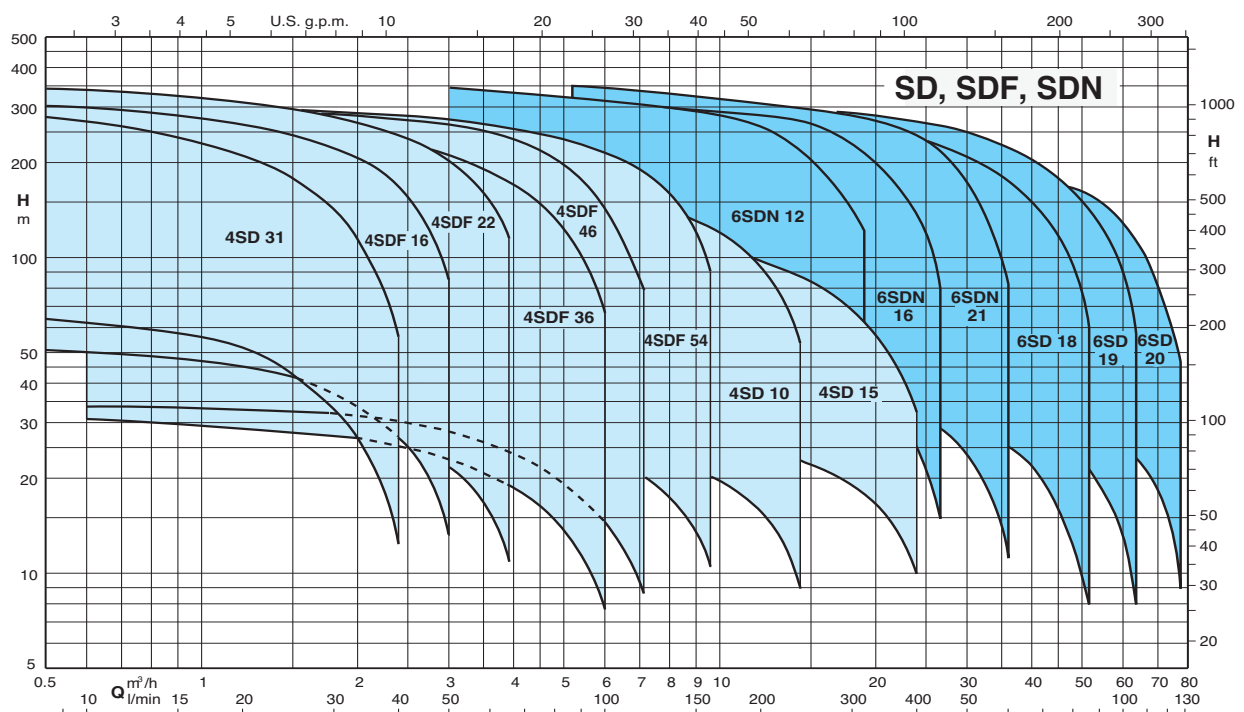


Submersible borehole pumps for 4" and 6" wells
Bombas sumergibles para pozos de 4" y 6"



Coverage chart - Campo de aplicaciones

$n \approx 3450$ 1/min



Construction

Submersible borehole pumps for 4" wells (DN 100), and 6" (DN 150), with external jacket in stainless steel AISI 304 and stages in polycarbonate for 4SD pumps and in Noryl for 4SDF, 6SD, 6SDN pumps.

Impellers

| | |
|---------------------------|-----------------------------|
| radial floating impellers | 4SDF 16, 22, 36, 46, 54 |
| radial impellers | 4SD 31, - 6SDN 12, 16, 21 |
| mixed flow impellers | 4SD 10, 15 - 6SD 18, 19, 20 |

Connection: threaded ports **ISO 228/1**.
threaded ports **NPT (ANSI/ASME B1.20.1)** on request only for 4"

Delivery casing with built-in non-return valve.

Applications

For water supply.
For civil and industrial applications.
For irrigation.

Operating conditions

Max. sand quantity into the water: 150 g/m³ (300 g/m³ high percentage of solids and sand).
Continuous duty.

Rewindable motor CS series

2-pole induction motor, 60 Hz (n = 3450 rpm).
Sized for connection to the pumps according to NEMA Standards.
Standard voltages:

- single-phase 110 V up to 0,75 kW;
127 V up to 1,1 kW;
220 V up to 2,2 kW
- three-phase 220 V; 380 V; 440 V, 460 V;
220/380 V; 380/660 V.

Voltage tolerance : ±10%.

Recommended type of starting for powers from 7.5 kW: star/delta, soft start, impedance starting, autotransformer.

| Motor | Max. Liquid temperature | Cooling: minimum flow velocity | Max. starts per hour | Motor P2 |
|-------|-------------------------|--------------------------------|----------------------|-----------|
| 4CS | 35 °C | 0,08 m/s | 20 | all types |
| 6CS-R | 30 °C | 0,1 m/s | 15 | 4÷11 kW |
| | | 0,2 m/s | 15 | 13÷15 kW |
| | 25 °C | 0,2 m/s | 15 | 18,5 kW |
| | | 0,2 m/s | 13 | 22÷30 kW |
| | 40 °C | 0,1 m/s | 13 | 37 kW |
| | | 0,3 m/s | 6 | 45 kW |

Insulation class F for 4" motors, PVC coated wire for 6" motors.

Protection IP 68.

Cable: 4CS length 2 m, 6CS length 3,5 m

Special features on request

- Other voltages. - Other temperatures.

Materials

| Components | 4SD, 4SDF | 6SD, 6SDN |
|----------------------|-----------------------------|--------------------|
| External jacket | Cr-Ni steel AISI 304 | |
| Stage casing (4SDF) | Cr-Ni steel AISI 304 | - |
| Stage casing (4,6SD) | Polycarbonate (Lexan 141 R) | GFN2V* (NORYL®) |
| Diffuser | GFN2V* (NORYL®)* for 4SDF | |
| Impeller | | |
| Wear ring | Cr-Ni steel AISI 304 | |
| Shaft | Cr steel AISI 430 F | |
| Delivery casing | Cr-Ni steel | Bronze |
| Suction lantern | AISI 304 | G-Cu Sn 10 EN 1982 |
| Bearing bush | Thermoplastic | Rubber |
| Strainer | Cr-Ni steel AISI 430 | |
| Screws | Cr-Ni steel AISI 304 | |

* Trademark of General Electric

Ejecución

Electrobombas sumergibles para pozos profundos 4" (DN 100 mm), 6" (DN 150 mm), con camisa externa en acero inoxidable AISI 304 y cuerpos elementos in policarbonato para 4SD en NORYL® para 4SDF, 6SDN.

Rodetes:

| | |
|--------------------------|-----------------------------|
| flotantes a flujo radial | 4SDF 16, 22, 36, 46, 54 |
| radiales | 4SD 31, - 6SDN 12, 16, 21 |
| semi-axiales | 4SD 10, 15 - 6SD 18, 19, 20 |

Conexión: Roscados **ISO 228/1**.
Roscados **NPT (ANSI/ASME B1.20.1)** bajo demanda solamente para 4".

Válvula de retención incorporada en el cuerpo de impulsión.

Aplicaciones

Para suministros de agua.
Para aplicaciones civiles e industriales.
Para riegos en general.

Limites de empleo

Máxima cantidad de arena en el agua: 150 g/m³ (300 g/m³ alta porcentaje de sólidos y arena)
Servicio continuo.

Motor rebobinable serie CS

Motor a inducción 2 polos, 60 Hz (n = 3450 1/min).
Dimensiones para el acoplamiento a la bomba según NEMA Standard.
Tensiones de alimentación:

- monofásicos 110 V - hasta 0,75 kW;
127 V - hasta 1,1 kW;
220 V - hasta 2,2 kW.
- trifásicos 220 V; 380 V; 440 V;
220/380 V; 380/660 V.

Variación de tensión : ±10%

Tipo de arranque aconsejado para potencias desde 7.5kW: estrella/triángulo, soft start, o con impedancia.

| Motores | Temperatura del agua hasta | Refrigeración: velocidad mínima del caudal | Arranques por hora máximos | Motores P2 |
|---------|----------------------------|--|----------------------------|------------|
| 4CS | 35 °C | 0,08 m/s | 20 | todos |
| 6CS-R | 30 °C | 0,1 m/s | 15 | 4÷11 kW |
| | | 0,2 m/s | 15 | 13÷15 kW |
| | 25 °C | 0,2 m/s | 15 | 18,5 kW |
| | | 0,2 m/s | 13 | 22÷30 kW |
| | 40 °C | 0,1 m/s | 13 | 37 kW |
| | | 0,3 m/s | 6 | 45 kW |

Aislamiento clase F para motores 4", hilo con revestimiento en PVC para motores 6".

Protección IP 68.

Cable 4CS Longitud 2 m, 6CS Longitud 3,5 m.

Ejecuciones especiales bajo demanda

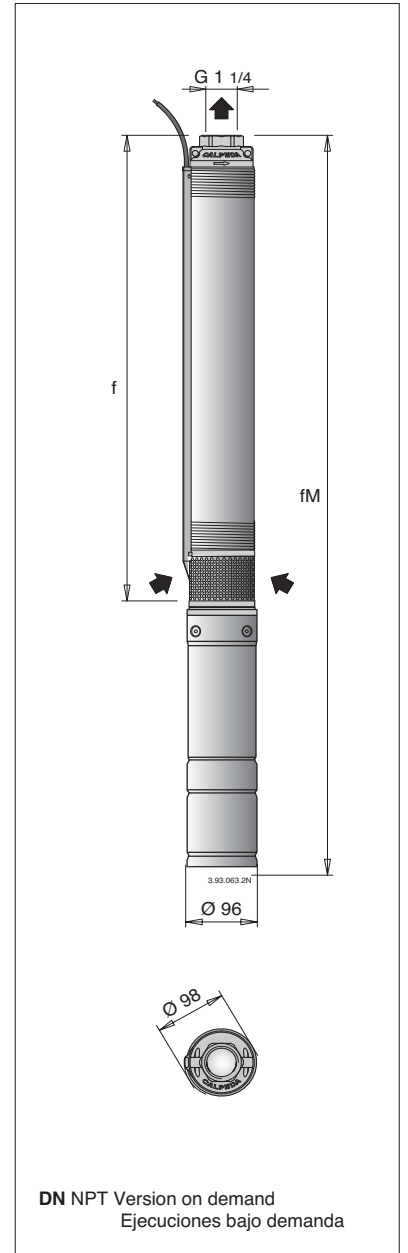
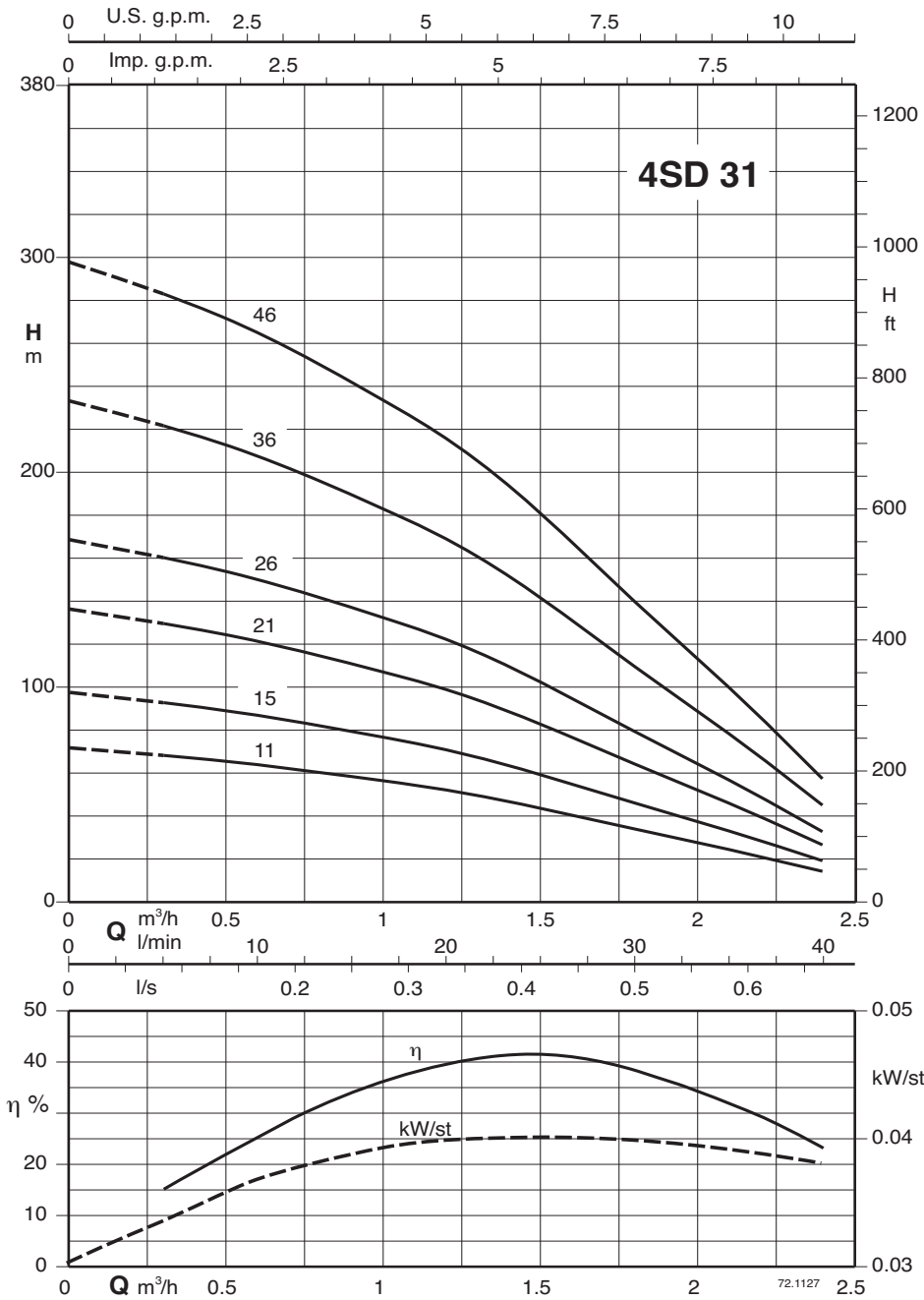
- Otras tensiones. - Otras temperaturas.

Materiales

| Componentes | 4SD, 4SDF | 6 SDN |
|-------------------------|-----------------------------|--------------------|
| Camisa externa | Acero Cr-Ni AISI 304 | |
| Cuerpo elemento (4SDF) | Acero Cr-Ni AISI 304 | - |
| Cuerpo elemento (4,6SD) | Polycarbonato (Lexan 141 R) | GFN2V* (NORYL®) |
| Diffusor | GFN2V* (NORYL®)* para 4SDF | |
| Rodete | | |
| Anillo de cierre | Acero Cr-Ni AISI 304 | |
| Eje | Acero Cr AISI 430 F | |
| Cuerpo de impulsión | Acero Cr-Ni AISI 304 | Bronze |
| Lantern de aspiración | | G-Cu Sn 10 EN 1982 |
| Cojinete guía | Termoplástico | Goma |
| Filtro | Acero Cr-Ni AISI 430 | |
| Tornillo | Acero Cr-Ni AISI 304 | |

* Marca registrada de General Electric

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



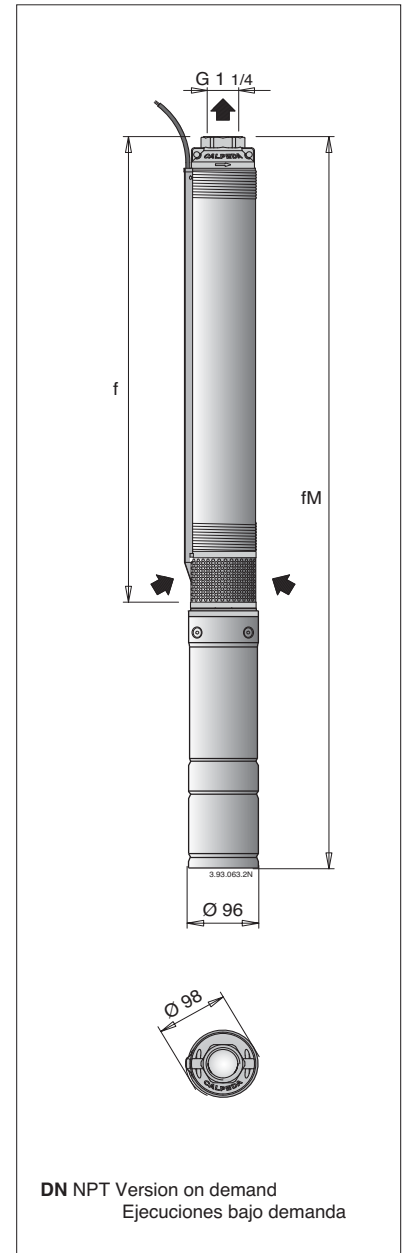
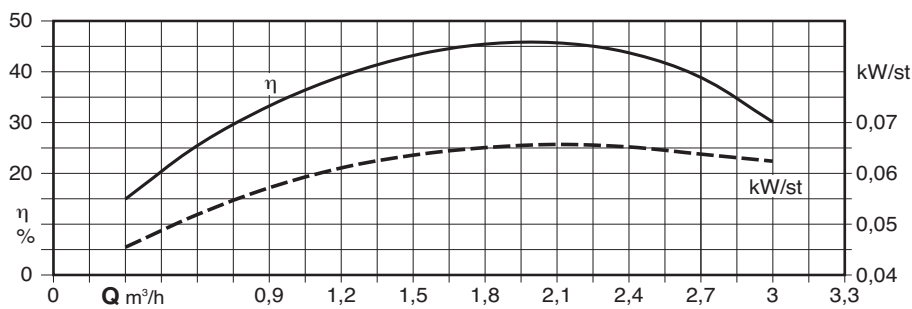
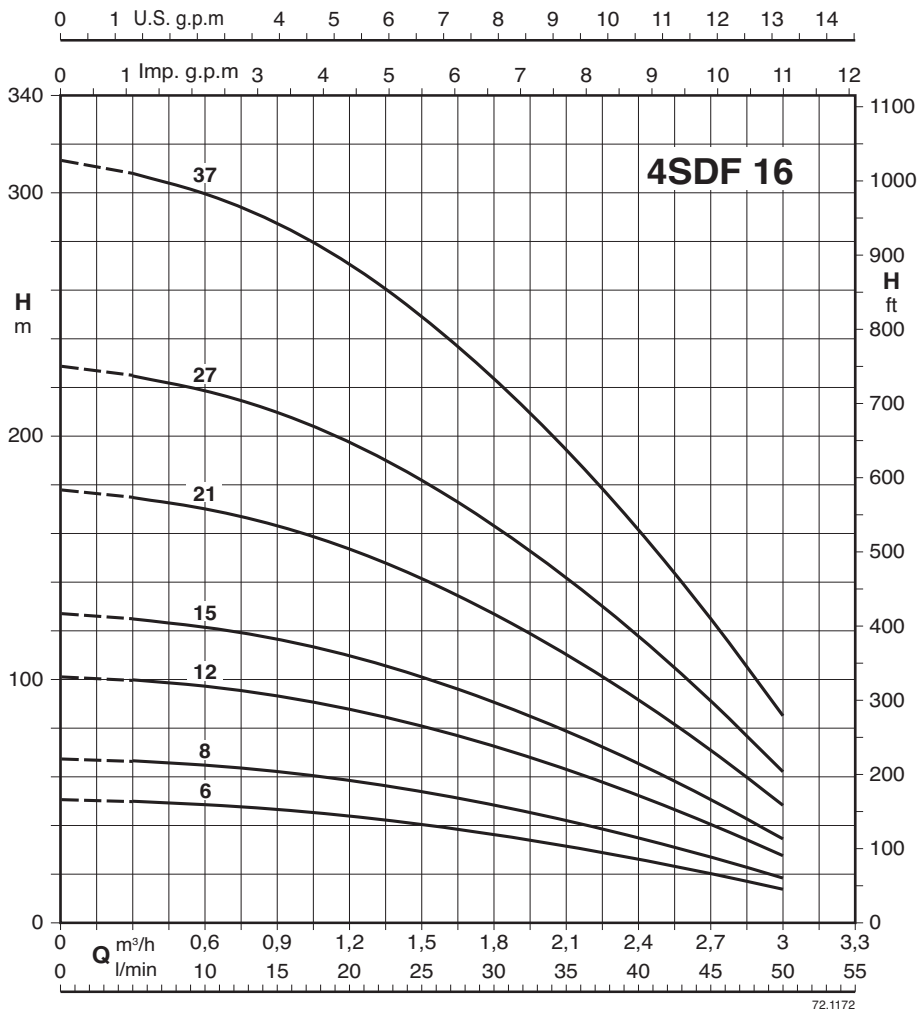
| 3~ | 1~ | P ₂ | | Q | $n \approx 3450$ 1/min | | | | | | | | | | | 4SD | | 4SDM | |
|----------------|-----------------|----------------|------|-------|------------------------|------|-----|------|------|------|------|------|-----|---|------|------|------|------|------|
| | | kW | HP | | 0 | 0,3 | 0,6 | 0,9 | 1,2 | 1,5 | 1,8 | 2,1 | 2,4 | f | fM | kg | fM | kg | |
| | | | | l/min | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | | | | | | |
| 4SD 31/11EC-60 | 4SDM 31/11EC-60 | 0,37 | 0,5 | 71 | 67,5 | 63,5 | 58 | 51,5 | 42,5 | 33,5 | 24 | 13,5 | | | 473 | 800 | 10,3 | 800 | 10,2 |
| 4SD 31/15EC-60 | 4SDM 31/15EC-60 | 0,37 | 0,5 | 97 | 92,5 | 84,5 | 79 | 70,5 | 57,5 | 45,5 | 32,5 | 18,5 | | | 550 | 877 | 10,9 | 877 | 10,8 |
| 4SD 31/21EC-60 | 4SDM 31/21EC-60 | 0,55 | 0,75 | 136 | 130 | 121 | 110 | 98,5 | 80,5 | 64 | 45,5 | 26 | | | 670 | 1017 | 13 | 1032 | 13,5 |
| 4SD 31/26EC-60 | 4SDM 31/26EC-60 | 0,75 | 1 | 168 | 160 | 150 | 137 | 122 | 100 | 79 | 56,5 | 32 | | | 768 | 1130 | 14,8 | 1170 | 15,8 |
| 4SD 31/36EC-60 | 4SDM 31/36EC-60 | 1,1 | 1,5 | 233 | 222 | 207 | 189 | 169 | 138 | 109 | 78 | 44,5 | | | 965 | 1367 | 17,7 | 1412 | 18,4 |
| 4SD 31/46EC-60 | 4SDM 31/46EC-60 | 1,5 | 2 | 298 | 283 | 265 | 242 | 216 | 177 | 140 | 99,5 | 57 | | | 1160 | 1607 | 20,2 | 1627 | 20,4 |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



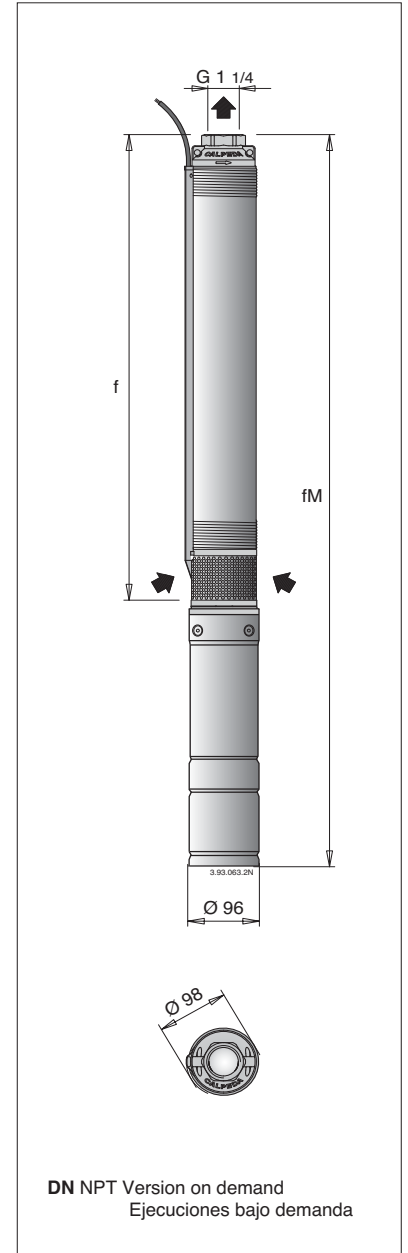
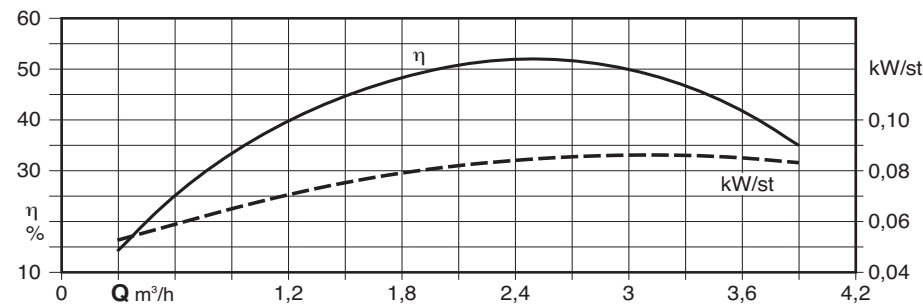
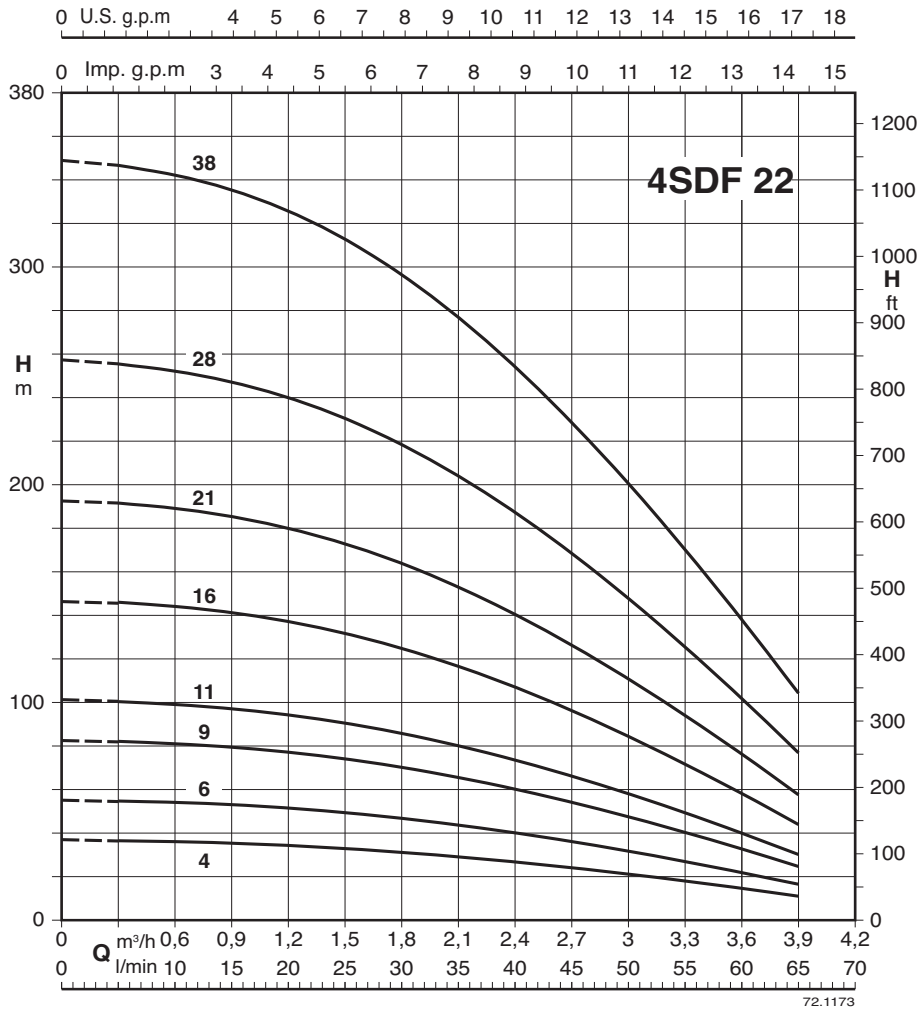
| 3~ | 1~ | P ₂ | | Q | n ≈ 3450 1/min | | | | | | | | | | | 4SDF | | 4SDFM | | | | | | |
|-----------------|------------------|----------------|------|--------|----------------|------|------|------|-------------------|------|------|------|------|------|-----|------|------|-------|------|----|----|----|----|----|
| | | | | | kW | | HP | | m ³ /h | | | | | | | | | | | f | fM | kg | fM | kg |
| | | | | | 0 | 0,3 | 0,6 | 0,9 | 1,2 | 1,5 | 1,8 | 2,1 | 2,4 | 3 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 |
| | | | | H m | 50,9 | 49,9 | 48,6 | 46,6 | 43,9 | 40,4 | 36,3 | 31,5 | 26,2 | 13,8 | 305 | 632 | 11 | 632 | 10,9 | | | | | |
| 4SDF 16/6EC-60 | 4SDFM 16/6EC-60 | 0,37 | 0,5 | | 67,8 | 66,6 | 64,8 | 62,2 | 58,5 | 53,9 | 48,3 | 42 | 34,9 | 18,4 | 345 | 672 | 11,3 | 672 | 11,2 | | | | | |
| 4SDF 16/8EC-60 | 4SDFM 16/8EC-60 | 0,37 | 0,5 | | 102 | 99,9 | 97,2 | 93,2 | 87,8 | 80,8 | 72,5 | 63 | 52,4 | 27,6 | 425 | 772 | 13,1 | 787 | 13,8 | | | | | |
| 4SDF 16/12EC-60 | 4SDFM 16/12EC-60 | 0,55 | 0,75 | | 127 | 125 | 121 | 117 | 110 | 101 | 90,6 | 78,8 | 65,5 | 34,5 | 485 | 847 | 14,8 | 887 | 15,6 | | | | | |
| 4SDF 16/15EC-60 | 4SDFM 16/15EC-60 | 0,75 | 1 | | 178 | 175 | 170 | 163 | 154 | 141 | 127 | 110 | 91,7 | 48,3 | 605 | 1007 | 17,1 | 1052 | 18,4 | | | | | |
| 4SDF 16/21EC-60 | 4SDFM 16/21EC-60 | 1,1 | 1,5 | | 229 | 225 | 219 | 210 | 198 | 182 | 163 | 142 | 118 | 62,1 | 725 | 1172 | 19,8 | 1192 | 20,7 | | | | | |
| 4SDF 16/27EC-60 | 4SDFM 16/27EC-60 | 1,5 | 2 | | 314 | 308 | 300 | 287 | 271 | 249 | 224 | 194 | 161 | 85,1 | 915 | 1317 | 20,8 | 1432 | 24,8 | | | | | |
| 4SDF 16/37EC-60 | 4SDFM 16/37EC-60 | 2,2 | 3 | | | | | | | | | | | | | | | | | | | | | |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



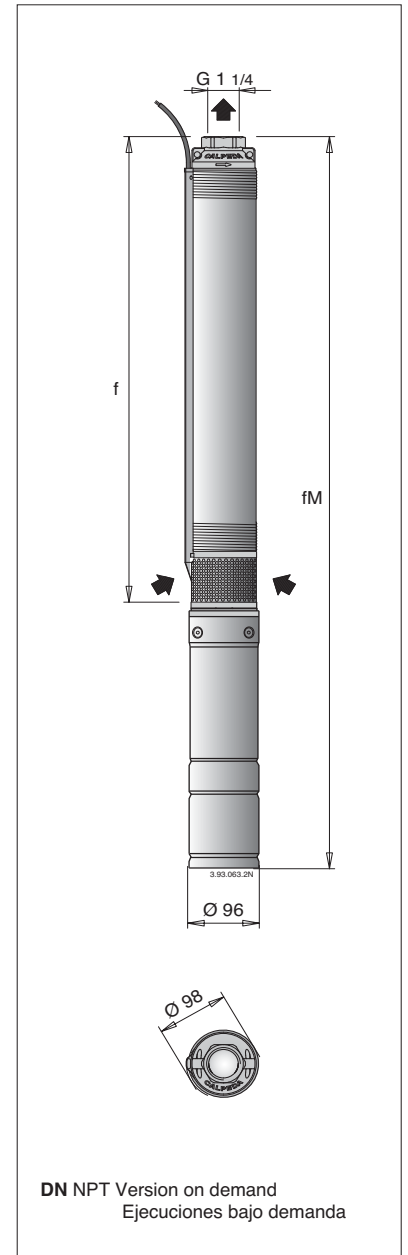
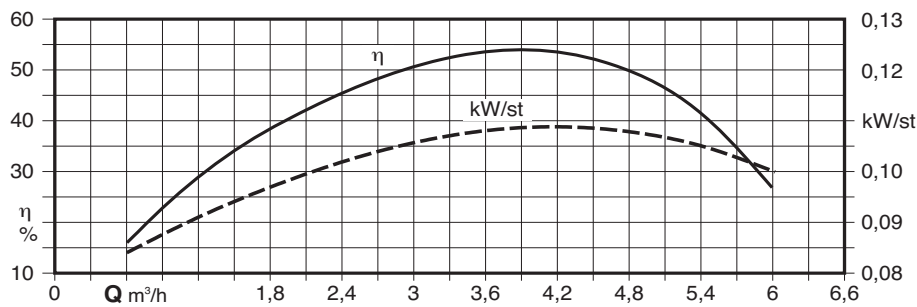
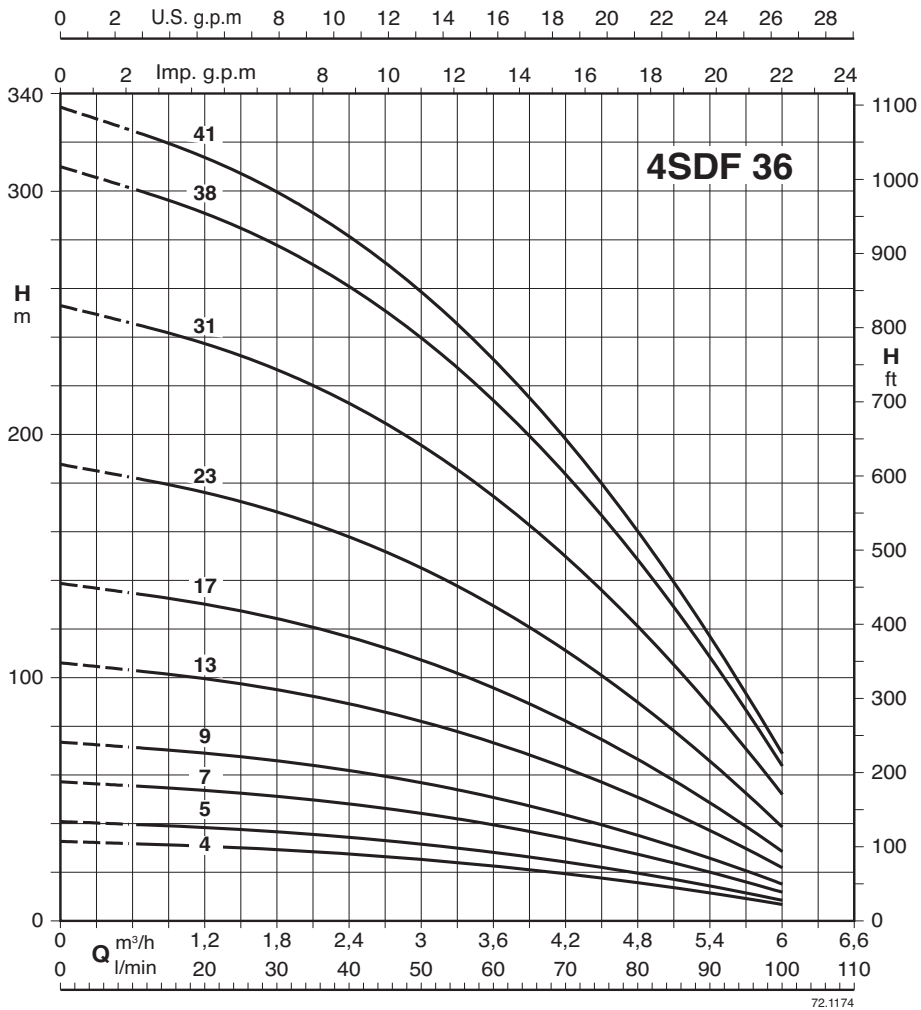
| 3~ | 1~ | P ₂ | | Q | n ≈ 3450 1/min | | | | | | | | | | | 4SDF | | 4SDFM | |
|-----------------|------------------|----------------|------|--------|----------------|------|------|------|------|------|------|------|------|------|-----|------|------|-------|------|
| | | kW | HP | | 0 | 0,3 | 0,6 | 0,9 | 1,2 | 1,8 | 2,4 | 3 | 3,6 | 3,9 | f | fM | kg | fM | kg |
| | | | | l/min | 0 | 5 | 10 | 15 | 20 | 30 | 40 | 50 | 60 | 65 | mm | mm | | mm | |
| 4SDF 22/4EC-60 | 4SDFM 22/4EC-60 | 0,37 | 0,5 | H m | 36,8 | 36,5 | 36 | 35,3 | 34,3 | 31,2 | 26,8 | 21,1 | 14,5 | 11 | 265 | 592 | 10,6 | 592 | 10,5 |
| 4SDF 22/6EC-60 | 4SDFM 22/6EC-60 | 0,37 | 0,5 | | 55,2 | 54,7 | 54 | 53 | 51,4 | 46,8 | 40,1 | 31,7 | 21,8 | 16,5 | 305 | 632 | 11 | 632 | 10,9 |
| 4SDF 22/9EC-60 | 4SDFM 22/9EC-60 | 0,55 | 0,75 | | 82,8 | 82,1 | 81,1 | 79,4 | 77,1 | 70,2 | 60,2 | 47,5 | 32,7 | 24,7 | 365 | 712 | 12,5 | 727 | 13,2 |
| 4SDF 22/11EC-60 | 4SDFM 22/11EC-60 | 0,75 | 1 | | 101 | 100 | 99,1 | 97,1 | 94,3 | 85,8 | 73,6 | 58 | 40 | 30,2 | 405 | 767 | 14,1 | 807 | 14,9 |
| 4SDF 22/16EC-60 | 4SDFM 22/16EC-60 | 1,1 | 1,5 | | 147 | 146 | 144 | 141 | 137 | 125 | 107 | 84,4 | 58,1 | 43,9 | 505 | 907 | 16,1 | 952 | 17,5 |
| 4SDF 22/21EC-60 | 4SDFM 22/21EC-60 | 1,5 | 2 | | 193 | 192 | 189 | 185 | 180 | 164 | 140 | 111 | 76,3 | 57,6 | 605 | 1052 | 18,6 | 1072 | 19,5 |
| 4SDF 22/28EC-60 | 4SDFM 22/28EC-60 | 2,2 | 3 | | 257 | 255 | 252 | 247 | 240 | 218 | 187 | 148 | 102 | 76,8 | 745 | 1147 | 19,1 | 1262 | 23,1 |
| 4SDF 22/38EC-60 | | 3 | 4 | | 349 | 347 | 342 | 335 | 326 | 296 | 254 | 201 | 138 | 104 | 935 | 1408 | 24,3 | | |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3~ | 1~ | P ₂ | | Q | $n \approx 3450$ 1/min | | | | | | | | | | |
|-----------------|------------------|----------------|------|-------|------------------------|------|------|------|------|------|------|------|------|------|--|
| | | | | | m ³ /h | | | | | | | | | | |
| | | | | | 0 | 0,6 | 1,2 | 1,8 | 2,4 | 3 | 3,6 | 4,2 | 4,8 | 6 | |
| | | kW | HP | l/min | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 100 | |
| | | | | H | | | | | | | | | | | |
| | | | | m | | | | | | | | | | | |
| 4SDF 36/4EC-60 | 4SDFM 36/4EC-60 | 0,37 | 0,5 | | 32,6 | 31,7 | 30,6 | 29,2 | 27,4 | 25,2 | 22,5 | 19,3 | 15,6 | 6,7 | |
| 4SDF 36/5EC-60 | 4SDFM 36/5EC-60 | 0,37 | 0,5 | | 40,8 | 39,6 | 38,3 | 36,5 | 34,3 | 31,5 | 28,1 | 24,1 | 19,5 | 8,4 | |
| 4SDF 36/7EC-60 | 4SDFM 36/7EC-60 | 0,55 | 0,75 | | 57,1 | 55,4 | 53,6 | 51,1 | 48,0 | 44,1 | 39,4 | 33,8 | 27,3 | 11,7 | |
| 4SDF 36/9EC-60 | 4SDFM 36/9EC-60 | 0,75 | 1 | | 73,4 | 71,3 | 68,9 | 65,7 | 61,7 | 56,7 | 50,6 | 43,4 | 35,1 | 15,1 | |
| 4SDF 36/13EC-60 | 4SDFM 36/13EC-60 | 1,1 | 1,5 | | 106 | 103 | 99,5 | 95,0 | 89,2 | 81,9 | 73,1 | 62,7 | 50,7 | 21,8 | |
| 4SDF 36/17EC-60 | 4SDFM 36/17EC-60 | 1,5 | 2 | | 139 | 135 | 130 | 124 | 117 | 107 | 95,6 | 82,0 | 66,3 | 28,4 | |
| 4SDF 36/23EC-60 | 4SDFM 36/23EC-60 | 2,2 | 3 | | 188 | 182 | 176 | 168 | 158 | 145 | 129 | 111 | 89,7 | 38,5 | |
| 4SDF 36/31EC-60 | | 3 | 4 | | 253 | 245 | 237 | 226 | 213 | 195 | 174 | 150 | 121 | 51,9 | |
| 4SDF 36/38EC-60 | | 4 | 5,5 | | 310 | 301 | 291 | 278 | 261 | 239 | 214 | 183 | 148 | 63,6 | |
| 4SDF 36/41EC-60 | | 4 | 5,5 | | 334 | 325 | 314 | 300 | 281 | 258 | 231 | 198 | 160 | 68,6 | |

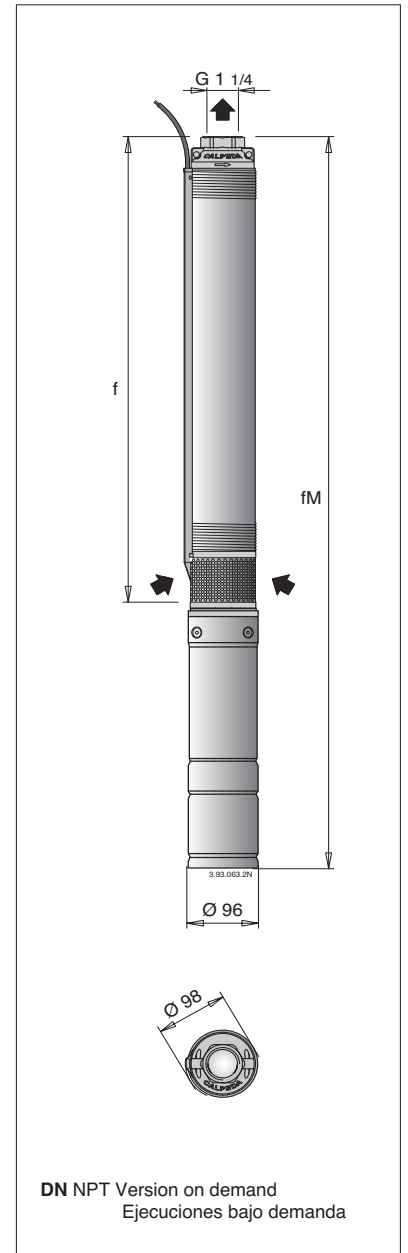
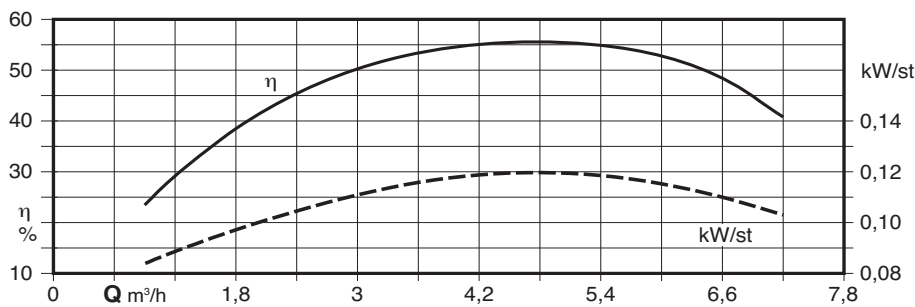
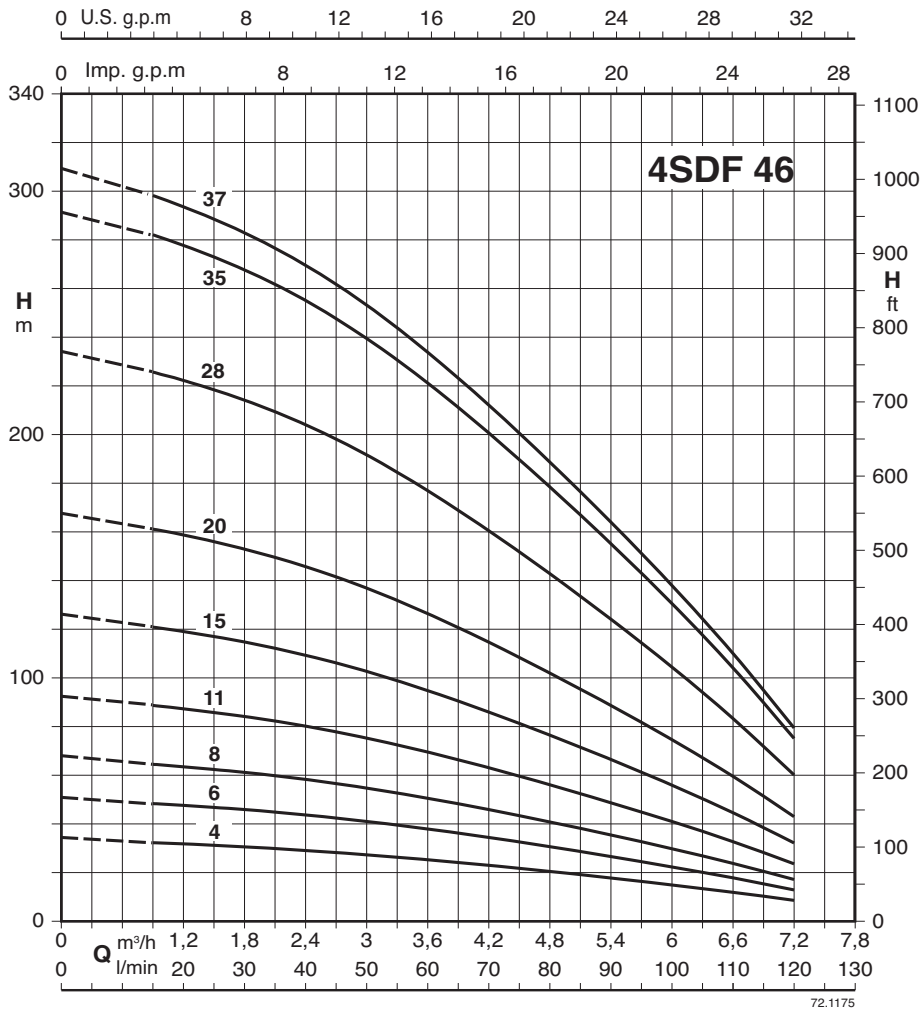
| f | 4SDF | | 4SDFM | |
|------|------|------|-------|------|
| | fM | kg | fM | kg |
| 290 | 617 | 10,7 | 617 | 10,6 |
| 317 | 644 | 11 | 644 | 10,9 |
| 370 | 717 | 12,5 | 717 | 13,2 |
| 422 | 784 | 14,1 | 799 | 14,9 |
| 528 | 930 | 16,1 | 935 | 17,5 |
| 635 | 1082 | 18,7 | 1102 | 19,7 |
| 794 | 1196 | 19,1 | 1311 | 23,1 |
| 979 | 1452 | 24,5 | | |
| 1165 | 1703 | 26,8 | | |
| 1244 | 1782 | 27,1 | | |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



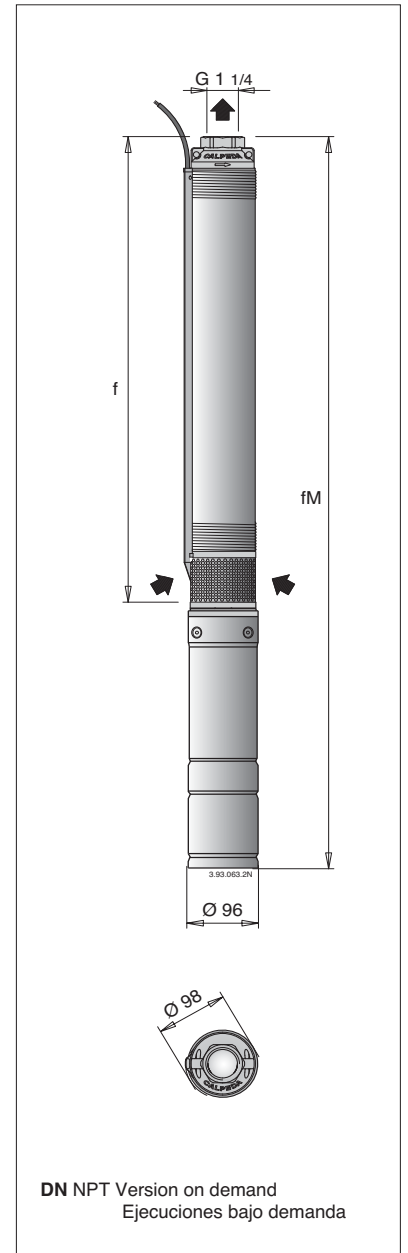
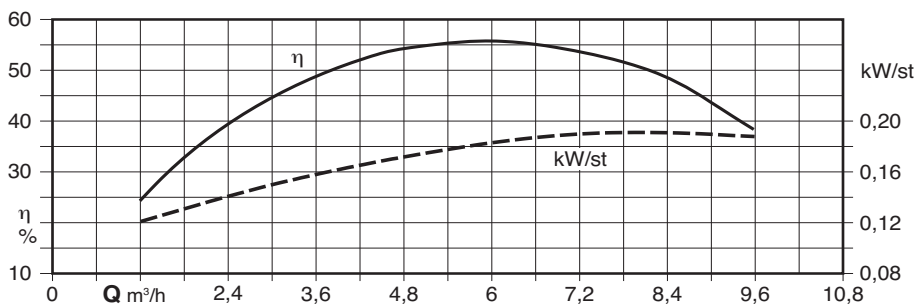
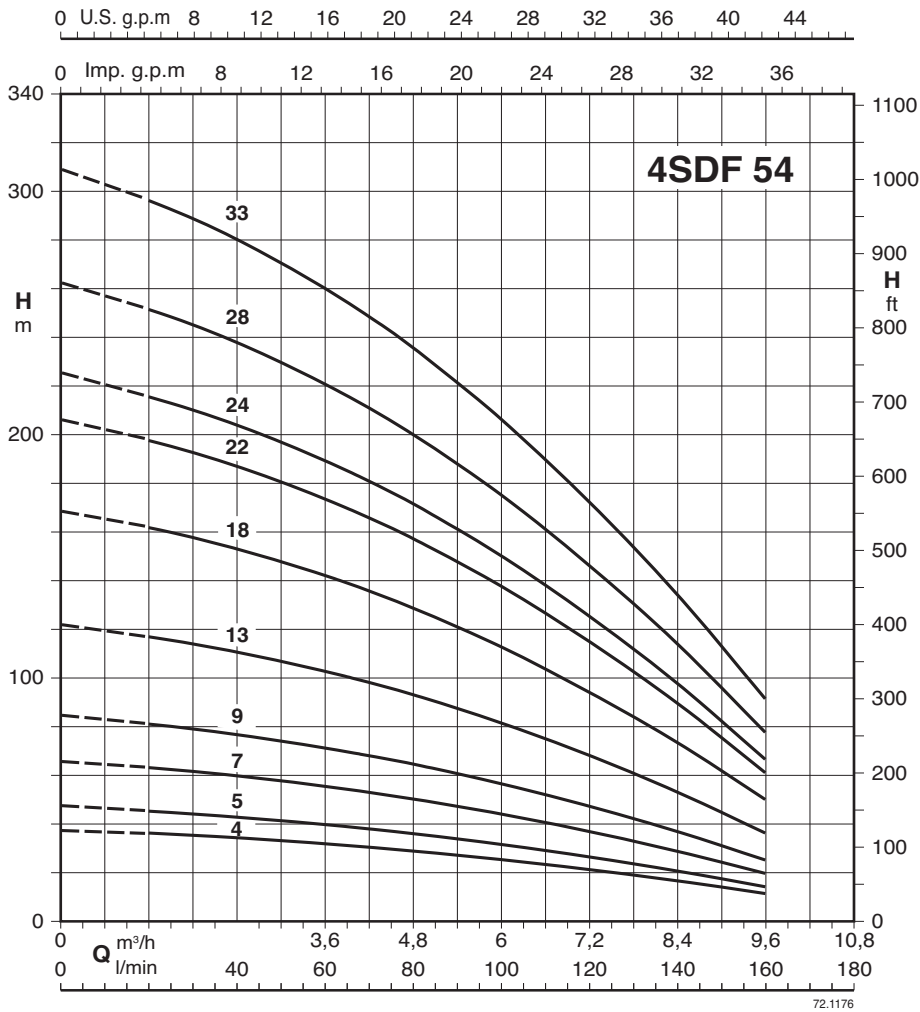
| 3~ | 1~ | P ₂ | | Q | n \approx 3450 1/min | | | | | | | | | | | | 4SDF | | 4SDFM | | |
|-----------------|------------------|----------------|------|---|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|----|----|
| | | | | | m ³ /h | | | | | | | | | | | | f | fM | kg | fM | kg |
| | | | | | l/min | | | | | | | | | | | | mm | mm | | mm | |
| | | kW | HP | | 0 | 0,9 | 1,2 | 1,8 | 2,4 | 3 | 3,6 | 4,8 | 6 | 7,2 | | | | | | | |
| | | | | H | 0 | 15 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 120 | | | | | | | |
| | | | | m | | | | | | | | | | | | | | | | | |
| 4SDF 46/4EC-60 | 4SDFM 46/4EC-60 | 0,37 | 0,5 | | 33,6 | 32,2 | 31,7 | 30,6 | 29,1 | 27,4 | 25,3 | 20,4 | 14,9 | 8,6 | 290 | 617 | 9,7 | 617 | 9,6 | | |
| 4SDF 46/6EC-60 | 4SDFM 46/6EC-60 | 0,55 | 0,75 | | 50,3 | 48,4 | 47,6 | 45,9 | 43,7 | 41,1 | 37,9 | 30,6 | 22,4 | 12,9 | 340 | 687 | 12,1 | 702 | 12,8 | | |
| 4SDF 46/8EC-60 | 4SDFM 46/8EC-60 | 0,75 | 1 | | 67,1 | 64,5 | 63,5 | 61,2 | 58,3 | 54,7 | 50,6 | 40,8 | 29,8 | 17,2 | 395 | 757 | 13,8 | 797 | 14,5 | | |
| 4SDF 46/11EC-60 | 4SDFM 46/11EC-60 | 1,1 | 1,5 | | 92,3 | 88,6 | 87,3 | 84,1 | 80,2 | 75,3 | 69,5 | 56,1 | 41 | 23,6 | 475 | 877 | 15,5 | 922 | 16,9 | | |
| 4SDF 46/15EC-60 | 4SDFM 46/15EC-60 | 1,5 | 2 | | 126 | 121 | 119 | 115 | 109 | 103 | 94,8 | 76,5 | 55,9 | 32,2 | 585 | 1032 | 18 | 1052 | 18,9 | | |
| 4SDF 46/20EC-60 | 4SDFM 46/20EC-60 | 2,2 | 3 | | 168 | 161 | 159 | 153 | 146 | 137 | 126 | 102 | 74,6 | 42,9 | 715 | 1117 | 18,2 | 1232 | 22,2 | | |
| 4SDF 46/28EC-60 | | 3 | 4 | | 235 | 226 | 222 | 214 | 204 | 192 | 177 | 143 | 104 | 60,1 | 925 | 1398 | 23,2 | | | | |
| 4SDF 46/35EC-60 | | 4 | 5,5 | | 294 | 282 | 278 | 268 | 255 | 239 | 221 | 178 | 131 | 75,1 | 1110 | 1648 | 27,9 | | | | |
| 4SDF 46/37EC-60 | | 4 | 5,5 | | 310 | 298 | 294 | 283 | 270 | 253 | 234 | 189 | 138 | 79,4 | 1165 | 1703 | 28,4 | | | | |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



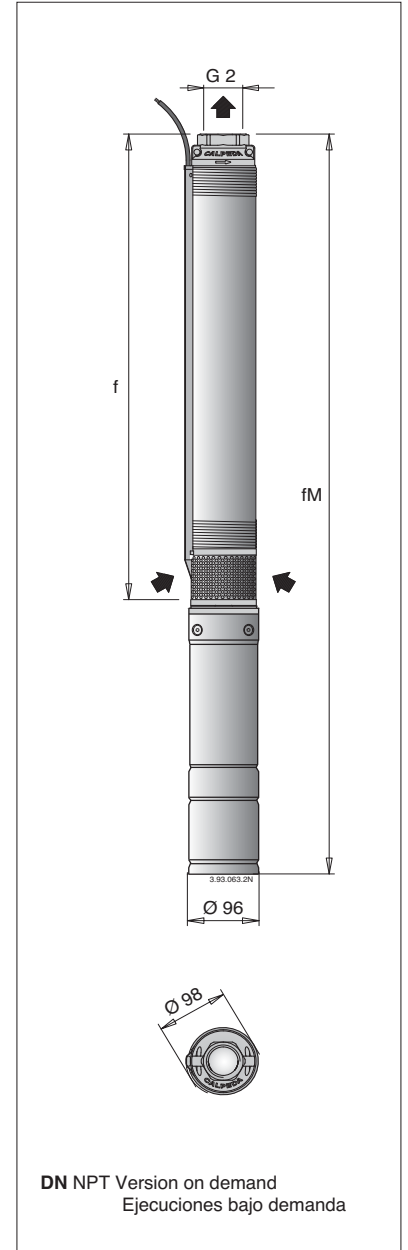
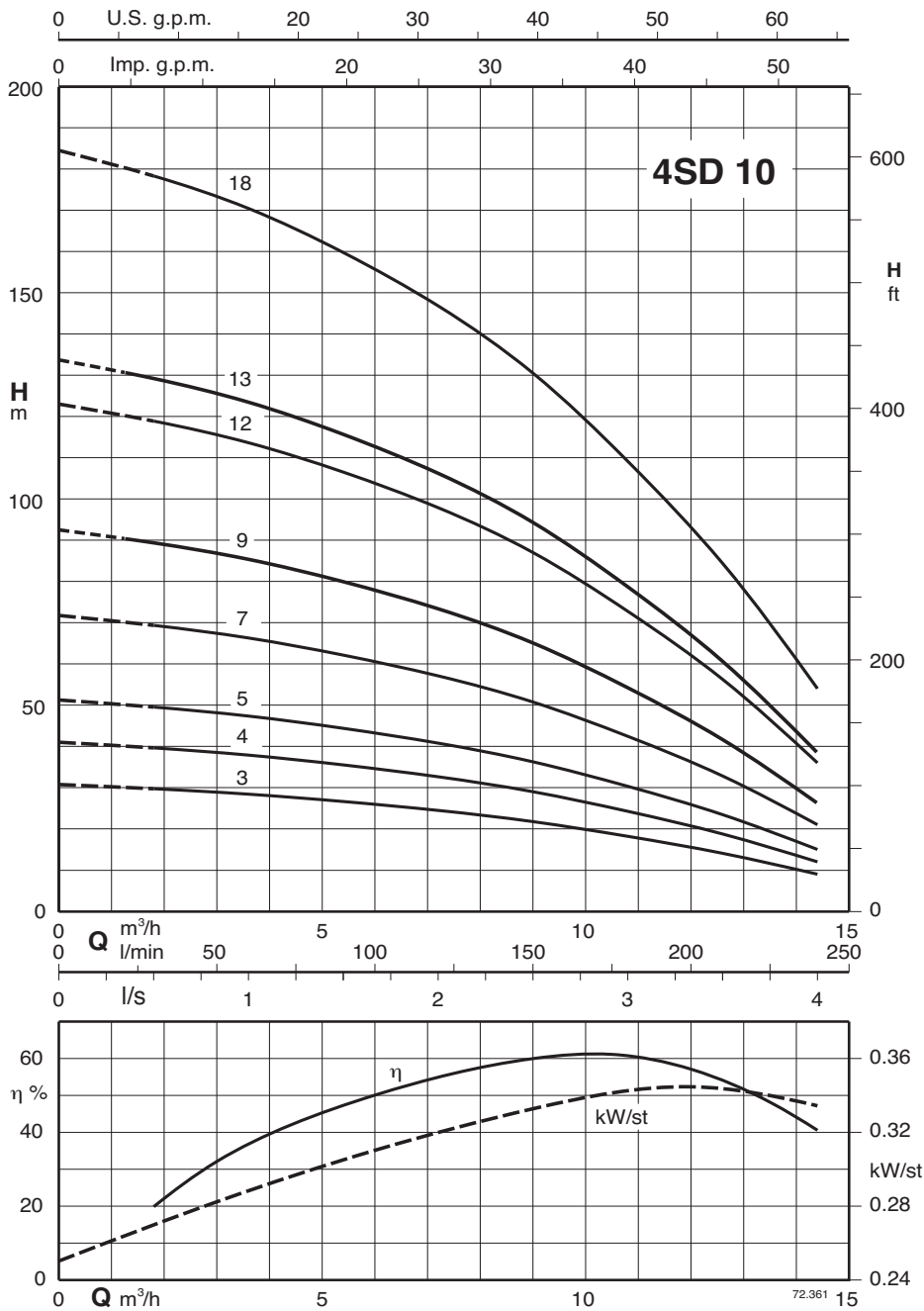
| 3~ | 1~ | P ₂ | | Q | n ≈ 3450 1/min | | | | | | | | | | | 4SDF | | 4SDFM | |
|-----------------|------------------|----------------|------|-------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|----|
| | | kW | HP | | m³/h | 0 | 1,2 | 2,4 | 3,6 | 4,2 | 4,8 | 6 | 7,2 | 8,4 | 9,6 | f | fM | fM | fM |
| | | | | l/min | 0 | 20 | 40 | 60 | 70 | 80 | 100 | 120 | 140 | 160 | mm | mm | mm | mm | |
| 4SDF 54/4EC-60 | 4SDFM 54/4EC-60 | 0,55 | 0,75 | H | 37,4 | 35,9 | 34,0 | 31,5 | 30,1 | 28,6 | 25,0 | 20,9 | 16,3 | 11,0 | 310 | 657 | 11,6 | 672 | |
| 4SDF 54/5EC-60 | 4SDFM 54/5EC-60 | 0,75 | 1 | m | 46,7 | 44,9 | 42,5 | 39,4 | 37,6 | 35,7 | 31,3 | 26,1 | 20,3 | 13,8 | 340 | 702 | 13 | 742 | |
| 4SDF 54/7EC-60 | 4SDFM 54/7EC-60 | 1,1 | 1,5 | | 65,4 | 62,8 | 59,4 | 55,2 | 52,7 | 50,0 | 43,8 | 36,5 | 28,5 | 19,3 | 400 | 802 | 14,6 | 847 | |
| 4SDF 54/9EC-60 | 4SDFM 54/9EC-60 | 1,5 | 2 | | 84,1 | 80,8 | 76,4 | 70,9 | 67,8 | 64,3 | 56,3 | 47,0 | 36,6 | 24,9 | 460 | 907 | 16,7 | 927 | |
| 4SDF 54/13EC-60 | 4SDFM 54/13EC-60 | 2,2 | 3 | | 122 | 117 | 110 | 102 | 97,9 | 92,8 | 81,3 | 67,8 | 52,9 | 35,9 | 580 | 982 | 16,7 | 1097 | |
| 4SDF 54/18EC-60 | | 3 | 4 | | 168 | 162 | 153 | 142 | 136 | 129 | 113 | 93,9 | 73,2 | 49,7 | 730 | 1203 | 21,1 | | |
| 4SDF 54/22EC-60 | | 4 | 5,5 | | 206 | 198 | 187 | 173 | 166 | 157 | 138 | 115 | 89,5 | 60,8 | 850 | 1388 | 25,4 | | |
| 4SDF 54/24EC-60 | | 4 | 5,5 | | 224 | 215 | 204 | 189 | 181 | 171 | 150 | 125 | 97,6 | 66,3 | 910 | 1448 | 25,8 | | |
| 4SDF 54/28EC-60 | | 5,5 | 7,5 | | 262 | 251 | 238 | 221 | 211 | 200 | 175 | 146 | 114 | 77,3 | 1030 | 1668 | 31,2 | | |
| 4SDF 54/33EC-60 | | 5,5 | 7,5 | | 309 | 296 | 280 | 260 | 249 | 236 | 206 | 172 | 134 | 91,1 | 1180 | 1818 | 32,5 | | |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



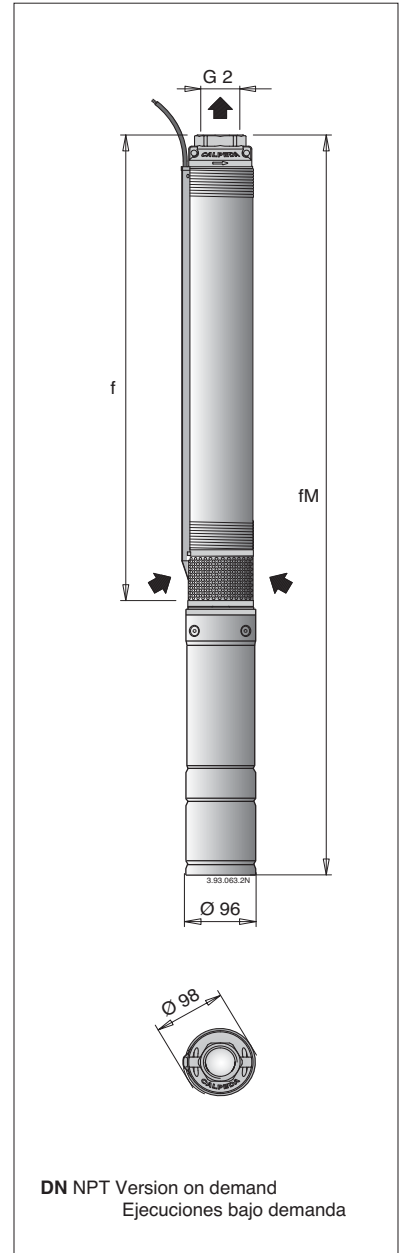
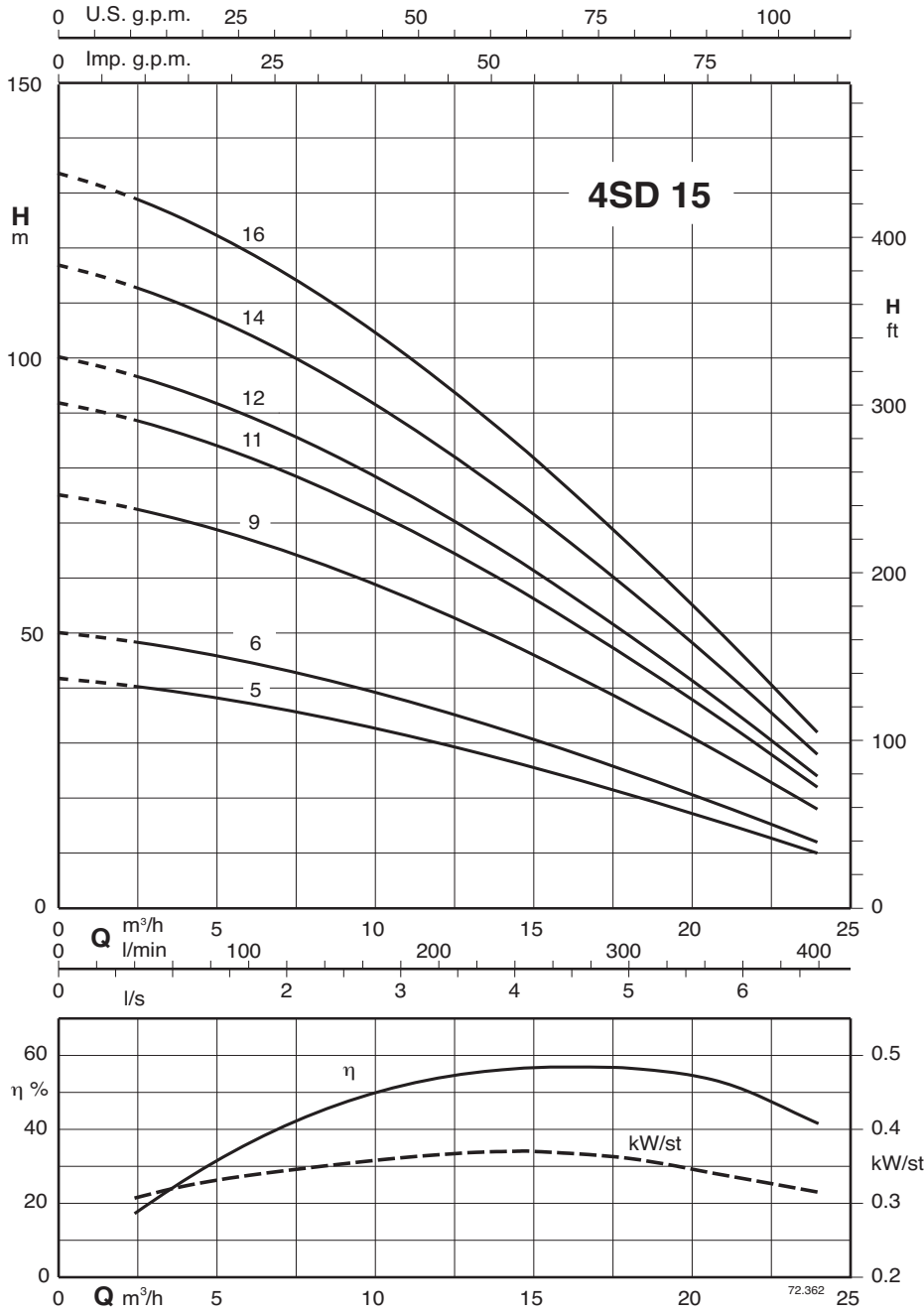
| 3~ | 1~ | P ₂ | | Q | n ≈ 3450 1/min | | | | | | | | | | | 4SD | | 4SDM | |
|----------------|----------------|----------------|-----|-------|----------------|-----|-----|-----|-----|-----|------|-----|------|------|------|------|------|------|------|
| | | kW | HP | | 0 | 1,2 | 2,4 | 3,6 | 6 | 8,4 | 10,8 | 12 | 13,2 | 14,4 | f | fM | fM | fM | |
| | | | | l/min | 0 | 20 | 40 | 60 | 100 | 140 | 180 | 200 | 220 | 240 | mm | mm | kg | mm | kg |
| 4SD 10/3EC-60 | 4SDM 10/3EC-60 | 0,75 | 1 | H | 31 | 30 | 29 | 28 | 26 | 23 | 18 | 18 | 12 | 9 | 427 | 789 | 12,2 | 829 | 13,2 |
| 4SD 10/4EC-60 | 4SDM 10/4EC-60 | 1,1 | 1,5 | | 41 | 40 | 39 | 38 | 34 | 30 | 24 | 24 | 16 | 12 | 480 | 882 | 13,9 | 927 | 14,5 |
| 4SD 10/5EC-60 | 4SDM 10/5EC-60 | 1,5 | 2 | | 51 | 50 | 49 | 47 | 43 | 38 | 30 | 30 | 20 | 15 | 533 | 980 | 15,2 | 1000 | 15,3 |
| 4SD 10/7EC-60 | 4SDM 10/7EC-60 | 2,2 | 3 | | 72 | 70 | 69 | 66 | 61 | 53 | 43 | 43 | 29 | 21 | 638 | 1040 | 13,6 | 1155 | 19,4 |
| 4SD 10/9EC-60 | | 3 | 4 | | 92 | 90 | 89 | 85 | 78 | 68 | 55 | 55 | 36 | 27 | 715 | 1188 | 23,6 | | |
| 4SD 10/12EC-60 | | 4 | 5,5 | | 123 | 120 | 118 | 113 | 104 | 91 | 73 | 73 | 48 | 36 | 902 | 1440 | 25,2 | | |
| 4SD 10/13EC-60 | | 4 | 5,5 | | 133 | 130 | 128 | 122 | 113 | 99 | 79 | 79 | 52 | 39 | 925 | 1463 | 31,1 | | |
| 4SD 10/18EC-60 | | 5,5 | 7,5 | | 184 | 180 | 177 | 171 | 156 | 136 | 110 | 110 | 75 | 54 | 1220 | 1858 | 32,5 | | |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3~ | 1~ | P ₂ | | Q | $n \approx 3450$ 1/min | | | | | | | | | | 4SD | | 4SDM | | |
|----------------|----------------|----------------|-----|--------|------------------------|------|------|------|------|------|------|------|------|----|------|------|------|------|------|
| | | kW | HP | | m ³ /h | 0 | 2,4 | 4,8 | 7,2 | 9,6 | 12 | 15 | 18 | 21 | 24 | f | fM | kg | fM |
| 4SD 15/5EC-60 | 4SDM 15/5EC-60 | 1,5 | 2 | H m | 41,8 | 40,4 | 38,5 | 36,1 | 33,3 | 30,1 | 25,7 | 20,8 | 15,5 | 10 | 600 | 1047 | 17,1 | 1067 | 18 |
| 4SD 15/6EC-60 | 4SDM 15/6EC-60 | 2,2 | 3 | | 50,2 | 48,5 | 46,2 | 43,3 | 39,9 | 36,1 | 30,8 | 24,9 | 18,6 | 12 | 680 | 1082 | 16,9 | 1197 | 20,9 |
| 4SD 15/9EC-60 | | 3 | 4 | | 75,3 | 72,7 | 69,2 | 65 | 59,9 | 54,2 | 46,2 | 37,4 | 28 | 18 | 915 | 1388 | 22,4 | | |
| 4SD 15/11EC-60 | | 4 | 5,5 | | 92 | 88,9 | 84,6 | 79,4 | 73,2 | 66,2 | 56,4 | 45,7 | 34,2 | 22 | 1070 | 1608 | 26,8 | | |
| 4SD 15/12EC-60 | | 4 | 5,5 | | 100 | 96,9 | 92,3 | 86,6 | 79,9 | 72,2 | 61,6 | 49,9 | 37,3 | 24 | 1145 | 1683 | 27,4 | | |
| 4SD 15/14EC-60 | | 5,5 | 7,5 | | 117 | 113 | 108 | 101 | 93,2 | 84,3 | 71,8 | 58,2 | 43,5 | 28 | 1375 | 2013 | 32,9 | | |
| 4SD 15/16EC-60 | | 5,5 | 7,5 | | 134 | 129 | 123 | 116 | 107 | 96,3 | 82,1 | 66,5 | 49,7 | 32 | 1520 | 2158 | 34,3 | | |

P₂ Rated motor power output.
Potencia nominal del motor.

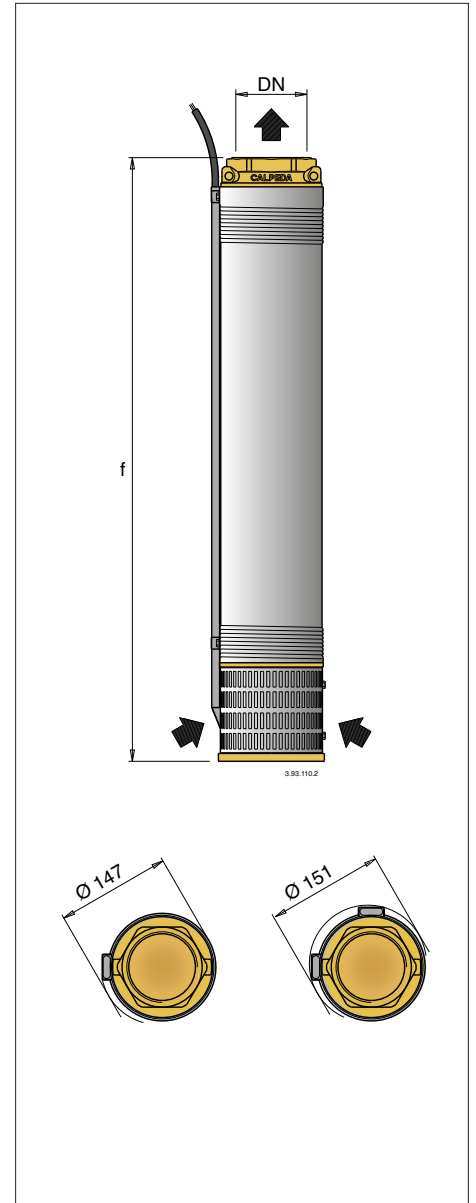
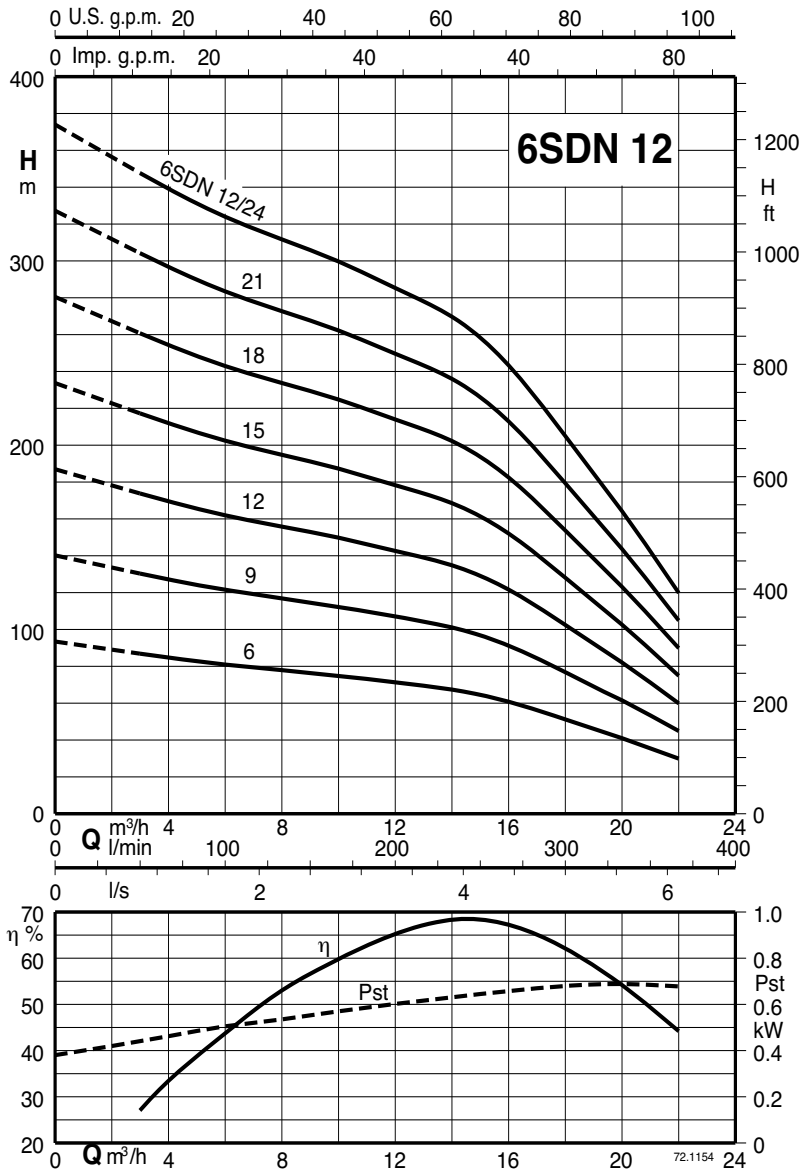
H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

6SDN 12 60 Hz



Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3 ~ | P ₂ | | Q | n ≈ 3450 rpm | | | | | | | | | | | |
|---------------|----------------|------|--------|--------------|-----|-----|-----|------|------|-----|------|------|-----|----|--|
| | | | | m³/h | | | | | | | | | | | |
| | kW | HP | | l/min | 3 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | |
| 6SDN 12/6-60 | 4 | 5,5 | H m | 87 | 81 | 78 | 75 | 71,5 | 67,5 | 60 | 51,5 | 41 | 30 | | |
| 6SDN 12/9-60 | 5,5 | 7,5 | | 131 | 122 | 117 | 113 | 107 | 101 | 91 | 77 | 61,5 | 45 | | |
| 6SDN 12/12-60 | 7,5 | 10 | | 174 | 162 | 156 | 150 | 143 | 135 | 122 | 103 | 82 | 60 | | |
| 6SDN 12/15-60 | 9,2 | 12,5 | | 218 | 203 | 195 | 188 | 179 | 169 | 152 | 128 | 103 | 75 | | |
| 6SDN 12/18-60 | 11 | 15 | | 261 | 243 | 234 | 225 | 214 | 203 | 183 | 154 | 123 | 90 | | |
| 6SDN 12/21-60 | 13 | 17,5 | | 305 | 284 | 273 | 263 | 250 | 236 | 213 | 180 | 144 | 105 | | |
| 6SDN 12/24-60 | 15 | 20 | | 348 | 324 | 312 | 300 | 286 | 270 | 244 | 205 | 165 | 120 | | |

| DN | f | |
|----------------|------|------|
| | mm | kg |
| G 3 ISO 228 | 560 | 12,8 |
| | 677 | 14,5 |
| | 793 | 16,2 |
| | 908 | 17,9 |
| | 1025 | 19,6 |
| | 1141 | 21,3 |
| | 1320 | 23 |

P₂ Rated motor power output.
Potencia nominal del motor.

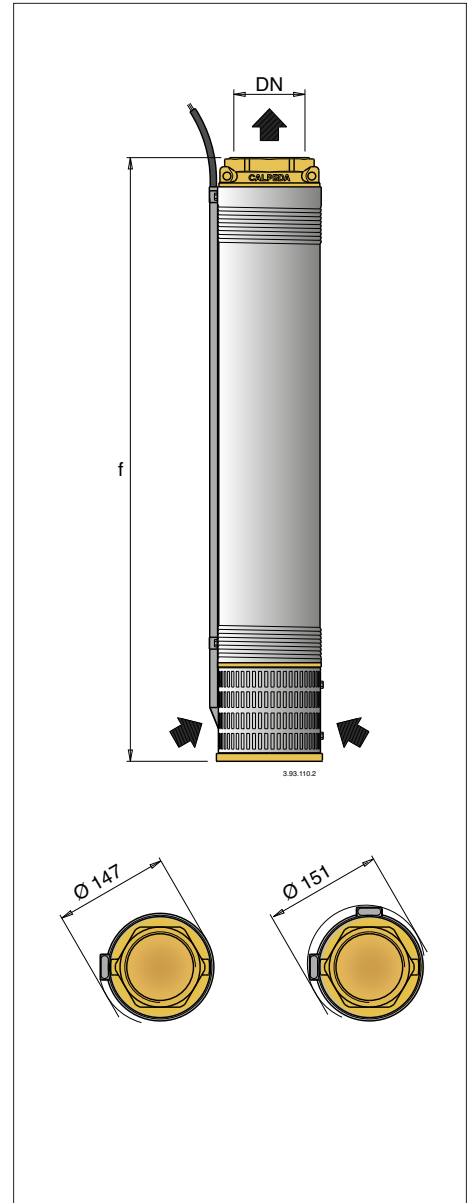
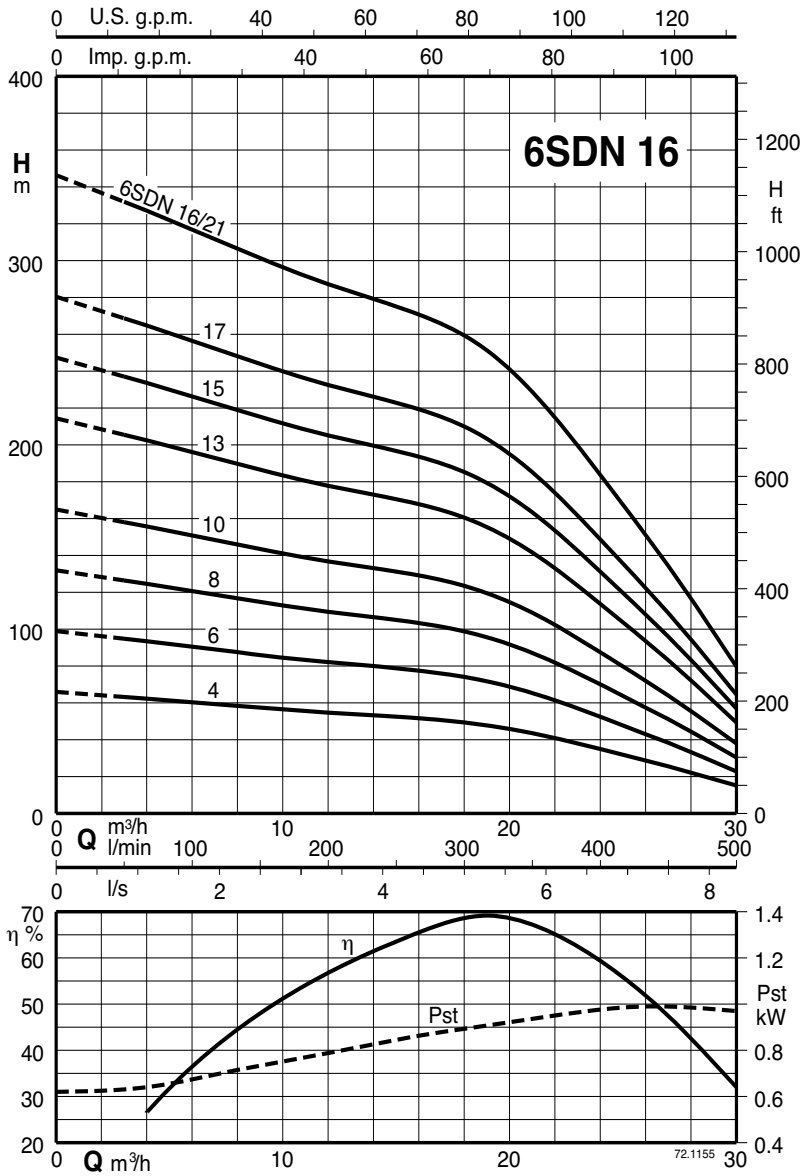
H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

6SDN 16 60 Hz



Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3 ~ | P ₂ | | Q | n ≈ 3450 rpm | | | | | | | | | | | |
|---------------|----------------|------|--------|--------------|-------|------|-----|-----|------|------|------|------|--|--|--|
| | | | | | | | | | | | | | | | |
| | kW | HP | m³/h | 4 | 8 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | | | |
| | | | l/min | 66,6 | 133,3 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | | | |
| | | | H m | 62,5 | 58,5 | 54,7 | 52 | 50 | 43,5 | 35 | 25,5 | 15 | | | |
| 6SDN 16/4-60 | 4 | 5,5 | | 93,5 | 87,5 | 82 | 78 | 75 | 65,5 | 52,5 | 38,5 | 23 | | | |
| 6SDN 16/6-60 | 5,5 | 7,5 | | 125 | 117 | 109 | 104 | 100 | 87 | 70 | 51 | 30,5 | | | |
| 6SDN 16/8-60 | 7,5 | 10 | | 156 | 146 | 137 | 130 | 125 | 109 | 87,5 | 64 | 38 | | | |
| 6SDN 16/10-60 | 9,2 | 12,5 | | 203 | 190 | 178 | 169 | 163 | 142 | 114 | 83 | 49,5 | | | |
| 6SDN 16/13-60 | 11 | 15 | | 234 | 219 | 205 | 195 | 188 | 164 | 131 | 96 | 57 | | | |
| 6SDN 16/15-60 | 13 | 17,5 | | 265 | 248 | 233 | 221 | 213 | 185 | 149 | 109 | 64,5 | | | |
| 6SDN 16/17-60 | 15 | 20 | | 327 | 307 | 287 | 273 | 263 | 229 | 184 | 134 | 80 | | | |
| 6SDN 16/21-60 | 18,5 | 25 | | | | | | | | | | | | | |

| DN | f | |
|----------------|------|------|
| | mm | kg |
| G 3 ISO 228 | 484 | 12,5 |
| | 561 | 13,5 |
| | 638 | 14,5 |
| | 715 | 15,5 |
| | 830 | 17 |
| | 907 | 18 |
| | 985 | 19 |
| | 1139 | 21,5 |

P₂ Rated motor power output.
Potencia nominal del motor.

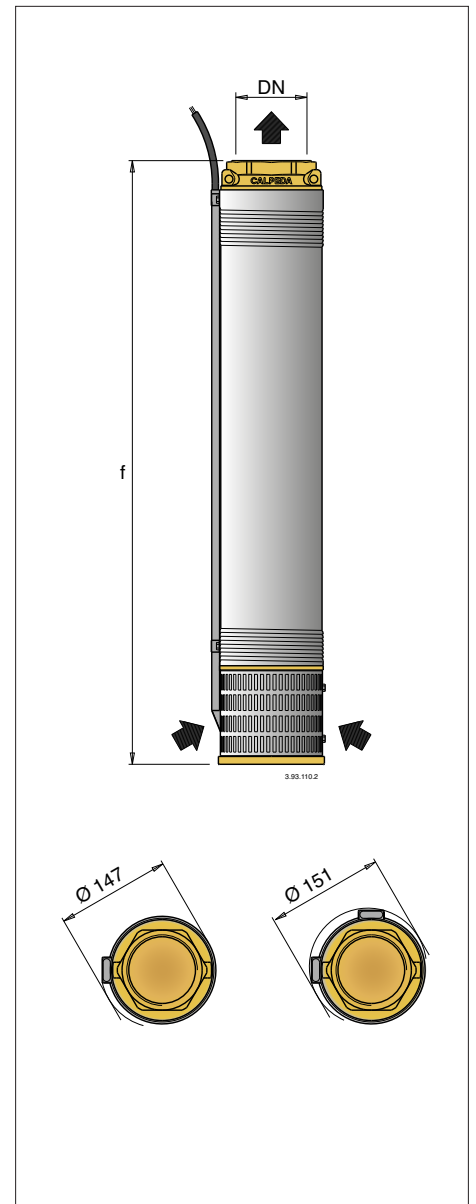
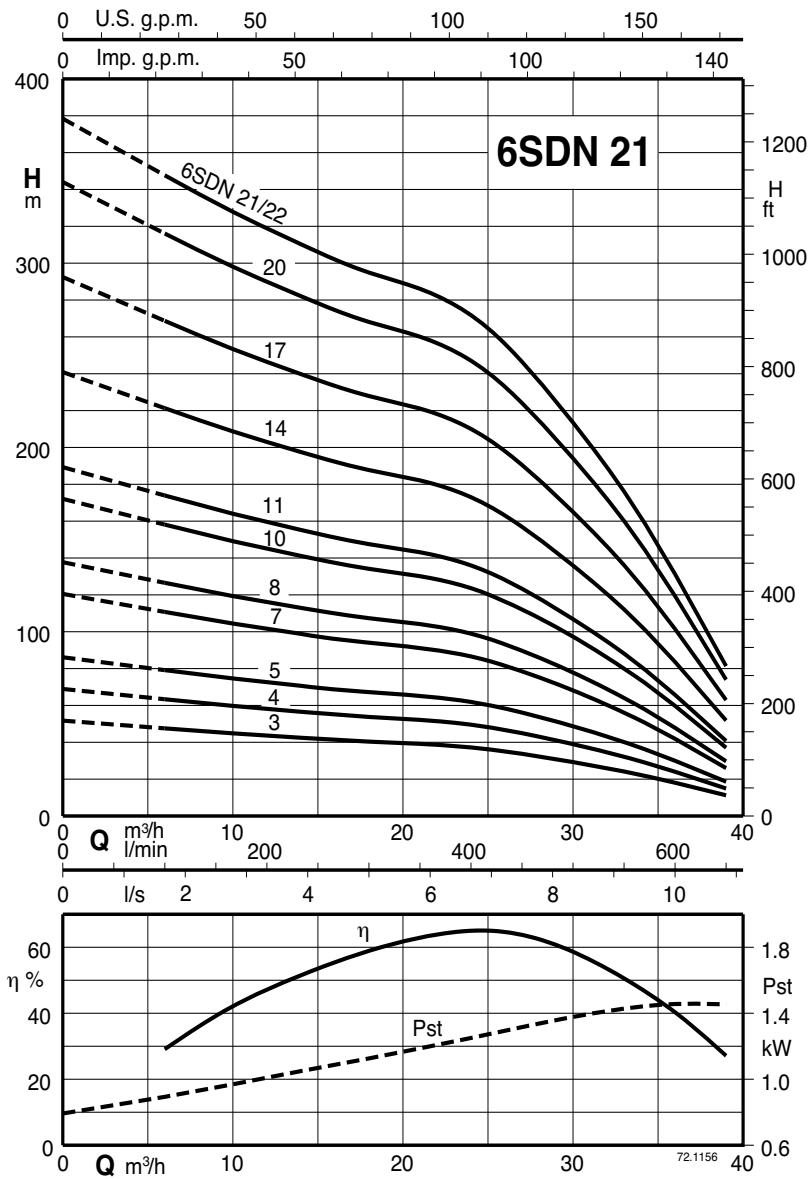
H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

6SDN 21 60 Hz



Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3 ~ | P ₂ | | Q | n ≈ 3450 rpm | | | | | | | | | | | |
|---------------|----------------|------|------|--------------|------|------|-----|------|------|------|-----|------|------|----|----|
| | | | | H | | | | | | | | | | | |
| | kW | HP | | m³/h | 6 | 10 | 14 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 |
| 6SDN 21/3-60 | 4 | 5,5 | 47,5 | 44,5 | 42,5 | 40 | 39 | 37 | 33,5 | 29 | 24 | 18 | 11 | | |
| 6SDN 21/4-60 | 5,5 | 7,5 | 63 | 59,5 | 56,5 | 53,5 | 52 | 49,5 | 45 | 39 | 32 | 24 | 15 | | |
| 6SDN 21/5-60 | 7,5 | 10 | 79 | 74,5 | 70,5 | 67 | 65 | 62 | 56 | 48,5 | 40 | 30 | 18,5 | | |
| 6SDN 21/7-60 | 9,2 | 12,5 | 111 | 104 | 98,5 | 94 | 91 | 86,5 | 78,5 | 68 | 56 | 42 | 26 | | |
| 6SDN 21/8-60 | 11 | 15 | 126 | 119 | 113 | 107 | 104 | 99 | 89,5 | 77,5 | 64 | 47,5 | 29,5 | | |
| 6SDN 21/10-60 | 13 | 17,5 | 158 | 149 | 141 | 134 | 130 | 124 | 112 | 97 | 80 | 59,5 | 37 | | |
| 6SDN 21/11-60 | 15 | 20 | 174 | 164 | 155 | 147 | 143 | 136 | 123 | 107 | 88 | 65,5 | 40,5 | | |
| 6SDN 21/14-60 | 18,5 | 25 | 221 | 209 | 197 | 188 | 182 | 173 | 157 | 136 | 112 | 83,5 | 51,5 | | |
| 6SDN 21/17-60 | 22 | 30 | 269 | 253 | 240 | 228 | 221 | 210 | 190 | 165 | 136 | 101 | 62,5 | | |
| 6SDN 21/20-60 | 26 | 35 | 316 | 298 | 282 | 268 | 260 | 247 | 224 | 194 | 160 | 119 | 74 | | |
| 6SDN 21/22-60 | 30 | 40 | 348 | 328 | 310 | 295 | 286 | 272 | 246 | 213 | 176 | 131 | 81 | | |

| DN | f | kg |
|----------------|-------|------|
| G 3 ISO 228 | 470 | 12,1 |
| | 517 | 12,7 |
| | 565 | 13,3 |
| | 660 | 14,5 |
| | 707 | 15,1 |
| | 802 | 16,3 |
| | 850 | 16,9 |
| | 992 | 18,7 |
| | 1135 | 20,5 |
| | 12771 | 22,3 |
| 1420 | 23,5 | |

P₂ Rated motor power output.
Potencia nominal del motor.

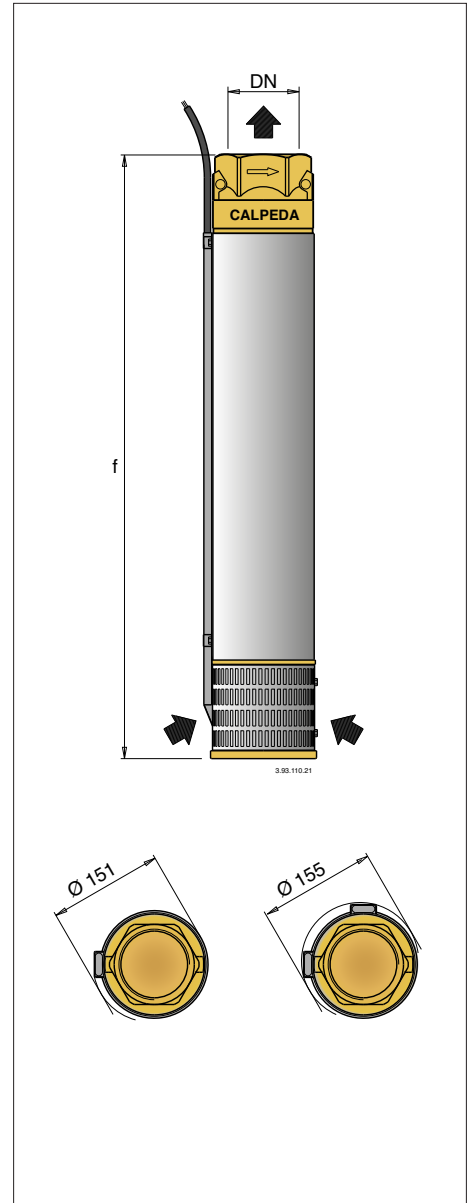
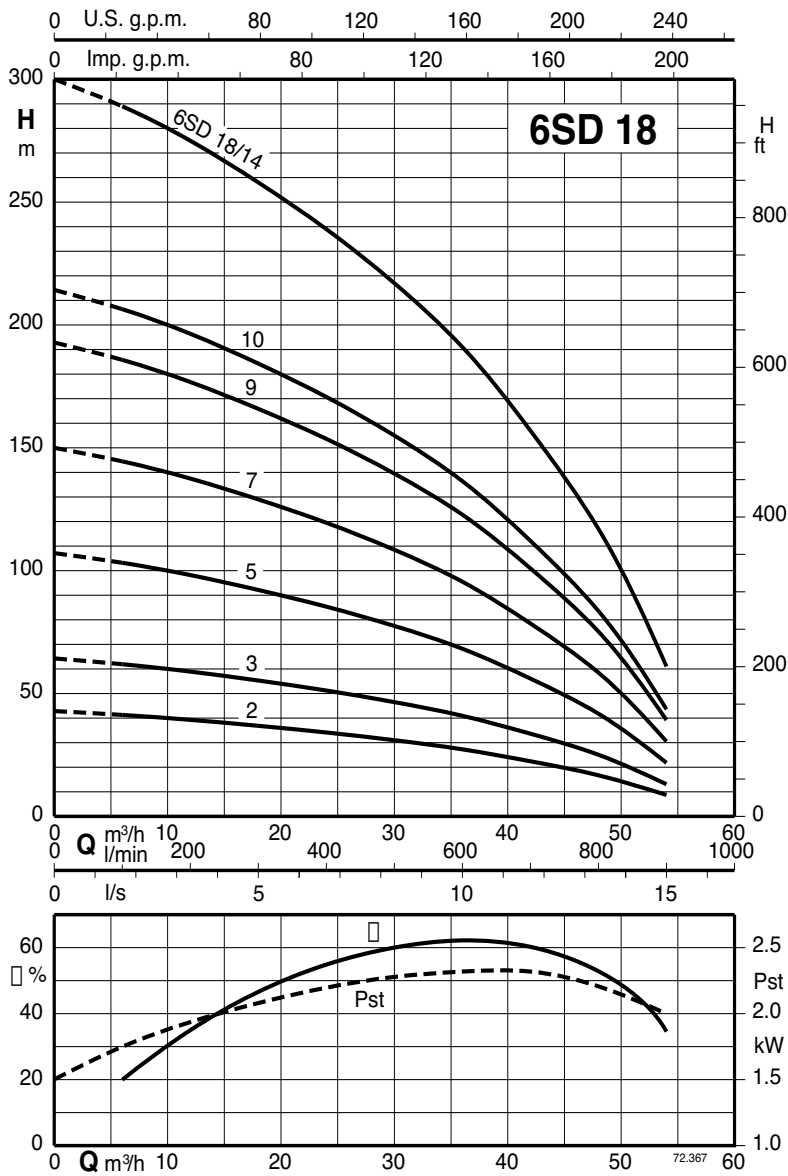
H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

6SD 18 60 Hz



Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3 ~ | P2 | | Q | $n \approx 3450$ rpm | | | | | | | | | | | |
|--------------|------|-----|-------|----------------------|-----|-----|-----|-----|-----|-----|-----|----|--|--|--|
| | | | | m³/h | | | | | | | | | | | |
| | kW | HP | l/min | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | | | |
| 6SD 18/2-60 | 5,5 | 7,5 | | 42 | 40 | 39 | 35 | 33 | 27 | 23 | 16 | 8 | | | |
| 6SD 18/3-60 | 7,5 | 10 | | 63 | 60 | 57 | 52 | 47 | 41 | 33 | 23 | 13 | | | |
| 6SD 18/5-60 | 11 | 15 | | 105 | 100 | 94 | 87 | 79 | 68 | 56 | 40 | 21 | | | |
| 6SD 18/7-60 | 15 | 20 | | 147 | 140 | 131 | 121 | 109 | 95 | 78 | 57 | 30 | | | |
| 6SD 18/9-60 | 18,5 | 25 | | 188 | 179 | 167 | 153 | 137 | 118 | 95 | 69 | 39 | | | |
| 6SD 18/10-60 | 22 | 30 | | 210 | 200 | 186 | 173 | 156 | 136 | 112 | 83 | 43 | | | |
| 6SD 18/14-60 | 30 | 40 | | 291 | 277 | 260 | 240 | 218 | 191 | 158 | 117 | 61 | | | |

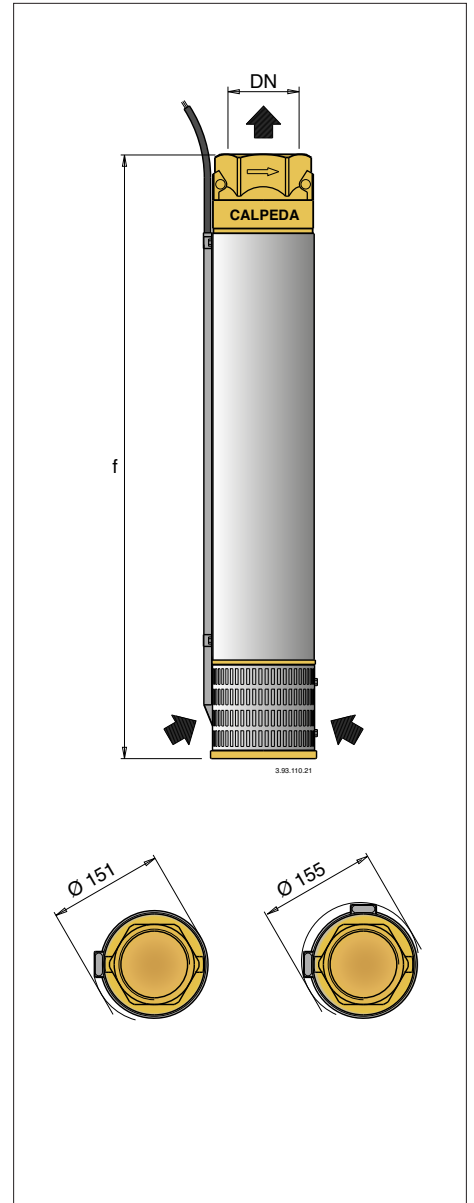
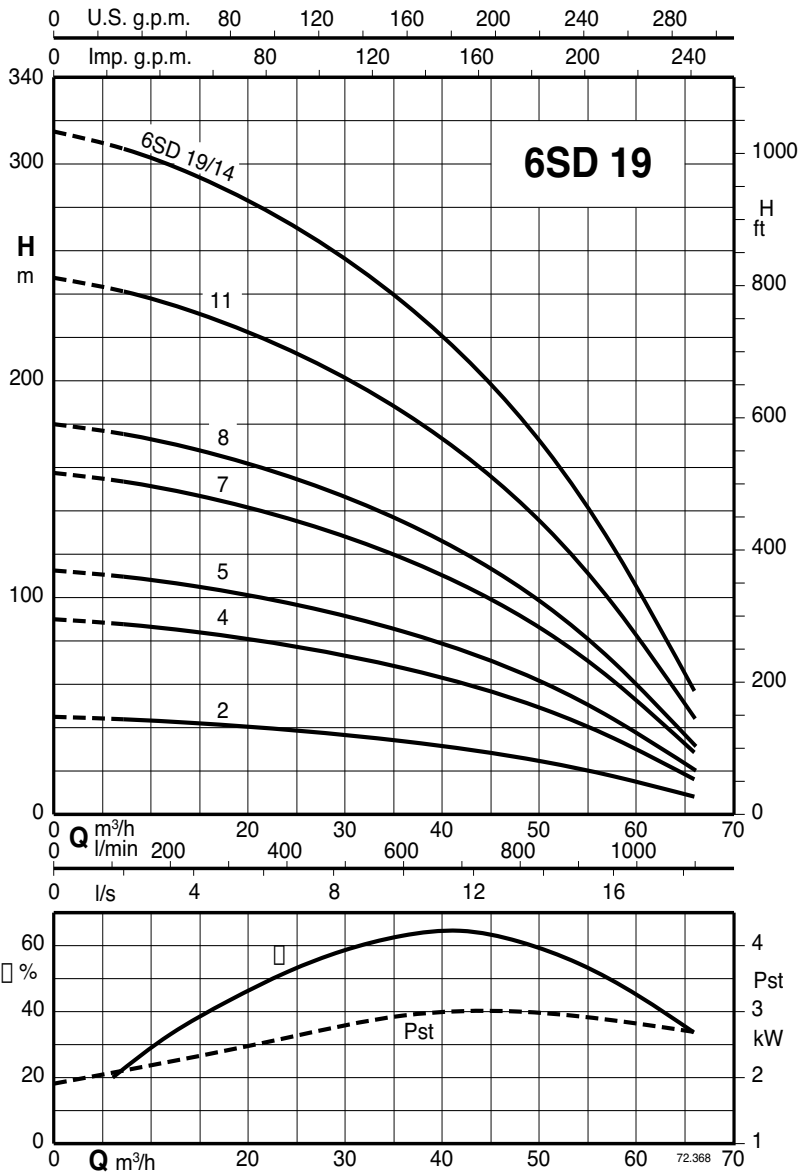
| DN | f | kg |
|----------------|------|------|
| | mm | |
| G 3 ISO 228 | 542 | 58,5 |
| | 651 | 64,5 |
| | 870 | 74 |
| | 1088 | 86 |
| | 1307 | 103 |
| | 1416 | 121 |
| | 1853 | 146 |

P2 Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3 ~ | P ₂ | | Q | $n \approx 3450$ rpm | | | | | | | | | | | |
|--------------|----------------|-----|-----|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|--|
| | | | | m ³ /h | | | | | | | | | | | |
| | kW | HP | | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | |
| 6SD 19/2-60 | 5,5 | 7,5 | 44 | 43 | 41 | 39 | 37 | 34 | 31 | 27 | 21 | 15 | 8 | | |
| 6SD 19/4-60 | 11 | 15 | 88 | 86 | 82 | 79 | 74 | 68 | 61 | 51 | 41 | 29 | 16 | | |
| 6SD 19/5-60 | 15 | 20 | 110 | 107 | 103 | 98 | 92 | 85 | 75 | 65 | 52 | 37 | 20 | | |
| 6SD 19/7-60 | 18,5 | 25 | 153 | 149 | 144 | 137 | 129 | 119 | 106 | 91 | 73 | 51 | 28 | | |
| 6SD 19/8-60 | 22 | 30 | 177 | 172 | 165 | 157 | 148 | 135 | 121 | 104 | 83 | 60 | 32 | | |
| 6SD 19/11-60 | 30 | 40 | 244 | 237 | 228 | 216 | 203 | 187 | 166 | 142 | 115 | 82 | 45 | | |
| 6SD 19/14-60 | 37 | 50 | 310 | 300 | 288 | 275 | 257 | 237 | 212 | 183 | 147 | 104 | 57 | | |

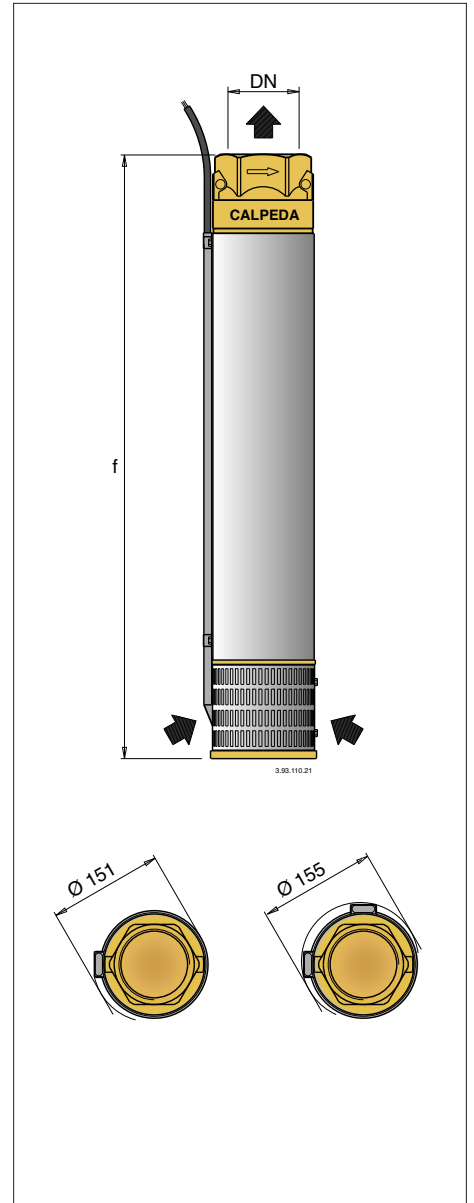
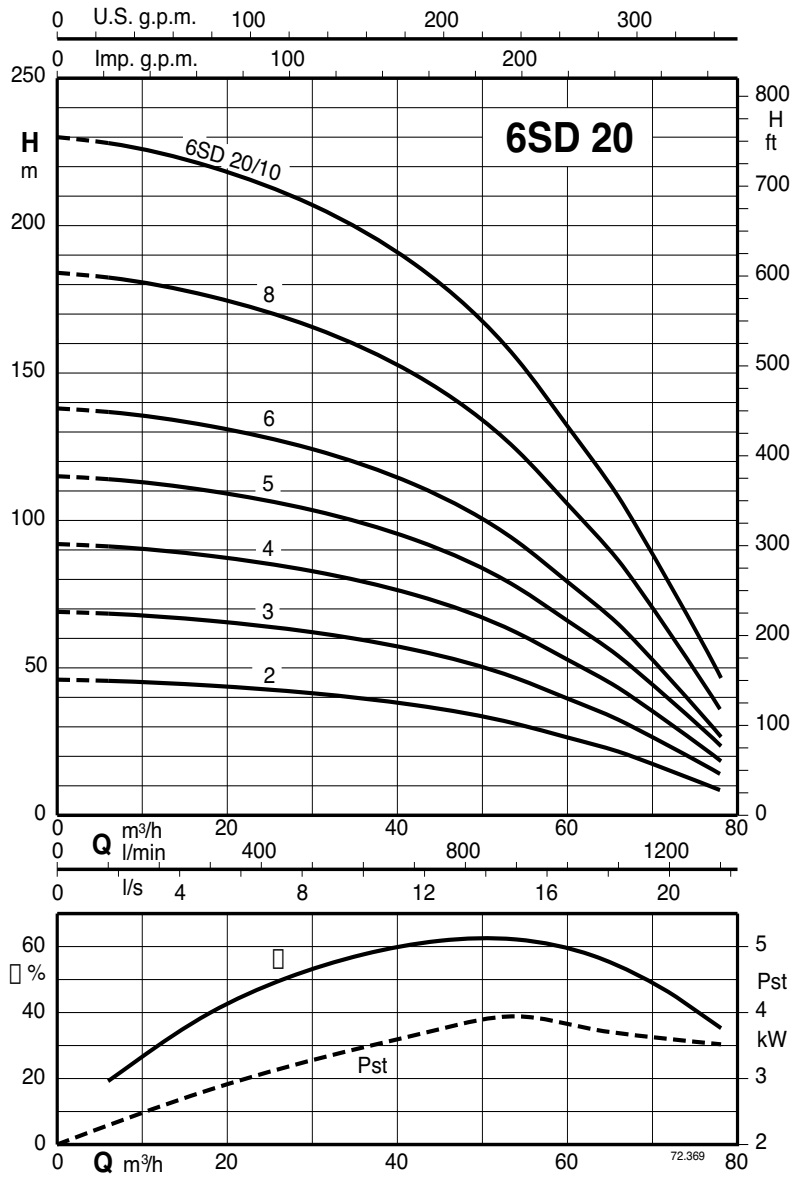
| DN | f | kg |
|----------------|------|------|
| G 3 ISO 228 | 542 | 58,5 |
| | 760 | 72 |
| | 870 | 81 |
| | 1088 | 98 |
| | 1197 | 117 |
| | 1525 | 140 |
| | 1853 | 196 |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.

Performance - Prestaciones $n \approx 3450$ rpm, dimensions and weights - dimensiones y pesos



| 3~ | P ₂ | | Q | n ≈ 3450 rpm | | | | | | | | | | | | |
|--------------|----------------|----|--------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|
| | | | | m³/h | | | | | | | | | | | | |
| | kW | HP | | l/min | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 |
| 6SD 20/2-60 | 7,5 | 10 | H m | 45 | 44 | 42 | 41 | 40 | 37 | 34 | 30 | 26 | 20 | 15 | 9 | |
| 6SD 20/3-60 | 11 | 15 | | 67 | 66 | 64 | 62 | 59 | 56 | 51 | 46 | 39 | 31 | 22 | 13 | |
| 6SD 20/4-60 | 15 | 20 | | 88 | 87 | 84 | 82 | 78 | 73 | 68 | 61 | 51 | 40 | 30 | 18 | |
| 6SD 20/5-60 | 18,5 | 25 | | 112 | 109 | 106 | 103 | 98 | 93 | 86 | 77 | 65 | 51 | 38 | 23 | |
| 6SD 20/6-60 | 22 | 30 | | 135 | 132 | 129 | 122 | 112 | 113 | 104 | 93 | 79 | 63 | 45 | 27 | |
| 6SD 20/8-60 | 30 | 40 | | 181 | 177 | 171 | 166 | 158 | 149 | 137 | 123 | 105 | 84 | 60 | 36 | |
| 6SD 20/10-60 | 37 | 50 | | 226 | 222 | 216 | 208 | 198 | 189 | 173 | 155 | 132 | 106 | 76 | 46 | |

| DN | f | |
|----------------|------|------|
| | mm | kg |
| G 3 ISO 228 | 542 | 62 |
| | 651 | 69,5 |
| | 760 | 80 |
| | 870 | 94 |
| | 979 | 112 |
| | 1197 | 132 |
| | 1416 | 152 |

P₂ Rated motor power output.
Potencia nominal del motor.

H Total head in m
Altura total en m

Tolerances according to UNI EN ISO 9906:2012.
Tolerancias según UNI EN ISO 9906:2012.