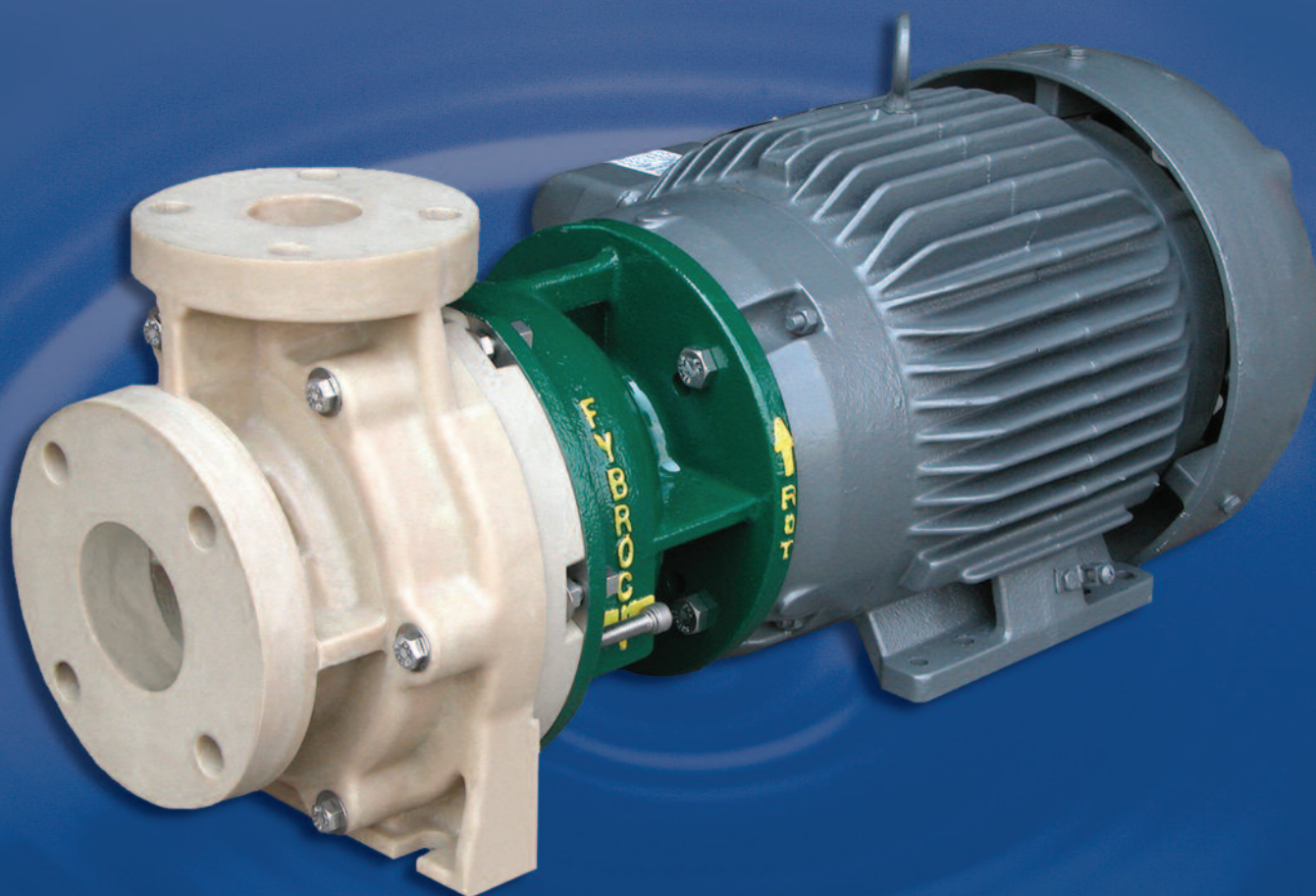


FYBROC® SERIES 2530

ASME/ANSI SPECIFICATION
B73.1 DIMENSIONS

FYBROC® SERIES 2630

SELF-PRIMING



Fybroc® Close Coupled Sealless Pumps

BULLETIN 25B1

FYBROC SERIES 2530 CLOSE-COUPLED SEALLESS PUMPS

- Capacities to 1500 GPM (350 m³/hr)
- Heads to 400 feet (125 m)
- Powers to 100 HP (75 kw)
- Temperatures to 200°F (93°C)
- Working Pressures to 200 PSI (1,380 kPa)
- Ten pump sizes
- Materials of construction availability:
VR-1, VR-1 BPO-DMA, EY-2

FEATURES

- "All-FRP", continuous strand, thermoset construction
- Sealless design
- **NO** separate liner concerns
- Separate impeller and inner magnet assembly
- Stationary, self-aligning, sintered silicon carbide shaft
- Interchangeable front and rear thrust bearings
- ASME/ANSI B73.1 dimensioned liquid end
- Zero emissions/leakage
- Simple operation and ease of maintenance

APPLICATIONS & SERVICES

- | | |
|----------------------------------|---------------------------|
| • Chemical Processes | • Battery Manufacturers |
| • Metal Finishing | • General Industrial |
| • Pharmaceutical | • Hydrochloric Acid |
| • Food Processing | • Sodium Hydroxide |
| • Scrubber OEMs | • Sodium Hypochlorite |
| • Semi-Conductor | • Sulfuric Acid |
| • Printed Circuit Boards | • Ferric/Ferrous Chloride |
| • Rail Car/Tank Unloading | • Nitric Acid |
| • Water and Wastewater Treatment | • Chromic Acid |
| • Pulp and Paper | • Solvents |
| • Automotive | • Specialty Chemicals |

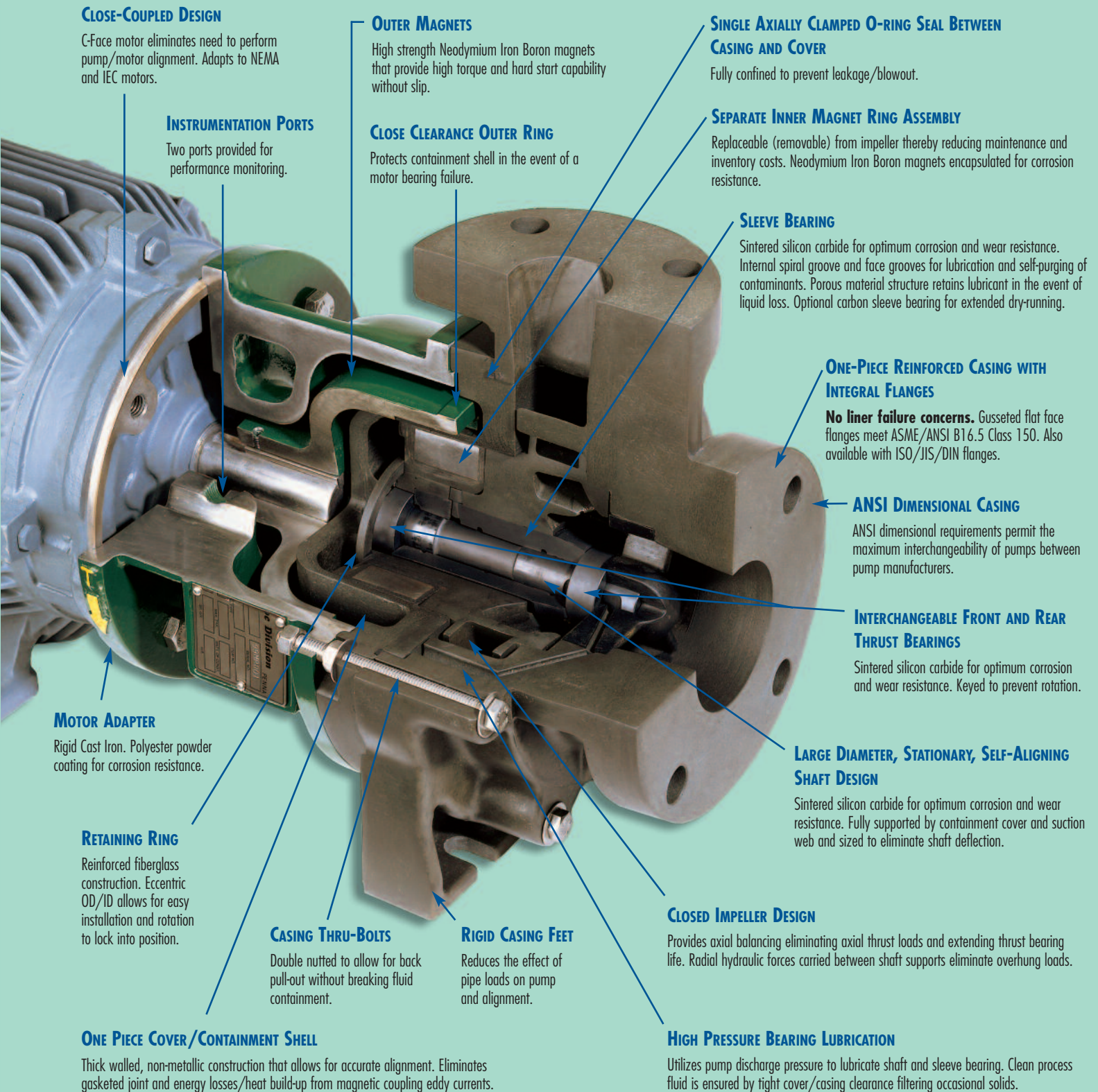


**VR-1
Construction**



**EY-2
Construction**

SIMPLE, RELIABLE AND COST EFFECTIVE



FYBROC SERIES 2530 – DESIGN FEATURES

FIGURE 1

- Separate impeller and inner magnet ring assembly
- Replaceable (removable) from impeller thereby reducing routine maintenance and inventory costs
- Neodymium Iron Boron magnets encapsulated with 1/8" fiberglass corrosion protection
- Closed impeller design with low stress hex drive

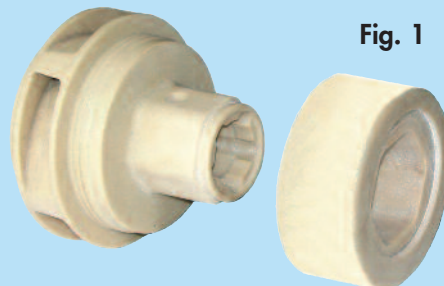


Fig. 1

FIGURE 2

- One-piece reinforced (ASME/ANSI dimensioned) casing with integral, gusseted flanges
- **NO SEPARATE LINER FAILURE CONCERNS**
- Expanded suction eye to compensate for suction web, thereby yielding lower NPSH requirements

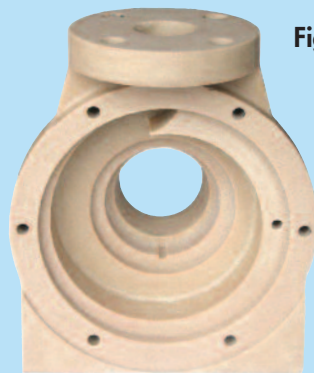
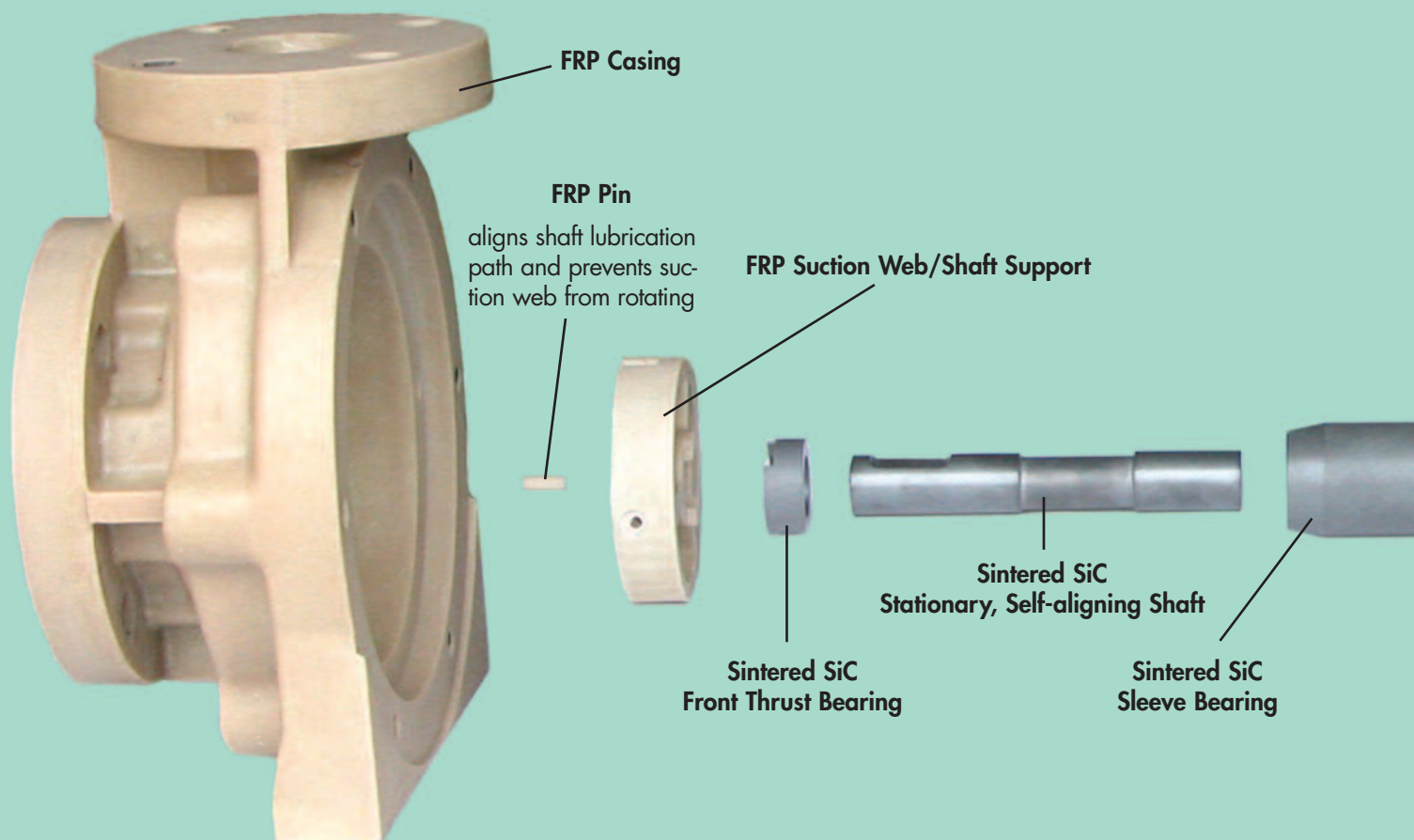


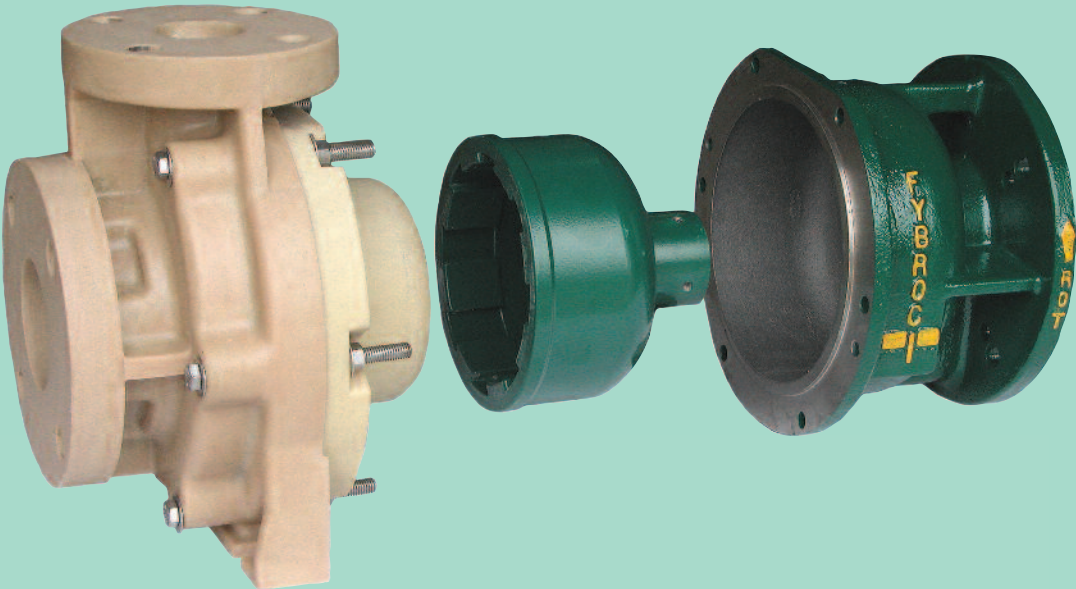
Fig. 2



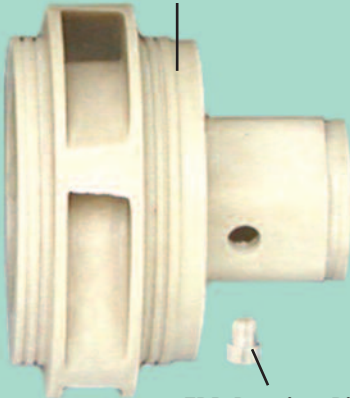
ASSEMBLED PUMP END



**CONTAINED LIQUID
END WITH OUTER
MAGNET ASSEMBLY
AND PUMP ADAPTER
REMOVED**



FRP Axially Balanced,
Closed Impeller



FRP Bearing Pin

drives sleeve bearing and is held
in place by inner magnet ring and
pin shoulder

Inner Magnet Ring with
FRP Corrosion Protection



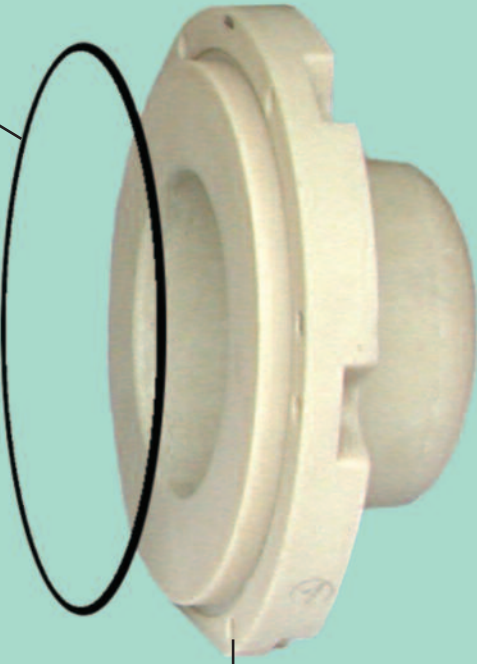
O-ring
Sintered SiC
Rear Thrust
Bearing



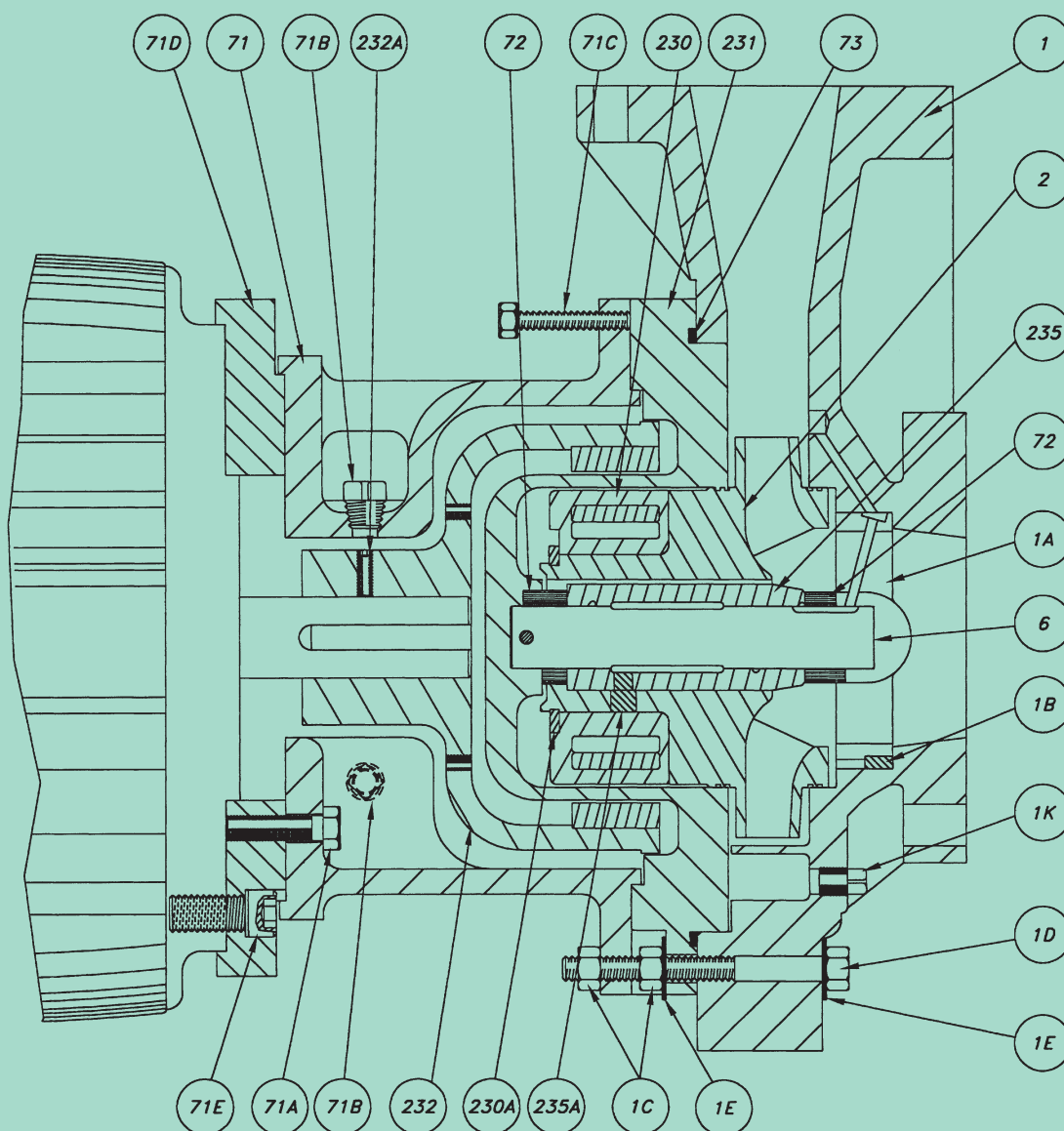
FRP Reinforced Eccentric
OD/ID Retaining Ring



One-piece FRP
Cover/Containment Shell

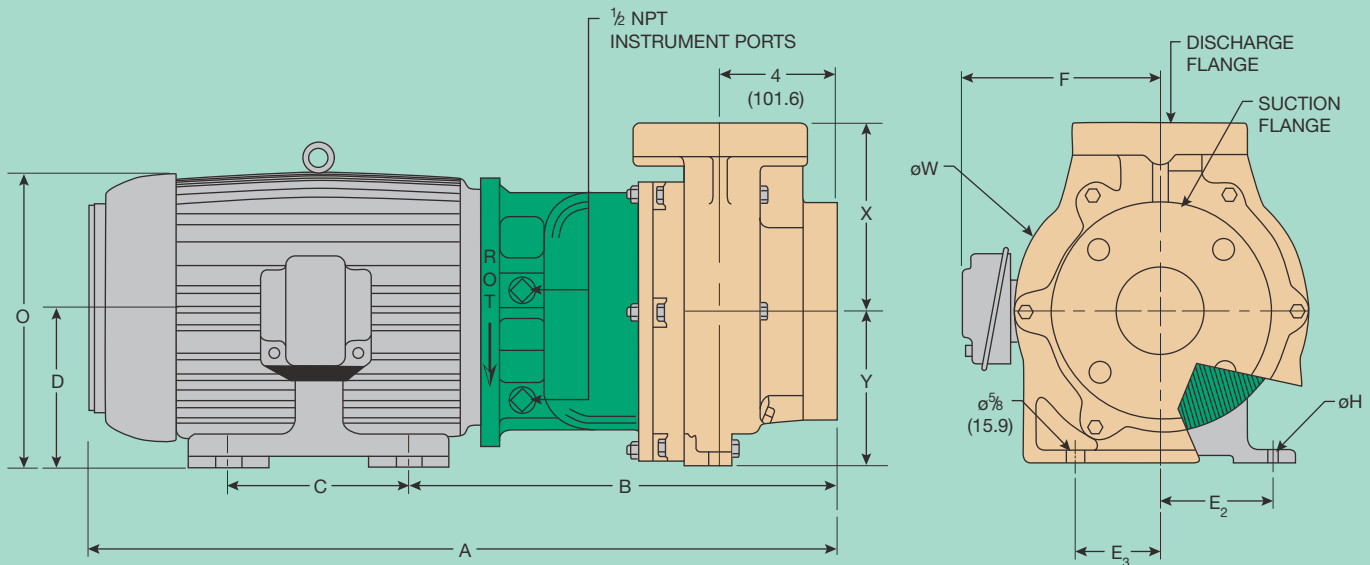


FYBROC SERIES 2530 – PARTS AND STANDARD MATERIALS OF CONSTRUCTION



PART NO.	DESCRIPTION	QUANTITY	MATERIAL	PART NO.	DESCRIPTION	QUANTITY	MATERIAL
1	Casing	1	Vinyl Ester	71C	Jack Screw, Adapter	2-4	303 SS
1A	Web, Shaft Support	1	Vinyl Ester	71D	Motor Adapter (if required)	1	Cast Iron
1B	Pin, Casing	1	Vinyl Ester	71E	Screw, Motor Adapter (if required)	4	303 SS
1C	Nut, Casing	12-32	303 SS	72	Bearing, Thrust	2	Silicon Carbide
1D	Bolt, Casing	6-16	303 SS	73	O-ring, Shell	1	Viton
1E	Washer, Casing	12-32	303 SS	230	Magnet Assembly, Inner	1	Vinyl Ester
1K	Plug, Drain (opt.)	1	Teflon	230A	Retaining Ring	1	Vinyl Ester
2	Impeller	1	Vinyl Ester	231	Shell, Cover	1	Vinyl Ester
6	Shaft	1	Silicon Carbide	232	Magnet Assembly, Outer	1	Cast Iron
71	Adapter	1	Cast Iron	232A	Set Screw	2	Steel
71A	Screw, Adapter	4	303 SS	235	Bearing, Sleeve	1	Silicon Carbide
71B	Plug, Adapter	2	Steel	235A	Pin, Bearing	1	Vinyl Ester

FYBROC SERIES 2530 – PUMP DIMENSIONS



SERIES 2530 GROUP I

MOTOR	A (1)	B (1)	C	D	E2	E3	F (1)	oH	O (1)
143TC	23 ³ / ₄	15	4	3 ¹ / ₂	2 ³ / ₄	3	7	11 ¹ / ₃₂	7 ¹ / ₂
145TC	603.2	381.0	5	88.9	69.9		177.8	8.7	190.5
182TC	25 ⁷ / ₈	15 ³ / ₄	4 ¹ / ₂	4 ¹ / ₂	3 ³ / ₄		7 ⁵ / ₈	7 ¹ / ₁₆	9 ¹ / ₂
184TC	657.2	400.0	5 ¹ / ₂	114.3	95.3		193.7	11.1	241.3
213TC	29 ³ / ₈	16 ¹¹ / ₁₆	5 ¹ / ₂	5 ¹ / ₄	4 ¹ / ₄	76.2	11 ¹ / ₈	7 ¹ / ₁₆	11 ¹ / ₂
215TC	746.1	423.8	7	133.3	108.0		282.6	11.1	292.1

SERIES 2530 GROUP II

182TC	27 ¹ / ₄	17 ¹ / ₄	4 ¹ / ₂	4 ¹ / ₂	3 ³ / ₄	47 ⁷ / ₈	7 ⁵ / ₈	7 ¹ / ₁₆	9 ¹ / ₂
184TC	692.1	438.1	5 ¹ / ₂	114.3	95.3		193.7	11.1	241.3
213TC	30 ³ / ₄	18 ¹ / ₈	5 ¹ / ₂	5 ¹ / ₄	4 ¹ / ₄		11 ¹ / ₈	7 ¹ / ₁₆	11 ¹ / ₂
215TC	781.1	460.4	7	133.3	108.0		282.6	11.1	292.1
254TC	34 ⁹ / ₁₆	18 ⁹ / ₁₆	8 ¹ / ₄	6 ¹ / ₄	5	123.8	11 ⁵ / ₈	17 ¹ / ₃₂	13 ¹ / ₂
256TC	877.9	471.5	10	158.8	127.0		295.3	13.5	342.9
284TSC	37 ¹ / ₈	18 ³ / ₄	9 ¹ / ₂	7	5 ¹ / ₂		12 ¹ / ₈	17 ¹ / ₃₂	14 ¹ / ₈
286TSC	943.0	476.3	11	177.8	139.7		308.0	13.5	358.8
324TSC	39 ³ / ₄	20 ⁷ / ₁₆	10 ¹ / ₂	8	6 ¹ / ₄	203.2	13 ⁵ / ₈	2 ¹ / ₃₂	15 ³ / ₄
326TSC	1009.7	519.1	12	203.2	158.8		346.1	16.7	400.1

SERIES 2530 GROUP I

PUMP SIZE	SUCT.	DISCH.	X	Y	oW
1X1 ¹ / ₂ X6	1 ¹ / ₂	1	6 ¹ / ₂	5 ¹ / ₄	10 ¹ / ₈
1 ¹ / ₂ X3X6	3	1 ¹ / ₂			
2X3X6	3	2			
1X1 ¹ / ₂ X8	1 ¹ / ₂	1			

SERIES 2530 GROUP II

3X4X6	4	3	8 ¹ / ₄	8 ¹ / ₄	14 ¹ / ₄
2X3X8	3	2	9 ¹ / ₂		
3X4X8	4	3	11		
1X2X10	2	1	8 ¹ / ₂		
4X6X10	6	4	13 ¹ / ₂	10	22 ¹ / ₄
4X6X13			342.9		

FLANGE	O.D.	THICK.	B.C.	NO. OF HOLES	SZ. OF HOLES
1	4 ¹ / ₄	7 ⁷ / ₈	3 ¹ / ₈	4	5 ⁵ / ₈
1 ¹ / ₂	5	1 ¹ / ₈	3 ⁷ / ₈		15.9
2	6	28.6	4 ³ / ₄		3 ³ / ₄
3	7 ¹ / ₂	152.4	6		
4	9	31.8	7 ¹ / ₂	8	19.1
6	11	(3)	9 ¹ / ₂		

(1) Motor dimensions may vary depending on manufacturer
(2) Add 1.875" for pump sizes 4X6X10 and 4X6X13

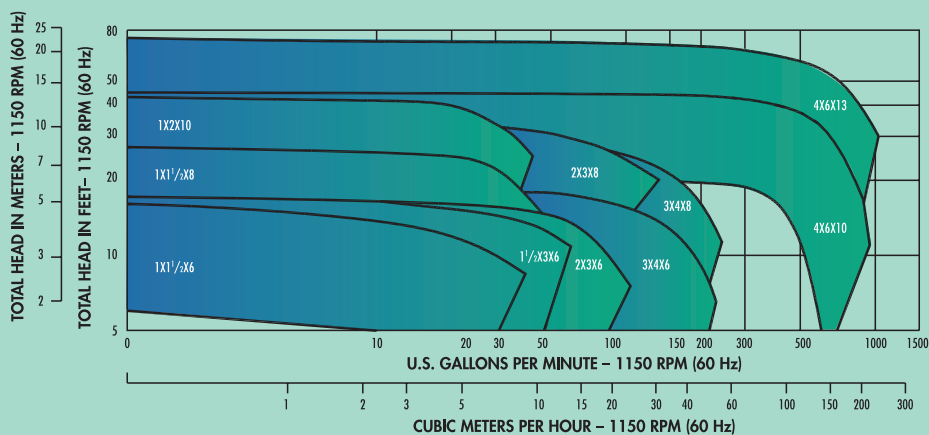
All dimensions in **inches** and millimeters
Flanges are ASME/ANSI B16.5 Class 150 Flat Face
Adapts to NEMA/IEC motors. Consult factory for flange configuration required to mount IEC motors.

(3) Raised suction connection
(4) 3/4"-10 tapped holes 1" deep.

FYBROC SERIES 2530 – PUMP COVERAGE

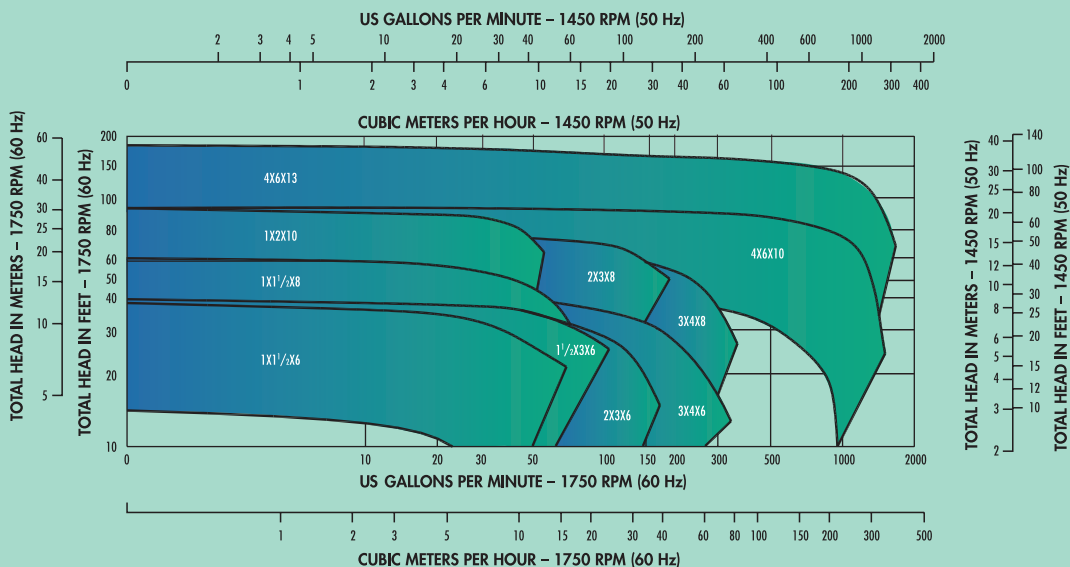
1150 RPM

60 HERTZ



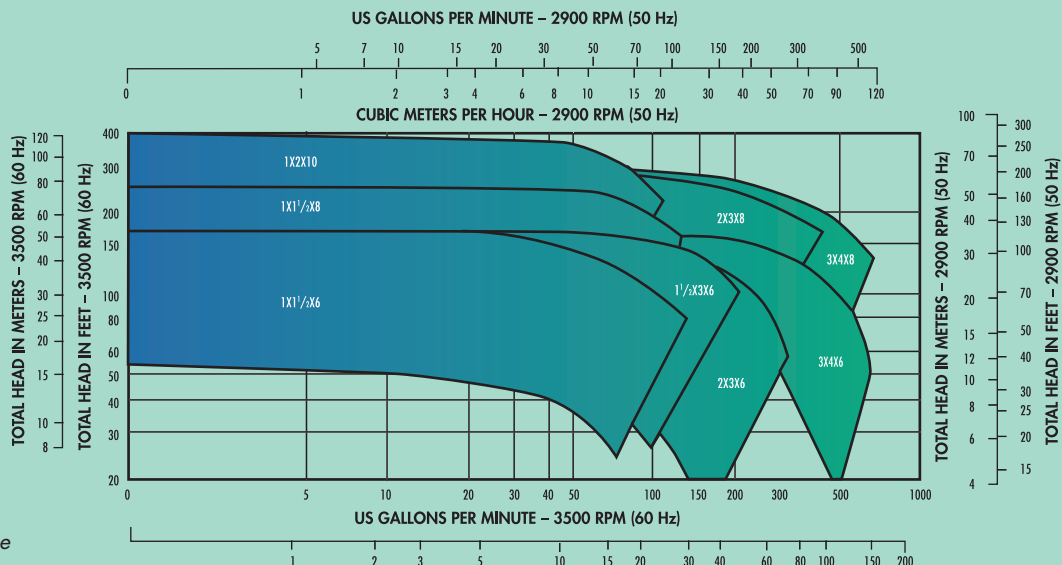
1750/1450 RPM

60/50 HERTZ



3500/2900 RPM

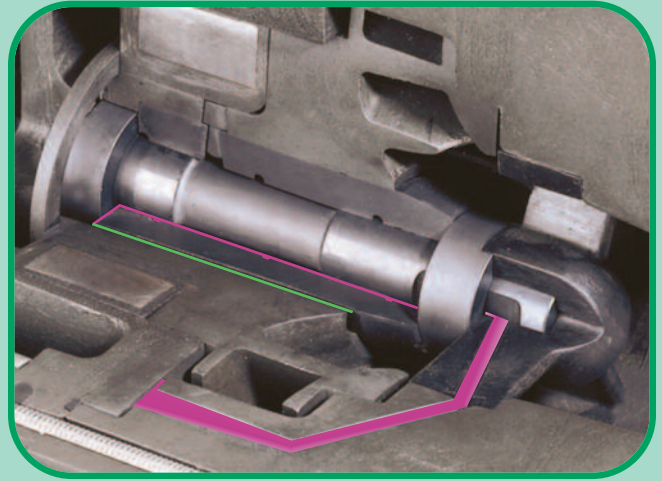
60/50 HERTZ



NOTE: For specific performance curves www.mp-gps.com.

HIGH PRESSURE BEARING LUBRICATION PATH

- Bearing lubrication path taken off of high pressure area
- Filters occasional solids out of the lubrication flow path
- Solid size restricted by the nominal $1/16$ " casing/cover clearance
- Sleeve bearing contains an integral spiral groove and face grooves for lubrication and self-purging of contaminants



FYBROC SERIES 2630 SELF-PRIMING

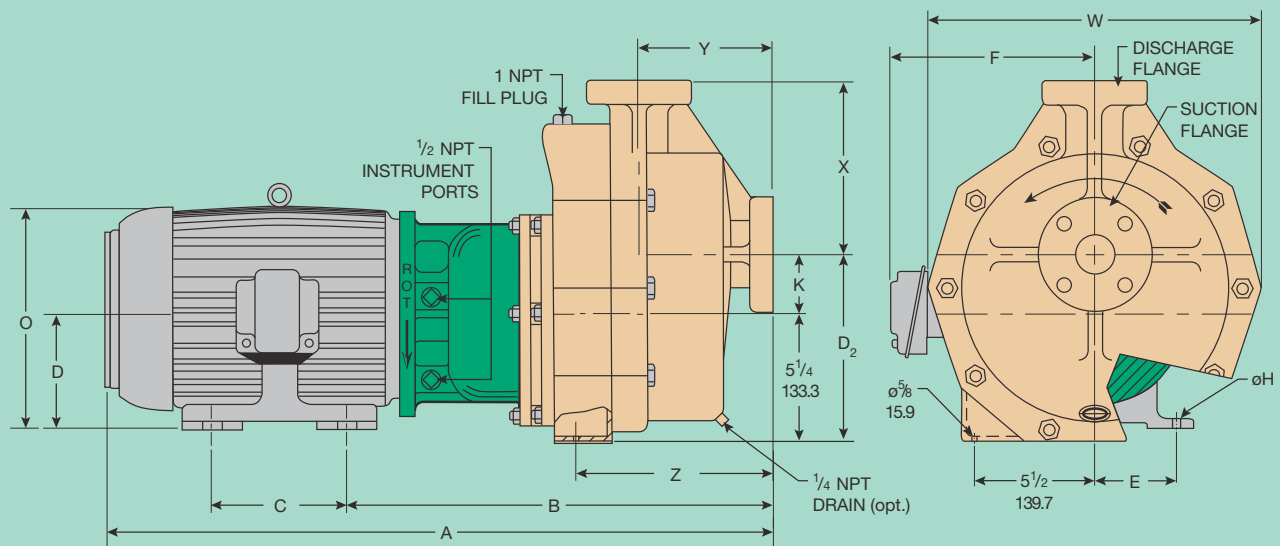
- Capacities to 300 GPM (70 m³/hr)
- Heads to 200 feet (65 m)
- Suction Lifts to 20 feet (6 m)
- Two pump sizes

The Fybroc Series 2630 is an FRP, close-coupled, self-priming, magnetic-drive sealless pump that incorporates many of the features found on the Fybroc Series 2530 pumps. With the exception of the casing volute/tank assembly, all components of the Series 2630 are fully interchangeable with those of the Series 2530. The Series 2630 is ideally suited for corrosive sump applications, tank car unloading, and other similar, demanding applications. The volute casing has been designed with optimal proportions in the recirculation chamber to provide for short and efficient priming times, without the use of troublesome check valves. The volute casing inlet

has also been designed to minimize NPSH requirements, thereby leading to greater allowable suction lifts.

An important feature of the Series 2630 is its replaceable volute extension. The casing volute cutwater in any self-priming pump must be in close proximity to the impeller in order to permit efficient priming. The removable volute extension in the Series 2630 is available in a number of sizes to match specific impeller diameters permitting field hydraulic changes and the restoration of priming efficiency, all without casing modifications or replacement.

FYBROC SERIES 2630 SELF-PRIMING – PUMP DIMENSIONS



SERIES 2630 SELF-PRIMING GROUP I

MOTOR FRAME	PUMP SIZE	A (1)	B (1)	C	D	E	F (1)	H	O (1)
143TC	1 x 1 1/2 x 8	28 3/8 720.7	19 9/16 496.9	4					
	2 x 3 x 6	30 9/16 776.3	21 3/4 552.5	101.6	3 1/2 88.9	2 3/4 69.9	7 177.8	1 1/32 8.7	7 1/2 190.5
145TC	1 x 1 1/2 x 8	28 3/8 720.7	19 9/16 496.9	5					
	2 x 3 x 6	30 9/16 776.3	21 3/4 552.5	127.0					
182TC	1 x 1 1/2 x 8	30 3/16 766.8	20 1/16 509.6	4 1/2 114.3					
	2 x 3 x 6	32 3/8 822.3	22 1/4 565.2	114.3	4 1/2 114.3	3 3/4 95.3	7 5/8 193.7		9 1/2 241.3
184TC	1 x 1 1/2 x 8	30 3/16 766.8	20 1/16 509.6						
	2 x 3 x 6	32 3/8 822.3	22 1/4 565.2	5 1/2 139.7				7/16 11.1	
213TC	1 x 1 1/2 x 8	33 11/16 855.7	20 15/16 531.8						
	2 x 3 x 6	35 7/8 911.2	23 1/8 587.4		5 1/4 133.3	4 1/4 108.0	11 1/8 282.6		11 1/2 292.1
215TC	1 x 1 1/2 x 8	33 11/16 855.7	20 15/16 531.8	7					
	2 x 3 x 6	35 7/8 911.2	23 1/8 587.4	177.8					

SERIES 2630 SELF-PRIMING GROUP I

PUMP SIZE	SUCT.	DISCH.	D ₂	K	W	X	Y	Z
1 X 1 1/2 X 8	1 1/2	1	8 7/8 225.4	3 5/8 92.1	14 3/8 365.1	7 177.8	6 152.4	9 5/16 236.5
2 X 3 X 6	3	2	9 1/8 231.8	3 7/8 98.4	17 5/8 447.7	9 1/8 231.8	7 177.8	11 1/2 292.1

FLANGE	O.D.	THICK.	B.C.	NO. OF HOLES	SZ. OF HOLES
1	4 1/4 108.0	1 25.4	3 1/8 79.4	4	5/8 15.9
1 1/2	5 127.0	1 1/8 28.6	3 7/8 98.4		3/4 19.1
2	6 152.4		4 3/4 120.7		
3	7 1/2 190.5		6 152.4		

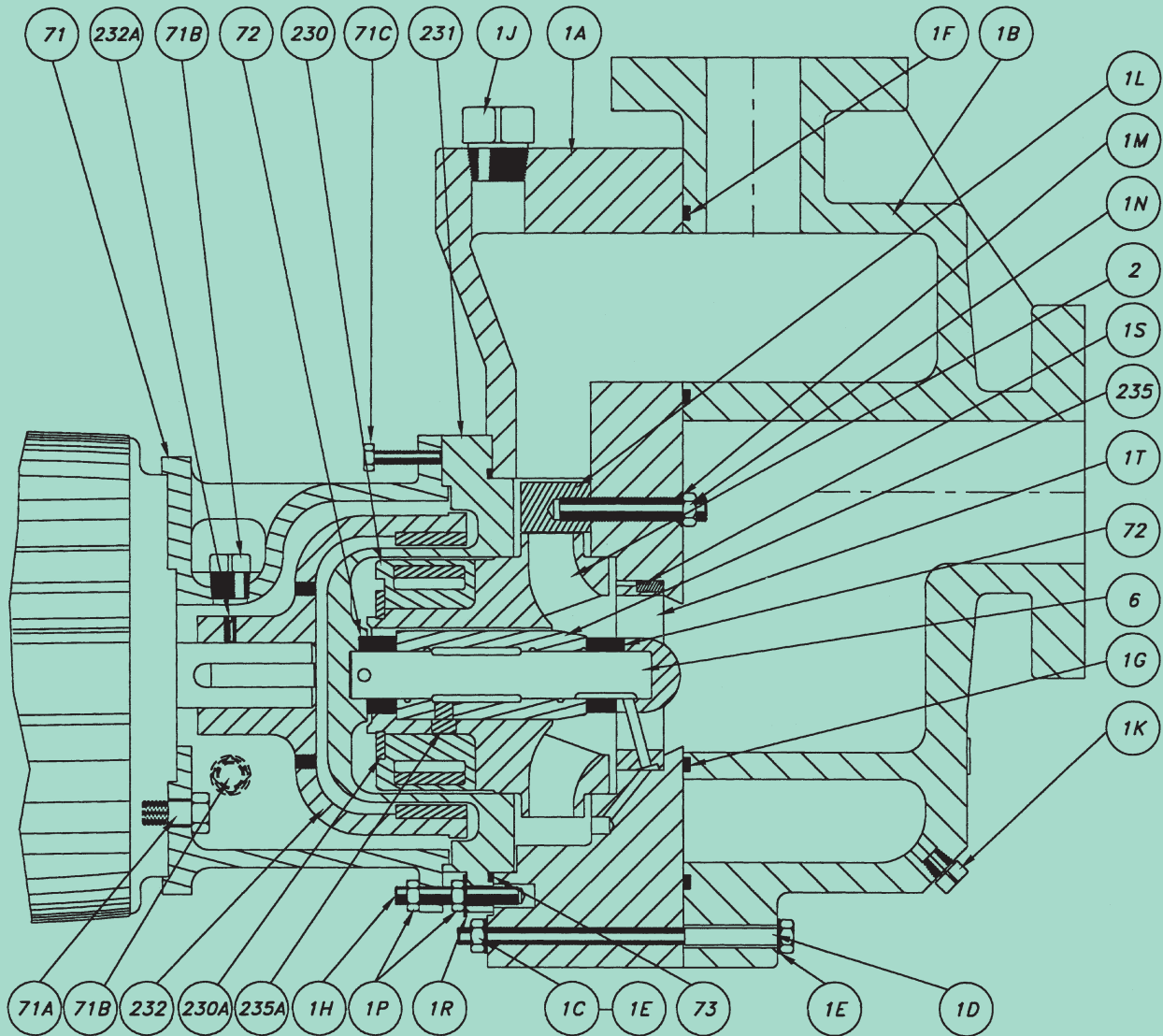
(1) Motor dimensions may vary depending on manufacturer

All dimensions in inches and millimeters

Flanges are ASME/ANSI B16.5 Class 150 Flat Face

Adapts to NEMA/IEC motors. Consult factory for flange configuration required to mount IEC motors.

FYBROC SERIES 2630 SELF-PRIMING – PARTS AND STANDARD MATERIALS OF CONSTRUCTION



PART NO.	DESCRIPTION	QUANTITY	MATERIAL
1A	Casing Volute	1	Vinyl Ester
1B	Casing Tank	1	Vinyl Ester
1C	Casing Nut	8-10	303 SS
1D	Casing Bolt	8-10	303 SS
1E	Casing Washer	16-20	303 SS
1F	O-ring, Discharge	1	Viton
1G	O-ring, Suction	1	Viton
1H	Stud, Casing	6	303 SS
1J	Fill Plug	1	Polypro
1K	Drain Plug (opt.)	1	Teflon
1L	Volute Insert	1	Vinyl Ester
1M	O-ring, Insert	1-2	Viton
1N	Nut, Insert	1-2	Vinyl Ester
1P	Nut, Casing	12	303 SS
1R	Washer, Casing	6	303 SS
1S	Pin, Casing	1	Vinyl Ester

PART NO.	DESCRIPTION	QUANTITY	MATERIAL
1T	Web, Shaft Support	1	Vinyl Ester
2	Impeller	1	Vinyl Ester
6	Shaft	1	Silicon Carbide
71	Adapter	1	Cast Iron
71A	Screw, Adapter	4	303 SS
71B	Plug, Adapter	2	Steel
71C	Jack Screw, Adapter	2	303 SS
72	Bearing, Thrust	2	Silicon Carbide
73	O-ring, Shell	1	Viton
230	Magnet Assembly, Inner	1	Vinyl Ester
230A	Retaining Ring	1	Vinyl Ester
231	Shell, Cover	1	Vinyl Ester
232	Magnet Assembly, Outer	1	Cast Iron
232A	Set Screw	2	Steel
235	Bearing, Sleeve	1	Silicon Carbide
235A	Pin, Bearing	1	Vinyl Ester

***The world's most
complete line of
pumps for handling
corrosive and
other difficult liquids***



ABOUT MET-PRO GLOBAL PUMP SOLUTIONS

Met-Pro Global Pump Solutions, which combines the resources of the Company's internationally recognized Dean Pump®, Fybroc® and Sethco® brands, is a leading niche-oriented global provider of solutions and products for the pumping of corrosive, abrasive and high temperature liquids. Its broad range of high quality centrifugal pumps provide excellent performance for tough applications including pumping of acids, brines, caustics, bleaches, seawater, high temperature liquids and a wide variety of waste liquids for a broad range of applications including the chemical, petrochemical, metal finishing, wastewater treatment, desalination and aquarium/aquaculture markets. For more information, visit **www.mp-gps.com**.

ABOUT CECO

CECO Environmental is a leading global environmental technology company focused on critical solutions in the air pollution control, energy and fluid handling and filtration industries. Through its well-known brands, CECO provides a wide spectrum of products and services that play a vital role in helping companies achieve exacting production standards, and meet increasing plant needs and stringent emissions control regulations. For more information, visit the company's website at **www.cecoenviro.com**.



A CECO Environmental Company

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