

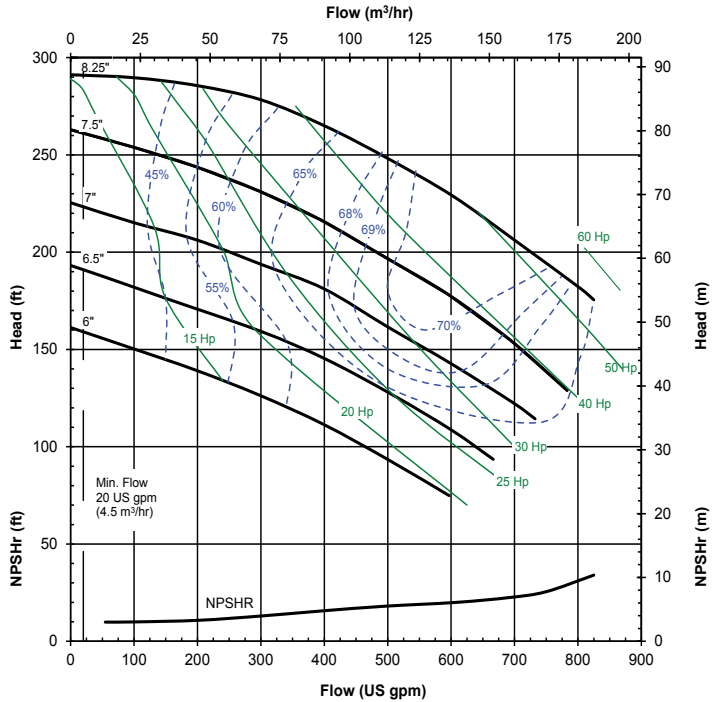
ULTRACHem[®] Series

ANSI DIMENSIONAL MAGNETIC DRIVE PUMPS

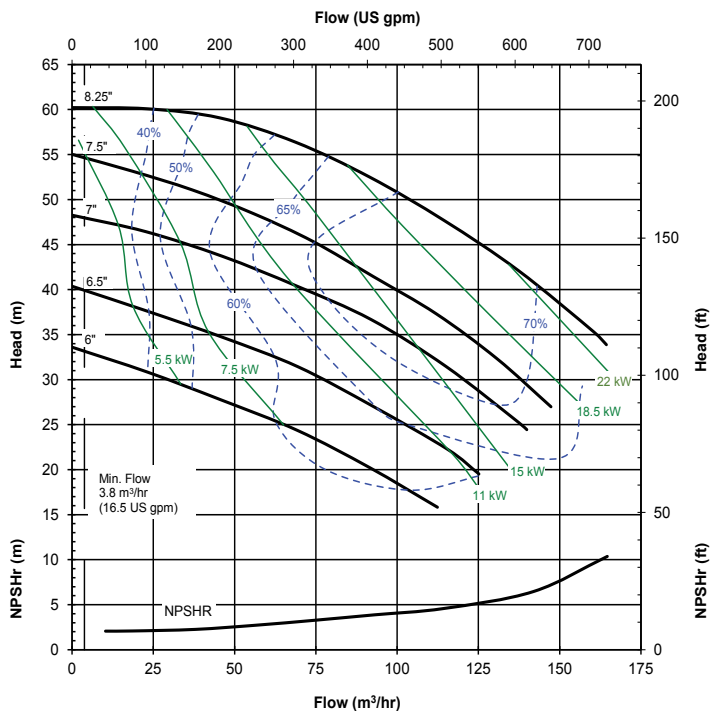
UC SERIES: MODEL 438

PERFORMANCE

3450 rpm, 60 Hz



2900 rpm, 50 Hz



*Tefzel[®] Fluoropolymer Resin
is a registered trademark of DuPont



FEATURES

- Durable, corrosion-resistant Tefzel[®] lined ductile iron casing
- Casing meets ANSI B73.1 m & 73.3 for foot and flange location
- Powerful neodymium magnets for dependable, leak-free operation
- Volute with partial splitter reduces radial thrust load
- Rear sealing ring to balance axial thrust
- Dual bushings provide optimum alignment
- Suction shaft support with integral straightening vanes
- Replaceable 2-piece impeller and drive hub
- Run dry capability with carbon or Dri-Coat SiC bushing
- Easy-set measurement free outer drive
- Exclusive vapor protection package to protect outer magnetic drive and motor face from corrosive fumes
- Back pull-out design
- Casing drain connection standard
- Specific gravity over 1.8
- Accepts standard NEMA 143-365 or IEC 90-225 motor frames
- ANSI or ISO flange mountable
- ATEX certified models available

TYPICAL APPLICATIONS

- Chemical manufacturing, blending, distribution
- Water treatment
- Plating and metal finishing
- Paper mills
- Fume scrubbers
- Metals manufacturing
- Electronics
- Pharmaceuticals
- Truck loading/unloading

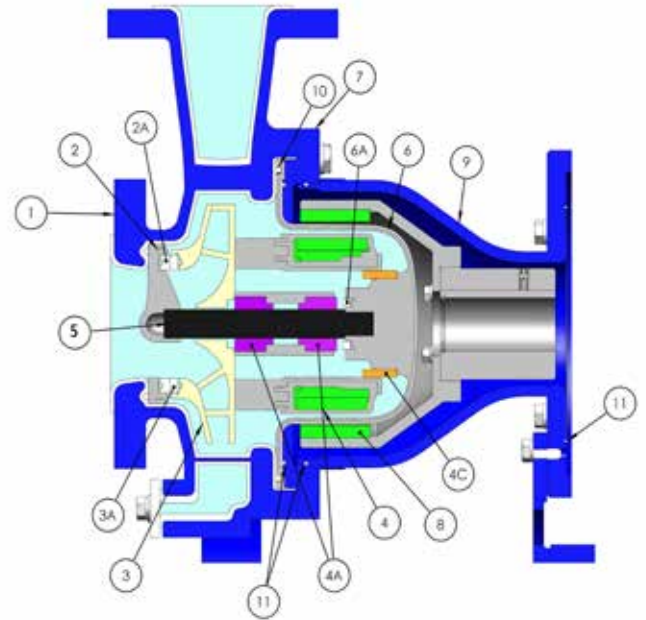
TYPICAL CHEMICALS

- Sodium hydroxide
- Sulfuric acid
- Hydrochloric acid
- Sodium hypochlorite
- Plating solutions
- Corrosive blends
- Solvents
- Wastewater



FINISH THOMPSON INC.

Item No.	Description	Construction
1	Casing	Cast ductile iron, DuPont Tefzel® (ETFE) lined
2	Shaft support	Carbon fiber filled ETFE
2A	Front thrust ring	Alpha sintered silicon carbide
3	Impeller	Carbon fiber filled ETFE
3A	Impeller thrust washer	Alpha sintered silicon carbide
4	Inner drive	Neodymium iron boron magnets encapsulated in CF ETFE
4A	Bushing options	Alpha sintered silicon carbide, carbon, Dri-Coat silicon carbide
4C	Rear sealing ring	Molybdenum disulfide-filled PTFE
5	Shaft	Alpha sintered silicon carbide
6	Barrier	Molded CF ETFE liner with Aramid Reinforced Epoxy external shell
6A	Barrier thrust ring	Alpha sintered silicon carbide
7	Clamp ring	Painted ductile iron
8	Outer drive magnet	Nickel-plated neodymium iron boron magnets/painted ductile iron
9	Motor adapter	Ductile iron
10	O-ring options	FKM, EPDM, FEP/FKM, Kalrez®, Simriz®, Atlas®
11	Vapor protection o-rings	Buna



Kalrez® is a registered trademark of DuPont Performance Elastomers

Simriz® Perfluoroelastomer is a registered trademark of Simrit® division of Freudenberg-NOK.

Atlas® is a trademark of the Asahi Glass Co., Ltd.

SPECIFICATIONS

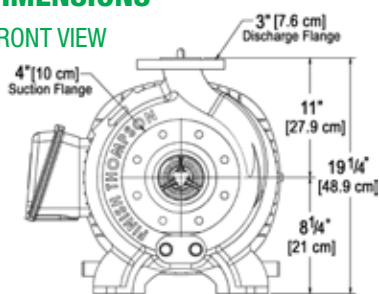
HP (kW)	Impeller Diameter		Suction in (cm)	Discharge in (cm)	Max. Flow 3500 rpm		Max. Head 3500 rpm		Max. Working Pressure psi (Bar)	Max. Viscosity cP	Max. Specific Gravity	Max. Temp. °F (°C)*
	in	cm			gpm	m ³ /hr	ft.	m				
1 - 75 (1.5 - 55)	6 - 8-1/4	15.2 - 21	4 (10.2)	3 (7.6)	825	187	290	88	300 (20.7)	200	1.8	250 (121)

*Except E magnet set: maximum 220° F (104° C)

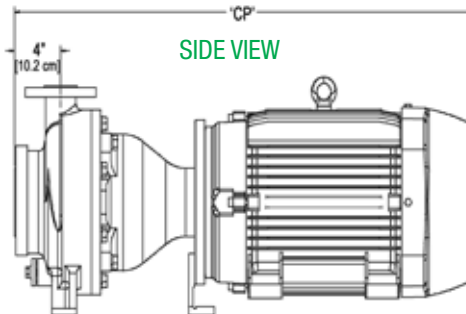
Note: Impeller trims available every 1/8" (.32 cm) between the smallest and largest diameters.

DIMENSIONS

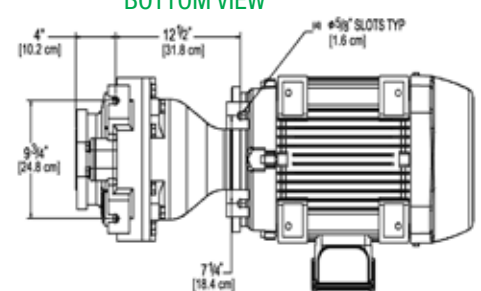
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



Motor Frames	CP (approx.)*	
	in	cm
NEMA		
143-145TC	27-11/16	70.3
182/184TC	29-9/16	75.1
213/215TC	32-5/8	82.9
254/256TC	37-1/2	95.3
282/284TC/TSC	39-27/32	101.2
324/326TC/TSC	44-21/32	113.4
364/365TC/TSC	46-27/32	119.0
IEC		
90	27-15/32	69.8
100/112	28-29/32	73.4
132	32-9/16	82.7
160	38-9/32	97.2
180	40-9/16	103
200	43-3/32	109.5
225	46-21/32	118.5

*For all magnet sets

ACCESSORIES



Bronze Bump Ring - add to the motor adapter to make pump suitable for hazardous areas.

SiC Dri-Coat (for shaft and bushings) is ideal protection for applications where the pump may see unintentional, brief periods of dry running.

Baseplate - fabricated of steel or fiberglass for extra strength and rigidity. Suitable for grouting. Shown with optional bearing frame.



M20 Power Monitor - Shuts the pump down when there is a drop in power to prevent run dry damage.

