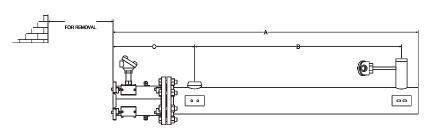


CIRCULATION PICK & SHIP



Heater Specifications (by Part Number)

	Electrical Data			Mechanical Parameters							
Part Number	WPSI Category	kW	Amp. Load	Vessel Const.¹	Inlet Conn. (FNPT)	Outlet Conn. (MNPT)	Overall Length 'A' Dim (in/mm)	Overall Length 'B' Dim (in/mm))	Overall Length 'C' Dim (in/mm)	Min. Allowance for Removal	Weight (lbs/kg.)
054-307616-001	45	8	10	3", 150#	1-1/2"	1-1/2"	49.22 / 1251	33 / 839	12.97 / 330	24 / 610	65 / 30
054-307616-002	45	12	15	4", 150#	2"	2"	61.66 / 1567	43.25 / 1099	14.91 / 379	30 / 762	109 / 50
054-307616-003	45	16.5	20	5", 150#	2"	2"	63.81 / 1621	43.25 / 1099	17.06 / 434	30 / 762	139 / 64
054-307616-004	45	24.9	30	6", 150#	2"	2"	63.87 / 1623	43.25 / 1099	17.12 / 435	30 / 762	182 / 83
054-307616-005	45	37	45	6", 150#	2"	2"	63.87 / 1623	43.25 / 1099	17.12 / 435	30 / 762	182 / 83
054-307616-006	45	58	70	6", 150#	2"	2"	63.87 /1623	43.25 / 1099	17.12 / 435	42 / 1067	193 / 88
054-307616-007	25	8	10	3", 150#	1-1/2"	2"	49.22 / 1251	33 / 839	12.97 / 330	30 / 762	66 / 30
054-307616-008	25	12	15	4", 150#	2"	2"	61.66 / 1567	43.25 / 1099	14.91 / 379	42 / 1067	116 / 53
054-307616-009	25	16.5	20	5", 150#	2"	2"	63.84 / 1622	43.25 / 1099	17.06 / 434	42 / 1067	146 / 67
054-307616-010	25	24.9	30	5", 150#	2"	2"	63.81 / 1621	43.25 / 1099	17.06 / 434	54 / 1372	153 / 70
054-307616-011	25	37	45	6", 150#	2"	2"	63.87 / 1623	43.25 / 1099	17.12 / 435	54 / 1372	105 / 48
054-307616-012	25	58	70	8", 150#	2"	2"	63.96 / 1625	43.25 / 1099	14.15 / 360	42 / 1067	305 / 139
054-307616-013	15	8	10	3", 150#	1-1/2"	1-1/2"	49.22 / 1251	33 / 839	12.97 / 330	42 / 1067	67 / 31
054-307616-014	15	12	15	4", 150#	2"	2"	61.66 / 1567	43.25 / 1099	14.91 / 379	54 / 1372	123 / 56
054-307616-015	15	16.5	20	5", 150#	2"	2"	63.81 / 1621	43.25 / 1099	17.06 / 434	54 / 1372	153 / 70
054-307616-016	15	24.9	30	6", 150#	2"	2"	63.87 / 1623	43.25 / 1099	17.12 / 435	54 / 1372	205 / 93
054-307616-017	15	37	45	8", 150#	2"	2"	63.96 / 1625	43.25 / 1099	14.15 / 360	42 / 1067	305 / 139
054-307616-018	7.5	5.5	7	4", 150#	2"	2"	61.66 / 1567	33 / 839	14.91 / 379	54 / 1372	123 / 56
054-307616-019	7.5	8	10	5", 150#	2"	2"	63.81 / 1621	43.25 / 1099	17.06 / 434	54 / 1372	153 / 70
054-307616-020	7.5	16.5	20	8", 150#	2"	2"	63.96 / 1625	43.25 / 1099	14.15 / 360	42 / 1067	305 / 139
054-307616-021	7.5	24.9	30	8", 150#	2"	2"	63.96 / 1625	43.25 / 1099	14.15 / 360	54 / 1372	325 / 148

Air temperature ratings are for general guidelines only. Every gas application must be thoroughly reviewed for application suitability or heater damage can occur. Please refer to the Chromalox technical literature or local sales office for proper guidance.

Refer to Chromalox Technical section for further details.

Heater Specifications (Common to All Units)

Electrical Rating – 480 volts, 1 circuit, 3 phase.

<u>Power Terminal Enclosure</u> — Powder coated, color red, rated NEMA 4 / IP66, UL / cCSAus Certification.

<u>Power Wiring Conduit Location</u> – Chromalox 'Octobox' enclosure allows for user selection of conduit punch size, entry location, and entry angle to suit installation needs.

<u>Pressure Vessel</u> – Painted exterior, SA-53B Carbon Steel construction, ANSI rated 150# flange heater with NPT process connections.

Installation Gasket – Composition grade gasket is provided.

<u>Element Sheath</u> – Heater elements are sheathed with INCOLOY® 800 for superior corrosion resistance and longevity.

<u>Element Seals</u> – Conformal terminal coating over mica is provided for all heater elements.

<u>Element Protection</u> — One type K thermocouple attached to element sheath for overtermperature protection. The mechanical compression fitting boundary connection allows for thermocouple replacement, if needed.

Element Overtemperature Sensor Electrical Enclosure –

A separate thermocouple, aluminum junction box, rated NEMA 4 / IP66 is included with a 3/4" NPT wiring connection provided.

Process Sensor Electrical Enclosure – A separate aluminum junction box, rated NEMA 4 / IP66 is included with a 3/4" NPT wiring connection.

Thermowell – An INCOLOY® 800 bundle thermowell is provided for customers requiring additional process temperature input locations.

Mounting Lugs – One fixed mounting lugs and one slotted lug (to allow for thermal expansion) is provided.

<u>Heater Removal</u> – Two threaded back out holes are provided for removal of heater bundle, if needed. Be sure to allow room for removal, during installation.

²Application pressure and temperature ratings must conform with ANSI guidelines to ensure safe operation of the unit. Proper temperature and pressure ratings must be observed for safe operation.



Steps for Picking Circulation Heater

- 1. Calculate the kilowatt requirement and round up to to the closest heater kW rating.
- 2. Choose the column with the appropriate application watt density.
- 3. Find the corresponding heater part number at the intersection of the selected heater kW rating and application watt density.
 - Confirm the selected heater part number **full specifications** for application and installation suitability.
- 4. Select related Power Control Assembly and Sensor Equipment Packages.

Heater Selection Table

kW Rating Load @ 480 V 3pH	45 WPSI Water Water/Glycol	25 WPSI Process Water Light Weight Oil <600°F Air¹	15 WPSI Medium Weight Oil <1,000°F Air¹	7.5 WPSI Heavy Weight Oil <1,200°F Air¹
58 kW / 70 Amps	054-307616-006	054-307616-012		
37 kW / 45 Amps	054-307616-005	054-307616-011	054-307616-017	
24.9 kW / 30 Amps	054-307616-004	054-307616-010	054-307616-016	054-307616-021
16.5 kW / 20 Amps	054-307616-003	054-307616-009	054-307616-015	054-307616-020
12 kW / 15 Amps	054-307616-002	054-307616-008	054-307616-014	
8 kW / 10 Amps	054-307616-001	054-307616-007	054-307616-013	054-307616-018
5.5 kW / 6.6 Amps				054-307616-019

¹Air temperature ratings are for general guidelines only. Every gas application must be thoroughly reviewed for application suitability or heater damage can occur. Please refer to the Chromalox technical literature or local sales office for proper guidance.

²Application pressure and temperature ratings must conform with ANSI guidelines to ensure safe operation of the unit. Proper temperature and pressure ratings