



**WARRENDER, LTD.**  
*Process & OEM Pumps*  
*From Stock or Built-to-Spec™*

## Series SR Compact Centrifugal Mag-Drive Pumps

Providing environmentally safe sealless, magnetic pumps of the highest quality for over 30 years.

Our company goal is to provide the solutions that protect our surroundings, raise the environmental awareness, and promote the growth of the community.



### Applications

- Refrigeration Circulation & Transfer
- Chemical Processing
- OEM Systems



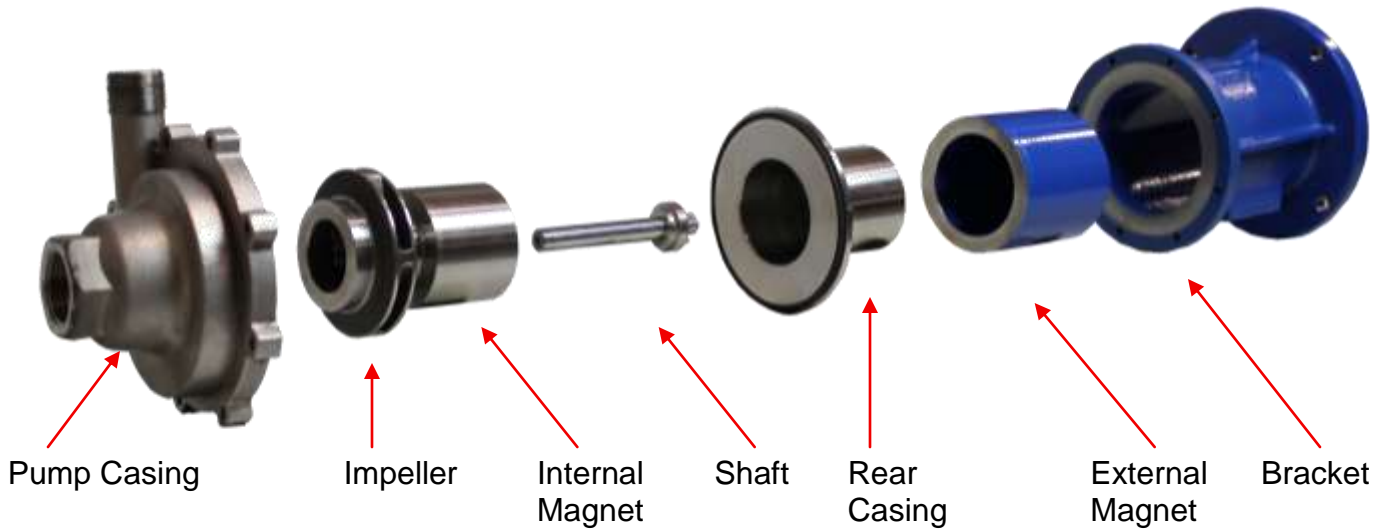
# WARRENDER Series SR

## End Suction Centrifugal Mag-Drive Pumps

WARRENDER Series SR alloy centrifugal mag-drive pumps provide the advantages of a heavy-duty seal-less process pump in a compact, cost effective design. SR pumps are equipped with zero leakage magnetic couplings to meet the latest toxic emissions regulations. The absence of mechanical seals eliminates costly pump maintenance, lost production time and process contamination.

### Technical Design Features

- Seal-less magnetic drive coupling
- Rugged alloy casing and pump components
- Heavy duty alloy containment shell
- High efficiency enclosed impeller design
- Silicon carbide sleeve vs. carbon journal bearings with intermittent dry-run capability
- High torque magnets suitable for direct starting motors
- Close-coupled NEMA motor frame or bearing pedestals



SR Series Pump– Explode View w/caption

### Commercial Benefits

- Avoid production downtime and maintenance due to mechanical seal failures
- Eliminates catastrophic seal leakage and potential fines
- Meets EPA regulations- exempt from constant seal monitoring
- Magnetic coupling allows for servicing the motor or power frame without exposing process fluid to atmosphere
- Extends life of power frame bearings
- Enhances plant and worker safety
- Prevents the loss of precious liquids

### Typical Applications

- Hot water
- Heat transfer liquids
- Refrigerants & cryogenics
- Hydrocarbons & solvents
- Acidic & corrosive solutions
- Caustics & air hardening liquids
- Hazardous & dangerous chemicals
- Toxic and carcinogenic liquids
- Precious & expensive chemicals
- Flammables & pyrophorics
- Biological pathogens

# Materials of Construction

## Alloy Components

- 316-SS Stainless Steel
- Hastelloy-C276

## Internal Sleeve, Stationary & Thrust Bearings

- Carbon, PTFE-C

## Casing O-Ring

- All elastomers, FEP, Encapsulated Viton, Silicon or 316-SS

## Performances

- 4 Models for Complete Hydraulic Coverage
- Flows: to 150 GPM
- Heads: to 135' TDH
- Horsepower range: 1/2 to 7.5 HP
- Pressure Rating: 150 PSI to 300 PSI (MAWP)\*
- Temperature Ratings:
  - Standard Design (240°F)
  - High Temp. Design (450°F)
  - Sub-Zero Temp. Design (0°F)

## Specifications

MODEL	PORT SIZE (NPT or Flanged)	*MAX GPM	*MAX TDH	HP	FRAME
SR6.0	1" x 3/4"	30	40	0.5	56C
SR7.0	1-1/2" x 1"	65	52	1.5	56C or 143/5TC
SR7.5	1-1/2" x 1-1/4"	110	90	2-3	143/5TC
SR8.0	2" x 1-1/2"	170	110	5-7.5	182/4TC

Standard SR Wetted Materials: 316L-SS front casing, impeller and rear casing, PTFE-C sleeve and Thrust bearings, single confined o-ring.

- Note: Maximum condition stated references open pumping capacity and maximum head at the limits of the curve.
- \* depending on operating temperature

# WARRENDER, LTD.

## Series "SR" Model Selection & Impeller Sizing

ORDERING EXAMPLE

**SR 7.0 H 1 A S T T 3 1**

## SR Pump Series

### Pump Size

6.0  
7.0  
7.5  
8.0

### Mag Coupling

H =High Torque

### Bearing Material & Shaft

1= 316-SS & PTFE-C  
2= 316-SS & Carbon  
3= SIC & PTFE-C  
4= SIC & Carbon

### Impeller Size

\*see curves

### Pump Casing & Impeller

S= 316-SS  
H= Hastelloy C  
T= 316-SS High Temp Design

### Pipe Connections

T= Threaded  
F= Flanged

### Motor Type

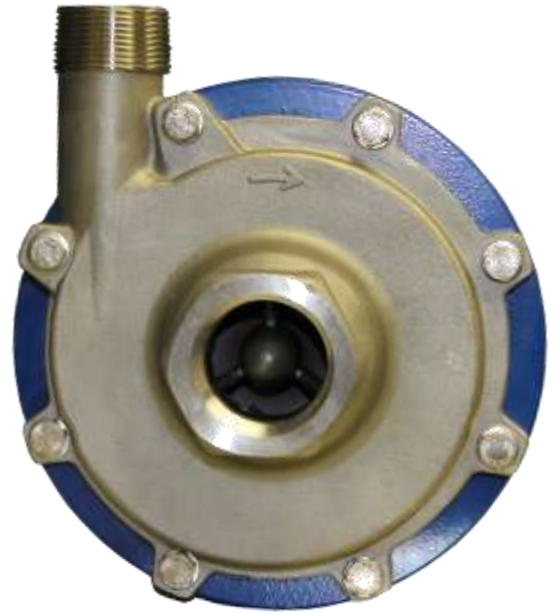
T= TEFC  
X= EXP  
C= Chemical Duty  
W= Without

### Motor Voltage

1= 115/230/60-Single Phase  
3= 208/230/460/60-Three Phase  
5= Alternate

### Motor RPM

1= 3450  
2= 1750



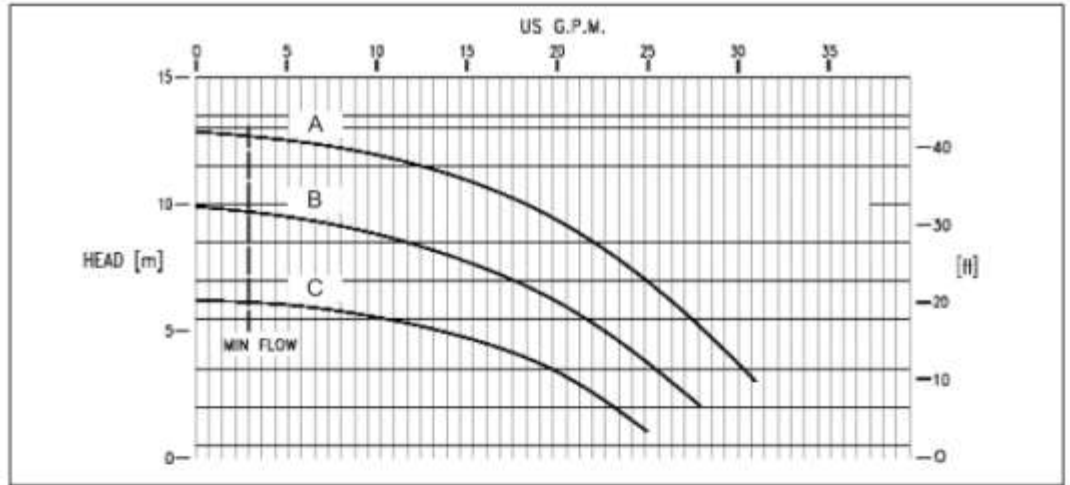
## SR 6.0

3500 RPM

Impeller (A) 3-1/8"

Impeller (B) 2-7/8"

Impeller (C) 2-5/8"



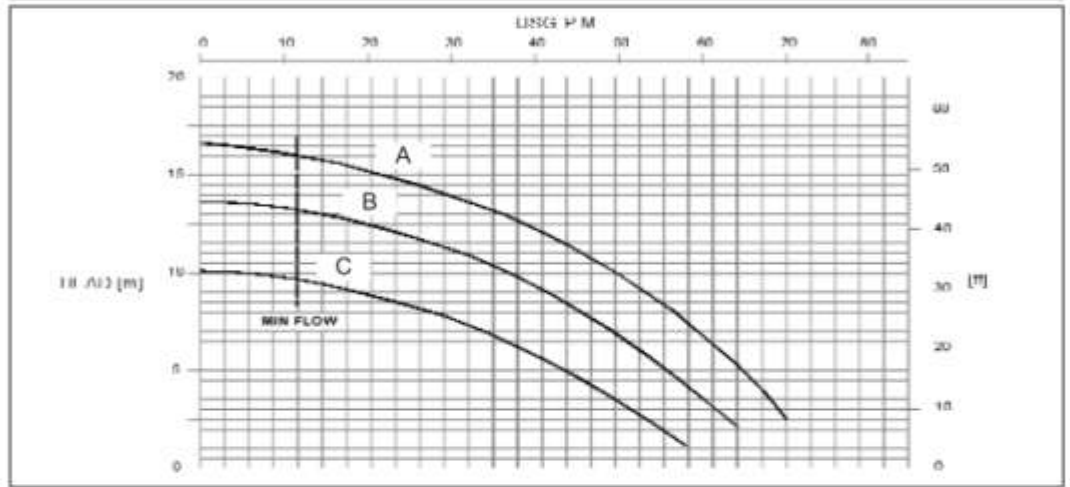
## SR 7.0

3500 RPM

Impeller (A) 3-3/4"

Impeller (B) 3-7/16"

Impeller (C) 3-1/16"



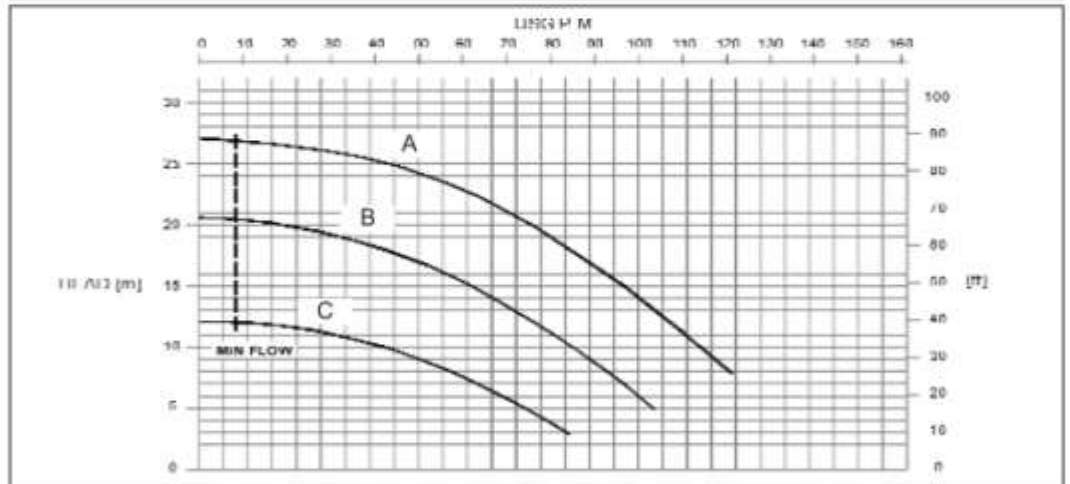
## SR 7.5

3500 RPM

Impeller (A) 4-3/4"

Impeller (B) 4-1/8"

Impeller (C) 3-7/16"



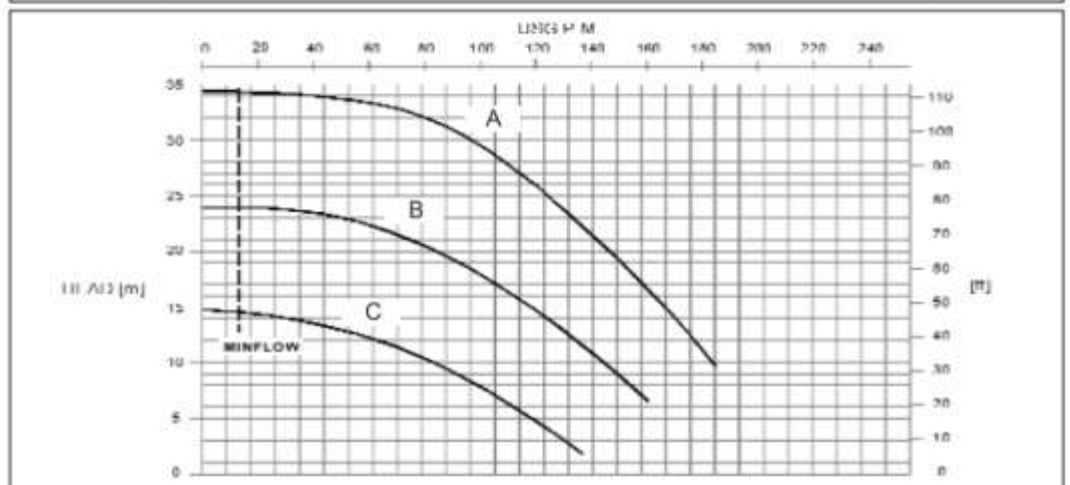
## SR 8.0

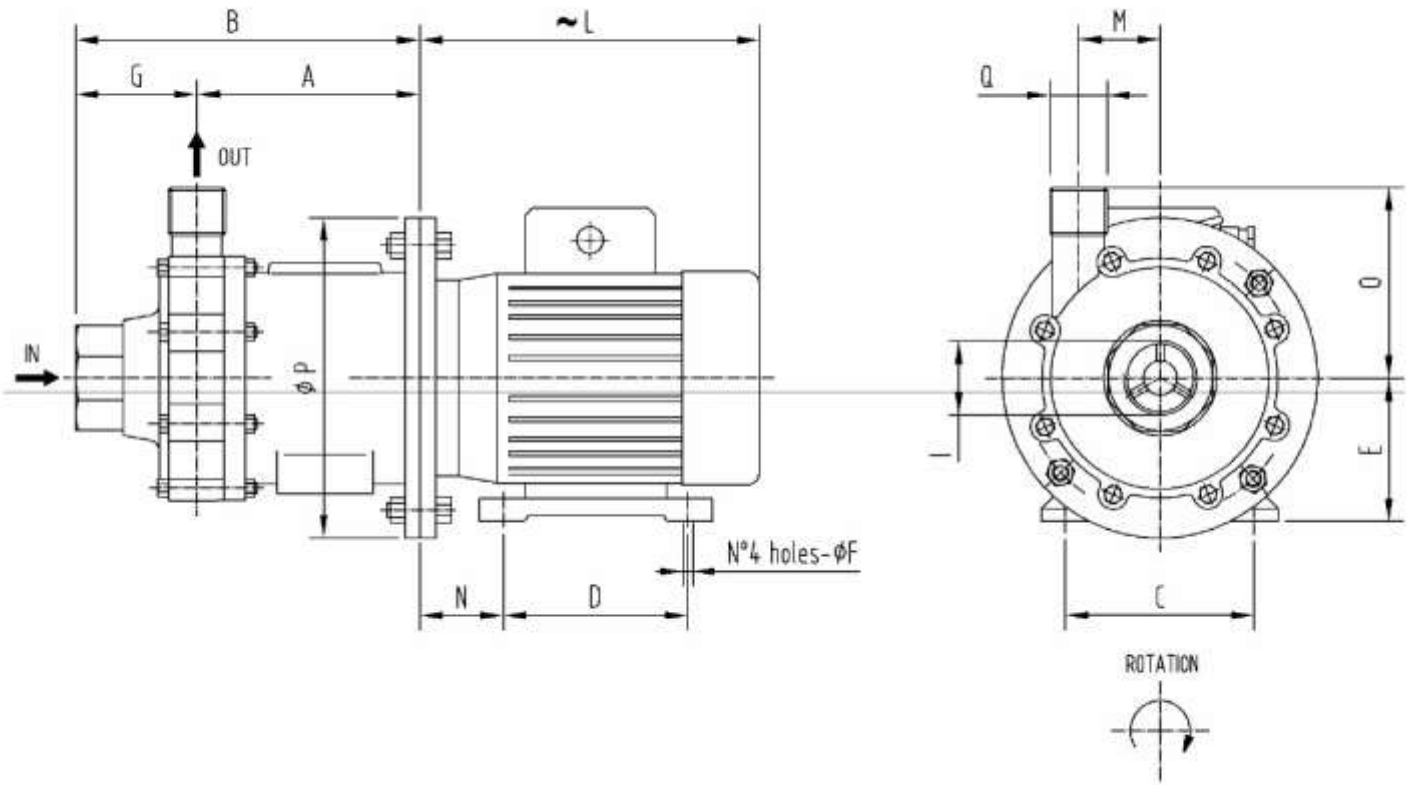
3500 RPM

Impeller (A) 5-1/4"

Impeller (B) 4-1/2"

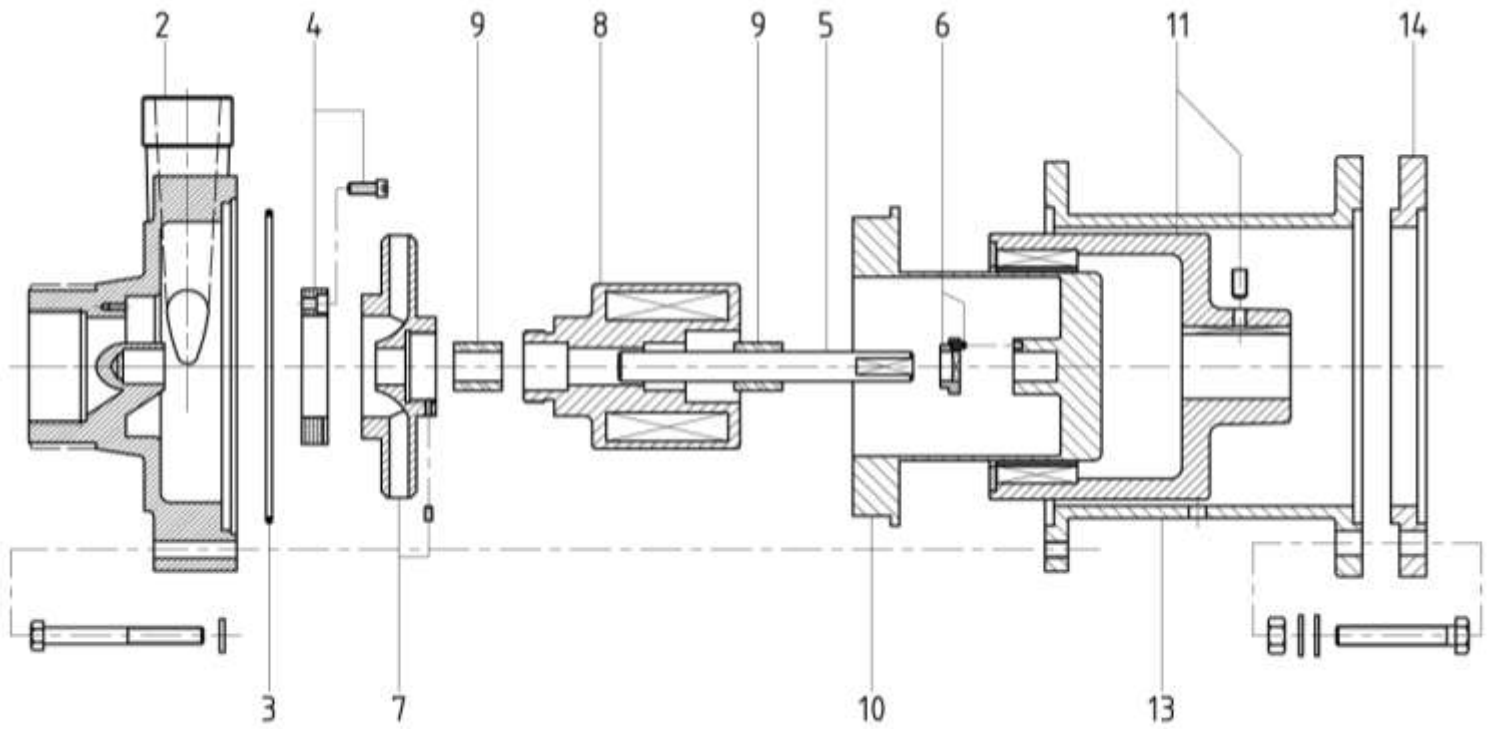
Impeller (C) 3-3/4"





Type	I Q		Dimensions in												
	Gas	Gas	A	B	C	D	E	F	G	L	Motor Size	M	N	O	P
SR 6.0	1"	3/4"	6.10	8.34	4.88	3	3.5	.34	2.24	9.29~	56C	1.77	2.75	3.50	6.65
SR 7.0	1 1/2"	1"	6.255	8.975	4.88	3	3.5	.34	2.72	9.29~	56C	1.73	2.75	3.86	6.65
SR 7.5	1 1/2"	1 1/4"	7	10.15	5.5	5	3.5	.34	3.15	11.17~	145TC	2.44	2.25	4.92	7.87
SR 8.0	2"	1 1/2"	8.01	11.31	*	*	*	*	3.31	*	*	2.64	*	5.51	7.87

\* consult factory for SR 8.0 motor size.  
~ dependent on type of motor



Ref	Description	Material	Code
2	Pump head	SS316	
3	O-Ring	Viton (standard)	
4	Casing Thr. Bushing (incl. of screws)	PTFEC SS316	
5	Shaft	SS316	
6	Ring	SS316	
7	Impeller	SS316	
8	Int. Magnet (incl. of 9)	SS316 / CoSm	
9	Sleeve Bearings	PTFEC (standard)	
10	Rear Casing	SS316	
11	Ext. Magnet	Neodym./Steel	
13	Bracket (includes #14 if required)	Cast Iron	
14	Motor Adaptor Flange (required on SR 7.5 & 8.0)	Steel	
15	Rear Wet End (3+5+6+7+8+9+10)	/	
16	Wet End (2+3+4+5+6+7+8+9+10)	/	

SR2013



WARRENDER, LTD.  
821 Sivert Drive  
Wood Dale, IL 60191

Phone: 847-247-8677  
Toll Free: 888-24 PUMPS  
Fax: 847-247-8680  
Web site: [www.warrender.com](http://www.warrender.com)  
Email: [sales@warrender.com](mailto:sales@warrender.com)

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