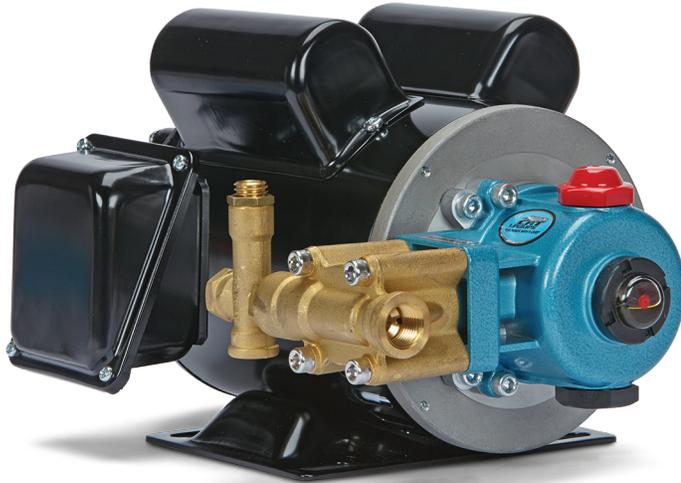


# 1CX SERIES PLUNGER PUMPS



0.13 – 0.5 GPM | 100 – 1,250 PSI

## Keeping Customers Comfortable

The high-pressure water pump is the most important part of a misting system. This is why customers select products such as the 1CX series pump from Cat Pumps. The 1CX is an incredibly reliable pump designed to keep your system running. From the oil lubricated drive-end to the specially-designed regulator, engineers at Cat Pumps set out to design the best compact misting pump available.

The 1CX is the perfect fit for misting applications that require 0.5 gpm or less. With seals that run thousands of hours before requiring any servicing, the 1CX is small in size but has the same life expectancy as our industrial products.

### Pump Specifications

	U.S. Measure	Metric Measure
Flows:	60 Hz – 0.13, 0.25, 0.5 gpm	60 Hz – 0.5, 0.9, 1.9 lpm
	50 Hz – 0.1, 0.2, 0.4 gpm	50 Hz – 0.4, 0.8, 1.6 lpm
Pressure Range:	100 – 1250 psi	6.9 – 86 bar
RPM:	1750 (60 Hz)	1750 (60 Hz)
	1450 (50 Hz)	1450 (50 Hz)
Inlet Port:	3/8" NPT(F)	3/8" NPT(F)
Discharge Port:	1/4" NPT(F)	1/4" NPT(F)
Seals:	NBR	NBR
Manifold:	Brass	Brass
Weight:	3.45 lbs	1.56 kg

### Typical Applications

- Greenhouse Misting
- Portable Fan Misting
- Pest Control
- Horse Barn Misting
- Sporting Events
- Visual Effects Fogging
- Odor Control
- Humidity Control
- Restaurant Mist Cooling
- Patio Mist Cooling
- Boat Mist Cooling
- Parks Misting
- Zoo Mist Cooling

### Ultra-Compact, Direct-Drive Motor/Pump Units

- Compact Pressure Regulator for space savings
- Hollow shaft pump minimizes footprint
- Specially designed motors that fit in compact spaces



# Product Quality, Reliability and Support You Expect

## Quality That Keeps Your Equipment Running

Specifying the best pump for the application is vital to long, trouble-free service. That's where Cat Pumps comes into play.

Our commitment to produce the highest-quality, longest-lasting products available is supported by maintaining a rigorous zero-defect quality assurance program to guarantee consistently high-quality products — every time.

### Cat Pumps Benefits:

- Jobs done on schedule with less downtime
- Fewer repairs result in reduced maintenance costs
- Fast turnaround for parts & pumps – 24 hour shipping

## Readily Available – Off the Shelf

In addition to receiving the highest-quality products available, Cat Pumps customers also benefit with the following:

- Pumps and repair parts are stock items
- Quick response with 95% of orders shipping within 24 hours
- Worldwide sales and service channel stocking genuine Cat Pumps products

## Engineering and Technical Support

Cat Pumps offers engineering and technical support for product selection, installation, maintenance, pump repair, troubleshooting and custom-designed systems. Live Support available Monday through Friday, 8:00 a.m. to 5:00 p.m. CST, (763) 780-5440 and at [techsupport@catpumps.com](mailto:techsupport@catpumps.com). Product service videos can be found at [www.catpumps.com](http://www.catpumps.com)

**“The applications I serve often require the pumps to perform at the edge of their operating limits. Cat Pumps are the only pumps that can handle the application variation and still meet the demands in life that customers need.”**

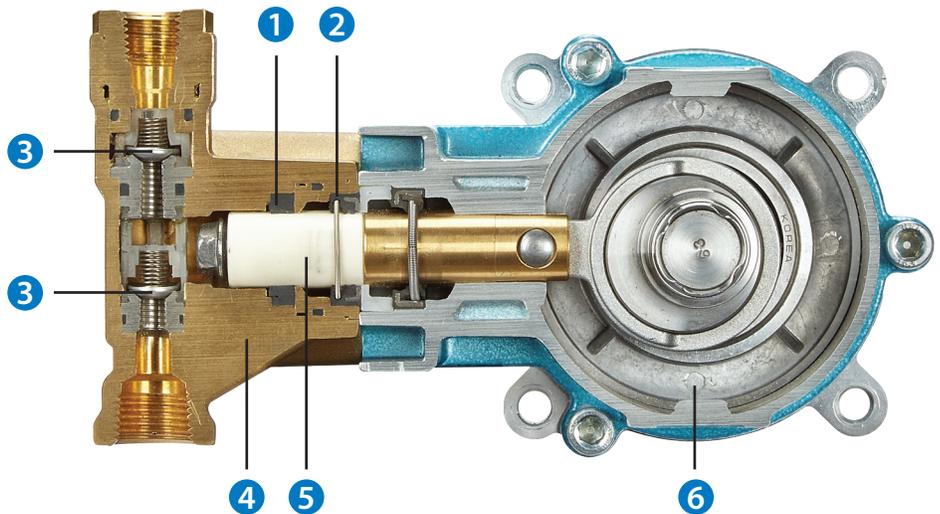
**Ali Erturk • Aniks**



Photos provided by Modern Misting Systems, Inc.

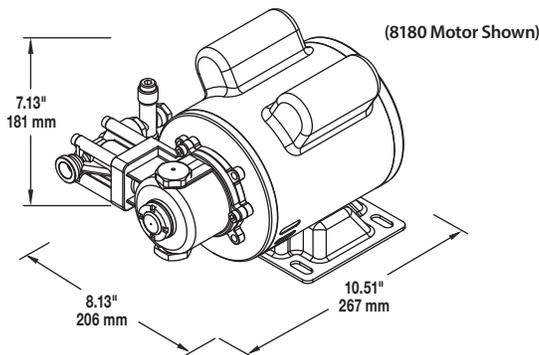
# 1CX Features – Compact and Long-Lasting

- 1 Industry-proven high-pressure seal**  
For longest service life
- 2 Low-pressure seal**  
For leak-free design
- 3 Stainless steel check valves**  
For the best corrosion and wear resistance
- 4 Brass manifold**  
Rugged and economical
- 5 Ceramic plunger**  
For a true seal-surface
- 6 Oil lubricated drive-end**  
For long-life



## Compact Design

High performance with a small footprint



## Model 7561 Regulator

Standard feature with 1CX series pumps. Designed specifically for low-flow misting applications.

- Compact
- Quiet
- Consistent Pressure
- Precise Adjustment



## Configuration Options

Cat Pumps provides products to best fit your needs, from separate components to a complete unit and everything in between.



Ordered as separate components to be assembled by customer.



Pump assembled to motor and ready to install in misting system.



Custom power units configured to system requirements.

## Model Number Selection Chart

Series	Flow (1750 rpm)	Regulator	Assemble Option	Motor Option*	Pulse Hose Option
1CX	013 = .13 gpm	R = Regulator Included	D = Pump and Motor not assembled	1 = 8180	Blank = No Pulse Hose
	025 = .25 gpm			2 = 8182	
	050 = .5 gpm		A = Pump and Motor assembled	3 = 8185	P = Pulse Hose Included
				4 = 8183	
			5 = 8186		

**Example:** 1CX050RA2P = .5 gpm, Regulator, 8182 Motor, Assembled, Pulse Hose included

\* See Motor Options Chart Below

## Motor Options

Motors	8180	8182	8185	8183	8186
Horsepower**	¼ HP	½ HP	½ HP	½ HP	½ HP
Phase	Single	Single	Single	Single	Single
Hertz	60 Hz	60 Hz	60 Hz	50 Hz	60 Hz
Voltage	115V / 230V	115V / 230V	115V / 230V	115V / 230V	115V / 230V
RPM	1750 rpm	1750 rpm	1750 rpm	1450 rpm	1750 rpm
Full load amp***	2.8 / 1.4	4.8 / 2.4	4.8 / 2.4	6.4 / 3.2	4.8 / 2.4
Service factor	1.0	1.0	1.0	1.0	1.0
Shaft diameter	½"	½"	½"	½"	½"
Connection	12" Leads	12" Leads	Terminal Box	Terminal Box	Terminal Box
Capacitors	Start and Run	Start and Run	Start and Run	Start and Run	Start and Run
Insulation class	E	E	E	F	E
Motor type	ODP	ODP	ODP	TEFC	TEFC
Compliance	RoHS, CSA	RoHS, CSA	RoHS, CSA	RoHS, CE, UL, CSA	RoHS, CSA
Weight	15.80 lbs	21.75 lbs	22.25 lbs	28.85 lbs	24.55 lbs

\*\* Horsepower Calculation = (GPM X PSI) ÷ 1060

\*\*\* NOTE: Without pulse hose, amp draw will increase as much as 2 amps depending upon pump model and discharge pressure.

## Replacement Parts

Fan Cover	999525	999525	999525	N/A	999524
Capacitor Cover	999529	999526	999526	N/A	999526



**8180 and 8182**  
12" Wire Leads



**8185**  
Terminal Box



**8183**  
Terminal Box



**8186**  
Terminal Box

Contact Cat Pumps for more information at [info@catpumps.com](mailto:info@catpumps.com) or (763) 780-5440



### CAT PUMPS

1681 – 94<sup>TH</sup> LANE N.E. MINNEAPOLIS, MN 55449-4324  
 PHONE (763) 780-5440 | FAX (763) 780-2958  
 E-MAIL: [INFO@CATPUMPS.COM](mailto:INFO@CATPUMPS.COM)  
[WWW.CATPUMPS.COM](http://WWW.CATPUMPS.COM)