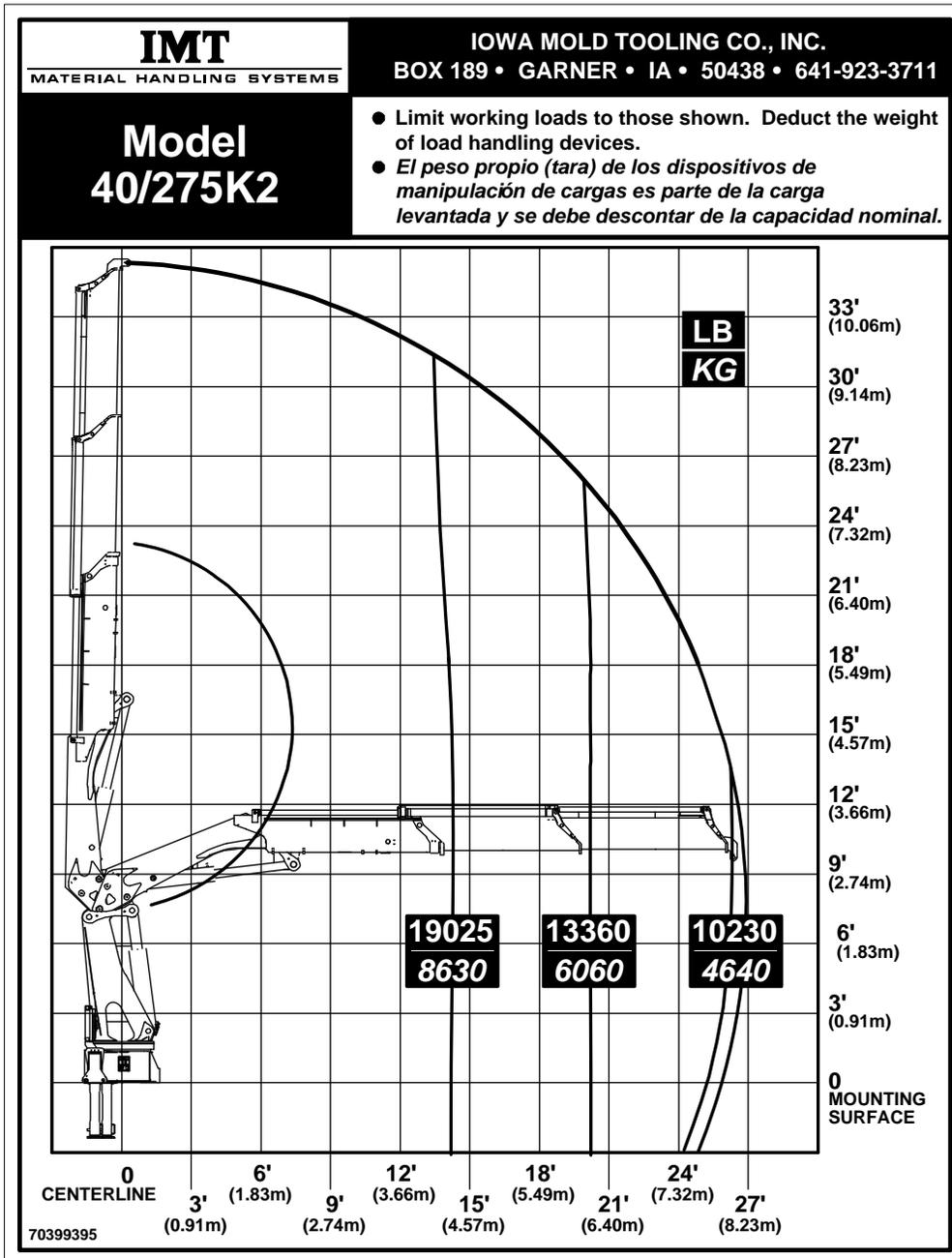
CHAPTER 2

Capacity Charts

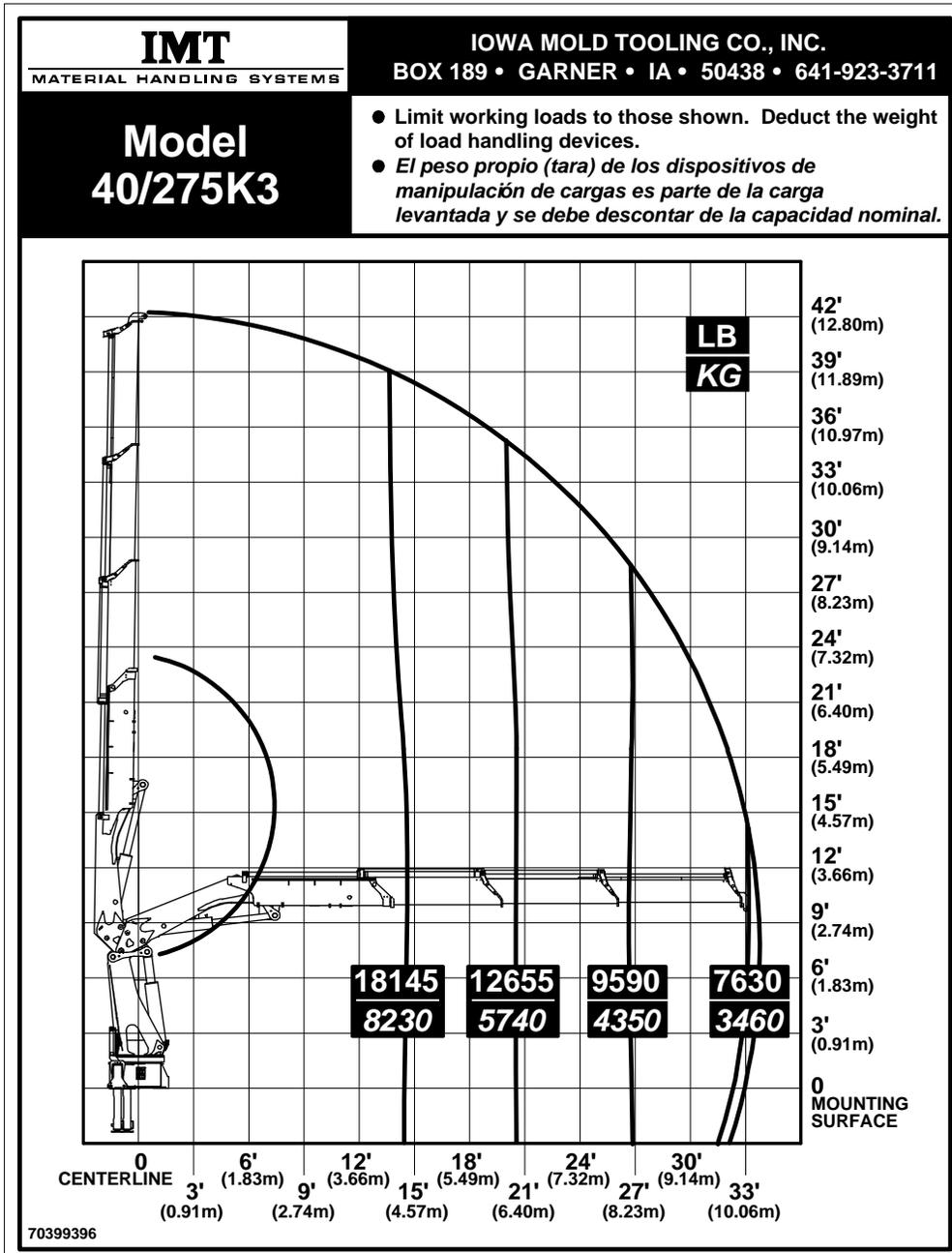
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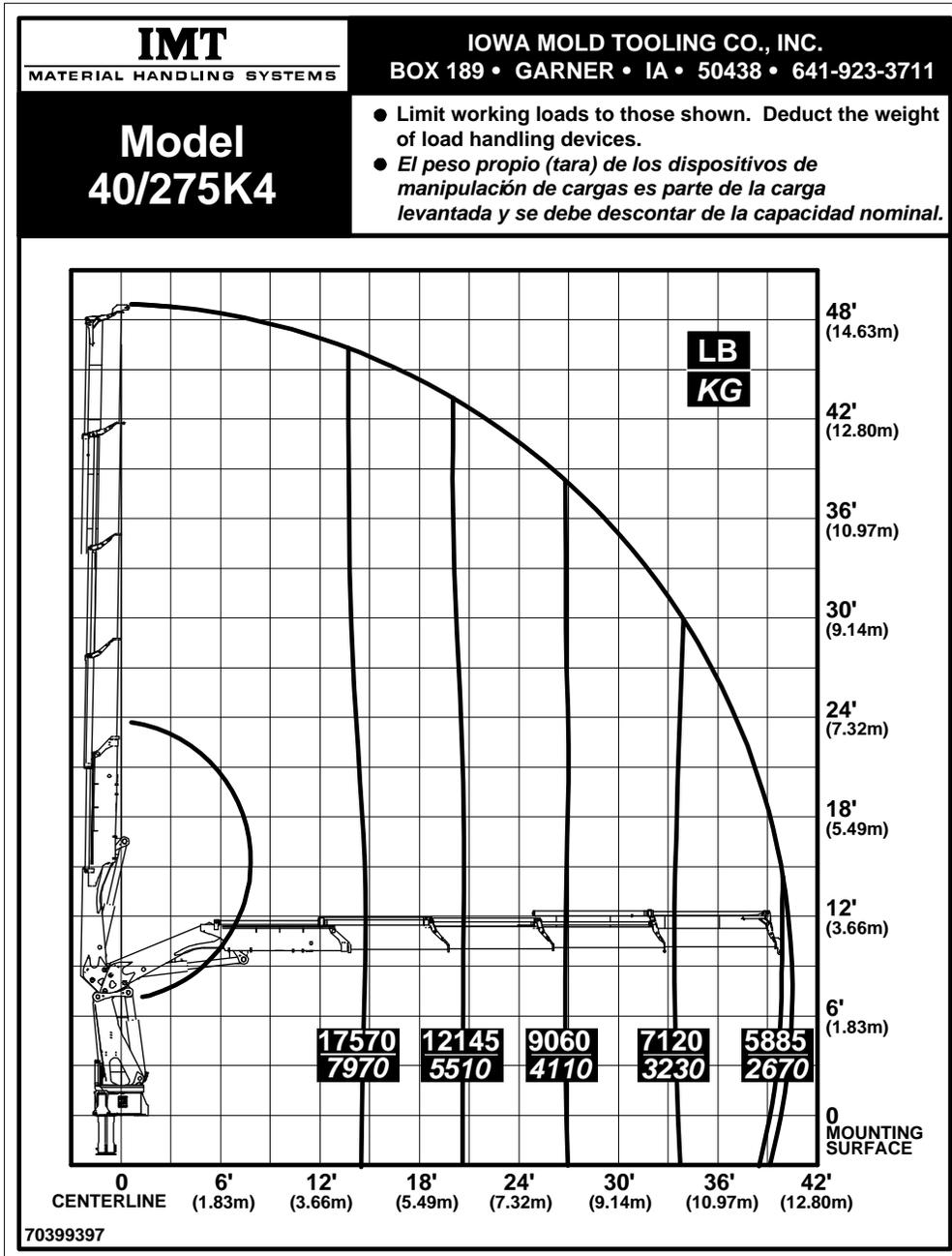
40/275 K2 Capacity Chart



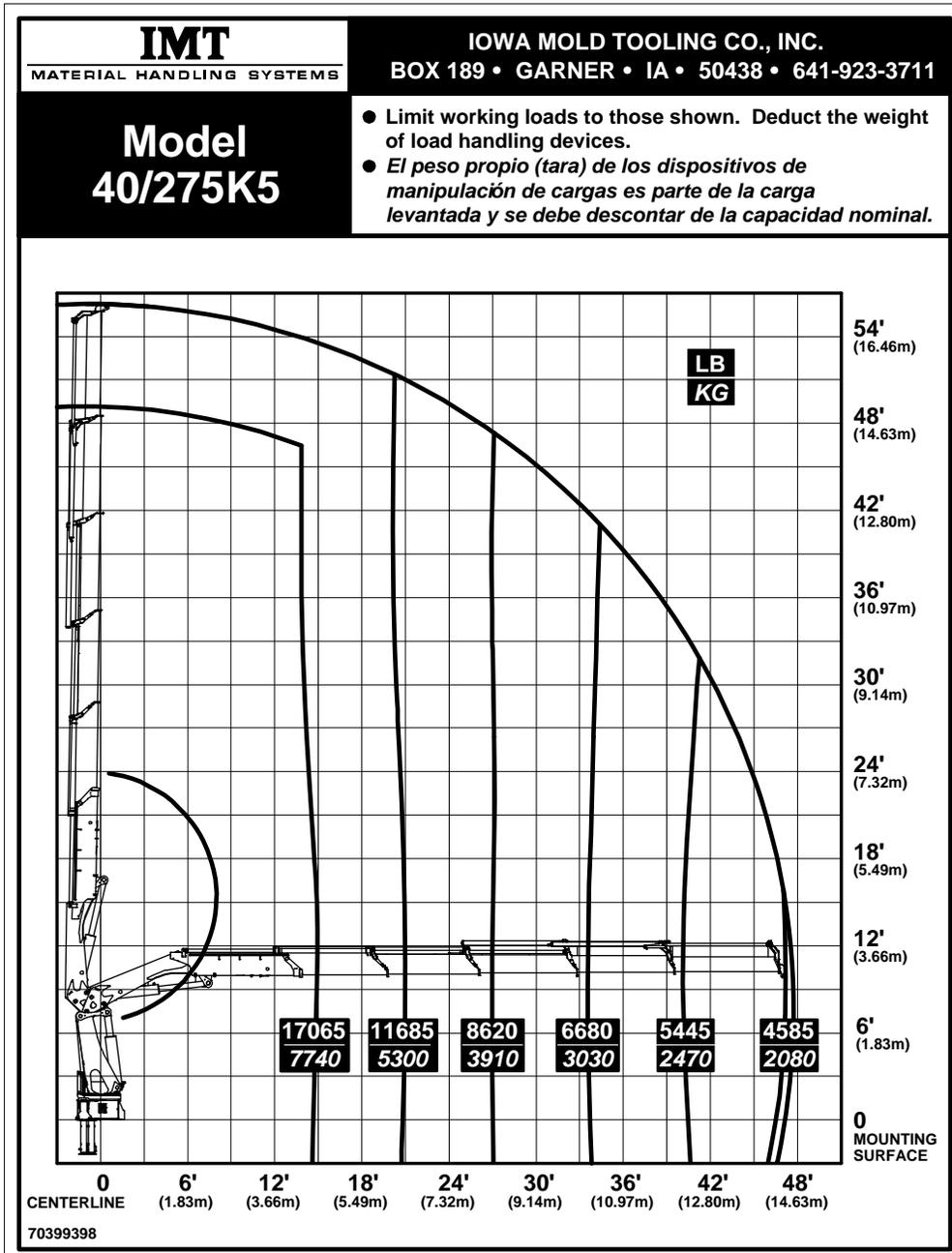
40/275 K3 Capacity Chart



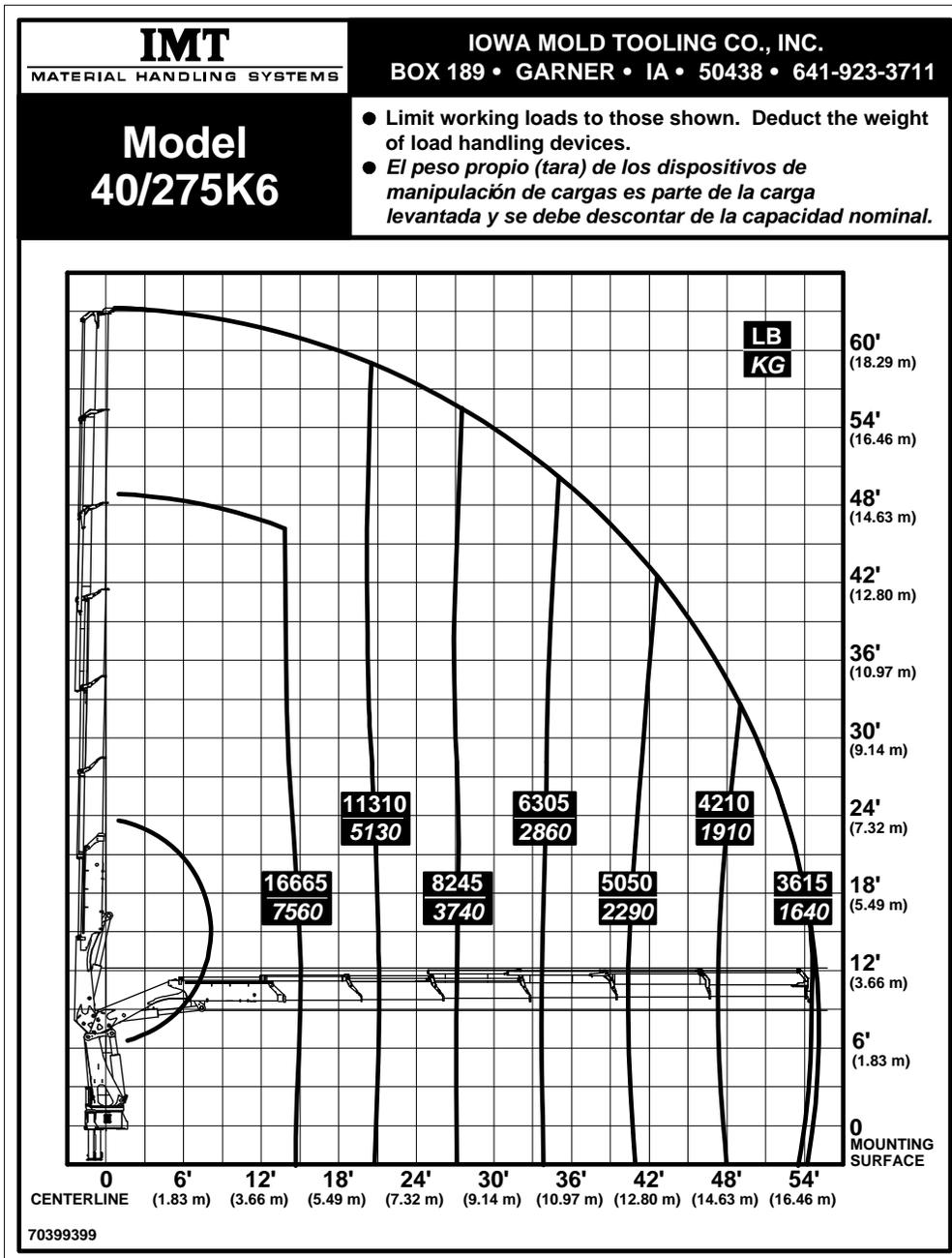
40/275 K4 Capacity Chart



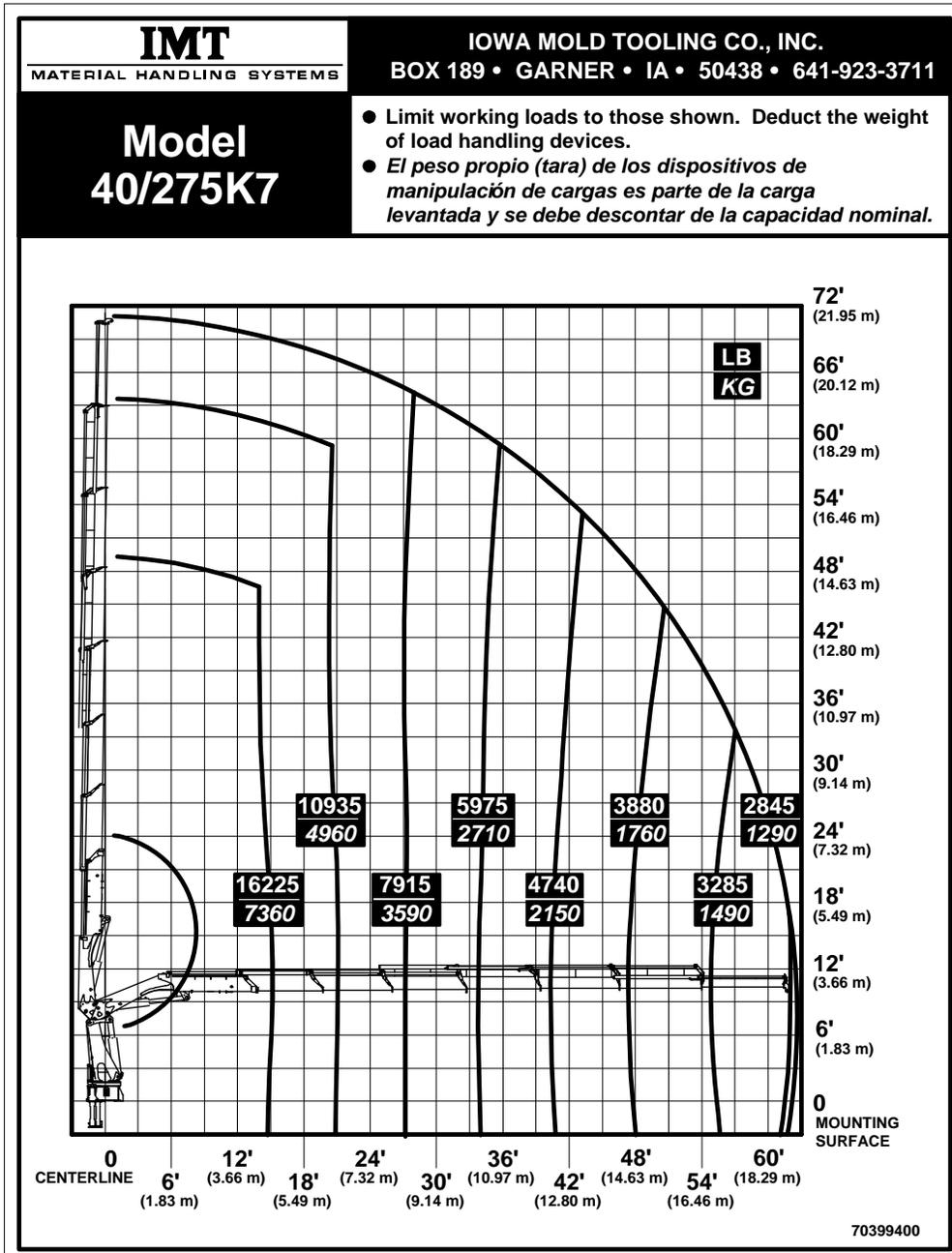
40/275 K5 Capacity Chart



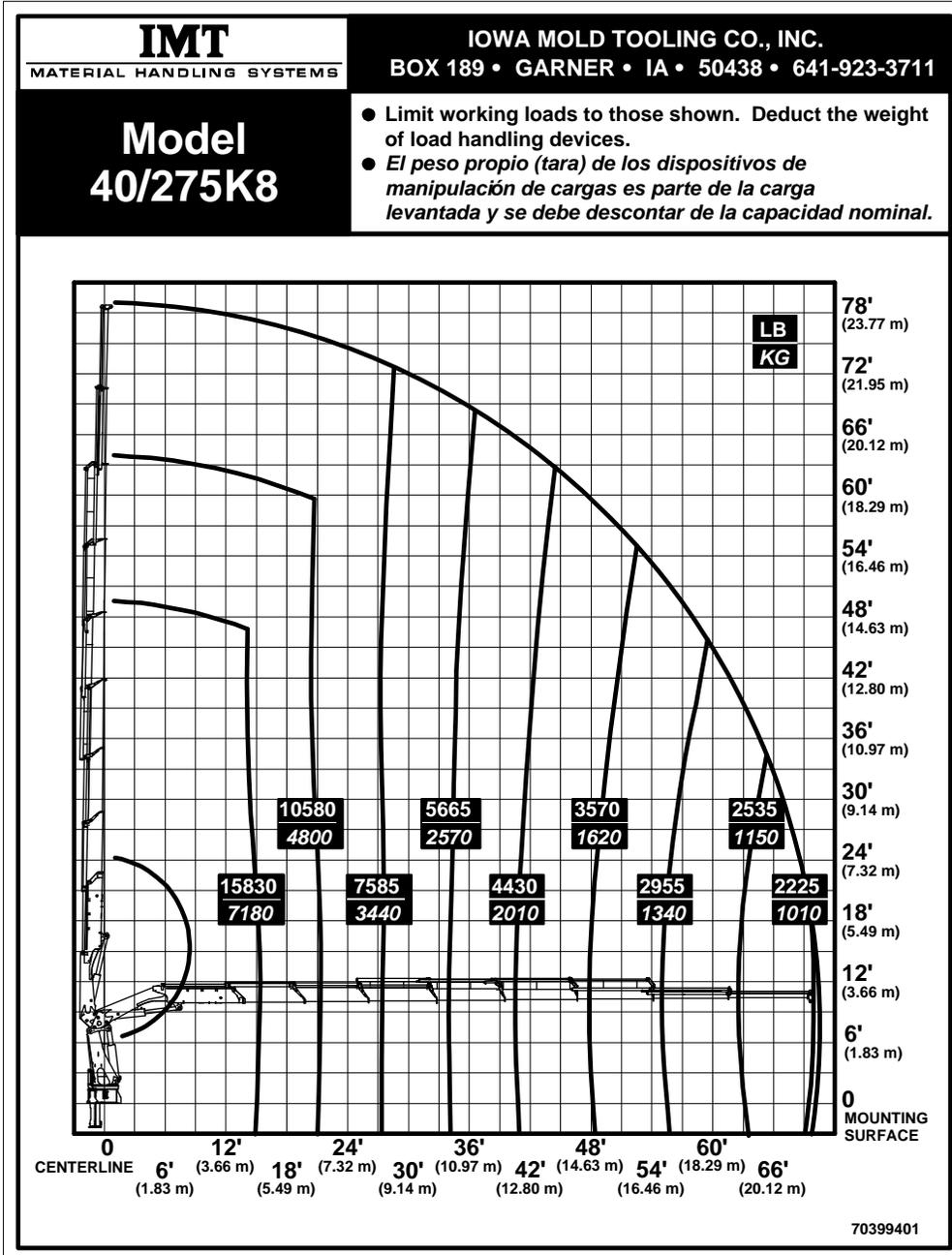
40/275 K6 Capacity Chart



40/275 K7 Capacity Chart



40/275 K8 Capacity Chart



CHAPTER 3

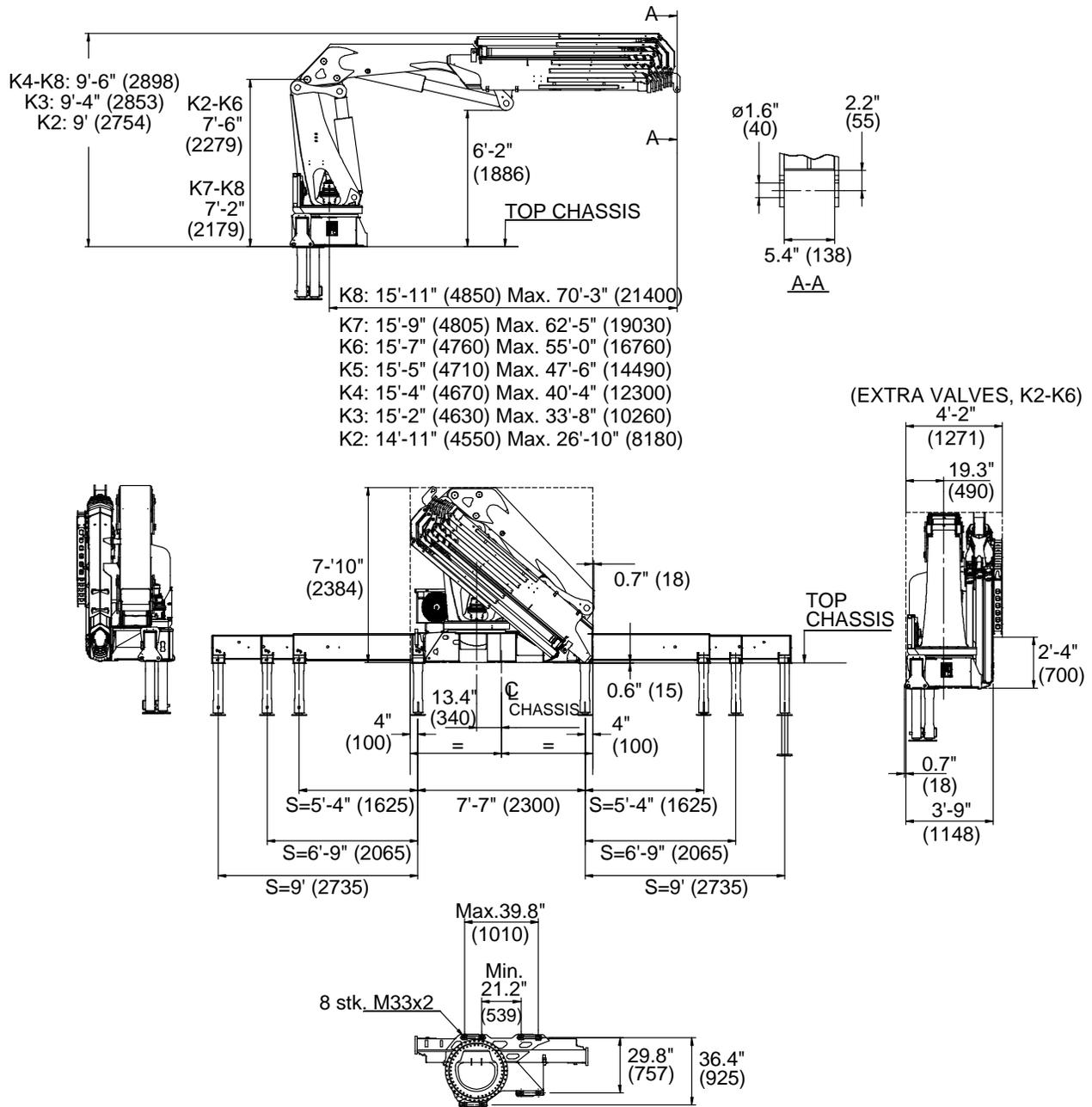
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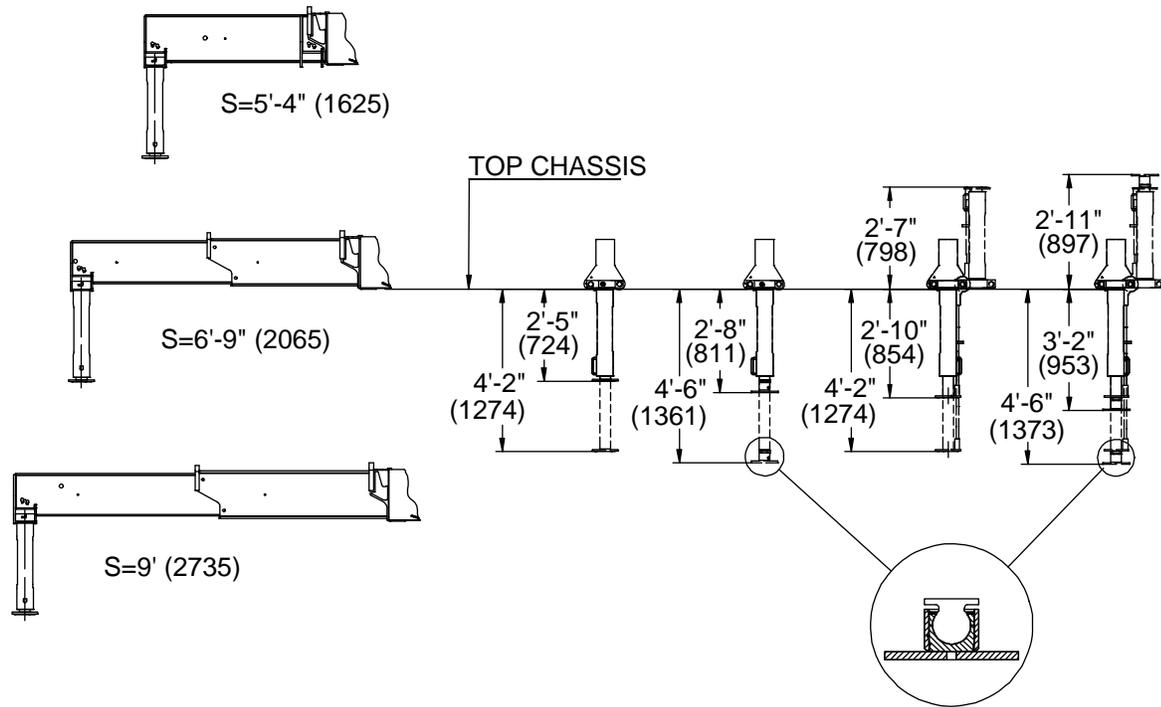
40/275 Dimensional Drawing

Dimensions in ft-inches (mm).



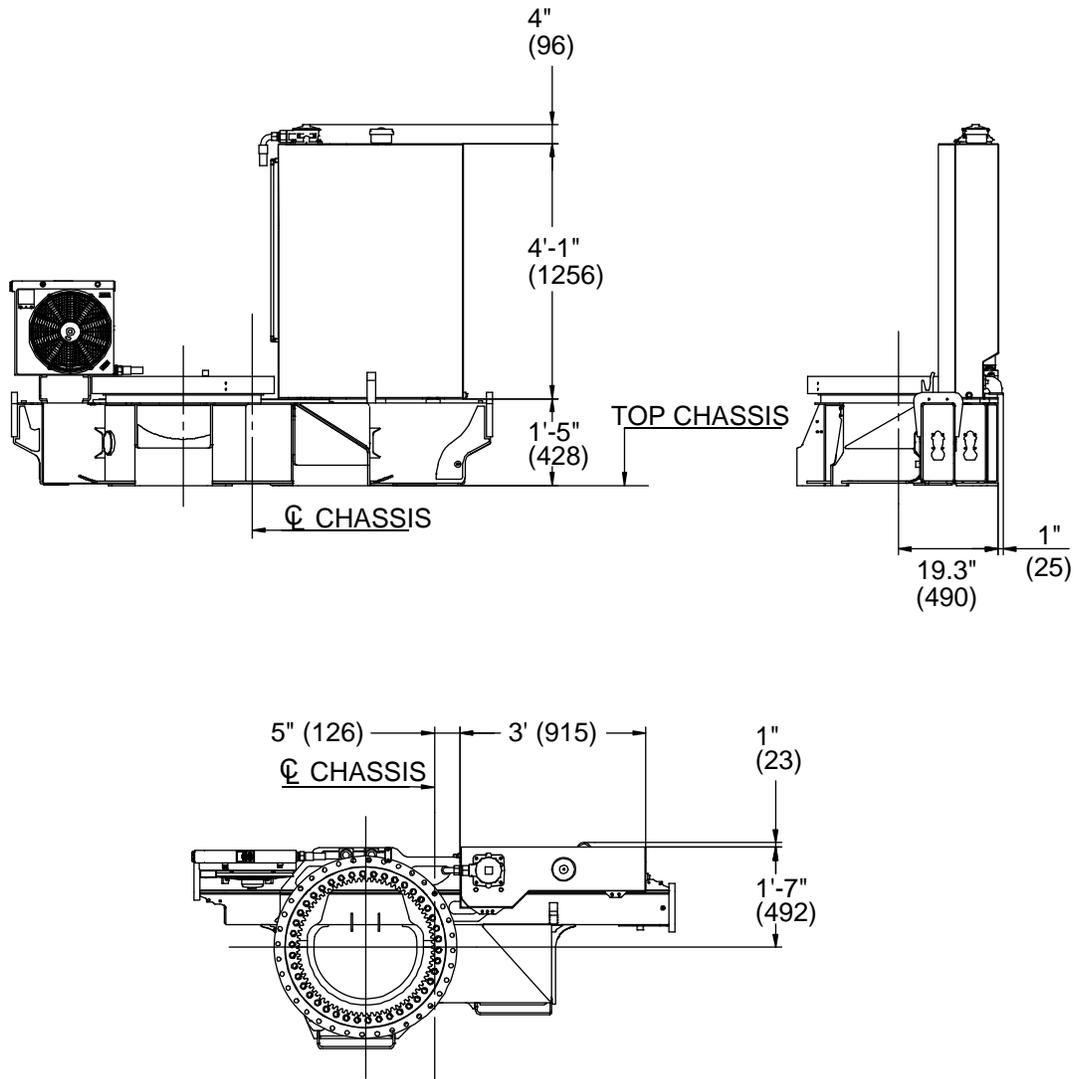
Stabilizer Drawing

Dimensions in ft-inches (mm).



Tank Dimensions

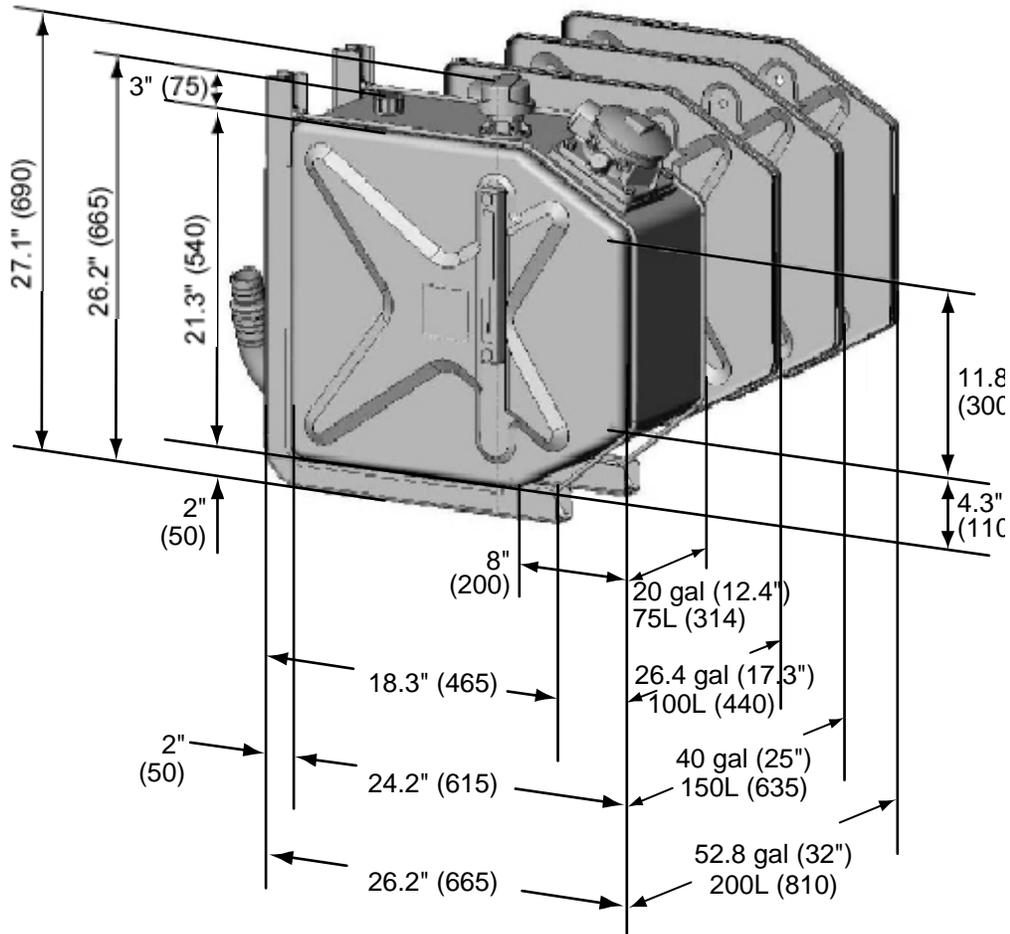
Dimensions in ft-inches (mm).



Chassis Mounted Tank Dimensions

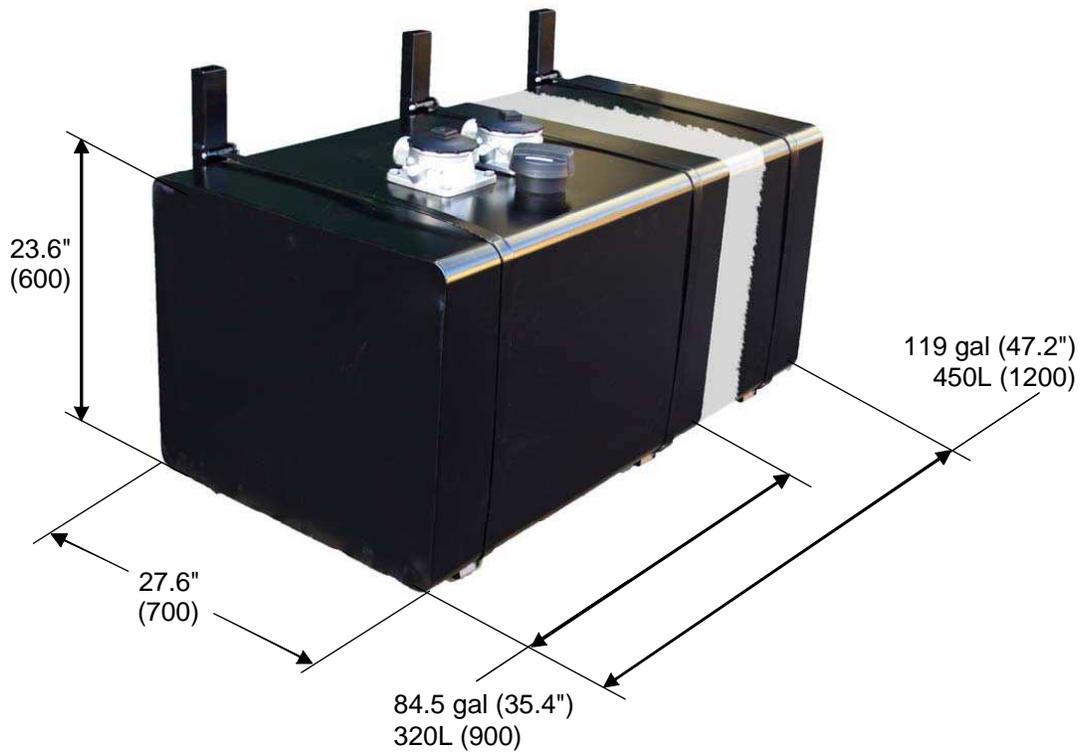
Dimensions in inches (mm).

20-53 Gallon (75-200L) Tanks



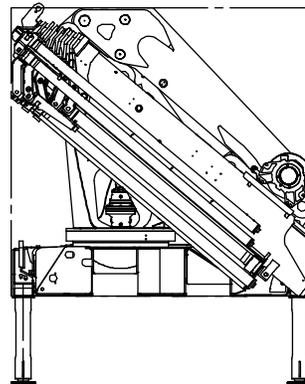
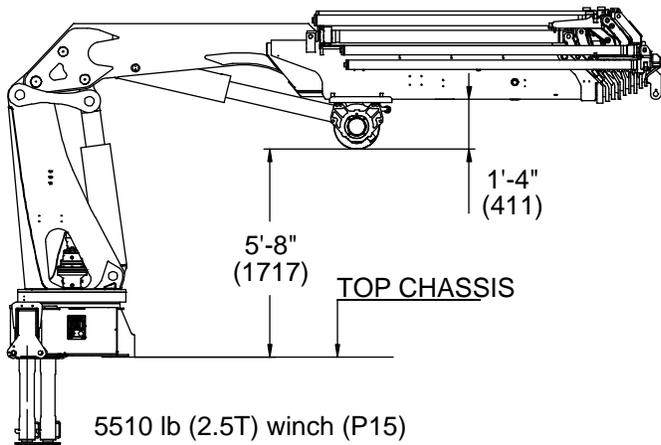
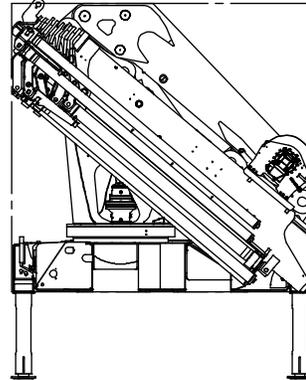
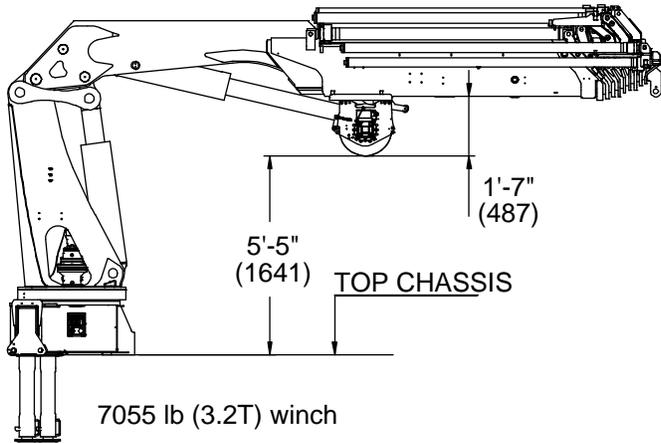
- Side-mounted chassis tanks include tank suspension, filters, suction socket and oil level indicator.
- Option right or left-side fitting.
- Suction socket for 2" and 2-1/2" suction hoses.
- Tank lengths include oil level indicator.
- Larger tanks include 2 return filters.

84.5-119 Gallon (320-450L) Tanks

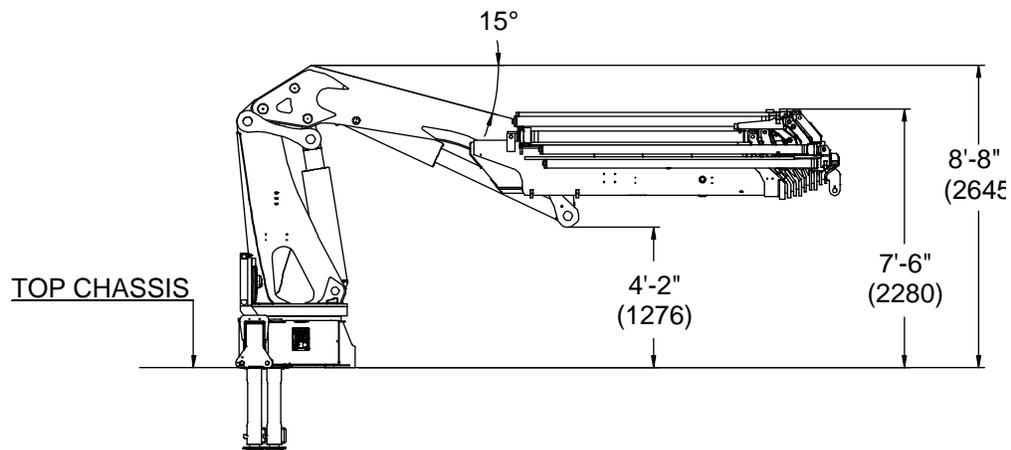
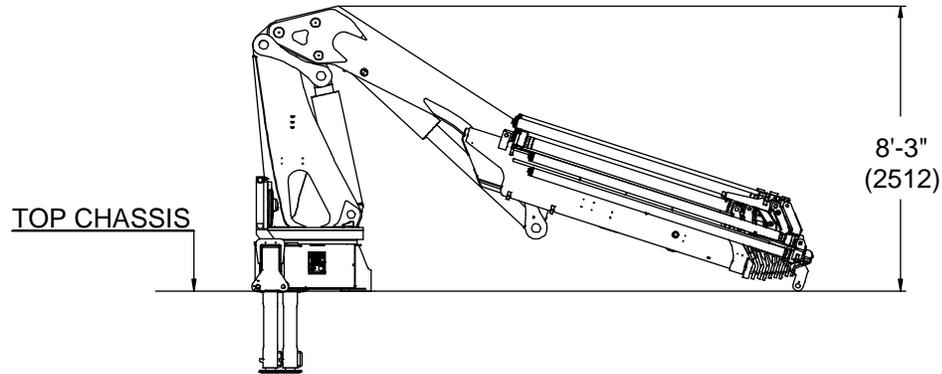


40/275 Winch Dimensions

Dimensions in ft-inches (mm).



40/275 Dimensions when Stowed in Truck



40/275 Swing Radius

