

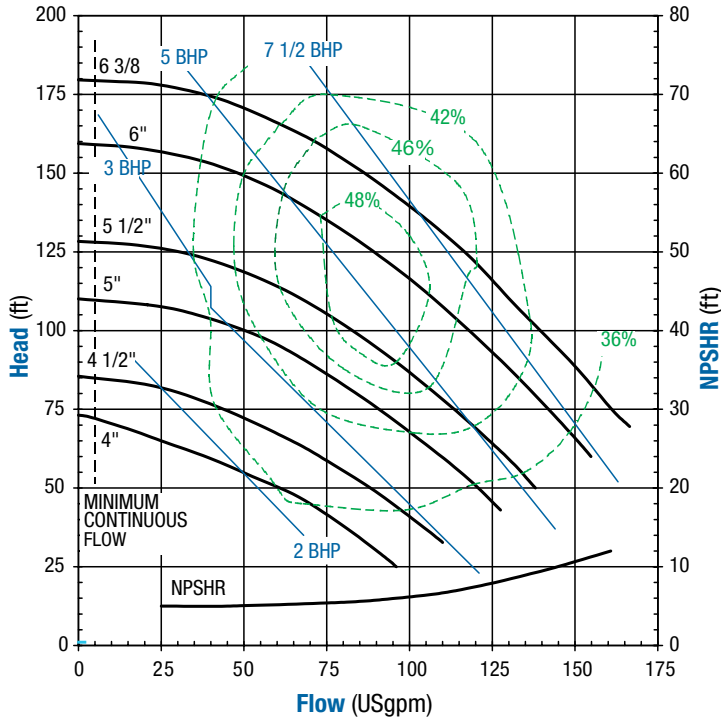
# ULTRACHem<sup>®</sup> Series

## ANSI DIMENSIONAL MAGNETIC DRIVE PUMPS

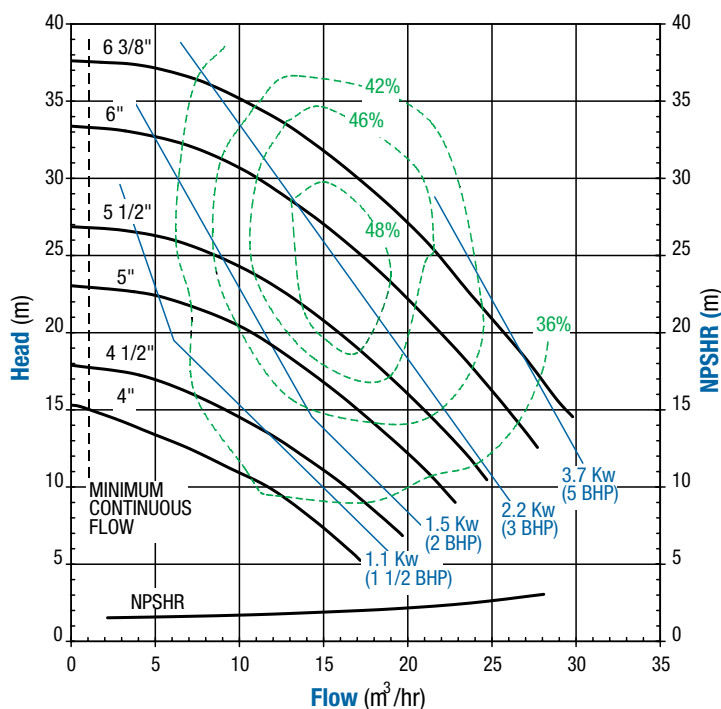
### UC SERIES: MODEL UC1516

#### PERFORMANCE

3450 rpm, 60 Hz



2900 rpm, 50 Hz



\*Tefzel<sup>®</sup> Fluoropolymer Resin is a registered trademark of DuPont



\* Patent No. 5,779,456

#### FEATURES

- Durable, corrosion-resistant Tefzel<sup>®</sup> lined ductile iron casing
- Casing meets ANSI B73.1m for foot and flange location
- Powerful neodymium magnets drive the impeller for dependable, leak-free operation with no environmental emissions
- Modified concentric volute reduces radial thrust load
- Rear sealing ring and balance holes balance axial thrust
- Dual bushings provide optimum alignment
- Carbon-filled ETFE shaft support with integral straightening vanes helps prevent pre-rotation in the suction and enhances low flow operation
- Easy-set measurement free outer drive
- Back pull-out design
- Casing drain connection standard
- Run dry capability with carbon bushing and SiC dri-coat
- Specific gravity over 1.8
- Accepts standard NEMA 143, 184, 215, 256 or IEC 80, 90, 110/112, 132, 160 motor frames
- ANSI or ISO flange mountable
- ATEX certified models available

#### TYPICAL APPLICATIONS

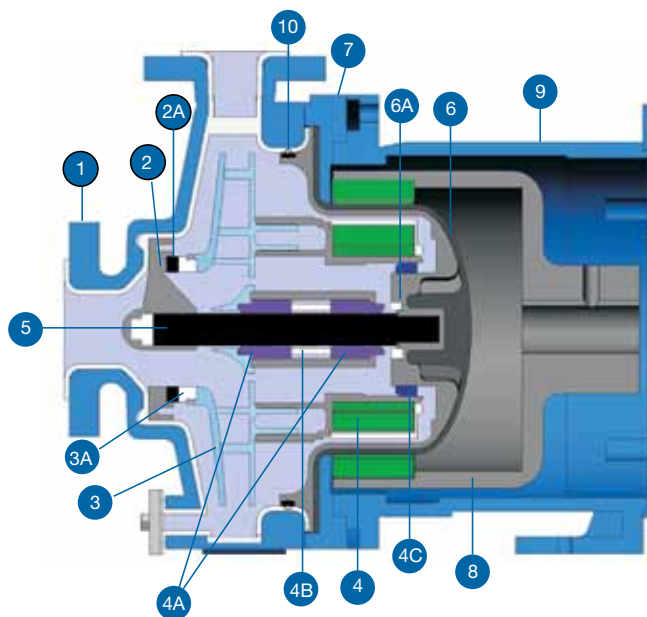
- Chemical manufacturing, blending, distribution
- Water treatment
- Plating and metal finishing
- Paper mills
- Fume scrubbers
- Metals manufacturing
- Electronics
- Pharmaceuticals
- Biodiesel

#### TYPICAL CHEMICALS

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



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	Fluorosint®, alpha sintered silicon carbide optional
4	Inner drive	Neodymium iron boron magnets encapsulated in pure ETFE
4A	Bushing options	Alpha sintered silicon carbide, carbon
4B	Bushing spacer	PTFE
4C	Rear sealing ring	Molybdenum disulfide-filled PTFE
5	Shaft	Alpha sintered silicon carbide
6	Barrier	Molded carbon fiber filled ETFE liner with woven glass reinforced vinyl ester external shell
6A	Barrier thrust ring	High purity alumina ceramic
7	Clamp ring	Steel
8	Outer drive magnet	Nickel-plated neodymium iron boron magnets/steel
9	Motor adapter	Ductile iron
10	O-ring options	FKM, EPDM, Kalrez®, Simriz®



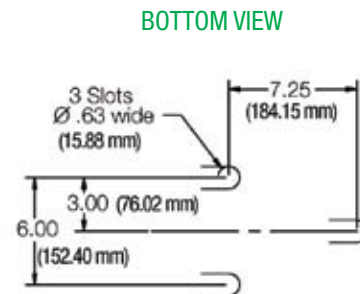
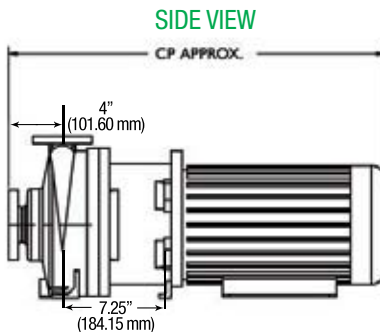
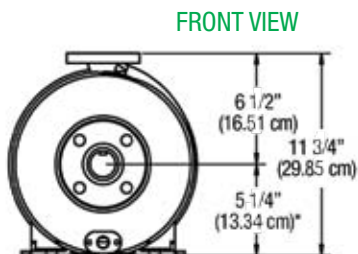
Kalrez® is a registered trademark of DuPont Performance Elastomers  
 Simriz® Perfluoroelastomer is a registered trademark of Simrit® division of Freudenberg-NOK.

## 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. Sp. Gravity	Max. Temp. °F (°C)
	in	cm			gpm	m³/hr	ft.	m				
3 - 20 (1.1 - 15.0)	4, 4 1/2, 5, 5 1/2, 6, 6 3/8	10.2, 11.4, 12.7, 14, 15.2, 16.2	1 1/2 (3.81)	1 (2.54)	167	37.9	180	55	175 (12)	200	1.8	250 (121)

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

## DIMENSIONS



\*Contact the factory for 132/160 dimension. All other frame sizes are as shown above. Dimensions are for reference only.

Motor Frames	CP			
	A-Drive (in)	B-Drive (in)	A-Drive (cm)	B-Drive (cm)
<b>NEMA</b>				
143-145TC	23 3/4	-		
182/184TC	28 1/16	29 1/16		
213/215TC	30 1/2	32 1/4		
254/256TC	-	36 3/4		
<b>IEC</b>				
80			58.1	-
90			61.7	-
100/112			67.5	-
132			73.9	76.5
160			-	86.0

## 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.

