

1400 Series High Capacity Circulators

Taco 1400 Series High Capacity Circulators are specifically designed for quiet, efficient, dependable operation in a wide range of medium to high flow/head hydronic heating, chilled water cooling and hot water recirculation applications. The space saving, close-coupled, maintenance free motor with permanently lubricated, sealed-for-life bearings, Noryl[®] impeller and durable, carbon/silicon-carbide mechanical seal provide unmatched reliability. Available in Cast Iron or Bronze construction.



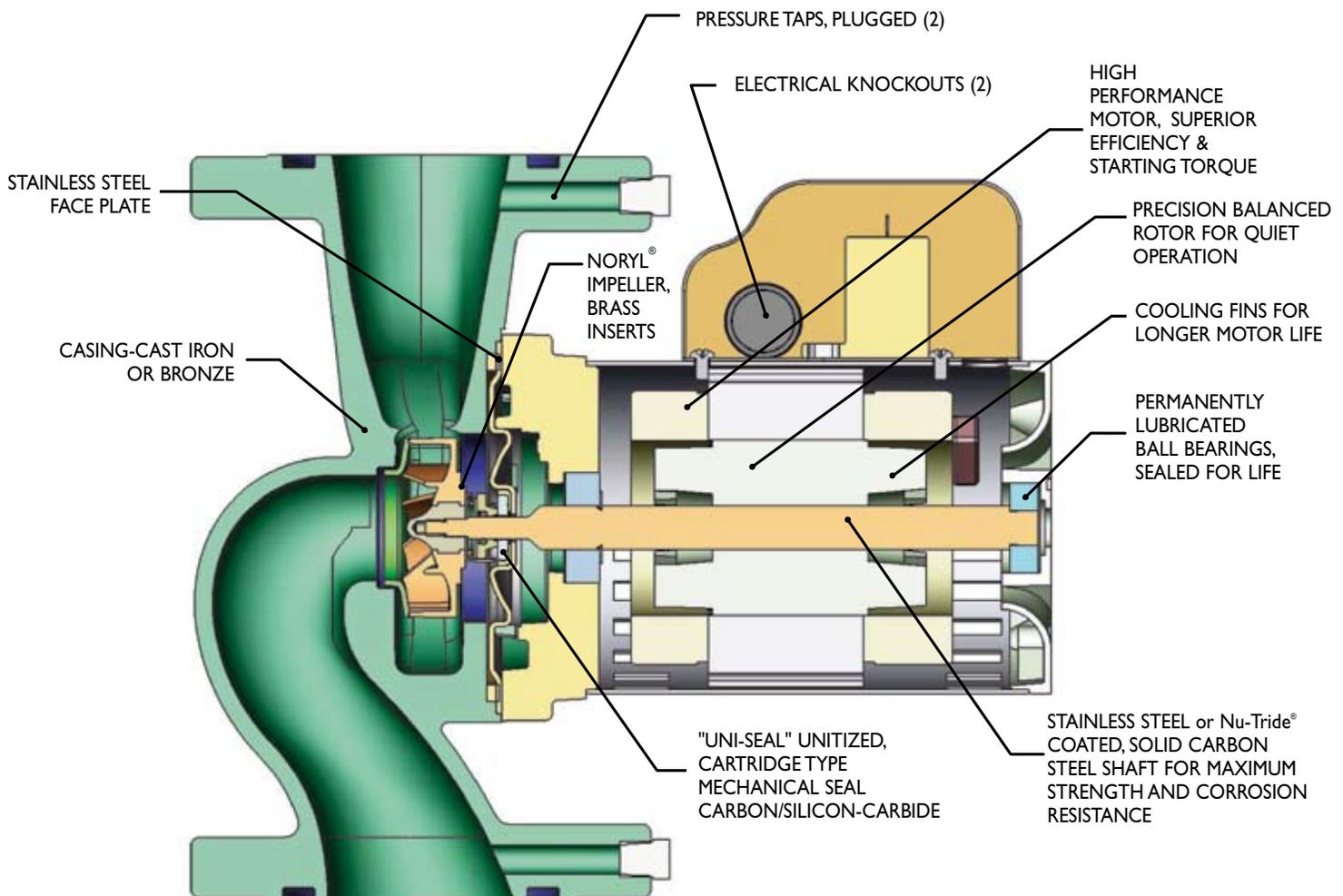
Features & Benefits 1400 Series High Capacity Circulators

Features

- Compact, space saving design
- Powerful close-coupled, maintenance free motor
- Superior efficiency, high starting torque
- Permanently lubricated, sealed for life bearings
- Precision balanced rotor for quiet operation
- Carbon/Silicon-Carbide mechanical seal for long life
- Universal flange to flange dimensions - Ideal for retrofits
- Anti-Condensate design for chilled water
- Dual electrical knock-outs
- Dual pressure taps, suction/discharge

Application

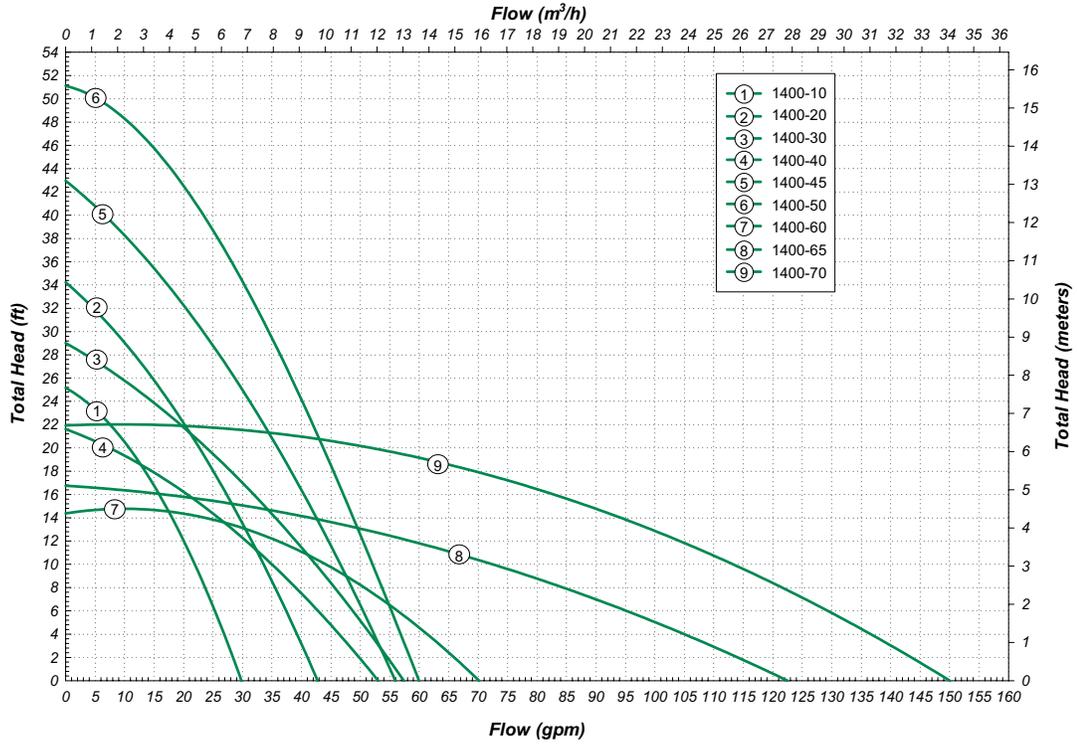
The compact 1400 Series High Capacity Circulators are designed for quiet, efficient, maintenance-free operation in a wide range of larger residential and commercial hydronic systems. Typical applications include hydronic heating, in-floor radiant, snow melt, high pressure drop boilers, outdoor wood boilers, chilled water cooling, geothermal heat pumps, primary/secondary loops and hydro air fan coils. The Bronze 1400 series should be used for open, domestic water recirculation systems. The unitized, carbon/silicon-carbide mechanical seal is easy to service in only a few minutes.



Performance Curves 1400 Series High Capacity Circulators

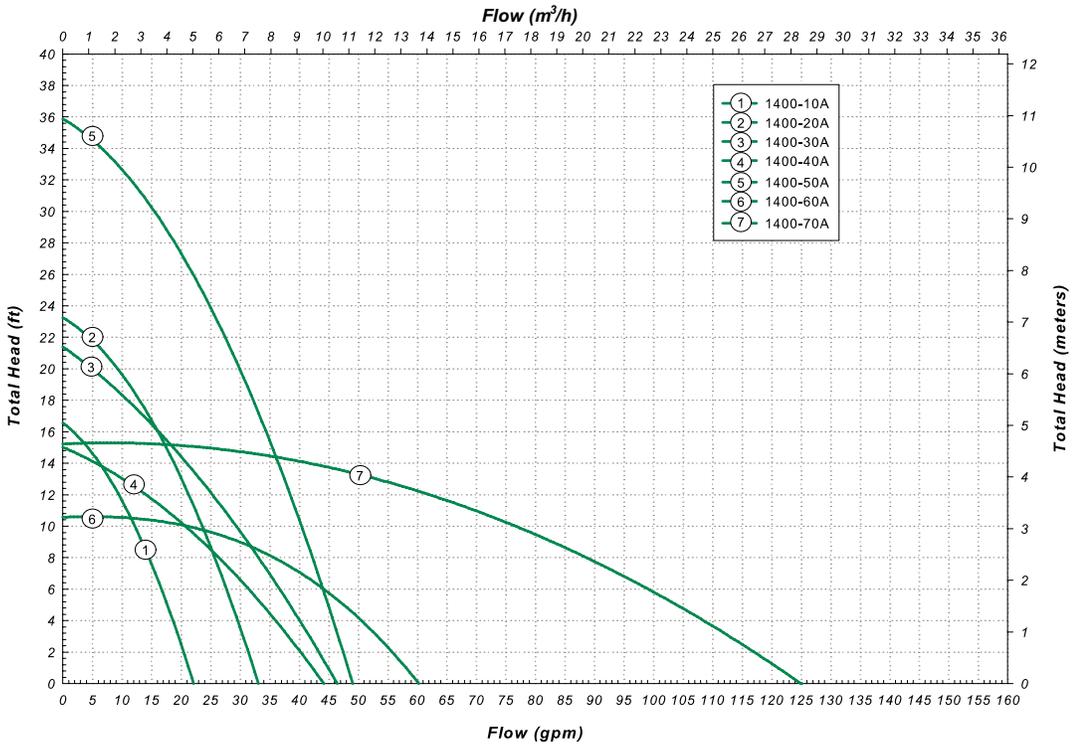
Performance Field - 60Hz

Taco 1400 Series — High Capacity Circulators — 60Hz



Performance Field - 50Hz

Taco 1400 Series — High Capacity Circulators — 50Hz



Submittal Data Information

1400 Series High Capacity Circulators

Submittal Data # 101-104
Supersedes: 10/13/05

Effective: 07/23/07

Materials of Construction

Casing: Cast Iron or Bronze
Face Plate: Stainless Steel
Motor Housing: Steel
Impeller: 30% Glass-filled Noryl®
Impeller Insert: Brass
Shaft: Nu-tride® coated Solid Alloy Steel or Stainless Steel
Mechanical Seal: Carbon/Silicon-Carbide
Motor Bearings: Stainless Steel
Permanently lubricated
O-Ring/Flange Gaskets: EPDM

Model Nomenclature

B – Bronze, Flanged
Y – 230/60/1 Motor
A – 220/50/1 Motor

Performance Data

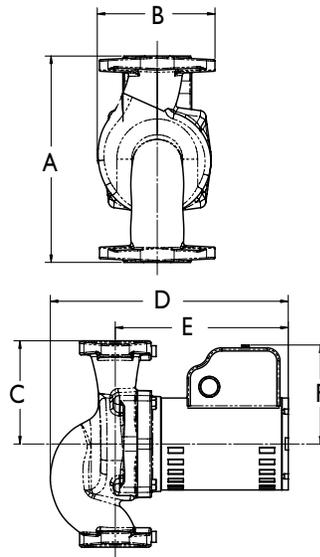
Flow Range: 0-147 GPM
Head Range: 0-51 Feet
Minimum Fluid Temp: 40°F (4°C)
Maximum Fluid Temp: 225°F (107°C)
Maximum Working Pressure: 150 psi



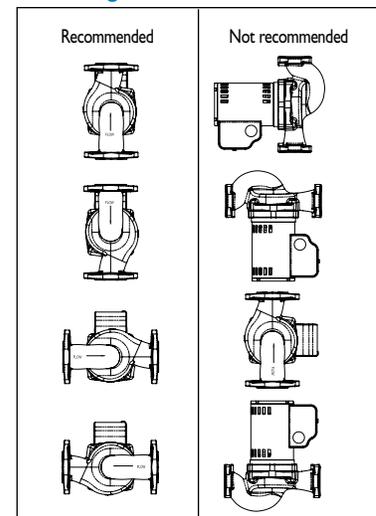
FOR INDOOR USE ONLY

Pump Dimensions & Weights

Cast Iron Model	Bronze Model	A		B		C		D		E		F		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
I400-10	I400-10B	6-3/8	162	4-1/2	114	3-3/16	82	8-3/16	208	6-3/8	162	4	102	12	5.4
I400-20	I400-20B	6-3/8	162	4-1/2	114	3-3/16	82	8-5/8	220	6-7/8	175	4	102	12.5	5.7
I400-30	I400-30B	8-1/2	216	4-3/4	121	4-1/4	108	9-3/4	248	7-1/8	181	4	102	15	6.8
I400-40	I400-40B	8-1/2	216	4-3/4	121	4-1/4	108	9-3/4	248	7-1/8	181	4	102	15	6.8
I400-45	I400-45B	6-3/8	162	4-5/8	119	3-3/16	82	10-1/4	260	8-1/2	216	4	102	15.5	7
I400-50	I400-50B	6-3/8	162	4-5/8	119	3-3/16	82	10-1/4	260	8-1/2	216	4	102	16.5	7.5
I400-50/2	I400-50B/2	6-3/8	162	5-1/4	133	3-3/16	82	10-1/4	260	8-1/2	216	4	102	17	7.7
I400-60	I400-60B	8-1/2	216	5-3/16	132	4-1/4	108	9-3/4	248	7-1/8	181	4	102	18.5	8.4
I400-65	I400-65B	8-1/2	216	5-1/2	140	4-1/4	108	11-1/4	285	8-3/4	222	4	102	22.5	10.2
I400-70	I400-70B	8-1/2	216	5-1/2	140	4-1/4	108	11-1/4	285	8-3/4	222	4	102	23.5	10.7
I400-70/3	I400-70B/3	8-1/2	216	6-5/8	168	4-1/4	108	12	305	8-3/4	222	4	102	29.5	13.4



Mounting Positions



Electrical Data

Model	Volts	Hz	Ph	Amps	RPM	HP
I400-10	115	60	1	1.5	3450	1/10
I400-20	115	60	1	2.0	3450	1/6
I400-30	115	60	1	2.0	3450	1/6
I400-40	115	60	1	2.0	3450	1/6
I400-45	115	60	1	3.2	3450	1/3
I400-50	115	60	1	5.0	3450	1/2
I400-60	115	60	1	2.0	3450	1/6
I400-65	115	60	1	3.2	3450	1/3
I400-70	115	60	1	5.0	3450	1/2

Motor Type Open Drip Proof, Permanent Split Capacitor, Thermally Protected

Motor Options 230/60/1, 220/50/1

1400 Series Companion Flange Sets

Models	Connection	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
I400-10/10B	Iron NPT	110-251F	110-252F	110-253F	110-254F	---	---	---
I400-20/20B	Bronze NPT	110-251BF	110-252BF	110-253BF	110-254BF	---	---	---
I400-45/45B	Bronze SWT	110-523BSF	110-524BSF	110-525BSF	110-526BSF	---	---	---
I400-50/50B	Shut-Off NPT	243-1	244-1	245-1	246-1	---	---	---
I400-50/50B	Shut-Off SWT	243-2	244-2	245-2	246-2	---	---	---
I400-50/50B/2	Iron NPT	---	---	---	---	194-2124F	---	---
I400-50/50B/2	Bronze NPT	---	---	---	---	194-2124BF	---	---
I400-30/30B	Iron NPT	---	---	194-1540F	194-1542F	---	---	---
I400-40/40B	Bronze NPT	---	---	194-1540BF	194-1542BF	---	---	---
I400-40/40B	Shut-Off NPT	---	---	247-1	248-1	---	---	---
I400-40/40B	Shut-Off SWT	---	---	247-2	248-2	---	---	---
I400-60/60B	Iron NPT	---	---	---	---	185-086C	---	---
I400-65/65B	Bronze NPT	---	---	---	---	185-086B	---	---
I400-70/70B	Iron NPT	---	---	---	---	---	185-112C	185-113C
I400-70/70B/3	Bronze NPT	---	---	---	---	---	185-112B	185-113B

1 Noryl® is a registered trademark of General Electric Co.

2 Nu-Tride® is a registered trademark of Kolene Corp.

