

Pump Performance Datasheet

Customer :	Quote Number / ID :	1471203
Customer ref. / PO :	Model :	40959 VL
Tag Number : 001	Stages :	1
Service :	Based on curve number :	VL_40959_4P Rev Aug21
Quantity : 1	Basic model number :	-
	Date last saved :	11/07/2023 4:03 PM

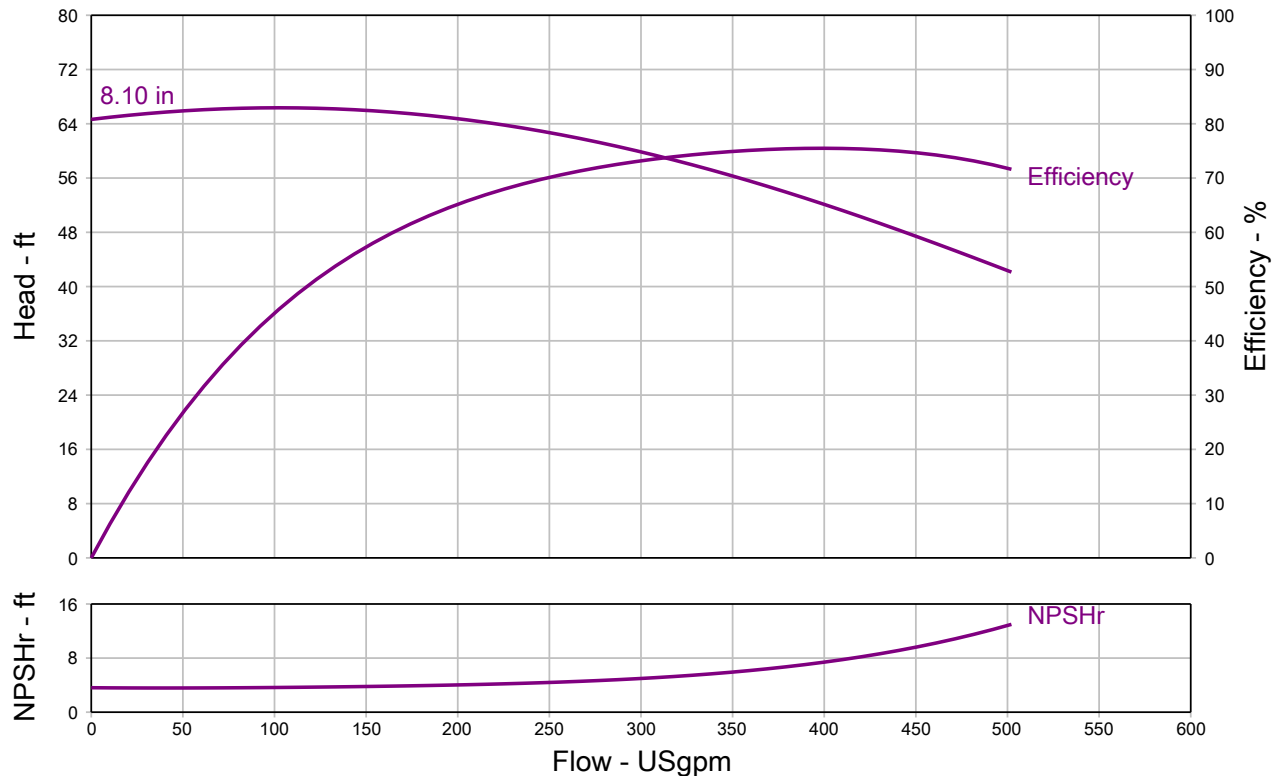
Operating Conditions		Liquid	
Flow, rated	: 398.5 USgpm	Liquid type	: Cold Water
Differential head / pressure, rated (requested)	: 52.23 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 52.42 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 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	: 1760 rpm	Material selected	: Cast iron - 125#
Impeller diameter, rated	: 8.10 in		
Impeller diameter, maximum	: 9.60 in		
Impeller diameter, minimum	: 6.90 in		

Performance		Pressure Data	
Efficiency	: 75.49 %	Maximum working pressure	: 28.72 psi.g
NPSH required / margin required	: 7.35 / 0.00 ft	Maximum allowable working pressure	: 175.0 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 29 / 124 Metric units	Maximum allowable suction pressure	: 175.0 psi.g
MCSF	: -	Hydrostatic test pressure	: 263.0 psi.g

Performance		Driver & Power Data (@Max density)	
Head, maximum, rated diameter	: 66.36 ft	Motor sizing specification	: Max power (non-overloading)
Head rise to shutoff	: 23.73 %	Margin over specification	: 0.00 %
Flow, best eff. point	: 398.5 USgpm	Service factor	: 1.00
Flow ratio, rated / BEP	: 99.99 %	Power, hydraulic	: 5.26 hp
Diameter ratio (rated / max)	: 84.38 %	Rated power (based on duty point)	: 6.96 hp
Head ratio (rated dia / max dia)	: 62.44 %	Max power (non-overloading)	: 7.46 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00	Nameplate motor rating	: 7.50 hp / 5.59 kW
Selection status	: Acceptable		

Energy Indexes	
PEI (CL)	: 0.96
ER (CL)	: 4



Grundfos Series VL - In-Line Centrifugal Pump, Close Coupled

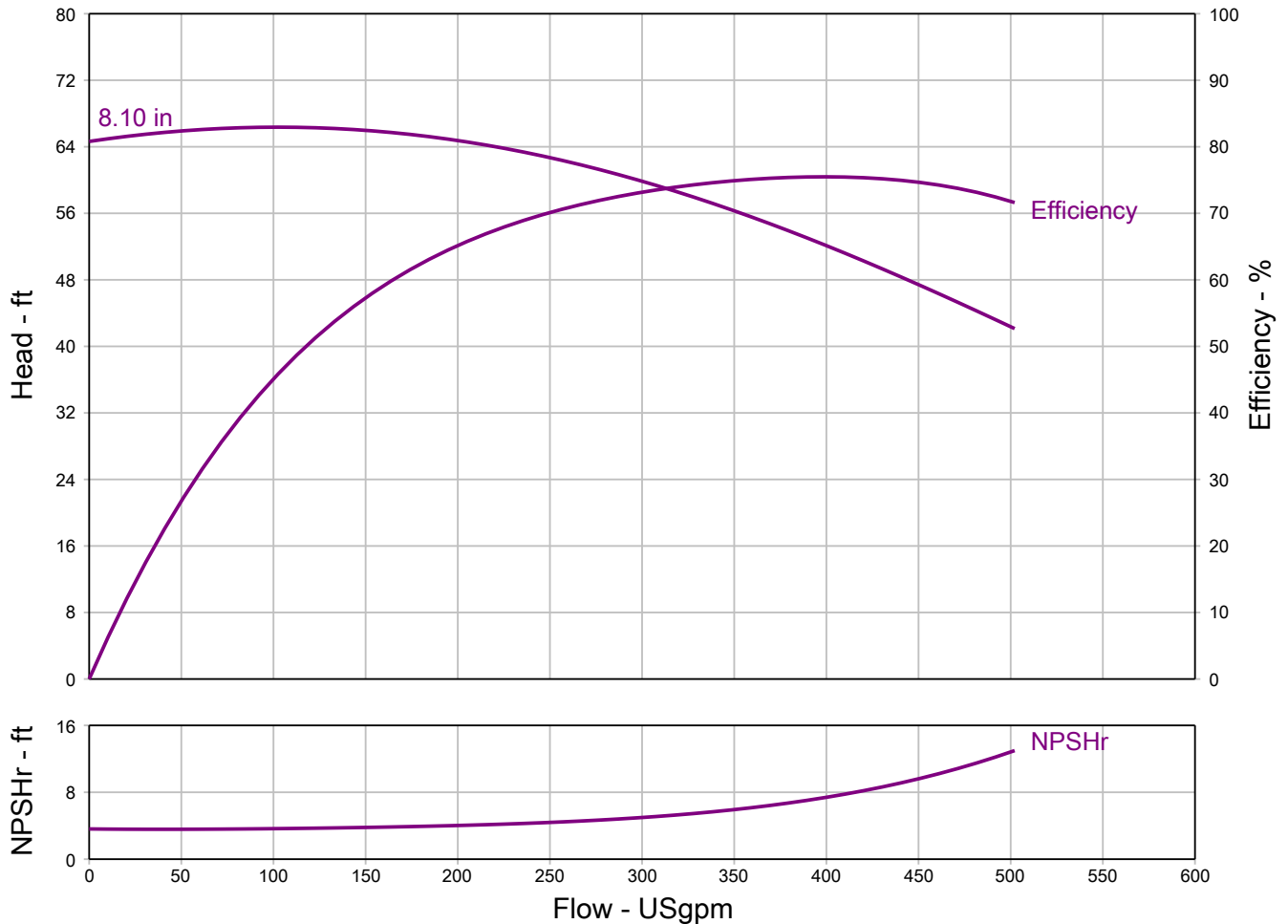
QUOTE NUMBER / ID 1471203	UNIT TAG 001	QUANTITY 1
REPRESENTATIVE	SERVICE	DATE
ENGINEER	SUBMITTED BY	DATE
CONTRACTOR	APPROVED BY	DATE
	ORDER #	DATE



VL 40959
1760 rpm

Part Number N/A

Conditions of Service		Pump Data		Motor Data	
Flow	398.5 USgpm	Impeller Diameter	8.09 in	Motor HP	7.5 HP
Head	52.23 ft	Max. Imp. Dia.	9.60 in	BHP	6.96 HP
Liquid	Cold Water	Min. Imp. Dia.	6.90 in	Enclosure	TEFC
Temperature	68.00 deg F	Efficiency	75.49 %	Voltage	230/460 V
NPSHr	7.35 ft	Suction	4 in.	Phase	3 Phase
Viscosity	1.00 cP	Discharge	4 in.	Cycle	60
Specific Gravity	1.000 SG	PEI (CL)	0.96	Frame Size	213JM
		ER (CL)	4		

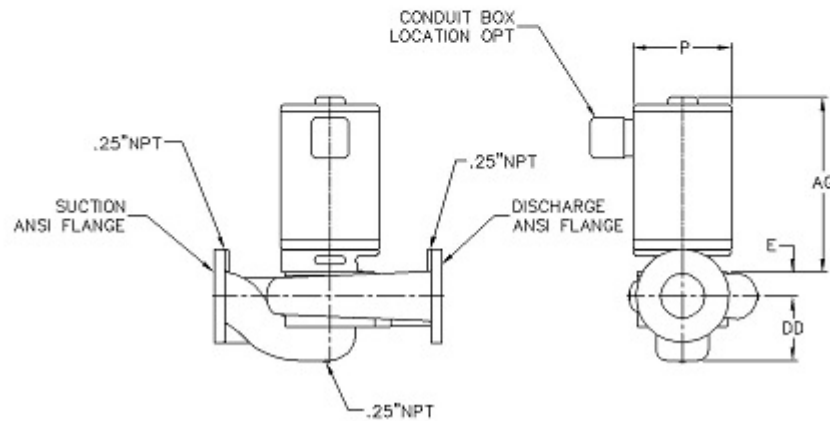
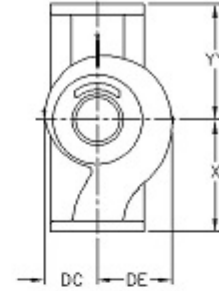


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Do not install pump larger than 215JM in vertical piping.

Pressure and drain tap locations are approximate.

Suction and discharge flanges, are cast per 250# ANSI thickness and diameter. All flanges are flat face. Some holes may be threaded because of nut clearances.



NOT FOR CONSTRUCTION, unless certified and referenced on order

Units	Frame	S x D	AG (Max)	DC	DD	DE	E	P (Max)	X	YY	Weight
inches	213JM	4 X 4	22.00	6.63	6.75	8.88	1.78	12.00	12.00	12.50	TBD