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Ruhrpumpen is an innovative and efficient centrifugal pump technology company and offers operators of Pump Systems, a wide range of quality products.

Ruhrpumpen is committed to global excellence with a complete range of Pumps, Fire Pump packages and related products, such as Decoking Systems and Tools to support the core markets, namely Oil & Gas, Petrochemical, Power, Heavy Industry applications, Mining and Water services.

The broad product line complies with the most demanding quality specifications and goes beyond stringent industry standards such as API, ANSI, Hydraulic Institute, Underwriter's Laboratories, Factory Mutual and ISO 9001.

Ruhrpumpen's quality program and in-house foundry, along with the latest testing equipment, ensures that the pumps we manufacture will provide long operating life, even under the most severe conditions.

FIRE PUMPS

Ruhrpumpen's Fire Pumps are Listed by Underwriter's Laboratories and Approved by Factory Mutual. The complete range includes Horizontal, Vertical Fire Pumps and complete Pre-Packaged Fire Systems, in both 50 and 60 Hz. The pumps are available in electric motor, diesel engine or steam turbine driven configuration.

Ruhrpumpen's Horizontal Split-Case, End Suction and Vertical In-Line, centrifugal pumps combine the latest in hydraulic design with almost a century of application experience to meet today's industrial and municipal requirements.

The Fire Pumps offer longer life, higher efficiencies, less downtime and lower maintenance costs. Heavy fabricated-steel bases, are available to mount the pump and driver. Flexible shaft coupling connects driver to pump.

Vertical Fire Pumps

The Vertical Fire Pumps (VTP) are normally designed to operate in wells, sumps or offshore. The bowl assembly consists primarily of a suction bowl & suction bell, one or more bowls, and a discharge head. The number of stages (bowls) required is determined by the head requirements of the installation. The pump bowl assembly is positioned in the sump or well at a depth to provide the proper submergence. A pump shaft, common to all moving parts in the bowl assembly, provides mechanical linkage to the pump driver unit.

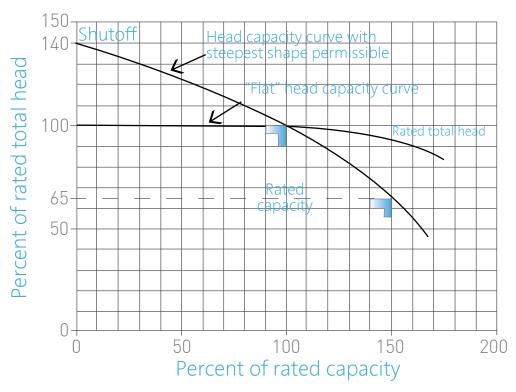
Pre-packaged Fire Pumps

Ruhrpumpen also offers complete Pre-Packaged Fire Pump Systems, which can vary from a pump with driver arrangement on a skid, to a fully prefabricated unit with environmental enclosures.





Selection Criteria



- Pump shall furnish not less than 150% of rated capacity at not less than 65% of total rated head.
- Shutoff head will range from a minimum of 101 percent to a maximum of 140 percent of rated head.
- As per NFPA-20 we can offer ranges over 5,000 gpm, these cases are subject to individual review by the authority having jurisdiction or a listing laboratory.
- As required by NFPA-20, each pump is tested at our factory to provide detailed performance data and to demonstrate its compliance with the required specifications.
- In compliance with NFPA-20, hydrostatic tests are performed on the pump for a period of not less than 5 minutes. In the case of vertical turbine pumps, both the discharge head and the bowl assembly are tested.
- The use of a Diesel Engine requires the proper environmental temperature (minimum 4.5°C / 40°F), to ensure correct operation of the Fire System. A Pump House may be required in order to meet these specific conditions, please contact the factory for more information.

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3. HORIZONTAL SPLIT CASE PUMPS	
3.1 HORIZONTAL SPLIT CASE PUMPS	
PUMP DESCRIPTION	
ZW LINEZW BARESHAFT PUMP DIMENSIONS	
HS LINE	
HS BARESHAFT PUMP DIMENSIONS	
STANDARD BILL OF MATERIALS (B.O.M.)	
ALTERNATE MATERIALS LIST	
3.2 HORIZONTAL SPLIT CASE PUMP RANGE	
LOW VOLUME RANGE	
150 - 400 GPM	
450 - 500 GPM	
1250 GPM	
MID VOLUME RANGE	
1500 GPM	
2000 GPM	
HIGH VOLUME RANGE	
2500 - 3500 GPM	
4000 - 5000 GPM	

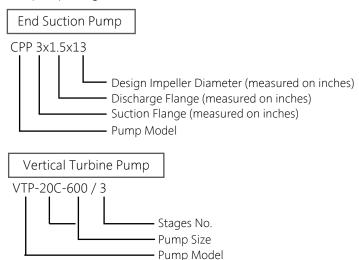
4. VERTICAL TURBINE PUMPS

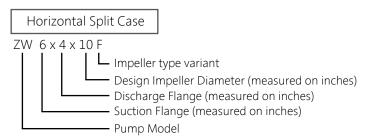
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	MID VOLUME RANGE 1500 - 2500 GPM	
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GENERAL INFORMATION

1.1 Type description

The pump designation follows this format:





1.2 Acronyms

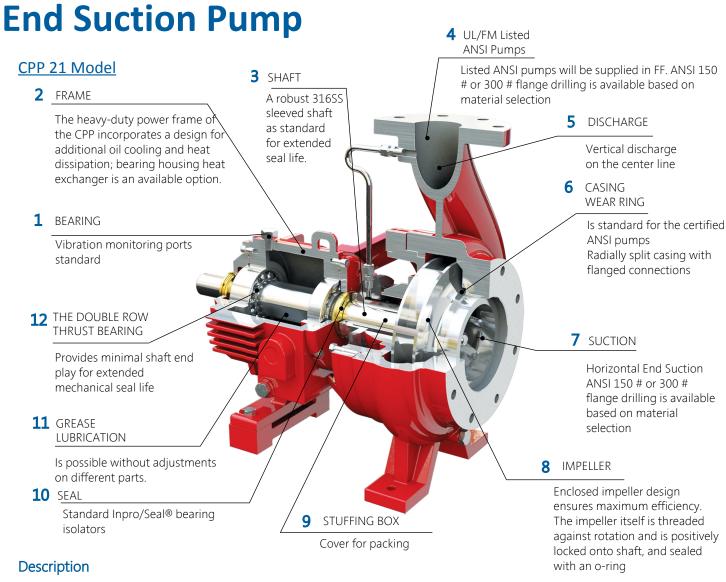
- RF: Raised Face
- FF: Flat Face
- PO: Purchase Order
- C. RP.: Contact Ruhrpumpen
- VTP: Vertical Turbine Pump
- SS: Stainless Steel
- Brz: Bronze

- Cl.:Cast Iron
- CST: Carbon Steel
- St: Steel
- Q1 : First Quarter
- CW: Clock Wise Rotation
- TBD: To Be Determined
- FM: Factory Mutual
- UL: Underwriters Laboratories
- CPP: Chemical Process Pump
- L: Length
- W: Width
- H: Height

As a strategic advantage we're vertically integrated with our own foundry and test lab; thus allowing us to manufacture fire pumps in special materials.

In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

PUMP DESCRIPTION



- Standard Materials*: Ductile iron casing, impeller, wear ring, shaft sleeve and Shaft in 316 SS.
- Single-stage horizontal centrifugal pump.
- Radially split casing with flanged connections.
- Horizontal end suction and top discharge on the center line.
- Enclosed impeller.
- Clockwise rotation (viewed from coupling end).
- Grease lubrication.
- ANSI/ASME Standard B 73.1 (OH1).
- "Back pull-out" design allows easy removal of pump assembly and easy of maintenance without disturbing casing flange connections.
- Standard or large bore stuffing boxes are available for packing.
- * Special design and materials upon request.
- ** Non-Witness Testing

Notes:

Our End Suction Fire Pumps are designed according ANSI (ASME B73.1) and are certified by FM & UL Approvals. Please contact our RP Team for more information regarding designs, materials & operations of our pumps. In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

Design Features









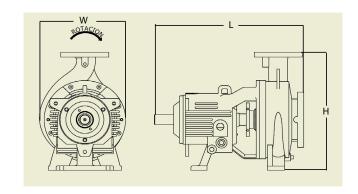
Horizontal End Suction Electric Pump

Pump General Information								
	Pump Model	Rotation		Construction Materials_				
Line	Size	Part Nº CW	Standard (Price List)	Other Available	Flange			
	3x1.5x13*	24009566		N/A				
	3x2x8	24009568						
CPP21	3x2x13	24009567	DI - SS		150 FF			
	4x3x8	24009569						
	4x3x10	24011807						

Bareshaft Pump Dimensions - CPP Line

MODEL	LENGTH		WI	OTH	HEIGHT	
MODEL	Inches	Cm	Inches	Cm	Inches	Cm
CPP 3x1.5x13	23	59	16	40	21	52
CPP 3X2X8	24	60	10	26	18	45
CPP 3X2X13	24	60	16	40	22	55
CPP 4X3X8	24	60	10	259	19	49
CPP 4X3X10	24	60	13	320	19	49

General Dimensions Centrifugal Pump "CPP" All dimensions are for informational purposes only.



Pump Ranges - 3500 RPM

PUMP	GALLONS PER MINUTE (GPM)								
MODEL	150	200	250	300	400				
CPP 3x1.5x13*	175 - 251					P			
CPP 3x2x8	62 - 130					RESS			
CPP 3x2x13		185 - 250				URE.			
CPP 4x3x8		40 - 134	40 - 133	40 - 131		(PSI)			
CPP 4x3x10			115 - 207	113 - 205	106 - 196				

Notes:

Conditions may vary depending on the conditions of operation of the pump. In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

^{*}UL Certify Only

Horizontal Split Case Pumps

HSC / HSD / HSL / HSR / ZW Models

1 COMPACT DESIGN

Heavy shaft and short bearing span reduce shaft deflection to a minimum, providing longer packing and bearing life and lower maintenance costs, while requiring less floor space. Clockwise rotation standard; counter-clockwise rotation optional.

2 BEARINGS

Radial and Thrust Bearings with grease lubrication for maximum life at minimum maintenance cost.

3 CASING

Horizontally split, upper and lower half bolted and dowelled.

Flanged suction and discharge connections located in the lower-half casing, allowing inspection and maintenance without disturbing piping or drive alignment.

4 STUFFING BOX

Deep Stuffing boxes are designed to accept a minimum of five rings of packing with lantern ring. Internally drilled liquid passage in upper-half casing provides lubrication to the packing area.

Description

- Standard Materials for HS pumps*: Cast iron casing, and steel shaft
- Standard Materials for ZW pumps: Cast iron casing / Ductil Iron, bronze / stainless steel fitted, steel shaft.
- Single-stage double suction horizontal centrifugal pump.
- Split case design allows service without disturbing the piping.
- Dynamically balanced double suction Impeller to reduce thrust loads.
- Clockwise rotation (viewed from coupling side).
- Grease lubricated bearings.
- * Special design and materials upon request.

** Non-Witness Testing

5 CASING WEAR RING

Close running clearance minimizes pressure leakage between suction and discharge chambers of the casing, maximizes efficiency and are easily replaceable.

6 SHAFT

Larger-diameter, precision-machined, high strength steel shaft provides maximum strength with minimum shaft deflection, so ensuring maximum reliability.

7 IMPELLER

Enclosed, double-suction type. Cast in one-piece and balanced to minimize thrust and to ensure longer bearing life Keyed to shaft and locked in position by threaded shaft sleeves.

8 SHAFT SLEEVE

Protects the shaft against corrosion and wear, extends through gland for maximum shaft protection.

Design Features









Notes:

Please contact our RP Team for more information regarding designs, materials & operations of our pumps. In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

Horizontal Split Case Bareshaft Pumps - ZW Line

					Pump Gene	ral Information	1			
	Pump Model	Rota	ition		Construction	1	Flang	Flanges		ght
Line	Size	Part № CW	Part № CCW	Standard	B.O.M		Line	Size	(Kg)	(Lb)
Line	Size	raitiv- Cvv	Fait IV- CCVV	Standard	Std.	Alt. Mat	Line	3120	(Ng)	(LD)
	ZW 6x4x8 F	24011421	24011423	CI - SS	1	4	250 RF	250 RF	189	416
	ZW 6x4x10	24014467	24014615	CI - SS	1	-	250 RF	250 RF	TBD	TBD
	ZW 6x4x12	24014468	24014616	CI - SS	1	-	250 RF	250 RF	TBD	TBD
	ZW 6x4x14 F	24014024	24014026	CI - SS	1	2	250 RF	250 RF	235	517
	ZW 6x4x16 F	24011591	24011592	CI - SS	1	2	250 RF	250 RF	326	717
	ZW 6x5x12 F	24014173	24014235	CI - SS	1	4	250 RF	250 RF	310	682
	ZW 6x5x14 F	24014002	24014004	CI - SS	1	2	250 RF	250 RF	326	717
	ZW 8x5x8 F	24014019	24014021	CI - SS	1	4	250 RF	250 RF	266	585
	ZW 8x5x10 F	24011839	24013990	CI - SS	1	4	250 RF	250 RF	295	649
	ZW 8x5x12 F	24013996	24013998	CI - SS	1	4	250 RF	250 RF	312	686
	ZW 8x5x14 F	24014007	24014009	CI - SS	1	2	250 RF	250 RF	357	785
	ZW 8x5x16 F	24014317	24011590	CI - SS	1	2	250 RF	250 RF	367	807
	ZW 8x6x8 F	24014013	24014015	CI - SS	1	4	250 RF	250 RF	280	616
ZW	ZW 8x6x10 F	24011583	24011586	CI - SS	1	4	250 RF	250 RF	351	772
	ZW 8x6x12 F	24011496	24014238	CI - SS	1	4	250 RF	250 RF	385	847
	ZW 8x6x14 F	24011493	24014267	CI - SS	1	2	250 RF	250 RF	414	911
	ZW 8x6x16 F	24014226	24014325	DI - SS	1	1	300 RF	300 RF	450	990
	ZW 8x6x19.5 F	24014347	24014753	CI - SS	2	1	250 RF	250 RF	TBD	TBD
	ZW 10x6x12 F	24011584	24014286	CI - SS	1	2	250 RF	250 RF	428	942
	ZW 10x6x14 F	24011585	24011588	CI - SS	1	2	250 RF	250 RF	428	1038
	ZW 10x8x8 F	24011495	24011490	CI - SS	1	4	125 FF	125 FF	383	843
	ZW 10x8x10 F	24011497	24011492	CI - SS	1	4	250 RF	250 RF	433	953
	ZW 12x10x20 F	24011595	24011826	CI - SS	1	2	250 RF	250 RF	866	1905
	ZW 12x10x24 F	24014092	24014094	DI - SS	2	2	300 RF	300 RF	1161	2554
	ZW 16x12x20 A	24014878	-	CI - SS	3	5	250 RF	250 RF	1149	2528
	ZW 16x12x20 F	24014882	-	CI - SS	3	5	250 RF	250 RF	1149	2528
	ZW 16x12x20 FH	24014259	24014661	CI - SS	4	3	250 RF	250 RF	1149	2528

Notes: TBD: To Be Determine CRP: Contact Ruhrpumpen. Fire Pumps weights and lead times are estimations and are subject to change.

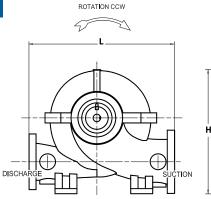
CW: Clock Wise Rotation, viewed from the coupling end.

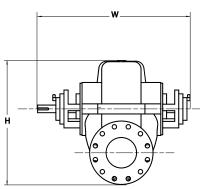
In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

Bareshaft Pump Dimensions

General Dimensions
Horizontal Split Case "ZW"
All dimensions are for informational purposes only.
Conditions may vary depending on the conditions of operation of the pump.

MODEL	WI	OTH	LEN	GTH	HEIGHT	
MODEL	Inches	Cm	Inches	Cm	Inches	Cm
ZW 6x4x8 F	22	55	26	66	18	46
ZW 6x4x10 F	TBD	TBD	TBD	TBD	TBD	TBD
ZW 6x4x12 F	TBD	TBD	TBD	TBD	TBD	TBD
ZW 6x4x14 B	28	71	26	66	22	57
ZW 6x4x14 F	28	71	26	66	22	57
ZW 6x4x16 F	31	79	30	75	26	66
ZW 6x5x12 F	29	73	30	75	22	55
ZW 6x5x14 F	29	73	30	75	24	62,2
ZW 8x5x8 F	25	62	30	76	21	54
ZW 8x5x10 F	26	67	30	75	22	56
ZW 8x5x12 F	29	73	30	75	24	60
ZW 8x5x14 F	32	81	30	75	26	66
ZW 8x5x16 F	33	83	30	75	28	71
ZW 8x6x8 F	26	66	30	75	16	40
ZW 8x6x10 F	29	74	33	83	25	64





MODEL	WIE	OTH	LEN	GTH	HEIGHT	
MODEL	Inches	Cm	Inches	Cm	Inches	Cm
ZW 8x6x12 F	31	79	33	83	26	66
ZW 8x6x14 F	33	83	33	83	26	67
ZW 8x6x16 F	35	89	33	83	29	74
ZW 8x6x19.5 F	TBD	TBD	TBD	TBD	TBD	TBD
ZW 10x6x12 F	32	81	33	83	28	70
ZW 10x6x14 F	34	86	33	83	28	72
ZW 10x8x8	41	162	36	141	32	127
ZW 10x8x10	41	162	36	141	32	127
ZW 12x10x20 F	56	220	57	224	46	181
ZW 12x10x24 F	45	115	44	113	36	92
ZW 16x12x20 A, F	52	131	47	120	40	101
ZW 20x14x25	51	130	47	120	39	99

Notes

TBD: To Be Determine

Fire Pumps weights are estimations and are subject to change. CW: Clock Wise Rotation, viewed from the coupling end.

In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

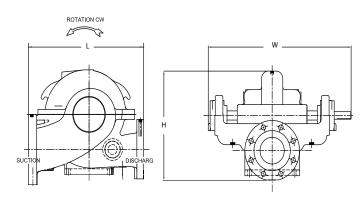
Horizontal Split Case Bareshaft Pumps - HS Line

	Pump General Information									
F	Pump Model	Rotation			Construction		Flanges		Weight	
	6:	Part Nº Part Nº).M.		6:	// \	(15)	
Line	Size	CW	ccw	Standard	Std.	Alt.	Line	Size	(Kg)	(Lb)
	HSC 8x12x14D	24011594	24011594	CI - SS	5	=	125 FF	125 FF	554	1219
HSC	HSC 8x12x18A	24009561	24009561	CI - Brz	1	<u>5</u>	125 FF	125 FF	900	1980
	HSC 8x14x21E	24009555	24009555	CI - Brz	2	<u>6</u>	250 RF	250 RF	950	2090
	HSC 10x14x26A	24009571	24009571	S. Duplex	1	-	300 FF	300 FF	1070	2354
	HSD 4x3x17A	24009535	Pending	CI - Brz	1	1	125 FF	125 FF	162	356
	HSD 6x4x9B	24009545	Pending	CI - Brz	1	3	125 FF	125 FF	113	249
	HSD 6x4x17A	24009533	Pending	CI - Brz	1	1	125 FF	125 FF	350	770
	HSD 8x6x9A	24009546	Pending	CI - Brz	1	1	125 FF	125 FF	145	319
HSD	HSD 8x6x17A	24009534	Pending	CI - Brz	1	3	125 FF	125 FF	300	660
	HSD 8x6x20A	24009536	Pending	CI - Brz	1	3	125 FF	250 RF	382	840
	HSD 10x8x17A	24009522	Pending	CI - Brz	2	2	125 FF	125 FF	386	849
	HSD 10x8x20A	24014117	Pending	CI - Brz	2	2	125 FF	250 RF	550	1210
	HSD 12x10x15A	24009538	Pending	CI - Brz	2	2	125 FF	125 FF	490	1078
HSL	HSL 3x4x10A	24000649	24000649	WCB - Brz	1	-	150 FF	150 FF	185	407
ПЭГ	HSL 6x8x13A	24009537	24009537	CI - Brz	1	1	125 FF	125 FF	340	748
HSR	HSR 4x6x11B	24009554	24009554	CI - Brz	3	7	125 FF	125 FF	182	400
пэк	HSR 8x10x14A	24009415	24009415	CI - Brz	1	1	125 FF	125 FF	341	750

Bareshaft Pump Dimensions

General Dimensions
Horizontal Split Case "HS"
All dimensions are for informational purposes only.
Conditions may vary depending on the conditions of operation of the pump.

MODEL	WI	OTH	LEN	GTH	HEIGHT	
MODEL	Inches	Cm	Inches	Cm	Inches	Cm
HSC 8x12x18A	39	98	47	120	34	85
HSC 8x14x21	42	107	52	131	38	97
HSC 10x14x26 A	46	117	52	133	44	112
HSC 12x8x14 D	25	64	23	59	21	54
HSD 4x3x17	19	48	24	60	16	40
HSD 6x4x9 B	27	69	28	70	28	71
HSD 6x4x17 A	21	53	24	60	20	50
HSD 8x6x9	29	74	28	70	29	74
HSD 8x6x17	31	79	32	81	28	70
HSD 8x6x20	35	88	43	110	31	78



MODEL	WIDTH		LEN	GTH	HEIGHT	
MODEL	Inches	Cm	Inches	Cm	Inches	Cm
HSD 10x8x17	29	74	32	81	27	70
HSD 10x8x20	32	81	32	81	31	79
HSD 12x10x15	35	89	32	81	31	78
HSL 3x4x10 A	23	57	30	77	18	46
HSL 6x8x13	29	74	37	95	23	57
HSR 4x6x11	23	57	31	78	21	53
HSR 8x10x14	29	72	34	87	29	73

Notes: TBD: To Be Determine CRP: Contact Ruhrpumpen. Fire Pumps weights and lead times are estimations and are subject to change.

CW: Clock Wise Rotation, viewed from the coupling end.

In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

Standard Bill of Materials (B.O.M.)

Please refer to Alternate Material List on next page. (15)

	CAST I	RON - STAINL STANDARI		l - SS)
	No. 1	No. 2	No. 3	No. 4
Bearing Lubrication	Greace	Greace	Greace	Greace
Seal Type	Packing	Packing	Packing	Packing
Casing	A48 Cl. 35B	A48 Cl. 35B	A48 Cl. 35B	A48 Cl. 40B
Cassing Wear Ring	A890 Gr. 1B	A744 Gr. CD4MCu	A351 Gr. CF8M	A890 Gr. 1B
Shaft	A434 - 4140 CL. BC	A434 - 4140 CL. BC	A434 - 4140 CL. BC	A434 - 4140 CL. BC
Shaft Sleve	A276 Type 316	A276 Type 316	B505 - C89320	A276 Type 316
Impeller	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M
Impeller Wear Ring	-	-	-	-
Stuffing Box	A48 Cl. 35B	A48 Cl. 35B	A48 Cl. 35B	A48 Cl. 40B
Lantern Ring	316 SS	316 SS	A276 Type 316	316 SS
Packing Gland	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M
Bearling House	A48 Cl. 35B	A48 Cl. 35B	A48 Cl. 35B	A48 Cl. 40B
Bearing Cover	A576 Gr. 1045	A576 Gr. 1045	A830 Gr. 1045	A576 Gr. 1045
Deflector	Rubber	Rubber	Rubber	Rubber
Cassing Studs	A193 Gr. B7	A193 Gr. B7	A193 Gr. B7	A193 Gr. B7

ALT.		(CI - SS RIALS /		\BLE
No.1	No.2	No.3	No.4	No.5
-	-	-	-	-
-	-	-	-	-
-	-	-	-	17
-	4 & 8	4 & 8	4 & 8	16
-	-	-	1	1
4	4	4	4	4
-	-	-	-	-
-	-	-	-	-
-	-	-	-	17
3	3	3	3	3
3	3	3	3	-
-	-	-	-	17
6 & 9	6 & 9	6 & 9	6 & 9	-
-	-	-	-	-
-	-	-	-	-

	(DI - SS) STAN	DARD B.O.M.
	No. 1	No. 2
Bearing Lubrication	Greace	Greace
Seal Type	Packing	Packing
Casing	A536 Gr. 80 - 55 - 06	A536 Gr. 80 - 55 - 06
Cassing Wear Ring	A890 Gr. 1B	A890 Gr. 1B
Shaft	A434 Gr. 4140 CL. BD	A434 Gr. 4140 CL. BD
Shaft Sleve	A276 Type 316	A276 Type 316
Impeller	A351 Gr. CF8M	A351 Gr. CF8M
Impeller Wear Ring	-	-
Stuffing Box	A536 Gr. 80 - 55 - 06	A536 Gr. 80 - 55 - 06
Lantern Ring	SST 316	SST 316
Packing Gland	A351 Gr. CF8M	A351 Gr. CF8M
Bearling House	A48 Cl. 35B	A48 Cl. 35B
Bearing Cover	A576 Gr. 1045	A576 Gr. 1045
Deflector	Rubber	Rubber
Cassing Studs	A193 - B7	A193 - B7

DUCTILE IRON - STAINLESS STEEL

(DI	- SS)
ALT. MATERIA	LS AVAILABLE
No. 1	No. 2
-	-
-	-
-	-
4 & 8	4 & 8
-	-
4	4
-	-
-	-
-	-
3	3
3	3
-	7
6 & 9	6 & 9
-	-
-	-

Standard Bill of Materials (B.O.M.)

	CAST IRON - BR STANDAR	
	No. 1	No. 2
Bearing Lubrication	Greace	Greace
Seal Type	Packing	Packing
Casing	A48 Cl. 30B	A48 Cl. 30B
Cassing Wear Ring	B584 - C89831	B584 - C89831
Shaft	A434 Gr. 4140 Cl. BC	A434 Gr. 4140 Cl. BC
Shaft Sleve	B505 - C89320	B505 - C89320
Impeller	B584 - C89833	B584 - C89833
Impeller Wear Ring	-	B505 - C89320
Stuffing Box	-	-
Lantern Ring	A276 Type 316	A276 Type 316
Packing Gland	A351 Gr. CF8M	A351 Gr. CF8M
Bearling House	A48 Cl. 30B	A48 Cl. 30B
Bearing Cover	A48 Cl. 30B	A48 Cl. 30B
Deflector	Neoprene	Neoprene
Cassing Studs	A193 Gr. B8M Cl 2	A193 Gr. B8M Cl 2

ALT. N	(CI - BRZ) ALT. MATERIALS AVAILABLE								
No. 1	No. 2	No. 3	No. 4						
-	-	-	-						
-	-	-	-						
-	-	-	-						
-	-	6	6						
-	-	-	7						
5	5	5	5						
-	-	-	-						
-	5	-	-						
-	-	-	-						
6 & 13	6 & 13	6 & 13	6 & 13						
6 & 13	6 & 13	6 & 13	6 & 13						
-	-	-	-						
-	-	-	-						
-	-	-	-						
-	-	-	-						

	ALTERNATE MATERIALS
1	A576 Gr. 1045
2	B30 - C89320
3	B584 - C89833
4	A351 Gr. CF8M
5	A479 Type 316L
6	A48 - 35B
7	A536 Gr. 80-55-06
8	A744 Gr. CD4MCu
9	A830 Gr. 1045
10	A494 Gr. M25S

	ALTERNATE MATERIALS
11	B150 - C63000
12	A276 Type 316
13	A216 Gr. WCB
14	B584 - C89831
15	A494 Gr.M-35-1
16	A890 Gr. 1B
17	A48 - 40B
18	B62 - C93800
19	B62 - C83600
20	-

150 GPM





UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
HSL 3x4x10 A	129 - 223	92 - 161		81 - 140						PRESSU (PSI)
										SURE SURE

200 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
HSC 3x4x10 A	128 - 222	91 - 159		78 - 138	67 - 122	54 - 99	43 - 77			9
										(PSI)

250 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
HSD 4x3x17 A								95 - 146		1
HSC 3X4X10 A	155 - 221	88 - 157		75 - 136	66 - 119	52 - 98	56 - 75			1

300 GPM

UL/FM LISTED					RPM				
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480
HSD 3x4x10 A	123 - 221	86 - 155		73 - 134	69 - 117				

400 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 8x5x16 F					178 - 254	147 - 207				9 5
										(PSI)

Certification in Process. Pumps have been witnessed tested before UL & FM. Pending issuance of certificate. (Estimated Q3 - 2017) PSI ranges may vary once certificate are submitted by UL & FM.

450 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 6x4x8 F	83 - 104									
ZW 6x4x12 F	209 - 258	150 - 182	147 - 178	132 - 159	112 - 138	90 - 11				3
ZW 6x4x14 F	231 - 339	163 - 237	158 - 231	141 - 206	128 - 178	104 - 146				PRESSOR
ZW 6x4x16 F					184 - 242	151 - 206	121 - 163	84 - 118		П
ZW 6x5x14 F						107 - 153				(PSI)
ZW 8x5x16 F					178 - 253	146 - 206			55 - 80	

500 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 6x4x8 F	82 - 103									
ZW 6x4x10 F		101 - 120	97 - 117	87 - 104						
ZW 6x4x12 F	208 - 258	151 - 182	147 - 177	131 - 159	112 - 137	90 - 111				
ZW 6x4x14 F	229 - 337	162 - 235	157 - 229	140 - 204	126 - 176	100 - 145				
ZW 6x4x16 F		246 - 323	240 - 314	214 - 280	185 - 241	150 - 204	118 - 161	81 - 117		
ZW 6x5x12 F						84 - 110				돭
ZW 6x5x14 F		173 - 248	168 - 242	150 - 216	128 - 183	104 - 147				PREVVORE
ZW 8x5x8 F	92 - 108	67 - 78	65 - 76	58 - 67	49 - 58					
ZW 8x5x16 F					178 - 253	146 - 206			54 - 80	(PSI)
ZW 8x6x8 F		67 - 80	65 - 78	58 - 69						
HSR 4x6x11 B	123 - 193									
HSL 6x8x13 A	149 - 222	108 - 221		95 - 193	82 - 167	64 - 130	54 - 109			
HSD 6x4x9 B	59 - 140	48 - 102		41 - 88	43 - 74					
HSD 6x4x17 A								73 - 139		

Certification in Process. Pumps have been witnessed tested before UL & FM. Pending issuance of certificate. (Estimated Q3 - 2017) PSI ranges may vary once certificate are submitted by UL & FM.

750 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 8x5x8 F	90 - 105	63 - 75	61 - 73	54 - 64	47 - 56					
ZW 6x4x10 F	130 - 161									
ZW 6x4x12 F	199 - 254									
ZW 6x4x16 F		235 - 316	229 - 307	203 - 273						
ZW 6x5x12 F	185 - 253	129 - 176	125 - 171	110 - 152	93 - 131	77 - 105				
ZW 6x5x14 F	235 - 339	164 - 241	159 - 234	141 - 208	123 - 178					
ZW 8x5x10 F		88 - 120	85 - 116	76 - 103	64 - 89					_
ZW 8x5x12 F		118 - 180	115 - 175	102 - 156	80 - 154	71 - 108				RES
ZW 8x5x14 F					123 - 196	99 - 159				PRESSURE
ZW 8x5x16 F					177 - 251	143 - 199				(PSI)
ZW 8x6x8 F		68 - 78	64 - 75	57 - 67] =
ZW 8x6x12 F								45 - 65		
ZW 10x6x12 F						83-119		47 - 65		
HSD 6x4x17 A								93 - 142		
HSD 8x6x20 A								108 - 197		
HSD 8x6x17 A									45 - 90	
HSL 6x8x13 A	148 - 221	106 - 219		92 - 190	76 - 154	60 - 130	50 - 108			

1000 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 6x5x12 F	175 - 243	119 - 168	116 - 163							
ZW 6x5x14 F	224 - 331									
ZW 8x5x10 F	118 - 164	85 - 116	83 - 112	73 - 99	62 - 86					
ZW 8x5x12 F	164 - 247	114 - 176	111 - 171	98 - 152	85 - 129	67 - 105				
ZW 8x5x16 F		237 - 330	231 - 321	205 - 286	170 - 247	136 - 196				
ZW 8x6x8 F	89 - 107	62 - 75	60 - 73	53 - 65						R
ZW 8x6x10 F					83 - 102					USS
ZW 8x6x19.5 F									87 - 120	PRESSURE (PSI)
ZW 8x5x14 F		159 - 255	156 - 248	138 - 220	116 - 191	92 - 153				(IS
ZW 10x6x12 F						82 - 117		46 - 64		
HSD 8x6x9 A	80 - 121									
HSD 8x6x20 A								106 - 195		
HSD 8x6x17 A								78 - 125	43 - 89	
HSD 10x8x20 A									76 - 130	

Certification in Process. Pumps have been witnessed tested before UL & FM. Pending issuance of certificate. (Estimated Q3 - 2017) PSI ranges may vary once certificate are submitted by UL & FM.

1250 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 8x5x10 F	114 - 159	80 - 111	77 - 108	67 - 95						
ZW 8x5x12 F	161 - 244	110 - 172	106 - 167		80 - 126					
ZW 8x5x14 F	220 - 355	151 - 248	146 - 241							
ZW 8x5x16 F		231 - 324	225 - 315	199 - 280						
ZW 8x6x8 F	86 - 104									
ZW 8x6x10 F		108 - 136	105 - 132	93 - 118	81 - 99					
ZW 8x6x12 F		134 - 187	131 - 182	116 - 162	101 - 141	81 - 115				PRE
ZW 8x6x14 F					141 - 194	112 - 157	87 - 123			PRESSURE
ZW 8x6x16 F					179 - 251	144 - 205				RE (
ZW 8x6x19.5 F								124 - 175	84 - 114	(PSI)
ZW 10x6x12 F					106 - 146	88 - 116		42 - 63		
ZW 10x8x8 F		61 - 79	59 - 77	52 - 65	45 - 59					
HSD 8x6x17 A								76 - 131		
HSD 8x6x20 A								103 - 195		
HSD 10x8x17 A									43 - 86	
HSR 8x10x14 A								44 - 92		

1500 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 8x5x10 F	108 - 154									
ZW 8x5x12 F	154 - 240									
ZW 8x5x14 F	208 - 346									
ZW 8x6x10 F		104 - 132	101 - 129	89 - 114	76 - 95					
ZW 8x6x12 F		132 - 184	129 - 175	114 - 157	99 - 135					
ZW 8x6x14 F		185 - 254	180 - 247							
ZW 8x6x16 F		236 - 331	229 - 322	203 - 287						PRE
ZW 8x6x19.5 F								121 - 167	81 - 109	PRESSURE
ZW 10x6x12 F		139 - 195	135 - 190	120 - 169	104 - 142	76 - 113		40 - 59		RE (I
ZW 10x6x14 F						113 - 147				(PSI)
ZW 10x8x10 F		87 - 124	84 - 120	75 - 107	65 - 91	49 - 74				
HSD 8x6x17 A								71 - 125		
HSD 8x6x20 A								100 - 190	70 - 139	
HSD 10x8x17 A									43 - 84	
HSD 10x8x20 A								110 - 117		
HSC 8x12x18 A								51 - 86		

Certification in Process. Pumps have been witnessed tested before UL & FM. Pending issuance of certificate. (Estimated Q3 - 2017) PSI ranges may vary once certificate are submitted by UL & FM.





2000 GPM

UL/FM LISTED					RPM					
SIZE	3550	3000	2960	2800	2600	2350	2100	1750	1480	
ZW 8x6x19.5 F								113 - 150		Τ
ZW 10x6x12 F		135 - 191	131 - 185	117 - 164						
ZW 10x6x14 F		179 - 251	174 - 244							2
HSD 10x8x20 A								100 - 182		PRESSOR
HSC 8x12x14 D								51 - 86		-
HSC 8x12x18 A								97 - 150		(PSI)
HSC 8x14x21 E								140 - 232		
HSC 10x8x17 A								87 - 128		

2500 -3500 GPM

UL/FM LISTED	250	00 GPM	RPM) GPM	
SIZE	1750	1480	1750	1480	1750	1480	
ZW 12x10x20 F	120 - 170	85 - 119	123 - 165	85- 116	120 - 162	82 - 115	
ZW 12x10x24 F		115 - 179	160 - 250	112 - 177	156 - 248	106 - 174	P
ZW 16X12X20 FH			130 - 188	91 - 129	128 - 186	89 - 128	RES
HSD 12x10x15 A	40 - 89						RESSURE
HSC 8x12x18 A	92 - 145						E (PSI)
HSC 8x14x21 E	133 - 234		151 - 224				=
HSC 10x14x26 A						138 - 227	

4000 - 5000 GPM

UL/FM LISTED	4000	GPM		GPM PM	5000 GPM			
SIZE	1750	1480	1750	1480	1750	1480		
ZW 14x10x24 F	152 - 177	107 - 124	149 - 174	104 - 121	147 - 171	100 - 117		
ZW 16x12x20 A	110 - 170	74 - 118	107 - 169	71 - 116			줉	
ZW 16x12x20 F	110 - 167	80 - 118	112 - 166	78 - 117			SOURE	
ZW 16X12X20 FH	130 - 184	88 - 127	123 - 182	87 - 126	120 - 180	85 - 124	주 (국	
ZW 20x14x25 A						125 - 179	S)	
HSC 10x14x26 A		131 - 226		126 - 223				

Certification in Process. Pumps have been witnessed tested before UL & FM. Pending issuance of certificate. (Estimated Q3 - 2017) PSI ranges may vary once certificate are submitted by UL & FM.

Vertical Turbine Pumps

VTP Model

1 DISCHARGE HEAD

Provides support for motor and entire pump and column assembly. Available in cast iron or fabricated steel.

2 COLUMN

Connections are flanged or threaded, and include replaceable bearing retainer.

3 COLUMN ASSEMBLY

Column assembly is manufactured in-plant to ensure accurate fit.

4 LINE SHAFT

Carbon steel and threaded with coupling. Other materials available for various applications

5 SUCTION BOWL

Provides a rigid support of the lower end of the pump shaft. Suction bell is available for special applications.

6 STRAINER

Prevents entry of foreign objects into pump suction. Designed in accordance with <u>NFPA-20.</u> (Corrosion resistance)

7 STUFFING BOX

Machined with bushing to guide shaft.

8 BEARINGS

Available in a variety of materials to meet pumping needs.

9 LINE SHAFT COUPLINGS

Are machined from solid steel stock.

10 SLEEVE BEARINGS

Operate in conjunction with pump shaft to provide long life and low friction.

11 ENCLOSED IMPELLERS

Enclosed impellers are designed for long life and high efficiency. Each is precision machined and balanced for vibration free operation; the vanes and guide passages are hand finished to improve the efficiency.

12 IMPELLERS

Standard tapered collets secure impeller to pump shaft. Keyed impellers available for some sizes.

Description

- Standard materials*: cast iron/fabricated steel discharge head; cast iron bowls; impellers, ring and other internal in stainless steel (unless otherwise indicated by RP).
- Number of stages designed upon pressure requirements.
- Enclosed impellers, single suction.
- Counterclockwise rotation viewed from coupling end.
- Column lengths in accordance with applications.
- Column pipe threaded construction is standard thru 12".
- Standard open-line shaft construction.
- Large bowl shaft sizing provides longer life.
- Fabricated base capable of supporting the weight of pump diesel engine and gear drive (upon request).
- Available with Diesel and/or Electric starting.

Design Features









Special design available on request.

* Special design and materials upon request.

Notes

Please contact our RP Team for more information regarding designs, materials & operations of our pumps. In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

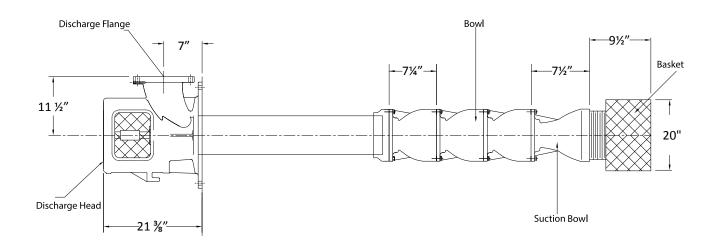
^{**} Non-Witness Testing.

VTP 10B-40 (450 GPM / 500 GPM)



	STAGES / PRESSURE										
			We	ight							
Stage	Construction		450 GPM			500 GPM		(Bowl's Only)			
		3000 RPM	2960 RPM	2800 RPM	3000 RPM	2960 RPM	2800 RPM	(Lbs)	(Kg)		
1	CI D	47 - 73	47 - 73 45 - 71 40 - 63 46 - 72 45 - 70 40 - 62						215		
2	CI-Brz	79 -124	568	258							

	PUMP MATERIALS											
	Di	scharge I	Flange	Colu	ımn	Shaft /	Column	В	owl	Imp	eller	
Stage	Size	Class	Material	Diameter	Material	Column Shaft Diam.	Shaft & Cou- pling Material	Material	Wear Ring	Material	Wear Ring	Strainer
1	6"Cast	125	CI.	6"	CST	1"	416 SS	CI	N/A	Brz	Brz	316 SS
2	0 0000	FF					.10 00	<u> </u>	.,,,,		5.2	310 00



Notes:

Fire Pumps weights and dimensions are estimations and are subject to change. Please contact RP for accurate weights. All dimensions are for informational purposes only.

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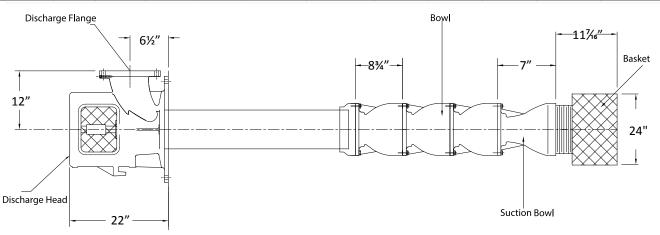
VTP 10C-67 (500 GPM)





	STAGES / PRESSURE										
		Pressure (PSI)	Wei	ght							
Stage	Construction	500 GPM	(Bowl's	only)							
		1760 RPM	(Lbs)	(Kg)							
3		47 - 69	661	300							
4		63 - 92	754	342							
5		78 - 116	847	384							
6	CI-Brz	94 - 139	940	426							
7		109 - 162	1033	468							
8		125 - 185	1126	510							
9		141 - 208	1219	554							

						PUMP	MATERIAL	S				
	Dis	charge Fla	inge	Colu	ımn	Shaft /	Column	Во	wl	lmį	oeller	
Stage	Size	Class	Material	Diameter	Material	Column Shaft Diam.	Shaft & Coupling Material	Material	Wear Ring	Material	Wear Ring	Strainer
3						1"						
4						1						
5	0". T											
6	8" Type C	150 RF	CI	6"	316 SS		416 SS	Brz.	Brz.	316 SS	316 SS	316 SS
7						1.25"						
8												
9												



Notes:

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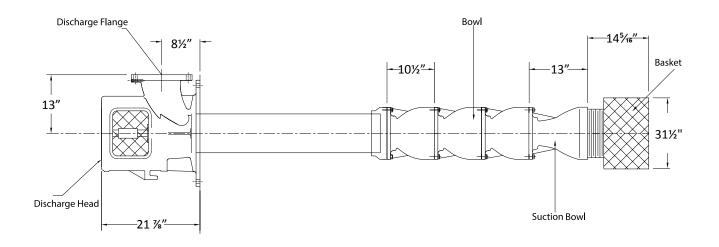
VTP 12C-135 (750GPM / 1000 GPM)





	STAGES / PRESSURE													
			Pressure (PSI)		Weig	ht								
Stage	Construction	750 0	(Bowl's Only)											
		1465 RPM	1760 RPM	1760 RPM	(Lbs)	(Kg)								
2	CI-BRZ	-	53 - 65	49 - 60	877	399								
3	CI-BRZ	51 - 66	79 - 97	73 - 91	1020	464								
4	CI-BRZ	68 - 88	106 - 130	98 - 121	1163	529								
5	CI-BRZ	85 - 110	132 - 162	122 - 152	1306	594								
6	CI-BRZ	102 - 132	159 - 195	147 - 182	1449	659								

						PUMP	MATERIAL	S				
	Disc	charge Fla	nge	Colu	ımn	Shaft /	Column	Вс	wl	li li	mpeller	
Stage	Size	Class	Material	Diameter	Material	Column Shaft Diam.	Shaft & Coupling Material	Material	Wear Ring	Material	Wear Ring	Strainer
2						1"						
3						1.25"						
4	8" Cast	125FF	CI.	8"	CST.		416 SS	CI.	Brz	Brz	Brz	316 SS
5						1.5"						
6												



Notes

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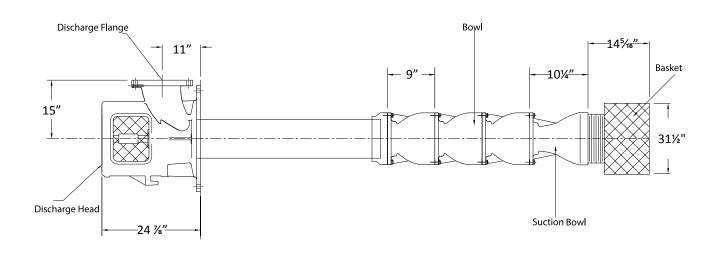
VTP 14D-275 (1500 GPM / 2000 GPM)





	STAGES / PRESSURE													
	Pressure (PSI) Weight													
Stage	(Poul's Only)													
		1770 RPM	1760 RPM	(Lbs)	(Kg)									
2	CI-BRZ	68 - 85	61 - 75	1330	605									
3	CI-BRZ	102 - 128	91 - 112	1508	685									

						PUMP	MATERIA	LS				
	Disc	harge Fla	ange	Colu	ımn	Shaft /	Column	Во	wl	I	mpeller	
Stage	Size	Class	Material	Diameter	Material	Column Shaft Diam.	Shaft & Coupling Material	Material	Wear Ring	Material	Wear Ring	Strainer
2	10" Cast	125	CS	10.75 "	CI.	1.25"	416 SS	CI.	Brz	Brz	Brz	316 SS
3	10 Cast	FF		10.73	Ci.	1.5"	410 33	Ci.	DIZ	DIZ	DI Z	310 33



Notes

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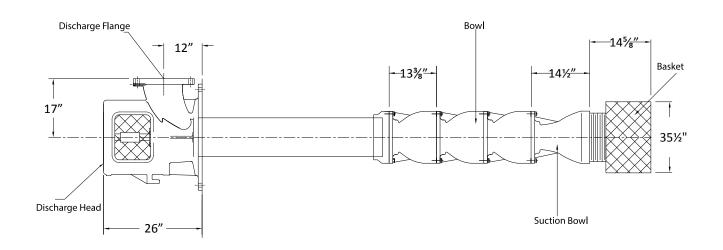
VTP 15C-277 (1500 GPM / 2000 GPM)





		S	TAGES / PRESSU	JRE		
			Pressure (PSI)		We	eight
Stage	Construction	1500	GPM	2000 GPM	(Bowl	´s Only)
		1465 RPM	1760 RPM	1760 RPM	(Lbs)	(Kg)
1	CI-BRZ	-	45 - 52	42 - 49	1652	751
2	CI-BRZ	53 - 70	90 - 104	84 - 97	1904	866
3	CI-BRZ	79 - 106	135 - 157	126 - 146	2156	980
4	CI-BRZ	106 - 141	180 - 209	168 - 195	2400	1095

						PUMP	//ATERIAL	S				
	Disc	charge Fla	inge	Colu	ımn	Shaft /	Column	Во	owl	In	npeller	
Stage	Size	Class	Material	Diameter	Material	Column Shaft Diam.	Shaft & Coupling Material	Material	Wear Ring	Material	Wear Ring	Strainer
1						1.5"						
2	12" Cast	125FF	CI.	12"	CSt.	2"	416 SS	CI.	Brz.	Brz.	Brz.	316 SS
4												



Notes:

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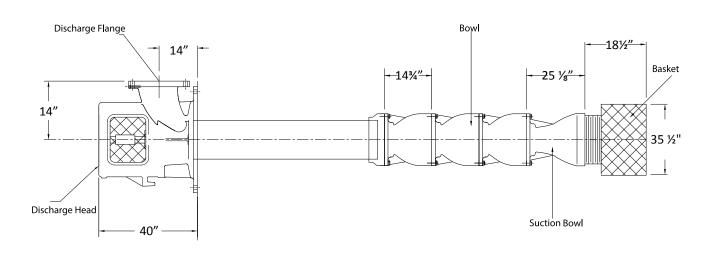
VTP 18D-410 (2500 GPM / 3000 GPM)





	STAGES / PRESSURE												
		Pressur	re (PSI)	We	eight								
Stage	Construction	2500 GPM	3000 GPM	(Bowl	's Only)								
		1770 RPM	1770 RPM	(Lbs)	(Kg)								
1		44 - 66	41 - 62										
2	CL Du-	88 - 133	82 - 125	CDD	6.00								
3	CI-Brz	132 - 200	123 - 187	C.RP	C.RP								
4		176 - 267	164 - 250										

						PUM	Р МАТЕ	RIALS				
	Dis	scharge Fl	ange	Colu	ımn	Shaft / Column			Bowl	Im	peller	
Stage	Size	Class	Material	Diame- ter	Mate- rial	Column Shaft Diam.	Shaft & Coupling Material	Material	Wear Ring	Material	Wear Ring	Strainer
1						1.6875"						
2	12"	125 FF	CI.	12"	Cst.		416 SS	CI.	Brz.	Brz.	Brz.	316 SS
3	Cast	123 FF	CI.	12	CSt.	2.25"	410 33	CI.	DIZ.	DIZ.	DIZ.	310 33
4												



Notes:

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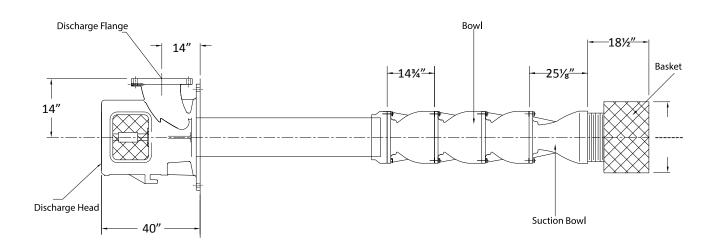
VTP 20C-600 (3000 GPM / 3500 GPM / 4000 GPM / 4500 GPM)





	STAGES / PRESSURE												
		We	eight										
Stage	Construction	3000 GPM	3500	GPM	4000 GPM	4500 GPM	(Bowl	's Only)					
		1460 RPM	1460 RPM	1760 RPM	1760 RPM	1760 RPM	(Lbs)	(Kg)					
1		47 - 59	46 - 56	69 - 87	67 - 83	67 - 80							
2	CI-Brz	94 - 119	92 - 113	138 - 173	134 - 166	134 - 161	C.RP	C.RP					
3		141 - 178	138 - 169	207 - 260	201 - 250	201 - 242							

	PUMP MATERIALS													
	Disc	harge F	lange	Colui	mn	Shaf	t / Column	Во	owl	Impo	eller			
Stage	Size	Class	Mate- rial	Diameter	Mate- rial	Column Shaft Diam.	Shaft & Coupling Material	Material	Wear Ring	Material	Wear Ring	Strainer		
1	14"	150				2.25"	Nitronic 50							
2	Type C	RF	CSt.	14"	316 SS	2.25	416 SS	CI.	Brz.	Brz.	Brz.	316 SS		
3	16" Type C	300 RF				2.5"	Nitronic 50							



Notes

Fire Pumps weights and dimensions are estimations and are subject to change. Please contact RP for accurate weights. All dimensions are for informational purposes only.

In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

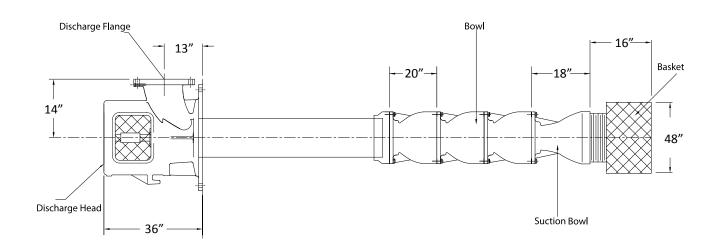
VTP 24B-440 (4500 GPM / 5000 GPM)





	STAGES / PRESSURE													
	Pressure (PSI) Weight													
Stage	Construction	4500 GPM	5000 GPM	(Bowl's	S Only)									
		1775 RPM	1775 RPM	(Lbs)	(Kg)									
1	CI Dun	119 - 142	116 - 140	CDD	CDD									
2	CI-Brz	238 - 284	232 - 280	C.RP	C.RP									

						PUMP	MATERIAL	.S				
	Disc	charge Fla	nge	Colu	ımn	Shaft /	Column	Вс	owl	ı	mpeller	
Stage	Size	Class	Material	Diameter	Material	Column Shaft Diam.	Shaft & Coupling Material	Material	Wear Ring	Material	Wear Ring	Strainer Material
1	14"	300 RF	CSt.	14"	CSt.	2.5"	416 SS	CI.	Brz.	Brz.	N/A	316 SS
2	Type L	SUU KF	CSI.	14	CSI.	2.5	410 33	CI.	DIZ.	DIZ.	N/A	210.22



Notes:

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In case your require fire pumps for sea water, corrosive environment and any other special application, please contact us.

VERTICAL TURBINE

Low Volume Range 450 - 1000 GPM





* 3000 RPM

** 1760 / 1770 / 1775 RPM

*** 1460 / 1465 RPM

FM

225	
220	
215	
210	
205	
200	
195	
190	
185	
180	
175	
170	
165	
160	
155	
150	
145	
140	
135	(VL)
130	
125	UL LISTED
120	ONLY
115	*2 Stages UL Only
110	81 - 146
105	3000 to 2800 RPM
100	
95	
90	
85	
80	
75	
70	
65	
60	*1 Stage UL Only
55	40 - 73
50	3000 to 2800 RPM
45	2000 1(1 101
40	
PSI	
	10B-40
	100 40

10B-40	
3000 RPM	
450 GPM]

	UL/FIVI
	141 - 208
	**8 Stages
	UL/FM
	125 - 185
	125 - 105
	**7 Stages
	UL/FM
	109 - 162
(ÑF)	
	**6 Stages
UL LISTED	UL/FM
ONLY	
ONLI	94 - 139
*2 C+2 ~ 2 C	
*2 Stages	
UL Only	
79 - 144	
3000 to	
	**5 Stages
2800 RPM	UL/FM
	78 - 116
	70 110
	**4 Stages
	UL/FM
	63 - 92
*1 Stage	
	**2 C+
UL Only	**3 Stage
40 - 72	UL/FM
3000 to	47 - 69
	1, 03
2800 RPM	
	ч .

**9 Stages UL/FM

10B-40	10C-67
3000 RPM	1760 RPM
500	GPM

	**6 Stages
	UL/FM
	159 - 195
	**5 Stages
	UL/FM
	132 - 162
***6 Stages	
UL/FM	
102 - 132	**4 Stages
102 - 152	UL/FM
	106 - 130
***5 Stages	
UL/FM	
85 - 110	***
	**3 Stages
	UL/FM
	79 - 97
***4 Stages	
UL/FM	
68 - 88	
***3 Stages	**2 Stages
UL/FM	UL/FM
51 - 66	53 - 65
02 00	

12C-135	12C-135
1465 RPM	1760 RPM
750	GPM

**6 Stages
UL/FM 147 - 182
147 - 102
**5 Stages
UL/FM
122 - 152
**4 Stages
UL/FM
98 - 121
4400
**3 Stages UL/FM
73 - 91
73-91
**2 Stages
UL/FM 49 - 60

12C-135 1760 RPM 1000 GPM

VERTICAL TURBINE

Mid Volume Range 1500 - 2500 GPM





** 1760 / 1770 / 1775 RPM *** 1460 / 1465 RPM

45 40 PSI		UL/FM 45 - 52	
45			
50		**1 Stage	
55	53 - 70		1
60	*** 2 Stages UL/FM		
65	de de de		
70		1	68 - 85
75			**2 Stages UL/FM
80			
85	79 - 106		
90	UL/FM 79 - 106	30 - 104	
95	*** 3 Stages	UL/FM 90 - 104	
100		**2 Stages	
105			
110			102 - 128
115	100 141		UL/FM
120	UL/FM 106 - 141		**3 Stages
125	*** 4 Stages		
130			
135			
140		135 - 157	
145		**3 Stages UL/FM	136 - 170
150			**4 Stages UL/FM
155			
160			
165			
170			
175			
180			
190 185		180 - 209	UL/FM 170 - 213
		UL/FM	**5 Stages
195		**4 Stages	
200			
205			
210			
215			
220			
225			

**4 Stages	**5 Stages
UL/FM	UL/FM
168 - 195	152 - 187
**3 Stages	**4 Stages
UL/FM	UL/FM
126 - 146	122 - 150
**2 Stages	**3 Stages
UL/FM	UL/FM
84 - 97	91 - 112
	**2 Stages UL/FM

**4 Stages UL/FM 176 - 267	
**3 Stages UL/FM 132 - 200	
**2 Stages UL/FM 88 - 133	

**2 Stages UL/FM 61 - 75

**1 Stage UL/FM 42-49

15C-277 14D-275 1760 RPM 1770 RPM 2000 GPM



18D-410 1770 RPM 2500 GPM

1465 RPM

1760 RPM

1500 GPM

1770 RPM

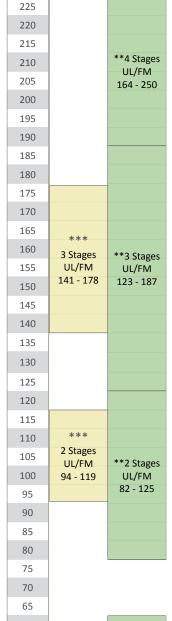
VERTICAL TURBINE

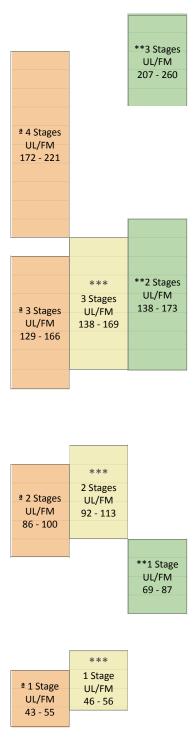
High Volume Range 3000 - 5000 GPM



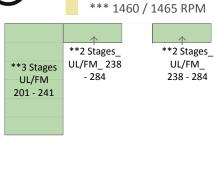


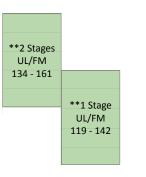
^a 1175 RPM ** 1760 / 1770 / 1775 RPM



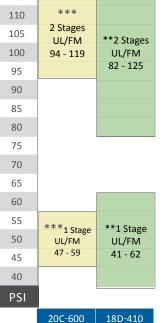












24B-440	20C-600	20C-600
1175 RPM	1460 RPM	1760 RPM
	3500 GPM	



20C-600	24B-440
1760 RPM	1775 RPM
4500	GPM

**1 Stage

UL/FM

67 - 80

24B-440 1775 RPM 5000 GPM

3000 GPM

1770 RPM

1460 RPM

Nothing is left to chance with a Ruhrpumpen Pre-Packaged Fire System

If your customer needs a packaged fire system to be completely housed, Ruhrpumpen can supply this enclosure. The Pump Houses include the following (optional) features.

- Interior Lighting
- Exterior Flood Lighting
- Pre-wired and pre-piped
- Pre-piped sprinkler systems for pump house interior
- Exhaust Fan
- Mini Power Zone
- Electric Heaters with Built-in Thermostat
- Wall or Floor access for piping

- Containment piping
- Floor Drain
- Architectural finishes
- Safety Equipment
- Grating Floor Deck design
- Seismic Calculations with PE Stamps
- Open Skid design
- Diamond Plate Floor Deck design





OPTIONAL FEATURES PRE-PACKAGED FIRE SYSTEMS

- · Ruhrpumpen can give start up and field training
- Leveling bolts optional
- High performance coating systems for corrosive or costal environments
- Stainless steel sensing lines
- · Stainless piping for salt or brackish water applications
- Mobile systems available
- Custom alarm panels available

Mobile Pre-Packaged System

Option for PE Stamps on all Drawings



Panel Options

Ruhrpumpen can offer Electric / Diesel and Jockey control panels. Panels are available for configurations with one or more drivers and the panels can be programmed for either fully automatic or manual operation. The Electric / Diesel Control Panels are UL/ULC listed and approved by Factory Mutual and CSA, as well as meeting or exceeding the requirements of NFPA 20 and NFPA 70.



ELECTRIC PANELS

Configurations LV:

- Across the line
- Soft Start
- Delta open / closed
- Primary resistor
- Auto-transformer
- Part Winding

Configurations MV:

Across the line

DIESEL PANELS

Diesel control panels are available for 12 volt (120, 220 / 240 VAC) or 24 volt (120, 220 VAC) diesel fire pump engines.





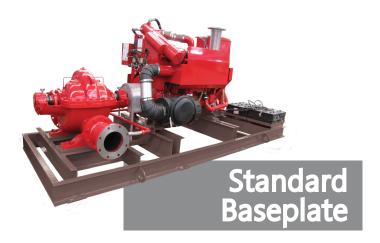
JOCKEY PANELS

Single or three phases Jockey Fire Pump Panels designed for 50 & 60 Hz in a variety of voltages.

Baseplates

The Fire Pumps will be mounted on a rigid single piece standard baseplate or a heavy duty baseplate. A drip rim or extension for a control panel can be added depending on customer requirements.





Other Ruhrpumpen Products



Vertical Barrel Pump

Low NPSH "Shockless Entry" first stage impeller (single or double suction), Single or multi-stage. Standard construction materials according to API latest edition(type VS6).

Condensate, Power plants, Municipal, Hydrocarbons, Pipeline, and Refineries.



Sump Pump

Single Stage single suction vertical centrifugal pump, volute type case, flanged and threaded discharge, cast iron casing, flexible coupling. Sump Drainage, Flood Control, Air Wash Systems, Power Plants, Chemical Industry, Municipal Systems, Water Treatment, Process Plants, and Sewage Lift Stations.



Vertical Turbine Pump

Multistage vertical centrifugal pump with diffuser type bowl, semi-open / enclosed impellers, cast iron bowls, counterclockwise rotation viewed from coupling end.

Deep Well, Irrigation,
Cooling Tower, Sump, and Condensate Pumps.



Volute Casing Centrifugal Pump

Axially split, horizontal single or two stage, double volute casing, double suction, closed impeller. Heavy duty process design according to API 610 latest edition (type BB1).

Pipeline Service-Mainline and Booster, Oil Extraction, Refinery, Chemical, Petrochemical, Metallurgical Industry, and Power Stations.



With every project you can count on QUALITY, SERVICE, EXPERTISE, INNOVATION and COMPETITIVENESS.

Because we have a commitment with each customer, the community and the world.

We are Ruhrpumpen the specialist for pumping technology!









UK, Lancing