

## Pump Performance Datasheet

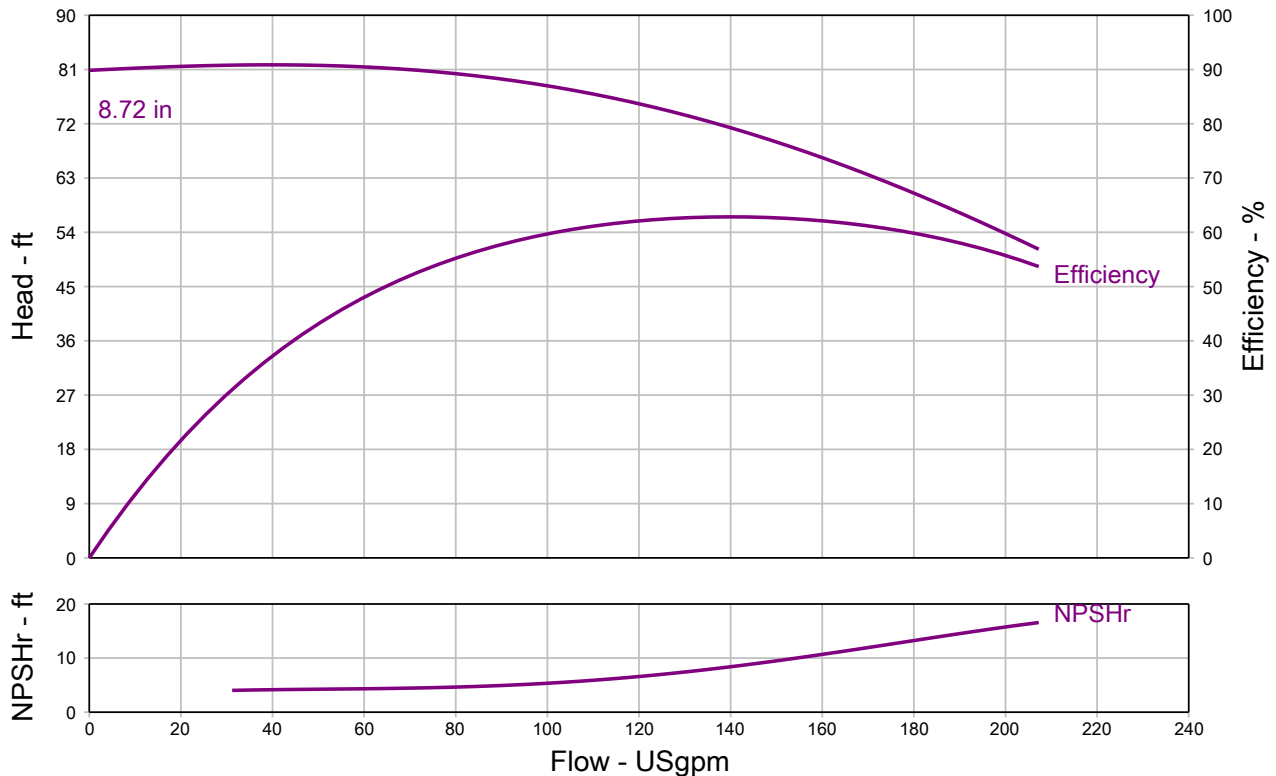
Customer :	Quote Number / ID :	1471203
Customer ref. / PO :	Model :	20959 VL
Tag Number : 001	Stages :	1
Service :	Based on curve number :	VL_20959_4P Rev 0
Quantity : 1	Basic model number :	-
	Date last saved :	11/06/2023 2:30 PM

Operating Conditions		Liquid	
Flow, rated	: 139.9 USgpm	Liquid type	: Cold Water
Differential head / pressure, rated (requested)	: 71.36 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 71.36 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	: 1760 rpm	Material selected	: Cast iron - 125#
Impeller diameter, rated	: 8.72 in		
Impeller diameter, maximum	: 9.60 in		
Impeller diameter, minimum	: 7.00 in		
Efficiency	: 62.85 %		

Performance		Pressure Data	
NPSH required / margin required	: 8.39 / 0.00 ft	Maximum working pressure	: 35.39 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 14 / 77 Metric units	Maximum allowable working pressure	: 175.0 psi.g
MCSF	: 37.01 USgpm	Maximum allowable suction pressure	: 175.0 psi.g
Head, maximum, rated diameter	: 81.78 ft	Hydrostatic test pressure	: 263.0 psi.g
Head rise to shutoff	: 13.32 %		
Flow, best eff. point	: 139.9 USgpm		
Flow ratio, rated / BEP	: 100.00 %		
Diameter ratio (rated / max)	: 90.83 %		
Head ratio (rated dia / max dia)	: 77.68 %		
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00		
Selection status	: Acceptable		

Energy Indexes		Driver & Power Data (@Max density)	
PEI (CL)	: 0.90	Motor sizing specification	: Max power (non-overloading)
ER (CL)	: 10	Margin over specification	: 0.00 %
		Service factor	: 1.00
		Power, hydraulic	: 2.52 hp
		Rated power (based on duty point)	: 4.01 hp
		Max power (non-overloading)	: 4.99 hp
		Nameplate motor rating	: 5.00 hp / 3.73 kW



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

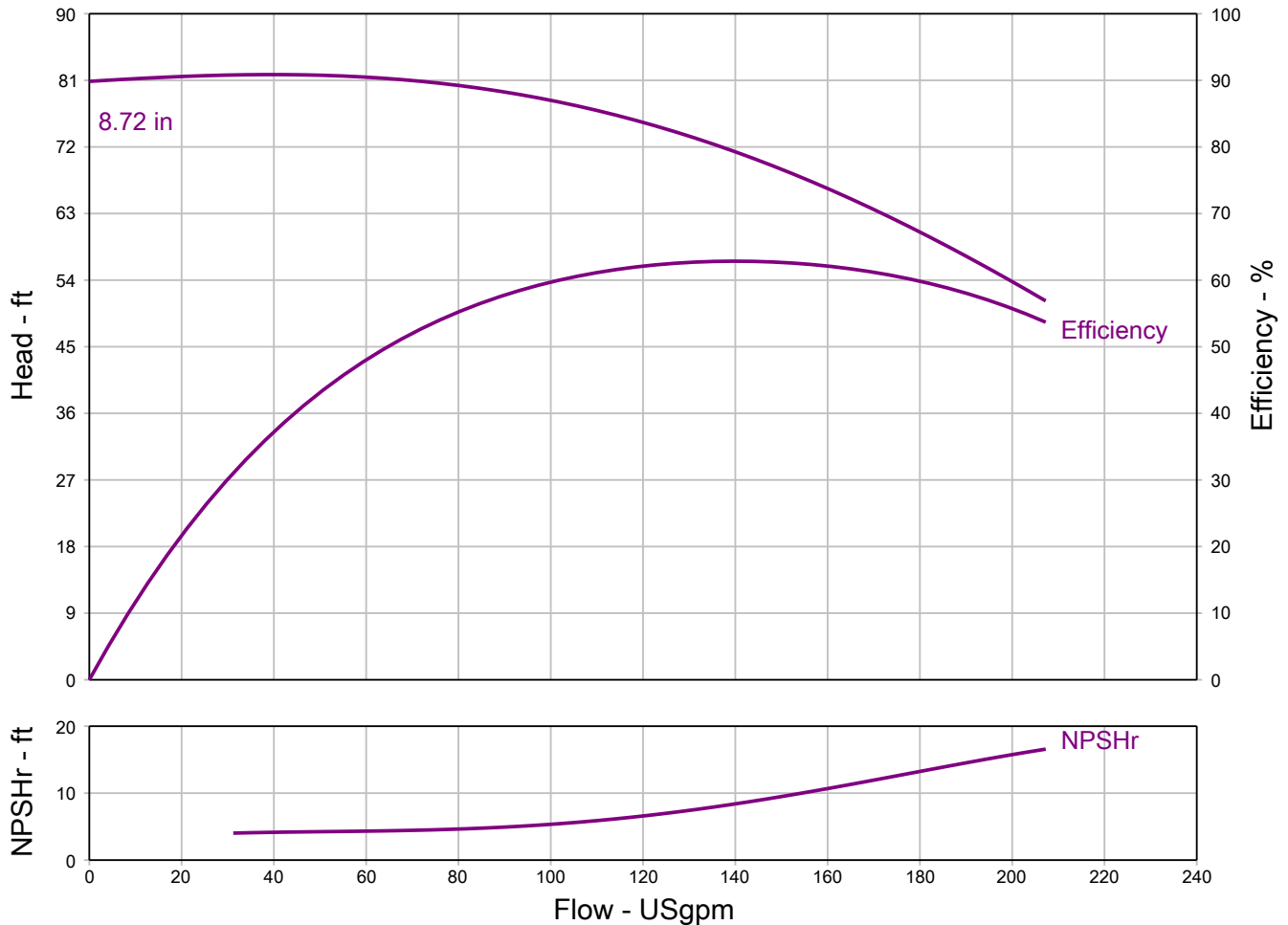
QUOTE NUMBER / ID 1471203	UNIT TAG 001	QUANTITY 1
REPRESENTATIVE	SERVICE	
ENGINEER	SUBMITTED BY	DATE
CONTRACTOR	APPROVED BY	DATE
	ORDER #	DATE



**VL 20959**  
**1760 rpm**

Part Number N/A

Conditions of Service		Pump Data		Motor Data	
Flow	139.9 USgpm	Impeller Diameter	8.72 in	Motor HP	5 HP
Head	71.36 ft	Max. Imp. Dia.	9.60 in	BHP	4.01 HP
Liquid	Cold Water	Min. Imp. Dia.	7.00 in	Enclosure	TEFC
Temperature	68.00 deg F	Efficiency	62.85 %	Voltage	230/460 V
NPSHr	8.39 ft	Suction	2 in.	Phase	3 Phase
Viscosity	1.00 cP	Discharge	2 in.	Cycle	60
Specific Gravity	1.000 SG	PEI (CL)	0.9	Frame Size	184JM
		ER (CL)	10		

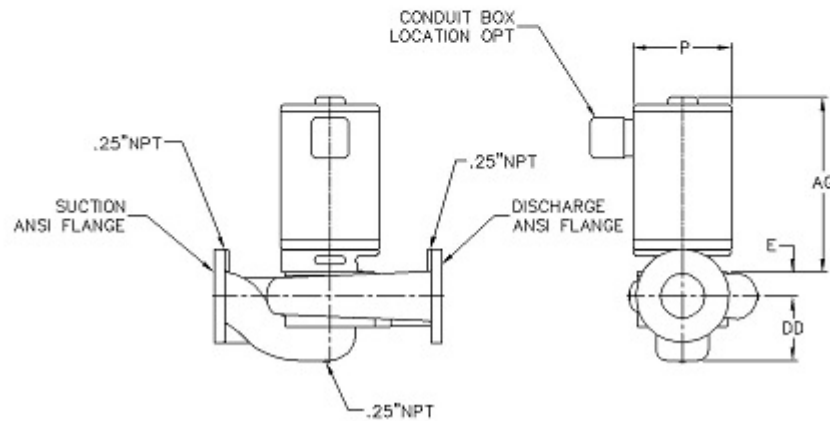
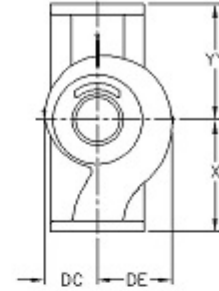


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Do not install pump larger than 215JM in vertical piping.

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	184JM	2 X 2	20.00	6.00	4.88	6.25	1.50	10.00	9.00	9.00	TBD