

4GHTAPICT4T1OP

4" HIGH PERFORMANCE TRASH PUMP, AUTO PRIME, OPEN, TRAILER UNIT

GLOBAL PUMP®

A MERSINO COMPANY

4GHT GLOBAL HIGH PERFORMANCE TRASH



Global Pump® High Performance Trash pumps are specifically designed to effectively handle a wide-range of liquids from water to sewage and sludge that can contain solids and other material.

Global Pump High Performance Trash pumps provide a dependable, highly efficient solution. The model 4GHT is capable of achieving maximum flows of 1,600 gpm (341 m³/h) and maximum total head of 174' (53.3 m) while handling solids up to 3" (76.2 mm) in diameter.

The standard 4GHT is powered by a water-cooled, 4-cylinder diesel engine. Alternative drives are available, including other diesel engines or electric motor options.

FEATURES

Global Pump's rugged, heavy duty pumps are engineered specifically for portable application

Non-return valve uses only a single moving part to allow full flow with minimal restriction

Standard engine control panel provides preset emergency shutdown protection and allows the addition of automatic level control

Fully guarded coupling

Pump casings are hydrostatically tested to 50 psig (345 kPa) above the peak casing design pressure

Highway trailer with integral fuel cell/chassis, lights, fenders, tie downs, lifting bail, front and rear jacks. Trailer brakes can be offered as required

OPTIONS

Available with a variety of priming systems, including Global's Auto Prime® automatic priming system (compressor-fed venturi priming) or a diaphragm priming system

Mechanical seal with glycol (biodegradable optional) quench allows the pump to start and run dry

Global Pump's Environmental Box separates and silences air exhaust and returns liquid to the pump suction.

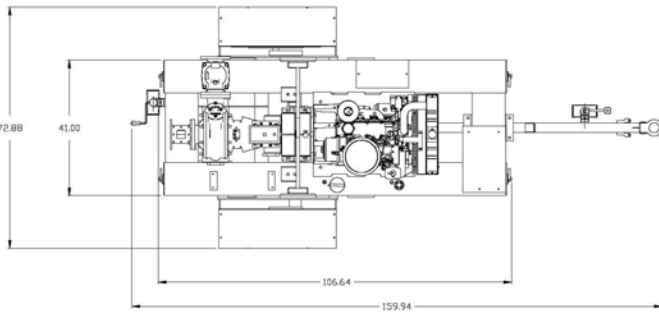
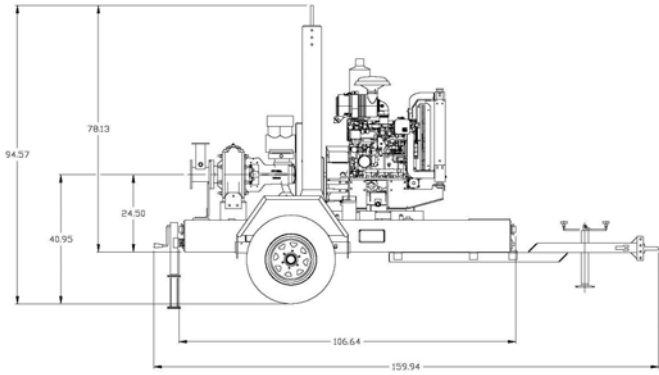
Fuel cubes for extended run times and/or remote location as required

Sound attenuated enclosure options

Skid-mounted formats with tie downs, lifting bail, and fork pockets

Hose racks, accessory containers and other custom features available as required

Wide range of suction and discharge fittings including Global Pump's own "QD" Quick Disconnect fittings and accessories

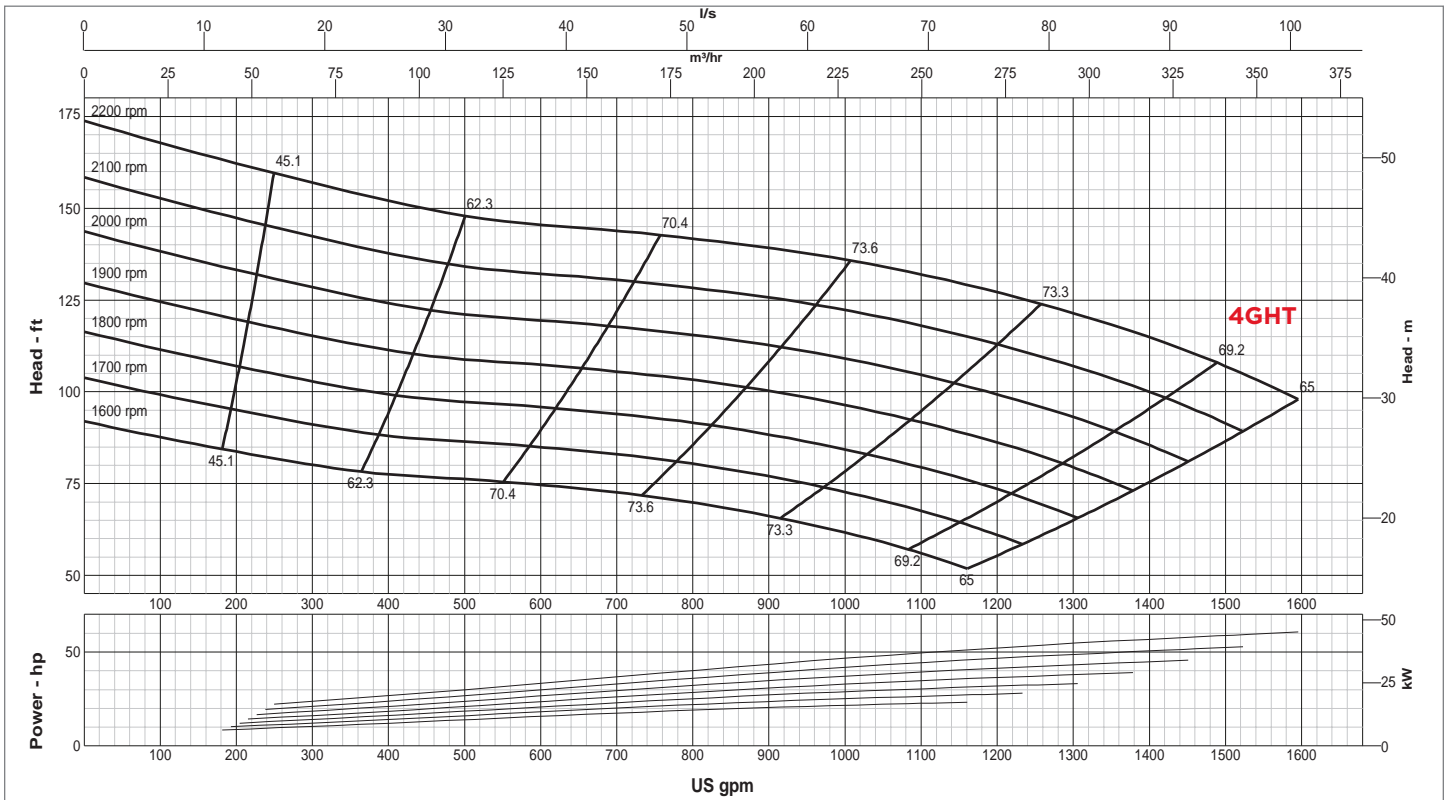


SPECIFICATIONS

Connections	4" (100 mm) ANSI Flanges
Max Pump Speed	2,200 rpm
Max Flow	1,600 gpm (341 m ³ /h)
Max Head	174' (53 m)
Max Static Priming Lift	28' (8.5 m)
Temperature Limit	160° F (70° C)
Solids Handling Capability	3" (76.2 mm)
Max Casing Pressure	125 psig (862 kPa)
Fuel Cell	85 gallons (320 liters)
Dry Weight	3,650 lbs

PUMP MATERIAL

Casing	Cast Iron (CD4MCu is an option)
Impeller	Cast Iron (CD4MCu is an option)
Bearing Housing	Cast Iron
Bearing Lubrication	Grease
Shaft	Stainless Steel
Seal	Silicon Carbide on Silicon Carbide
Chassis/Fuel Cell	Steel
Non-Return Valve	Nitrile Fitted Cast Iron



GLOBAL PUMP
 10162 East Coldwater Road, Davison, MI 48423
 Tel: 810.653.4828 Fax: 810.658.0632
1.866.360.PUMP www.globalpump.com

GLOBAL CONTROL BOX



ADVANCED PUMP CONTROL

A wide range of operating modes for both manual and auto operation to match the pumping requirements of the application.

DESCRIPTION
GENERAL
<ul style="list-style-type: none"> • Full Display • Fault Code Reader and Alarm Log • Service Alerts • Fuel Level Available • Alarm Horn • Monitor Suction & Discharge Pressure
AUTO START OPERATION MODES
<ul style="list-style-type: none"> • FLOATS (Single and Dual Float) • PRESSURE (Start, Stop and Maintain Pressure) • LEVEL (Start, Stop and Maintain Level) • INTEGRATED SCHEDULER (Run Days/Times)
AUTO THROTTLE OPERATION
<ul style="list-style-type: none"> • Warm Up Speed & Period • Prime Speed & Period • Operating Speed • Cool Down Speed & Period • Pressure and Level Maintain
FAILSAFE FLOAT BACKUP
<ul style="list-style-type: none"> • Float backup available in case of pressure or level transducer failure

PUMP CONTROL TECHNOLOGY

Controls, Incorporated brings its advanced engine control technology and reputation for durability to provide advanced pump control with simple and intuitive operation for Global Pump.

DURABILITY

The water tight IP67 rated display and control module is mounted in a NEMA 4X rated panel providing a two layer construction for maximum protection.

EASY-TO-READ DISPLAY

An advanced OLED display provides superior visibility in all lighting conditions while providing an extended temperature down to -40°C/-40°F.



Suction and discharge pressure monitoring is also available.

AUTO START OPERATION

A variety of auto start and auto throttle modes are available, providing a wide range of pump control options.

Auto Start/Stop

- Floats, Level, Pressure, Real-Time Clock Scheduler

Auto Throttle

- Warm Up, Prime, Operating and Cool Down Speeds
- Auto Throttle to Maintain Level or Pressure

Failsafe Float Backup

- Float backup for pressure and level applications

THROTTLE CONTROL

Minimum speed, maximum speed and rate of acceleration are selectable to assure the pump always operates in the correct speed range.

FAULT CODES


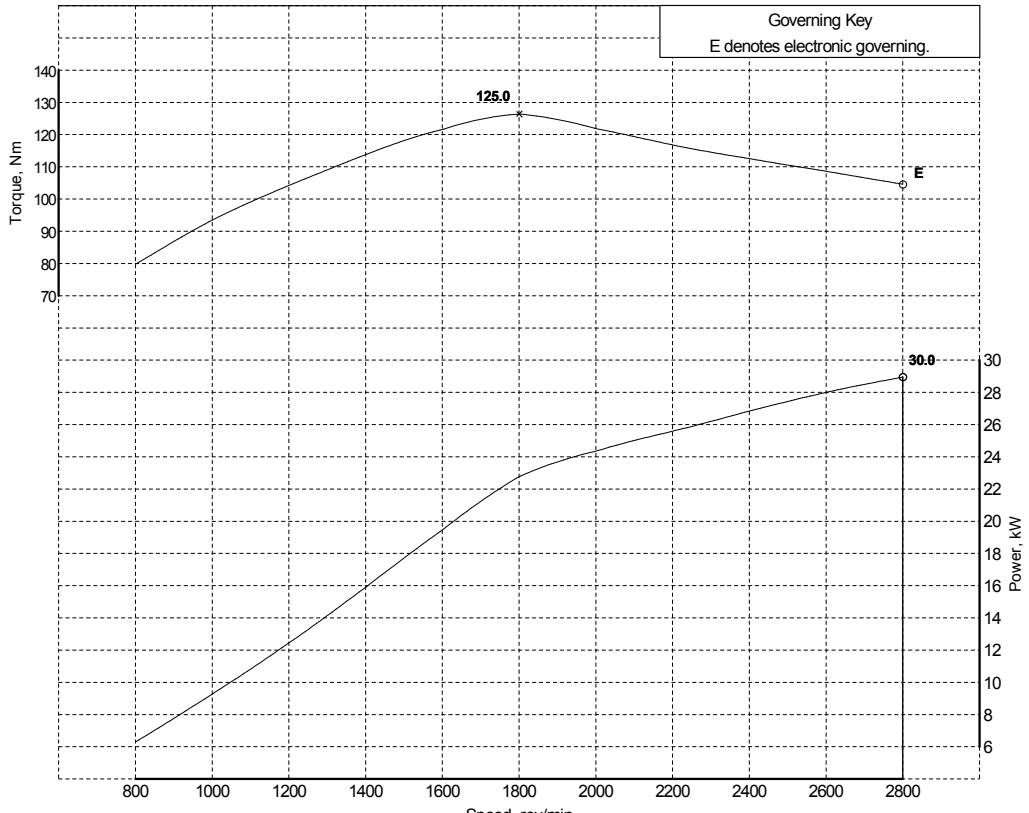
Engine alarm codes are displayed along with easy-to-read messages and corresponding yellow or red lamp illumination.

COMMUNICATIONS

Panel communications for simple integration with external devices, SCADA, remote monitoring and telemetry systems.

Power curves

C1.7 (DIT) - T4602

 Caterpillar Inc. ©2015 Commercial in Confidence, proprietary information of Caterpillar Inc.	Engine Model: C1.7	Curve: T 4602 Issue: 1 Date:	Sheet 1
	Development Target - May be Subject to Change		
Rating Standards: Production Tolerance On Power Output: +5%, -5% Total Barometric Pressure (kPa): 100 Vapour Pressure (kPa): 1 Air Inlet Temperature (°C): 25	ISO 14396: 2002	Fuel Types: Fuel Specification: EPA Part 1065.703 ULSD Density (kg/l @ 15°C): 0.840 - 0.865 Viscosity (mm ² /s @ 40°C): 2.0 - 3.2 Sulphur Content (% mass): 0.0007 - 0.0015 Cetane No: 40 - 50	USA FED Off Highway Europe Off Highway EU 2004/26/EC Stage 3B/4 0.833 - 0.837 2.3 - 3.3 0.001 max
 <p style="text-align: center;">Performance after 60 hours operation with fuel oil at 40°C at pump inlet.</p>			
Notes: 1. For duty cycle refer to the C rating definition(s) in the Caterpillar Industrial Engine Ratings Guide (LECH3874). Auxiliaries fitted to engine: Fan - not fitted. Alternator - off load.	Exhaust Quality Standard Smoke: Emissions: US EPA 40 CFR Part 1039 Tier 4 Final EU NRMM 97/68/EC Stage 3B	Certification Refs (Rated Speeds)	
	Power Standard	Certification Refs (Rated Speeds)	
Approved by: J. Reed (Engineering Manager)	Accepted by: H. Sambrook (NPI Program Manager)	Issued by: R.L. Hill (Legislation Engineer)	
Date	Date		