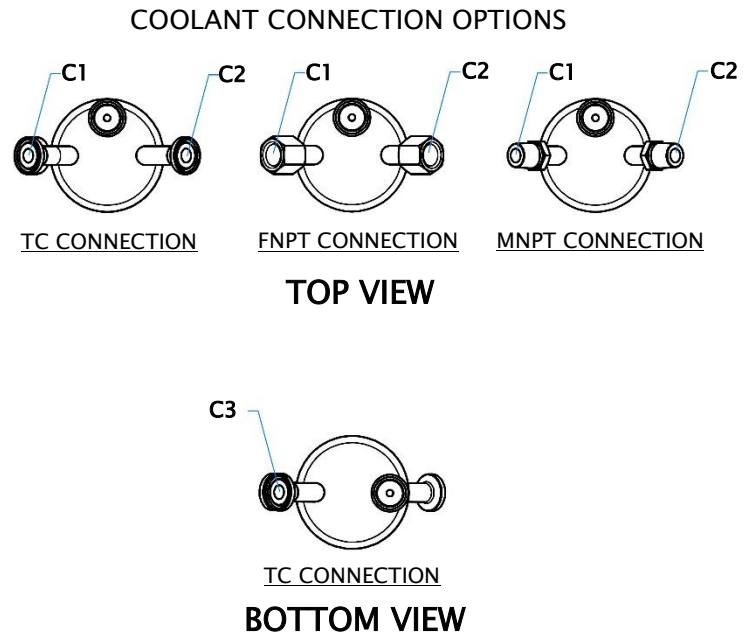
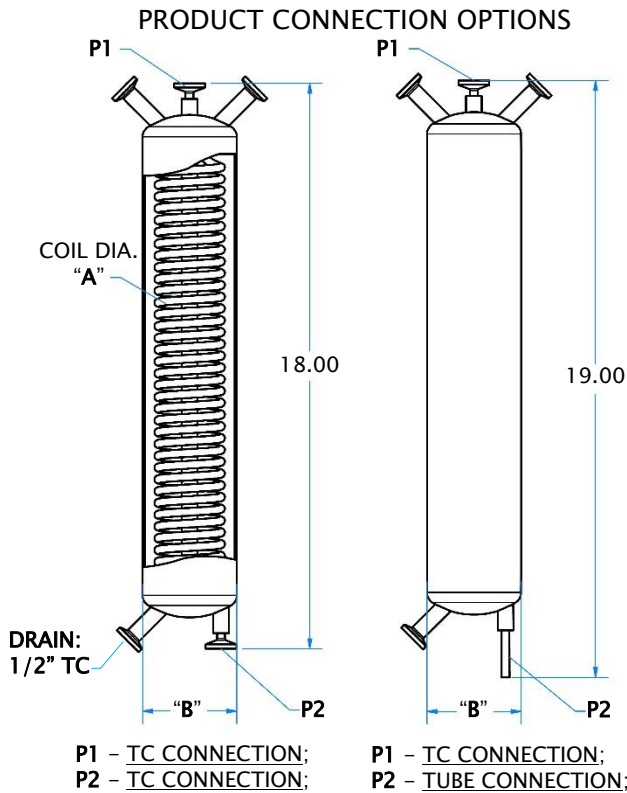


SANITARY SAMPLE COOLERS - VERTICAL



NOTE:

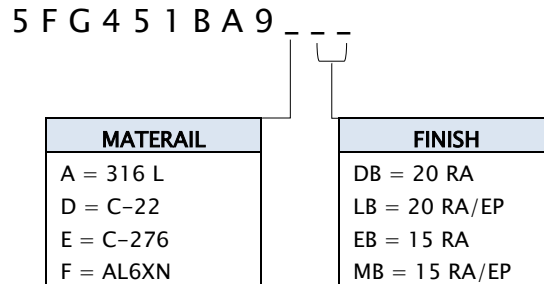
P1 - STEAM IN; P2 - CONDENSATE OUT; C1 - COOLANT INLET; C2 - COOLANT OUTLET; C3 - DRAIN PORT.

SANITARY SAMPLE COOLERS - VERTICAL - SMALL VOLUME SAMPLE (LESS THAN 0.5 LITER)							
PRODUCT INLET & OUTLET		COOLANT INLET & OUTLET		PART #	"A" DIM	"B" DIM	
1/4" TC X TC	1/2"	TC	X	TC	5FG451BA9*	0.25"	3.00"
	3/4"	TC	X	TC	5FG451CA9	0.25"	3.00"
	3/8"	FNPT	X	FNPT	5FG451HA9	0.25"	3.00"
	1/2"	FNPT	X	FNPT	5FG451JA9	0.25"	3.00"
	3/8"	MNPT	X	MNPT	5FG451QA9	0.25"	3.00"
	1/2"	MNPT	X	MNPT	5FG451RA9	0.25"	3.00"
1/4" TC X TUBE	1/2"	TC	X	TC	5FG452BA9	0.25"	3.00"
	3/4"	TC	X	TC	5FG452CA9	0.25"	3.00"
	3/8"	FNPT	X	FNPT	5FG452HA9	0.25"	3.00"
	1/2"	FNPT	X	FNPT	5FG452JA9	0.25"	3.00"
	3/8"	MNPT	X	MNPT	5FG452QA9	0.25"	3.00"
	1/2"	MNPT	X	MNPT	5FG452RA9	0.25"	3.00"

SANITARY SAMPLE COOLERS - VERTICAL - LARGE VOLUME SAMPLE (MORE THAN 0.5 LITER)							
PRODUCT INLET & OUTLET	COOLANT INLET & OUTLET				PART #	"A" DIM	"B" DIM
3/8" TC X TC	3/4"	TC	X	TC	5FG571CA9	0.375"	4.00"
	3/8"	FNPT	X	FNPT	5FG571HA9	0.375"	4.00"
	1/2"	FNPT	X	FNPT	5FG571JA9	0.375"	4.00"
	3/4"	FNPT	X	FNPT	5FG571KA9	0.375"	4.00"
	3/8"	MNPT	X	MNPT	5FG571QA9	0.375"	4.00"
	1/2"	MNPT	X	MNPT	5FG571RA9	0.375"	4.00"
	3/4"	MNPT	X	MNPT	5FG571SA9	0.375"	4.00"
3/8" TC X TUBE	3/4"	TC	X	TC	5FG572CA9	0.375"	4.00"
	3/8"	FNPT	X	FNPT	5FG572HA9	0.375"	4.00"
	1/2"	FNPT	X	FNPT	5FG572JA9	0.375"	4.00"
	3/4"	FNPT	X	FNPT	5FG572KA9	0.375"	4.00"
	3/8"	MNPT	X	MNPT	5FG572QA9	0.375"	4.00"
	1/2"	MNPT	X	MNPT	5FG572RA9	0.375"	4.00"
	3/4"	MNPT	X	MNPT	5FG572SA9	0.375"	4.00"
1/2" TC X TC	3/4"	TC	X	TC	5FG691CA9	0.500"	5.56"
	1.0"	TC	X	TC	5FG691DA9	0.500"	5.56"
	1/2"	FNPT	X	FNPT	5FG691JA9	0.500"	5.56"
	3/4"	FNPT	X	FNPT	5FG691KA9	0.500"	5.56"
	1.0"	FNPT	X	FNPT	5FG691LA9	0.500"	5.56"
	1/2"	MNPT	X	MNPT	5FG691RA9	0.500"	5.56"
	3/4"	MNPT	X	MNPT	5FG691SA9	0.500"	5.56"
1/2" TC X TUBE	3/4"	TC	X	TC	5FG692CA9	0.500"	5.56"
	1.0"	TC	X	TC	5FG692DA9	0.500"	5.56"
	1/2"	FNPT	X	FNPT	5FG692JA9	0.500"	5.56"
	3/4"	FNPT	X	FNPT	5FG692KA9	0.500"	5.56"
	1.0"	FNPT	X	FNPT	5FG692LA9	0.500"	5.56"
	1/2"	MNPT	X	MNPT	5FG692RA9	0.500"	5.56"
	3/4"	MNPT	X	MNPT	5FG692SA9	0.500"	5.56"
	1.0"	MNPT	X	MNPT	5FG692TA9	0.500"	5.56"

SANITARY SAMPLE COOLERS – VERTICAL CONFIGURATION

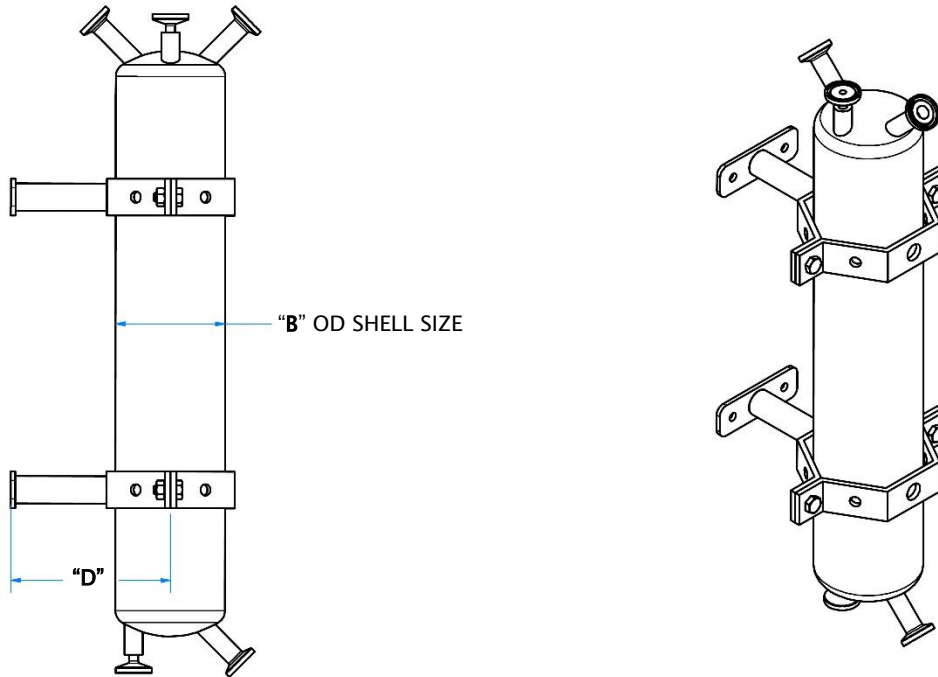
EXAMPLE: PART# **5FG451BA9*** – 1/4" TC X TC **PRODUCT INLET & OUTLET** X 1/2" TC X TC **COOLANT INLET & OUTLET**
VERTICAL SAMPLE COOLER



NOTE:

- **FINISH** REFERS TO THE ID SURFACE OF THE COIL
- **MATERIAL** REFERS TO PRODUCT CONTACT MATERIAL
- CUSTOM END CONNECTIONS AVAILABLE ON REQUEST. PLEASE CONTACT SALES REPRESENTATIVE

VERTICAL SAMPLE COOLER – OPTIONAL WALL MOUNTING BRACKET

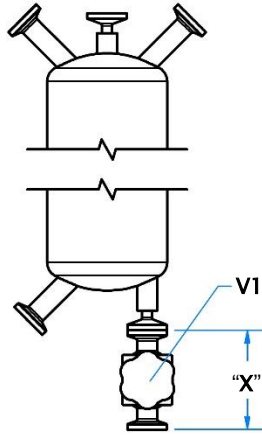


SANITARY SAMPLE COOLERS – VERTICAL STAND			
"B" OD SHELL SIZE	"D" DIM	FINISH	PART#
3.00"	5.50	20 RA	5FG400008ADB
		20 RA/EP	5FG400008ALB
4.00"	6.00	20 RA	5FG500008ADB
		20 RA/EP	5FG500008ALB
5.56"	6.75	20 RA	5FG600008ADB
		20 RA/EP	5FG600008ALB

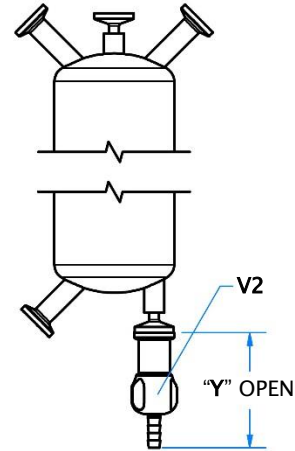
SANITARY SAMPLE COOLERS – OPTIONAL VALVES

1. CONDENSATE VALVE OPTION

INSTALLATION OF A SAMPLE FLOW CONTROL VALVE IN THE SAMPLE LINE AFTER THE COOLER (CONDENSATE VALVE) IS RECOMMENDED. AN ACQUASEAL DIAPHRAGM VALVE WILL ALLOW FOR MORE PRECISE FLOW CONTROL OR AN INLINE BLEED & SAMPLE VALVE WILL ALLOW FOR LIMITED AMOUNT OF SAMPLING. DIAPHRAGM VALVE SIZE MUST BE THE SAME AS THE SAMPLE LINE INLET CONNECTION.



V1 – ACQUASEAL DIAPHRAGM VALVE
CONNECTION SIZES – X (inch)
1/4" TC X TC 2.50"
3/8" TC X TC 2.50"
1/2" TC X TC 2.50"



V2 – INLINE BLEED & SAMPLE VALVE
CONNECTION SIZES X HB SIZE – Y (inch)
0.5" & 0.75" TC X 1/4" HB 2.95"
0.5" & 0.75" TC X 3/8" HB 3.40"
0.5" & 0.75" TC X 1/2" HB 3.40"

SANITARY SAMPLE COOLERS – CONDENSATE VALVE OPTION (Ø 3.00" OD SHELL SIZE)						
PRODUCT INLET & OUTLET	CONDENSATE VALVE TYPE	INLET	X	OUTLET	FINISH	PART #
1/4" TC X TC	INLINE BLEED VALVE	0.5" & 0.75" TC	X	1/4" HB	20 RA	6JGFA2ADBM0H0
					15 RA/EP	6JGFA2AMB0H0
	TWO WAY DIAPHRAGM VALVE	1/4" TC	X	1/4" TC	20 RA	STDFA4BHA1AA1ADBN1T
					15 RA/EP	STDFA4BHA1AA1AMBN1T

SANITARY SAMPLE COOLERS – CONDENSATE VALVE OPTION (Ø 4.00" OD SHELL SIZE)						
PRODUCT INLET & OUTLET	CONDENSATE VALVE TYPE	INLET	X	OUTLET	FINISH	PART #
3/8" TC X TC	INLINE SAMPLE VALVE	0.5" & 0.75" TC	X	3/8" HB	20 RA	6KGG2ADBM0H0
					15 RA/EP	6KGG2AMB0H0
	TWO WAY DIAPHRAGM VALVE	3/8" TC	X	3/8" TC	20 RA	STDFA6BHA1BA1BDBN1T
					15 RA/EP	STDFA6BHA1BA1BMBN1T

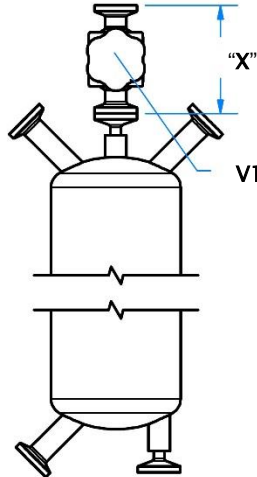
SANITARY SAMPLE COOLERS - CONDENSATE VALVE OPTION (Ø 5.56" OD SHELL SIZE)						
PRODUCT INLET & OUTLET	CONDENSATE VALVE TYPE	INLET	X	OUTLET	FINISH	PART #
1/2" TC X TC	INLINE SAMPLE VALVE	0.5" & 0.75" TC	X	1/2" HB	20 RA	6KGHA2ADBM0H0
					15 RA/EP	6KGHA2AMBM0H0
	TWO WAY DIAPHRAGM VALVE	1/2" TC	X	1/2" TC	20 RA	STDFA8BHA1CA1CDBN1T
					15 RA/EP	STDFA8BHA1CA1CMBN1T

NOTES:

- THE PART NUMBERS OF THE ANGLE BLEED VALVES AND THE ANGLE SAMPLE VALVES LISTED ABOVE, COME WITH AN EPDM O-RING SEAL AND A PTFE-TFM TIP
- PLEASE REFER TO THE "VENT, BLEED, AND SAMPLE VALVES" CATALOG FOR MORE ORDERING OPTIONS

2. STEAM VALVE OPTION

INSTALLATION OF A SAMPLE FLOW CONTROL VALVE IN THE SAMPLE LINE PRIOR TO THE COOLER (STEAM VALVE) IS RECOMMENDED. IN ACCORDANCE WITH THE OPERATING PRESSURE AND TEMPERATURE OF THE SAMPLE, PLEASE REFER TO ACQUASEAL DIAPHRAGM VALVE SPECIFICATIONS FOR OPTIONS.



V1 – ACQUASEAL DIAPHRAGM VALVE

CONNECTION SIZES	X (inch)
1/4" TC X TC	2.50"
3/8" TC X TC	2.50"
1/2" TC X TC	2.50"

SANITARY SAMPLE COOLERS – STEAM VALVE OPTION (Ø 3.00" OD SHELL SIZE)

PRODUCT INLET & OUTLET	CONDENSATE VALVE TYPE	INLET	X	OUTLET	FINISH	PART #
1/4" TC X TC 1/4" TC X TUBE	TWO WAY DIAPHRAGM VALVE	1/4" TC	X	1/4" TC	20 RA	STDFA4BHA1AA1ADBN1T
					15 RA/EP	STDFA4BHA1AA1AMBN1T

SANITARY SAMPLE COOLERS – STEAM VALVE (Ø 4.00" OD SHELL SIZE)

PRODUCT INLET & OUTLET	CONDENSATE VALVE TYPE	INLET	X	OUTLET	FINISH	PART #
3/8" TC X TC 3/8" TC X TUBE	TWO WAY DIAPHRAGM VALVE	3/8" TC	X	3/8" TC	20 RA	STDFA6BHA1BA1BDBN1T
					15 RA/EP	STDFA6BHA1BA1BMBN1T

SANITARY SAMPLE COOLERS – STEAM VALVE (Ø 5.56" OD SHELL SIZE)

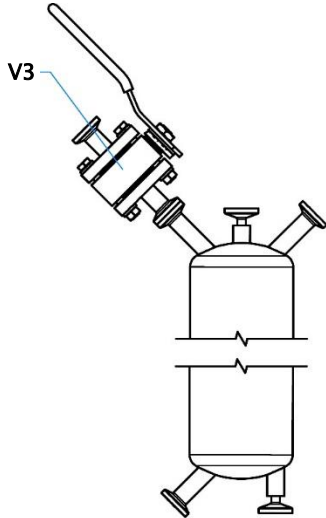
PRODUCT INLET & OUTLET	CONDENSATE VALVE TYPE	INLET	X	OUTLET	FINISH	PART #
1/2" TC X TC 1/2" TC X TUBE	TWO WAY DIAPHRAGM VALVE	1/2" TC	X	1/2" TC	20 RA	STDFA8BHA1CA1CDBN1T
					15 RA/EP	STDFA8BHA1CA1CMBN1T

NOTES:

- THE PART NUMBERS OF THE TWO WAY DIAPHRAGM VALVES LISTED ABOVE, COME WITH A MANUAL HANDLE AND AN EPDM-TFM BONDED DIAPHRAGM
- PLEASE REFER TO THE "DIAPHRAGM VALVES" CATALOG FOR MORE ORDERING OPTIONS

3. COOLING FLUID CONTROL VALVE OPTION

INSTALLATION OF A BALL VALVE IN THE COOLING FLUID INLET LINE CAN PROVIDE ISOLATION OF THE COOLER FOR PROCESSING PURPOSES LIKE STERILIZATION. VALVE SIZE MUST BE THE SAME AS THE COOLING FLUID INLET CONNECTION.



V3 - BALL VALVE

TC CONNECTION SIZES

1/2" TC X TC

3/4" TC X TC

1.0" TC X TC

SANITARY SAMPLE COOLERS - COOLING FLUID CONTROL VALVE					
BALL VALVE TYPE	INLET	X	OUTLET	FINISH	PART #
1/2" TC X TC	1/2" TC	X	1/2" TC	20 RA	79AA1CHM00AA1AADB
				15 RA/EP	79AA1CHM00AA1AAMB
3/4" TC X TC	3/4" TC	X	3/4" TC	20 RA	79AA1DHM00AA1AADB
				15 RA/EP	79AA1DHM00AA1AAMB
1.0" TC X TC	1.0" TC	X	1.0" TC	20 RA	79AA1EHM00AA1AADB
				15 RA/EP	79AA1EHM00AA1AAMB

NOTES:

- THE PART NUMBERS OF THE BALL VALVES LISTED ABOVE, COME WITH A MANUAL HANDLE, TFM SEAT & SEAL, AND EPDM O-RINGS
- PLEASE REFER TO THE "BALL VALVES" CATALOG FOR MORE ORDERING OPTIONS