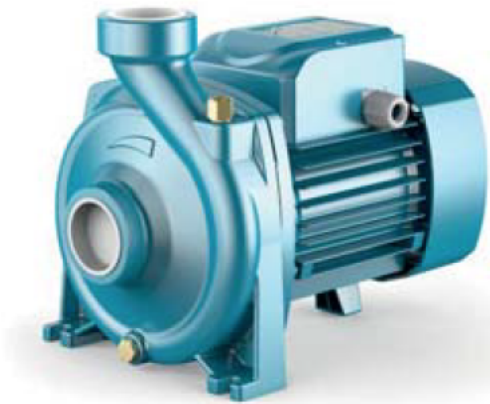


# ICH

## CENTRIFUGAL PUMPS



Clean water
 Domestic use
 Industrial use



### PERFORMANCE RANGE

- Flow rate up to **600 l/min** (36 m<sup>3</sup>/h)
- Head up to **33 m**

### APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure:
  - **6 bar** for ICH 100
  - **10 bar** for ICH 150, 200, 300, 150B, 200A
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1  
 IEC 60335-1  
 CEI 61-150

EN 60034-1  
 IEC 60034-1  
 CEI 2-3



| MODEL        |             | POWER (P <sub>2</sub> ) |     | Q<br>m <sup>3</sup> /h<br>l/min | 0    | 3    | 6    | 9    | 12   | 15   | 18   | 21  | 24   | 30   | 36  |  |
|--------------|-------------|-------------------------|-----|---------------------------------|------|------|------|------|------|------|------|-----|------|------|-----|--|
| Single-phase | Three-phase | kW                      | HP  |                                 | 0    | 50   | 100  | 150  | 200  | 250  | 300  | 350 | 400  | 500  | 600 |  |
| ICH 100M     | ICH 100     | 0.75                    | 1   | H metres                        | 21.2 | 20.2 | 19   | 17   | 14.5 | 11.6 | 8.4  |     |      |      |     |  |
| ICH 150M     | ICH 150     | 1.1                     | 1.5 |                                 | 29   | 28   | 26.5 | 24.5 | 22   | 18.5 | 15   |     |      |      |     |  |
| ICH 200M     | ICH 200     | 1.5                     | 2   |                                 | 33   | 32   | 30.5 | 28.5 | 26   | 22.5 | 19   |     |      |      |     |  |
| –            | ICH 300     | 2.2                     | 3   |                                 | 39   | 38   | 36.5 | 34.5 | 32   | 28.5 | 25   |     |      |      |     |  |
| ICH 150BM    | ICH 150B    | 1.1                     | 1.5 |                                 | 19   | –    | 18.5 | 18   | 17   | 16   | 15.2 | 14  | 12.8 | 9.7  | 6   |  |
| ICH 200AM    | ICH 200A    | 1.5                     | 2   |                                 | 22   | –    | 21.5 | 21   | 20.5 | 19.8 | 19   | 18  | 16.8 | 13.8 | 10  |  |

Q = Flow rate  
 H = Total manometric head  
 HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

| MODEL        |             | PORTS |     | DIMENSIONS mm |     |     |     |     |     |     |      |    | kg   |      |
|--------------|-------------|-------|-----|---------------|-----|-----|-----|-----|-----|-----|------|----|------|------|
| Single-phase | Three-phase | DN1   | DN2 | a             | f   | h   | h1  | h2  | n   | n1  | w    | s  | 1~   | 3~   |
| ICH 100M     | ICH 100     | 1½"   | 1½" | 45            | 300 | 225 | 92  | 133 | 190 | 160 | 4    | 10 | 13.0 | 12.0 |
| ICH 150M     | ICH 150     |       |     | 48.5          | 373 | 269 | 114 | 155 | 216 | 171 | 12   | 12 | 19.0 | 18.6 |
| ICH 200M     | ICH 200     |       |     | 48.5          | 373 | 269 | 114 | 155 | 216 | 171 | 12   | 12 | 21.8 | 20.5 |
| -            | ICH 300     |       |     | -             | -   | -   | -   | -   | -   | -   | -    | -  | -    | -    |
| ICH 150BM    | ICH 150B    | 2"    | 2"  | 59            | 386 | 260 | 110 | 150 | 208 | 160 | 12.5 | 11 | 20.1 | 19.2 |
| ICH 200AM    | ICH 200A    |       |     | 59            | 386 | 260 | 110 | 150 | 208 | 160 | 12.5 | 11 | 21.5 | 20.8 |

## ABSORPTION

| MODEL        | VOLTAGE |       |        |
|--------------|---------|-------|--------|
|              | 230 V   | 240 V | 110 V  |
| Single-phase |         |       |        |
| ICH 100M     | 5.6 A   | 5.3 A | 11.2 A |
| ICH 150M     | 8.0 A   | 7.6 A | 16.0 A |
| ICH 200M     | 10.0 A  | 9.0 A | 20.0 A |
| ICH 150BM    | 7.7 A   | 7.1 A | 14.8 A |
| ICH 200AM    | 10.1 A  | 9.7 A | 20.5 A |

| MODEL       | VOLTAGE |       |       |       |       |       |
|-------------|---------|-------|-------|-------|-------|-------|
|             | 230 V   | 400 V | 690 V | 240 V | 415 V | 720 V |
| Three-phase |         |       |       |       |       |       |
| ICH 100     | 4.4 A   | 2.5 A | 1.5 A | 4.0 A | 2.3 A | 1.3 A |
| ICH 150     | 5.7 A   | 3.3 A | 1.9 A | 5.5 A | 3.2 A | 1.8 A |
| ICH 200     | 7.4 A   | 4.3 A | 2.5 A | 7.1 A | 4.1 A | 2.4 A |
| ICH 300     | 9.5 A   | 5.5 A | 3.2 A | 9.1 A | 5.3 A | 3.1 A |
| ICH 150B    | 5.7 A   | 3.3 A | 1.9 A | 5.5 A | 3.2 A | 1.8 A |
| ICH 200A    | 7.1 A   | 4.1 A | 2.4 A | 6.5 A | 3.7 A | 2.1 A |

## INSTALLATION AND USE

Suitable for use in civil and agricultural applications.

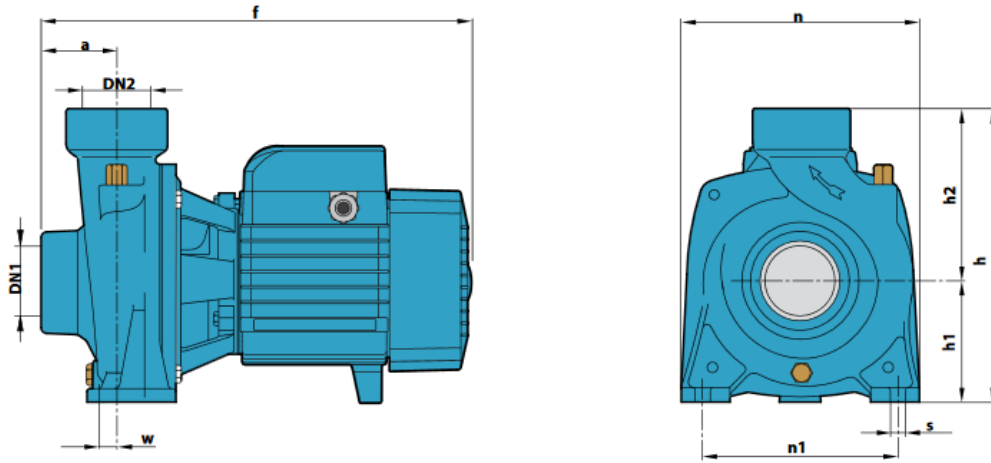
The high efficiency and continuous duty capabilities makes these pumps ideal for use in applications such as flood and spray irrigation, drawing water from lakes, rivers and wells, or for any number of different industrial applications where the characteristics of high flow rates and mid to low head are required.

The pump should be installed in an enclosed environment or sheltered from inclement weather.

## CONSTRUCTION CHARACTERISTICS

|                        |  |
|------------------------|--|
| <b>PUMP BODY</b>       | Cast iron complete with threaded ports in compliance with ISO 228/1  |
| <b>IMPELLER</b>        | Brass  |
| <b>MOTOR SHAFT</b>     | Stainless steel EN 10088-3 - 1.4104  |
| <b>MECHANICAL SEAL</b> | <b>ICH 100:</b><br>Ceramic - Graphite - NBR<br><br><b>ICH 150, 200, 300, 150B, 200A:</b><br>Graphite - Ceramic - NBR |
| <b>ELECTRIC MOTOR</b>  | The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30)                            |

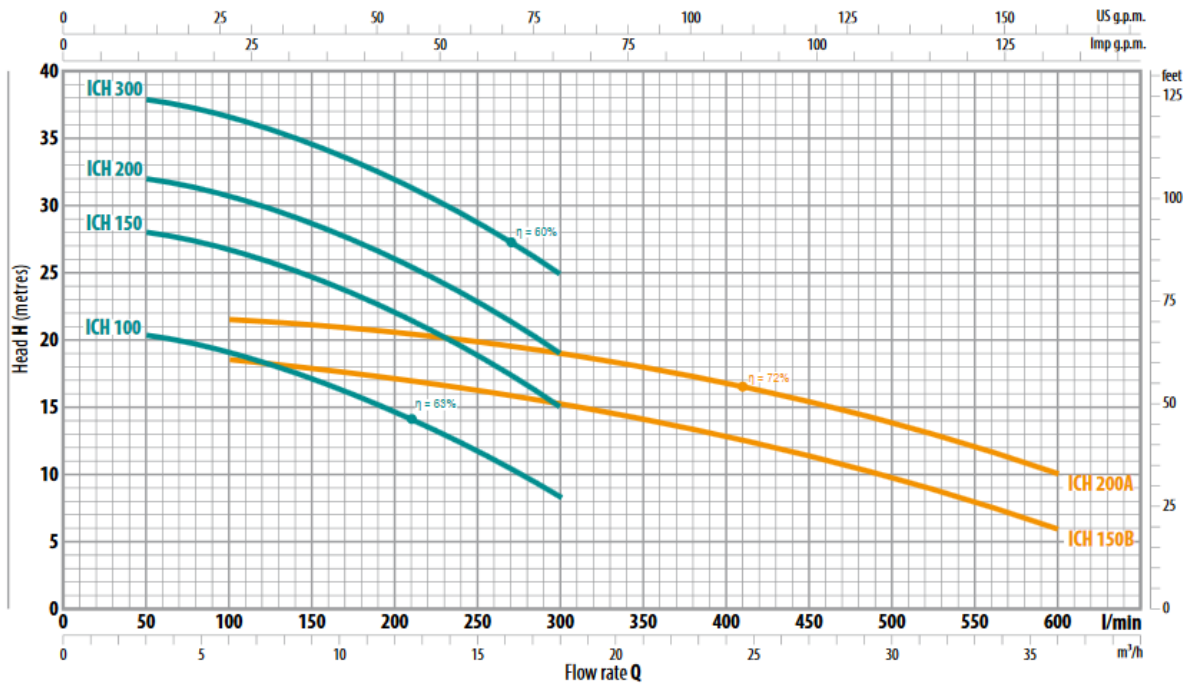
## DIMENSIONS AND WEIGHT



| MODEL        |             | PORTS |     | DIMENSIONS mm |      |     |     |     |     |     |      |    | kg   |      |
|--------------|-------------|-------|-----|---------------|------|-----|-----|-----|-----|-----|------|----|------|------|
| Single-phase | Three-phase | DN1   | DN2 | a             | f    | h   | h1  | h2  | n   | n1  | w    | s  | 1~   | 3~   |
| ICH 100M     | ICH 100     | 1½"   | 1½" | 45            | 300  | 225 | 92  | 133 | 190 | 160 | 4    | 10 | 13.0 | 12.0 |
| ICH 150M     | ICH 150     |       |     | 48.5          | 373  | 269 | 114 | 155 | 216 | 171 | 12   | 12 | 19.0 | 18.6 |
| ICH 200M     | ICH 200     |       |     | 21.8          | 20.5 |     |     |     |     |     |      |    |      |      |
| -            | ICH 300     |       |     | -             | 21.9 |     |     |     |     |     |      |    |      |      |
| ICH 150BM    | ICH 150B    | 2"    | 2"  | 59            | 386  | 260 | 110 | 150 | 208 | 160 | 12.5 | 11 | 20.1 | 19.2 |
| ICH 200AM    | ICH 200A    |       |     | 21.5          | 20.8 |     |     |     |     |     |      |    |      |      |

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz |  $n = 2900 \text{ min}^{-1}$  |  $H_S = 0 \text{ m}$



## Model ICH 200A / Centrifugal Pumps 2"