

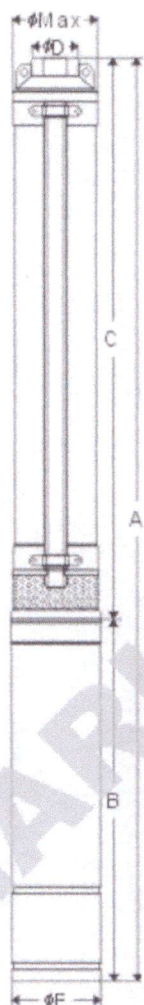
RapidFlo®**4" Deep Well Submersible Pump
Performance chart**

Part #	Power			Flow M ³ /H	0	2	3.5	4.27	5.26	6.11	7.2	7.74	Weight
	HP	Volt	Amp	Flow GPM	0	8.8	14.1	18.8	23.2	27	32	34.1	(lbs)
MA0431X-18A-E SS.MA0431X-18AEXT	3	230	17	H (ft)	625	550	480	420	340	220	42	5	54

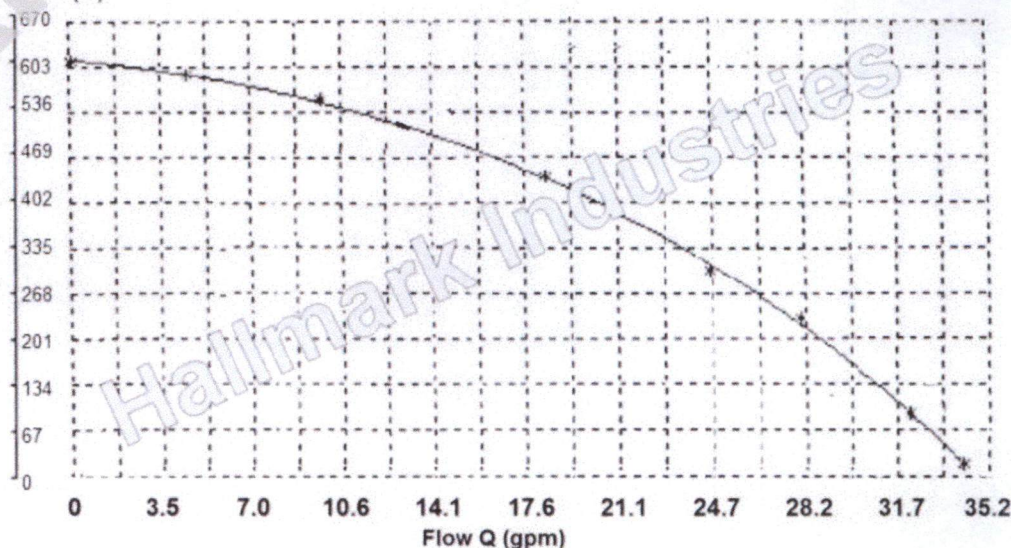
A	B	C	D	E	MAX
49.2"	22.2"	28.9"	1-1/4 NPT	3.9"	4.0"

Features & Technical Specifications:

- 4" deep well submersible pump, 18 - 20 stage, 625 feet Max head (open tank)
- Patented impeller provides heavy duty high flow: 35 GPM. That is greater than almost all other 3 HP well pumps.
- Water temperature: (32 ~113°F)
- Solid stainless steel body with heavy duty cast iron or stainless discharge
- Industrial grade heavy duty, also good for home usage
- Capacitor start motor, and thermal protection for longer life and powerful start.
- With a built in check valve!
- Comes with an external control box.
- This pump uses high quality UL approved motor, UL file No.: E233961
- This is a 3 wire pump with 4-Wire (3 wires + ground wire)
- 10' long electric cord comes with this submersible deep well pump.
- 1 1/4" NPT discharge
- Designed to fit inside 5" ID or larger pipe/well casing
- Heavy-duty thermoplastic impellers, diffusers, and intake screen.
- High efficiency, hermetically sealed motor is thermally protected to prevent overheating
- Submersible design eliminates the need for priming and creates quiet operation



Head (ft)

**HALLMARK INDUSTRIES, INC.**411 E. North Ave, Streamwood, IL 60107, USA • Ph: 847-301-8050 • Toll free 888-863-6623 • www.hallmarkind.com

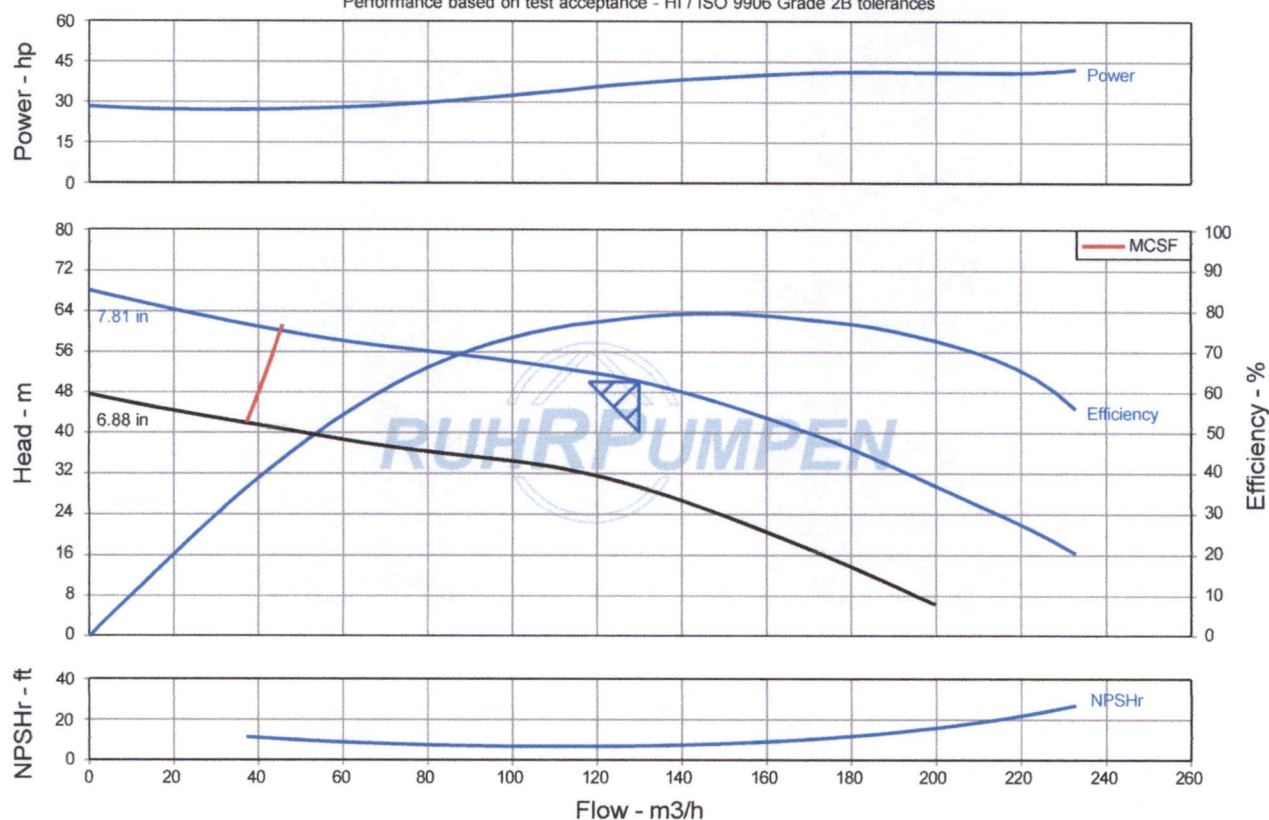
Pump Performance Datasheet

Customer	: EGEHID-OLIVO INDUSTRIAL	Quote number	: EGEHID-DAF-CM-2024-0027
Customer reference	:	Size	: 10C-67
Item number	: 001-TBA	Stages	: 4
Service	: Water pumping	Based on curve number	: VTP-10C-67-1760
Quantity	: 2	Date last saved	: 03/25/2024 4:58 PM
Operating Conditions		Liquid	
Flow, rated	: 130.0 m3/h	Liquid type	: Water
Differential head / pressure, rated (requested)	: 50.00 m	Additional liquid description	: Water
Differential head / pressure, rated (actual)	: 51.21 m	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		Viscosity, rated	: 1.00 cP
Speed, rated	: 1760 rpm	Vapor pressure, rated	: 0.34 psi.a
Impeller diameter, rated	: 7.81 in	Pressure Data	
Impeller diameter, maximum	: 7.81 in	Maximum discharge pressure	: See the Additional Data page
Impeller diameter, minimum	: 6.88 in	Maximum allowable working pressure	: See the Additional Data page
Efficiency	: 79.8 %	Maximum allowable suction pressure	: N/A
NPSH required / margin required	: 7.10 / 2.00 ft	Hydrostatic test pressure	: See the Additional Data page
Ns (imp. eye flow) / Nss (imp. eye flow)	: 2,474 / 9,291 US Units	Driver & Power Data (@Max density)	
MCSF	: 45.12 m3/h	Driver sizing specification	: Rated power
Head, maximum, rated diameter	: 79.73 m	Margin over specification	: 0.00 %
Head rise to shutoff (bowl / pump)	: 27.91 / 29.11 %	Service factor	: 1.00
Flow, best eff. point (bowl / pump)	: 149.5 / 147.0 m3/h	Power, hydraulic	: 29.55 hp
Flow ratio, rated / BEP (bowl / pump)	: 86.98 / 88.46 %	Power (bowl / pump)	: 37.02 / 37.22 hp
Diameter ratio (rated / max)	: 100.00 %	Power, maximum, rated diameter	: 42.31 hp
Head ratio (rated dia / max dia)	: 98.41 %	Minimum recommended motor rating	: 40.00 hp / 29.83 kW
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00		
Selection status	: Acceptable		

Pump performance. Adjusted for construction, viscosity, static lift to discharge nozzle centerline, friction and power losses of lineshaft and thrust bearings.

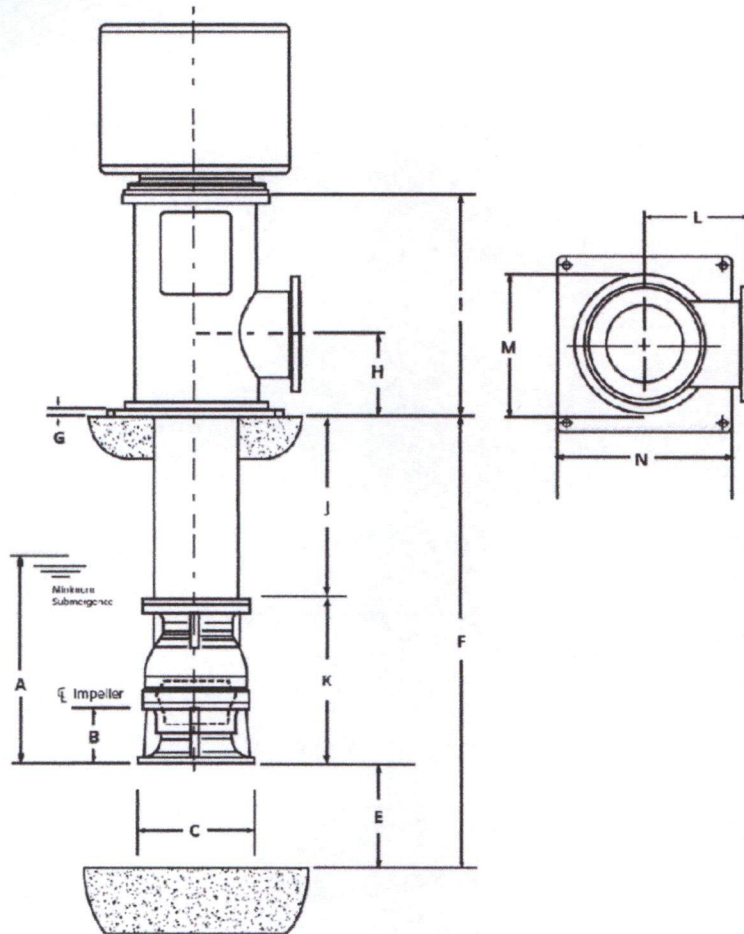
The duty point represents the head at the discharge nozzle centerline.

Performance based on test acceptance - HI / ISO 9906 Grade 2B tolerances



General Arrangement - 10C-67 / 4

For information only - not for construction
Not to scale
All dimensions in inches unless otherwise stated



A	B	C	E	F	G	H	I	J	K	L	M	N
12.00	5.50	11.00	3.67	476	1.50	7.00	21.40	428	43.75	11.50	12.00	21.00

Nozzles	Suction	Discharge Diameter	Dimensions	Size	Qty	Description	
Size	-	6 inch	A	12.00 in	-	BD size	-
Rating	-	125	-	-	-	Lineshaft type	Open
Face	FF (Flat Face)	FF (Flat Face)	-	-	-	Head type	L type
-	-	-	-	-	-	*BD and discharge dimensions are specified in the Scope of Supply.	-
Driver			-	-	-	-	-
Manufacturer	RuhrPumpen choice		-	-	-	-	-
Rating / Frame	40.00 hp / -		-	-	-	-	-
Speed / Poles	1800 / 4		-	-	-	-	-
Hz	60 Hz		-	-	-	-	-
Piping			-	-	-	-	-
Seal plan - primary/auxiliary	- / -		-	-	-	-	-
Cooling water plan	None		-	-	-	-	-
Mechanical Seal			-	-	-	-	-
Type	-		-	-	-	-	-
Coupling			-	-	-	-	-
Type & size	Flanged rigid		-	-	-	-	-
Coupling spacer	None coupling spacer		-	-	-	-	-
Weights (Approx.)			-	-	-	-	-
Bowl	435.0 lb		-	-	-	-	-
Soleplate	212.4 lb		-	-	-	-	-
Driver	634.0 lb		Customer Customer reference Project name Service Item number Pump size Quotation number				Olivo Industrial S.R.L. / EGEHID Request for VTP-ES 110 Water pumping 001-TBA 10C-67 2207843
Discharge head	N/A						
Motor stand	N/A						
Column	820.3 lb						
Total	2,101.7 lb						
-	-						
-	-						

Item number	001-TBA	Service	Water pumping
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Scope of Supply

Qty	Description	Average Unit Price	Extended Price
	Shaft Sealing		
	Shaft sealing: Standard Packing		
	Driver		
	Driver type: Motor drive		
	Motor Details		
	NEMA Motor Frame Type		
	Driver sizing specification: Rated Power		
	Service Factor NOT used		
	Electric Driver		
2	40 hp / 1760 rpm. Electric motor induction type. Vertical. 460 V / 3 Phase / 60 Hz. WPI enclosure. Manufactured by: Teco Westinghouse or equal manufacturer (Ruhrpumpen choice of manufacturer)		
	Coupling		
2	Coupling: Rigid adjustable 3-piece coupling		
	Coupling Spacer: No		
2	Coupling guard: Coupling guard - OSHA compliant		
	Testing		
	Performance Testing		
2	Certified Performance Test (non-witnessed) - Hydraulic Institute acceptance grade "2B"		
	Hydrostatic Testing		
2	Hydrostatic Pressure Test - bowl assembly (non-witnessed)		
2	Hydrostatic Pressure Test - discharge head (non-witnessed)		
2	Hydrostatic Pressure Test - column (non-witnessed)		
	Impeller Balancing		
2	Impeller dynamic balance - ISO 1940-1 (non-witnessed) G2.5		
	Paint		
	Stainless steel parts (if any) not coated.		
	Surface preparation is 'SSPC-SP10 (near White Metal) Sa 2½, ISO 8501-1' which meets the intent of ISO 12944 latest edition surface preparation requirements.		
	Bowl assembly coating		
1	Ruhrpumpen coating system A02-M: corrosivity category C2 / SSPC-SP10 surface preparation / EP top coat / color code RAL 5003 ("Ruhrpumpen blue") / exterior surfaces only		
	Discharge head coating		
1	Ruhrpumpen coating system A02-M: corrosivity category C2 / SSPC-SP10 surface preparation / EP top coat / color code RAL 5003 ("Ruhrpumpen blue") / exterior surfaces only		
	Column coating		
1	Ruhrpumpen coating system A02-M: corrosivity category C2 / SSPC-SP10 surface preparation / EP top coat / color code RAL 5003 ("Ruhrpumpen blue") / exterior surfaces only		
	Documentation		
	Documentation		
1	RP Standard documentation package 1		
	General arrangement		
	Discharge above mounting surface		
	Product Line Marketing Information		
	Please see our product brochure for general information about this product line (some available features shown in brochure may not have been offered in above scope of supply)		
	https://www.ruhrpumpen.com/en/products/vertical-pumps/vtp-vertical-turbine-pump		

Scope of Supply

Qty	Description	Average Unit Price	Extended Price
2	10C-67 -4 stage Vertical Pump Description: VS1, vertically suspended/single casing/discharge through column/diffuser, HI design pump Vertical specification Construction: Hydraulic Institute According with NSF: No Lineshaft Design: Open Bowl 10" bowl, stages: 4 Flanged bowl Suction bell Threaded bowl connection adapter to column Construction materials: CI-SSF Bowl materials: Cast iron bowl Impeller material: 304SS impeller Bearing material: Bronze bowl bearing Bowl shaft material: 12% Chr bowl shaft Bowl wear ring material: No bowl wear ring Impeller wear ring material: No impeller wear rings Bolting material: Carbon steel Discharge Head Discharge head by RP 6" Discharge Nozzle head Material: Cast Iron nozzle head Nozzle Head Type: Type L Discharge Flanges: 125# FF ANSI Flanges Discharge vent: None vent Bearing: Bronze Thrust Pot: No Thrust Pot Miscellaneous Adapter plate Seal chamber Assembly: Seal chamber Column Column construction: Threaded column Column material: Carbon steel (ASTM A53) column Column size: 6" column Column length: 35.67ft. 1" lineshaft Lineshaft material: 1045 carbon steel lineshaft Hardened bearing journals under bowl bearings/Shaft sleeves Lineshaft lubrication: Product lubrication Column Bearing material: Rubber column bearings		