

Astro 2 Series

Three-speed wet-rotor circulators

NSF ≤ 0.25%



CAUTION:
FOR SAFETY,
CONNECTIONS USE
WIRE SIZES AS
AT LEAST 90%
USE COPPER
CONDUCTORS ONLY.

WARNING: TO
REDUCE RISK OF
ELECTRICAL
SHOCK SEE
INSTRUCTION
MANUAL FOR
PROPER
INSTALLATION.

ARMSTRONG
ASTRO 290CI
PART #: 110022-525
REV. 01
1 PHASE, 115V - 60Hz

SPEED	Q ₁ (GAL)	P ₁ (W)	η (%)
1	157	1.4	1.6
2	184	1.6	1.9
3	218	1.9	

Thermally protected
Type 2 enclosure
Class II
Certified to CSA STD. C22.2 No. 108-01
UL 510-278
ETL
INTEGRAL
3792850
WATER CIRCULATING PUMP

WARNING
• For indoor use only
• Do not install with motor above or below pump body
• Use copper conductors only
• Non-weldable
• Do not run dry pump

SOLUTION OUTLINE

FILE NO: 10.125
DATE: MARCH 14, 2012

SUPERSEDES: 10.125
DATE: AUGUST 26, 2011

UNMATCHED PERFORMANCE

Armstrong
Astro 2 three-
speed circulators
provide unmatched
performance over
a wide range of
head and flow
requirements.



he three-speed design allows users to match the requirements of an installation exactly. It also helps with:

- Increased number of zones due to a building addition
- Addition of system elements such as an indirect hot water tank or spa

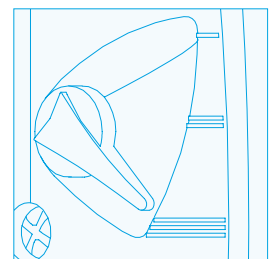
With Astro 2 three-speed units installed you can easily adjust the operating speed to handle these changed performance requirements.

Astro 2 circulators (except sweat connection models) include a removable check valve that eliminates the need for additional check valves in the system. For replacement installations, the check valve can be removed as required.

Reduced Inventory The complete range of 12 Astro 2 three-speed circulators replaces 128 models of competitors' pumps.

Adaptability After a circulator is installed you might need to change the performance to accommodate:

- Over/under estimated system resistance in the original design



THREE-SPEED SWITCH



SPEEDS



REPLACE SEVERAL WITH ONE

Key features

COMPLIANCE WITH LEAD-FREE REGULATIONS

Lead-free bronze and stainless steel models of Astro 2 certified <0.25 weighted average percent lead (NSF 61 Annex G) and complies with California Health and Safety Code Section 116875 (commonly known as AB1953).

INTERNATIONAL CODE COMPLIANCE

Astro 2 units are ETL listed for the US and Canada and conform to UL std. 778 and Canadian electrical safety standards CSA std. c22.2 No. 108-01.

THREE-SPEEDS

Reduce your inventory with a variety of performance curves. Twelve pumps replace 128 circulators. Correct design issues in the field by adjusting the circulator output.

REMOVABLE CHECK VALVE

Reduce costs by eliminating multiple system check valves. Helps prevent reverse flow and induced heat migration.

EASY CONNECTION

Models are available with union, sweat or flange connections. Models are also available with rotated flanges for installation in tight locations, where clearance is an issue.

TECHNICAL DATA

Flow range: 0 - 64 USgpm / 0 - 4.04 L/S

Head range: 0 - 31 FEET / 0 - 9.45 METERS

Motor: 60HZ single phase

Volts: 115V

Max. fluid temperature*: 230°F / 110°C

Max. working pressure: 150 PSI / 1034 kPa

*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)

• lead-free bronze (open system)**

• stainless steel (open system)**

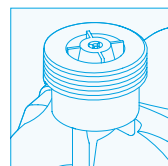
Impeller: polyether imide (PEI) **Shaft:** ceramic

Bearings: ceramic

Gasket material: EPDM

**Certified <0.25 weighted average percent lead (NSF 61 Annex G) and complies with California Health and Safety code section 116875 (commonly known as AB1953).

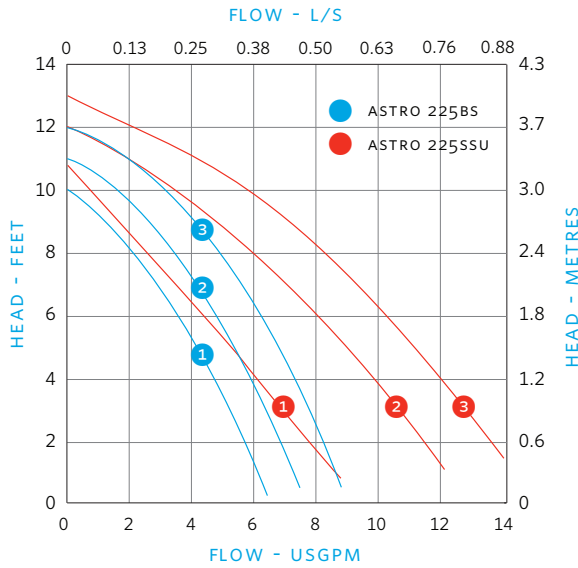
THE CHECK IS INSIDE



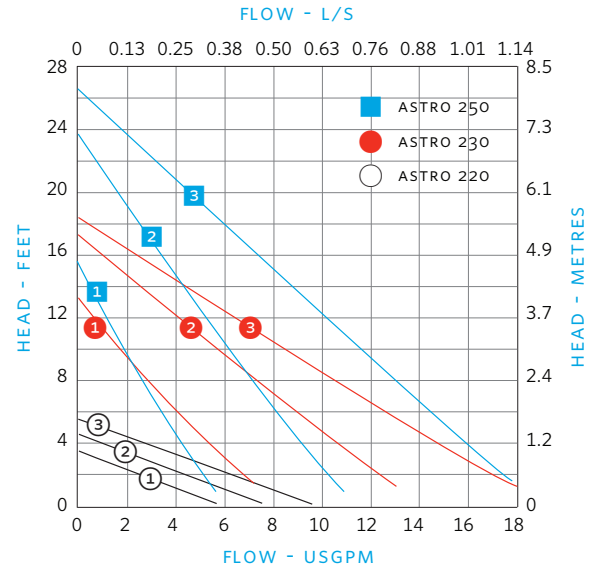
The integral check valve prevents reverse direction flow without the need to install a discrete check valve, saving capital cost and installation labour.

PERFORMANCE CURVES

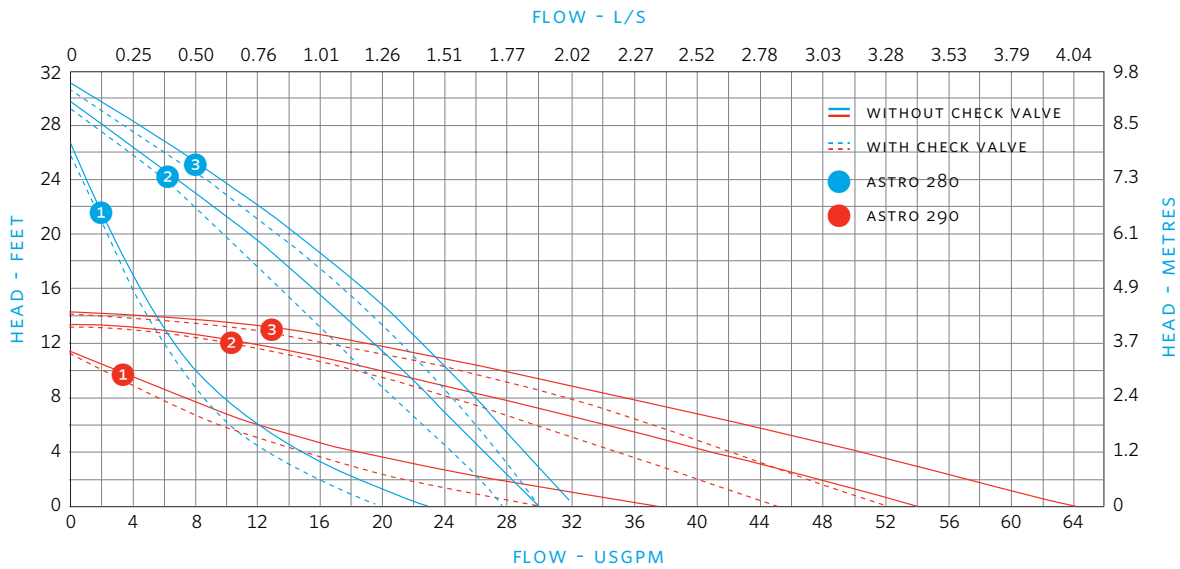
ASTRO 225BS, 225SSU



ASTRO 220, 230, 250



ASTRO 280, 290



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