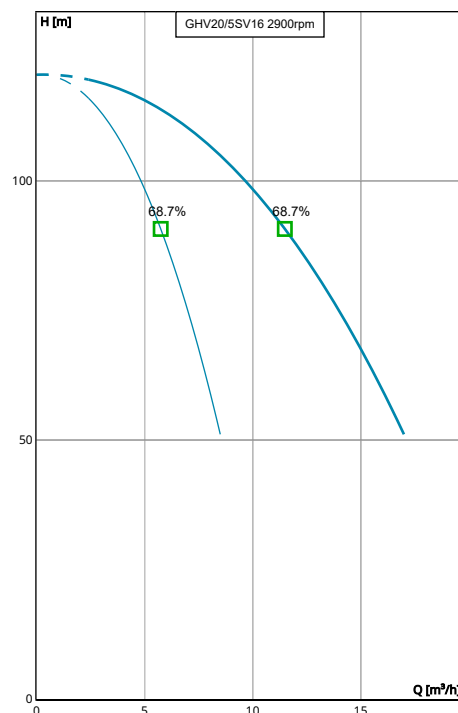


GHV20/5SV16F022T/4 | Configuration Summary



Variable speed booster sets assembled with two up to four pumps. The frequency converter (hydrovar) is installed on each pump. The pumps used are the eSV model.



Performance according to ISO 9906:2012

PUMP

Installation	Pump Size
Non-return valve in Delivery side	5SV16

MATERIALS

Construction
Standard version

SEAL

Type of Seal	Rotating Face
Mechanical Seals	Silicon Carbide
Name	Stationary Face
Q1BEGG	Carbon
	Elastomers
	EPDM
	Springs
	AISI 316
	Metal Components
	AISI 316
	Min Temperature
	-30.0 °C
	Max Temperature
	120.0 °C

STANDARD OPTIONS

Include Certified Pump	Include Double Pressure Transmitter
No	No
Control Panel With Clean Contacts	High Pressure Protection Switch
No	No
Manifold Size	Delivery Manifold Turned By 90°
Standard Manifold	No
Include Protection Against Dry	

MOTOR

Frequency	Power
50	2.2 kW
Poles	Phase (~)
2	3
	Voltage
	220-240/380-415 V

FLANGE

Flange
[F] = Round Flanges (AISI 304)

VFD

Hydrovar Name	Include Additional Card
HVL4.022 - 3PH 380-460 V	No
Control Panel Power Supply	Hydrovar Position
3 PH x 400 V	Standard Mounting

Running	Control Panel Protection Degree
No	(IP65 version)
Suction Side	No
Standard suction	Control Panel With Emergency
Delivery Side	Button
Standard delivery	No
Without Non-return Valve	Aqueduct Installation
No	No
Control Panel with Digital	Condensation Resistance
Voltmeter and Ammeter	(controlled by Thermostat)
No	No
Control Panel With Timer	Control Panel With Phase
No	Missing
Electrical Certified Pump	No
No	Without Control Devices
Include Control Panel With	No
Inverter	Pressure Transmitters and
No	HYDROVAR® Without Control
	Panel-Bracket
	No
	Electric Pump Special Seals
	No
	Wall Mounted Control Panel
	No
	Rubber Joints on Suction and
	Delivery Manifolds
	No
	Rubber Joints At Suction and
	Delivery
	No
	Y Filter On Suction Side
	No
	Control Panel Ready For A Cloud
	Connect Device (not included)
	No

GHV20/5SV16F022T/4 | Product Details

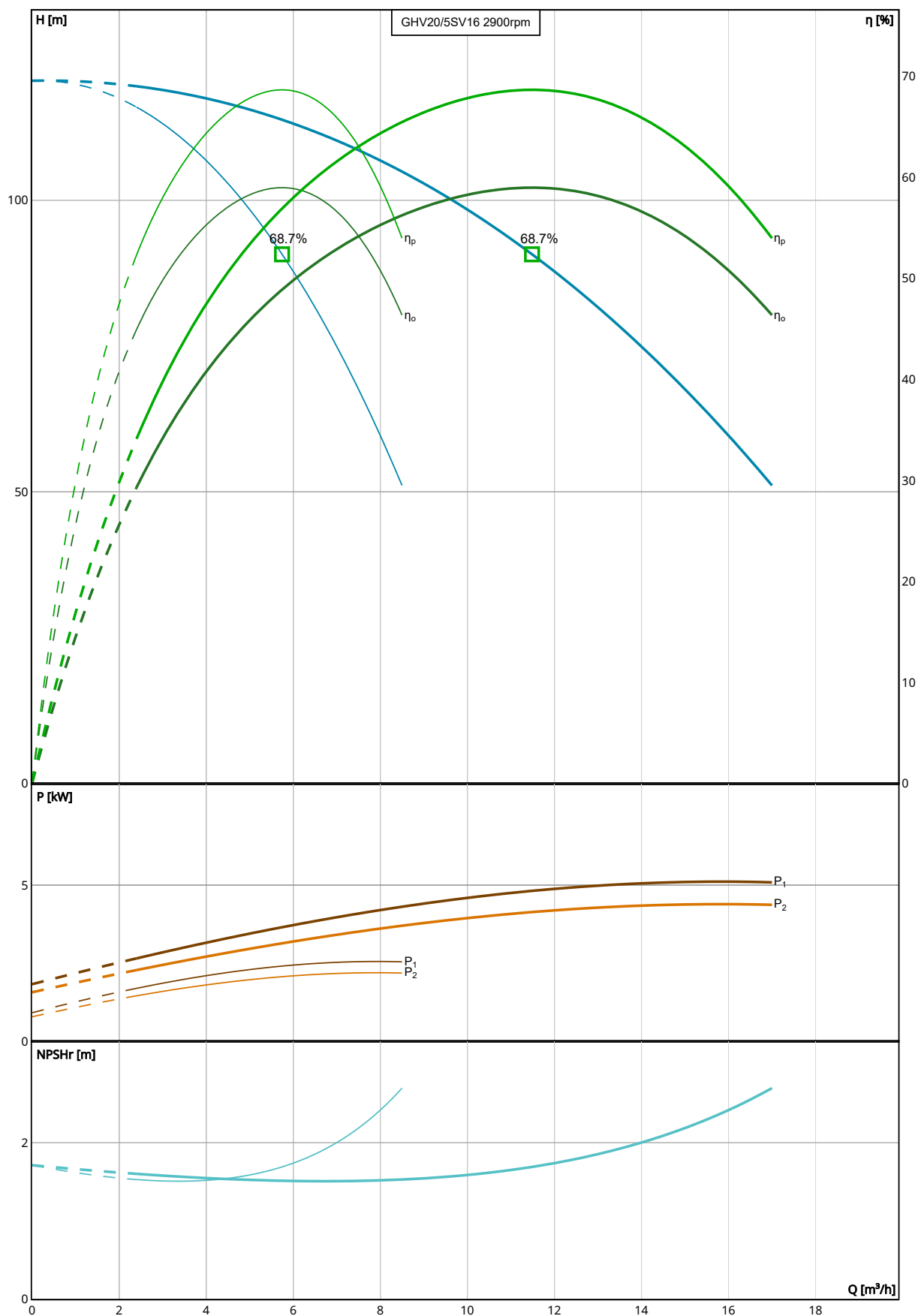
Construction Materials

- Sliding, blind, weld flange	Fittings (-)	Pressure gauge (-)	Screws, nuts, washers (-)
- Pump counterflange (-)	AISI 316	Water connection: Brass	AISI 316
AISI 304	Manifolds (-)	Cover ABS	Vacuum pressure gauge (-)
Base (-)	AISI 304	Fluid: -	Water connection: Brass
Painted steel	Non-return valves, threaded (-)	Pressure switches (-)	Cover ABS
Bracket (-)	Body: Brass	Galvanized steel / AISI 304	Fluid: glycol
Painted steel	Shutter: Brass	Pressure transmitters (-)	
Caps/plugs (-)	On-off valves, threaded (-)	AISI 304	
AISI 316	Nickel plated brass	Pump flange (-)	
		F/R	

Motor

Motor Name	Phase	IE Class	Frame Size
PLM 90 B14 2.2 kW	3	IE3	90 L
Design	Rated power	Enclosure	ICL
IM B14	2.2 kW	IP 55	F
Standard	Service Factor	Efficiency (%)	Motor Vendor
IEC	1	86.4	PLM
Shaft Diameter	Voltage	cos phi	Weight
24 mm	220-240/380-415 V	0.8	18 kg
L Shaft	Speed	Rated Current	
50 mm	2880.0 rpm	7.9-4.56 A	

GHV20/5SV16F022T/4 | Hydraulic Data & Performance Curve



Performance according to ISO 9906:2012

Selection

Series	Acceptance Grade
GHV	Manufacturer's Standard
Name	System Type
GHV20/5SV16 2900rpm	Multi Pump
Stages	Operating Pumps
16	2
Frequency	Standby Pumps
50 Hz	No Standby Pump
Impeller Diameters	
16x 76 mm	
Suction Type	
Pressurized	
Station Losses	
344.74 mbar	

Fluid and Operating Conditions

Fluid Type	Density
Water	1,000 kg/m ³
Fluid Temperature	Dynamic Viscosity
4 °C	0.002 Pa·s
Specific Gravity	Fluid Vapor Pressure
1	8.14 mbar
	Atmospheric Pressure
	1,013.53 mbar
	Elevation
	0 m
	Ambient Temperature
	20 °C
	NPSH Available
	10.27 m
	Submergence
	0 m

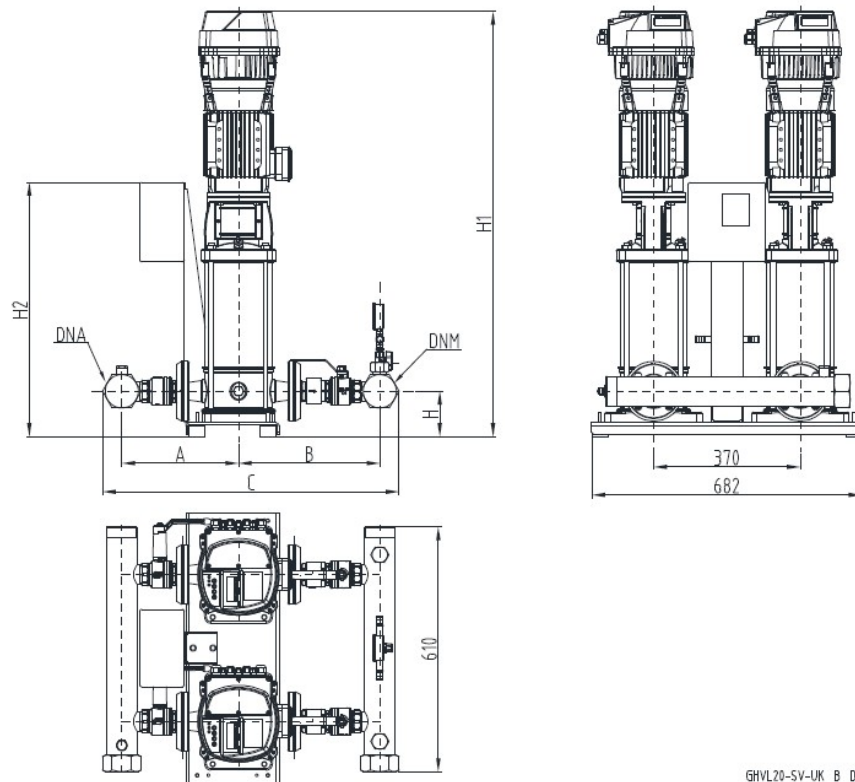
Design Curve - Single Pump

Rated Speed	BEP (1x)
2,900 RPM	68.65 %
Min Flow (1x)	BEP Flow (1x)
2.4 m ³ /h	5.74 m ³ /h
Max Flow (1x)	BEP Head (1x)
8.5 m ³ /h	90.72 m
H@QMin (1x)	Max Operating Pressure (1x)
115.95 m	11,798.64 mbar
H@QMax (1x)	Shut Off Head (1x)
51.11 m	120.47 m
	Max P2 (1x)
	2.2 kW

Design Curve - System

Rated Speed	BEP
2,900 RPM	68.65 %
Min Flow	BEP Flow
2.4 m ³ /h	11.49 m ³ /h
Max Flow	BEP Head
17 m ³ /h	90.72 m
H@QMin	Max Operating Pressure
119.53 m	11,798.64 mbar
H@QMax	Shut Off Head
51.11 m	120.47 m
	Max P2
	4.39 kW

GHV20/5SV16F022T/4 | Dimensional Data & Drawing



Drawing is preliminary and is subject to change.

Dimensions

A	H1
260 mm	1140 mm
B	H2
329 mm	800 mm
C	DNA (Rp/R/DN)
649 mm	R 2"
H	DNM (Rp/R/DN)
109 mm	R 2"