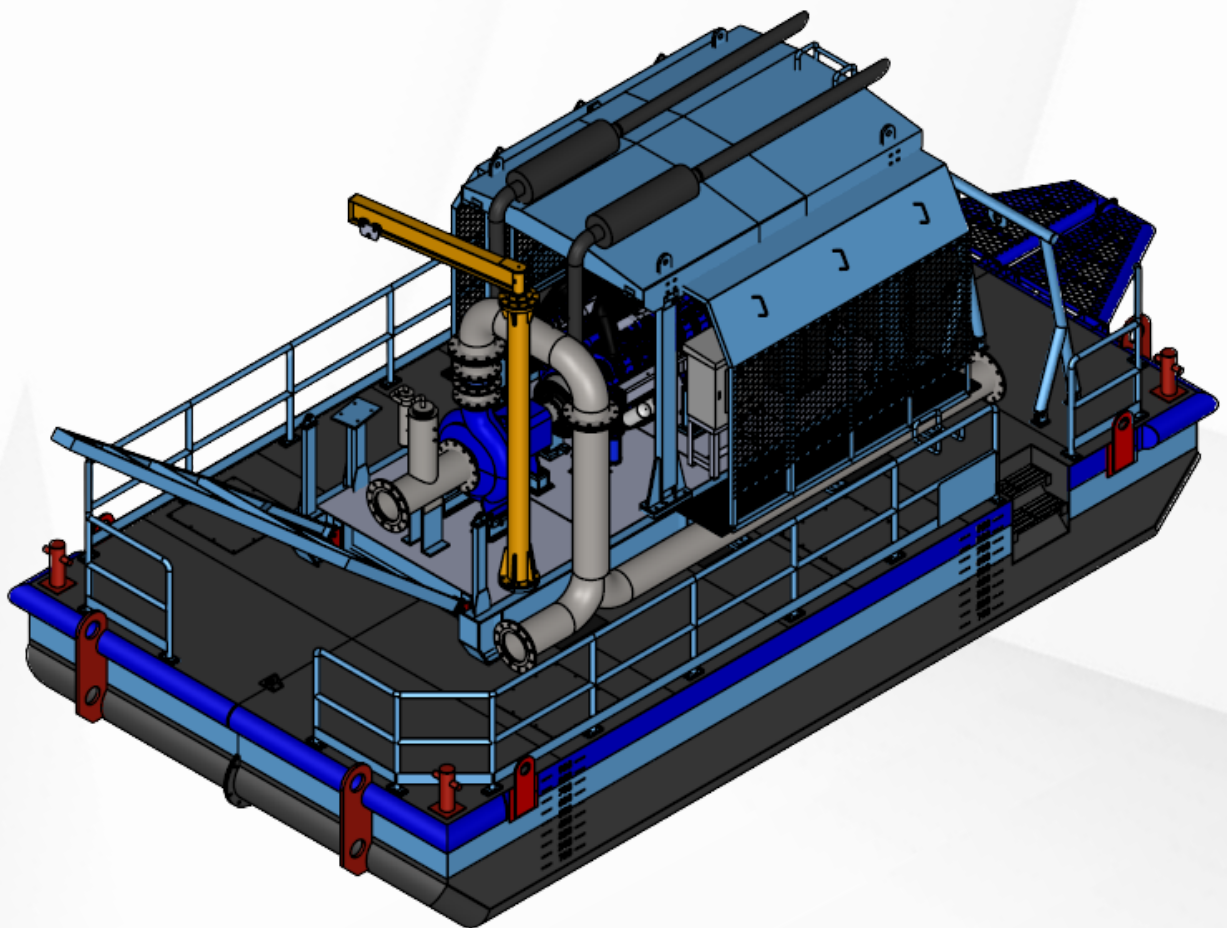


EBRO

DEWATERING AND DREDGE PUMPS



Overview

The EBRO Series is a premium heavy-duty dewatering pump engineered to deliver exceptional performance, reliability, and operational efficiency in the most demanding environments. Designed for construction sites, mining operations, industrial facilities, municipal projects, and water management applications, the EBRO Series combines advanced hydraulic technology with robust material construction to ensure continuous and dependable operation. At the heart of the EBRO Series is its high-efficiency open impeller design, specifically developed to handle water containing sand, silt, debris, and suspended solids while minimizing the risk of clogging. This innovative hydraulic configuration ensures stable performance, reduced downtime, and superior pumping efficiency across a wide operating range. Open impeller technology also simplifies inspection and servicing, making maintenance faster and more cost-effective.

Key Advantages

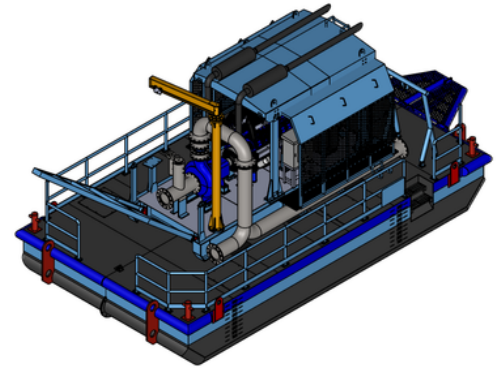
- High-efficiency Open Impeller Design for superior solids handling and reduced clogging
- All Duplex Stainless Steel Construction for exceptional corrosion and abrasion resistance
- Optimized hydraulics delivering high efficiency and lower energy consumption
- Easy Maintenance design for reduced downtime and simplified servicing
- Heavy-duty construction for demanding dewatering applications
- Reliable Package System for fast deployment and dependable operation
- Long service life with reduced lifecycle costs
- Suitable for construction, mining, industrial, municipal, and water management projects

To ensure dependable operation in the field, the EBRO Series is available as a complete and reliable package system, integrating pump, motor, controls, protection devices, and accessories into a ready-to-operate solution. Every package is designed to provide maximum reliability, easy installation, and seamless integration into temporary or permanent dewatering systems.

Designation

Series Name
End Suction Centrifugal Pump
Pump Discharge Size (mm)
Nominal Impeller Diameter (mm)
Open Impeller

EBRO-APR 150-500-OP



Pump Performance data

DEWATERING PUMPS		Pump Type							
		APR 150-500				APR 200-500			
		Flow	Head	Power	NPSH	Flow	Head	Power	NPSH
Pump Performance	1200 RPM	400 m3/h	50 m	100 kW	3.0 m	600 m3/h	58 m	148 kW	3.7 m
	1300 RPM	450 m3/h	59 m	127 kW	3.3 m	650 m3/h	66 m	188 kW	3.9 m
	1400 RPM	500 m3/h	68 m	165 kW	3.8 m	700 m3/h	78 m	235 kW	4.3 m
	1500 RPM	550 m3/h	78 m	205 kW	4.2 m	750 m3/h	91 m	287 kW	4.8 m
	1600 RPM	600 m3/h	89 m	255 kW	4.8 m	800 m3/h	104 m	345 kW	5.3 m
	1700 RPM	650 m3/h	101 m	320 kW	5.3 m	850 m3/h	117 m	405 kW	6.0 m
Pump Design	Brand / Origin	REINHA PUMPS / Germany							
	Impeller type	Open							
	Impeller Diameter	510 mm				530 mm			
	Casing Rating Pressure	16 bar							
	Bearing Lubrication	Grease with Auto-Lubrication							
	Max Fluid Temperature	120 deg C							
	Max. Slurry SG	1.15							
	Max. Solid Passage	30 mm				35 mm			
	Suction Size	PUMP : DN 250, PIPE : DN 250 (PN16)				PUMP : DN 250, PIPE : DN 250 (PN16)			
	Discharge Size	PUMP : DN 150 , PIPE : DN 200 (PN16)				PUMP : DN 200 PN 16, PIPE : DN 250 (PN16)			
Recommended discharge pipeline	HDPE PN 16, DN 250				HDPE PN 16, DN 300				
Pump Material	Volute Casing	Duplex Stainless Steel (DIN 1.4460)							
	Casing Cover	Duplex Stainless Steel (DIN 1.4460)							
	Impeller	Duplex Stainless Steel (DIN 1.4460)							
	Shaft	Duplex Stainless Steel (DIN 1.4460)							
	Flat Seal	C-4430							
	O-ring	NBR							
	Shaft Seal	Gland Packing (Graphite/PTFE7.300)							
Diesel Engine Driver	Brand / Origin	VMAN / China (CAT, Volvo or others are available on request)							
	Model	D 22 B3				D22 B			
	Continuos Power	404 kW/1800 RPM				517 Kw / 1800 RPM			
	Engine Design	4-Cycle, V-type, 12-Cylinder, Turbo charged & inter-cooled							
	Displacement	21.9 Liter							
	Lubrication Metode	Fully forced pressure feed type							
	Cooling Methode	Fresh Water Force Circulation (Radiator)							
	Governor	E-Gov							
	Fuel Consumption	98 liter / hour				128 liter / hour			

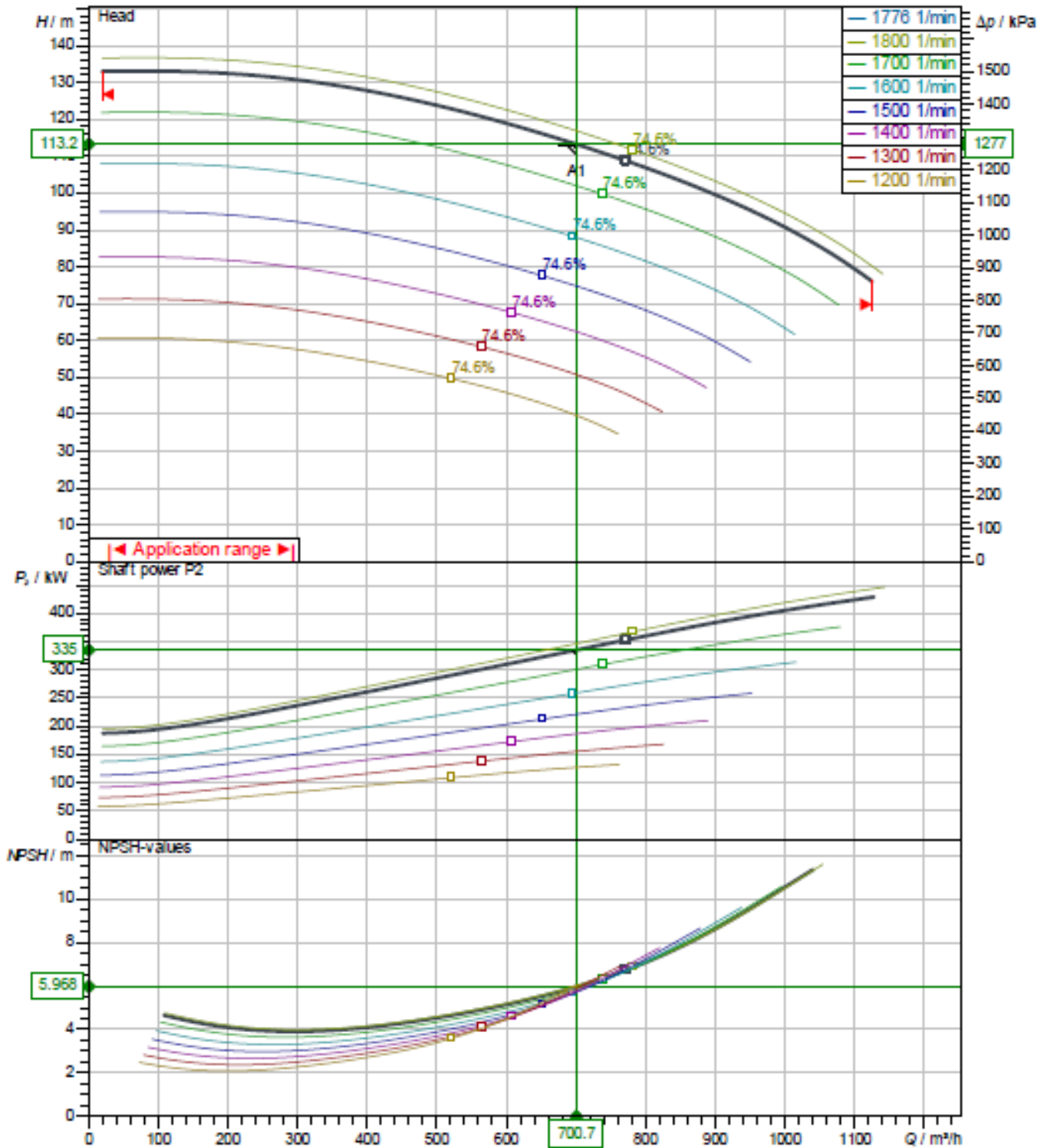


VMAN Diesel Engine Datasheet

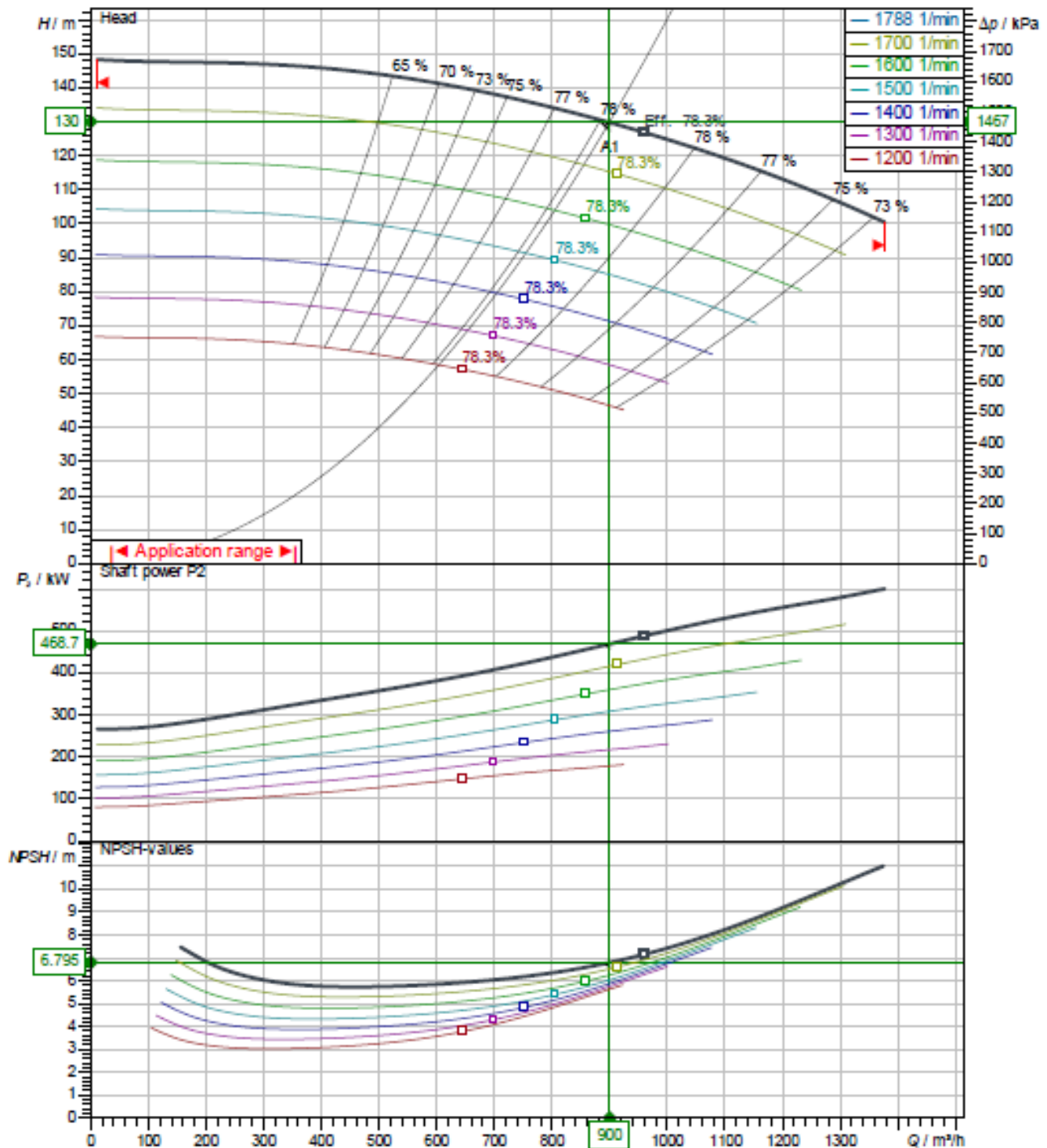
General Engine Data		D22B3	D22B
Engine Powers : Prime/sStandby/Continuous		525/577/404 kW	617/739/517 kW
Engine Model		4-Cycle, V-type, 12-Cylinder, Turbo charged & inter-cooled (air to air)	
Engine Type		1800 Rpm	
Bore x stroke		128 x 142 mm	
Displacement		21.927 L	
Compression Ration		15.5 : 1	
Rotations (Looking at flywheel)		Counter Clockwise (CCW)	
Firing Order		1-12-5-8-3-10-6-7-2-11-4-9	
Injection Timing		20°±1° BTDC @ 1800 rpm	
Dry Weight		1575 kg	
Dimension		1995 x 1392 x 1312 mm	
Flywheel Housing		SAE 1 or SAE 0	
Flywheel		14{PCD:438.15mm/17.25inch} or 18{PCD:543mm/31.38inch}	
Number Of Theeth on Flywheel		160	
Piston Speed		8.52 m/s	
Lubrication Systems		D22B3	D22B
Lub. Method		Fully forced pressure feed type	
Oil Filter		Full flow, cartridge type	
Lub Oil Specification		CF-4	
Lube Oil Pressure		Idle Speed : Min 160 kPa	
Maximum Oil Temp		110 Deg C	
Max.Permissible Oil Temperature		90 Deg C	
Oil Comsumption (as % of fuel Consumption)		<0.5	
Oil Capacity		57 L	
Cooling System		D22B3	D22B
Cooling Method		Fresh Water Forced Circulation	
Coolant Capacity		Engine 23 L + Radiator 96 L	
Coolant Flow Rate		660 liters/min @1800rpm	
Pressure Cap		49 kPa	
Max. Permissible Temperature		90 Deg C	
Max. Coolant Warning Temperature		95 Deg C	
Max. Coolant Shutdown Temperature		105 Deg C	
Thermostat Open Temperature		71 Deg C	
Max. External Coolant System Restriction		Not Available	

*Optional others Diesel Engine Brand are available on request

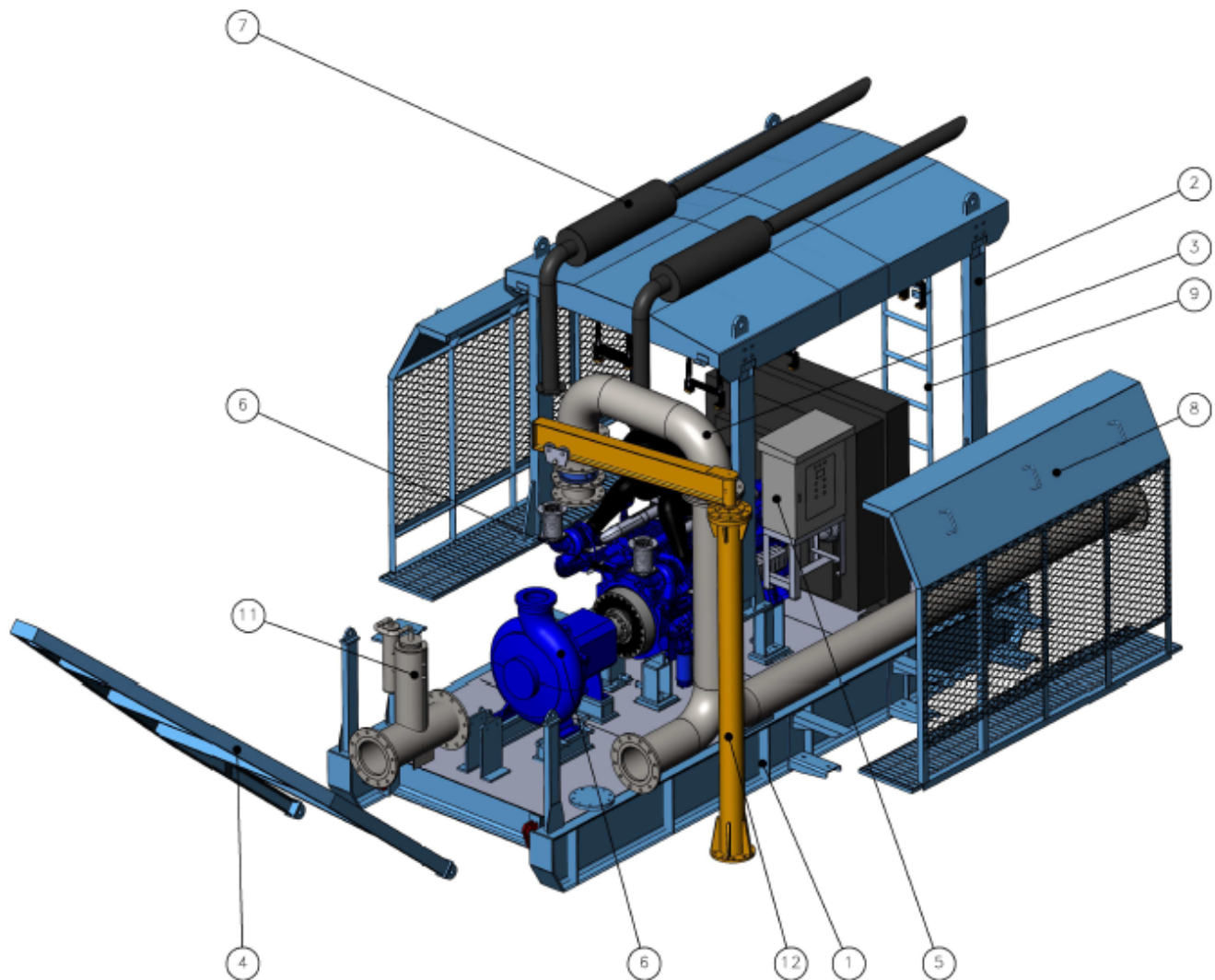
Performance curve : EBRO-APR 150-500-OP



Performance curve : EBRO-APR 200-500-OP



EBRO APR Series Exploded View



Part Number	Part Name	Qty
1	Skid Base Pump & Engine	1
2	Roof Canopy & Pillar	1
3	Discharge Line	1
4	Boom Suction	1
5	Control Panel	1
6	Pump Unit	1
7	Diesel Engine	1
8	Safety Blast	2
9	Rear Ladder	1
10	Exhaust Muffler	2
11	Vacuum Tank Priming Separator	1
12	JIB Crane	1

Pontoon Dimensional Data

