

ALM / ALP

ELECTRIC IN-LINE PUMPS



TECHNICAL DATA

Operating range:

from 0,6 to 8,4 m³/h with head up to 21 metres.

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water. Maximum glycol content 30% (for other glycol percentages contact Technical Support).

Pumped liquid temperature range: from -15 °C to +120 °C.

Maximum ambient temperature: +40 °C.

Maximum operating pressure: 10 bar (1000 kPa).

Unions on request: see the final ACCESSORIES table.

Special executions on requests: alternative voltages and frequencies.

APPLICATIONS

Hot or cold water circulation pump with in-line ports, suitable for installation directly on the pipework of civil and industrial heating, air conditioning, refrigeration, and sanitary water systems.

CONSTRUCTION FEATURES OF THE PUMP

Cast iron pump body and motor support for ALM 500 and ALP 2000, bronze for ALM 200 and ALP 800.

1" 1/2 M-GAS suction and delivery ports for ALM 200 and ALP 800, and 2" M-GAS for ALM 500 and ALP 2000. Technopolymer impeller. Carbon/ceramic mechanical seal.

CONSTRUCTION FEATURES OF THE MOTOR

External ventilation cooling, closed, asynchronous type, with four poles for the ALM version, and two poles for the ALP version.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3.

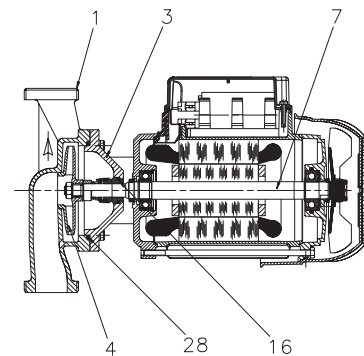
Protection class: IP 55

Insulation class: F

| | | |
|-------------------|--------------|-------------------|
| Standard voltage: | single-phase | 220-240 V, 50 Hz. |
| | three-phase | 230/400 V, 50 Hz |

MATERIALS

| N. | PARTS* | MATERIALS | MODELS |
|----|------------------|---|--------------------|
| 1 | PUMP BODY | BRONZE G Cu Sn5 Zn5 Pb5 UNI 7013/8 ^a -72 | ALM 200 - ALP 800 |
| | | CAST IRON 250 UNI ISO 185 | ALM 500 - ALP 2000 |
| 3 | SUPPORT | BRONZE G Cu Sn5 Zn5 Pb5 UNI 7013/8 ^a -72 | ALM 200 - ALP 800 |
| | | CAST IRON 250 UNI ISO 185 | ALM 500 - ALP 2000 |
| 4 | IMPELLER | TECHNOPOLYMER | |
| 7 | SHAFT WITH ROTOR | AISI 303 STAINLESS STEEL X10 CrNiS 1809 UNI 6900/71 | |
| 16 | MECHANICAL SEAL | CARBON / CERAMIC | |
| 28 | OR RING | EPDM RUBBER | |

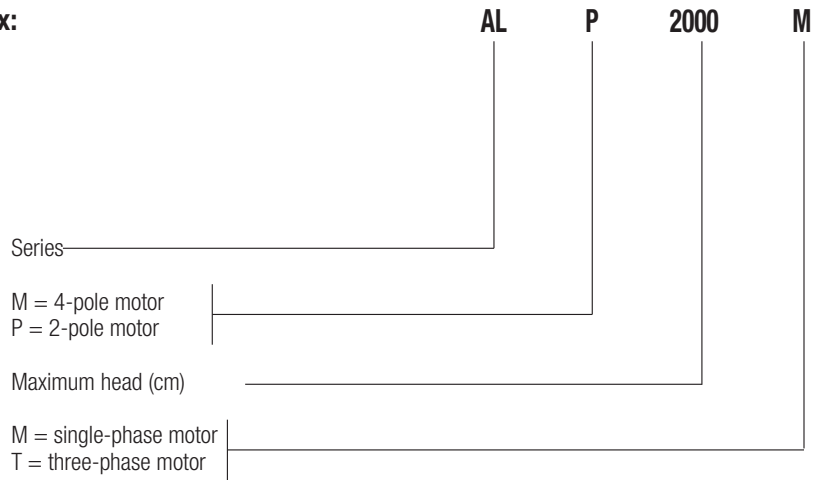


* In contact with the liquid

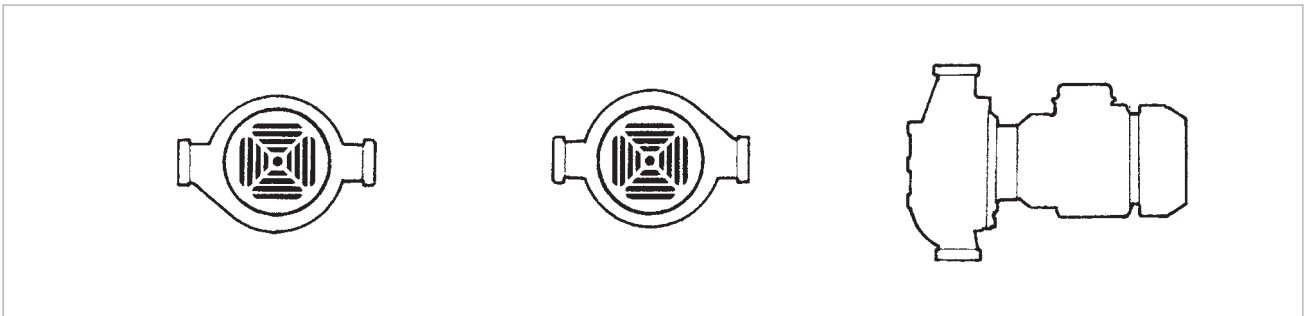
ALM / ALP

ELECTRIC IN-LINE PUMPS

– Denomination index:
(example)



Fixed horizontal installation for ALM 200 and ALP 800; both horizontal and vertical installation for ALM 500 and ALP 2000.



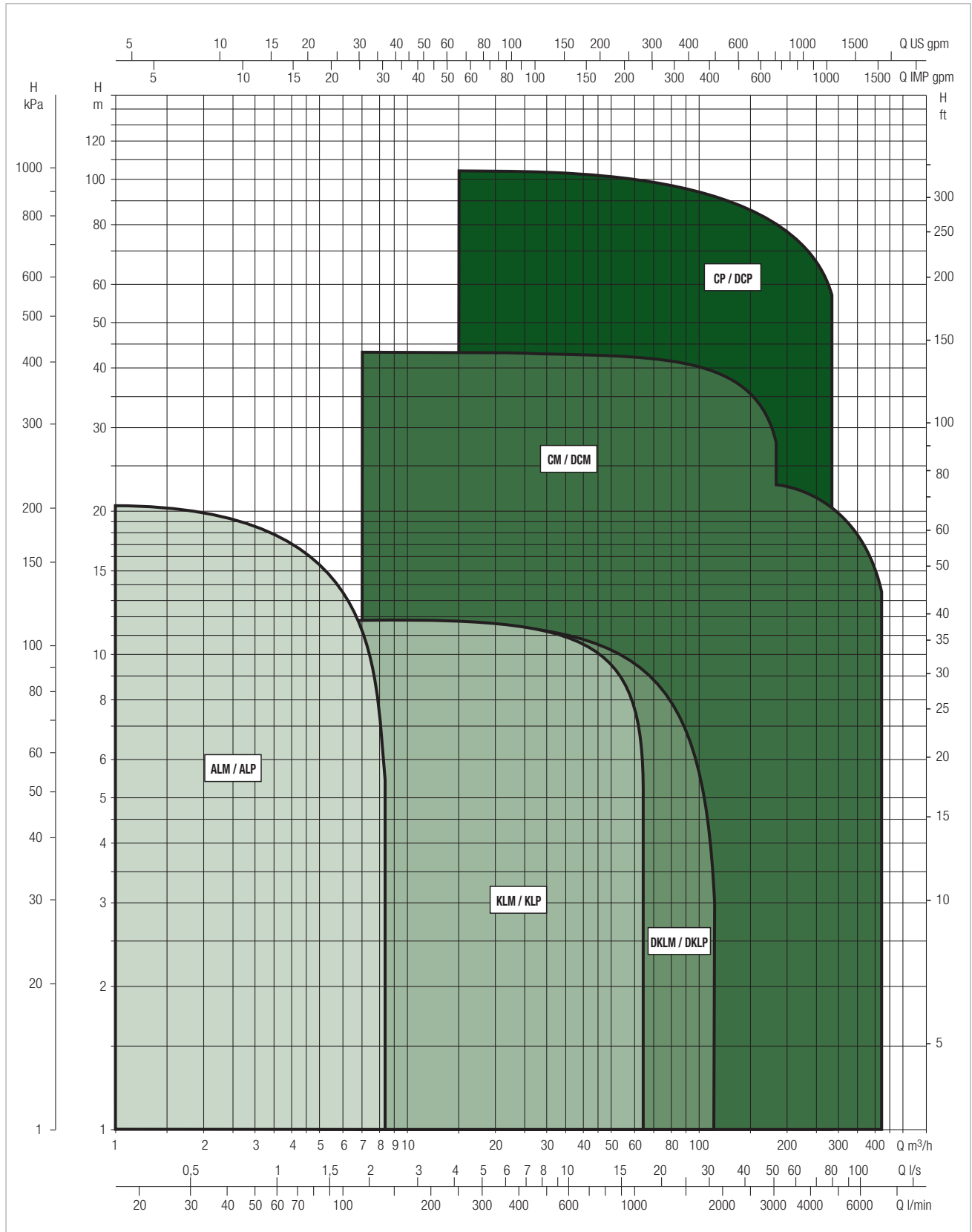
ELECTRIC IN-LINE PUMPS

IN-LINE ELECTRIC PUMPS FOR CIRCULATION SYSTEMS

PERFORMANCE RANGE

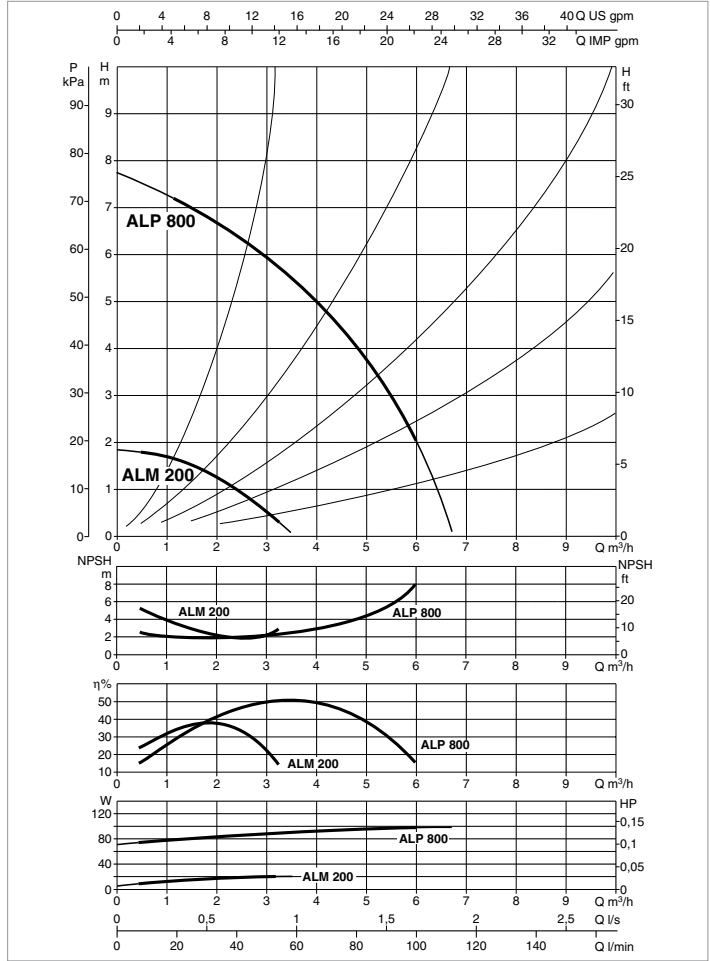
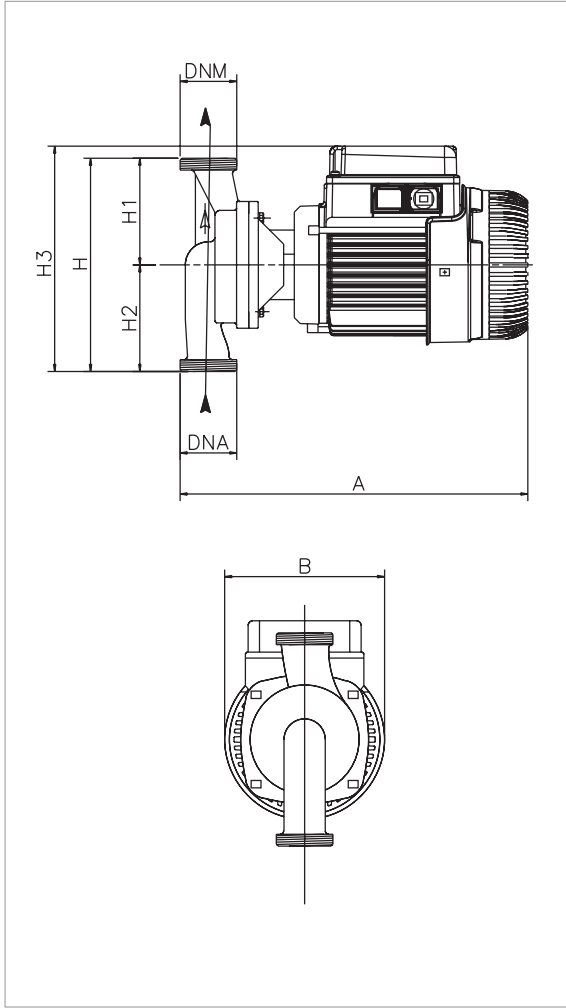
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE



ALM 200 / ALP 800 - IN-LINE ELECTRIC PUMPS FOR HEATING, AIR CONDITIONING, REFRIGERATION, SOLAR, AND SANITARY SYSTEMS - SINGLE, THREADED

Pumped liquid temperature range: from -15 °C to +120 °C - Maximum ambient temperature: +40 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

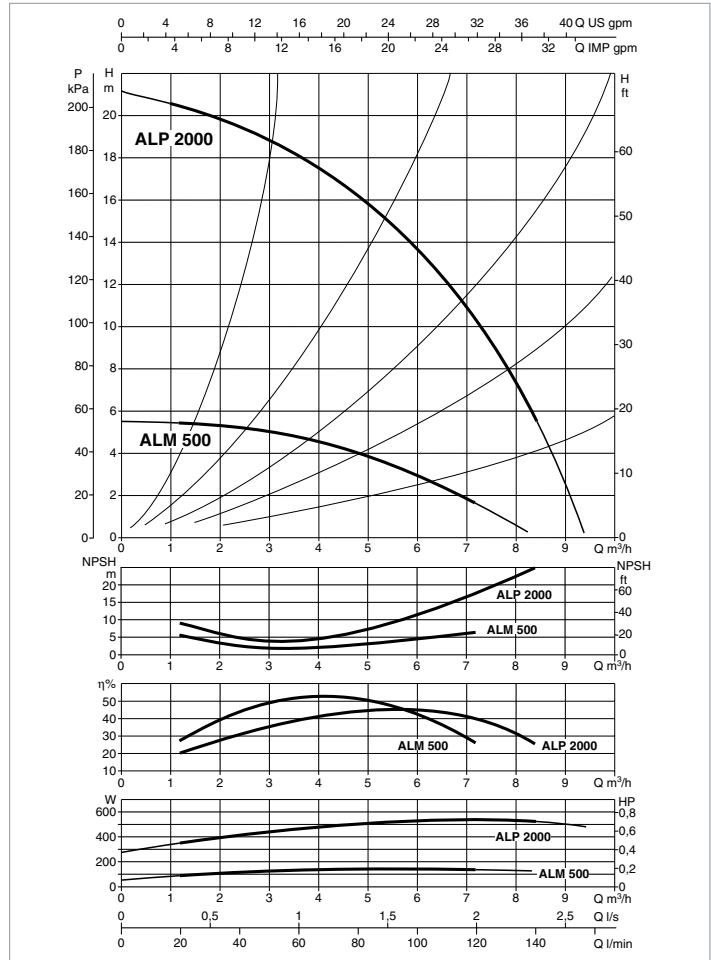
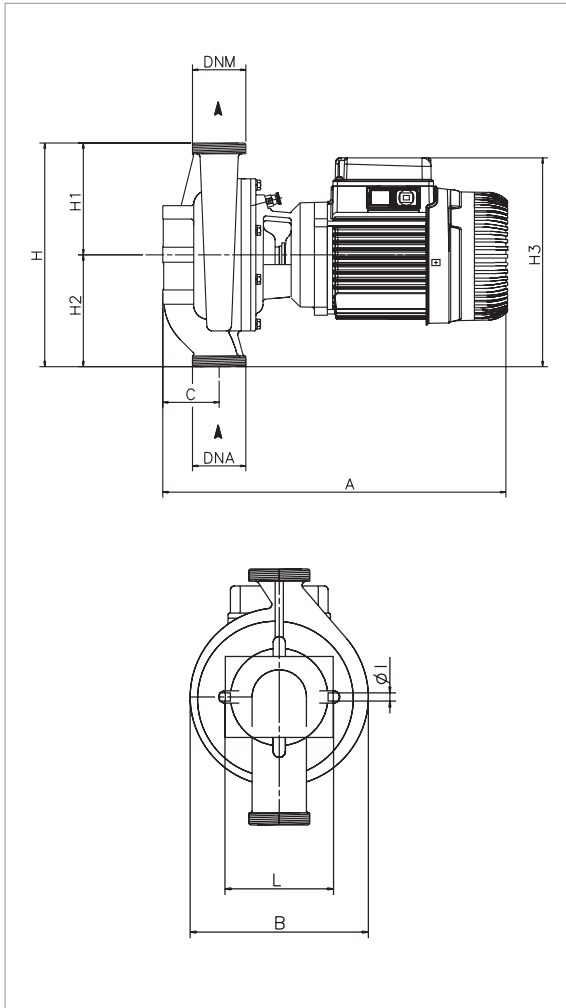
| MODEL | Q=m³/h | 0 | 1,2 | 2,4 | 3,6 | 4,8 | 6 |
|-----------|---------|-----|------|-----|-----|-----|-----|
| | Q=l/min | 0 | 20 | 40 | 60 | 80 | 100 |
| ALM 200 M | H (m) | 1,9 | 1,65 | 1 | | | |
| ALM 200 T | | 1,9 | 1,65 | 1 | | | |
| ALP 800 M | | 7,7 | 7,2 | 6,3 | 5,8 | 3,9 | 2 |
| ALP 800 T | | 7,7 | 7,2 | 6,3 | 5,8 | 3,9 | 2 |

| MODEL | CENTRE DISTANCE | ELECTRICAL DATA | | | | | | | | |
|-----------|-----------------|------------------------|------------|----------|----------|------------|------|----------|-----------|-----|
| | | POWER INPUT 50 Hz | MOTOR TYPE | n r.p.m. | P1 MAX W | P2 NOMINAL | | In A | CAPACITOR | |
| | | | | | | kW | HP | | µF | Vc |
| ALM 200 M | 180 | 1x220-240 V ~ | 4 POLES | 1480 | 0,14 | 0,059 | 0,08 | 0,7 | 8 | 450 |
| ALM 200 T | 180 | 3x230 V ~ 3x400 V ~ | 4 POLES | 1475 | 0,08 | 0,059 | 0,08 | 0.53-0.3 | - | - |
| ALP 800 M | 180 | 1x220-240 V ~ | 2 POLES | 2925 | 0,24 | 0,37 | 0,5 | 1,4 | 10 | 450 |
| ALP 800 T | 180 | 3x230 V ~ 3x400 V ~ | 2 POLES | 2915 | 0,20 | 0,37 | 0,5 | 1.2-0.7 | - | - |

| MODEL | A | B | C | L | ∅ | H | H1 | H2 | H3 | DNA NPT | DNM NPT | PACKING DIMENSIONS | | | VOLUME (m³) | WEIGHT kg |
|---------|-----|-----|---|---|---|-----|----|----|-----|------------|------------|--------------------|-----|-----|-------------|-----------|
| | | | | | | | | | | | | L/A | L/B | H | | |
| ALM 200 | 300 | 136 | - | - | - | 180 | 90 | 90 | 190 | 1 1/2" G-M | 1 1/2" G-M | 332 | 202 | 257 | 0,017 | 7,5 |
| ALP 800 | 300 | 136 | - | - | - | 180 | 90 | 90 | 190 | 1 1/2" G-M | 1 1/2" G-M | 332 | 202 | 257 | 0,017 | 7,5 |

ALM 500 / ALP 2000 - IN-LINE ELECTRIC PUMPS FOR HEATING, AIR CONDITIONING, REFRIGERATION, SOLAR, AND SANITARY SYSTEMS - SINGLE, THREADED

Pumped liquid temperature range: from -15 °C to +120 °C - Maximum ambient temperature: +40 --°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL | Q=m³/h | 0 | 1,2 | 2,4 | 3,6 | 4,8 | 6 | 7,2 | 8,4 |
|------------|---------|------|------|------|-----|-----|------|------|-----|
| | Q=l/min | 0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 |
| ALM 500 M | H (m) | 5,5 | 5,4 | 5,3 | 4,8 | 4,1 | 3 | 1,5 | |
| ALM 500 T | | 5,5 | 5,4 | 5,3 | 4,8 | 4,1 | 3 | 1,5 | |
| ALP 2000 M | | 21,1 | 20,6 | 19,6 | 18 | 16 | 13,8 | 10,5 | 5,3 |
| ALP 2000 T | | 21,1 | 20,6 | 19,6 | 18 | 16 | 13,8 | 10,5 | 5,3 |

| MODEL | CENTRE DISTANCE | ELECTRICAL DATA | | | | | | | | |
|------------|-----------------|------------------------|------------|----------|----------|------------|------|---------|-----------|-----|
| | | POWER INPUT 50 Hz | MOTOR TYPE | n r.p.m. | P1 MAX W | P2 NOMINAL | | In A | CAPACITOR | |
| | | | | | | kW | HP | | µF | Vc |
| ALM 500 M | 250 | 1x220-240 V ~ | 4 POLES | 1425 | 0,22 | 0,25 | 0,33 | 1 | 8 | 450 |
| ALM 500 T | 250 | 3x230 V ~ 3x400 V ~ | 4 POLES | 1465 | 0,19 | 0,25 | 0,33 | 1-0.6 | - | - |
| ALP 2000 M | 250 | 1x220-240 V ~ | 2 POLES | 2870 | 0,75 | 0,55 | 0,75 | 3,7 | 16 | 450 |
| ALP 2000 T | 250 | 3x230 V ~ 3x400 V ~ | 2 POLES | 2830 | 0,66 | 0,55 | 0,75 | 2.3-1.3 | - | - |

| MODEL | A | B | C | L | Ø | H | H1 | H2 | H3 | DNA NPT | DNM NPT | PACKING DIMENSIONS | | | VOLUME (m³) | WEIGHT kg |
|----------|-----|-----|----|----|---|-----|-----|-----|-----|---------|---------|--------------------|-----|-----|-------------|-----------|
| | | | | | | | | | | | | L/A | L/B | H | | |
| ALM 500 | 386 | 174 | 63 | 95 | 8 | 250 | 125 | 125 | 235 | 2" G-M | 2" G-M | 492 | 232 | 292 | 0,033 | 14,5 |
| ALP 2000 | 386 | 174 | 63 | 95 | 8 | 250 | 125 | 125 | 235 | 2" G-M | 2" G-M | 492 | 232 | 292 | 0,033 | 14,5 |