



3HX Series

PRODUCT DATA SHEET

Fluoropolymer Heater

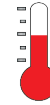
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Built-in thermal protector & grounded element



Up to 100°C (212°F)



1,000 to 6,000 watts



120 to 600 Volts



PTFE sleeved 304 stainless steel



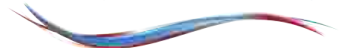
cULus
CE (except 600 Volts)

3HX SERIES, THREE ELEMENT FLUOROPOLYMER (PTFE) HEATERS						
WATTS	VOLTS	HOT ZONE in/(mm)	OVERALL LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)	
1000	120	10	17	3HX1117-1**	10	
	240	(254)	(432)	3HX1217-**	(4.5)	
1500	120	16	23	3HX1.5123-1**	11	
	240	(406)	(584)	3HX1.5223-**	(5)	
	480			3HX1.5423-**		
2000	120	22	29	3HX2129-1**	12	
	240	(559)	(737)	3HX2229-**	(5.4)	
	480			3HX2429-**		
3000	240	29	35	3HX3235-**	14	
	480	(737)	(889)	3HX3435-**	(6.4)	
4000	240	39	47	3HX4247-**	17	
	480	(991)	(1194)	3HX4447-**	(7.7)	
5000	240	48	59	3HX5259-**	20	
	480	(1219)	(1499)	3HX5459-**	(9.1)	
6000	240	56	68	3HX6268-**	23	
	480	(1422)	(1727)	3HX6468-**	(10.4)	

Three-phase standard



ISO 9001:2015
WITH DESIGN CERTIFIED





Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Lower Watt densities available for highly viscous solutions & technical acids

Specifications

Wattages 1,000 to 6,000 Watts

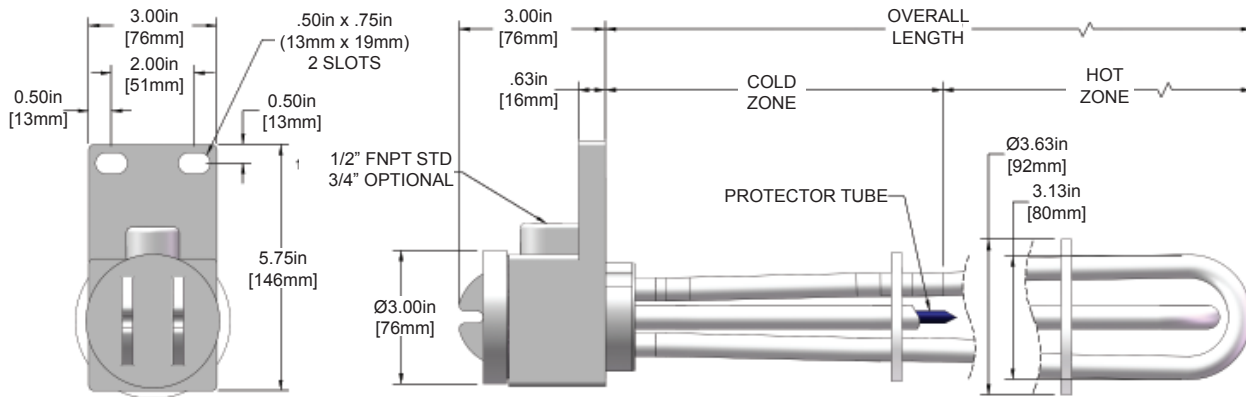
Voltages 120 to 600 Volts

Temperature Range Up to 100°C (212°F)

- Safety Features**
- Grounded internal metal element
 - Built-in thermal protector. Replaceable P1 protector standard for up to 82°C (180°F). Other options available
 - Non-floating construction

Certifications cULus listed
CE compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Overall Length	Phase	Type of Protector	Wire & Conduit Length
3HX = PTFE	1 = 1000	1 = 120	17 = 1kW	1 = single	Replaceable Fuse	36" length standard (no designator)
	1.5 = 1500	2 = 240	23 = 1.5kW		P1 (std) = solutions up to 190°F	Specify variations from standard Ex: -X84 = 84"
	2 = 2000	3 = 380	29 = 2kW		Resettable Fuse	
	3 = 3000	4 = 480	35 = 3kW		P2 = solutions up to 190°F	
	4 = 4000	5 = 415	47 = 4kW		P8 = solutions up to 210°F	
	5 = 5000	6 = 600	59 = 5kW		P3 = solutions up to 250°F	
	6 = 6000	7 = 400	68 = 6kW			
		8 = 208				
		9 = 220				
		0 = 200				





HXOL Series

Fluoropolymer Heater

PRODUCT DATA SHEET

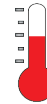
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Built-in thermal protector & grounded element



Up to 100°C (212°F)



1000 to 6,000 Watts



120 to 600 Volts
(600V on 4,500W or lower only)



PTFE sleeved 304 stainless steel



CE (except 600 Volts)

HXOL SERIES, FLEX RISER FLUOROPOLYMER (PTFE) HEATERS													
WATTS	VOLTS	WIDTH in/(mm)	LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)	WATTS	VOLTS	WIDTH in/(mm)	LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)		
1000	120	2	11	HXOL1102-11L-**	6	4000	240	6	14	HXOL4206-14L-**	14		
	240	(50)	(280)	HXOL1202-11L-**	(2.5)		480	(155)	(355)	HXOL4406-14L-**	(6.5)		
1000	120	4	8	HXOL1104-08L-**	6	4000	240	8	11	HXOL4208-11L-**	14		
	240	(100)	(205)	HXOL1204-08L-**	(2.5)		480	(205)	(280)	HXOL4408-11L-**	(6.5)		
2000	120	4	13	HXOL2104-13L-**	7	5000	240	6	18	HXOL5206-18L-**	17		
	240	(100)	(330)	HXOL2204-13L-**	(3.5)		480	(155)	(460)	HXOL5406-18L-**	(8)		
	480			HXOL2404-13L-**		5000	240	8	13	HXOL5208-13L-**	17		
							480	(205)	(330)	HXOL5408-13L-**	(8)		
2000	120	5	10	HXOL2105-10L-**	7	5000	240	9	11	HXOL5209-11L-**	17		
	240	(125)	(255)	HXOL2205-10L-**	(3.5)		480	(230)	(280)	HXOL5409-11L-**	(8)		
	480			HXOL2405-10L-**			480	(230)	(280)	HXOL5409-11L-**	(8)		
2000	120	6	8	HXOL2106-08L-**	7	5000	240	10	10	HXOL5210-10L-**	17		
	240	(155)	(205)	HXOL2206-08L-**	(3.5)		480	(255)	(255)	HXOL5410-10L-**	(8)		
	480			HXOL2406-08L-**		6000	240	7	18	HXOL6207-18L-**	20		
							480	(180)	(460)	HXOL6407-18L-**	(9)		
3000	240	4	18	HXOL3204-18L-**	12	6000	240	8	15	HXOL6208-15L-**	20		
	480	(100)	(460)	HXOL3404-18L-**	(5.5)		480	(205)	(380)	HXOL6408-15L-**	(9)		
3000	240	5	12	HXOL3205-12L-**	12	6000	240	9	13	HXOL6209-13L-**	20		
	480	(125)	(305)	HXOL3405-12L-**	(5.5)		480	(230)	(330)	HXOL6409-13L-**	(9)		
3000	240	6	11	HXOL3206-11L-**	12	6000	240	10	12	HXOL6210-12L-**	20		
	480	(155)	(280)	HXOL3406-11L-**	(5.5)		480	(255)	(305)	HXOL6410-12L-**	(9)		
3000	240	8	8	HXOL3208-08L-**	12	6000	240	11	11	HXOL6211-11L-**	20		
	480	(205)	(205)	HXOL3408-08L-**	(5.5)		480	(280)	(280)	HXOL6411-11L-**	(9)		
4000	240	5	18	HXOL4205-18L-**	14								
	480	(125)	(460)	HXOL4405-18L-**	(6.5)								

Other dimensional configurations available, consult factory. Single phase only. Fluoropolymer guards standard. Risers pictured in left position, right position available





Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Flexible riser with 4 ft. (1.2m) of continuous PTFE cable leading to vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Optional patented purge feature promotes a longer heater life by reducing chemical permeation
- Lower Watt densities available for highly viscous solutions & technical acids

Specifications

Wattages 1,000 to 6,000 Watts

Voltages 120 to 600 Volts
(600V on 4,500W or lower only)
Single phase only.

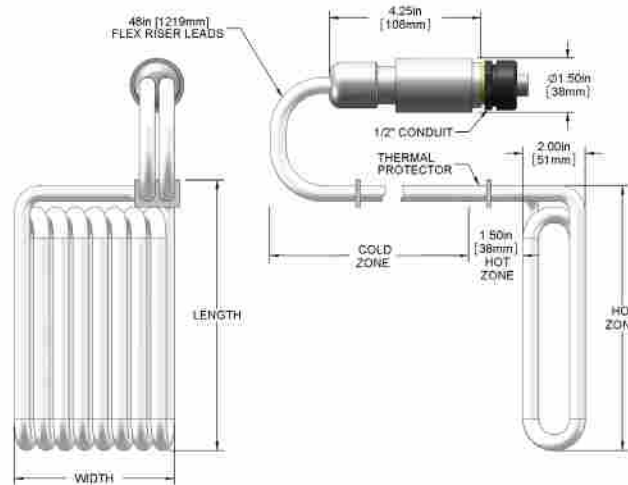
Temperature Range Up to 100°C (212°F)

Safety Features

- Grounded internal metal element
- Built-in thermal protector. Resettable P3 protector standard for up to 121°C (250°F). Other options available
- Non-floating construction

Certifications CE compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Width	Length	Riser Location	Riser Option	Type of Protector	Wire & Conduit Length
HXL = PTFE	1 = 1000	1 = 120	Specify in inches	Specify in inches	L = left front corner R = right front corner	FR = flex riser length, specify length in inches Ex: FR48 = 48" R = rigid riser length	Thermal Protector (flex riser) Resettable Fuse P3 = solutions up to 250°F (121°C)	36" length standard (no designator) Specify variations from standard Ex: -X84 = 84"
	2 = 2000	2 = 240					Thermal Protector (rigid riser) Replaceable Fuse P1 (std) = solutions up to 180°F P4 = solutions up to 230°F Resettable Fuse P2 = solutions up to 190°F P8 = 190° to 210°F P3 = 210° to 250°F	
	3 = 3000	3 = 380						
	4 = 4000	4 = 480						
	5 = 5000	5 = 415						
	6 = 6000	6 = 600						
		7 = 400						
		8 = 208						
		9 = 220						
		0 = 200						





HXRL Series

Fluoropolymer Heater

PRODUCT DATA SHEET

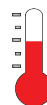
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Built-in thermal protector & grounded element



Up to 100°C (212°F)



1000 to 6,000 Watts



120 to 600 Volts
(600V on 4,500W or lower only)



PTFE sleeved 304 stainless steel



CE (except 600 Volts)

HXRL SERIES, FLEX RISER FLUOROPOLYMER (PTFE) HEATERS											
WATTS	VOLTS	WIDTH in/(mm)	LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)	WATTS	VOLTS	WIDTH in/(mm)	LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
1000	120	4	19	HXRL1104-19L**	6	3000	240	18	13	HXRL3218-13L**	12
	240	(102)	(483)	HXRL1204-19L**	(2.7)		480	(457)	(330)	HXRL3418-13L**	(5.4)
1000	120	6	13	HXRL1106-13L**	6	4000	240	12	25	HXRL4212-25L**	14
	240	(152)	(330)	HXRL1206-13L**	(2.7)		480	(305)	(635)	HXRL4412-25L**	(6.4)
1000	120	8	10	HXRL1108-10L**	6	4000	240	14	22	HXRL4214-22L**	14
	240	(203)	(254)	HXRL1208-10L**	(2.7)		480	(356)	(559)	HXRL4414-22L**	(6.4)
2000	120	6	25	HXRL2106-25L**	7	4000	240	16	19	HXRL4216-19L**	14
	240	(152)	(635)	HXRL2206-25L**	(3.2)		480	(406)	(483)	HXRL4416-19L**	(6.4)
	480			HXRL2406-25L**		4000	240	18	17	HXRL4218-17L**	14
2000	120	8	19	HXRL2108-19L**	7		480	(457)	(432)	HXRL4418-17L**	(6.4)
	240	(203)	(483)	HXRL2208-19L**	(3.2)	4000	240	20	15	HXRL4220-15L**	14
	480			HXRL2408-19L**			480	(508)	(381)	HXRL4420-15L**	(6.4)
2000	120	10	15	HXRL2110-15L**	7	5000	240	12	31	HXRL5212-31L**	17
	240	(254)	(381)	HXRL2210-15L**	(3.2)		480	(305)	(787)	HXRL5412-31L**	(7.7)
	480			HXRL2410-15L**		5000	240	14	27	HXRL5214-27L**	17
2000	120	12	13	HXRL2112-13L**	7		480	(356)	(686)	HXRL5414-27L**	(7.7)
	240	(305)	(330)	HXRL2212-13L**	(3.2)	5000	240	16	23	HXRL5216-23L**	17
	480			HXRL2412-13L**			480	(406)	(584)	HXRL5416-23L**	(7.7)
2000	120	14	11	HXRL2114-11L**	7	5000	240	18	21	HXRL5218-21L**	17
	240	(356)	(279)	HXRL2214-11L**	(3.2)		480	(457)	(533)	HXRL5418-21L**	(7.7)
	480			HXRL2414-11L**		6000	240	12	36	HXRL6212-36L**	20
3000	240	10	23	HXRL3210-23L**	12		480	(305)	(914)	HXRL6412-36L**	(9.1)
	480	(254)	(584)	HXRL3410-23L**	(5.4)	6000	240	14	30	HXRL6214-30L**	20
	800			HXRL3610-23L**			480	(356)	(762)	HXRL6414-30L**	(9.1)
3000	240	12	19	HXRL3212-19L**	12		480	(305)	(483)	HXRL6216-26L**	20
	480	(305)	(483)	HXRL3412-19L**	(5.4)	6000	240	16	26	HXRL6416-26L**	(9.1)
	800			HXRL3612-19L**			480	(406)	(660)	HXRL6220-21L**	20
3000	240	14	16	HXRL3214-16L**	12		480	(356)	(406)	HXRL6416-26L**	(9.1)
	480	(356)	(406)	HXRL3414-16L**	(5.4)	6000	240	20	21	HXRL6220-21L**	20
	800			HXRL3614-16L**			480	(508)	(533)	HXRL6420-21L**	(9.1)
3000	240	16	14	HXRL3216-14L**	12						
	480	(406)	(356)	HXRL3416-14L**	(5.4)						

Other dimensional configurations available, consult factory. Single phase only. Fluoropolymer guards standard. Risers pictured in left position, right position available



Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Flexible riser with 4 ft. (1.2m) of continuous PTFE cable leading to vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Optional patented purge feature promotes a longer heater life by reducing chemical permeation
- Lower Watt densities available for highly viscous solutions & technical acids

Specifications

Wattages 1,000 to 6,000 Watts

Voltages 120 to 600 Volts
 (600V on 4,500W or lower only)
 Single phase only.

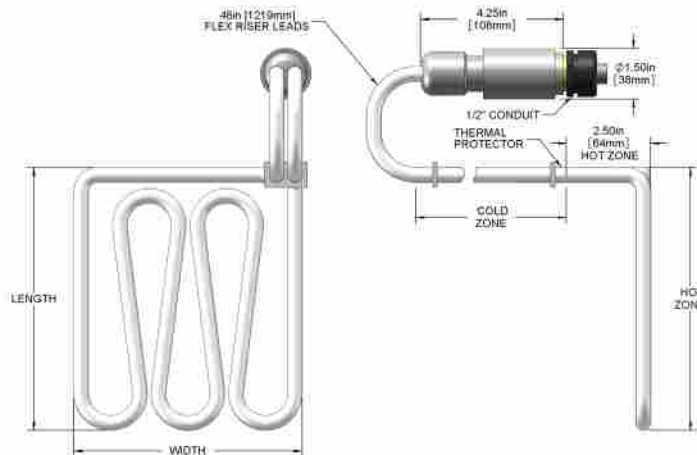
Temperature Range Up to 100°C (212°F)

Safety Features

- Grounded internal metal element
- Built-in thermal protector. Resettable P3 protector standard for up to 121°C (250°F). Other options available
- Non-floating construction

Certifications CE compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Width	Length	Riser Location	Riser Option	Type of Protector	Wire & Conduit Length
HXRRL = PTFE	1 = 1000	1 = 120	Specify in inches	Specify in inches	L = left front corner R = right front corner	FR = flex riser length, specify length in inches Ex: FR48 = 48" R = rigid riser length	Thermal Protector (flex riser) Resettable Fuse P3 = solutions up to 250°F (121°C)	36" length standard (no designator) Specify variations from standard Ex: -X84 = 84"
	2 = 2000	2 = 240					Thermal Protector (rigid riser) Replaceable Fuse	
	3 = 3000	3 = 380					P1 (std) = solutions up to 190°F	
	4 = 4000	4 = 480					P4 = solutions up to 220°F	
	5 = 5000	5 = 415					Resettable Fuse	
	6 = 6000	6 = 600					P2 = solutions up to 190°F	
		7 = 400					P8 = 190° to 210°F	
		8 = 208					P3 = 210° to 250°F	
		9 = 220						
		0 = 200						





HXSL Series

PRODUCT DATA SHEET

Fluoropolymer Heater

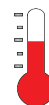
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Built-in thermal protector & grounded element



Up to 100°C (212°F)



1000 to 6,000 Watts



120 to 600 Volts
(600V on 4,500W or lower only)



PTFE sleeved 304 stainless steel



CE (except 600 Volts)

HXSL SERIES, FLEX RISER FLUOROPOLYMER (PTFE) HEATERS					
WATTS	VOLTS	WIDTH* in/(mm)	LENGTH* in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
1000	120	*	*	HXSL1**	6
	240	*	*		(2.7)
2000	120	*	*	HXSL2**	7
	240	*	*		(3.2)
	480	*	*		
3000	240	*	*	HXSL3**	12
	480	*	*		(5.4)
4000	240	*	*	HXSL4**	14
	480	*	*		(6.4)
5000	240	*	*	HXSL5**	17
	480	*	*		(7.7)
6000	240	*	*	HXSL6**	20
	480	*	*		(9.1)

*Please consult factory for model numbers of specific heaters. **Single phase only.** Heaters built to conform to tank dimensions. Risers pictured in left position, right position available.



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Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Flexible riser with 4 ft. (1.2m) of continuous PTFE cable leading to vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Optional patented purge feature promotes a longer heater life by reducing chemical permeation
- Lower Watt densities available for highly viscous solutions & technical acids

Specifications

Wattages 1,000 to 6,000 Watts

Voltages 120 to 600 Volts
(600V on 4,500W or lower only)
Single phase only.

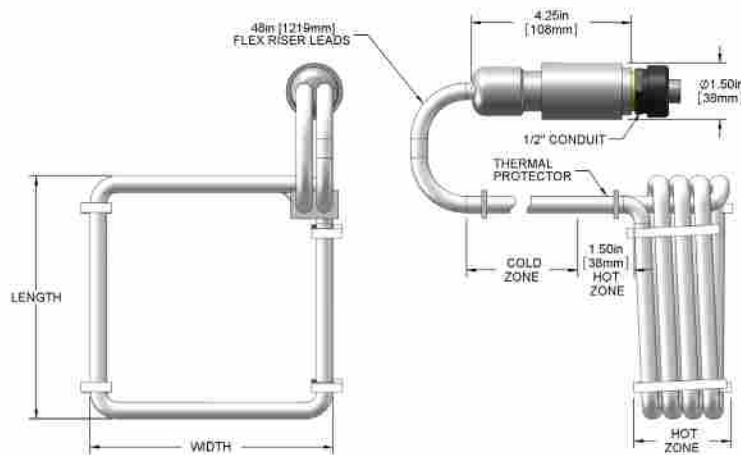
Temperature Range Up to 100°C (212°F)

Safety Features

- Grounded internal metal element
- Built-in thermal protector.
Resettable P3 protector standard for up to 121°C (250°F). Other options available
- Non-floating construction

Certifications CE compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Width	Length	Riser Location	Riser Option	Type of Protector	Wire & Conduit Length
HXSL = PTFE	1 = 1000	1 = 120	Specify in inches	Specify in inches	L = left front corner R = right front corner	FR = flex riser length, specify length in inches Ex: FR48 = 48" R = rigid riser length	Thermal Protector (flex riser) Resettable Fuse P3 = solutions up to 250°F (121°C)	36" length standard (no designator) Specify variations from standard Ex: -X84 = 84"
	2 = 2000	2 = 240					Thermal Protector (rigid riser) Replaceable Fuse P1 (std) = solutions up to 190°F P4 = solutions up to 220°F	
	3 = 3000	3 = 380					Resettable Fuse P2 = solutions up to 190°F P8 = 190° to 210°F P3 = 210° to 250°F	
	4 = 4000	4 = 480						
	5 = 5000	5 = 415						
	6 = 6000	6 = 600						
		7 = 400						
		8 = 208						
		9 = 220						
		0 = 200						





HXT Series

PRODUCT DATA SHEET

Fluoropolymer Heater

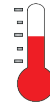
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Grounded element



Up to 100°C (212°F)



1,000 to 6,000 Watts



120 to 600 Volts
600V on 4,500W or lower only



PTFE sleeved 304 stainless steel



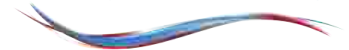
CE (except 600 Volts)

HXT SERIES, FLUOROPOLYMER (PTFE) SCREW PLUG HEATERS						
WATTS	VOLTS	OVERALL LENGTH in/(mm)	PIPE THREAD	MODEL NUMBER	SHIP WGT. lbs/(kg)	
1000	120	9	2-1/2	HXT1109	9	
	240	(229)	2-1/2	HXT1209	(4.1)	
2000	120	14	2-1/2	HXT2114	12	
	240	(356)	2-1/2	HXT2214	(5.4)	
	480		2-1/2	HXT2414		
3000	240	19	2-1/2	HXT3219	15	
	480	(483)	2-1/2	HXT3419	(6.8)	
4000	240	26	2-1/2	HXT4226	17	
	480	(660)	2-1/2	HXT4426	(7.7)	
5000	240	30	2-1/2	HXT5230	20	
	480	(762)	2-1/2	HXT5430	(9.1)	
6000	240	34	2-1/2	HXT6234	23	
	480	(864)	2-1/2	HXT6434	(10.4)	

Single phase only.



ISO 9001:2015
WITH DESIGN CERTIFIED





Features & Values

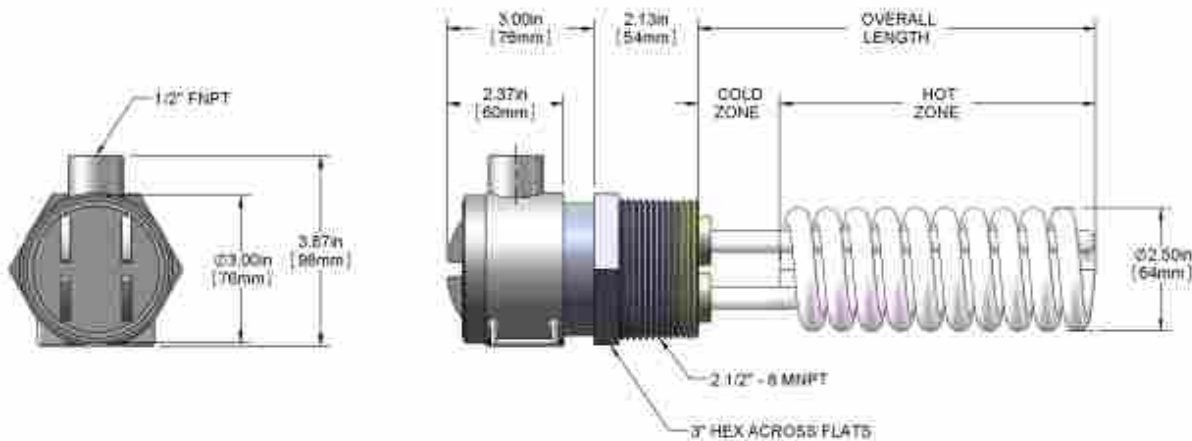
- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element and PVDF screw plug reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Lower Watt densities available for highly viscous solutions & technical acids

Specifications

Wattages	1,000 to 18,000 Watts
Voltages	120 to 600 Volts (600V on 4,500W or lower only)
Temperature Range	Up to 100°C (212°F)
Safety Features	▫ Grounded internal metal element
Certifications	CE compliant (except 600V)

NOTE: Intended for horizontal installation only.

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Length (in.)	Type of Protector	Wire & Conduit Length
HXT = PTFE	1 = 1000	1 = 120	9 = 1kW	Resettable Fuse (Type-J TC)	36" length standard (no designator)
	2 = 2000	2 = 240	14 = 2kW	P3 (std) = Solutions up to 250°F	Specify variations from standard Ex: -X84 = 84"
	3 = 3000	3 = 380	19 = 3kW		
	4 = 4000	4 = 480	26 = 4kW		
	5 = 5000	5 = 415	30 = 5kW		
	6 = 6000	6 = 600	34 = 6kW		
		7 = 400	Specify custom lengths		
		8 = 208			
		9 = 220			
		0 = 200			





TF Series

PRODUCT DATA SHEET

Fluoropolymer Heater

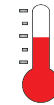
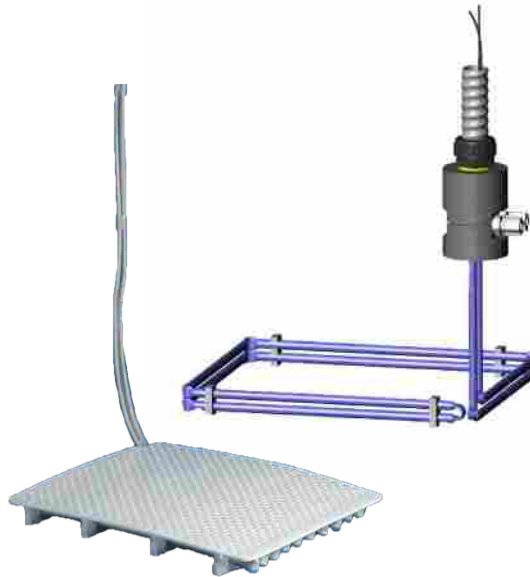
Excellent chemical resistance to aggressive acids!

Compatible with virtually any chemistry

Process temperature uniformity with low Watt density design

High efficiency & compact design

Extended service life with patented purge feature



Up to 130°C (266°F)



250 to 12,000 Watts

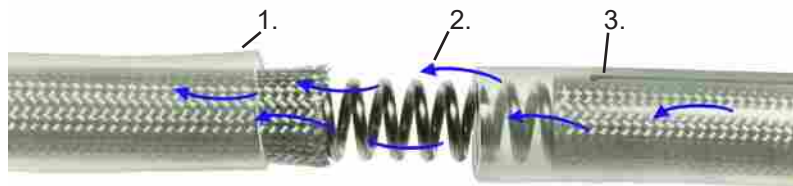


120 to 600 Volts
Single or three phase



PTFE sheath

Purged Heater Element Construction



1. Fluoropolymer Sleeve Heating Element
Resistance element sleeved in braided material for even coil separation. The entire element is given an outer sleeving of pre-tested & pre-extruded fluoropolymer tubing. THIS IS NOT A COATED PRODUCT.

2. N2 Purge System
Monitors heater integrity & prevents condensation or diffusion of corrosive gases by purging nitrogen or clean dry air through the tubing.

3. Over-Temperature Thermocouple
Protects the integrity of the heater. If an operator should leave the heater on while draining or aspirating a tank, when used in conjunction with a temperature control device, it will automatically shut off the heater when it is exposed to air.

PROCESS TECHNOLOGY

ISO 9001:2015
WITH DESIGN CERTIFIED



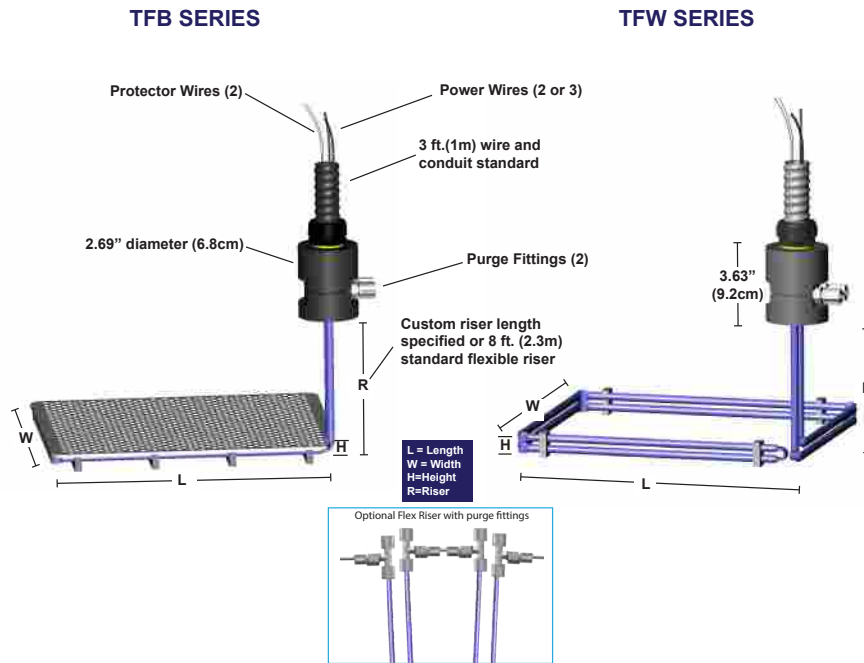
Features & Values

- Years of trouble-free performance in the most demanding chemical applications, such as semiconductor, FPD, MEMS, & biomedical industries
- PTFE heater element with 38mm (.015 in.) thick fluoropolymer sheath for safety & long service life
- Patented “purged” element design ensures maximum element life by removing chemical permeation
- 100% fluoropolymer wetted surfaces for virtually any non-flammable process solutions including HF & KOH
- Low Watt density design promotes process temperature uniformity

Specifications

Wattages	250 to 12,000 Watts
Voltages	120 to 600 Volts Single or three phase.
Temperature Range	Up to 130°C (266°F) For higher temperatures, see options section
Options Available (Consult Factory)	<ul style="list-style-type: none"> ▫ Custom heater configurations built to customer specifications ▫ 76mm(.030 in.) thick sheath available for applications above 130°C or for use with certain chemistries, such as nitride etch or HF. ▫ PID temperature control module ▫ Element gas purge flow regulator panel ▫ Special configurations & lengths ▫ Longer wire & conduit lengths ▫ Bolt down feature ▫ Lower Watt densities for highly viscous solutions & technical acids ▫ Customized process & over-temperature control sensors

Dimensions



Ordering Information

TFB Bottom Heater consist of:
PTFE ensleeved heating element
PTFE guard
8 foot heater leads
Nitrogen purge connections
Overtemperature thermocouples
Optional "TCO" thermal cut off heater fuse

1	TFB	-	1000	-	XXX
Number of Layers	Model	Wattage	Plan Number		
1	TFB	- 250-12,000	XXX (assigned)		
2	TFW				
3					
4					





3HXO Series

Fluoropolymer Heater

PRODUCT DATA SHEET

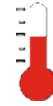
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Built-in thermal protector & grounded element



Up to 100°C (212°F)



1,500 to 18,000 Watts



120 to 600 Volts
(600V on 12,000W or lower only)



PTFE sleeved 304 stainless steel



cULus
CE (except 600 Volts)

3HXO SERIES, MULTI ELEMENT FLUOROPOLYMER (PTFE) HEATERS							
WATTS	VOLTS	WIDTH in/(mm)	HEATER PAD LENGTH in/(mm)	OVERALL LENGTH in/(mm)	MAX. COLD ZONE in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
1500	240	10.5	6	11	36	3HXO1.5110.5-06-11-*	15
		(263)	(152)	(279)	(915)	3HXO1.5210.5-06-11-*	(6.8)
3000	480	10.5	6	11	36	3HXO3210.5-06-11.**	20
		(263)	(152)	(279)	(915)	3HXO3410.5-06-11.**	(9.1)
4500	480	10.5	9.5	17	35	3HXO4.5210-9.5-17.**	21
		(263)	(241)	(432)	(890)	3HXO4.5410-9.5-17.**	(9.5)
6000	480	13	10.5	17	35	3HXO6213-10.5-17.**	22
		(330)	(267)	(432)	(890)	3HXO6413-10.5-17.**	(10)
9000	480	13	16	23	35	3HXO9213-16-23.**	36
		(330)	(406)	(584)	(890)	3HXO9413-16-23.**	(16.3)
12000	480	13	20.5	29	35	3HXO12213-20.5-29.**	42
		(330)	(521)	(737)	(890)	3HXO12413-20.5-29.**	(19.1)
15000	480	13	25	35	31	3HXO15213-25-35.**	48
		(330)	(635)	(889)	(790)	3HXO15413-25-35.**	(21.8)
18000	480	13	29	40	25	3HXO18213-29-40.**	54
		(330)	(737)	(1016)	(635)	3HXO18413-29-40.**	(24.5)

Three-phase standard. Guards recommended.





Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Optional patented purge feature promotes a longer heater life by reducing chemical permeation
- Lower Watt densities available for highly viscous solutions & technical acids

Specifications

Wattages 1,500 to 18,000 Watts

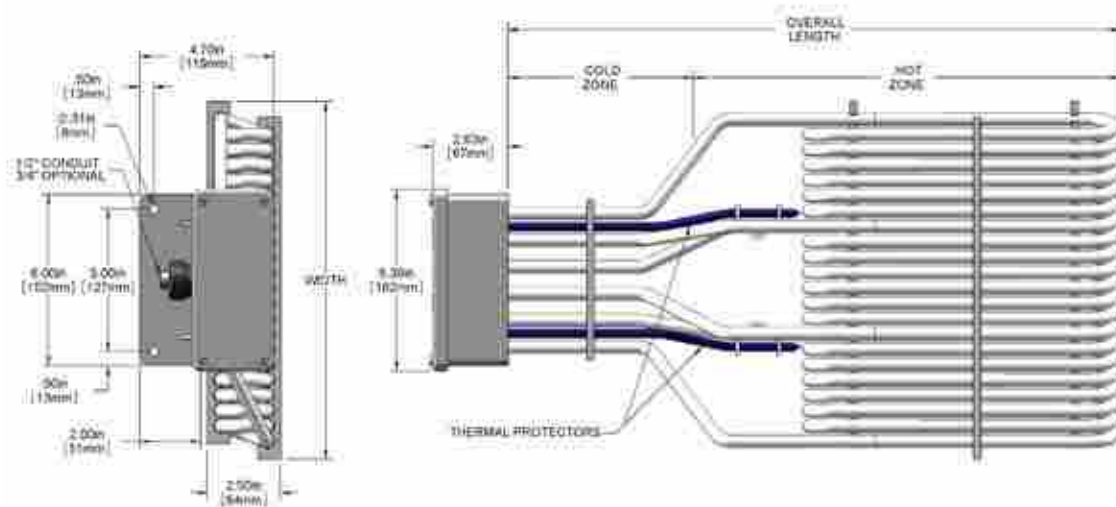
Voltages 120 to 600 Volts. *600 volt not available on 15 kW to 18 kW.

Temperature Range Up to 100°C (212°F)

- Safety Features**
- Grounded internal metal element
 - Built-in thermal protector. Replaceable P1 protector standard for up to 82°C (180°F). Other options available
 - Non-floating construction

Certifications cULus listed
CE compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Width	Hot Zone	Overall Length	Phase	Type of Protector	Wire & Conduit Length
3HXO = PTFE	1.5 = 1500	1 = 120	10.5 = 1.5kW	08 = 1.5kW	11 = 1.5kW	3 phase (std), no designator	Replaceable Fuse	36" length standard (no designator)
	3 = 3000	2 = 240	11 = 3kW	08 = 3kW	11 = 3kW	1 = single phase	P1 (std) = solutions up to 190°F	Specify variations from standard Ex: -X84 = 84"
	4.5 = 4500	3 = 380	11 = 4.5kW	11.5 = 4.5kW	17 = 4.5kW		Resettable Fuse	
	6 = 6000	4 = 480	13 = 6kW	12.5 = 6kW	17 = 6kW		P2 = solutions up to 190°F	
	9 = 9000	5 = 415	13 = 9kW	18 = 9kW	23 = 9kW		P8 = 190° to 210°F	
	12 = 12000	6 = 600	13 = 12kW	22.5 = 12kW	29 = 12kW		P3 = 210° to 250°F	
	15 = 15000	7 = 400	13 = 15kW	27 = 15kW	35 = 15kW			
	18 = 18000	8 = 208	13 = 18kW	31 = 18kW	40 = 18kW			
		9 = 220						
		0 = 200						
					Specify custom lengths			





3HXOL Series

PRODUCT DATA SHEET

Fluoropolymer Heater

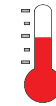
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Grounded internal metal element & non-floating construction



Up to 100°C (212°F)



3,000 to 18,000 Watts



120 to 600 Volts
(600V on 12,000W or lower only)



PTFE sleeved 304 stainless steel



cULus
CE (except 600 Volts)

3HXOL SERIES, MULTI ELEMENT L-SHAPED FLUOROPOLYMER (PTFE) HEATERS							
WATTS	VOLTS	WIDTH in/(mm)	HEATER PAD LENGTH in/(mm)	STD. VERT. LENGTH in/(mm)	MAX. COLD ZONE in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
3000	240	8	13	18	36	3HXOL3208-13-R-**.**. .	20
	480	(203)	(330)	(460)	(915)	3HXOL3408-13-R-**.**. .	(9.1)
4500	240	10.5	11	18	35	3HXOL4.5210.5-11-R-**.**. .	21
	480	(263)	(280)	(460)	(890)	3HXOL4.5410.5-11-R-**.**. .	(9.5)
6000	240	10.5	19	18	35	3HXOL6210.5-19-R-**.**. .	22
	480	(263)	(485)	(460)	(890)	3HXOL6410.5-19-R-**.**. .	(10)
9000	240	10.5	23	18	35	3HXOL9210.5-23-R-**.**. .	36
	480	(263)	(585)	(460)	(890)	3HXOL9410.5-23-R-**.**. .	(16.5)
12000	240	10.5	30	18	35	3HXOL12210.5-30-R-**.**. .	42
	480	(263)	(760)	(460)	(890)	3HXOL12410.5-30-R-**.**. .	(19.5)
15000	240	10.5	36	18	31	3HXOL15210.5-36-R-**.**. .	48
	480	(263)	(915)	(460)	(790)	3HXOL15410.5-36-R-**.**. .	(22)
18000	240	10.5	42	18	25	3HXOL18210.5-42-R-**.**. .	54
	480	(263)	(1070)	(460)	(635)	3HXOL18410.5-42-R-**.**. .	(24.5)

Three-phase standard. Guards recommended.

**PROCESS
TECHNOLOGY**

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Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Optional patented purge feature promotes a longer heater life by reducing chemical permeation
- Lower Watt densities available for highly viscous solutions & technical acids

Specifications

Wattages 3,000 to 18,000 Watts

Voltages 120 to 600 Volts. *600 volt not available on 15 kW to 18 kW.

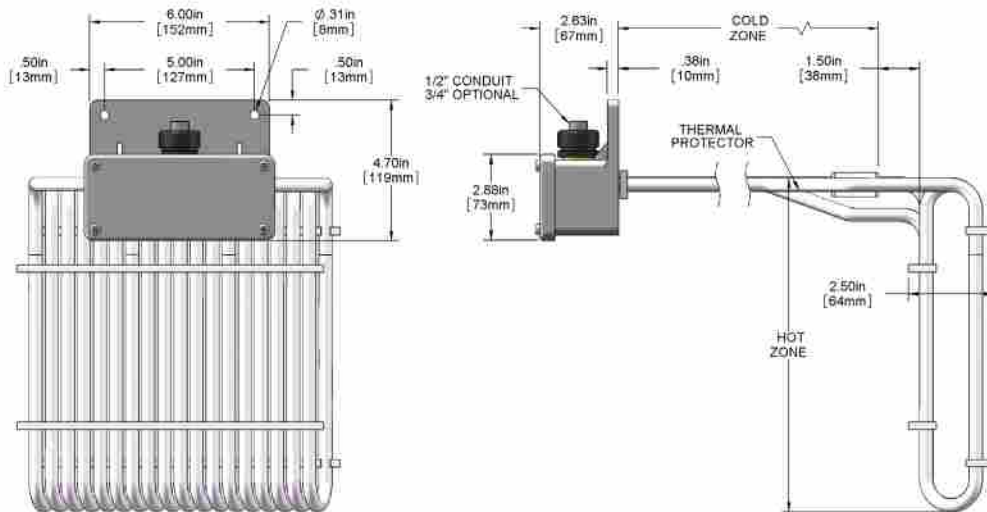
Temperature Range Up to 100°C (212°F)

Safety Features

- Grounded internal metal element
- Built-in thermal protector. Replaceable P1 protector standard for up to 82°C (180°F). Other options available
- Non-floating construction

Certifications cULus listed
CE compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Width	Heater Pad Length	Vertical Length	Phase	Type of Protector	Wire & Conduit Length
3HXOL = PTFE	3 = 3000	1 = 120	08 = 3kW	13 = 3kW	R18	3 phase (std), no designator	Replaceable Fuse	36" length standard (no designator)
	4.5 = 4500	2 = 240	10.5 = 4.5kW	11 = 4.5kW	Specify custom lengths	1 = single phase	P1 (std) = solutions up to 190°F	Specify variations from standard Ex: -X84 = 84"
	6 = 6000	3 = 380	10.5 = 6kW	19 = 6kW			Resettable Fuse	
	9 = 9000	4 = 480	10.5 = 9kW	23 = 9kW			P2 = solutions up to 190°F	
	12 = 12000	5 = 415	10.5 = 12kW	30 = 12kW			P8 = 190° to 210°F	
	15 = 15000	6 = 600	10.5 = 15kW	36 = 15kW			P3 = 210° to 250°F	
	18 = 18000	7 = 400	10.5 = 18kW	42 = 18kW				
		8 = 208						
		9 = 220						
		0 = 200						





6HX Fluoropolymer Heater

Excellent chemical resistance to aggressive acids.



FEATURES

Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F).

Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free.

Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)

Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit.

Lower watt densities for highly viscous solutions & technical acids.

6HX SERIES, SIX ELEMENT FLUOROPOLYMER (PTFE) HEATERS					
WATTS	VOLTS	HOT ZONE in/(mm)	OVERALL LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
2000	120	9	17	6HX2117-1**	19
	240	(229)	(432)	6HX2217-1**	(8.6)
	480			6HX2417-**	
3000	240	15	23	6HX3223-**	22
	480	(381)	(584)	6HX3423-**	(10)
4000	240	21	29	6HX4229-**	24
	480	(553)	(737)	6HX4429-**	(10.9)
6000	240	28	35	6HX6235-**	27
	480	(711)	(889)	6HX6435-**	(12.2)
8000	240	38	47	6HX8247-**	33
	480	(965)	(1194)	6HX8447-**	(15)
10000	240	47	59	6HX10259-**	40
	480	(1194)	(1499)	6HX10459-**	(18.1)
12000	240	55	68	6HX12268-**	45
	480	(1397)	(1727)	6HX12468-**	(20.4)



Temperature:
Up to 100°C



120 to 600 volts,
600V on 4,500W
or lower only



Watts: 2000 to
12,000



cULus
(except 600 volts)

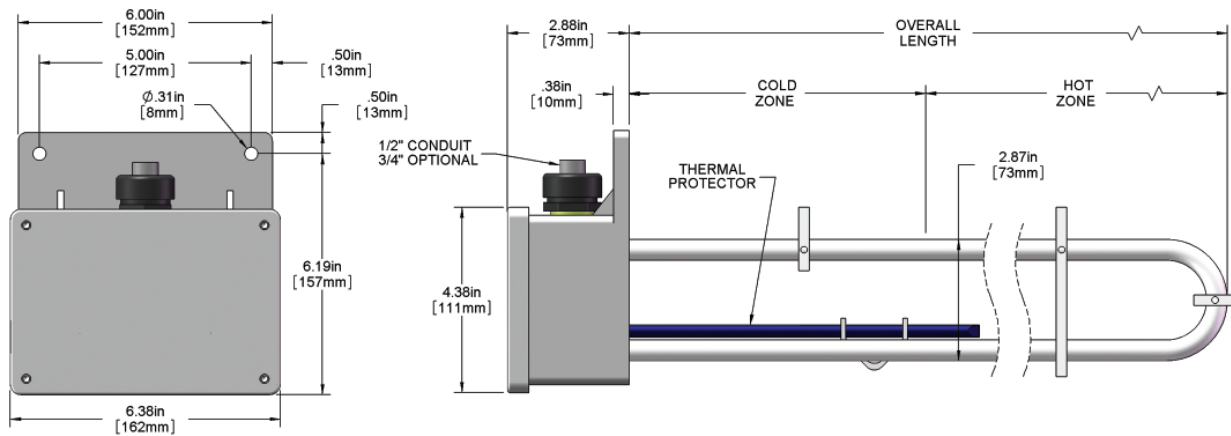


6HX Metal Heater

SPECIFICATIONS

Wattages	2000 Watts to 12,000 Watts
Voltages	120 volts to 600 volts
Temperature Range	Up to 100°C (212° F)
Safety Features	<p>Grounded internal metal element.</p> <p>Thermal protector built in. Replaceable PI protector standard for solutions up to 180°C (82°F).</p> <p>Non-floating construction.</p> <p>Other options available.</p>

DIMENSIONS



MODEL NUMBER BREAKDOWN

Series	Wattage	Voltage	Overall Length	Phase	Type of Protector	Wire & Conduit Length
6HX = PTFE	2 = 2000	1 = 120	17 = 2kW	No Designator = 3-phase (std.)	Replaceable Fuse	36" length standard (no designator)
	3 = 3000	2 = 240	23 = 3kW	1 = Single phase	P1 (std) = solutions up to 190°F	Specify variations from standard Ex: -X84 = 84"
	4 = 4000	3 = 380	29 = 4kW		Resettable Fuse	
	6 = 6000	4 = 480	35 = 6kW		P2 = solutions up to 190°F	
	8 = 8000	5 = 415	47 = 8kW		P8 = solutions up to 210°F	
	10 = 10000	6 = 600	59 = 10kW		P3 = solutions up to 250°F	
	12 = 12000	7 = 400	68 = 12kW			
		8 = 208				
		9 = 220				
		0 = 200				



9HX Fluoropolymer Heater

Excellent chemical resistance to aggressive acids.



FEATURES

Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F).

Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free.

Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)

Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit.

Lower watt densities for highly viscous solutions & technical acids.

9HX SERIES, NINE ELEMENT FLUOROPOLYMER (PTFE) HEATERS					
WATTS	VOLTS	HOT ZONE in/(mm)	OVERALL LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
3000	240	9	17	9HX3217-**	28
	480	(229)	(432)	9HX3417-**	(12.7)
4500	240	15	23	9HX4.5223-**	33
	480	(381)	(584)	9HX4.5423-**	(15)
6000	240	21	29	9HX6229-**	36
	480	(553)	(737)	9HX6429-**	(16.3)
9000	240	28	35	9HX9235-**	40
	480	(711)	(889)	9HX9435-**	(18.1)
12000	240	38	47	9HX12247-**	49
	480	(965)	(1194)	9HX12447-**	(22.2)
15000	240	47	59	9HX15259-**	60
	480	(1194)	(1499)	9HX15459-**	(27.2)
18000	240	55	68	9HX18268-**	67
	480	(1397)	(1727)	9HX18468-**	(30.4)

Three-phase standard. Single phase available. Add "-1" before thermal protector designator.

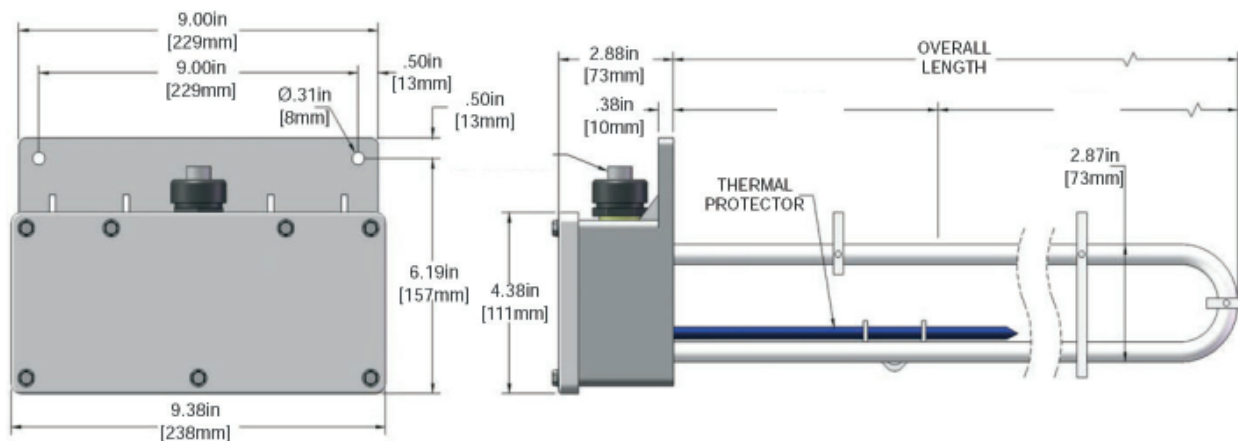


9HX Metal Heater

SPECIFICATIONS

Wattages	3000 Watts to 18,000 Watts
Voltages	120 volts to 600 volts
Temperature Range	Up to 100°C (212° F)
Safety Features	Grounded internal metal element. Thermal protector built in. Replaceable PI protector standard for solutions up to 180°C (82°F). Non-floating construction. Other options available.

DIMENSIONS



MODEL NUMBER BREAKDOWN

9HX 3 1 17 - P1 -

Series	Wattage	Voltage	Overall Length	Phase	Type of Protector	Wire & Conduit Length
9HX = PTFE	3 = 3000	1 = 120	17 = 3kW	No Designator = 3-phase (std.)	Replaceable Fuse	36" length standard (no designator)
	4.5 = 4500	2 = 240	23 = 4.5kW	1 = Single phase	P1 (std) = solutions up to 190°F	Specify variations from standard Ex: -X84 = 84"
	6 = 6000	3 = 380	29 = 6kW		Resettable Fuse	
	9 = 9000	4 = 480	35 = 9kW		P2 = solutions up to 190°F	
	12 = 12000	5 = 415	47 = 12kW		P8 = solutions up to 210°F	
	15 = 15000	6 = 600	59 = 15kW		P3 = solutions up to 250°F	
	18 = 18000	7 = 400	68 = 18kW			
		8 = 208				
		9 = 220				
		0 = 200				



FLX Series

PRODUCT DATA SHEET

Fluoropolymer Heater

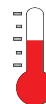
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Built-in thermal protector & grounded element



Up to 100°C (212°F)



1,000 to 18,000 Watts



120 to 600 Volts



PTFE sleeved 304 stainless steel



CE (except 600 Volts)

FLX SERIES, 3" 150 LB. STYLE SINGLE ELEMENT FLUOROPOLYMER (PTFE) FLANGED HEATERS					
WATTS	VOLTS	NO. OF ELEMENTS	OVERALL LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
1000	120	1	11	3FLX1111-**	20
	240		(279)	3FLX1211-**	(9.1)
2000	240	1	16	3FLX2216-**	23
	480		(406)	3FLX2416-**	(10.4)
3000	240	1	21	3FLX3221-**	26
	480		(533)	3FLX3421-**	(11.8)
4000	240	1	28	3FLX4228-**	29
	480		(711)	3FLX4428-**	(13.2)
5000	240	1	32	3FLX5232-**	32
	480		(813)	3FLX5432-**	(14.5)
6000	240	1	35	3FLX6235-**	35
	480		(889)	3FLX6435-**	(15.9)

FLX SERIES, 6" 150 LB. STYLE THREE ELEMENT FLUOROPOLYMER (PTFE) FLANGED HEATERS					
WATTS	VOLTS	NO. OF ELEMENTS	OVERALL LENGTH in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
3000	240	3	11	6FLX3211-**	42
	480		(279)	6FLX3411-**	(19.1)
6000	240	3	16	6FLX6216-**	51
	480		(406)	6FLX6416-**	(23.1)
9000	240	3	21	6FLX9221-**	60
	480		(533)	6FLX9421-**	(27.2)
12000	240	3	28	6FLX12228-**	66
	480		(711)	6FLX12428-**	(29.9)
15000	240	3	32	6FLX15232-**	75
	480		(813)	6FLX15432-**	(34)
18000	240	3	35	6FLX18235-**	84
	480		(889)	6FLX18435-**	(38.1)

PROCESS TECHNOLOGY

ISO 9001:2015
WITH DESIGN CERTIFIED

Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Lower Watt densities available for highly viscous solutions & technical acids

NOTE: Gasket & bolts are not provided. Intended for horizontal installation only.

Specifications

Wattages 1,000 to 18,000 Watts

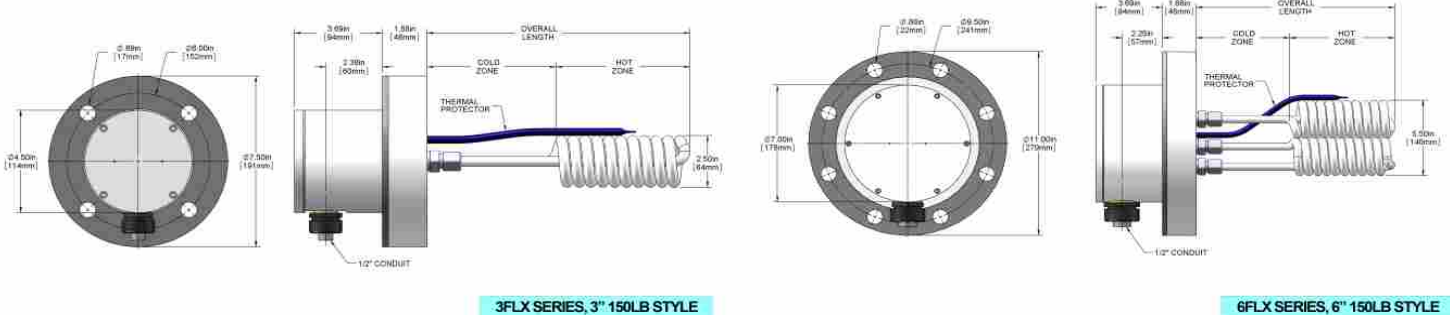
Voltages 120 to 600 Volts
 3FLX single phase only
 6FLX single or three phase

Temperature Range Up to 100°C (212°F)

- Safety Features**
- Grounded internal metal element
 - Built-in thermal protector. Replaceable P1 protector standard for up to 82°C (180°F). Other options available
 - Non-floating construction

Certifications CE compliant (except 600V)

Dimensions



Model Number Breakdown

3		FLX		1		1		11		-		P2		-	
Flange Size	Series	Wattage	Voltage	Overall Length (in.)		Phase		Type of Protector Resettable Fuse (Type-J TC)		Wire & Conduit Length		Additional control components required			
3 = 3"	FLX = PTFE	1 = 1000	1 = 120	3FLX	6FLX	No Designator = single-phase (std. for 3FL)		P2 = solutions up to 190°F		36" length standard (no designator)		P2 = solutions up to 190°F		Specify variations from standard Ex: -X84 = 84"	
6 = 6"		2 = 2000	2 = 240	16 = 2kW	6kW	No Designator = three-phase (std. for 6FL)		P8 = solutions up to 210°F							
		3 = 3000	3 = 380	21 = 3kW	9kW	1 = single-phase (6FL only)									
		4 = 4000	4 = 480	28 = 4kW	12kW										
		5 = 5000	5 = 415	32 = 5kW	15kW										
		6 = 6000	6 = 600	35 = 6kW	18kW										
		9 = 9000	7 = 400	Specify (Custom lengths available)											
		12 = 12000	8 = 208												
		15 = 15000	9 = 220												
		18 = 18000	0 = 200												





HXF Series

PRODUCT DATA SHEET

Fluoropolymer Heater

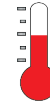
Excellent chemical resistance to aggressive acids!

Inert to most solutions

Low Watt density design saves space & ensures long life

Corrosion-resistant head

Built-in thermal protector & grounded element



Up to 100°C (212°F)



500 to 6,000 Watts



120 to 600 Volts
(600V on 4,500W & lower)



PTFE sleeved 304 stainless steel



cULus
CE (except 600 Volts)

HXF SERIES, LOW PROFILE FLUOROPOLYMER (PTFE) HEATERS							
WATTS	VOLTS	HOT ZONE in/(mm)	OVERALL LENGTH in/(mm)	DIA. in/(mm)	MAX. COLD ZONE in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
500	120	6	14	5	36	HXF.5105-14-**	6
		(152)	(356)	(127)	(914)	HXF.5205-14-**	(2.7)
1000	240	7	14	6	36	HXF1106-14-**	7
		(178)	(356)	(152)	(914)	HXF1206-14-**	(3.2)
2000	480	9	17	8	35	HXF2108-17-**	8
		(229)	(432)	(203)	(889)	HXF2208-17-**	(3.6)
						HXF2408-17-**	
3000	480	10	23	9	35	HXF3209-23-**	13
		(254)	(584)	(229)	(889)	HXF3409-23-**	(5.9)
4000	480	12	29	11	35	HXF4211-29-**	15
		(305)	(737)	(279)	(889)	HXF4411-29-**	(6.8)
5000	480	13	35	12	31	HXF5212-35-**	18
		(330)	(889)	(305)	(787)	HXF5412-35-**	(8.2)
6000	480	14	40	13	25	HXF6213-40-**	22
		(356)	(1016)	(330)	(635)	HXF6413-40-**	(10)

Single phase only. Guards recommended. This configuration is not recommended for electroless chemistry, phosphoric acid, or applications prone to sludge buildup.

**PROCESS
TECHNOLOGY**

ISO 9001:2015
WITH DESIGN CERTIFIED



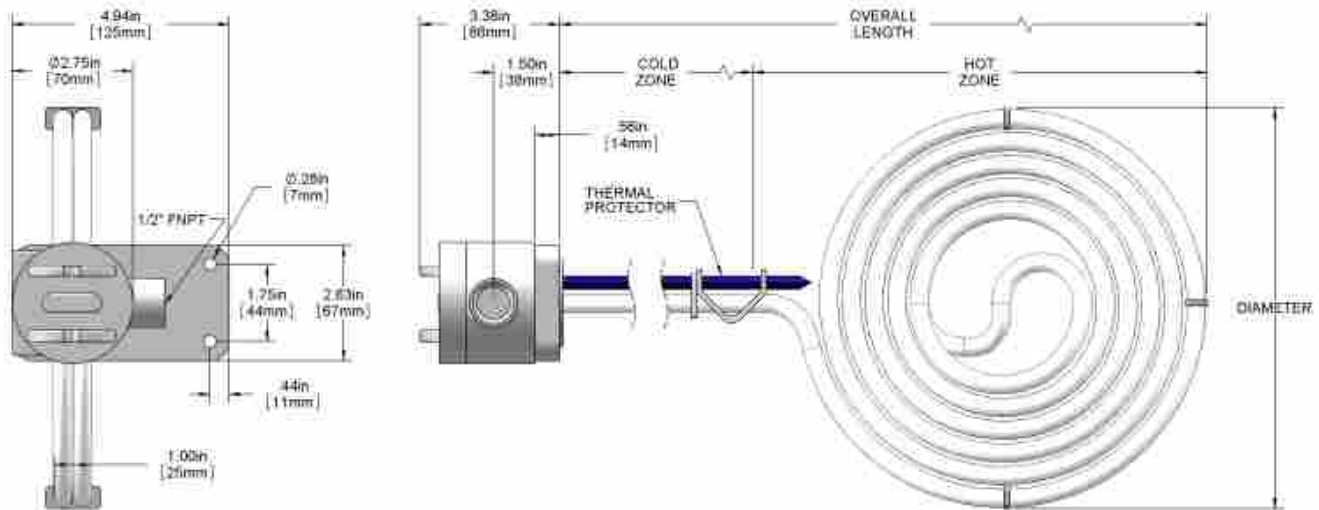
Features & Values

- Inert to most aqueous acid, alkaline, anodizing, & pickling solutions up to 100°C (212°F)
- Rugged, heavy wall PTFE covered stainless steel element reduces permeation. Guaranteed 100% pinhole free
- Space saving & long service life with low Watt density design of 10 W/in² (1.5 W/cm²)
- Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit
- Lower Watt densities available for highly viscous solutions & technical acids
- Optional patented purge feature promotes longer heater life

Specifications

Wattages	500 to 6,000 Watts
Voltages	120 to 600 Volts (600V on 4,500W or lower only)
Temperature Range	Up to 100°C (212°F)
Safety Features	<ul style="list-style-type: none"> ▫ Grounded internal metal element ▫ Built-in thermal protector. Replaceable P1 protector standard for up to 82°C (180°F). Other options available ▫ Non-floating construction
Certifications	cULus listed CE compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Diameter (in.)	Overall Length	Type of Protector	Wire & Conduit Length
HXF = PTFE	.5 = 500	1 = 120	05 = .5kW	14 = .5kW	Replaceable Fuse (Type-J TC)	36" length standard (no designator)
	1 = 1000	2 = 240	06 = 1kW	14 = 1kW	P1 (std) = solutions up to 190°F	Specify variations from standard Ex: -X84 = 84"
	2 = 2000	3 = 380	08 = 2kW	17 = 2kW	P4 = solutions 190°F to 220°F	
	3 = 3000	4 = 480	09 = 3kW	23 = 3kW	Resettable Fuse (Type-J TC)	
	4 = 4000	5 = 415	11 = 4kW	29 = 4kW	P2 = solutions up to 190°F	
	5 = 5000	6 = 600	12 = 5kW	35 = 5kW	P8 = solutions up to 210°F	
	6 = 6000	7 = 400	13 = 6kW	40 = 6kW	P3 = solutions up to 250°F	
		8 = 208		Specify custom lengths		
		9 = 220				
		0 = 200				





HXFL Series

PRODUCT DATA SHEET

Fluoropolymer Heater

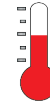
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PTFE sleeved 304 stainless steel



cULus
CE (except 600 Volts)

HXFL SERIES, LOW PROFILE L-SHAPED FLUOROPOLYMER (PTFE) HEATERS							
WATTS	VOLTS	HOT ZONE in/(mm)	STD. VERT. LENGTH in/(mm)	DIA. in/(mm)	MAX. COLD ZONE in/(mm)	MODEL NUMBER	SHIP WGT. lbs/(kg)
500	120	5	12	5	36	HXFL5105-R-***	6
		(127)	(305)	(127)	(914)	HXFL5205-R-***	(2.7)
1000	120	6	12	6	36	HXFL1106-R-***	7
		(152)	(305)	(152)	(914)	HXFL1206-R-***	(3.2)
2000	120	8	18	8	35	HXFL2108-R-***	8
		(203)	(457)	(203)	(889)	HXFL2208-R-***	(3.6)
						HXFL2408-R-***	
3000	240	9	18	9	35	HXFL3209-R-***	13
		(229)	(457)	(229)	(889)	HXFL3409-R-***	(5.9)
4000	240	11	18	11	35	HXFL4211-R-***	15
		(279)	(457)	(279)	(889)	HXFL4411-R-***	(6.8)
5000	240	12	18	12	31	HXFL5212-R-***	18
		(305)	(457)	(305)	(787)	HXFL5412-R-***	(8.2)
6000	240	13	18	13	25	HXFL6213-R-***	22
		(330)	(457)	(330)	(635)	HXFL6413-R-***	(10)

Single phase only. Guards recommended. This configuration is not recommended for electroless chemistry, phosphoric acid, or applications prone to sludge buildup.





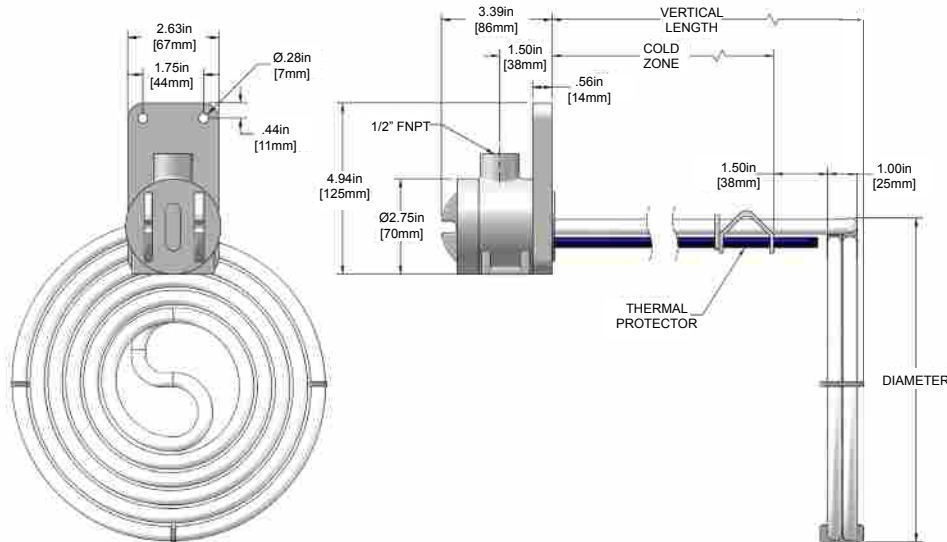
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Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Diameter (in.)	Vertical Length (in.)	Type of Protector	Wire & Conduit Length
HXFL = PTFE	.5 = 500	1 = 120	05 = .5kW	R12 = .5kW	Replaceable Fuse (Type-J TC)	36" length standard (no designator)
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	2 = 2000	3 = 380	08 = 2kW	R18 = 2kW	Resettable Fuse (Type-J TC)	
	3 = 3000	4 = 480	09 = 3kW	R18 = 3kW	P2 = solutions up to 190°F	
	4 = 4000	5 = 415	11 = 4kW	R18 = 4kW	P8 = solutions up to 210°F	
	5 = 5000	6 = 600	12 = 5kW	R18 = 5kW	P3 = solutions up to 250°F	
	6 = 6000	7 = 400	13 = 6kW	R18 = 6kW		
		8 = 208		Specify custom lengths		
		9 = 220				
		0 = 200				

