

## ASTRO 2 CIRCULATORS

### ASTRO 2 3-Speed Circulators (except Astro 286):

#### IRON BODY CONSTRUCTION (Includes Check Valve)

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Astro 210CI	110223-326	Flanged	\$ 339.00	11
Astro 230CI	110223-305	Flanged	\$ 195.00	9
Astro 230CI-R	110223-315	Flanged Rotated	\$ 195.00	9
Astro 250CI	110223-307	Flanged	\$ 218.00	9
Astro 250CI-R	110223-317	Flanged Rotated	\$ 218.00	9
Astro 280CI	110223-320	Flanged	\$ 528.00	11
Astro 280CI 230V	110223-322	Flanged	\$ 528.00	11
Astro 286CI	110223-324	Flanged	\$ 546.00	11
Astro 290CI	110223-328	Flanged	\$ 546.00	14

#### LEAD FREE SWEAT CONNECTION\*

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Astro 225BS 1/2" SWT	110223-303	Sweat - 1/2"	OBS	7
Astro 225BS 3/4" SWT	110223-304	Sweat - 3/4"	OBS	7

#### STAINLESS STEEL BODY CONSTRUCTION\* (Includes Check Valve)

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Astro 210SS	110223-327	Flanged	\$ 643.00	11
Astro 220SSU w/ 1/2" SWT	110223-301	Sweat - 1/2"	\$ 397.00	7
Astro 220SSU w/ 3/4" SWT	110223-302	Sweat - 3/4"	\$ 399.00	7
Astro 220SSU	110223-309	Union	\$ 394.00	7
Astro 225SSU	110223-310	Union	\$ 398.00	7
Astro 230SS	110223-306	Flanged	\$ 383.00	9
Astro 250SS	110223-308	Flanged	\$ 359.00	8
Astro 280SS	110223-321	Flanged	\$ 692.00	11
Astro 280SS 230V	110223-323	Flanged	\$ 657.00	11
Astro 286SS	110223-325	Flanged	\$ 629.00	11
Astro 290SS	110223-329	Flanged	\$ 653.00	11

#### COMPANION FLANGE KITS (contains two (2) flanges, hardware & gaskets)

#### CAST IRON

Model	Part No.	Size	List Price	Wt. (lbs.)
ASTRO 210/230/250/280/286CI/CI-R	816013-111	0.75"	\$ 28.00	2
ASTRO 210/230/250/280/286CI/CI-R	816012-111	1"	\$ 28.00	2
ASTRO 210/230/250/280/286CI/CI-R	816011-111	1.25"	\$ 28.00	2
ASTRO 210/230/250/280/286CI/CI-R	816009-111	1.5"	\$ 28.00	3
ASTRO 290CI	806073-111	1"	\$ 49.00	2
ASTRO 290CI	804300-111	1.25"	\$ 49.00	2
ASTRO 290CI	804301-111	1.5"	\$ 49.00	3

## ASTRO 2 CIRCULATORS

**LEAD FREE BRONZE\***

Model	Part No.	Size	List Price	Wt. (lbs.)
ASTRO 210/230/250/280/286SS	816013-841	0.75"	\$ 89.00	2
ASTRO 210/230/250/280/286SS	816012-841	1"	\$ 89.00	2
ASTRO 210/230/250/280/286SS	816011-841	1.25"	\$ 101.00	2
ASTRO 210/230/250/280/286SS	816009-841	1.5"	\$ 113.00	3
ASTRO 290SS	806073-841	1"	\$ 141.00	2
ASTRO 290SS	804300-841	1.25"	\$ 141.00	2
ASTRO 290SS	804301-841	1.5"	\$ 141.00	3

**LEAD FREE UNION FITTING SETS\* (contains two (2) half unions & gaskets)**

Model	Part No.	Connection	List Price	Wt. (lbs.)
ASTRO 220SSU/225SSU	810120-320	1.25" NPSM x 0.5" Sweat Lead Free	\$ 80.00	2
ASTRO 220SSU/225SSU	810120-322	1.25" NPSM x 0.75" Sweat Lead Free	\$ 80.00	2
ASTRO 220SSU/225SSU	810120-324	1.25" NPSM x 0.75" FNPT Lead Free	\$ 87.00	2

**UNION FITTING SETS (contains two (2) half unions & gaskets)**

Model	Part No.	Connection	List Price	Wt. (lbs.)
ASTRO 220SSU/225SSU	810120-220	1.25" NPSM x 0.5" Sweat	\$ 59.00	2
ASTRO 220SSU/225SSU	810120-222	1.25" NPSM x 0.75" Sweat	\$ 59.00	2
ASTRO 220SSU/225SSU	810120-224	1.25" NPSM x 0.75" FNPT	\$ 68.00	2

\* Complies with Section 116875 of the California Health and Safety Code and Vermont Act 193  
 (Lead content of all wetted surface is 0.25% or less)

## ASTRO 2 DOMESTIC HOT WATER RE-CIRCULATION SYSTEMS

### ASTRO Express 2 System (for 2 pipe installation)

Model No.	Part No.	Description	List Price	Lead time	Wt. ea. lbs.
Astro Express 2 System	110223B-401	Astro 2 SSU w/timer & 6 ft. Line cord, union hardware kit*, Astro Express LF Valve	\$ 689.00	1 week	10
Astro Express LF Valve	561100LF-001	Extra valve for long branches off main distribution (optional)	\$ 165.00	1 week	0.5

\* Includes two gaskets, union nuts, 3/4" FPT tailpieces, and one 3/4" MPT tailpiece. Hoses for valve connection not included.

### ASTRO 2 HWR Systems (for dedicated return - 3 pipe installation)

	Model No.	Part No.	Connection/Controls	List Price	Lead time	Wt. ea. lbs.
Timer Aquastat Line Cord	ASTRO 220SSU050S-TA	110223B-140	Astro 220SSU Stainless steel 1/2" sweat w/ timer, aquastat & 6 ft. line corc	\$ 598.00	1 week	7
	ASTRO 220SSU075S-TA	110223B-141	Astro 220SSU Stainless steel 3/4" sweat w/ timer, aquastat & 6 ft. line corc	\$ 603.00	1 week	7
	ASTRO 225BS050S-TA	110223B-142	Astro 225BS Lead free bronze 1/2" sweat w/ timer, aquastat & 6 ft. line corc	OBS		
	ASTRO 225BS075S-TA	110223B-143	Astro 225BS Lead free bronze 3/4" sweat w/ timer, aquastat & 6 ft. line corc	OBS		
	ASTRO 220SSU-TA	110223B-144	Astro 220SSU 1 1/4" NPSM Union w/ timer, aquastat & 6 ft. line corc	\$ 594.00	1 week	7
	ASTRO 225SSU-TA	110223B-145	Astro 225SSU 1 1/4" NPSM Union w/ timer, aquastat & 6 ft. line corc	\$ 608.00	1 week	7
	ASTRO 230SS-TA	110223B-148	Astro 230SS circulator w/ timer, aquastat & 6 ft. line corc	\$ 619.00	3 weeks	9
	ASTRO 250SS-TA	110223B-149	Astro 250SS circulator w/ timer, aquastat & 6 ft. line corc	\$ 645.00	3 weeks	9
Timer Line Cord	ASTRO 220SSU050S-T	110223B-240	Astro 220SSU Stainless steel 1/2" sweat w/ timer & 6 ft. line corc	\$ 579.00	1 week	7
	ASTRO 220SSU075S-T	110223B-241	Astro 220SSU Stainless steel 3/4" sweat w/ timer & 6 ft. line corc	\$ 581.00	1 week	7
	ASTRO 225BS050S-T	110223B-242	Astro 225BS Lead free bronze 1/2" sweat w/ timer & 6 ft. line corc	OBS		
	ASTRO 225BS075S-T	110223B-243	Astro 225BS Lead free bronze 3/4" sweat w/ timer & 6 ft. line corc	OBS		
	ASTRO 220SSU-T	110223B-244	Astro 220SSU 1 1/4" NPSM Union w/ timer & 6 ft. line cord	\$ 575.00	1 week	7
	ASTRO 225SSU-T	110223B-245	Astro 225SSU 1 1/4" NPSM Union w/ timer & 6 ft. line cord	\$ 588.00	1 week	7
	ASTRO 230SS-T	110223B-248	Astro 230SS circulator w/ timer & 6 ft. line corc	\$ 603.00	3 weeks	9
	ASTRO 250SS-T	110223B-249	Astro 250SS circulator w/ timer & 6 ft. line corc	\$ 625.00	3 weeks	9
Line Cord	ASTRO 220SSU050S-LC	110223-340	Astro 220SSU Stainless steel 1/2" sweat w/ 6 ft. line corc	\$ 440.00	1 week	6.5
	ASTRO 220SSU075S-LC	110223-341	Astro 220SSU Stainless steel 3/4" sweat w/ 6 ft. line corc	\$ 442.00	1 week	6.5
	ASTRO 225BS050S-LC	110223-342	Astro 225BS Lead free bronze 1/2" sweat w/ 6 ft. line corc	OBS		
	ASTRO 225BS075S-LC	110223-343	Astro 225BS Lead free bronze 3/4" sweat w/ 6 ft. line corc	OBS		
	ASTRO 220SSU-LC	110223-344	Astro 220SSU 1 1/4" NPSM Union w/ 6 ft. line cord	\$ 437.00	1 week	7.5
	ASTRO 225SSU-LC	110223-345	Astro 225SSU 1 1/4" NPSM Union w/ 6 ft. line cord	\$ 446.00	1 week	7.5
	ASTRO 230SS-LC	110223-348	Astro 230SS circulator w/ 6 ft. line cord	\$ 464.00	3 weeks	8.5
	ASTRO 250SS-LC	110223-349	Astro 250SS circulator w/ 6 ft. line cord	\$ 491.00	3 weeks	8.5

## COMPASS CIRCULATORS

### Compass R - Dry Rotor Design Envelope Variable Speed Circulators

#### DUCTILE IRON BODY CONSTRUCTION

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Compass R2075DI-8.5X2 (115V)	119181-113	Flanged	\$ 2,589.00	17.8
Compass R2075DI-8.5X2 (230V)	119182-113	Flanged	\$ 2,589.00	17.8

#### STAINLESS STEEL BODY CONSTRUCTION

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Compass R2075SS-8.5X2 (115V)	119181-173	Flanged	\$ 4,186.00	17.8
Compass R2075SS-8.5X2 (230V)	119182-173	Flanged	\$ 4,186.00	17.8

### Compass H - Design Envelop Variable Speed Circulators

#### IRON BODY CONSTRUCTION (Includes Check Valve)

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Compass H20-20 CI (0-10v)	180203-686	Flanged	\$ 366.00	11

#### STAINLESS STEEL BODY CONSTRUCTION\* (Includes Check Valve)

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Compass H20-20 SS (0-10v)	180203-687	Flanged	\$ 580.00	11
Compass H20-20 SSU (0-10v)	180203-684	Flanged	\$ 580.00	11

#### STAINLESS STEEL BODY CONSTRUCTION\* (Includes Check Valve)

Model No.	Part No.	Connection	List Price	Wt.ea.lbs.
Compass 20-20 SSU	180203-604	Flanged	\$ -	8

### COMPASS R COMPANION FLANGE KITS (contains two (2) flanges, hardware & gaskets)

#### CAST IRON

Model	Part No.	Size	List Price	Wt. (lbs.)
Compass R2075DI-8.5X2	816013-212	0.75"	\$ 29.00	2
Compass R2075DI-8.5X2	816012-212	1"	\$ 28.00	2
Compass R2075DI-8.5X2	816011-212	1.25"	\$ 28.00	2
Compass R2075DI-8.5X2	816009-212	1.5"	\$ 28.00	3

#### LEAD FREE BRONZE\*

Model	Part No.	Size	List Price	Wt. (lbs.)
Compass R2075SS-8.5X2	816013-942	0.75"	\$ 84.00	2
Compass R2075SS-8.5X2	816012-942	1"	\$ 84.00	2
Compass R2075SS-8.5X2	816011-942	1.25"	\$ 96.00	2
Compass R2075SS-8.5X2	816009-942	1.5"	\$ 107.00	3

### COMPASS H COMPANION FLANGE KITS (contains two (2) flanges, hardware & gaskets)

#### CAST IRON

Model	Part No.	Size	List Price	Wt. (lbs.)
Compass H20-20 CI	816013-111	0.75"	\$ 28.00	2
Compass H20-20 CI	816012-111	1"	\$ 28.00	2
Compass H20-20 CI	816011-111	1.25"	\$ 28.00	2
Compass H20-20 CI	816009-111	1.5"	\$ 28.00	3

#### BRONZE

Model	Part No.	Size	List Price	Wt. (lbs.)
Compass H20-20 SS	816013-841	0.75"	\$ 89.00	2
Compass H20-20 SS	816012-841	1"	\$ 89.00	2
Compass H20-20 SS	816011-841	1.25"	\$ 101.00	2
Compass H20-20 SS	816009-841	1.5"	\$ 113.00	3

#### LEAD FREE UNION FITTING SETS\* (contains two (2) half unions & gaskets)

Model	Part No.	Connection	List Price	Wt. (lbs.)
Compass H20-20 SSU	810120-320	1.25" NPSM x 0.5" Sweat Lead Free	\$ 80.00	2
Compass H20-20 SSU	810120-322	1.25" NPSM x 0.75" Sweat Lead Free	\$ 80.00	2
Compass H20-20 SSU	810120-324	1.25" NPSM x 0.75" FNPT Lead Free	\$ 87.00	2

\* Complies with Section 116875 of the California Health and Safety Code and Vermont Act 193  
 (Lead content of all wetted surface is 0.25% or less)

## E SERIES CIRCULATORS

### CAST IRON BODY CONSTRUCTION

Model	Part No.		List Price	Wt (lbs)
	120V Motor	240V Motor		
E7.2	182202-643	182202-671	\$ 579.00	14.0
E8.2	182202-657	182202-645	\$ 623.00	14.0
E9.2	182202-659	182202-647	\$ 623.00	14.0
E10.2	182202-649	182202-661	\$ 636.00	17.0
E11.2	182202-651	182202-663	\$ 636.00	17.0
E12.2	182212-841	182212-800	\$ 1,120.00	20.0
E13.2	182202-655	182202-667	\$ 789.00	17.0
E14.2	182212-843	182212-802	\$ 1,161.00	20.0
E15.2	182212-661	182212-620	\$ 1,526.00	23.0
E16.2	182202-653	182202-665	\$ 1,271.00	21.0
E17.2	182212-663	182212-622	\$ 1,347.00	23.0
E19.2	182212-649	182212-608	\$ 1,298.00	23.0
E21.2	182212-665	182212-624	\$ 1,298.00	23.0
E22.2	182212-667	182212-626	\$ 1,679.00	23.0
E23.2	182212-651	182212-610	\$ 2,109.00	23.0
E24.2	182212-653	182212-612	\$ 1,651.00	23.0
E28.2	182212-655	182212-614	\$ 1,534.00	29.0
E29.2	182212-657	182212-616	\$ 1,842.00	29.0
E30.2	182212-645	182212-604	\$ 1,298.00	19.0
E30.2 - 3"	182212-671	182212-630	\$ 1,317.00	29.0
E33.2	182212-669	182212-628	\$ 1,383.00	19.0
E33.2 - 3"	182212-675	182212-634	\$ 1,404.00	29.0

x fluid temp = 150°F (65°C)

### BRONZE BODY (Lead Free) CONSTRUCTION

Model	Part No.		List Price	Wt (lbs)
	120V Motor	240V Motor		
E7.2B	182202-644	182202-672	\$ 917.00	15.0
E8.2B	182202-658	182202-646	\$ 975.00	15.0
E9.2B	182202-660	182202-648	\$ 975.00	15.0
E10.2B	182202-650	182202-662	\$ 1,001.00	17.0
E11.2B	182202-652	182202-664	\$ 1,001.00	17.0
E12.2B	182212-842	182212-801	\$ 1,449.00	20.0
E13.2B	182202-656	182202-668	\$ 1,176.00	16.0
E14.2B	182212-844	182212-803	\$ 1,515.00	20.0
E15.2B	182212-662	182212-621	\$ 2,874.00	23.0
E16.2B	182202-654	182202-666	\$ 2,220.00	23.0
E17.2B	182212-664	182212-623	\$ 2,353.00	23.0
E19.2B	182212-650	182212-609	\$ 2,198.00	23.0
E21.2B	182212-666	182212-625	\$ 2,250.00	23.0
E22.2B	182212-668	182212-627	\$ 2,927.00	23.0
E23.2B	182212-652	182212-611	\$ 4,388.00	23.0
E24.2B	182212-654	182212-613	\$ 2,927.00	23.0
E28.2B	182212-656	182212-615	\$ 2,948.00	32.0
E29.2B	182212-658	182212-617	\$ 3,968.00	32.0
E30.2B	182212-646	182212-605	\$ 2,450.00	28.0
E30.2B - 3"	182212-672	182212-631	\$ 2,500.00	32.0
E33.2B	182212-670	182212-629	\$ 2,564.00	28.0
E33.2B - 3"	182212-676	182212-635	\$ 2,615.00	32.0

### Flange Kit Model and Part Number

Flange kits*	Cast Iron				Lead Free Bronze**			
	E7 E8 E9 E12 E14	E10 E11 E13	E16 E30-2" E33-2"	E28 E29 E30-3"	E7 E8 E9 E12 E14 E15 E17	E10 E11 E13	E16 E30-2" E33-2"	E28 E29 E30-3" E33-3"
	E15 E17	E19 E21 E22 E23 E24		E33-3"	E19 E21 E22 E23 E24			
Flange (¾")	816013-211	N/A	N/A	N/A	816013-941	N/A	N/A	N/A
Flange (1")	816012-211	806073-111	N/A	N/A	816012-941	806073-841	N/A	N/A
Flange (1¼")	816011-211	804300-111	N/A	N/A	816011-941	804300-841	N/A	N/A
Flange (1½")	816009-211	804301-111	N/A	N/A	816009-941	804301-841	N/A	N/A
Flange (2")	N/A	N/A	806074-111	N/A	N/A	N/A	806074-841	N/A
Flange (3")**	N/A	N/A	N/A	805188-111	N/A	N/A	N/A	805188-841

\*(contains two (2) flanges, hardware & gaskets)

Description	Cast Iron			Lead Free Bronze**		
	Part No.	Price	Wt (lbs)	Part No.	Price	Wt (lbs)
Flange kit - (¾")	816013-211	\$ 29.00	2	816013-941	\$ 84.00	2
Flange kit - (1")	816012-211	\$ 28.00	2	816012-941	\$ 84.00	2
Flange kit - (1¼")	816011-211	\$ 28.00	2	816011-941	\$ 96.00	2
Flange kit - (1½")	816009-211	\$ 28.00	3	816009-941	\$ 107.00	3
Flange kit - (1")	806073-111	\$ 49.00	2	806073-841	\$ 141.00	2
Flange kit - (1¼")	804300-111	\$ 49.00	2	804300-841	\$ 141.00	2
Flange kit - (1½")	804301-111	\$ 49.00	3	804301-841	\$ 141.00	3
Flange kit - (2")	806074-111	\$ 138.00	4	806074-841	\$ 547.00	4
Flange kit - (3")	805188-111	\$ 141.00	7	805188-841	\$ 597.00	7

\*\* Complies with Section 116875 of the California Health and Safety Code and Vermont Act 193 (Lead content of all wetted surface is 0.25% or less)

## SERIES S & H - HYDRONIC CIRCULATORS

### SERIES S & H :STANDARD design

Model No.	Motor H.P	Flange Size*	Wt. (lbs)	Construction			
				Bronze Fitted		Lead Free* Bronze	
Item No.	List Price	Item No.	List Price				
S-25	1/12	Less Flgs	21	174031-013	OBS	174031LF-043	OBS
S-35	1/6	2"	42	174033-013	OBS	174033LF-043	OBS
S-45	1/4	Less Flgs See Note 4	50	174036-113	OBS	174036LF-143	OBS
S-46	1/3	3"	56	174037-113	OBS	174037LF-143	OBS
H-32	1/6	Less Flgs	33	174034-013	OBS	174034LF-043	OBS
H-41	1/6	1"	37	174035-113	OBS	174035LF-143	OBS
S-55-1	1/2 1PH	3"	90	106284-132	OBS	106284LF-133	OBS
S-55-3	1/2 3PH	3"	81	106284-136A	OBS	106284LF-137A	OBS
S-57-1	3/4 1PH	3"	90	106285-132	OBS	106285LF-133	OBS
S-57-3	3/4 3PH	3"	84	106285-136A	OBS	106285LF-137A	OBS
S-69-1	1 1PH	3"	143	116531-132	\$ 3,714.00	116532LF-133	\$ 6,678.00
S-69-3	1 3PH	3"	138	116535-136A	\$ 3,714.00	116536LF-137A	\$ 6,678.00

### SERIES S & H :MAINTENANCE FREE design

Model No.	Motor H.P	Flange Size*	Wt. (lbs)	Construction			
				Bronze Fitted		Lead Free* Bronze	
Item No.	List Price	Item No.	List Price				
S-25	1/12	Less Flgs	21	174031MF-013	\$ 524.00	174031MF-043	\$ 913.00
S-35	1/6	2"	42	174033MF-013	\$ 1,159.00	174033MF-043	\$ 2,074.00
S-45	1/4	Less Flgs See	50	174036MF-113	\$ 1,521.00	174036MF-143	\$ 2,933.00
S-46	1/3	3"	56	174037MF-113	\$ 2,204.00	174037MF-143	\$ 4,147.00
H-32	1/6	Less Flgs	33	174034MF-013	\$ 934.00	174034MF-043	\$ 1,629.00
H-41	1/6	1"	37	174035MF-113	\$ 1,248.00	174035MF-143	\$ 1,996.00
S-55-1	1/2 1PH	3"	90	106284MF-132	\$ 2,225.00	106284MF-133	\$ 4,108.00
S-55-3	1/2 3PH	3"	81	106284MF-136A	\$ 2,225.00	106284MF-137A	\$ 4,108.00
S-57-1	3/4 1PH	3"	90	106285MF-132	\$ 2,644.00	106285MF-133	\$ 4,512.00
S-57-3	3/4 3PH	3"	84	106285MF-136A	\$ 2,644.00	106285MF-137A	\$ 4,512.00

**Notes:**

- STANDARD design circulators are with Sleeve Bearing SBA and MAINTENANCE FREE design circulators are with ball bearing SBA
- All circulators: Maximum Working Pressure 125psig
- Construction: Hydronic systems (225 degF max.) - Bronze Fitted construction. DHW - Use Lead Free Bronze Construction
- Both Lead Free Bronze & Bronze fitted construction includes non-ferrous impeller, impeller nut, and washer. (S69 is supplied with Bronze Impeller)
- S-45 flanges: 2.5" Iron (#105189-011) \$ 73.00 each 2.5" Bronze (#105189-841) \$ 185.00 each  
3" Iron (#105188-011) \$ 73.00 each 3" Lead Free Bronze (#105188-841) \$ 185.00 each
- 1/2hp to 1hp single phase motors are 115/230V, 60 cycle and have built in thermal overload protection
- Three phase motors are 208/230/460V, 60 cycle unless otherwise indicated and require separate overload protection
- All circulator motors are ODP (Open Drip Proof) enclosure unless shown otherwise
- All Item No. with -136A or -137A have Premium Efficiency motors.

### CUSTOM MODELS

Model No.	Item No.	List Price
S-25 BF/BI	174031-113	\$ 743.00
S-25 AB/BI	174031-143	\$ 1,131.00
S-35 BF/BI	174033-113	\$ 1,517.00
S-35 AB/BI	174033-143	\$ 2,518.00
H-32 AB/BI	174034-143	\$ 1,987.00
H-32 BF TEFC 1/4HP-3-60	174034-033	\$ 1,857.00
H-32 AB TEFC 1/4HP-3-60	174034-063	\$ 2,689.00

### SPECIAL FEATURES - SERIES "S" & "H"

Description (NCP Number Required)	List Adder
230 Volt, Single Phase, 60 Cycle, 1/4 or 1/3 H.P.	\$ 556.00
208-230/460 Volt, 3 Phase, 60 Cycle 1/4 or 1/3 H.P	\$ 766.00
115/230 volt 1 phase 60 cycle, 1/4hp TEFC motor (H-32, S-35, H-41 only)	\$ 642.00
<b>For S-25 to S-57 and H-32 to H-41:</b>	
1/2" Viton Seal (brass fitted)	\$ 184.00
<b>For S-69 Circulators:</b>	
3/4" Viton Seal ( brass fitted)	\$ 239.00

### PUMP ITEM ELECTRICS (Option)

Add 10% to Total Price for 50Hz Cycle

### \* Flanges- 10 per Pack

Model	Flange Size	Cast Iron	List / Pack	Lead Free Bronze	List / Pack	Wt. (lbs.)
S-25	0.75"	110140-026	\$ 104.00	110141-027	\$ 342.00	50
S-25	1"	110140-024	\$ 104.00	110141-025	\$ 342.00	50
S-25	1.25"	110140-022	\$ 104.00	110141-023	\$ 342.00	50
S-25	1.5"	110140-020	\$ 104.00	110141-021	\$ 342.00	80
H-32	1"	110140-032	\$ 136.00	110141-033	\$ 609.00	100
H-32	1.25"	110140-028	\$ 136.00	110141-029	\$ 609.00	100
H-32	1.5"	110140-030	\$ 136.00	110141-031	\$ 609.00	120

\* Complies with Section 116875 of the California Health and Safety Code and Vermont Act 19:

## SERIES S & H - HYDRONIC CIRCULATORS

ECM motor efficiency

Bronze Fitted Construction

Model No.	Motor H.P	Flange Size*	115/1/60		230/1/60	
			Item No.	List Price	Item No.	List Price
S-55-1	1/2 1PH	3"	106284MF-742	\$ 3,241.00	106284MF-842	\$ 3,241.00
S-57-1	3/4 1PH	3"	106285MF-742	\$ 3,836.00	106285MF-842	\$ 3,836.00
S-69-1	1 1PH	3"			116531-842	\$ 4,665.00

Lead Free

Model No.	Motor H.P	Flange Size*	115/1/60		230/1/60	
			Item No.	List Price	Item No.	List Price
S-55-1	1/2 1PH	3"	106284MF-743	\$ 5,311.00	116511-843	\$ 5,311.00
S-57-1	3/4 1PH	3"	106285MF-743	\$ 5,822.00	106285MF-843	\$ 5,822.00
S-69-1	1 1PH	3"			116531-843	\$ 7,304.00

## H-51 to H-68 - 1050 and 1060

**STOCK SIZES H-51 to H-68 : STANDARD design**

Model No.	Motor H.P.	Flange Size	Wt. (lbs)	Single Phase		Three Phase		Single Phase		Three Phase	
				Item No.	List Price	Item No.	List Price	Item No.	List Price	Item No.	List Price
H-51*	1/4	1"	53	116431-132	OBS	110119-100	OBS	116432LF-133	OBS	110119LF-101	OBS
H-52*	1/3	1.25"	53	116435-132	OBS	110119-102	OBS	116436LF-133	OBS	110119LF-103	OBS
H-53*	1/2	1.5"	64	116439-132	OBS	116443-136A	OBS	116440LF-133	OBS	116444LF-137A	OBS
H-54*	3/4	2"	75	116451-132	OBS	116455-136A	OBS	116452LF-133	OBS	116456LF-137A	OBS
H-63	1/2	1.5"	95	116463-132	\$ 2,280.00	116467-136A	\$ 2,236.00	116464LF-133	\$ 4,729.00	116468LF-137A	4679
H-64	3/4	1.5"	98	116475-132	\$ 2,603.00	116479-136A	\$ 2,454.00	116476LF-133	\$ 5,011.00	116480LF-137A	4928
H-65	1	1.5"	101	116487-132	\$ 3,070.00	116491-136A	\$ 2,811.00	116488LF-133	\$ 5,523.00	116492LF-137A	5323
H-66	3/4	2"	121	116499-132	\$ 3,219.00	116503-136A	\$ 2,811.00	116500LF-133	\$ 5,521.00	116504LF-137A	5580
H-67	1	2"	127	116511-132	\$ 3,317.00	116515-136A	\$ 3,046.00	116512LF-133	\$ 6,076.00	116516LF-137A	5779
H-68	1 1/2	2"	132	Refer to 2D 1060		116523-136A	\$ 3,219.00	Refer to 2D 1060		116524LF-137A	6076

\* Non Ferrous Impeller

**STOCK SIZES H-51 to H-68 : MAINTENANCE FREE design**

Model No.	Motor H.P.	Flange Size	Wt. (lbs)	Bronze fitted Construction				Lead Free Construction			
				Single Phase		Three Phase		Single Phase		Three Phase	
				Item No.	List Price	Item No.	List Price	Item No.	List Price	Item No.	List Price
H-51*	1/4	1"	53	116431MF-132	\$ 1,472.00	110119MF-100	\$ 1,578.00	116432MF-133	2888	110119MF-101	3328
H-52*	1/3	1.25"	53	116435MF-132	\$ 1,597.00	110119MF-102	\$ 1,643.00	116436MF-133	3074	110119MF-103	3200
H-53*	1/2	1.5"	64	116439MF-132	\$ 1,853.00	116443MF-136A	\$ 1,771.00	116440MF-133	\$ 3,372.00	116444MF-137A	3316
H-54*	3/4	2"	75	116451MF-132	\$ 1,987.00	116455MF-136A	\$ 1,875.00	116452MF-133	\$ 3,643.00	116456MF-137A	3502

Notes:

- STANDARD design circulators are with Sleeve Bearing SBA and MAINTENANCE FREE design circulators are with ball bearing SBA
- Prices shown are for pumps complete with 60 cycle, 1750 RPM dripproof motors, companion flanges & construction as listed
- Three phase motors are dual rate 60/50 cycle
- Three phase motors are 208/230/460 or 575 volt, 60 cycle or 190/380/415 volt, 50 cycle. Specify on purchase order
- Single Phase motors - 1/4 HP and 1/3HP are 115 volt, 60 cycle. All other motors are 115/230 volt, 60 cycle
- For special pump and motor construction or motor electricians other than listed above, consult the factory (NCP # required)
- For units 1 HP or greater, when ever 3 phase power is available, the use of single phase motors is not recommended
- For All Iron construction, consult the factory
- All Item No. with -136A or -137A have Premium Efficiency motors.



## H-51 to H-68 - 1050 and 1060

**CUSTOM BUILT - SERIES 1050**

Model No.	Motor H.P.	Bronze Fitted Construction			Lead Free Bronze Construction			Wt. (lbs)
		Single Phase		Three Phase	Single Phase		Three Phase	
		Resilient Mount	Rigid Mount	208/230/460 Rigid Mount	Resilient Mount	Rigid Mount	208/230/460 Rigid Mount	
1B*	1/4	\$ 1,917.00	X	\$ 2,022.00	\$ 3,501.00	X	\$ 3,552.00	53
	1/3	\$ 2,157.00	X	\$ 2,184.00	\$ 3,759.00	X	\$ 3,820.00	53
1-1/4B*	1/4	\$ 1,987.00	X	\$ 2,140.00	\$ 3,814.00	X	\$ 3,995.00	53
	1/3	\$ 2,209.00	X	\$ 2,242.00	\$ 4,055.00	X	\$ 4,113.00	53
	1/2	\$ 2,494.00	X	\$ 2,333.00	\$ 4,356.00	X	\$ 4,214.00	64
1-1/2B*	1/4	\$ 2,125.00	X	\$ 2,149.00	\$ 4,081.00	X	\$ 4,121.00	53
	1/3	\$ 2,209.00	X	\$ 2,291.00	\$ 4,174.00	X	\$ 4,300.00	53
	1/2	\$ 2,494.00	X	\$ 2,365.00	\$ 4,486.00	X	\$ 4,367.00	64
	3/4	\$ 2,674.00	X	\$ 2,514.00	\$ 4,696.00	X	\$ 4,543.00	83
2B	1/3	\$ 2,222.00	X	\$ 2,313.00	\$ 4,293.00	X	\$ 4,409.00	61
	1/2	\$ 2,494.00	X	\$ 2,333.00	\$ 4,583.00	X	\$ 4,424.00	79
	3/4	\$ 2,678.00	X	\$ 2,517.00	\$ 4,784.00	X	\$ 4,636.00	83
	1	\$ 3,473.00	X	\$ 3,112.00	\$ 5,660.00	X	\$ 5,288.00	88

Note:  
 1. Prices for 1050 series MAINTENANCE FREE design circulators are the same as the STANDARD design circulators .

**CUSTOM BUILT - SERIES 1060**

Model No.	Motor H.P.	Bronze Fitted Construction			Lead Free Bronze Construction			Wt. (lbs)
		Single Phase		Three Phase	Single Phase		Three Phase	
		Resilient Mount	Rigid Mount	208/230/460 Rigid Mount	Resilient Mount	Rigid Mount	208/230/460 Rigid Mount	
1-1/2D	1/2	\$ 2,494.00	X	\$ 2,365.00	\$ 4,486.00	X	\$ 4,367.00	95
	3/4	\$ 2,674.00	X	\$ 2,514.00	\$ 4,696.00	X	\$ 4,543.00	99
	1	\$ 3,742.00	X	\$ 3,673.00	\$ 7,137.00	X	\$ 6,866.00	101
	1 1/2	\$ 4,831.00	X	\$ 3,957.00	\$ 8,105.00	X	\$ 7,176.00	127
2D	1/2	\$ 2,494.00	X	\$ 2,333.00	\$ 4,583.00	X	\$ 4,424.00	99
	3/4	\$ 2,678.00	X	\$ 2,517.00	\$ 4,784.00	X	\$ 4,636.00	106
	1	\$ 3,473.00	X	\$ 3,112.00	\$ 5,660.00	X	\$ 5,288.00	110
	1.5	X	\$ 4,902.00	\$ 4,256.00	\$ 8,753.00	\$ 7,921.00	132	
	2	X	X	\$ 4,471.00	X	X	\$ 8,161.00	138
3D	1	X	\$ 5,630.00	\$ 5,029.00	\$ 11,209.00	\$ 9,771.00	149	
	1 1/2	X	\$ 4,902.00	\$ 5,316.00	\$ 8,753.00	\$ 10,071.00	152	
	2	X	X	\$ 5,571.00	X	\$ 10,344.00	157	
	3	X	X	\$ 6,295.00	X	\$ 11,072.00	165	

\*1/4hp resilient mount single phase available 115V only

High Efficiency Motors - 84%		
1750 rpm/ 60 Hz/ 3 Phase - 208-230/460V		
Power, h.p	Motor Type	List Adder
1	ODP	\$ 854.00
1.5	ODP	\$ 848.00
2	ODP	\$ 937.00
3	TEFC	\$ 1,428.00

For TEFC Motors	
1750 rpm/ 60 Hz/ 3 Phase - 208-230/460v	
Power, h.p	List Adder
0.5	\$ 567.00
0.75	\$ 647.00
1	\$ 726.00
1.5	\$ 807.00
2	\$ 815.00
3	\$ 890.00

## H-51 to H-68 - 1050 and 1060

**PUMP ITEM ELECTRICS (Option)**

Add 10% to Total Price for 50Hz Cycle

ECM motor efficiency

Bronze Fitted Construction

Model No.	Motor H.P.	Flange Size	115/1/60		230/1/60	
			Item No.	List Price	Item No.	List Price
H-53	1/2	1.5"	116439MF-742	\$ 2,810.00	116439MF-842	\$ 2,810.00
H-54	3/4	2"	116451MF-742	\$ 2,935.00	116451MF-842	\$ 2,935.00
H-63	1/2	1.5"	116463-742	\$ 3,013.00	116463-842	\$ 3,013.00
H-64	3/4	1.5"	116475-742	\$ 3,426.00	116475-842	\$ 3,426.00
H-65	1	1.5"			116487-842	\$ 4,009.00
H-66	3/4	2"	116499-742	\$ 4,214.00	116499-842	\$ 4,214.00
H-67	1	2"			116511-842	\$ 4,308.00

Lead Free Bronze Construction

Model No.	Motor H.P.	Flange Size	115/1/60		230/1/60	
			Item No.	List Price	Item No.	List Price
H-53	1/2	1.5"	116439MF-743	\$ 4,603.00	116439MF-843	\$ 4,603.00
H-54	3/4	2"	116451MF-743	\$ 4,759.00	116451MF-843	\$ 4,759.00
H-63	1/2	1.5"	116463-743	\$ 5,710.00	116463-843	\$ 5,710.00
H-64	3/4	1.5"	116475-743	\$ 6,039.00	116475-843	\$ 6,039.00
H-65	1	1.5"			116487-843	\$ 6,629.00
H-66	3/4	2"	116499-743	\$ 6,551.00	116499-843	\$ 6,551.00
H-67	1	2"			116511-843	\$ 7,186.00

# GOLD SERIES - PUMP LESS VOLUTE KITS

## IN-LINE CIRCULATORS (SLEEVE BEARING SBA)

Model No.	Item Number	Impeller - in (mm)	Motor H.P.	Voltage	Phase	Weight - lbs	List Price
S-25 LV	110116-200	2-3/4 (70)	1/12	115	single	13	OBS
H-32 LV	110116-201	3-3/8 (86)	1/6	115	single	18	OBS
H-41 LV	110116-202	4-1/4 (108)	1/6	115	single	19	OBS
S-45 LV	110116-203	4-1/4 (108)	1/4	115	single	20	OBS
S-46 LV	110116-204	4-1/4 (108)	1/3	115	single	20	OBS
H-51 LV	110116-300	5-1/4 (135)	1/4	115	single	29	OBS
H-52 LV	110116-301	5-1/4 (135)	1/3	115	single	29	OBS
H-53 LV	110116-302	5-1/4 (135)	1/2	115/230	single	36	OBS
H-53-3 LV	110116-303	5-1/4 (135)	1/2	208-230/460	three	30	OBS
H-54 LV	110116-304	5-1/4 (135)	3/4	115/230	single	40	OBS
H-54-3 LV	110116-305	5-1/4 (135)	3/4	208-230/460	three	34	OBS
S-55 LV	110116-306	5-1/4 (135)	1/2	115/230	single	36	OBS
S-55-3 LV	110116-307	5-1/4 (135)	1/2	208-230/460	three	30	OBS

## IN-LINE CIRCULATORS (BALL BEARING SBA / MAINTENANCE FREE)

Model No.	Item Number	Impeller - in (mm)	Motor H.P.	Voltage	Phase	Weight - lbs	List Price
S-25 LV/MF	110116MF-200	2-3/4 (70)	1/12	115	single	13	\$ 490.00
H-32 LV/MF	110116MF-201	3-3/8 (86)	1/6	115	single	18	\$ 889.00
H-41 LV/MF	110116MF-202	4-1/4 (108)	1/6	115	single	19	\$ 1,105.00
S-45 LV/MF	110116MF-203	4-1/4 (108)	1/4	115	single	20	\$ 1,420.00
S-46 LV/MF	110116MF-204	4-1/4 (108)	1/3	115	single	20	\$ 1,945.00
H-51 LV/MF	110116MF-300	5-1/4 (135)	1/4	115	single	29	\$ 1,298.00
H-52 LV/MF	110116MF-301	5-1/4 (135)	1/3	115	single	29	\$ 1,411.00
H-53 LV/MF	110116MF-302	5-1/4 (135)	1/2	115/230	single	36	\$ 1,636.00
H-53-3 LV/MF	110116MF-303	5-1/4 (135)	1/2	208-230/460	three	30	\$ 1,565.00
H-54 LV/MF	110116MF-304	5-1/4 (135)	3/4	115/230	single	40	\$ 2,336.00
H-54-3 LV/MF	110116MF-305	5-1/4 (135)	3/4	208-230/460	three	34	\$ 2,336.00
S-55 LV/MF	110116MF-306	5-1/4 (135)	1/2	115/230	single	36	\$ 1,964.00
S-55-3 LV/MF	110116MF-307	5-1/4 (135)	1/2	208-230/460	three	30	\$ 1,964.00

## RAYPAK TIP BOILER HEADER PUMPS (SLEEVE BEARING SBA)

Model No.	Item Number	Impeller - in (mm)	Motor H.P.	Voltage	Phase	Weight - lbs	List Price
Raypak 1	110108-675	4-3/8 (110)	1/3	115	single	28	OBS
Raypak 2	110108-677	4-1/2 (113)	1/2	115/208-230	single	38	OBS
Raypak 3	110108-717	4-1/2 (113)	3/4	115/208-231	single	0	OBS
Raypak 4	110108-680	none	1/2	115/208-232	single	38	OBS

## RAYPAK TIP BOILER HEADER PUMPS (BALL BEARING SBA / MAINTENANCE FREE)

Model No.	Item Number	Impeller - in (mm)	Motor H.P.	Voltage	Phase	Weight - lbs	List Price
Raypak 1/MF- 4.375 IMP nfi (1/3hp)	110108MF-675	4-3/8 (110)	1/3	115	single	48	\$ 1,272.00
Raypak 2/MF- 4.5 IMP nfi (1/2hp)	110108MF-677	4-1/2 (113)	1/2	115/208-230	single	82	\$ 1,429.00
Raypak 3/MF- 4.5 IMP nfi (3/4hp)	110108MF-717	4-1/2 (113)	3/4	115/208-231	single	68	\$ 1,473.00
Raypak 4/MF (1/2hp)	110108MF-680	none	1/2	115/208-232	single	58	\$ 1,214.00
SBA - 4.50in IMP bi	110108MF-394	4-1/2 (113)	N/A	SBA	N/A	10	\$ 682.00
SBA - 4.50in IMP nfi	110108MF-397	4-1/2 (113)	N/A	SBA	N/A	10	\$ 424.00
PLV - 4.25in IMP bi (1/2hp)	110108MF-679	4-1/4 (108)	1/2	115/208-230	single	82	\$ 1,578.00
PLV - 4.25in IMP nfi (3/4hp)	110108MF-817	4-1/4 (108)	3/4	115/208-230	single	68	\$ 1,623.00
PLV - 5.25in IMP nfi (3/4hp)	110116MF-304*	5-1/4 (133)	3/4	115/208-230	single	40	\$ 2,336.00
PLV - 4.25in IMP nfi (3/4hp)	110108MF-681	4-1/2 (133)	3/4	115/208-230	single	68	\$ 1,473.00

**Notes:**

- Maximum Working Pressure = 125 psi (862 kPa)
- Maximum Liquid Temperature = 225F (107C)
- Construction: SS face plate, Noryl Impeller, Gold painted (suits both boiler and potable water applications)
- Mechanical Seal: carbon / ceramic, SS trim, viton secondary seal
- Motor: ODP (open drip proof), 60 Hz, 1800 rpm
- Supplied less volute, for installed circulator replacement only.
- See colour brochure for cross reference to all applicable models.
- SBA - Seal Bearing Assembly, the motor and casing (volute) is not included
- PLV - Pump Less Volute, the casing (volute) is not included
- bi - Bronze Impeller
- nfi - Non-Ferrous Impeller
- \*The original part number 110108-720, is replaced by 110116MF-304 as it is a full size untrimmed Impeller, a standard Pump Less Volute (PLV).

## GOLD SERIES - PUMP LESS VOLUTE KITS

### IN-LINE CIRCULATORS (SLEEVE BEARING SBA)

#### ECM IN-LINE CIRCULATORS (BALL BEARING SBA / MAINTENANCE FREE)

Model No.	Item Number	Impeller - in (mm)	Motor H.P.	Voltage	Phase	Weight - lb (kg)	List Price
H-53MF ECM plv/nfi 115/1/60	116439MF-702	5-1/4 (135)	1/2	115	Single	59 (27)	\$ 3,707
H-53MF ECM plv/nfi 230/1/60	116439MF-802	5-1/4 (135)	1/2	208-230	Single	60 (27)	\$ 3,707
S-57& H-54MF ECM plv/nfi 115/1/60	116451MF-704	5-1/4 (135)	3/4	115	Single	61 (27)	\$ 4,298
S-57& H-54MF ECM plv/nfi 230/1/60	116451MF-804	5-1/4 (135)	3/4	208-230	Single	62 (27)	\$ 4,298
S-55MF ECM plv/nfi 115/1/60	106284MF-706	5-1/4 (135)	1/2	115	Single	63 (27)	\$ 4,532
S-55MF ECM plv/nfi 230/1/60	106284MF-806	5-1/4 (135)	1/2	208-230	Single	64 (27)	\$ 4,532

#### ECM IN-LINE CIRCULATORS (SLEEVE BEARING SBA)

Model No.	Item Number	Impeller - in (mm)	Motor H.P.	Voltage	Phase	Weight - lb (kg)	List Price
H-63 plv/bi ECM 115/1/60	116463-704	5-3/4 (146)	1/2	115	Single	91 (41)	\$ 4,362
H-63 plv/bi ECM 230/1/60	116463-804	5-3/4 (146)	1/2	208-230	Single	92 (41)	\$ 4,362
H-64 plv/bi ECM 115/1/60	116475-704	6-1/2 (165)	3/4	115	Single	93 (41)	\$ 4,733
H-64 plv/bi ECM 230/1/60	116475-804	6-1/2 (165)	3/4	208-230	Single	94 (41)	\$ 4,733
H-65 plv/bi ECM 230/1/60	116487-804	7 (178)	1	208-230	Single	95 (41)	\$ 5,319
H-66 plv/bi ECM 115/1/60	116499-704	5-5/8 (143)	3/4	115	Single	96 (41)	\$ 5,383
H-66 plv/bi ECM 230/1/60	116499-804	5-5/8 (143)	3/4	208-230	Single	97 (41)	\$ 5,383
H-67 plv/bi ECM 230/1/60	116511-804	6-1/4 (159)	1	208-230	Single	98 (41)	\$ 5,748
S-69 plv/bi ECM 230/1/60	116531-804	5-7/8 (149)	1	208-230	Single	99 (41)	\$ 5,985

#### E SERIES CIRCULATORS

Model No.	Item Number	Motor H.P.	Voltage	Phase	Weight - lbs	List Price
E7.2 LV	182202-001	1/6	120	single	13	\$ 560.00
	182202-003	1/6	240	single	13	\$ 560.00
E8.2 LV	182202-005	1/6	120	single	13	\$ 602.00
	182202-007	1/6	240	single	13	\$ 602.00
E9.2 LV	182202-009	1/6	120	single	13	\$ 595.00
	182202-011	1/6	240	single	13	\$ 595.00
E10.2 LV	182202-013	1/6	120	single	15	\$ 629.00
	182202-015	1/6	240	single	15	\$ 629.00
E11.2 LV	182202-017	1/6	120	single	15	\$ 629.00
	182202-019	1/6	240	single	15	\$ 629.00
E12.2 LV	182212-021	2/5	120	single	15	\$ 964.00
	182212-023	2/5	240	single	15	\$ 964.00
E13.2 LV	182202-025	1/6	120	single	15	\$ 760.00
	182202-027	1/6	240	single	15	\$ 760.00
E14.2 LV	182212-029	2/5	120	single	18	\$ 1,025.00
	182212-031	2/5	240	single	18	\$ 1,025.00
E16.2 LV	182202-037	1/6	120	single	22	\$ 1,251.00
	182202-039	1/6	240	single	22	\$ 1,251.00

Notes:

- Maximum Working Pressure = 150 psi ( 1034 kPa)
- Maximum Liquid Temperature = 230F (110C)
- Construction: SS face plate, Noryl Impeller, Gold painted (suits both boiler and potable water applications)
- Mechanical Seal: Silicon carbide/ Carbon , SS trim, viton secondary seal
- Motor: ODP (open drip proof), 60 Hz, 1800 rpm
- Supplied less volute, for installed circulator replacement only.
- See colour brochure for cross reference to all applicable models.

## RAYPAK TIP BOILER PARTS

Part No.	Description	List Price
816706-023	1/2" Viton Seal	\$ 62.00
106158-000	Body Gasket	\$ 6.00
807436-000	Coupler 1/2 x 1/2" (1/3hp motor)	\$ 73.00
806137-000	Coupler 1/2 x 5/8" (1/2hp motor)	\$ 89.00
816141-002	Resilient Mount Motor - 1/3hp/1750/60/1/115 - 2B1050 only	\$ 1,074.00
811757-001	Resilient Mount Motor - 1/2hp/1750/60/1/115/208/230 - 2B1050 only	\$ 966.00
816032-003	Universal SBA with Viton Seal - 2B1050 only	\$ 542.00
814910-001	Stub Shaft (1.5 B 4260 only)	\$ 214.00
816304-317	**Noryl Impeller (impeller diameter to be specified at time of order)	\$ 306.00
816304-047	Bronze Impeller (impeller diameter to be specified at time of order)	\$ 445.00

\*\* Noryl Impeller replaces the 828286-045 Bronze Impeller

### REPLACEMENT SEAL BEARING ASSEMBLIES WITH VITON SEAL

Part No.	Description	Impeller used		List Price
		Part No.	Trimmed to:	
110108-393	5 Series SBA with 4.25" fabricated bronze impeller & coupler	816304-047	4.25"	\$ 833.00
110108-394	5 Series SBA with 4.5" noryl impeller & coupler	816304-317	4.5"	\$ 682.00
816999-097	Shaft & bearing module with Viton Seal kit	N/A	N/A	\$ 285.00

See GOLD PLV price list for complete Raypak Tip Boiler Header Pumps

## HYDRONICS SPECIALTIES

### AUTOMATIC AIR VENTS

12 units/box

Model	Item No.	List Price	Wt. (lbs)
AVA - 013	272005-300	\$ 25.00	0.2
AVA - 025	272005-301	\$ 30.00	0.2
AVA - 038	272005-302	\$ 38.00	0.2
AVA - 050*	272005-303	\$ 47.00	0.2
AVA - 075**	272005-308	\$ 66.00	0.35
AVV - 038	272005-305	\$ 58.00	0.35
AVV - 050*	272005-306	\$ 43.00	0.35
AVV - 075**	272005-307	\$ 51.00	0.6

\*with service check valve \*\* 1/2" FPT and 3/4" MPT adapter

### MAID-O-MIST AIR VENTS (while quantities last)

Model	Item No.	List Price	Wt. (lbs)
71	272005-002	\$ 96.00	0.3
75	272005-003	\$ 116.00	0.5
72	272005-005	\$ 26.00	1
7A	272005-006	\$ 18.00	1
67	272005-004	\$ 41.00	0.5

### FLO-CONTROL VALVES

Model	Item No.	List Price	Wt. (lbs)
<b>Straight angle pattern</b>			
FV-3/4-CI	216145-311	\$ 142.00	3
FV-1-CI	216146-311	\$ 142.00	3
FV-1-1/4-CI	216147-311	\$ 150.00	4
FV-1-1/2-CI	216148-311	\$ 203.00	8
FV-2-CI	216149-311	\$ 249.00	12
FV-2-1/2-CI	216391-311	\$ 539.00	22
FV-3	216392-311	\$ 616.00	24

### FLEX FLANGE (Isolation Flange kit with Check Valve)

Model	Item No.	List Price	Wt. (lbs)
FF-050T	110124-200	\$ 86.00	1.62
FF-075T	110124-201	\$ 91.00	1.62
FF-100T	110124-202	\$ 107.00	2
FF-125T	110124-203	\$ 136.00	2.75
FF-150T	110124-204	\$ 177.00	3.75
FF-050S	110124-250	\$ 86.00	1.62
FF-075S	110124-251	\$ 91.00	1.62
FF-100S	110124-252	\$ 107.00	2
FF-125S	110124-253	\$ 136.00	2.75
FF-150S	110124-254	\$ 177.00	3.75

Note: Price includes 2 flanges, hardware & adapter gaskets

### DIAPHRAGM EXPANSION TANKS (Residential)

Model	Item No.	List Price	Wt. (lbs)
15	572018-001	\$ 155.00	5
30	572018-002	\$ 188.00	9
60	572018-003	\$ 371.00	14
90	572018-004	\$ 508.00	23
SX-30V	572018-005	\$ 550.00	25
SX-40V	572018-006	\$ 583.00	32
SX-60V	572018-007	\$ 809.00	45
SX-90V	572018-008	\$ 1,485.00	70
SX-110V	572018-009	\$ 1,747.00	92
SX-160V	572018-010	\$ 1,855.00	113

### COMBINATION VALVE

Model	Item No.	List Price	Wt. (lbs)
C-11-U*	216945-300	\$ 270.00	3

### STANDARD RELIEF VALVE

RL-11	216942-300	\$ 124.00	1.25
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### PRESSURE REDUCING VALVES

RD-11-U*	216944-300	\$ 141.00	2
RD-40	207937-343	\$ 185.00	3.25
RD-50	207937-300	\$ 185.00	3.25
HRD-70	207936-300	\$ 185.00	3.25

\* with fast fill feature

### Aquastat

Model	Item No.	List Price	Wt. (lbs)
1/2"	110123-120	\$ 50.00	0.7
3/4"	110123-121	\$ 50.00	0.7

### 24 hour Mechanical Timer

#### (Domestic Hot Water Recirculation)

Model	Item No.	List Price	Wt. (lbs)
Analogue timer	810223-130	\$ 134.00	0.7
24hr Manual timer for any circ. under 0.5hp	810123-130	\$ 125.00	0.7
For Astro 2 HWR ONLY	810223B-130	\$ 128.00	0.6

### CIRCULATOR ISOLATION FLANGES

Model	Item No.	List Price	Wt. (lbs)
CIF-050T	110124-100	\$ 81.00	1.12
CIF-075T	110124-000	\$ 86.00	1.12
CIF-100T	110124-001	\$ 102.00	1.5
CIF-125T	110124-002	\$ 130.00	2.25
CIF-150T	110124-003	\$ 166.00	3.25
CIF-050S	110124-150	\$ 81.00	1.12
CIF-075S	110124-050	\$ 86.00	1.12
CIF-100S	110124-051	\$ 102.00	1.5
CIF-125S	110124-052	\$ 130.00	2.25
CIF-150S	110124-053	\$ 166.00	3.25

Note: Price includes 2 flanges and hardware (no gaskets)

### REPLACEMENT CHECK VALVES

Model	Item No.	List Price	Wt. (lbs)
CHECK VALVE 1"	810223-104	\$ 12	0.02
CHECK VALVE 1 1/4"	810223-105	\$ 19	0.04

## 4270 STANDARD PUMP PROGRAM

STOCK MODEL	4270 Model	Impeller Size	HP-RPM-PH	Wt. (lbs)	PEI (ULTEM) Impeller		Bronze Impeller	
					Part Number	List Price	Part Number	List Price
702S	1.25 X 1	3.5"	3/4-3500-1	36	410133-201	\$ 968.00	410133-241	\$ 1,087.00
702T	1.25 X 1	3.5"	3/4-3500-3	36	410133-301	\$ 1,023.00	410133-341	\$ 1,135.00
704S	1.25 X 1	4"	1-3500-1	40	410133-203	\$ 1,143.00	410133-243	\$ 1,256.00
704T	1.25 X 1	4"	1-3500-3	40	410133-303	\$ 1,155.00	410133-343	\$ 1,270.00
705S	1.25 X 1	4.5"	1.5-3500-1	49	410133-204	\$ 1,389.00	410133-244	\$ 1,506.00
705T	1.25 X 1	4.5"	1.5-3500-3	49	410133-304	\$ 1,319.00	410133-344	\$ 1,434.00
706S	1.5 X 1.25	4.5"	2-3500-1	49	410134-200	\$ 1,607.00	410134-240	\$ 1,711.00
706T	1.5 X 1.25	4.5"	2-3500-3	49	410134-300	\$ 1,506.00	410134-340	\$ 1,651.00
707S	2 X 1.5	4"	1.5-3500-1	53	410135-200	\$ 1,408.00	410135-240	\$ 1,537.00
707T	2 X 1.5	4"	1.5-3500-3	53	410135-300	\$ 1,352.00	410135-340	\$ 1,487.00
709T	2 X 1.5	4.375"	2-3500-3	56	410135-302	\$ 1,542.00	410135-342	\$ 1,694.00
7010T	2 X 1.5	5"	3-3500-3	60	410135-303	\$ 1,733.00	410135-343	\$ 1,896.00

**Prices shown above cover units supplied as follows:**

Suffix "S" indicates Single phase 115/230 volt motor  
 Suffix "T" indicates Three phase 208-230/460 volt motor

**Standard Construction**

1. **Pump Construction:** Cast Iron - Volute, ULTEM - Impeller, Type21 - Seal
2. **Motor Construction:**
  - A. ODP type and 50J frame with 416 Stainless Steel Shaft
  - B. Standard efficiency and 60 Hz. With power configuration as:
    - i) Single phase: 115 / 230 V (2 & 3 h.p motors are only available with 230V)
    - ii) Three phase: 208-230/460V
3. **Maximum Working Pressure:** 150 psi
4. **Maximum Temperature:** 275 deg F

**4270 Kit Pricing (Cast Iron Volute Only)**

4270 Model	Impeller Size	PEI (ULTEM) Impeller		Bronze Impeller	
		Module No.	List	Module No.	List
1 1/4" x 1"	5"	410133-900	\$ 463.00	410133-940	\$ 569.00
1 1/2" x 1 1/4"	5"	410134-900	\$ 459.00	410134-940	\$ 567.00
2" x 1 1/2"	5.5"	410135-900	\$ 452.00	410135-940	\$ 549.00

## SERIES 4270 MOTOR MOUNTED END SUCTION PUMPS WITH MOTORS

**Standard Construction**

Pump Size	RPM	Motor H.P.	Cast Iron Construction		Wt. (lbs.)
			Single Phase	Three Phase	
1.25 x 1 x 5	1800	0.33	\$ 1,066.00	N/A	40
		0.5	\$ 975.00	\$ 1,027.00	40
	3600	0.75	\$ 1,120.00	\$ 1,365.00	42
		1	\$ 1,145.00	\$ 1,157.00	44
		1.5	\$ 1,391.00	\$ 1,325.00	54
		2	\$ 1,600.00	\$ 1,478.00	56
		3	\$ 1,636.00	\$ 1,558.00	61
1.5 x 1.25 x 5.5	1800	0.33	\$ 1,077.00	N/A	40
		0.5	\$ 1,204.00	N/A	44
	3600	0.75	\$ 1,129.00	\$ 1,376.00	44
		1	\$ 1,155.00	\$ 1,166.00	46
		1.5	\$ 1,403.00	\$ 1,404.00	56
		2	\$ 1,610.00	\$ 1,486.00	58
		3	\$ 1,647.00	\$ 1,594.00	63
		5	\$ 2,241.00	\$ 2,160.00	68
		2 x 1.5 x 5.5	1800	0.33	\$ 1,087.00
0.5	\$ 1,216.00			N/A	44
3600	0.75		\$ 1,135.00	\$ 1,382.00	44
	1		\$ 1,162.00	\$ 1,175.00	46
	1.5		\$ 1,411.00	\$ 1,341.00	56
	2		\$ 1,620.00	\$ 1,492.00	58
	3		\$ 1,654.00	\$ 1,623.00	63
	5		\$ 2,250.00	\$ 2,170.00	68

**Standard Construction**

1. **Pump Construction:** Cast Iron - Volute, ULTEM - Impeller, Type21 -
2. **Motor Construction:**
  - A. ODP type and 50J frame with 416 Stainless Steel Shaft
  - B. Standard efficiency and 60 Hz. With power configuration as:
    - i) Single phase: 115 / 230 V (2 & 3 h.p motors are only available with 230V)
    - ii) Three phase: 208-230/460V
3. **Maximum Working Pressure:** 150 psi
4. **Maximum Temperature:** 275 deg F

**LIST ADDERS**

Bronze impeller	\$ 123.00
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**For TEFC Motors**

Motor h.p with 3 phase / 3600 rpm/ 60 Hz	List Price
1/2	\$ 166.00
3/4	\$ 170.00
1	\$ 105.00
1 1/2	\$ 95.00
2	\$ 114.00
3	\$ 141.00
5	\$ 300.00

*Seal Flush Line:	\$ 84.00
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\*Required when pump is mounted vertically