



### I Application

The sanitary and cost-efficient design of the Hyginox SE centrifugal pump makes it particularly suitable as main process pump in the dairy, beverage, pharmaceutical and cosmetic industries.

### I Design and features

Hyginox SE is a range of close-coupled centrifugal pumps with sanitary design, compact and efficient. It is made of a cold-formed stainless steel casing, stainless steel open impeller (investment casting), mechanical seal, pump cover, lantern and shaft, connected to the motor shaft by mechanical compression.

The motor complies with the IEC standards, it is protected with a stainless steel shroud and provided with the height adjustable hygienically designed legs.

### I Technical specifications

#### Materials:

|                                     |  |
|-------------------------------------|--|
| Parts in contact with the product   | Stainless steel AISI 316L (1.4404)       |
| Other steel parts                   | Stainless steel AISI 304 (1.4301)        |
| Gaskets in contact with the product | EPDM (according to FDA and EC 1935/2004) |

Single internal mechanical seal EN 12756 I1k (according to FDA and EC 1935/2004):

|                 |                       |
|-----------------|-----------------------|
| Rotary part     | Carbon (C)            |
| Stationary part | Silicon carbide (SiC) |
| Gaskets         | EPDM                  |

#### Surface finish:

|          |           |
|----------|-----------|
| Internal | Ra<0,8 µm |
| External | Matt      |

Connections: DIN 11851

#### Operating limits:

|                           |                            |                 |
|---------------------------|----------------------------|-----------------|
| Nominal pressure          | 10 bar                     | 145 PSI         |
| Temperature range         | -10°C to +120 °C           | 14 °F to 248 °F |
|                           | +140°C (SIP, max- 30 min.) | 284 °F          |
| Maximum flow              | 130 m³/h 5                 | 72 US GPM       |
| Maximum differential head | 90 m                       | 295 ft          |
| Maximum speed             | 3500 rpm                   |                 |



## I Motor

Triphasic induction motor with B34 flange (B35 for motor frame 132 and above), in compliance with the IEC standards, 2 poles = 3000/3600 rpm, efficiency class according to EC regulation, IP 55 protection and F-class insulation.

3 phases, 50 Hz, 230 V Δ / 400 V Y, ≤ 4 kW  
 3 phases, 50 Hz, 400 V Δ / 690 V Y, ≥ 5,5 kW

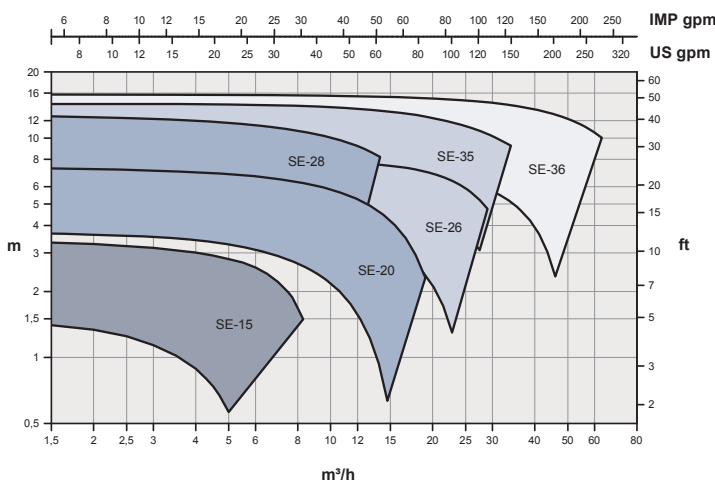
## I Options

SiC/SiC mechanical seal.  
 Gaskets: FPM and PTFE.  
 Jacketed pump housing.  
 Drain port.  
 Other connection types.  
 Motor with other voltages, frequencies, protection classes and efficiencies.  
 Trolley and/or control panel.  
 ATEX certification.

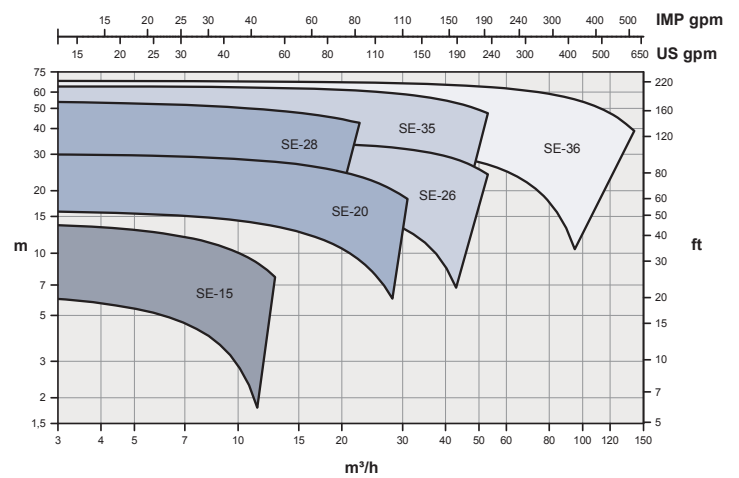
## I Performance charts

50 Hz

1450 rpm

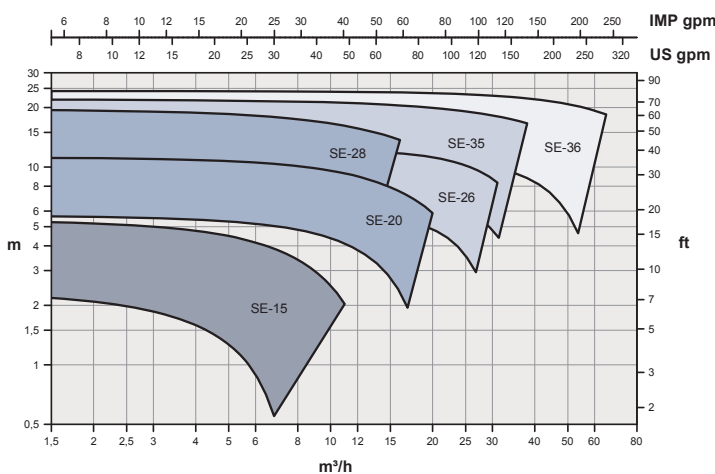


2900 rpm

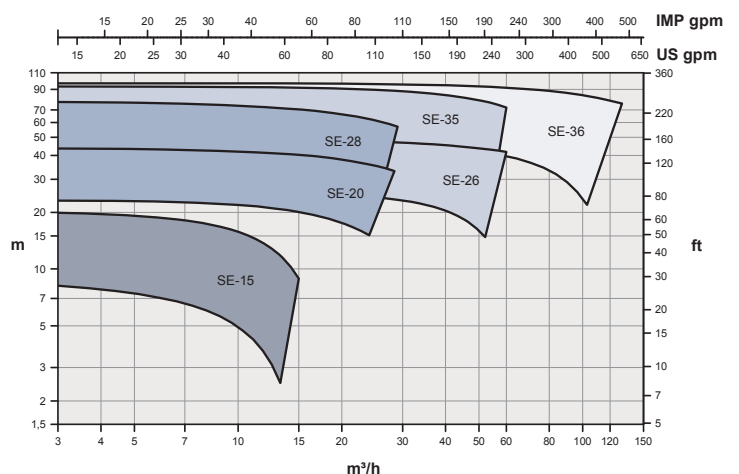


60 Hz

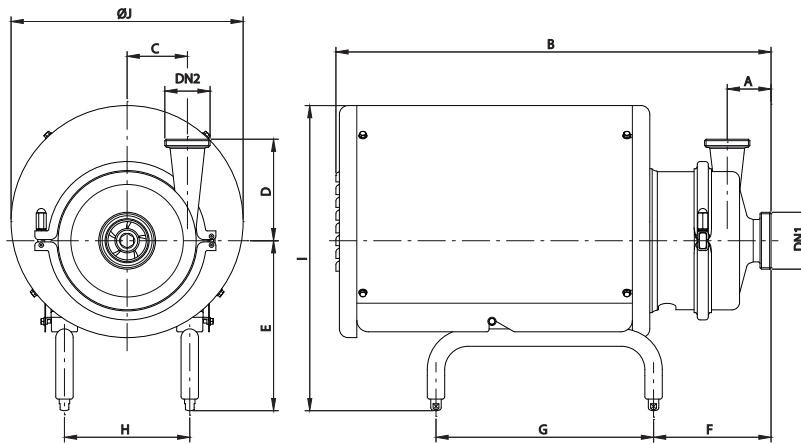
1750 rpm



3500 rpm



I Dimensions: Hyginox SE

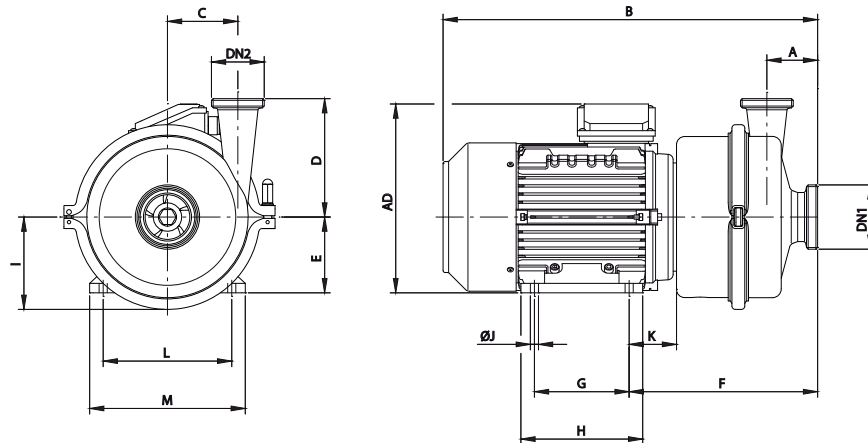


| Pump  | Size | Motor kW | rpm  | DN1  | DN2 | A  | B    | C   | D     | E   | F   | G     | H   | I   | ØJ  | kg  |     |     |    |    |
|-------|------|----------|------|------|-----|----|------|-----|-------|-----|-----|-------|-----|-----|-----|-----|-----|-----|----|----|
| SE-15 | A    | 71       | 0,25 | 1450 | 40  | 32 | 440  | 55  | 100   | 203 | 111 | 250   | 112 | 350 | 230 | 14  |     |     |    |    |
|       |      |          | 0,55 |      |     |    |      |     |       |     |     |       |     |     |     | 15  |     |     |    |    |
|       | B    | 80       | 0,75 | 2950 |     |    | 22   |     |       |     |     |       |     |     |     |     |     |     |    |    |
| C     | 90S  | 1,1      | 24   |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
| SE-20 | C    | 90S      | 1,1  | 1450 | 50  | 40 | 530  | 74  | 140   | 227 | 154 | 275   | 132 | 415 | 290 | 30  |     |     |    |    |
|       |      |          | 1,5  |      |     |    |      |     |       |     |     |       |     |     |     | 29  |     |     |    |    |
|       | D    | 100      | 2,2  | 2950 |     |    | 605  |     |       | 74  | 140 | 266   | 152 | 325 | 175 | 480 | 350 | 43  | 31 |    |
|       |      |          | 3    |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     | 43 |    |
| E     | 112  | 4        | 49   |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
| SE-26 | C    | 90S      | 1,1  | 1450 | 65  | 50 | 540  | 72  | 150   | 227 | 162 | 275   | 132 | 415 | 290 | 31  |     |     |    |    |
|       |      |          | 3    |      |     |    |      |     |       |     |     |       |     |     |     | 43  |     |     |    |    |
|       | D    | 100      | 4    |      |     |    | 2950 |     |       | 610 | 72  | 150   | 266 | 159 | 325 | 175 | 480 | 350 | 50 | 56 |
|       |      |          | 5,5  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    | 56 |
|       | E    | 112      | 7,5  |      |     |    | 71   |     |       |     |     |       |     |     |     |     |     |     |    |    |
| 7,5   |      |          | 79   |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
| 7,5   |      |          | 79   |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
| SE-28 | C    | 90S      | 1,1  | 1450 | 40  | 40 | 535  | 106 | 165   | 227 | 157 | 275   | 132 | 415 | 290 | 36  |     |     |    |    |
|       |      |          | 3    |      |     |    |      |     |       |     |     |       |     |     |     | 48  |     |     |    |    |
|       | D    | 100      | 4    |      |     |    | 2950 |     |       | 610 | 106 | 165   | 266 | 154 | 325 | 175 | 480 | 350 | 55 | 61 |
|       |      |          | 5,5  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    | 61 |
|       | E    | 112      | 7,5  |      |     |    | 76   |     |       |     |     |       |     |     |     |     |     |     |    |    |
| 7,5   |      |          | 84   |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
| 7,5   |      |          | 84   |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
| SE-35 | D    | 100      | 2,2  | 1450 | 65  | 50 | 620  | 104 | 175   | 266 | 168 | 325   | 175 | 480 | 350 | 49  |     |     |    |    |
|       |      |          | 3    |      |     |    |      |     |       |     |     |       |     |     |     | 54  |     |     |    |    |
|       | E    | 112      | 5,5  |      |     |    | 2950 |     |       | 750 | 104 | 175   | 278 | 175 | 325 | 175 | 490 | 400 | 76 | 62 |
|       |      |          | 5,5  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    | 76 |
|       | F    | 132S     | 7,5  |      |     |    | 85   |     |       |     |     |       |     |     |     |     |     |     |    |    |
|       |      |          | 11   |      |     |    | 98   |     |       |     |     |       |     |     |     |     |     |     |    |    |
| G     | 160M | 11       | 134  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
|       |      | 15       | 154  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
| SE-36 | D    | 100      | 2,2  | 1450 | 100 | 65 | 620  | 98  | 181,5 | 266 | 168 | 325   | 175 | 480 | 350 | 52  |     |     |    |    |
|       |      |          | 3    |      |     |    |      |     |       |     |     |       |     |     |     | 57  |     |     |    |    |
|       | E    | 112      | 4    |      |     |    | 2950 |     |       | 750 | 98  | 181,5 | 278 | 175 | 325 | 175 | 490 | 400 | 88 | 63 |
|       |      |          | 7,5  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    | 88 |
|       | F    | 132S     | 11   |      |     |    | 101  |     |       |     |     |       |     |     |     |     |     |     |    |    |
|       |      |          | 11   |      |     |    | 101  |     |       |     |     |       |     |     |     |     |     |     |    |    |
| G     | 160M | 11       | 136  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |
|       |      | 15       | 156  |      |     |    |      |     |       |     |     |       |     |     |     |     |     |     |    |    |

Dimensions with DIN 11851 connections



**I Dimensions: Hyginox SE without shroud and without legs**



| Pump  | Size | Motor kW | rpm  | DN1 | DN2 | A  | B    | C   | D     | E   | F   | G   | H   | AD  | I   | ØJ  | K   | L   | M   | kg  |     |    |  |  |  |    |     |
|-------|------|----------|------|-----|-----|----|------|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|--|--|--|----|-----|
| SE-15 | A    | 71       | 0,25 | 40  | 32  | 55 | 375  | 55  | 100   | 71  | 202 | 90  | 105 | 185 | 80  | 7   | 45  | 112 | 140 | 10  |     |    |  |  |  |    |     |
|       |      |          | 0,55 |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 11 |     |
|       | B    | 80       | 0,75 |     |     |    | 2950 |     |       | 420 | 80  | 231 | 100 | 130 |     | 215 | 10  | 50  | 125 | 160 | 16  |    |  |  |  |    |     |
|       | C    | 90S      | 1,1  |     |     |    | 445  |     |       | 90  | 237 |     |     | 235 |     | 10  | 56  | 140 | 180 | 22  |     |    |  |  |  |    |     |
| SE-20 | C    | 90S      | 1,1  | 50  | 40  | 55 | 450  | 74  | 140   | 90  | 237 | 100 | 130 | 235 | 105 | 10  | 56  | 140 | 180 | 24  |     |    |  |  |  |    |     |
|       |      |          | 1,5  |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 23 |     |
|       | D    | 90L      | 2,2  |     |     |    | 2950 |     |       | 470 | 100 | 255 | 125 | 155 |     | 260 | 12  | 63  | 160 | 200 | 34  |    |  |  |  |    |     |
|       |      | E        | 100  |     |     |    | 3    |     |       | 510 | 112 | 262 | 140 | 180 |     | 280 |     | 70  | 190 | 230 | 41  |    |  |  |  |    |     |
| SE-26 | E    | 112      | 4    | 65  | 50  | 55 | 530  | 72  | 150   | 112 | 268 | 140 | 180 | 280 | 105 | 10  | 56  | 140 | 180 | 25  |     |    |  |  |  |    |     |
|       |      |          | 5,5  |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 34 |     |
|       | F    | 132S     | 7,5  |     |     |    | 2950 |     |       | 605 | 132 | 310 |     | 190 |     | 320 | 150 | 12  | 70  | 190 | 230 | 41 |  |  |  |    |     |
|       |      |          |      |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 47 |     |
|       |      |          |      |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 59 |     |
| SE-28 | C    | 90S      | 1,1  | 40  | 40  | 65 | 450  | 106 | 165   | 90  | 240 | 100 | 125 | 235 | 137 | 10  | 56  | 140 | 180 | 30  |     |    |  |  |  |    |     |
|       |      |          | 3    |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 39 |     |
|       | D    | 100      | 3    |     |     |    | 2950 |     |       | 525 | 100 | 257 |     | 180 |     | 260 | 12  | 63  | 160 | 200 | 46  |    |  |  |  |    |     |
|       |      | E        | 112  |     |     |    | 4    |     |       | 540 | 112 | 264 | 140 | 180 |     | 280 |     | 70  | 190 | 230 | 52  |    |  |  |  |    |     |
|       |      | F        | 132S |     |     |    | 5,5  |     |       | 600 | 132 | 306 |     | 190 |     | 320 | 150 | 112 | 216 | 260 | 64  |    |  |  |  |    |     |
| SE-35 | F    | 132S     | 7,5  | 65  | 50  | 75 | 610  | 104 | 175   | 132 | 320 |     | 190 | 320 | 150 | 12  | 112 | 216 | 260 | 65  |     |    |  |  |  |    |     |
|       |      |          | 11   |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 74 |     |
|       |      |          | 11   |     |     |    | 2950 |     |       | 650 |     |     | 178 | 230 |     |     |     |     |     |     |     |    |  |  |  |    | 87  |
|       |      |          | 11   |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  |    | 116 |
|       |      | G        | 160M |     |     |    | 15   |     |       | 765 | 160 | 375 | 210 | 265 |     | 405 | 175 | 15  | 167 | 254 | 315 |    |  |  |  |    | 136 |
|       |      |          |      |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  |    |     |
| SE-36 | D    | 100      | 2,2  | 100 | 65  | 75 | 540  | 981 | 181,5 | 100 | 271 | 140 | 180 | 260 | 137 | 12  | 63  | 160 | 200 | 43  |     |    |  |  |  |    |     |
|       |      |          | 3    |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |  | 48 |     |
|       | E    | 112      | 4    |     |     |    | 555  |     |       | 112 | 278 |     | 180 | 280 |     |     |     |     |     |     |     |    |  |  |  | 54 |     |
|       |      | F        | 132S |     |     |    | 7,5  |     |       | 610 | 132 | 320 | 178 | 190 |     | 320 | 150 | 112 | 216 | 260 | 77  |    |  |  |  |    |     |
|       |      |          | 11   |     |     |    | 2950 |     |       | 650 |     |     | 230 | 320 |     | 150 |     |     |     |     | 90  |    |  |  |  |    |     |
|       | G    | 160M     | 11   |     |     |    | 765  |     |       |     |     |     |     |     |     |     |     |     |     | 118 |     |    |  |  |  |    |     |
|       |      |          | 15   |     |     |    |      |     |       |     |     |     |     |     |     |     |     |     |     |     | 138 |    |  |  |  |    |     |

Dimensions with DIN 11851 connections

