



**ST series 4", 6"**

**Submersible Electric Pumps**

**60HZ**



# STAIRS 4" ST Submersible Pump

## **Discharge Head and Motor**

**Adaptor** are precision machined cast 304 stainless steel for superior strength and durability. The motor adaptor is NEMA standard.

## **Impellers are floating type made with Noryl®**

for a superior sand handling. Together with glass filled polycarbonate diffusers make the super strong pumps for maximum wear and abrasive resistance. The materials are FDA compliant materials.

**Impeller Bowls** are made from 304 stainless steel, maximizing wear from abrasion.

**Shaft Coupling** is made from 304 stainless steel for easy alignment to the motor shaft.

**Strainer** is made from stamped 304 stainless steel for rigidity.

**Non-Return valve** made from 304 stainless steel, fitted in the discharge to prevent any back flow of water and alleviate any water hammer to the pumps.

**Pump Shaft** is made from hex 304 stainless steel bar material for high corrosion resistance.

**Bearing** is made with Polyacetal for strong wear and abrasive resistance.

**Pump body** is covered by a 1.5mm thick 304 polished stainless steel casing, ensures optimum resistance to abrasion.

## **APPLICATIONS**

- Water Supply
- Irrigation
- Pressure Boosting

## **GENERAL SPECIFICATIONS PUMP**

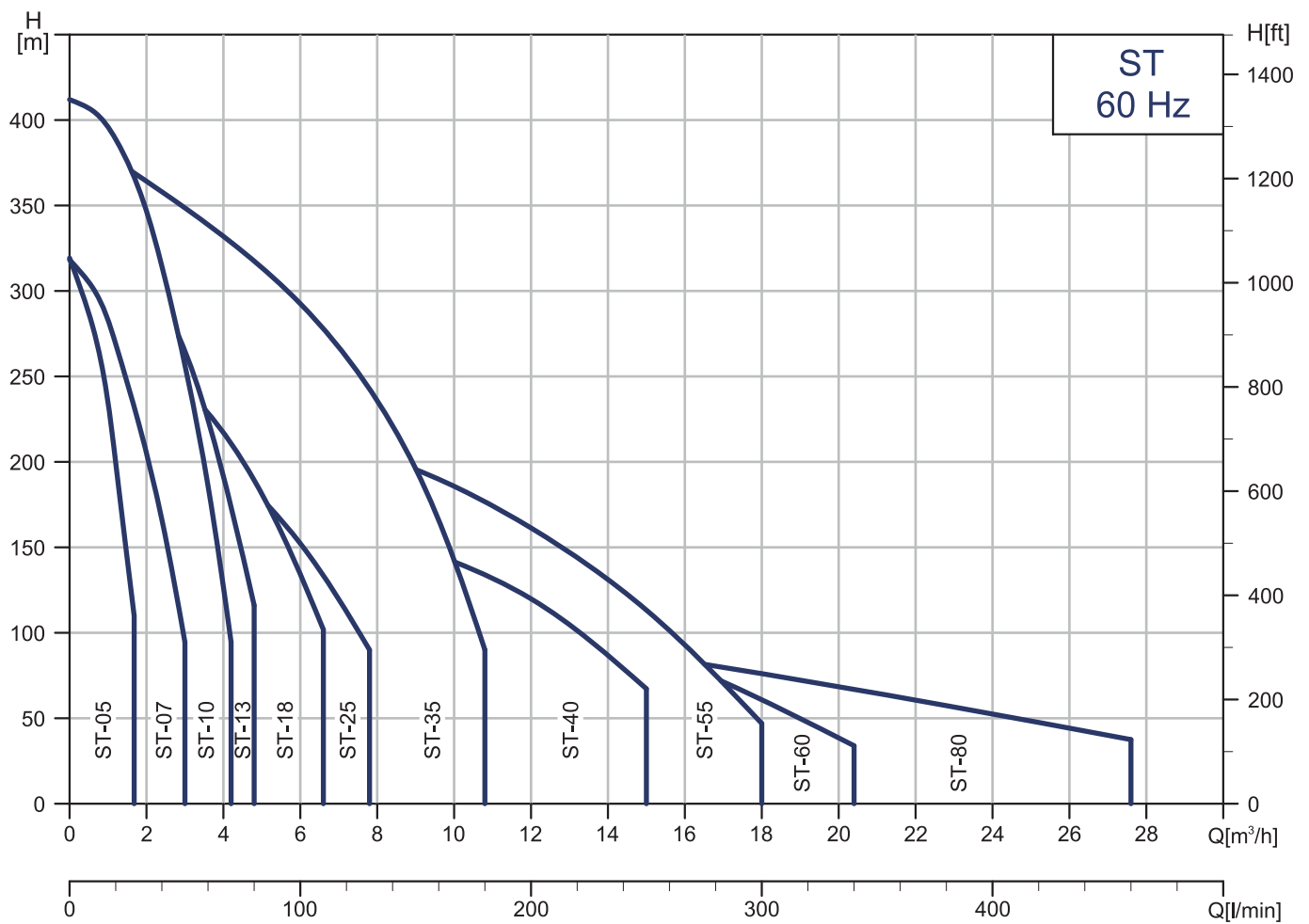
- Delivery: up to 27.8 m<sup>3</sup>/h at 3450 rpm
- Head: up to 410 m at 3450 rpm
- Maximum permissible quantity of sand:150g/m<sup>3</sup>
- ST05-ST07-ST10-ST13-ST18 models Rp1 ¼" discharge.
- ST25 model 1 ½" discharge.
- ST35-ST40-ST55-ST60-ST80 models Rp 2" discharge.
- Motor Power: from 0.37 to 7.5 kW.

## **MOTOR**

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| Flange               | 4" NEMA standard                                        |
| Degree of protection | IP 68                                                   |
| Insulation class     | F                                                       |
| Single phase motors  | 0.37 kW up to 4 kW                                      |
| Three phase motors   | 0.37 kW up to 7.5 kW                                    |
| Standard voltages    | 1~ 220V-230V<br>3~ 230V or 400V                         |
| Cable length         | 1.7 M 0.37 kW up to 1.5 kW<br>2.5 M 2.2 kW up to 7.5 kW |

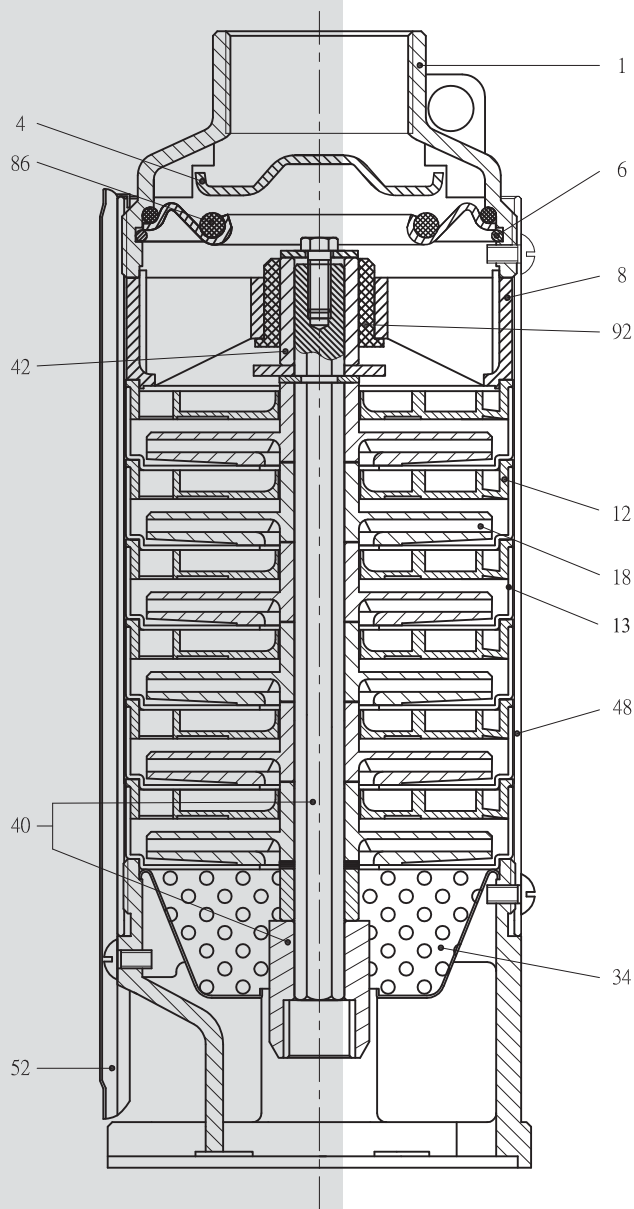
# Performance range

ST 4"



# Material Specification

ST 4"

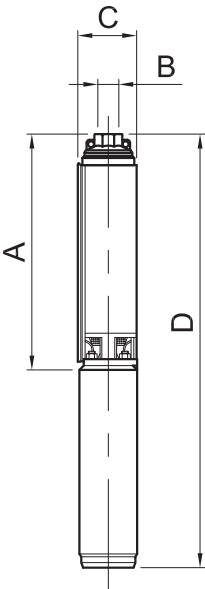
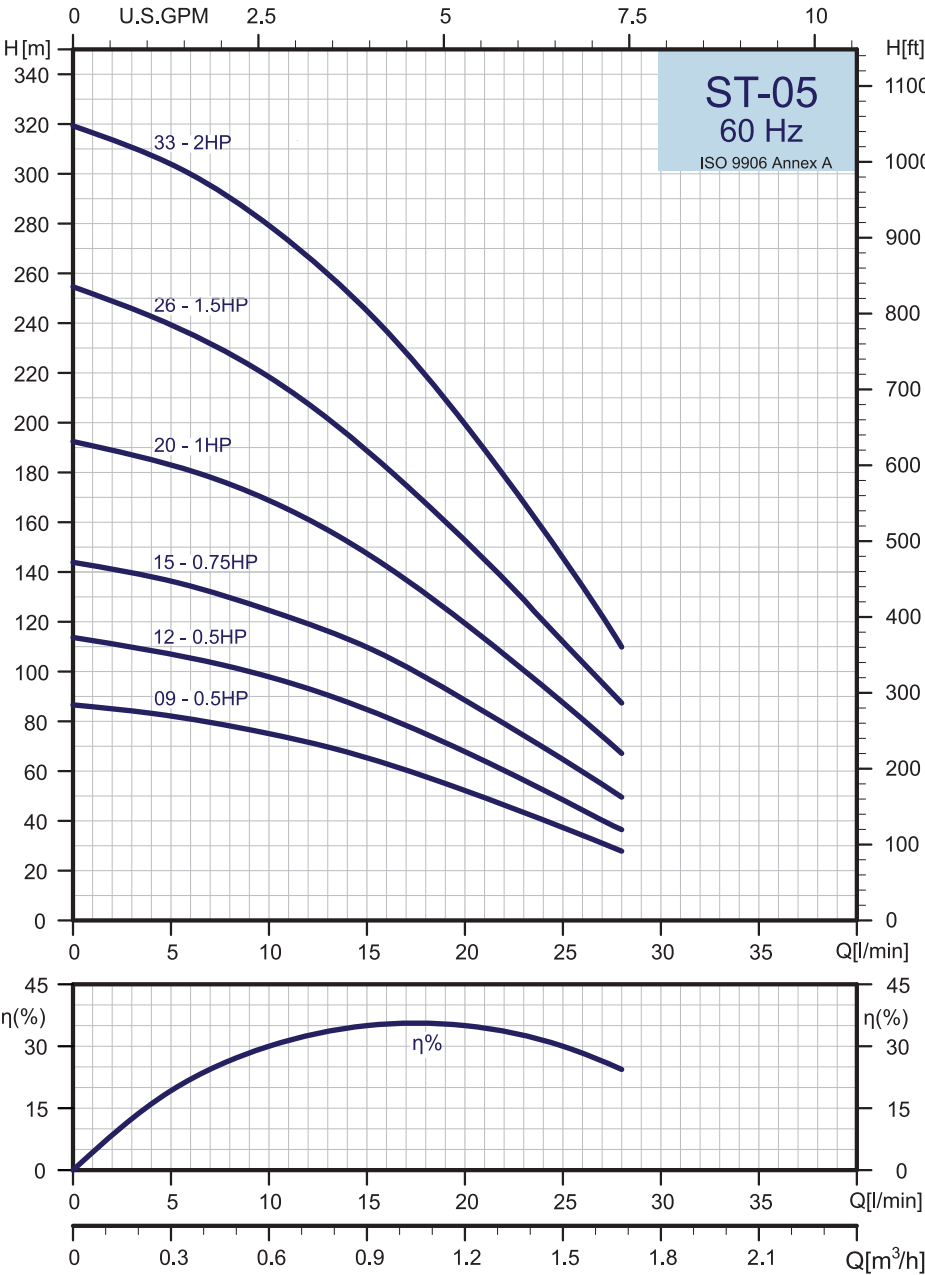


| Pos. | Part Name                  | Material                   |
|------|----------------------------|----------------------------|
| 01   | Discharge Head             | AISI 304 SS                |
| 04   | Check Valve Cone           | AISI 304 SS                |
| 06   | Check Valve retaining Ring | AISI 304 SS                |
| 08   | Bearing Spider             | Glass Filled Polycarbonate |
| 12   | Diffuser                   | Glass Filled Polycarbonate |
| 13   | Bowl                       | AISI 304 SS                |
| 18   | Impeller                   | Noryl                      |
| 34   | Strainer                   | AISI 304 SS                |
| 40   | Pump Shaft/<br>Coupling    | AISI 304 SS                |
| 42   | Shaft Sleeve               | AISI 304 SS or Noryl       |
| 48   | Pump Casing                | AISI 304 SS                |
| 52   | Cable Guard                | AISI 304 SS                |
| 86   | O-Ring                     | NBR                        |
| 92   | Bearing                    | Polyacetal                 |

# Performance Curves

# ST-05

ST 4"



| Single Phase Motor     |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-0509                | 306            | RP/NPT<br>1 1/4" | 98 | 652  |
| ST-0512                | 359            |                  | 98 | 705  |
| ST-0515                | 411            |                  | 98 | 776  |
| ST-0520                | 499            |                  | 98 | 879  |
| ST-0526                | 642            |                  | 98 | 1047 |
| ST-0533                | 795            |                  | 98 | 1235 |

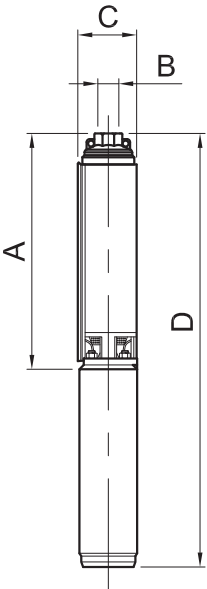
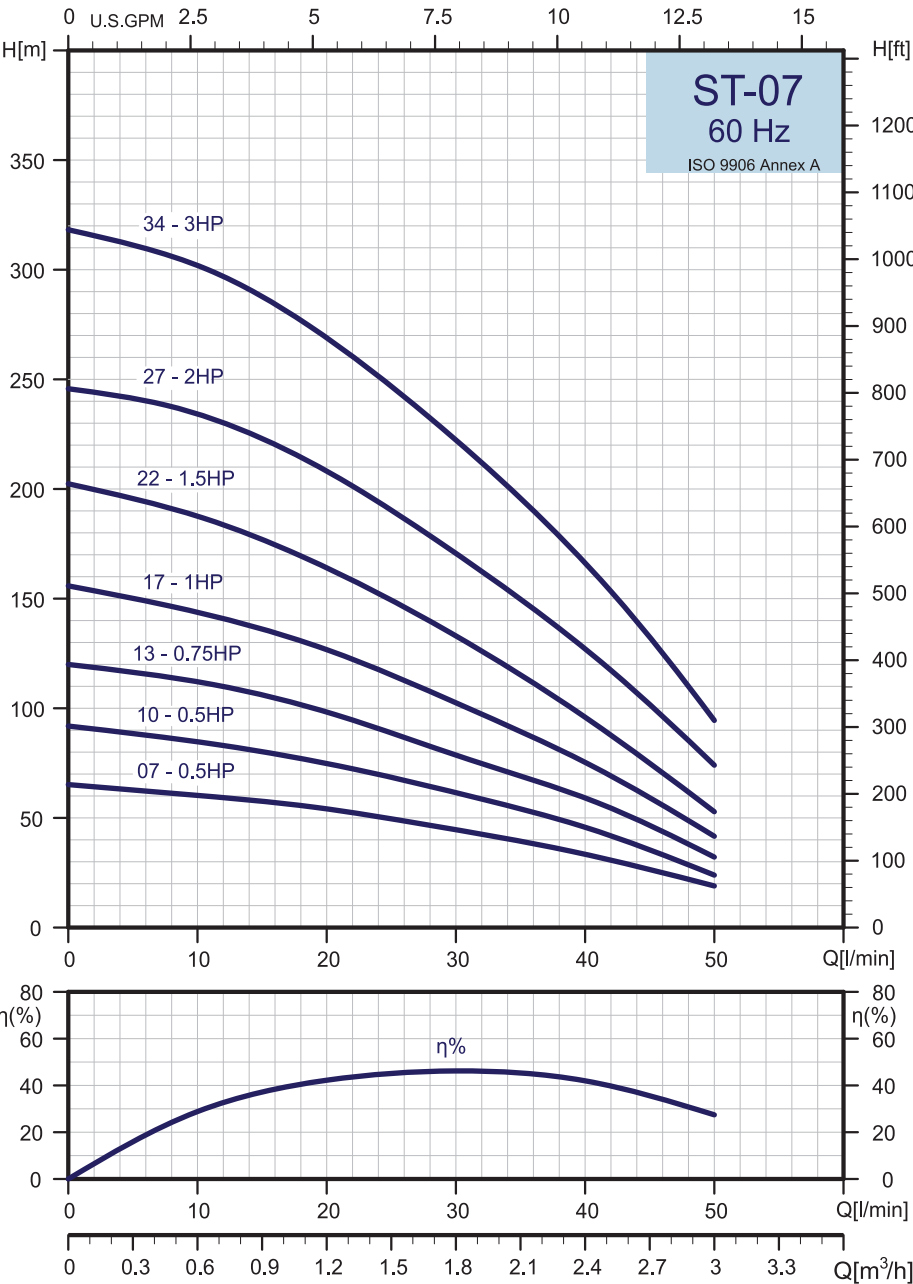
| Three Phase Motor      |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-0509                | 306            | RP/NPT<br>1 1/4" | 98 | 636  |
| ST-0512                | 359            |                  | 98 | 689  |
| ST-0515                | 411            |                  | 98 | 757  |
| ST-0520                | 499            |                  | 98 | 846  |
| ST-0526                | 642            |                  | 98 | 1022 |
| ST-0533                | 795            |                  | 98 | 1200 |

| Selection Chart |        |       |      |                        |     |     |     |     |     |     |     |                |              |             |
|-----------------|--------|-------|------|------------------------|-----|-----|-----|-----|-----|-----|-----|----------------|--------------|-------------|
| PUMP<br>TYPE    | STAGES | MOTOR |      | Q=DELIVERY             |     |     |     |     |     |     |     |                |              |             |
|                 |        |       |      | l/min                  | 0   | 10  | 15  | 20  | 25  | 30  | 35  | PUMP           | ELECTRO PUMP |             |
|                 |        | KW    | HP   | m³/h                   | 0   | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | Net Weight(kg) |              |             |
|                 |        |       |      | H=TOTAL HEAD IN METERS |     |     |     |     |     |     |     |                | Single phase | Three phase |
| ST-0509         | 9      | 0.37  | 0.5  | 87                     | 75  | 65  | 52  | 38  | 21  |     | 3.1 | 10.4           | 9.8          |             |
| ST-0512         | 12     | 0.37  | 0.5  | 114                    | 98  | 85  | 68  | 49  | 28  |     | 3.6 | 10.9           | 10.3         |             |
| ST-0515         | 15     | 0.55  | 0.75 | 144                    | 124 | 110 | 89  | 65  | 39  |     | 4.1 | 12.3           | 11.5         |             |
| ST-0520         | 20     | 0.75  | 1.0  | 193                    | 169 | 148 | 120 | 88  | 53  |     | 4.9 | 13.7           | 13.1         |             |
| ST-0526         | 26     | 1.1   | 1.5  | 255                    | 219 | 179 | 152 | 112 | 68  |     | 5.8 | 15.8           | 14.7         |             |
| ST-0533         | 33     | 1.5   | 2.0  | 320                    | 280 | 245 | 200 | 145 | 82  |     | 8.3 | 19.8           | 18.3         |             |

# Performance Curves

# ST-07

ST 4"



| Single Phase Motor     |                |                    |    |      |
|------------------------|----------------|--------------------|----|------|
| Dimensions and Weights |                |                    |    |      |
| Pump Type              | Dimensions(mm) |                    |    |      |
|                        | A              | B                  | C  | D    |
| ST-0707                | 275            | RP / NPT<br>1-1/4" | 98 | 621  |
| ST-0710                | 330            |                    | 98 | 676  |
| ST-0713                | 385            |                    | 98 | 750  |
| ST-0717                | 455            |                    | 98 | 835  |
| ST-0722                | 545            |                    | 98 | 950  |
| ST-0727                | 675            |                    | 98 | 1115 |
| ST-0734                | 833            |                    | 98 | 1328 |

| Three Phase Motor      |                |                    |    |      |
|------------------------|----------------|--------------------|----|------|
| Dimensions and Weights |                |                    |    |      |
| Pump Type              | Dimensions(mm) |                    |    |      |
|                        | A              | B                  | C  | D    |
| ST-0707                | 275            | RP / NPT<br>1-1/4" | 98 | 605  |
| ST-0710                | 330            |                    | 98 | 660  |
| ST-0713                | 385            |                    | 98 | 731  |
| ST-0717                | 455            |                    | 98 | 820  |
| ST-0722                | 545            |                    | 98 | 925  |
| ST-0727                | 675            |                    | 98 | 1080 |
| ST-0734                | 833            |                    | 98 | 1273 |

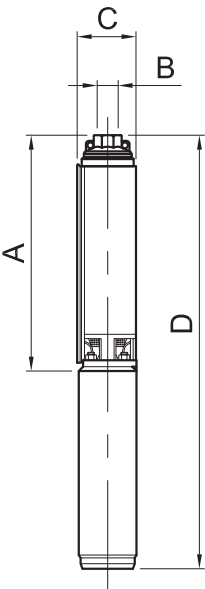
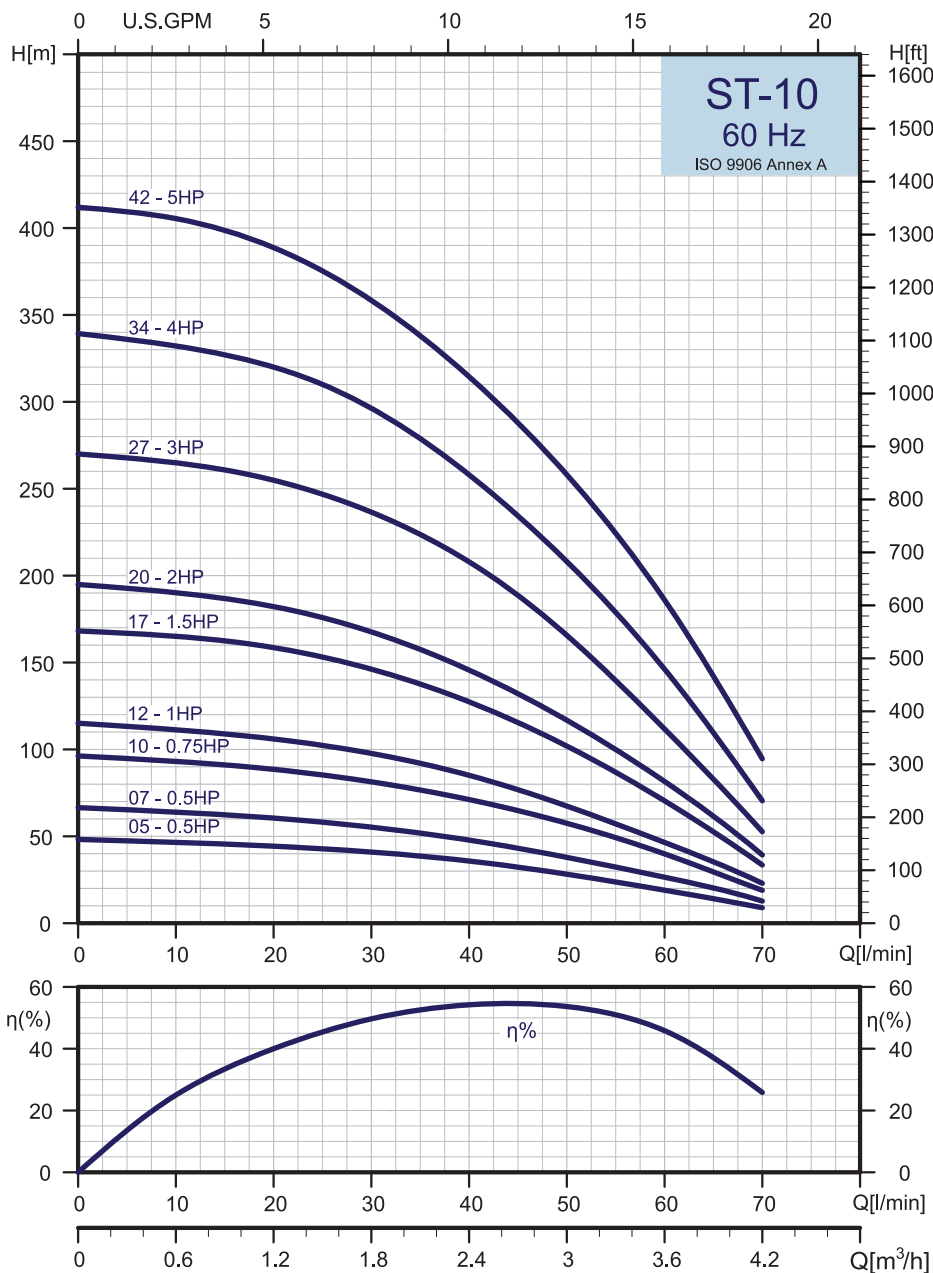
## Selection Chart

| PUMP<br>TYPE | STAGES | MOTOR |      | Q=DELIVERY             |   |     |     |     |     |     |     |     |     |     |                |              |              |
|--------------|--------|-------|------|------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|--------------|--------------|
|              |        |       |      | l/min                  | 0 | 10  | 15  | 20  | 25  | 30  | 35  | 40  | 50  | 60  | PUMP           | ELECTRO PUMP |              |
|              |        | KW    | HP   | m³/h                   | 0 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 3.0 | 3.6 | Net Weight(kg) |              |              |
|              |        |       |      | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |     |     |     |     |                |              | Single phase |
| ST-0707      | 7      | 0.37  | 0.5  | 66                     |   |     | 57  | 54  | 49  | 44  | 39  | 33  | 19  |     | 2.7            | 10.0         | 9.4          |
| ST-0710      | 10     | 0.37  | 0.5  | 92                     |   |     | 80  | 75  | 68  | 62  | 54  | 47  | 24  |     | 3.3            | 10.6         | 10.0         |
| ST-0713      | 13     | 0.55  | 0.75 | 120                    |   |     | 106 | 98  | 89  | 79  | 69  | 59  | 32  |     | 3.8            | 12.0         | 11.2         |
| ST-0717      | 17     | 0.75  | 1.0  | 156                    |   |     | 136 | 127 | 115 | 102 | 89  | 75  | 42  |     | 4.5            | 13.3         | 12.7         |
| ST-0722      | 22     | 1.1   | 1.5  | 203                    |   |     | 177 | 165 | 150 | 133 | 115 | 97  | 53  |     | 5.4            | 15.4         | 14.3         |
| ST-0727      | 27     | 1.5   | 2.0  | 246                    |   |     | 223 | 208 | 190 | 171 | 150 | 127 | 74  |     | 6.6            | 18.1         | 16.6         |
| ST-0734      | 34     | 2.2   | 3.0  | 318                    |   |     | 288 | 269 | 247 | 223 | 196 | 167 | 95  |     | 9.3            | 23.3         | 20.9         |

# Performance Curves

# ST-10

ST 4"



| Single Phase Motor     |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-1005                | 236            | RP/NPT<br>1 1/4" | 98 | 582  |
| ST-1007                | 271            |                  | 98 | 617  |
| ST-1010                | 324            |                  | 98 | 689  |
| ST-1012                | 359            |                  | 98 | 739  |
| ST-1017                | 447            |                  | 98 | 852  |
| ST-1020                | 499            |                  | 98 | 939  |
| ST-1027                | 660            |                  | 98 | 1155 |
| ST-1034                | 796            |                  | 98 | 1403 |
| ST-1042                | 954            |                  | 98 | 1637 |

| Three Phase Motor      |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-1005                | 236            | RP/NPT<br>1 1/4" | 98 | 566  |
| ST-1007                | 271            |                  | 98 | 601  |
| ST-1010                | 324            |                  | 98 | 670  |
| ST-1012                | 359            |                  | 98 | 724  |
| ST-1017                | 447            |                  | 98 | 827  |
| ST-1020                | 499            |                  | 98 | 904  |
| ST-1027                | 660            |                  | 98 | 1100 |
| ST-1034                | 796            |                  | 98 | 1312 |
| ST-1042                | 954            |                  | 98 | 1561 |

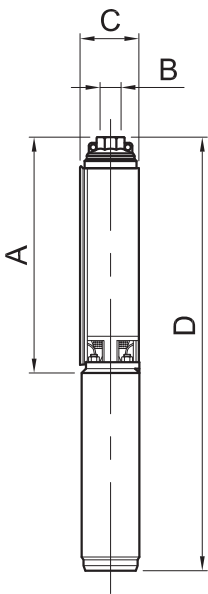
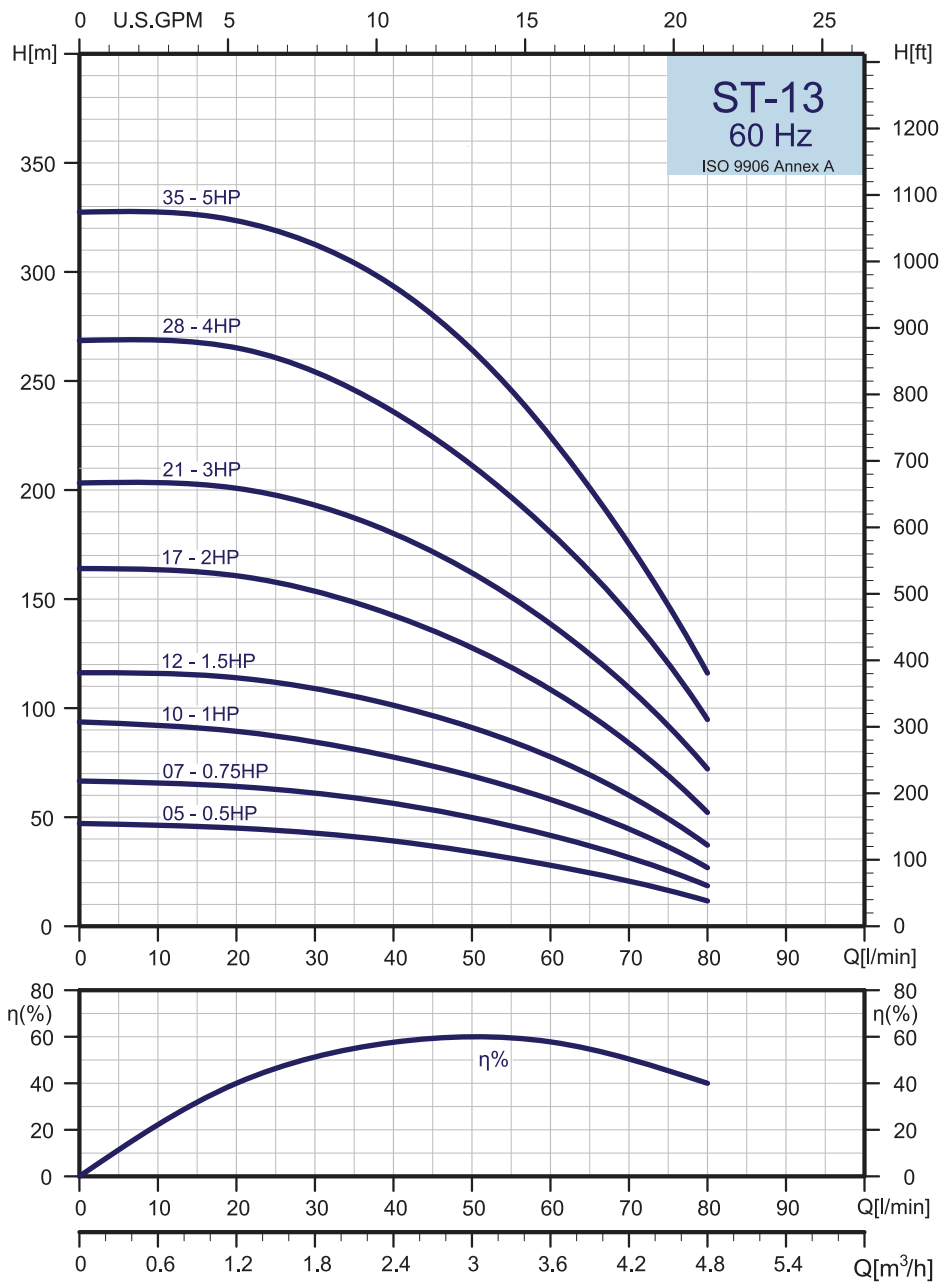
## Selection Chart

| PUMP<br>TYPE | STAGES | MOTOR |      | Q=DELIVERY             |   |     |     |     |     |     |     |     |     |     |     |                |              | PUMP | ELECTRO PUMP |  |
|--------------|--------|-------|------|------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|--------------|------|--------------|--|
|              |        |       |      | l/min                  | 0 | 15  | 20  | 25  | 30  | 35  | 40  | 50  | 60  | 70  | 80  |                |              |      |              |  |
|              |        | KW    | HP   | m³/h                   | 0 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | Net Weight(kg) |              |      |              |  |
|              |        |       |      | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |     |     |     |     |     |                | Single phase |      | Three phase  |  |
| ST-1005      | 5      | 0.37  | 0.5  | 48                     |   | 44  | 42  | 40  | 38  | 36  | 29  | 19  | 9   |     | 2.5 | 9.8            | 9.2          |      |              |  |
| ST-1007      | 7      | 0.37  | 0.5  | 67                     |   | 60  | 58  | 55  | 52  | 49  | 39  | 27  | 13  |     | 2.8 | 10.1           | 9.5          |      |              |  |
| ST-1010      | 10     | 0.55  | 0.75 | 96                     |   | 89  | 85  | 81  | 77  | 71  | 58  | 40  | 19  |     | 3.3 | 11.5           | 10.7         |      |              |  |
| ST-1012      | 12     | 0.75  | 1.0  | 115                    |   | 106 | 102 | 98  | 92  | 85  | 68  | 47  | 23  |     | 3.6 | 12.4           | 11.8         |      |              |  |
| ST-1017      | 17     | 1.1   | 1.5  | 168                    |   | 159 | 152 | 147 | 138 | 128 | 102 | 70  | 35  |     | 4.4 | 14.4           | 13.3         |      |              |  |
| ST-1020      | 20     | 1.5   | 2.0  | 195                    |   | 181 | 177 | 168 | 158 | 146 | 118 | 82  | 40  |     | 4.9 | 16.4           | 14.9         |      |              |  |
| ST-1027      | 27     | 2.2   | 3.0  | 270                    |   | 255 | 247 | 237 | 223 | 209 | 167 | 111 | 53  |     | 6.0 | 20.0           | 17.6         |      |              |  |
| ST-1034      | 34     | 3.0   | 4.0  | 339                    |   | 320 | 310 | 296 | 280 | 259 | 209 | 146 | 70  |     | 8.5 | 27.9           | 23.7         |      |              |  |
| ST-1042      | 42     | 3.7   | 5.0  | 412                    |   | 389 | 375 | 358 | 338 | 315 | 258 | 186 | 95  |     | 9.8 | 32.5           | 29.3         |      |              |  |

# Performance Curves

# ST-13

ST 4"



| Single Phase Motor     |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-1305                | 236            | RP/NPT<br>1 1/4" | 98 | 582  |
| ST-1307                | 271            |                  | 98 | 636  |
| ST-1310                | 324            |                  | 98 | 704  |
| ST-1312                | 359            |                  | 98 | 764  |
| ST-1317                | 447            |                  | 98 | 887  |
| ST-1321                | 519            |                  | 98 | 1014 |
| ST-1328                | 679            |                  | 98 | 1286 |
| ST-1335                | 841            |                  | 98 | 1524 |

| Three Phase Motor      |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-1305                | 236            | RP/NPT<br>1 1/4" | 98 | 566  |
| ST-1307                | 271            |                  | 98 | 617  |
| ST-1310                | 324            |                  | 98 | 689  |
| ST-1312                | 359            |                  | 98 | 739  |
| ST-1317                | 447            |                  | 98 | 852  |
| ST-1321                | 519            |                  | 98 | 959  |
| ST-1328                | 679            |                  | 98 | 1195 |
| ST-1335                | 841            |                  | 98 | 1448 |

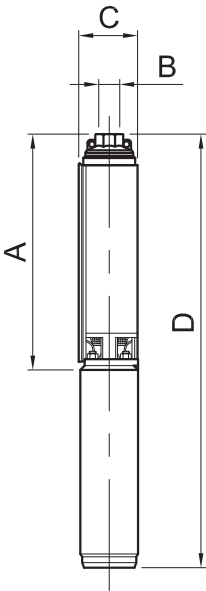
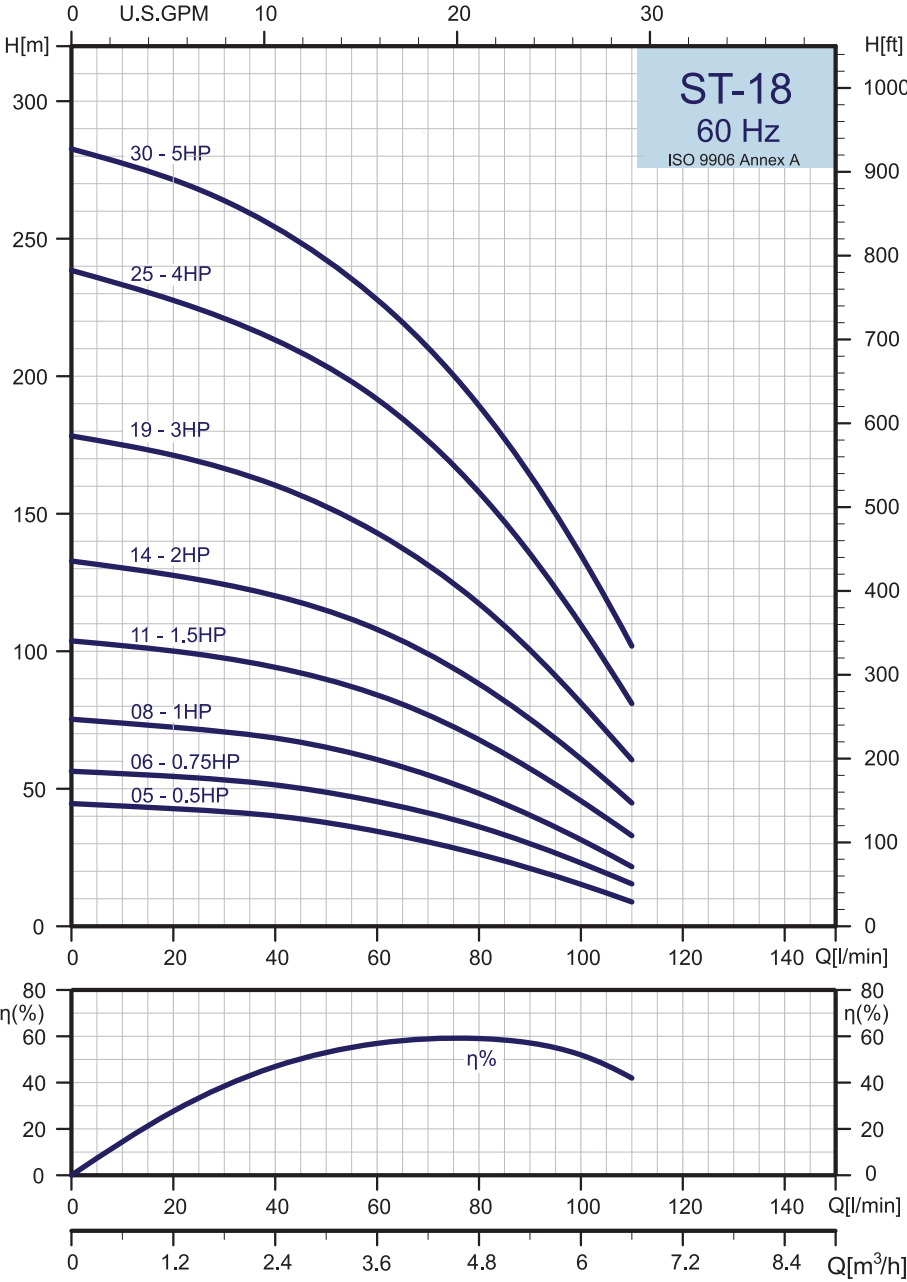
## Selection Chart

| PUMP<br>TYPE | STAGES | MOTOR |      | Q=DELIVERY             |   |     |     |     |     |     |     |     |     |     |                |      | PUMP | ELECTRO PUMP |             |
|--------------|--------|-------|------|------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|------|------|--------------|-------------|
|              |        |       |      | l/min                  | 0 | 25  | 30  | 35  | 40  | 50  | 60  | 70  | 80  | 90  |                |      |      |              |             |
|              |        | KW    | HP   | m <sup>3</sup> /h      | 0 | 1.5 | 1.8 | 2.1 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | Net Weight(kg) |      |      |              |             |
|              |        |       |      | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |     |     |     |     |                |      |      | Single phase | Three phase |
| ST-1305      | 5      | 0.37  | 0.5  | 47                     |   | 42  | 40  | 39  | 34  | 28  | 21  | 12  |     | 2.5 | 9.8            | 9.2  |      |              |             |
| ST-1307      | 7      | 0.55  | 0.75 | 67                     |   | 61  | 59  | 57  | 50  | 41  | 31  | 19  |     | 2.8 | 11.0           | 10.2 |      |              |             |
| ST-1310      | 10     | 0.75  | 1.0  | 94                     |   | 85  | 81  | 78  | 69  | 58  | 45  | 28  |     | 3.2 | 12.0           | 11.4 |      |              |             |
| ST-1312      | 12     | 1.1   | 1.5  | 116                    |   | 109 | 106 | 102 | 91  | 78  | 60  | 38  |     | 3.5 | 13.5           | 12.4 |      |              |             |
| ST-1317      | 17     | 1.5   | 2.0  | 165                    |   | 154 | 148 | 143 | 128 | 109 | 83  | 53  |     | 4.3 | 15.8           | 14.3 |      |              |             |
| ST-1321      | 21     | 2.2   | 3.0  | 204                    |   | 193 | 187 | 180 | 162 | 139 | 110 | 72  |     | 5.0 | 19.0           | 16.6 |      |              |             |
| ST-1328      | 28     | 3.0   | 4.0  | 269                    |   | 254 | 246 | 236 | 211 | 180 | 142 | 96  |     | 6.0 | 25.4           | 21.2 |      |              |             |
| ST-1335      | 35     | 3.7   | 5.0  | 327                    |   | 312 | 304 | 292 | 264 | 223 | 175 | 117 |     | 8.6 | 31.3           | 28.2 |      |              |             |

# Performance Curves

# ST-18

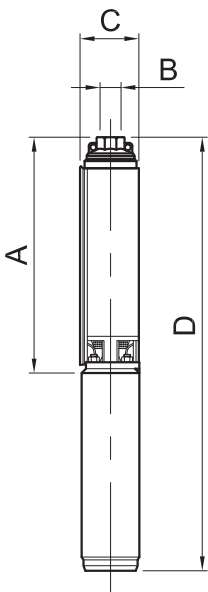
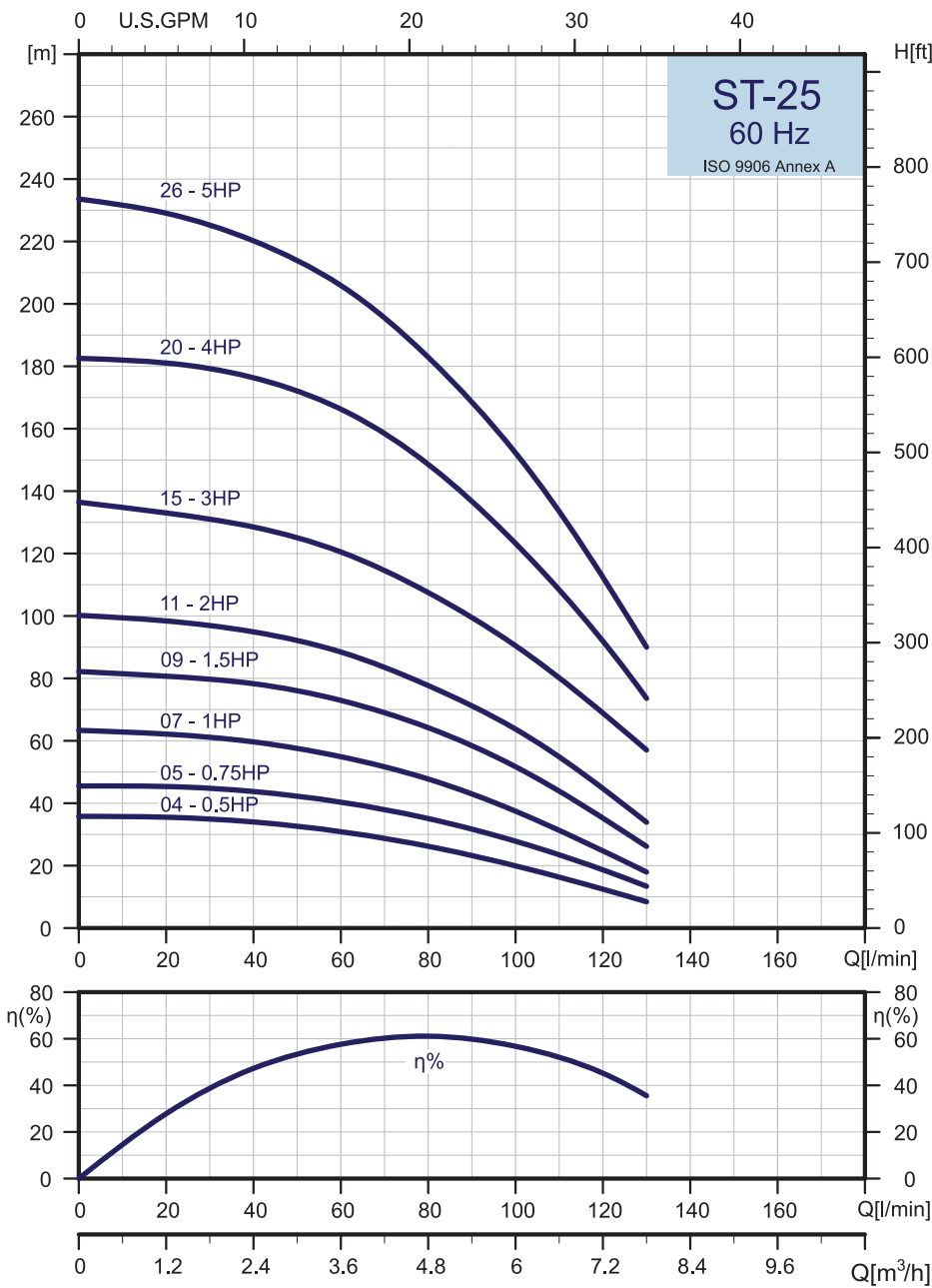
ST 4"



| Single Phase Motor     |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-1805                | 257            | RP/NPT<br>1 1/4" | 98 | 603  |
| ST-1806                | 279            |                  | 98 | 644  |
| ST-1808                | 322            |                  | 98 | 702  |
| ST-1811                | 387            |                  | 98 | 792  |
| ST-1814                | 452            |                  | 98 | 892  |
| ST-1819                | 560            |                  | 98 | 1055 |
| ST-1825                | 763            |                  | 98 | 1370 |
| ST-1830                | 865            |                  | 98 | 1548 |

| Three Phase Motor      |                |                  |    |      |
|------------------------|----------------|------------------|----|------|
| Dimensions and Weights |                |                  |    |      |
| Pump Type              | Dimensions(mm) |                  |    |      |
|                        | A              | B                | C  | D    |
| ST-1805                | 257            | RP/NPT<br>1 1/4" | 98 | 587  |
| ST-1806                | 279            |                  | 98 | 625  |
| ST-1808                | 322            |                  | 98 | 687  |
| ST-1811                | 387            |                  | 98 | 767  |
| ST-1814                | 452            |                  | 98 | 857  |
| ST-1819                | 560            |                  | 98 | 1000 |
| ST-1825                | 763            |                  | 98 | 1279 |
| ST-1830                | 865            |                  | 98 | 1472 |

| Selection Chart |        |                        |      |            |   |     |     |     |     |     |     |     |     |     |     |     |                |              |  |
|-----------------|--------|------------------------|------|------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|--------------|--|
| PUMP<br>TYPE    | STAGES | MOTOR                  |      | Q=DELIVERY |   |     |     |     |     |     |     |     |     |     |     |     |                |              |  |
|                 |        |                        |      | l/min      | 0 | 30  | 35  | 40  | 50  | 60  | 70  | 80  | 90  | 100 | 110 | 120 | PUMP           | ELECTRO PUMP |  |
|                 |        | KW                     | HP   | m³/h       | 0 | 1.8 | 2.1 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 | 7.2 | Net Weight(kg) |              |  |
|                 |        | H=TOTAL HEAD IN METERS |      |            |   |     |     |     |     |     |     |     |     |     |     |     | Single phase   | Three phase  |  |
| ST-1805         | 5      | 0.37                   | 0.5  | 45         |   | 41  | 40  | 38  | 35  | 31  | 27  | 21  | 15  | 9   |     | 2.7 | 10.0           | 9.4          |  |
| ST-1806         | 6      | 0.55                   | 0.75 | 56         |   | 53  | 52  | 49  | 45  | 41  | 37  | 30  | 23  | 16  |     | 2.8 | 11.0           | 10.2         |  |
| ST-1808         | 8      | 0.75                   | 1.0  | 75         |   | 70  | 68  | 65  | 61  | 55  | 49  | 41  | 32  | 22  |     | 3.1 | 11.9           | 11.3         |  |
| ST-1811         | 11     | 1.1                    | 1.5  | 104        |   | 96  | 94  | 90  | 84  | 77  | 68  | 58  | 46  | 33  |     | 3.6 | 13.6           | 12.5         |  |
| ST-1814         | 14     | 1.5                    | 2.0  | 133        |   | 123 | 120 | 115 | 108 | 99  | 88  | 75  | 61  | 45  |     | 4.1 | 15.6           | 14.1         |  |
| ST-1819         | 19     | 2.2                    | 3.0  | 178        |   | 164 | 160 | 153 | 143 | 131 | 117 | 100 | 81  | 61  |     | 4.9 | 18.9           | 16.5         |  |
| ST-1825         | 25     | 3.0                    | 4.0  | 238        |   | 217 | 213 | 204 | 192 | 176 | 158 | 136 | 110 | 81  |     | 6.9 | 26.3           | 22.1         |  |
| ST-1830         | 30     | 3.7                    | 5.0  | 283        |   | 260 | 254 | 242 | 228 | 210 | 189 | 164 | 135 | 102 |     | 8.1 | 30.8           | 27.6         |  |



| Single Phase Motor<br>Dimensions and Weights |                |                  |    |      |
|----------------------------------------------|----------------|------------------|----|------|
| Pump Type                                    | Dimensions(mm) |                  |    |      |
|                                              | A              | B                | C  | D    |
| ST-2504                                      | 247            | RP/NPT<br>1 1/2" | 98 | 593  |
| ST-2505                                      | 272            |                  | 98 | 637  |
| ST-2507                                      | 320            |                  | 98 | 700  |
| ST-2509                                      | 370            |                  | 98 | 775  |
| ST-2511                                      | 419            |                  | 98 | 859  |
| ST-2515                                      | 518            |                  | 98 | 1013 |
| ST-2520                                      | 679            |                  | 98 | 1286 |
| ST-2526                                      | 864            |                  | 98 | 1547 |

| Three Phase Motor<br>Dimensions and Weights |                |                  |    |      |
|---------------------------------------------|----------------|------------------|----|------|
| Pump Type                                   | Dimensions(mm) |                  |    |      |
|                                             | A              | B                | C  | D    |
| ST-2504                                     | 247            | RP/NPT<br>1 1/2" | 98 | 577  |
| ST-2505                                     | 272            |                  | 98 | 618  |
| ST-2507                                     | 320            |                  | 98 | 685  |
| ST-2509                                     | 370            |                  | 98 | 750  |
| ST-2511                                     | 419            |                  | 98 | 824  |
| ST-2515                                     | 518            |                  | 98 | 958  |
| ST-2520                                     | 679            |                  | 98 | 1195 |
| ST-2526                                     | 864            |                  | 98 | 1491 |

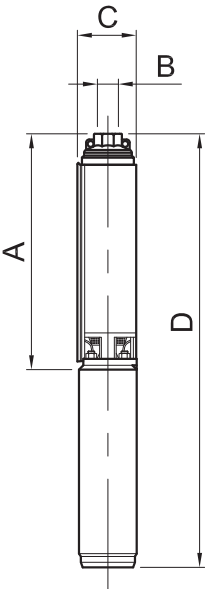
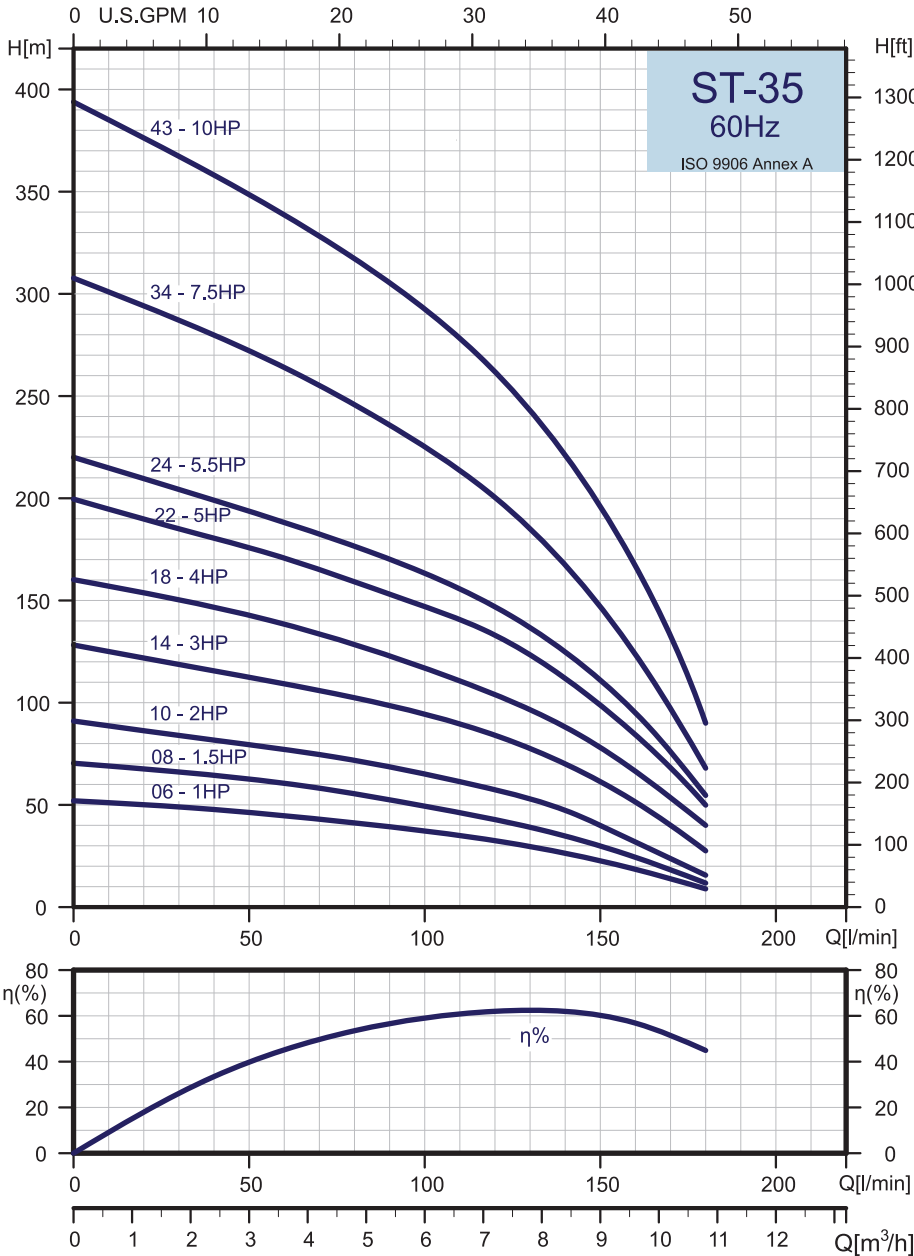
Selection Chart

| PUMP<br>TYPE | STAGES | MOTOR |      | Q=DELIVERY             |   |     |     |     |     |     |     |     |     |     |                |      |              | PUMP        | ELECTRO PUMP |  |
|--------------|--------|-------|------|------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|------|--------------|-------------|--------------|--|
|              |        |       |      | l/min                  | 0 | 40  | 50  | 60  | 70  | 80  | 90  | 100 | 120 | 140 |                |      |              |             |              |  |
|              |        | KW    | HP   | m³/h                   | 0 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 7.2 | 8.4 | Net Weight(kg) |      |              |             |              |  |
|              |        |       |      | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |     |     |     |     |                |      | Single phase | Three phase |              |  |
| ST-2504      | 4      | 0.37  | 0.5  | 36                     |   |     | 33  | 31  | 29  | 27  | 23  | 20  | 12  |     | 2.4            | 9.7  | 9.1          |             |              |  |
| ST-2505      | 5      | 0.55  | 0.75 | 46                     |   |     | 42  | 40  | 38  | 35  | 32  | 28  | 19  |     | 2.6            | 10.8 | 10           |             |              |  |
| ST-2507      | 7      | 0.75  | 1.0  | 63                     |   |     | 58  | 55  | 52  | 48  | 43  | 37  | 25  |     | 3.1            | 11.9 | 11.3         |             |              |  |
| ST-2509      | 9      | 1.1   | 1.5  | 82                     |   |     | 76  | 73  | 69  | 64  | 58  | 52  | 35  |     | 3.5            | 13.5 | 12.4         |             |              |  |
| ST-2511      | 11     | 1.5   | 2.0  | 100                    |   |     | 92  | 88  | 84  | 78  | 71  | 64  | 45  |     | 3.9            | 15.4 | 13.9         |             |              |  |
| ST-2515      | 15     | 2.2   | 3.0  | 136                    |   |     | 125 | 121 | 115 | 107 | 100 | 90  | 69  |     | 4.7            | 18.7 | 16.3         |             |              |  |
| ST-2520      | 20     | 3     | 4.0  | 183                    |   |     | 172 | 166 | 158 | 148 | 137 | 122 | 92  |     | 5.8            | 25.2 | 21.0         |             |              |  |
| ST-2526      | 26     | 3.7   | 5.0  | 234                    |   |     | 214 | 206 | 196 | 183 | 169 | 152 | 112 |     | 8.1            | 30.8 | 27.6         |             |              |  |

# Performance Curves

# ST-35

ST 4"



| Single Phase Motor     |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-3506                | 359            | RP/NPT<br>2" | 98 | 739  |
| ST-3508                | 421            |              | 98 | 826  |
| ST-3510                | 483            |              | 98 | 923  |
| ST-3514                | 607            |              | 98 | 1102 |
| ST-3518                | 731            |              | 98 | 1338 |
| ST-3522                | 893            |              | 98 | 1576 |
| ST-3524                | 993            |              | 98 | 1676 |
| ST-3534                | 1295           |              | 98 | N/A  |
| ST-3543                | 1356           |              | 98 | N/A  |

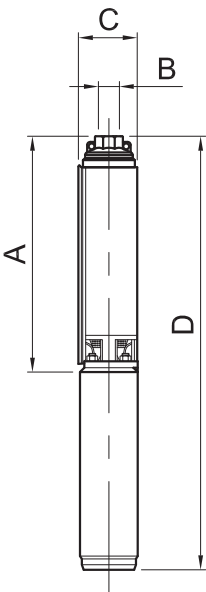
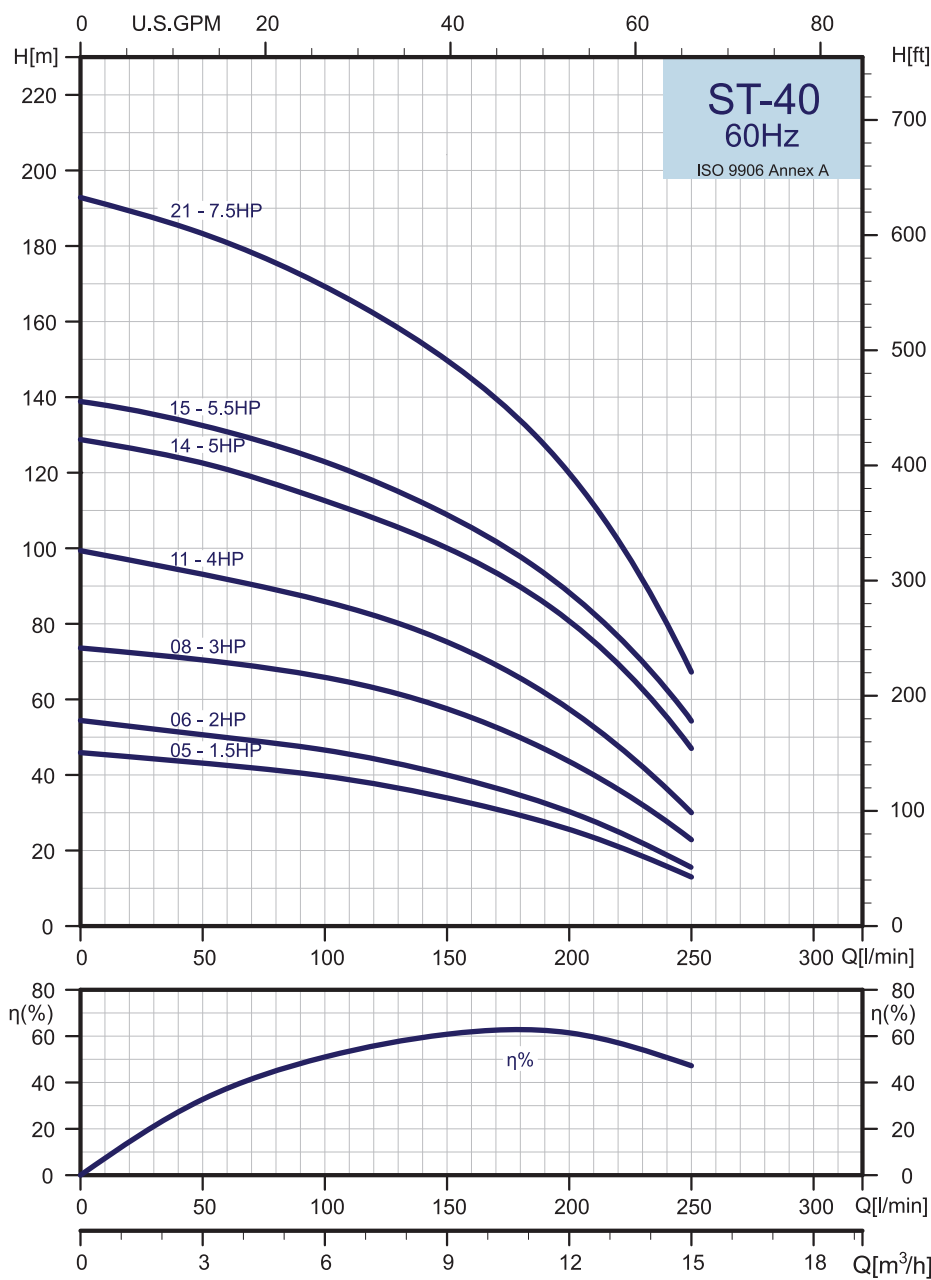
| Three Phase Motor      |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-3506                | 359            | RP/NPT<br>2" | 98 | 724  |
| ST-3508                | 421            |              | 98 | 801  |
| ST-3510                | 483            |              | 98 | 888  |
| ST-3514                | 607            |              | 98 | 1047 |
| ST-3518                | 731            |              | 98 | 1247 |
| ST-3522                | 893            |              | 98 | 1500 |
| ST-3524                | 993            |              | 98 | 1600 |
| ST-3534                | 1295           |              | 98 | 1978 |
| ST-3543                | 1356           |              | 98 | 2140 |

| Selection Chart |        |       |     |                        |   |     |     |     |     |     |     |     |     |     |      |      |                |      |              |             |
|-----------------|--------|-------|-----|------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|----------------|------|--------------|-------------|
| PUMP<br>TYPE    | STAGES | MOTOR |     | Q=DELIVERY             |   |     |     |     |     |     |     |     |     |     |      |      |                | PUMP | ELECTRO PUMP |             |
|                 |        |       |     | l/min                  | 0 | 50  | 60  | 70  | 80  | 90  | 100 | 120 | 140 | 160 | 180  | 200  |                |      |              |             |
|                 |        | KW    | HP  | m³/h                   | 0 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 7.2 | 8.4 | 9.6 | 10.8 | 12   | Net Weight(kg) |      |              |             |
|                 |        |       |     | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |     |     |     |     |      |      |                |      | Single phase | Three phase |
|                 |        |       |     |                        |   |     |     |     |     |     |     |     |     |     |      |      |                |      |              |             |
| ST-3506         | 6      | 0.75  | 1.0 | 52                     |   | 44  | 43  | 42  | 40  | 38  | 33  | 27  | 18  | 9   |      | 3.4  | 12.2           | 11.6 |              |             |
| ST-3508         | 8      | 1.1   | 1.5 | 70                     |   | 60  | 58  | 55  | 52  | 50  | 43  | 35  | 24  | 12  |      | 4.0  | 14.0           | 12.9 |              |             |
| ST-3510         | 10     | 1.5   | 2.0 | 91                     |   | 77  | 75  | 72  | 69  | 65  | 58  | 48  | 32  | 17  |      | 4.6  | 16.1           | 14.6 |              |             |
| ST-3514         | 14     | 2.2   | 3.0 | 128                    |   | 109 | 106 | 102 | 99  | 94  | 83  | 70  | 51  | 29  |      | 5.7  | 19.7           | 17.3 |              |             |
| ST-3518         | 18     | 3.0   | 4.0 | 160                    |   | 139 | 133 | 129 | 123 | 117 | 104 | 89  | 67  | 40  |      | 6.9  | 26.3           | 22.1 |              |             |
| ST-3522         | 22     | 3.7   | 5   | 200                    |   | 170 | 165 | 159 | 152 | 147 | 132 | 111 | 84  | 50  |      | 8.1  | 30.8           | 27.6 |              |             |
| ST-3524         | 24     | 4.0   | 5.5 | 220                    |   | 189 | 182 | 177 | 170 | 162 | 148 | 125 | 95  | 55  |      | 9.7  | 32.5           | 29.2 |              |             |
| ST-3534         | 34     | 5.5   | 7.5 | 308                    |   | 263 | 255 | 246 | 236 | 225 | 200 | 167 | 122 | 69  |      | 12.6 | N/A            | 35.7 |              |             |
| ST-3543         | 43     | 7.5   | 10  | 394                    |   | 339 | 328 | 317 | 305 | 292 | 261 | 220 | 167 | 90  |      | 15.2 | N/A            | 42.7 |              |             |

Performance Curves

ST-40

ST 4"



| Single Phase Motor     |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-4005                | 325            | RP/NPT<br>2" | 98 | 730  |
| ST-4006                | 356            |              | 98 | 796  |
| ST-4008                | 418            |              | 98 | 913  |
| ST-4011                | 511            |              | 98 | 1118 |
| ST-4014                | 604            |              | 98 | 1287 |
| ST-4015                | 638            |              | 98 | 1321 |
| ST-4021                | 859            |              | 98 | N/A  |

| Three Phase Motor      |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-4005                | 325            | RP/NPT<br>2" | 98 | 705  |
| ST-4006                | 356            |              | 98 | 761  |
| ST-4008                | 418            |              | 98 | 858  |
| ST-4011                | 511            |              | 98 | 1027 |
| ST-4014                | 604            |              | 98 | 1211 |
| ST-4015                | 638            |              | 98 | 1245 |
| ST-4021                | 859            |              | 98 | 1542 |

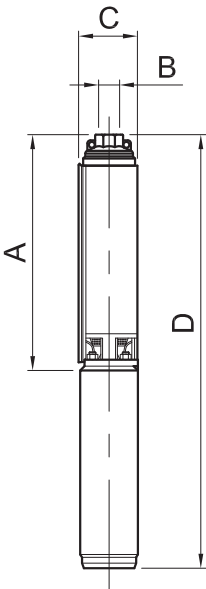
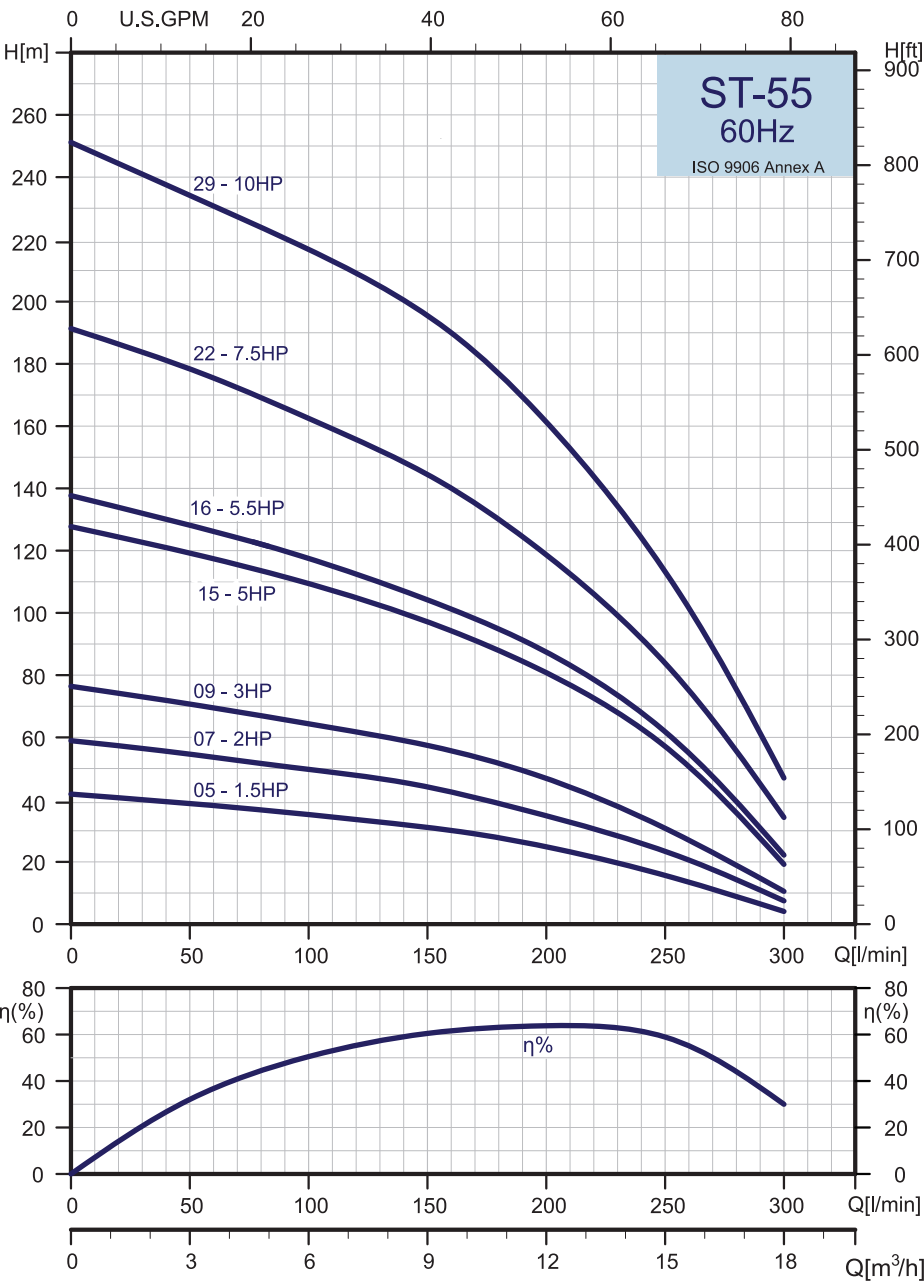
Selection Chart

| PUMP<br>TYPE | STAGES | MOTOR |     | Q=DELIVERY             |   |     |     |     |     |     |     |     |     |      |     |     |      |                |      | PUMP | ELECTRO PUMP |             |
|--------------|--------|-------|-----|------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|------|----------------|------|------|--------------|-------------|
|              |        |       |     | l/min                  | 0 | 60  | 70  | 80  | 90  | 100 | 120 | 140 | 160 | 180  | 200 | 250 | 280  |                |      |      |              |             |
|              |        | KW    | HP  | m³/h                   | 0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 7.2 | 8.4 | 9.6 | 10.8 | 12  | 15  | 16.8 | Net Weight(kg) |      |      |              |             |
|              |        |       |     | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |     |     |     |      |     |     |      |                |      |      | Single phase | Three phase |
| ST-4005      | 5      | 1.1   | 1.5 | 46                     |   | 42  | 41  | 40  | 39  | 37  | 35  | 33  | 29  | 25   | 14  |     | 3.1  | 13.1           | 12.0 |      |              |             |
| ST-4006      | 6      | 1.5   | 2.0 | 55                     |   | 49  | 48  | 47  | 47  | 45  | 42  | 38  | 35  | 30   | 17  |     | 3.4  | 14.9           | 13.4 |      |              |             |
| ST-4008      | 8      | 2.2   | 3.0 | 74                     |   | 69  | 68  | 67  | 66  | 63  | 60  | 56  | 50  | 43   | 24  |     | 4.0  | 18.0           | 15.6 |      |              |             |
| ST-4011      | 11     | 3.0   | 4.0 | 100                    |   | 91  | 88  | 87  | 86  | 83  | 78  | 73  | 66  | 58   | 30  |     | 4.9  | 24.3           | 20.1 |      |              |             |
| ST-4014      | 14     | 3.7   | 5.0 | 129                    |   | 118 | 116 | 115 | 113 | 108 | 103 | 97  | 90  | 81   | 48  |     | 5.7  | 28.4           | 25.2 |      |              |             |
| ST-4015      | 15     | 4.0   | 5.5 | 139                    |   | 128 | 126 | 125 | 123 | 118 | 113 | 105 | 97  | 88   | 55  |     | 6.0  | 28.8           | 25.5 |      |              |             |
| ST-4021      | 21     | 5.5   | 7.5 | 194                    |   | 178 | 175 | 173 | 169 | 162 | 154 | 145 | 134 | 120  | 68  |     | 7.8  | N/A            | 30.9 |      |              |             |

Performance Curves

ST-55

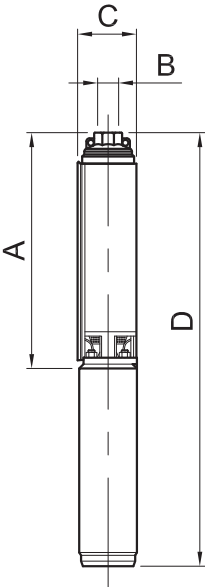
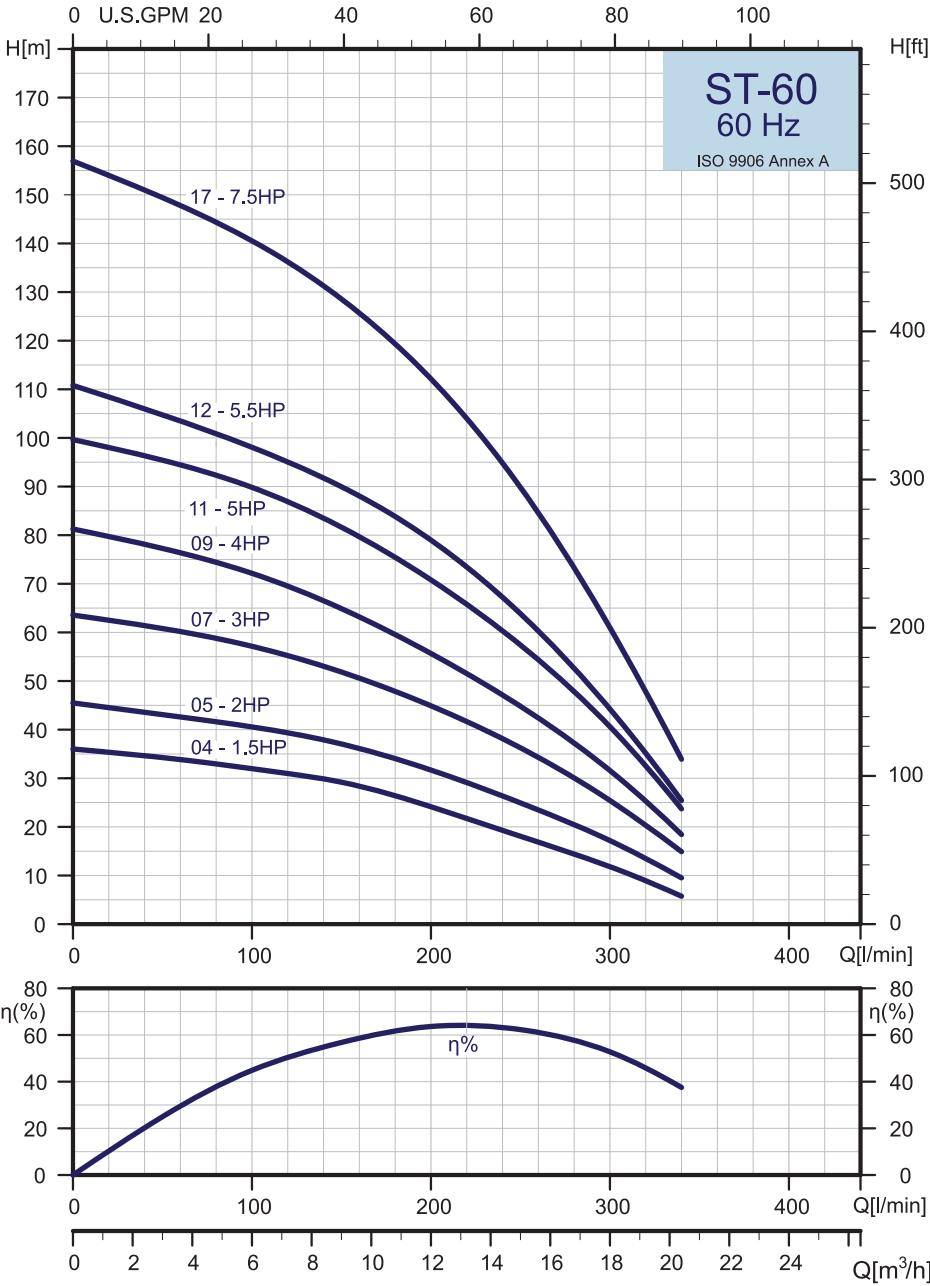
ST 4"



| Single Phase Motor     |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-5505                | 433            | RP/NPT<br>2" | 98 | 838  |
| ST-5507                | 537            |              | 98 | 977  |
| ST-5509                | 641            |              | 98 | 1136 |
| ST-5515                | 953            |              | 98 | 1636 |
| ST-5516                | 1005           |              | 98 | 1612 |
| ST-5522                | 1383           |              | 98 | N/A  |
| ST-5529                | 1746           |              | 98 | N/A  |

| Three Phase Motor      |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-5505                | 433            | RP/NPT<br>2" | 98 | 813  |
| ST-5507                | 537            |              | 98 | 942  |
| ST-5509                | 641            |              | 98 | 1081 |
| ST-5515                | 953            |              | 98 | 1560 |
| ST-5516                | 1005           |              | 98 | 1612 |
| ST-5522                | 1383           |              | 98 | 2066 |
| ST-5529                | 1746           |              | 98 | 2529 |

| PUMP<br>TYPE | STAGES | MOTOR |     | Q=DELIVERY             |   |     |     |     |     |     |     |     |      |     |      |      |      |      |     |      |                |      | PUMP | ELECTRO PUMP |             |
|--------------|--------|-------|-----|------------------------|---|-----|-----|-----|-----|-----|-----|-----|------|-----|------|------|------|------|-----|------|----------------|------|------|--------------|-------------|
|              |        |       |     | l/min                  | 0 | 70  | 80  | 90  | 100 | 120 | 140 | 160 | 180  | 200 | 220  | 240  | 260  | 280  | 300 | 340  |                |      |      |              |             |
|              |        | KW    | HP  | m³/h                   | 0 | 4.2 | 4.8 | 5.4 | 6.0 | 7.2 | 8.4 | 9.6 | 10.8 | 12  | 13.2 | 14.4 | 15.6 | 16.8 | 18  | 20.4 | Net Weight(kg) |      |      |              |             |
|              |        |       |     | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |     |     |      |     |      |      |      |      |     |      |                |      |      | Single phase | Three phase |
|              |        |       |     |                        |   |     |     |     |     |     |     |     |      |     |      |      |      |      |     |      |                |      |      |              |             |
| ST-5505      | 5      | 1.1   | 1.5 | 42                     |   |     | 38  | 37  | 36  | 34  | 32  | 30  | 28   | 25  | 22   | 18   | 14   | 9    | 5   |      | 4.3            | 14.3 | 13.2 |              |             |
| ST-5507      | 7      | 1.5   | 2.0 | 59                     |   |     | 52  | 51  | 50  | 48  | 46  | 43  | 40   | 36  | 31   | 26   | 21   | 15   | 8   |      | 5.3            | 16.8 | 15.3 |              |             |
| ST-5509      | 9      | 2     | 3.0 | 76                     |   |     | 67  | 66  | 64  | 62  | 59  | 56  | 52   | 47  | 42   | 35   | 28   | 19   | 11  |      | 6.2            | 20.2 | 17.8 |              |             |
| ST-5515      | 15     | 3.7   | 5.0 | 128                    |   |     | 113 | 112 | 109 | 105 | 100 | 94  | 88   | 80  | 72   | 63   | 51   | 37   | 20  |      | 9.0            | 31.7 | 28.5 |              |             |
| ST-5516      | 16     | 4.0   | 5.5 | 137                    |   |     | 122 | 120 | 117 | 112 | 107 | 101 | 95   | 88  | 79   | 68   | 55   | 40   | 23  |      | 9.5            | 32.3 | 29.0 |              |             |
| ST-5522      | 22     | 5.5   | 7.5 | 191                    |   |     | 169 | 166 | 162 | 156 | 149 | 140 | 131  | 118 | 106  | 91   | 75   | 55   | 35  |      | 13.3           | N/A  | 36.4 |              |             |
| ST-5529      | 29     | 7.5   | 10  | 251                    |   |     | 225 | 221 | 218 | 209 | 200 | 190 | 177  | 161 | 144  | 125  | 101  | 75   | 48  |      | 16.6           | N/A  | 44.1 |              |             |



| Single Phase Motor     |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-6004                | 378            | RP/NPT<br>2" | 98 | 783  |
| ST-6005                | 430            |              | 98 | 870  |
| ST-6007                | 534            |              | 98 | 1029 |
| ST-6009                | 638            |              | 98 | 1245 |
| ST-6011                | 742            |              | 98 | 1425 |
| ST-6012                | 797            |              | 98 | 1480 |
| ST-6017                | 1092           |              | 98 | N/A  |

| Three Phase Motor      |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-6004                | 378            | RP/NPT<br>2" | 98 | 758  |
| ST-6005                | 430            |              | 98 | 835  |
| ST-6007                | 534            |              | 98 | 974  |
| ST-6009                | 638            |              | 98 | 1154 |
| ST-6011                | 742            |              | 98 | 1349 |
| ST-6012                | 797            |              | 98 | 1404 |
| ST-6017                | 1092           |              | 98 | 1775 |

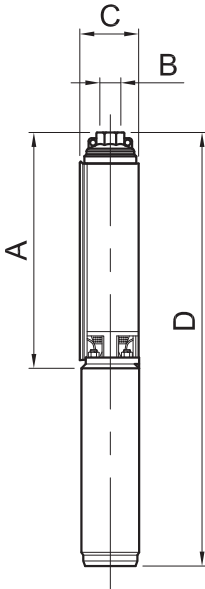
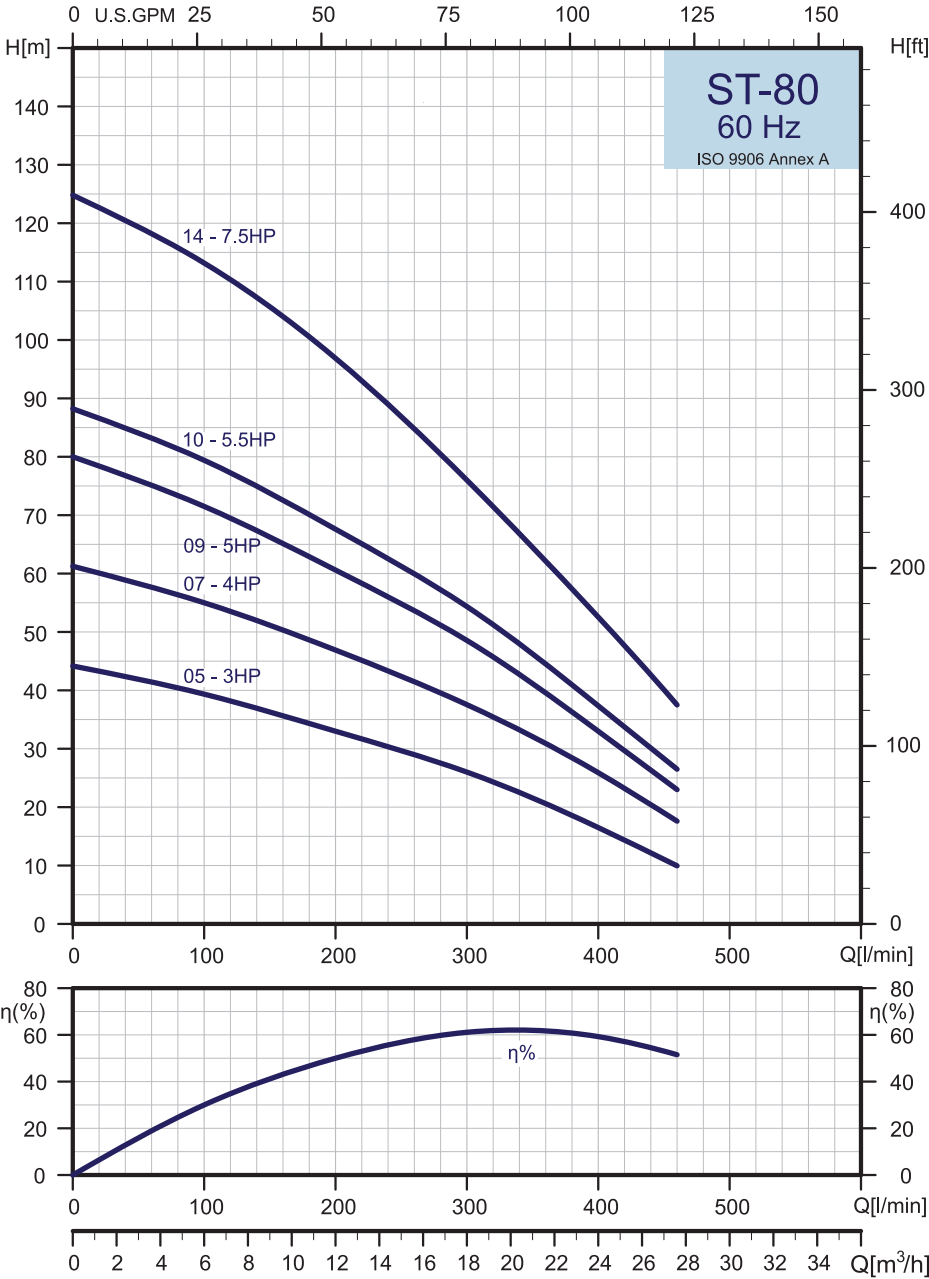
Selection Chart

| PUMP<br>TYPE | STAGES | MOTOR |     | Q=DELIVERY             |   |     |     |     |     |     |      |     |      |      |      |      |     |      |      |                |              |             | PUMP | ELECTRO PUMP |  |
|--------------|--------|-------|-----|------------------------|---|-----|-----|-----|-----|-----|------|-----|------|------|------|------|-----|------|------|----------------|--------------|-------------|------|--------------|--|
|              |        |       |     | l/min                  | 0 | 90  | 100 | 120 | 140 | 160 | 180  | 200 | 220  | 240  | 260  | 280  | 300 | 340  | 380  |                |              |             |      |              |  |
|              |        | KW    | HP  | m³/h                   | 0 | 5.4 | 6.0 | 7.2 | 8.4 | 9.6 | 10.8 | 12  | 13.2 | 14.4 | 15.6 | 16.8 | 18  | 20.4 | 22.8 | Net Weight(kg) |              |             |      |              |  |
|              |        |       |     | H=TOTAL HEAD IN METERS |   |     |     |     |     |     |      |     |      |      |      |      |     |      |      |                |              |             |      |              |  |
|              |        |       |     |                        |   |     |     |     |     |     |      |     |      |      |      |      |     |      |      |                | Single phase | Three phase |      |              |  |
| ST-6004      | 4      | 1.1   | 1.5 | 36                     |   |     | 32  | 31  | 30  | 28  | 26   | 24  | 22   | 19   | 17   | 14   | 12  | 6    |      | 3.9            | 13.9         | 12.8        |      |              |  |
| ST-6005      | 5      | 1.5   | 2.0 | 46                     |   |     | 41  | 39  | 37  | 36  | 34   | 32  | 29   | 26   | 23   | 20   | 17  | 9    |      | 4.4            | 15.9         | 14.4        |      |              |  |
| ST-6007      | 7      | 2.2   | 3.0 | 64                     |   |     | 57  | 55  | 53  | 51  | 48   | 45  | 42   | 38   | 34   | 30   | 25  | 15   |      | 5.3            | 19.3         | 16.9        |      |              |  |
| ST-6009      | 9      | 3.0   | 4.0 | 82                     |   |     | 72  | 69  | 67  | 64  | 60   | 56  | 52   | 47   | 42   | 37   | 32  | 18   |      | 6.3            | 25.7         | 21.5        |      |              |  |
| ST-6011      | 11     | 3.7   | 5.0 | 100                    |   |     | 90  | 87  | 83  | 80  | 75   | 71  | 67   | 60   | 54   | 48   | 41  | 24   |      | 7.2            | 29.9         | 26.7        |      |              |  |
| ST-6012      | 12     | 4.0   | 5.5 | 110                    |   |     | 98  | 95  | 92  | 88  | 84   | 78  | 73   | 67   | 60   | 55   | 44  | 26   |      | 7.7            | 30.5         | 27.2        |      |              |  |
| ST-6017      | 17     | 5.5   | 7.5 | 157                    |   |     | 140 | 136 | 131 | 126 | 119  | 112 | 104  | 95   | 85   | 73   | 61  | 35   |      | 10.1           | N/A          | 33.2        |      |              |  |

# Performance Curves

# ST-80

ST 4"



| Single Phase Motor     |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-8005                | 472            | RP/NPT<br>2" | 98 | 967  |
| ST-8007                | 608            |              | 98 | 1215 |
| ST-8009                | 743            |              | 98 | 1426 |
| ST-8010                | 814            |              | 98 | 1497 |
| ST-8014                | 1081           |              | 98 | N/A  |

| Three Phase Motor      |                |              |    |      |
|------------------------|----------------|--------------|----|------|
| Dimensions and Weights |                |              |    |      |
| Pump Type              | Dimensions(mm) |              |    |      |
|                        | A              | B            | C  | D    |
| ST-8005                | 472            | RP/NPT<br>2" | 98 | 912  |
| ST-8007                | 608            |              | 98 | 1124 |
| ST-8009                | 743            |              | 98 | 1350 |
| ST-8010                | 814            |              | 98 | 1421 |
| ST-8014                | 1081           |              | 98 | 1764 |

## Selection Chart

| PUMP<br>TYPE | STAGES | MOTOR                  |     | Q=DELIVERY |   |     |     |      |     |      |      |      |      |     |      |      |      |      |     |                |             | PUMP | ELECTRO PUMP |  |
|--------------|--------|------------------------|-----|------------|---|-----|-----|------|-----|------|------|------|------|-----|------|------|------|------|-----|----------------|-------------|------|--------------|--|
|              |        |                        |     | l/min      | 0 | 140 | 160 | 180  | 200 | 220  | 240  | 260  | 280  | 300 | 340  | 380  | 420  | 460  | 500 |                |             |      |              |  |
|              |        | KW                     | HP  | m³/h       | 0 | 8.4 | 9.6 | 10.8 | 12  | 13.2 | 14.4 | 15.6 | 16.8 | 18  | 20.4 | 22.8 | 25.2 | 27.6 | 30  | Net Weight(kg) |             |      |              |  |
|              |        | H=TOTAL HEAD IN METERS |     |            |   |     |     |      |     |      |      |      |      |     |      |      |      |      |     | Single phase   | Three phase |      |              |  |
| ST-8005      | 5      | 2.2                    | 3.0 | 44         |   | 36  | 34  | 33   | 32  | 30   | 29   | 28   | 26   | 23  | 19   | 14   | 10   |      | 4.4 | 18.4           | 16.0        |      |              |  |
| ST-8007      | 7      | 3.0                    | 4.0 | 61         |   | 50  | 49  | 47   | 45  | 43   | 41   | 40   | 38   | 33  | 28   | 23   | 18   |      | 5.6 | 25.0           | 20.8        |      |              |  |
| ST-8009      | 9      | 3.7                    | 5.0 | 80         |   | 65  | 63  | 61   | 58  | 56   | 54   | 51   | 49   | 43  | 36   | 30   | 23   |      | 6.9 | 29.6           | 26.4        |      |              |  |
| ST-8010      | 10     | 4.0                    | 5.5 | 88         |   | 73  | 70  | 68   | 65  | 63   | 60   | 57   | 54   | 48  | 41   | 34   | 27   |      | 7.5 | 30.3           | 27.0        |      |              |  |
| ST-8014      | 14     | 5.5                    | 7.5 | 126        |   | 104 | 101 | 97   | 93  | 89   | 85   | 80   | 76   | 67  | 62   | 48   | 38   |      | 9.9 | N/A            | 33.0        |      |              |  |

# STAIRS 6" ST Submersible Pump

## Description

The 6" submersible pumps for high pressures and flow rates, particularly equipped with a high rigidity **Silicon-Carbide(SIC) Bearing**, provide reliability and quality guaranteed.

## Discharge Head and Motor

**Adaptor** are precision machined cast 304 stainless steel for superior strength and durability. The motor adaptor is NEMA standard.

## Impellers are floating type made

**with Noryl®** for a superior sand handling. Together with glass filled polycarbonate diffusers make the super strong pumps for maximum wear and abrasive resistance. The materials are FDA compliant materials.

**Impeller Bowls** are made from 304 stainless steel, maximizing wear from abrasion.

**Shaft Coupling** is made from 304 stainless steel for easy alignment to the motor shaft.

**Strainer** is made from stamped 304 stainless steel for rigidity.

**Non-Return valve** made from 304 stainless steel, fitted in the discharge to prevent any back flow of water and alleviate any water hammer to the pumps.

**Pump Shaft** is made from hex 304 stainless steel bar material for high corrosion resistance.

**Pump body** is covered by a thick 304 stainless steel casing, ensures optimum resistance to abrasion.

## APPLICATIONS

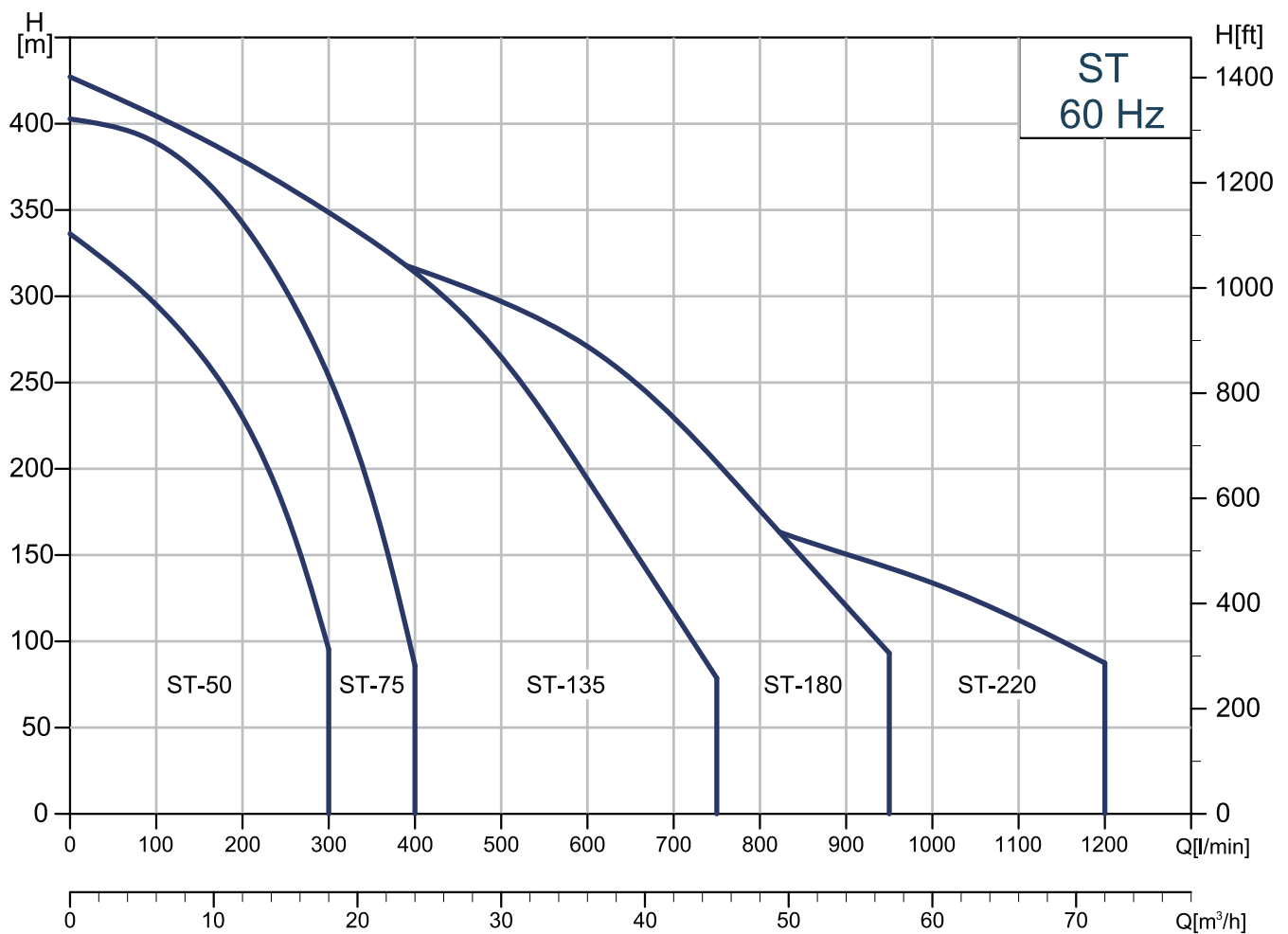
- Water Supply
- Irrigation
- Pressure Boosting

## GENERAL SPECIFICATIONS PUMP

- Delivery: up to 72 m<sup>3</sup>/h at 3450 rpm
- Head: up to 430 m at 3450 rpm
- Maximum permissible quantity of sand: 50g/m<sup>3</sup>
- ST 50-ST75-ST135-ST180-ST220 models 3" discharge.

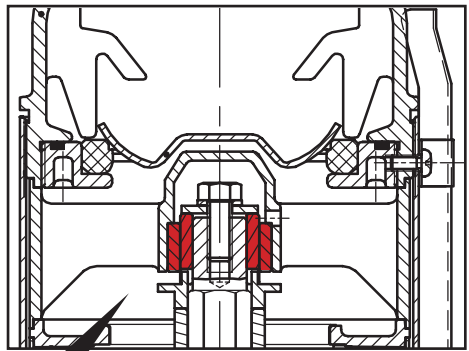
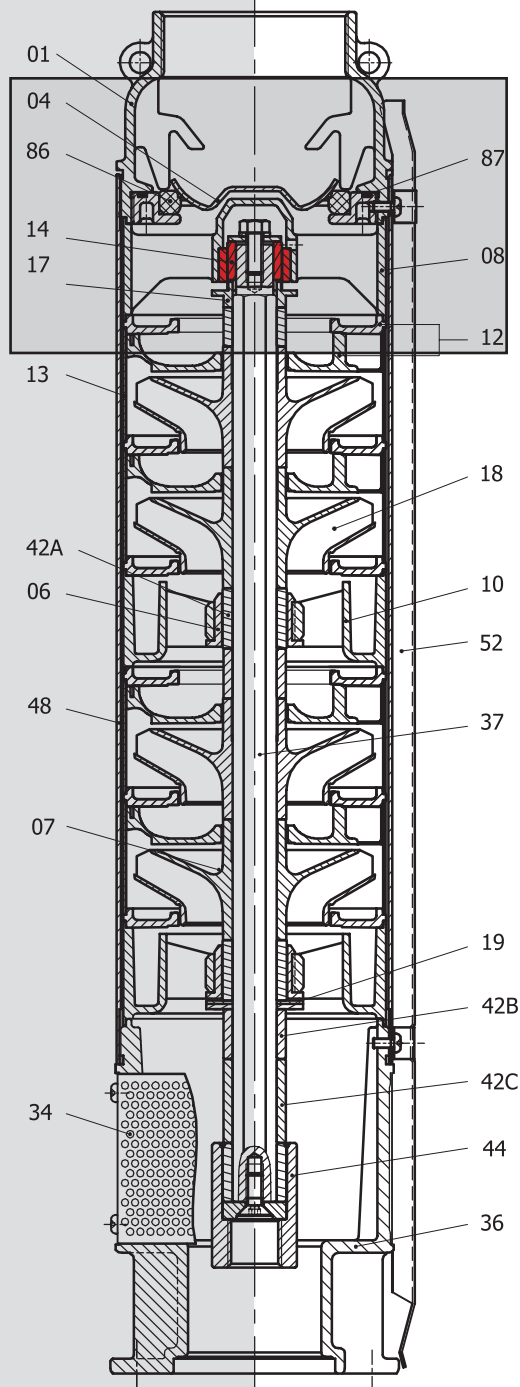
# Performance range

ST 6"



# Material Specification

ST 6"



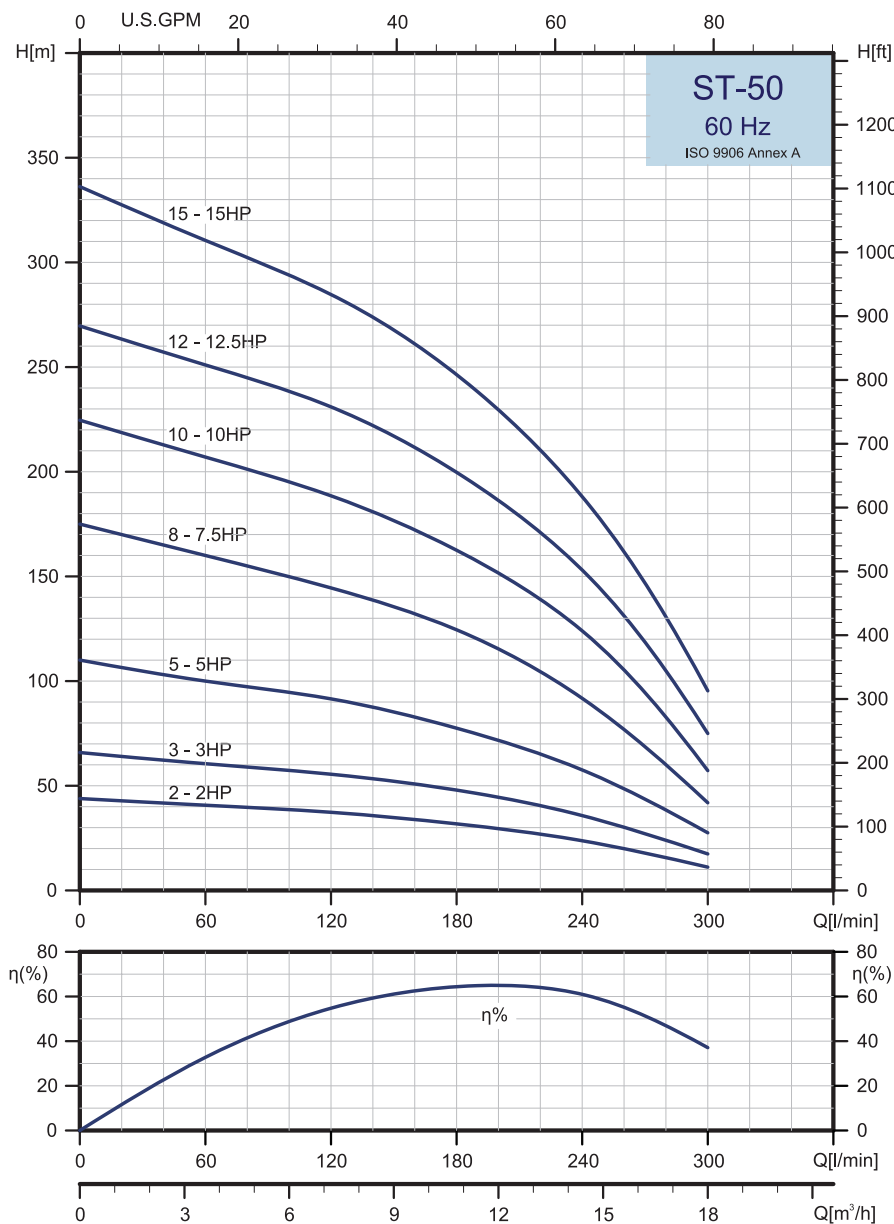
High rigidity **Silicon-Carbide(SIC) Bearing** ensure high corrosion resistance and provide long and dependable service life.

| Pos. | Part Name                    | Material                      |
|------|------------------------------|-------------------------------|
| 01   | Discharge                    | AISI 304                      |
| 04   | Valve cone                   | AISI 304                      |
| 06   | Bearing                      | POM+PTFE                      |
| 07   | Bearing                      | Bronze                        |
| 08   | Upper bearing spider         | AISI 304<br>+ Silicon carbide |
| 10   | Bearing Spider               | Noryl                         |
| 12   | Diffuser                     | Glass Filled<br>Polycarbonate |
| 13   | Diffuser casing              | AISI 304                      |
| 14   | Bearing ring                 | Silicon carbide               |
| 17   | Sleeve for boffle            | AISI 304                      |
| 18   | Impeller                     | Noryl                         |
| 19   | Counter thrust bearing plate | Carbon fiber<br>+ PTFE        |
| 34   | Strainer                     | AISI 304                      |
| 36   | Suction interconnector       | AISI 304                      |
| 37   | Pump shaft                   | AISI 304                      |
| 42A  | Shaft sleeve                 | AISI 304                      |
| 42B  | Shaft sleeve                 | Noryl                         |
| 42C  | Shaft sleeve                 | Noryl                         |
| 44   | Coupling                     | AISI 304                      |
| 48   | Pump casing                  | AISI 304                      |
| 52   | Cable guard                  | AISI 304                      |
| 86   | Valve Seat                   | AISI 304<br>+ NBR             |
| 87   | O-ring                       | NBR                           |

# Performance Curves

# ST-50

## ST 6"

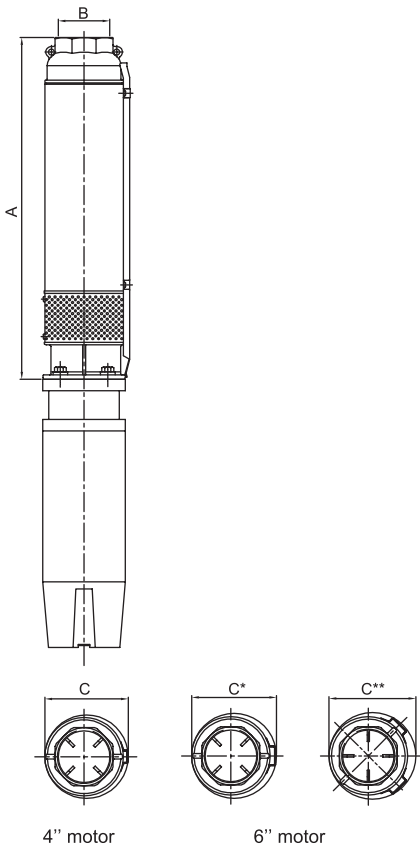


Product data

| Pump Type | HP   | Q(GPM) | H(ft) | Hmax(ft) |
|-----------|------|--------|-------|----------|
| ST 50-02  | 2    | 50     | 101   | 144      |
| ST 50-03  | 3    | 50     | 153   | 217      |
| ST 50-05  | 5    | 50     | 246   | 361      |
| ST 50-08  | 7.5  | 50     | 396   | 575      |
| ST 50-10  | 10   | 50     | 518   | 737      |
| ST 50-12  | 12.5 | 50     | 636   | 885      |
| ST 50-15  | 15   | 50     | 784   | 1103     |

Dimensions and weights

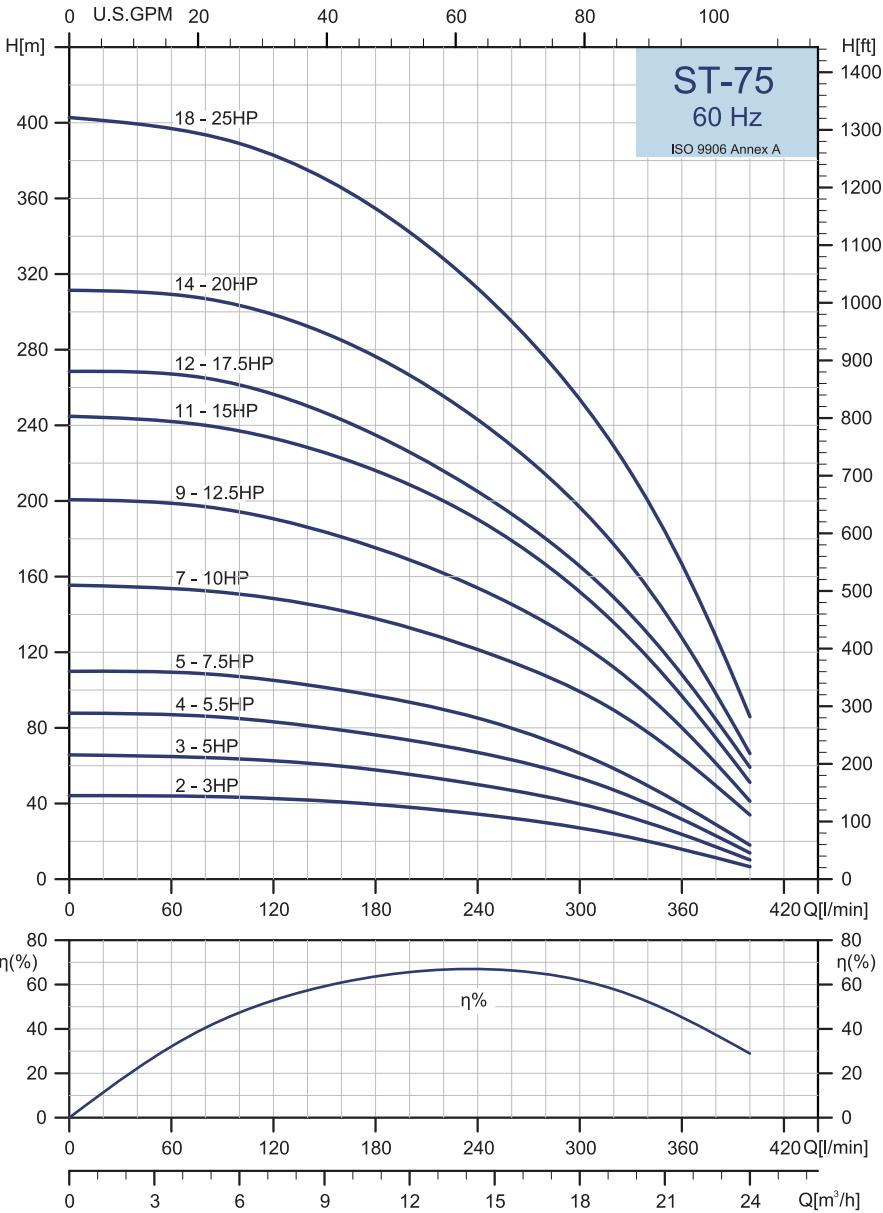
| Pump type | Motor |      |      | Dimensions(mm) |                   |     |     |     | Weight(kg) |
|-----------|-------|------|------|----------------|-------------------|-----|-----|-----|------------|
|           | Power |      | Type |                |                   |     |     |     | Pump       |
|           | kW    | HP   |      | A              | B                 | C   | C*  | C** |            |
| ST 50-2   | 1.5   | 2    | 4"   | 425            | NPT3'<br><br>RP3' | 138 |     |     | 8.2        |
| ST 50-3   | 2.2   | 3    | 4"   | 463            |                   | 138 |     |     | 8.9        |
| ST 50-5   | 3.7   | 5    | 4"   | 539            |                   | 138 |     |     | 10.3       |
| ST 50-8   | 5.5   | 7.5  | 4"   | 653            |                   | 138 |     |     | 12.5       |
| ST 50-10  | 7.5   | 10   | 4"   | 729            |                   | 138 |     |     | 13.8       |
| ST 50-8   | 5.5   | 7.5  | 6"   | 667            |                   |     | 141 | 144 | 13.2       |
| ST 50-10  | 7.5   | 10   | 6"   | 743            |                   |     | 141 | 144 | 14.6       |
| ST 50-12  | 9.3   | 12.5 | 6"   | 819            |                   |     | 141 | 144 | 15.9       |
| ST 50-15  | 11    | 15   | 6"   | 933            |                   |     | 141 | 144 | 17.8       |



# Performance Curves

# ST-75

## ST 6"

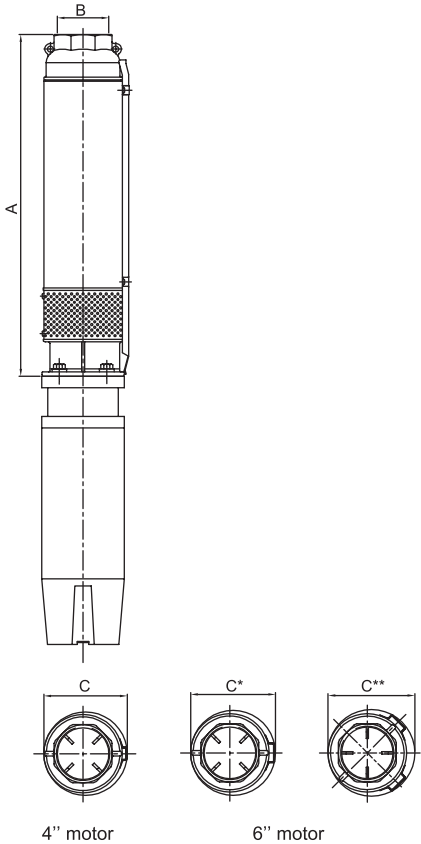


### Product data

| Pump Type | HP   | Q(GPM) | H(ft) | Hmax(ft) |
|-----------|------|--------|-------|----------|
| ST 75-02  | 3    | 75     | 97    | 145      |
| ST 75-03  | 5    | 75     | 141   | 216      |
| ST 75-04  | 5.5  | 75     | 190   | 288      |
| ST 75-05  | 7.5  | 75     | 238   | 361      |
| ST 75-07  | 10   | 75     | 348   | 510      |
| ST 75-09  | 12.5 | 75     | 439   | 659      |
| ST 75-11  | 15   | 75     | 538   | 804      |
| ST 75-12  | 17.5 | 75     | 582   | 881      |
| ST 75-14  | 20   | 75     | 692   | 1022     |
| ST 75-18  | 25   | 75     | 891   | 1322     |

### Dimensions and weights

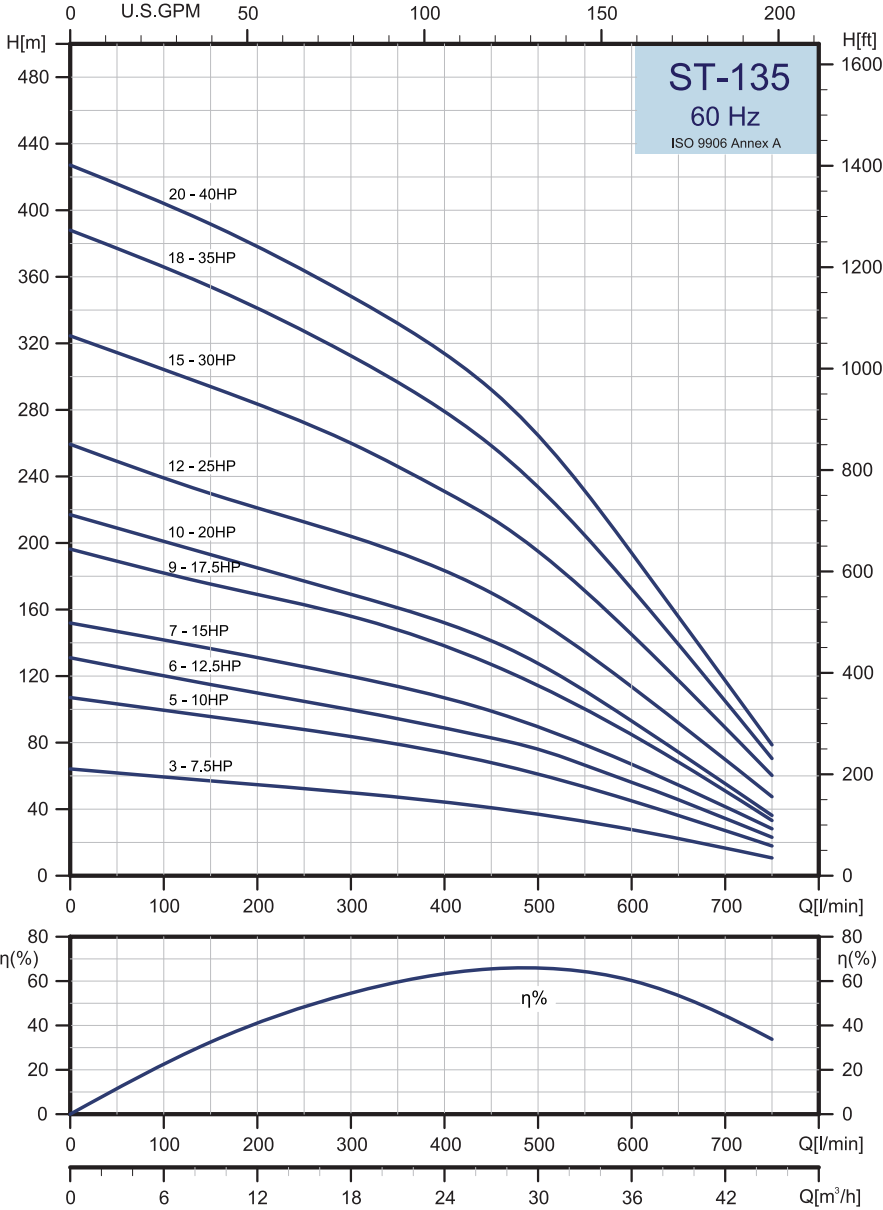
| Pump type | Motor |      |      | Dimensions(mm) |               |     |     |     | Weight(kg) |
|-----------|-------|------|------|----------------|---------------|-----|-----|-----|------------|
|           | Power |      | Type |                |               |     |     |     | Pump       |
|           | kW    | HP   |      | A              | B             | C   | C*  | C** |            |
| ST 75-2   | 2.2   | 3    | 4"   | 425            | NPT3"<br>RP3" | 138 |     |     | 8.2        |
| ST 75-3   | 3.7   | 5    | 4"   | 463            |               | 138 |     |     | 8.9        |
| ST 75-4   | 4     | 5.5  | 4"   | 501            |               | 138 |     |     | 9.6        |
| ST 75-5   | 5.5   | 7.5  | 4"   | 539            |               | 138 |     |     | 10.3       |
| ST 75-7   | 7.5   | 10   | 4"   | 615            |               | 138 |     |     | 11.7       |
| ST 75-5   | 5.5   | 7.5  | 6"   | 553            |               |     | 141 | 144 | 11.1       |
| ST 75-7   | 7.5   | 10   | 6"   | 629            |               |     | 141 | 144 | 12.5       |
| ST 75-9   | 9.3   | 12.5 | 6"   | 705            |               |     | 141 | 144 | 13.9       |
| ST 75-11  | 11    | 15   | 6"   | 781            |               |     | 141 | 144 | 15.2       |
| ST 75-12  | 13    | 17.5 | 6"   | 819            |               |     | 141 | 144 | 15.8       |
| ST 75-14  | 15    | 20   | 6"   | 895            |               |     | 141 | 144 | 17.2       |
| ST 75-18  | 18.5  | 25   | 6"   | 1047           |               |     | 141 | 144 | 19.9       |



# Performance Curves

# ST-135

## ST 6"

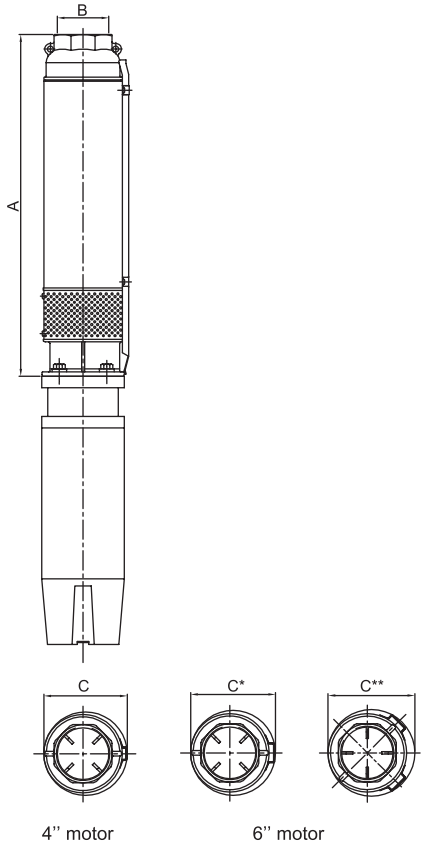


### Product data

| Pump Type | HP   | Q(GPM) | H(ft) | Hmax(ft) |
|-----------|------|--------|-------|----------|
| ST 135-03 | 7.5  | 135    | 119   | 211      |
| ST 135-05 | 10   | 135    | 195   | 352      |
| ST 135-06 | 12.5 | 135    | 244   | 430      |
| ST 135-07 | 15   | 135    | 287   | 499      |
| ST 135-09 | 17.5 | 135    | 366   | 645      |
| ST 135-10 | 20   | 135    | 408   | 712      |
| ST 135-12 | 25   | 135    | 491   | 851      |
| ST 135-15 | 30   | 135    | 624   | 1065     |
| ST 135-18 | 35   | 135    | 747   | 1273     |
| ST 135-20 | 40   | 135    | 846   | 1402     |

### Dimensions and weights

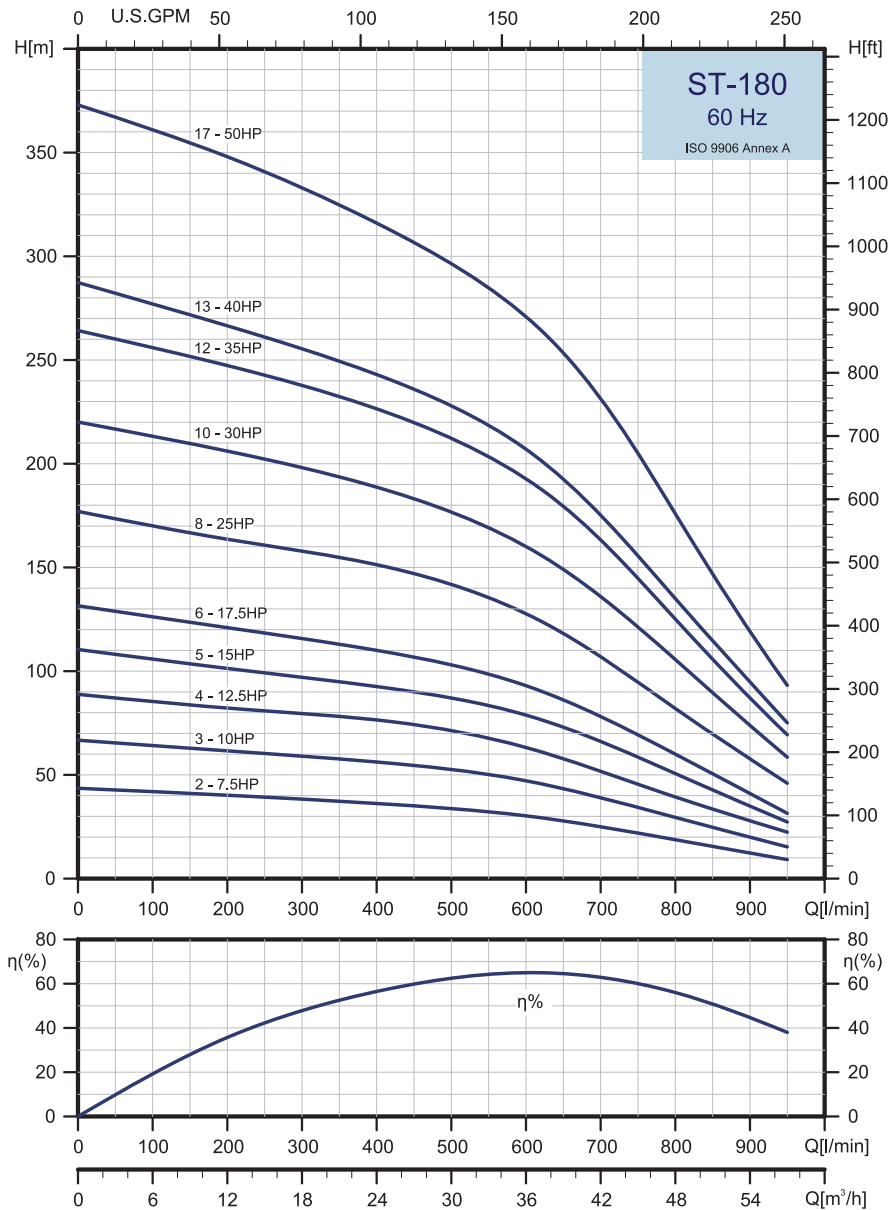
| Pump type | Motor |      | Type | Dimensions(mm) |               |     |     |     | Weight(kg) |
|-----------|-------|------|------|----------------|---------------|-----|-----|-----|------------|
|           | kW    | HP   |      | A              | B             | C   | C*  | C** |            |
| ST 135-3  | 5.5   | 7.5  | 4"   | 520            | NPT3"<br>RP3" | 138 |     |     | 9.9        |
| ST 135-5  | 7.5   | 10   | 4"   | 634            |               | 138 |     |     | 11.8       |
| ST 135-3  | 5.5   | 7.5  | 6"   | 534            |               |     | 141 | 144 | 10.7       |
| ST 135-5  | 7.5   | 10   | 6"   | 648            |               |     | 141 | 144 | 12.5       |
| ST 135-6  | 9.3   | 12.5 | 6"   | 705            |               |     | 141 | 144 | 13.5       |
| ST 135-7  | 11    | 15   | 6"   | 762            |               |     | 141 | 144 | 14.4       |
| ST 135-9  | 13    | 17.5 | 6"   | 876            |               |     | 141 | 144 | 16.1       |
| ST 135-10 | 15    | 20   | 6"   | 933            |               |     | 141 | 144 | 17         |
| ST 135-12 | 18.5  | 25   | 6"   | 1047           |               |     | 141 | 144 | 18.9       |
| ST 135-15 | 22    | 30   | 6"   | 1218           |               |     | 141 | 144 | 21.6       |
| ST 135-18 | 26    | 35   | 6"   | 1389           |               |     | 141 | 144 | 24.3       |
| ST 135-20 | 30    | 40   | 6"   | 1555           |               |     | 141 | 144 | 27         |



# Performance Curves

# ST-180

## ST 6"

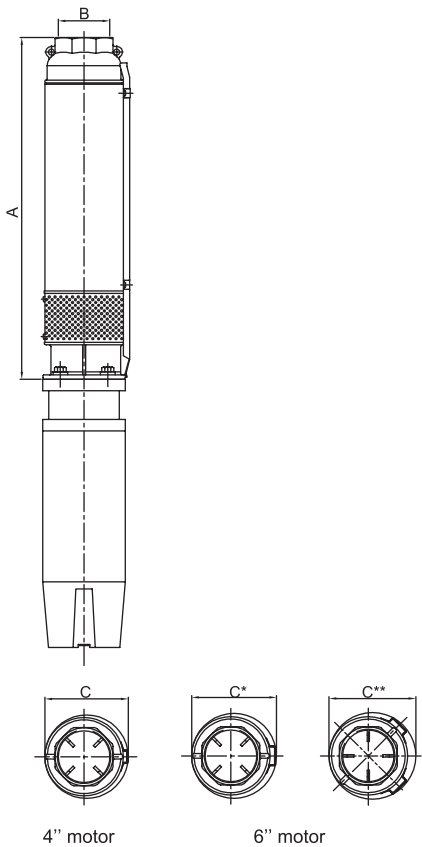


### Product data

| Pump Type | HP   | Q(GPM) | H(ft) | Hmax(ft) |
|-----------|------|--------|-------|----------|
| ST 180-02 | 7.5  | 180    | 86    | 143      |
| ST 180-03 | 10   | 180    | 134   | 220      |
| ST 180-04 | 12.5 | 180    | 178   | 292      |
| ST 180-05 | 15   | 180    | 226   | 363      |
| ST 180-06 | 17.5 | 180    | 267   | 432      |
| ST 180-08 | 25   | 180    | 366   | 581      |
| ST 180-10 | 30   | 180    | 463   | 723      |
| ST 180-12 | 35   | 180    | 557   | 867      |
| ST 180-13 | 40   | 180    | 598   | 943      |
| ST 180-17 | 50   | 180    | 788   | 1224     |

### Dimensions and weights

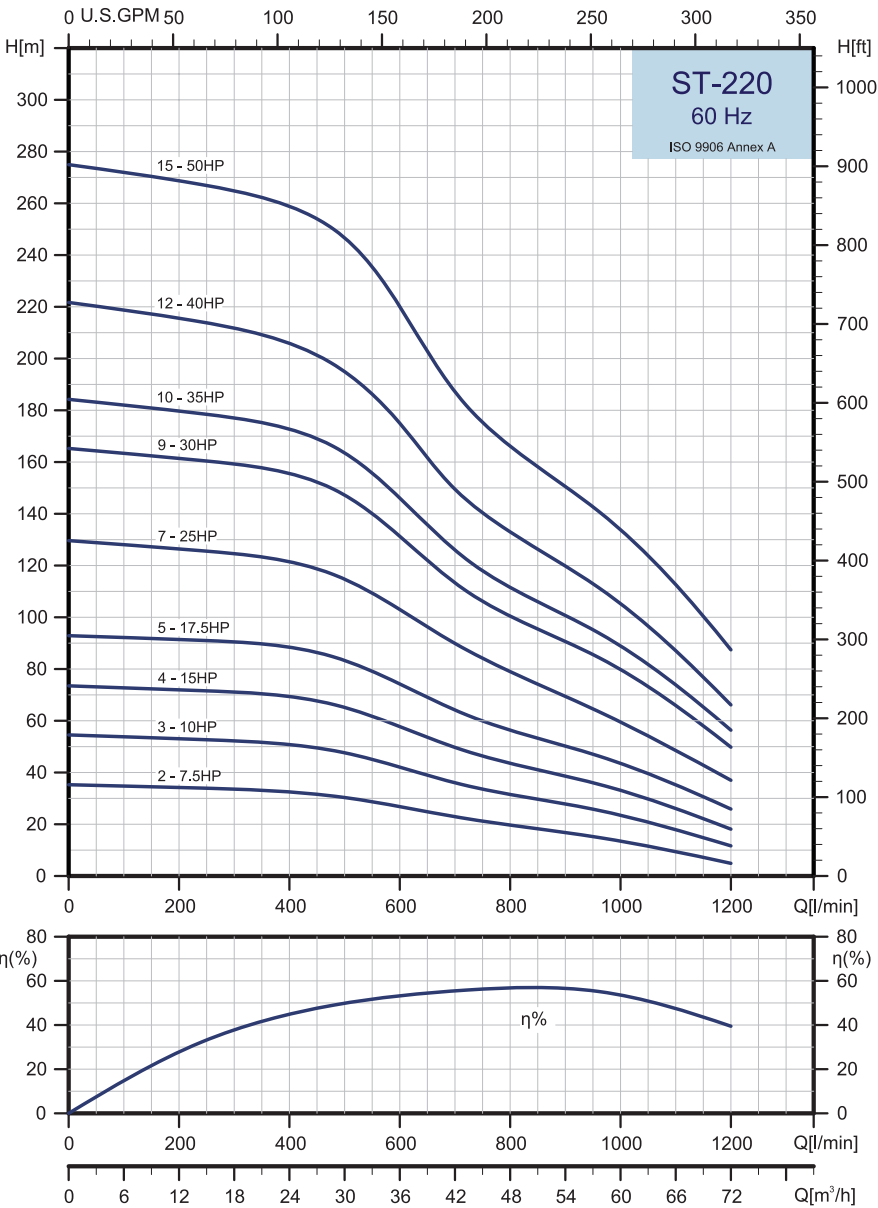
| Pump type | Motor |      |      | Dimensions(mm) |               |     |     |     | Weight(kg) |
|-----------|-------|------|------|----------------|---------------|-----|-----|-----|------------|
|           | Power |      | Type |                |               |     |     |     | Pump       |
|           | kW    | HP   |      | A              | B             | C   | C'  | C** |            |
| ST 180-2  | 5.5   | 7.5  | 4"   | 469            | NPT3"<br>RP3" | 138 |     |     | 8.9        |
| ST 180-3  | 7.5   | 10   | 4"   | 529            |               | 138 |     |     | 9.9        |
| ST 180-2  | 5.5   | 7.5  | 6"   | 483            |               |     | 141 | 144 | 9.8        |
| ST 180-3  | 7.5   | 10   | 6"   | 543            |               |     | 141 | 144 | 10.7       |
| ST 180-4  | 9.3   | 12.5 | 6"   | 603            |               |     | 141 | 144 | 11.6       |
| ST 180-5  | 11    | 15   | 6"   | 663            |               |     | 141 | 144 | 12.6       |
| ST 180-6  | 13    | 17.5 | 6"   | 723            |               |     | 141 | 144 | 13.6       |
| ST 180-8  | 18.5  | 25   | 6"   | 843            |               |     | 141 | 144 | 15.5       |
| ST 180-10 | 22    | 30   | 6"   | 963            |               |     | 141 | 144 | 17.4       |
| ST 180-12 | 26    | 35   | 6"   | 1083           |               |     | 141 | 144 | 19.2       |
| ST 180-13 | 30    | 40   | 6"   | 1143           |               |     | 141 | 144 | 20.3       |
| ST 180-17 | 37    | 50   | 6"   | 1435           |               |     | 141 | 144 | 24.9       |



# Performance Curves

# ST-220

## ST 6"

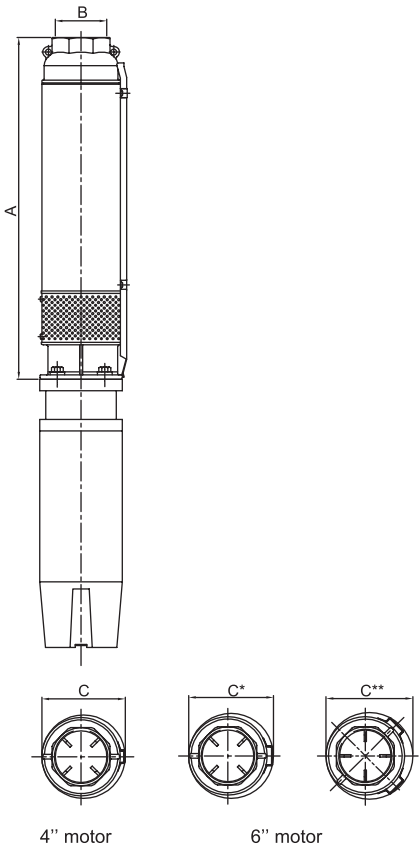


Product data

| Pump Type | HP   | Q(GPM ) | H(ft) | Hmax(ft) |
|-----------|------|---------|-------|----------|
| ST 220-02 | 7.5  | 220     | 62    | 116      |
| ST 220-03 | 10   | 220     | 100   | 179      |
| ST 220-04 | 15   | 220     | 138   | 242      |
| ST 220-05 | 17.5 | 220     | 179   | 305      |
| ST 220-07 | 25   | 220     | 249   | 426      |
| ST 220-09 | 30   | 220     | 319   | 543      |
| ST 220-10 | 35   | 220     | 354   | 605      |
| ST 220-12 | 40   | 220     | 422   | 728      |
| ST 220-15 | 50   | 220     | 528   | 903      |

Dimensions and weights

| Pump type | Motor |      |      | Dimensions(mm) |               |     |     |     | Weight(kg) |
|-----------|-------|------|------|----------------|---------------|-----|-----|-----|------------|
|           | Power |      | Type |                |               |     |     |     |            |
|           | kW    | HP   |      | A              | B             | C   | C*  | C** | Pump       |
| ST 220-2  | 5.5   | 7.5  | 4"   | 469            | NPT3"<br>RP3" | 138 |     |     | 8.9        |
| ST 220-3  | 7.5   | 10   | 4"   | 529            |               | 138 |     |     | 9.9        |
| ST 220-2  | 5.5   | 7.5  | 6"   | 483            |               |     | 141 | 144 | 9.8        |
| ST 220-3  | 7.5   | 10   | 6"   | 543            |               |     | 141 | 144 | 10.7       |
| ST 220-4  | 11    | 15   | 6"   | 603            |               |     | 141 | 144 | 11.7       |
| ST 220-5  | 13    | 17.5 | 6"   | 663            |               |     | 141 | 144 | 12.6       |
| ST 220-7  | 18.5  | 25   | 6"   | 783            |               |     | 141 | 144 | 14.5       |
| ST 220-9  | 22    | 30   | 6"   | 903            |               |     | 141 | 144 | 16.5       |
| ST 220-10 | 26    | 35   | 6"   | 963            |               |     | 141 | 144 | 17.5       |
| ST 220-12 | 30    | 40   | 6"   | 1083           |               |     | 141 | 144 | 19.5       |
| ST 220-15 | 37    | 50   | 6"   | 1263           |               |     | 141 | 144 | 22.6       |





STAIRS INDUSTRIAL CO.,LTD  
company

NO.3-8,Sanchial Tsun,Lutsao Hsiang,  
Chiai Hsien,Taiwan

Tel:+886(0)53750488

Fax:+886(0)53755658

E-Mail:[stairs@stairs.com.tw](mailto:stairs@stairs.com.tw)

[www.stairs.com.tw](http://www.stairs.com.tw)