

Applications



BUILDING SERVICES | General water transfer; pressure boosting; chilled & condenser water circulation in air-conditioning systems; fire hose reel; landscaping & water feature applications.

V
Linear's typical application in a Variable Speed Drive pressure booster system



INDUSTRIAL | Water circulation & machine cooling; boiler feed; high pressure washing system; heat exchanger and other industrial processes.

WATER TREATMENT | Water treatment system handling non-aggressive liquid; ultra-filtration system; reverse osmosis.



AGRICULTURAL & FARMING | Horticultural irrigation systems; light irrigation for lawns & gardens; sprinkler application.

LINEAR's extensive range was developed to meet a wide demand of flowrates & pressure heads.

The range consists 125 models with bore sizes from dia. 25mm to 80mm and flowrates up to 1,250 litres/min at pressure heads that can reach 29 bar with the multiple stage feature. This ensures the best hydraulic selection of a most suitable pump, with optimised operating efficiency and lowest power consumption, to meet specific operating duty point.



© | Copyrights Reserved | Monoflo Pumps Pty Ltd

“Linear”...
A Reflection of
Customers' Needs.



LN Stainless Steel Vertical Multistage In-line Centrifugal Pump



© | Copyrights Reserved

General

Excellent design features place MONOFLO's 'Linear' stainless steel vertical multistage in-line pump at a high level of quality and optimum performance.

Understanding today's demanding requirements in the pumping applications in building services as well as in the fields of industrial & manufacturing, Linear is designed to fulfill all these.

Linear comprises an extensive range of models with various number of stages to meet flowrates and pressure heads up to 1250 litres/min and 29bars respectively.



Λ
Connection options | Flange LN(S)F, or Cutting Ferrule LN(S)V type

Design Features

STAINLESS STEEL CONSTRUCTION | All wetted parts are produced in high quality polished pressed stainless steel, which offers excellent corrosion resistance and increased durability. The smooth and uniform surface ensures optimum performance, maintaining high efficiency throughout pump life and lower power consumption, hence lowering operating cost.

Depending on the medium to be handled, Linear offers two main variance of material of construction. The wetted hydraulic parts of Model LN is constructed in 304 stainless steel. For medium containing slightly more aggressive elements, Model LNS offers SS316-grade construction.

VERTICAL IN-LINE CONSTRUCTION | The 'in-line' suction-discharge ports simplifies installation and pipe layout. Suction and discharge pipes are both fitted to the casing, allowing the pump hydraulics to be maintained without disturbance to the pipework.

Where floor space is a constrain, the Linear with the 'vertical in-line' construction requires minimal installation area.

PIPE CONNECTIONS | Depending on requirements, various versions of pipe connections are available. Both Models LN & LNS are available in **DIN flange connections**; and up to LN(S)16, connections are also available in either **threaded** or **cutting ferrule** type. Flanges also available in ANSI or JIS standards.

IMPELLERS | Impellers are of enclosed type, with vanes and shrouds precision-pressed and projection-welded to form efficient hydraulic components.

SHAFT SEALING | Tungsten carbide-carbon mechanical seals conforming to DIN24960 are fitted as standard. Depending on application, choices of sealing materials are available as options.

MOTORS | Linear is supplied with IP55 weatherproof rating, IEC standard, aluminium frame, TEFC type electric motors. NEMA motors can also be fitted as options.



Λ
Typical application in building services - water transfer, pressure boosting, etc.

monoflo PUMPS

...engineering flow in our life

monoflo

monoflo

As MONOFLO Pumps is constantly improved, we reserve the right to make specification changes without prior notice and without incurring liability.

© | Copyrights Reserved | Monoflo Pumps Pty Ltd

monoflo
MONOFLO PUMPS PTY LTD

For inquiries, services & spare parts
Distributor

cat.linear/revA/05

Operating Limits

LIQUID HANDLED | Clean water or slightly-aggressive liquid compatible to AISI 304/ 316.

WORKING PRESSURE | Maxi-mum working pressure up to **30 bar** dependence on temperature of fluid handled and the number of pump stages. [Refer to Linear Technical Manual]

FLOWRATE | Maximum capacity up to **1 251 litres/ min** or **75 m3/hr.**

DISCHARGE PRESSURE | Maximum discharge pressure up to **29 bar** or **290 metres.**

OPERATING TEMPERATURE | The ambient temperature shall not exceed **40°C**. Temperature range of medium pumped, from **-15°C** to **120°C**.

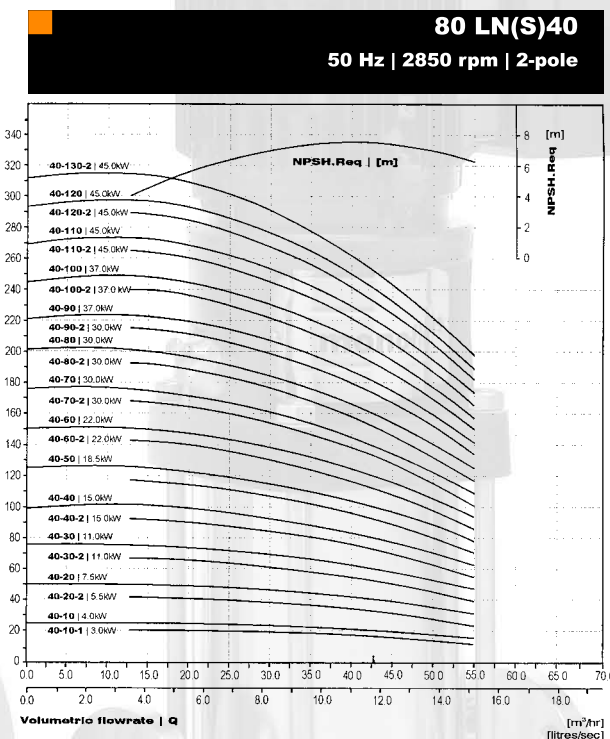
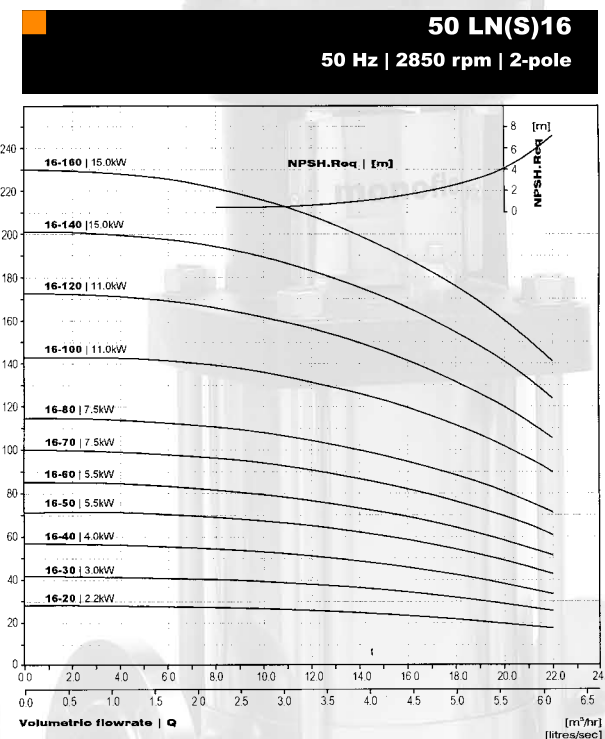
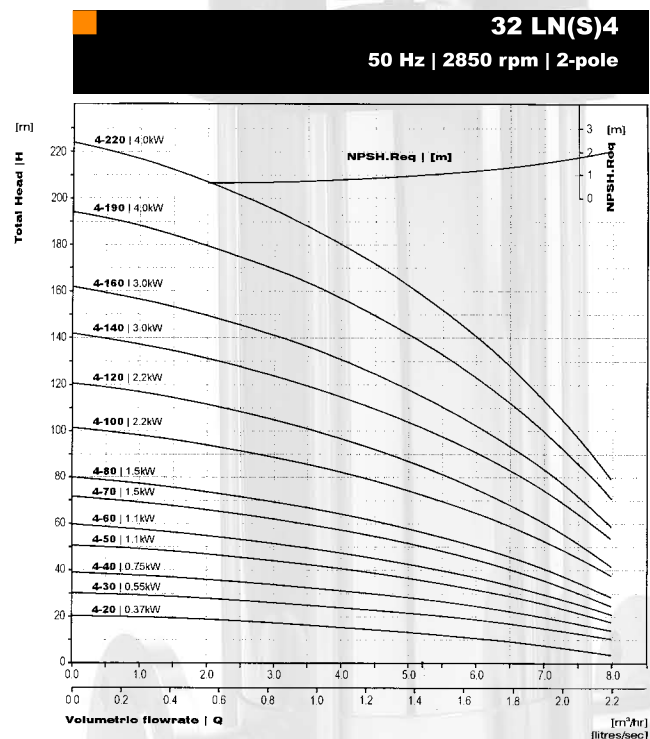
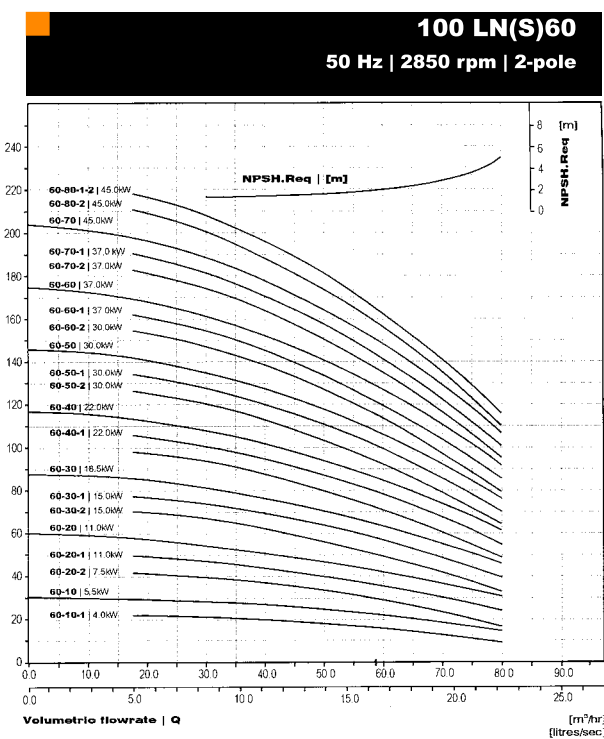
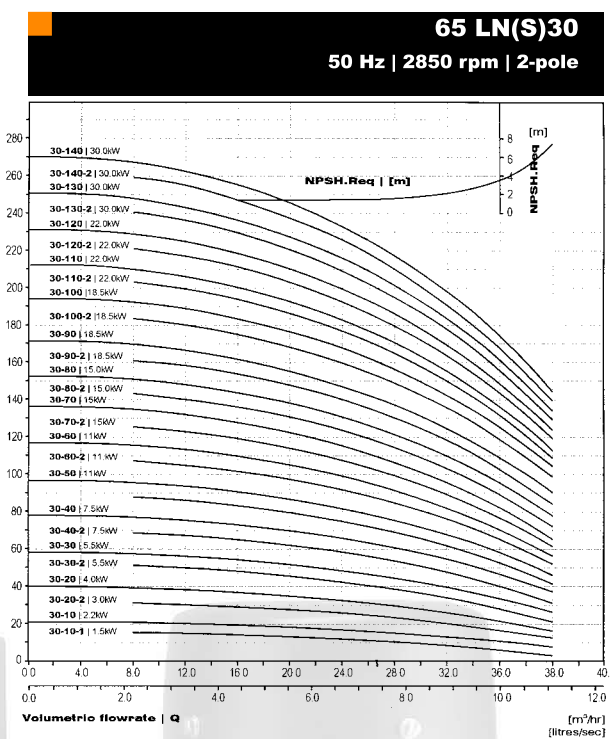
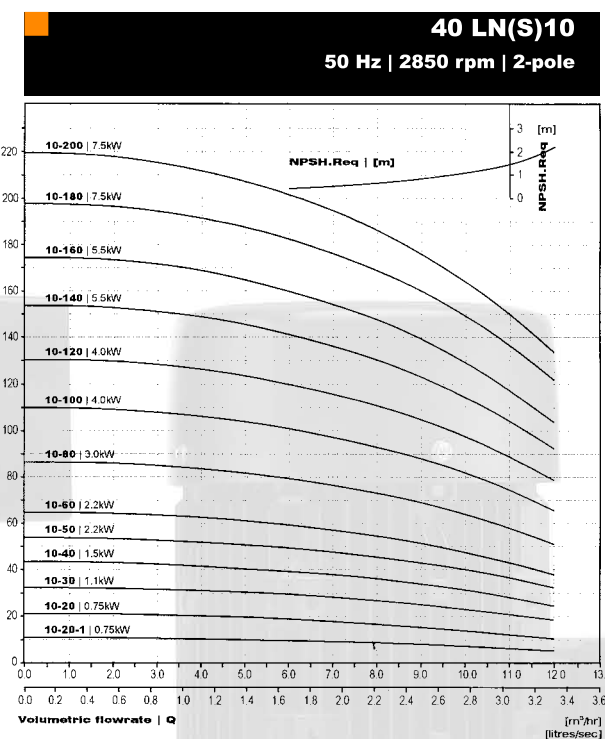
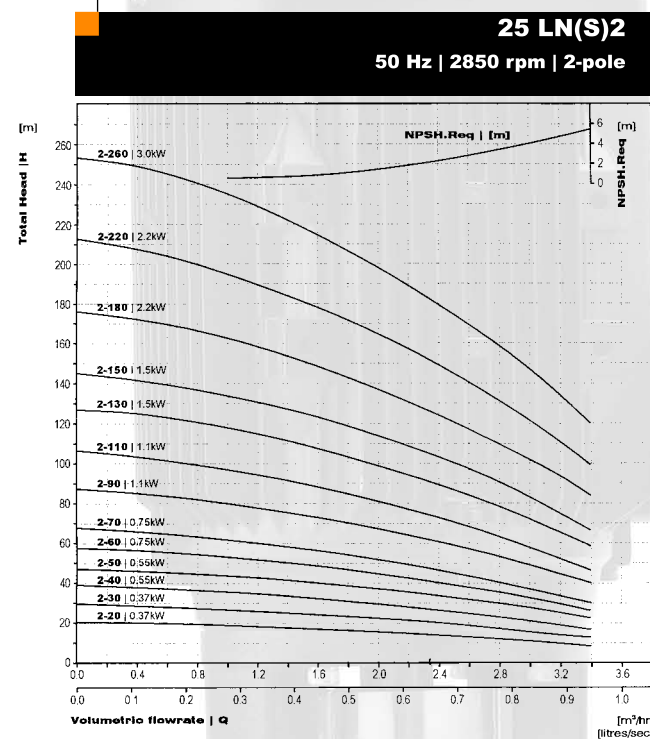
OPERATING SPEED | Nominal operating speed is **2 900 r.p.m.** at **50Hz**, and **3 600 r.p.m.** at **60Hz**

Technical Data

Material of construction		
Parts	Material	Model LNS
Top plate pump inlet & outlet port impellers diffusers cylinder sleeve	Stainless Steel AISI304	Stainless Steel AISI316
Pump shaft	Stainless Steel AISI303	Stainless Steel AISI316
Bearing (bush)	Tungsten Carbide	
Pump base	Cast Iron ASTM 25B	
Motor bracket	Cast Iron ASTM 25B	
Priming plug	Stainless Steel AISI 304	
Neck ring	P T F E	
Mechanical seals (DIN 24960)	Standard Tungsten carbide/ Graphite/ F P M	
	Optional Silicon Carbide/ Silicon Carbide/ F P M	
Motor data		
Motor type	Totally Enclosed Fan-cooled TEFC	
Protection	IP 5 5 Protection Weatherproof	
Insulation	Class 'F'	
Rating	Continuous	
Voltage	50Hz 220~240Volts/1-ph 380~415Volts/3-ph 60Hz 110~220Volts/1-ph 220~460Volts/3-ph	

Performance Curves

- Curve tolerance in accordance to ISO9906, Appendix A
- Water test temperature at 20°C



Model Designation

65 LN (S) F 30 - 100 / 5 T

Motor phase
M | Single-phase
T | Three-phase

Motor frequency
5 | 50 Hz
6 | 60 Hz

No. of impeller stages (x10) | **10 stages**

Pump nominal flowrate in m³/hr | **30m³/hr**

Connection type
F | Flange
T | Threaded
V | Cutting ferrule

'Linear' Series model prefix.
L N | 304 stainless steel version
L N S | 316 stainless steel version

Pump suction/discharge connection size| **65mm**



monoflo P U M P S
...engineering flow in our life