



# STAINLESS STEEL SUBMERSIBLE PUMPS

50 HZ CATALOGUE





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**FOR OVER 85 YEARS, WE HAVE TAKEN WATER TO FARMS, HOMES AND FACTORIES ACROSS INDIA AND THE WORLD.**

### **AN 85-YEAR LEGACY**

What started with the production of a one-of-its-kind hand blower in 1935 by Shri Laljibhai Gajjar has today grown into one of India's most respectable pumps brand with an international presence with a manufacturing prowess and distribution networks across the world. As the creator of India's first oil-based submersible pumps in 1991 to introducing Stainless Steel Pumps in 2009 to integrated Solar Pumps in this decade, we continue to deliver well-engineered pumps that bring water where it is needed.

**Strategic partnership with KOEL since 2017, one of the most admired Indian MNC.**

### **OUR VISION**

To be the preferred water solutions Company for the domestic and agricultural sector across the world by virtue of its vision, techno-pioneering spirit, reliable technology and a growth-focused, customer-centric approach.

### **OUR MISSION**

To work relentlessly towards the Company's vision. To reach out to customers across sectors and geographic domains. To build prosperous partnerships across the world. To set new standards in pumping solutions and to respond efficiently to the world's water and energy challenges.

### **OUR VALUES**

La Gajjar Machineries is driven by the spirit of innovation that makes a difference. We genuinely believe that we are more than a manufacturing company. We are a brand that is adding value to water, the lifeline of the world. This drives us to create reliable, innovative and sustainable solutions for the world.

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# STAINLESS STEEL SUBMERSIBLE PUMPS

50Hz

## PRODUCT ADVANTAGES AND SPECIFICATION

The specific feature of SS Submersible Pump is its high ratio of working pressure to delivery. Due to efficient design, these pumps have reduced stages resulting in longer pump life and trouble free operations.

### SPECIFICATIONS & ADVANTAGES:

1. Suction, Stage Casing and Discharge Outlets are made of Stainless Steel.
2. Impellers are made of Stainless Steel.
3. Pump shaft is made of SS 431.
4. Bearing Bush for shaft is made of anti friction Rubber to provide wear resistance against sand.
5. Non Return Valve is made of Stainless Steel.
6. Cable Guard and Strainer are made of Stainless Steel.
7. Pump and Motor couplings are according to NEMA Standard.
8. Minimum Water on aspiration is one meter.
9. Maximum level of sand content: 50 gm/m<sup>3</sup>
10. Application : These pumps are for domestic, agriculture & industrial usage.
11. Operating Range -

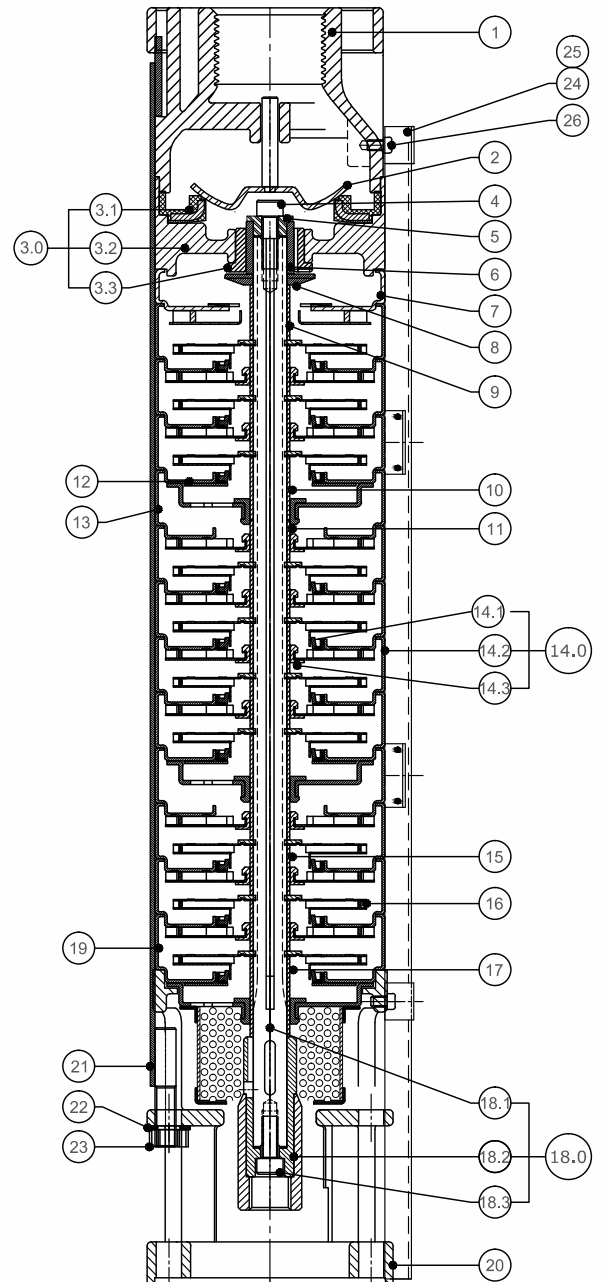
|                  |                        |
|------------------|------------------------|
| 4" - Head range  | : 9 mtr to 510 mtr     |
| Flow rate        | : 7 lpm to 185 lpm     |
| Immersion        | : 1 mtr minimum        |
| 6" - Head range  | : 4 mtr to 489 mtr     |
| Flow rate        | : 70 lpm to 1300 lpm   |
| Immersion        | : 1 mtr minimum        |
| 8" - Head range  | : 7 mtr to 395 mtr     |
| Flow rate        | : 335 lpm to 2000 lpm  |
| Immersion        | : 1 mtr minimum        |
| 10" - Head range | : 3 mtr to 284 mtr     |
| Flow rate        | : 1333 lpm to 3467 lpm |
| Immersion        | : 1 mtr minimum        |

\*Performance tolerance can be +/- 7%

## 4RP 3 SERIES PUMP DESIGN

### Material Specification

| No.  | PART NAME                           | MATERIAL          |
|------|-------------------------------------|-------------------|
| 1    | DISCHARGE CHAMBER HOUSING           | STEEL CAST 304    |
| 2    | VALVE CONE                          | S.S. 304          |
| 3.0  | TOP BEARING + VALVE SEAT + GM BUSH  | SUB ASSLY         |
| 3.1  | VALVE SEAT                          | N.B.R. + S.S. 304 |
| 3.2  | TOP BEARING HOUSING                 | STEEL CAST 304    |
| 3.3  | TOP BEARING BUSH                    | GUN METAL         |
| 4    | ALLEN BOLT M6X20                    | S.S. 304          |
| 5    | TOP BUSH T-TYPE                     | S.S. 304          |
| 6    | TOP DIFFUSER SLEEVE                 | S.S. 304          |
| 7    | TOP DIFFUSER                        | S.S. 304          |
| 8    | THRUST WASHER                       | S.S. 420          |
| 9    | TOP SLEEVE                          | S.S. 304          |
| 10   | MIDDLE BEARING SLEEVE_L-24          | S.S. 304          |
| 11   | MIDDLE BEARING SLEEVE_L-16          | S.S. 304          |
| 12   | MIDDLE BEARING ASSLY WITH BUSH      | SUB ASSLY         |
| 13   | DIFFUSER WITH BUSH                  | SUB ASSLY         |
| 14.0 | DIFFUSER WITH BUSH & NECKRING ASSLY | SUB ASSLY         |
| 14.1 | NECKRING                            | N.B.R. + S.S. 304 |
| 14.2 | BEARING BUSH                        | N.B.R.            |
| 15   | IMPELLER STAGE SLEEVE_L-19          | S.S. 304          |
| 16   | IMPELLER                            | S.S. 304          |
| 17   | IMPELLER 1st STAGE SLEEVE_L-30.5    | S.S. 304          |
| 18.0 | SHAFTING WITH COUPLING              | SUB ASSLY         |
| 18.1 | PUMP SHAFT                          | S.S. 1.4362       |
| 18.2 | COUPLING                            | S.S. 304          |
| 18.3 | ALLEN BOLT M6 x 20                  | S.S. 304          |
| 19   | 1st DIFFUSER_21 MM                  | S.S. 304          |
| 20   | SUCTION                             | STEEL CAST 304    |
| 21   | CLAMPING STRIP                      | S.S. 304          |
| 22   | WASHER                              | S.S. 304          |
| 23   | HEX NUT M8                          | S.S. 316          |
| 24   | CABLE GUARD                         | S.S. 304          |
| 25   | CLAMP OF CABLE GUARD                | S.S. 304          |
| 26   | SCREW_M4                            | S.S. 304          |

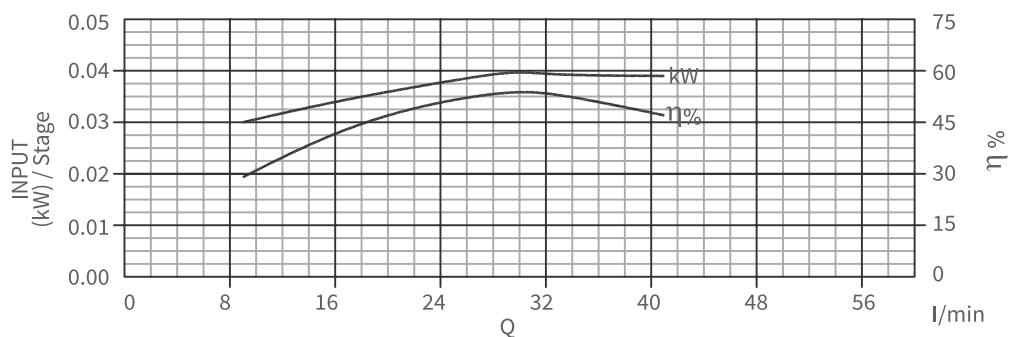
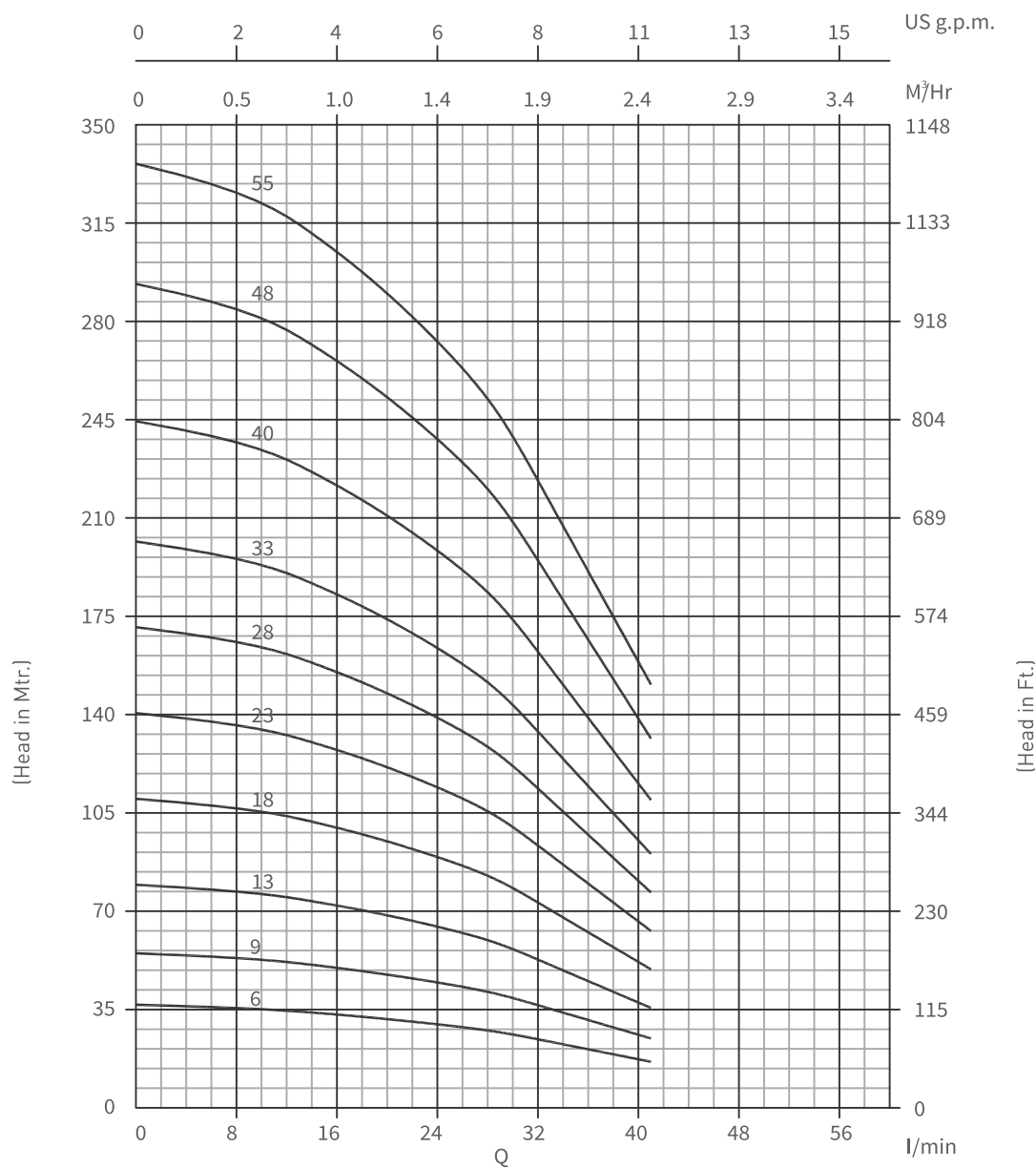


NOTE :  
PUMPS UP TO 33 STAGE DISCHARGE CHAMBER COMES WITH S.S. FABRICATED AND FROM 34 STAGE & ONWARDS WITH STEEL CAST .

# 4RP 3, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



## 4RP 3, 50Hz

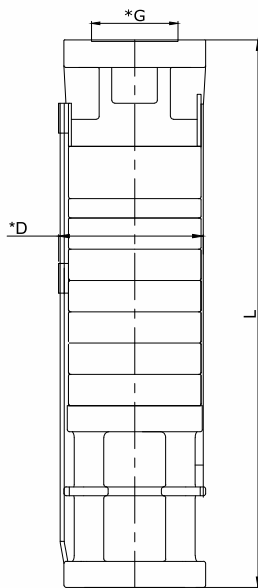
ISO 9906 Annexure A

## PERFORMANCE CHART

| Model Name   |             |       | Rating |    |       | Discharge |      |      |      |      |      |      |      |
|--------------|-------------|-------|--------|----|-------|-----------|------|------|------|------|------|------|------|
| Single Phase | Three Phase | Stage | kW     | HP | l/min | 0         | 9    | 14   | 20   | 27   | 30   | 33   | 41   |
|              |             |       |        |    | m³/h  | 0         | 0.54 | 0.84 | 1.20 | 1.62 | 1.80 | 1.98 | 2.46 |

| 4RP 3-06 | 4RP 3-06 | 6  | 0.37 | 0.50 | HEAD IN Mtrs. | 37  | 36  | 34  | 32  | 28  | 26  | 23  | 16  |
|----------|----------|----|------|------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 4RP 3-09 | 4RP 3-09 | 8  | 0.37 | 0.50 |               | 55  | 53  | 51  | 48  | 42  | 39  | 35  | 25  |
| 4RP 3-13 | 4RP 3-13 | 13 | 0.55 | 0.75 |               | 79  | 77  | 74  | 69  | 61  | 57  | 51  | 36  |
| 4RP 3-18 | 4RP 3-18 | 18 | 0.75 | 1.00 |               | 110 | 107 | 102 | 95  | 85  | 78  | 70  | 49  |
| 4RP 3-23 | 4RP 3-23 | 23 | 1.10 | 1.50 |               | 141 | 137 | 130 | 122 | 109 | 100 | 90  | 63  |
| 4RP 3-28 | 4RP 3-28 | 28 | 1.50 | 2.00 |               | 171 | 166 | 159 | 148 | 132 | 122 | 109 | 77  |
| 4RP 3-33 | 4RP 3-33 | 33 | 1.50 | 2.00 |               | 202 | 196 | 187 | 175 | 156 | 144 | 129 | 90  |
| 4RP 3-40 | 4RP 3-40 | 40 | 2.20 | 3.00 |               | 244 | 238 | 227 | 212 | 189 | 174 | 156 | 110 |
| 4RP 3-48 | 4RP 3-48 | 48 | 2.20 | 3.00 |               | 293 | 285 | 272 | 254 | 227 | 209 | 188 | 132 |
|          | 4RP 3-55 | 55 | 3.00 | 4.00 |               | 336 | 327 | 312 | 291 | 260 | 240 | 215 | 151 |

## Dimensions & Weights



| Model Name | Specification |        |                 |                         |
|------------|---------------|--------|-----------------|-------------------------|
|            | D (mm)        | L (mm) | Pump Weight Kg. | Weight (incl. pkg.) Kg. |
| 4RP 3 - 06 | 98            | 282    | 3.2             | 3.5                     |
| 4RP 3 - 09 | 98            | 345    | 4.2             | 4.7                     |
| 4RP 3 - 13 | 98            | 429    | 5.4             | 6.1                     |
| 4RP 3 - 18 | 98            | 534    | 7.2             | 8.1                     |
| 4RP 3 - 23 | 98            | 660    | 8.9             | 10.1                    |
| 4RP 3 - 28 | 98            | 765    | 10.6            | 12.0                    |
| 4RP 3 - 33 | 98            | 870    | 12.2            | 13.9                    |
| 4RP 3 - 40 | 98            | 1094   | 13.0            | 14.8                    |
| 4RP 3 - 48 | 98            | 1283   | 14.6            | 16.5                    |
| 4RP 3 - 55 | 98            | 1430   | 16.2            | 18.4                    |

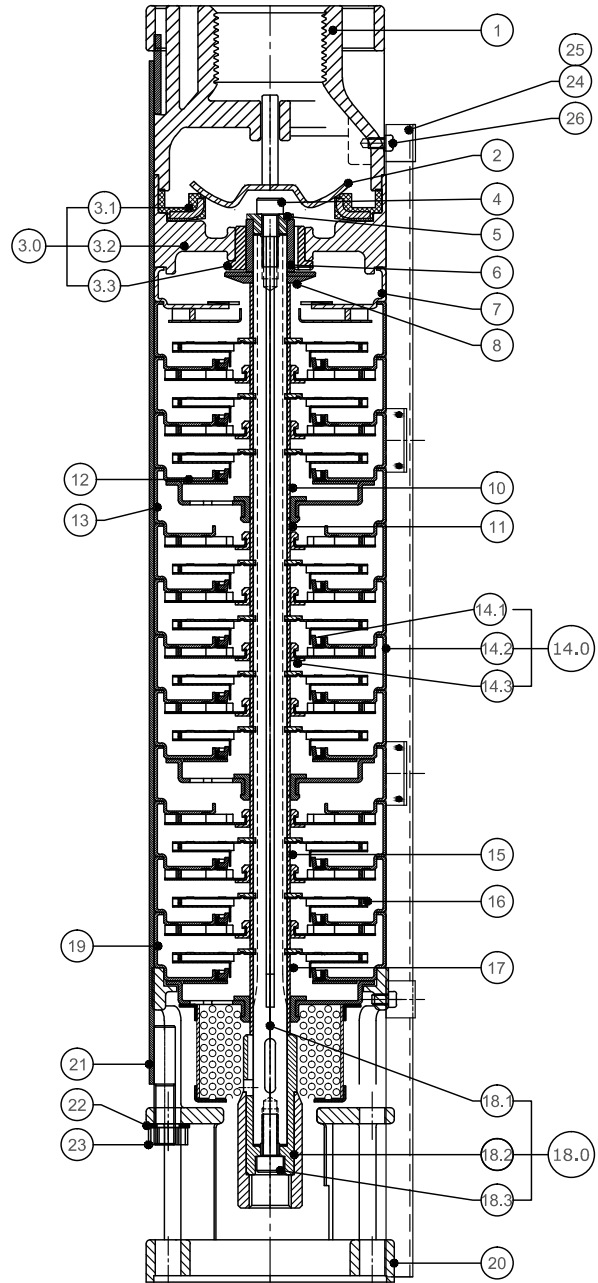
\*G: Available Outlet Size 1.25" BSP

\*D: With Cable Guard

# 4RP 4 SERIES PUMP DESIGN

## Material Specification

| No.  | PART NAME                           | MATERIAL          |
|------|-------------------------------------|-------------------|
| 1    | DISCHARGE CHAMBER HOUSING           | STEEL CAST 304    |
| 2    | VALVE CONE                          | S.S. 304          |
| 3.0  | TOP BEARING + VALVE SEAT + GM BUSH  | SUB ASSLY         |
| 3.1  | VALVE SEAT                          | N.B.R. + S.S. 304 |
| 3.2  | TOP BEARING HOUSING                 | STEEL CAST 304    |
| 3.3  | TOP BEARING BUSH                    | GUN METAL         |
| 4    | ALLEN BOLT M6X20                    | S.S. 304          |
| 5    | TOP BUSH T-TYPE                     | S.S. 304          |
| 6    | TOP DIFFUSER SLEEVE                 | S.S. 304          |
| 7    | TOP DIFFUSER                        | S.S. 304          |
| 8    | THRUST WASHER                       | S.S. 420          |
| 9    | TOP SLEEVE                          | S.S. 304          |
| 10   | MIDDLE BEARING SLEEVE_L-24          | S.S. 304          |
| 11   | MIDDLE BEARING SLEEVE_L-16          | S.S. 304          |
| 12   | MIDDLE BEARING ASSLY WITH BUSH      | SUB ASSLY         |
| 13   | DIFFUSER WITH BUSH                  | SUB ASSLY         |
| 14.0 | DIFFUSER WITH BUSH & NECKRING ASSLY | SUB ASSLY         |
| 14.1 | NECKRING                            | N.B.R. + S.S. 304 |
| 14.2 | BEARING BUSH                        | N.B.R.            |
| 15   | IMPELLER STAGE SLEEVE_L-19          | S.S. 304          |
| 16   | IMPELLER                            | S.S. 304          |
| 17   | IMPELLER 1st STAGE SLEEVE_L-30.5    | S.S. 304          |
| 18.0 | SHAFTING WITH COUPLING              | SUB ASSLY         |
| 18.1 | PUMP SHAFT                          | S.S. 1.4362       |
| 18.2 | COUPLING                            | S.S. 304          |
| 18.3 | ALLEN BOLT M6 x 20                  | S.S. 304          |
| 19   | 1st DIFFUSER_21 MM                  | S.S. 304          |
| 20   | SUCTION                             | STEEL CAST 304    |
| 21   | CLAMPING STRIP                      | S.S. 304          |
| 22   | WASHER                              | S.S. 304          |
| 23   | HEX NUT M8                          | S.S. 316          |
| 24   | CABLE GUARD                         | S.S. 304          |
| 25   | CLAMP OF CABLE GUARD                | S.S. 304          |
| 26   | SCREW_M4                            | S.S. 304          |

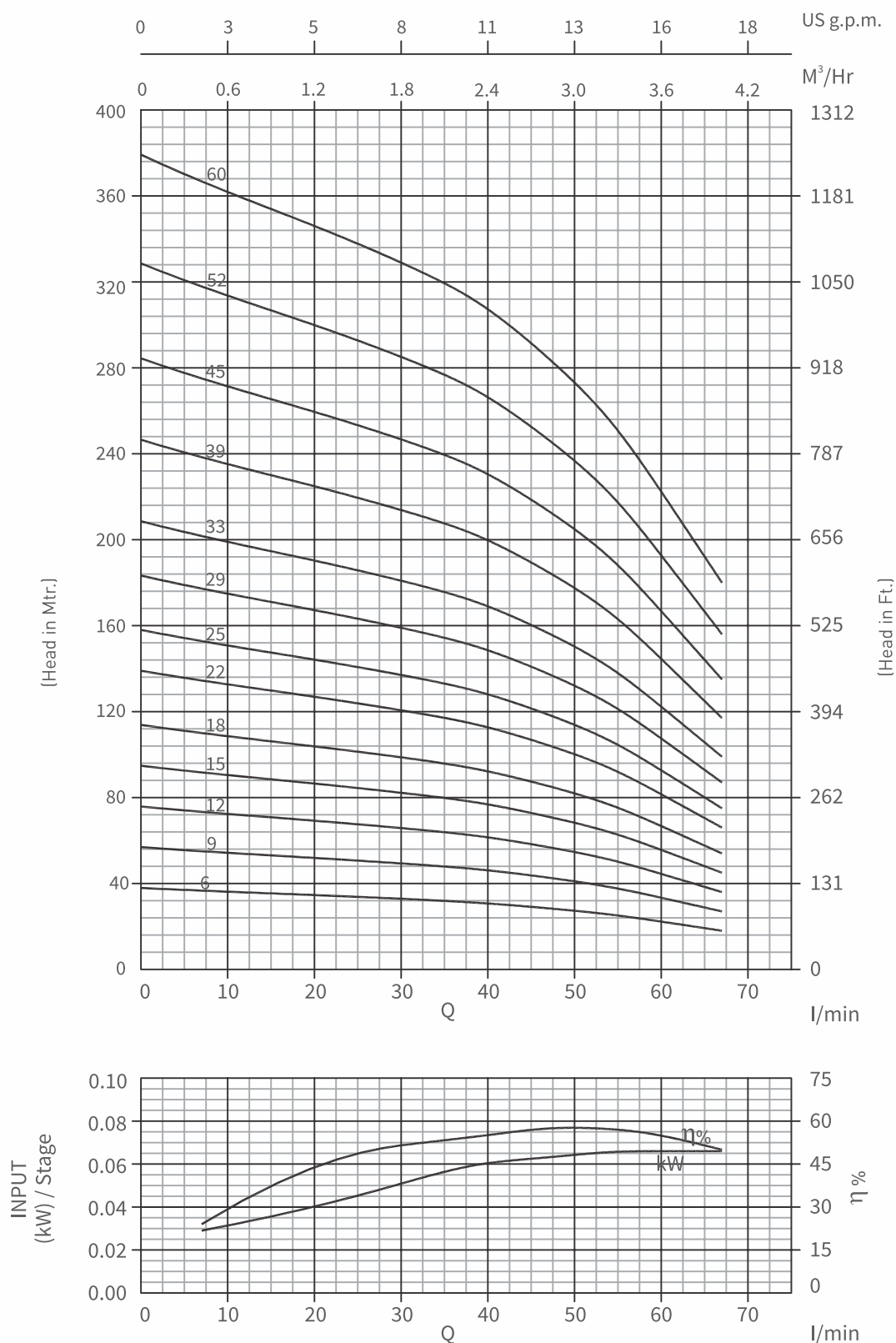


NOTE :  
PUMPS UP TO 33 STAGE DISCHARGE CHAMBER COMES WITH S.S. FABRICATED AND FROM 34 STAGE & ONWARDS WITH STEEL CAST .

# 4RP 4, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# 4RP 4, 50Hz

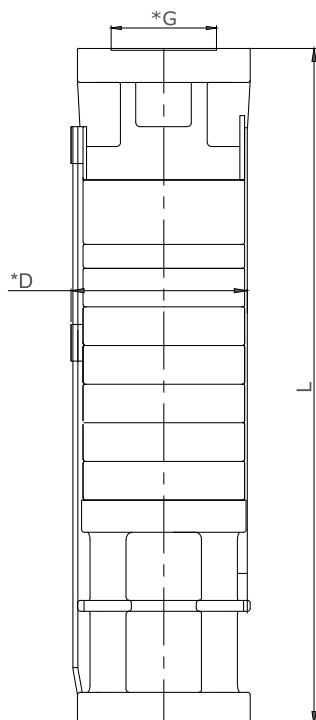
ISO 9906 Annexure A

## PERFORMANCE CHART

| Model Name   |             | Stage | Rating |    | l/min<br>m <sup>3</sup> /h | Discharge |      |      |      |      |      |      |      |      |  |
|--------------|-------------|-------|--------|----|----------------------------|-----------|------|------|------|------|------|------|------|------|--|
| Single Phase | Three Phase |       | kW     | HP |                            | 0         | 7    | 20   | 34   | 40   | 47   | 54   | 60   | 67   |  |
|              |             |       |        |    |                            | 0         | 0.42 | 1.20 | 2.04 | 2.40 | 2.82 | 3.24 | 3.60 | 4.02 |  |

|          |          |    |      |      |               |     |     |     |     |     |     |     |     |     |  |
|----------|----------|----|------|------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| 4RP 4-06 | 4RP 4-06 | 06 | 0.37 | 0.50 | HEAD IN Mtrs. | 38  | 37  | 35  | 32  | 31  | 28  | 26  | 22  | 18  |  |
| 4RP 4-09 | 4RP 4-09 | 09 | 0.55 | 0.75 |               | 57  | 55  | 52  | 48  | 46  | 43  | 39  | 33  | 17  |  |
| 4RP 4-12 | 4RP 4-12 | 12 | 0.75 | 1.00 |               | 76  | 73  | 69  | 64  | 62  | 57  | 52  | 45  | 36  |  |
| 4RP 4-15 | 4RP 4-15 | 15 | 1.10 | 1.50 |               | 95  | 92  | 87  | 81  | 77  | 71  | 64  | 56  | 45  |  |
| 4RP 4-18 | 4RP 4-18 | 18 | 1.10 | 1.50 |               | 114 | 110 | 104 | 97  | 93  | 86  | 77  | 67  | 54  |  |
| 4RP 4-22 | 4RP 4-22 | 22 | 1.50 | 2.00 |               | 139 | 134 | 127 | 118 | 113 | 104 | 95  | 82  | 66  |  |
| 4RP 4-25 | 4RP 4-25 | 25 | 1.50 | 2.00 |               | 158 | 152 | 144 | 134 | 128 | 119 | 108 | 93  | 75  |  |
| 4RP 4-29 | 4RP 4-29 | 29 | 2.20 | 3.00 |               | 183 | 177 | 168 | 156 | 149 | 138 | 125 | 108 | 87  |  |
| 4RP 4-33 | 4RP 4-33 | 33 | 2.20 | 3.00 |               | 209 | 201 | 191 | 177 | 170 | 157 | 142 | 122 | 99  |  |
|          | 4RP 4-39 | 39 | 3.00 | 4.00 |               | 246 | 238 | 225 | 209 | 200 | 185 | 168 | 145 | 117 |  |
|          | 4RP 4-45 | 45 | 3.00 | 4.00 |               | 284 | 274 | 260 | 242 | 231 | 214 | 194 | 167 | 135 |  |
|          | 4RP 4-52 | 52 | 4.00 | 5.50 |               | 329 | 317 | 301 | 279 | 267 | 247 | 224 | 193 | 156 |  |
|          | 4RP 4-60 | 60 | 4.00 | 5.50 |               | 379 | 366 | 347 | 322 | 308 | 285 | 258 | 223 | 180 |  |

## Dimensions & Weights



| Model Name | Specification |        |                 |                         |
|------------|---------------|--------|-----------------|-------------------------|
|            | D (mm)        | L (mm) | Pump Weight Kg. | Weight (incl. pkg.) Kg. |
| 4RP 4 - 06 | 98            | 282    | 3.4             | 3.7                     |
| 4RP 4 - 09 | 98            | 345    | 4.4             | 4.9                     |
| 4RP 4 - 12 | 98            | 408    | 5.4             | 6.0                     |
| 4RP 4 - 15 | 98            | 471    | 6.4             | 7.2                     |
| 4RP 4 - 18 | 98            | 534    | 7.4             | 8.3                     |
| 4RP 4 - 22 | 98            | 639    | 8.7             | 9.8                     |
| 4RP 4 - 25 | 98            | 702    | 9.7             | 11.0                    |
| 4RP 4 - 29 | 98            | 786    | 10.9            | 12.4                    |
| 4RP 4 - 33 | 98            | 870    | 12.2            | 13.9                    |
| 4RP 4 - 39 | 98            | 1073   | 12.7            | 14.5                    |
| 4RP 4 - 45 | 98            | 1220   | 14.0            | 16.0                    |
| 4RP 4 - 52 | 98            | 1367   | 15.5            | 17.8                    |
| 4RP 4 - 60 | 98            | 1535   | 17.3            | 20.0                    |

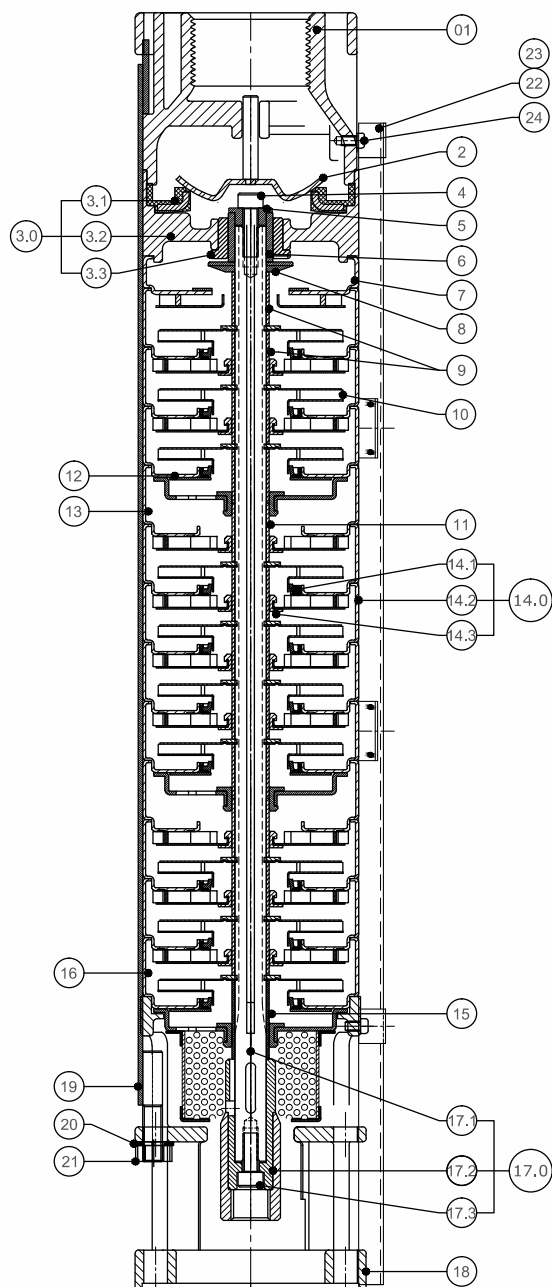
\*G: Available Outlet Size 1.25" BSP

\*D: With Cable Guard

# 4RP 6 SERIES PUMP DESIGN

## Material Specification

| No.  | PART NAME                           | MATERIAL          |
|------|-------------------------------------|-------------------|
| 1    | DISCHARGE CHAMBER HOUSING           | STEEL CAST 304    |
| 2    | VALVE CONE                          | S.S. 304          |
| 3.0  | TOP BEARING + VALVE SEAT + GM BUSH  | SUB ASSLY         |
| 3.1  | VALVE SEAT                          | N.B.R. + S.S. 304 |
| 3.2  | TOP BEARING HOUSING                 | STEEL CAST 304    |
| 3.3  | TOP BEARING BUSH                    | GUN METAL         |
| 4    | ALLEN BOLT M6X20                    | S.S. 304          |
| 5    | TOP BUSH T-TYPE                     | S.S. 304          |
| 6    | TOP DIFFUSER SLEEVE                 | S.S. 304          |
| 7    | TOP DIFFUSER                        | S.S. 304          |
| 8    | THRUST WASHER                       | S.S. 420          |
| 9    | TOP & IMPELLER STAGE SLEEVE_L-22    | S.S. 304          |
| 10   | IMPELLER                            | S.S. 304          |
| 11   | MIDDLE BEARING SLEEVE_L-24          | S.S. 304          |
| 12   | MIDDLE BEARING ASSLY WITH BUSH      | SUB ASSLY         |
| 13   | DIFFUSER WITH BUSH                  | SUB ASSLY         |
| 14.0 | DIFFUSER WITH BUSH & NECKRING ASSLY | SUB ASSLY         |
| 14.1 | NECKRING                            | N.B.R. + S.S. 304 |
| 14.2 | DIFFUSER                            | S.S. 304          |
| 14.3 | BEARING BUSH                        | N.B.R.            |
| 15   | IMPELLER 1st STAGE SLEEVE_L-32      | S.S. 304          |
| 16   | 1st DIFFUSER_24 MM                  | S.S. 304          |
| 17.0 | SHAFTING WITH COUPLING              | SUB-ASSLY         |
| 17.1 | PUMP SHAFT                          | S.S. 1.4362       |
| 17.2 | COUPLING                            | S.S. 304          |
| 17.3 | ALLEN BOLT M6 x 20                  | S.S. 304          |
| 18   | SUCTION                             | STEEL CAST 304    |
| 19   | CLAMPING STRIP                      | S.S. 304          |
| 20   | WASHER                              | S.S. 304          |
| 21   | HEX NUT M8                          | S.S. 316          |
| 22   | CABLE GUARD                         | S.S. 304          |
| 23   | CLAMP OF CABLE GUARD                | S.S. 304          |
| 24   | SCREW_M4                            | S.S. 304          |

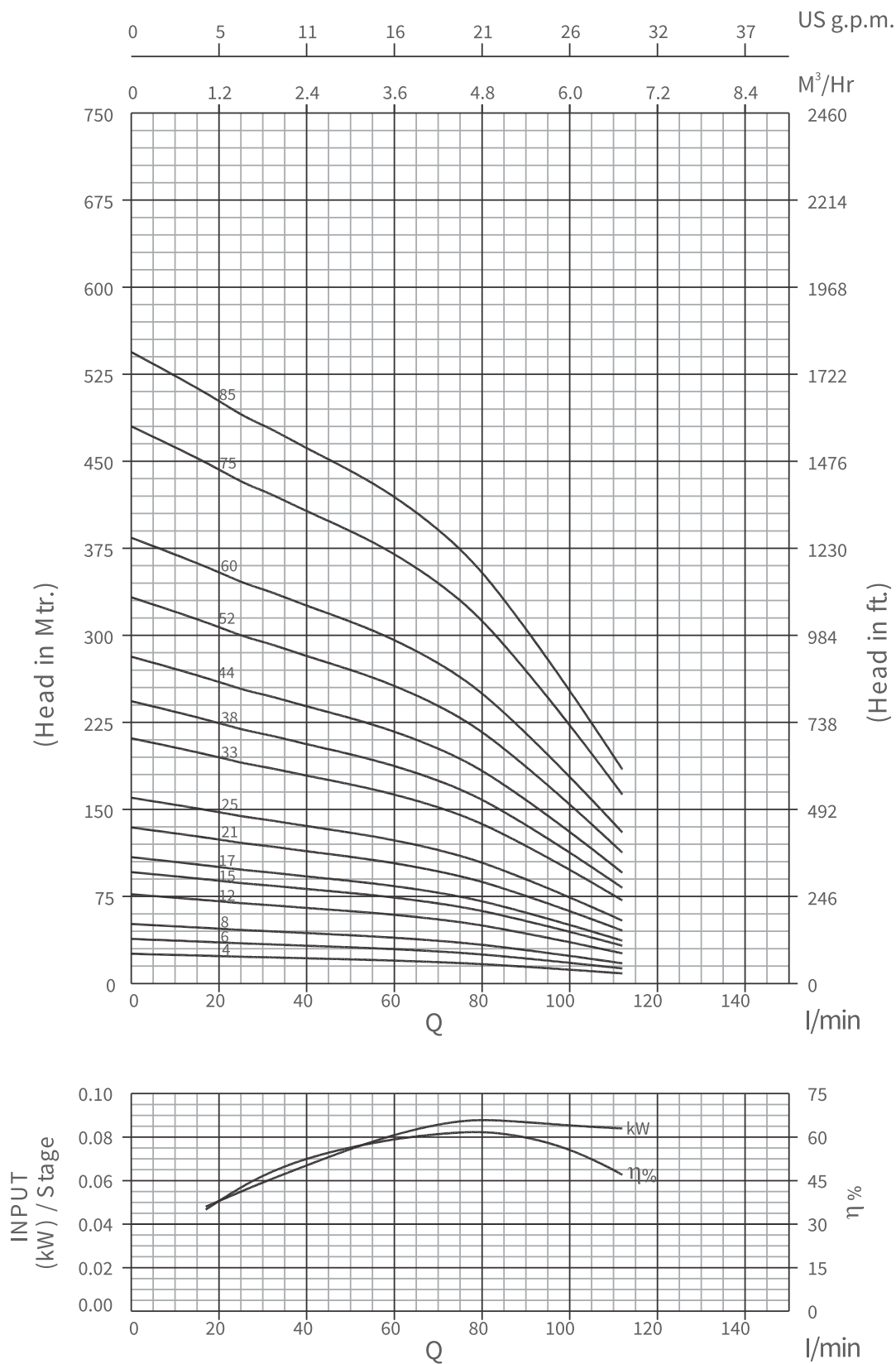


NOTE :  
PUMPS UP TO 33 STAGE DISCHARGE CHAMBER COMES WITH S.S. FABRICATED AND FROM 34 STAGE & ONWARDS WITH STEEL CAST .

# 4RP 6, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



## 4RP 6, 50Hz

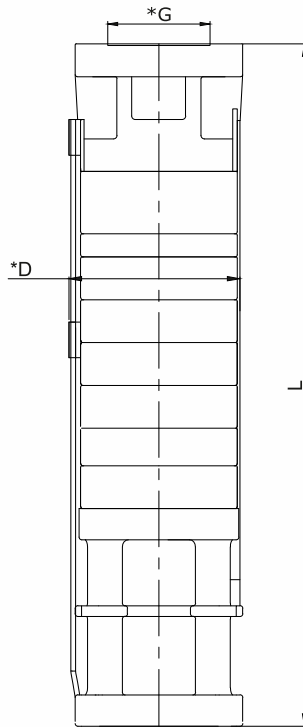
ISO 9906 Annexure A

## PERFORMANCE CHART

| Model Name   |             | Stage | Rating |    | l/min<br>m <sup>3</sup> /h | Discharge |      |      |      |      |      |      |      |      |      |  |
|--------------|-------------|-------|--------|----|----------------------------|-----------|------|------|------|------|------|------|------|------|------|--|
| Single Phase | Three Phase |       | kW     | HP |                            | 0         | 17   | 25   | 31   | 40   | 57   | 74   | 84   | 101  | 112  |  |
|              |             |       |        |    |                            | 0         | 1.02 | 1.50 | 1.86 | 2.40 | 3.42 | 4.44 | 5.04 | 6.06 | 6.72 |  |

|          |          |    |      |       |               |     |     |      |      |     |     |     |     |     |     |  |
|----------|----------|----|------|-------|---------------|-----|-----|------|------|-----|-----|-----|-----|-----|-----|--|
| 4RP 6-04 | 4RP 6-04 | 4  | 0.37 | 0.50  | HEAD IN Mtrs. | 26  | 24  | 23   | 22.5 | 22  | 20  | 18  | 16  | 12  | 9   |  |
| 4RP 6-06 | 4RP 6-06 | 6  | 0.55 | 0.75  |               | 38  | 36  | 34.5 | 34   | 33  | 30  | 27  | 24  | 18  | 13  |  |
| 4RP 6-08 | 4RP 6-08 | 8  | 0.75 | 1.00  |               | 51  | 48  | 46   | 45   | 43  | 40  | 36  | 32  | 23  | 17  |  |
| 4RP 6-12 | 4RP 6-12 | 12 | 1.10 | 1.50  |               | 77  | 72  | 69   | 68   | 65  | 61  | 54  | 48  | 35  | 26  |  |
| 4RP 6-15 | 4RP 6-15 | 15 | 1.50 | 2.00  |               | 96  | 90  | 86   | 85   | 81  | 76  | 67  | 60  | 44  | 33  |  |
| 4RP 6-17 | 4RP 6-17 | 17 | 1.50 | 2.00  |               | 109 | 102 | 98   | 96   | 92  | 86  | 76  | 67  | 50  | 37  |  |
| 4RP 6-21 | 4RP 6-21 | 21 | 2.20 | 3.00  |               | 134 | 126 | 121  | 119  | 114 | 106 | 94  | 83  | 61  | 46  |  |
| 4RP 6-25 | 4RP 6-25 | 25 | 2.20 | 3.00  |               | 160 | 150 | 144  | 141  | 136 | 126 | 112 | 99  | 73  | 54  |  |
|          | 4RP 6-33 | 33 | 3.00 | 4.00  |               | 211 | 198 | 190  | 186  | 179 | 167 | 148 | 131 | 96  | 72  |  |
|          | 4RP 6-38 | 38 | 4.00 | 5.50  |               | 243 | 228 | 218  | 215  | 206 | 192 | 170 | 151 | 111 | 82  |  |
|          | 4RP 6-44 | 44 | 4.00 | 5.50  |               | 282 | 264 | 253  | 249  | 238 | 222 | 197 | 175 | 128 | 95  |  |
|          | 4RP 6-52 | 52 | 5.50 | 7.50  |               | 333 | 312 | 299  | 294  | 282 | 263 | 233 | 206 | 152 | 113 |  |
|          | 4RP 6-60 | 60 | 5.50 | 7.50  |               | 384 | 360 | 345  | 339  | 325 | 303 | 269 | 238 | 175 | 130 |  |
|          | 4RP 6-75 | 75 | 7.50 | 10.00 |               | 480 | 450 | 431  | 424  | 406 | 379 | 336 | 298 | 219 | 163 |  |
|          | 4RP 6-85 | 85 | 7.50 | 10.00 |               | 544 | 510 | 489  | 480  | 461 | 429 | 381 | 337 | 248 | 184 |  |

## Dimensions & Weights



| Model Name | Specification |        |                 |                         |
|------------|---------------|--------|-----------------|-------------------------|
|            | *D (mm)       | L (mm) | Pump Weight Kg. | Weight (incl. pkg.) Kg. |
| 4RP 6 - 04 | 98            | 252    | 3.5             | 3.7                     |
| 4RP 6 - 06 | 98            | 300    | 3.9             | 4.2                     |
| 4RP 6 - 08 | 98            | 348    | 4.2             | 4.6                     |
| 4RP 6 - 12 | 98            | 444    | 6.2             | 6.8                     |
| 4RP 6 - 15 | 98            | 516    | 6.9             | 7.7                     |
| 4RP 6 - 17 | 98            | 564    | 7.3             | 8.1                     |
| 4RP 6 - 21 | 98            | 684    | 8.8             | 9.9                     |
| 4RP 6 - 25 | 98            | 780    | 10.2            | 11.5                    |
| 4RP 6 - 33 | 98            | 972    | 13.1            | 14.8                    |
| 4RP 6 - 38 | 98            | 1169   | 13.9            | 15.8                    |
| 4RP 6 - 44 | 98            | 1337   | 15.0            | 17.2                    |
| 4RP 6 - 52 | 98            | 1529   | 18.0            | 20.6                    |
| 4RP 6 - 60 | 98            | 1721   | 20.0            | 23.0                    |
| 4RP 6 - 52 | 138           | 1546   | 20.2            | 22.2                    |
| 4RP 6 - 60 | 138           | 1738   | 22.7            | 25.0                    |
| 4RP 6 - 75 | 138           | 2122   | 27.7            | 30.5                    |
| 4RP 6 - 85 | 138           | 2386   | 31.0            | 36.5                    |

\*G: Available Outlet Size 1.5" BSP

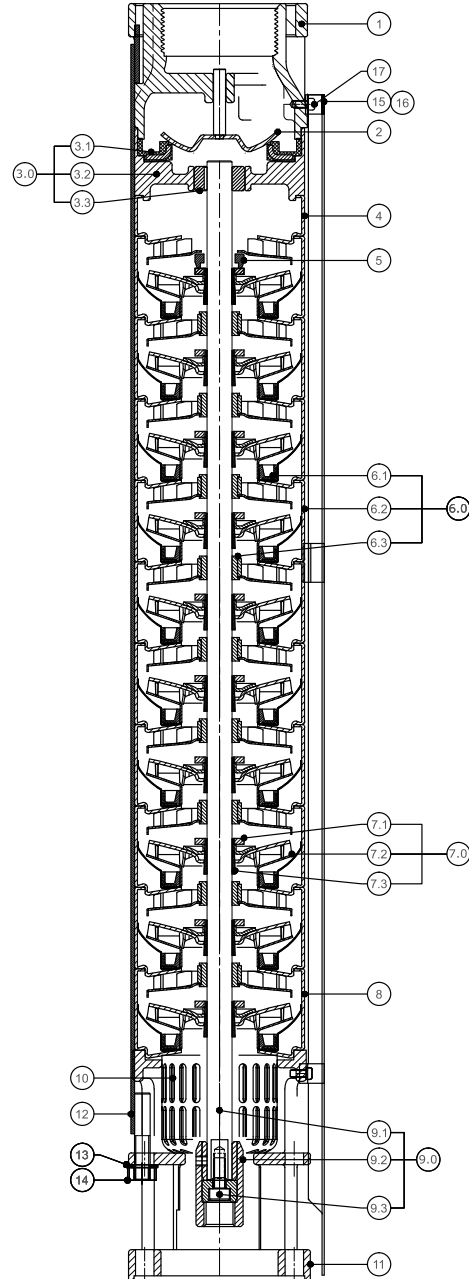
\*D: With Cable Guard

4RP 6 - 52, 4RP 6 - 60, 4RP 6 - 75 & 4RP 6 - 85 Pump  
Available in 6" joining.

# 4RP 9 SERIES PUMP DESIGN

## Material Specification

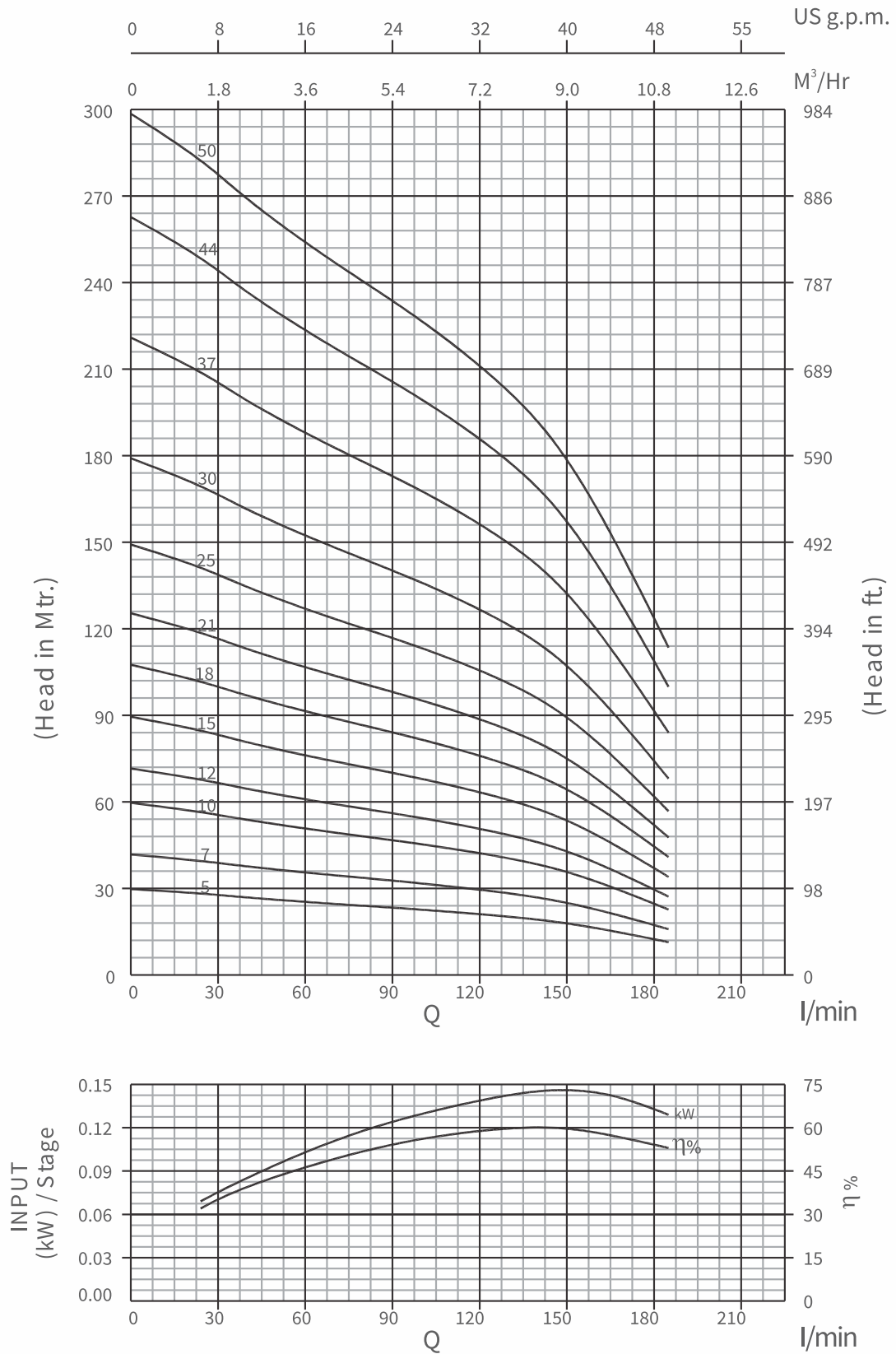
| No. | PART NAME                          | MATERIAL          |
|-----|------------------------------------|-------------------|
| 1   | DISCHARGE CHAMBER HOUSING          | STEEL CAST 304    |
| 2   | VALVE CONE                         | S.S. 304          |
| 3.0 | TOP BEARING + VALVE SEAT + GM BUSH | SUB ASSLY         |
| 3.1 | VALVE SEAT                         | N.B.R.            |
| 3.2 | TOP BEARING HOUSING                | STEEL CAST 304    |
| 3.3 | TOP GM BUSH                        | GUN METAL         |
| 4   | TOP DIFFUSER                       | S.S. 304          |
| 5   | SPACING WASHER                     | PTFE              |
| 6.0 | DIFFUSER ASSLY                     | SUB ASSLY         |
| 6.1 | NECK RING                          | N.B.R. + S.S. 304 |
| 6.2 | DIFFUSER                           | S.S. 304          |
| 6.3 | BEARING BUSH                       | N.B.R.            |
| 7.0 | IMPELLER ASSLY                     | SUB ASSLY         |
| 7.1 | COLLET NUT                         | S.S. 304          |
| 7.2 | IMPELLER                           | S.S. 304          |
| 7.3 | COLLET                             | S.S. 304          |
| 8   | DIFFUSER 1st                       | S.S. 304          |
| 9.0 | SHAFTING WITH COUPLING             | SUB ASSLY         |
| 9.1 | PUMP SHAFT                         | S.S. 431          |
| 9.2 | COUPLING                           | S.S. 304          |
| 9.3 | ALLEN BOLT                         | S.S. 304          |
| 10  | STRAINER                           | S.S. 304          |
| 11  | SUCTION                            | STEEL CAST 304    |
| 12  | CLAMPING STRIP                     | S.S. 304          |
| 13  | WASHER                             | S.S. 304          |
| 14  | HEX NUT                            | S.S. 316          |
| 15  | CABLE GUARD                        | S.S. 304          |
| 16  | CLAMP OF CABLE GUARD               | S.S. 304          |
| 17  | SCREW_M4                           | S.S. 304          |



# 4RP 9, 50Hz

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## PERFORMANCE CURVES

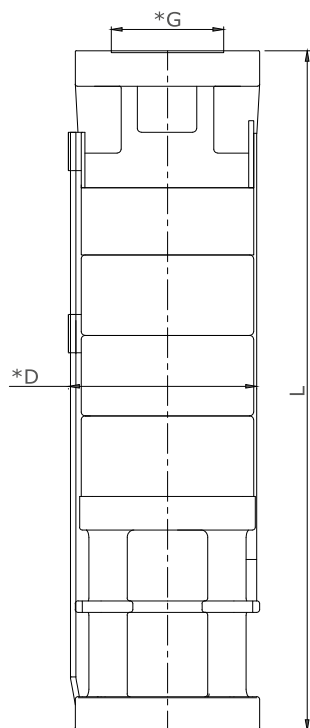


# PERFORMANCE CHART

| Model Name   |             | Rating |    |    | Discharge         |   |      |     |     |     |     |     |      |      |
|--------------|-------------|--------|----|----|-------------------|---|------|-----|-----|-----|-----|-----|------|------|
| Single Phase | Three Phase | Stage  | kW | HP | l/min             | 0 | 24   | 34  | 67  | 101 | 134 | 151 | 168  | 185  |
|              |             |        |    |    | m <sup>3</sup> /h | 0 | 1.44 | 2.0 | 4.0 | 6.0 | 8.0 | 9.0 | 10.0 | 11.1 |

|          |          |    |      |       |               |     |     |     |     |     |     |     |     |     |
|----------|----------|----|------|-------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 4RP 9-05 | 4RP 9-05 | 5  | 0.75 | 1.00  | HEAD IN Mtrs. | 30  | 28  | 27  | 25  | 23  | 20  | 18  | 15  | 11  |
| 4RP 9-07 | 4RP 9-07 | 7  | 1.10 | 1.50  |               | 42  | 40  | 38  | 35  | 32  | 28  | 25  | 21  | 16  |
| 4RP 9-10 | 4RP 9-10 | 10 | 1.50 | 2.00  |               | 60  | 57  | 55  | 50  | 45  | 40  | 36  | 30  | 23  |
| 4RP 9-12 | 4RP 9-12 | 12 | 2.20 | 3.00  |               | 72  | 68  | 66  | 60  | 54  | 48  | 43  | 36  | 27  |
| 4RP 9-15 | 4RP 9-15 | 15 | 2.20 | 3.00  |               | 90  | 85  | 82  | 75  | 68  | 60  | 54  | 45  | 34  |
|          | 4RP 9-18 | 18 | 3.00 | 4.00  |               | 107 | 102 | 98  | 89  | 82  | 72  | 64  | 53  | 41  |
|          | 4RP 9-21 | 21 | 4.00 | 5.50  |               | 125 | 119 | 115 | 104 | 95  | 84  | 75  | 62  | 48  |
|          | 4RP 9-25 | 25 | 4.00 | 5.50  |               | 149 | 142 | 136 | 124 | 114 | 100 | 89  | 74  | 57  |
|          | 4RP 9-30 | 30 | 5.50 | 7.50  |               | 179 | 170 | 164 | 149 | 136 | 120 | 107 | 89  | 68  |
|          | 4RP 9-37 | 37 | 5.50 | 7.50  |               | 221 | 210 | 202 | 184 | 168 | 148 | 132 | 110 | 84  |
|          | 4RP 9-44 | 44 | 7.50 | 10.00 |               | 263 | 249 | 240 | 219 | 200 | 176 | 157 | 131 | 100 |
|          | 4RP 9-50 | 50 | 7.50 | 10.00 |               | 298 | 284 | 273 | 248 | 227 | 200 | 178 | 148 | 114 |

## Dimensions & Weights



| Model Name | Specification |        |                 |                         |
|------------|---------------|--------|-----------------|-------------------------|
|            | *D (mm)       | L (mm) | Pump Weight Kg. | Weight (incl. pkg.) Kg. |
| 4RP 9 - 05 | 98            | 451    | 6.60            | 7.3                     |
| 4RP 9 - 07 | 98            | 535    | 7.50            | 8.3                     |
| 4RP 9 - 10 | 98            | 661    | 8.80            | 9.7                     |
| 4RP 9 - 12 | 98            | 745    | 9.70            | 10.7                    |
| 4RP 9 - 15 | 98            | 871    | 11.00           | 12.1                    |
| 4RP 9 - 18 | 98            | 997    | 12.30           | 13.5                    |
| 4RP 9 - 21 | 98            | 1123   | 13.60           | 15.0                    |
| 4RP 9 - 25 | 98            | 1291   | 15.40           | 16.9                    |
| 4RP 9 - 30 | 98            | 1501   | 17.60           | 19.4                    |
| 4RP 9 - 37 | 98            | 1795   | 20.70           | 22.8                    |
| 4RP 9 - 44 | 98            | 2089   | 24.30           | 26.7                    |
| 4RP 9 - 50 | 98            | 2341   | 27.10           | 29.8                    |
| 4RP 9 - 30 | 138           | 1518   | 19.60           | 21.6                    |
| 4RP 9 - 37 | 138           | 1812   | 22.90           | 25.2                    |
| 4RP 9 - 44 | 138           | 2106   | 25.80           | 28.4                    |
| 4RP 9 - 50 | 138           | 2358   | 29.60           | 32.6                    |
| 4RP 9 - 58 | 138           | 2694   | 31.40           | 34.5                    |

\*G: Available Outlet Size BSP 2.0"

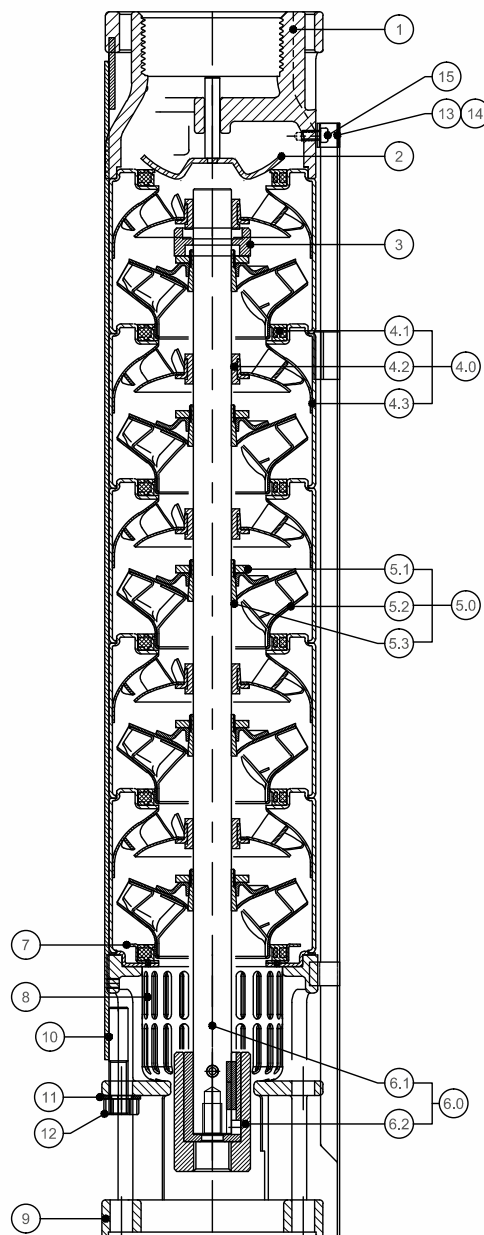
\* D: With Cable Guard

4RP 9 - 30, 4RP 9 - 37, 4RP 9 - 44, & 4RP 9 - 50 & 4RP 9 - 58 pump are also available in 6" Joining.

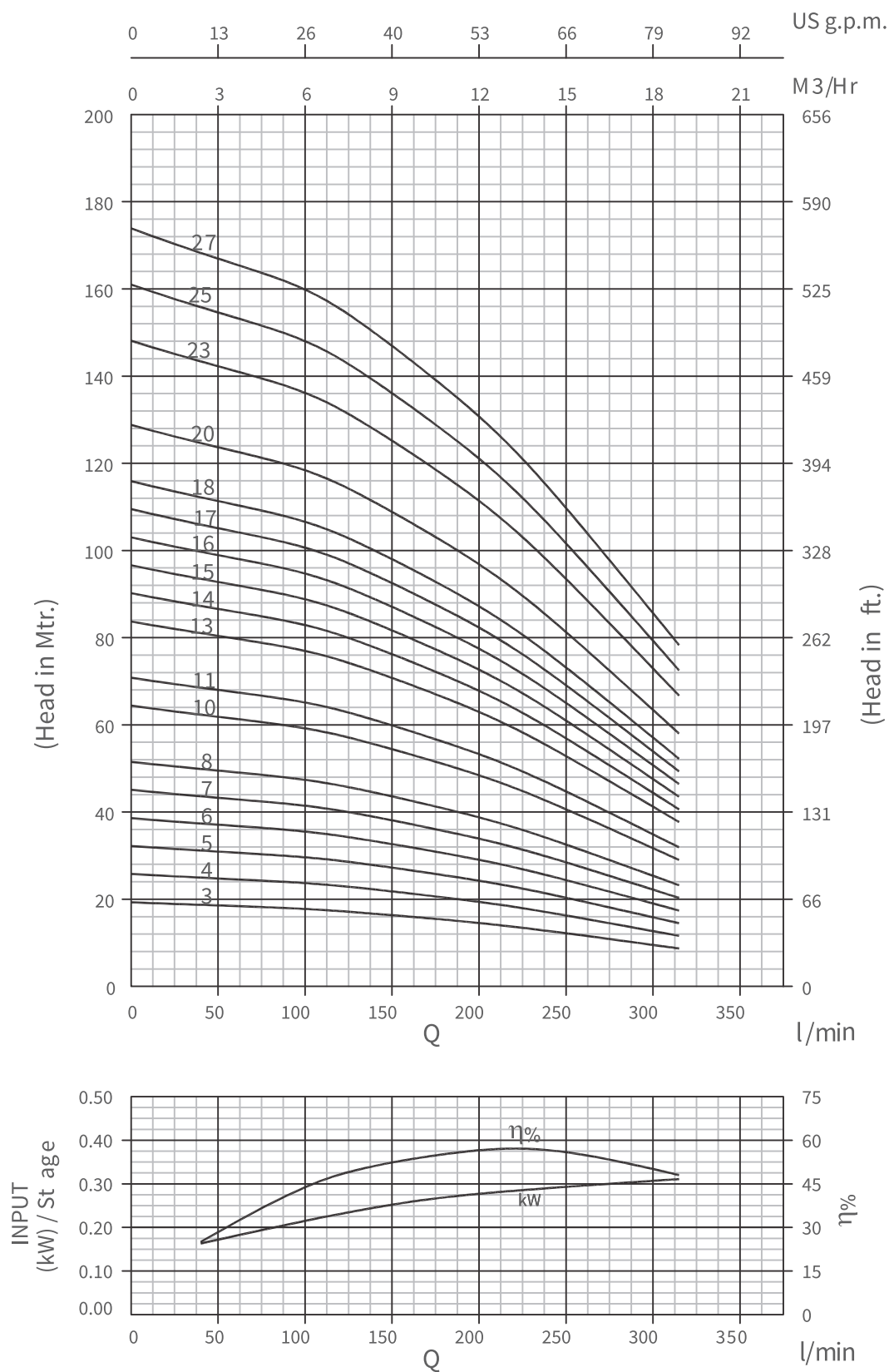
# 4RP 14 SERIES PUMP DESIGN

## Material Specification

| No. | PART NAME                 | MATERIAL       |
|-----|---------------------------|----------------|
| 1   | DISCHARGE CHAMBER HOUSING | STEEL CAST 304 |
| 2   | VALVE CONE                | S.S. 304       |
| 3   | SPACING WASER             | PTFE           |
| 4.0 | DIFFUSER ASSLY            | SUB ASSLY      |
| 4.1 | NECKRING                  | N.B.R. + NYLON |
| 4.2 | BEARING BUSH              | N.B.R          |
| 4.3 | DIFFUSER                  | S.S. 304       |
| 5.0 | IMPELLER                  | S.S. 304       |
| 5.1 | NOT OF COLLET             | S.S. 304       |
| 5.2 | IMPELLER                  | S.S. 304       |
| 5.3 | COLLET                    | S.S. 304       |
| 6.0 | PUMP SHAFT & COUPLING     | SUB ASSLY      |
| 6.1 | PUMP SHAFT                | S.S. 1.4362    |
| 6.2 | COUPLING                  | S.S. 304       |
| 7   | S.S.CONNECTOR             | S.S. 304       |
| 8   | STRAINER                  | S.S. 304       |
| 9   | SUCTION                   | STEEL CAST 304 |
| 10  | CLAMPING STRIP            | S.S. 304       |
| 11  | WASHER                    | S.S. 304       |
| 12  | HEX NUT                   | S.S. 316       |
| 13  | CABLE GUARD               | S.S. 304       |
| 14  | CLAMP OF CABLE GUARD      | S.S. 304       |
| 15  | SCREW_M4                  | S.S. 304       |



# PERFORMANCE CURVES



# 4RP 14, 50Hz

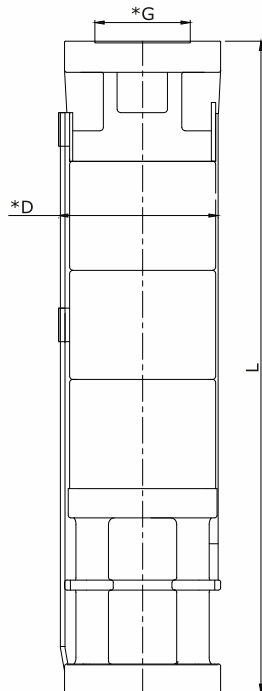
ISO 9906 Annexure A

## PERFORMANCE CHART

| Model Name   |             | Stage | Rating |    | l/min<br>m <sup>3</sup> /h | Discharge |     |     |     |      |      |      |      |
|--------------|-------------|-------|--------|----|----------------------------|-----------|-----|-----|-----|------|------|------|------|
| Single Phase | Three Phase |       | kW     | HP |                            | 0         | 40  | 95  | 130 | 170  | 215  | 260  | 315  |
|              |             |       |        |    |                            | 0         | 2.4 | 5.7 | 7.8 | 10.2 | 12.9 | 15.6 | 18.9 |

|           |           |    |      |       |               |     |      |     |     |     |     |     |    |
|-----------|-----------|----|------|-------|---------------|-----|------|-----|-----|-----|-----|-----|----|
| 4RP 14-03 | 4RP 14-03 | 03 | 1.10 | 1.50  | HEAD IN Mtrs. | 19  | 18.5 | 18  | 17  | 16  | 14  | 12  | 9  |
| 4RP 14-04 | 4RP 14-04 | 04 | 1.10 | 1.50  |               | 26  | 25   | 24  | 23  | 21  | 19  | 16  | 12 |
| 4RP 14-05 | 4RP 14-05 | 05 | 1.50 | 2.00  |               | 32  | 31   | 30  | 28  | 26  | 23  | 20  | 14 |
| 4RP 14-06 | 4RP 14-06 | 06 | 1.50 | 2.00  |               | 39  | 37   | 36  | 34  | 31  | 28  | 23  | 17 |
| 4RP 14-07 | 4RP 14-07 | 07 | 2.20 | 3.00  |               | 45  | 44   | 42  | 40  | 37  | 33  | 27  | 20 |
| 4RP 14-08 | 4RP 14-08 | 08 | 2.20 | 3.00  |               | 52  | 50   | 48  | 45  | 42  | 37  | 31  | 23 |
|           | 4RP 14-10 | 10 | 3.00 | 4.00  |               | 64  | 62   | 60  | 57  | 52  | 47  | 39  | 29 |
|           | 4RP 14-11 | 11 | 3.00 | 4.00  |               | 71  | 68   | 66  | 62  | 57  | 51  | 43  | 32 |
|           | 4RP 14-13 | 13 | 3.00 | 4.00  |               | 84  | 81   | 78  | 74  | 68  | 61  | 51  | 38 |
|           | 4RP 14-14 | 14 | 4.00 | 5.50  |               | 90  | 87   | 84  | 79  | 73  | 65  | 55  | 41 |
|           | 4RP 14-15 | 15 | 4.00 | 5.50  |               | 97  | 93   | 90  | 85  | 78  | 70  | 58  | 44 |
|           | 4RP 14-16 | 16 | 4.00 | 5.50  |               | 103 | 100  | 96  | 91  | 84  | 75  | 62  | 46 |
|           | 4RP 14-17 | 17 | 4.00 | 5.50  |               | 109 | 106  | 102 | 96  | 89  | 79  | 66  | 49 |
|           | 4RP 14-18 | 18 | 5.50 | 7.50  |               | 116 | 112  | 108 | 102 | 94  | 84  | 70  | 52 |
|           | 4RP 14-20 | 20 | 5.50 | 7.50  |               | 129 | 124  | 120 | 113 | 104 | 93  | 78  | 58 |
|           | 4RP 14-23 | 23 | 5.50 | 7.50  |               | 148 | 143  | 138 | 130 | 120 | 107 | 90  | 67 |
|           | 4RP 14-25 | 25 | 7.50 | 10.00 |               | 161 | 156  | 150 | 142 | 130 | 117 | 98  | 72 |
|           | 4RP 14-27 | 27 | 7.50 | 10.00 |               | 174 | 168  | 162 | 153 | 141 | 126 | 105 | 78 |

## Dimensions & Weights



| Model Name  | Specification |        |                 |                        |
|-------------|---------------|--------|-----------------|------------------------|
|             | *D (mm)       | L (mm) | Pump Weight Kg. | Weight (incl.pkg.) Kg. |
| 4RP 14 - 03 | 98            | 387    | 4.70            | 5.4                    |
| 4RP 14 - 04 | 98            | 452    | 5.40            | 6.2                    |
| 4RP 14 - 05 | 98            | 517    | 6.10            | 7.0                    |
| 4RP 14 - 06 | 98            | 582    | 6.9             | 7.9                    |
| 4RP 14 - 07 | 98            | 647    | 7.7             | 8.9                    |
| 4RP 14 - 08 | 98            | 712    | 8.4             | 9.7                    |
| 4RP 14 - 10 | 98            | 842    | 9.9             | 11.4                   |
| 4RP 14 - 11 | 98            | 907    | 10.6            | 12.2                   |
| 4RP 14 - 13 | 98            | 1037   | 12.1            | 13.9                   |
| 4RP 14 - 14 | 98            | 1102   | 12.9            | 14.8                   |
| 4RP 14 - 15 | 98            | 1167   | 13.6            | 15.6                   |
| 4RP 14 - 16 | 98            | 1232   | 14.4            | 16.6                   |
| 4RP 14 - 17 | 98            | 1297   | 15.1            | 17.4                   |
| 4RP 14 - 18 | 98            | 1362   | 16.6            | 19.1                   |
| 4RP 14 - 20 | 98            | 1492   | 18.1            | 20.8                   |
| 4RP 14 - 23 | 98            | 1687   | 20.4            | 23.5                   |
| 4RP 14 - 25 | 98            | 1817   | 21.9            | 25.2                   |
| 4RP 14 - 27 | 98            | 1947   | 23.4            | 26.9                   |

\*G: Available Outlet Size 2.0" BSP\*

D: With Cable Guard

4RP 14 - 18, 4RP 14 - 25, 4RP 14 - 27 pump are also available in 6" Joining

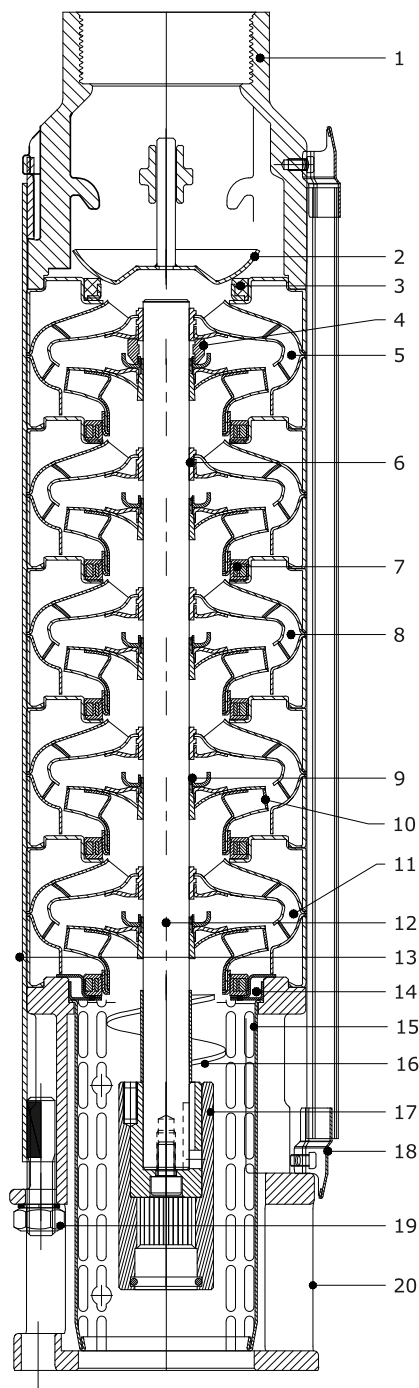
# 6RP 15 SERIES PUMP DESIGN

## Material Specification

| NO | PART NAME                     | MATERIAL         |
|----|-------------------------------|------------------|
| 1  | DISCHARGE CHAMBER HOUSING     | STEEL CAST 304   |
| 2  | VALVE                         | S.S.304          |
| 3  | VALVE SEAT                    | N.B.R. + S.S.304 |
| 4  | SPACING WASHER                | 25% CFT          |
| 5  | INTERMEDIATE CHAMBER TOP      | S.S.304          |
| 6  | BEARING BUSH                  | N.B.R.           |
| 7  | NECKRING                      | N.B.R. + NYLON   |
| 8  | INTERMEDIATE CHAMBER          | S.S.304          |
| 9  | COLLET & COLLET NUT           | S.S.304          |
| 10 | IMPELLER                      | S.S.304          |
| 11 | INTERMEDIATE CHAMBER 1St      | S.S.304          |
| 12 | PUMP SHAFT (UP TO 26 STAGES)  | S.S.431          |
|    | PUMP SHAFT (27 STAGE & ABOVE) | S.S.1.4362       |
| 13 | CLAMPING STRIP                | S.S.304          |
| 14 | SUCTION CONNECTOR             | S.S.304          |
| 15 | STRAINER                      | S.S.304          |
| 16 | PRIMING SCREW                 | S.S.304          |
| 17 | NEMA COUPLING                 | S.S.304          |
| 18 | CABLE GUARD                   | S.S.304          |
| 19 | HEX NUT                       | S.S.316          |
| 20 | SUCTION                       | STEEL CAST 304   |

Note:

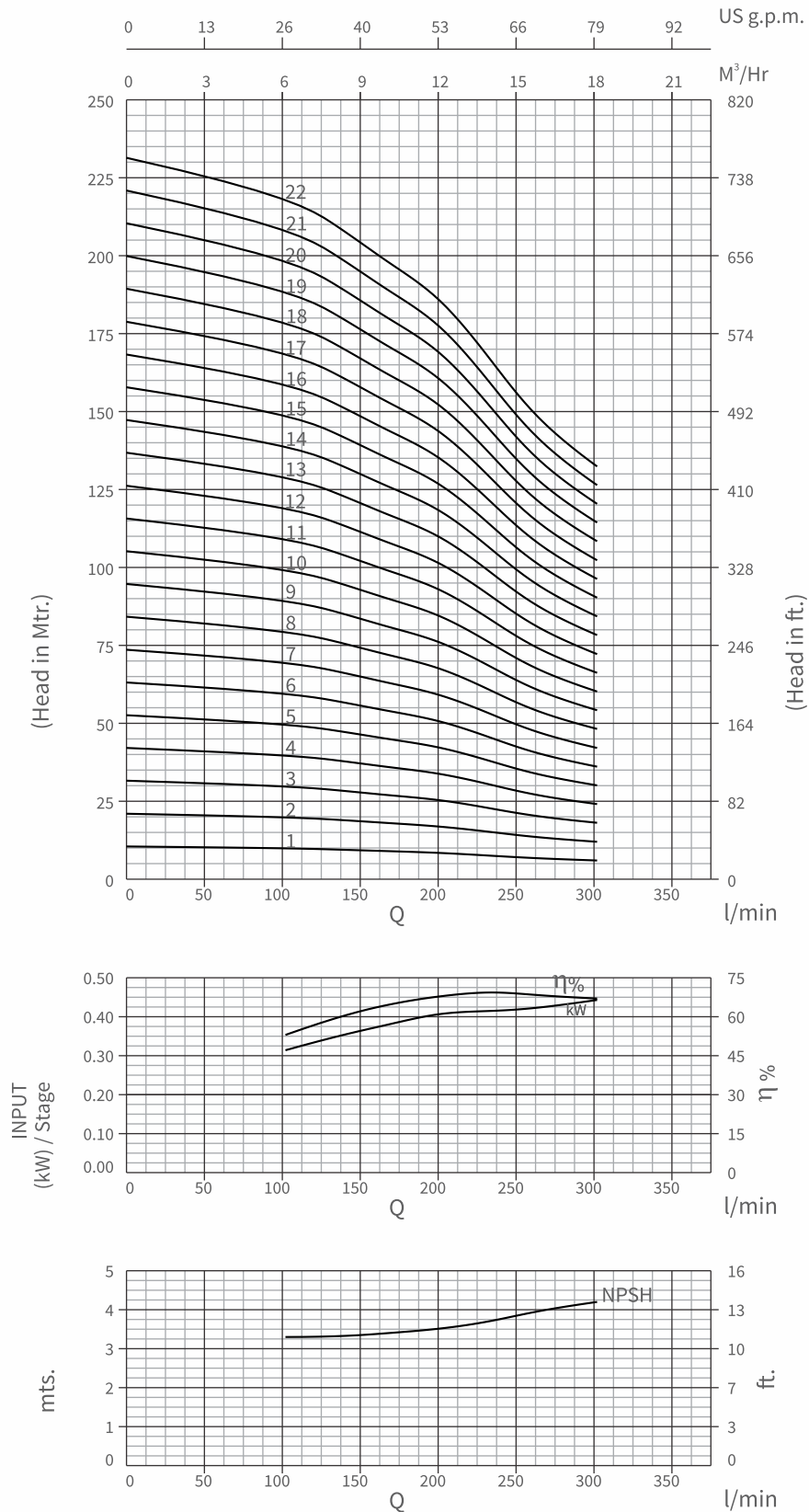
PUMPS UP TO 20 STAGE DISCHARGE CHAMBER COMES WITH S.S. FABRICATED AND FROM 21 STAGE & ONWARDS WITH STEEL CAST.



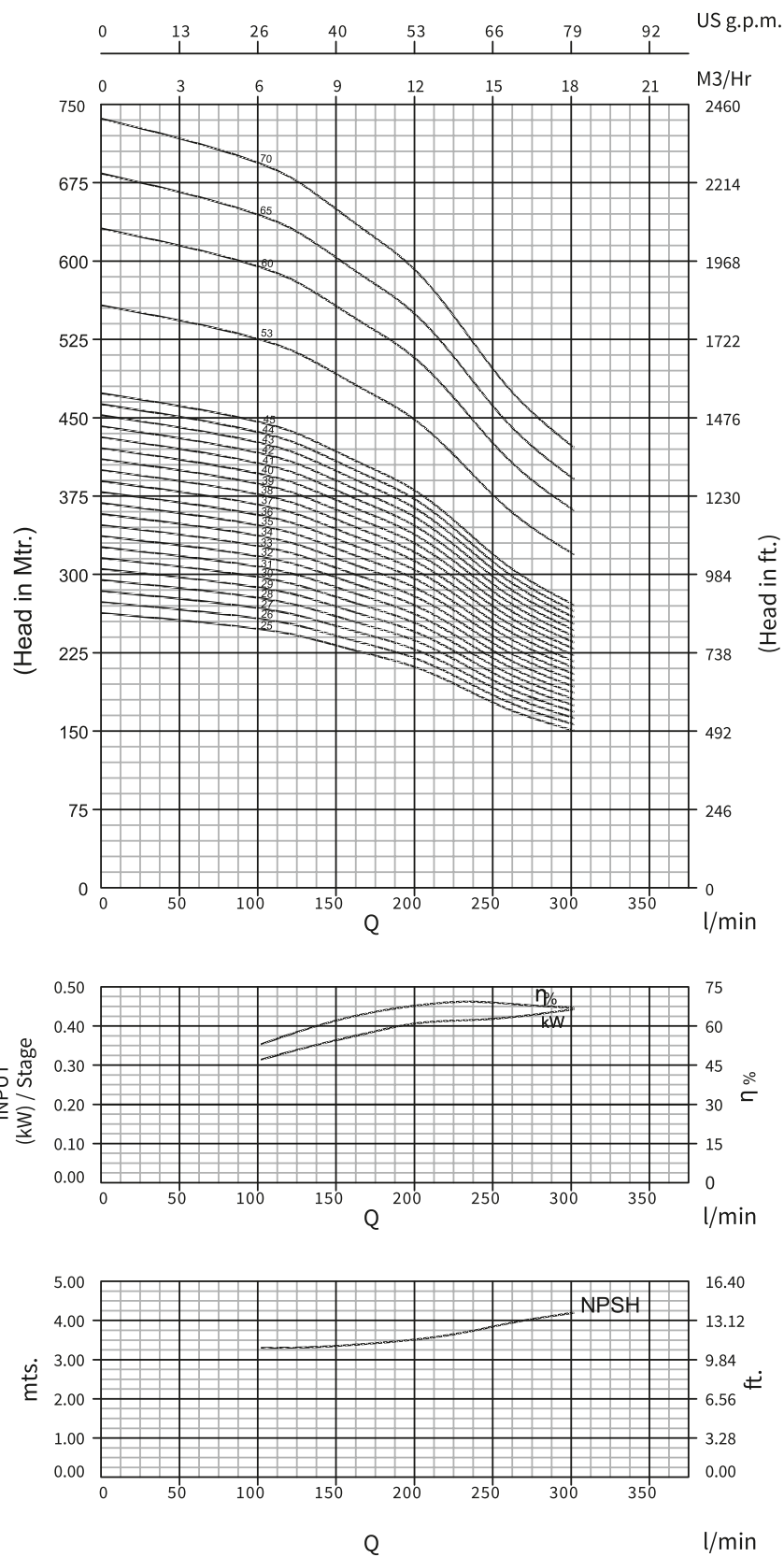
# 6RP 15, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# PERFORMANCE CURVES



# 6RP 15, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CHART

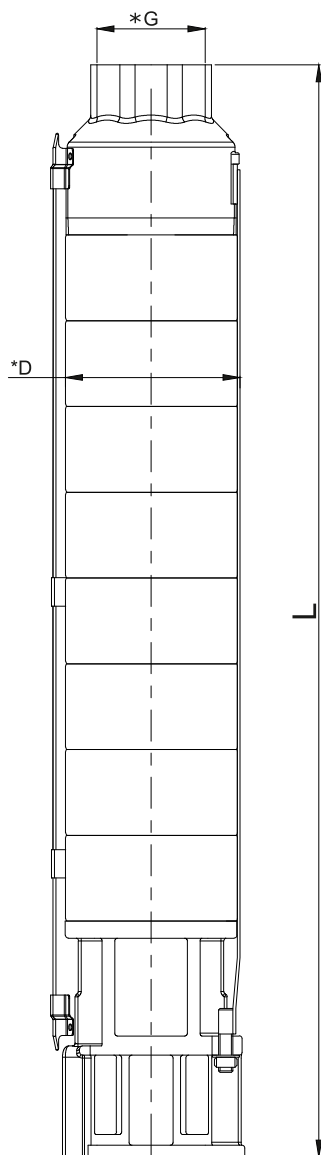
| MODEL NAME  |       | RATING |    |                            | DISCHARGE |     |     |      |      |      |      |      |
|-------------|-------|--------|----|----------------------------|-----------|-----|-----|------|------|------|------|------|
| THREE PHASE | STAGE | kW     | HP | l/min<br>m <sup>3</sup> /h | 0         | 102 | 135 | 168  | 201  | 235  | 266  | 302  |
|             |       |        |    |                            | 0         | 6.1 | 8.1 | 10.0 | 12.0 | 14.1 | 15.9 | 18.1 |

|           |    |       |       |               |      |     |     |     |     |     |     |     |
|-----------|----|-------|-------|---------------|------|-----|-----|-----|-----|-----|-----|-----|
| 6RP 15-01 | 1  | 0.55  | 0.75  | HEAD IN Mtrs. | 10.5 | 10  | 9.5 | 9   | 8.5 | 7.5 | 7   | 6   |
| 6RP 15-02 | 2  | 1.10  | 1.50  |               | 21   | 20  | 19  | 18  | 17  | 15  | 13  | 12  |
| 6RP 15-03 | 3  | 1.50  | 2.00  |               | 32   | 30  | 29  | 27  | 26  | 23  | 20  | 18  |
| 6RP 15-04 | 4  | 2.20  | 3.00  |               | 42   | 40  | 38  | 36  | 34  | 30  | 26  | 24  |
| 6RP 15-05 | 5  | 2.20  | 3.00  |               | 53   | 50  | 48  | 45  | 43  | 38  | 33  | 30  |
| 6RP 15-06 | 6  | 3.00  | 4.00  |               | 63   | 60  | 57  | 54  | 51  | 45  | 40  | 36  |
| 6RP 15-07 | 7  | 3.00  | 4.00  |               | 74   | 70  | 67  | 63  | 60  | 53  | 46  | 42  |
| 6RP 15-08 | 8  | 4.00  | 5.50  |               | 84   | 80  | 76  | 72  | 68  | 60  | 53  | 48  |
| 6RP 15-09 | 9  | 4.00  | 5.50  |               | 95   | 90  | 86  | 81  | 77  | 68  | 59  | 54  |
| 6RP 15-10 | 10 | 5.50  | 7.50  |               | 105  | 100 | 95  | 90  | 85  | 75  | 66  | 60  |
| 6RP 15-11 | 11 | 5.50  | 7.50  |               | 116  | 110 | 105 | 99  | 94  | 83  | 73  | 66  |
| 6RP 15-12 | 12 | 5.50  | 7.50  |               | 126  | 120 | 114 | 108 | 102 | 90  | 79  | 72  |
| 6RP 15-13 | 13 | 7.50  | 10.00 |               | 137  | 130 | 124 | 117 | 111 | 98  | 86  | 78  |
| 6RP 15-14 | 14 | 7.50  | 10.00 |               | 147  | 140 | 134 | 126 | 119 | 106 | 92  | 84  |
| 6RP 15-15 | 15 | 7.50  | 10.00 |               | 158  | 150 | 143 | 135 | 128 | 113 | 99  | 90  |
| 6RP 15-16 | 16 | 7.50  | 10.00 |               | 168  | 160 | 153 | 144 | 136 | 121 | 106 | 96  |
| 6RP 15-17 | 17 | 9.30  | 12.50 |               | 179  | 170 | 162 | 153 | 145 | 128 | 112 | 102 |
| 6RP 15-18 | 18 | 9.30  | 12.50 |               | 189  | 180 | 172 | 162 | 153 | 136 | 119 | 108 |
| 6RP 15-19 | 19 | 9.30  | 12.50 |               | 200  | 190 | 181 | 171 | 162 | 143 | 125 | 114 |
| 6RP 15-20 | 20 | 9.30  | 12.50 |               | 210  | 200 | 191 | 180 | 170 | 151 | 132 | 120 |
| 6RP 15-21 | 21 | 11.00 | 15.00 |               | 221  | 210 | 200 | 189 | 179 | 158 | 139 | 126 |
| 6RP 15-22 | 22 | 11.00 | 15.00 |               | 231  | 220 | 210 | 198 | 187 | 166 | 145 | 132 |
| 6RP 15-23 | 23 | 11.00 | 15.00 |               | 242  | 230 | 219 | 207 | 196 | 173 | 152 | 138 |
| 6RP 15-24 | 24 | 11.00 | 15.00 |               | 252  | 240 | 229 | 216 | 204 | 181 | 158 | 144 |
| 6RP 15-25 | 25 | 13.00 | 17.50 |               | 263  | 250 | 238 | 224 | 213 | 188 | 165 | 150 |
| 6RP 15-26 | 26 | 13.00 | 17.50 |               | 274  | 260 | 248 | 233 | 222 | 196 | 172 | 157 |
| 6RP 15-27 | 27 | 13.00 | 17.50 |               | 284  | 270 | 258 | 242 | 230 | 204 | 178 | 163 |
| 6RP 15-28 | 28 | 13.00 | 17.50 |               | 295  | 280 | 267 | 251 | 239 | 211 | 185 | 169 |
| 6RP 15-29 | 29 | 15.00 | 20.00 |               | 305  | 290 | 277 | 260 | 247 | 219 | 191 | 175 |
| 6RP 15-30 | 30 | 15.00 | 20.00 |               | 316  | 300 | 286 | 269 | 256 | 226 | 198 | 181 |
| 6RP 15-31 | 31 | 15.00 | 20.00 |               | 326  | 310 | 296 | 278 | 264 | 234 | 205 | 187 |
| 6RP 15-32 | 32 | 15.00 | 20.00 |               | 337  | 320 | 305 | 287 | 273 | 241 | 211 | 193 |
| 6RP 15-33 | 33 | 15.00 | 20.00 |               | 347  | 330 | 315 | 296 | 281 | 249 | 218 | 199 |
| 6RP 15-34 | 34 | 18.50 | 25.00 |               | 358  | 340 | 324 | 305 | 290 | 256 | 224 | 205 |
| 6RP 15-35 | 35 | 18.50 | 25.00 |               | 368  | 350 | 334 | 314 | 298 | 264 | 231 | 211 |
| 6RP 15-36 | 36 | 18.50 | 25.00 |               | 379  | 360 | 343 | 323 | 307 | 271 | 238 | 217 |
| 6RP 15-37 | 37 | 18.50 | 25.00 |               | 389  | 370 | 353 | 332 | 315 | 279 | 244 | 223 |
| 6RP 15-38 | 38 | 18.50 | 25.00 |               | 400  | 380 | 363 | 341 | 324 | 287 | 251 | 229 |
| 6RP 15-39 | 39 | 18.50 | 25.00 |               | 410  | 390 | 372 | 350 | 332 | 294 | 257 | 235 |
| 6RP 15-40 | 40 | 18.50 | 25.00 |               | 421  | 400 | 382 | 359 | 341 | 302 | 264 | 241 |
| 6RP 15-41 | 41 | 22.00 | 30.00 |               | 431  | 410 | 391 | 368 | 349 | 309 | 271 | 247 |
| 6RP 15-42 | 42 | 22.00 | 30.00 |               | 442  | 420 | 401 | 377 | 358 | 317 | 277 | 253 |
| 6RP 15-43 | 43 | 22.00 | 30.00 |               | 452  | 430 | 410 | 386 | 366 | 324 | 284 | 259 |
| 6RP 15-44 | 44 | 22.00 | 30.00 |               | 463  | 440 | 420 | 395 | 375 | 332 | 290 | 265 |
| 6RP 15-45 | 45 | 22.00 | 30.00 |               | 473  | 450 | 429 | 404 | 383 | 339 | 297 | 271 |
| 6RP 15-53 | 53 | 26.00 | 35.00 |               | 558  | 530 | 506 | 476 | 452 | 400 | 350 | 319 |
| 6RP 15-60 | 60 | 30.00 | 40.00 |               | 631  | 600 | 572 | 539 | 511 | 452 | 396 | 361 |
| 6RP 15-65 | 65 | 34.00 | 45.00 |               | 681  | 650 | 620 | 584 | 554 | 490 | 429 | 391 |
| 6RP 15-70 | 70 | 37.00 | 50.00 |               | 736  | 700 | 668 | 629 | 596 | 528 | 462 | 421 |

# 6RP 15, 50Hz

ISO 9906 Annexure A

## Dimensions & Weights



| Model Name  | Specification |        |                |                       |
|-------------|---------------|--------|----------------|-----------------------|
|             | *D (mm)       | L (mm) | Pump Weight Kg | Weight (Incl. pkg) Kg |
| 6RP 15 - 1  | 142           | 331    | 8              | 10                    |
| 6RP 15 - 2  | 142           | 392    | 9              | 11                    |
| 6RP 15 - 3  | 142           | 452    | 10             | 12                    |
| 6RP 15 - 4  | 142           | 513    | 12             | 14                    |
| 6RP 15 - 5  | 142           | 573    | 13             | 15                    |
| 6RP 15 - 6  | 142           | 634    | 14             | 16                    |
| 6RP 15 - 7  | 142           | 694    | 15             | 17                    |
| 6RP 15 - 8  | 142           | 755    | 17             | 19                    |
| 6RP 15 - 9  | 142           | 815    | 18             | 20                    |
| 6RP 15 - 10 | 142           | 894    | 19             | 21                    |
| 6RP 15 - 11 | 142           | 955    | 20             | 23                    |
| 6RP 15 - 12 | 142           | 1015   | 22             | 24                    |
| 6RP 15 - 13 | 142           | 1076   | 23             | 25                    |
| 6RP 15 - 14 | 142           | 1136   | 24             | 26                    |
| 6RP 15 - 15 | 142           | 1197   | 25             | 28                    |
| 6RP 15 - 16 | 142           | 1257   | 26             | 29                    |
| 6RP 15 - 17 | 142           | 1318   | 28             | 31                    |
| 6RP 15 - 18 | 142           | 1378   | 29             | 32                    |
| 6RP 15 - 19 | 142           | 1439   | 30             | 33                    |
| 6RP 15 - 20 | 142           | 1499   | 31             | 34                    |
| 6RP 15 - 21 | 142           | 1560   | 33             | 36                    |
| 6RP 15 - 22 | 142           | 1620   | 34             | 37                    |
| 6RP 15 - 23 | 142           | 1681   | 35             | 39                    |
| 6RP 15 - 24 | 142           | 1741   | 36             | 40                    |
| 6RP 15 - 25 | 142           | 1802   | 38             | 41                    |
| 6RP 15 - 26 | 142           | 1862   | 39             | 42                    |
| 6RP 15 - 27 | 142           | 1923   | 40             | 43                    |
| 6RP 15 - 28 | 142           | 1983   | 41             | 45                    |
| 6RP 15 - 29 | 142           | 2044   | 42             | 46                    |
| 6RP 15 - 30 | 142           | 2104   | 44             | 47                    |
| 6RP 15 - 31 | 142           | 2165   | 45             | 49                    |
| 6RP 15 - 32 | 142           | 2225   | 46             | 50                    |
| 6RP 15 - 33 | 142           | 2286   | 47             | 51                    |
| 6RP 15 - 34 | 142           | 2346   | 49             | 53                    |
| 6RP 15 - 35 | 142           | 2407   | 50             | 54                    |
| 6RP 15 - 36 | 142           | 2467   | 51             | 55                    |
| 6RP 15 - 37 | 142           | 2528   | 52             | 56                    |
| 6RP 15 - 38 | 142           | 2588   | 53             | 57                    |
| 6RP 15 - 39 | 142           | 2649   | 55             | 59                    |
| 6RP 15 - 40 | 142           | 2709   | 56             | 60                    |
| 6RP 15 - 41 | 142           | 2770   | 57             | 62                    |
| 6RP 15 - 42 | 142           | 2830   | 58             | 63                    |
| 6RP 15 - 43 | 142           | 2891   | 60             | 64                    |
| 6RP 15 - 44 | 142           | 2951   | 61             | 65                    |

\*G : Available Outlet Size BSP 2.5"

\*D : With Cable Guard

6RP 15 - 01 to 6RP 15-16 Pumps Are Also Available  
in 4" Joining

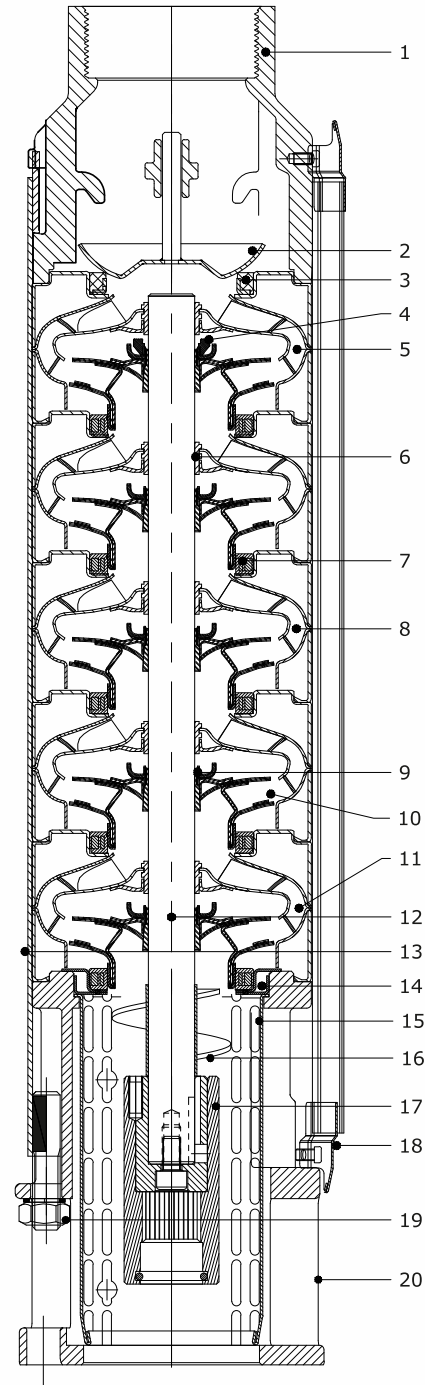
# 6RP 18 SERIES PUMP DESIGN

## Material Specification

| NO | PART NAME                     | MATERIAL         |
|----|-------------------------------|------------------|
| 1  | DISCHARGE CHAMBER HOUSING     | STEEL CAST 304   |
| 2  | VALVE                         | S.S.304          |
| 3  | VALVE SEAT                    | N.B.R. + S.S.304 |
| 4  | SPACING WASHER                | 25% CFT          |
| 5  | INTERMEDIATE CHAMBER TOP      | S.S.304          |
| 6  | BEARING BUSH                  | N.B.R.           |
| 7  | NECKRING                      | N.B.R. + NYLON   |
| 8  | INTERMEDIATE CHAMBER          | S.S.304          |
| 9  | COLLET & COLLET NUT           | S.S.304          |
| 10 | IMPELLER                      | S.S.304          |
| 11 | INTERMEDIATE CHAMBER 1st      | S.S.304          |
| 12 | PUMP SHAFT (UP TO 26 STAGES)  | S.S.431          |
|    | PUMP SHAFT (27 STAGE & ABOVE) | S.S.1.4362       |
| 13 | CLAMPING STRIP                | S.S.304          |
| 14 | SUCTION CONNECTOR             | S.S.304          |
| 15 | STRAINER                      | S.S.304          |
| 16 | PRIMING SCREW                 | S.S.304          |
| 17 | NEMA COUPLING                 | S.S.304          |
| 18 | CABLE GUARD                   | S.S.304          |
| 19 | HEX NUT                       | S.S.316          |
| 20 | SUCTION                       | STEEL CAST 304   |

Note:

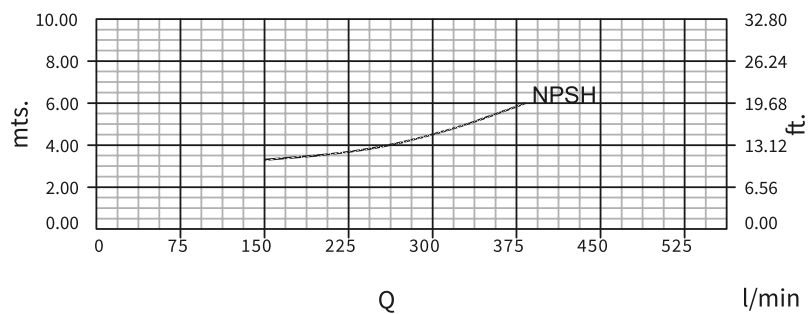
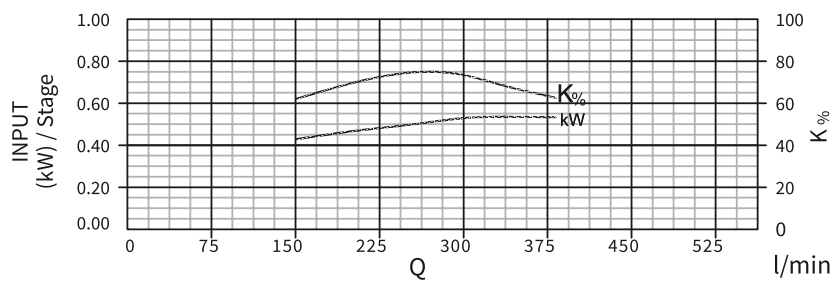
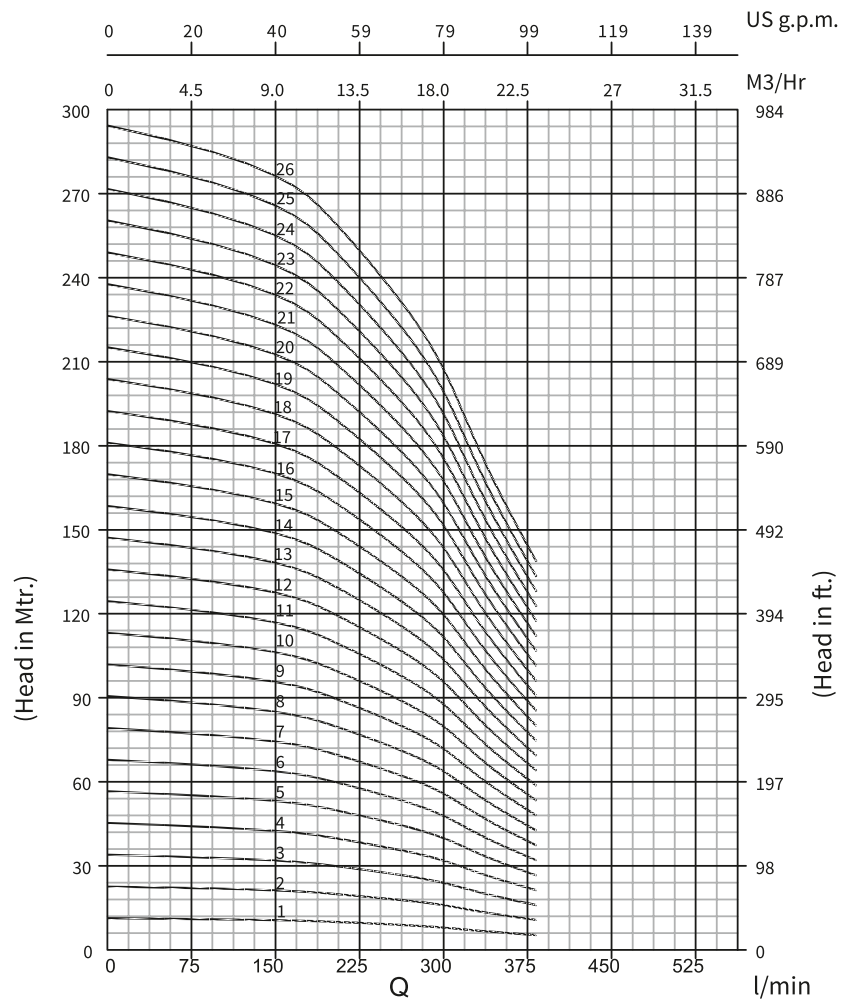
PUMPS UP TO 20 STAGE DISCHARGE CHAMBER COMES WITH S.S. FABRICATED AND FROM 21 STAGE & ONWARDS WITH STEEL CAST.



# 6RP 18, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# 6RP 18, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CHART

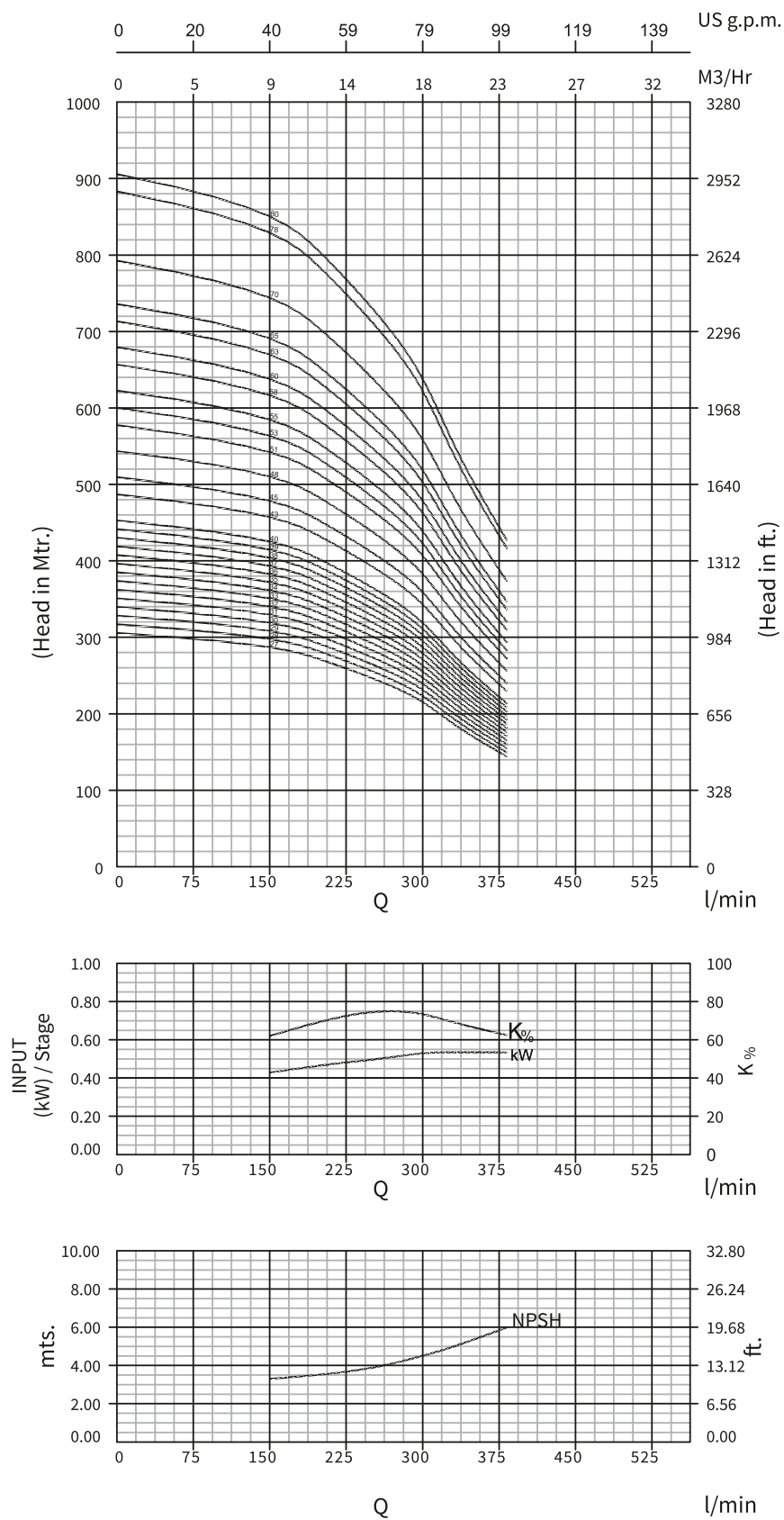
| MODEL NAME  |       | RATING |    |                   | Discharge |     |     |     |     |     |     |
|-------------|-------|--------|----|-------------------|-----------|-----|-----|-----|-----|-----|-----|
| THREE PHASE | STAGE | kW     | HP | l/min             | 0         | 150 | 200 | 250 | 300 | 333 | 383 |
|             |       |        |    | m <sup>3</sup> /h | 0         | 9   | 12  | 15  | 18  | 20  | 23  |

|           |    |       |       |               |      |     |     |     |     |     |     |
|-----------|----|-------|-------|---------------|------|-----|-----|-----|-----|-----|-----|
| 6RP 18-01 | 1  | 0.55  | 0.75  | HEAD IN Mtrs. | 11.3 | 11  | 10  | 9   | 8   | 7   | 5   |
| 6RP 18-02 | 2  | 1.10  | 1.50  |               | 23   | 22  | 20  | 18  | 16  | 13  | 11  |
| 6RP 18-03 | 3  | 2.20  | 3.00  |               | 34   | 32  | 30  | 27  | 24  | 20  | 16  |
| 6RP 18-04 | 4  | 2.20  | 3.00  |               | 45   | 43  | 40  | 37  | 33  | 27  | 21  |
| 6RP 18-05 | 5  | 3.00  | 4.00  |               | 57   | 54  | 50  | 46  | 41  | 34  | 27  |
| 6RP 18-06 | 6  | 4.00  | 5.50  |               | 68   | 65  | 60  | 55  | 49  | 40  | 32  |
| 6RP 18-07 | 7  | 4.00  | 5.50  |               | 79   | 76  | 70  | 64  | 57  | 47  | 37  |
| 6RP 18-08 | 8  | 5.50  | 7.50  |               | 91   | 87  | 80  | 73  | 65  | 54  | 43  |
| 6RP 18-09 | 9  | 5.50  | 7.50  |               | 102  | 97  | 91  | 82  | 73  | 60  | 48  |
| 6RP 18-10 | 10 | 5.50  | 7.50  |               | 113  | 108 | 101 | 92  | 81  | 67  | 53  |
| 6RP 18-11 | 11 | 7.50  | 10.00 |               | 125  | 119 | 111 | 101 | 89  | 74  | 59  |
| 6RP 18-12 | 12 | 7.50  | 10.00 |               | 136  | 130 | 121 | 110 | 98  | 80  | 64  |
| 6RP 18-13 | 13 | 7.50  | 10.00 |               | 147  | 141 | 131 | 119 | 106 | 87  | 69  |
| 6RP 18-14 | 14 | 9.30  | 12.50 |               | 158  | 152 | 141 | 128 | 114 | 94  | 75  |
| 6RP 18-15 | 15 | 9.30  | 12.50 |               | 170  | 162 | 151 | 137 | 122 | 100 | 80  |
| 6RP 18-16 | 16 | 9.30  | 12.50 |               | 181  | 173 | 161 | 147 | 130 | 107 | 85  |
| 6RP 18-17 | 17 | 9.30  | 12.50 |               | 192  | 184 | 171 | 156 | 138 | 114 | 91  |
| 6RP 18-18 | 18 | 11.00 | 15.00 |               | 204  | 195 | 181 | 165 | 146 | 121 | 96  |
| 6RP 18-19 | 19 | 11.00 | 15.00 |               | 215  | 206 | 191 | 174 | 154 | 127 | 101 |
| 6RP 18-20 | 20 | 11.00 | 15.00 |               | 226  | 217 | 201 | 183 | 163 | 134 | 107 |
| 6RP 18-21 | 21 | 13.00 | 17.50 |               | 238  | 227 | 211 | 192 | 171 | 141 | 112 |
| 6RP 18-22 | 22 | 13.00 | 17.50 |               | 249  | 238 | 221 | 202 | 179 | 147 | 117 |
| 6RP 18-23 | 23 | 13.00 | 17.50 |               | 260  | 249 | 231 | 211 | 187 | 154 | 123 |
| 6RP 18-24 | 24 | 13.00 | 17.50 |               | 272  | 260 | 241 | 220 | 195 | 161 | 128 |
| 6RP 18-25 | 25 | 15.00 | 20.00 |               | 283  | 271 | 252 | 229 | 203 | 168 | 133 |
| 6RP 18-26 | 26 | 15.00 | 20.00 |               | 294  | 282 | 262 | 238 | 211 | 174 | 174 |

# 6RP 18, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# 6RP 18, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CHART

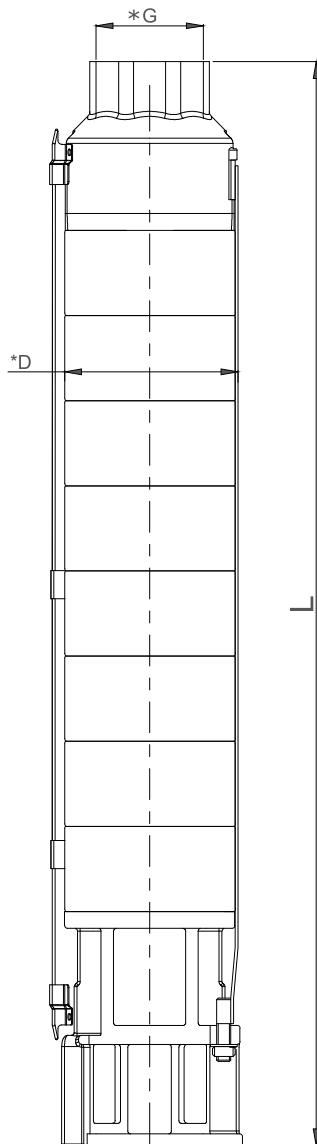
| MODEL NAME  |       | RATING |    |                   | Discharge |     |     |     |     |     |     |
|-------------|-------|--------|----|-------------------|-----------|-----|-----|-----|-----|-----|-----|
| THREE PHASE | STAGE | kW     | HP | l/min             | 0         | 150 | 200 | 250 | 300 | 333 | 383 |
|             |       |        |    | m <sup>3</sup> /h | 0         | 9   | 12  | 15  | 18  | 20  | 23  |

|           |    |       |       |               |     |     |     |     |     |     |     |
|-----------|----|-------|-------|---------------|-----|-----|-----|-----|-----|-----|-----|
| 6RP 18-25 | 25 | 15.00 | 20.00 | HEAD IN Mtrs. | 283 | 271 | 252 | 229 | 203 | 168 | 133 |
| 6RP 18-26 | 26 | 15.00 | 20.00 |               | 294 | 282 | 262 | 238 | 211 | 174 | 139 |
| 6RP 18-27 | 27 | 15.00 | 20.00 |               | 306 | 292 | 272 | 247 | 220 | 181 | 144 |
| 6RP 18-28 | 28 | 18.50 | 25.00 |               | 317 | 303 | 282 | 256 | 228 | 188 | 149 |
| 6RP 18-29 | 29 | 18.50 | 25.00 |               | 328 | 314 | 292 | 266 | 236 | 194 | 155 |
| 6RP 18-30 | 30 | 18.50 | 25.00 |               | 340 | 325 | 302 | 275 | 244 | 201 | 160 |
| 6RP 18-31 | 31 | 18.50 | 25.00 |               | 351 | 336 | 312 | 284 | 252 | 208 | 165 |
| 6RP 18-32 | 32 | 18.50 | 25.00 |               | 362 | 347 | 322 | 293 | 260 | 214 | 171 |
| 6RP 18-33 | 33 | 18.50 | 25.00 |               | 374 | 357 | 332 | 302 | 268 | 221 | 176 |
| 6RP 18-34 | 34 | 22.00 | 30.00 |               | 385 | 368 | 342 | 311 | 276 | 228 | 181 |
| 6RP 18-35 | 35 | 22.00 | 30.00 |               | 396 | 379 | 352 | 321 | 285 | 234 | 187 |
| 6RP 18-36 | 36 | 22.00 | 30.00 |               | 408 | 390 | 362 | 330 | 293 | 241 | 192 |
| 6RP 18-37 | 37 | 22.00 | 30.00 |               | 419 | 401 | 372 | 339 | 301 | 248 | 197 |
| 6RP 18-38 | 38 | 22.00 | 30.00 |               | 430 | 412 | 382 | 348 | 309 | 255 | 203 |
| 6RP 18-39 | 39 | 22.00 | 30.00 |               | 441 | 422 | 392 | 357 | 317 | 261 | 208 |
| 6RP 18-40 | 40 | 22.00 | 30.00 |               | 453 | 433 | 402 | 366 | 325 | 268 | 213 |
| 6RP 18-43 | 43 | 26.00 | 35.00 |               | 487 | 466 | 433 | 394 | 350 | 288 | 229 |
| 6RP 18-45 | 45 | 26.00 | 35.00 |               | 509 | 487 | 453 | 412 | 366 | 302 | 240 |
| 6RP 18-48 | 48 | 26.00 | 35.00 |               | 543 | 520 | 483 | 440 | 390 | 322 | 256 |
| 6RP 18-51 | 51 | 30.00 | 40.00 |               | 577 | 552 | 513 | 467 | 415 | 342 | 272 |
| 6RP 18-53 | 53 | 30.00 | 40.00 |               | 600 | 574 | 533 | 485 | 431 | 355 | 282 |
| 6RP 18-55 | 55 | 37.00 | 50.00 |               | 623 | 596 | 553 | 504 | 447 | 368 | 293 |
| 6RP 18-58 | 58 | 37.00 | 50.00 |               | 657 | 628 | 583 | 531 | 472 | 389 | 309 |
| 6RP 18-60 | 60 | 37.00 | 50.00 |               | 679 | 650 | 604 | 550 | 488 | 402 | 320 |
| 6RP 18-63 | 63 | 37.00 | 55.00 |               | 713 | 682 | 634 | 577 | 512 | 422 | 336 |
| 6RP 18-65 | 65 | 45.00 | 60.00 |               | 736 | 704 | 654 | 595 | 528 | 436 | 346 |
| 6RP 18-70 | 70 | 45.00 | 60.00 |               | 792 | 758 | 704 | 641 | 569 | 469 | 373 |
| 6RP 18-78 | 78 | 45.00 | 60.00 |               | 883 | 845 | 785 | 714 | 634 | 523 | 416 |
| 6RP 18-80 | 80 | 45.00 | 60.00 |               | 906 | 866 | 805 | 733 | 650 | 536 | 426 |

# 6RP 18, 50Hz

ISO 9906 Annexure A

## Dimensions & Weights



| Model Name  | Specification |        |                 |                         |
|-------------|---------------|--------|-----------------|-------------------------|
|             | *D (mm)       | L (mm) | Pump Weight Kg. | Weight (Incl. pkg.) Kg. |
| 6RP-18 - 01 | 142           | 331    | 8               | 10                      |
| 6RP-18 - 02 | 142           | 392    | 9               | 11                      |
| 6RP-18 - 03 | 142           | 452    | 11              | 12                      |
| 6RP-18 - 04 | 142           | 513    | 12              | 13                      |
| 6RP-18 - 05 | 142           | 573    | 13              | 15                      |
| 6RP-18 - 06 | 142           | 634    | 14              | 16                      |
| 6RP-18 - 07 | 142           | 694    | 16              | 18                      |
| 6RP-18 - 08 | 142           | 755    | 17              | 19                      |
| 6RP-18 - 09 | 142           | 815    | 18              | 20                      |
| 6RP-18 - 10 | 142           | 894    | 19              | 21                      |
| 6RP-18 - 11 | 142           | 955    | 21              | 23                      |
| 6RP-18 - 12 | 142           | 1015   | 22              | 24                      |
| 6RP-18 - 13 | 142           | 1076   | 23              | 26                      |
| 6RP-18 - 14 | 142           | 1136   | 24              | 27                      |
| 6RP-18 - 15 | 142           | 1197   | 26              | 28                      |
| 6RP-18 - 16 | 142           | 1257   | 27              | 30                      |
| 6RP-18 - 17 | 142           | 1318   | 28              | 31                      |
| 6RP-18 - 18 | 142           | 1378   | 29              | 32                      |
| 6RP-18 - 19 | 142           | 1439   | 31              | 34                      |
| 6RP-18 - 20 | 142           | 1499   | 32              | 35                      |
| 6RP-18 - 21 | 142           | 1560   | 33              | 37                      |
| 6RP-18 - 22 | 142           | 1620   | 34              | 38                      |
| 6RP-18 - 23 | 142           | 1681   | 36              | 39                      |
| 6RP-18 - 24 | 142           | 1741   | 37              | 40                      |
| 6RP-18 - 25 | 142           | 1802   | 38              | 42                      |
| 6RP-18 - 26 | 142           | 1862   | 39              | 43                      |
| 6RP-18 - 27 | 142           | 1923   | 41              | 44                      |
| 6RP-18 - 28 | 142           | 1983   | 42              | 45                      |
| 6RP-18 - 29 | 142           | 2044   | 43              | 47                      |
| 6RP-18 - 30 | 142           | 2104   | 44              | 48                      |
| 6RP-18 - 31 | 142           | 2165   | 46              | 50                      |
| 6RP-18 - 32 | 142           | 2225   | 47              | 51                      |
| 6RP-18 - 33 | 142           | 2286   | 48              | 52                      |
| 6RP-18 - 34 | 142           | 2346   | 49              | 53                      |
| 6RP-18 - 35 | 142           | 2407   | 51              | 55                      |
| 6RP-18 - 36 | 142           | 2467   | 52              | 56                      |
| 6RP-18 - 37 | 142           | 2528   | 53              | 57                      |
| 6RP-18 - 38 | 142           | 2588   | 54              | 58                      |
| 6RP-18 - 39 | 142           | 2649   | 56              | 60                      |
| 6RP-18 - 40 | 142           | 2709   | 57              | 61                      |
| 6RP-18 - 43 | 142           | 2891   | 62              | 66                      |
| 6RP-18 - 45 | 142           | 3012   | 64              | 68                      |
| 6RP-18 - 48 | 142           | 3193   | 67              | 71                      |
| 6RP-18 - 51 | 142           | 3375   | 71              | 75                      |
| 6RP-18 - 53 | 142           | 3496   | 73              | 77                      |
| 6RP-18 - 55 | 142           | 3617   | 75              | 79                      |
| 6RP-18 - 58 | 142           | 3798   | 79              | 84                      |
| 6RP-18 - 60 | 142           | 3919   | 81              | 86                      |

\*G : Available Outlet Size 2.5" BSP & 3.0" BSP

\*D : With Cable Guard

6RP - 18-01 to 6RP - 18-13 Pumps Are Also Available in 4" Joining.

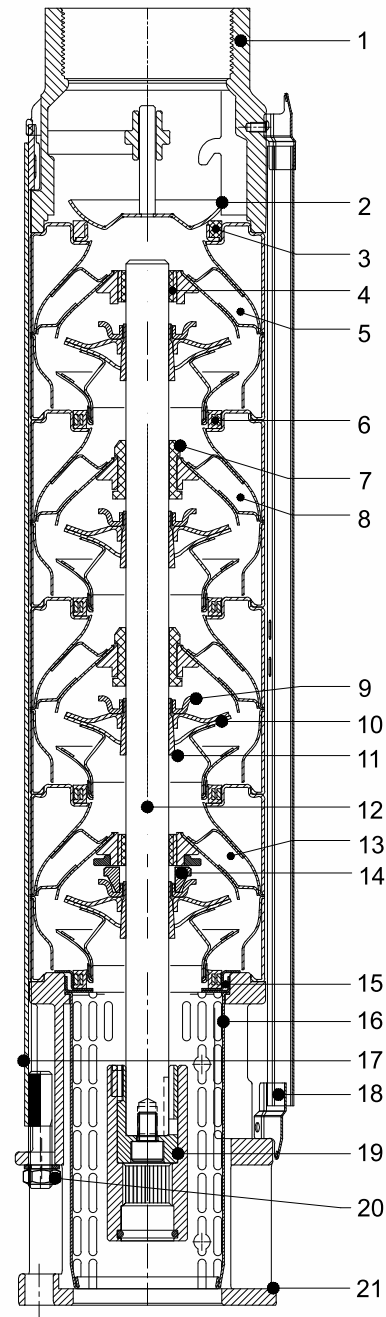
## 6VP 32 SERIES PUMP DESIGN

### Material Specification

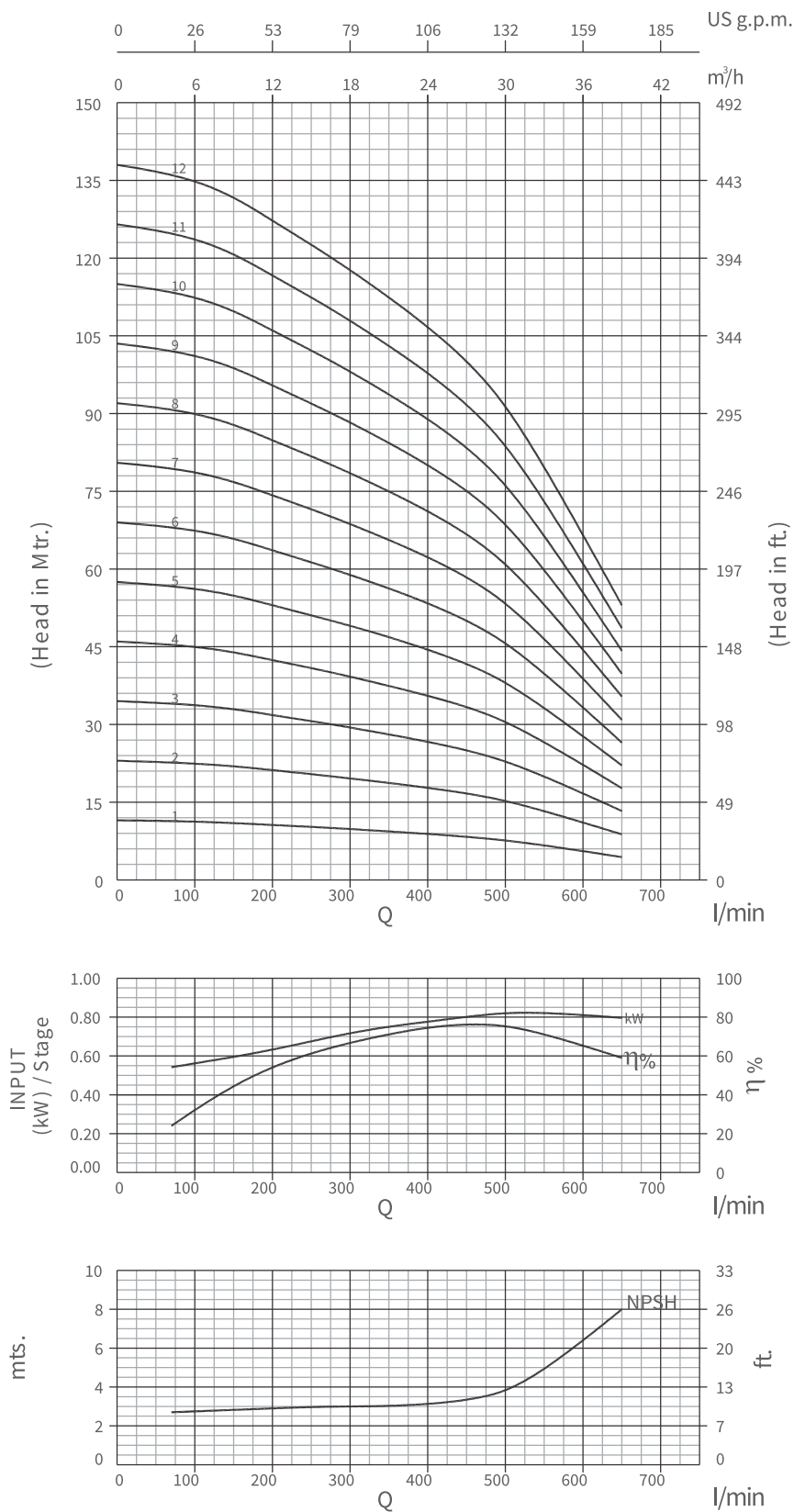
| NO | PART NAME                     | MATERIAL         |
|----|-------------------------------|------------------|
| 1  | DISCHARGE CHAMBER HOUSING     | STEEL CAST 304   |
| 2  | VALVE                         | S.S.304          |
| 3  | VALVE SEAT                    | N.B.R. + S.S.304 |
| 4  | TOP & FIRST BEARING BUSH      | N.B.R. + S.S.304 |
| 5  | INTERMEDIATE CHAMBER TOP      | S.S.304          |
| 6  | NECKRING                      | N.B.R. + NYLON   |
| 7  | BEARING BUSH                  | N.B.R.           |
| 8  | INTER MEDIATE CHAMBER         | S.S.304          |
| 9  | COLLET NUT                    | S.S.304          |
| 10 | IMPELLER                      | S.S.304          |
| 11 | COLLET                        | S.S.304          |
| 12 | PUMP SHAFT (UP TO 18 STAGES)  | S.S.431          |
|    | PUMP SHAFT (19 STAGE & ABOVE) | S.S.1.4362       |
| 13 | INTER MEDIATE CHAMBER 1st     | S.S.304          |
| 14 | SPACING WASHER                | 25% CFT          |
| 15 | CONNECTOR                     | S.S.304          |
| 16 | STRAINER                      | S.S.304          |
| 17 | CLAMPING STRIP                | S.S.304          |
| 18 | CABLE GUARD                   | S.S.304          |
| 19 | NEMA COUPLING                 | S.S.304          |
| 20 | HEX NUT                       | S.S.316          |
| 20 | SUCTION                       | STEEL CAST 304   |

**Note:**

PUMPS UP TO 20 STAGE DISCHARGE CHAMBER COMES WITH S.S. FABRICATED AND FROM 21 STAGE & ONWARDS WITH STEEL CAST.



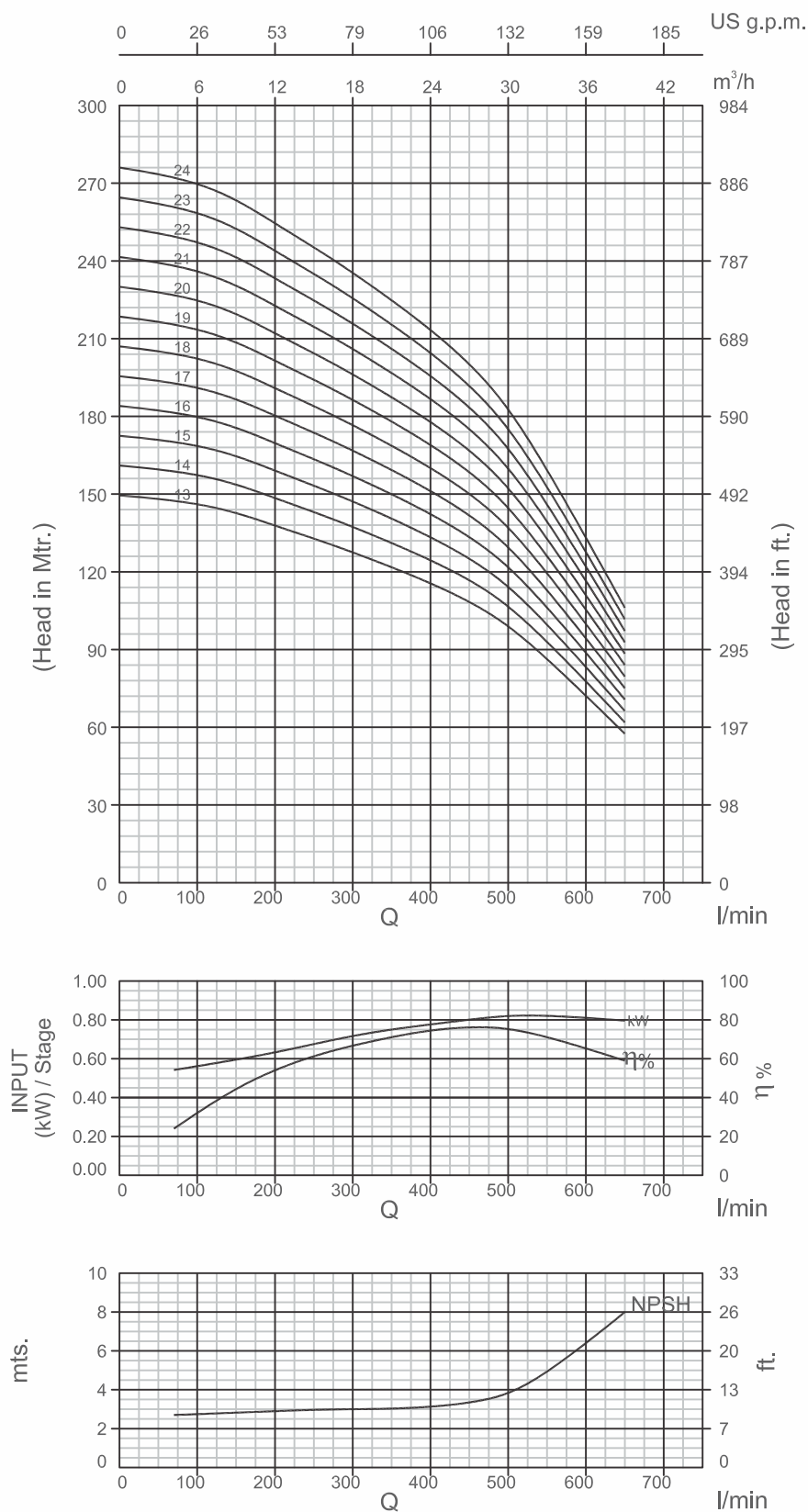
# PERFORMANCE CURVES



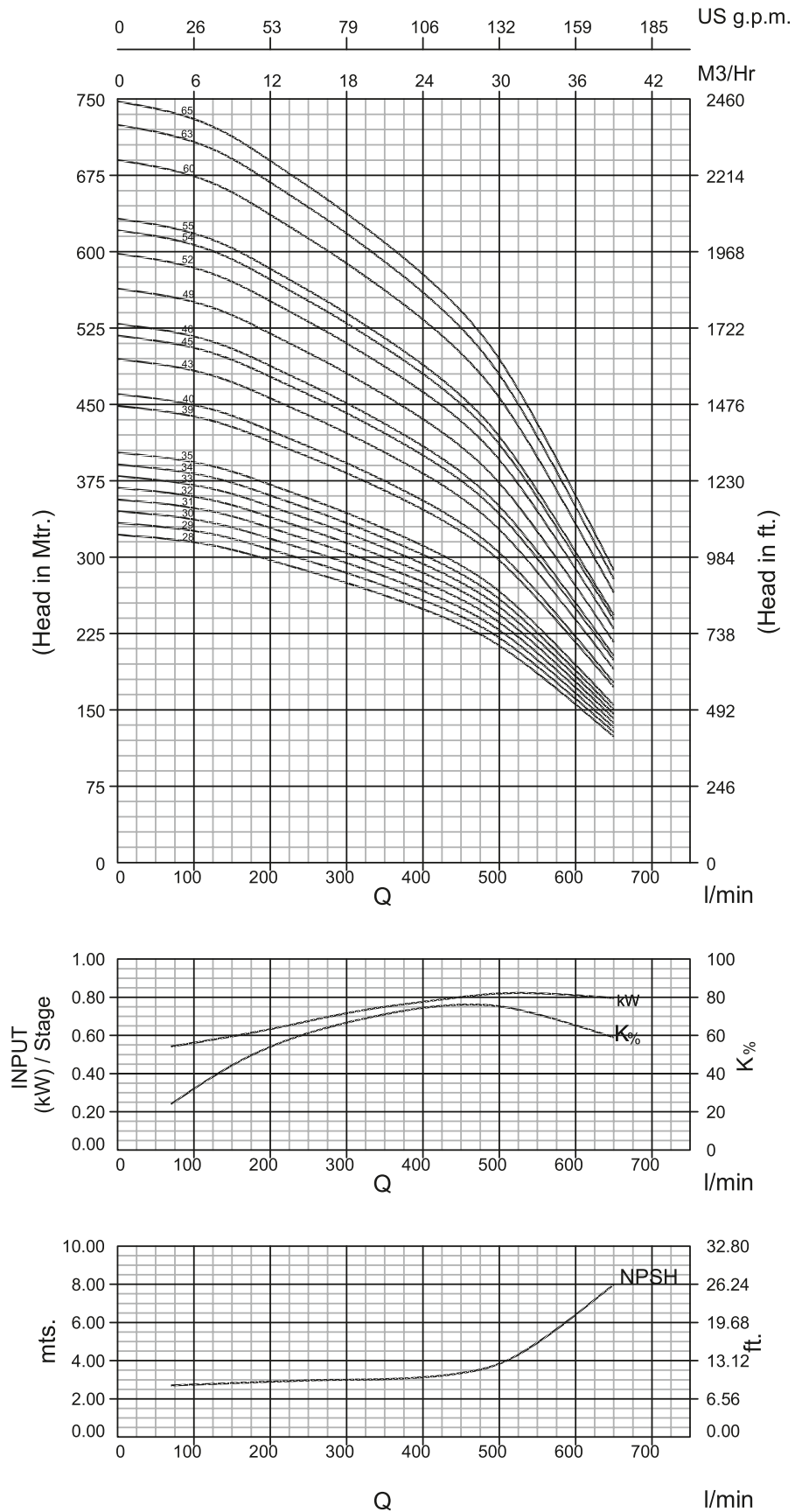
# 6RP 32, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# PERFORMANCE CURVES



# 6RP 32, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CHART

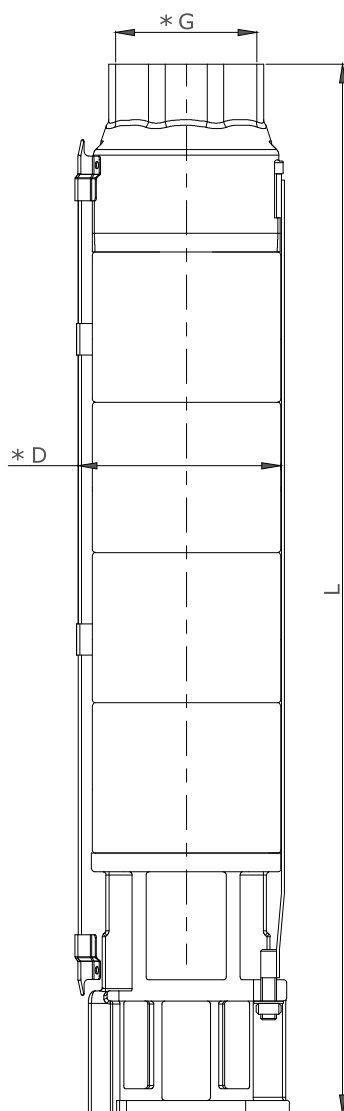
| Model Name  |       | Rating |    |                            | Discharge |     |     |      |      |      |      |      |      |      |
|-------------|-------|--------|----|----------------------------|-----------|-----|-----|------|------|------|------|------|------|------|
| Three Phase | Stage | kW     | HP | l/min<br>m <sup>3</sup> /h | 0         | 70  | 135 | 200  | 270  | 335  | 400  | 470  | 535  | 650  |
|             |       |        |    |                            | 0         | 4.2 | 8.1 | 12.0 | 16.2 | 20.1 | 24.0 | 28.2 | 32.1 | 39.0 |

|           |    |       |       |               |      |      |     |      |     |     |     |     |     |     |
|-----------|----|-------|-------|---------------|------|------|-----|------|-----|-----|-----|-----|-----|-----|
| 6RP 32-01 | 1  | 1.10  | 1.50  | HEAD IN Mtrs. | 11.5 | 11.3 | 11  | 10.5 | 10  | 9.5 | 9   | 8   | 7   | 4   |
| 6RP 32-02 | 2  | 2.20  | 3.00  |               | 23   | 22.5 | 22  | 21   | 20  | 19  | 18  | 16  | 14  | 9   |
| 6RP 32-03 | 3  | 3.00  | 4.00  |               | 34.5 | 34   | 33  | 32   | 30  | 29  | 27  | 24  | 21  | 13  |
| 6RP 32-04 | 4  | 4.00  | 5.50  |               | 46   | 45   | 44  | 42   | 40  | 38  | 36  | 33  | 28  | 18  |
| 6RP 32-05 | 5  | 5.50  | 7.50  |               | 58   | 57   | 56  | 53   | 50  | 48  | 45  | 41  | 35  | 22  |
| 6RP 32-06 | 6  | 5.50  | 7.50  |               | 69   | 68   | 67  | 64   | 60  | 57  | 53  | 49  | 42  | 27  |
| 6RP 32-07 | 7  | 7.50  | 10.00 |               | 80.5 | 80   | 78  | 74   | 70  | 67  | 62  | 57  | 49  | 31  |
| 6RP 32-08 | 8  | 7.50  | 10.00 |               | 92   | 91   | 89  | 85   | 81  | 76  | 71  | 65  | 56  | 35  |
| 6RP 32-09 | 9  | 9.30  | 12.50 |               | 104  | 102  | 100 | 95   | 91  | 86  | 80  | 73  | 63  | 40  |
| 6RP 32-10 | 10 | 9.30  | 12.50 |               | 115  | 114  | 111 | 106  | 101 | 95  | 89  | 81  | 70  | 44  |
| 6RP 32-11 | 11 | 9.30  | 12.50 |               | 126  | 125  | 122 | 117  | 111 | 105 | 98  | 90  | 78  | 49  |
| 6RP 32-12 | 12 | 11.00 | 15.00 |               | 138  | 136  | 133 | 127  | 121 | 114 | 107 | 98  | 85  | 53  |
| 6RP 32-13 | 13 | 11.00 | 15.00 |               | 150  | 148  | 145 | 138  | 131 | 124 | 116 | 106 | 92  | 57  |
| 6RP 32-14 | 14 | 13.00 | 17.50 |               | 161  | 159  | 156 | 148  | 141 | 133 | 125 | 114 | 99  | 62  |
| 6RP 32-15 | 15 | 13.00 | 17.50 |               | 172  | 171  | 167 | 159  | 151 | 143 | 134 | 122 | 106 | 66  |
| 6RP 32-16 | 16 | 15.00 | 20.00 |               | 184  | 182  | 178 | 170  | 161 | 152 | 143 | 130 | 113 | 71  |
| 6RP 32-17 | 17 | 15.00 | 20.00 |               | 196  | 193  | 189 | 180  | 171 | 162 | 151 | 138 | 120 | 75  |
| 6RP 32-18 | 18 | 18.50 | 25.00 |               | 207  | 205  | 200 | 191  | 181 | 171 | 160 | 147 | 127 | 80  |
| 6RP 32-19 | 19 | 18.50 | 25.00 |               | 218  | 216  | 211 | 201  | 191 | 181 | 169 | 155 | 134 | 84  |
| 6RP 32-20 | 20 | 18.50 | 25.00 |               | 230  | 227  | 222 | 212  | 201 | 190 | 178 | 163 | 141 | 88  |
| 6RP 32-21 | 21 | 18.50 | 25.00 |               | 242  | 239  | 234 | 223  | 211 | 200 | 187 | 171 | 148 | 93  |
| 6RP 32-22 | 22 | 22.00 | 30.00 |               | 253  | 250  | 245 | 233  | 222 | 209 | 196 | 179 | 155 | 97  |
| 6RP 32-23 | 23 | 22.00 | 30.00 |               | 264  | 262  | 256 | 244  | 232 | 219 | 205 | 187 | 162 | 102 |
| 6RP 32-24 | 24 | 22.00 | 30.00 |               | 276  | 273  | 267 | 254  | 242 | 228 | 214 | 195 | 169 | 106 |
| 6RP 32-25 | 25 | 22.00 | 30.00 |               | 288  | 284  | 278 | 265  | 252 | 238 | 223 | 204 | 176 | 110 |
| 6RP 32-26 | 26 | 22.00 | 30.00 |               | 299  | 296  | 289 | 276  | 262 | 247 | 232 | 212 | 183 | 115 |
| 6RP 32-27 | 27 | 26.00 | 35.00 |               | 310  | 307  | 300 | 286  | 272 | 257 | 241 | 220 | 190 | 119 |
| 6RP 32-28 | 28 | 26.00 | 35.00 |               | 322  | 318  | 311 | 297  | 282 | 266 | 249 | 228 | 197 | 124 |
| 6RP 32-29 | 29 | 26.00 | 35.00 |               | 334  | 330  | 322 | 307  | 292 | 276 | 258 | 236 | 204 | 128 |
| 6RP 32-30 | 30 | 26.00 | 35.00 |               | 345  | 341  | 334 | 318  | 302 | 285 | 267 | 244 | 212 | 133 |
| 6RP 32-31 | 31 | 26.00 | 35.00 |               | 356  | 352  | 345 | 329  | 312 | 295 | 276 | 252 | 219 | 137 |
| 6RP 32-32 | 32 | 30.00 | 40.00 |               | 368  | 364  | 356 | 339  | 322 | 304 | 285 | 260 | 226 | 141 |
| 6RP 32-33 | 33 | 30.00 | 40.00 |               | 380  | 375  | 367 | 350  | 332 | 314 | 294 | 269 | 233 | 146 |
| 6RP 32-34 | 34 | 30.00 | 40.00 |               | 391  | 387  | 378 | 360  | 342 | 323 | 303 | 277 | 240 | 150 |
| 6RP 32-35 | 35 | 30.00 | 40.00 |               | 402  | 398  | 389 | 371  | 352 | 333 | 312 | 285 | 247 | 155 |
| 6RP 32-39 | 39 | 37.00 | 50.00 |               | 448  | 443  | 434 | 413  | 393 | 371 | 347 | 317 | 275 | 172 |
| 6RP 32-43 | 43 | 37.00 | 50.00 |               | 494  | 489  | 478 | 456  | 433 | 409 | 383 | 350 | 303 | 190 |
| 6RP 32-45 | 45 | 37.00 | 50.00 |               | 518  | 512  | 500 | 477  | 453 | 428 | 401 | 366 | 317 | 199 |
| 6RP 32-46 | 46 | 45.00 | 60.00 |               | 529  | 523  | 512 | 488  | 463 | 437 | 410 | 374 | 324 | 203 |
| 6RP 32-49 | 49 | 55.00 | 60.00 |               | 564  | 557  | 545 | 519  | 493 | 466 | 437 | 399 | 345 | 217 |
| 6RP 32-52 | 52 | 55.00 | 60.00 |               | 598  | 591  | 578 | 551  | 524 | 495 | 463 | 423 | 367 | 230 |
| 6RP 32-54 | 54 | 55.00 | 75.00 |               | 621  | 614  | 600 | 572  | 544 | 514 | 481 | 440 | 381 | 239 |
| 6RP 32-55 | 55 | 55.00 | 75.00 |               | 632  | 625  | 612 | 583  | 554 | 523 | 490 | 448 | 388 | 243 |
| 6RP 32-60 | 60 | 60.00 | 80.00 |               | 690  | 682  | 667 | 636  | 604 | 571 | 535 | 488 | 423 | 265 |
| 6RP 32-63 | 63 | 63.00 | 85.00 |               | 724  | 716  | 701 | 668  | 634 | 599 | 561 | 513 | 444 | 278 |
| 6RP 32-65 | 65 | 63.00 | 85.00 |               | 748  | 739  | 723 | 689  | 655 | 618 | 579 | 529 | 458 | 287 |

# 6RP 32, 50Hz

ISO 9906 Annexure A

## Dimensions & Weights



| Model Name  | Specification |        |                 |                         |
|-------------|---------------|--------|-----------------|-------------------------|
|             | *D (mm)       | L (mm) | Pump Weight Kg. | Weight (Incl. pkg.) Kg. |
| 6RP 32 - 01 | 142           | 369    | 9               | 10                      |
| 6RP 32 - 02 | 142           | 465    | 11              | 12                      |
| 6RP 32 - 03 | 142           | 561    | 13              | 15                      |
| 6RP 32 - 04 | 142           | 657    | 15              | 17                      |
| 6RP 32 - 05 | 142           | 753    | 17              | 19                      |
| 6RP 32 - 06 | 142           | 849    | 19              | 22                      |
| 6RP 32 - 07 | 142           | 947    | 21              | 24                      |
| 6RP 32 - 08 | 142           | 1041   | 23              | 26                      |
| 6RP 32 - 09 | 142           | 1137   | 25              | 28                      |
| 6RP 32 - 10 | 142           | 1249   | 27              | 31                      |
| 6RP 32 - 11 | 142           | 1345   | 29              | 33                      |
| 6RP 32 - 12 | 142           | 1441   | 31              | 35                      |
| 6RP 32 - 13 | 142           | 1537   | 33              | 37                      |
| 6RP 32 - 14 | 142           | 1633   | 35              | 40                      |
| 6RP 32 - 15 | 142           | 1729   | 37              | 42                      |
| 6RP 32 - 16 | 142           | 1825   | 39              | 44                      |
| 6RP 32 - 17 | 142           | 1921   | 41              | 47                      |
| 6RP 32 - 18 | 142           | 2017   | 43              | 49                      |
| 6RP 32 - 19 | 142           | 2113   | 45              | 51                      |
| 6RP 32 - 20 | 142           | 2209   | 47              | 53                      |
| 6RP 32 - 21 | 142           | 2305   | 49              | 56                      |
| 6RP 32 - 22 | 142           | 2401   | 51              | 58                      |
| 6RP 32 - 23 | 142           | 2497   | 53              | 60                      |
| 6RP 32 - 24 | 142           | 2593   | 55              | 62                      |
| 6RP 32 - 25 | 142           | 2689   | 57              | 65                      |
| 6RP 32 - 26 | 142           | 2785   | 59              | 67                      |
| 6RP 32 - 27 | 142           | 2881   | 61              | 69                      |
| 6RP 32 - 28 | 142           | 2977   | 63              | 72                      |
| 6RP 32 - 29 | 142           | 3073   | 65              | 74                      |
| 6RP 32 - 30 | 142           | 3169   | 67              | 76                      |
| 6RP 32 - 31 | 142           | 3265   | 69              | 78                      |
| 6RP 32 - 32 | 142           | 3361   | 71              | 81                      |
| 6RP 32 - 33 | 142           | 3457   | 73              | 83                      |
| 6RP 32 - 34 | 142           | 3553   | 75              | 85                      |
| 6RP 32 - 35 | 142           | 3631   | 77              | 87                      |
| 6RP 32 - 39 | 142           | 4033   | 87              | 96                      |
| 6RP 32 - 43 | 142           | 4417   | 95              | 106                     |
| 6RP 32 - 46 | 142           | 4705   | 99              | 112                     |
| 6RP 32 - 49 | 142           | 4993   | 105             | 119                     |
| 6RP 32 - 52 | 142           | 5281   | 111             | 126                     |
| 6RP 32 - 54 | 142           | 5473   | 115             | 131                     |
| 6RP 32 - 58 | 142           | 5857   | 123             | 140                     |
| 6RP 32 - 60 | 142           | 6049   | 127             | 144                     |

\*G : Available Outlet Size 2.5" BSP & 3.0" BSP

\*D : With Cable Guard

6RP 32 - 01 to 6RP 32 - 08 Pumps Are Also Available in 4" Joining.

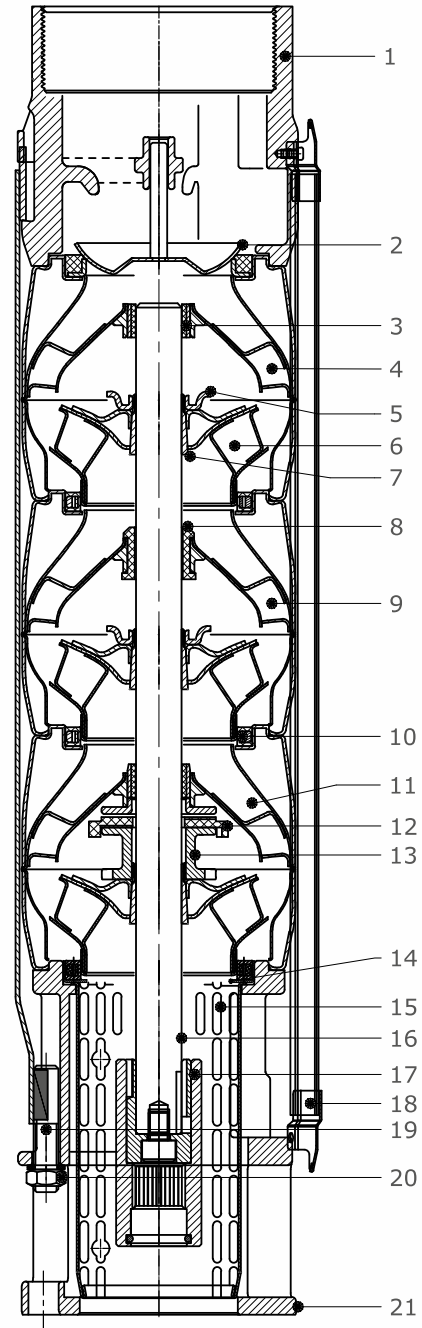
6RP 32-46, 6RP 32-49, 6RP 32-52, 6RP 32-54, 6RP 58 & 6RP 32-60 Pumps Are Also Available with & without mounted sleeve in 8" Joining

# 6RP 48 & 6RP 62 SERIES PUMP DESIGN

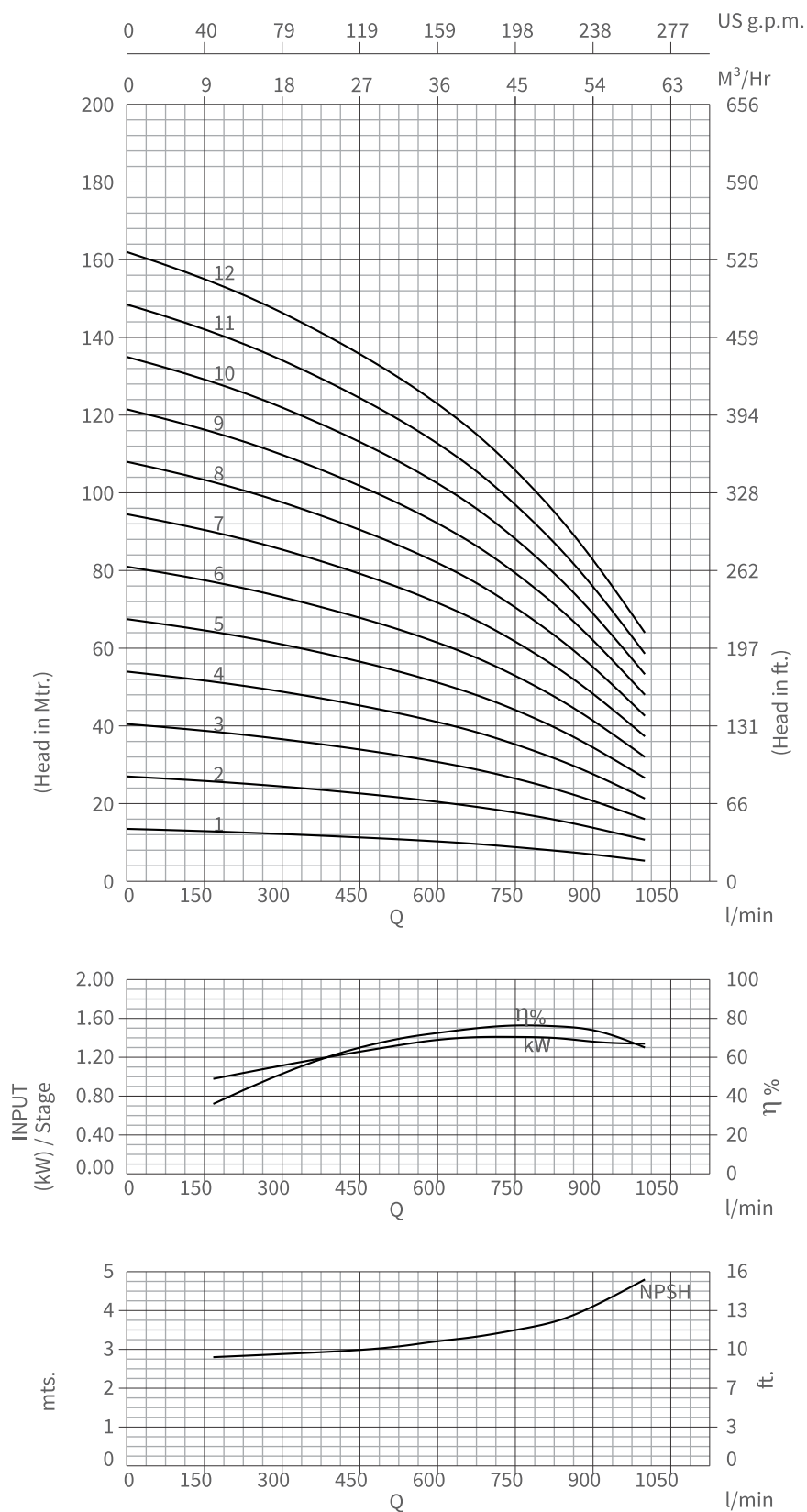
## Material Specification

| No | PART NAME                     | MATERIAL         |
|----|-------------------------------|------------------|
| 1  | DISCHARGE CHAMBER HOUSING     | STEEL CAST 304   |
| 2  | VALVE                         | S.S.304          |
| 3  | TOP & FIRST BEARING BUSH      | N.B.R. + S.S.304 |
| 4  | INTERMEDIATE CHAMBER TOP      | S.S.304          |
| 5  | COLLET NUT                    | S.S.304          |
| 6  | IMPELLER                      | S.S.304          |
| 7  | COLLET                        | S.S.304          |
| 8  | BEARING BUSH                  | NBR              |
| 9  | INTERMEDIATE CHAMBER STAGE    | S.S.304          |
| 10 | NECKRING                      | N.B.R. + NYLON   |
| 11 | INTERMEDIATE CHAMBER 1st      | S.S.304          |
| 12 | SPACING WASHER                | 25% CFT          |
| 13 | FIRST STAGE NUT               | STEEL CAST 304   |
| 14 | RETAINER                      | S.S.304          |
| 15 | STRAINER                      | S.S.304          |
| 16 | PUMP SHAFT (UP TO 09 STAGES)  | S.S.431          |
|    | PUMP SHAFT (10 STAGE & ABOVE) | S.S.1.4362       |
| 17 | NEMA COUPLING                 | S.S.304          |
| 18 | CABLE GUARD                   | S.S.304          |
| 19 | CLAMPING STRIP                | S.S.304          |
| 20 | HEX NUT                       | S.S. 316         |
| 21 | SUCTION                       | STEEL CAST 304   |

NOTE :  
PUMPS UP TO 20 STAGE DISCHARGE  
CHAMBER COMES WITH S.S.  
FABRICATED AND FROM 21 STAGE &  
ONWARDS WITH STEEL CAST.



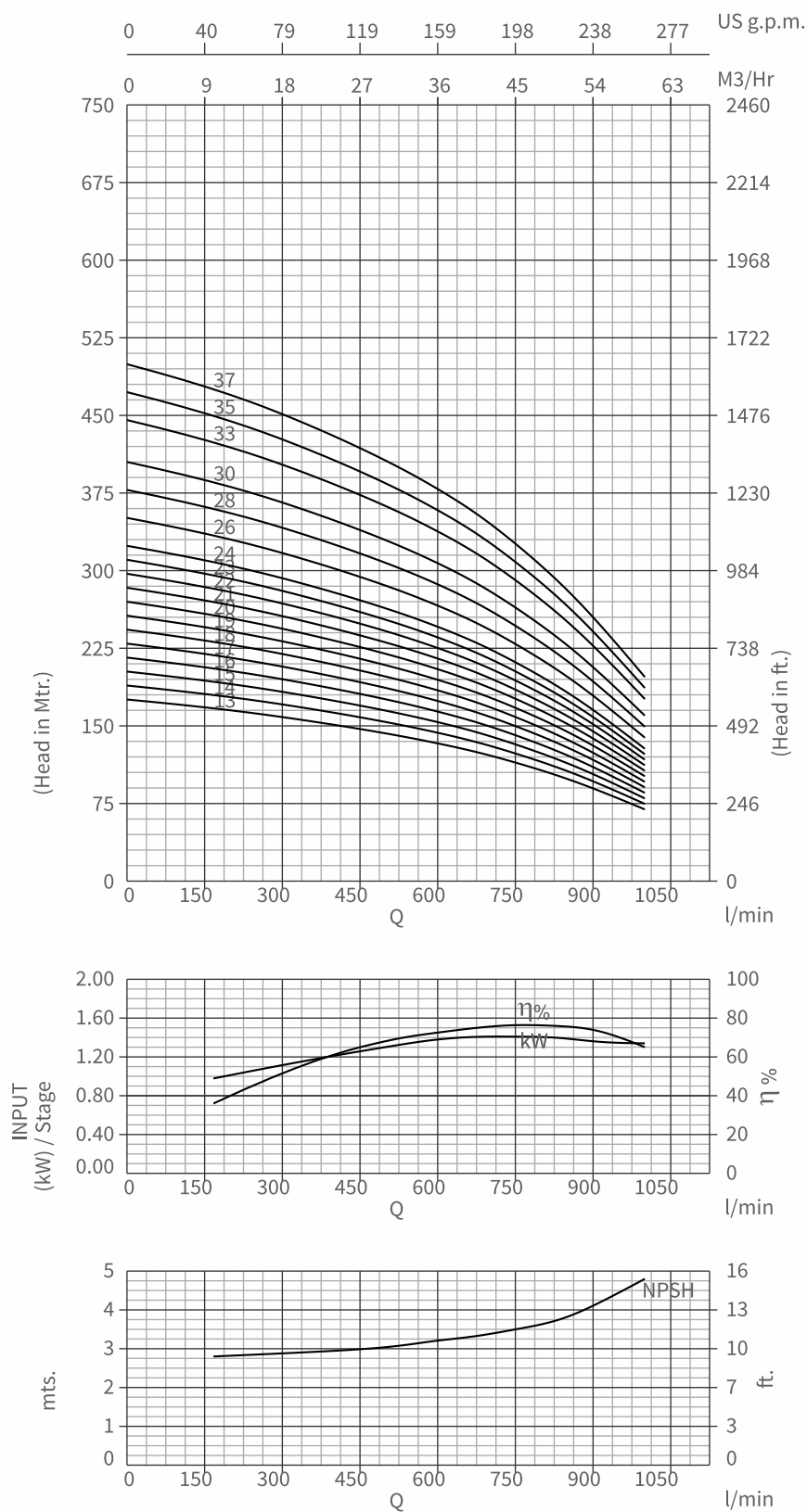
# PERFORMANCE CURVES



# 6RP 48, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# 6RP 48, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CHART

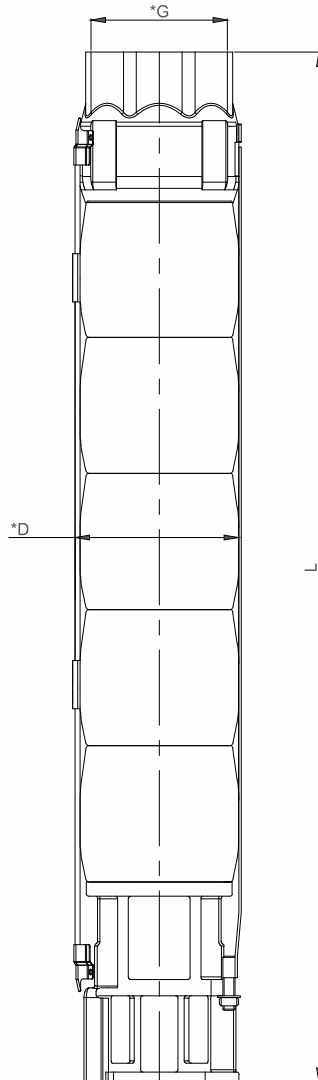
| MODEL NAME  |       | RATING |    |       | DISCHARGE |      |      |      |      |      |      |      |      |      |
|-------------|-------|--------|----|-------|-----------|------|------|------|------|------|------|------|------|------|
| THREE PHASE | STAGE | kW     | HP | l/min | 0         | 167  | 335  | 500  | 585  | 670  | 750  | 835  | 917  | 1000 |
|             |       |        |    | m³/h  | 0         | 10.0 | 20.1 | 30.0 | 35.1 | 40.2 | 45.0 | 50.1 | 55.0 | 60.0 |

|           |    |       |       |               |     |     |     |     |     |     |     |     |     |     |
|-----------|----|-------|-------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 6RP 48-01 | 1  | 2.20  | 3.00  | HEAD IN Mtrs. | 14  | 13  | 12  | 11  | 10  | 9.5 | 9   | 8   | 7   | 5   |
| 6RP 48-02 | 2  | 3.00  | 4.00  |               | 27  | 26  | 24  | 22  | 21  | 19  | 18  | 16  | 13  | 11  |
| 6RP 48-03 | 3  | 5.50  | 7.50  |               | 40  | 39  | 36  | 33  | 31  | 29  | 26  | 23  | 20  | 16  |
| 6RP 48-04 | 4  | 7.50  | 10.00 |               | 54  | 52  | 48  | 44  | 41  | 39  | 35  | 31  | 27  | 21  |
| 6RP 48-05 | 5  | 7.50  | 10.00 |               | 68  | 64  | 60  | 55  | 52  | 48  | 44  | 39  | 33  | 27  |
| 6RP 48-06 | 6  | 9.30  | 12.50 |               | 81  | 77  | 72  | 66  | 62  | 58  | 53  | 47  | 40  | 32  |
| 6RP 48-07 | 7  | 11.00 | 15.00 |               | 94  | 90  | 84  | 77  | 73  | 68  | 62  | 55  | 47  | 37  |
| 6RP 48-08 | 8  | 13.00 | 17.50 |               | 108 | 103 | 96  | 88  | 83  | 77  | 71  | 63  | 53  | 43  |
| 6RP 48-09 | 9  | 15.00 | 20.00 |               | 122 | 116 | 108 | 99  | 93  | 87  | 79  | 70  | 60  | 48  |
| 6RP 48-10 | 10 | 15.00 | 20.00 |               | 135 | 129 | 120 | 110 | 104 | 97  | 88  | 78  | 67  | 53  |
| 6RP 48-11 | 11 | 18.50 | 25.00 |               | 148 | 142 | 132 | 121 | 114 | 106 | 97  | 86  | 73  | 59  |
| 6RP 48-12 | 12 | 18.50 | 25.00 |               | 162 | 155 | 144 | 132 | 124 | 116 | 106 | 94  | 80  | 64  |
| 6RP 48-13 | 13 | 22.00 | 30.00 |               | 176 | 168 | 157 | 143 | 135 | 126 | 115 | 102 | 87  | 69  |
| 6RP 48-14 | 14 | 22.00 | 30.00 |               | 189 | 181 | 169 | 154 | 145 | 135 | 124 | 110 | 93  | 75  |
| 6RP 48-15 | 15 | 22.00 | 30.00 |               | 202 | 194 | 181 | 165 | 156 | 145 | 132 | 117 | 100 | 80  |
| 6RP 48-16 | 16 | 26.00 | 35.00 |               | 216 | 206 | 193 | 176 | 166 | 155 | 141 | 125 | 107 | 85  |
| 6RP 48-17 | 17 | 26.00 | 35.00 |               | 230 | 219 | 205 | 187 | 176 | 164 | 150 | 133 | 113 | 91  |
| 6RP 48-18 | 18 | 30.00 | 40.00 |               | 243 | 232 | 217 | 198 | 187 | 174 | 159 | 141 | 120 | 96  |
| 6RP 48-19 | 19 | 30.00 | 40.00 |               | 256 | 245 | 229 | 209 | 197 | 184 | 168 | 149 | 127 | 101 |
| 6RP 48-20 | 20 | 30.00 | 40.00 |               | 270 | 258 | 241 | 220 | 207 | 193 | 177 | 157 | 133 | 107 |
| 6RP 48-21 | 21 | 37.00 | 50.00 |               | 284 | 271 | 253 | 231 | 218 | 203 | 185 | 164 | 140 | 112 |
| 6RP 48-22 | 22 | 37.00 | 50.00 |               | 297 | 284 | 265 | 242 | 228 | 213 | 194 | 172 | 147 | 117 |
| 6RP 48-23 | 23 | 37.00 | 50.00 |               | 310 | 297 | 277 | 253 | 239 | 222 | 203 | 180 | 153 | 123 |
| 6RP 48-24 | 24 | 37.00 | 50.00 |               | 324 | 310 | 289 | 264 | 249 | 232 | 212 | 188 | 160 | 128 |
| 6RP 48-26 | 26 | 45.00 | 60.00 |               | 351 | 335 | 313 | 286 | 270 | 251 | 230 | 204 | 173 | 139 |
| 6RP 48-28 | 28 | 45.00 | 60.00 |               | 378 | 361 | 337 | 308 | 290 | 271 | 247 | 219 | 187 | 149 |
| 6RP 48-30 | 30 | 45.00 | 60.00 |               | 405 | 387 | 361 | 330 | 311 | 290 | 265 | 235 | 200 | 160 |
| 6RP 48-33 | 33 | 55.00 | 75.00 |               | 446 | 426 | 397 | 363 | 342 | 319 | 291 | 258 | 220 | 176 |
| 6RP 48-35 | 35 | 55.00 | 75.00 |               | 472 | 452 | 421 | 385 | 363 | 338 | 309 | 274 | 233 | 187 |
| 6RP 48-37 | 37 | 63.00 | 85.00 |               | 500 | 477 | 445 | 407 | 384 | 358 | 327 | 290 | 247 | 197 |

## 6RP 48, 50Hz

ISO 9906 Annexure A

### Dimensions & Weights



| Model Name  | Specification |        |                 |                         |
|-------------|---------------|--------|-----------------|-------------------------|
|             | *D (mm)       | L (mm) | Pump Weight Kg. | Weight (Incl. pkg.) Kg. |
| 6RP 48 - 01 | 147           | 400    | 10              | 12                      |
| 6RP 48 - 02 | 147           | 513    | 12              | 14                      |
| 6RP 48 - 03 | 147           | 628    | 14              | 16                      |
| 6RP 48 - 04 | 147           | 741    | 16              | 18                      |
| 6RP 48 - 05 | 147           | 854    | 18              | 21                      |
| 6RP 48 - 06 | 147           | 967    | 20              | 23                      |
| 6RP 48 - 07 | 147           | 1080   | 22              | 25                      |
| 6RP 48 - 08 | 147           | 1193   | 24              | 28                      |
| 6RP 48 - 09 | 147           | 1306   | 26              | 30                      |
| 6RP 48 - 10 | 147           | 1424   | 28              | 32                      |
| 6RP 48 - 11 | 147           | 1537   | 30              | 35                      |
| 6RP 48 - 12 | 147           | 1650   | 32              | 37                      |
| 6RP 48 - 13 | 147           | 1763   | 34              | 39                      |
| 6RP 48 - 14 | 147           | 1876   | 36              | 41                      |
| 6RP 48 - 15 | 147           | 1989   | 38              | 44                      |
| 6RP 48 - 16 | 147           | 2102   | 40              | 46                      |
| 6RP 48 - 17 | 147           | 2215   | 42              | 48                      |
| 6RP 48 - 18 | 147           | 2328   | 44              | 51                      |
| 6RP 48 - 19 | 147           | 2441   | 46              | 53                      |
| 6RP 48 - 20 | 147           | 2554   | 48              | 55                      |
| 6RP 48 - 21 | 147           | 2667   | 50              | 58                      |
| 6RP 48 - 22 | 147           | 2780   | 52              | 60                      |
| 6RP 48 - 23 | 147           | 2893   | 54              | 62                      |
| 6RP 48 - 24 | 147           | 3006   | 56              | 64                      |
| 6RP 48 - 26 | 147           | 3232   | 60              | 69                      |
| 6RP 48 - 28 | 147           | 3458   | 64              | 74                      |
| 6RP 48 - 30 | 147           | 3684   | 68              | 78                      |
| 6RP 48 - 33 | 147           | 4023   | 74              | 85                      |

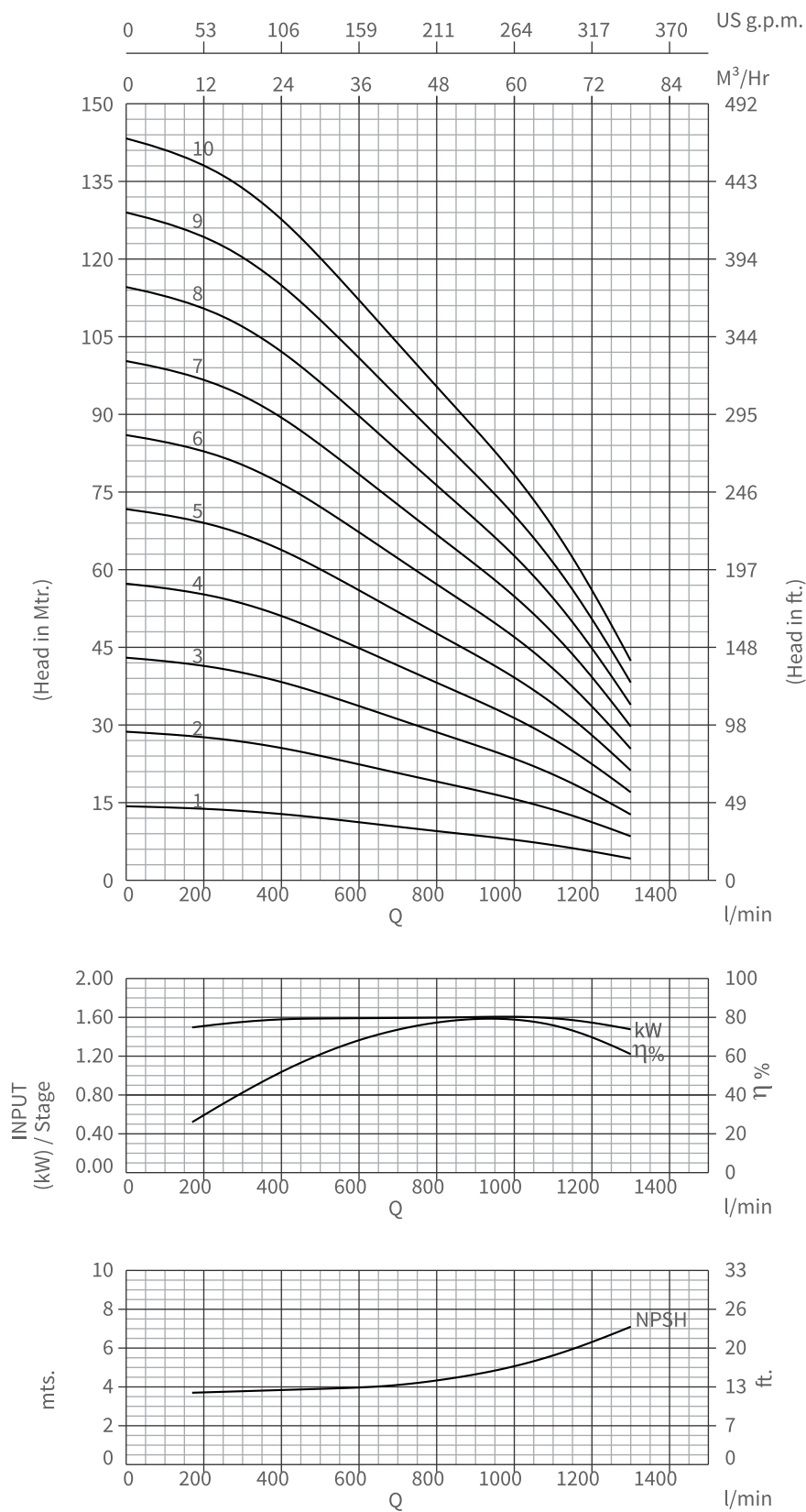
\*G : Available outlet size 3" BSP & 4" BSP

\*D : With cable Guard

6RP 48 - 01 to 6RP 48 - 05 Pumps Are Also Available in 4" Joining.

6RP 48 - 26, 6RP 48 - 28, 6RP 48 - 30, 6RP 48 - 33, 6RP 48 - 35 & 6RP 48 - 37 Pumps Are Also Available with & Without mounted sleeve in 8" Joining.

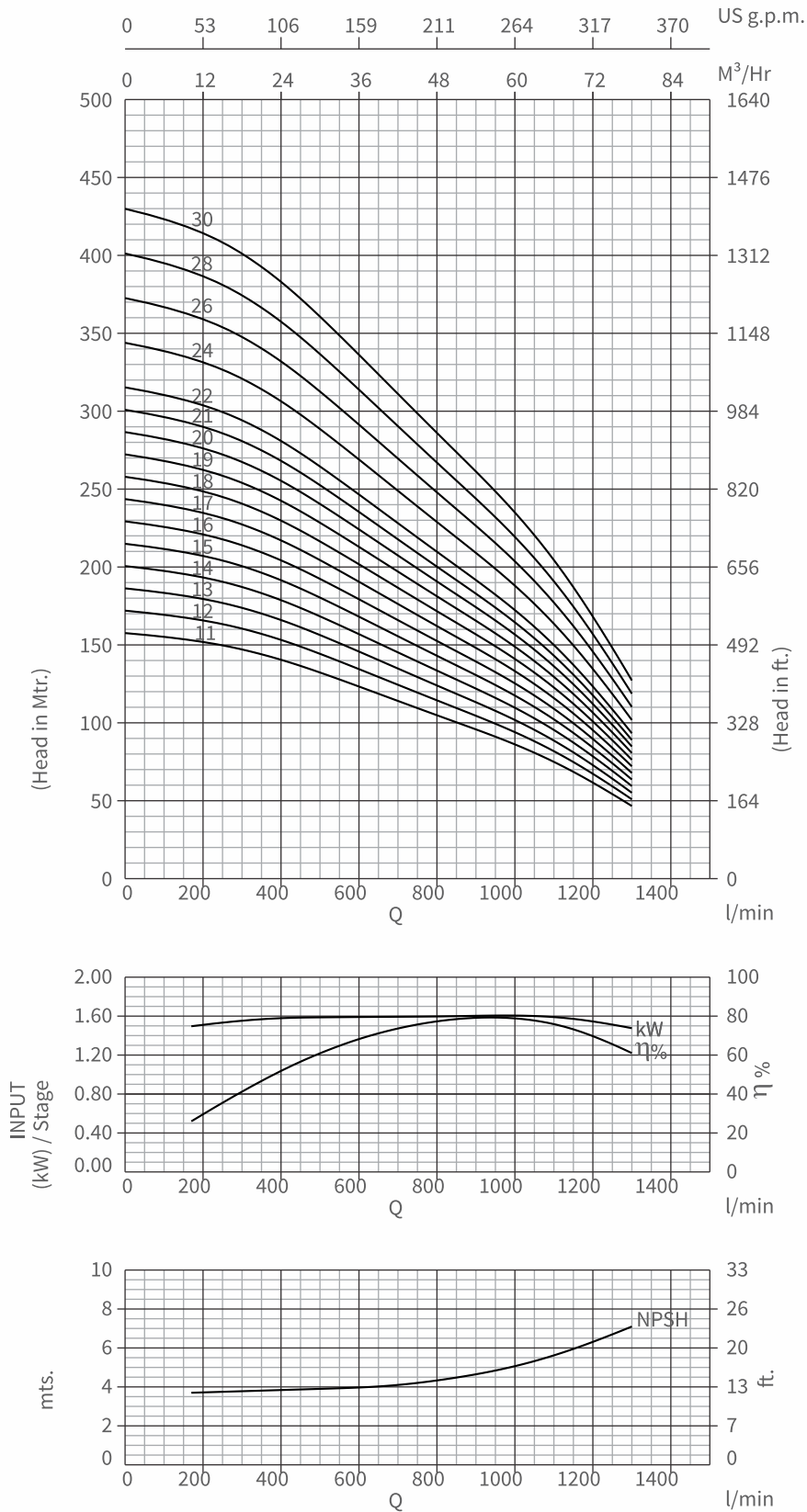
# PERFORMANCE CURVES



# 6RP 62, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# PERFORMANCE CHART

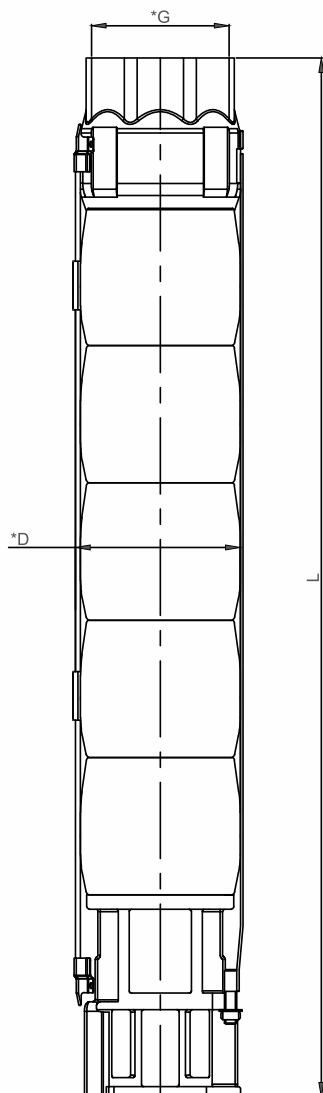
| MODEL NAME  |       | RATING |    |                   | DISCHARGE |      |      |      |      |      |      |      |      |
|-------------|-------|--------|----|-------------------|-----------|------|------|------|------|------|------|------|------|
| THREE PHASE | STAGE | kW     | HP | l/min             | 0         | 170  | 335  | 500  | 670  | 835  | 1000 | 1167 | 1300 |
|             |       |        |    | m <sup>3</sup> /h | 0         | 10.2 | 20.1 | 30.1 | 40.2 | 50.1 | 60.0 | 70.0 | 78.0 |

|           |    |       |       |               |      |     |     |     |     |     |     |     |     |
|-----------|----|-------|-------|---------------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 6RP 62-01 | 1  | 2.20  | 3.00  | HEAD IN Mtrs. | 14.5 | 14  | 13  | 12  | 11  | 9   | 8   | 6   | 4   |
| 6RP 62-02 | 2  | 4.00  | 5.50  |               | 29   | 28  | 27  | 24  | 21  | 18  | 16  | 12  | 8   |
| 6RP 62-03 | 3  | 5.50  | 7.50  |               | 43   | 42  | 40  | 36  | 32  | 28  | 24  | 18  | 13  |
| 6RP 62-04 | 4  | 7.50  | 10.00 |               | 57   | 56  | 53  | 48  | 42  | 37  | 32  | 25  | 17  |
| 6RP 62-05 | 5  | 9.30  | 12.50 |               | 72   | 70  | 66  | 60  | 53  | 46  | 40  | 31  | 21  |
| 6RP 62-06 | 6  | 11.00 | 15.00 |               | 86   | 84  | 80  | 72  | 64  | 55  | 47  | 37  | 25  |
| 6RP 62-07 | 7  | 13.00 | 17.50 |               | 100  | 98  | 93  | 84  | 74  | 65  | 55  | 43  | 30  |
| 6RP 62-08 | 8  | 15.00 | 20.00 |               | 115  | 112 | 106 | 96  | 85  | 74  | 63  | 49  | 34  |
| 6RP 62-09 | 9  | 18.50 | 25.00 |               | 129  | 126 | 120 | 108 | 96  | 83  | 71  | 55  | 38  |
| 6RP 62-10 | 10 | 18.50 | 25.00 |               | 143  | 140 | 133 | 120 | 106 | 92  | 79  | 61  | 42  |
| 6RP 62-11 | 11 | 22.00 | 30.00 |               | 158  | 154 | 146 | 133 | 117 | 102 | 87  | 68  | 47  |
| 6RP 62-12 | 12 | 22.00 | 30.00 |               | 172  | 168 | 159 | 145 | 127 | 111 | 95  | 74  | 51  |
| 6RP 62-13 | 13 | 26.00 | 35.00 |               | 186  | 182 | 173 | 157 | 138 | 120 | 103 | 80  | 55  |
| 6RP 62-14 | 14 | 26.00 | 35.00 |               | 201  | 196 | 186 | 169 | 149 | 129 | 111 | 86  | 59  |
| 6RP 62-15 | 15 | 26.00 | 35.00 |               | 215  | 210 | 199 | 181 | 159 | 139 | 118 | 92  | 64  |
| 6RP 62-16 | 16 | 30.00 | 40.00 |               | 229  | 224 | 212 | 193 | 170 | 148 | 126 | 98  | 68  |
| 6RP 62-17 | 17 | 30.00 | 40.00 |               | 244  | 238 | 226 | 205 | 181 | 157 | 134 | 104 | 72  |
| 6RP 62-18 | 18 | 37.00 | 50.00 |               | 258  | 252 | 239 | 217 | 191 | 166 | 142 | 111 | 76  |
| 6RP 62-19 | 19 | 37.00 | 50.00 |               | 272  | 266 | 252 | 229 | 202 | 176 | 150 | 117 | 81  |
| 6RP 62-20 | 20 | 37.00 | 50.00 |               | 287  | 280 | 266 | 241 | 212 | 185 | 158 | 123 | 85  |
| 6RP 62-21 | 21 | 37.00 | 50.00 |               | 301  | 294 | 279 | 253 | 223 | 194 | 166 | 129 | 89  |
| 6RP 62-22 | 22 | 45.00 | 60.00 |               | 315  | 308 | 292 | 265 | 234 | 203 | 174 | 135 | 93  |
| 6RP 62-24 | 24 | 45.00 | 60.00 |               | 344  | 336 | 319 | 289 | 255 | 222 | 190 | 147 | 102 |
| 6RP 62-26 | 26 | 55.00 | 75.00 |               | 373  | 364 | 345 | 313 | 276 | 240 | 205 | 160 | 110 |
| 6RP 62-28 | 28 | 55.00 | 75.00 |               | 401  | 392 | 372 | 337 | 297 | 259 | 221 | 172 | 119 |
| 6RP 62-30 | 30 | 55.00 | 75.00 |               | 430  | 420 | 398 | 362 | 319 | 277 | 237 | 184 | 127 |

## 6RP 62, 50Hz

ISO 9906 Annexure A

### Dimensions & Weights



| Model Name  | Specification |        |                 |                         |
|-------------|---------------|--------|-----------------|-------------------------|
|             | *D (mm)       | L (mm) | Pump Weight Kg. | Weight (Incl. pkg.) Kg. |
| 6RP 62 - 01 | 147           | 400    | 10              | 12                      |
| 6RP 62 - 02 | 147           | 513    | 12              | 14                      |
| 6RP 62 - 03 | 147           | 628    | 14              | 16                      |
| 6RP 62 - 04 | 147           | 741    | 16              | 18                      |
| 6RP 62 - 05 | 147           | 854    | 18              | 21                      |
| 6RP 62 - 06 | 147           | 967    | 20              | 23                      |
| 6RP 62 - 07 | 147           | 1080   | 22              | 25                      |
| 6RP 62 - 08 | 147           | 1193   | 24              | 28                      |
| 6RP 62 - 09 | 147           | 1306   | 26              | 30                      |
| 6RP 62 - 10 | 147           | 1424   | 28              | 32                      |
| 6RP 62 - 11 | 147           | 1537   | 30              | 35                      |
| 6RP 62 - 12 | 147           | 1650   | 32              | 37                      |
| 6RP 62 - 13 | 147           | 1763   | 34              | 39                      |
| 6RP 62 - 14 | 147           | 1876   | 36              | 41                      |
| 6RP 62 - 15 | 147           | 1989   | 38              | 44                      |
| 6RP 62 - 16 | 147           | 2102   | 40              | 46                      |
| 6RP 62 - 17 | 147           | 2215   | 42              | 48                      |
| 6RP 62 - 18 | 147           | 2328   | 44              | 51                      |
| 6RP 62 - 19 | 147           | 2441   | 46              | 53                      |
| 6RP 62 - 20 | 147           | 2554   | 48              | 55                      |
| 6RP 62 - 21 | 147           | 2667   | 50              | 58                      |
| 6RP 62 - 22 | 147           | 2780   | 52              | 60                      |
| 6RP 62 - 24 | 147           | 3006   | 56              | 64                      |

\*G : Available outlet size 3" BSP & 4" BSP

\*D : With cable Guard

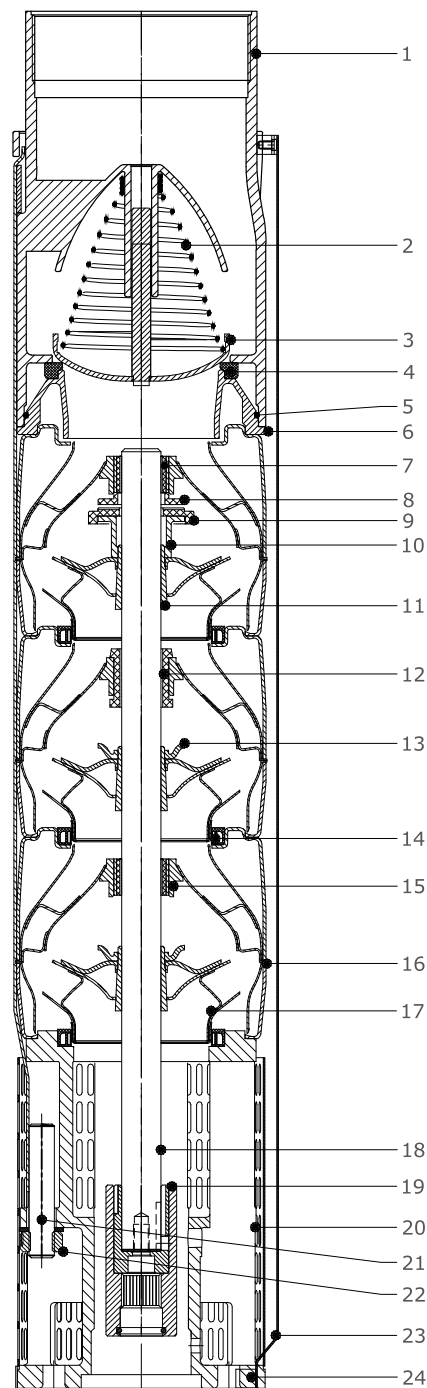
6RP 62 - 01 TO 6RP 62 - 03 Pumps Are Also Available in 4" Joining.

6RP 62 - 22, 6RP 62 - 24, 6RP 62 - 26, 6RP 62 - 28 & 6RP 62 - 30  
Pumps Are Also Available with & without mounted sleeve in 8" Joining.

# 8RP 80 & 8RP 98 SERIES PUMP DESIGN

## Material Specification

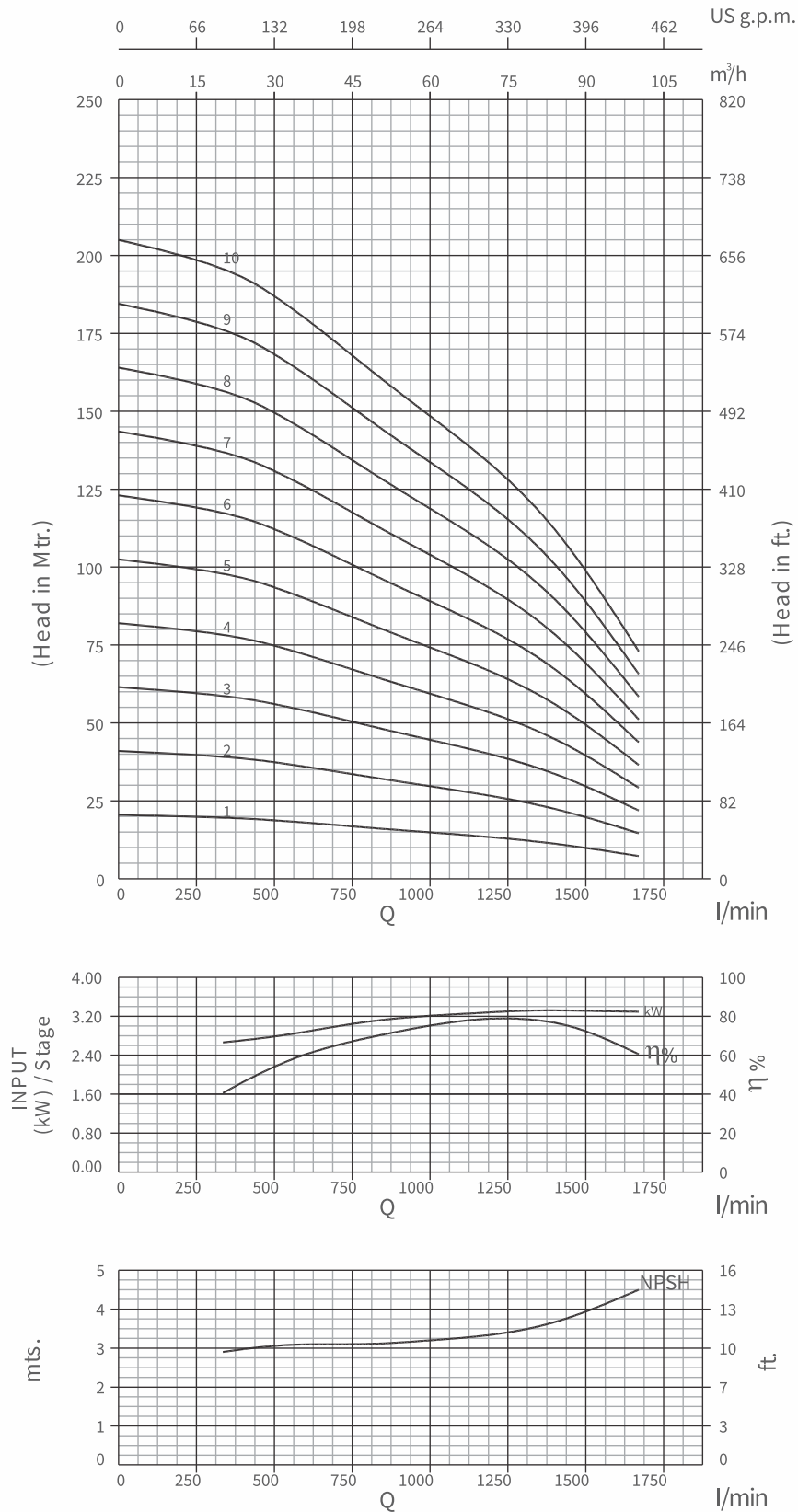
| No | PART NAME                     | MATERIAL         |
|----|-------------------------------|------------------|
| 1  | DISCHARGE CHAMBER HOUSING     | STEEL CAST 304   |
| 2  | SPRING                        | S.S.302          |
| 3  | VALVE                         | S.S.304          |
| 4  | VALVE SEAT                    | N.B.R.           |
| 5  | "O" RING                      | N.B.R.           |
| 6  | VALVE SEAT HOUSING            | STEEL CAST 304   |
| 7  | FIRST STAGE BEARING BUSH      | N.B.R. + S.S.304 |
| 8  | STOP RING                     | S.S.304          |
| 9  | SPACING WASHER                | 25% CFT          |
| 10 | FIRST STAGE NUT               | STEEL CAST 304   |
| 11 | IMPELLER COLLET               | S.S.304          |
| 12 | BEARING BUSH STAGE            | N.B.R.           |
| 13 | COLLET NUT                    | S.S.304          |
| 14 | NECKRING                      | N.B.R. + NYLON   |
| 15 | IMC SLEEVE                    | S.S.304          |
| 16 | INTERMEDIATE CHAMBER          | S.S.304          |
| 17 | IMPELLER                      | S.S.304          |
| 18 | PUMP SHAFT (UP TO 04 STAGES)  | S.S.431          |
|    | PUMP SHAFT (05 STAGE & ABOVE) | S.S.1.4362       |
| 19 | NEMA COUPLING                 | S.S.304          |
| 20 | STRAINER                      | S.S.304          |
| 21 | CLAMPING STRIP                | S.S.304          |
| 22 | HEX NUT                       | S.S.316          |
| 23 | CABLE GUARD                   | S.S.304          |
| 24 | SUCTION                       | STEEL CAST 304   |



# 8RP 80, 50Hz

ISO 9906 Annexure A

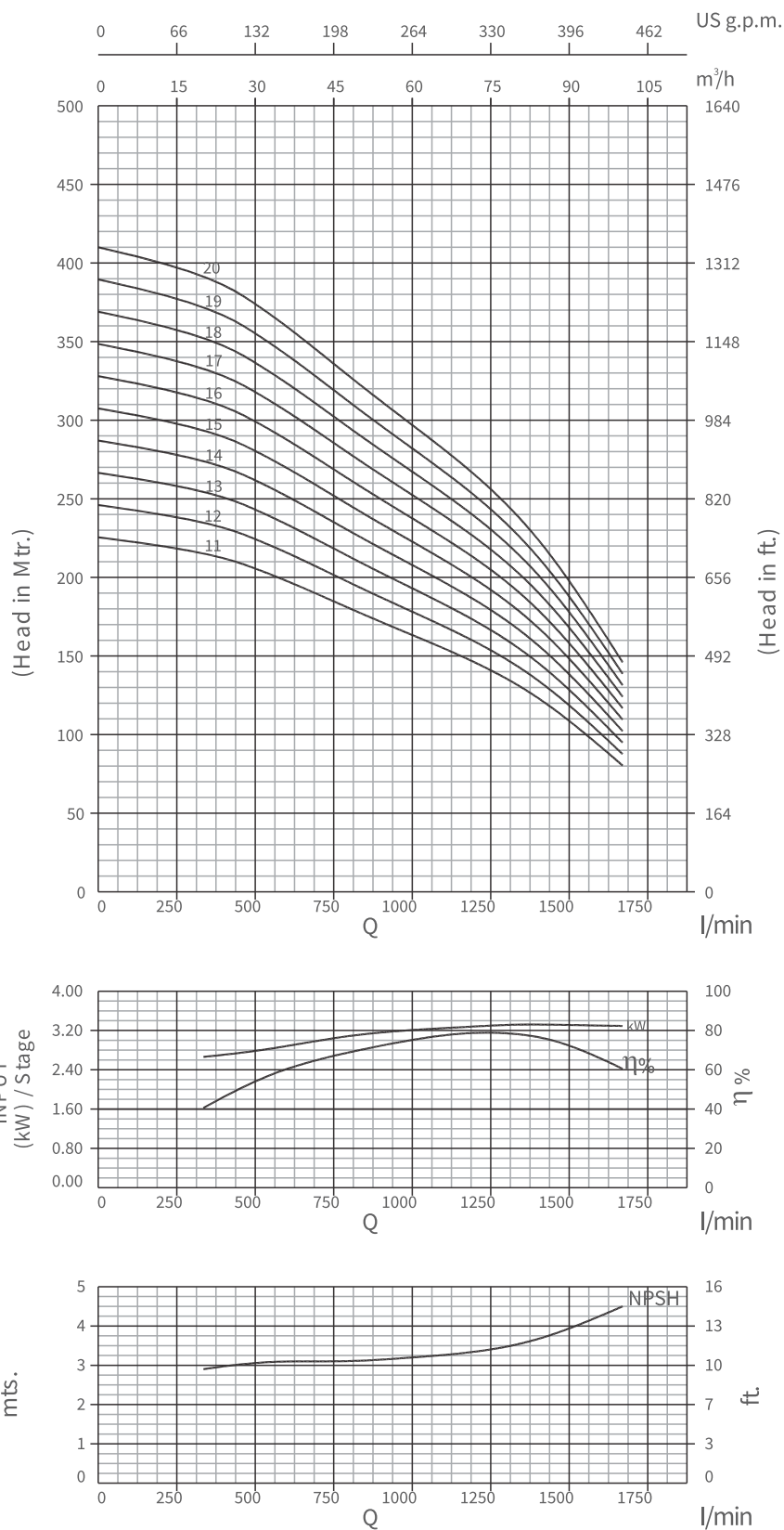
## PERFORMANCE CURVES



# 8RP 80, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# 8RP 80, 50Hz

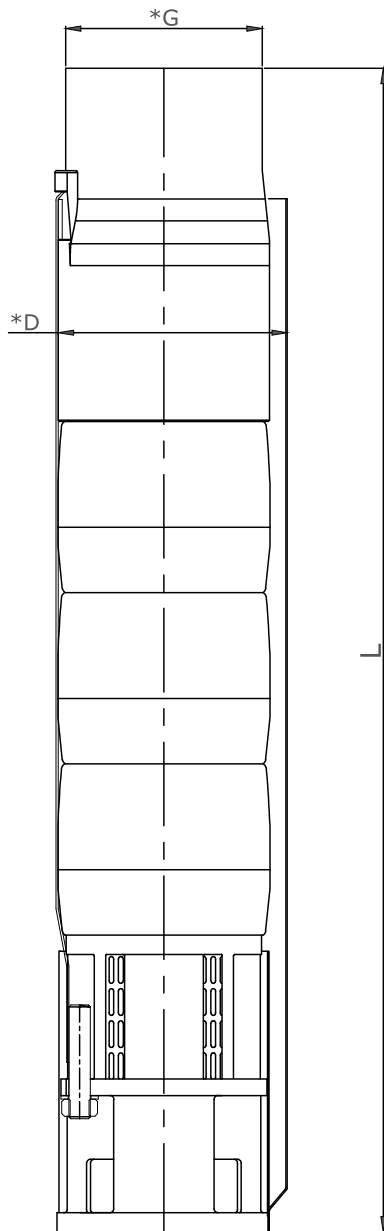
ISO 9906 Annexure A

## PERFORMANCE CHART

| Model Name  |       | Rating |    |                            | Discharge |      |      |      |      |      |      |      |      |       |
|-------------|-------|--------|----|----------------------------|-----------|------|------|------|------|------|------|------|------|-------|
| Three Phase | Stage | kW     | HP | l/min<br>m <sup>3</sup> /h | 0         | 335  | 500  | 670  | 835  | 1000 | 1170 | 1335 | 1500 | 1670  |
|             |       |        |    |                            | 0         | 20.0 | 30.0 | 40.2 | 50.1 | 60.0 | 70.2 | 80.1 | 90.0 | 100.0 |

|           |    |       |       |              |      |     |     |     |     |     |     |     |     |     |
|-----------|----|-------|-------|--------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 8RP 80-01 | 1  | 5.50  | 7.50  | HEAD IN Mts. | 20.5 | 20  | 19  | 17  | 16  | 15  | 14  | 12  | 10  | 7   |
| 8RP 80-02 | 2  | 7.50  | 10.00 |              | 41   | 40  | 38  | 35  | 32  | 30  | 27  | 24  | 20  | 15  |
| 8RP 80-03 | 3  | 11.00 | 15.00 |              | 62   | 59  | 56  | 52  | 48  | 45  | 41  | 36  | 30  | 22  |
| 8RP 80-04 | 4  | 15.00 | 20.00 |              | 82   | 79  | 75  | 70  | 64  | 59  | 54  | 48  | 40  | 29  |
| 8RP 80-05 | 5  | 18.50 | 25.00 |              | 102  | 99  | 94  | 87  | 80  | 74  | 68  | 60  | 50  | 36  |
| 8RP 80-06 | 6  | 22.00 | 30.00 |              | 123  | 118 | 112 | 105 | 97  | 89  | 81  | 72  | 60  | 44  |
| 8RP 80-07 | 7  | 26.00 | 35.00 |              | 144  | 138 | 131 | 122 | 113 | 104 | 95  | 84  | 70  | 51  |
| 8RP 80-08 | 8  | 30.00 | 40.00 |              | 164  | 158 | 150 | 140 | 129 | 119 | 108 | 96  | 80  | 58  |
| 8RP 80-09 | 9  | 30.00 | 40.00 |              | 184  | 178 | 169 | 157 | 145 | 134 | 122 | 108 | 90  | 66  |
| 8RP 80-10 | 10 | 37.00 | 50.00 |              | 205  | 198 | 188 | 174 | 161 | 148 | 136 | 120 | 100 | 73  |
| 8RP 80-11 | 11 | 37.00 | 50.00 |              | 226  | 217 | 206 | 192 | 177 | 163 | 149 | 133 | 110 | 80  |
| 8RP 80-12 | 12 | 45.00 | 60.00 |              | 246  | 237 | 225 | 209 | 193 | 178 | 163 | 145 | 120 | 88  |
| 8RP 80-13 | 13 | 55.00 | 75.00 |              | 266  | 257 | 244 | 227 | 209 | 193 | 176 | 157 | 130 | 95  |
| 8RP 80-14 | 14 | 55.00 | 75.00 |              | 287  | 276 | 262 | 244 | 225 | 208 | 190 | 169 | 140 | 102 |
| 8RP 80-15 | 15 | 55.00 | 75.00 |              | 308  | 296 | 281 | 262 | 242 | 223 | 203 | 181 | 150 | 110 |
| 8RP 80-16 | 16 | 63.00 | 85.00 |              | 328  | 316 | 300 | 279 | 258 | 238 | 217 | 193 | 160 | 117 |
| 8RP 80-17 | 17 | 63.00 | 85.00 |              | 348  | 336 | 319 | 297 | 274 | 252 | 230 | 205 | 170 | 124 |
| 8RP 80-18 | 18 | 63.00 | 85.00 |              | 369  | 356 | 338 | 314 | 290 | 267 | 244 | 217 | 180 | 131 |
| 8RP 80-19 | 19 | 75.00 | 100.0 |              | 390  | 375 | 356 | 332 | 306 | 282 | 257 | 229 | 190 | 139 |
| 8RP 80-20 | 20 | 75.00 | 100.0 |              | 410  | 395 | 375 | 349 | 322 | 297 | 271 | 241 | 200 | 146 |

## Dimensions & Weights



| Model Name  | Specification |             |           |                         |                            |
|-------------|---------------|-------------|-----------|-------------------------|----------------------------|
|             | D*<br>(mm)    | D**<br>(mm) | L<br>(mm) | Pump Weight<br>(in Kg.) | Weight (Incl.<br>pkg.) Kg. |
| 8RP 80 - 01 | 175           | 180         | 620       | 21                      | 23                         |
| 8RP 80 - 02 | 175           | 180         | 748       | 25                      | 28                         |
| 8RP 80 - 03 | 175           | 180         | 876       | 29                      | 32                         |
| 8RP 80 - 04 | 175           | 180         | 1004      | 33                      | 36                         |
| 8RP 80 - 05 | 175           | 180         | 1132      | 37                      | 41                         |
| 8RP 80 - 06 | 175           | 180         | 1260      | 41                      | 45                         |
| 8RP 80 - 07 | 175           | 180         | 1388      | 45                      | 50                         |
| 8RP 80 - 08 | 175           | 180         | 1516      | 49                      | 54                         |
| 8RP 80 - 09 | 175           | 180         | 1644      | 53                      | 58                         |
| 8RP 80 - 10 | 175           | 180         | 1772      | 55                      | 63                         |
| 8RP 80 - 11 | 175           | 180         | 1900      | 59                      | 67                         |
| 8RP 80 - 12 | 196           | 200         | 2028      | 63                      | 72                         |
| 8RP 80 - 13 | 196           | 200         | 2156      | 67                      | 76                         |
| 8RP 80 - 14 | 196           | 200         | 2284      | 71                      | 80                         |
| 8RP 80 - 15 | 196           | 200         | 2412      | 75                      | 85                         |
| 8RP 80 - 16 | 196           | 200         | 2540      | 79                      | 89                         |
| 8RP 80 - 17 | 196           | 200         | 2668      | 83                      | 87                         |
| 8RP 80 - 18 | 196           | 200         | 2796      | 87                      | 94                         |
| 8RP 80 - 19 | 196           | 200         | 2924      | 91                      | 98                         |
| 8RP 80 - 20 | 196           | 200         | 3052      | 95                      | 102                        |

\* G: Available Outlet Size 5" BSP

\* D: Maximum Diameter With Single Cable Guard

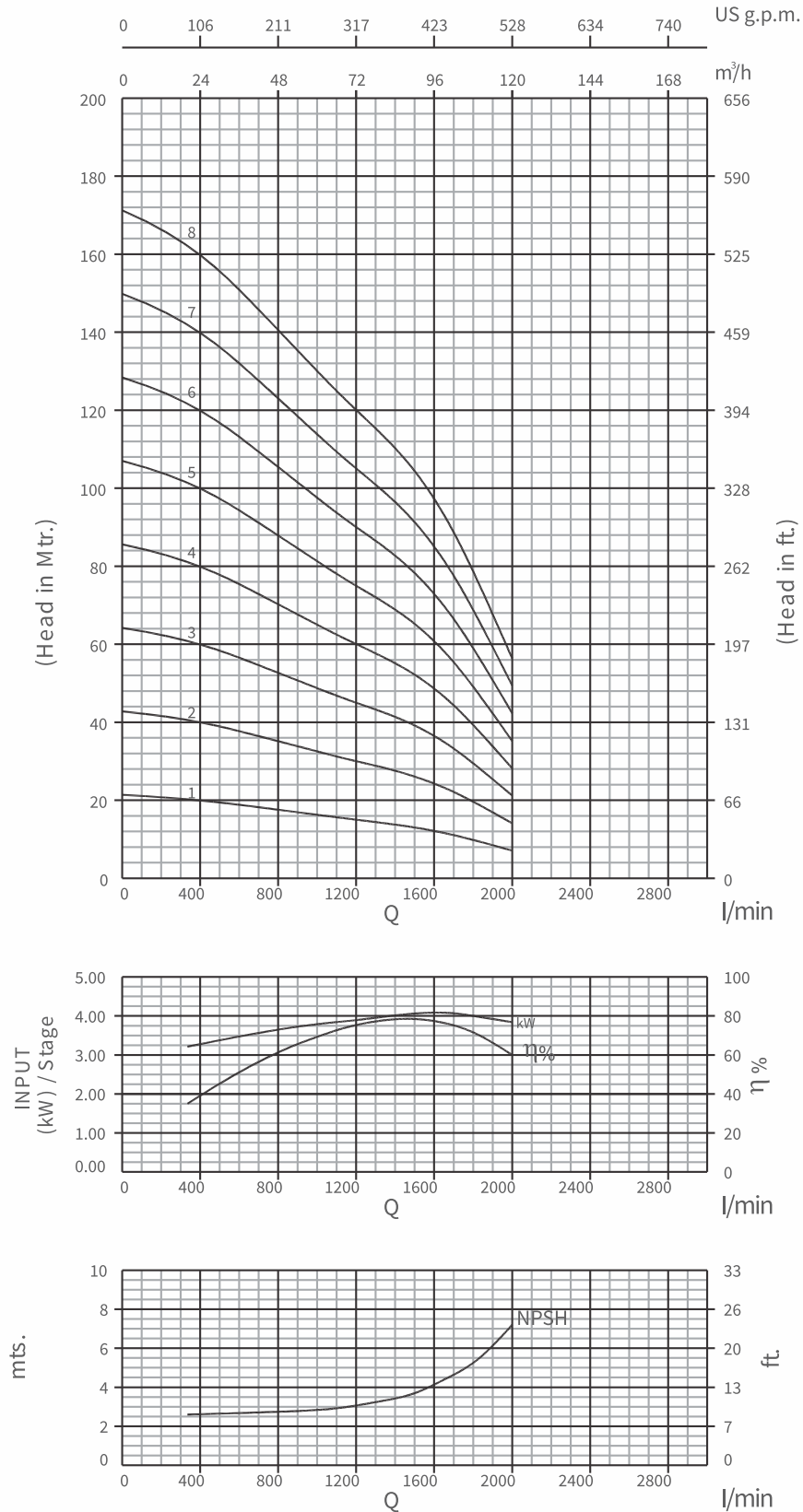
\*\* D: Maximum Diameter With Double Cable Guard  
upto 50 HP 6" Motor Joining.

8RP 80 - 01 TO 8RP 80 - 11 Pump Are Available in 6" Joining.  
8RP 80 - 12 to 8RP 80 - 20 Pump Are Available in 8" Joining.

# 8RP 98, 50Hz

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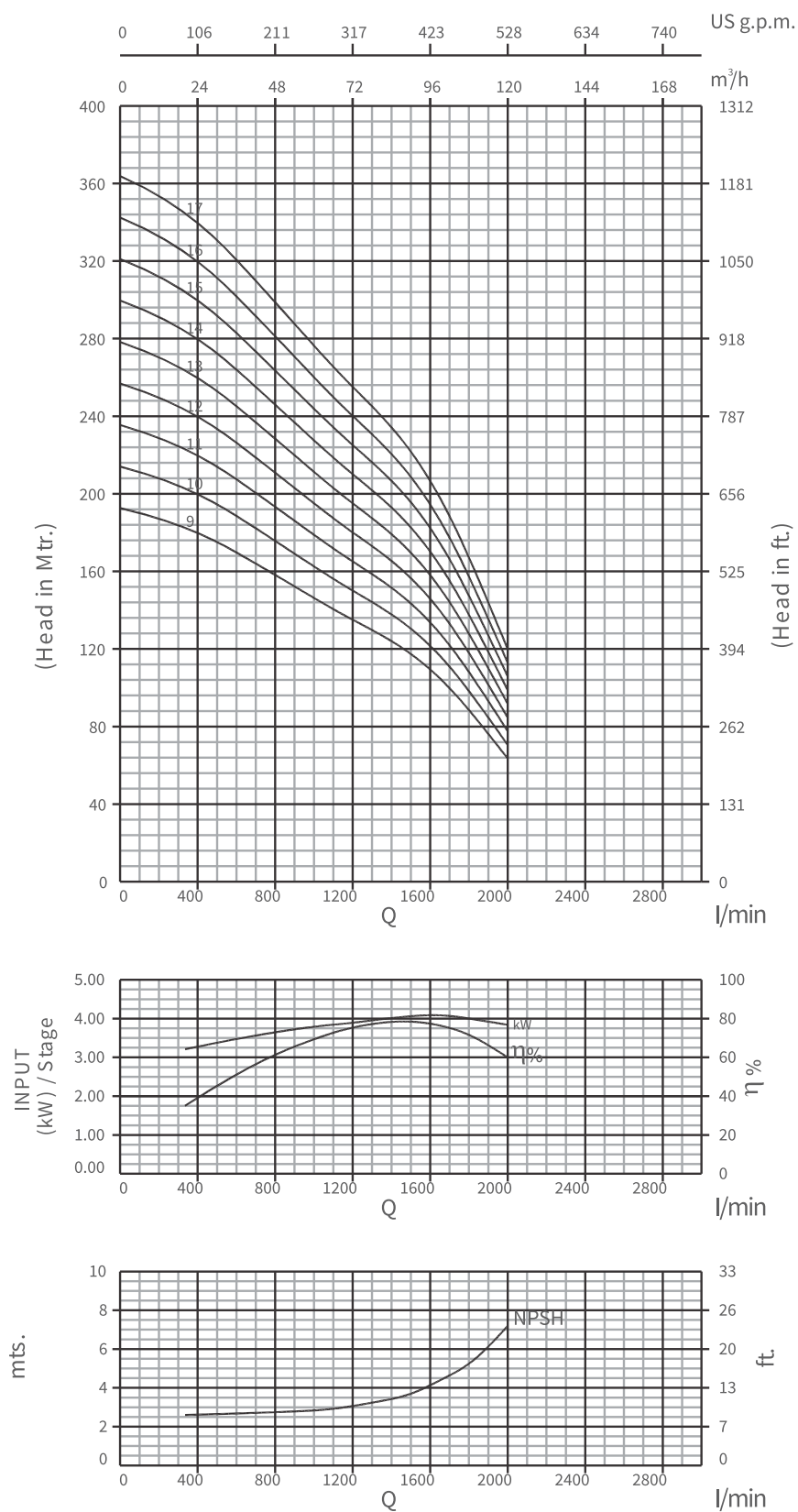
## PERFORMANCE CURVES



# 8RP 98, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# 8RP 98, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CHART

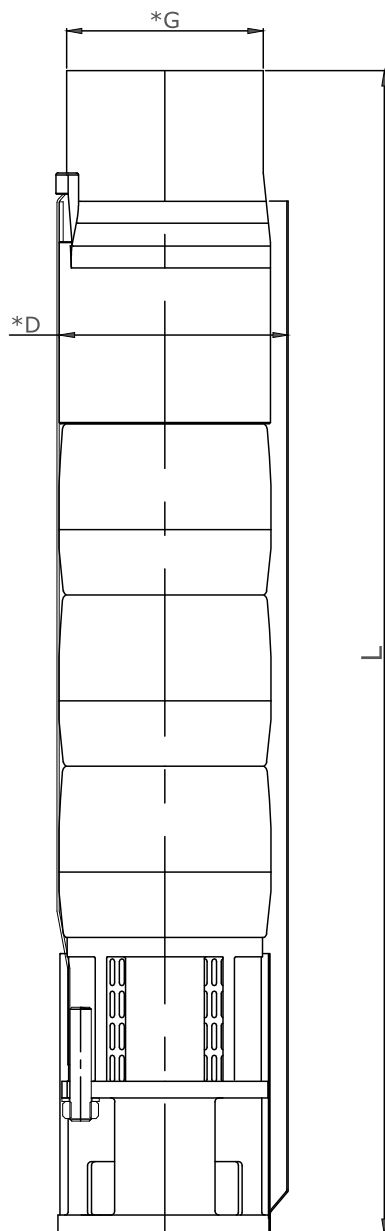
| Model Name  |       | Rating |    |                   | Discharge |      |      |      |      |      |      |       |       |       |
|-------------|-------|--------|----|-------------------|-----------|------|------|------|------|------|------|-------|-------|-------|
| Three Phase | Stage | kW     | HP | l/min             | 0         | 335  | 675  | 1010 | 1170 | 1335 | 1500 | 1670  | 1835  | 2000  |
|             |       |        |    | m <sup>3</sup> /h | 0         | 20.0 | 40.5 | 60.6 | 70.2 | 80.1 | 90.0 | 100.2 | 110.1 | 120.0 |

|           |    |       |       |               |      |     |     |     |     |     |     |     |     |     |
|-----------|----|-------|-------|---------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 8RP 98-01 | 1  | 5.50  | 7.50  | HEAD IN Mtrs. | 21.5 | 21  | 18  | 16  | 15  | 14  | 13  | 12  | 9   | 7   |
| 8RP 98-02 | 2  | 9.30  | 12.50 |               | 43   | 41  | 37  | 32  | 30  | 28  | 26  | 23  | 19  | 14  |
| 8RP 98-03 | 3  | 13.00 | 17.50 |               | 64   | 62  | 55  | 49  | 46  | 43  | 39  | 35  | 28  | 21  |
| 8RP 98-04 | 4  | 18.50 | 25.00 |               | 86   | 82  | 74  | 65  | 61  | 57  | 52  | 46  | 38  | 28  |
| 8RP 98-05 | 5  | 22.00 | 30.00 |               | 107  | 103 | 92  | 81  | 76  | 71  | 66  | 58  | 47  | 35  |
| 8RP 98-06 | 6  | 26.00 | 35.00 |               | 128  | 123 | 110 | 97  | 91  | 85  | 79  | 69  | 56  | 42  |
| 8RP 98-07 | 7  | 30.00 | 40.00 |               | 150  | 144 | 129 | 113 | 106 | 100 | 92  | 81  | 66  | 49  |
| 8RP 98-08 | 8  | 37.00 | 50.00 |               | 171  | 164 | 147 | 129 | 121 | 114 | 105 | 92  | 75  | 56  |
| 8RP 98-09 | 9  | 37.00 | 50.00 |               | 193  | 185 | 166 | 146 | 137 | 128 | 118 | 104 | 85  | 63  |
| 8RP 98-10 | 10 | 45.00 | 60.00 |               | 214  | 205 | 184 | 162 | 152 | 142 | 131 | 115 | 94  | 70  |
| 8RP 98-11 | 11 | 55.00 | 75.00 |               | 235  | 226 | 203 | 178 | 167 | 157 | 144 | 127 | 104 | 78  |
| 8RP 98-12 | 12 | 55.00 | 75.00 |               | 257  | 246 | 221 | 194 | 182 | 171 | 157 | 138 | 113 | 85  |
| 8RP 98-13 | 13 | 55.00 | 75.00 |               | 278  | 267 | 239 | 210 | 197 | 185 | 171 | 150 | 122 | 92  |
| 8RP 98-14 | 14 | 63.00 | 85.00 |               | 300  | 287 | 258 | 227 | 212 | 199 | 184 | 161 | 132 | 99  |
| 8RP 98-15 | 15 | 75.00 | 100.0 |               | 321  | 308 | 276 | 243 | 228 | 213 | 197 | 173 | 141 | 106 |
| 8RP 98-16 | 16 | 75.00 | 100.0 |               | 342  | 328 | 295 | 259 | 243 | 228 | 210 | 184 | 151 | 113 |
| 8RP 98-17 | 17 | 75.00 | 100.0 |               | 364  | 349 | 313 | 275 | 258 | 242 | 223 | 196 | 160 | 120 |

# 8RP 98, 50Hz

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## Dimensions & Weights



| Model Name  | Specification |          |        |                      | Weight (Incl. pkg.) Kg. |
|-------------|---------------|----------|--------|----------------------|-------------------------|
|             | D* (mm)       | D** (mm) | L (mm) | Pump Weight (in Kg.) |                         |
| 8RP 98 - 01 | 175           | 180      | 620    | 21                   | 23                      |
| 8RP 98 - 02 | 175           | 180      | 748    | 25                   | 28                      |
| 8RP 98 - 03 | 175           | 180      | 876    | 29                   | 32                      |
| 8RP 98 - 04 | 175           | 180      | 1004   | 33                   | 36                      |
| 8RP 98 - 05 | 175           | 180      | 1132   | 37                   | 41                      |
| 8RP 98 - 06 | 175           | 180      | 1260   | 41                   | 45                      |
| 8RP 98 - 07 | 175           | 180      | 1388   | 45                   | 50                      |
| 8RP 98 - 08 | 175           | 180      | 1516   | 49                   | 54                      |
| 8RP 98 - 09 | 175           | 180      | 1644   | 53                   | 58                      |
| 8RP 98 - 10 | 196           | 200      | 1772   | 55                   | 63                      |
| 8RP 98 - 11 | 196           | 200      | 1900   | 59                   | 67                      |
| 8RP 98 - 12 | 196           | 200      | 2028   | 63                   | 72                      |
| 8RP 98 - 13 | 196           | 200      | 2156   | 67                   | 76                      |
| 8RP 98 - 14 | 196           | 200      | 2284   | 71                   | 80                      |
| 8RP 98 - 15 | 196           | 200      | 2412   | 75                   | 85                      |
| 8RP 98 - 16 | 196           | 200      | 2540   | 79                   | 89                      |
| 8RP 98 - 17 | 196           | 200      | 2668   | 83                   | 87                      |

\* G: Available Outlet Size 5" BSP

\* D: Maximum Diameter With Single Cable Guard

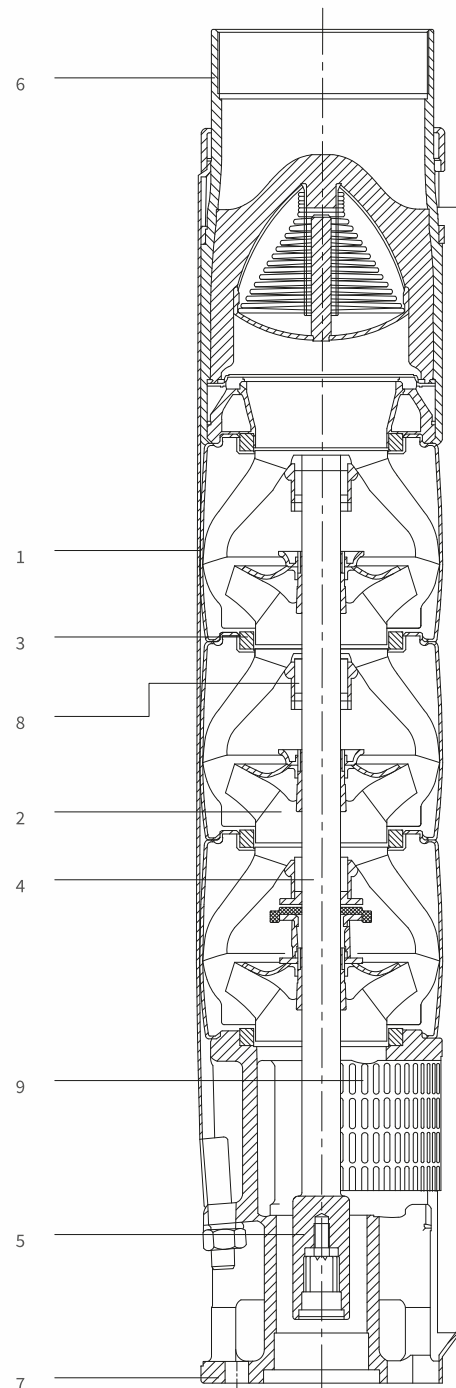
\*\* D: Maximum Diameter With Double Cable Guard upto 50 HP 6" Motor Joining.

8RP 98 - 01 to 8RP 98 - 09 Pump Are Available in 6" Joining.  
8RP 98 - 10 to 8RP 98 - 17 Pump Are Available in 8" Joining.

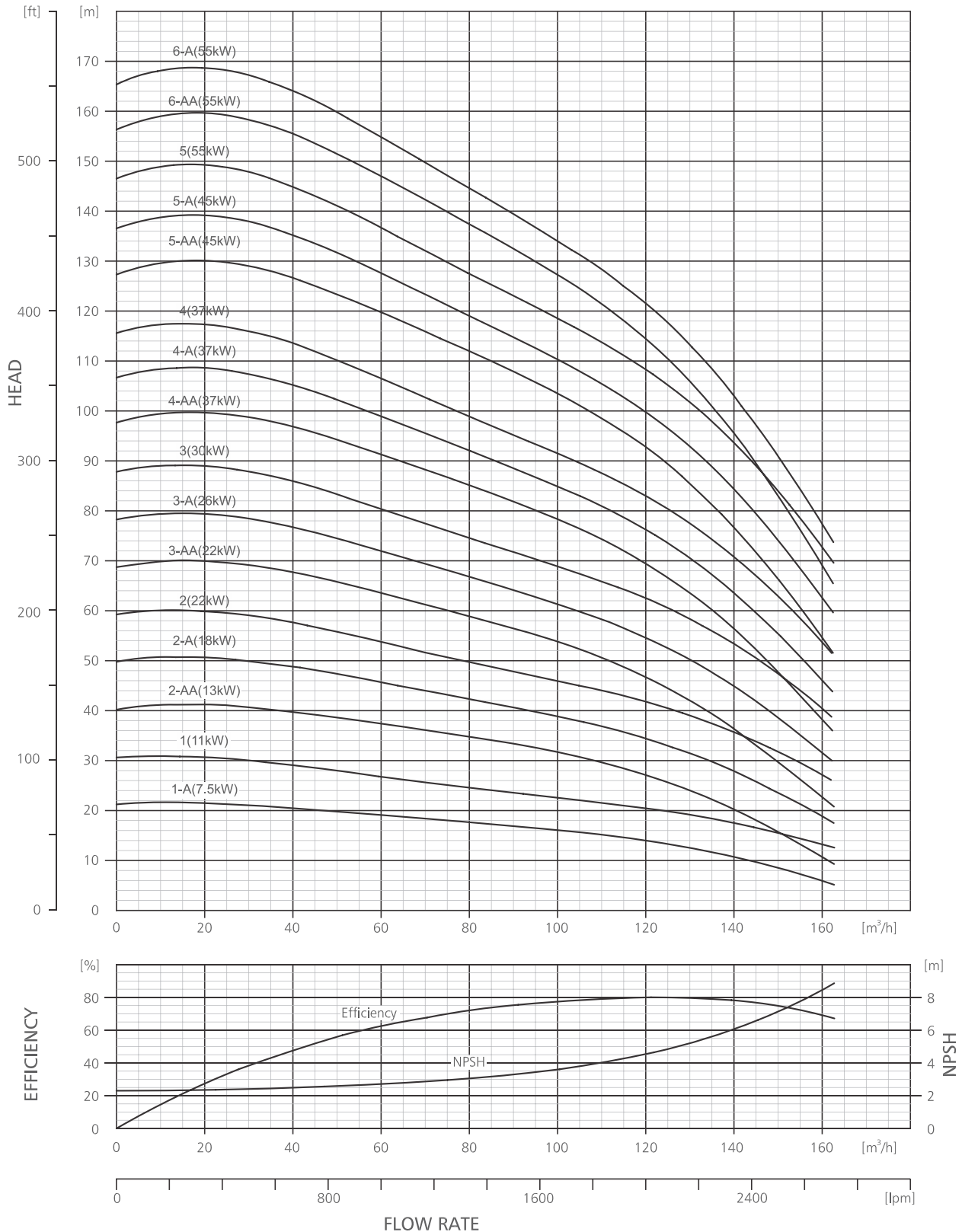
# 10RP 128 SERIES PUMP DESIGN

## Material Specification

| NO | PART NAME       | MATERIAL        | STANDARD |
|----|-----------------|-----------------|----------|
| 1  | BOWL / DIFFUSER | STAINLESS STEEL | 304      |
| 2  | IMPELLER        | STAINLESS STEEL | 304      |
| 3  | NECK RING       | NBR             |          |
| 4  | SHAFT           | STAINLESS STEEL | 431      |
| 5  | COUPLE          | STAINLESS STEEL | 316      |
| 6  | DELIVERY CASING | STAINLESS STEEL | 304      |
| 7  | SUCTION CASE    | STAINLESS STEEL | 304      |
| 8  | BEARING BUSH    | NBR             |          |
| 9  | STRAINER        | STAINLESS STEEL | 304      |



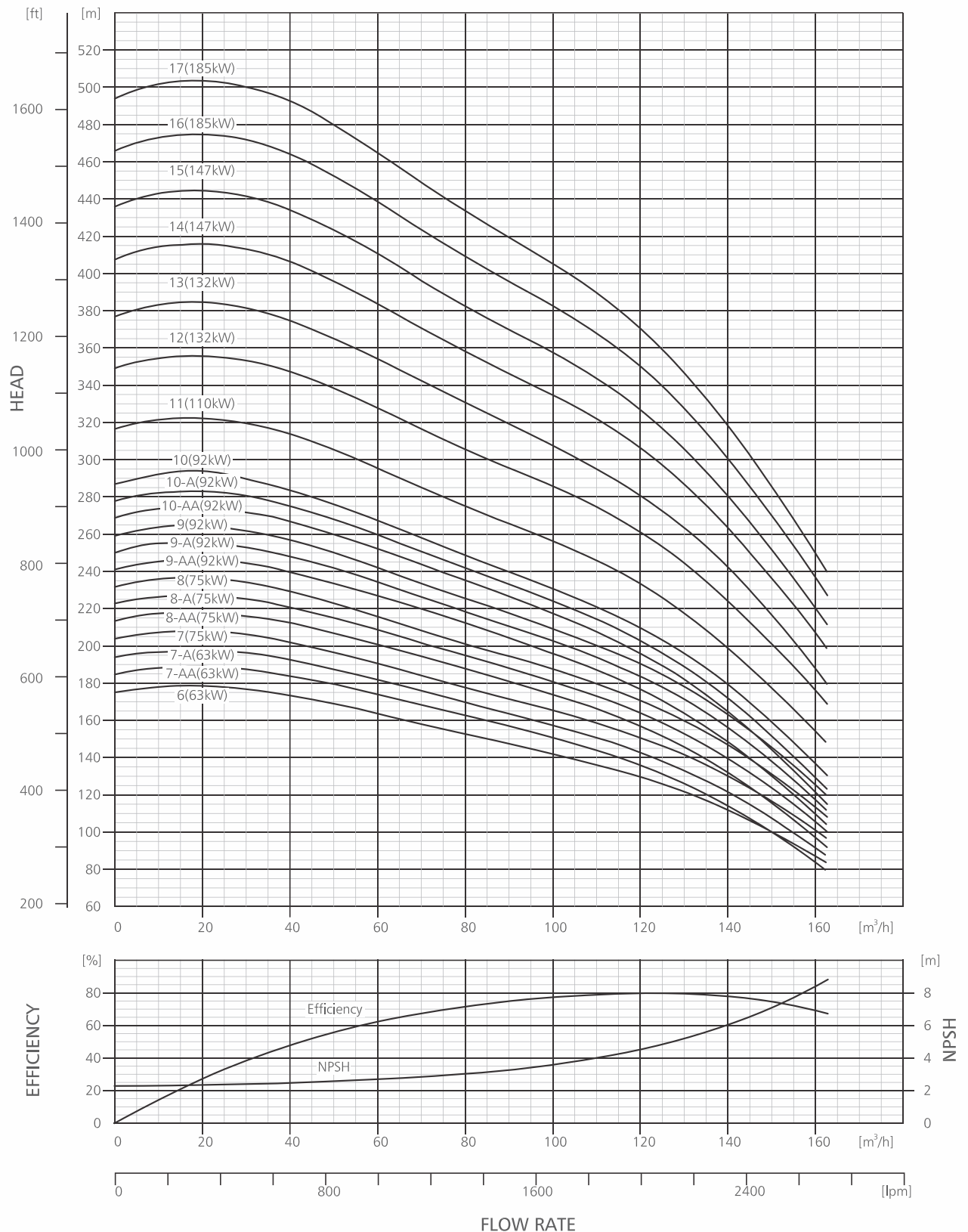
## PERFORMANCE CURVES



# 10RP 128, 50Hz

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## PERFORMANCE CURVES



# 10RP 128, 50Hz

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## PERFORMANCE CHART

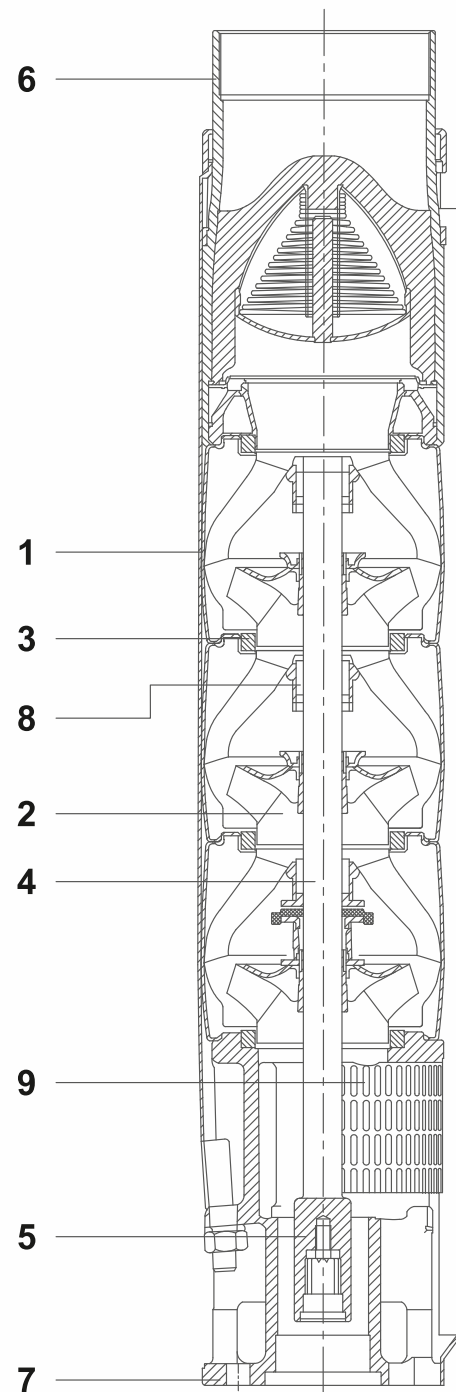
| Model Name  | Rating |    | Discharge         |   |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|--------|----|-------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Three Phase | kW     | HP | l/min             | 0 | 1000 | 1167 | 1333 | 1500 | 1667 | 1833 | 2000 | 2167 | 2333 | 2500 | 2667 | 2700 |
|             |        |    | m <sup>3</sup> /h | 0 | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  | 150  | 160  |      |

|                |      |      |               |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----------------|------|------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 10RP-128-1-A   | 7.5  | 10   | HEAD IN Mtrs. | 21  | 19  | 18  | 17  | 17  | 16  | 15  | 14  | 12  | 10  | 8   | 6   | 5   |
| 10RP-128-1     | 11   | 15   |               | 30  | 27  | 25  | 24  | 23  | 22  | 21  | 20  | 19  | 17  | 15  | 13  | 12  |
| 10RP-128-2-AA  | 13   | 17.5 |               | 40  | 37  | 36  | 35  | 33  | 31  | 29  | 27  | 24  | 20  | 16  | 11  | 10  |
| 10RP-128-2-A   | 18.5 | 25   |               | 50  | 45  | 44  | 42  | 40  | 39  | 37  | 34  | 31  | 28  | 23  | 19  | 18  |
| 10RP-128-2     | 22   | 30   |               | 59  | 54  | 52  | 50  | 48  | 46  | 44  | 42  | 39  | 35  | 32  | 27  | 26  |
| 10RP-128-3-AA  | 22   | 30   |               | 69  | 63  | 61  | 59  | 56  | 54  | 50  | 47  | 42  | 36  | 30  | 22  | 21  |
| 10RP-128-3-A   | 26   | 35   |               | 78  | 72  | 69  | 67  | 64  | 61  | 58  | 54  | 50  | 45  | 38  | 31  | 30  |
| 10RP-128-3     | 30   | 40   |               | 88  | 80  | 77  | 74  | 72  | 69  | 66  | 62  | 58  | 53  | 47  | 40  | 39  |
| 10RP-128-4-AA  | 37   | 50   |               | 98  | 91  | 88  | 85  | 82  | 78  | 74  | 69  | 63  | 56  | 48  | 38  | 36  |
| 10RP-128-4-A   | 37   | 50   |               | 107 | 99  | 95  | 92  | 88  | 85  | 81  | 76  | 70  | 63  | 55  | 46  | 44  |
| 10RP-128-4     | 37   | 50   |               | 116 | 106 | 102 | 99  | 95  | 91  | 87  | 83  | 77  | 71  | 63  | 54  | 52  |
| 10RP-128-5-AA  | 45   | 60   |               | 127 | 120 | 116 | 112 | 108 | 103 | 98  | 93  | 85  | 77  | 66  | 54  | 52  |
| 10RP-128-5-A   | 45   | 60   |               | 136 | 127 | 123 | 119 | 115 | 110 | 105 | 100 | 93  | 84  | 74  | 63  | 60  |
| 10RP-128-5     | 55   | 75   |               | 146 | 137 | 132 | 127 | 123 | 118 | 114 | 108 | 102 | 93  | 84  | 72  | 70  |
| 10RP-128-6-AA  | 55   | 75   |               | 156 | 147 | 142 | 137 | 132 | 127 | 121 | 114 | 106 | 95  | 83  | 69  | 66  |
| 10RP-128-6-A   | 55   | 75   |               | 165 | 155 | 150 | 144 | 139 | 134 | 128 | 121 | 113 | 103 | 91  | 77  | 74  |
| 10RP-128-6     | 63   | 85   |               | 175 | 164 | 158 | 153 | 147 | 142 | 136 | 130 | 122 | 112 | 100 | 87  | 84  |
| 10RP-128-7-AA  | 63   | 85   |               | 185 | 174 | 168 | 163 | 157 | 151 | 144 | 136 | 126 | 114 | 100 | 83  | 80  |
| 10RP-128-7-A   | 63   | 85   |               | 194 | 182 | 176 | 170 | 164 | 158 | 151 | 143 | 133 | 122 | 107 | 92  | 88  |
| 10RP-128-7     | 75   | 100  |               | 204 | 191 | 184 | 178 | 172 | 165 | 159 | 151 | 142 | 130 | 117 | 101 | 97  |
| 10RP-128-8-AA  | 75   | 100  |               | 214 | 201 | 194 | 188 | 181 | 174 | 166 | 157 | 146 | 132 | 116 | 97  | 93  |
| 10RP-128-8-A   | 75   | 100  |               | 223 | 209 | 202 | 195 | 188 | 181 | 173 | 164 | 153 | 139 | 123 | 105 | 101 |
| 10RP-128-8     | 75   | 100  |               | 232 | 216 | 209 | 202 | 195 | 188 | 180 | 171 | 160 | 147 | 131 | 113 | 109 |
| 10RP-128-9-AA  | 93   | 125  |               | 241 | 227 | 219 | 212 | 204 | 196 | 187 | 177 | 164 | 149 | 130 | 110 | 105 |
| 10RP-128-9-A   | 93   | 125  |               | 250 | 234 | 226 | 219 | 211 | 203 | 194 | 184 | 171 | 156 | 138 | 117 | 113 |
| 10RP-128-9     | 93   | 125  |               | 260 | 242 | 234 | 226 | 218 | 209 | 201 | 191 | 178 | 163 | 146 | 125 | 121 |
| 10RP-128-10-AA | 93   | 125  |               | 269 | 252 | 244 | 235 | 227 | 218 | 208 | 196 | 182 | 165 | 144 | 121 | 117 |
| 10RP-128-10-A  | 93   | 125  |               | 278 | 260 | 251 | 242 | 233 | 224 | 214 | 203 | 189 | 172 | 152 | 129 | 124 |
| 10RP-128-10    | 93   | 125  |               | 287 | 267 | 258 | 249 | 240 | 231 | 221 | 210 | 196 | 179 | 159 | 137 | 132 |

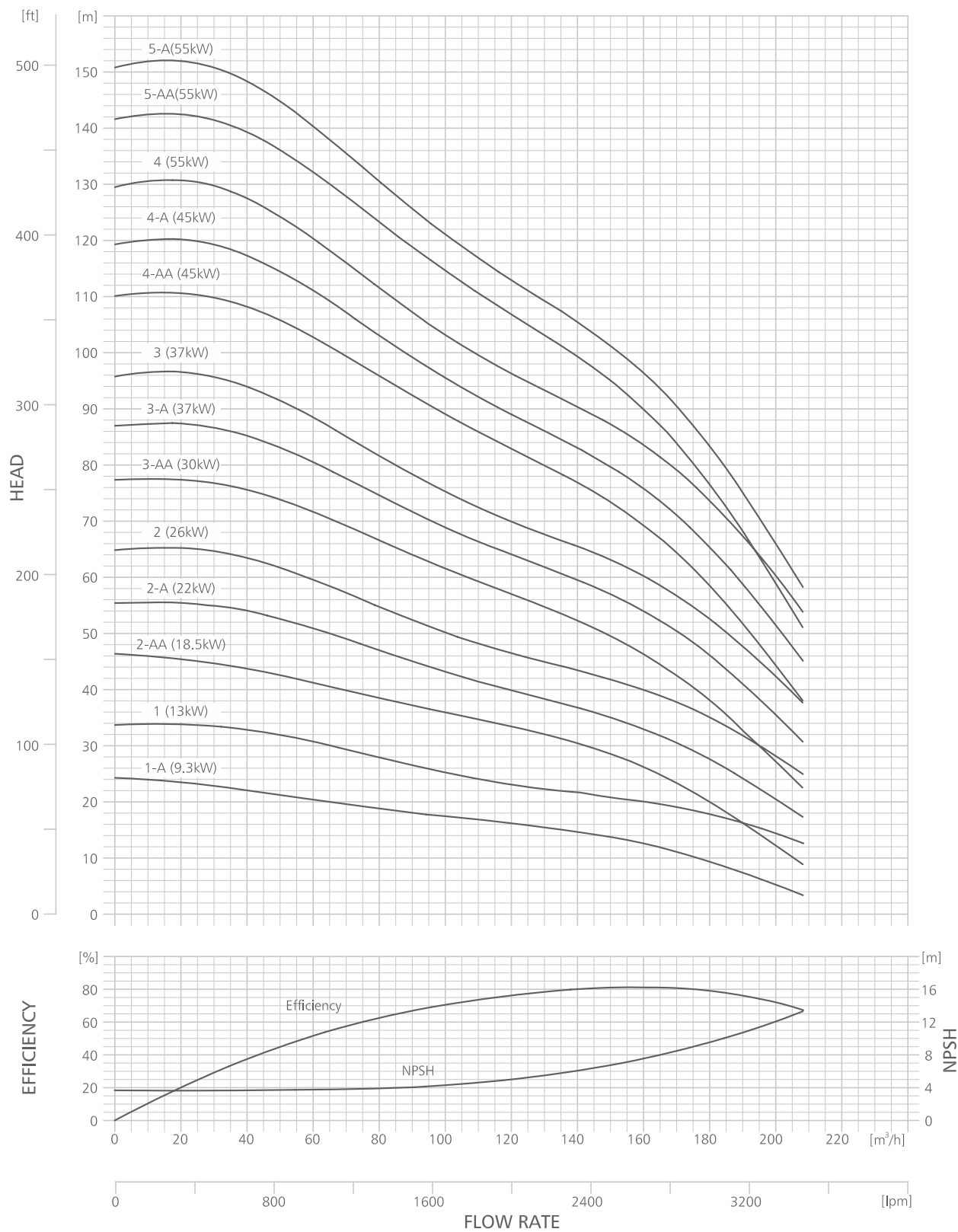
# 10RP 162 SERIES PUMP DESIGN

## Material Specification

| NO | PART NAME       | MATERIAL        | STANDARD |
|----|-----------------|-----------------|----------|
| 1  | BOWL / DIFFUSER | STAINLESS STEEL | 304      |
| 2  | IMPELLER        | STAINLESS STEEL | 304      |
| 3  | NECK RING       | NBR             |          |
| 4  | SHAFT           | STAINLESS STEEL | 431      |
| 5  | COUPLE          | STAINLESS STEEL | 316      |
| 6  | DELIVERY CASING | STAINLESS STEEL | 304      |
| 7  | SUCTION CASE    | STAINLESS STEEL | 304      |
| 8  | BEARING BUSH    | NBR             |          |
| 9  | STRAINER        | STAINLESS STEEL | 304      |



PERFORMANCE CURVES



# 10RP 162, 50Hz

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## PERFORMANCE CHART

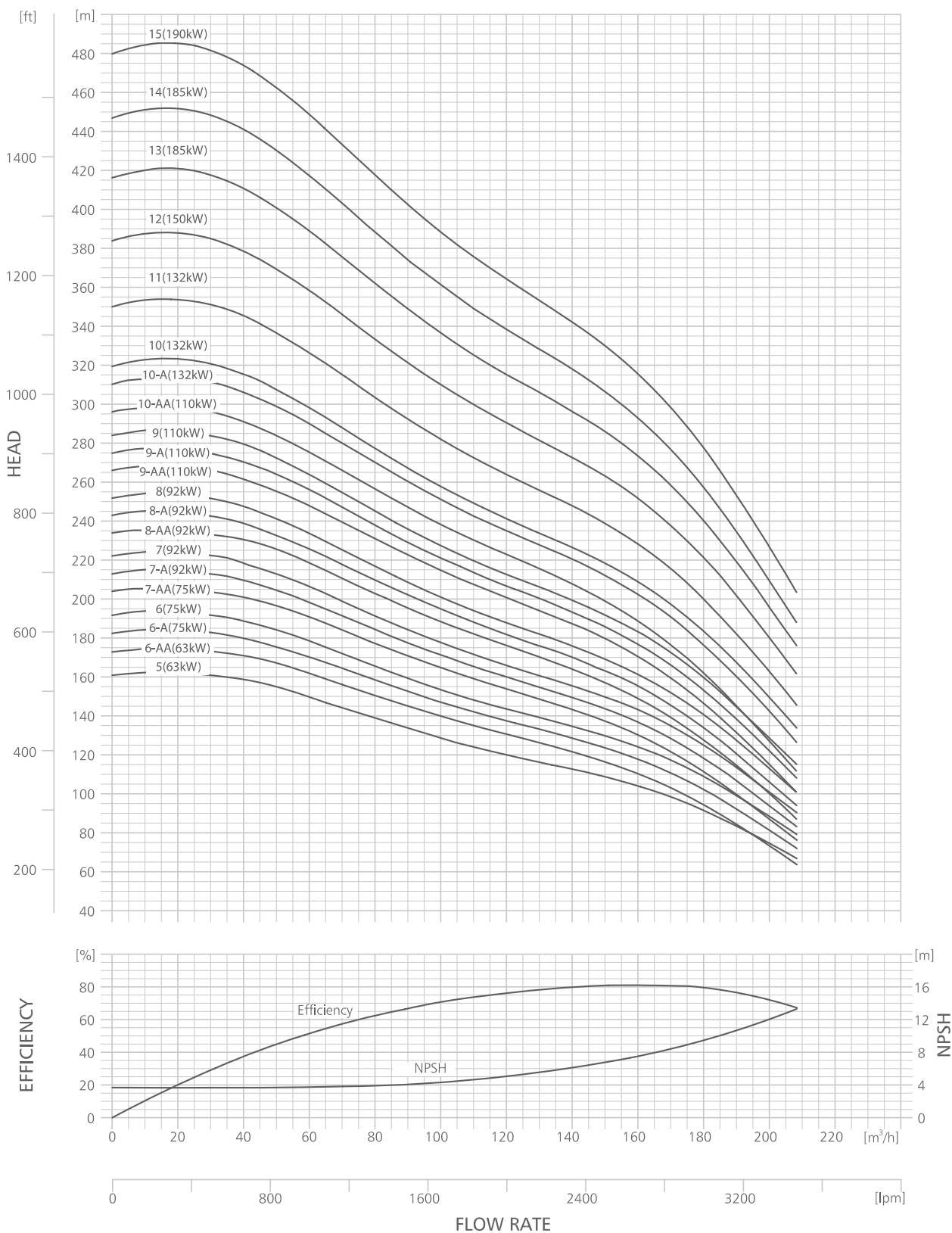
| Model Name  | Rating |    |       | Discharge |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-------------|--------|----|-------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Three Phase | kW     | HP | l/min | 0         | 1333 | 1500 | 1667 | 1833 | 2000 | 2167 | 2333 | 2500 | 2667 | 2833 | 3000 | 3167 | 3333 | 3467 |  |
|             |        |    | m³/h  | 0         | 80   | 90   | 100  | 110  | 120  | 130  | 140  | 150  | 160  | 170  | 180  | 190  | 200  | 208  |  |

|               |       |       |               |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |
|---------------|-------|-------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|
| 10RP-162-1-A  | 9.3   | 12.50 | HEAD IN Mtrs. | 24  | 19  | 18  | 17  | 17  | 16  | 15  | 15  | 14  | 13 | 11 | 9  | 7  | 5  | 3  |
| 10RP-162-1    | 13.00 | 17.50 |               | 34  | 28  | 26  | 25  | 24  | 23  | 22  | 22  | 21  | 20 | 19 | 18 | 16 | 14 | 13 |
| 10RP-162-2-AA | 18.50 | 25.00 |               | 46  | 38  | 37  | 36  | 35  | 33  | 32  | 30  | 29  | 26 | 23 | 20 | 16 | 12 | 9  |
| 10RP-162-2-A  | 22.00 | 30.00 |               | 55  | 47  | 45  | 43  | 41  | 40  | 38  | 37  | 35  | 33 | 31 | 28 | 24 | 20 | 17 |
| 10RP-162-2    | 26.00 | 35.00 |               | 65  | 55  | 52  | 50  | 48  | 46  | 45  | 43  | 42  | 40 | 38 | 35 | 32 | 28 | 25 |
| 10RP-162-3-AA | 30.00 | 40.00 |               | 77  | 67  | 64  | 62  | 59  | 57  | 55  | 52  | 49  | 46 | 42 | 38 | 33 | 27 | 23 |
| 10RP-162-3-A  | 37.00 | 50.00 |               | 87  | 75  | 72  | 69  | 66  | 64  | 62  | 59  | 57  | 54 | 50 | 46 | 41 | 35 | 31 |
| 10RP-162-3    | 37.00 | 50.00 |               | 96  | 82  | 78  | 75  | 72  | 70  | 68  | 65  | 63  | 60 | 57 | 53 | 48 | 42 | 38 |
| 10RP-162-4-AA | 45.00 | 60.00 |               | 110 | 96  | 92  | 89  | 86  | 83  | 80  | 77  | 73  | 69 | 64 | 58 | 52 | 44 | 38 |
| 10RP-162-4-A  | 45.00 | 60.00 |               | 119 | 103 | 99  | 95  | 92  | 89  | 86  | 83  | 80  | 76 | 71 | 65 | 59 | 51 | 45 |
| 10RP-162-4    | 55.00 | 75.00 |               | 129 | 111 | 107 | 103 | 100 | 96  | 93  | 90  | 87  | 83 | 79 | 74 | 67 | 60 | 54 |
| 10RP-162-5-AA | 55.00 | 75.00 |               | 142 | 123 | 119 | 114 | 111 | 107 | 103 | 99  | 95  | 90 | 84 | 76 | 68 | 59 | 51 |
| 10RP-162-5-A  | 55.00 | 75.00 |               | 151 | 130 | 126 | 121 | 117 | 113 | 109 | 105 | 101 | 96 | 90 | 83 | 75 | 66 | 58 |

# 10RP 162, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# 10RP 162, 50Hz

ISO 9906 Annexure A

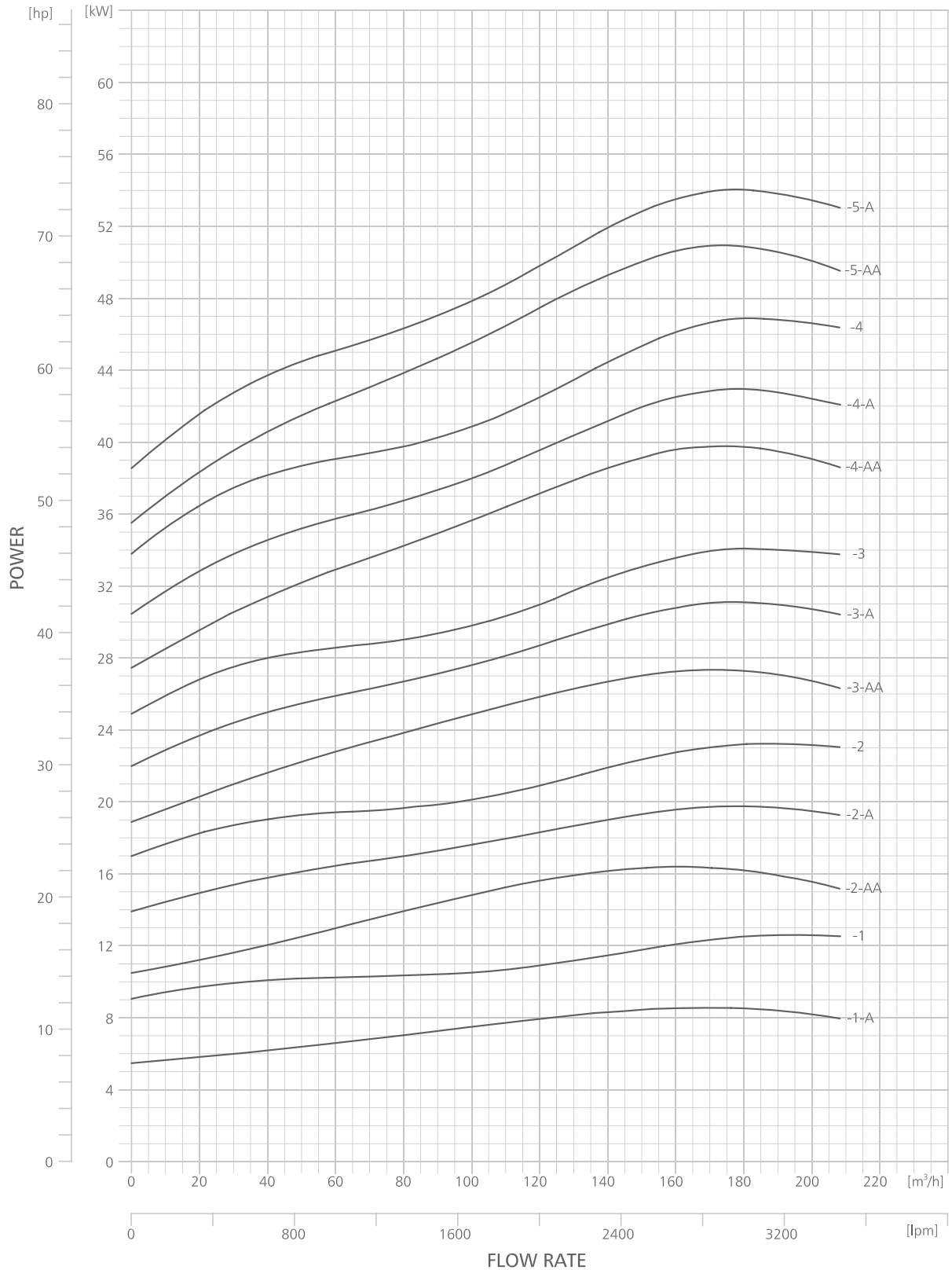
## PERFORMANCE CHART

| Model Name  | Rating |    |       | Discharge |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-------------|--------|----|-------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Three Phase | kW     | HP | l/min | 0         | 1333 | 1500 | 1667 | 1833 | 2000 | 2167 | 2333 | 2500 | 2667 | 2833 | 3000 | 3167 | 3333 | 3467 |  |
|             |        |    | m³/h  | 0         | 80   | 90   | 100  | 110  | 120  | 130  | 140  | 150  | 160  | 170  | 180  | 190  | 200  | 208  |  |

|               |        |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|---------------|--------|--------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 10RP-162-5    | 63.00  | 85.00  | HEAD IN Mtrs: | 161 | 139 | 133 | 129 | 124 | 120 | 116 | 113 | 109 | 104 | 98  | 91  | 83  | 74  | 67  |
| 10RP-162-6-AA | 63.00  | 85.00  |               | 173 | 150 | 145 | 140 | 135 | 131 | 126 | 121 | 116 | 110 | 103 | 94  | 84  | 73  | 64  |
| 10RP-162-6-A  | 75.00  | 100.00 |               | 183 | 158 | 153 | 147 | 142 | 137 | 133 | 128 | 123 | 118 | 111 | 102 | 92  | 81  | 72  |
| 10RP-162-6    | 75.00  | 100.00 |               | 192 | 166 | 159 | 154 | 148 | 144 | 139 | 135 | 130 | 124 | 117 | 109 | 99  | 88  | 79  |
| 10RP-162-7-AA | 75.00  | 100.00 |               | 204 | 177 | 171 | 165 | 159 | 154 | 149 | 143 | 137 | 130 | 122 | 112 | 100 | 87  | 76  |
| 10RP-162-7-A  | 92.00  | 125.00 |               | 213 | 184 | 177 | 171 | 165 | 160 | 155 | 149 | 144 | 137 | 128 | 118 | 107 | 94  | 84  |
| 10RP-162-7    | 92.00  | 125.00 |               | 222 | 191 | 184 | 177 | 171 | 166 | 161 | 155 | 150 | 143 | 135 | 125 | 113 | 101 | 91  |
| 10RP-162-8-AA | 92.00  | 125.00 |               | 234 | 203 | 195 | 188 | 182 | 176 | 170 | 164 | 157 | 149 | 139 | 127 | 114 | 99  | 87  |
| 10RP-162-8-A  | 92.00  | 125.00 |               | 243 | 210 | 202 | 195 | 188 | 182 | 176 | 170 | 163 | 155 | 145 | 134 | 121 | 106 | 94  |
| 10RP-162-8    | 92.00  | 125.00 |               | 252 | 217 | 208 | 201 | 194 | 188 | 182 | 176 | 169 | 161 | 152 | 140 | 127 | 113 | 101 |
| 10RP-162-9-AA | 110.00 | 150.00 |               | 266 | 231 | 223 | 215 | 207 | 201 | 194 | 187 | 179 | 170 | 159 | 146 | 131 | 115 | 102 |
| 10RP-162-9-A  | 110.00 | 150.00 |               | 275 | 238 | 229 | 221 | 214 | 207 | 200 | 193 | 186 | 177 | 166 | 153 | 138 | 122 | 109 |
| 10RP-162-9    | 110.00 | 150.00 |               | 284 | 245 | 236 | 227 | 220 | 213 | 206 | 199 | 192 | 183 | 172 | 160 | 145 | 129 | 116 |

**10RP 162, 50Hz**  
ISO 9906 Annexure A

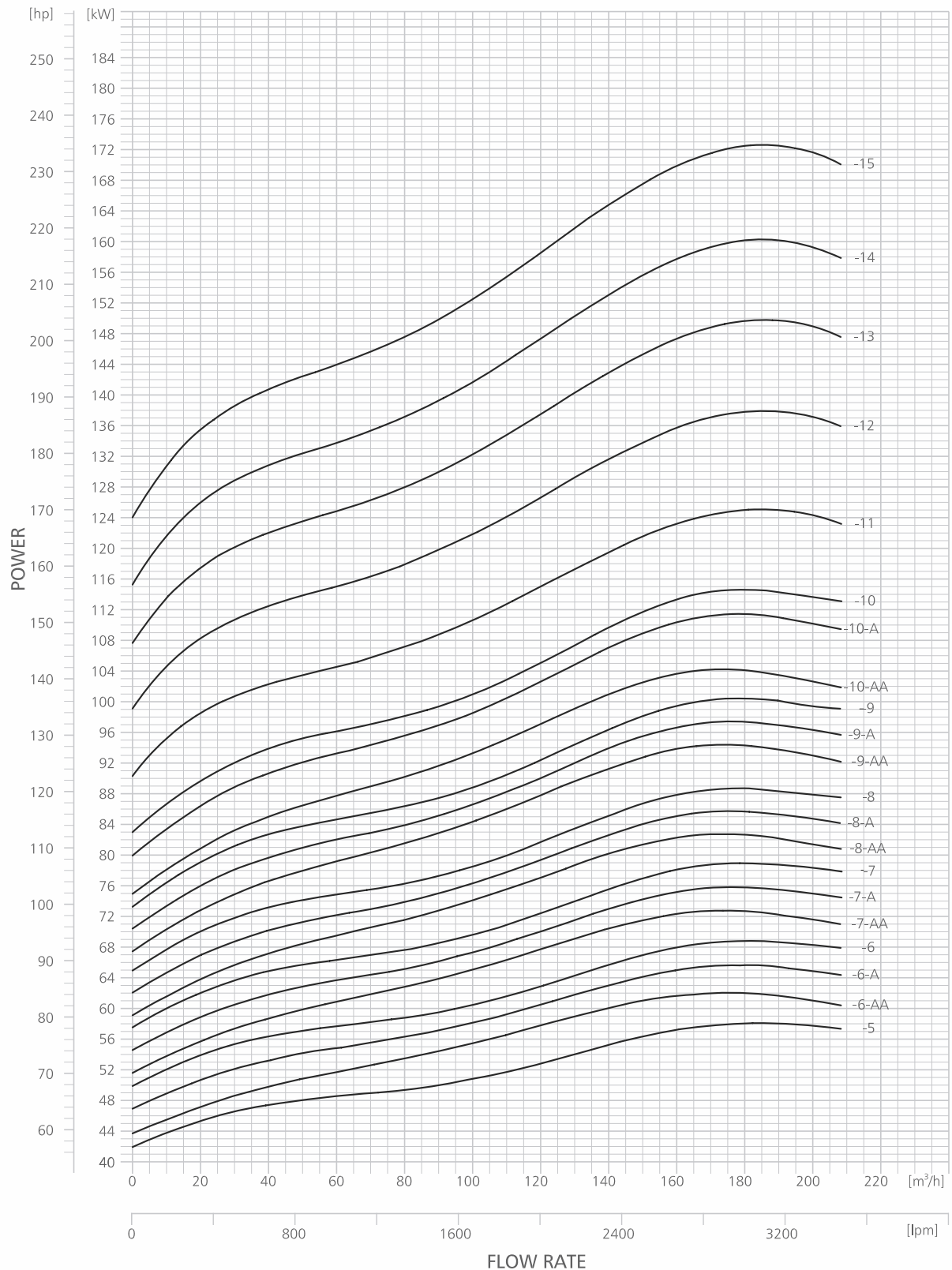
## PERFORMANCE CURVES



# 10RP 162, 50Hz

ISO 9906 Annexure A

## PERFORMANCE CURVES



# CONVERSION TABLES

| Volume (Capacity)             |            |                     |                                |                       |                                  |
|-------------------------------|------------|---------------------|--------------------------------|-----------------------|----------------------------------|
| Cubic metre<br>m <sup>3</sup> | Litre<br>L | Millilitre<br>mL    | Imperial<br>gallon<br>Imp. gal | Us<br>gallon<br>USgal | Cubic<br>feet<br>ft <sup>3</sup> |
| 1                             | 1000       | 1 x 10 <sup>6</sup> | 219.9692                       | 264.1721              | 35.3147                          |
| 0.001                         | 1          | 1000                | 0.2200                         | 0.2642                | 0.0353                           |
| 1 x 10 <sup>-6</sup>          | 0.001      | 1                   | 0.0002                         | 0.0003                | 3.515 x 10 <sup>-7</sup>         |
| 0.0045                        | 4.5461     | 4546.09             | 1                              | 1.2009                | 0.1605                           |
| 0.0038                        | 3.7854     | 3785.4118           | 0.8327                         | 1                     | 0.1337                           |
| 0.0283                        | 28.3168    | 28316.8488          | 6.2288                         | 7.4805                | 1                                |

| Volume (Flow)              |                              |                                               |                                               |                                                  |                                   |                                  |                                       |
|----------------------------|------------------------------|-----------------------------------------------|-----------------------------------------------|--------------------------------------------------|-----------------------------------|----------------------------------|---------------------------------------|
| Litre per<br>second<br>l/s | Liter per<br>minute<br>l/min | Cubic metre<br>per hour<br>m <sup>3</sup> /hr | Cubic feet<br>per hour<br>ft <sup>3</sup> /hr | Cubic feet<br>per minute<br>ft <sup>3</sup> /min | Imp. gallon<br>per minute<br>lgpm | US gallon<br>per minute<br>USgpm | US barrel<br>per day<br>US barrel/day |
| 1                          | 60                           | 3.600                                         | 127.1328                                      | 2.1189                                           | 13.1982                           | 15.8504                          | 543.4390                              |
| 0.0167                     | 1                            | 0.0600                                        | 2.1189                                        | 0.0353                                           | 0.2200                            | 0.2642                           | 9.0570                                |
| 0.2778                     | 16.6667                      | 1                                             | 35.3147                                       | 0.5886                                           | 3.6662                            | 4.4029                           | 150.9550                              |
| 0.0079                     | 0.4719                       | 0.0283                                        | 1                                             | 0.0167                                           | 0.1038                            | 0.1247                           | 4.2750                                |
| 0.4719                     | 28.3168                      | 1.6990                                        | 60.0000                                       | 1                                                | 6.2288                            | 7.4805                           | 265.4750                              |
| 0.0758                     | 4.5461                       | 0.2728                                        | 9.6326                                        | 0.1605                                           | 1                                 | 1.2010                           | 41.1750                               |
| 0.0631                     | 3.7854                       | 0.2271                                        | 8.0208                                        | 0.1337                                           | 0.8327                            | 1                                | 34.2860                               |
| 0.0020                     | 0.1100                       | 0.0060                                        | 0.2400                                        | 0.0040                                           | 0.0240                            | 0.0310                           | 1                                     |

| Liquid head and pressure                       |                       |                      |                                                                   |                                          |                                         |                                          |                                      |                                |
|------------------------------------------------|-----------------------|----------------------|-------------------------------------------------------------------|------------------------------------------|-----------------------------------------|------------------------------------------|--------------------------------------|--------------------------------|
| Newton per<br>square metre<br>N/m <sup>2</sup> | Kilo<br>Pascal<br>kPa | bar                  | Kilogram force<br>per square<br>centimetre<br>kgf/cm <sup>2</sup> | Pound force<br>per square<br>inch<br>psi | Feet of<br>water<br>ft H <sub>2</sub> O | Meters of<br>water<br>m H <sub>2</sub> O | Millimeter<br>of<br>mercury<br>mm Hg | Inch<br>of<br>mercury<br>in Hg |
| 1                                              | 0.001                 | 1 x 10 <sup>-5</sup> | 1.02 x 10 <sup>-5</sup>                                           | 1.45 x 10 <sup>-4</sup>                  | 3.35 x 10 <sup>-4</sup>                 | 1.02 x 10 <sup>-4</sup>                  | 0.0075                               | 2.95 x 10 <sup>-4</sup>        |
| 1000                                           | 1                     | 0.010                | 0.0102                                                            | 0.1450                                   | 0.3346                                  | 0.1020                                   | 7.5                                  | 0.2953                         |
| 1 x 10 <sup>5</sup>                            | 100                   | 1                    | 1.0197                                                            | 14.5038                                  | 33.4553                                 | 10.1973                                  | 750.0638                             | 29.5300                        |
| 98066.50                                       | 98.0665               | 0.9807               | 1                                                                 | 14.2233                                  | 32.8084                                 | 10                                       | 735.5613                             | 28.9590                        |
| 6894.76                                        | 6.8949                | 0.0689               | 0.0703                                                            | 1                                        | 2.3067                                  | 0.7031                                   | 51.7151                              | 2.0360                         |
| 2989.07                                        | 2.9891                | 0.0299               | 0.0305                                                            | 0.4335                                   | 1                                       | 0.3048                                   | 22.4199                              | 0.8827                         |
| 9806.55                                        | 9.8066                | 0.0981               | 0.1000                                                            | 1.4223                                   | 3.2808                                  | 1                                        | 73.5554                              | 2.8959                         |
| 133.32                                         | 0.1333                | 0.0013               | 0.0014                                                            | 0.0193                                   | 0.0446                                  | 0.0136                                   | 1                                    | 0.0394                         |
| 3386.39                                        | 3.3864                | 0.0339               | 0.0345                                                            | 0.4912                                   | 1.1329                                  | 0.3453                                   | 25.4001                              | 1                              |

# CONVERSION TABLES

| Power                 |            |            |
|-----------------------|------------|------------|
| HP                    | W          | kW         |
| 1 (SI)                | 746        | 0.746      |
| 1 (Metric)            | 736        | 0.736      |
| $1.34 \times 10^{-3}$ | 1 (SI)     | 0.001      |
| $1.36 \times 10^{-3}$ | 1 (Metric) | 0.001      |
| 1.3405                | 1000       | 1 (SI)     |
| 1.3587                | 1000       | 1 (Metric) |

| Length     |            |            |                  |                  |            |
|------------|------------|------------|------------------|------------------|------------|
| Metre<br>m | Feet<br>ft | Yard<br>yd | Centimetre<br>cm | Millimeter<br>mm | Inch<br>in |
| 1          | 3.2808     | 1.0936     | 100              | 1000             | 39.3701    |
| 0.3048     | 1          | 0.3333     | 30.48            | 304.8            | 12         |
| 0.9144     | 3          | 1          | 91.14            | 914.4            | 36         |
| 0.01       | 0.0328     | 0.0109     | 1                | 10               | 0.3937     |
| 0.001      | 0.0033     | 0.0011     | 0.1              | 1                | 0.0394     |
| 0.0254     | 0.0833     | 0.0278     | 2.54             | 25.4             | 1          |

| Mass           |             |                             |            |
|----------------|-------------|-----------------------------|------------|
| Kilogram<br>kg | Pound<br>lb | Hundred<br>weight<br>(long) | Tonne<br>t |
| 1              | 2.2046      | 0.0199                      | 0.001      |
| 0.4536         | 1           | 0.009                       | 0.0005     |
| 50.3592        | 111.02      | 1                           | 0.0504     |
| 1000           | 2204.6226   | 19.8573                     | 1          |

| Temperature                     |                                 |                            |
|---------------------------------|---------------------------------|----------------------------|
| To convert from                 | To                              | Use formula                |
| Temperature Celsius (C) - tC    | Temperature Kelvin (K) - tK     | $tK = tC + 273.15$         |
| Temperature Fahrenheit (F) - tF | Temperature Kelvin (K) - tK     | $tK = (tF + 459.67) / 1.8$ |
| Temperature Celsius (C) - tC    | Temperature Fahrenheit (F) - tF | $tF = 1.8tC + 32$          |
| Temperature Fahrenheit (F) - tF | Temperature Celsius (C) - tC    | $tC = (tF - 32) / 1.8$     |
| Temperature Kelvin (K) - tK     | Temperature Celsius (C) - tC    | $tC = tK - 273.15$         |
| Temperature Kelvin (K) - tK     | Temperature Fahrenheit (F) - tF | $tF = 1.8tK - 459.67$      |

## Head losses in ordinary water pipes

| Quantity of water           |             | Head losses in ordinary water pipes                           |                |                |                |                |                |                |                |                |                |                |                |  |
|-----------------------------|-------------|---------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
| Litres/min.                 | Litres/sec. | Nominal pipe diameter in inches and internal diameter in [mm] |                |                |                |                |                |                |                |                |                |                |                |  |
|                             |             | 1/2"                                                          | 3/4"           | 1"             | 1 1/4"         | 1 1/2"         | 2"             | 2 1/2"         | 3"             | 3 1/2"         | 4"             | 5"             | 6"             |  |
|                             |             | 15.75                                                         | 21.25          | 27.00          | 35.75          | 41.25          | 52.50          | 68.00          | 80.25          | 92.50          | 105.0          | 130.0          | 155.5          |  |
| 10                          | 0.16        | 0.855<br>9.910                                                | 0.470<br>2.407 | 0.292<br>0.784 |                |                |                |                |                |                |                |                |                |  |
| 15                          | 0.25        | 1.282<br>20.11                                                | 0.705<br>4.862 | 0.438<br>1.570 | 0.249<br>0.416 |                |                |                |                |                |                |                |                |  |
| 20                          | 0.33        | 1.710<br>33.53                                                | 0.940<br>8.035 | 0.584<br>2.588 | 0.331<br>0.677 | 0.249<br>0.346 |                |                |                |                |                |                |                |  |
| 25                          | 0.42        | 2.138<br>49.93                                                | 1.174<br>11.91 | 0.730<br>3.834 | 0.415<br>1.004 | 0.312<br>0.510 |                |                |                |                |                |                |                |  |
| 30                          | 0.50        | 2.565<br>69.34                                                | 1.409<br>16.50 | 0.876<br>5.277 | 0.498<br>1.379 | 0.374<br>0.700 | 0.231<br>0.223 |                |                |                |                |                |                |  |
| 35                          | 0.58        | 2.993<br>91.54                                                | 1.644<br>21.75 | 1.022<br>6.949 | 0.581<br>1.811 | 0.436<br>0.914 | 0.269<br>0.291 |                |                |                |                |                |                |  |
| 40                          | 0.67        |                                                               | 1.879<br>27.66 | 1.168<br>8.820 | 0.664<br>2.290 | 0.499<br>1.160 | 0.308<br>0.368 |                |                |                |                |                |                |  |
| 50                          | 0.83        |                                                               | 2.349<br>41.40 | 1.460<br>13.14 | 0.830<br>3.403 | 0.623<br>1.719 | 0.385<br>0.544 | 0.229<br>0.159 |                |                |                |                |                |  |
| 60                          | 1.00        |                                                               | 2.819<br>57.74 | 1.751<br>18.28 | 0.996<br>4.718 | 0.748<br>2.375 | 0.462<br>0.751 | 0.275<br>0.218 |                |                |                |                |                |  |
| 70                          | 1.12        |                                                               | 3.288<br>76.49 | 2.043<br>24.18 | 1.162<br>6.231 | 0.873<br>3.132 | 0.539<br>0.988 | 0.321<br>0.287 | 0.231<br>0.131 |                |                |                |                |  |
| 80                          | 1.33        |                                                               |                | 2.335<br>30.87 | 1.328<br>7.940 | 0.997<br>3.988 | 0.616<br>1.254 | 0.367<br>0.363 | 0.263<br>0.164 |                |                |                |                |  |
| 90                          | 1.50        |                                                               |                | 2.827<br>38.30 | 1.494<br>9.828 | 1.122<br>4.927 | 0.693<br>1.551 | 0.413<br>0.449 | 0.269<br>0.203 |                |                |                |                |  |
| 100                         | 1.67        |                                                               |                | 2.919<br>46.49 | 1.660<br>11.90 | 1.247<br>5.972 | 0.770<br>1.875 | 0.459<br>0.542 | 0.329<br>0.244 | 0.248<br>0.124 |                |                |                |  |
| 125                         | 2.08        |                                                               |                | 3.649<br>70.41 | 2.075<br>17.93 | 1.558<br>8.967 | 0.962<br>2.802 | 0.574<br>0.809 | 0.412<br>0.365 | 0.310<br>0.185 | 0.241<br>0.101 |                |                |  |
| 150                         | 2.50        |                                                               |                |                | 2.490<br>25.11 | 1.870<br>12.53 | 1.154<br>3.903 | 0.668<br>1.124 | 0.494<br>0.506 | 0.372<br>0.256 | 0.289<br>0.140 |                |                |  |
| 175                         | 2.92        |                                                               |                |                | 2.904<br>33.32 | 2.182<br>16.66 | 1.347<br>5.179 | 0.803<br>1.488 | 0.576<br>0.670 | 0.434<br>0.338 | 0.337<br>0.184 |                |                |  |
| 200                         | 3.33        |                                                               |                |                | 3.319<br>42.75 | 2.493<br>21.36 | 1.539<br>6.624 | 0.918<br>1.901 | 0.659<br>0.855 | 0.496<br>0.431 | 0.385<br>0.234 | 0.251<br>0.084 |                |  |
| 250                         | 4.17        |                                                               |                |                | 4.149<br>64.86 | 3.117<br>32.32 | 1.924<br>10.03 | 1.147<br>2.860 | 0.823<br>1.282 | 0.620<br>0.646 | 0.481<br>0.350 | 0.314<br>0.126 |                |  |
| 300                         | 5.00        |                                                               |                |                |                | 3.740<br>45.52 | 2.309<br>14.04 | 1.377<br>4.009 | 0.988<br>1.792 | 0.744<br>0.903 | 0.577<br>0.488 | 0.377<br>0.175 | 0.263<br>0.074 |  |
| 400                         | 6.67        |                                                               |                |                |                | 4.987<br>78.17 | 3.078<br>24.04 | 1.836<br>6.828 | 1.317<br>3.053 | 0.992<br>1.530 | 0.770<br>0.829 | 0.502<br>0.294 | 0.351<br>0.124 |  |
| 500                         | 8.33        |                                                               |                |                |                |                | 3.848<br>36.71 | 2.295<br>10.40 | 1.647<br>4.622 | 1.240<br>2.315 | 0.962<br>1.254 | 0.628<br>0.445 | 0.439<br>0.187 |  |
| 600                         | 10.0        |                                                               |                |                |                |                | 4.618<br>51.84 | 2.753<br>14.62 | 1.976<br>6.505 | 1.488<br>3.261 | 1.155<br>1.757 | 0.753<br>0.623 | 0.526<br>0.260 |  |
| 700                         | 11.7        |                                                               |                |                |                |                |                | 3.212<br>19.52 | 2.306<br>8.693 | 1.736<br>4.356 | 1.347<br>2.345 | 0.879<br>0.831 | 0.614<br>0.347 |  |
| 800                         | 13.3        |                                                               |                |                |                |                |                | 3.671<br>25.20 | 2.635<br>11.18 | 1.984<br>5.582 | 1.540<br>3.009 | 1.005<br>1.066 | 0.702<br>0.445 |  |
| 900                         | 15.0        |                                                               |                |                |                |                |                | 4.130<br>31.51 | 2.964<br>13.97 | 2.232<br>6.983 | 1.732<br>3.762 | 1.130<br>1.328 | 0.790<br>0.555 |  |
| 1000                        | 16.7        |                                                               |                |                |                |                |                | 4.589<br>38.43 | 3.294<br>17.06 | 2.480<br>8.521 | 1.925<br>4.595 | 1.256<br>1.616 | 0.877<br>0.674 |  |
| 1250                        | 20.8        |                                                               |                |                |                |                |                |                | 4.117<br>26.10 | 3.100<br>13.00 | 2.406<br>7.010 | 1.570<br>2.458 | 1.097<br>1.027 |  |
| 1500                        | 25.0        |                                                               |                |                |                |                |                |                | 4.941<br>36.97 | 3.720<br>18.42 | 2.887<br>9.892 | 1.883<br>3.468 | 1.316<br>1.444 |  |
| 1750                        | 29.2        |                                                               |                |                |                |                |                |                |                | 4.340<br>24.76 | 3.368<br>13.30 | 2.197<br>4.665 | 1.535<br>1.934 |  |
| 2000                        | 33.3        |                                                               |                |                |                |                |                |                |                | 4.980<br>31.94 | 3.850<br>17.16 | 2.511<br>5.995 | 1.754<br>2.496 |  |
| 2500                        | 41.7        |                                                               |                |                |                |                |                |                |                |                | 4.812<br>26.26 | 3.139<br>9.216 | 2.193<br>3.807 |  |
| 3000                        | 50.0        |                                                               |                |                |                |                |                |                |                |                |                | 3.767<br>13.05 | 2.632<br>5.417 |  |
| 4000                        | 66.7        |                                                               |                |                |                |                |                |                |                |                |                | 5.023<br>22.72 | 3.509<br>8.926 |  |
| 5000                        | 83.3        |                                                               |                |                |                |                |                |                |                |                |                |                | 4.386<br>14.42 |  |
| 90° bends, slide valves     |             | 1.0                                                           | 1.0            | 1.1            | 1.2            | 1.3            | 1.4            | 1.5            | 1.6            | 1.6            | 1.7            | 2.0            | 2.5            |  |
| T-pieces, non-return valves |             | 4.0                                                           | 4.0            | 4.0            | 5.0            | 5.0            | 5.0            | 6.0            | 6.0            | 6.0            | 7.0            | 8.0            | 9.0            |  |

The upper figures indicate the velocity of water in m/sec.

The lower figures indicate head loss in metres per 100 metres of straight pipes.

The table is calculated in accordance with H. Lang's new formula  $a=0.02$  and for a water temperature of 10 degree C. The head loss in bends, slide valves, T-pieces and non-return valves is equivalent to the metres of straight pipes states in the last two lines of the table.

To find the head loss in foot valves, multiply the loss in T-pieces by two.

## Head losses in plastic pipes

Upper figures indicate the velocity of in m/sec. Lower figures indicate head loss in metres per 100 metres of straight pipes.

| Quantity of water |             | PELM/PEH PN 10 |              |              |               |              |               |               |               |              |               |               |               |
|-------------------|-------------|----------------|--------------|--------------|---------------|--------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|
| Litres/min.       | Litres/sec. | PELM           |              |              |               |              |               | PEH           |               |              |               |               |               |
|                   |             | 25<br>20.4     | 32<br>26.2   | 40<br>32.6   | 50<br>40.8    | 63<br>51.4   | 75<br>61.4    | 90<br>73.6    | 110<br>90.0   | 125<br>102.2 | 140<br>114.6  | 160<br>130.8  | 180<br>147.2  |
| 10                | 0.16        | 0.49<br>1.8    | 0.30<br>0.66 | 0.19<br>0.27 | 0.12<br>0.085 |              |               |               |               |              |               |               |               |
| 15                | 0.25        | 0.76<br>4.0    | 0.46<br>1.14 | 0.3<br>0.6   | 0.19<br>0.18  | 0.12<br>0.63 |               |               |               |              |               |               |               |
| 20                | 0.33        | 1.0<br>6.4     | 0.61<br>2.2  | 0.39<br>0.9  | 0.25<br>0.28  | 0.16<br>0.11 |               |               |               |              |               |               |               |
| 25                | 0.42        | 1.3<br>10.0    | 0.78<br>3.5  | 0.5<br>1.4   | 0.32<br>0.43  | 0.2<br>0.17  | 0.14<br>0.074 |               |               |              |               |               |               |
| 30                | 0.50        | 1.53<br>13.0   | 0.93<br>4.6  | 0.6<br>1.9   | 0.38<br>0.57  | 0.24<br>0.22 | 0.17<br>0.092 |               |               |              |               |               |               |
| 35                | 0.58        | 1.77<br>16.0   | 1.08<br>6.0  | 0.69<br>2.0  | 0.44<br>0.70  | 0.28<br>0.27 | 0.2<br>0.12   |               |               |              |               |               |               |
| 40                | 0.67        | 2.05<br>22.0   | 1.24<br>7.5  | 0.80<br>3.3  | 0.51<br>0.93  | 0.32<br>0.35 | 0.23<br>0.16  | 0.16<br>0.063 |               |              |               |               |               |
| 50                | 0.83        | 2.54<br>37.0   | 1.54<br>11.0 | 0.99<br>4.8  | 0.63<br>1.40  | 0.4<br>0.50  | 0.28<br>0.22  | 0.2<br>0.09   |               |              |               |               |               |
| 60                | 1.00        | 3.06<br>43.0   | 1.85<br>15.0 | 1.2<br>6.5   | 0.76<br>1.90  | 0.48<br>0.70 | 0.34<br>0.32  | 0.24<br>0.13  | 0.16<br>0.050 |              |               |               |               |
| 70                | 1.12        | 3.43<br>50.0   | 2.08<br>18.0 | 1.34<br>8.0  | 0.86<br>2.50  | 0.54<br>0.83 | 0.38<br>0.38  | 0.26<br>0.17  | 0.18<br>0.068 |              |               |               |               |
| 80                | 1.33        |                | 2.47<br>25.0 | 1.59<br>10.5 | 1.02<br>3.00  | 0.64<br>1.20 | 0.45<br>0.50  | 0.31<br>0.22  | 0.2<br>0.084  |              |               |               |               |
| 90                | 1.50        |                | 2.78<br>30.0 | 1.8<br>12.0  | 1.15<br>3.50  | 0.72<br>1.30 | 0.51<br>0.57  | 0.35<br>0.26  | 0.24<br>0.092 | 0.18<br>0.05 |               |               |               |
| 100               | 1.67        |                | 3.1<br>39.0  | 2.0<br>16.0  | 1.28<br>4.6   | 0.8<br>1.80  | 0.56<br>0.73  | 0.39<br>0.30  | 0.26<br>0.12  | 0.2<br>0.07  |               |               |               |
| 125               | 2.08        |                | 3.86<br>50.0 | 2.49<br>24.0 | 1.59<br>6.6   | 1.00<br>2.50 | 0.70<br>1.10  | 0.49<br>0.50  | 0.33<br>0.18  | 0.25<br>0.10 | 0.20<br>0.055 |               |               |
| 150               | 2.50        |                |              | 3.00<br>33.0 | 1.91<br>8.6   | 1.20<br>3.5  | 0.84<br>1.40  | 0.59<br>0.63  | 0.39<br>0.24  | 0.30<br>0.13 | 0.24<br>0.075 |               |               |
| 175               | 2.92        |                |              | 3.5<br>38.0  | 2.23<br>11.0  | 1.41<br>4.3  | 0.99<br>1.80  | 0.69<br>0.78  | 0.46<br>0.30  | 0.36<br>0.18 | 0.28<br>0.09  |               |               |
| 200               | 3.33        |                |              | 3.99<br>50.0 | 2.55<br>14.0  | 1.60<br>5.5  | 1.12<br>2.40  | 0.78<br>1.0   | 0.52<br>0.40  | 0.41<br>0.22 | 0.32<br>0.12  | 0.25<br>0.065 |               |
| 250               | 4.17        |                |              |              | 3.19<br>21.0  | 2.01<br>8.0  | 1.41<br>3.70  | 0.98<br>1.50  | 0.66<br>0.57  | 0.51<br>0.34 | 0.40<br>0.18  | 0.31<br>0.105 | 0.25<br>0.06  |
| 300               | 5.00        |                |              |              | 3.82<br>28.0  | 2.41<br>10.5 | 1.69<br>4.60  | 1.18<br>1.95  | 0.78<br>0.77  | 0.61<br>0.45 | 0.48<br>0.25  | 0.37<br>0.13  | 0.29<br>0.085 |
| 400               | 6.67        |                |              |              |               | 3.21<br>19.0 | 2.25<br>8.0   | 1.57<br>3.60  | 1.05<br>1.40  | 0.81<br>0.78 | 0.65<br>0.44  | 0.50<br>0.23  | 0.39<br>0.15  |
| 500               | 8.33        |                |              |              |               | 4.01<br>28.0 | 2.81<br>11.5  | 1.96<br>5.0   | 1.31<br>2.0   | 1.02<br>1.20 | 0.81<br>0.63  | 0.62<br>0.33  | 0.49<br>0.21  |
| 600               | 10.0        |                |              |              |               | 4.82<br>37.0 | 3.38<br>15.0  | 2.35<br>6.6   | 1.57<br>2.60  | 1.22<br>1.50 | 0.97<br>0.82  | 0.74<br>0.45  | 0.59<br>0.28  |
| 700               | 11.7        |                |              |              |               | 5.64<br>47.0 | 3.95<br>24.0  | 2.75<br>8.0   | 1.84<br>3.50  | 1.43<br>1.90 | 1.13<br>1.10  | 0.87<br>0.60  | 0.69<br>0.40  |
| 800               | 13.3        |                |              |              |               |              | 4.49<br>26.0  | 3.13<br>11.0  | 2.09<br>4.5   | 1.62<br>2.60 | 1.29<br>1.40  | 0.99<br>0.81  | 0.78<br>0.48  |
| 900               | 15.0        |                |              |              |               |              | 5.07<br>33.0  | 3.53<br>13.5  | 2.36<br>5.5   | 1.83<br>3.20 | 1.45<br>1.70  | 1.12<br>0.95  | 0.08<br>0.58  |
| 1000              | 16.7        |                |              |              |               |              | 5.64<br>40.0  | 3.93<br>16.0  | 2.63<br>6.7   | 2.04<br>3.90 | 1.62<br>2.2   | 1.24<br>1.2   | 0.96<br>0.75  |
| 1250              | 20.8        |                |              |              |               |              | 4.89<br>25.0  | 3.27<br>9.0   | 2.54<br>5.0   | 2.02<br>3.0  | 1.55<br>1.6   | 1.22<br>0.95  |               |
| 1500              | 25.0        |                |              |              |               |              | 5.88<br>33.0  | 3.93<br>13.0  | 3.05<br>8.0   | 2.42<br>4.1  | 1.86<br>2.3   | 1.47<br>1.40  |               |
| 1750              | 29.2        |                |              |              |               |              | 6.86<br>44.0  | 4.59<br>17.5  | 3.56<br>9.7   | 2.83<br>5.7  | 2.17<br>3.2   | 1.72<br>1.9   |               |
| 2000              | 33.3        |                |              |              |               |              |               | 5.23<br>23.0  | 4.06<br>13.0  | 3.23<br>7.0  | 2.48<br>4.0   | 1.96<br>2.4   |               |
| 2500              | 41.7        |                |              |              |               |              |               | 6.55<br>34.0  | 5.08<br>18.0  | 4.04<br>10.5 | 3.10<br>6.0   | 2.45<br>3.5   |               |
| 3000              | 50.0        |                |              |              |               |              |               | 7.86<br>45.0  | 6.1<br>27.0   | 4.85<br>14.0 | 3.72<br>7.6   | 2.94<br>4.4   |               |
| 4000              | 66.7        |                |              |              |               |              |               |               | 8.13<br>43.0  | 6.47<br>24.0 | 4.96<br>13.0  | 3.92<br>7.5   |               |
| 5000              | 83.3        |                |              |              |               |              |               |               |               | 8.08<br>33.0 | 6.2<br>18.0   | 4.89<br>11.0  |               |

The table is based on a nomogram.

Roughness: K = 0.01 mm.

Water temperature : t = 10 Degree C

## NOTE

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