



Astro 2 Series

Three-speed wet-rotor circulators

NSF 372



SOLUTION OUTLINE

FILE NO: 10.125
DATE: OCTOBER 2017

SUPERSEDES: 10.125
DATE: SEPTEMBER 2017

MORE VALUE BUILT IN

BENEFITS

30

MONTHS
WARRANTY

With four new sizes, the Astro 2 circulator range allows you to service more customers and address a broader range of applications.

Astro 2 circulators offer contractor-friendly features for fast and convenient installation.

Astro 2 circulators will provide your customers years of trouble-free operation.

With new selection tools, finding the right Astro 2 model for your situation couldn't be easier.

BUILT TO WIN

Running a contracting business is challenging. You want solutions that make your work easier, and simplify your installations. Armstrong understands your requirements and has built in the functionality and reliability you need to be successful.

Compare and check the details. Armstrong has listened to contractors and added a host of new features to the Astro 2 circulator line. No other circulator line on the market is designed with such attention to detail, and offers as much value to your contracting business and customers.

Expanded line with four new models. Astro 280, 290, 210 and 286 models are now available in both cast iron and stainless steel, allowing you to serve an even wider range of applications. The full Astro 2 offering for hydronics applications covers 100% of common competing models.

KEY FEATURES

Cross-reference information is printed on the box, for convenient access.

e-Coating on the inside of cast-iron volutes provides enhanced corrosion protection for improved reliability.

Flange-to-flange compatibility offers quick and easy exchange of competing models.

Large wiring box and convenient plug-in terminal strip save time.

High-flow check valve, is pre-installed for convenience. Where the installation does not call for a check valve, it can be removed in seconds.

Motor data

| MODEL | INPUT | SPEED | FULL LOAD AMP DRAW (A) | NOMINAL POWER (W) |
|---------------------|----------------------------|-------|------------------------|-------------------|
| ASTRO 210CI/SS | 115V, 60HZ Single phase | 3 | 1.06 | 200 |
| | | 2 | 1.50 | |
| | | 1 | 1.72 | |
| ASTRO 220SSU | | 3 | 0.29 | 33 |
| | | 2 | 0.27 | |
| | | 1 | 0.20 | |
| ASTRO 225BS | | 3 | 0.64 | 75 |
| | | 2 | 0.49 | |
| | | 1 | 0.38 | |
| ASTRO 225SSU | 3 | 0.69 | 83 | |
| | 2 | 0.55 | | |
| | 1 | 0.43 | | |
| ASTRO 230SS/CI/CI-R | 3 | 0.81 | 97 | |
| | 2 | 0.58 | | |
| | 1 | 0.45 | | |
| ASTRO 250SS/CI/CI-R | 3 | 0.98 | 117 | |
| | 2 | 0.79 | | |
| | 1 | 0.65 | | |
| ASTRO 280CI/SS | 3 | 1.90 | 218 | |
| | 2 | 1.80 | | |
| | 1 | 1.50 | | |
| ASTRO 290CI/SS | 3 | 1.90 | 218 | |
| | 2 | 1.60 | | |
| | 1 | 1.40 | | |
| ASTRO 280CI/SS 230V | 3 | 0.90 | 210 | |
| | 2 | 0.86 | | |
| | 1 | 0.80 | | |
| ASTRO 286CI/SS | 1 | 1.60 | 375 | |

TECHNICAL DATA

Max. fluid temperature*: 185°F/85°C (Astro 286 up to 1.35A)
150°F/65°C (Astro 286 over 1.35A)
230°F/110°C (all others)

Max. working pressure: 150 PSI / 1034 kPa

Certification: ETL listed for US and Canada (conforms to UL STD.778 certified to CSA STD. C22.2 NO.108-01) NSF 372 (for lead free bronze and stainless steel models)

Warranty: 30 months

*Since water conditions can vary with geographical location (i.e. amount and type of dissolved solids) it is recommended that the operating temperature of the fluid for open (potable) systems be kept as low as possible (i.e. below 150°F or 65°C) to avoid precipitation of calcium.

MATERIALS OF CONSTRUCTION

Pump body: • Cast iron (closed system)
• Stainless steel** (open system)
• Lead-free bronze** (open system)

Impeller: Noryl

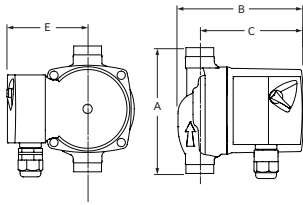
Shaft: ceramic

Bearings: ceramic

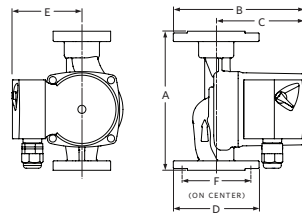
Gasket: EPDM

**Certified <0.25 weighted average percent lead (NSF 372) and complies with California Health and Safety code section 116875 (commonly known as AB1953).

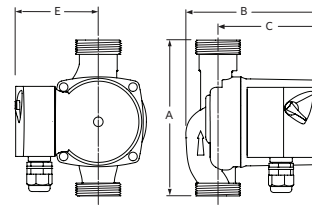
ASTRO 225BS



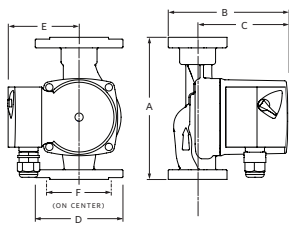
ASTRO 230SS/CI & 250SS/CI



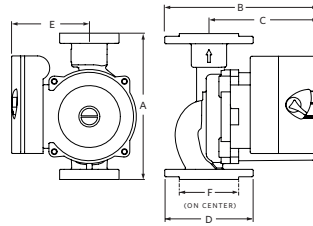
ASTRO 220SSU & 225SSU



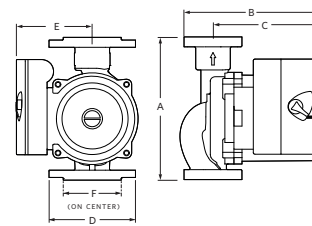
ASTRO 230CI-R & 250CI-R



ASTRO 210CI/SS & 280SS



ASTRO 280CI, 290CI/SS & 286CI/SS



Dimensions and weights

| LEAD FREE BRONZE* | | A | B | C | D | E | F | CONNECTION TYPE & SIZE | WEIGHT |
|-------------------|----------------------|------------|------------|------------|------------|-----------|-----------|---------------------------------|------------|
| 110223-303 | Astro 225BS ½" SWT | 5.00 (127) | 5.00 (127) | 4.13 (105) | — | 3.00 (76) | — | Sweat - ½" | 6.0 (2.7) |
| 110223-304 | Astro 225BS ¾" SWT | 5.00 (127) | 5.00 (127) | 4.13 (105) | — | 3.00 (76) | — | Sweat - ¾" | 6.0 (2.7) |
| STAINLESS STEEL* | | A | B | C | D | E | F | CONNECTION TYPE & SIZE | WEIGHT |
| 110223-309 | Astro 220ssu** | 6.00 (152) | 5.00 (127) | 4.00 (102) | — | 3.00 (76) | — | Union - 1¼" NPSM | 6.5 (2.9) |
| 110223-310 | Astro 225ssu** | | | | | | | | |
| 110223-306 | Astro 230ss** | 6.38 (162) | 6.00 (150) | 4.00 (102) | 4.00 (102) | 3.00 (76) | 3.25 (80) | Flange - (2) ½" dia. bolt holes | 8.0 (3.6) |
| 110223-308 | Astro 250ss** | | | | | | | | |
| 110223-327 | Astro 210ss** | 6.50 (165) | 6.37 (162) | 4.87 (124) | 4.00 (102) | 3.50 (90) | 3.13 (80) | Flange - (2) ½" dia. bolt holes | 10.1 (4.6) |
| 110223-323 | Astro 280ss (230v)** | | | | | | | | |
| 110223-325 | Astro 286ss** | | | | | | | | |
| 110223-329 | Astro 290ss** | 8.50 (216) | 6.65 (169) | 5.20 (132) | 4.00 (102) | 3.50 (90) | 3.45 (88) | Flange - (2) ½" dia. bolt holes | 13.2 (6.0) |
| CAST IRON | | A | B | C | D | E | F | CONNECTION TYPE & SIZE | WEIGHT |
| 110223-305 | Astro 230ci** | 6.38 (162) | 6.00 (150) | 4.00 (102) | 4.00 (102) | 3.00 (76) | 3.25 (80) | Flange - (2) ½" dia. bolt holes | 8.0 (3.6) |
| 110223-315 | Astro 230ci-R** | | | | | | | | |
| 110223-307 | Astro 250ci** | 6.38 (162) | 6.00 (150) | 4.00 (102) | 4.00 (102) | 3.00 (76) | 3.25 (80) | Flange - (2) ½" dia. bolt holes | 8.0 (3.6) |
| 110223-317 | Astro 250ci-R** | | | | | | | | |
| 110223-326 | Astro 210ci** | 6.50 (165) | 6.37 (162) | 4.87 (124) | 4.00 (102) | 3.50 (90) | 3.13 (80) | Flange - (2) ½" dia. bolt holes | 10.1 (4.6) |
| 110223-322 | Astro 280ci (230v)** | | | | | | | | |
| 110223-324 | Astro 286ci** | | | | | | | | |
| 110223-328 | Astro 290ci** | 8.50 (216) | 6.65 (169) | 5.20 (132) | 4.00 (102) | 3.50 (90) | 3.45 (88) | Flange - (2) ½" dia. bolt holes | 13.2 (6.0) |

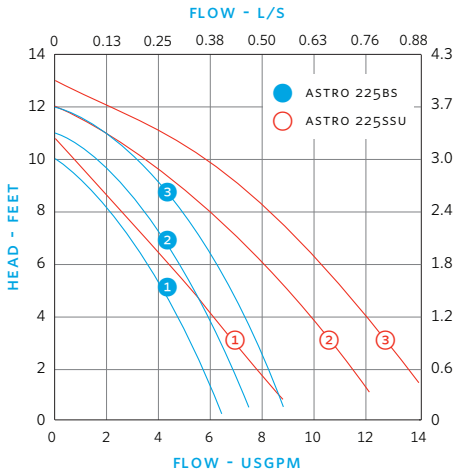
NOTE: All dimensions are in inches (mm) and weights in lbs (kg).

* Certified <0.25 weighted average percent lead and complies with California Health and Safety Code Section 116875 (commonly known as AB 1953).

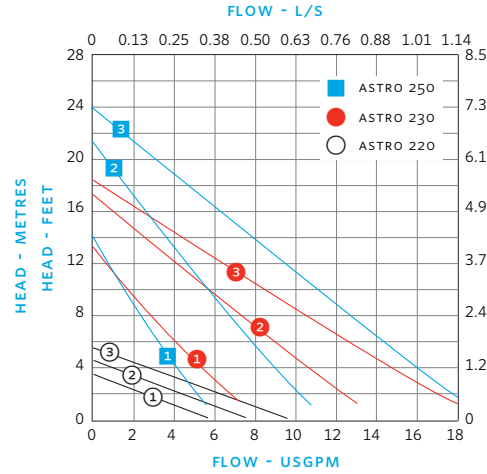
** Removable check valve installed at pump outlet.

Performance curves

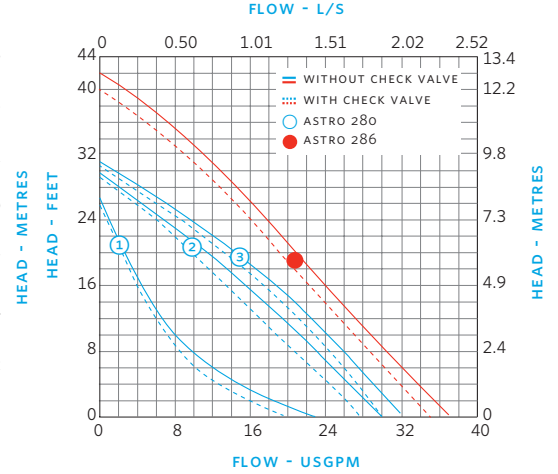
ASTRO 225BS, 225SSU



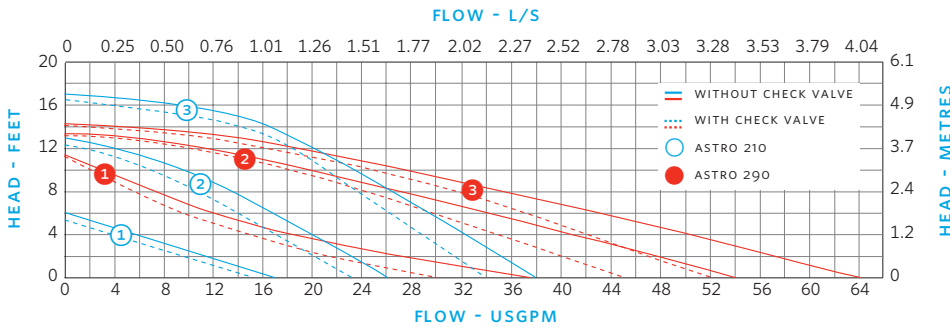
ASTRO 220, 230, 250



ASTRO 280, 286



ASTRO 210, 290



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