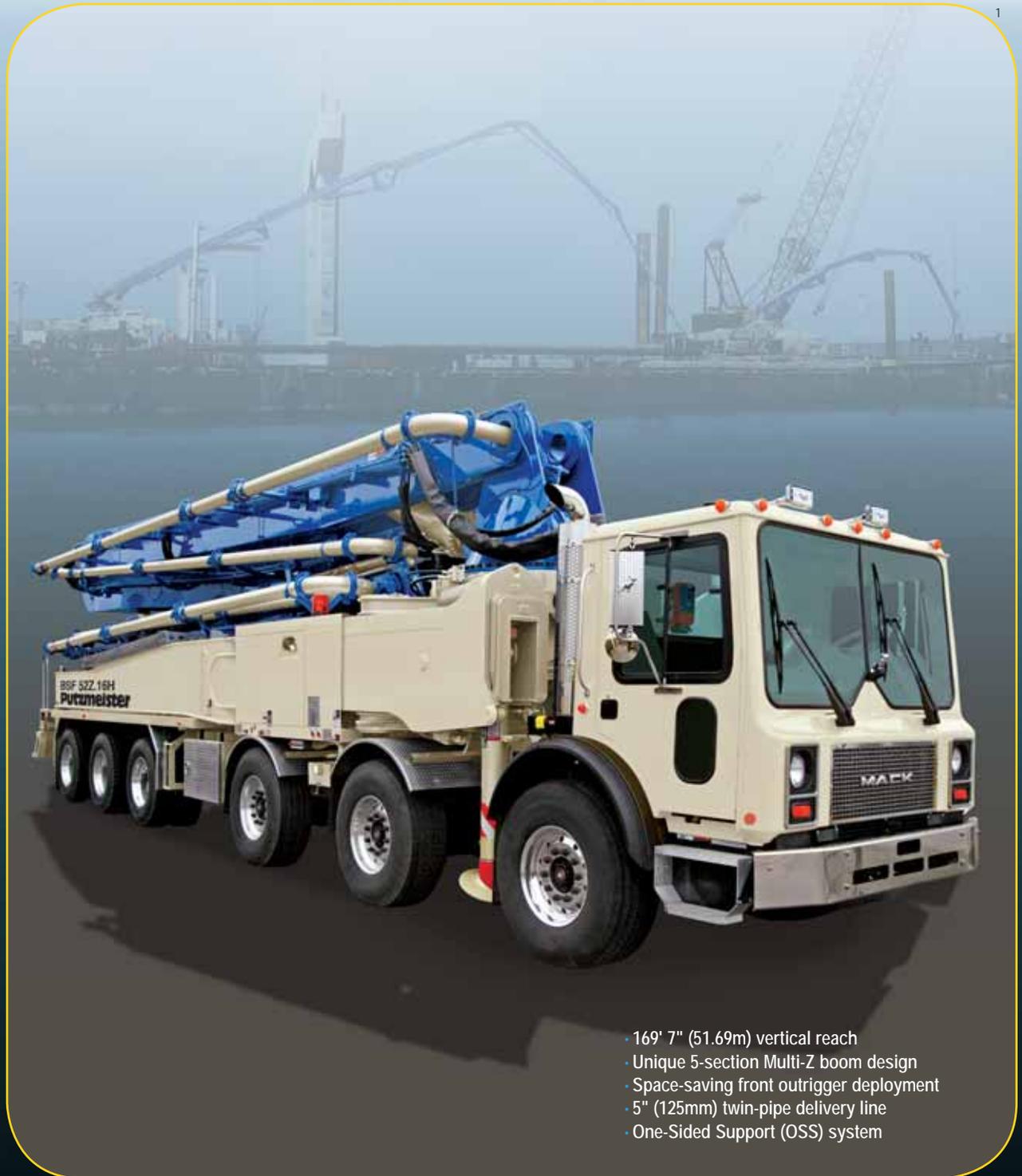


52Z-Meter

Truck-Mounted Concrete Boom Pump



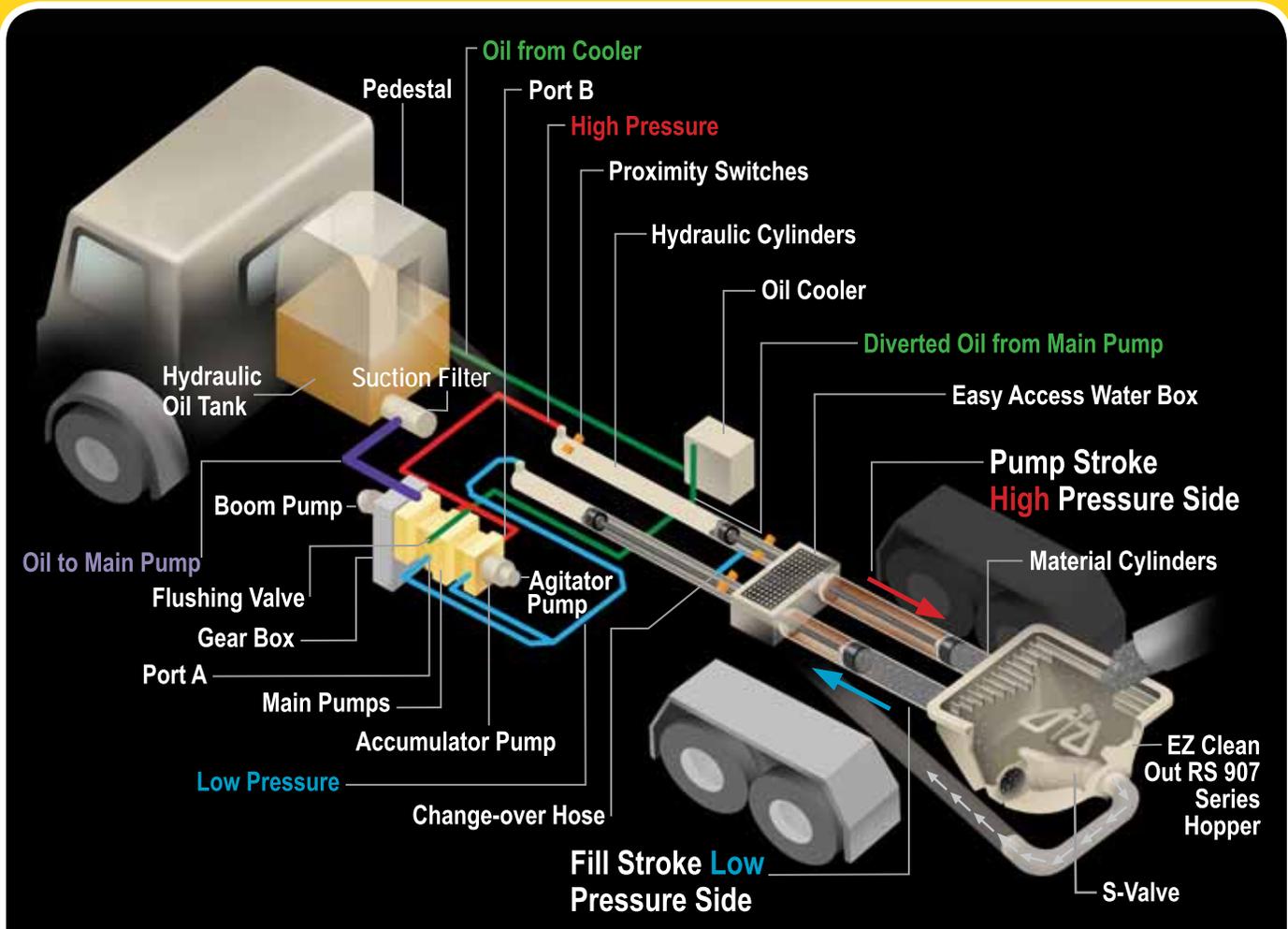
52Z-Meter

- 169' 7" (51.69m) vertical reach
- Unique 5-section Multi-Z boom design
- Space-saving front outrigger deployment
- 5" (125mm) twin-pipe delivery line
- One-Sided Support (OSS) system

Putzmeister

FREE FLOW HYDRAULICS

2



Putzmeister Free Flow Hydraulics in a Closed Loop System

The pumps at the heart of Putzmeister's free flow pumping system are bi-directional, variable displacement piston pumps. Depending on stroke, oil flows in a closed loop from either port A or port B on the pump to the hydraulic cylinders.

Depending on the specific pump cell size, up to 20% of the oil leaves the simple closed loop system during each stroke through a flushing valve on the main pump and cycles to a cooler before it returns to the hydraulic oil tank. Removing and cooling only this minimal amount of oil is possible because, unlike an open loop system, the oil flows freely without passing through any unnecessary valves that can generate heat.

The closed loop also requires far less oil to run the system, as a larger reservoir is not necessary to cool all of the oil.

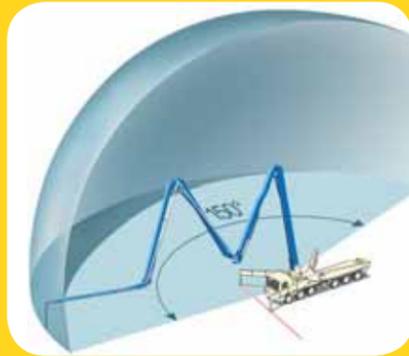
Speed and timing are also critical to superior performance. Quicker and more responsive than a hydraulic signal, the electrical system on a Putzmeister pump minimizes the time it takes to change direction at stroke end.

An electrical signal precisely synchronizes the drive cylinders with the accumulator system that controls the S-Valve in the hopper. Reserved energy stored in a nitrogen bladder is sent as a supercharged blast of oil at precisely the right moment to facilitate a smooth and fast shift of the S-Valve from one position to another.

Key Advantages of Putzmeister's Free Flow Hydraulics:

- Changes in material pressure in the delivery line are reduced to ensure smooth pumping and a consistent concrete flow.
- There is greater pump output due to the efficient use of all available energy.
- The intelligent design minimizes wear-inducing pressure peaks, increases service life and makes our pumps extremely powerful.
- Rapid change-over of the stroke means higher outputs, a smoother flow of concrete and less boom bounce.

Putzmeister BOOM PUMP ADVANTAGE



One-Sided Support (OSS) System

For enhanced job site versatility, Putzmeister's unique OSS system allows the operator to reduce the outrigger extension on one side of the unit to create a smaller overall machine footprint. Utilizing a series of sensors, OSS enables the unit to maintain a defined and safe 150 degree working envelope on space-restrictive sites that demand a larger boom.



Better Boom Design

Robust and more resilient, Putzmeister's "smart design" boom incorporates welding seams below the edge of maximum stress. The boom is engineered to offer the flexibility to adapt to different loads and features more straight pipe for a less stressful concrete flow and longer wear on parts. The Multi-Z configuration can pump even if the boom is not fully extended.



RS 907L Hopper

Putzmeister's EZ Clean Out RS 907L hopper combines an impact resistant solid polyurethane component with a steel base for a durable, yet lightweight design. Engineered for performance and easy maintenance, the RS 907L features quick access to the S-Valve and shift cylinders. Hard-faced remixer paddles and a vibrator complement the hopper's large 19.4 cu. ft. (550L) capacity.

52Z-Meter

Truck-Mounted Concrete Boom Pump Standard Features

Boom

- 169' 7" (51.69m) vertical reach
- Versatile 5-section Multi-Z boom
- Automatic lubrication
- Integrated work lights

Delivery Line

- Equipped with 5" (125mm) twin-pipe delivery line on all boom sections providing efficient concrete delivery
- ESSER 900 twin-pipe deck pipe with 900 turret elbow
- Easy lift-out brackets for simple delivery line replacement
- Standardized elbows and straight pipe sections
- Common component availability and easy replacement

Pedestal

- Rotation bearing and access openings simplify turret pipe changes
- Fully integrated pedestal design absorbs all forces
- Easy access large single-suction filter with indicator gauge
- Condensation trap in the hydraulic tank for water collection
- Two spacious decks for convenient pipe and hose storage
- Automatic lubrication
- Side-mounted aluminum toolboxes
- Integrated work lights
- Breakaway rear steps

Boom Operation and Control

- Fully proportional HBC radio remote
- Smooth and precise boom positioning at greater distances
- Fully proportional cable remote with 164' (50m) cable
- Gauge Port Central (GPC)
- Modular Boom Controls (MBC)
- Ergonomic Boom Control (EBC) with OneTouch™
- Extended Range EBC
- 24V electrical system

EZ Clean Out RS 907L Hopper

- Large 19.4 cu ft (550L) capacity
- Hard-faced remixer paddles
- Vibrator
- Hinged splash guard covers hopper during transit
- Low hopper height allows easy discharge from a mixer truck
- Automatic lubrication
- Integrated work lights

Outriggers

- Quick setup on restrictive job sites
- Fully hydraulic outriggers with integral cylinders
- Front outriggers swing out, telescope out and extend down
- Rear outriggers swing out and extend down
- Auxiliary fuel tank in outrigger
- Water tank in outrigger
- Four outrigger pads in two side compartments
- One-Sided Support (OSS) system featuring a 150° working range
- Bubble level indicators

Concrete Pump

- Choose from high pressure or high volume with the same setup
- Free flow hydraulic system for smooth, controllable pumping
- Multi-piece piston cup design
- Automatic lubrication of the concrete pistons for long service life
- Hard-chromed material cylinders
- Redundant proximity sensor system with function indicators
- Fully adjustable volume control for very slow pumping with full concrete pressure and boom speed
- Modular pump control box

S-Valve

- Ideal for high pressure applications and harsh mixes
- Hard-faced S-Valve
- Gradual 9" to 7" (230 to 180mm) reduction
- Thick-walled valve construction
- Lasting wear over years of use



Clean Out

- Fast and easy clean out
- 406 psi (28 bar) hydraulically-driven water pump
- Wash out kit and hose
- 172 gallon (650L) water tank

Putzmeister PRO-VANTAGE® WARRANTY PLAN

The PRO-VANTAGE® Warranty Plan extends the coverage on all Putzmeister BSF boom pumps for a total of 36 months or 6,600 hours at no extra charge.



Design Features Enhance Performance

In addition to its fantastic reach capabilities, the 52Z-Meter is incredibly nimble on congested sites. The unit's true Multi-Z boom design and outriggers deploy easily enabling the machine to pump in confined spaces and difficult to access structures.

The fully integrated rotation bearing pedestal is designed to absorb all forces of the outriggers and boom. This single structural element features access openings to simplify changes to the turret pipe.

Putzmeister BOOM PUMP ADVANTAGE



Modular Flatpack

Fully removable, Putzmeister's modular bolt-on flatpack and hydraulic system combine versatility and servicing convenience. This simple design allows for cost-effective, minimally labor intensive pump cell replacement for upgrades, repairs or as part of a maintenance program.



Fuel Economy

Switch gears and save with Putzmeister's patented Econo-Gear™. The exclusive design allows the Mack chassis engine to run at a lower rpm, achieving less stress on wear parts, lower noise levels and reduced fuel consumption. Econo-Gear makes a significant impact on job site safety and profitability with an estimated 10-15% savings.



Convenience and Control

The Frequency Hopping system on the standard HBC proportional radio remote ensures minimal interference with other frequency transmitters. Radiomatic Power Boost further enhances reception quality with a 50-100% increase in signal power. A fully proportional cable remote is also standard. Unlike other remote control systems, the radio and cable remote systems are completely independent, offering redundancies to ensure complete proportional operation with either the radio or cable remote in the event of a problem.



Modular Control Box



Ergonic® Graphic Display



OneTouch™ Radio Remote



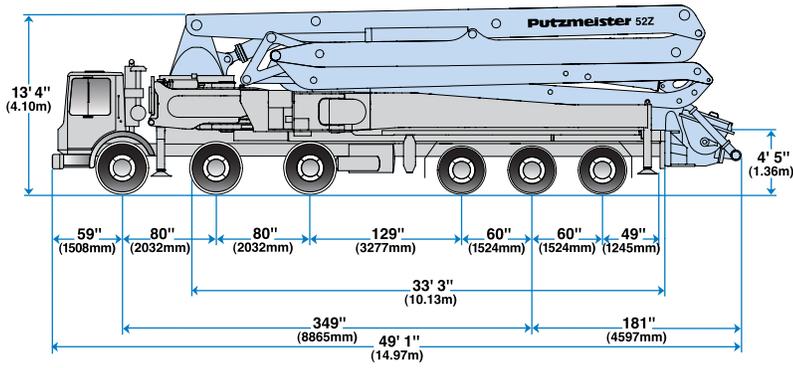
Putting You in Control of Success

While size matters, it's nothing without control. Another standard feature on the 52Z-Meter, Putzmeister's Ergonic® technology goes beyond monitoring performance. It also allows the operator to set parameters that control the boom, the pump and various other functions. Ergonic is a main control system that encompasses various modules housed in the **Modular Control Box**. These include the Ergonic Pump Control System (EPS) for the pump and various operational functions, Ergonic Tele Service (ETS) for real-time remote diagnosis of computer fault codes in the field and Ergonic Boom Control (EBC).

EPS includes an **Ergonic Graphic Display (EGD)**, featuring a three-inch square LCD screen which allows the operator to both view functions from the unique modular control box and change selected pump settings such as number of strokes per minute, pressure limits, truck rpm and more. This module also includes Ergonic Output Control (EOC), which automatically controls optimum engine rpm while ensuring the lowest possible fuel consumption, reduced wear and low noise levels.

ETS allows the Putzmeister support group to wirelessly access and troubleshoot any problems that may occur with the Ergonic computer systems. With this setup, Putzmeister Customer Support technicians can check the Ergonic computer systems anytime the truck is in PTO mode. This includes viewing software versions, engine rpm, stroke time, high pressure, pump output, e-stop, oil temperature, pressure in the boom cylinders, boom position, radio remote functions, operating hours and fault histories.

Providing technology to ensure minimal boom bounce, enhanced safety and easy troubleshooting, the Ergonic system features EBC with OneTouch.™ This unique module enables the operator to use a single joystick on the radio remote to automatically move all boom sections and slewing in tandem while keeping the end hose level and the boom within prescribed maximum and minimum heights.



52Z-Meter Truck-Mounted Specifications

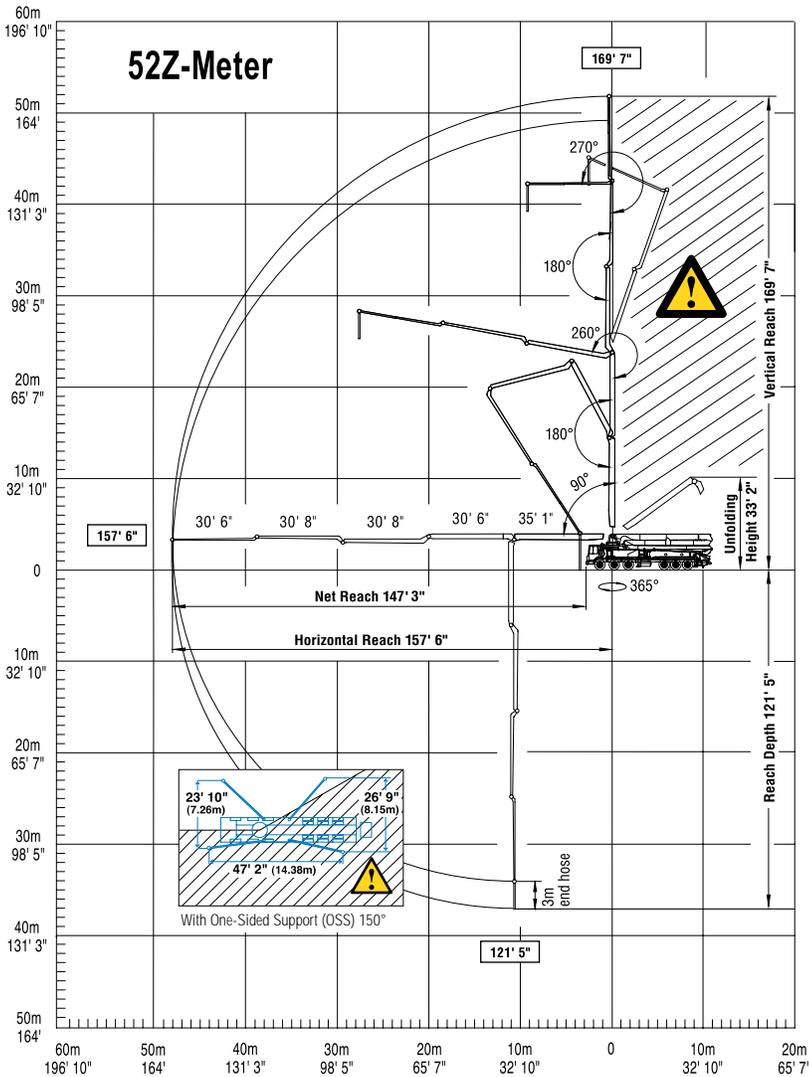
Based on Model MACK MRU 688S with .16H pump cell

| | | |
|----------------------|-------------|------------|
| Length | 49' 1" | (14.97m) |
| Width | 8' 2" | (2.50m) |
| Height | 13' 4" | (4.10m) |
| Wheelbase | 349" | (8,865mm) |
| Front axle weight | 54,000 lbs | (24,500kg) |
| Rear axle weight | 51,600 lbs | (23,400kg) |
| Approx. total weight | 105,600 lbs | (47,900kg) |

Weights are approximate and include pump, boom, truck, full hydraulic oil, driver and some fuel. Varies with options selected.

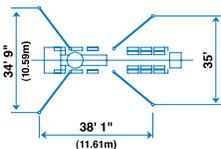
Dimensions will vary with different truck makes, models and specifications.

Range Diagram



End hose not to be operated in caution area.

Photos and drawings are for illustrative purposes only. For available options, please refer to price list.



Authorized Distributor



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Boom Specifications • Multi-Z Design

Height & Reach

| | | |
|----------------------------|---------|----------|
| Vertical reach | 169' 7" | (51.69m) |
| Horizontal reach | 157' 6" | (48.01m) |
| Reach from front of truck* | 147' 3" | (44.88m) |
| Reach depth | 121' 5" | (37.01m) |
| Unfolding height | 33' 2" | (10.11m) |

5-Section Boom

| | |
|--------------------------|------|
| 1st section articulation | 90° |
| 2nd section articulation | 180° |
| 3rd section articulation | 260° |
| 4th section articulation | 180° |
| 5th section articulation | 270° |

| | | |
|--------------------|--------|----------|
| 1st section length | 35' 1" | (10.69m) |
| 2nd section length | 30' 6" | (9.30m) |
| 3rd section length | 30' 8" | (9.35m) |
| 4th section length | 30' 8" | (9.35m) |
| 5th section length | 30' 6" | (9.30m) |

General Specs

| | | |
|--|--------|----------|
| Pipeline size (ID) metric ends | 5" | (125mm) |
| Rotation | 365° | |
| End hose — length (heavy-duty) | 10' | (3m) |
| End hose — diameter | 5" | (125mm) |
| Outrigger spread L - R — front swing out & telescope | 34' 9" | (10.59m) |
| Outrigger spread L - R — rear swing-out | 35' | (10.67m) |

Pump Specifications 52Z.16H 52Z.20H

| | | |
|-----------------------------------|---|---|
| Output — rod side | 210 yd ³ /hr (160m ³ /hr) | — |
| piston side | 146 yd ³ /hr (112m ³ /hr) | 260 yd ³ /hr (200m ³ /hr) |
| Pressure — rod side | 1233 psi (85 bar) | — |
| piston side | 1885 psi (130 bar) • | 1233 psi (85 bar) |
| Material cylinder diameter | 9" (230mm) | 11" (280mm) |
| Stroke length | 83" (2100mm) | 83" (2100mm) |
| Max strokes per minute — rod side | 31 | — |
| piston side | 21 | 26 |
| Volume control | 0-Full | 0-Full |
| Vibrator | Standard | Standard |
| Hard-chromed material cylinders | Standard | Standard |
| Hydraulic system | Free Flow | Free Flow |
| Hydraulic system pressure | 5075 psi (350 bar) | 5075 psi (350 bar) |
| Differential cylinder diameter | 5.5" (140mm) | 5.5" (140mm) |
| Rod diameter | 3.1" (80mm) | 3.1" (80mm) |
| Maximum size aggregate | 2.5" (63mm) | 2.5" (63mm) |
| Water Tank | 172 gal (650L) | 172 gal (650L) |

Maximum theoretical values listed.

* Applies to units mounted on PMA stock truck — MACK MRU 688S

• Standard delivery line system rated at max line pressure of 1233 psi (85 bar)