

## CM100HP - HIGH PRESSURE CIRCULATION PUMP

FEATURES	BENEFITS	COMPETITIVE ADVANTAGES
Wide Operating Temperature Range	Designed for ambient temperatures of -40°F to +220°F at a liquid temp of +200°F (-40°C to +105°C at a liquid temperature of +93°C)	Reliable operation even under extreme conditions
Automatic Security Protection	Designed with built-in protection for Low Voltage, Reverse Polarity, Dry Run, Voltage Transients and Locked Rotor	Pump protection even when exposed to adverse conditions
Variable Speed Control	Pump able to operate at duty cycles of 10% to 100%	Variable speed control allows adjustment to specific speed control need of application.  Also equipped with derating feature that automatically reduces speed
Long Service Life	Designed for continuous duty	Motor designed for 40,000 hours service life
Magnetic Drive	Low maintenance requirement	Eliminates the risk of leakage common with mechanical seals in shaft driven pumps
Enclosure: IP6K9K and IP67	Waterproof design in extreme conditions	Operation in extreme weather and cleaning conditions.



# TECHNICAL SPECIFICATIONS

## CM100HP GENERAL INFORMATION

<b>CAPACITY</b>	1" (25 mm) port	22.5 GPM (85 l/min) at 1 bar (33.5 ftH <sub>2</sub> O)
	1 1/2" (38 mm) port	22.5 GPM (85 l/min) at 1 bar (33.5 ftH <sub>2</sub> O)
<b>SYSTEM PRESSURE</b>	-3 to + 36 psi (-0.2 to +2.5 bar) at +212°F (+100°C)	
<b>LIQUID</b>	Water/glycol mixture; max. 60% glycol	
<b>MOTOR SERVICE LIFE</b>	The motor is designed for a service life of 40,000 hours at nominal voltage and ambient temperature of +104°F (+40°C)	
<b>MOTOR, VOLTAGE</b>	Nominal 27.2 V DC for use between 16-32 V DC	
<b>MOTOR</b>	Enclosed (as per IP6K9K and IP67) permanent magnet, ball bearing mounted brushless motor, designed for continuous operation	
<b>INPUT POWER</b>	Max. 475 W	
<b>DRY RUNNING</b>	Max. 25 minutes	
<b>PORTS</b>	1" (25 mm) or 1 1/2" (38 mm) diameter	
<b>WEIGHT</b>	8.5 lbs (3.9 kg)	
<b>PUMP HOUSING</b>	Aluminum, black anodized	
<b>IMPELLER</b>	PPS GF	
<b>INTERMEDIATE PART</b>	PPA GF	
<b>MOUNTING</b>	Separate universal bracket for flat surfaces. Pump is adjustable in bracket for universal application.	
<b>FLAMMABILITY</b>	UL94 Class V0 (external polymer materials meet same requirements)	
<b>DEGREE OF PROTECTION</b>	IP6K9K, IP67 (ISO 20653)	

### EMC approved according to:

UN ECE R10 rev. 5, with references to CISPR 12, CISPR 25, ISO 11452-2, -3, -4, -5 and ISO 7637.

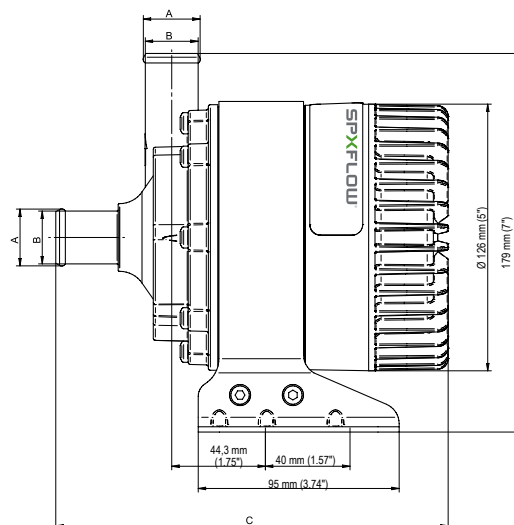
EN61000-6-3:2007 + A1:2011, +AC:2012 Class B.

EN 61000-6-2:2005 + AC: 2005 Industrial.

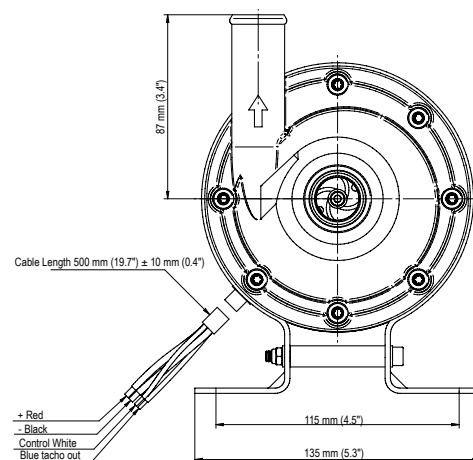
EN 60945:2002 Marine, Chapter 9 and 10.

EN 55014-1:2006 + A1:2009 + A2: 2011.

EN55014-2:1997 + A1:2001 + A2: 2008 + AC: 1997.



	A	B	C
CM100HP AL-1BL 27,2VC Pump Ø25	1" (26.9 mm)	1" (25 mm)	7.3" (186 mm)
CM100HP AL-1BL 27,2VC Pump Ø38	1.5" (39.9 mm)	1.5" (38 mm)	7.5" (191 mm)



### CM100HP Pressure and capacity data (based on water at 68°F/20°C (and recommended hose diameter))

HOSE CONNECTION	BACK PRESSURE			FLOW		AMPERAGE (27.2V) Recommended Fuse Size: 25 – 30A
	BAR	KPA	FTH <sub>2</sub> O	L/MIN	GPM	
1" (Ø25 mm)	0.6	60	20.07	104	27.5	16.4
1 1/2" (Ø38 mm)	0.1	100	33.46	85	22.5	16.4
	1.4	140	46.84	57	15.1	16

PART NUMBER	DESCRIPTION
10-13576-02	CM100H P AL-1B L 27,2V D25
10-13577-02	CM100H P AL-1B L 27,2V D38



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