

# ASTRO 2 HOT WATER RE-CIRCULATION SYSTEM | SUBMITTAL

**File No:** 10.585  
**Date:** MARCH 30, 2022  
**Supersedes:** 10.585  
**Date:** JULY 14, 2015

Job: \_\_\_\_\_ Representative: \_\_\_\_\_  
 \_\_\_\_\_ Ordered by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

QUANTITY	TAG NO.	MODEL NO.	FLOW (USgpm)	HEAD (feet)	COMMENTS

**TECHNICAL DATA**

**Power connection:** 6.0 ft (1.8 m) power cord, molded duplex plug with ground

**Environment:** Indoor use only

**Max. working pressure:** 150 PSI (1034 kpa)

**Ambient temperature:** 39°F (4°C) to 104°F (40°C)

**Max. water temperature:** 230°F (110°C)

**Low temperature switchpoint**<sup>①</sup>: 85°F (29°C) ± 10%

**High temperature switchpoint**<sup>①</sup>: 105°F (40°C) ± 10%

**Clock/timer:** 12 hour analog clock with AM/PM indication

**Timer settings:** Individual mechanical toggles for each 15 minute interval over 24 hours

**Manual override:** 3 position slide switch, ON/OFF/AUTO

Approvals:  listed

NSF-372 certified

**NOTE:**

① High/low temperature switchpoints are as measured on pipe surface with the Aquastat (TA models only).

**HOT WATER RE-CIRCULATION SYSTEM APPLICATIONS**

Armstrong Astro 2 hot water re-circulation systems automatically circulate water through domestic hot water distribution pipes. This helps to ensure that everyone in the household has 'instant' hot water at the tap when they need it, while also helping to conserve water and save water heating energy costs. All systems are assembled, wired, tested and then shipped from the factory, ready for installation.

**MATERIALS OF CONSTRUCTION**  
 (Wetted parts)

**Pump casing:** Stainless steel\* (ss models)

**Pump shaft:** Ceramic

**Impeller:** Noryl

**Bearings:** Ceramic

**NOTE:**

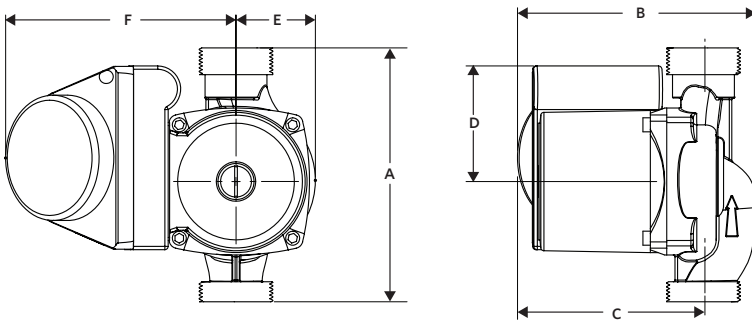
\* Complies with section 116875 at the California Health and Safety/Code and Vermont Act 193 (Lead content of wetted surface is 0.25% or less)

**DIMENSIONS**

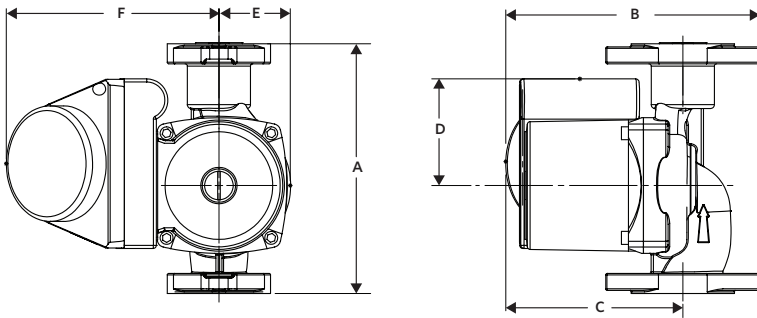
MODEL	A	B	C	D	E	F
ASTRO 220/225SSU	5.98 (152)	5.62 (143)	4.38 (111)	2.72 (69)	1.87 (48)	5.43 (138)
ASTRO 230/250SS	6.38 (162)	6.49 (165)	4.52 (115)	2.72 (69)	1.82 (46)	5.43 (138)

**NOTE:** All dimensions are in inches (mm)

**ASTRO 220/225SSU**



**ASTRO 230/250SS**

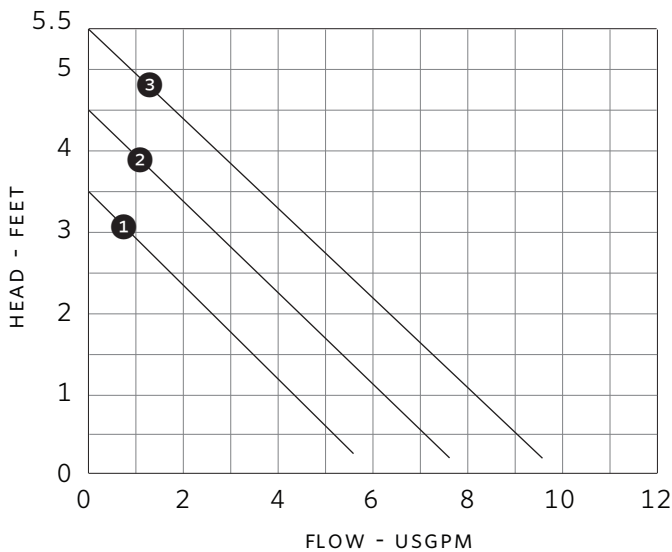


ITEM	MODEL	CONNECTION	SIZE	CORD	TIMER	AQUASTAT	ELECTRICAL DATA	WEIGHT
110223B-140	ASTRO 220SSU050S-TA*	Sweat	½"	✓	✓	✓	115 Vac, 60 Hz, 0.29 A, 33W	7.50 (3.40)
110223B-141	ASTRO 220SSU075S-TA*	Sweat	¾"	✓	✓	✓	115 Vac, 60 Hz, 0.29 A, 33W	7.50 (3.40)
110223B-144	ASTRO 220SSU-TA	NPSM union	1¼"	✓	✓	✓	115 Vac, 60 Hz, 0.29 A, 33W	7.50 (3.40)
110223B-145	ASTRO 225SSU-TA	NPSM union	1¼"	✓	✓	✓	115 Vac, 60 Hz, 0.69 A, 83W	7.50 (3.40)
110223B-148	ASTRO 230SS-TA	2 bolt flange	2 bolt flange	✓	✓	✓	115 Vac, 60 Hz, 0.81 A, 97W	10.00 (4.54)
110223B-149	ASTRO 250SS-TA	2 bolt flange	2 bolt flange	✓	✓	✓	115 Vac, 60 Hz, 0.98 A, 117W	10.00 (4.54)
110223B-240	ASTRO 220SSU050S-T*	Sweat	½"	✓	✓	—	115 Vac, 60 Hz, 0.29 A, 33W	7.50 (3.40)
110223B-241	ASTRO 220SSU075S-T*	Sweat	¾"	✓	✓	—	115 Vac, 60 Hz, 0.29 A, 33W	7.50 (3.40)
110223B-244	ASTRO 220SSU-T	NPSM union	1¼"	✓	✓	—	115 Vac, 60 Hz, 0.29 A, 33W	7.50 (3.40)
110223B-245	ASTRO 225SSU-T	NPSM union	1¼"	✓	✓	—	115 Vac, 60 Hz, 0.69 A, 83W	7.50 (3.40)
110223B-248	ASTRO 230SS-T	2 bolt flange	2 bolt flange	✓	✓	—	115 Vac, 60 Hz, 0.81 A, 97W	10.00 (4.54)
110223B-249	ASTRO 250SS-T	2 bolt flange	2 bolt flange	✓	✓	—	115 Vac, 60 Hz, 0.98 A, 117W	10.00 (4.54)
110223-340	ASTRO 220SSU050S-LC*	Sweat	½"	✓	—	—	115 Vac, 60 Hz, 0.29 A, 33W	7.00 (3.18)
110223-341	ASTRO 220SSU075S-LC*	Sweat	¾"	✓	—	—	115 Vac, 60 Hz, 0.29 A, 33W	7.00 (3.18)
110223-344	ASTRO 220SSU-LC	NPSM union	1¼"	✓	—	—	115 Vac, 60 Hz, 0.29 A, 33W	7.00 (3.18)
110223-345	ASTRO 225SSU-LC	NPSM union	1¼"	✓	—	—	115 Vac, 60 Hz, 0.69 A, 83W	7.00 (3.18)
110223-348	ASTRO 230SS-LC	2 bolt flange	2 bolt flange	✓	—	—	115 Vac, 60 Hz, 0.81 A, 97W	9.00 (4.08)
110223-349	ASTRO 250SS-LC	2 bolt flange	2 bolt flange	✓	—	—	115 Vac, 60 Hz, 0.98 A, 117W	9.00 (4.08)

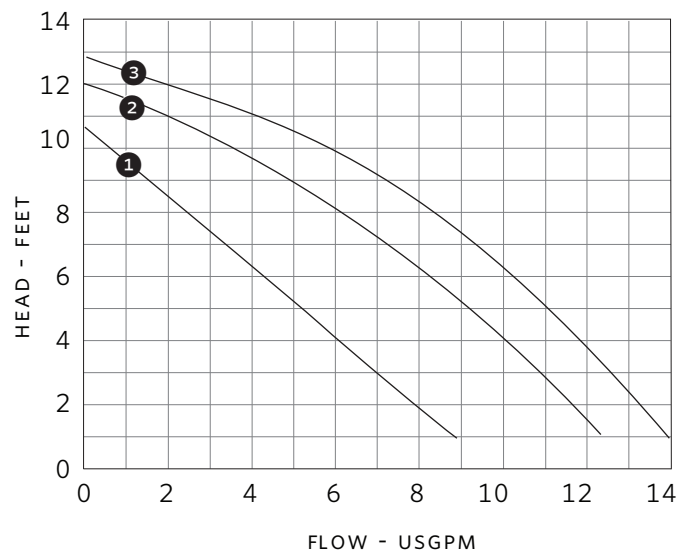
**NOTE:** All weights are in lbs. (kg) \*Union model with sweat hardware kit.

**PERFORMANCE CURVE**

**ASTRO 220SS**

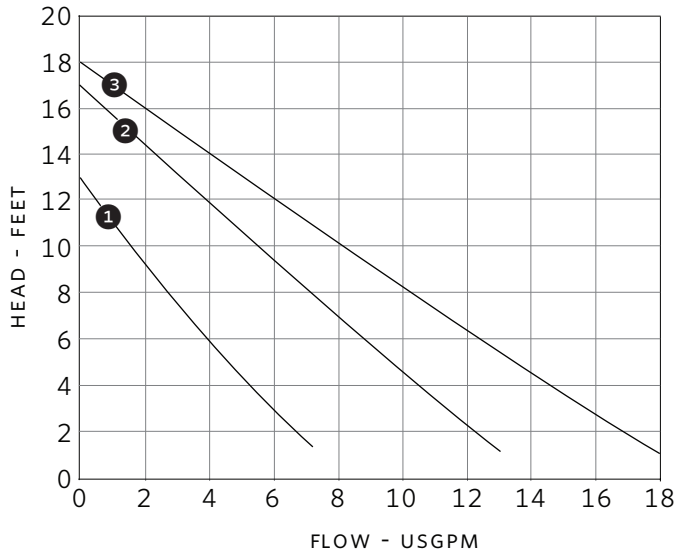


**ASTRO 225SS**

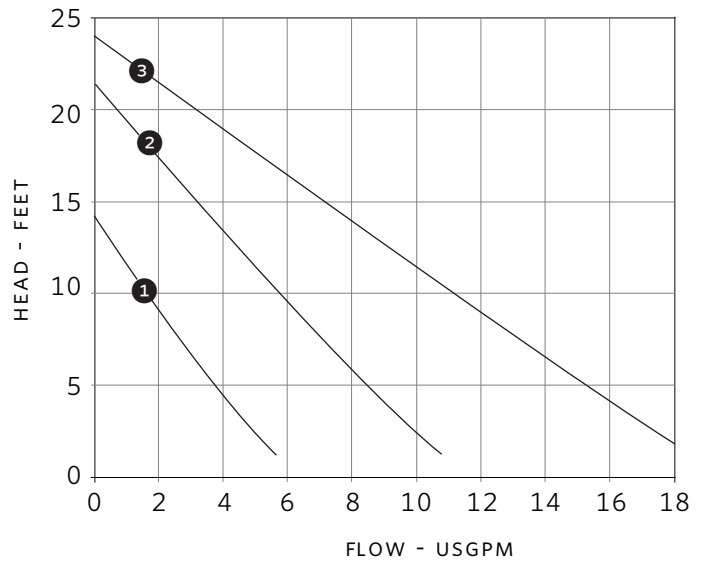


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**ASTRO 230SS**



**ASTRO 250SS**



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