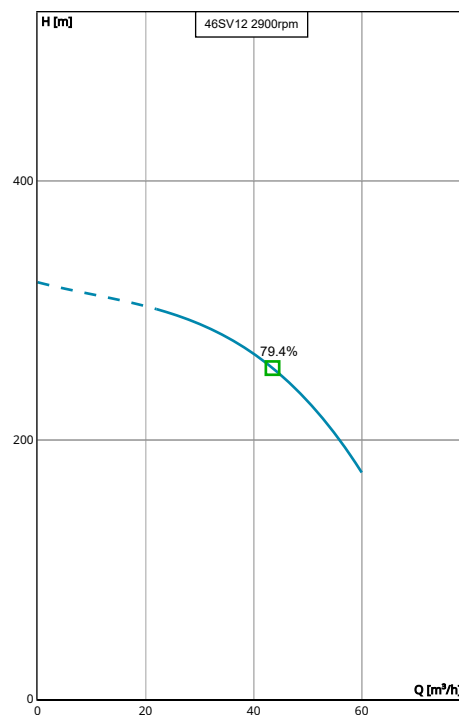


46SV12N450T/E | Configuration Summary



The Lowara e-SV vertical multistage pump is a highly reliable and technologically advanced multipurpose pump. It's capable of satisfying the needs of a wide variety of users and many different construction designs are available. The e-SV range feature models in eleven sizes with 1-3-5-10-15-22-33-46-66-92-125 m³/h nominal capacities.



Performance according to ISO 9906:2012

PUMP

Installation	Pump Size
Complete Pump	46SV

MATERIALS

Pump Body Material	Impeller Material
Stainless Steel	Stainless Steel (AISI 316L)

SEAL

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

STANDARD OPTIONS

PTC Sensor	Special Configuration
Yes	Please Select

MOTOR

Vendor	Power
Lowara by Omega	45 kW
Frequency (Hz)	Phase (~)
50	3
Poles	Voltage
2	380-415/660-690 V
Efficiency	Frame Size
IE3	225 S/M2

FLANGE

Flange
[N] = Round Flanges (AISI 316)

46SV12N450T/E | Product Details



05104_A_DS

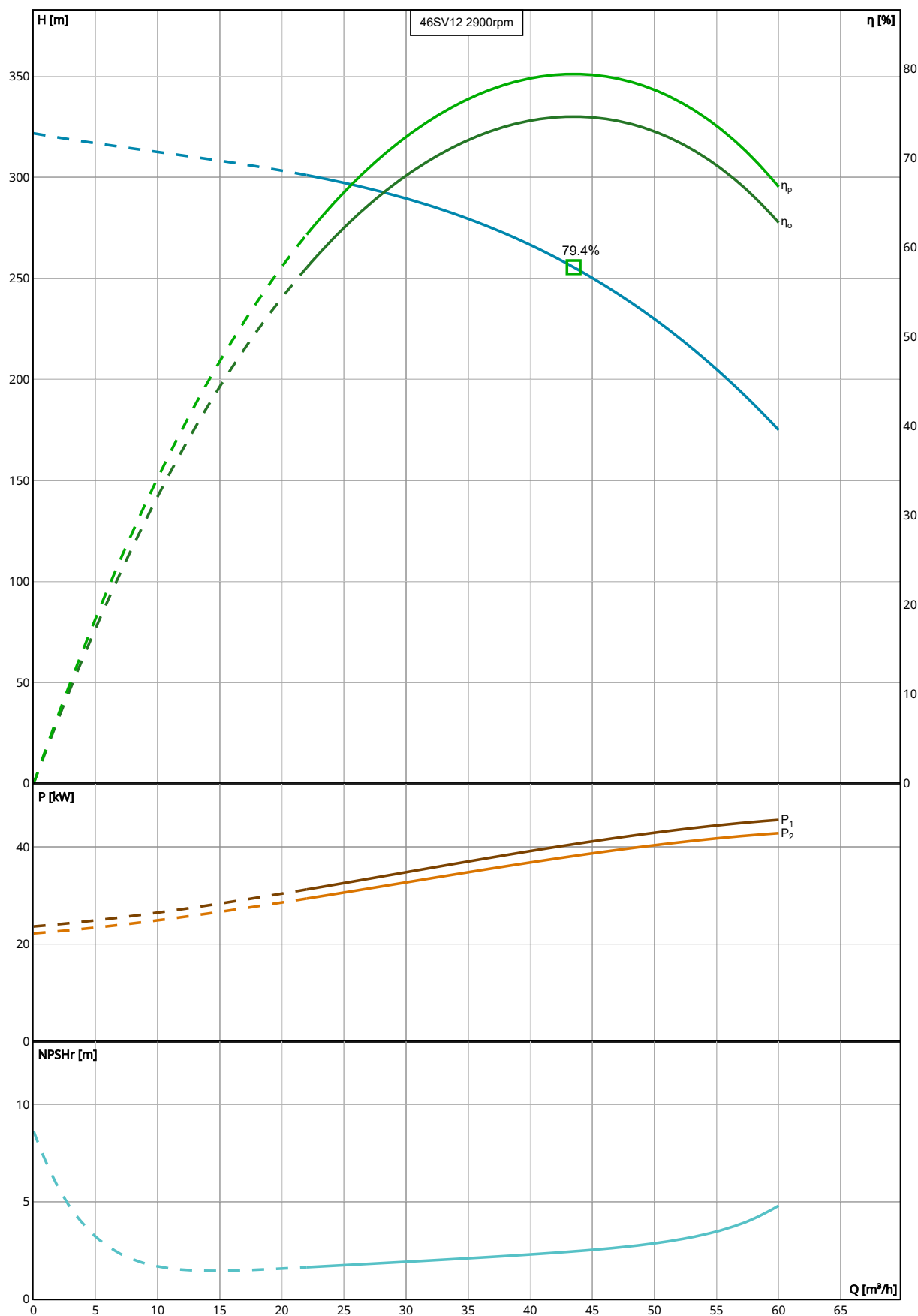
Construction Materials

Pump body (1) Stainless Steel / ASTM CF8M	Outer sleeve (4) Stainless steel / AISI 316L	Coupling (8) Cast Iron / ASTM Class 25	Elastomers (11) See Seal section
Lower support (1A) Stainless Steel / ASTM CF8M	Shaft (5) Duplex stainless steel	Upper head (9) Stainless Steel / ASTM CF8M	Coupling protection (12) Stainless steel / AISI 304
Impeller (2) Stainless steel / AISI 316L	Adapter (6) Cast Iron / ASTM Class 25	Seal housing (9A) Stainless Steel / ASTM CF8M	Shaft sleeve and bushing (13) Tungsten carbide
Diffuser (3) Stainless steel / AISI 316L	Wear ring (7) Technopolymer PPS	Mechanical seal (10) See Seal section	Bushing for diffuser (14) Carbon
Fill / Drain plugs (15) Stainless steel / AISI 316			
Tie rods (16) Stainless steel / AISI 431			

Motor

Motor Name 3MAS 225 M B5 45 kW	Phase 3	IE Class IE3	Frame Size 225 S/M2
Design IM B5	Rated power 45 kW	Enclosure IP 55	ICL F
Standard IEC	Service Factor 1.1	Efficiency (%) 94	Weight 272.8 kg
Shaft Diameter 55 mm	Voltage 380-415/660-690 V	cos phi 0.91	
L Shaft 110 mm	Speed 2975.0 rpm	Rated Current 76.4-44.3 A	

46SV12N450T/E | Hydraulic Data & Performance Curve



Performance according to ISO 9906:2012

Selection

Series	Operating Pumps
e-SV	1
Name	Standby Pumps
46SV12 2900rpm	No Standby Pump
Stages	
12	
Frequency	
50 Hz	
Impeller Diameters	
12x 133 mm	
Acceptance Grade	
Manufacturer's Standard	
System Type	
Single Pump	

Fluid and Operating Conditions

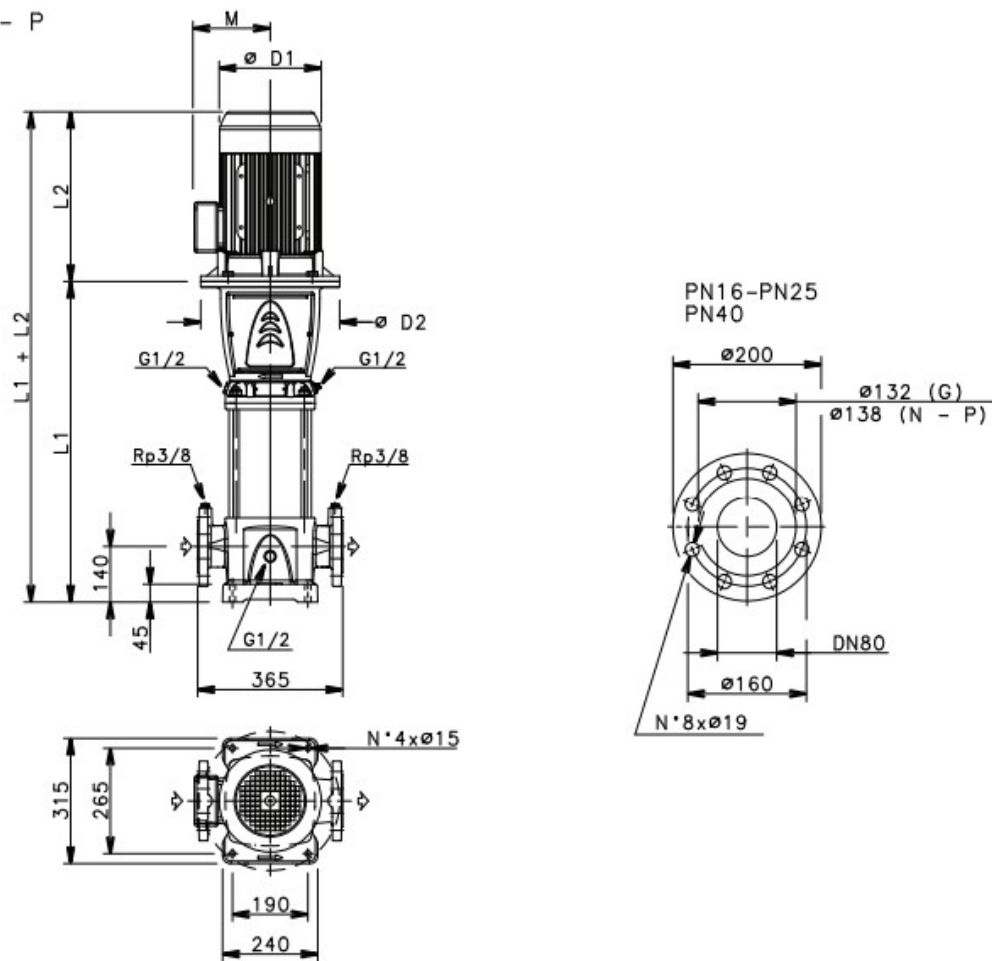
Fluid Type	Density
Water	1,000 kg/m ³
Fluid Temperature	Dynamic Viscosity
4 °C	0.002 Pa·s
Specific Gravity	Fluid Vapor Pressure
1	8.14 mbar
	Atmospheric Pressure
	1,013.53 mbar
	Elevation
	0 m
	Ambient Temperature
	20 °C
	NPSH Available
	10.27 m
	Submergence
	0 m

Design Curve

Rated Speed	BEP
2,900 RPM	79.39 %
Min Flow	BEP Flow
22 m ³ /h	43.49 m ³ /h
Max Flow	BEP Head
60 m ³ /h	255.52 m
H@QMin	Max Operating Pressure
301.03 m	31,508.62 mbar
H@QMax	Max P2
174.97 m	42.82 kW

46SV12N450T/E | Dimensional Data & Drawing

46SV G - N - P
(DN80)



Drawing is preliminary and is subject to change.

05106_E_DD

Dimensions

D1	M
460 mm	309 mm
D2	PN
450 mm	40
L1	Weight (Pump Only)
1409 mm	131 kg
L2	Total Weight
701 mm	423 kg