

## Pump Performance Datasheet

Customer :	Quote Number / ID :	1471203
Customer ref. / PO :	Model :	NBS 030-110-4P
Tag Number : 001	Stages :	1
Service :	Based on curve number :	030-110-4P_Std
Quantity : 1	Basic model number :	-
	Date last saved :	10/11/2022 2:07 PM

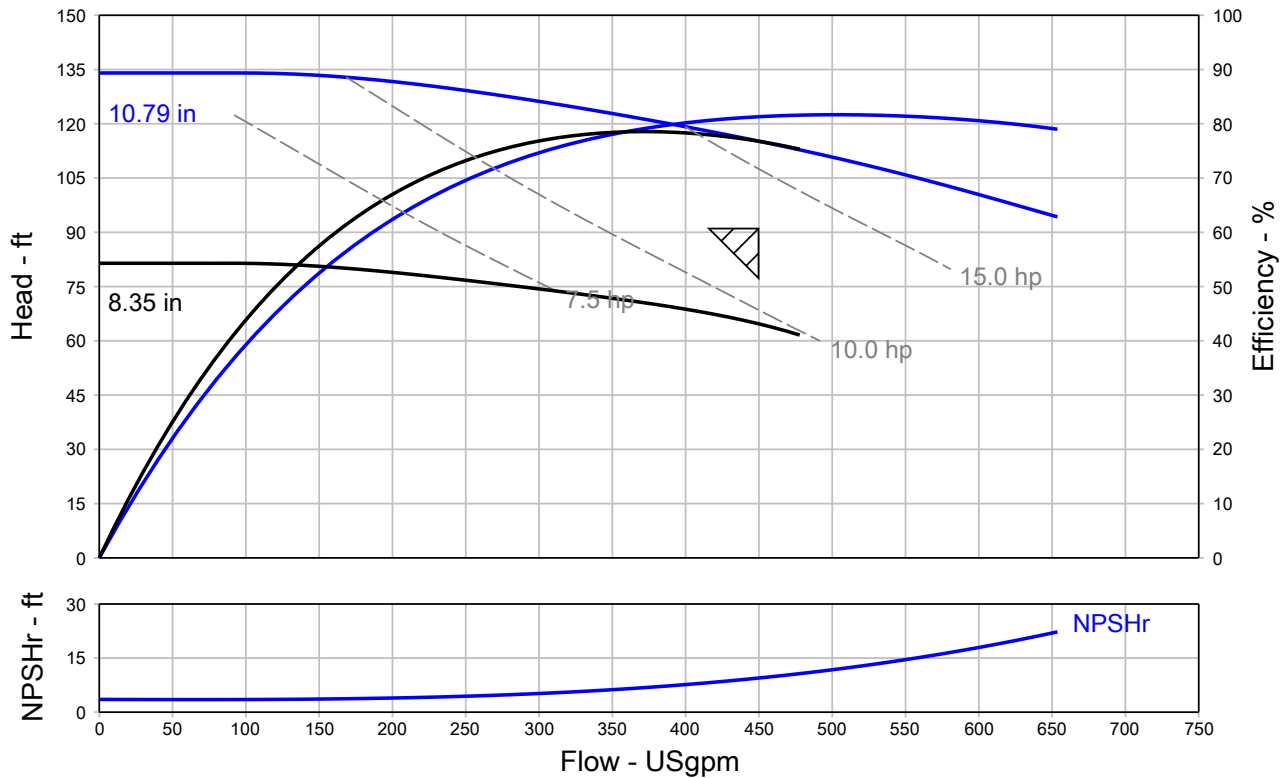
Operating Conditions	Liquid
Flow, rated : 449.7 USgpm	Liquid type : Cold Water
Differential head / pressure, rated (requested) : 91.04 ft	Additional liquid description :
Differential head / pressure, rated (actual) : 115.2 ft	Solids diameter, max : 0.00 in
Suction pressure, rated / max : 0.00 / 0.00 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
	Viscosity, rated : 1.00 cP
	Vapor pressure, rated : 0.34 psi.a

Performance	Material
Speed, rated : 1765 rpm	Material selected : Cast iron / 125 Class
Impeller diameter, rated : 10.79 in	
Impeller diameter, maximum : 10.79 in	
Impeller diameter, minimum : 8.35 in	
Efficiency : 81.30 %	
NPSH required / margin required : 9.46 / 0.00 ft	
nq (imp. eye flow) / S (imp. eye flow) : 22 / 120 Metric units	
MCSF : 50.30 USgpm	
Head, maximum, rated diameter : 134.0 ft	
Head rise to shutoff : 16.35 %	
Flow, best eff. point : 502.8 USgpm	
Flow ratio, rated / BEP : 89.45 %	
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	

Pressure Data
Maximum working pressure : 58.01 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

Driver & Power Data (@Max density)
Motor sizing specification : Max power (non-overloading)
Margin over specification : 0.00 %
Service factor : 1.15 (used)
Power, hydraulic : 13.08 hp
Rated power (based on duty point) : 16.09 hp
Max power (non-overloading) : 19.69 hp
Nameplate motor rating : 20.00 hp / 14.91 kW

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



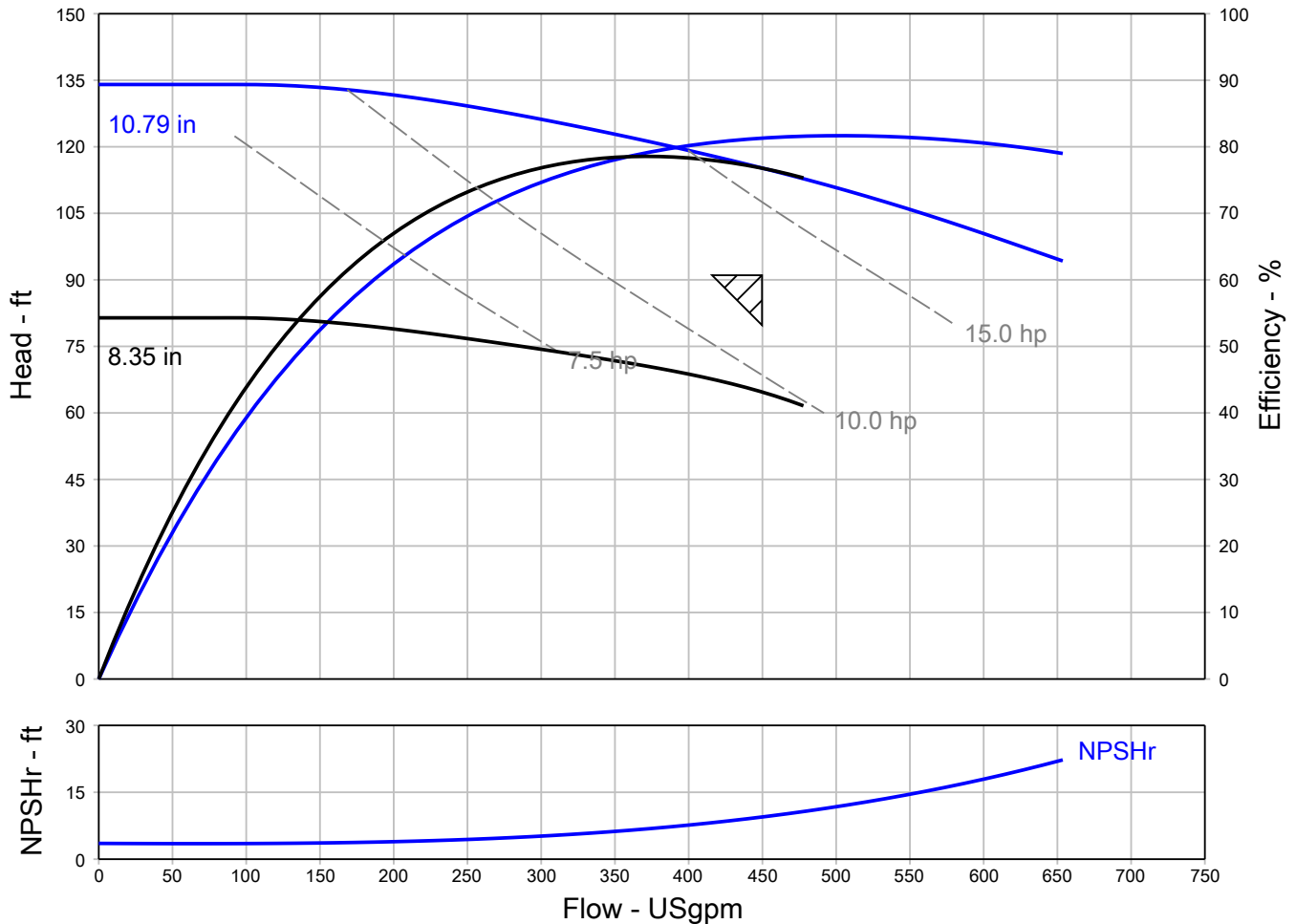
**Grundfos Series NBS - Split Coupled End Suction Pump**

<b>QUOTE NUMBER / ID</b> 1471203	<b>UNIT TAG</b> 001	<b>QUANTITY</b> 1
<b>REPRESENTATIVE</b>	<b>SERVICE</b>	
<b>ENGINEER</b>	<b>SUBMITTED BY</b>	<b>DATE</b>
<b>CONTRACTOR</b>	<b>APPROVED BY</b>	<b>DATE</b>
	<b>ORDER #</b>	<b>DATE</b>



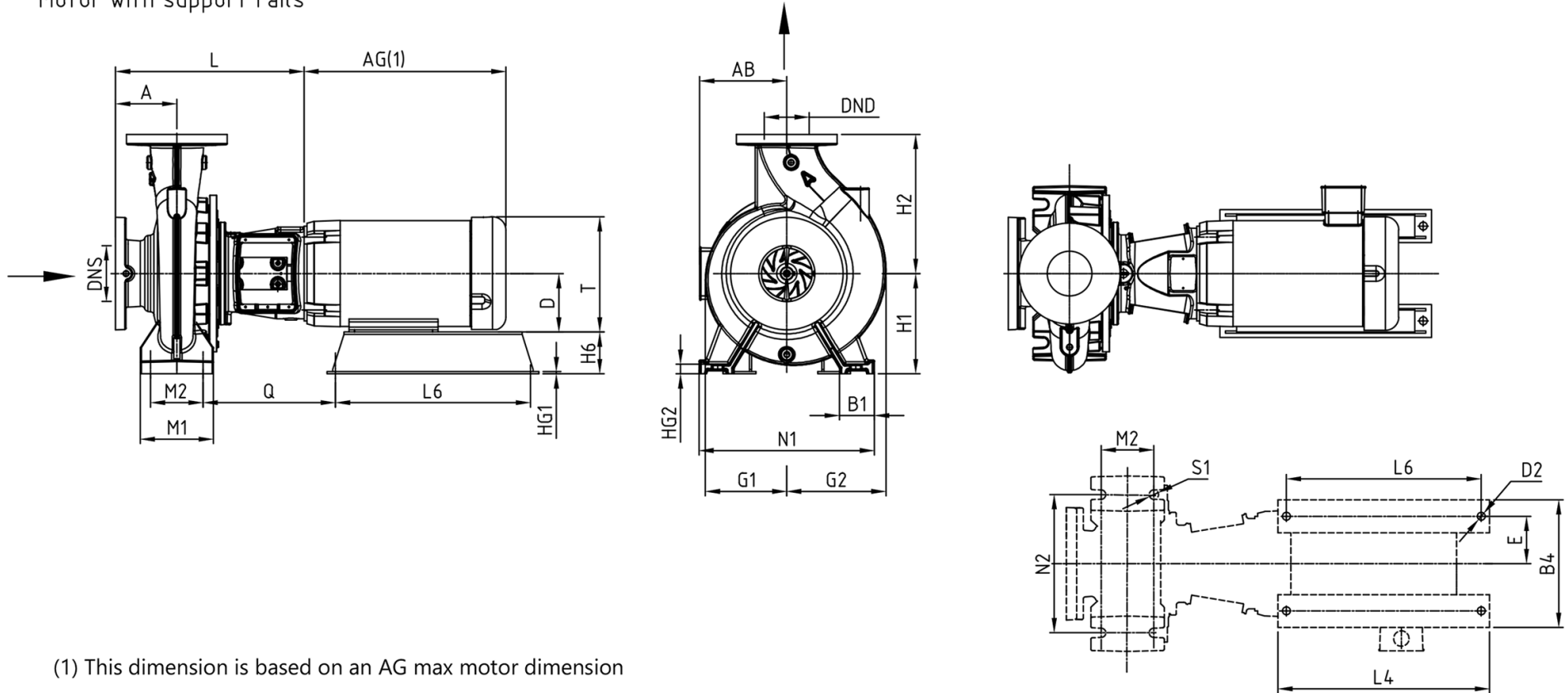
**NBS 030-110-4P**  
**1765 rpm**

Conditions of Service		Pump Data		Motor Data	
Flow	449.7 USgpm	Impeller Diameter	10.79 in	Motor HP	20 HP
Head	91.04 ft	Max. Imp. Dia.	10.79 in	BHP	16.09 HP
Liquid	Cold Water	Min. Imp. Dia.	8.35 in	Enclosure	TEFC
Temperature	68.00 deg F	Efficiency	81.3 %	Voltage	230/460 V
NPSHr	9.46 ft	Suction	4 in	Phase	3 Phase
Viscosity	1.00 cP	Discharge	3 in	Cycle	60
Specific Gravity	1.000 SG	PEI (CL)	0.9	Frame Size	256TC
		ER (CL)	10	Shaft Grounding	Include



**Grundfos Series NBS - Split Coupled End Suction Pump**

Mounting design B  
Centre-line outlet  
Motor with support rails



NOT FOR CONSTRUCTION, unless certified and referenced on order

Units	Frame	DNS	DND	Class	A	AB	AG	B1	B4	D	D2	E	G1	G2	H1	H2	H6	HG1	HG2	L	L4	L6	M1	M2	N1	N2	Q	S1	T
inches	256TC	4	3	125	5.00	9.63	21.53	3.15	12.95	6.25	0.69	5.00	7.09	8.02	8.00	12.50	1.75	0.20	0.75	17.56	20.00	18.50	6.30	4.72	15.75	12.40	12.81	0.83	12.88