

## Pump Performance Datasheet

|                    |       |                       |                      |
|--------------------|-------|-----------------------|----------------------|
| Customer           | :     | Quote Number / ID     | : 596697             |
| Customer ref. / PO | :     | Model                 | : NBS 015-070-2P     |
| Tag Number         | : 001 | Stages                | : 1                  |
| Service            | :     | Based on curve number | : 015-070-2P_Std     |
| Quantity           | : 1   | Basic model number    | : -                  |
|                    |       | Date last saved       | : 05/31/2022 9:34 AM |

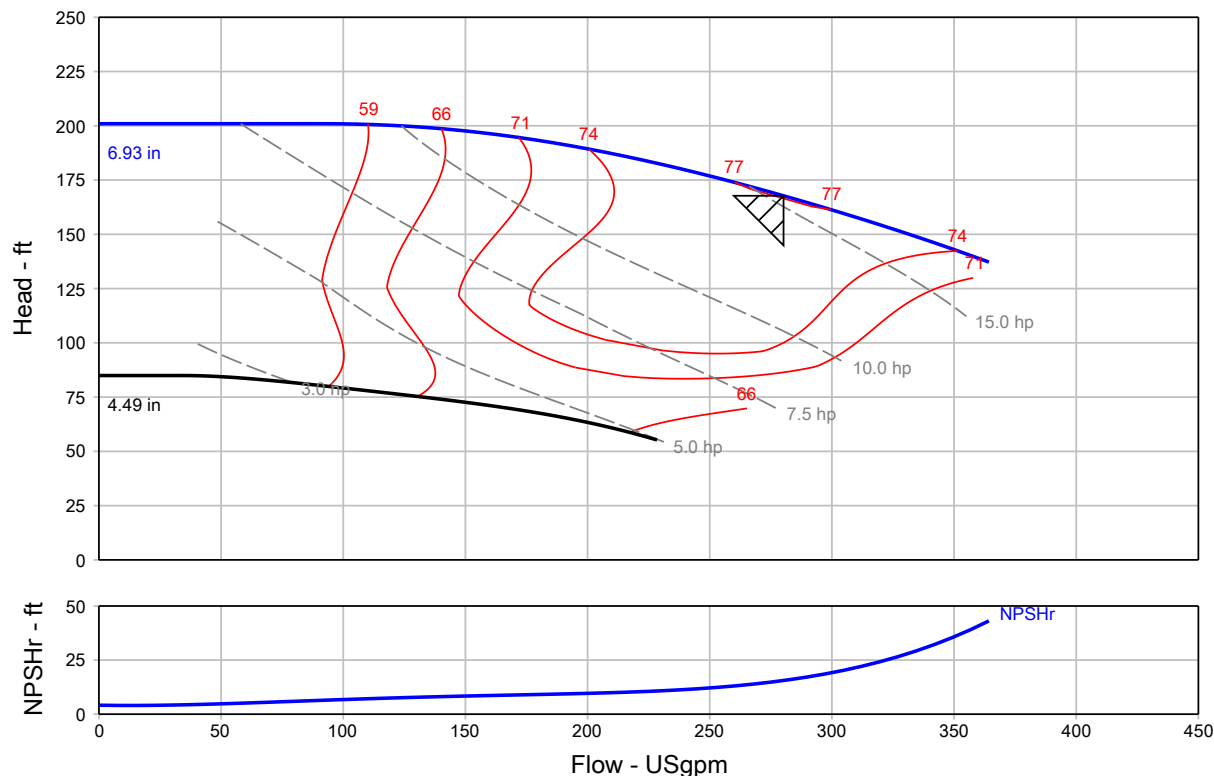
| Operating Conditions                            |                     | Liquid                          |                    |
|-------------------------------------------------|---------------------|---------------------------------|--------------------|
| Flow, rated                                     | : 280.2 USgpm       | Liquid type                     | : Cold Water       |
| Differential head / pressure, rated (requested) | : 167.7 ft          | Additional liquid description   | :                  |
| Differential head / pressure, rated (actual)    | : 167.7 ft          | Solids diameter, max            | : 0.00 in          |
| Suction pressure, rated / max                   | : 0.00 / 0.00 psi.g | Solids concentration, by volume | : 0.00 %           |
| NPSH available, rated                           | : Ample             | Temperature, max                | : 68.00 deg F      |
| Site Supply Frequency                           | : 60 Hz             | Fluid density, rated / max      | : 1.000 / 1.000 SG |

| Performance  |            | Material          |                         |
|--------------|------------|-------------------|-------------------------|
| Speed, rated | : 3450 rpm | Material selected | : Cast iron / 125 Class |

| Impeller diameter, rated               | : 6.93 in               | Pressure Data                      |               |
|----------------------------------------|-------------------------|------------------------------------|---------------|
| Impeller diameter, maximum             | : 6.93 in               | Maximum working pressure           | : 86.97 psi.g |
| Impeller diameter, minimum             | : 4.49 in               | Maximum allowable working pressure | : 175.0 psi.g |
| Efficiency                             | : 77.20 %               | Maximum allowable suction pressure | : 130.0 psi.g |
| NPSH required / margin required        | : 15.56 / 0.00 ft       | Hydrostatic test pressure          | : 263.0 psi.g |
| nq (imp. eye flow) / S (imp. eye flow) | : 24 / 143 Metric units |                                    |               |
| MCSF                                   | : 28.02 USgpm           |                                    |               |

| Head, maximum, rated diameter    | : 201.0 ft                  | Driver & Power Data (@Max density) |                               |
|----------------------------------|-----------------------------|------------------------------------|-------------------------------|
| Head rise to shutoff             | : 19.79 %                   | Motor sizing specification         | : Max power (non-overloading) |
| Flow, best eff. point            | : 280.2 USgpm               | Margin over specification          | : 0.00 %                      |
| Flow ratio, rated / BEP          | : 100.00 %                  | Service factor                     | : 1.15 (used)                 |
| Diameter ratio (rated / max)     | : 100.00 %                  | Power, hydraulic                   | : 11.87 hp                    |
| Head ratio (rated dia / max dia) | : 100.00 %                  | Rated power (based on duty point)  | : 15.37 hp                    |
| Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] | : 1.00 / 1.00 / 1.00 / 1.00 | Max power (non-overloading)        | : 17.39 hp                    |
| Selection status                 | : Acceptable                | Nameplate motor rating             | : 20.00 hp / 14.91 kW         |

| Energy Indexes |        |
|----------------|--------|
| PEI (CL)       | : 0.90 |
| ER (CL)        | : 10   |



## Construction Datasheet

|                     |                    |                            |                   |
|---------------------|--------------------|----------------------------|-------------------|
| Project name        | Default            | Tag Number                 | 001               |
| Consulting engineer |                    | Service                    |                   |
| Customer            |                    | Model                      | NBS 015-070-2P    |
| Customer ref. / PO  |                    | Quantity                   | 1                 |
| Quote Number / ID   | 596697             | Quoted By (Sales Office)   | PFC EQUIPMENT INC |
| Date last saved     | 05/31/2022 9:34 AM | Quoted By (Sales Engineer) | Kelly Kresa       |

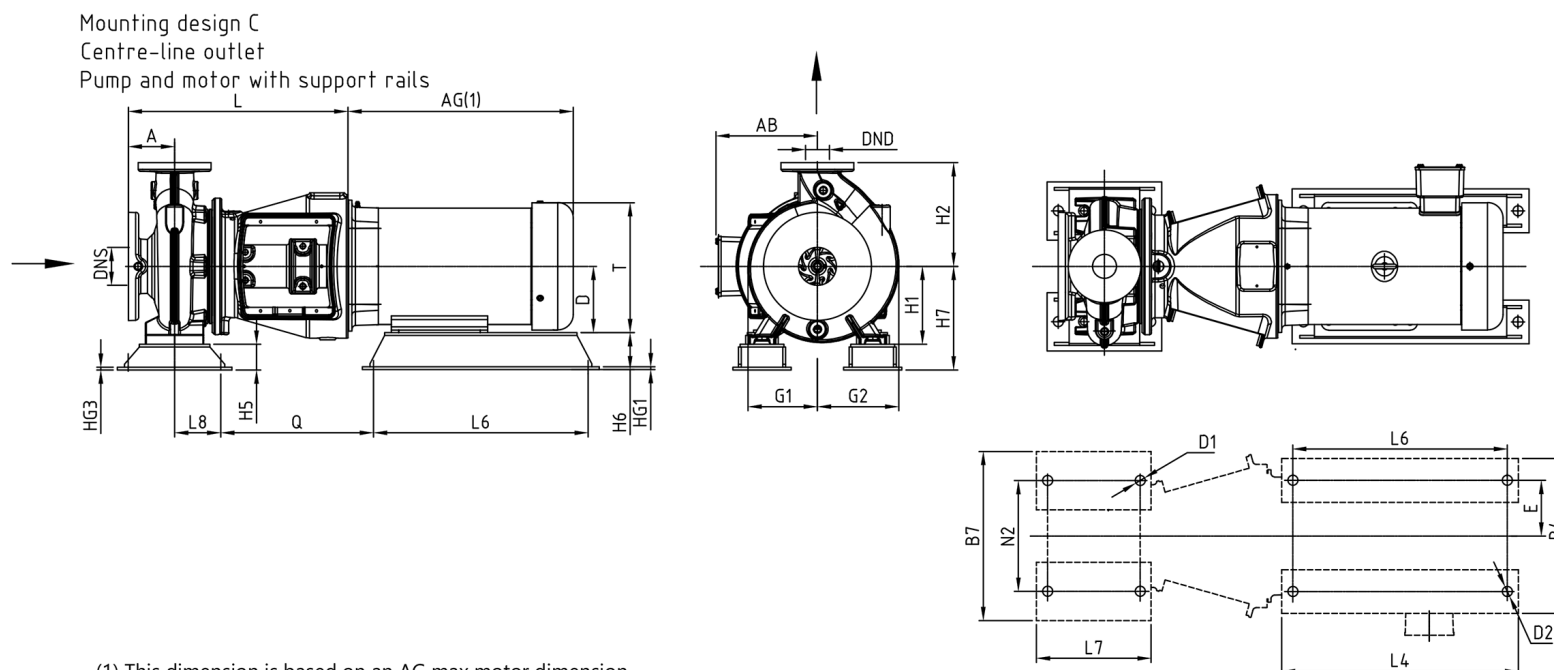
### Construction Code : NBS 015-070/6.93AASG6S2ESBQQEOX2

| Construction       |                                                 | Motor Information               |                 |
|--------------------|-------------------------------------------------|---------------------------------|-----------------|
| Product Family     | NBS_Std                                         | Manufacturer                    | Baldor          |
| Suction Size       | 2.5 in.                                         | Frame Size                      | 256TC           |
| Discharge Size     | 1.5 in.                                         | Power                           | 20 HP           |
| Flange Rating      | Class 125                                       | RPM                             | 3600            |
| Orientation        | Horizontal                                      | Enclosure                       | TEFC            |
| Rotation           | Clockwise                                       | Operating Power Supply          | 230/460/3/60    |
| Pump Housing       | Cast Iron, ASTM A48 - Class 35                  | Efficiency                      | Premium         |
| O-Ring             | EPDM                                            | Service Factor                  | 1.15            |
| Plug               | Galvanized                                      | Motor Application               | General Purpose |
| Impeller           | Stainless Steel, AISI-304 / EN 1.430            | <b>Weight (Approx.)</b>         |                 |
| Impeller Nut       | Stainless Steel, AISI-304                       | Pump                            | 166.0 lb        |
| Shaft              | Stainless Steel, AISI 420                       | Support Rail                    | 25.00 lb        |
| Cover              | Ductile Cast Iron, ASTM 70-50-05                | Base Plate                      | -               |
| Seal Type          | Rubber bellows seal                             | Driver                          | 229.0 lb        |
| Shaft Seal         | BQQE - Silicon carbide / Silicon carbide / EPDM | Estimated Shipping Gross Weight | 420.0 lb        |
| Seal Cap           | Ductile Cast Iron, ASTM 70-50-05                |                                 |                 |
| Motor Stool        | Gray Cast Iron, ASTM Class 30                   |                                 |                 |
| Recirculation Line | None                                            |                                 |                 |
| Coupling           | Rigid, Axial Split Coupling (aluminum)          |                                 |                 |
| Support Rail       | Support Rail                                    |                                 |                 |

## General Arrangement

Project name : Default  
 Consulting engineer :  
 Customer :  
 Customer ref. / PO :  
 Quote Number / ID : 596697  
 Date last saved : 05/31/2022 9:34 AM

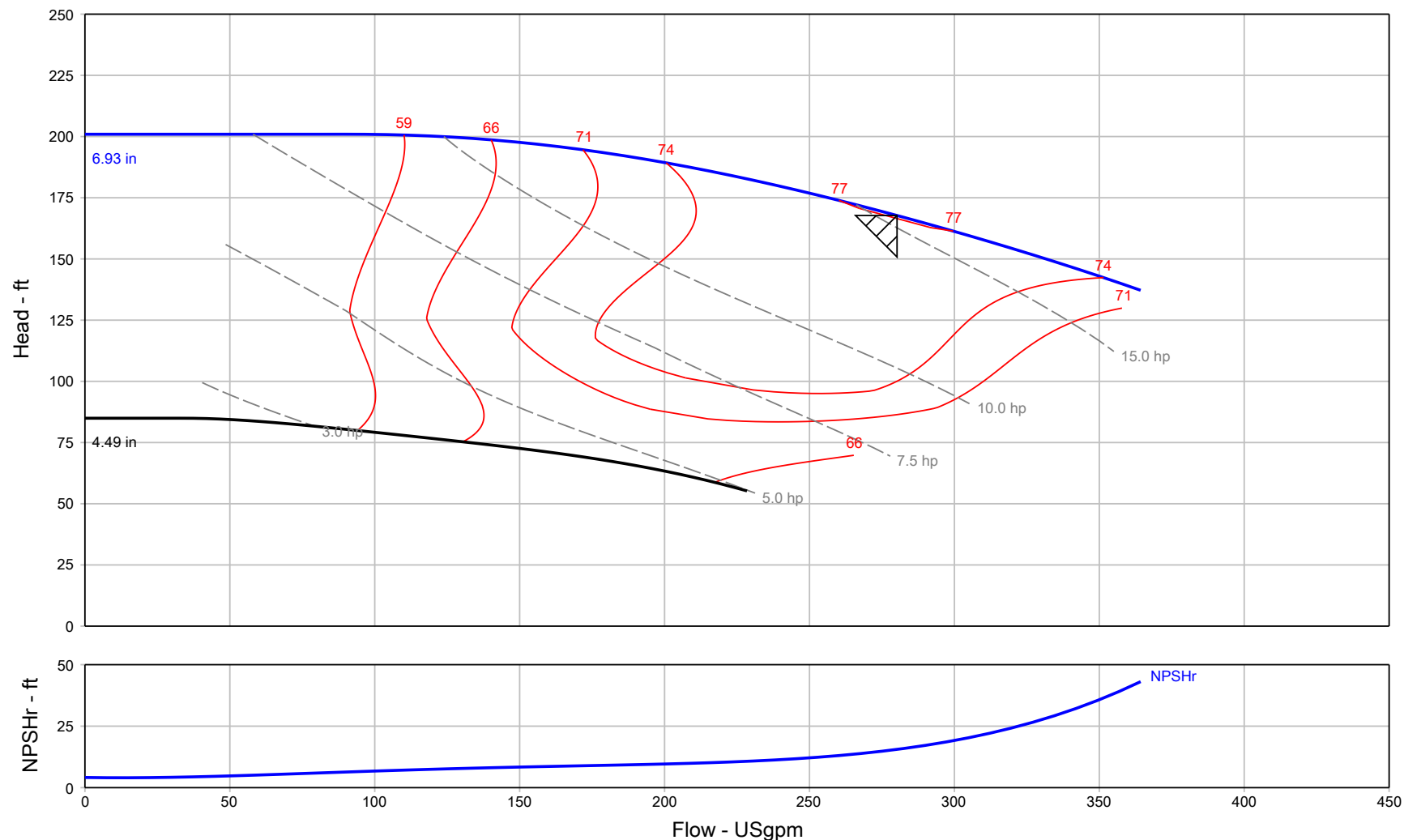
Tag Number : 001  
 Service :  
 Model : NBS 015-070-2P  
 Quantity of pumps : 1  
 Quoted By (Sales Office) : PFC EQUIPMENT INC  
 Quoted By (Sales Engineer) : Kelly Kresa



**NOT FOR CONSTRUCTION, UNLESS CERTIFIED AND REFERENCED ON ORDER**

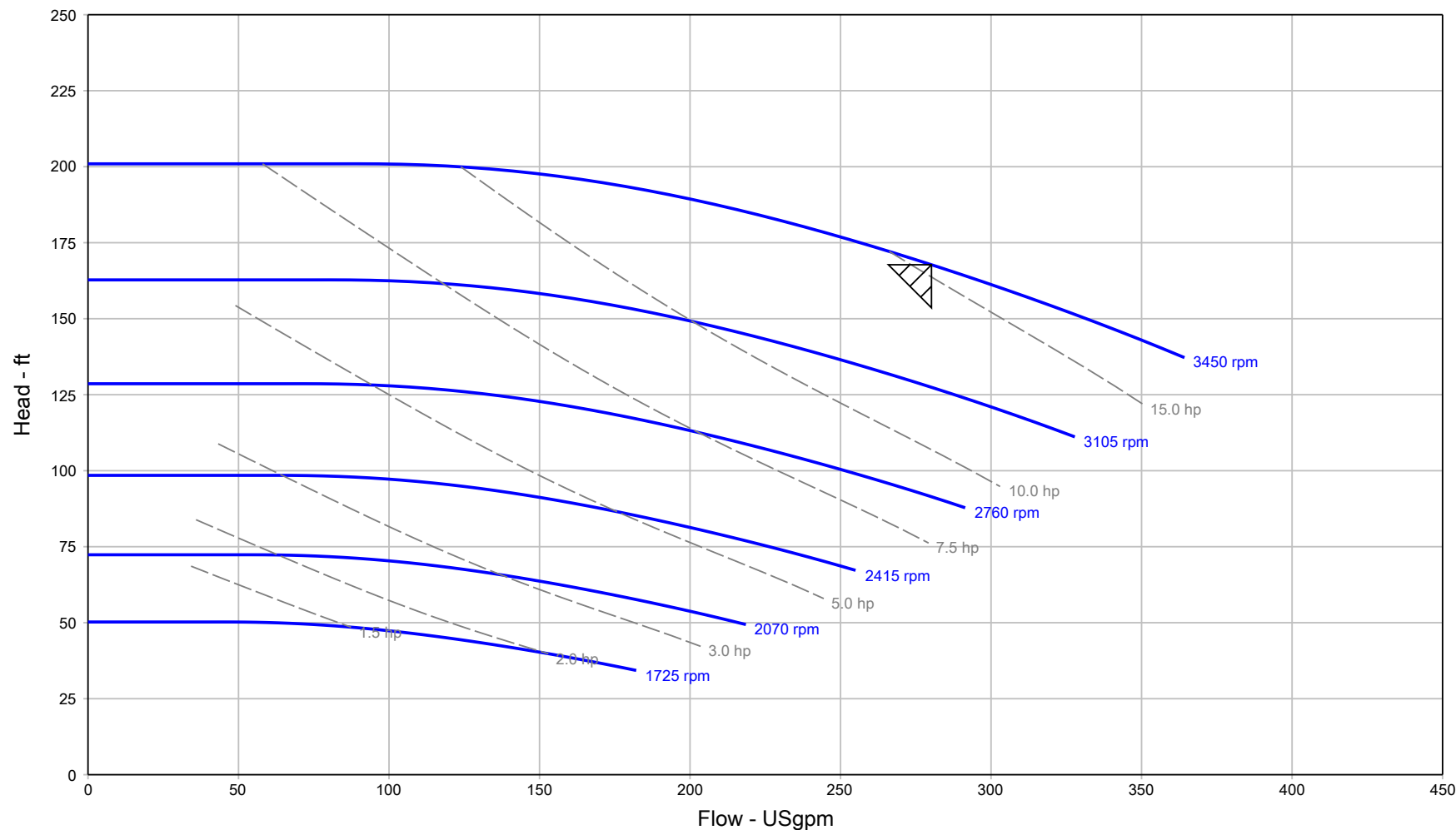
| Units                 | Frame | DNS | DND | Class              | A    | AB   | AG    | B4            | B7    | D          | D1   | D2         | E    | G1   | G2   | H1               | H2   | H5   | H6   | H7                  | HG1  | HG3  | L     | L4    | L6    | L7   | L8   | N2   | Q     | T     | Weight |
|-----------------------|-------|-----|-----|--------------------|------|------|-------|---------------|-------|------------|------|------------|------|------|------|------------------|------|------|------|---------------------|------|------|-------|-------|-------|------|------|------|-------|-------|--------|
| inches                | 256TC | 2.5 | 1.5 | 125                | 3.13 | 9.63 | 21.53 | 11.97         | 11.42 | 6.25       | 0.69 | 0.69       | 5.00 | 4.69 | 5.51 | 5.25             | 7.00 | 1.75 | 0.75 | 7.00                | 0.38 | 0.20 | 14.64 | 20.25 | 18.75 | 7.75 | 3.13 | 7.48 | 10.24 | 12.88 | 420.0  |
| Conditions of Service |       |     |     |                    |      |      |       |               |       | Motor Data |      |            |      |      |      |                  |      |      |      |                     |      |      |       |       |       |      |      |      |       |       |        |
| Flow: 280.2 USgpm     |       |     |     | Fluid: Cold Water  |      |      |       | HP: 20        |       |            |      | Encl: TEFC |      |      |      | Phase: 3         |      |      |      | Efficiency: Premium |      |      |       |       |       |      |      |      |       |       |        |
| TDH: 167.7 ft         |       |     |     | Temp.: 68.00 deg F |      |      |       | RPM: 3450 rpm |       |            |      | Hz: 60     |      |      |      | Voltage: 230/460 |      |      |      | S.F.: 1.15          |      |      |       |       |       |      |      |      |       |       |        |

## Pump Performance Curve



|                       |                      |                            |                     |                                     |               |
|-----------------------|----------------------|----------------------------|---------------------|-------------------------------------|---------------|
| Project name          | : Default            | Tag Number                 | : 001               | Flow, rated                         | : 280.2 USgpm |
| Consulting engineer   | :                    | Service                    | :                   | Differential head / pressure, rated | : 167.7 ft    |
| Customer              | :                    | Model                      | : NBS 015-070-2P    | Rated power (based on duty point)   | : 15.37 hp    |
| Customer ref. / PO    | :                    | Quantity                   | : 1                 | Max power (non-overloading)         | : 17.39 hp    |
| Quote Number / ID     | : 596697             | Quoted By (Sales Office)   | : PFC EQUIPMENT INC | Efficiency                          | : 77.20 %     |
| Date last saved       | : 05/31/2022 9:34 AM | Quoted By (Sales Engineer) | : Kelly Kresa       | Impeller diameter, rated            | : 6.93 in     |
| Based on curve number | : 015-070-2P_Std     | Stages                     | : 1                 | PEI (CL)                            | : 0.90        |
|                       |                      | Speed, rated               | : 3450 rpm          | ER (CL)                             | : 10          |

## Multi-Speed Performance Curve



|                     |                      |                            |                     |                                     |                             |
|---------------------|----------------------|----------------------------|---------------------|-------------------------------------|-----------------------------|
| Project name        | : Default            | Tag Number                 | : 001               | Speed, rated                        | : 3450 rpm                  |
| Consulting engineer | :                    | Service                    | :                   | Flow, rated                         | : 280.2 USgpm               |
| Customer            | :                    | Model                      | : NBS 015-070-2P    | Differential head / pressure, rated | : 167.7 ft                  |
| Customer ref. / PO  | :                    | Quantity                   | : 1                 | Fluid density, rated / max          | : 1.000 / 1.000 SG          |
| Quote Number / ID   | : 596697             | Quoted By (Sales Office)   | : PFC EQUIPMENT INC | Viscosity                           | : 1.00 cP                   |
| Date last saved     | : 05/31/2022 9:34 AM | Quoted By (Sales Engineer) | : Kelly Kresa       | Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]    | : 1.00 / 1.00 / 1.00 / 1.00 |
|                     |                      | Stages                     | : 1                 | Based on curve number               | : 015-070-2P_Std            |