

SP4

4" SUBMERSIBLE PUMPS



- Clean water
(Maximum sand content 150 g/m³)
- Domestic use
- Civil use



CONSTRUCTION CHARACTERISTICS

| | |
|-----------------------|---|
| DELIVERY BODY | Precision cast stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1 |
| IMPELLER | Lexan 141-R for 1-1.5-2-4-6-8 SP4 Noryl FE1520PW for 10-12-15 SP4 |
| DIFFUSER | Noryl FE1520PW |
| STAGE CASING | Stainless steel AISI 304 |
| PUMP SHAFT | Stainless steel AISI 304 |
| DRIVE COUPLING | Stainless steel AISI 316L up to 2.2 kW; Stainless steel AISI 304 for higher powers |
| MOTOR 4" | Oil filled motor Jacket: AISI 316 stainless steel Shaft: "DUPLIX" stainless steel |
| POWER CABLE | Length of power cable: – for P2 from 0.37 to 3 kW: 1.7 m – for P2 from 4 to 7.5 kW: 2.7 m |

PERFORMANCE RANGE

- Flow rate up to **340 l/min** (20.4 m³/h)
- Head up to **405 m**

APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **150 g/m³**
- **100 m** immersion limit
- Installation:
 - vertical
 - horizontal, with the following limits:
 - 1SP4 - 1.5SP4 - 2SP4 - 4SP4 up to **27 stages**
 - 6SP4 - 8SP4 up to **17 stages**
 - 10SP4 - 12SP4 - 15SP4 up to **12 stages**
- Starts/hour: **20** at regular intervals
- Minimum flow rate for motor cooling **8 cm/s**
- Continuous service **S1**

INSTALLATION AND USE

Suitable for use with clean water with a sand content of no more than 150 g/m³. Because of their high efficiency and reliability, they are suitable for use in domestic, civil and industrial applications such as for the distribution of water in combination with pressure tanks, for irrigation, for washing plants and for pressure boosting in fire-fighting sets, etc..

CONSTRUCTION AND SAFETY STANDARDS

- Single-phase 230 V - 50 Hz
- Three-phase 400 V - 50 Hz

The single-phase versions supplied with a capacitor included in the packaging.

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

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



OPTIONS AVAILABLE ON REQUEST

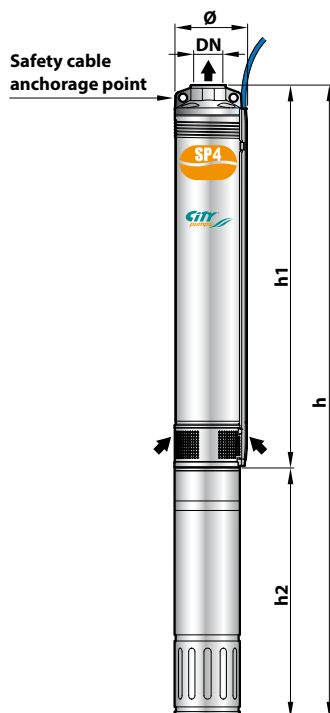
- Kit of cooling jacket complete with filter and supports



DIMENSIONS AND WEIGHT

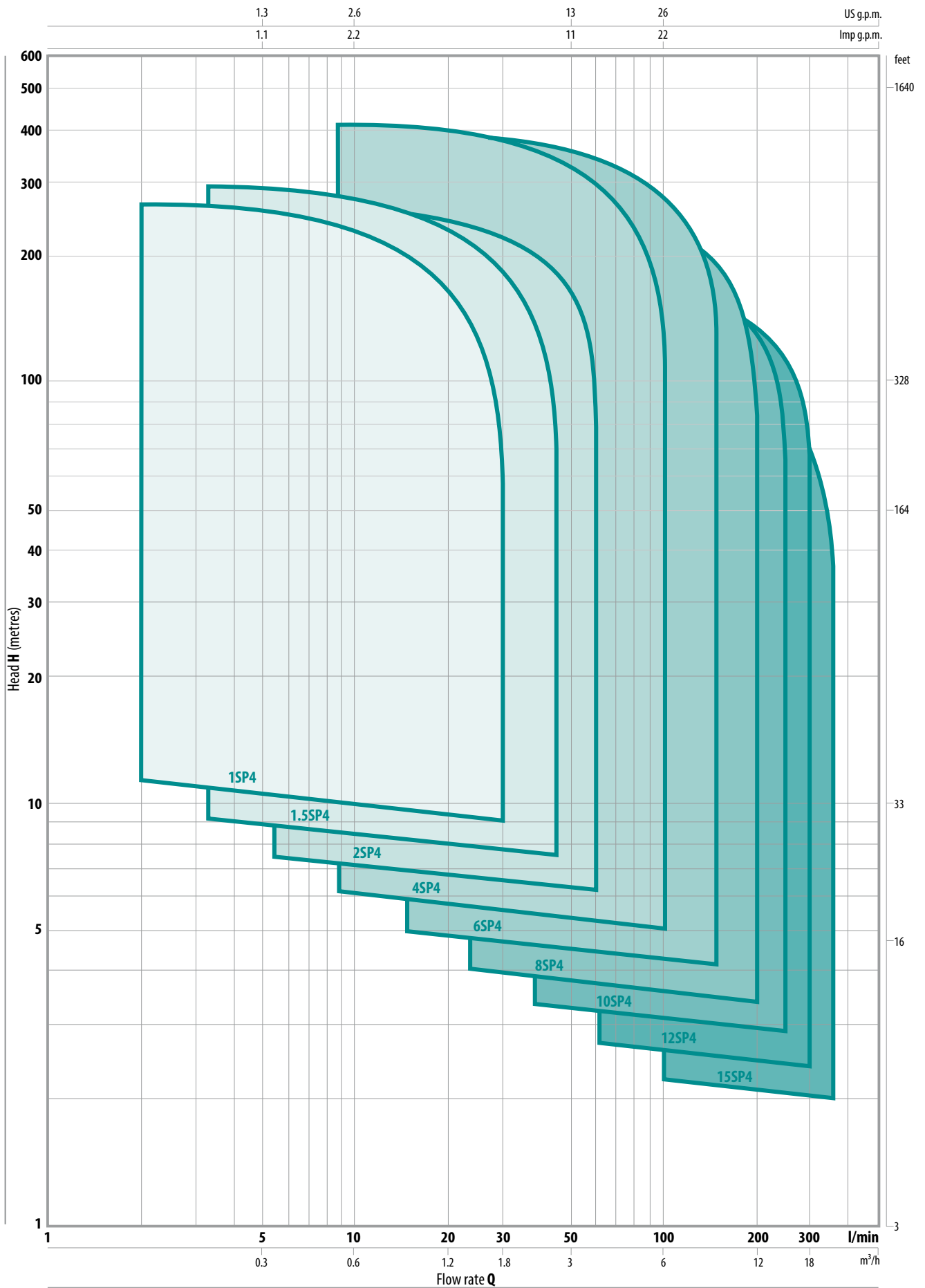
| MODEL Single-phase | PORT DN | DIMENSIONS mm | | | | kg 1~ | | |
|-----------------------|------------|---------------|------|-----|------|----------|------|------|
| | | Ø | h1 | h2 | h | | | |
| 1SP05-4M/R | 1 1/4" | 98 | 400 | 311 | 711 | 11.2 | | |
| 1SP07-4M/R | | | 517 | 331 | 848 | 13.2 | | |
| 1SP10-4M/R | | | 646 | 356 | 1002 | 15.9 | | |
| 1SP15-4M/R | | | 856 | 396 | 1252 | 19.6 | | |
| 1SP20-4M/R | | | 1065 | 437 | 1502 | 23.1 | | |
| 1.5SP05-4M/R | | | 308 | 311 | 619 | 10.3 | | |
| 1.5SP07-4M/R | | | 400 | 331 | 731 | 11.7 | | |
| 1.5SP10-4M/R | | | 499 | 356 | 855 | 14.2 | | |
| 1.5SP15-4M/R | | | 646 | 396 | 1042 | 17.5 | | |
| 1.5SP20-4M/R | | | 800 | 437 | 1237 | 20.9 | | |
| 1.5SP30-4M/R | | | 1134 | 492 | 1626 | 28.1 | | |
| 2SP05-4M/R | | | 290 | 311 | 601 | 10.1 | | |
| 2SP07-4M/R | | | 345 | 331 | 676 | 11.4 | | |
| 2SP10-4M/R | | | 400 | 356 | 756 | 13.3 | | |
| 2SP15-4M/R | | | 554 | 396 | 950 | 16.6 | | |
| 2SP20-4M/R | | | 683 | 437 | 1120 | 19.5 | | |
| 2SP30-4M/R | | | 929 | 492 | 1421 | 25.4 | | |
| 4SP07-4M | | | 314 | 331 | 645 | 11.0 | | |
| 4SP10-4M/R | | | 358 | 356 | 714 | 12.8 | | |
| 4SP15-4M/R | | | 468 | 396 | 864 | 15.6 | | |
| 4SP20-4M/R | | | 580 | 437 | 1017 | 18.3 | | |
| 4SP30-4M/R | | | 756 | 492 | 1248 | 23.2 | | |
| 6SP07-4M/R | | | 2" | 98 | 281 | 331 | 612 | 10.9 |
| 6SP10-4M/R | | | | | 341 | 356 | 697 | 12.5 |
| 6SP15-4M/R | | | | | 431 | 396 | 827 | 15.0 |
| 6SP20-4M/R | | | | | 576 | 437 | 1013 | 17.8 |
| 6SP30-4M/R | 695 | 492 | | | 1187 | 22.2 | | |
| 8SP10-4M/R | 281 | 356 | | | 637 | 12.0 | | |
| 8SP15-4M/R | 371 | 396 | | | 767 | 14.4 | | |
| 8SP20-4M/R | 431 | 437 | | | 868 | 16.4 | | |
| 8SP30-4M/R | 576 | 492 | | | 1068 | 21.0 | | |
| 10SP10-4M/R | 616 | 356 | | | 972 | 14.0 | | |
| 10SP15-4M/R | 762 | 396 | | | 1158 | 16.9 | | |
| 10SP20-4M/R | 981 | 437 | | | 1418 | 20.2 | | |
| 10SP30-4M/R | 1346 | 492 | | | 1838 | 26.4 | | |
| 12SP10-4M/R | 543 | 356 | | | 899 | 13.4 | | |
| 12SP15-4M/R | 689 | 396 | | | 1085 | 16.3 | | |
| 12SP20-4M/R | 835 | 437 | | | 1272 | 19.0 | | |
| 12SP30-4M/R | 1200 | 492 | | | 1692 | 25.2 | | |
| 15SP15-4M/R | 616 | 396 | | | 1012 | 15.7 | | |
| 15SP20-4M/R | 762 | 437 | | | 1199 | 18.4 | | |
| 15SP30-4M/R | 1054 | 492 | | | 1546 | 24.0 | | |

| MODEL Three-phase | PORT DN | DIMENSIONS mm | | | | kg 3~ |
|----------------------|------------|---------------|------|------|------|----------|
| | | Ø | h1 | h2 | h | |
| 1SP05-4/R | 1 1/4" | 98 | 400 | 311 | 711 | 11.2 |
| 1SP07-4/R | | | 517 | 331 | 848 | 13.2 |
| 1SP10-4/R | | | 646 | 356 | 1002 | 15.9 |
| 1SP15-4/R | | | 856 | 371 | 1227 | 18.8 |
| 1SP20-4/R | | | 1065 | 396 | 1461 | 21.6 |
| 1.5SP05-4/R | | | 308 | 311 | 619 | 10.3 |
| 1.5SP07-4/R | | | 400 | 331 | 731 | 11.7 |
| 1.5SP10-4/R | | | 499 | 356 | 855 | 14.2 |
| 1.5SP15-4/R | | | 646 | 371 | 1017 | 16.7 |
| 1.5SP20-4/R | | | 800 | 396 | 1196 | 19.4 |
| 1.5SP30-4/R | | | 1134 | 437 | 1571 | 24.9 |
| 2SP05-4/R | | | 290 | 311 | 601 | 10.1 |
| 2SP07-4/R | | | 345 | 331 | 676 | 11.4 |
| 2SP10-4/R | | | 400 | 356 | 756 | 13.3 |
| 2SP15-4/R | | | 554 | 371 | 925 | 15.8 |
| 2SP20-4/R | | | 683 | 396 | 1079 | 18.0 |
| 2SP30-4/R | | | 929 | 437 | 1366 | 22.2 |
| 4SP07-4/R | | | 314 | 331 | 645 | 11.0 |
| 4SP10-4/R | | | 358 | 356 | 714 | 12.8 |
| 4SP15-4/R | | | 468 | 371 | 839 | 14.8 |
| 4SP20-4/R | | | 580 | 396 | 976 | 16.8 |
| 4SP30-4/R | | | 756 | 437 | 1193 | 20.0 |
| 4SP40-4/R | | | 978 | 450 | 1428 | 23.9 |
| 4SP55-4/R | | | 1295 | 505 | 1800 | 31.1 |
| 4SP75-4/R | | | 1652 | 700 | 2352 | 44.1 |
| 6SP07-4/R | | | 2" | 98 | 281 | 331 |
| 6SP10-4/R | 341 | 356 | | | 697 | 12.5 |
| 6SP15-4/R | 431 | 371 | | | 802 | 14.2 |
| 6SP20-4/R | 576 | 396 | | | 972 | 16.3 |
| 6SP30-4/R | 695 | 437 | | | 1132 | 19.0 |
| 6SP40-4/R | 900 | 450 | | | 1350 | 22.5 |
| 6SP55-4/R | 1164 | 505 | | | 1669 | 27.7 |
| 6SP75-4/R | 1519 | 700 | | | 2219 | 40.4 |
| 6SP100-4/R | 2063 | 800 | | | 2863 | 51.0 |
| 8SP10-4/R | 281 | 356 | | | 637 | 12.0 |
| 8SP15-4/R | 371 | 371 | | | 742 | 13.6 |
| 8SP20-4/R | 431 | 396 | | | 827 | 14.9 |
| 8SP30-4/R | 576 | 437 | | | 1013 | 17.8 |
| 8SP40-4/R | 695 | 450 | | | 1145 | 20.4 |
| 8SP55-4/R | 900 | 505 | | | 1405 | 25.4 |
| 8SP75-4/R | 1164 | 700 | | | 1864 | 36.5 |
| 8SP100-4/R | 1519 | 800 | | | 2319 | 43.9 |
| 10SP10-4/R | 616 | 356 | | | 972 | 14.0 |
| 10SP15-4/R | 762 | 371 | | | 1133 | 16.1 |
| 10SP20-4/R | 981 | 396 | | | 1377 | 18.7 |
| 10SP30-4/R | 1346 | 437 | | | 1783 | 23.2 |
| 10SP40-4/R | 1784 | 450 | | | 2234 | 28.2 |
| 10SP55-4/R | 2368 | 505 | | | 2873 | 36.1 |
| 10SP75-4/R | 3171 | 700 | | | 3871 | 51.2 |
| 12SP10-4/R | 543 | 356 | | | 899 | 13.4 |
| 12SP15-4/R | 689 | 371 | | | 1060 | 15.5 |
| 12SP20-4/R | 835 | 396 | 1231 | 17.5 | | |
| 12SP30-4/R | 1200 | 437 | 1637 | 22.0 | | |
| 12SP40-4/R | 1565 | 450 | 2015 | 26.5 | | |
| 12SP55-4/R | 2003 | 505 | 2508 | 32.9 | | |
| 12SP75-4/R | 2660 | 700 | 3360 | 46.9 | | |
| 15SP15-4/R | 616 | 371 | 987 | 14.9 | | |
| 15SP20-4/R | 762 | 396 | 1158 | 16.9 | | |
| 15SP30-4/R | 1054 | 437 | 1491 | 20.8 | | |
| 15SP40-4/R | 1346 | 450 | 1796 | 24.7 | | |
| 15SP55-4/R | 1711 | 505 | 2216 | 30.5 | | |
| 15SP75-4/R | 2295 | 700 | 2995 | 43.9 | | |



PERFORMANCE RANGE

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



PERFORMANCE DATA

50 Hz | n= 2900 min⁻¹

| MODEL | | POWER (P ₂) | | Q | 0 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | |
|---------------|--------------|-------------------------|------|---------------------|---------------------|-----------|------------|------------|------------|------------|------------|------------|
| Single-phase | Three-phase | kW | HP | | m ³ /h | 0 | 5 | 10 | 15 | 20 | 25 | 30 |
| 1SP05-4M /R | 1SP05-4 /R | 0.37 | 0.50 | H metres | 77 | 73 | 67 | 60 | 51 | 40 | 26 | |
| 1SP07-4M /R | 1SP07-4 /R | 0.55 | 0.75 | | 107 | 101 | 93 | 83 | 71 | 55 | 36 | |
| 1SP10-4M /R | 1SP10-4 /R | 0.75 | 1 | | 148 | 140 | 129 | 115 | 98 | 77 | 50 | |
| 1SP15-4M /R | 1SP15-4 /R | 1.1 | 1.5 | | 206 | 197 | 182 | 161 | 136 | 107 | 70 | |
| 1SP20-4M /R | 1SP20-4 /R | 1.5 | 2 | | 266 | 254 | 234 | 207 | 176 | 137 | 90 | |
| | | | | | Q m ³ /h | 0 | 0.3 | 0.9 | 1.5 | 1.8 | 2.1 | 2.7 |
| | | | | | 0 | 5 | 15 | 25 | 30 | 35 | 45 | |
| 1.5SP05-4M /R | 1.5SP05-4 /R | 0.37 | 0.50 | H metres | 50 | 48 | 44 | 36 | 32 | 26 | 14 | |
| 1.5SP07-4M /R | 1.5SP07-4 /R | 0.55 | 0.75 | | 81 | 78 | 71 | 59 | 52 | 43 | 23 | |
| 1.5SP10-4M /R | 1.5SP10-4 /R | 0.75 | 1 | | 106 | 102 | 93 | 78 | 68 | 56 | 30 | |
| 1.5SP15-4M /R | 1.5SP15-4 /R | 1.1 | 1.5 | | 156 | 151 | 136 | 115 | 100 | 83 | 45 | |
| 1.5SP20-4M /R | 1.5SP20-4 /R | 1.5 | 2 | | 200 | 193 | 175 | 147 | 128 | 106 | 58 | |
| 1.5SP30-4M /R | 1.5SP30-4 /R | 2.2 | 3 | | 288 | 277 | 250 | 211 | 184 | 153 | 83 | |
| | | | | Q m ³ /h | 0 | 0.6 | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 | |
| | | | | | 0 | 10 | 20 | 30 | 40 | 50 | 60 | |
| 2SP05-4M /R | 2SP05-4 /R | 0.37 | 0.50 | H metres | 48 | 46 | 44 | 39 | 33 | 25 | 14 | |
| 2SP07-4M /R | 2SP07-4 /R | 0.55 | 0.75 | | 70 | 68 | 63 | 57 | 48 | 36 | 20 | |
| 2SP10-4M /R | 2SP10-4 /R | 0.75 | 1 | | 90 | 88 | 82 | 74 | 62 | 46 | 26 | |
| 2SP15-4M /R | 2SP15-4 /R | 1.1 | 1.5 | | 135 | 130 | 122 | 111 | 93 | 71 | 39 | |
| 2SP20-4M /R | 2SP20-4 /R | 1.5 | 2 | | 180 | 173 | 164 | 150 | 126 | 96 | 52 | |
| 2SP30-4M /R | 2SP30-4 /R | 2.2 | 3 | | 260 | 250 | 238 | 216 | 183 | 138 | 75 | |
| | | | | Q m ³ /h | 0 | 1.2 | 2.4 | 3.0 | 3.6 | 4.8 | 6.0 | |
| | | | | | 0 | 20 | 40 | 50 | 60 | 80 | 100 | |
| 4SP07-4M | 4SP07-4 /R | 0.55 | 0.75 | H metres | 46 | 44 | 40 | 38 | 35 | 28 | 17 | |
| 4SP10-4M /R | 4SP10-4 /R | 0.75 | 1 | | 60 | 56 | 52 | 49 | 45 | 35 | 23 | |
| 4SP15-4M /R | 4SP15-4 /R | 1.1 | 1.5 | | 92 | 88 | 81 | 76 | 70 | 55 | 35 | |
| 4SP20-4M /R | 4SP20-4 /R | 1.5 | 2 | | 120 | 112 | 104 | 98 | 90 | 70 | 45 | |
| 4SP30-4M /R | 4SP30-4 /R | 2.2 | 3 | | 170 | 162 | 150 | 141 | 130 | 101 | 63 | |
| - | 4SP40-4 /R | 3 | 4 | | 230 | 220 | 202 | 190 | 175 | 137 | 85 | |
| - | 4SP55-4 /R | 4 | 5.5 | | 308 | 293 | 269 | 249 | 230 | 181 | 117 | |
| - | 4SP75-4 /R | 5.5 | 7.5 | | 405 | 385 | 350 | 325 | 300 | 235 | 155 | |
| | | | | | Q m ³ /h | 0 | 1.5 | 3.0 | 4.5 | 6.0 | 7.5 | 9.0 |
| | | | | | 0 | 25 | 50 | 75 | 100 | 125 | 150 | |
| 6SP07-4M /R | 6SP07-4 /R | 0.55 | 0.75 | H metres | 27 | 26 | 24 | 22 | 19 | 15 | 11 | |
| 6SP10-4M /R | 6SP10-4 /R | 0.75 | 1 | | 40 | 38 | 36 | 33 | 29 | 24 | 17 | |
| 6SP15-4M /R | 6SP15-4 /R | 1.1 | 1.5 | | 61 | 58 | 54 | 50 | 44 | 35 | 26 | |
| 6SP20-4M /R | 6SP20-4 /R | 1.5 | 2 | | 87 | 83 | 78 | 71 | 61 | 49 | 35 | |
| 6SP30-4M /R | 6SP30-4 /R | 2.2 | 3 | | 114 | 107 | 100 | 91 | 79 | 62 | 45 | |
| - | 6SP40-4 /R | 3 | 4 | | 154 | 148 | 138 | 128 | 112 | 92 | 67 | |
| - | 6SP55-4 /R | 4 | 5.5 | | 210 | 200 | 186 | 170 | 149 | 121 | 86 | |
| - | 6SP75-4 /R | 5.5 | 7.5 | | 285 | 276 | 258 | 240 | 212 | 170 | 124 | |
| - | 6SP100-4 /R | 7.5 | 10 | | 380 | 365 | 340 | 315 | 280 | 233 | 173 | |
| | | | | Q m ³ /h | 0 | 2.4 | 4.8 | 6.0 | 7.2 | 9.6 | 12.0 | |
| | | | | | 0 | 40 | 80 | 100 | 120 | 160 | 200 | |
| 8SP10-4M /R | 8SP10-4 /R | 0.75 | 1 | H metres | 27 | 26 | 24 | 23 | 22 | 17 | 10 | |
| 8SP15-4M /R | 8SP15-4 /R | 1.1 | 1.5 | | 47 | 46 | 43 | 41 | 38 | 29 | 16 | |
| 8SP20-4M /R | 8SP20-4 /R | 1.5 | 2 | | 60 | 58 | 55 | 52 | 48 | 37 | 21 | |
| 8SP30-4M /R | 8SP30-4 /R | 2.2 | 3 | | 87 | 85 | 80 | 76 | 70 | 54 | 30 | |
| - | 8SP40-4 /R | 3 | 4 | | 112 | 110 | 104 | 99 | 92 | 70 | 40 | |
| - | 8SP55-4 /R | 4 | 5.5 | | 153 | 150 | 141 | 134 | 124 | 95 | 53 | |
| - | 8SP75-4 /R | 5.5 | 7.5 | | 205 | 200 | 190 | 181 | 167 | 128 | 72 | |
| - | 8SP100-4 /R | 7.5 | 10 | | 280 | 272 | 257 | 244 | 225 | 175 | 98 | |
| | | | | | Q m ³ /h | 0 | 3.0 | 6.0 | 7.5 | 9.0 | 12 | 15.0 |
| | | | | | 0 | 50 | 100 | 125 | 150 | 200 | 250 | |
| 10SP10-4M/R | 10SP10-4/R | 0.75 | 1 | H metres | 33 | 29 | 25 | 23 | 20.5 | 13.5 | 4 | |
| 10SP15-4M/R | 10SP15-4/R | 1.1 | 1.5 | | 43 | 39 | 35 | 31 | 27.5 | 18 | 6 | |
| 10SP20-4M/R | 10SP20-4/R | 1.5 | 2 | | 60 | 54 | 47 | 42 | 37.5 | 25 | 8 | |
| 10SP30-4M/R | 10SP30-4/R | 2.2 | 3 | | 87 | 79 | 69 | 62 | 55 | 36.5 | 11 | |
| - | 10SP40-4/R | 3 | 4 | | 120 | 109 | 95 | 85 | 76 | 50 | 15 | |
| - | 10SP55-4/R | 4 | 5.5 | | 163 | 148 | 129 | 116 | 103 | 68 | 21 | |
| - | 10SP75-4/R | 5.5 | 7.5 | | 223 | 203 | 176 | 159 | 141 | 93 | 29 | |
| | | | | | Q m ³ /h | 0 | 3.0 | 6.0 | 8.4 | 12 | 15.6 | 18.0 |
| | | | | | | 0 | 50 | 100 | 140 | 200 | 260 | 300 |
| 12SP10-4M/R | 12SP10-4/R | 0.75 | 1 | H metres | 27 | 25 | 22.5 | 20.5 | 16.5 | 10.7 | 5 | |
| 12SP15-4M/R | 12SP15-4/R | 1.1 | 1.5 | | 38 | 35 | 31.5 | 28.5 | 23.2 | 15 | 7 | |
| 12SP20-4M/R | 12SP20-4/R | 1.5 | 2 | | 48 | 45 | 40.7 | 36.7 | 29.8 | 19.2 | 9 | |
| 12SP30-4M/R | 12SP30-4/R | 2.2 | 3 | | 75 | 70 | 63.3 | 57 | 46.5 | 30 | 14 | |
| - | 12SP40-4/R | 3 | 4 | | 102 | 95 | 85.8 | 77.5 | 63 | 40.5 | 19 | |
| - | 12SP55-4/R | 4 | 5.5 | | 135 | 125 | 113 | 102 | 83 | 53.5 | 25 | |
| - | 12SP75-4/R | 5.5 | 7.5 | 183 | 170 | 153.7 | 138.7 | 112.8 | 72.7 | 34 | | |
| | | | | Q m ³ /h | 0 | 3.0 | 6.0 | 9.0 | 12 | 15 | 20.4 | |
| | | | | | 0 | 50 | 100 | 150 | 200 | 250 | 340 | |
| 15SP15-4M/R | 15SP15-4/R | 1.1 | 1.5 | H metres | 32 | 30 | 27.5 | 24.5 | 21.5 | 17.5 | 3 | |
| 15SP20-4M/R | 15SP20-4/R | 1.5 | 2 | | 43 | 40 | 36.5 | 32.5 | 28.5 | 23.5 | 5 | |
| 15SP30-4M/R | 15SP30-4/R | 2.2 | 3 | | 64 | 60 | 54.5 | 49 | 43 | 35 | 7 | |
| - | 15SP40-4/R | 3 | 4 | | 86 | 80 | 73 | 65.5 | 57.5 | 46.5 | 9 | |
| - | 15SP55-4/R | 4 | 5.5 | | 113 | 105 | 95.5 | 86 | 75.5 | 61 | 12 | |
| - | 15SP75-4/R | 5.5 | 7.5 | | 156 | 145 | 132 | 119 | 104.5 | 84.5 | 17 | |