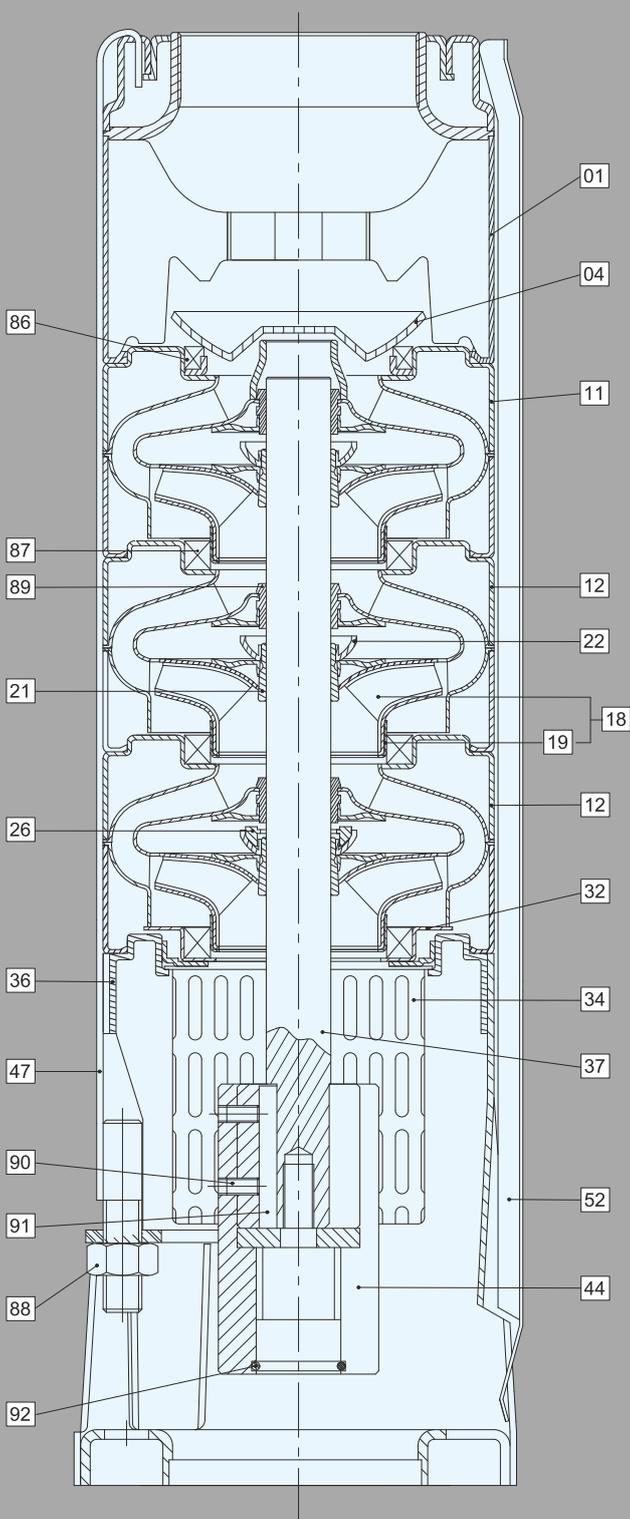


General Data



Example: SP-90



Material Specification-6" Pumps

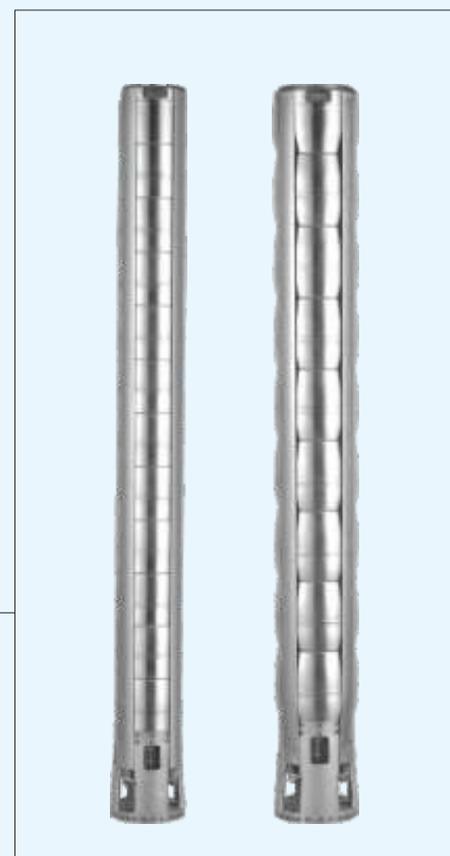
| Pos. | Components | Material | Standard |
|------|---------------------------------|--------------------------|----------|
| 01 | Discharge | Stainless Steel | 304 |
| 04 | Valve Cone | Stainless Steel | 304 |
| 11 | Top Diffuser | Stainless Steel | 304 |
| 12 | Diffuser | Stainless Steel | 304 |
| 18 | Impeller | Stainless Steel | 304 |
| 19 | Ring Of Impeller | Stainless Steel | 304 |
| 21 | Split Cone | Stainless Steel | 304 |
| 22 | Split Cone Nut | Stainless Steel | 304 |
| 26 | Spacing Washer For Stop Ring | Carbon/ Graphite/PTFE | |
| 32 | Neck Ring Retainer | Stainless Steel | 304 |
| 34 | Strainer | Stainless Steel | 304 |
| 36 | Suction Interconnector | Stainless Steel | 304 |
| 37 | Pump Shaft | Stainless Steel | 431 |
| 44 | Coupling | Stainless Steel | 304 |
| 47 | Strap | Stainless Steel | 304 |
| 52 | Cable Guard | Stainless Steel | 304 |
| 86 | Valve Seat | SUS304+NBR | |
| 87 | Neck Ring | SUS304+NBR | |
| 88 | Nut | Stainless Steel | 304 |
| 89 | Bearing | NBR | |
| 90 | Screw | Stainless Steel | 304 |
| 91 | Key | Stainless Steel | 304 |
| 92 | O-ring | NBR | |

*AISI 316 stainless steel pumps are available on request.

6" Stainless Steel Submersible Pumps

Stairs' SP 6" stainless steel submersible pumps are made of high quality 304 or 316 corrosion resistant stainless steel. Shafts are made of high strength 431 stainless steel. The pumps are designed for efficient and dependable performance, and a long and trouble-free life. The pumps are light in weight and ruggedly constructed for heavy duty applications.

Capacity (m³/h) min 3 max 78
 Total Head: Max. 433 m



Applications

- ◆ Potable water supply from deep wells
- ◆ Agricultural-Irrigation and livestock watering
- ◆ Municipal and industrial water supply
- ◆ Pressure boosting
- ◆ Mine de-watering
- ◆ Fountains, etc.

Pumped Liquids

- ◆ Clean, non corrosive and non-abrasive liquids.

Operating Conditions

- ◆ Max. ambient temperature (Liquid): 30°C
- ◆ Sand content: Max. 50 g/m³

Features

- ◆ Stainless steel construction designed and built for years of trouble free operation
- ◆ Heavy duty stainless steel discharge head with built-in check valve for long life and ease of installation
- ◆ Mounting specifications are according to NEMA standards
- ◆ High quality shaft bearings providing low friction and high wear resistance
- ◆ Heavy duty stainless steel impellers & diffusers ensuring optimal performance
- ◆ Stainless steel strainer to restrict the entry of sand and other extraneous material

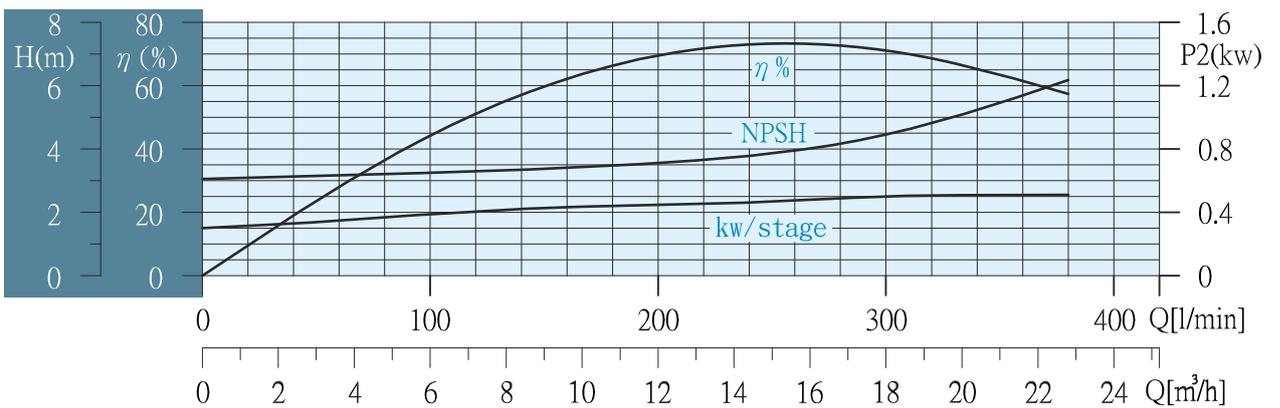
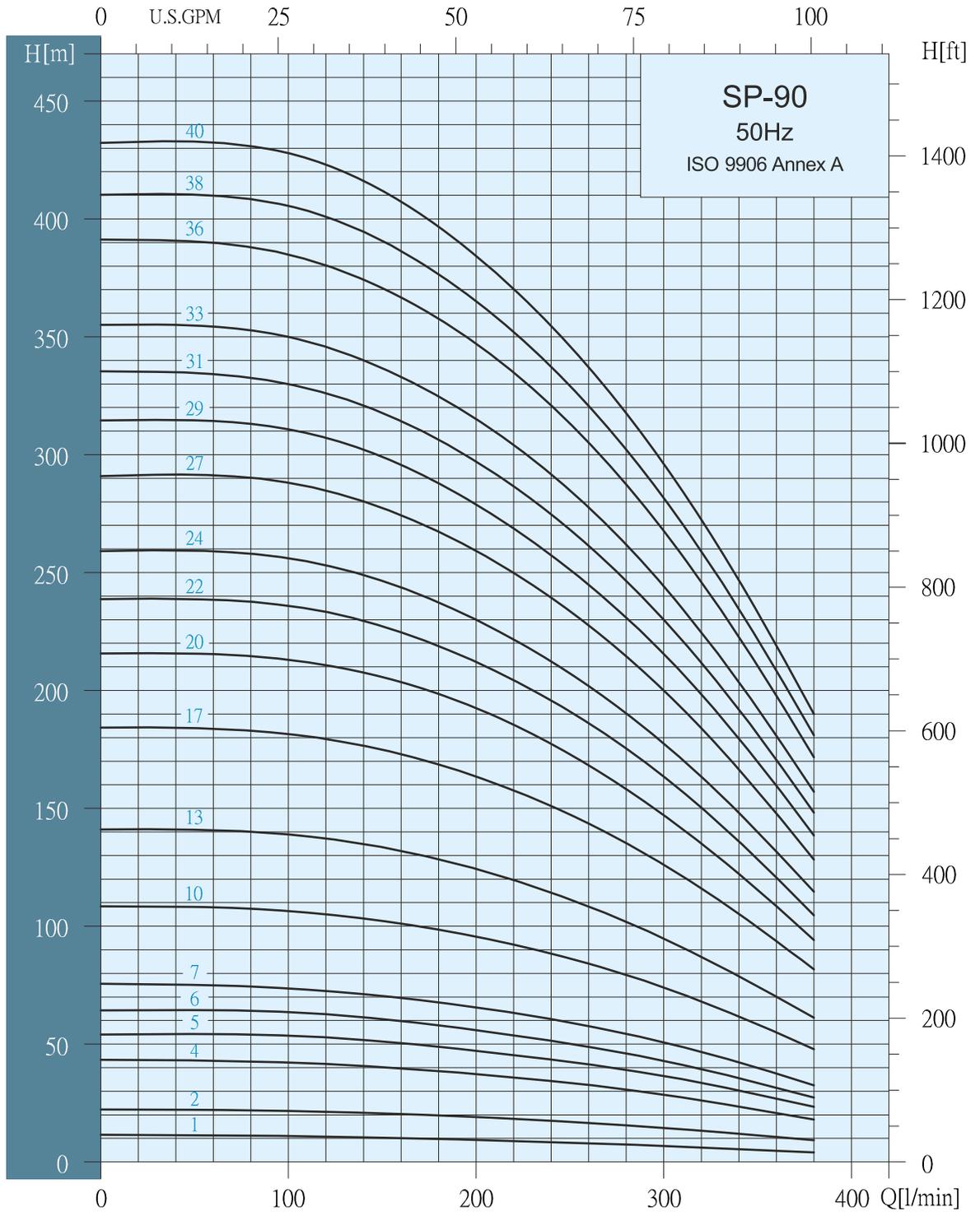
Stairs SP Series



STAIRS PUMPS

SP 6"

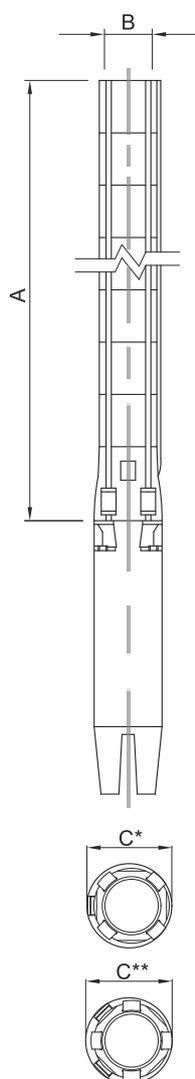
SP90 Performance Curves



Selection Chart

| Pump Type | Motor | | Max.current | | m ³ /h l/min | Q capacity 2900 rpm | | | | | | | |
|-----------|-------|------|-------------|------|----------------------------|---------------------|------|------|------|------|------|------|-----|
| | P2 | | Amp | | | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 23 |
| | KW | HP | 220V | 380V | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 383 |
| SP 90-1 | 0.55 | 0.75 | 2.6 | 1.5 | HEAD IN METERS | 11.5 | 11 | 10.5 | 9.5 | 8 | 7 | 6 | 4 |
| SP 90-2 | 1.1 | 1.5 | 5.2 | 3.0 | | 22 | 21.5 | 20 | 19 | 17.5 | 14 | 12 | 9 |
| SP 90-4 | 2.2 | 3 | 9.5 | 5.5 | | 42.5 | 42 | 40 | 38 | 33 | 28.5 | 23 | 18 |
| SP 90-5 | 3 | 4 | 13.3 | 7.7 | | 53 | 52 | 50.5 | 47.5 | 42.5 | 37 | 28.5 | 22 |
| SP 90-6 | 3.7 | 5 | 15.4 | 8.9 | | 64 | 63 | 60 | 56 | 50 | 43 | 34 | 27 |
| SP 90-7 | 4 | 5.5 | 17 | 10.4 | | 75 | 74 | 70 | 66 | 59 | 50.5 | 40 | 32 |
| SP 90-10 | 5.5 | 7.5 | 22.2 | 12.8 | | 108 | 107 | 102 | 95 | 86 | 74 | 58 | 48 |
| SP 90-13 | 7.5 | 10 | 28.5 | 16.5 | | 141 | 139 | 133 | 124 | 112 | 95 | 75 | 60 |
| SP 90-17 | 9.3 | 12.5 | 36 | 20.9 | | 184 | 182 | 175 | 163 | 147 | 126 | 100 | 80 |
| SP 90-20 | 11 | 15 | 41.8 | 24.2 | | 216 | 213 | 206 | 192 | 173 | 147 | 116 | 95 |
| SP 90-22 | 13 | 17.5 | 50 | 29 | | 239 | 237 | 228 | 212 | 190 | 163 | 129 | 105 |
| SP 90-24 | 13 | 17.5 | 50 | 29 | | 260 | 257 | 247 | 230 | 208 | 178 | 140 | 115 |
| SP 90-27 | 15 | 20 | 55 | 32 | | 291 | 288 | 277 | 259 | 234 | 200 | 158 | 128 |
| SP 90-29 | 18.5 | 25 | 69 | 40 | | 314 | 311 | 300 | 279 | 250 | 215 | 170 | 138 |
| SP 90-31 | 18.5 | 25 | 69 | 40 | | 335 | 330 | 318 | 298 | 269 | 230 | 181 | 148 |
| SP 90-33 | 18.5 | 25 | 69 | 40 | | 355 | 350 | 337 | 315 | 285 | 243 | 191 | 157 |
| SP 90-36 | 22 | 30 | 81 | 47 | | 390 | 385 | 371 | 348 | 313 | 268 | 210 | 170 |
| SP 90-38 | 22 | 30 | 81 | 47 | | 410 | 405 | 390 | 365 | 330 | 281 | 222 | 180 |
| SP 90-40 | 22 | 30 | 81 | 47 | | 433 | 428 | 412 | 384 | 346 | 296 | 235 | 190 |

*Higher pressure, longer stages pumps up to 60 stages are available on request.



Dimensions And Weights

| Pump Type | Dimensions(mm) | | | | Net Weight(Kg) |
|-----------|----------------|---------------------------|-----|-----|----------------|
| | A | B | C* | C** | Pump |
| SP 90-1 | 343 | RP 2 1/2" NPT 3" | 131 | | 5.0 |
| SP 90-2 | 403 | | 131 | | 6.4 |
| SP 90-4 | 524 | | 131 | | 9.3 |
| SP 90-5 | 585 | | 131 | | 10.8 |
| SP 90-6 | 645 | | 131 | | 12.2 |
| SP 90-7 | 706 | | 131 | | 13.7 |
| SP 90-10 | 887 | | 131 | | 18.0 |
| SP 90-13 | 1069 | | 142 | 142 | 22.4 |
| SP 90-17 | 1311 | | 142 | 142 | 28.2 |
| SP 90-20 | 1492 | | 142 | 142 | 32.5 |
| SP 90-22 | 1613 | | 142 | 142 | 35.4 |
| SP 90-24 | 1734 | | 142 | 142 | 38.3 |
| SP 90-27 | 1916 | | 142 | 142 | 42.7 |
| SP 90-29 | 2037 | | 142 | 142 | 45.6 |
| SP 90-31 | 2158 | | 142 | 142 | 48.5 |
| SP 90-33 | 2279 | | 142 | 142 | 51.4 |
| SP 90-36 | 2460 | | 142 | 142 | 55.7 |
| SP 90-38 | 2581 | | 142 | 142 | 58.6 |
| SP 90-40 | 2702 | | 142 | 142 | 61.5 |

C*: Maximum diameter of pump with one motor cable

C**: Maximum diameter of pump with two motor cable

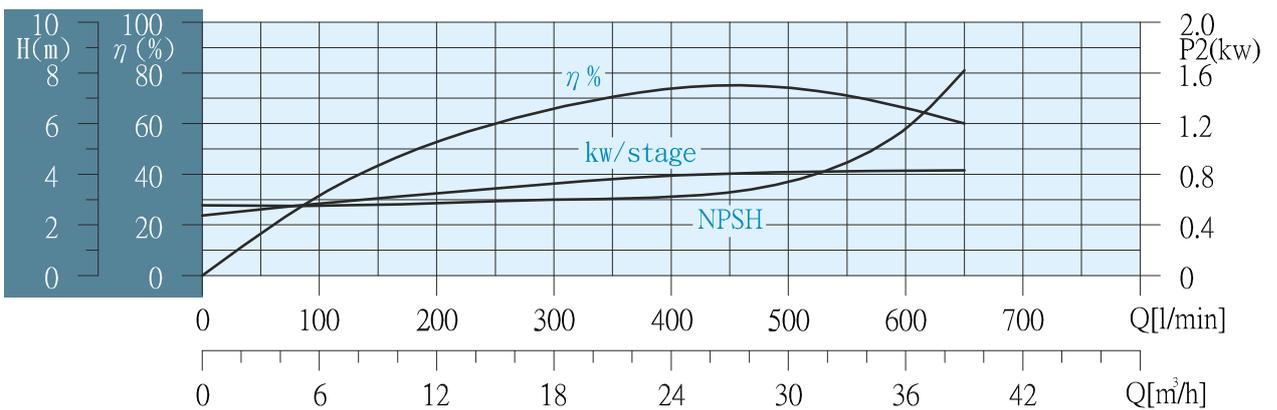
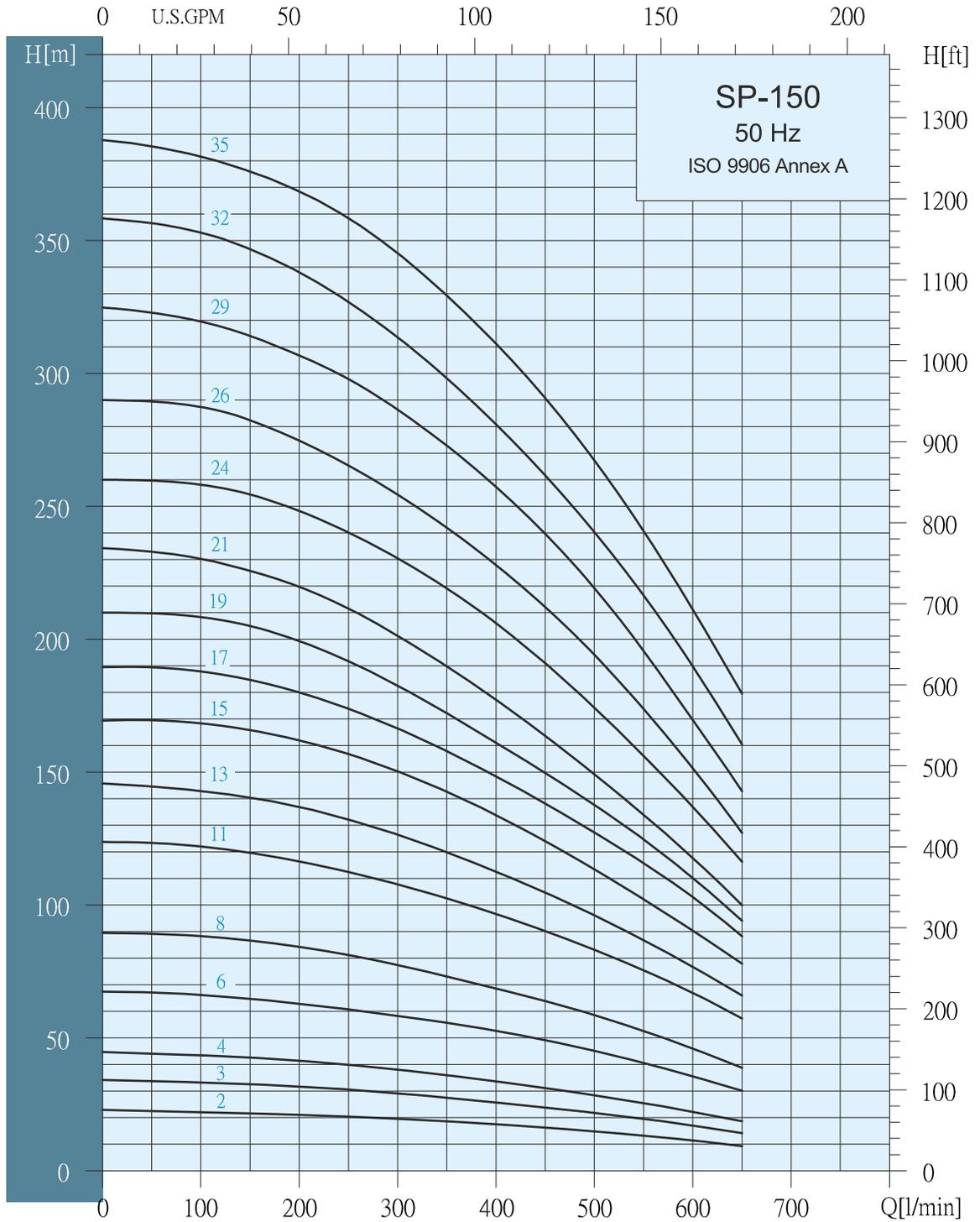
Stairs SP Series



STAIRS PUMPS

SP 6"

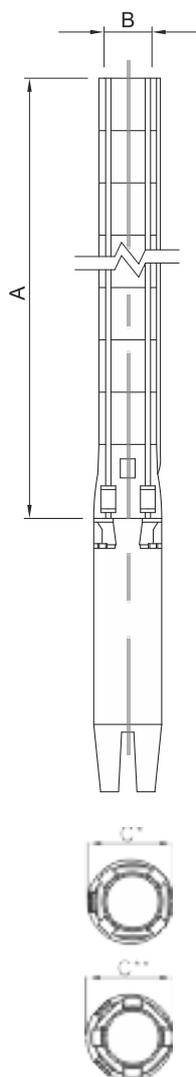
SP150 Performance Curves



Selection Chart

| Pump Type | Motor | | Max.current | | Q capacity 2900 rpm | | | | | | | | | | | | | |
|-----------|-------|-----|-------------|------|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | P2 | | Amp | | m ³ /h l/min | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 |
| | KW | HP | 220V | 380V | | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 |
| SP150-2 | 2.2 | 3 | 9.5 | 5.5 | HEAD IN METERS | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 13 | 11 | 9 | 6 |
| SP150-3 | 3 | 4 | 13.3 | 7.7 | | 33 | 32 | 31 | 30 | 29 | 28 | 26 | 24 | 22 | 20 | 17 | 14 | 11 |
| SP150-4 | 3.7 | 5 | 15.4 | 8.9 | | 43 | 42 | 41 | 40 | 38 | 36 | 34 | 31 | 28 | 26 | 23 | 19 | 15 |
| SP150-6 | 5.5 | 7.5 | 22.2 | 12.8 | | 67 | 64 | 62 | 60 | 58 | 56 | 52 | 49 | 45 | 40 | 36 | 30 | 25 |
| SP150-8 | 7.5 | 10 | 28.5 | 16.5 | | 88 | 87 | 84 | 81 | 78 | 73 | 68 | 64 | 58 | 53 | 46 | 38 | 31 |
| SP150-11 | 11 | 15 | 41.8 | 24.2 | | 122 | 120 | 117 | 112 | 108 | 102 | 97 | 90 | 83 | 76 | 67 | 57 | 47 |
| SP150-13 | 11 | 15 | 41.8 | 24.2 | | 143 | 140 | 137 | 132 | 127 | 120 | 113 | 105 | 97 | 87 | 77 | 66 | 55 |
| SP150-15 | 15 | 20 | 55 | 32 | | 168 | 166 | 162 | 157 | 150 | 142 | 134 | 124 | 113 | 102 | 90 | 77 | 65 |
| SP150-17 | 15 | 20 | 55 | 32 | | 188 | 185 | 180 | 173 | 167 | 158 | 148 | 138 | 127 | 116 | 103 | 88 | 71 |
| SP150-19 | 18.5 | 25 | 69 | 40 | | 208 | 205 | 199 | 192 | 182 | 172 | 161 | 150 | 137 | 125 | 110 | 94 | 77 |
| SP150-21 | 18.5 | 25 | 69 | 40 | | 230 | 226 | 220 | 212 | 202 | 190 | 177 | 164 | 149 | 134 | 117 | 100 | 80 |
| SP150-24 | 22 | 30 | 81 | 47 | | 258 | 254 | 248 | 240 | 230 | 219 | 207 | 191 | 175 | 156 | 137 | 117 | 93 |
| SP150-26 | 22 | 30 | 81 | 47 | | 287 | 282 | 275 | 266 | 255 | 242 | 227 | 212 | 194 | 173 | 152 | 127 | 100 |
| SP150-29 | 26 | 35 | 96 | 56 | | 319 | 314 | 307 | 298 | 287 | 273 | 257 | 240 | 220 | 196 | 170 | 143 | 113 |
| SP150-32 | 30 | 40 | 111 | 64 | | 353 | 347 | 338 | 327 | 313 | 298 | 281 | 261 | 240 | 217 | 190 | 160 | 130 |
| SP150-35 | 30 | 40 | 111 | 64 | | 382 | 377 | 368 | 358 | 346 | 329 | 311 | 290 | 267 | 240 | 211 | 180 | 148 |

*Higher pressure, longer stages pumps up to 54 stages are available on request.



Dimensions And Weights

| Pump Type | Dimensions(mm) | | | | Net Weight(Kg) |
|-----------|----------------|---------------|-----|-----|----------------|
| | A | B | C* | C** | Pump |
| SP150-2 | 462 | NPT/ RP 3" | 131 | | 8.4 |
| SP150-3 | 558 | | 131 | | 10.1 |
| SP150-4 | 654 | | 131 | | 11.8 |
| SP150-6 | 846 | | 131 | | 15.2 |
| SP150-8 | 1038 | | 142 | 142 | 18.6 |
| SP150-11 | 1326 | | 142 | 142 | 23.6 |
| SP150-13 | 1518 | | 142 | 142 | 27.0 |
| SP150-15 | 1710 | | 142 | 142 | 30.4 |
| SP150-17 | 1902 | | 142 | 142 | 33.8 |
| SP150-19 | 2094 | | 142 | 142 | 37.2 |
| SP150-21 | 2286 | | 142 | 142 | 40.6 |
| SP150-24 | 2574 | | 142 | 142 | 45.6 |
| SP150-26 | 2766 | | 142 | 142 | 49.0 |
| SP150-29 | 3054 | | 142 | 142 | 54.1 |
| SP150-32 | 3342 | | 142 | 142 | 59.2 |
| SP150-35 | 3630 | | 142 | 142 | 64.3 |

C*: Maximum diameter of pump with one motor cable

C**: Maximum diameter of pump with two motor cable

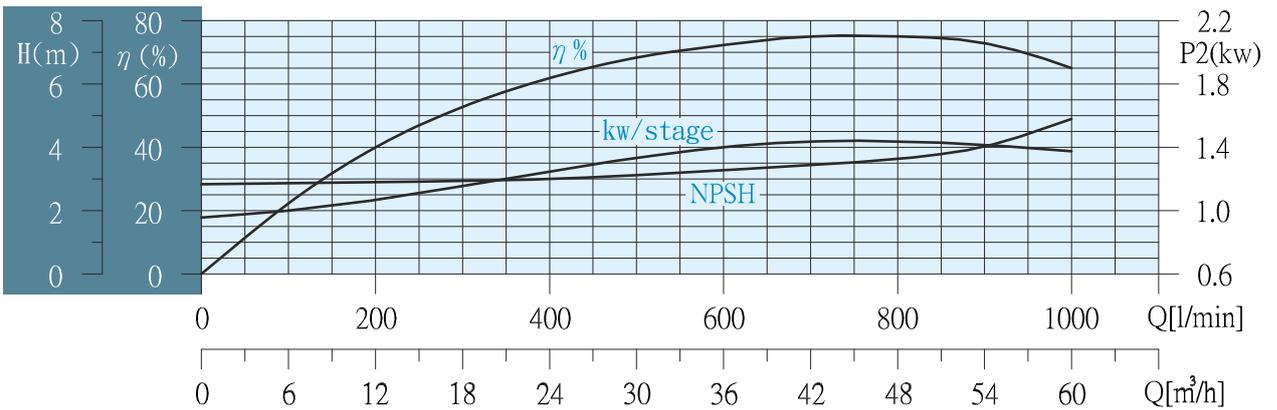
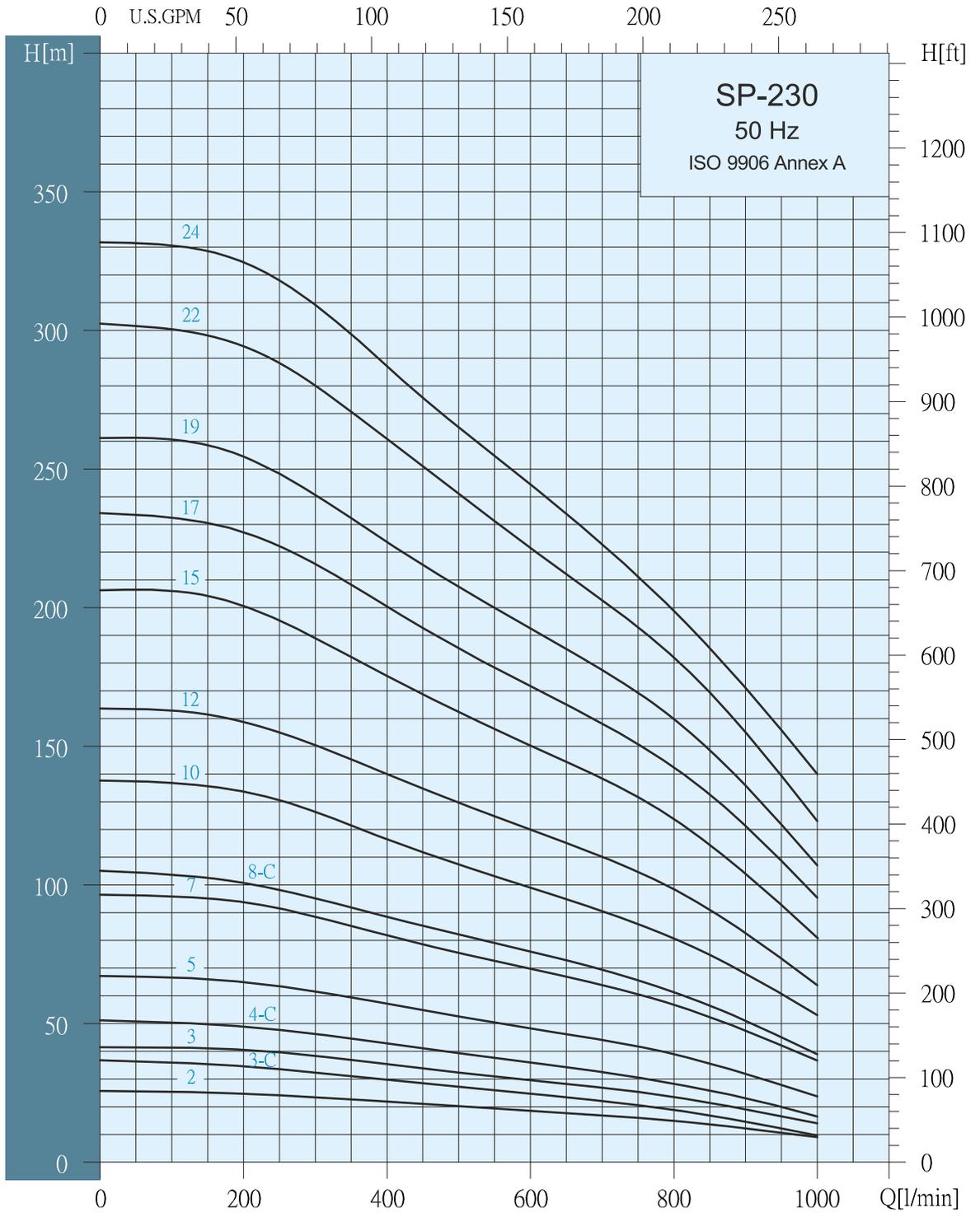
Stairs SP Series



STAIRS PUMPS

SP 6"

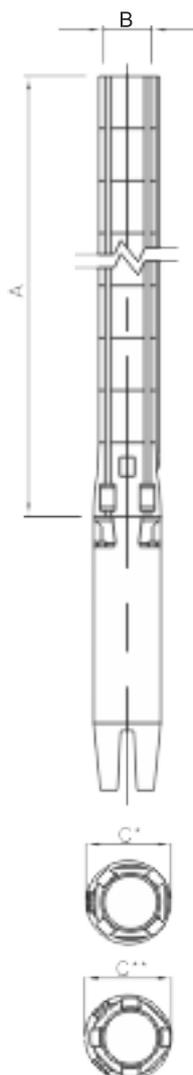
SP230 Performance Curves



Selection Chart

| Pump Type | Motor | | Max.current | | m ³ /h l/min | Q capacity 2900 rpm | | | | | | | | | | | |
|-----------|-------|-----|-------------|------|----------------------------|---------------------|------|-----|------|-----|-----|-----|-----|-----|-----|-----|------|
| | P2 | | Amp | | | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 36 | 42 | 48 | 54 | 60 |
| | KW | HP | 220V | 380V | | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 |
| SP230-2 | 3 | 4 | 13.3 | 7.7 | HEAD IN METERS | 24 | 23.5 | 23 | 22.5 | 22 | 21 | 20 | 18 | 17 | 15 | 12 | 9 |
| SP230-3C | 3.7 | 5 | 15.4 | 8.9 | | 35 | 34 | 32 | 31 | 29 | 28 | 27 | 24 | 22 | 19 | 14 | 10 |
| SP230-3 | 5.5 | 7.5 | 22.2 | 12.8 | | 40 | 39 | 38 | 37 | 35 | 34 | 33 | 29 | 27 | 23 | 18 | 14 |
| SP230-4C | 5.5 | 7.5 | 22.2 | 12.8 | | 49 | 47 | 46 | 45 | 43 | 41 | 39 | 36 | 32 | 28 | 23 | 17 |
| SP230-5 | 7.5 | 10 | 28.5 | 16.5 | | 65 | 63 | 61 | 59 | 57 | 55 | 53 | 48 | 44 | 39 | 32 | 24 |
| SP230-7 | 11 | 15 | 41.8 | 24.2 | | 94 | 92 | 88 | 85 | 82 | 79 | 76 | 70 | 64 | 57 | 47 | 37 |
| SP230-8C | 11 | 15 | 41.8 | 24.2 | | 100 | 98 | 95 | 92 | 88 | 85 | 82 | 76 | 69 | 61 | 51 | 39 |
| SP230-10 | 15 | 20 | 55 | 32 | | 133 | 130 | 127 | 122 | 117 | 112 | 107 | 98 | 90 | 80 | 67 | 53 |
| SP230-12 | 18.5 | 25 | 69 | 40 | | 158 | 155 | 150 | 145 | 140 | 135 | 130 | 120 | 110 | 98 | 83 | 64 |
| SP230-15 | 22 | 30 | 81 | 47 | | 200 | 195 | 189 | 183 | 176 | 169 | 163 | 150 | 138 | 124 | 103 | 81 |
| SP230-17 | 26 | 35 | 96 | 56 | | 227 | 222 | 215 | 208 | 200 | 193 | 186 | 172 | 158 | 143 | 121 | 96 |
| SP230-19 | 30 | 40 | 111 | 64 | | 254 | 248 | 241 | 233 | 224 | 216 | 208 | 193 | 178 | 160 | 136 | 107 |
| SP230-22 | 37 | 50 | 138 | 80 | | 294 | 288 | 280 | 270 | 260 | 251 | 241 | 222 | 203 | 183 | 155 | 123 |
| SP230-24 | 37 | 50 | 138 | 80 | | 325 | 317 | 309 | 298 | 287 | 276 | 265 | 244 | 223 | 199 | 171 | 140 |

*Higher pressure, longer stages pumps up to 37 stages are available on request.



Dimensions And Weights

| Pump Type | Dimensions(mm) | | | | Net Weight(Kg) |
|-----------|----------------|--------------------|-----|-----|----------------|
| | A | B | C* | C** | Pump |
| SP230-2 | 496 | NPT/RP 3" or 4" | 146 | | 9.2 |
| SP230-3-C | 609 | | 146 | | 11.5 |
| SP230-3 | 609 | | 146 | | 11.5 |
| SP230-4-C | 722 | | 146 | | 13.8 |
| SP230-5 | 835 | | 149 | 152 | 16.0 |
| SP230-7 | 1061 | | 149 | 152 | 20.6 |
| SP230-8-C | 1174 | | 149 | 152 | 22.9 |
| SP230-10 | 1400 | | 149 | 152 | 27.4 |
| SP230-12 | 1626 | | 149 | 152 | 32.0 |
| SP230-15 | 1965 | | 149 | 152 | 38.8 |
| SP230-17 | 2191 | | 149 | 152 | 43.4 |
| SP230-19 | 2417 | | 149 | 152 | 47.9 |
| SP230-22 | 2756 | | 149 | 152 | 54.8 |
| SP230-24 | 2982 | | 149 | 152 | 59.3 |

C*: Maximum diameter of pump with one motor cable

C**: Maximum diameter of pump with two motor cable

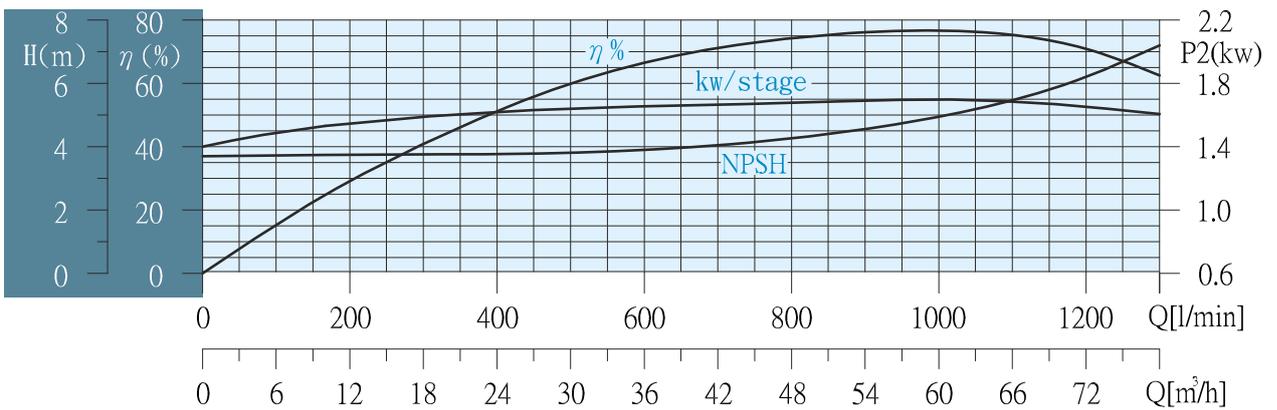
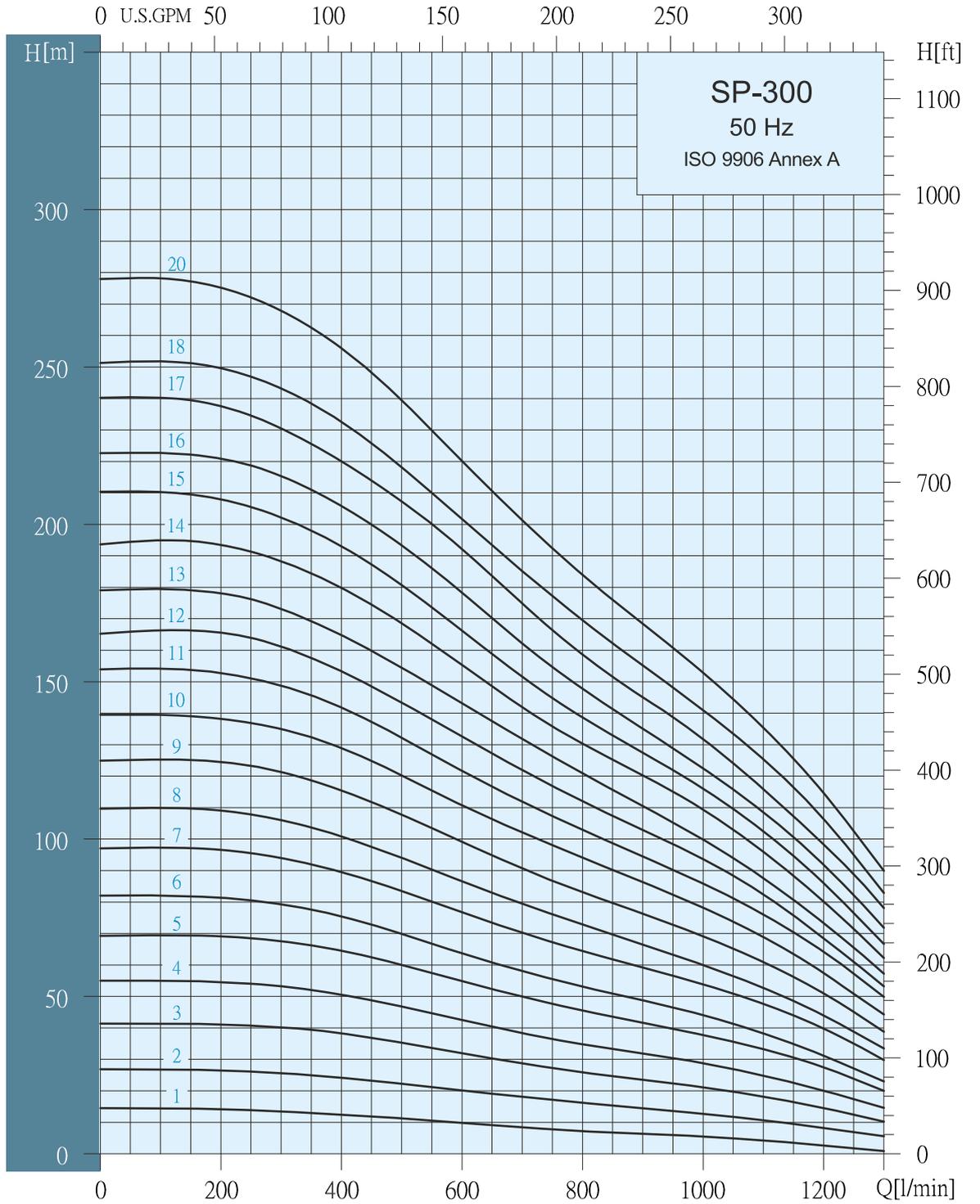
Stairs SP Series



STAIRS PUMPS

SP 6"

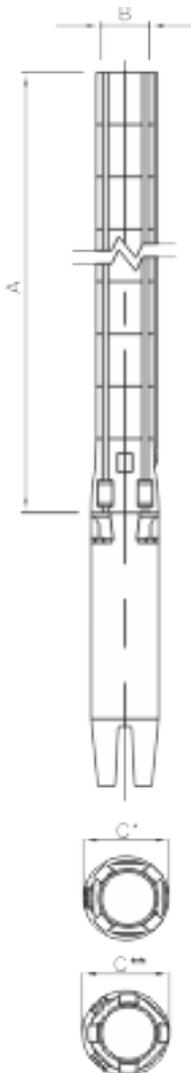
SP300 Performance Curves



Selection Chart

| Pump Type | Motor | | Max.current | | Q capacity 2900 rpm | | | | | | | | | | | | | |
|-----------|-------|------|-------------|------|---------------------|-----|------|-----|------|-----|-----|-----|-----|-----|------|------|------|------|
| | P2 | | Amp | | m³/h l/min | 18 | 21 | 24 | 27 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 |
| | KW | HP | 220V | 380V | | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 |
| SP300-1 | 2.2 | 3 | 9.5 | 5.5 | HEAD IN METERS | 13 | 12.5 | 12 | 11.5 | 11 | 10 | 8 | 7 | 6 | 5 | 4 | 2 | 1 |
| SP300-2 | 4 | 5.5 | 15.4 | 8.9 | | 26 | 25 | 24 | 23 | 22 | 20 | 18 | 16 | 14 | 13 | 11 | 8 | 5 |
| SP300-3 | 5.5 | 7.5 | 22.2 | 12.8 | | 40 | 39 | 38 | 37 | 36 | 32 | 28 | 26 | 24 | 21 | 18 | 14 | 10 |
| SP300-4 | 7.5 | 10 | 28.5 | 16.5 | | 53 | 52 | 51 | 48 | 47 | 43 | 38 | 35 | 32 | 28 | 25 | 20 | 14 |
| SP300-5 | 9.3 | 12.5 | 36 | 20.9 | | 67 | 66 | 64 | 62 | 60 | 55 | 50 | 46 | 42 | 38 | 33 | 27 | 19 |
| SP300-6 | 11 | 15 | 41.8 | 24.2 | | 79 | 78 | 76 | 73 | 70 | 64 | 58 | 53 | 48 | 44 | 38 | 32 | 23 |
| SP300-7 | 13 | 17.5 | 50 | 29 | | 94 | 92 | 89 | 86 | 84 | 77 | 70 | 64 | 59 | 54 | 47 | 40 | 29 |
| SP300-8 | 15 | 20 | 55 | 32 | | 106 | 104 | 101 | 97 | 94 | 87 | 80 | 73 | 67 | 60 | 53 | 44 | 33 |
| SP300-9 | 18.5 | 25 | 69 | 40 | | 122 | 118 | 116 | 112 | 108 | 99 | 91 | 83 | 76 | 69 | 61 | 51 | 38 |
| SP300-10 | 18.5 | 25 | 69 | 40 | | 135 | 132 | 128 | 125 | 120 | 111 | 102 | 95 | 87 | 78 | 68 | 57 | 45 |
| SP300-11 | 22 | 30 | 81 | 47 | | 148 | 146 | 142 | 137 | 132 | 122 | 112 | 103 | 95 | 86 | 76 | 64 | 49 |
| SP300-12 | 22 | 30 | 81 | 47 | | 162 | 157 | 153 | 148 | 143 | 133 | 122 | 112 | 103 | 94 | 83 | 68 | 53 |
| SP300-13 | 26 | 35 | 96 | 56 | | 173 | 169 | 165 | 160 | 155 | 143 | 132 | 121 | 110 | 100 | 87 | 73 | 57 |
| SP300-14 | 26 | 35 | 96 | 56 | | 188 | 184 | 180 | 175 | 168 | 156 | 142 | 130 | 120 | 109 | 96 | 80 | 63 |
| SP300-15 | 26 | 35 | 96 | 56 | | 203 | 197 | 193 | 187 | 180 | 166 | 152 | 138 | 127 | 116 | 103 | 86 | 67 |
| SP300-16 | 30 | 40 | 111 | 64 | | 216 | 211 | 206 | 200 | 193 | 178 | 162 | 148 | 135 | 123 | 108 | 92 | 72 |
| SP300-17 | 37 | 50 | 138 | 80 | | 230 | 226 | 220 | 214 | 207 | 192 | 175 | 158 | 145 | 132 | 116 | 97 | 78 |
| SP300-18 | 37 | 50 | 138 | 80 | | 243 | 238 | 233 | 226 | 218 | 202 | 185 | 170 | 155 | 141 | 126 | 107 | 83 |
| SP300-20 | 37 | 50 | 138 | 80 | | 267 | 263 | 256 | 248 | 239 | 220 | 201 | 184 | 168 | 153 | 136 | 115 | 90 |

*Higher pressure, longer stages pumps up to 30 stages are available on request.



Dimensions And Weights

| Pump Type | Dimensions(mm) | | | | Net Weight(Kg) |
|-----------|----------------|--------------------|-----|-----|----------------|
| | A | B | C* | C** | Pump |
| SP300-1 | 383 | NPT/RP 3" or 4" | 146 | | 6.9 |
| SP300-2 | 496 | | 146 | | 9.2 |
| SP300-3 | 609 | | 146 | | 11.5 |
| SP300-4 | 722 | | 149 | 152 | 13.7 |
| SP300-5 | 835 | | 149 | 152 | 16.0 |
| SP300-6 | 948 | | 149 | 152 | 18.3 |
| SP300-7 | 1061 | | 149 | 152 | 20.6 |
| SP300-8 | 1174 | | 149 | 152 | 22.9 |
| SP300-9 | 1287 | | 149 | 152 | 25.1 |
| SP300-10 | 1400 | | 149 | 152 | 27.4 |
| SP300-11 | 1513 | | 149 | 152 | 29.7 |
| SP300-12 | 1626 | | 149 | 152 | 32.0 |
| SP300-13 | 1739 | | 149 | 152 | 34.3 |
| SP300-14 | 1852 | | 149 | 152 | 36.5 |
| SP300-15 | 1965 | | 149 | 152 | 38.8 |
| SP300-16 | 2078 | | 149 | 152 | 41.1 |
| SP300-17 | 2191 | | 149 | 152 | 43.4 |
| SP300-18 | 2304 | | 149 | 152 | 45.7 |
| SP300-20 | 2530 | | 149 | 152 | 50.2 |

C*: Maximum diameter of pump with one motor cable

C**: Maximum diameter of pump with two motor cable