

Pump Performance Datasheet

Customer	:	Quote Number / ID	: 596697
Customer ref. / PO	:	Model	: NBS 040-095-2P
Tag Number	: 001	Stages	: 1
Service	:	Based on curve number	: 040-095-2P_Std
Quantity	: 1	Basic model number	: -
		Date last saved	: 05/11/2022 11:52 AM

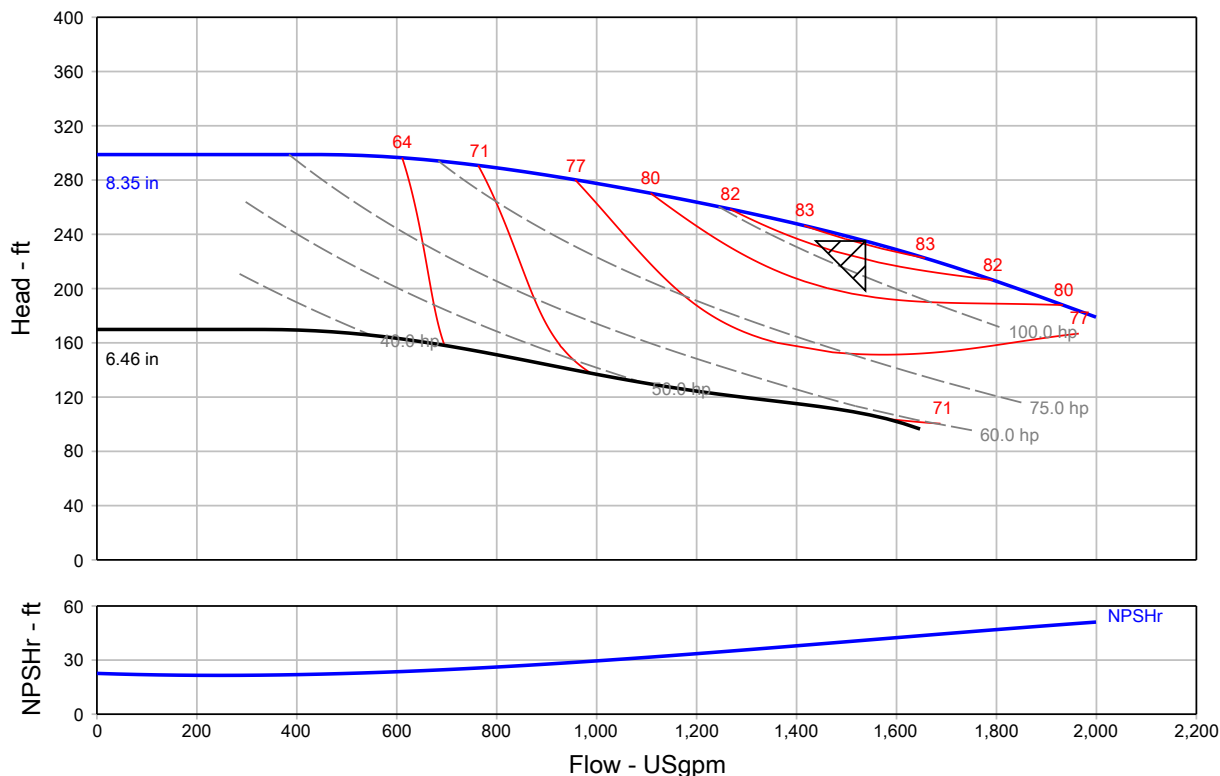
Operating Conditions	Liquid
Flow, rated	: 1,537.8 USgpm
Differential head / pressure, rated (requested)	: 235.0 ft
Differential head / pressure, rated (actual)	: 235.0 ft
Suction pressure, rated / max	: 0.00 / 0.00 psi.g
NPSH available, rated	: Ample
Site Supply Frequency	: 60 Hz
Liquid type	: Cold Water
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	: 3540 rpm
Impeller diameter, rated	: 8.35 in
Impeller diameter, maximum	: 8.35 in
Impeller diameter, minimum	: 6.46 in
Efficiency	: 83.26 %
NPSH required / margin required	: 41.03 / 0.00 ft
nq (imp. eye flow) / S (imp. eye flow)	: 45 / 166 Metric units
MCSF	: 153.8 USgpm
Head, maximum, rated diameter	: 298.8 ft
Head rise to shutoff	: 27.11 %
Flow, best eff. point	: 1,537.8 USgpm
Flow ratio, rated / BEP	: 100.00 %
Diameter ratio (rated / max)	: 100.00 %
Head ratio (rated dia / max dia)	: 100.00 %
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00
Selection status	: Acceptable

Impeller diameter, rated	: 8.35 in		
Impeller diameter, maximum	: 8.35 in		

Impeller diameter, minimum	: 6.46 in	Pressure Data	
Efficiency	: 83.26 %	Maximum working pressure	: 129.3 psi.g
NPSH required / margin required	: 41.03 / 0.00 ft	Maximum allowable working pressure	: 175.0 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 45 / 166 Metric units	Maximum allowable suction pressure	: 130.0 psi.g
MCSF	: 153.8 USgpm	Hydrostatic test pressure	: 263.0 psi.g

Head, maximum, rated diameter	: 298.8 ft	Driver & Power Data (@Max density)	
Head rise to shutoff	: 27.11 %	Motor sizing specification	: Max power (non-overloading)
Flow, best eff. point	: 1,537.8 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	: 91.25 hp
Head ratio (rated dia / max dia)	: 100.00 %	Rated power (based on duty point)	: 110 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00	Max power (non-overloading)	: 115 hp
Selection status	: Acceptable	Nameplate motor rating	: 125 hp / 93.21 kW



Construction Datasheet

Project name	Default	Tag Number	001
Consulting engineer		Service	
Customer		Model	NBS 040-095-2P
Customer ref. / PO		Quantity	1
Quote Number / ID	596697	Quoted By (Sales Office)	PFC EQUIPMENT INC
Date last saved	05/11/2022 11:52 AM	Quoted By (Sales Engineer)	Kelly Kresa

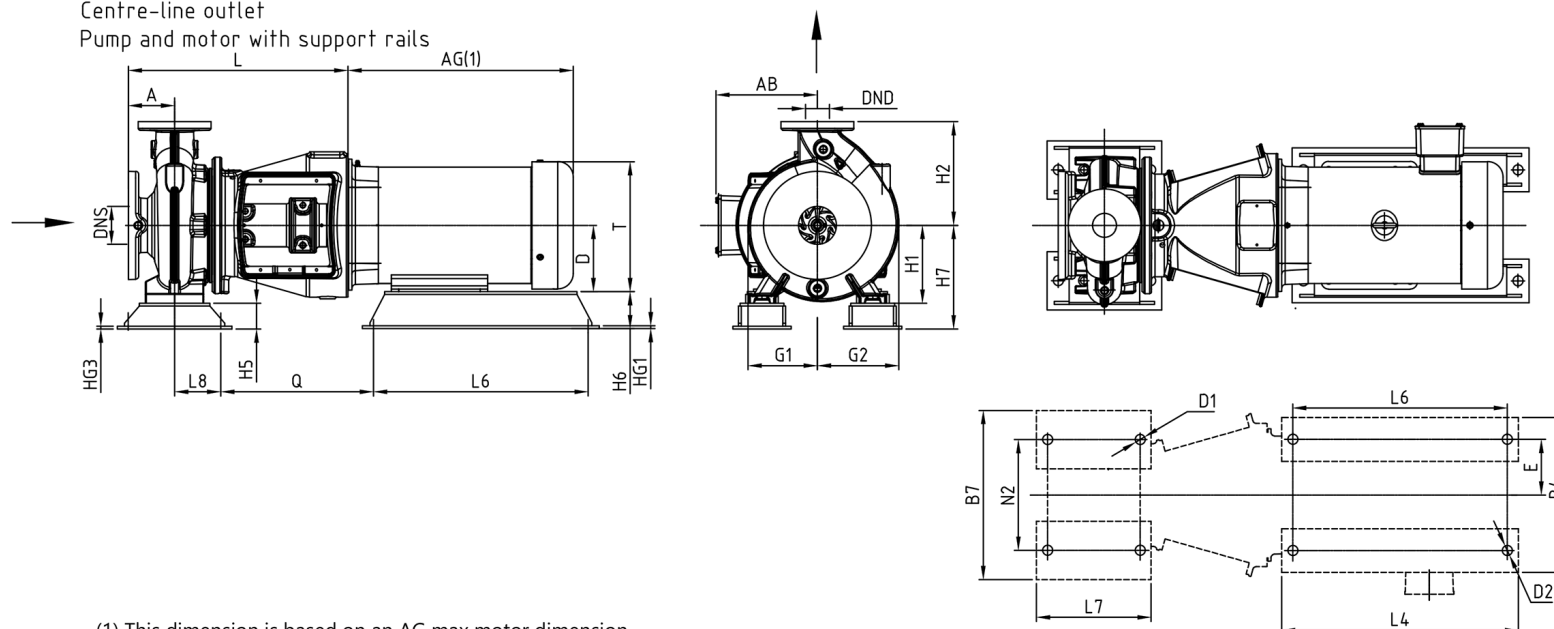
Construction Code : NBS 040-095/8.35AASG6S5ESBQQEWX2

Construction		Motor Information	
Product Family	NBS_Std	Manufacturer	Baldor
Suction Size	5 in.	Frame Size	444TSC
Discharge Size	4 in.	Power	125 HP
Flange Rating	Class 125	RPM	3600
Orientation	Horizontal	Enclosure	TEFC
Rotation	Clockwise	Operating Power Supply	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	Duplex Stainless Steel, SAF 2205	Pump	352.0 lb
Shaft	Duplex Stainless Steel, SAF 2205	Support Rail	102.0 lb
Cover	Ductile Cast Iron, ASTM 70-50-05	Base Plate	-
Seal Type	Rubber bellows seal	Driver	1,539.0 lb
Shaft Seal	BQQE - Silicon carbide / Silicon carbide / EPDM	Estimated Shipping Gross Weight	1,993.0 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 040-095-2P
Customer ref. / PO	:	Quantity of pumps	: 1
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC
Date last saved	: 05/11/2022 11:52 AM	Quoted By (Sales Engineer)	: Kelly Kresa

Mounting design C
Centre-line outlet
Pump and motor with support rails

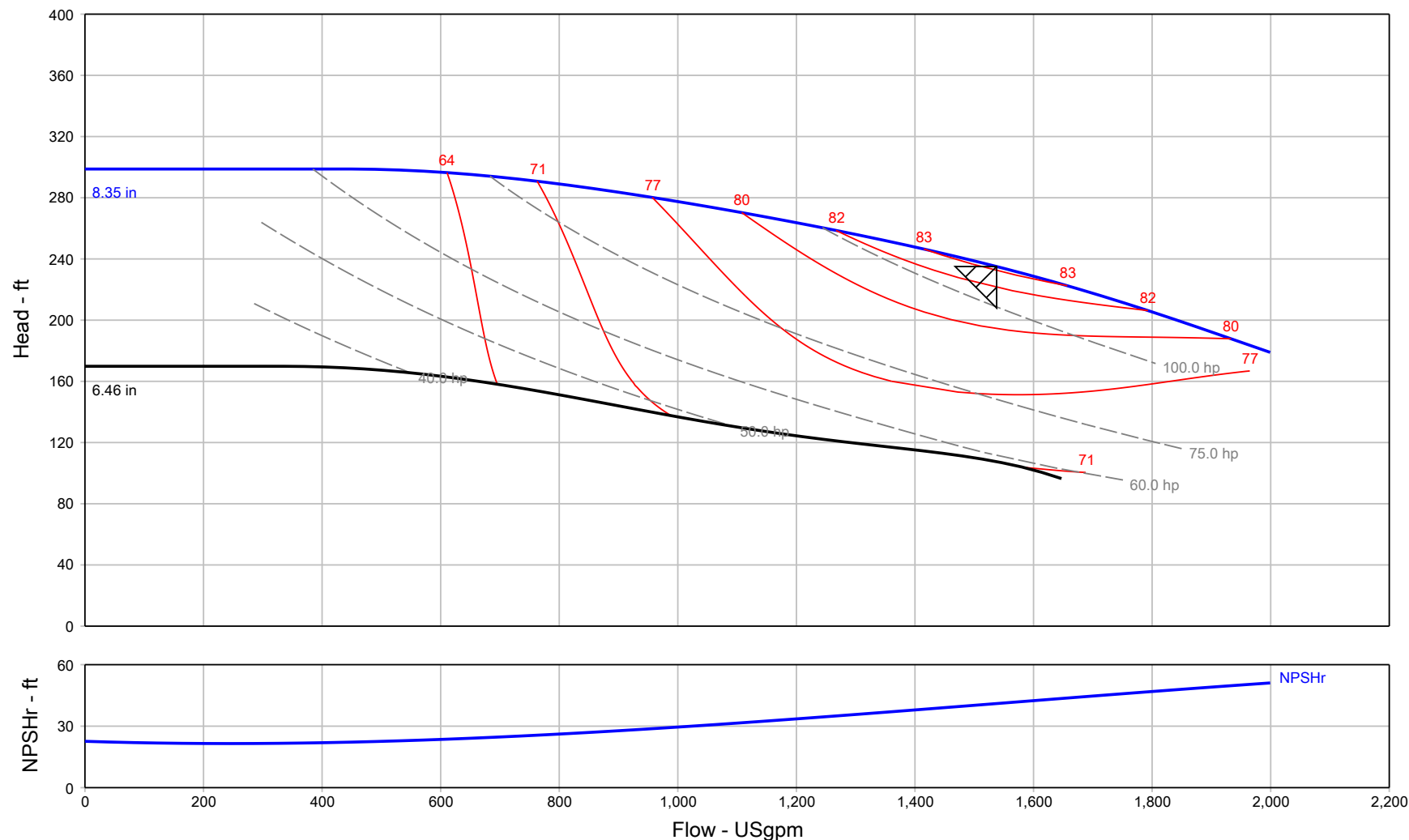


(1) This dimension is based on an AG max motor dimension

NOT FOR CONSTRUCTION, UNLESS CERTIFIED AND REFERENCED ON ORDER

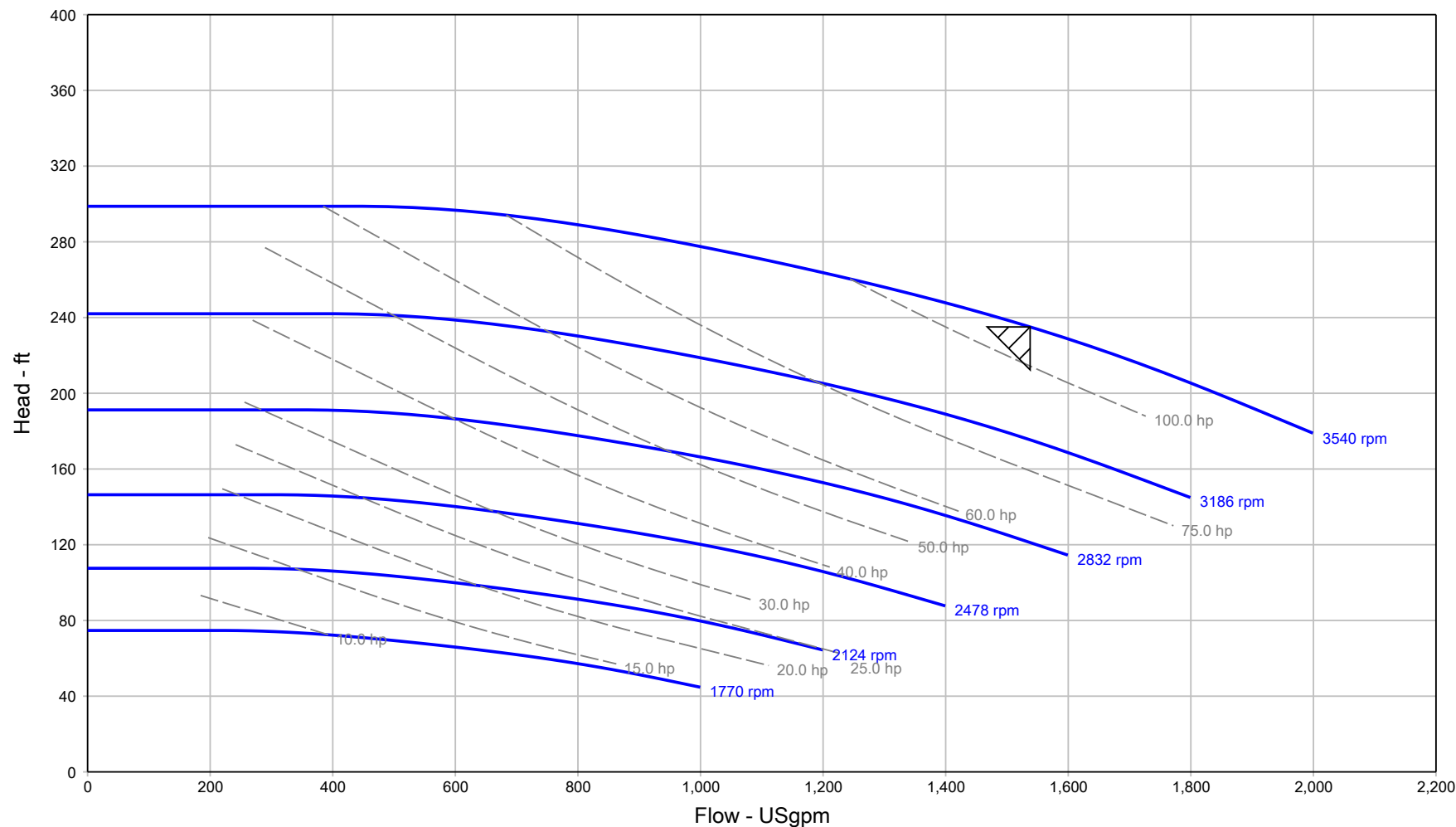
Units	Frame	DNS	DND	Class	A	AB	AG	B4	B7	D	D1	D2	E	G1	G2	H1	H2	H5	H6	H7	HG1	HG3	L	L4	L6	L7	L8	N2	Q	T	Weight
inches	444TSC	5	4	125	5.50	24.63	36.75	21.94	17.32	11.00	0.69	0.69	9.00	7.11	8.91	9.00	11.00	3.00	1.00	12.00	0.50	0.20	19.56	29.50	28.00	10.00	4.25	12.40	13.51	28.75	1,993.0
Conditions of Service									Motor Data																						
Flow: 1,537.8 USgpm				Fluid: Cold Water				HP: 125				Encl: TEFC				Phase: 3				Efficiency: Premium											
TDH: 235.0 ft				Temp.: 68.00 deg F				RPM: 3540 rpm				Hz: 60				Voltage: 460							S.F.: 1.15								

Pump Performance Curve



Project name	: Default	Tag Number	: 001	Flow, rated	: 1,537.8 USgpm
Consulting engineer	:	Service	:	Differential head / pressure, rated	: 235.0 ft
Customer	:	Model	: NBS 040-095-2P	Rated power (based on duty point)	: 110 hp
Customer ref. / PO	:	Quantity	: 1	Max power (non-overloading)	: 115 hp
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC	Efficiency	: 83.26 %
Date last saved	: 05/11/2022 11:52 AM	Quoted By (Sales Engineer)	: Kelly Kresa	Impeller diameter, rated	: 8.35 in
Based on curve number	: 040-095-2P_Std	Stages	: 1	PEI (CL)	: 0.96
		Speed, rated	: 3540 rpm	ER (CL)	: 4

Multi-Speed Performance Curve



Project name	: Default	Tag Number	: 001	Speed, rated	: 3540 rpm
Consulting engineer	:	Service	:	Flow, rated	: 1,537.8 USgpm
Customer	:	Model	: NBS 040-095-2P	Differential head / pressure, rated	: 235.0 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	: 05/11/2022 11:52 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	: 040-095-2P_Std