

# Reactor Coil Model R500

AMETEK Reactor Coil Heat Exchangers—made with tubing of fluoropolymer fluorocarbon resin—are used for heating and cooling of corrosive fluids in a wide range of processes and applications. The well-known non-stick characteristics of fluoropolymer resist corrosion and reduce fouling. AMETEK Reactor Coils are designed for immersion directly into the process vessel, and are most efficient when agitated in the process solution. During agitation, the flexing action of the coils helps reduce fouling and dislodges deposits that may have formed. This and other unique design features make the Model R500 Reactor Coil ideal for crystallizer applications.



**REACTOR COIL MODEL R500**

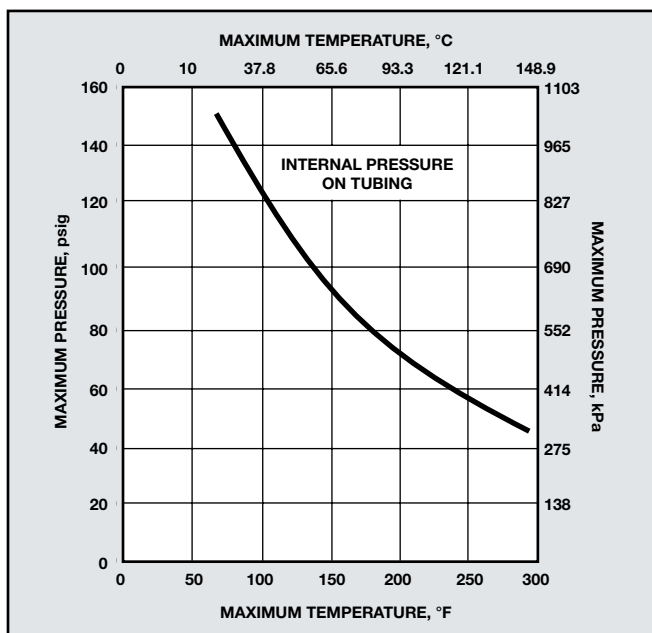
## PRODUCT DESCRIPTION

<b>Tubing Configuration</b>	Loose Bundle
<b>Tube Outside Diameter</b>	.125" (3.175 mm)
<b>Tube Wall Thickness</b>	.0125" (.3175 mm)
<b>Length Tolerance</b>	Standard: -0, +5.0" (-0 +127 mm) Close: ±0.5" (±12.7 mm)
<b>Average Heat Transfer Coefficient (U)</b>	40-50 BTU/Hr./ft <sup>2</sup> ./°F (227-284 watts/m <sup>2</sup> .-°K)

## HEAT TRANSFER AREA

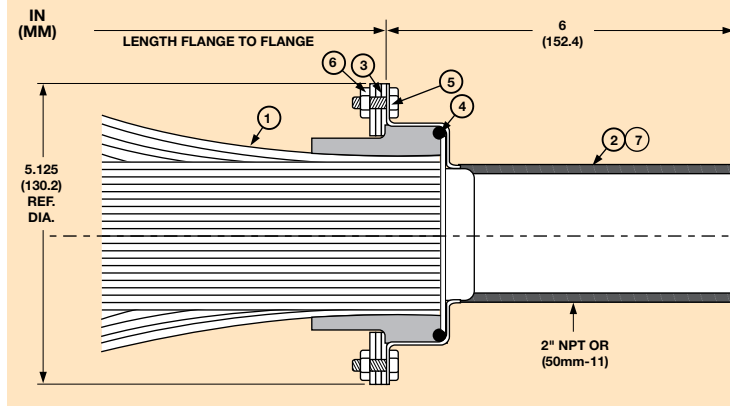
LENGTH	AREA	
	FT.	M <sup>2</sup>
4	49.1	4.6
6	81.8	7.6
8	114.5	10.6
10	147.2	13.7
12	179.9	16.7
14	212.0	19.8
16	245.3	22.8

## OPERATING LIMITS



FEP Series coils are considered inert to corrosive chemicals. Contact an AMETEK representative for chemical resistance data on your specific application. Q-Series heat exchangers are inert to most corrosive chemicals except for certain concentrated hot, oxidizing acids.

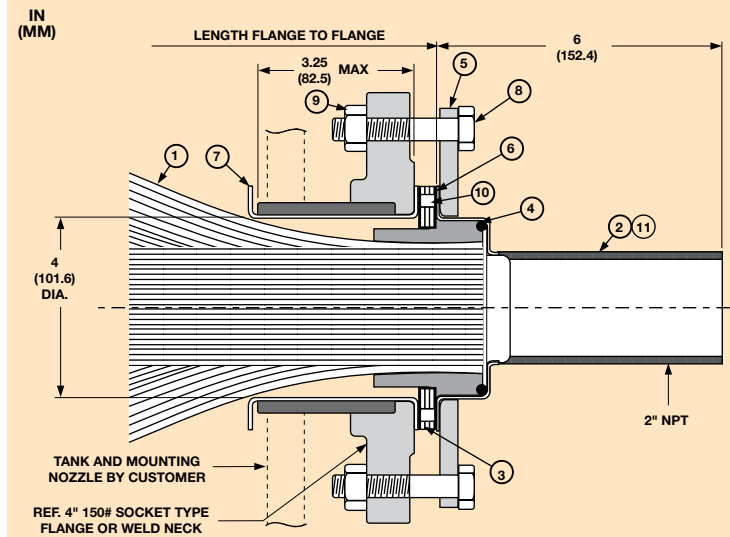
## MODEL R500S, SC, SMC



### LIST OF MATERIALS

ITEM	PART NO.	DESCRIPTION	QTY.
1	13D5257	BUNDLE	1
2	13A706-3	END CAP—316 S.S.	2
3	13A1005-1	SPLIT RING—316 S.S.	2
4	2-339	O-RING—EPR	2
5	1/4-20x5/8	HEX HEAD BOLT—316 S.S.	16
6	1/4-20	HEX NUT—304 S.S.	16
7	13D6204-3	END CAP—316 S.S.	2

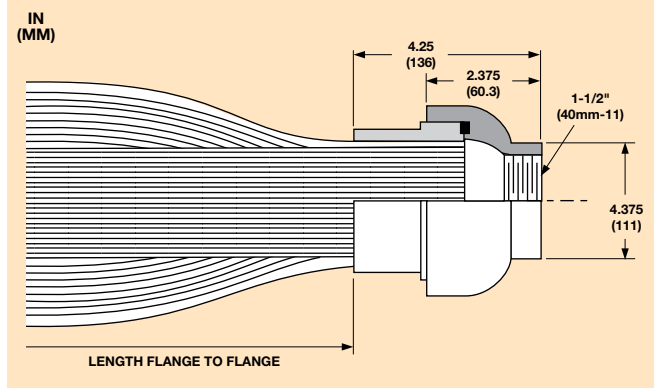
## MODEL R500W, WC, WMC



### LIST OF MATERIALS

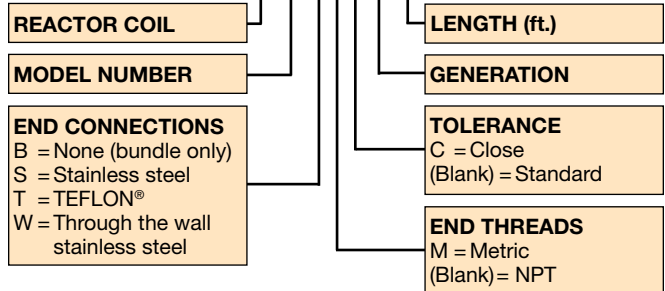
ITEM	PART NO.	DESCRIPTION	QTY.
1	13D5257	BUNDLE	1
2	13A706-3	END CAP—316 S.S.	2
3	13A1005-1	SPLIT RING—316 S.S.	2
4	2-339	O-RING—EPR	2
5	13A934	HOLD DOWN RING—C.S.	2
6	13A1003	COLLAR—VITON®	2
7	13A1006	SLEEVE—FLUOROPOLYMER	2
8	1/2-13x2 3/4	HEX HEAD BOLT—316 S.S.	16
9	1/2-13	HEX NUT—316 S.S.	16
10	13A6226	BUTTON	16
11	13D6204-3	END CAP—316 S.S.	2

## MODEL R500T



### NOMENCLATURE

R500SMC-4-12



Fluoropolymer resins are generally considered inert to most chemicals. Under certain conditions of pressure and temperature, or combinations of chemicals, fluoropolymer tubing should not be used. Please contact AMETEK for discussion of your specific process to be certain that our products are appropriate for your intended use.

Adequate ventilation should be used where fluoropolymers are heated during tube repairs. Flu-like symptoms may occur from exposure to vapors evolved from fluoropolymers at very high temperatures, up to 800°F or from smoking materials that contain particles of fluoropolymers. Symptoms pass within 48 hours and are the only adverse effects observed in humans to date. Unheated fluoropolymers are essentially inert and are nonirritating to the skin.

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# AMETEK®

## FLUOROPOLYMER PRODUCTS

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