



Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
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Date: 2/21/2024

Return Request: 3/28/2024

Project: Little Rock West High School

Supplier: Fluid Solutions

Manufacturer: Various

Submittal: Hydronic Pumps

Submittal Number: 23 21 23-01

Drawing # and Installation: Mechanical Drawings

ARCHITECT

Lewis Architects Engineers
11225 Huron Lane, Suite 104
Little Rock, AR 72211
501-223-9302

ENGINEER

Lewis Architects Engineers
11225 Huron Lane, Suite 104
Little Rock, AR 72211
501-223-9302

GENERAL CONTRACTOR

Baldwin & Shell
1000 W. Capitol Ave.
Little Rock, AR 72201
501-374-8677

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

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chowell@comfortar.com

9924 Landers Rd.
No. Little Rock, AR 72117

Pump Performance Datasheet

Customer	:		Quote Number / ID	:	110123A
Customer ref. / PO	:		Model	:	40959 VLS
Tag Number	:	PCHP-1,2,3	Stages	:	1
Service	:	Chilled Water	Based on curve number	:	VLS_40959_4P Rev Aug21
Quantity	:	3	Basic model number	:	-
			Date last saved	:	01/18/2024 9:18 AM

Operating Conditions		Liquid	
Flow, rated	: 470.0 USgpm	Liquid type	: Cold Water
Differential head / pressure, rated (requested)	: 60.00 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 60.07 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

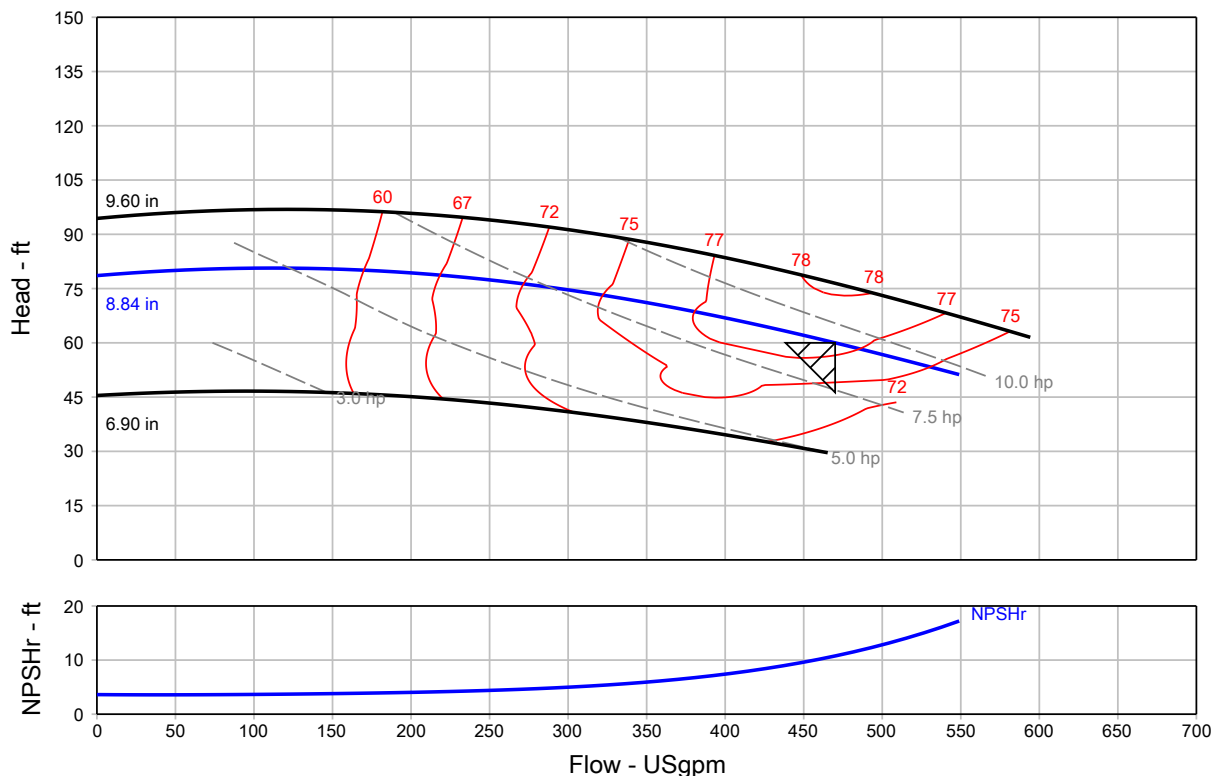
Performance			
Speed, rated	: 1760 rpm	Viscosity, rated	: 1.00 cP
Impeller diameter, rated	: 8.84 in	Vapor pressure, rated	: 0.34 psi.a

		Material	
Impeller diameter, maximum	: 9.60 in	Material selected	: Cast iron - 125#
Impeller diameter, minimum	: 6.90 in		

		Pressure Data	
Efficiency	: 77.35 %	Maximum working pressure	: 34.91 psi.g
NPSH required / margin required	: 10.76 / 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	: 133.9 USgpm	Hydrostatic test pressure	: 263.0 psi.g

		Driver & Power Data (@Max density)	
Head, maximum, rated diameter	: 80.67 ft	Motor sizing specification	: Max power (non-overloading)
Head rise to shutoff	: 30.97 %	Margin over specification	: 0.00 %
Flow, best eff. point	: 435.7 USgpm	Service factor	: 1.00
Flow ratio, rated / BEP	: 107.87 %	Power, hydraulic	: 7.12 hp
Diameter ratio (rated / max)	: 92.08 %	Rated power (based on duty point)	: 9.20 hp
Head ratio (rated dia / max dia)	: 78.47 %	Max power (non-overloading)	: 9.64 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00	Nameplate motor rating	: 10.00 hp / 7.46 kW
Selection status	: Acceptable		

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

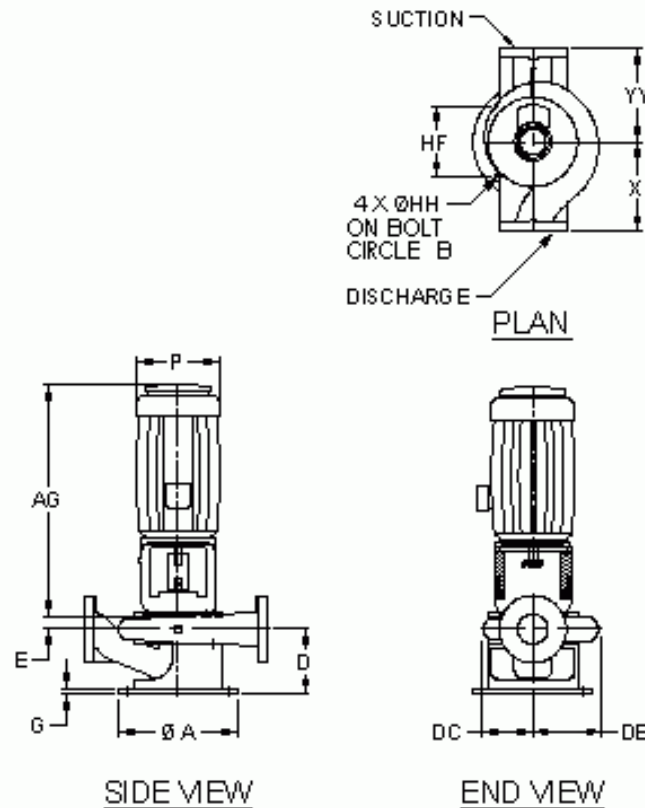


Construction Datasheet

Project name : LR West HS				Tag Number : PCHP-1,2,3	
Consulting engineer :				Service : Chilled Water	
Customer : FLUID SOLUTIONS INC				Model : 40959 VLS	
Customer ref. / PO :				Quantity : 3	
Quote Number / ID : 110123A				Quoted By (Sales Office) : FLUID SOLUTIONS INC	
Date last saved : 01/18/2024 9:18 AM				Quoted By (Sales Engineer) : James Dayer	
Construction				Motor Information	
Nozzle	Size (in.)	Nozzle Configuration	Pos'n	Manufacturer	: Baldor
Suction	4	125# ANSI	Side	Frame Size	: 215TC
Discharge	4	125# ANSI	Side	Power	: 10.00 hp
Orientation / Configuration : Vertical				RPM	: 1800 rpm
Rotation : Clockwise				Enclosure	: ODP
Wear Ring Configuration : Single - Case				Operating Power Supply	: 230/460/3/60
Discharge Elbow Size : -				Efficiency	: Premium
Subplate : -				Service factor	: 1.15
Sump Depth (feet) : -				Motor Application	: General Purpose
Bearing Frame : -				Motor Options/Accessories	: -
Bearing Frame Foot : -				Cord Length (feet)	: -
Bearing Type (Radial/Thrust) : In motor				Materials	
Bearing Lubrication : Regreasable				Case	: Cast Iron, ASTM A48 - Class 30
Thrust Bearing : -				Motor Bracket	: Cast Iron, ASTM-A48, CL 30
Intermediate Bearing : -				Impeller	: Stainless Steel, AISI-304 (H304)
Lower Bearing : -				Impeller Cap Screw and Washer	: Stainless Steel, AISI-303
Bearing Housing Accessories : -				Impeller Key	: Stainless Steel, AISI 316
PACO Construction code : 17-40959-130268-1782P				Case wear ring	: Tin Bronze, ASTM B584-90500 (B18)
Baseplate, Coupling and Guard				Impeller wear ring	: -
Baseplate : Pump stand				Pump Shaft	: Stainless Steel, AISI-303
Drip Pan : -				Sleeve	: -
Coupling : Rigid, Axial Split Coupling (aluminum) RASC2				Line Shaft	: -
Guard : OSHA Approved				Column	: -
Seal & Packing Construction				Discharge Pipe	: -
Sealing Method : Single Seal, Type 21				Discharge Elbow	: -
Seal Material : Buna Carbon Ceramic SS-Spring and Hardware				Suction Elbow	: -
Packing Gland : -				Subplate	: -
Lantern Ring : -				Hardware	: Steel, Grade 5
Recirculation Lines : Nylon Tubing with Brass Fittings				O Rings	: Buna N
Weights (Approx.)				Pump Coatings	: Standard Manufacturers Paint
Pump : 497.0 lb					
Baseplate : 50.00 lb					
Driver : 133.0 lb					
Estimated Shipping gross weight : 680.0 lb					

General Arrangement

Project name	: LR West HS	Tag Number	: PCHP-1,2,3
Consulting engineer	:	Service	: Chilled Water
Customer	:	Model	: 40959 VLS
Customer ref. / PO	:	Quantity of pumps	: 3
Quote Number / ID	: 110123A	Quoted By (Sales Office)	: FLUID SOLUTIONS INC
Date last saved	: 01/18/2024 9:18 AM	Quoted By (Sales Engineer)	: James Dayer



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Units	Frame	S x D (in.)	A	AG	B	D	DC	DE	E	G	HF	HH	P	X	YY	Weight ea
inches	215TC	4 X 4	16.00	30.00	13.50	8.75	6.63	8.88	1.78	0.75	9.55	0.75	14.75	12.00	12.50	680.0
Conditions of Service				Motor Data												
Flow: 470.0 USgpm		Fluid: Cold Water		HP: 10		Encl: ODP		Phase: 3				Efficiency: Premium				
TDH: 60.00 ft		Temp.: 68.00 deg F		RPM: 1760 rpm		Hz: 60		Voltage: 230/460				S.F.: 1.15				

Pump Performance Datasheet

Customer	:		Quote Number / ID	:	110123A
Customer ref. / PO	:		Model	:	60125 VLS
Tag Number	:	SCHP-1,2	Stages	:	1
Service	:	Chilled Water	Based on curve number	:	VLS_60125_4P Rev Aug21
Quantity	:	2	Basic model number	:	-
			Date last saved	:	11/01/2023 1:30 PM

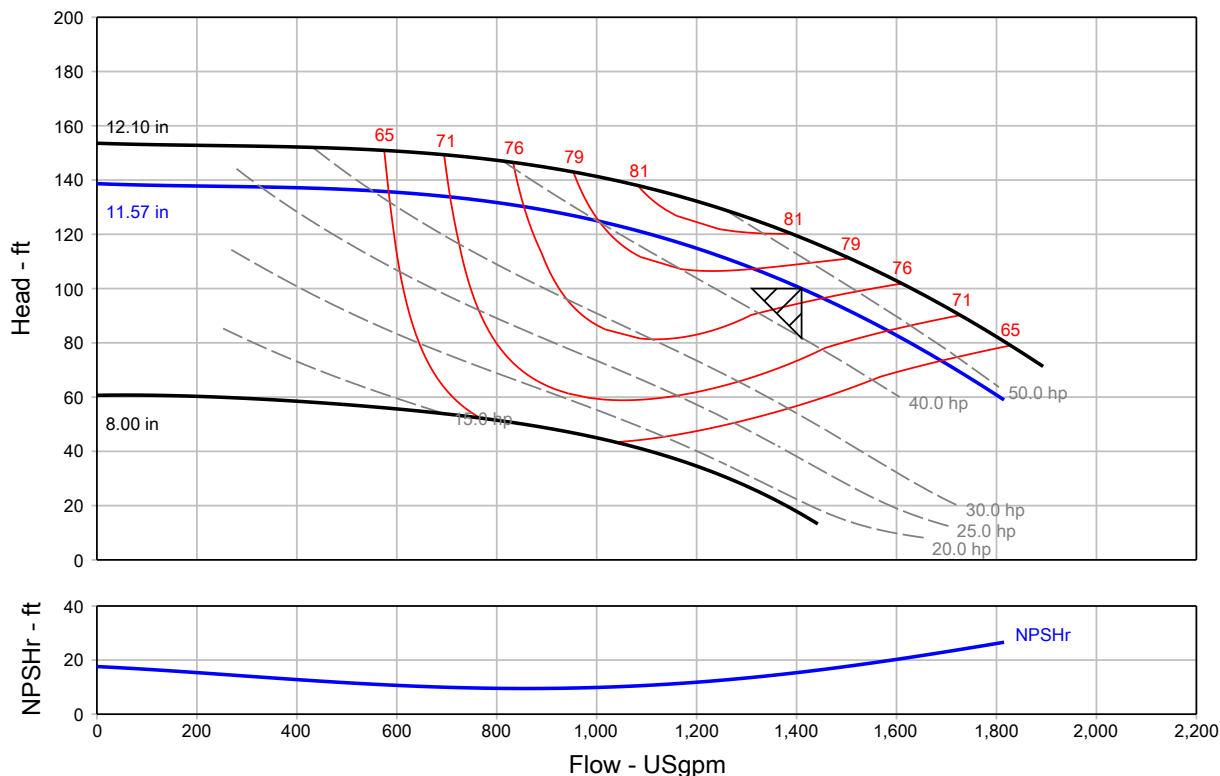
Operating Conditions		Liquid	
Flow, rated	: 1,410.0 USgpm	Liquid type	: Cold Water
Differential head / pressure, rated (requested)	: 100.0 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 100.0 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 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	: 1780 rpm	Material selected	: Cast iron - 125#

Impeller diameter, rated	: 11.57 in	Pressure Data	
Impeller diameter, maximum	: 12.10 in	Maximum working pressure	: 60.00 psi.g
Impeller diameter, minimum	: 8.00 in	Maximum allowable working pressure	: 175.0 psi.g
Efficiency	: 77.16 %	Maximum allowable suction pressure	: 175.0 psi.g
NPSH required / margin required	: 15.56 / 0.00 ft	Hydrostatic test pressure	: 263.0 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 32 / 184 Metric units		
MCSF	: 354.6 USgpm		

Head, maximum, rated diameter	: 138.7 ft	Driver & Power Data (@Max density)	
Head rise to shutoff	: 38.64 %	Motor sizing specification	: Max power (non-overloading)
Flow, best eff. point	: 1,162.4 USgpm	Margin over specification	: 0.00 %
Flow ratio, rated / BEP	: 121.30 %	Service factor	: 1.00
Diameter ratio (rated / max)	: 95.62 %	Power, hydraulic	: 35.60 hp
Head ratio (rated dia / max dia)	: 84.23 %	Rated power (based on duty point)	: 46.14 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00	Max power (non-overloading)	: 48.91 hp
Selection status	: Acceptable	Nameplate motor rating	: 50.00 hp / 37.29 kW

Energy Indexes	
PEI (CL)	: 0.98
ER (CL)	: 2

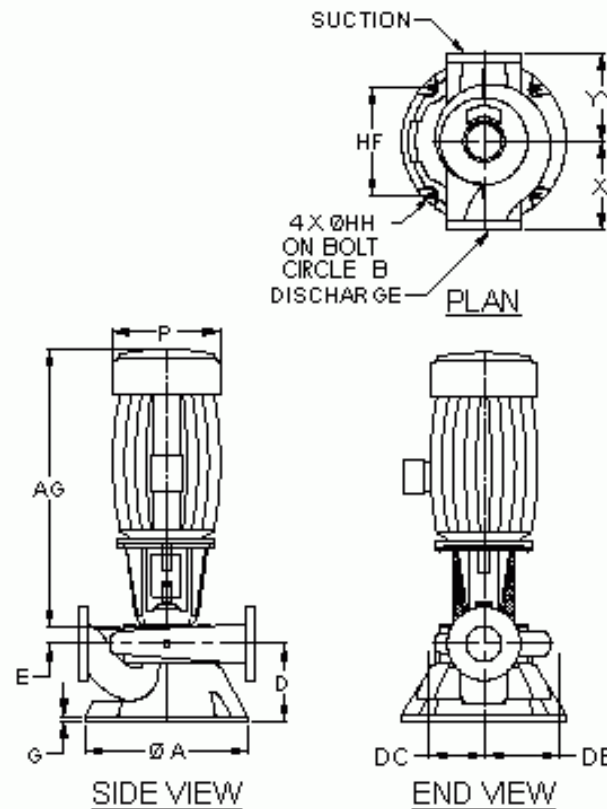


Construction Datasheet

Project name	: LR West HS	Tag Number	: SCHP-1,2
Consulting engineer	:	Service	: Chilled Water
Customer	: FLUID SOLUTIONS INC	Model	: 60125 VLS
Customer ref. / PO	:	Quantity	: 2
Quote Number / ID	: 110123A	Quoted By (Sales Office)	: FLUID SOLUTIONS INC
Date last saved	: 11/01/2023 1:30 PM	Quoted By (Sales Engineer)	: James Dayer
Construction		Motor Information	
Nozzle	Size (in.)	Nozzle Configuration	Pos'n
Suction	6	125# ANSI	Side
Discharge	6	125# ANSI	Side
Orientation / Configuration	: Vertical	Manufacturer	: Baldor
Rotation	: Clockwise	Frame Size	: 326TC
Wear Ring Configuration	: Single - Case	Power	: 50.00 hp
Discharge Elbow Size	: -	RPM	: 1800 rpm
Subplate	: -	Enclosure	: ODP
Sump Depth (feet)	: -	Operating Power Supply	: 230/460/3/60
Bearing Frame	: -	Efficiency	: Premium
Bearing Frame Foot	: -	Service factor	: 1.15
Bearing Type (Radial/Thrust)	: In motor	Motor Application	: General Purpose
Bearing Lubrication	: Regreasable	Motor Options/Accessories	: -
Thrust Bearing	: -	Cord Length (feet)	: -
Intermediate Bearing	: -	Materials	
Lower Bearing	: -	Case	: Cast Iron, ASTM A48 - Class 35
Bearing Housing Accessories	: -	Motor Bracket	: Cast Iron, ASTM-A48, CL 30
PACO Construction code	: 17-60125-1A0268-1902P	Impeller	: Stainless Steel, AISI-304 (H304)
Baseplate, Coupling and Guard		Impeller Cap Screw and Washer	: Stainless Steel, AISI-303
Baseplate	: Pump stand	Impeller Key	: Stainless Steel, AISI 316
Drip Pan	: -	Case wear ring	: Tin Bronze, ASTM B584-90500 (B18)
Coupling	: Rigid, Axial Split Coupling (aluminum) RASC7	Impeller wear ring	: -
Guard	: OSHA Approved	Pump Shaft	: Stainless Steel, AISI-303
Seal & Packing Construction		Sleeve	: -
Sealing Method	: Single Seal, Type 21	Line Shaft	: -
Seal Material	: Buna Carbon Ceramic SS-Spring and Hardware	Column	: -
Packing Gland	: -	Discharge Pipe	: -
Lantern Ring	: -	Discharge Elbow	: -
Recirculation Lines	: Nylon Tubing with Brass Fittings	Suction Elbow	: -
Weights (Approx.)		Subplate	: -
Pump	: 555.0 lb	Hardware	: Steel, Grade 5
Baseplate	: 117.0 lb	O Rings	: Buna N
Driver	: 475.0 lb	Pump Coatings	: Standard Manufacturers Paint
Estimated Shipping gross weight	: 1,147.0 lb		

General Arrangement

Project name	: LR West HS	Tag Number	: SCHP-1,2
Consulting engineer	:	Service	: Chilled Water
Customer	:	Model	: 60125 VLS
Customer ref. / PO	:	Quantity of pumps	: 2
Quote Number / ID	: 110123A	Quoted By (Sales Office)	: FLUID SOLUTIONS INC
Date last saved	: 11/01/2023 1:30 PM	Quoted By (Sales Engineer)	: James Dayer



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Units	Frame	S x D (in.)	A	AG	B	D	DC	DE	E	G	HF	HH	P	X	YY	Weight ea	
inches	326TC	6 X 6	28.00	47.00	26.00	13.25	8.13	11.13	2.72	0.88	18.38	0.75	21.00	15.00	15.00	1,147.0	
Conditions of Service				Motor Data													
Flow: 1,410.0 USgpm		Fluid: Cold Water		HP: 50			Encl: ODP			Phase: 3				Efficiency: Premium			
TDH: 100.0 ft		Temp.: 68.00 deg F		RPM: 1780 rpm			Hz: 60			Voltage: 230/460				S.F.: 1.15			

Pump Performance Datasheet

Customer	:		Quote Number / ID	:	110123A
Customer ref. / PO	:		Model	:	5012C VLS
Tag Number	:	HWP-1,2	Stages	:	1
Service	:	Heating Water	Based on curve number	:	VLS_5012C_4P Rev Aug21
Quantity	:	2	Basic model number	:	-
			Date last saved	:	11/01/2023 1:32 PM

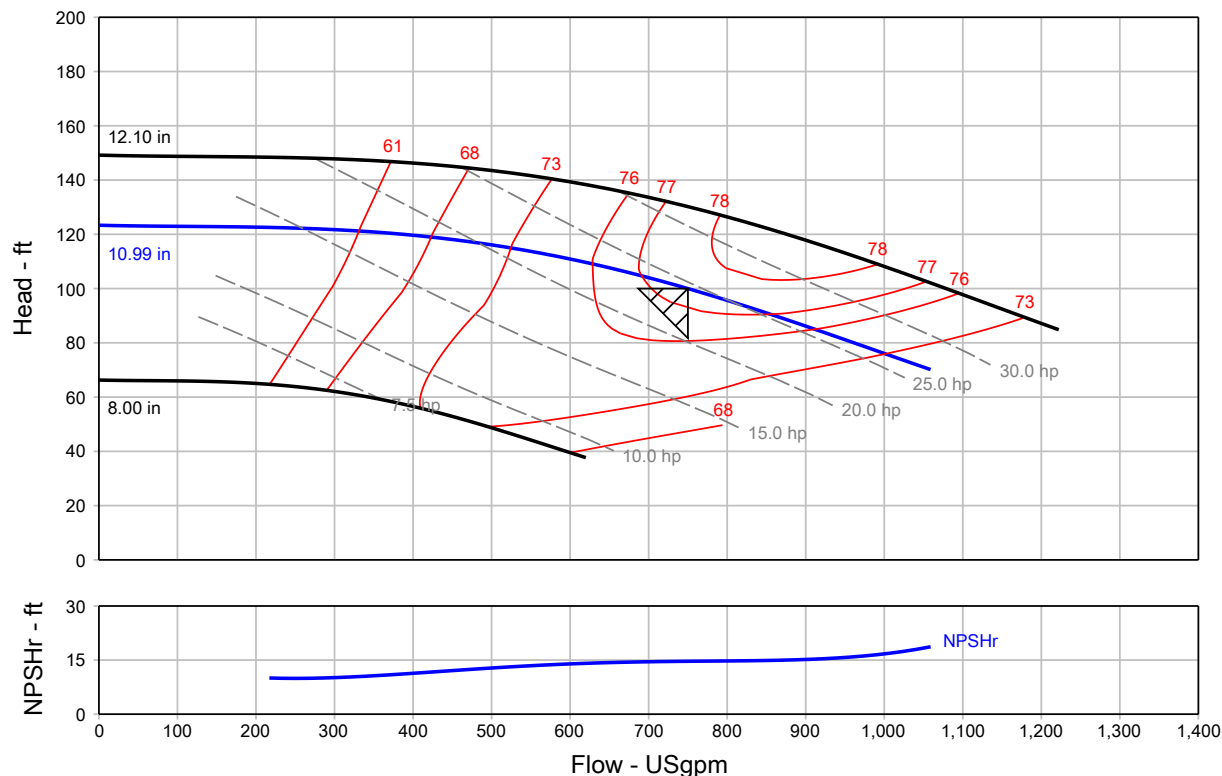
Operating Conditions		Liquid	
Flow, rated	: 750.0 USgpm	Liquid type	: Cold Water
Differential head / pressure, rated (requested)	: 100.0 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 100.2 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 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

Performance		Material	
Speed, rated	: 1780 rpm	Material selected	: Cast iron - 125#

Impeller diameter, rated	: 10.99 in	Pressure Data	
Impeller diameter, maximum	: 12.10 in	Maximum working pressure	: 53.37 psi.g
Impeller diameter, minimum	: 8.00 in	Maximum allowable working pressure	: 175.0 psi.g
Efficiency	: 77.44 %	Maximum allowable suction pressure	: 175.0 psi.g
NPSH required / margin required	: 14.66 / 0.00 ft	Hydrostatic test pressure	: 263.0 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 29 / 134 Metric units		
MCSF	: 222.2 USgpm		

Head, maximum, rated diameter	: 123.3 ft	Driver & Power Data (@Max density)	
Head rise to shutoff	: 23.33 %	Motor sizing specification	: Max power (non-overloading)
Flow, best eff. point	: 774.8 USgpm	Margin over specification	: 0.00 %
Flow ratio, rated / BEP	: 96.80 %	Service factor	: 1.00
Diameter ratio (rated / max)	: 90.83 %	Power, hydraulic	: 18.93 hp
Head ratio (rated dia / max dia)	: 76.80 %	Rated power (based on duty point)	: 24.45 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00	Max power (non-overloading)	: 26.81 hp
Selection status	: Acceptable	Nameplate motor rating	: 30.00 hp / 22.37 kW

Energy Indexes	
PEI (CL)	: 0.99
ER (CL)	: 1



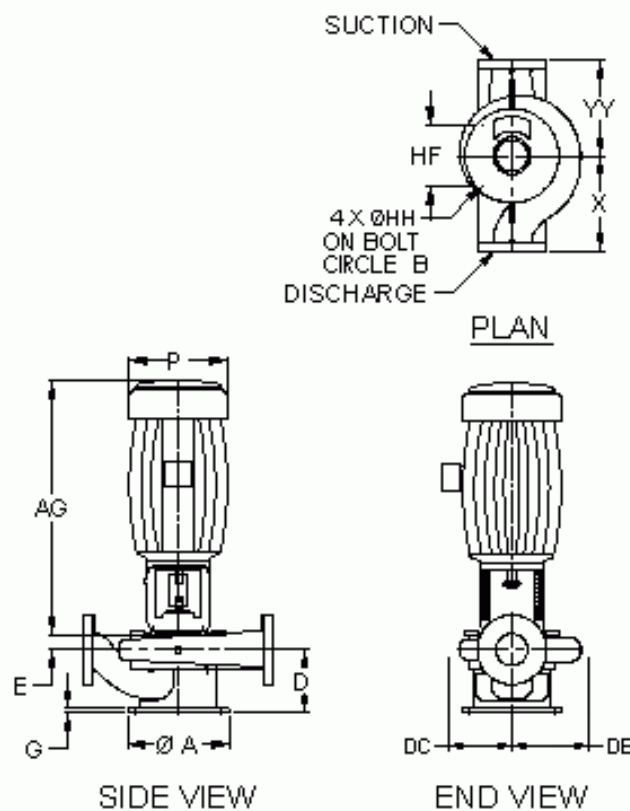
Construction Datasheet

Project name : LR West HS				Tag Number : HWP-1,2	
Consulting engineer :				Service : Heating Water	
Customer : FLUID SOLUTIONS INC				Model : 5012C VLS	
Customer ref. / PO :				Quantity : 2	
Quote Number / ID : 110123A				Quoted By (Sales Office) : FLUID SOLUTIONS INC	
Date last saved : 11/01/2023 1:32 PM				Quoted By (Sales Engineer) : James Dayer	
Construction				Motor Information	
Nozzle	Size (in.)	Nozzle Configuration	Pos'n	Manufacturer	: Baldor
Suction	5	125# ANSI	Side	Frame Size	: 286TC
Discharge	5	125# ANSI	Side	Power	: 30.00 hp
Orientation / Configuration : Vertical				RPM	: 1800 rpm
Rotation : Clockwise				Enclosure	: ODP
Wear Ring Configuration : Single - Case				Operating Power Supply	: 230/460/3/60
Discharge Elbow Size : -				Efficiency	: Premium
Subplate : -				Service factor	: 1.15
Sump Depth (feet) : -				Motor Application	: General Purpose
Bearing Frame : -				Motor Options/Accessories	: -
Bearing Frame Foot : -				Cord Length (feet)	: -
Bearing Type (Radial/Thrust) : In motor				Materials	
Bearing Lubrication : Regreasable				Case	: Cast Iron, ASTM A48 - Class 35
Thrust Bearing : -				Motor Bracket	: Cast Iron, ASTM-A48, CL 30
Intermediate Bearing : -				Impeller	: Stainless Steel, AISI-304 (H304)
Lower Bearing : -				Impeller Cap Screw and Washer	: Stainless Steel, AISI-303
Bearing Housing Accessories : -				Impeller Key	: Stainless Steel, AISI 316
PACO Construction code : 17-5012C-1A0268-1882P				Case wear ring	: Tin Bronze, ASTM B584-90500 (B18)
Baseplate, Coupling and Guard				Impeller wear ring	: -
Baseplate : Pump stand				Pump Shaft	: Stainless Steel, AISI-303
Drip Pan : -				Sleeve	: -
Coupling : Rigid, Axial Split Coupling (aluminum) RASC5				Line Shaft	: -
Guard : OSHA Approved				Column	: -
Seal & Packing Construction				Discharge Pipe	: -
Sealing Method : Single Seal, Type 21				Discharge Elbow	: -
Seal Material : Buna Carbon Ceramic SS-Spring and Hardware				Suction Elbow	: -
Packing Gland : -				Subplate	: -
Lantern Ring : -				Hardware	: Steel, Grade 5
Recirculation Lines : Nylon Tubing with Brass Fittings				O Rings	: Buna N
Weights (Approx.)				Pump Coatings	: Standard Manufacturers Paint
Pump : 484.0 lb					
Baseplate : 50.00 lb					
Driver : 375.0 lb					
Estimated Shipping gross weight : 909.0 lb					

General Arrangement

Project name : LR West HS
 Consulting engineer :
 Customer :
 Customer ref. / PO :
 Quote Number / ID : 110123A
 Date last saved : 11/01/2023 1:32 PM

Tag Number : HWP-1,2
 Service : Heating Water
 Model : 5012C VLS
 Quantity of pumps : 2
 Quoted By (Sales Office) : FLUID SOLUTIONS INC
 Quoted By (Sales Engineer) : James Dayer



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Units	Frame	S x D (in.)	A	AG	B	D	DC	DE	E	G	HF	HH	P	X	YY	Weight ea	
inches	286TC	5 X 5	16.00	39.50	13.50	10.00	8.19	10.84	2.25	0.75	9.55	0.75	18.50	15.00	15.00	909.0	
Conditions of Service				Motor Data													
Flow: 750.0 USgpm		Fluid: Cold Water		HP: 30			Encl: ODP			Phase: 3					Efficiency: Premium		
TDH: 100.0 ft		Temp.: 68.00 deg F		RPM: 1780 rpm			Hz: 60			Voltage: 230/460					S.F.: 1.15		

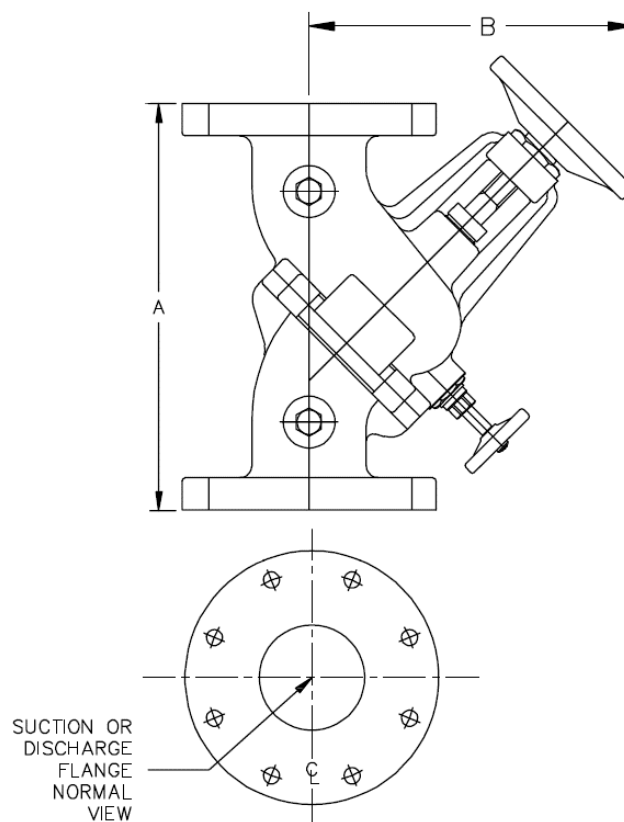
Project name	: LR West HS	Tag Number	: TDV
Consulting engineer	:	Service	: Pumps
Customer	: FLUID SOLUTIONS INC	Model	: CV40-125
Customer ref. / PO	:	Quantity	: 3
Quote Number / ID	: 110123A	Quoted By (Sales Office)	: FLUID SOLUTIONS INC
Date last saved	: 11/01/2023 1:42 PM	Quoted By (Sales Engineer)	: James Dayer

Construction				Grundfos Combination Valves	
Nozzle	Size (in.)	Nozzle Configuration	Pos'n		
Inlet	4	-	Side		
Outlet	4	-	Side		
Valve Body : ASTM A395 Seat Guide : - Disc : Bronze ASTM B124 C37700 Spring : Stainless Steel, ASTM A240-304 Packing Gland : Bronze ASTM B124 C37700 Stem Packing : - Yoke : Steel ASTM A283-C Indicator : - Hand wheel : Ductile iron A395 Construction Code/Part Number : 96877845					
Weights (Approx.)				Description	
Estimated Shipping gross weight : 102.0 lb				Grundfos Series CV, Combination valve combines three valves in one: shut-off valve, balancing valve, and check valve. The combination valve makes it possible to reduce the overall system pressure drop since fewer individual components are needed when installing a pump. The combination valve provides the feature of changing the flange orientation to allow 90° pipe connection. Additional feature includes a built-in bypass valve allowing for drainage of water upstream of the check valve. -	

General Arrangement

Project name : LR West HS
 Consulting engineer :
 Customer :
 Customer ref. / PO :
 Quote Number / ID : 110123A
 Date last saved : 11/01/2023 1:42 PM

Tag Number : TDV
 Service : Pumps
 Model : CV40-125
 Quantity of pumps : 3
 Quoted By (Sales Office) : FLUID SOLUTIONS INC
 Quoted By (Sales Engineer) : James Dayer



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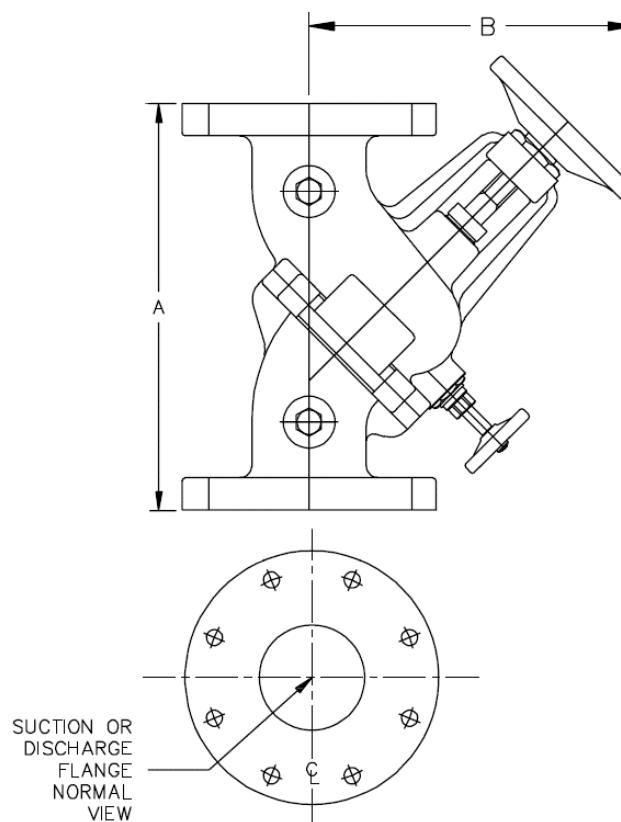
Units	Inlet (in)	Outlet (in)	A (in)	B (in)	Weight (lbs)
inches	4	4	13.27	10.83	102.0

Project name		: LR West HS		Tag Number		: TDV	
Consulting engineer		:		Service		: Pumps	
Customer		: FLUID SOLUTIONS INC		Model		: CV80-125	
Customer ref. / PO		:		Quantity		: 2	
Quote Number / ID		: 110123A		Quoted By (Sales Office)		: FLUID SOLUTIONS INC	
Date last saved		: 11/01/2023 1:47 PM		Quoted By (Sales Engineer)		: James Dayer	
Construction				Grundfos Combination Valves			
Nozzle		Size (in.)	Nozzle Configuration	Pos'n			
Inlet		8	-	Side			
Outlet		8	-	Side			
Valve Body		: ASTM A395					
Seat Guide		: -					
Disc		: Bronze ASTM B124 C37700					
Spring		: Stainless Steel, ASTM A240-304					
Packing Gland		: Bronze ASTM B124 C37700					
Stem Packing		: -					
Yoke		: Steel ASTM A283-C					
Indicator		: -					
Hand wheel		: Ductile iron A395					
Construction Code/Part Number		: 96877847					
Weights (Approx.)				Description Grundfos Series CV, Combination valve combines three valves in one: shut-off valve, balancing valve, and check valve. The combination valve makes it possible to reduce the overall system pressure drop since fewer individual components are needed when installing a pump. The combination valve provides the feature of changing the flange orientation to allow 90° pipe connection. Additional feature includes a built-in bypass valve allowing for drainage of water upstream of the check valve. -			
Estimated Shipping gross weight		: 355.0 lb					

General Arrangement

Project name : LR West HS
 Consulting engineer :
 Customer :
 Customer ref. / PO :
 Quote Number / ID : 110123A
 Date last saved : 11/01/2023 1:47 PM

Tag Number : TDV
 Service : Pumps
 Model : CV80-125
 Quantity of pumps : 2
 Quoted By (Sales Office) : FLUID SOLUTIONS INC
 Quoted By (Sales Engineer) : James Dayer



NOT FOR CONSTRUCTION, UNLESS CERTIFIED AND REFERENCED ON ORDER

Units	Inlet (in)	Outlet (in)	A (in)	B (in)	Weight (lbs)
inches	8	8	20.24	16.69	355.0

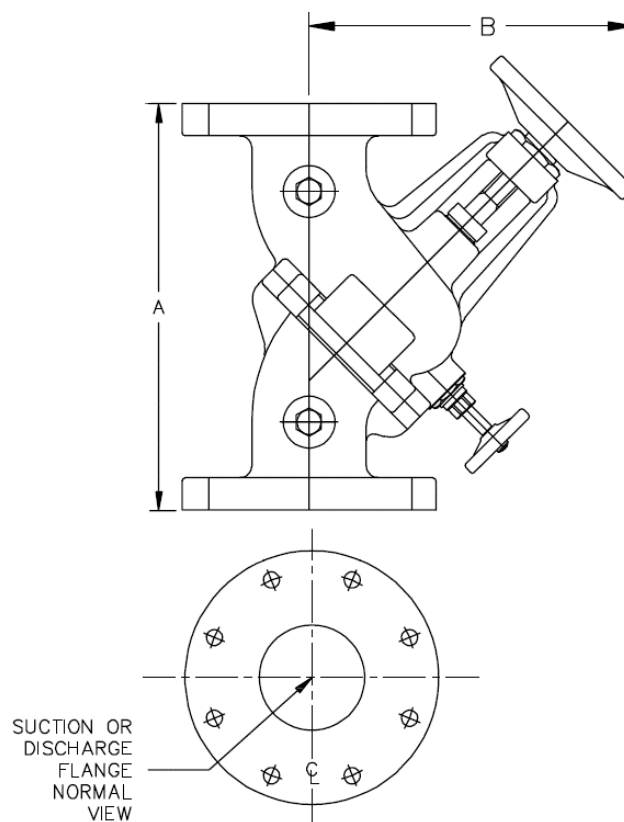
Project name : LR West HS		Tag Number : OTDV	
Consulting engineer :		Service : Pumps	
Customer : FLUID SOLUTIONS INC		Model : CV60-125	
Customer ref. / PO :		Quantity : 2	
Quote Number / ID : 110123A		Quoted By (Sales Office) : FLUID SOLUTIONS INC	
Date last saved : 11/01/2023 1:48 PM		Quoted By (Sales Engineer) : James Dayer	

Construction				Grundfos Combination Valves	
Nozzle	Size (in.)	Nozzle Configuration	Pos'n		
Inlet	6	-	Side		
Outlet	6	-	Side		
Valve Body : ASTM A395 Seat Guide : - Disc : Bronze ASTM B124 C37700 Spring : Stainless Steel, ASTM A240-304 Packing Gland : Bronze ASTM B124 C37700 Stem Packing : - Yoke : Steel ASTM A283-C Indicator : - Hand wheel : Ductile iron A395 Construction Code/Part Number : 96877846					
Weights (Approx.)				Description	
Estimated Shipping gross weight : 205.0 lb				Grundfos Series CV, Combination valve combines three valves in one: shut-off valve, balancing valve, and check valve. The combination valve makes it possible to reduce the overall system pressure drop since fewer individual components are needed when installing a pump. The combination valve provides the feature of changing the flange orientation to allow 90° pipe connection. Additional feature includes a built-in bypass valve allowing for drainage of water upstream of the check valve. -	

General Arrangement

Project name : LR West HS
 Consulting engineer :
 Customer :
 Customer ref. / PO :
 Quote Number / ID : 110123A
 Date last saved : 11/01/2023 1:48 PM

Tag Number : 0TDV
 Service : Pumps
 Model : CV60-125
 Quantity of pumps : 2
 Quoted By (Sales Office) : FLUID SOLUTIONS INC
 Quoted By (Sales Engineer) : James Dayer



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Units	Inlet (in)	Outlet (in)	A (in)	B (in)	Weight (lbs)
inches	6	6	17.28	14.45	205.0