



**CPE SYSTEMS
INCORPORATED**

HYGINOX SEN-20 CENTRIFUGAL PUMP ASSEMBLY (3-15 HP)

FOR CRAFT FOOD AND BEVERAGE INDUSTRIES

PUMPS

-

HOSES

-

HEAT EXCHANGERS

-

FLOW METERS

-

GASKETS

-

VALVES

-

FITTINGS

-

THERMOMETERS

-

PORTABLE SYSTEMS

-

AND MORE

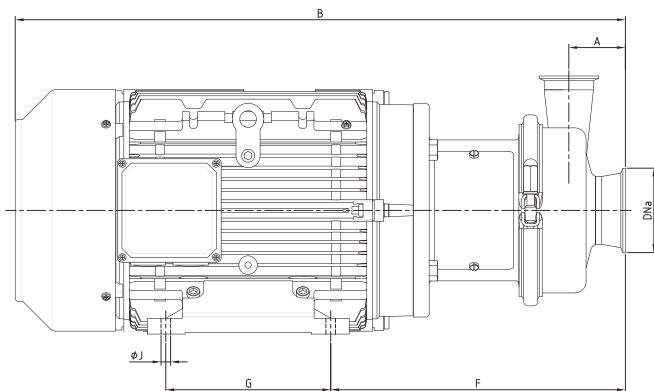


Hyginox SEN is INOXPA's line of internally sealed, close-coupled centrifugal pumps. These pumps are perfect for brewing and brewers, providing increased seal lifetime and decreased maintenance, while still offering the same performance and ease-of-use benefits you would expect from a centrifugal pump. It is designed specifically for the dairy, beverage, and food-processing industries, and is assembled according to NEMA standards.



DESIGN

The design of the Hyginox SEN seal makes it both balanced and hygienic, with a stationary part made of carbon and a rotary part made of silicon carbide, with EPDM gaskets. The entire mechanical seal can also be provided in silicon carbide, and the gaskets FPM. Pump components in contact with food are polished AISI 316L stainless steel, and the unit is fully food safe.



Technical Specifications

Materials

Parts in contact with product:	Stainless steel AISI 316L
Other steel parts:	Stainless steel AISI 304
Gaskets in contact with product:	EPDM

Mechanical seal

Rotary Seal:	Silicon carbide (SiC)
Stationary Seal:	Carbon (C) Gaskets EPDM
External surface finish:	Bright polish
Internal surface finish:	Ra<0,8 µm
Connections:	CLAMP 2" x 2"
Motor:	S.S Premium Efficiency Nema C Face

Operating limits

Nominal pressure:	10 bar 145 PSI
Temperature range:	14 °F to 248 °F 284 °F (SIP, max. 30 min.)

Maximum flow:	100 m ³ /h 440 US GPM
Maximum differential head:	95 m 310 ft
Maximum speed:	3500 rpm



The SMV range of NEMA 4/4X (IP65) inverter drives offer sophisticated auto-tuning, fast dynamic torque response with impressive low-speed operation all from a compact and simple to use package. Brought to us by Lenze AC Tech these VFD's are designed for motor applications where dynamic speed and torque control is demanded, making the units ideal for conveyors, food production lines, packaging equipment plus fan and pump systems.

FEATURES

- Superior Performance over 3HP
- Modes of Operation:
 - V/Hz (Constant and Variable)
 - Enhanced V/Hz (Constant and Variable)
- Vector Speed Control with 60:1 Speed Range
- Vector Torque Control
- Dynamic Torque Response
- Sophisticated Auto-tuning (Motor Calibration)
- Impressive Low Speed Operation
- Sequencer with 16 Programmable segments
- Delayed start/stop
- Over 65K repeat cycles

Technical Specifications

Horsepower	3 HP to 15 HP
1Ø Input	240 VAC, 50/60 Hz
3Ø Output	230 VAC 4.0kW/5HP 0-500 Hz
Dimensions approx.	9.8" X 7.6" X 7.3"
Enclosure	NEMA-4X/IP-65

Heavy Duty Pump Cart



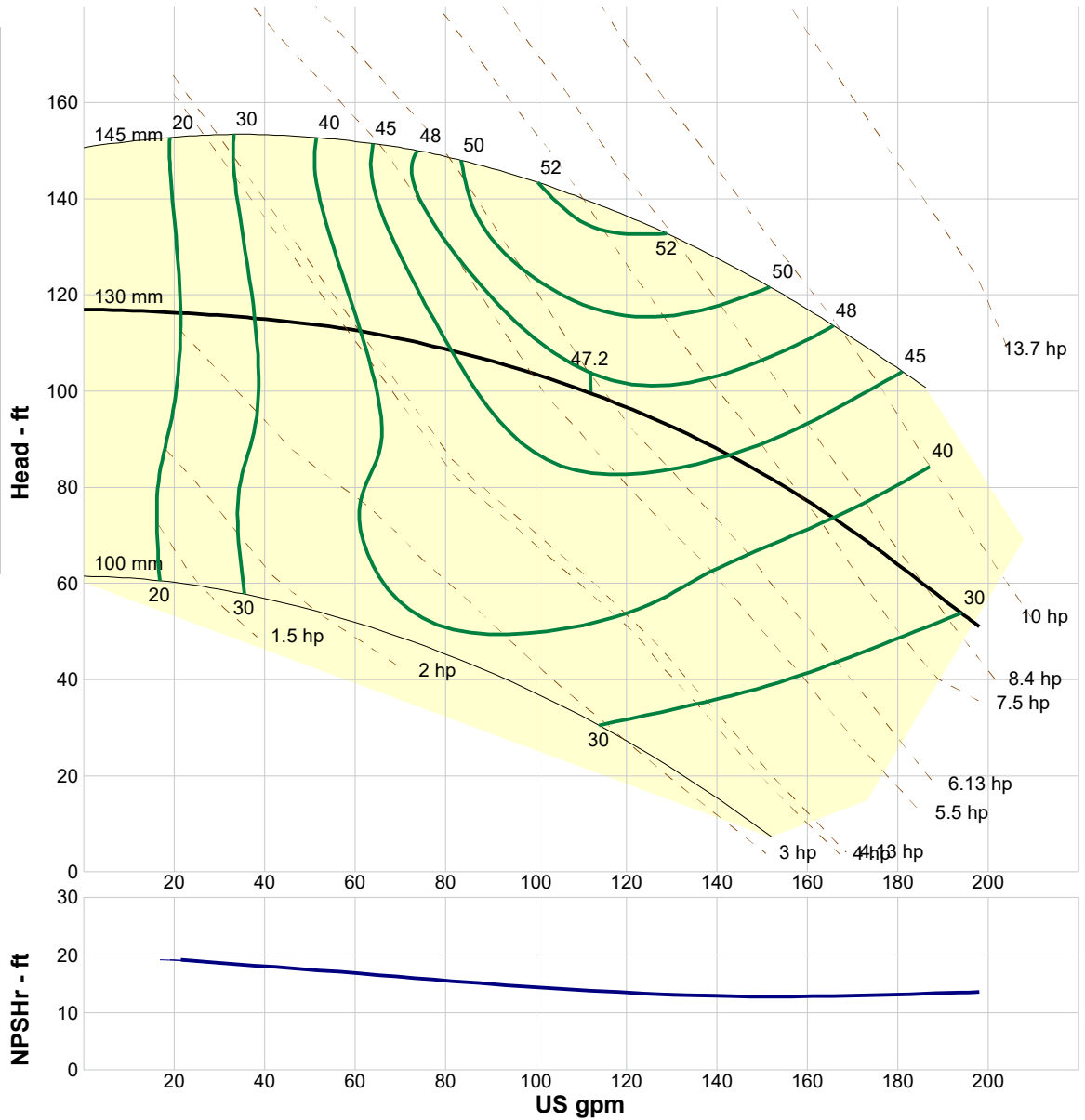
Custom designed for the craft food and beverage industry, our heavy duty pump cart is built for pumps up to 5HP. This cart is ergonomic, tilt draining, has a small footprint and has easy maneuverability. All parts hand welded in Canada for quality assurance and durability.

Material

Frame	1 1/2" 16 ga stainless steel tube frame
Handle	1 1/2" 16 ga stainless steel tube
Platform	14 ga stainless steel AISI 304 *pre-drilled to fit 56 and 184 Nema frame motors
Axle	1/2 ga stainless steel rod axle
Wheels	8" Foam filled tires and non rusting wheels



---- Data Point ----	
Flow:	174 US gpm
Head:	67.8 ft
Eff:	37%
Power:	8.02 hp
NPSHr:	13.1 ft
---- Design Curve ----	
Shutoff head:	117 ft
Shutoff dP:	50.6 psi
Min flow:	---
BEP:	47% @ 112 US gpm
NOL power:	8.8 hp @ 198 US gpm
-- Max Curve --	
Max power:	11 hp @ 186 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
190	3600	56.6	31	8.64	13.4
158	3600	78	42	7.45	12.9
126	3600	93.7	46	6.41	13.4
94.8	3600	105	46	5.39	14.8
63.2	3600	112	41	4.4	16.6