

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 10:33 AM

Operating Conditions	Liquid
Flow, rated	: 175.7 USgpm
Differential head / pressure, rated (requested)	: 68.44 ft
Differential head / pressure, rated (actual)	: 68.44 ft
Suction pressure, rated / max	: 0.00 / 0.00 psi.g
NPSH available, rated	: Ample
Site Supply Frequency	: 60 Hz
Liquid type	: Cold Water
Additional liquid description	:
Solids diameter, max	: 0.00 in
Solids concentration, by volume	: 0.00 %
Temperature, max	: 68.00 deg F
Fluid density, rated / max	: 1.000 / 1.000 SG
Viscosity, rated	: 1.00 cP
Vapor pressure, rated	: 0.34 psi.a

Performance	Material
Speed, rated	: 3450 rpm
Impeller diameter, rated	: 4.49 in
Impeller diameter, maximum	: 6.93 in
Impeller diameter, minimum	: 4.49 in
Efficiency	: 68.86 %
NPSH required / margin required	: 10.77 / 0.00 ft
nq (imp. eye flow) / S (imp. eye flow)	: 24 / 143 Metric units
MCSF	: 17.55 USgpm
Head, maximum, rated diameter	: 84.94 ft
Head rise to shutoff	: 24.10 %
Flow, best eff. point	: 175.7 USgpm
Flow ratio, rated / BEP	: 100.00 %
Diameter ratio (rated / max)	: 64.79 %
Head ratio (rated dia / max dia)	: 35.28 %
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00
Selection status	: Acceptable

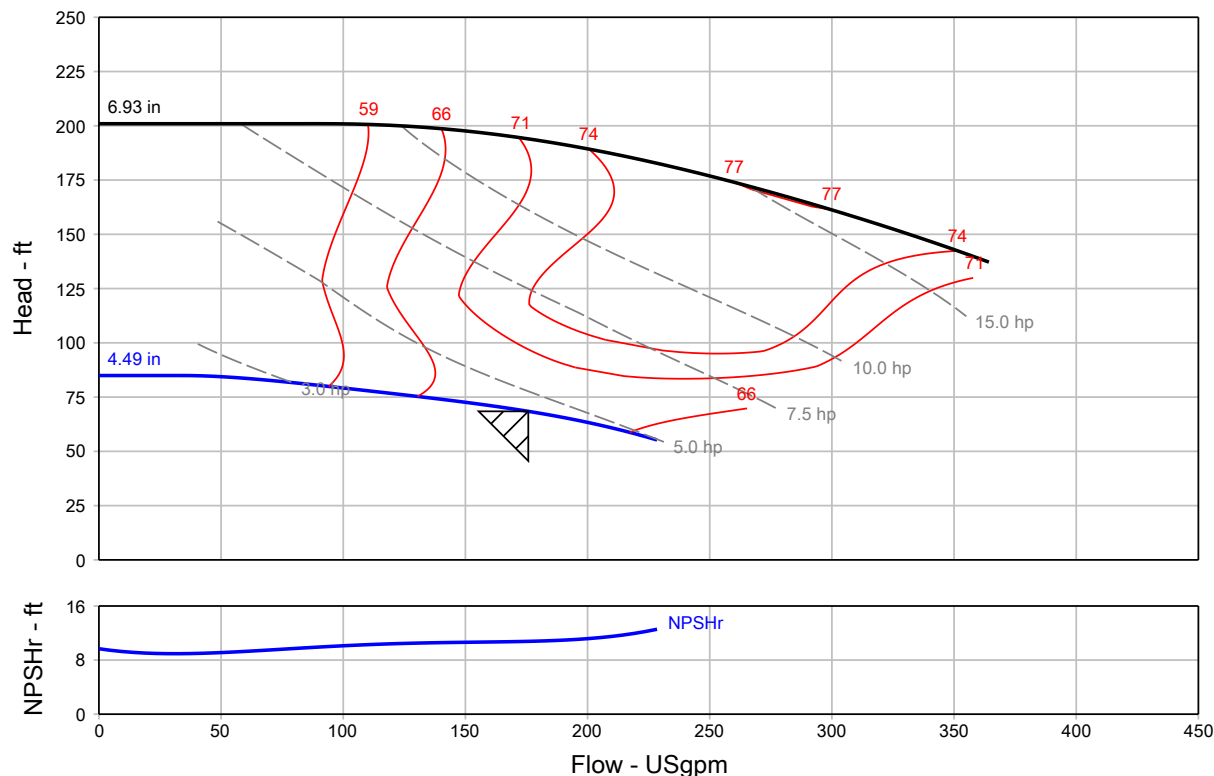
Impeller diameter, rated	: 4.49 in	
Impeller diameter, maximum	: 6.93 in	
		Material
		Material selected : Cast iron / 125 Class

Impeller diameter, minimum	: 4.49 in		
Efficiency	: 68.86 %		
NPSH required / margin required	: 10.77 / 0.00 ft		
nq (imp. eye flow) / S (imp. eye flow)	: 24 / 143 Metric units		
MCSF	: 17.55 USgpm		

Pressure Data	
Maximum working pressure	: 36.76 psi.g
Maximum allowable working pressure	: 175.0 psi.g
Maximum allowable suction pressure	: 130.0 psi.g
Hydrostatic test pressure	: 263.0 psi.g

Head, maximum, rated diameter	: 84.94 ft	Driver & Power Data (@Max density)	
Head rise to shutoff	: 24.10 %	Motor sizing specification	: Max power (non-overloading)
Flow, best eff. point	: 175.7 USgpm	Margin over specification	: 0.00 %
Flow ratio, rated / BEP	: 100.00 %	Service factor	: 1.15 (used)
Diameter ratio (rated / max)	: 64.79 %	Power, hydraulic	: 3.04 hp
Head ratio (rated dia / max dia)	: 35.28 %	Rated power (based on duty point)	: 4.41 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00	Max power (non-overloading)	: 4.98 hp
Selection status	: Acceptable	Nameplate motor rating	: 5.00 hp / 3.73 kW

Energy indexes	
PEI (CL)	: 0.90
ER (CL)	: 10



Construction Datasheet

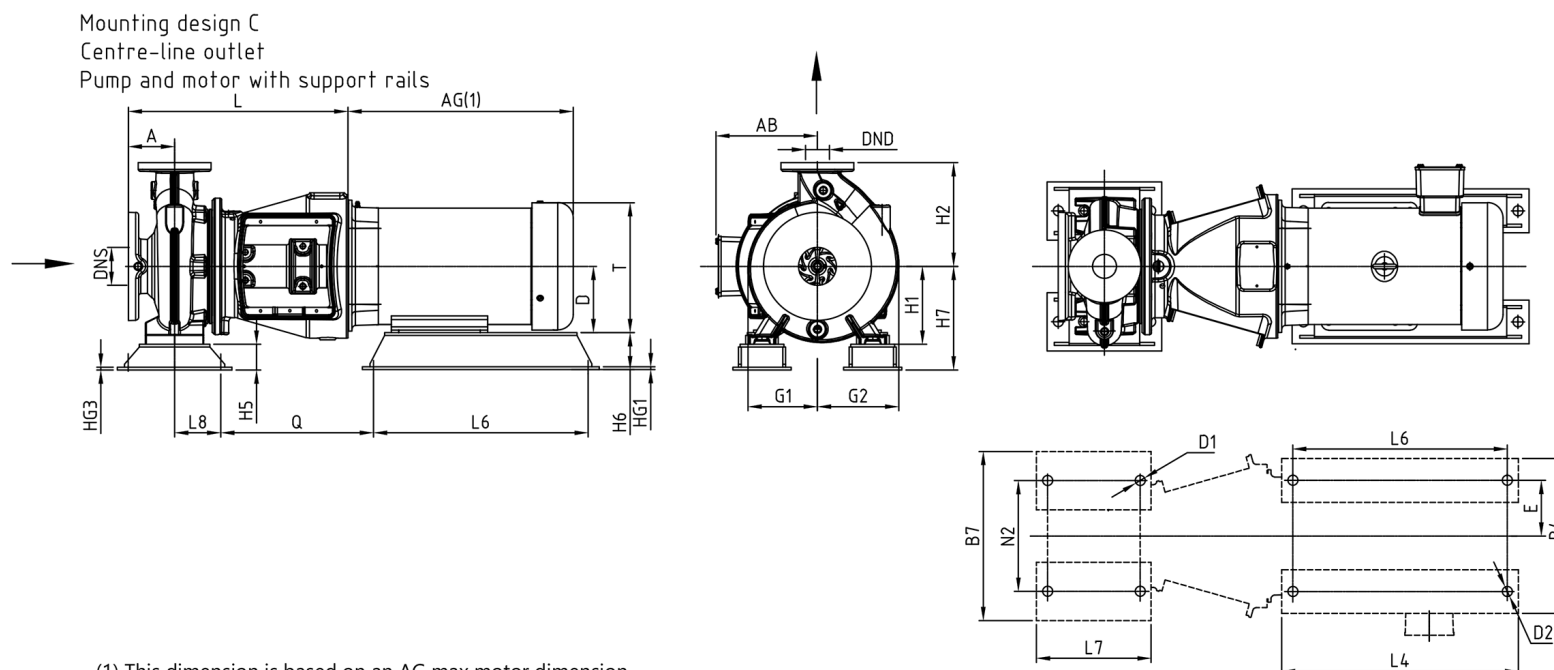
Project name	Default	Tag Number	001
Consulting engineer		Service	
Customer		Model	NBS 015-070-2P
Customer ref. / PO		Quantity	1
Quote Number / ID	596697	Quoted By (Sales Office)	PFC EQUIPMENT INC
Date last saved	05/31/2022 10:33 AM	Quoted By (Sales Engineer)	Kelly Kresa

Construction Code : NBS 015-070/4.49AASG6S2ESBQQEKX2

Construction		Motor Information	
Product Family	NBS_Std	Manufacturer	Baldor
Suction Size	2.5 in.	Frame Size	184TC
Discharge Size	1.5 in.	Power	5 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	Weight (Approx.)	
Impeller Nut	Stainless Steel, AISI-304	Pump	166.0 lb
Shaft	Stainless Steel, AISI 420	Support Rail	32.00 lb
Cover	Ductile Cast Iron, ASTM 70-50-05	Base Plate	-
Seal Type	Rubber bellows seal	Driver	78.00 lb
Shaft Seal	BQQE - Silicon carbide / Silicon carbide / EPDM	Estimated Shipping Gross Weight	276.0 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

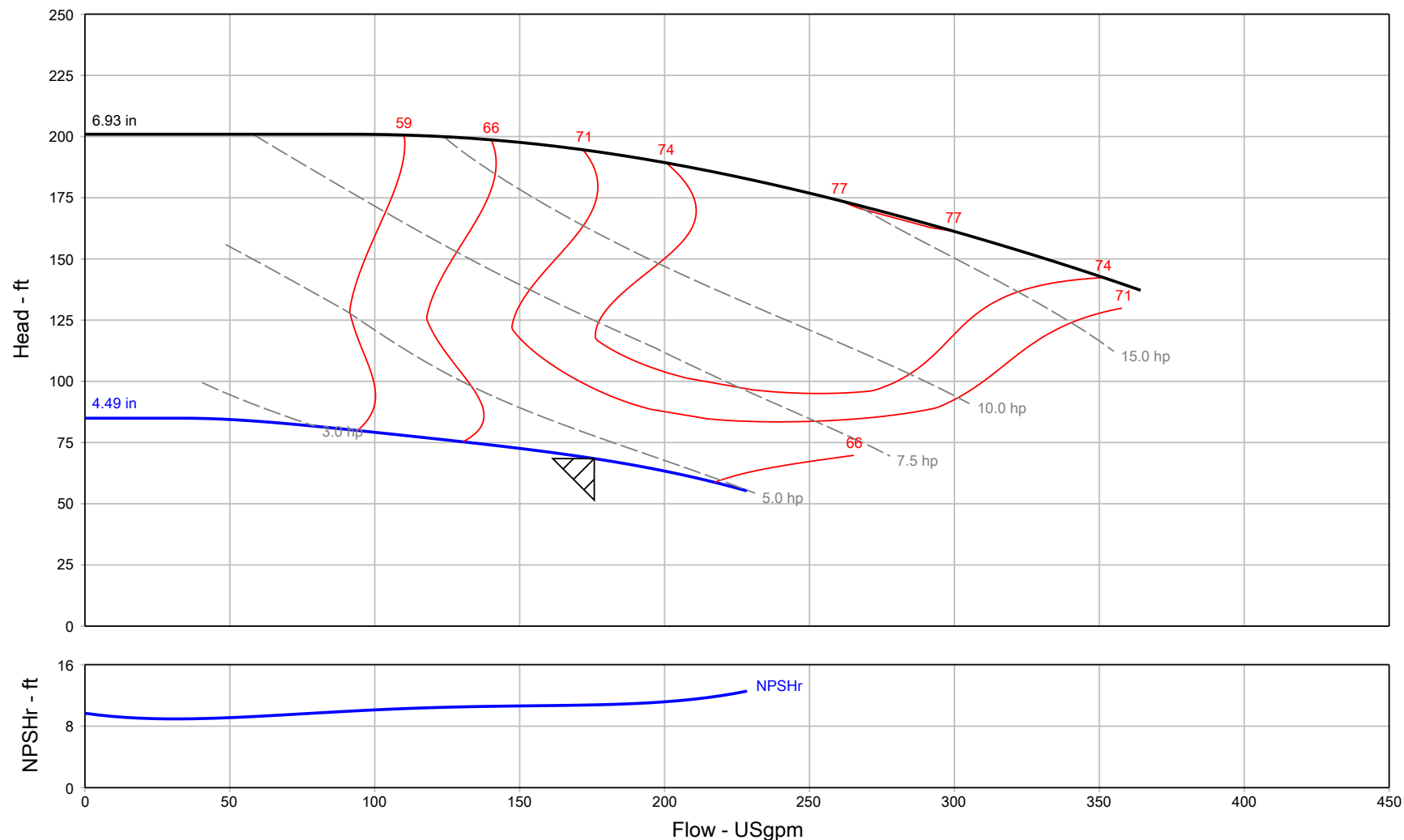
Project name	: Default	Tag Number	: 001
Consulting engineer	:	Service	:
Customer	:	Model	: NBS 015-070-2P
Customer ref. / PO	:	Quantity of pumps	: 1
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC
Date last saved	: 05/31/2022 10:33 AM	Quoted By (Sales Engineer)	: Kelly Kresa



NOT FOR CONSTRUCTION, UNLESS CERTIFIED AND REFERENCED ON ORDER

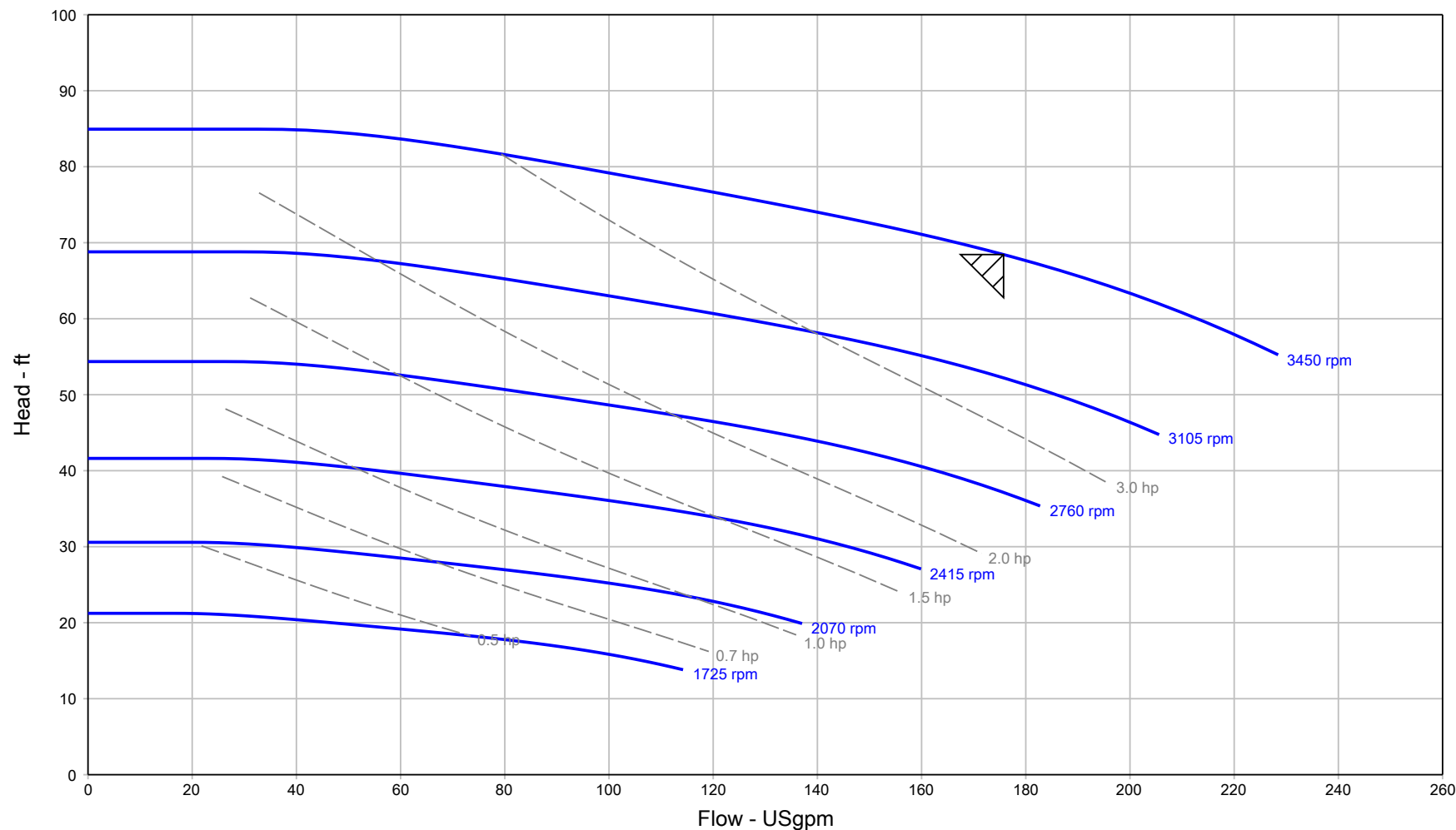
Units	Frame	DNS	DND	Class	A	AB	AG	B4	B7	D	D1	D2	E	G1	G2	H1	H2	H5	H6	H7	HG1	HG3	L	L4	L6	L7	L8	N2	Q	T	Weight
inches	184TC	2.5	1.5	125	3.13	5.88	15.63	10.45	11.42	4.50	0.69	0.69	3.75	4.69	5.51	5.25	7.00	1.75	2.50	7.00	0.20	0.20	14.64	13.75	12.25	7.75	3.13	7.48	9.54	8.69	276.0
Conditions of Service								Motor Data																							
Flow: 175.7 USgpm				Fluid: Cold Water				HP: 5					Encl: TEFC					Phase: 3					Efficiency: Premium								
TDH: 68.44 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	: 175.7 USgpm
Consulting engineer	:	Service	:	Differential head / pressure, rated	: 68.44 ft
Customer	:	Model	: NBS 015-070-2P	Rated power (based on duty point)	: 4.41 hp
Customer ref. / PO	:	Quantity	: 1	Max power (non-overloading)	: 4.98 hp
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC	Efficiency	: 68.86 %
Date last saved	: 05/31/2022 10:33 AM	Quoted By (Sales Engineer)	: Kelly Kresa	Impeller diameter, rated	: 4.49 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	: 175.7 USgpm
Customer	:	Model	: NBS 015-070-2P	Differential head / pressure, rated	: 68.44 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 10:33 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