



Parflex Engineered Power Solutions

Heated Enclosure Systems for Power Generation



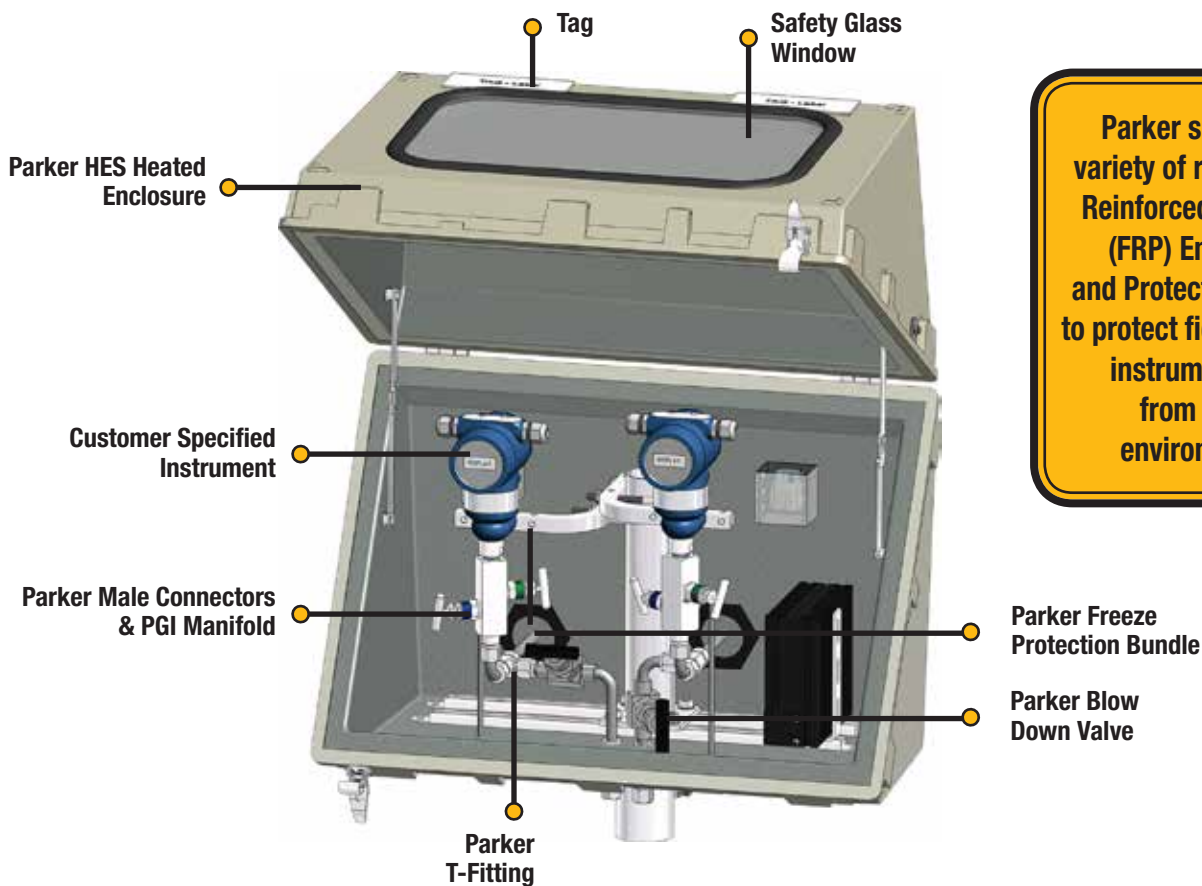
ENGINEERING YOUR SUCCESS.

Bring In A Complete System

Parflex Multitube™ provides system solutions to the power generation market with a fully integrated heated enclosure line as part of our current heated tubing bundle products.

Parflex Engineered Systems Solutions helps you reduce field installation labor costs and simplify the project management at your plants by providing power generation customers with fully integrated pressure and differential pressure instruments as part of our heated tubing bundle system for Low Pressure, Medium Pressure and High Pressure applications.

Parker is able to supply a range of robust Fiber Reinforced Polyester (FRP) enclosures and protective sun shades to protect field mounted instrumentation from harsh environments. An enclosure or sun shade covering the instrument will protect it from severe weather, extreme radiant sun heat or sub-zero temperatures. It also prevents damage to the instrument from airborne dirt/dust particles, falling debris or even accidental breakage.



Parker supplies a variety of robust Fiber Reinforced Polyester (FRP) Enclosures and Protective Shades to protect field mounted instrumentation from harsh environments.

Product Features:

- Available with a wide range of Parker PGI manifolds
- Single, Double or Triple instrument mount boxes available
- Weight saving - FRP enclosures are 25% of the weight of the equivalent steel units
- Excellent corrosion and chemical resistance
- Suitable for all proprietary instruments

Product Benefits:

- Enclosures protect and extend the life of instruments
- Reduce plant downtime by ensuring freeze protection in the winter
- Reduce high maintenance costs with fewer change outs due to environment exposure
- Protect personnel from high temperature applications above 140°F, per NEC 427.12.



'HES' Heated Enclosure Systems



- Available with fully fitted packages that are ready to install on site. The manifolds, instrument (sourced or free-issued), fittings and heating systems can be pre-fitted by Parker's assembly service team and delivered fully pressured tested and certified, so when an enclosure arrives at the installation point it can be mounted straight on to a 2" NB pipe stand.



Steam Purge Bundles

- Parker also offers a full line of process and condensate vent tubing insulated and heat traced for freeze protection. It can then be connected to the compression fittings and the instrument signal cable wired in. The system is then ready for commissioning and use.



Accessories & Custom Design Solutions

- Parker offers a wide range of accessories, as well as modular custom designed enclosures. So, if you have something else in mind for your project or want to explore other cost & space saving options, we can help engineer a solution. Large panel instrument systems can be customized, allowing you to house multiple instruments at a centralized point within your plant and simplifying long-term operational usage and maintenance.

'HES' Heated Enclosure Systems

All of the Parflex 'HES' come equipped with stainless steel hinges on the doors and lids, and the Split Diagonal designs are fitted with a prop-open-stay catches. As standard, each enclosure is fitted with a galvanized steel base plate with a welded stub to suit mounting the enclosure to a 2" NB pipe stand.

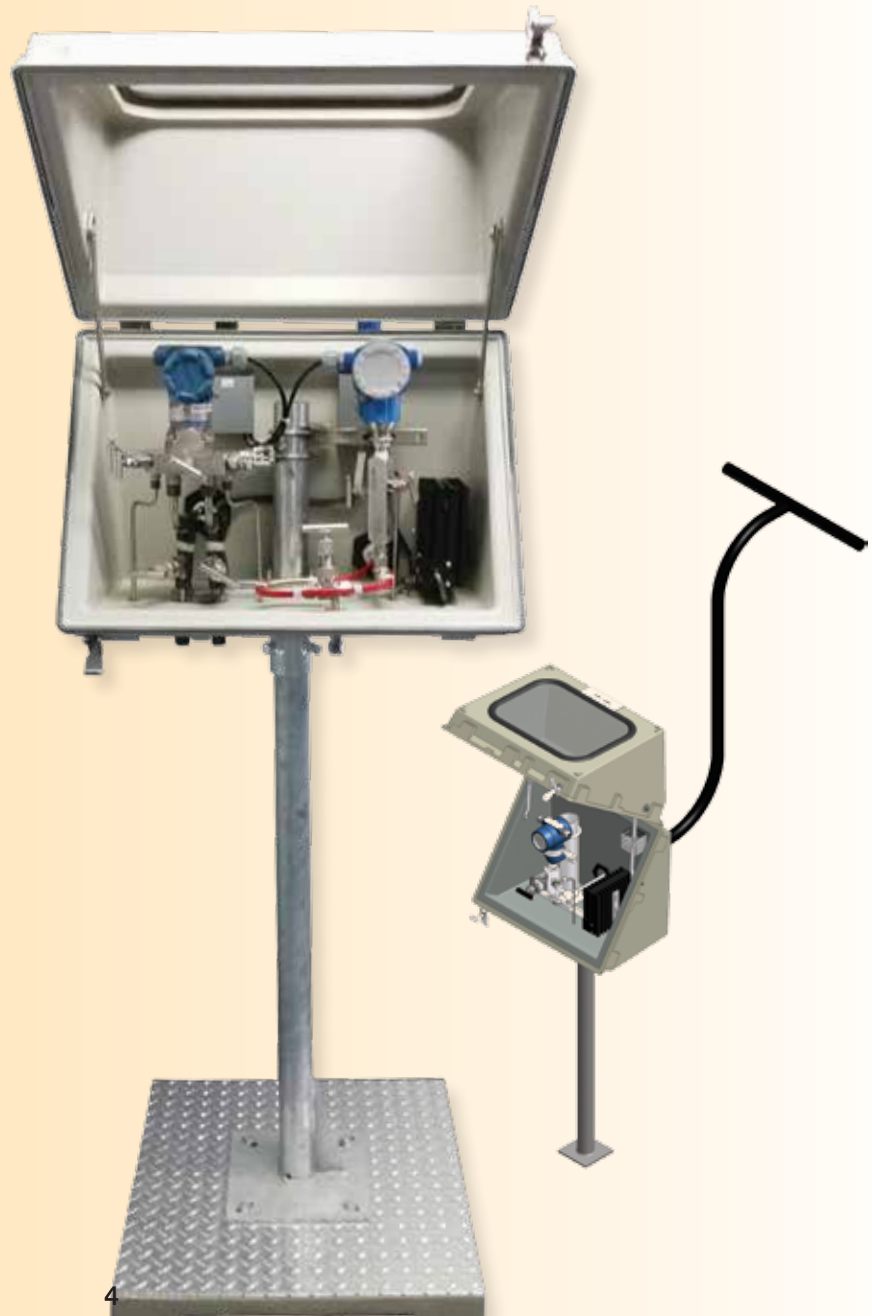
Triple and Multi size enclosures can be outfitted with two welded stubs to suit mounting two 2" NB pipe stands. If required, rear mounting options are available. The Parflex 'HES' enclosure can also be fitted with an internal mounting rail system to allow for increased flexibility of instrument installation. The rail system also keeps your instrument components protected off the floor of the enclosure.

Product Features:

- Made with durable hot-pressed Fiber Reinforced Polyester (FRP)
- Fire retardant material, low flammability UL 94 VO
- Ingress protection rating IP65, UV resistant
- Double seal technology with a formed tongue & groove seal and EPDM seal
- Operating temperature range -60 °C to 100°C (-76 °F to 212°F) with gasket EPDM
- Color-light grey RAL 7032

Product Options:

- Arctic Insulation, Polyurethane foam with FRP lining
- Antistatic surface per EN IEC 60079-0
- CSA Type 4X
- Available in either traditional (SD) split-diagonal style or (PB) panel board
- Each style comes in 3 measurements for single, double or triple instrument mounting.
- Other options include -vertical or horizontal finned heaters, thermostats, breather and vent drains, safety glass windows, sample line entry feed-thru, electrical terminal blocks for sample line heater and instrument power connection

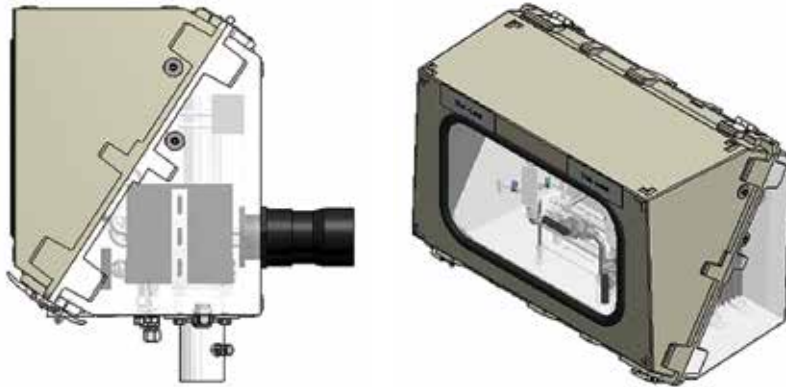


Enclosure Styles & Options

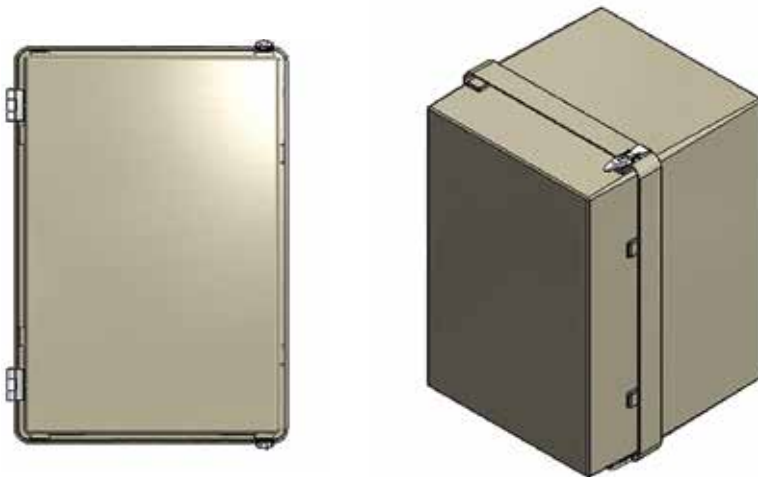
Enclosure Part Number	Style	Outside Nominal Dimensions*		
		Width (inch)	Depth (inch)	Height (inch)
HES-SD1	Split Diagonal Single	23.00	15.40	19.30
HES-SD2	Split Diagonal Double	28.00	15.40	19.30
HES-SD3	Split Diagonal Triple	37.80	15.40	19.30
HES-PB1	Panel Board Single	17.32	16.90	25.20
HES-PB2	Panel Board Double	20.50	16.90	29.50
HES-PB3	Panel Board Triple	31.50	18.90	23.60

* Vertical orientation, lid and doors closed

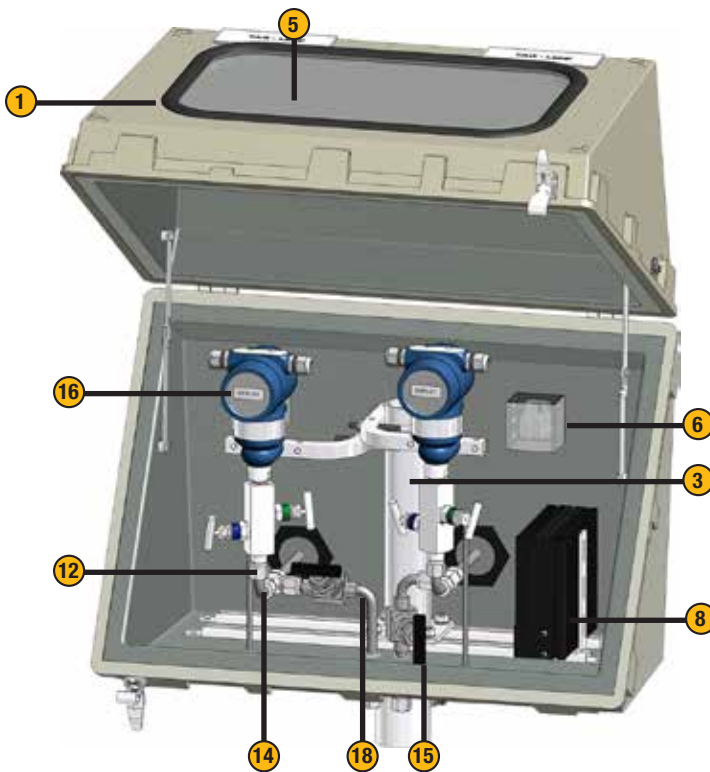
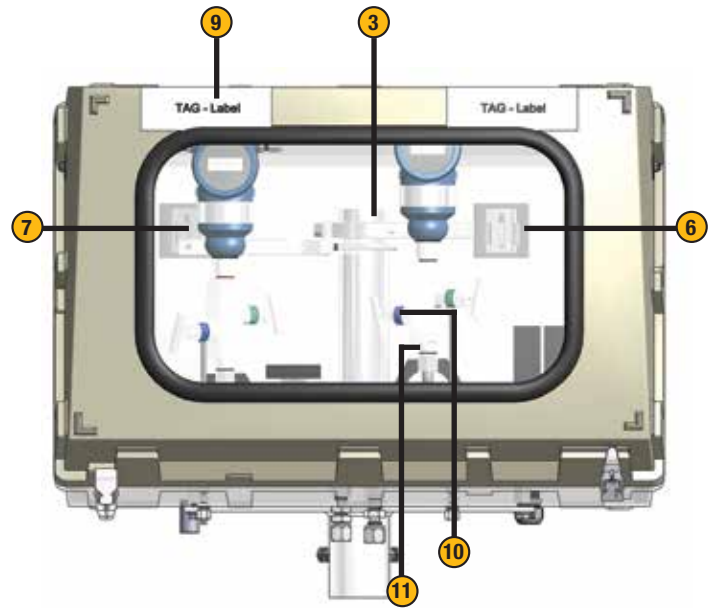
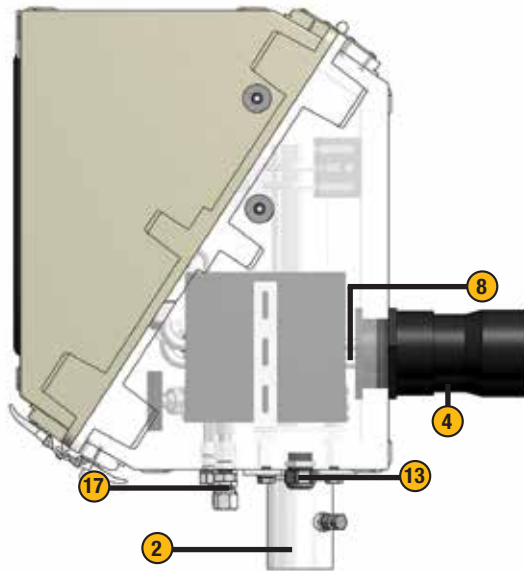
Split Diagonal Style



Panel Board Style



Code	Description
Split Diagonal Boxes	
M-SD	External Rear 2" Pipe Mounting Bracket
R-SD	Rear Wall Mounting Bracket
I-SD	Internal Mounting Plates
IMR-SD	Internal Mounting Rails
IBV-SD	Instrument Bracket Vertical Mount
IBH-SD	Instrument Bracket Horizontal Mount
Panel Board Boxes - Options	
M-PB	External Rear 2" Pipe Mounting Bracket
R-PB	Rear Wall Mounting Bracket
I-PB	Internal Mounting Plates
IMR-PB	Internal Mounting Rails
IBV-PB	Instrument Bracket Vertical Mount
IBH-PB	Instrument Bracket Horizontal Mount
Heating Options	
E260	Non Haze Convection heater with integral thermostat
E500	Non Haze Convection heater with integral thermostat
Other Options	
TS	Thermostat
E500	Non Haze Convection heater with integral thermostat
BD	Breather Drain
WA	Window Acrylic
WS	Window Safety Glass
TG	Tags
PS	2" Pipe Stand
TEG	Tubing Entry Grommet
PTFT	Bundle Entry Seal



Item	Qty.	Item	Description
1	1	HES-SD2	Split Diagonal Double Instrument Enclosure
2	1	M-SD	2" External Mounting Hub, Galv/Steel
3	1	IPA-SD	2" Internal Mounting Post, Galv/Steel
4	2	PTFT	Bundle Feed Thru Entry
5	1	WS	Window Safety Glass
6	1	TS-1	Terminal Block/Panduit 120 VAC
7	1	TS-2	Terminal Block/Panduit 24 VDC
8	1	E1260	Electric Box Heater 260W/120V (Rated at 240V)
9	2	TG	Lamacoid Tag

Item	Qty.	Item	Description
10	2	4-4-FBZ-SS	1/4" Male Connector
11	2	4-4-WBZ-SS	1/4" Bulkhead Union
12	2	8-8-FBZ-SS	1/2" Male Connector
13	2	8-8-WBZ-SS	1/2" Bulkhead Union
14	2	8-8-8-JBZ-SS	1/2" T-Fitting
15	2	8A-U12LB-SS	1/2" Blowdown Valve
16	2	Customer Instrument	Customer Specified Instrument
17	1	BD	Breather Drain
18	AR	316SS	SEAMLESS 1/2" Stainless steel tubing as needed

Freeze Protected High Temperature Pressure & Differential Pressure Bundles



Product Features:

- Continuous Steam Service
 - Design to withstand long-term steam purge, power-off, without destroying the heating element.
- Intermittent Steam Service
 - Designed to withstand occasional (5-minutes once per day) steam purge, power off, without destroying the heating element.

Continuous Steam Service

Part Number	Process Tube O.D. inch	Wall Thickness inch	Nominal Product O.D. inch	Product Weight (lbs./ft.)	Min. Bend Radius inch	Watt Density per foot/ Voltage	Circuit Length Ft. @ 50°F Start-up / Breaker (amps) 120V	Performance At Low Ambient Conditions	Maximum Allowable Continuous Steam Purge	Maximum Jacket Surface Temperature during Steam Purge & High Ambient 80°F (26.6°C)
#						Watt/ft.		At -40°F (-40°C) will maintain at least freeze protection**	Continuous Steam Purge	
CS- Continuous Steam Purge - Single Process Tube Seamless Stainless Steel, ASTM A269							@120V*			
CS-B0849A-612A-V8N	(1) 1/2	0.049	1.61	0.55	10	10	250 ft. / 40 Amp	40°F (4.4°C)	650°F (343°C)	180°F (82°C)
CS-B0849A-712A-V8N	(1) 1/2	0.049	1.85	0.59	11	10	250 ft. / 40 Amp	40°F (4.4°C)	750°F (399°C)	180°F (82°C)
CS-B0849A-812A-V8N	(1) 1/2	0.049	2.01	0.61	12	15	190 ft. / 40 Amp	40°F (4.4°C)	850°F (454°C)	180°F (82°C)
CS-B0849A-912A-V8N	(1) 1/2	0.049	2.17	0.63	13	15	190 ft. / 40 Amp	40°F (4.4°C)	950°F (510°C)	180°F (82°C)
CS- Continuous Steam Purge - Dual Process Tube Seamless Stainless Steel, ASTM A269										
CS-B0849B-612A-V8N	(2) 1/2	0.049	2.09	0.86	13	10	250 ft. / 40 Amp	40°F (4.4°C)	650°F (343°C)	180°F (82°C)
CS-B0849B-712A-V8N	(2) 1/2	0.049	2.25	0.88	13	10	250 ft. / 40 Amp	40°F (4.4°C)	750°F (399°C)	180°F (82°C)
CS-B0849B-812A-V8N	(2) 1/2	0.049	2.49	0.92	15	15	190 ft. / 40 Amp	40°F (4.4°C)	850°F (454°C)	180°F (82°C)
CS-B0849B-912A-V8N	(2) 1/2	0.049	2.69	1.04	16	15	190 ft. / 40 Amp	40°F (4.4°C)	950°F (510°C)	180°F (82°C)

*Many other alloys available, as well as seamless stainless steel tubing. Product is also available in 208, 240 and 277V.

** As ambient conditions go above -40°F (-40°C), without use of a controller the product could maintain higher temperatures.

Intermittent Steam Service

Part Number	Process Tube O.D. inch	Wall Thickness inch	Nominal Product O.D. inch	Product Weight (lbs./ft.)	Min. Bend Radius inch	Watt Density per foot/ Voltage	Circuit Length Ft. / Breaker (amps) 120V	Performance At Low Ambient Conditions	Maximum Allowable Continuous Steam Purge	Maximum Jacket Surface Temperature during Steam Purge & High Ambient 80°F (26.6°C)
#						Watt/ft.		At -40°F (-40°C) will maintain at least freeze protection**	Continuous Steam Purge	
IS- Single Process Tube - Seamless Stainless Steel, ASTM A269							@120V*			
IS-B0849A-612A-V4	(1) 1/2"	0.049"	1.93	0.59	12	10	250 Ft / 40 Amp	40°F (4.4°C)	650°F (343°C)	140°F (60°C)
IS-B0849A-712A-V4	(1) 1/2"	0.049"	2.01	0.61	12	10	250 Ft / 40 Amp	40°F (4.4°C)	750°F (399°C)	140°F (60°C)
IS-B0849A-812A-V4	(1) 1/2"	0.049"	2.09	0.62	13	15	190 Ft / 40 Amp	40°F (4.4°C)	850°F (454°C)	140°F (60°C)
IS-B0849A-912A-V4	(1) 1/2"	0.049"	2.09	0.62	13	15	190 Ft / 40 Amp	40°F (4.4°C)	950°F (510°C)	140°F (60°C)
IS- Dual Process Tube - Seamless Stainless Steel, ASTM A269										
IS-B0849B-612A-V4	(2) 1/2"	0.049"	2.25	0.88	13	10	250 Ft / 40 Amp	40°F (4.4°C)	650°F (343°C)	140°F (60°C)
IS-B0849B-712A-V4	(2) 1/2"	0.049"	2.33	0.89	14	10	250 Ft / 40 Amp	40°F (4.4°C)	750°F (399°C)	140°F (60°C)
IS-B0849B-812A-V4	(2) 1/2"	0.049"	2.33	0.89	14	15	190 Ft / 40 Amp	40°F (4.4°C)	850°F (454°C)	140°F (60°C)
IS-B0849B-912A-V4	(2) 1/2"	0.049"	2.41	0.90	14	15	190 Ft / 40 Amp	40°F (4.4°C)	950°F (510°C)	140°F (60°C)

*Many other alloys available, as well as seamless stainless steel tubing. Product is also available in 208, 240 and 277V.

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