

## Astro Hot Water Re-circulation Systems

## SUBMITTAL

JOB: _____	REPRESENTATIVE: _____
_____	_____
ENGINEER: _____	ORDER NO: _____ DATE: _____
CONTRACTOR: _____	SUBMITTED BY: _____ DATE: _____
_____	APPROVED BY: _____ DATE: _____

Quantity	TAG No.	Model No.	Flow (USgpm)	Head (feet)	Comments

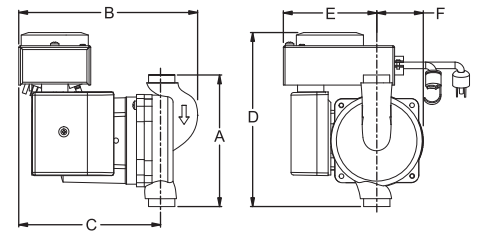
### HOT WATER RE-CIRCULATION SYSTEM APPLICATIONS

Armstrong Astro 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.

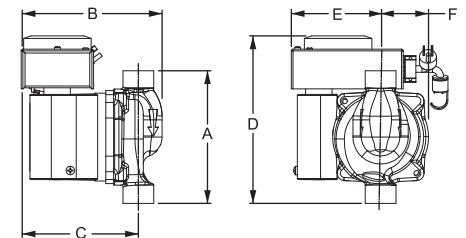


TECHNICAL DATA	
Power Connection	5.0 ft (1.5 m) power cord, molded duplex plug with ground
Environment	Indoor use only
Max. Working Pressure	140 psi (965 kPa)
Ambient Temperature	-40°F to 180°F (-40°C to 82°C)
Max. Water Temperature	230°F (110°C)
Low Temperature Switchpoint <sup>1</sup>	85°F (29°C) ± 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/auto/off

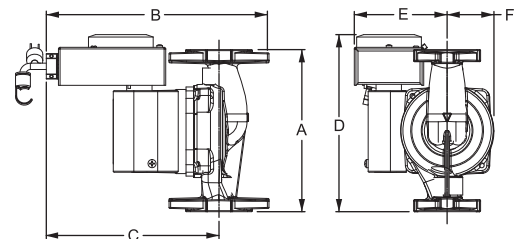
<sup>1</sup>High/low temperature switchpoints are as measured on pipe surface with the Aquastat (TA models only).



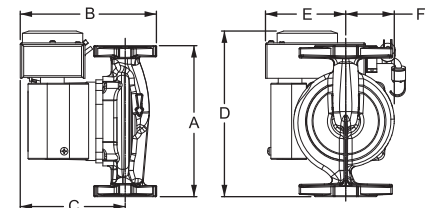
All Astro Sweat Models



All Astro Union Models



Astro 20/30/50 Flanged



Astro 70 Flanged

MATERIALS OF CONSTRUCTION (Wetted Parts)	
Pump Casing	Cast bronze
Pump Shaft	Stainless steel
Impeller	Polypropylene (glass-filled)
Bearings	Graphite
Bearing Seal	EPDM

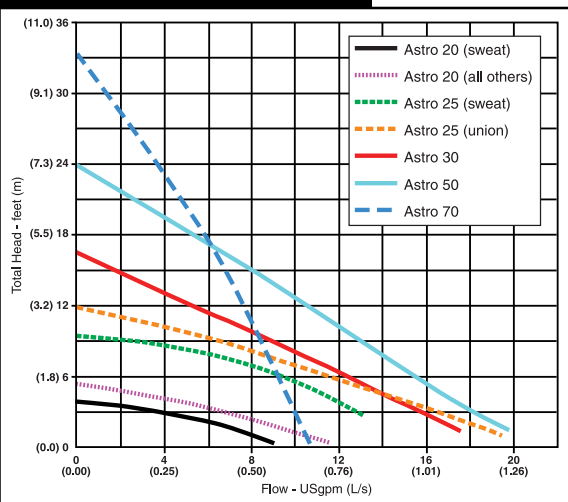
DIMENSIONS						
	A	B	C	D	E	F
All Astro Sweat Models	5.0 (127)	6.5 (165)	5.6 (142)	7.1 (180)	4.3 (110)	1.8 (46)
All Astro Union Models	5.0 (127)	5.3 (134)	4.4 (112)	6.3 (160)	3.4 (86)	1.8 (46)
Astro 20/30/50 Flanged	6.4 (162)	8.7 (221)	6.8 (173)	7.0 (178)	3.7 (93)	1.8 (46)
Astro 70 Flanged	6.4 (162)	5.8 (146)	4.4 (112)	7.0 (178)	3.4 (86)	2.1 (52)

Note: All dimensions are in inches (mm)

Model	Connection	Size	Cord	Timer	Aquastat	Electrical Data	Weight
Astro 20B050S-TA	Sweat	½"	✓	✓	✓	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.3 (2.9)
Astro 20B075S-TA	Sweat	¾"	✓	✓	✓	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.3 (2.9)
Astro 25B050S-TA	Sweat	½"	✓	✓	✓	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.3 (2.9)
Astro 25B075S-TA	Sweat	¾"	✓	✓	✓	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.3 (2.9)
Astro 20BU-TA	NPSM Union	1¼"	✓	✓	✓	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.8 (3.1)
Astro 25BU-TA	NPSM Union	1¼"	✓	✓	✓	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.8 (3.1)
Astro 20BF-TA	2-bolt Flange		✓	✓	✓	115 Vac, 60 Hz, 0.5 A, 1/25 hp	7.3 (3.1)
Astro 30B-TA	2-bolt Flange		✓	✓	✓	115 Vac, 60 Hz, 0.7 A, 1/25 hp	7.3 (3.1)
Astro 50B-TA	2-bolt Flange		✓	✓	✓	115 Vac, 60 Hz, 0.95 A, 1/20 hp	7.7 (3.6)
Astro 70B-TA	2-bolt Flange		✓	✓	✓	115 Vac, 60 Hz, 1.0 A, 1/20 hp	8.0 (3.7)
Astro 20B050S-T	Sweat	½"	✓	✓	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.3 (2.9)
Astro 20B075S-T	Sweat	¾"	✓	✓	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.3 (2.9)
Astro 25B050S-T	Sweat	½"	✓	✓	---	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.3 (2.9)
Astro 25B075S-T	Sweat	¾"	✓	✓	---	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.3 (2.9)
Astro 20BU-T	NPSM Union	1¼"	✓	✓	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.8 (3.1)
Astro 25BU-T	NPSM Union	1¼"	✓	✓	---	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.8 (3.1)
Astro 20BF-T	2-bolt Flange		✓	✓	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	7.3 (3.1)
Astro 30B-T	2-bolt Flange		✓	✓	---	115 Vac, 60 Hz, 0.7 A, 1/25 hp	7.3 (3.1)
Astro 50B-T	2-bolt Flange		✓	✓	---	115 Vac, 60 Hz, 0.95 A, 1/20 hp	7.7 (3.6)
Astro 70B-T	2-bolt Flange		✓	✓	---	115 Vac, 60 Hz, 1.0 A, 1/20 hp	8.0 (3.7)
Astro 20B050S-LC	Sweat	½"	✓	---	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.0 (2.7)
Astro 20B075S-LC	Sweat	¾"	✓	---	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.0 (2.7)
Astro 25B050S-LC	Sweat	½"	✓	---	---	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.0 (2.7)
Astro 25B075S-LC	Sweat	¾"	✓	---	---	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.0 (2.7)
Astro 20BU-LC	NPSM Union	1¼"	✓	---	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	6.5 (2.9)
Astro 25BU-LC	NPSM Union	1¼"	✓	---	---	115 Vac, 60 Hz, 0.6 A, 1/25 hp	6.5 (2.9)
Astro 20BF-LC	2-bolt Flange		✓	---	---	115 Vac, 60 Hz, 0.5 A, 1/25 hp	7.0 (3.2)
Astro 30B-LC	2-bolt Flange		✓	---	---	115 Vac, 60 Hz, 0.7 A, 1/25 hp	7.0 (3.2)
Astro 50B-LC	2-bolt Flange		✓	---	---	115 Vac, 60 Hz, 0.95 A, 1/20 hp	7.4 (3.4)
Astro 70B-LC	2-bolt Flange		✓	---	---	115 Vac, 60 Hz, 1.0 A, 1/20 hp	7.7 (3.5)

Note: All weights are in lbs. (kg)

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