

COMPASS | DESIGN ENVELOPE VARIABLE SPEED WET ROTOR CIRCULATORS | SUBMITTAL

File No: 10.65
Date: SEPTEMBER 20, 2016
Supersedes: 10.65
Date: MARCH 28, 2014

Job: _____ Representative: _____
 _____ Ordered by: _____ Date: _____
 Engineer: _____ Submitted by: _____ Date: _____
 Contractor: _____ Approved by: _____ Date: _____

TECHNICAL DATA

Supply voltage: 1 × 115 V - 10%/+ 6%, 60 Hz

	MINIMUM	MAXIMUM
Amp	0.05	0.65
Watt	5	45

Motor protection: The pump requires no external motor protection.

Maximum working temperature: 230°F (110°C) maximum

Maximum working pressure: 150 psi (10 bar).

Maximum relative air humidity (rh): 95%.

Flow range: 0 - 20 USgpm (0 to 1.26 L/s)

Head range: 0 - 20.0 feet (0 to 6.09 m)

Enclosure class: Type 2

Insulation class: H

Certification: ETL listed for US and Canada (conforms to ULSTD.778 certified to CSA STD. C22.2 NO.108-01)

*NSF 372 (for stainless steel models)

INLET PRESSURE

Minimum inlet pressure in relation to liquid temperature:

LIQUID TEMPERATURE	MINIMUM INLET PRESSURE
150°F (65°C)	3.0 ft (0.91 m)
167°F (75°C)	4.4 ft (1.34 m)
194°F (90°C)	9.2 ft (2.8 m)
230°F (110°C)	36.1 ft (11.0 m)

Sound pressure level: The sound pressure level of the pump is lower than 43 dB(A).

Ambient temperature: 32°F (0°C) - 104°F (40°C)

Pumped liquids: Water or water Glycol mix.

Liquid temperature: 36°F (2°C) - 230°F (110°C)**

To avoid condensation in the control box and stator, the liquid temperature must always be higher than the ambient temperature.

AMBIENT TEMPERATURE	LIQUID TEMPERATURE	
	MIN.	MAX.
32°F (0°C)	35.6°F (2°C)	230°F (110°C)
50°F (10°C)	10°C (50°F)	230°F (110°C)
68°F (20°C)	68°F (20°C)	230°F (110°C)
86°F (30°C)	86°F (30°C)	230°F (110°C)
95°F (35°C)	95°F (35°C)	194°F (90°C)
104°F (40°C)	104°F (40°C)	176°F (80°C)

MATERIALS OF CONSTRUCTION

Pump body: Cast iron (closed systems)
 Stainless steel* (open systems)

Impeller: Noryl

Shaft: Ceramic

Bearings: Ceramic

Gasket material: EPDM

HARDWARE KIT

Companion flange kit (contains two (2) flanges, hardware and gaskets) (for flange models)

Union kit (contains two (2) union nuts, connection (sweat or nut) and gaskets)

Cast iron: 0.75", 1", 1.25", 1.5"

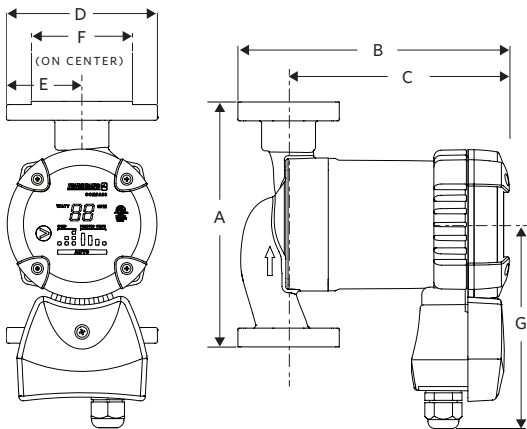
Bronze: 0.75", 1", 1.25", 1.5"

DIMENSIONS AND WEIGHTS

STAINLESS STEEL*	A	B	C	D	E	F	G	CONNECTION TYPE & SIZE	WEIGHT
Compass 20-20 ss flange	6.50 (165)	7.08 (180)	5.75 (146)	4.00 (102)	2.00 (50)	3.25 (80)	5.31 (135)	Flange - (2) ½" dia. bolt holes	8.0 (3.6)
Compass 20-20 ssu	6.00 (152)	7.08 (180)	5.75 (146)	4.00 (102)	2.00 (50)	1.25 (32)	5.31 (135)	1¼" Union	
CAST IRON	A	B	C	D	E	F	G	CONNECTION TYPE & SIZE	WEIGHT
Compass 20-20 ci flange	6.50 (165)	7.08 (180)	5.75 (146)	4.00 (102)	2.00 (50)	3.25 (80)	5.31 (135)	Flange - (2) ½" dia. bolt holes	8.0 (3.6)

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).
** For open systems, it is recommended that the liquid temperature be less than 150°F (65°C) to avoid precipitation of calcium.

COMPASS FLANGE



TORONTO
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BUFFALO
+1 716 693 8813

BIRMINGHAM
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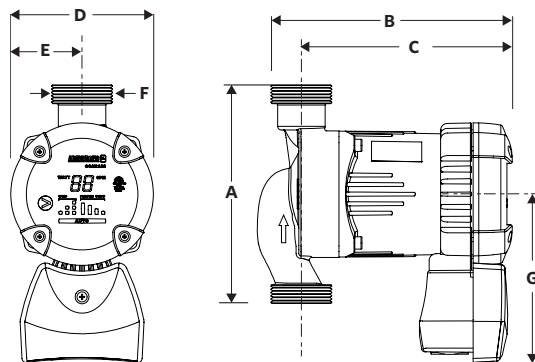
MANCHESTER
+44 (0) 8444 145 145

BANGALORE
+91 (0) 80 4906 3555

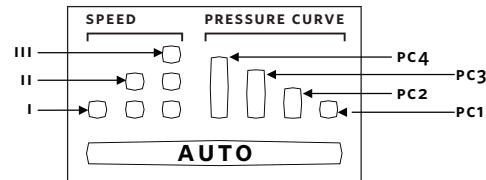
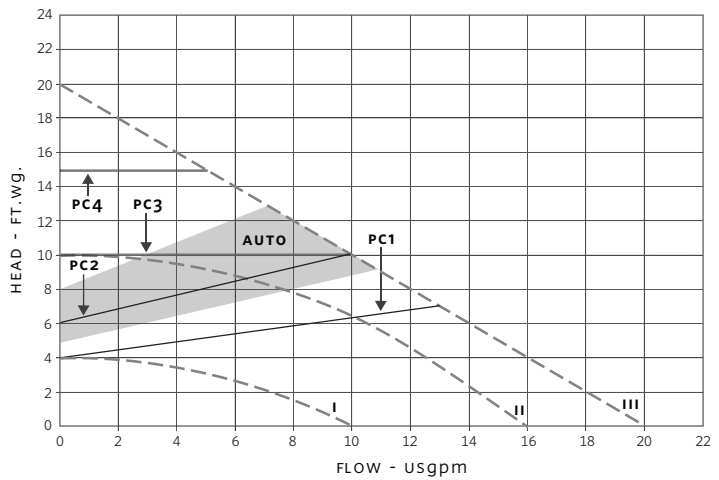
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COMPASS UNION



COMPASS PERFORMANCE CURVES



Lights on the display indicate the Control mode selected.