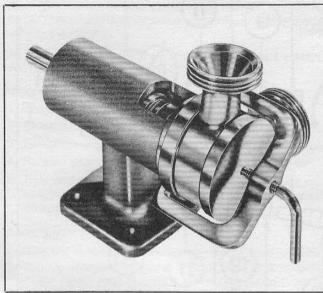


### Models 15010-SERIES 15030-SERIES 15050-SERIES 15070-SERIES



# PUREFLO® SANITARY PUMPS FEATURES

Body: Type 316 Stainless Steel

Impeller: Jabsco Neoprene Compound

Shaft: Type 316 Stainless Steel

Seal: Sanitary Mechanical Carbon Face
Bearings: Roller and Ball Bearings

Ports: 1-1/2" or 2" Acme Sanitary Threads with

Bevel Seat or Clamp Type

Weight: 15010-Series 9 lbs (approx.)

15030-Series 15 lbs (approx.) 15050-Series 21 lbs (approx.) 15070-Series 39 lbs (approx.)

#### VARIATIONS AVAILABLE

VARIATION	10 GPM	25 GPM	50 GPM	100 GPM
Port Size	11/2"	11/2"	2"	2"
Standard Neoprene Impeller and Acme Ports	15010-0665	15030-0665	15050-0665	15070-0665
Standard Neoprene Impeller and Clamp Ports	15010-0765	15030-0765	15050-0765	15070-0765
High Pressure Neoprene Impeller and Acme Ports	15010-0675	15030-0675	15050-0675	
High Pressure Neoprene Impeller and Clamp Ports	15010-0775	15030-0775	15050-0775	

#### APPLICATIONS AND OPERATING INSTRUCTIONS

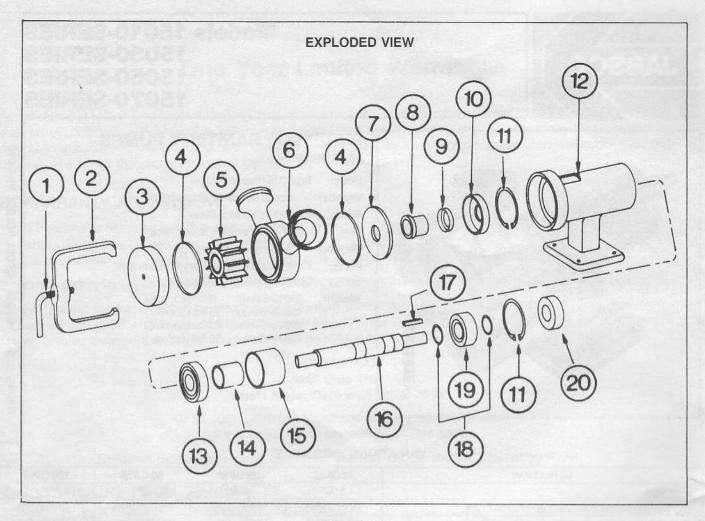
Some of the many diverse products handled by Pureflo pumps include: DAIRY PROCESSING Buttermilk, Condensed Milk, Cream, Milk Whey, Eggs and other assorted dairy products. FOOD PROCESSING Sugar Liquors, Brines, Catsup, Chocolate, Glaze, Gelatin, Honey, Jams, Jellies, Mayonnaise, Molasses, Mustard, Pickle Relish, Vinegar, Water, Yeast Slurries. BEVERAGE PROCESSING Alcohols, Beers, Brewery Slop, Cider, Distillery Wort, Extracts, Flavors, Juice, Mash, Soft Drinks, Wines. MISCELLANEOUS Chemicals, Cosmetics, Pharmaceuticals.

- INSTALLATION Pump may be mounted in any position. The
  rotation of the pump shaft determines the locations of the
  pump's intake and discharge ports; refer to dimensional
  drawing. Pump is normally assembled at factory for clockwise
  rotation (looking at end cover). If counter clockwise rotation is
  desired, follow steps 1, 2 & 3 of disassembly and steps 3, 4 &
  5 of assembly instructions to change direction of impeller blade
  deflection under cam. Before use, rotate pump shaft in direction
  of operating rotation.
- 2. DRIVE Belt or Direct.
  - BELT Proper belt tension will insure optimum performance, bearing and belt life.
  - DIRECT Clearance should be left between drive shaft and pump shaft when installing coupling. Mount and align pump and drive shaft before tightening set screw. Flexible coupling usually desirable.

NOTE: Capacitor type motor is required.

WARNING: A SAFETY GUARD MUST BE INSTALLED WITH EITHER TYPE DRIVE.

- SPEEDS 100 RPM to maximum shown in performance table.
   Speed determines pump capacity. For maximum pump life, operate at lowest possible speeds. Refer to the viscosity/speed chart for maximum allowable speeds.
- 4. SELF-PRIMING Primes at low or high speeds. For vertical dry suction lift of 10 feet, a minimum of 1,000 RPM is required. Pump can produce up to 20 feet of lift when wetted. INTAKE LINES MUST BE AIRTIGHT to prevent product foaming and to assure self-priming. Self-priming is reduced when pumping higher viscosity fluids. Consult factory.
- RUNNING DRY The impeller is lubricated by the product being pumped. DO NOT RUN DRY for more than 30 seconds. Lack of liquid may damage the impeller.
- 6. TEMPERATURES 40°F 150°F. Contact factory for impeller recommendation on applications outside this range.
- 7. PRESSURES Consult performance chart. When operating pressures approach the upper recommended ranges for standard pressure impellers, it is ordinarily desirable to use a high pressure model to increase impeller life. Line losses due to product viscosity must be considered when calculating operating pressures.



#### PART LIST

### MODEL 15030-SERIES

PART#

9551-0010 12698-0000 10515-0001 92000-0310 QTY.

2

	MODEL 15010-SERI		MODE		
KEY	DESCRIPTION	PART#	QTY.	KEY	DESCRIPTION
1	Clamp Screw	10408-0010	1	1	Clamp Screw
2	Clamp	12695-0000	1	2	Clamp
3	End Cover	10435-0001	1	3	End Cover
4	*O-Ring	92000-0290	2	4	*O-Ring
5	*Impeller (Standard Neoprene)	7614-0005	1	5	*Impeller (Standard Ne
	(High Pressure Neoprene)	8980-0005	1		(High Pressure
6	Body (Acme Thread)	15014-0061	1	6	Body (Acme Thread)
	(Clamp Type)	15014-0071	1		(Clamp Type)
+	O-Ring (Clamp Port)	92000-0710	2	1	O-Ring (Clamp Port)
7	Wearplate	10396-0010	1	7	Wearplate
8	*Seal Assembly	7749-0000	1	8	*Seal Assembly
9	Seal Collar	5307-0000	- 1	9	Seal Collar
+	Allen Wrench	92351-0020	1	t	Allen Wrench
10	Seal (Roller Bearing)	92701-0110	1	10	Seal (Roller Bearing)
11	Retaining Ring (Housing)	91700-2920	2	11	Retaining Ring (Hous
12	Bearing Housing	12234-0000	1	12	Bearing Housing
13	Bearing (Roller)	92601-0350	1	13	Bearing (Roller)
14	Bearing Spacer (Shaft)	10693-0010	1	14	Bearing Spacer (Shat
15	Bearing Spacer (Housing)	10449-0010	1	15	Bearing Spacer (House
16	Shaft	10447-0001	1	16	Shaft
17	Key	9215-0000	1	17	Key
18	Retaining Ring (Shaft)	91700-2470	2	18	Retaining Ring (Shaft
19	Bearing (Ball)	92601-0330	1	19	Bearing (Ball)
20	Seal (Ball Bearing)	92701-0110	1	20	Seal (Ball Bearing)
+	Service Kit (Standard Neoprene)	90072-0005		+	Service Kit (Standard
	(High Pressure Neoprene)	90073-0005			(High Press

4	U-raing	92000-0310	-
5	*Impeller (Standard Neoprene)	8981-0005	1
	(High Pressure Neoprene)	8840-0005	1
6	Body (Acme Thread)	15034-0061	1
	(Clamp Type)	15034-0071	1
†	O-Ring (Clamp Port)	92000-0710	2
7	Wearplate	10046-0010	1
8	*Seal Assembly	8728-0000	1
9	Seal Collar	8727-0000	1
†	Allen Wrench	92351-0020	1
10	Seal (Roller Bearing)	92701-0170	1
11	Retaining Ring (Housing)	91701-0260	2
12	Bearing Housing	12658-0000	1
13	Bearing (Roller)	92601-0340	- 1
14	Bearing Spacer (Shaft)	10428-0010	1
15	Bearing Spacer (Housing)	10525-0010	1
16	Shaft	10517-0001	1
17	Key	9215-0000	1
18	Retaining Ring (Shaft)	91700-0980	2
19	Bearing (Ball)	92601-0300	1
20	Seal (Ball Bearing)	92701-0170	1
+	Service Kit (Standard Neoprene)	90089-0005	
	(High Pressure Neoprene)	90090-0005	

<sup>\*</sup> Parts supplied in Service Kit.

<sup>†</sup> Not Shown

Parts supplied in Service Kit.

#### **HEAD CAPACITY TABLE**

		av Janera	HEAD CAL		Paleda reent 2000a						
	TOTAL	LHEAD	500	RPM	1160	RPM	1750	RPM			
	PSI	Feet of Water	GPM	H.P.	GPM	H.P.	GPM	H.P.			
15010-SERIES	4.3	10	3.5	1/6	7.5	1/4	11.3	1/2			
Standard Pressure	8.7	20	3.1	1/6	6.7	1/4	10.2	1/2			
	13.0	30	2.6	1/6	5.5	1/3	9.0	1/2			
	21.6	50					5.2	1/2			
15010-SERIES	8.7	20	2.9	1/6	6.9	1/3	10.4	1/2			
15010-SERIES High Pressure	17.3	40	2.7	1/6	5.2	1/3	8.7	1/2			
	26.0	60	2.3	1/6	3.0	1/2	6.2	1/2			
	34.6	80					4.0	3/4			
15030-SERIES	4.3	10	8.0	1/6	16.5	1/3	25.5	3/4			
Standard Pressure	8.7	20	7.5	1/4	16.0	1/3	24.6	3/4			
	17.3	40	5.4	1/4	14.3	1/3	23.0	3/4			
7   \$316 for	26.0	60			12.8	1/2	21.0	1			
	34.6	80					18.0	1			
15030-SERIES	17.3	40	7.0	1/3	15.0	3/4	22.8	1			
High Pressure	26.0	60	6.3	1/3	13.8	3/4	21.9	1			
	34.6	80	6.0	1/2	12.4	1	20.8	1			
	51.5	120	4.5	1/2	9.1	1	17.1	1-1/2			
	60.5	140			7.0	1	14.2	1-1/2			
15050-SERIES	4.3	10	15.5	1/2	35.2	3/4	54.0	1-1/2			
15050-SERIES Standard Pressure	8.7	20	15.0	1/2	33.8	3/4	52.8	1-1/2			
	17.3	40	13.5	1/2	29.4	1	50.0	1-1/2			
	26.0	60	11.3	1/2	23.2	1-1/2	46.0	2			
	34.6	80					41.4	3			
15050-SERIES	8.7	20	16.5	3/4	37.4	1-1/2	54.8	3			
High Pressure	21.6	50	15.5	3/4	36.8	2	53.7	3			
	34.6	80	14.0	3/4	35.0	2	51.8	5			
	47.6	110	12.5	1	32.7	2	48.5	5			
	60.5	140			28.5	2	43.2	5			
15070-SERIES	8.7	20	25.5	3/4	73.0	2	102.0	3			
Standard Pressure	17.3	40	20.0	1	65.0	3	91.0	5			
	21.6	50	17.0	1	61.0	3	84.0	5			
	26.0	60		I Sha A-III	57.0	3	77.0	5			
	30.3	70			100000000000000000000000000000000000000		67.0	5			
15070-SERIES	8.7	20	30.0	1	70.0	2					
High Pressure	17.3	40	26.0	1	66.0	3					
	26.0	60	23.0	1	62.0	3					
	34.6	80	18.0	1-1/2	56.0	3					
	43.3	100		116.01	50.0	5					

Table shows approximate head-flow for new pump handling water. **Use capacitor start motor.** For operation at speeds not shown, contact factory for application engineering assistance. Progressively longer life may be expected as operating speeds and pressures are reduced. **Table shows** approximate head-flow for new pump in U.S. gallons.

#### PUMP SPEED SELECTION ACCORDING TO PRODUCT VISCOSITY

Viscosity S.S.U.	Pump Speed (Max. RPM)						
50	1750	700	1680	4,000	1400	15,000*	787
100	1750	800	1645	5,000	1312	20,000*	700
200	1750	900	1610	6,000	1225	30,000*	612
300	1750	1,000	1575	7,000	1138	40,000*	525
400	1750	1,500	1540	8,000	1050	50,000*	437
500	1750	2,000	1505	9,000	962	75,000*	298
600	1715	3,000	1450	10,000	875	100,000*	175

<sup>\*</sup> Use High Pressure Impeller

KEY	DESCRIPTION	PART#	QTY
1	Clamp Screw	10697-0010	1
2	Clamp	12996-0000	1
3	End Cover	10299-0001	1
4	*O-Ring	92000-0040	2
5	*Impeller (Standard Neoprene)	14346-0005	1
	(High Pressure Neoprene)	8983-0005	1
6	Body (Acme Thread)	15054-0061	1
	(Clamp Type)	15054-0071	1
†	O-Ring (Clamp Port)	92000-0730	2
7	Wearplate	10276-0010	1
8	*Seal Assembly	9023-0000	1
9	Seal Collar	7866-0000	1
†	Allen Wrench	92351-0050	1
10	Seal (Roller Bearing)	92702-0780	1
11	Retaining Ring (Housing)	91701-2830	2
12	Bearing Housing	12944-0000	1
13	Bearing (Roller)	18753-0007	1
14	Bearing Spacer (Shaft)	10539-0010	1
15	Bearing Spacer (Housing)	10291-0010	1
16	Shaft	10277-0001	1
17	Key	9214-0000	1
18	Retaining Ring (Shaft)	91700-1180	2
19	Bearing (Ball)	18753-0007	1
20	Seal (Ball Bearing)	92702-0780	1
+	Service Kit (Standard Neoprene)	90093-0005	
	(High Pressure Neoprene)	90094-0005	

KEY	DESCRIPTION	PART#	QTY.	
1	Clamp Screw	18024-0000	1	
2	Clamp	12927-0000	1	
3	End Cover	10345-0001	1	
4	*O-Ring	92000-0030	2	
5	*Impeller (Standard Neoprene)	8963-0005	1	
	(High Pressure Neoprene)	8600-0005	1	
6	Body (Acme Thread)	15074-0061	1	
	(Clamp Type)	15074-0071	1	
†	O-Ring (Clamp Port)	92000-0730	2	
7	Wearplate	10346-0010	1	
8	*Seal Assembly	14052-0000	1	
9	Seal Collar	8248-0000	1	
†	*Allen Wrench	92351-0050	1	
10	Seal (Roller Bearing)	92700-0870	1	
11	Retaining Ring (Housing)	91701-4370	2	
12	Bearing Housing	14028-0000	1	
13	Bearing (Roller)	92601-0240	1	
14	Bearing Spacer (Shaft)	10378-0010	1	
15	Bearing Spacer (Housing)	10351-0010	1	
16	Shaft	10347-0001	1	
17	Key	8448-0000	1	
18	Retaining Ring	91700-1370	2	
19	Bearing (Ball)	92601-0230	1	
20	Seal (Ball Bearing)	92700-0870	1	
†	Service Kit (Standard Neoprene)	90080-0035		

<sup>\*</sup> Parts supplied in Service Kit.

† Not Shown

† Not Shown

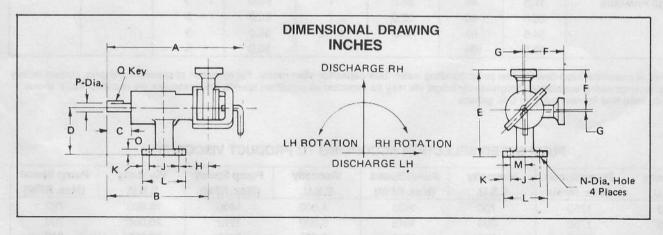
NOTE: Serial number of pump, which is found on the label, must be specified when ordering parts.

Explanation of Serial Numbers:

1. Effective March 30, 1970 the serial number consists of Month and Year of manufacture, e.g. 570 = May 1970.

2. Prior to March, 1970

The first part of the serial number denotes the capacity of the pump. For example, serial number 100-3021 was used on a 100 GPM pump. The first number in the second series of digits denotes the year the pump was manufactured: For example, serial number 100-3021 reveals the pump was produced in 1963. The use of this digit is VERY IMPORTANT. A pump bearing the serial number 100-401 is a "later" number than serial number 100-3021. Pumps with serial number containing letter "A" are of a more recent design, except as noted in 1 above.



MODEL	PORT	I.D.	Α	В	С	D	E	F	G	Н	J	K	L	M	N	0	Р	Q
15010-Series	1½ Acme	11/16	103/8	79/16	13/4	31/2	67/16	215/16	1/8	21/4	21/4	1/2	31/4	11/8	13/32	3/8	5/8	3/16 X 3/16 X 1 1/8
150 10-Series	11/2 Clamp	11/16	103/8	79/16	13/4	31/2	61/4	23/4	1/8	21/4	21/4	1/2	31/4	11/8	13/32	3/8	5/8	3/16 X 3/16 X 1 1/8
15030-Series	11/2 Acme	1	125/8	95/16	211/16	41/2	711/16	33/16	1/8	27/16	25/8	1/2	35/8	15/16	13/32	13/32	7/8	3/16 X 3/16 X 1 1/8
15030-Selles	11/2 Clamp	1	125/8	95/16	211/16	41/2	71/4	23/4	1/8	27/16	25/8	1/2	35/8	15/16	13/32	13/32	7/8	3/16 x 3/16 x 1 1/8
15050-Series	2 Acme	11/4	133/4	10	27/8	41/2	81/4	33/4	1/16	3	25/8	1/2	35/8	15/16	13/32	7/16	11/8	1/4 × 1/4 × 1 1/2
15050-Selles	2 Clamp	11/4	133/4	10	27/8	41/2	77/8	3%	1/16	3	25/8	1/2	35/8	15/16	13/32	7/16	11/8	1/4 x 1/4 x 1 1/2
15070-Series	2 Acme	17/8	181/4	131/16	41/4	41/2	85/8	41/8	3/16	31/2	3	1/2	4	11/2	17/32	1/2	13/8	5/16 x 5/16 x 2
15070-Series	2 Clamp	17/8	181/4	131/16	41/4	41/2	81/4	33/4	3/16	31/2	3	1/2	4	11/2	17/32	1/2	13/8	5/16 X 5/16 X 2

Parts supplied in Service Kit.

#### SERVICE INSTRUCTIONS – ALL MODEL PUMPS ASSEMBLY AND DISASSEMBLY OF PUMP HEAD

Before using pump it should be disassembled and cleaned to remove any dust and dirt resulting from storage or shipping. Wash parts in standard cleaning solutions approved for handling stainless steel. Thoroughly rinse before reassembly. DO NOT USE IODINE BASED SANITIZERS as the iodine attacks the elastomer materials used in the impeller.

All parts have been expertly machined and polished. HANDLE WITH CARE. DO NOT DROP OR MISHANDLE.

#### Disassembly:

- 1. Remove end cover clamp, end cover and O-ring.
- 2. Grasp pump ports and slide pump body and impeller from shaft.
- 3. Remove O-ring and then push the impeller from the pump body.
- 4. Remove wearplate from pump.
- Slide seal assembly off the shaft. Do not damage the carbon seal face in handling. Do not loosen or remove seal collar, except as noted below.

#### Assembly:

- 1. Slide seal assembly onto shaft (carbon face toward pump head).
- Replace wearplate. BE SURE THAT FLAT SIDE IS TOWARD PUMP HEAD AND THE SIDE WITH THE RAISED BOSS IS TOWARD CARBON FACE OF SEAL ASSEMBLY.

- Lubricate bore of pump body with Orange Solid Grease or suitable substitute and then replace impeller into pump body by twisting and pushing at same time.
- Replace two O-rings on either side of body and install assembly on shaft. (Impeller blades bent under cam should point in opposite direction to operational rotation.)
- Position end cover and then replace end cover clamp. CLAMP SHOULD BE HAND TIGHTENED. Do not use wrench or hammer.

NOTE: The seal collar is set at the factory to provide proper seal compression and should not require further adjustment.

If adjustment is required: With pump head disassembled; loosen two set screws on seal collar. Replace seal assembly on shaft and then install wearplate in REVERSE POSITION with flat side toward seal. While holding wearplate in position against adaptor, push seal assembly and seal collar against wearplate and tighten the two set screws in seal collar. Remove wearplate and replace to correct position with raised boss against carbon face of seal before assembling pump. DO NOT ASSEMBLE PUMP WITH WEARPLATE IN REVERSE POSITION.

## DETAILED DISASSEMBLY AND ASSEMBLY OF BEARING HOUSING

#### DISASSEMBLY

- 1. Loosen set screws in seal collar. Remove seal collar from shaft.
- Pry outer bearing seal from rear of bearing housing by inserting a screwdriver blade between O.D. of seal and housing bore. Remove housing retaining ring using retaining ring pliers.
- Push on impeller drive end of shaft to remove shaft and bearing assembly. Outer race of front bearing and housing bearing will remain in housing.
- 4. Remove housing bearing spacer from housing
- Pry or tap out front bearing seal from housing bore and remove front retaining ring with retaining ring pliers.
- 6. Push outer race of front bearing from housing.
- Remove retaining rings from shaft with retaining ring pliers. Use an arbor press to remove bearings from shaft. Roller bearing presses off toward impeller and ball bearing presses off toward drive end of shaft. Remove bearing spacer.

#### **ASSEMBLY**

- Push outer race of roller bearing into housing from impeller end. Install front housing retaining ring. Push outer race up against housing retaining ring.
- 2. Press front bearing seal into housing against front housing retaining ring (spring of lip seal faces outward).

- Install large diameter bearing spacer into housing against outer race of bearing.
- 4. To replace bearing shaft:
  - (a) Install front shaft retaining ring.
  - (b) Press ball bearing on shaft against retaining ring (drive end of shaft).
  - (c) Install rear shaft retaining ring against ball bearing.
  - (d) Slide bearing spacer on shaft up to front retaining ring.
  - (e) Press roller bearing on shaft from impeller drive end up to spacer.
- Liberally coat bearing race areas of bearings with bearing grease. Do not overpack with grease or overheating will result.
- From rear of housing, insert shaft/bearing assembly roller bearing first into housing taking care not to damage front bearing seal or bearings.
- 7. Install rear bearing seal into housing against retaining ring (with lip seal spring outward).
- 8. Press rear bearing seal into housing against retaining ring (with lip seal spring outward).
- Replace seal collar, position and secure as described in instructions on assembly and disassembly of pump head components.

### One Year Limited Warranty

**A. WARRANTY:** ITT warrants that at the time of shipment, the products manufactured by ITT and sold hereunder shall be in conformity with applicable written specifications and descriptions referred to or set forth herein, free from defects in material and workmanship, merchantable, and suitable for a particular purpose, provided such is implied by State law under the circumstances of this sale.

#### **B. WARRANTY ADJUSTMENT:**

- 1. ITT agrees to repair or furnish a replacement for, but not to remove or install, any product or component thereof which, within one (1) year from date of purchase, shall upon test and examination by ITT prove defective within the above warranty. Receipt verifying purchase date is required to obtain adjustment.
- 2. Buyer shall notify ITT of any defect within this warranty no later than ninety (90) days after the defect is discovered.
- 3. No product will be accepted for return or replacement without the prior written authorization of ITT. Upon such authorization, and in accordance with instructions from ITT, the product will be returned to ITT, shipping charges prepaid by Buyer. Products returned to ITT will be addressed as follows:

ITT JABSCO 1485 Dale Way Costa Mesa, California 92626-3998

Or to such alternate locations as may be designated on the product, its container, or this sheet.

Repair or replacement made under this warranty will be shipped prepaid to Buyer.

#### C. EXCLUSIONS FROM WARRANTY:

- 1. The foregoing warranty is limited solely as set forth herein and applies only for the period designated above.
- 2. ITT SHALL NOT BE LIABLE FOR ANY LOSS, DAMAGE, SPECIAL OR CONSEQUENTIAL DAMAGE OF ANY KIND, WHETHER BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, OR STRICT LIABILITY ARISING IN CONNECTION WITH THE SALE, USE, OR REPAIR OF THE PRODUCT.
- 3. THE MAXIMUM LIABILITY OF ITT IN CONNECTION WITH THIS WARRANTY SHALL NOT IN ANY CASE EXCEED THE CONTRACT PRICE FOR THE PRODUCT CLAIMED TO BE DEFECTIVE OR UNSUITABLE.
- 4. This warranty does not extend to any product manufactured by ITT which has been subjected to misuse, neglect, accident, improper installation, or use in violation of instructions furnished by ITT.
- 5. This warranty does not extend to or apply to any unit which has been repaired or altered at any place other than ITT's factory, or by persons not expressly approved by ITT, nor to any unit the serial number, model number, or identification of which has been removed, defaced or changed.
- 6. Components manufactured by any supplier other than ITT shall bear only that warranty made by the manufacturer of that product.
- 7. This warranty applies to products defined as "consumer products" by the Consumer Product Warranties Act as from time to time amended.

**STANDARD WARRANTY:** If the products manufactured and sold hereunder are not Consumer Products, the warranty extended to Buyer shall be as set forth in subparagraphs (a), (b), and (c), EXCEPT THAT ALL EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY OR SUITABILITY FOR ANY PARTICULAR PURPOSE ARE EXCLUDED.

ITT JABSCO
A Unit of ITT Corporation

Rev. 7/89

1485 Dale Way, P.O. Box 2158 Costa Mesa, California 92628-2158 Telephone: (714) 545-8251