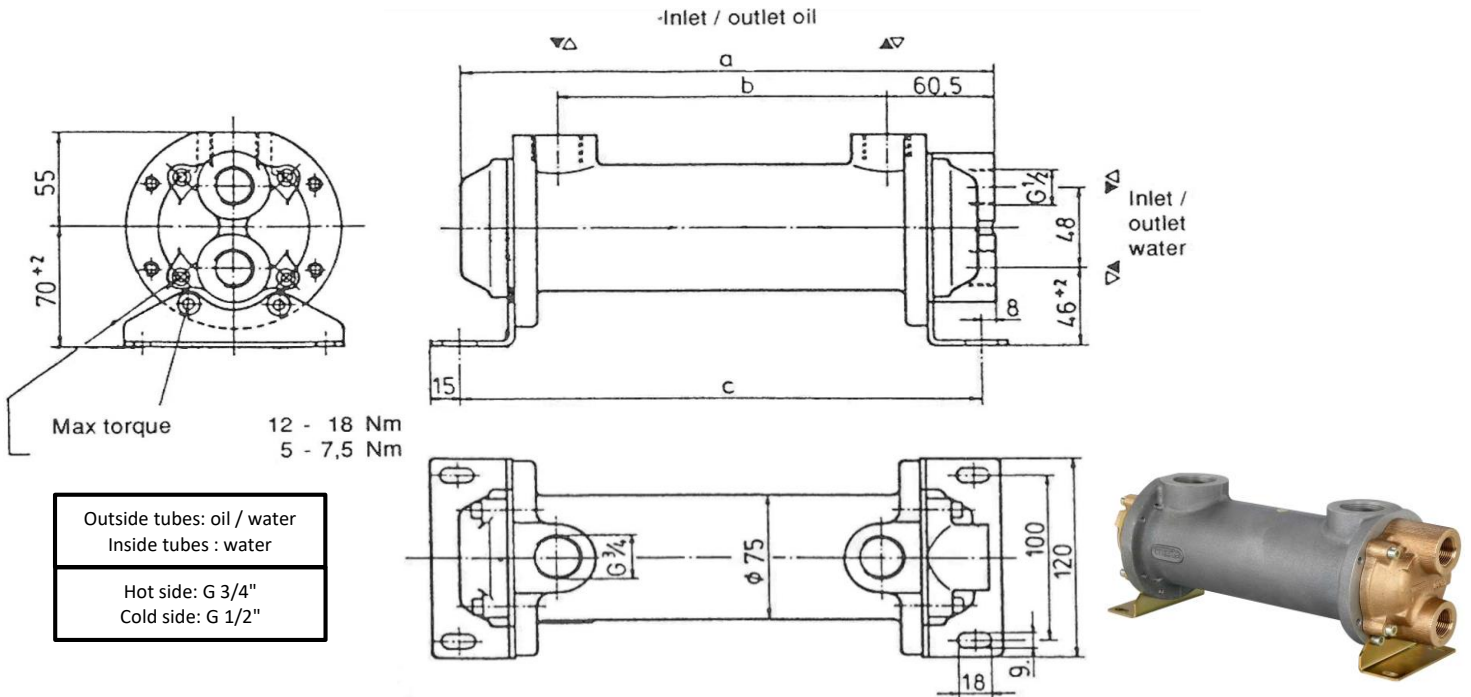


**TECHNICAL
DATA**

**MULTITUBULAR HEAT EXCHANGER
Oil / Water
A065**



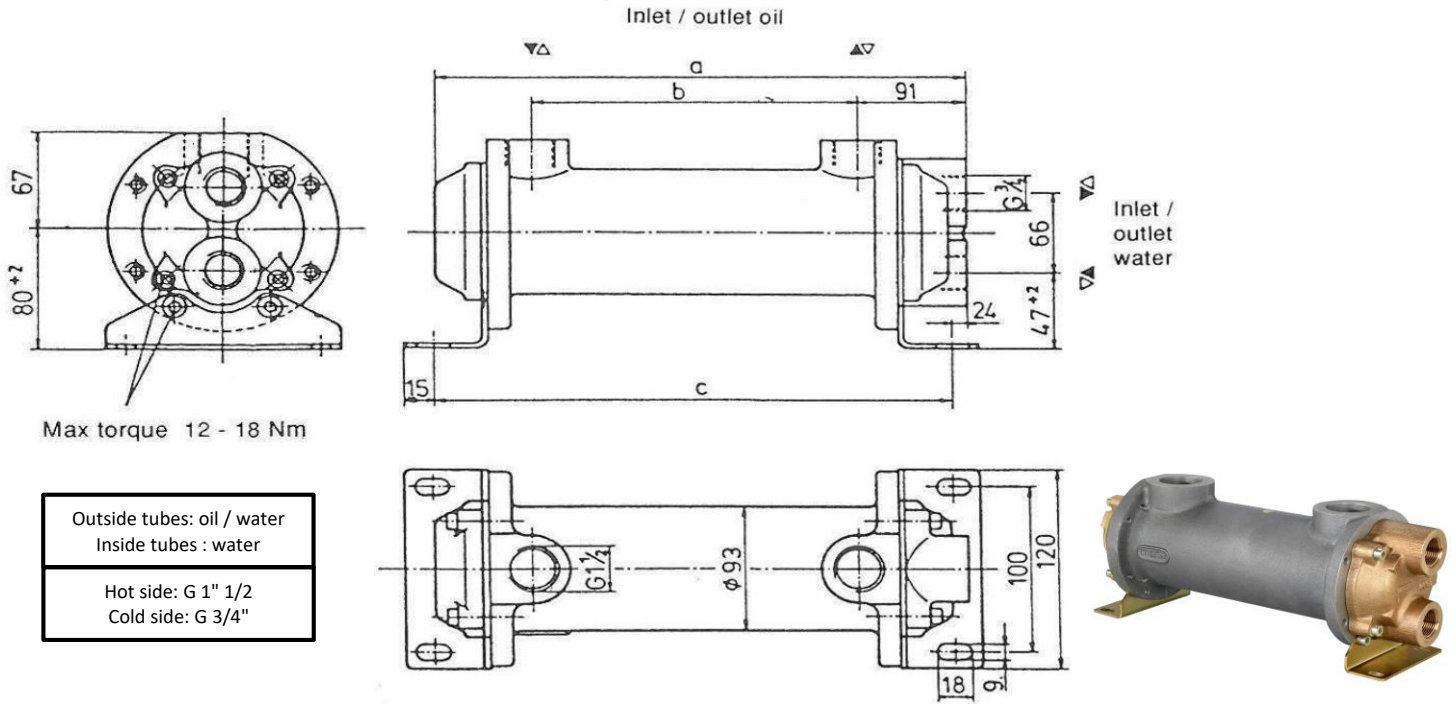
Outside tubes: oil / water
Inside tubes : water

Hot side: G 3/4"
Cold side: G 1/2"

Data	Cooling of oil / water by untreated water or sea water																			
Dimensions [mm]	Core length [mm]																			
		161	241	411																
	a	212	292	462																
	b	100	180	350																
c	205	285	455																	
Area [m²]	A	0,15	0,23	0,39																
Volume [L]	Outside tubes	0,28	0,43	0,75																
	Inside tubes	0,26	0,34	0,51																
Weight [kg]	Total	2,80	3,40	4,70																
	Tubestack only	1,00	1,30	2,00																
Working characteristics	Maximum working pressure [bar]		Outside tubes	16	Maximum water flow rate Qw = 30.6 L/min															
			Inside tubes	10																
	Maximum working temperature [°C]		Outside tubes	120																
			Inside tubes	90																
Designation	Tube	Tube plate	Baffle	Shell	Cover	O-ring														
Materials	CuNi10Fe	CuZn39Pb2	CuZn36	anod. Al	CuSn7Pb6Zn4	Viton														
Model	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">A</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">0</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">6</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">5</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">-</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">2</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">4</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">1</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">-</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">4</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">/</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">CN</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">-</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">BR</td> </tr> </table> <p style="margin-top: 5px;"> Type Geometry Core diameter </p> <p style="margin-top: 5px;"> Core length Number of passes on cold side </p> <p style="margin-top: 5px;"> Tubes material - Copper CN Copper-Nickel </p> <p style="margin-top: 5px;"> Covers material - Brass </p>						A	0	6	5	-	2	4	1	-	4	/	CN	-	BR
A	0	6	5	-	2	4	1	-	4	/	CN	-	BR							

**TECHNICAL
DATA**

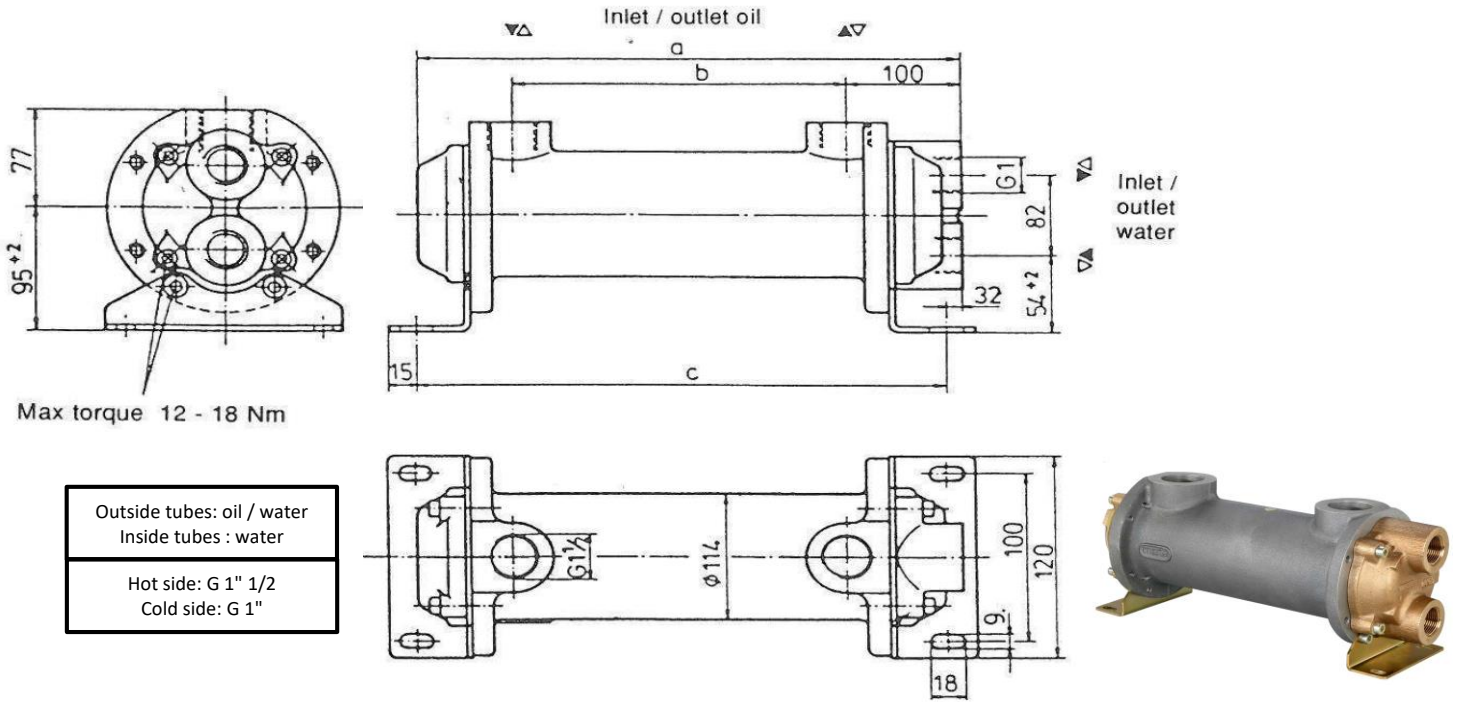
**MULTITUBULAR HEAT EXCHANGER
Oil / Water
A083**



Data	Cooling of oil / water by untreated water or sea water					
Dimensions [mm]	Core length [mm]					
		190	241	411		
	a	261	312	482		
	b	99	150	320		
c	233	284	454			
Area [m²]	A	0,27	0,34	0,59		
Volume [L]	Outside tubes	0,57	0,73	1,24		
	Inside tubes	0,60	0,70	1,05		
Weight [kg]	Total	4,40	4,90	6,75		
	Tubestack only	1,68	2,03	3,17		
Working characteristics	Maximum working pressure [bar]		Outside tubes	16	Maximum water flow rate Qw = 69 L/min	
			Inside tubes	10		
	Maximum working temperature [°C]		Outside tubes	120		
			Inside tubes	90		
Designation	Tube	Tube plate	Baffle	Shell	Cover	O-ring
Materials	CuNi10Fe	CuZn39Pb2	CuZn36	anod. Al	CuSn7Pb6Zn4	Viton
Model	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">A</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">0</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">8</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">-</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">4</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">-</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">4</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">/</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">CN</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">-</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">BR</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">-</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">H</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;"> <p>Type</p> <p>Core diameter</p> <p>Core length</p> <p>Number of passes on cold side</p> </div> <div style="width: 30%;"> <p>Geometry</p> <p>Tubes material - Copper CN Copper-Nickel</p> <p>Covers material - Brass</p> </div> <div style="width: 30%;"> <p>Flow on hot side - Standard H High flow</p> <p>Option</p> </div> </div> </div>					

**TECHNICAL
DATA**

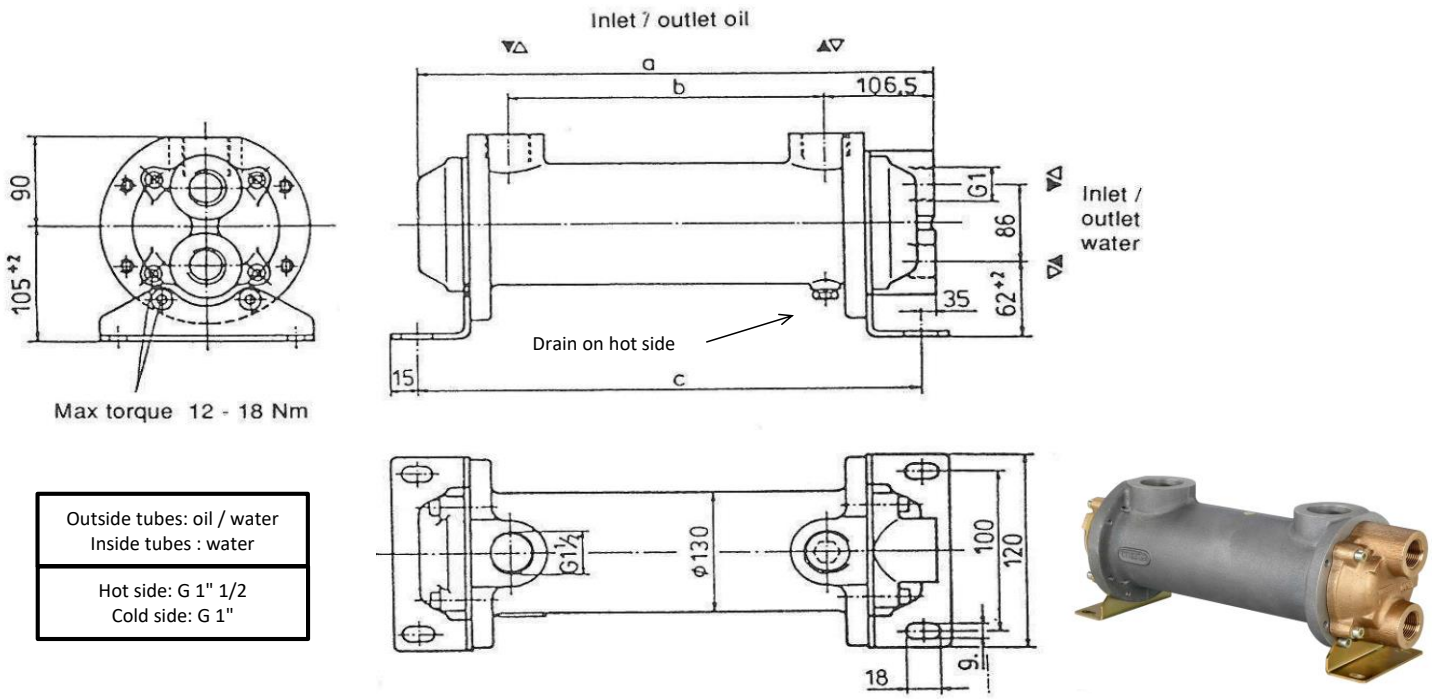
**MULTITUBULAR HEAT EXCHANGER
Oil / Water
A104**



Data	Cooling of oil / water by untreated water or sea water					
Dimensions [mm]	Core length [mm]					
		214	314	564		
	a	299	399	649		
	b	120	220	470		
c	256	356	606			
Area [m²]	A	0,50	0,75	1,37		
Volume [L]	Outside tubes	0,95	1,40	2,50		
	Inside tubes	0,95	1,20	1,80		
Weight [kg]	Total	6,60	8,20	12,00		
	Tubestack only	3,45	4,53	7,20		
Working characteristics	Maximum working pressure [bar]		Outside tubes	16	Maximum water flow rate Qw = 94 L/min	
			Inside tubes	10		
	Maximum working temperature [°C]		Outside tubes	120		
			Inside tubes	90		
Designation	Tube	Tube plate	Baffle	Shell	Cover	O-ring
Materials	CuNi10Fe	CuZn39Pb2	CuZn36	anod. Al	CuSn7Pb6Zn4	Viton
Model	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px 5px;">A</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> - <div style="border: 1px solid black; padding: 2px 5px;">3</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> - <div style="border: 1px solid black; padding: 2px 5px;">4</div> / <div style="border: 1px solid black; padding: 2px 5px;">CN</div> - <div style="border: 1px solid black; padding: 2px 5px;">BR</div> - <div style="border: 1px solid black; padding: 2px 5px;">H</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;"> <p>Type</p> <p>Core diameter</p> <p>Core length</p> <p>Number of passes on cold side</p> </div> <div style="width: 30%;"> <p>Geometry</p> <p>Tubes material - Copper CN Copper-Nickel</p> <p>Covers material - Brass</p> </div> <div style="width: 30%;"> <p>Flow on hot side - Standard H High flow</p> <p>Option</p> </div> </div>					

**TECHNICAL
DATA**

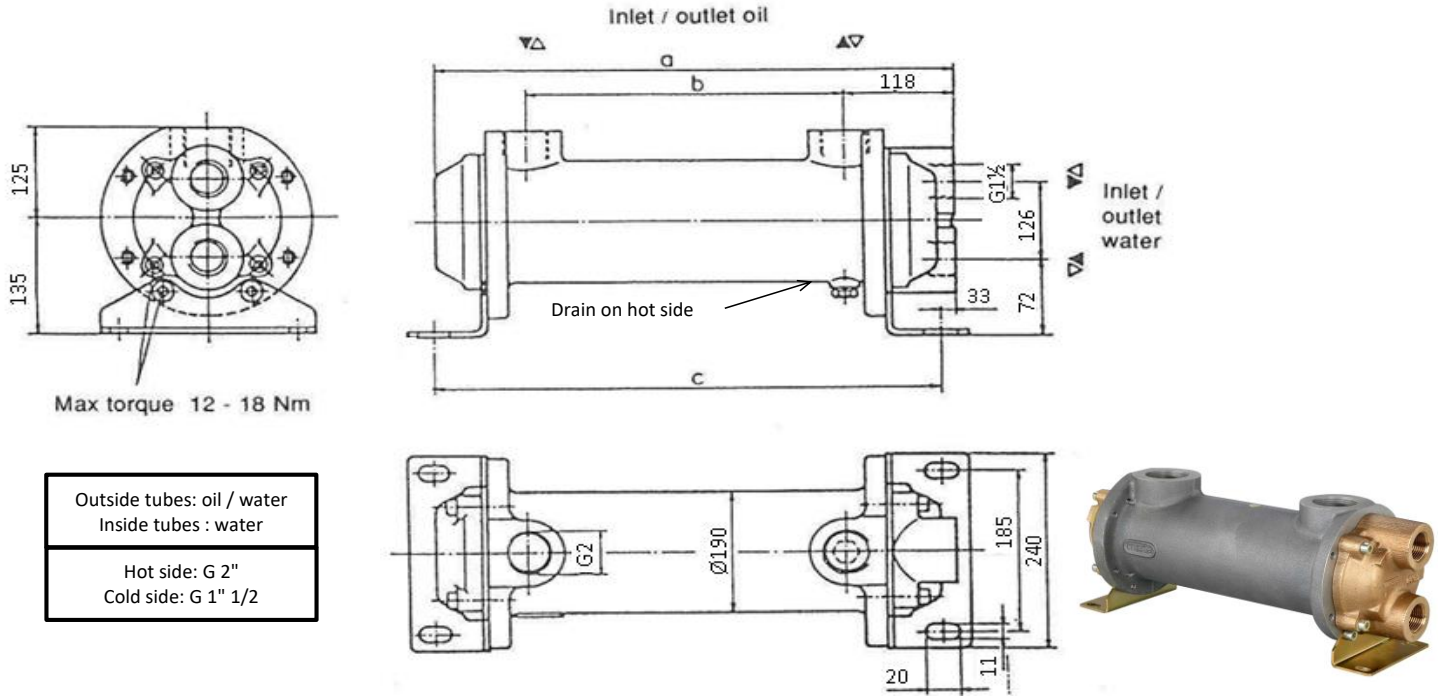
**MULTITUBULAR HEAT EXCHANGER
Oil / Water
A120**



Data	Cooling of oil / water by untreated water or sea water					
Dimensions [mm]	Core length [mm]					
		324	524	814		
	a	415	615	905		
	b	222	422	712		
c	365	565	855			
Area [m²]	A	1,11	1,83	2,87		
Volume [L]	Outside tubes	1,85	3,00	4,66		
	Inside tubes	1,85	2,60	3,70		
Weight [kg]	Total	10,50	14,50	20,50		
	Tubestack only	5,90	8,80	13,20		
Working characteristics	Maximum working pressure [bar]		Outside tubes	16	Maximum water flow rate Qw = 168 L/min	
			Inside tubes	10		
	Maximum working temperature [°C]		Outside tubes	120		
			Inside tubes	90		
Designation	Tube	Tube plate	Baffle	Shell	Cover	O-ring
Materials	CuNi10Fe	CuZn39Pb2	CuZn36	anod. Al	CuSn7Pb6Zn4	Viton
Model	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px 5px;">A</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="font-size: 15px;">-</div> <div style="border: 1px solid black; padding: 2px 5px;">3</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="font-size: 15px;">-</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="font-size: 15px;">/</div> <div style="border: 1px solid black; padding: 2px 5px;">CN</div> <div style="font-size: 15px;">-</div> <div style="border: 1px solid black; padding: 2px 5px;">BR</div> <div style="font-size: 15px;">-</div> <div style="border: 1px solid black; padding: 2px 5px;">H</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 20%;"> <p>Type</p> <p>Core diameter</p> <p>Core length</p> <p>Number of passes on cold side</p> </div> <div style="width: 20%; border: 1px solid gray; padding: 2px;">Geometry</div> <div style="width: 20%;"> <p>Tubes material</p> <ul style="list-style-type: none"> - Copper CN Copper-Nickel <p>Covers material</p> <ul style="list-style-type: none"> - Brass </div> <div style="width: 20%;"> <p>Flow on hot side</p> <ul style="list-style-type: none"> - Standard H High flow <p style="text-align: right;">Option</p> </div> </div>					

**TECHNICAL
DATA**

**MULTITUBULAR HEAT EXCHANGER
Oil / Water
A178**



Outside tubes: oil / water Inside tubes : water
Hot side: G 2" Cold side: G 1" 1/2

Data	Cooling of oil / water by untreated water or sea water																			
Dimensions [mm]	Core length [mm]																			
		720																		
	a	813																		
	b	602																		
	c	772																		
Area [m²]	A	6,00																		
Volume [L]	Outside tubes	7,50																		
	Inside tubes	7,20																		
Weight [kg]	Total	45,00																		
	Tubestack only	27,50																		
Working characteristics	Maximum working pressure [bar]	Outside tubes	16	Maximum water flow rate Qw = 380 L/min																
		Inside tubes	10																	
	Maximum working temperature [°C]	Outside tubes	120																	
		Inside tubes	90																	
Designation	Tube	Tube plate	Baffle	Shell	Cover	O-ring														
Materials	CuNi10Fe	CuZn39Pb2	CuZn36	anod. Al	CuSn7Pb6Zn4	Viton														
Model	<table style="margin: auto; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px 5px;">A</td> <td style="border: 1px solid black; padding: 2px 5px;">1</td> <td style="border: 1px solid black; padding: 2px 5px;">7</td> <td style="border: 1px solid black; padding: 2px 5px;">8</td> <td style="border: 1px solid black; padding: 2px 5px;">-</td> <td style="border: 1px solid black; padding: 2px 5px;">7</td> <td style="border: 1px solid black; padding: 2px 5px;">2</td> <td style="border: 1px solid black; padding: 2px 5px;">0</td> <td style="border: 1px solid black; padding: 2px 5px;">-</td> <td style="border: 1px solid black; padding: 2px 5px;">4</td> <td style="border: 1px solid black; padding: 2px 5px;">/</td> <td style="border: 1px solid black; padding: 2px 5px;">CN</td> <td style="border: 1px solid black; padding: 2px 5px;">-</td> <td style="border: 1px solid black; padding: 2px 5px;">BR</td> </tr> </table> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: left;"> <p>Type</p> <p>Core diameter</p> <p>Core length</p> <p>Number of passes on cold side</p> </div> <div style="text-align: center;"> <p>Geometry</p> </div> <div style="text-align: left;"> <p>Tubes material</p> <ul style="list-style-type: none"> - Copper CN Copper-Nickel <p>Covers material</p> <ul style="list-style-type: none"> - Brass </div> </div>						A	1	7	8	-	7	2	0	-	4	/	CN	-	BR
A	1	7	8	-	7	2	0	-	4	/	CN	-	BR							