



# Submittal Data Information

## Plumb 'n' Plug® Domestic Hot Water Circulators

101-066

EFFECTIVE: February 14, 2014

SUPERSEDES: March 1, 2011

JOB \_\_\_\_\_ ENGINEER \_\_\_\_\_ CONTRACTOR \_\_\_\_\_ REP. \_\_\_\_\_

ITEM NO.	MODEL NO.	
----------	-----------	--

**General Product Information:**

Taco Plumb n' Plug® (PNP) Circulators periodically recirculate hot water through the domestic water piping system to decrease the delivery time to outlet fixtures and reduce wasted water. These UL-listed units feature quiet, efficient operation and low power consumption. Self lubricating, with no mechanical seal and Taco's unique replaceable cartridge design, Plumb n' Plug® circulators are field serviceable and maintenance free. An optional Aquastat is available for constant circulation applications to maintain temperature between 95°F and 115°F.

**Performance Data:**

Flow Range: 0 - 7 GPM (003), 0 - 19.5 GPM (005) 0 - 11.5 GPM (006)
Head Range: 0 - 4.5 Feet (003), 0 - 8.5 Feet (005) 0 - 9.5 Feet (006)
Minimum Fluid Temperature: 40°F (4°C)
Maximum Fluid Temperature: 220°F (104°C)
Maximum Working Pressure: 125 PSI

**Features:**

- UL Listed
- 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 Connections - Stainless Steel
- Flanged - Stainless Steel

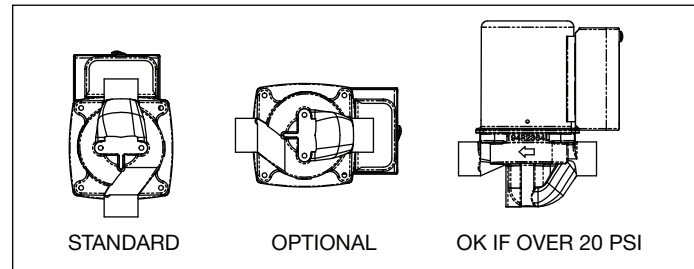
**Materials of Construction:**

- CIRCULATOR:**
- 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 (IFC®):**
- 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
- SF - Stainless Steel, Flanged
- PNP - Plumb n' Plug®

**Mounting Positions:**



**Electrical Data:**

MODEL	VOLTS	Hz	Ph	AMPS	RPM	HP
003-PNP	115	60	1	0.45	3250	1/40
005-PNP				0.54		
006-PNP				0.52		
006-PNP (IFC)				0.57		
Motor Type	Permanent Split Capacitor, Impedance Protected					



A Taco resource - saving product

## ANALOG TIMER OPTION:

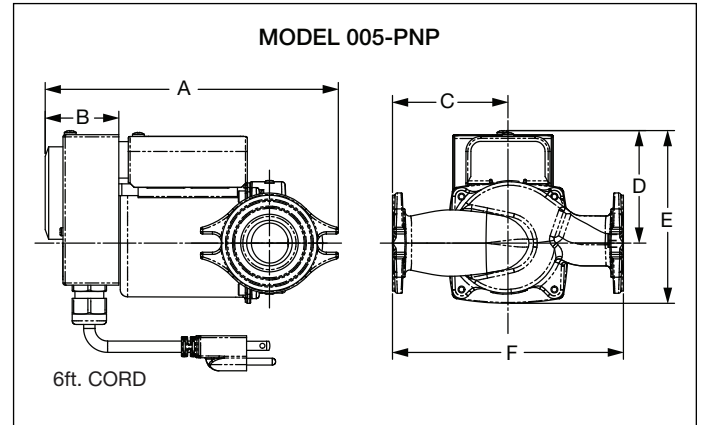
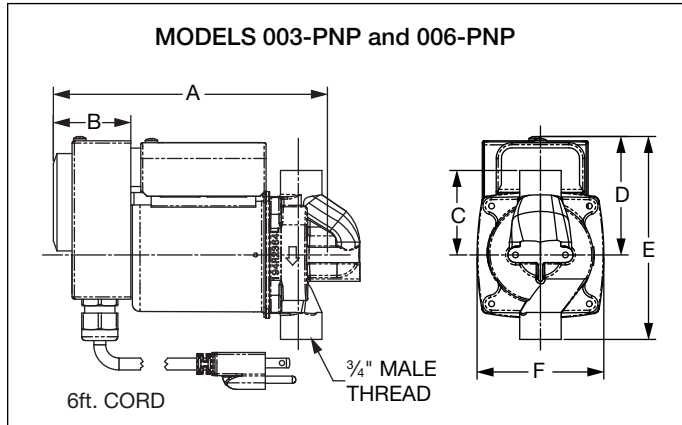
### Application:

The Plumb n' Plug with analog timer will cycle the circulator during peak usage periods such as early morning or early evening. An optional aquastat is available for constant circulation applications 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 and 006 PNP is designed for systems using 200-400 feet of 3/4" pipe. Installation of isolation valves, pipe insulation and flow checks are recommended.

### Analog Features:

- 24 Hour Analog Timer
- 15 Minute ON/OFF intervals
- Easy-to-Use Clock Timer
- Factory installed 6' line cord

### Pump Dimensions & Weights:



ANALOG TIMER															
MODEL	CONNECTION	A		B		C		D		E		F		SHIP WGT.	
		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	77.8	5 1/4	134	3 5/16	84	7.0	3.2
003-B4-PNP	3/4" Sweat					2 3/16	56								
003-ST4-PNP	3/4" FNPT					2	51								
003-SC4-1PNP	Union					2 31/32	76								
005-SF2-PNP	SS Flanged	8 1/8	205			3 5/32	80	3 3/32	78.6	4 3/4	121	6 3/8	162		
006-BC4-PNP	1/2" Sweat	7 1/4	184			2 1/8	54	3 1/16	77.8	5 1/4	134	3 5/16	84		
006-B4-PNP	3/4" Sweat					2 3/16	56								
006-ST4-PNP	3/4" FNPT					2	51								
006-SC4-1PNP	Union			2 31/32	76	6	152								

ANALOG TIMER with INTEGRAL FLOW CHECK (IFC) <sup>®</sup>																					
MODEL	CONNECTION	A		B		C		D		E		F		SHIP WGT.							
		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	77.8	5 1/4	134	3 5/16	84	7.0	3.2						
003-BC4-2PNP	3/4" Sweat																				
005-SF2-1PNP	SS Flanged					3 5/32	80									3 3/32	78.6	4 3/4	121	6 3/8	162
006-BC7-1PNP	1/2" Sweat					2 3/16	56									3 1/16	77.8	5 1/4	134	3 5/16	84
006-BC7-PNP	3/4" Sweat																				

## DIGITAL TIMER OPTION:

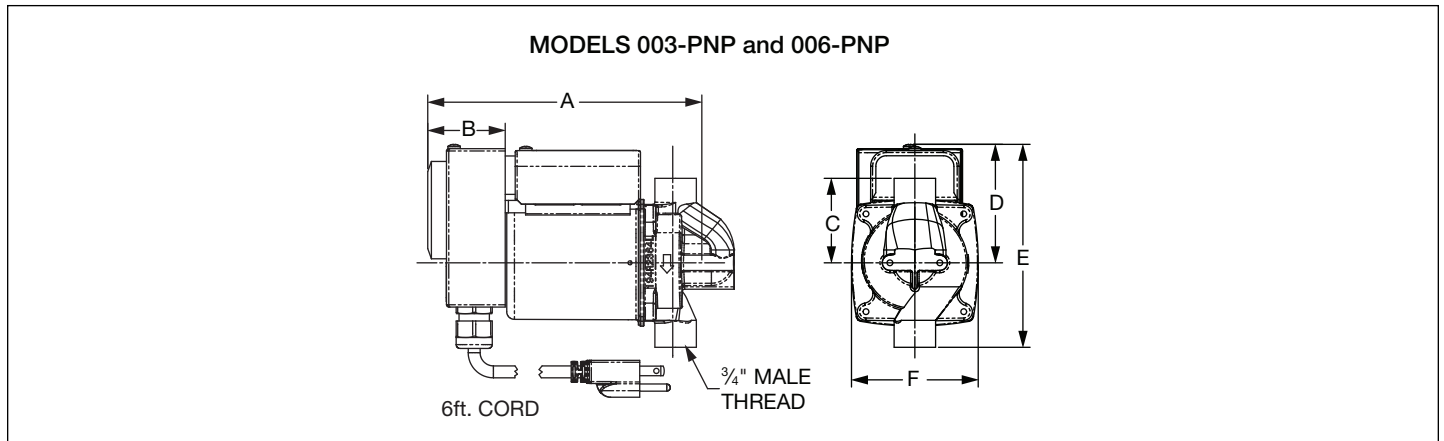
### Application:

The Plumb n' Plug with Digital Timer allows ON/OFF program settings to fit any homeowner's schedule. Multiple settings allow for different weekday/weekend run times. Run time intervals can be set as short as 1 minute to maximize energy savings. Easy-to-Use clockface and large LCD display make settings a snap. Its onboard capacitor retains settings in memory for up to 2,500 hours during power outages. An optional Aquastat is available for constant circulation applications to maintain temperature between 95°F and 115°F. Taco 003 PNP is ideal for recirculation loops. Its design operating condition of 3 gpm at 3 feet of head helps to reduce erosion and noise in system piping. Use the 003 PNP for systems up to 200 total feet (supply and return) of 3/4" pipe. Installation of isolation valves pipe insulation and flow checks are recommended.

### Digital Features:

- Digital Timer - 7 Day Programmable
- Large LCD Display
- Easy-to-Use Program Buttons
- ON/OFF Intervals as short as 1 Minute
- 2,500 Hour Capacitor Backup, Saves Settings

### Pump Dimensions & Weights:



DIGITAL TIMER															
MODEL	CONNECTION	A		B		C		D		E		F		SHIP WGT.	
		IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	LBS.	KG
003-BC4-8PNP	1/2" Sweat	7 1/4	184	1 15/16	49	2 1/8	54	3 1/16	78	5 1/4	134	3 5/16	84	7.0	3.2
003-B4-2PNP	3/4" Sweat					2 3/16	56								
003-ST4-2PNP	3/4" FNPT					2	51								
003-SC4-3PNP	Union					2 31/32	76			6	152				
006-BC4-4PNP	1/2" Sweat					2 1/8	54								
006-B4-2PNP	3/4" Sweat					2 3/16	56			5 1/4	134				
006-ST4-2PNP	3/4" FNPT					2	51								
006-SC4-3PNP	Union					2 31/32	76			6	152				

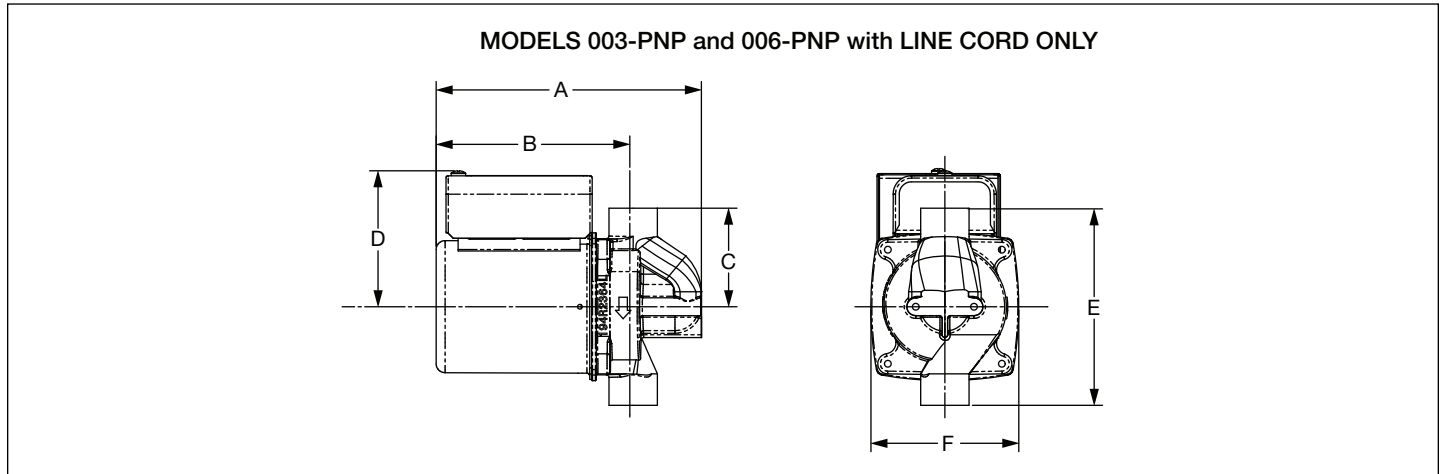
DIGITAL TIMER with INTEGRAL FLOW CHECK (IFC) <sup>®</sup>															
MODEL	CONNECTION	A		B		C		D		E		F		SHIP WGT.	
		IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	LBS.	KG
003-BC4-11PNP	1/2" Sweat	8 1/8	205	1 15/16	49	2 3/16	56	3 1/16	78	5 1/4	134	3 5/16	84	7.0	3.2
003-BC4-10PNP	3/4" Sweat														
006-BC7-5PNP	1/2" Sweat														
006-BC7-4PNP	3/4" Sweat														

## LINE CORD ONLY OPTION:

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

### Pump Dimensions & Weights:

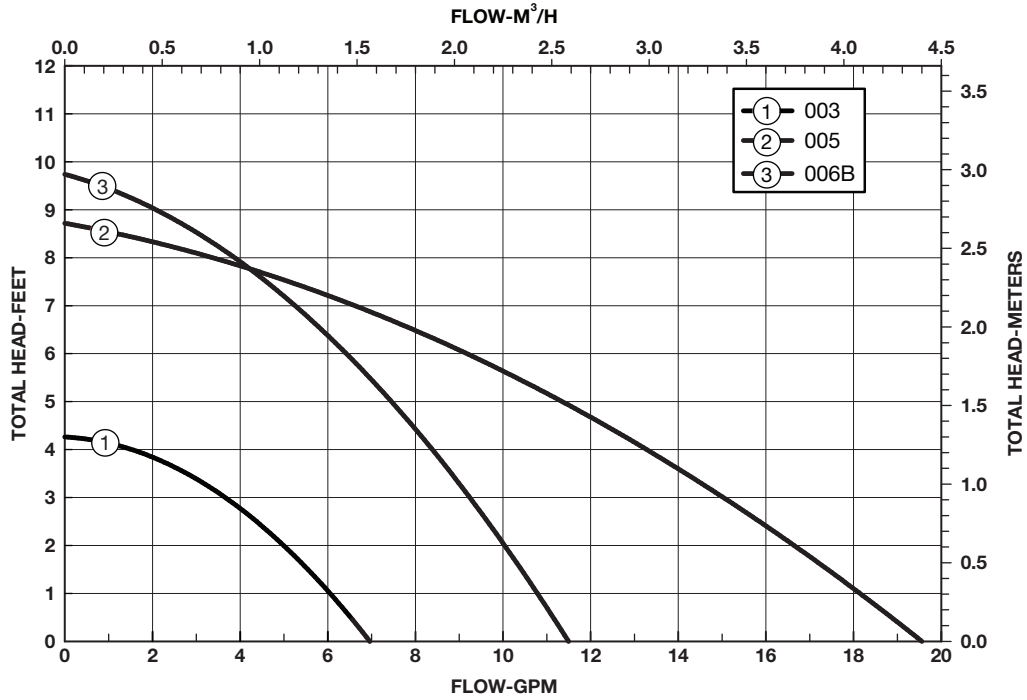


LINE CORD ONLY															
MODEL	CONNECTION	A		B		C		D		E		F		SHIP WGT.	
		IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	LBS.	KG
003-BC4-4PNP	1/2" Sweat	5 1/8	130	4 1/8	105	2 3/16	56	3 1/16	78	4 13/32	112	3 5/16	84	6.5	2.9
003-B4-1PNP	3/4" Sweat	5 1/8	130	4 1/8	105	2 1/8	54			4 1/4	108				
003-ST4-1PNP	3/4" FNPT	5 5/8	143	4 7/8	124	2	51			4	102				
003-SC4-2PNP	Union	5 5/32	131	4 11/32	110	2 31/32	76			5 15/16	151				
006-BC4-2PNP	1/2" Sweat	5 1/8	130	4 1/8	105	2 3/16	56			4 13/32	112				
006-B4-1PNP	3/4" Sweat	5 1/8	130	4 1/8	105	2 1/8	54			4 1/4	108				
006-ST4-1PNP	3/4" FNPT	5 5/8	143	4 7/8	124	2	51			4	102				
006-SC4-2PNP	Union	5 5/32	131	4 11/32	110	2 31/32	76			5 15/16	151				

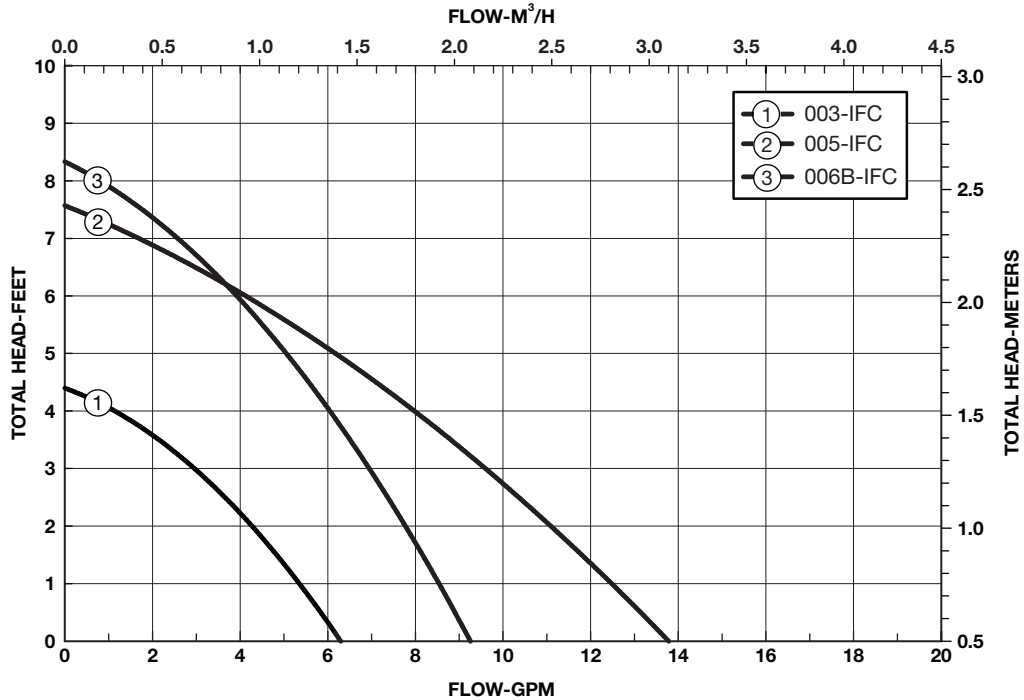
LINE CORD ONLY with INTEGRAL FLOW CHECK (IFC)®															
MODEL	CONNECTION	A		B		C		D		E		F		SHIP WGT.	
		IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	IN.	mm	LBS.	KG
003-BC4-7PNP	1/2" Sweat	6	152	4 7/8	124	2 3/16	56	2 15/16	75	4 3/8	111	3 5/16	84	6.5	2.9
003-BC4-6PNP	3/4" Sweat														
006-BC7-3PNP	1/2" Sweat														
006-BC7-2PNP	3/4" Sweat														

# PERFORMANCE FIELD INFORMATION (60 Hz)

## DOMESTIC WATER RECIRCULATION MODELS (STD)



## DOMESTIC WATER RECIRCULATION MODELS (IFC)



**Do your best work.®**

TACO, INC., 1160 Cranston Street, Cranston, RI 02920 Telephone: (401) 942-8000 FAX: (401) 942-2360.

TACO (Canada), Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8. Telephone: 905/564-9422. FAX: 905/564-9436.

Visit our web site at: <http://www.taco-hvac.com>

Printed in USA

Copyright 2014

TACO, Inc.