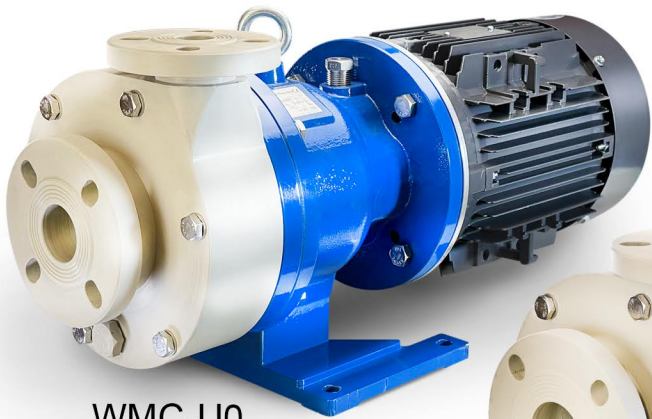


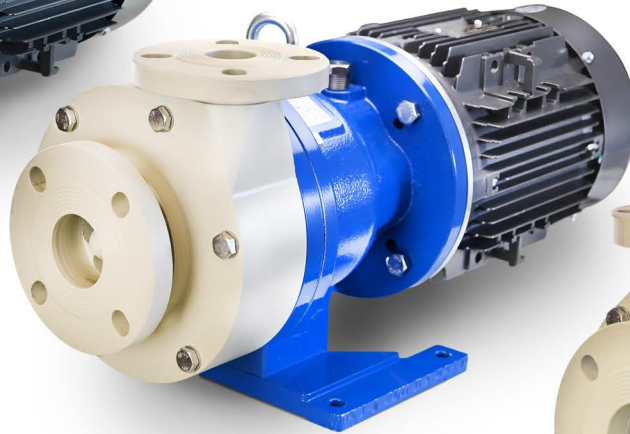
WMC-U Series

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

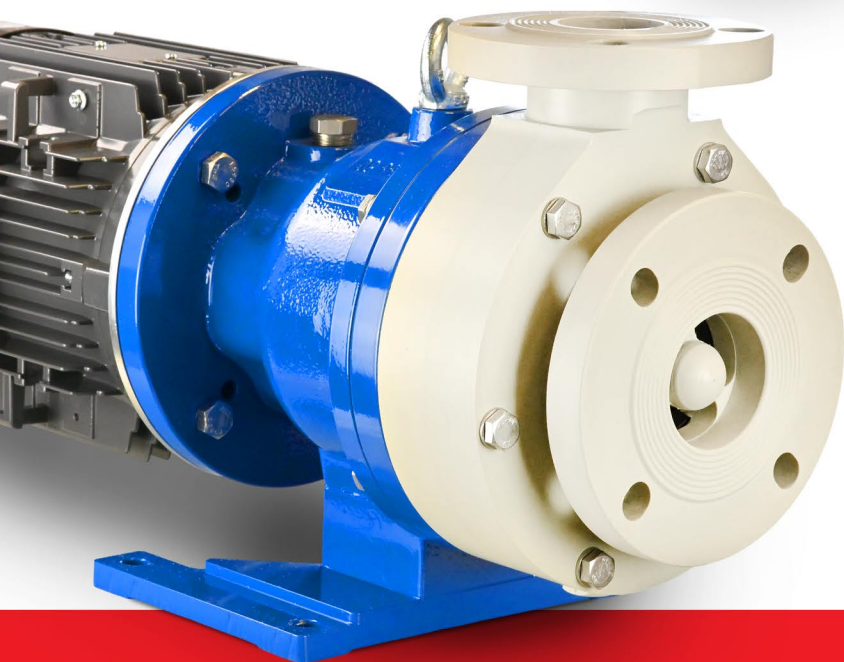


WMC-U0

WMC-U1



WMC-U4



**SOLID PP OR PVDF
NON-METALLIC
CENTRIFUGAL PUMPS**

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

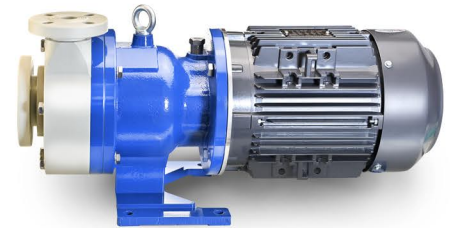
Warrender WMC-U0, U1, U4 are machined billet thermoplastic and fluoroplastic pump casings and components provide optimal resistance to corrosive chemicals. Non-metallic materials are subjected to rates of swelling and permeation that challenges molded designs with thin wall construction. Glass reinforcement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

WMC-U MAG-DRIVE PUMP RETROFIT MODELS:

WMC-U0

WMC-U1

WMC-U4



MOC: PP-Polypropylene or PVDF-Polyvinylidene Fluoride

Pump Casings & Internal Components:

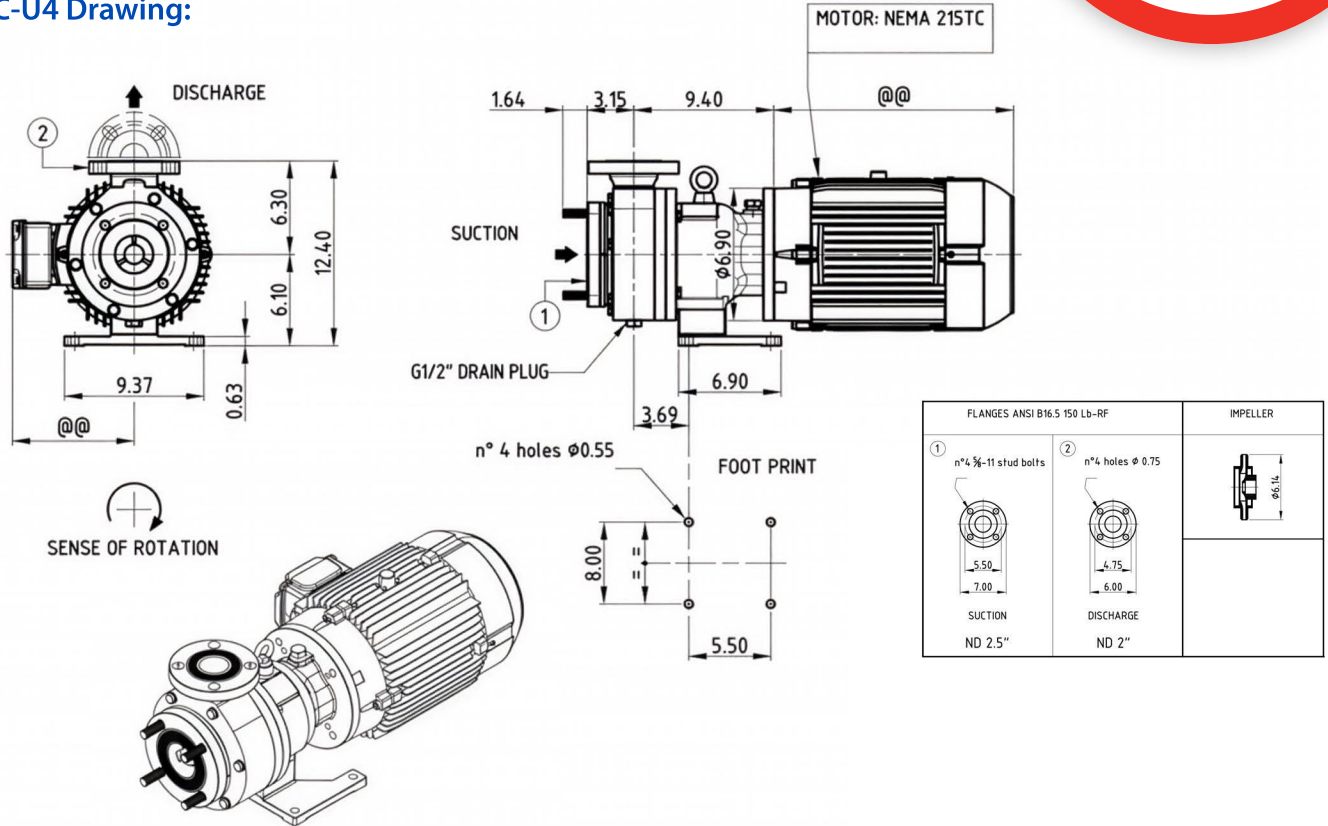
- Glass-Free Polypropylene (PP) or Polyvinylidene Fluoride (PVDF)
- Exclusive Heavy-Duty Rear Thrust Bearing
- Shaft & Casing Wear Ring: Silicon Carbide
- Internal Bearings: SIC or PTFE-C
- Casing O-Ring: EPDM, Viton or FEP



Front & Rear Thrust Bearings

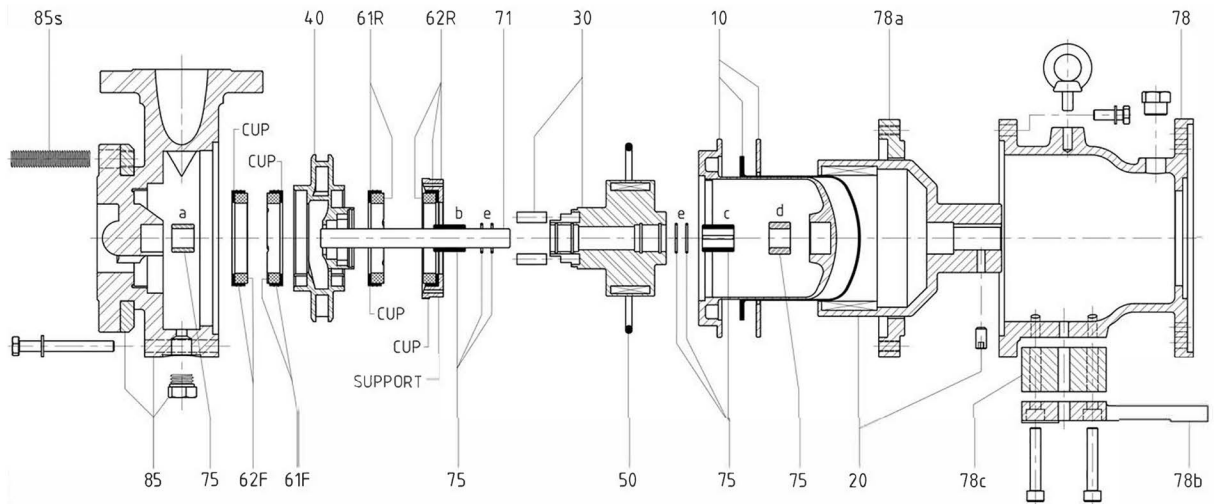
Warrender's non-metallic designs are uniquely constructed from pure Polypropylene (PP) or Polyvinylidene Fluoride (PVDF). Rugged pump casings and impeller assemblies are machined from solid extruded bar and block material. CNC machined construction provides distinctive advantages over molded or lined 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.

WMC-U4 Drawing:



WMC-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+40-50-61F-61R-62R-71-75)
90	Wet End (10+30+40-50-61F-61R-62F-62R-71-75-85)

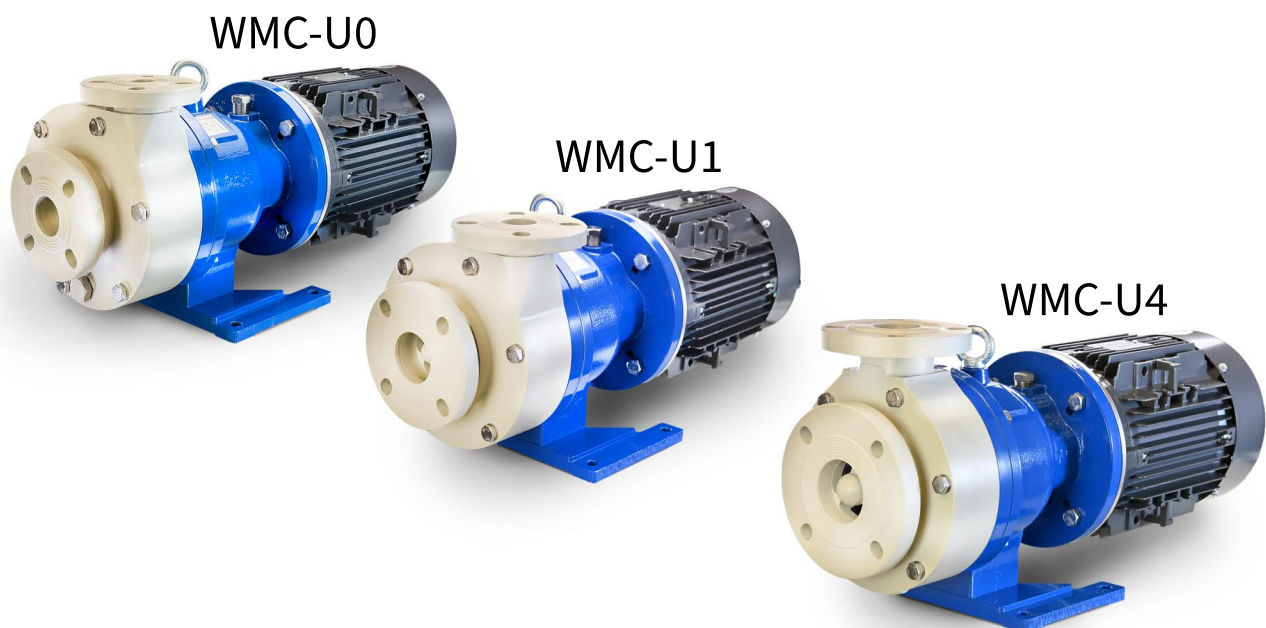


* Technical specifications available upon request

Warrender WMC-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. WMC-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

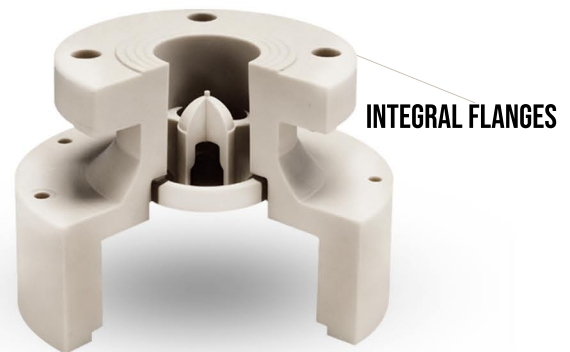


Commercial Benefits:

- Eliminates costly and complex mechanical seal systems
- Avoidance of mechanical seals that cause production downtime
- Zero leakage, magnetic coupling circumvents constant EPA monitoring and potential fines from excessive emissions associated with mechanical seals
- Efficient hydraulic design minimizes power consumption
- Magnetic coupling prevents the introduction of unwanted air into the process for higher production yields
- Positive sealing with integral flanged ports eliminates the chance of emissions from plastic threads
- Simplified maintenance, with registered fits, requires no special tools or settings
- SOLID thermoplastic casings never corrode (internally or externally)
- Premium machined pure thermoplastics provide higher resistance to chemical and temperature degradation than molded or composite materials
- Standard NEMA motor frame allows for low cost, fast replacements in the field



Rear Cartridge



**Solid Billet
Machined
Casing**

INTEGRAL FLANGES

WMC-U0 - 3500RPM

GENERAL PERFORMANCE CURVES, REFERENCE ONLY

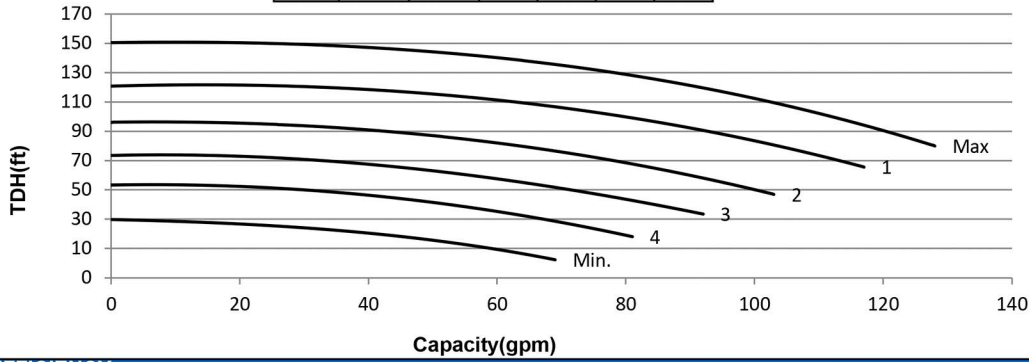
(English Units)

Pump: 1.5x1x5 Series: WMC-U0 - 3500RPM

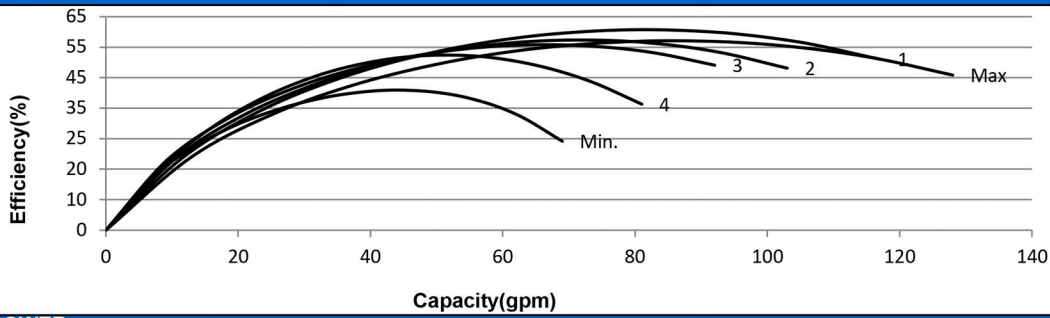
S.G: 1.1 RPM: 3500

PERFORMANCE

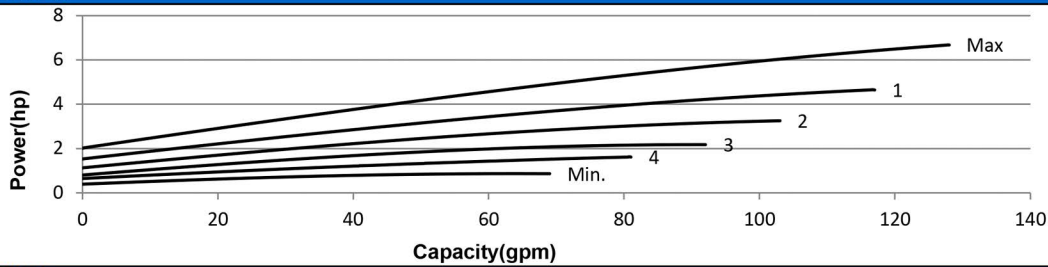
TRIM:	Max	1	2	3	4	Min
(in.)	6.13	5.50	5.00	4.50	4.00	3.25



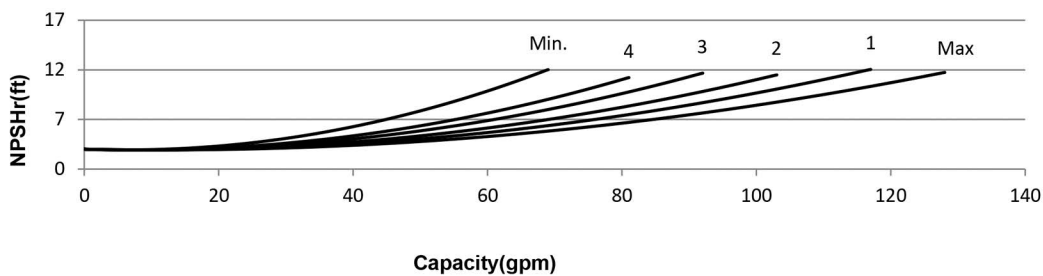
EFFICIENCY



POWER



NPSHr





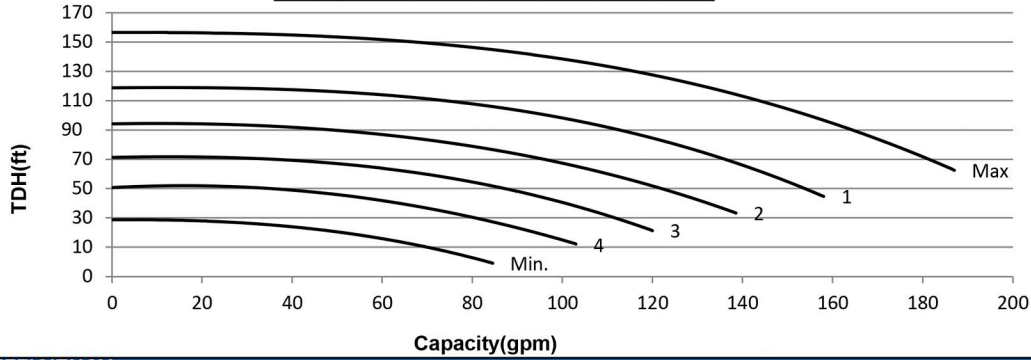
WMC-U1 - 3500RPM

GENERAL PERFORMANCE CURVES, REFERENCE ONLY
(English Units)

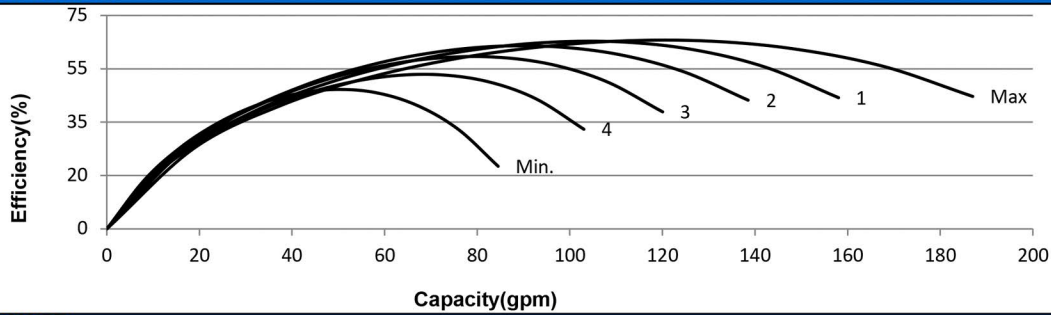
Pump: 2x1.5x6 Series: WMC-U1 - 3500RPM
S.G: 1.1 RPM: 3500

PERFORMANCE

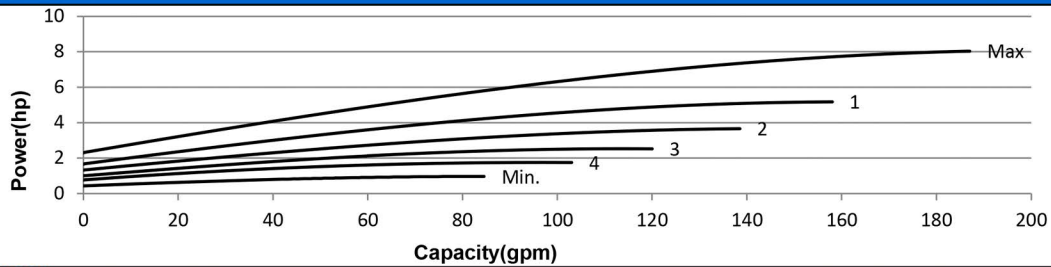
TRIM:	Max	1	2	3	4	Min
(in.)	6.13	5.50	5.00	4.50	4.00	3.25



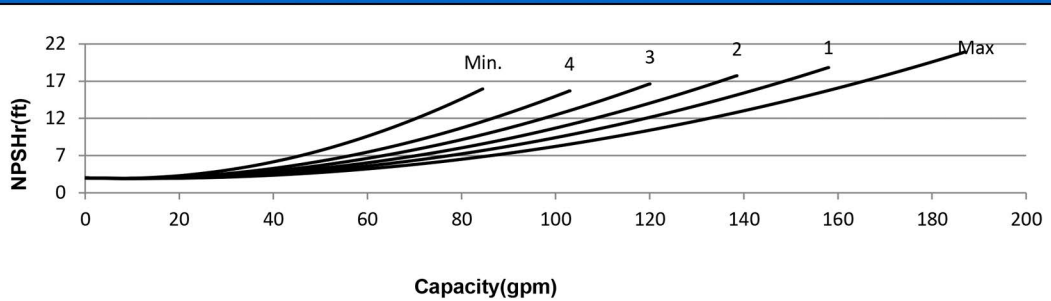
EFFICIENCY



POWER



NPSHr



WMC-U4 - 3500RPM

GENERAL PERFORMANCE CURVES, REFERENCE ONLY

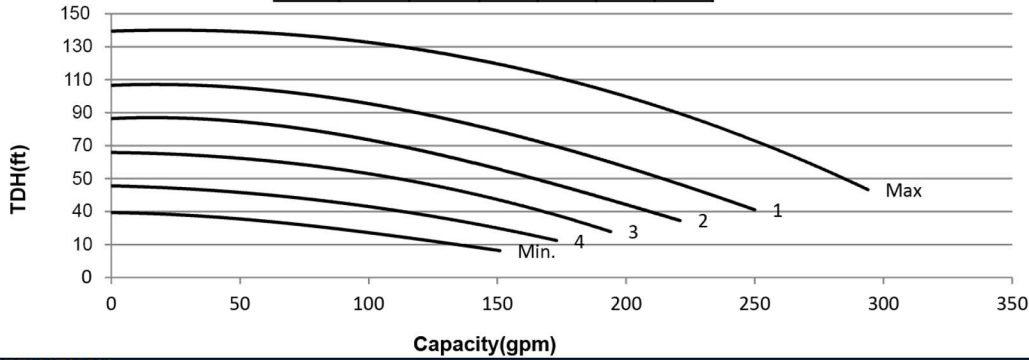
(U.S. Units)

Pump: 2.5x2x6 Series: WMC-U4 - 3500RPM

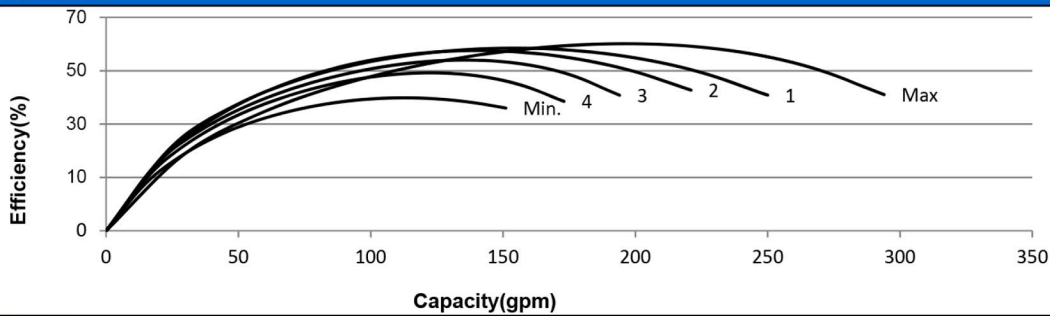
S.G: 1.00 RPM: 3500

PERFORMANCE

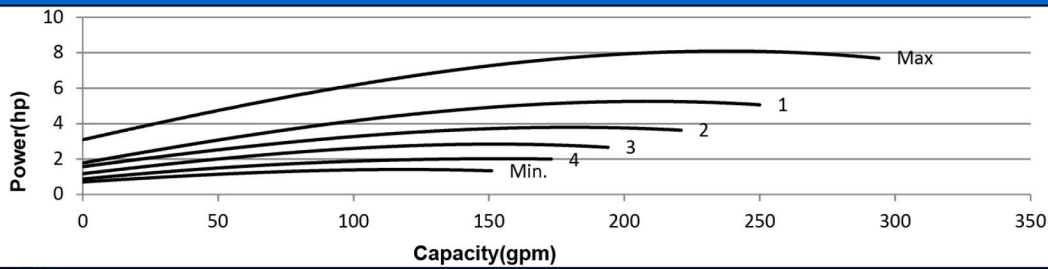
TRIM:	Max	1	2	3	4	Min
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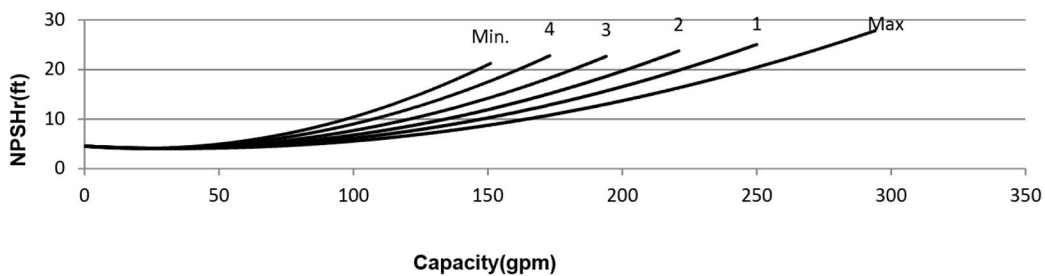
EFFICIENCY



POWER



NPSHr





WARRENDER
warrender.com

SEAL-LESS
ZERO (0)
EMISSIONS
PUMPS

WMC-U Series

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

