





# LH100C8 INSTANT-PRIME® PUMP



# PUMP SPECIFICATIONS

Pump End: GSPS MCL-I458C

Pump Size: 5x4 inches (125x100 mm) Max Flow: 1300 US GPM (305 m³/h)

Max Head: 160 feet (49 m) Solids Size: 1 inches (25.4 mm)

Mechanical Seal: Single mechanical seal 1.875"

Lip Seals: CR type, single lip, Buna-N (Bearing & SAE

Cover) and Viton(Stuffing box)

Non-Drive End Bearing: Single row ball bearing 6310 Drive End Bearing: Single row ball bearing 6410

Air/Water Chamber: Steel material and designed to separate air and water before entering into vacuum pump suction

hose.

Discharge Non Return Valve: Swing type, cast iron with

Buna-N disc (Viton optional)
Gasket: Aramid Fiber w/ EPDM

O Ring: Buna-N

# VACUUM ASSISTED PRIMING SYSTEM

**INSTANT-PRIME® SYSTEM:** Patent Pending self priming pumps are equipped with the most powerful priming system and P-S-P mechnism. Instant-Prime® pump sets a new benchmark of vacuum assisted priming pumps in the industry.

VACUUM PUMP DATA\*: Air Capacity: 112CFM Vacuum: -26inHg(9m)

\* at engine speed 2200 rpm

# PUMP FEATURES

# 1 ECO Friendly Vacuum Priming System

GSPS pump's EVP self priming system has extraordinary features like large air process capability, high vacuum, low operation temperature, maintenance free, oil and mechanical seal free etc.

# 2 P-S-P Auto Switch System (Prime-Sleep-Prime)

EVP system will be switched to sleep status automatically once priming was finished. When it is used for general purpose application, EVP system only operates for a few seconds for priming, which makes it almost unnecessary for daily maintenance or changing spare parts within its life cycle.

# 3 Dry Running Protection System

Instant-Prime® pumps offer three types of dry running seal options: oil reservoir lubricated mechanical seal, air cushion protected mechanical seal and grease lubricated lip seals configurations. Either of them can secure the pump run dry for a long time.

# 4 Cooling System\*\*

A pressurized cooling flush water is introduced from centrifugal pump into vacuum pump's water jacket and then flows back to centrifugal pump. This cooling system cools the vacuum pump quickly and brings most of the heat out of the vacuum pump's cavity, and makes its rotor has an extraordinary long life.

## 5 Easy Maintenance Structure

It is very convenient to remove the vacuum pump's cover from its non-drive end, and slides can be easily pulled out for inspection or replacement. It is also easy to access to the centrifugal pump's impeller, wear ring or mechanical seal for inspection or maintenance without removing diesel engine or pump's frame since the centrifugal pump's suction cover can be fully opened.

# 6 All-In-One Pump Applications

EVP Priming system's powerful function makes Instant-Prime® pumps can be used in almost all aspects of fluid industry, including well point dewatering. Buy one pump and get all your jobs covered.

## ENGINE SPECIFICATIONS

Engine Model: DEUTZ D2.9L4

Rated Power At Speed: 50HP @ 2600RPM

Engine Type: Water-cooled 4-cylinder inline engine with

cooled, external exhaust gas recirculation with and without turbocharging and optionally with

and without charge air cooling.

Displacement: 177 Cu.In. (2.9 Liters)

EPA Tier: Tier 4 Final/Stage V

Fuel Tank: 85 U.S. Gallons (320 Liters)
Full Load Operating Time: 34.3 Hours

Starter: 12 Volts Electric

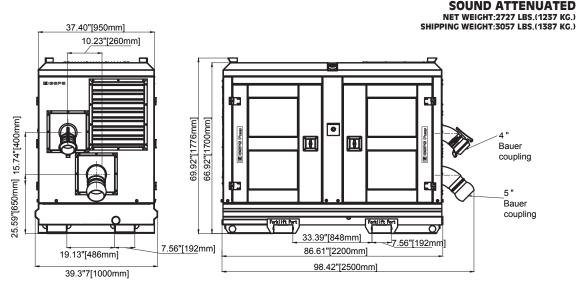
Control Panel: Murphy, Controls Inc, Deepsea, Kensho, Lofa

# PUMP MATERIAL OF CONSTRUCTION

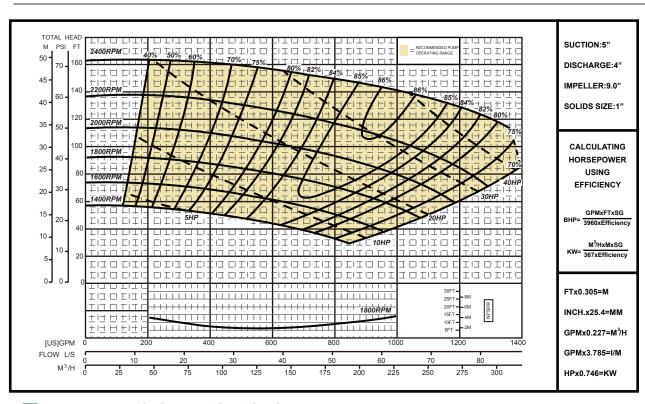
Main Parts	Standard (code:38)	Optional 1 (code:58)	Optional 2 (code:88)	Optional 3 (code:98)
Impeller	CA6NMSS	CA6NMSS	26% High Chrome	CD4MCu
Shaft	17-4PH	17-4PH	17-4PH	17-4PH
Wear Ring	Gray Iron	Gray Iron	Carbon Steel	316SS
Suction Cover	Gray Iron	Ductile Iron	26% High Chrome	CD4MCu
Volute	Gray Iron	Ductile Iron	26% High Chrome	CD4MCu
Stuffing Box	Gray Iron	Ductile Iron	26% High Chrome	CD4MCu
Adaptor	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron



<sup>\*\*</sup> cooling system is only needed for well point dewatering application.



# **LH100C8 INSTANT-PRIME® PUMP PERFORMANCE CURVE**



# PUMP DESIGNATION SYSTEM

#### **Pump Type** LH:Low Head Pump

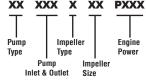
MH:Medium Head Pump HH:High Head Pump

# **Pump Inlet & Outlet**

LH:Pump Outlet Size(mm) MH:Pump Outlet Size(mm) HH:Pump Intlet Size(mm)

# Impeller Type

S:Solids Handling C:Clear Water



# Impeller Size:Inch

**Engine Power:hp** 

# XXX **PXXX**

# **Pump Material**

38:Standard 58:Optional 1 88:Optional 2 98:Optional 3

#### **MXX** XX X XX XX Seal Priming Priming Type System Pump Seal Cooling Material Material

### Seal Type

MO:Mech.Seal Oil Lub(Standard) MA:Mech.Seal Air Cushion LG:Lip Seal Grease Lub

XX

Package

Type

Seal Material

2:TC/SiC

3:TC/TC

4:NBR

5.Viton

1:SiC/SiC(Standard)

**Priming System** V1:Venturi V2:Diaphram Pump(NA) V3:EVP(Standard)

# Cooling

WC:With Cooling System NC:No Cooling System

### Package Type

SO:Skid Open TO:Trailer Open SE:Skid Enclosed TE:Trailer Enclosed SP:Skid Push Bar GN:Goose Neck

**GSPS PUMP LLC** 



