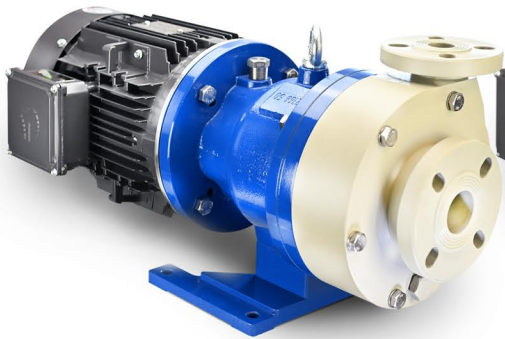




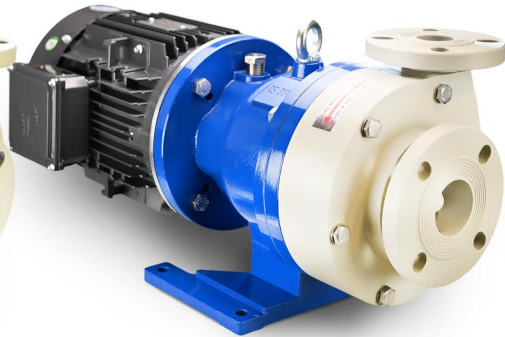
MAG-DRIVE PUMPS FOR CORROSIVE PROCESSES

# CP-U Series

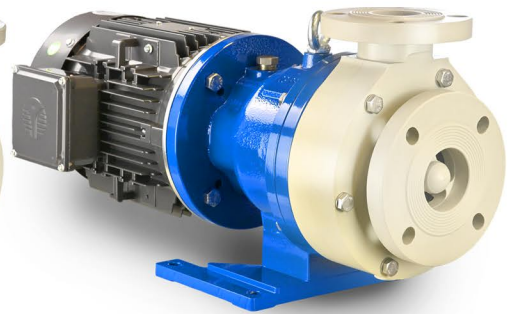
*SOLID NON-METALLIC SEAL-LESS*  
RETROFIT MAG-DRIVE PUMPS



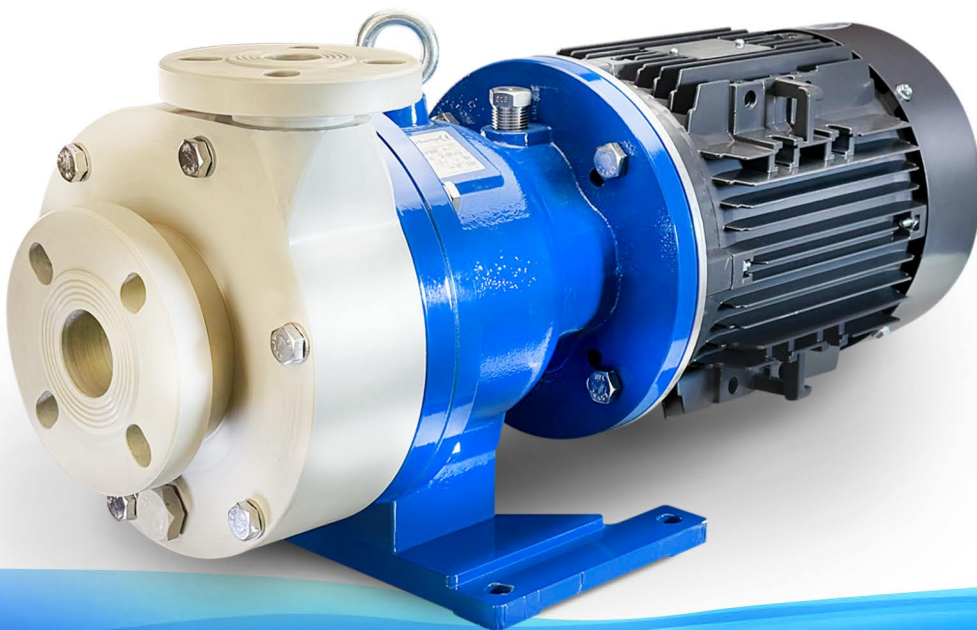
CP-U0



CP-U1



CP-U4



SOLID PP OR PVDF  
NON-METALLIC  
CENTRIFUGAL PUMPS



## MAG-DRIVE PUMPS FOR CORROSIVE PROCESSES

CHEMAG specializes in highly engineered seal-less magnetically driven process pumps to safely meet corrosive process requirements and meet EPA Zero (0) Emissions.

CHEMAG CP-U0, CP-U1, CP-U4 are machined billet thermoplastic and fluoroplastic pump casings and components provide optimal resistance to corrosive chemicals. Non-metallic materials are subjected to rates of swelling and permeation that challenges molded designs with thin wall construction. Glass reinforcement alters the chemical resistance, leading to permeation, "wicking" and degradation.

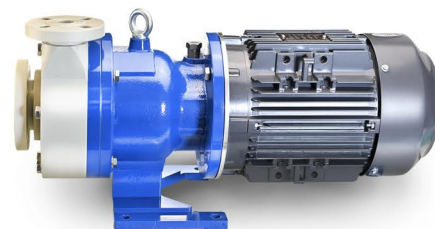
### CP-CU MAG-DRIVE PUMP RETROFIT MODELS:

**CP-U0**

**CP-U1**

**CP-U4**

**MOC: PP-Polypropylene or PVDF-Polyvinylidene Fluoride**



### Pump Casings & Internal Components:

- Glass-Free Polypropylene (PP) or Polyvinylidene Fluoride (PVDF)
- Exclusive Heavy-Duty Rear Thrust Bearing
- Shaft & Casing Wear Ring: Silicon Carbide
- Internal Bearings: SIC or PTFE-C
- Casing O-Ring: EPDM, Viton or FEP

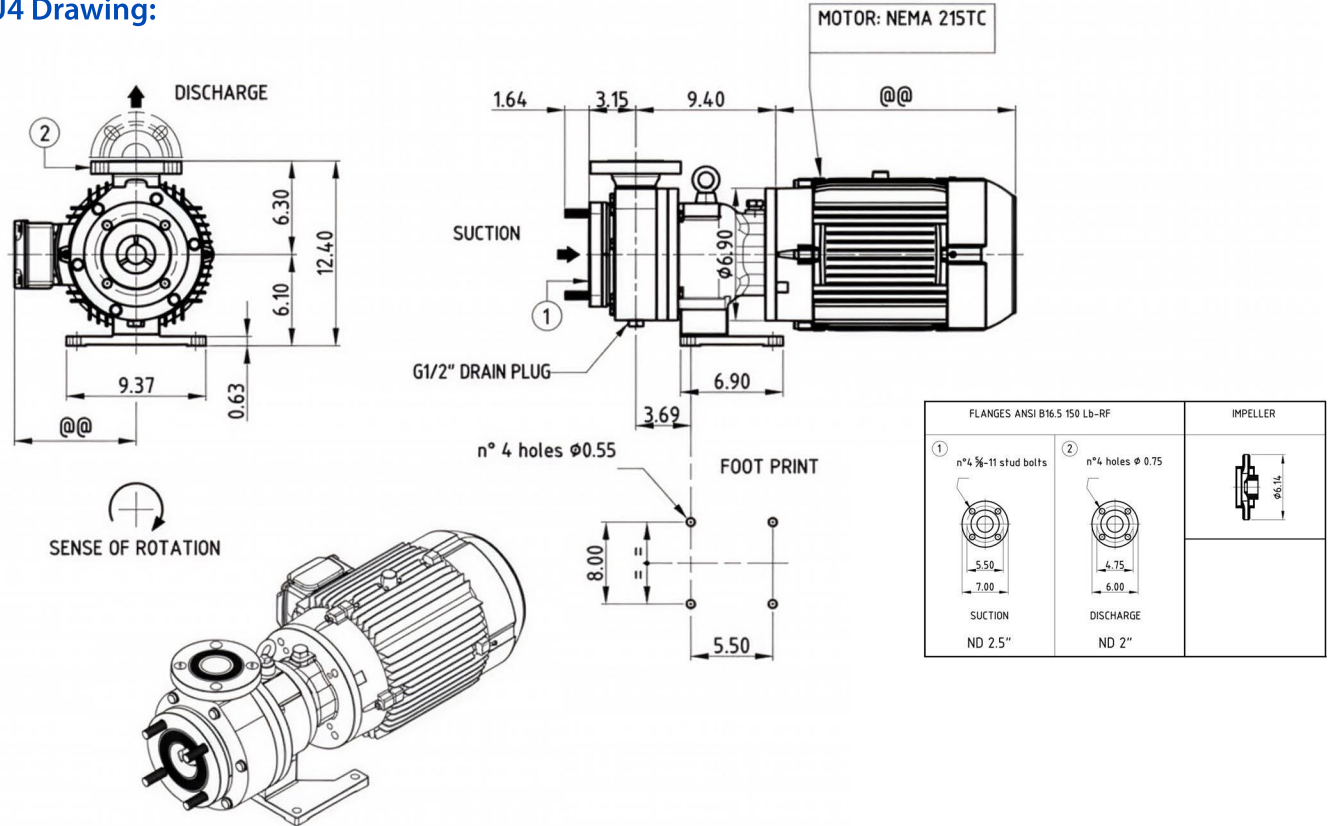


Front & Rear Thrust Bearings

CHEMAG non-metallic designs are uniquely constructed from pure Polypropylene (PP) or Polyvinylidene Fluoride (PVDF). Rugged pump casings and impeller assemblies are machined from solid extruded bar and block material. CNC machined construction provides distinctive advantages over molded or lined configurations. Typical casing wall thicknesses for molded pumps are only 1/8" - 1/4"; failures often result from chemical attack, thermal expansion and pipe stress. Lined pumps have a mere .100" - .120" lining thickness and the added risk of casing failures caused by separation permeation or external corrosion. Solid thermoplastic pump casings feature wall thicknesses of 1/2" to 1-1/2" for optimal chemical resistance and durability.

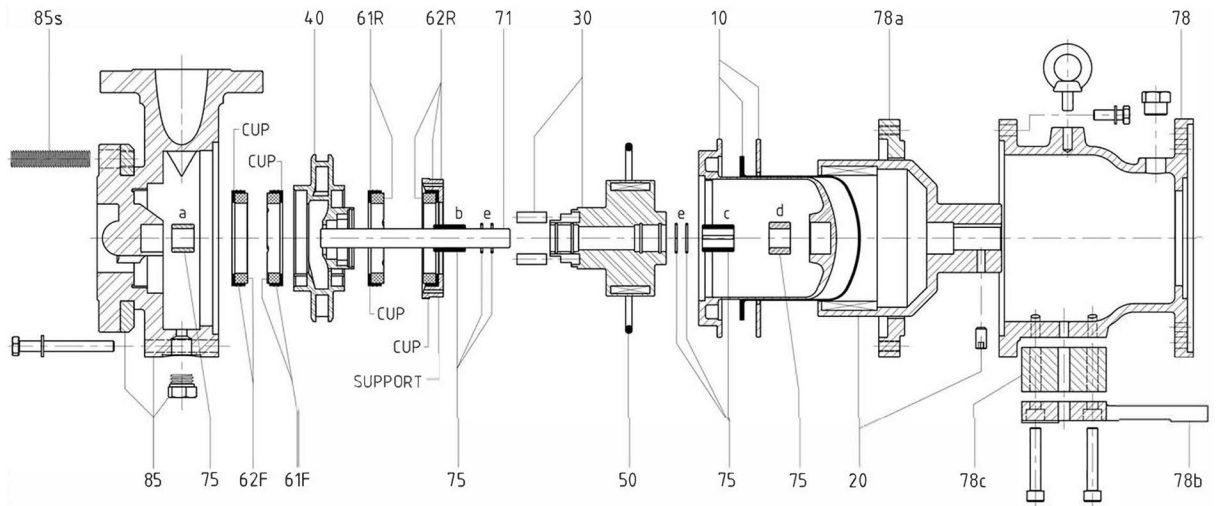
## MAG-DRIVE PUMPS FOR CORROSIVE PROCESSES

### CP-U4 Drawing:



### CP-U4 Exploded View:

REF	DESCRIPTION
10	Rear Casing-Reinforc. FC +Rear Casing Flange (incl. of 75d)
20	Ext. Magnet
30	Int. Magnet (incl. of 75b-75c-a-rings 2100 [e])
40	Impeller (incl. of 61F+61R)
50	O-Ring 228 (628)
61F	Imp. Front Thr. Brg-Cup
61R	Imp. Rear Thr. Brg-Cup
62F	Casing Front Thr. Brg-Cup
62R	Casing Rear Thr. Brg-Cup+Support
71	Shaft (incl. of 75d)
75	Bearings (a-d) (b-c) (incl. of o-rings 2100 [e])
78	Bracket
78a	Casing Adaptor Flange
78b	Foot
78c	Foot Adaptor Block
85	Pump Head (incl. of 62F-75a)
85s	Stud Bolts
88	Rear Wet End (10+30+40-50-60-61F-61R-62R-71-75)
90	Wet End (10+30+40-50-61F-61R-62F-62R-71-75-85)



\* Technical specifications available upon request

CHEMAG CP-U Series pumps are fabricated from SOLID extruded pure PP or PVDF thermoplastics to resist internal or external corrosion. Heavy walled, CNC machined construction provides resistance to permeation and migration of corrosive, and aggressive liquids. CP-U Series pumps avoid deformation and degradation, with lesser designs, even in the most severe applications.

### Technical Features:

- Exclusive SOLID machined PP or PVDF casings and impeller components for maximum chemical resistance
- Robust casing wall thicknesses
- Solid thermoplastic casings withstand external corrosion
- Integral raised face flanges (no threaded adapters) for positive sealing and zero leakage
- Oversized, Casing wear rings & thrust bearings
- Modular impeller allows for varying hydraulic performances
- Compact, high torque magnetic coupling with reduced mass
- Zero leakage, magnetic coupling circumvents constant EPA monitoring
- Standardized NEMA or IEC motors
- Simplified maintenance, with registered fits, requires no special tools or settings





# MAG-DRIVE PUMPS FOR CORROSIVE PROCESSES

CP-U0 - 3500RPM

GENERAL PERFORMANCE CURVES, REFERENCE ONLY

(English Units)

Pump: 1.5x1x5 Series: Chemag CP-U0 mag

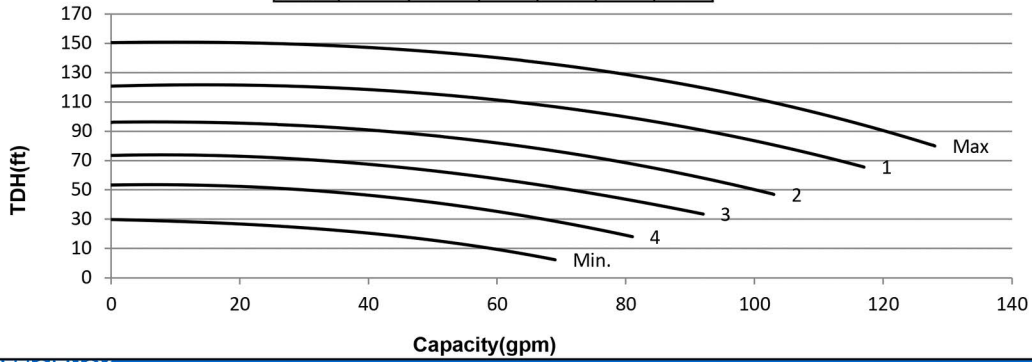
S.G: 1.1 RPM: 3500



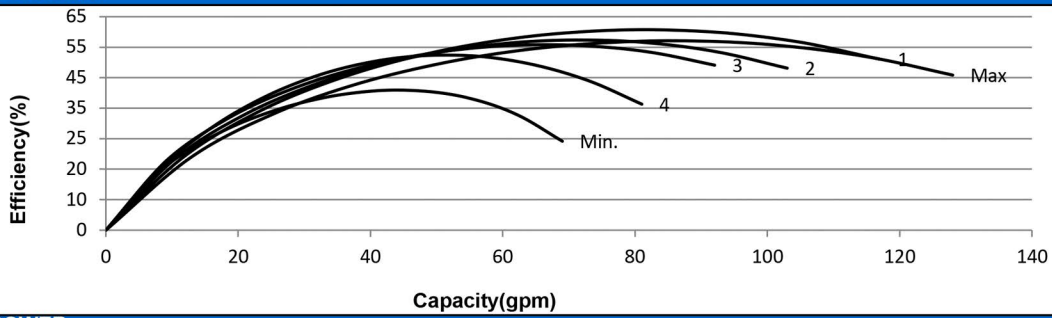
chemag.com

## PERFORMANCE

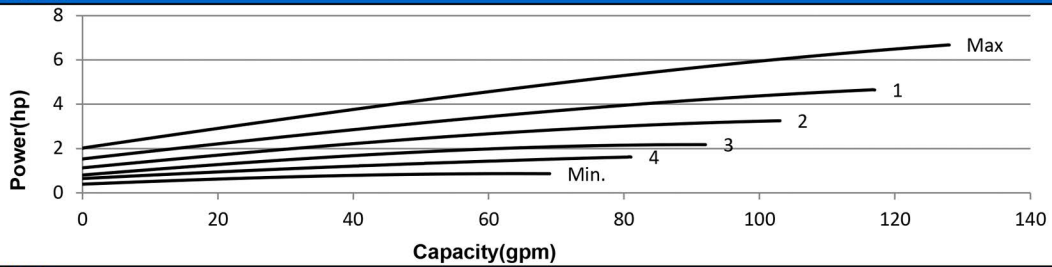
TRIM:	Max	1	2	3	4	Min
(in.)	6.13	5.50	5.00	4.50	4.00	3.25



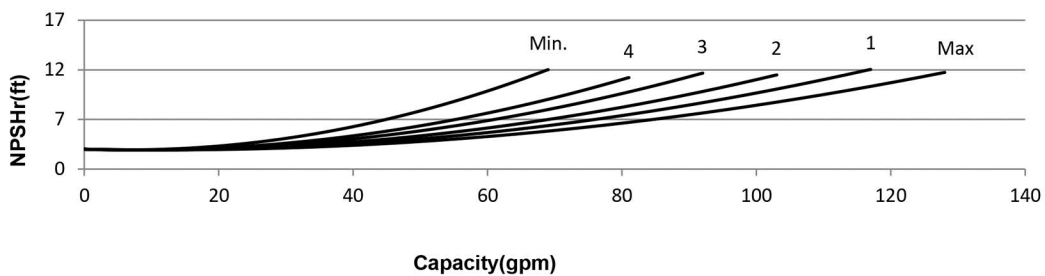
## EFFICIENCY



## POWER



## NPSHr





# MAG-DRIVE PUMPS FOR CORROSIVE PROCESSES

CP-U1 - 3500RPM

GENERAL PERFORMANCE CURVES, REFERENCE ONLY

(English Units)

Pump: 2x1.5x6

Series: CP-U1 mag

S.G: 1.1

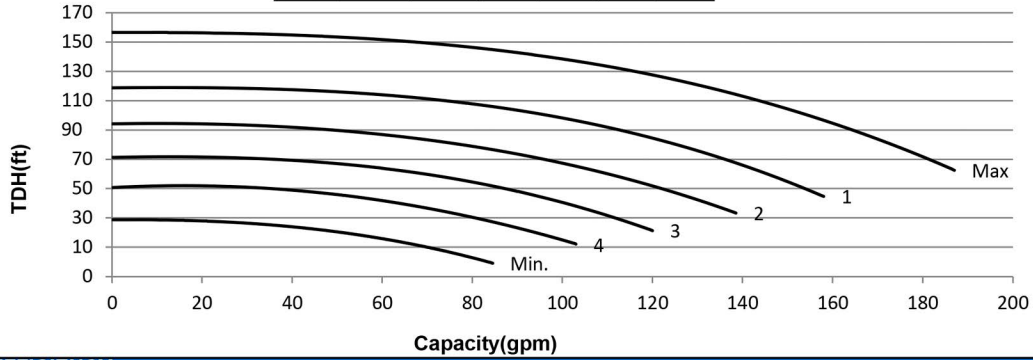
RPM: 3500



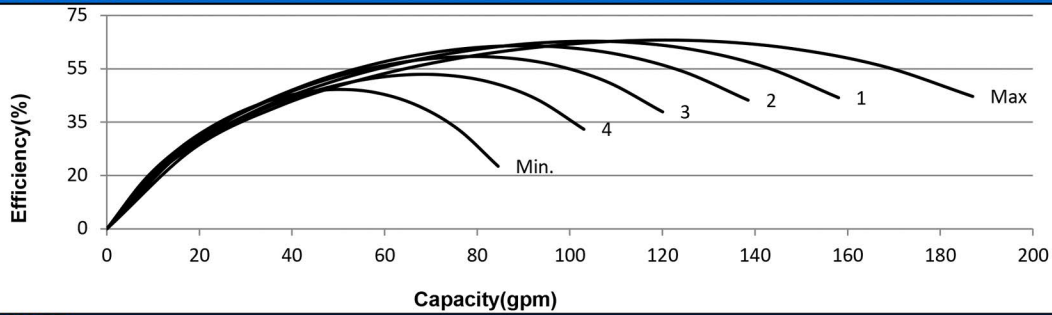
chemag.com

## PERFORMANCE

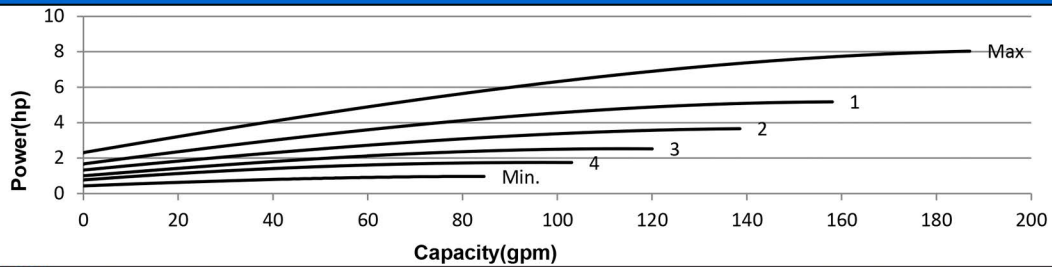
TRIM:	Max	1	2	3	4	Min
(in.)	6.13	5.50	5.00	4.50	4.00	3.25



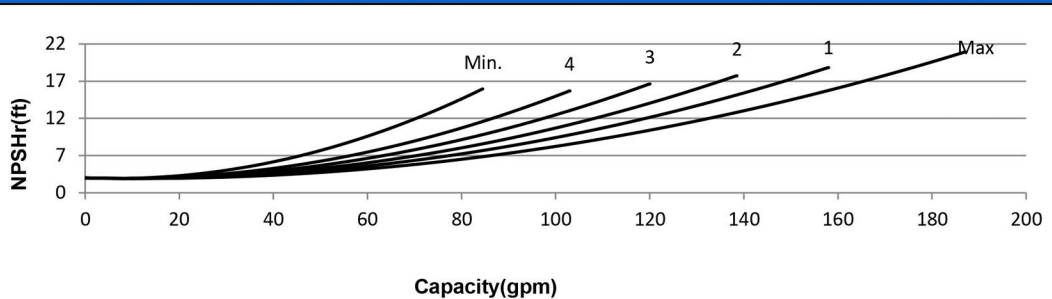
## EFFICIENCY



## POWER



## NPSHr





# MAG-DRIVE PUMPS FOR CORROSIVE PROCESSES

CP-U4 - 3500RPM

**GENERAL PERFORMANCE CURVES, REFERENCE ONLY**

(U.S. Units)

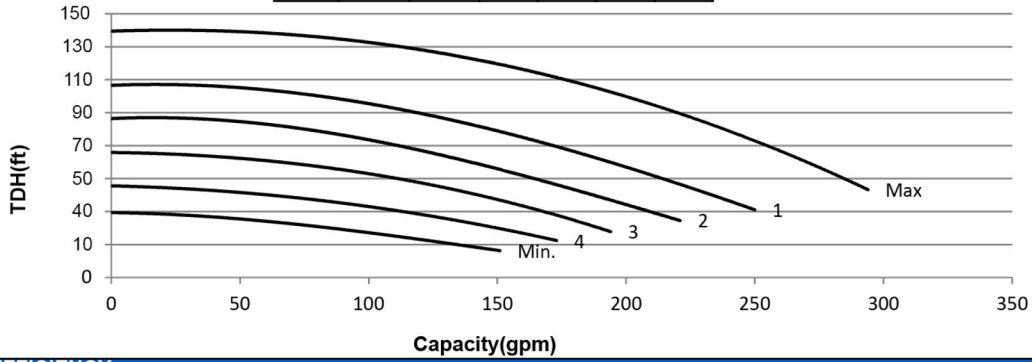
**Pump:** 2.5x2x6    **Series:** CP-U4  
**S.G.:** 1.00        **RPM:** 3500



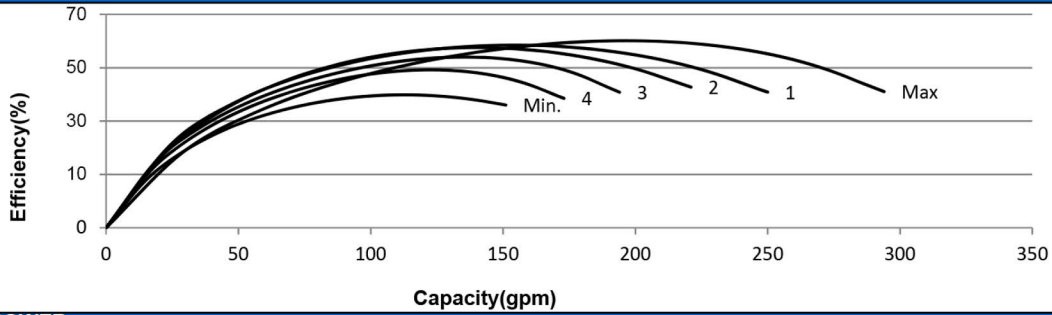
chemag.com

**PERFORMANCE**

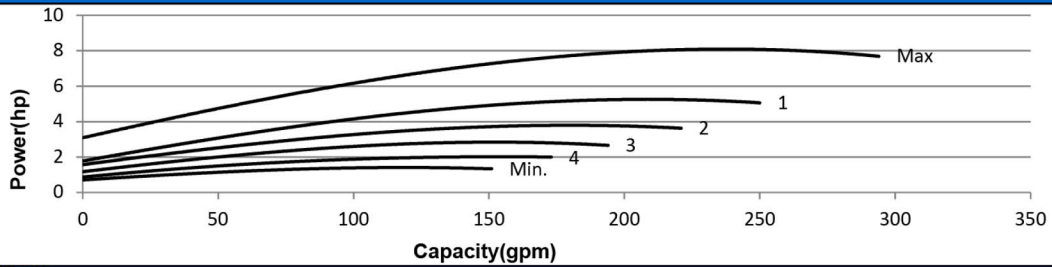
TRIM:	Max	1	2	3	4	Min
(in.)	6.13	5.50	5.00	4.50	4.00	3.58



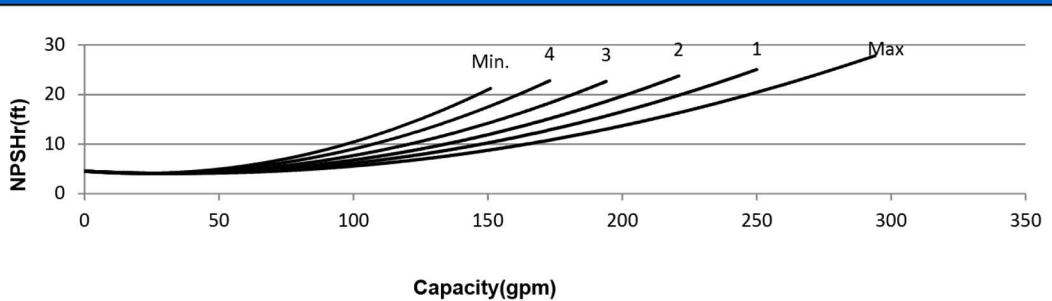
**EFFICIENCY**



**POWER**

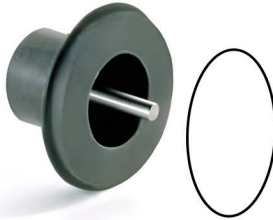
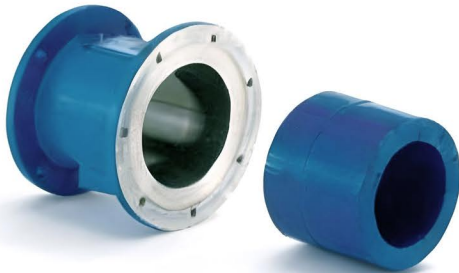


**NPSHr**

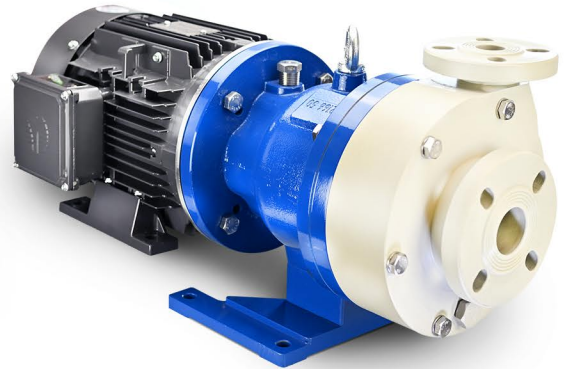
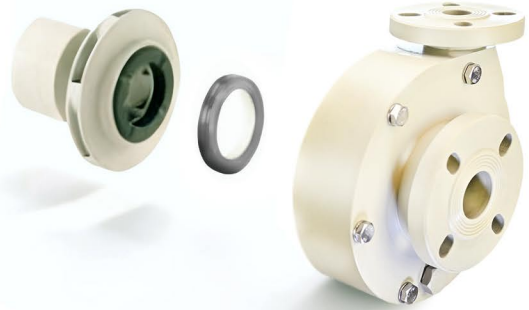


## CP-U Series

SOLID NON-METALLIC SEAL-LESS  
RETROFIT MAG-DRIVE PUMPS



EXPLODED VIEW



CP-CU26