

# Equipment Data Sheet: Alfa Laval Lynx 40

The Alpha Laval Lynx 40 VFD is a Variable Frequency Drive, High Volume/High G Force Centrifuge built into a user friendly slim-line design.

## Dimensions

Overall Dimensions & Weight	
Weight	5,000 kg (11,000 lbs.)
Length X	5,080 mm (198.00 in.)
Height Y	1,490 mm (58.00 in.)
Width Z	1,360 mm (53.00 in.)

## Performances

G-Force & Feed Rate	
Max Design Speed	3,650 rpm
Max Operating Speed	3,000 rpm
Max G-Force	3,594 G @ 3,650 rpm
Max Sigma Value	4,049 m <sup>2</sup> (43,583 ft <sup>2</sup> ) @ 3,000 rpm
Hydraulic Capacity	128.0 m <sup>3</sup> /h (528 GPM)
Max Solids Discharge Rate	12.5 m <sup>3</sup> /h (55 GPM)

## Physical Data

Rotating Assembly	
Bowl Diameter (Internal)	482.6 mm (19.00 in.)
Bowl Length (Internal)	2,032 mm (80.00 in.)
Pond Setting	126mm - 180mm
Bowl Material	Stainless Steel Duplex
Bushings Protection	Tungsten Carbide Solids Discharge
Scroll Type	Single Lead – Quasi Axial Flow
Scroll Pitch	152 mm (5.98 in.)
Scroll Angle	6°
Scroll Material	Stainless Steel Duplex
Flights Protection	Scroll Fitted with Tungsten Carbide Ti Ies
Pillow Block	Split Pi I low Block
Pillow Block Bearings	Grease Lubricated - Manual
Internal Bearings	Grease Lubricated - Manual
Feed Tube	Open Ended

## Physical Data

Gearbox	
Type	Planetary Gearbox, Ratio 169:1
Max Output Torque	6,000 Nm (4,425 ft·lb)
Operating Differential	1 – 40 rpm
Drive & Operating System	
Voltage	440/480 Volt, 60 Hz, 3 Phase
Main Drive Motor	93 kW (125 HP)
Back Drive Motor	15 kW (20 HP)
Control System	PLC (Programmable Logic Controller)
Drive System	VFD (Variable Frequency Drive)
Safety Features	
Safety Devices	Micro-switch on Vessel & Guards to Avoid Start-up While Servicing. Vibration Shut off Sensors
Display (Settings)	Bowl Speed, Differential Value, Feed Rate, Current Adsorbed
Automatic Safety System	Continuous Monitoring& Self Shutdown on All Critical Parameters , Automatic Control to Avoid Pack-off& Automatic Unplugging Procedure.
Certification	
Certification	Class I , Division I Hazardous Areas for USA & Canada
Operating Temperature	0 +40°C (+32 +104 °F)
Storage Temperature	-20 +40°C (-4 +104 °F)
Process Fluid Temperature	Drilling Fluid: < 85°C (185°F)

## Nozzle Schedule

Connection	
Feed Pipe	2" ANSI B 16.5 Welding Neck
Liquid Discharge	6 in. Victaulic
Solids Discharge	810 x 450 mm (31.89 x 17.72 in.)

