

Plumb n' Plug® Cartridge Circulators

The 003, 005 and 006 Plumb n' Plug® Cartridge Circulators are designed to conserve water, increase comfort and reduce the delivery time of hot water to outlet fixtures by periodically re-circulating hot water through the system. An average residence can save up to 12,000 gallons of water per year. A pre-wired 6 foot line cord and optional 24 hour analog or 7-day digital plug-in timer allow for easy installation and setup. Simply Plumb it in, then Plug it in. Plumb n' Plug circulators include all standard 00® maintenance-free design features, including; no mechanical seal, a self-lubricating replaceable cartridge, quiet, efficient operation and unmatched reliability. Available with Sweat, Threaded or Union connections and optional Integral Flow Check (IFC®).



Submittal Data Information

Plumb n' Plug®

Submittal Data # 101-066
Supersedes: 11/12/19

Effective: 10/02/24

Features

- Factory Installed 6' Line Cord
- 24 Hour/15 Minute Interval Analog Timer
- Optional 95°F – 115°F Aquastat Available
- Standard High Capacity Output
- Compact Design
- Quiet, Efficient Operation
- Direct Drive — Low Power Consumption
- Unique Replaceable Cartridge Design
-Field Serviceable
- Self-Lubricating
- No Mechanical Seal
- Unmatched Reliability — Maintenance Free
- Sweat Connections — Bronze
- Union, Threaded, & Flanged Connections — Stainless Steel

Materials of Construction

Casing (Volute):	Bronze or Stainless Steel
Stator Housing:	Steel
Cartridge:	Stainless Steel
Impeller:	Non-Metallic
Shaft:	Ceramic
Bearings:	Carbon
O-Ring & Gaskets:	EPDM
Integral Flow Check:	Body & Plunger - Acetal, Spring - Stainless Steel
O-ring:	EPDM

Model Nomenclature

- BC – Bronze, 1/2" Sweat
B – Bronze, 3/4" Sweat
ST – Stainless Steel, 3/4" FNPT
SC – Stainless Steel, Union Connection
PNP – Plumb n' Plug®
SF – Stainless Steel, Flanged

Performance Data

Maximum Flow:	7 GPM (003) 11.5 GPM (006) 19.5 GPM (005)
Maximum Head:	4.5 Feet (003) 9.5 Feet (006) 8.5 Feet (005)
Minimum Fluid Temperature:	40°F (4°C)
Maximum Fluid Temperature:	220°F (104°C)
Maximum Working Pressure:	125 psi

Application

The Taco 003, 005 & 006 Plumb n' Plug® (PNP) periodically re-circulates hot water through the domestic piping system to decrease the delivery time to outlet fixtures and reduce wasted water. Typical timer programming will cycle the Plumb n' Plug during high peak usage periods such as early morning or early evening. An optional aquastat is available to maintain temperature between 95°F and 115°F.

The Taco 003 PNP is ideal for recirculation loops. Its design operating condition of 3 gpm at 3 feet of head helps to reduce erosion corrosion and noise in system piping. Use the 003 PNP for systems up to 200 total feet (supply and return) of 3/4" pipe. The Taco 005 & 006 PNP's are designed for systems using 200-400 feet of 3/4" pipe. Installation of isolation valves, pipe insulation and flow checks are recommended.

Pump Dimensions & Weights

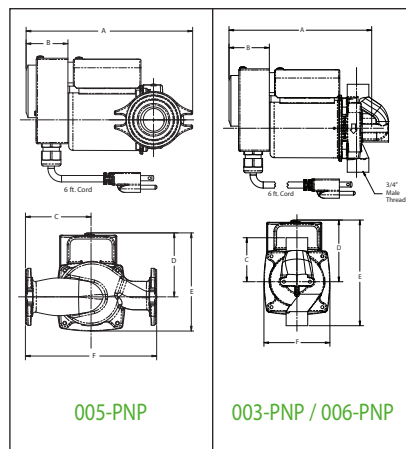
Analog Timer

Model	Connection	A		B		C		D		E		F		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
003-BC4-PNP	1/2" Sweat	7-1/4	184	1-15/16	49	2-1/8	54	3-1/16	78.0	5-1/4	134	3-5/16	84	7.0	3.2
003-B4-PNP	3/4" Sweat	7-1/4	184	1-15/16	49	2-3/16	56	3-1/16	78.0	5-1/4	134	3-5/16	84	7.0	3.2
003-ST4-PNP	3/4" FNPT	7-1/4	184	1-15/16	49	2	51	3-1/16	78.0	5-1/4	134	3-5/16	84	7.0	3.2
003-SC4-1PNP	Union	7-1/4	184	1-15/16	49	2-31/32	76	3-1/16	78.0	6	152	3-5/16	84	7.0	3.2
006-BC4-PNP	1/2" Sweat	7-1/4	184	1-15/16	49	2-1/8	54	3-1/16	78.0	5-1/4	134	3-5/16	84	7.0	3.2
006-B4-PNP	3/4" Sweat	7-1/4	184	1-15/16	49	2-3/16	56	3-1/16	78.0	5-1/4	134	3-5/16	84	7.0	3.2
006-ST4-PNP	3/4" FNPT	7-1/4	184	1-15/16	49	2	51	3-1/16	78.0	5-1/4	134	3-5/16	84	7.0	3.2
006-SC4-1PNP	Union	7-1/4	184	1-15/16	49	2-31/32	76	3-1/16	78.0	6	152	3-5/16	84	7.0	3.2
005-SF2-1PNP	SS Flanged	8-1/8	205	1-15/16	49	3-5/32	80	3-3/32	78.4	4-3/4	121	6-3/8	162	7.0	3.2

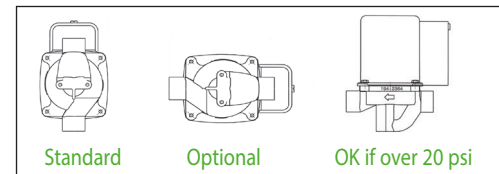
Analog Timer with Integral Flow Check (IFC®)

Model	Connection	A		B		C		D		E		F		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
003-BC4-3PNP	1/2" Sweat	8-1/8	205	1-15/16	49	2-3/16	56	3-1/16	78	5-1/4	134	3-5/16	84	7.0	3.2
003-BC4-2PNP	3/4" Sweat	8-1/8	205	1-15/16	49	2-3/16	56	3-1/16	78	5-1/4	134	3-5/16	84	7.0	3.2
006-BC7-1PNP	1/2" Sweat	8-1/8	205	1-15/16	49	2-3/16	56	3-1/16	78	5-1/4	134	3-5/16	84	7.0	3.2
006-BC7-PNP	3/4" Sweat	8-1/8	205	1-15/16	49	2-3/16	56	3-1/16	78	5-1/4	134	3-5/16	84	7.0	3.2
005-SF2-1PNP	SS Flanged	8-1/8	205	1-15/16	49	3-5/32	80	3-3/32	78.4	4-3/4	121	6-3/8	162	7.0	3.2

Pump Drawings



Mounting Positions



Electrical Data

Model	Volts	Hz	Ph	Amps	RPM	HP
003-PNP	115	60	1	.45	3250	1/40
006-PNP	115	60	1	.52	3250	1/40
005-PNP	115	60	1	.54	3250	1/35

Motor Type Permanent Split Capacitor
Impedance Protected



Certified to
NSF International
60 & 372

Submittal Data Information Plumb n' Plug®

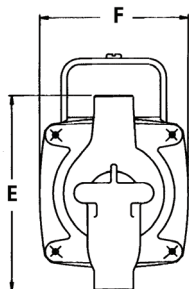
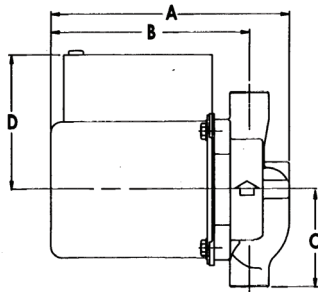
Features

- 7-day digital plug-in timer
- 28 ON/OFF programmable events
- Automatic daylight savings time adjustment
- Convenient dial simplifies programming
- Battery backup stores settings for up to 3 months

Application

For recirculation systems setup for constant circulation or with an optional aquastat control, use Plumb n' Plug® with line cord only. Simply Plumb it in and Plug it in.

Line Cord Only Models



Application

The Plumb n' Plug® with Digital Timer allows ON/OFF program settings to fit any homeowners' schedule. Twenty-eight programmable events allow you to customize the hot water run times to meet the household demand. Its intuitive logic can automatically adjust to daylight savings time, and the convenient dial simplifies programming. A battery backup will retain your settings for up to three months with no power.

Pump Dimensions & Weights Digital Timer

Model	Connection	A		B		C		D		E		F		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
003B-RECIRC-DT	1/2" Sweat	5-1/8	130	4-1/8	105	2-3/16	56	3-1/16	78	4-13/32	112	3-5/16	84	6.0	2.8
006B-RECIRC-DT	3/4" Sweat	5-1/8	130	4-1/8	105	2-1/8	54	3-1/16	78	4-1/4	108	3-5/16	84	6.0	2.8

Digital Timer with Integral Flow Check (IFC®)

Model	Connection	A		B		C		D		E		F		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
006B-RECIRC-DTHFC	3/4" Sweat	6	152	4-7/8	124	2-3/16	56	2-15/16	75	4-3/8	111	3-5/16	84	6.0	2.8

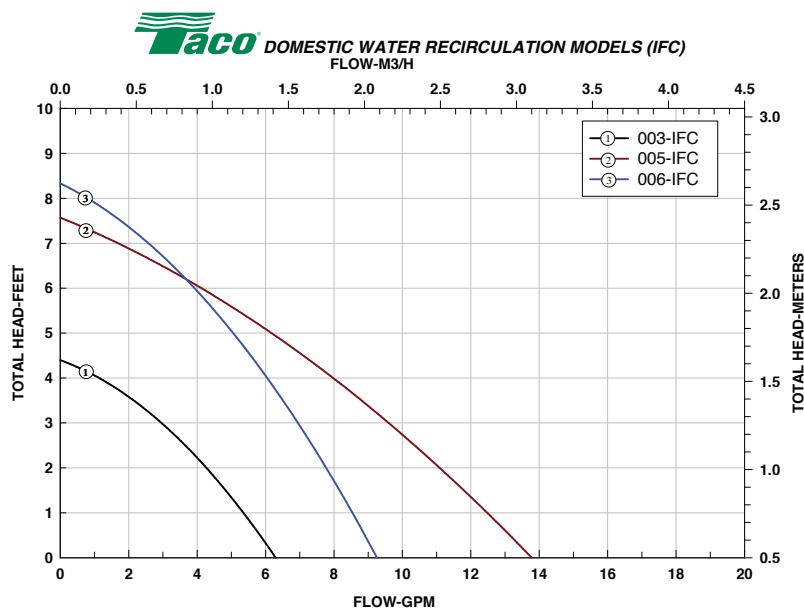
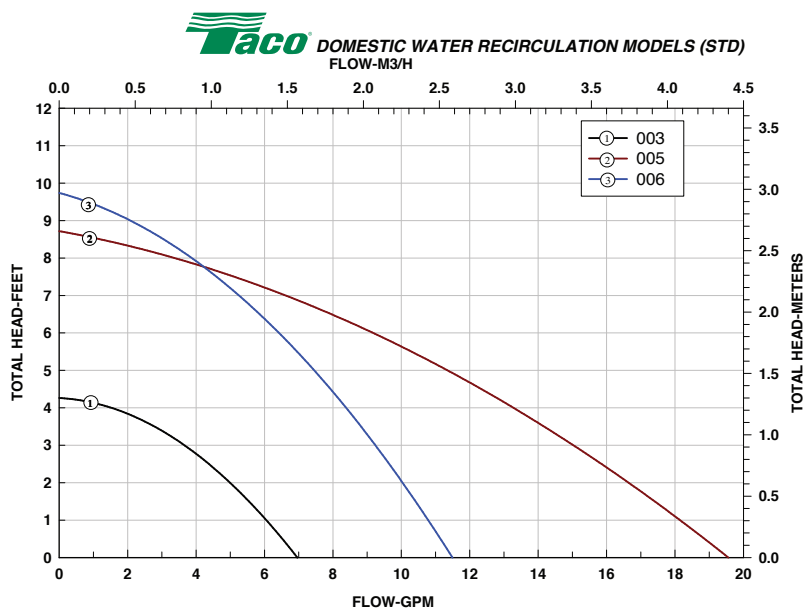
Line Cord Only

Model	Connection	A		B		C		D		E		F		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
003-BC4-4PNP	1/2" Sweat	5-1/8	130	4-1/8	105	2-3/16	56	3-1/16	78	4-13/32	112	3-5/16	84	6.5	2.9
003-B4-1PNP	3/4" Sweat	5-1/8	130	4-1/8	105	2-1/8	54	3-1/16	78	4-1/4	108	3-5/16	84	6.5	2.9
003-ST4-1PNP	3/4" FNPT	5-1/8	143	4-7/8	124	2	51	3-1/16	78	4	102	3-5/16	84	6.5	2.9
003-SC4-2PNP	Union	5-5/32	131	4-11/32	110	2-31/32	76	3-1/16	78	5-15/16	151	3-5/16	84	6.5	2.9
006-BC4-2PNP	1/2" Sweat	5-1/8	130	4-1/8	105	2-3/16	56	3-1/16	78	4-13/32	112	3-5/16	84	6.5	2.9
006-B4-1PNP	3/4" Sweat	5-1/8	130	4-1/8	105	2-1/8	54	3-1/16	78	4-1/4	108	3-5/16	84	6.5	2.9
006-ST4-1PNP	3/4" FNPT	5-5/8	143	4-7/8	124	2	51	3-1/16	78	4	102	3-5/16	84	6.5	2.9
006-SC4-2PNP	Union	5-5/32	131	4-11/32	110	2-31/32	76	3-1/16	78	5-15/16	151	3-5/16	84	6.5	2.9

Line Cord Only with Integral Flow Check (IFC®)

Model	Connection	A		B		C		D		E		F		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
003-BC4-7PNP	1/2" Sweat	6	152	4-7/8	124	2-3/16	56	2-15/16	75	4-3/8	111	3-5/16	84	6.5	2.9
003-BC4-6PNP	3/4" Sweat	6	152	4-7/8	124	2-3/16	56	2-15/16	75	4-3/8	111	3-5/16	84	6.5	2.9
006-BC7-3PNP	1/2" Sweat	6	152	4-7/8	124	2-3/16	56	2-15/16	75	4-3/8	111	3-5/16	84	6.5	2.9
006-BC7-2PNP	3/4" Sweat	6	152	4-7/8	124	2-3/16	56	2-15/16	75	4-3/8	111	3-5/16	84	6.5	2.9

60 Hz Performance Field Information



Taco Inc., 1160 Cranston Street, Cranston, RI 02920 / (401) 942-8000
Taco (Canada) Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8 / (905) 564-9422