

Multiflo heat exchanger consists of small diameter smooth tubes which form the u-bundle; specific baffles are fitted inside allowing a better thermal exchange.

Multiflo heat exchanger is demountable.

The u-bundle fitted inside the shell can be easily removed for maintenance.

Application range

Particularly suited for thermal exchange of industrial products

Standard materials

Stainless steel aisi 304/316 L

(Other type of materials are available on request)

Standard pressure project

12 bar

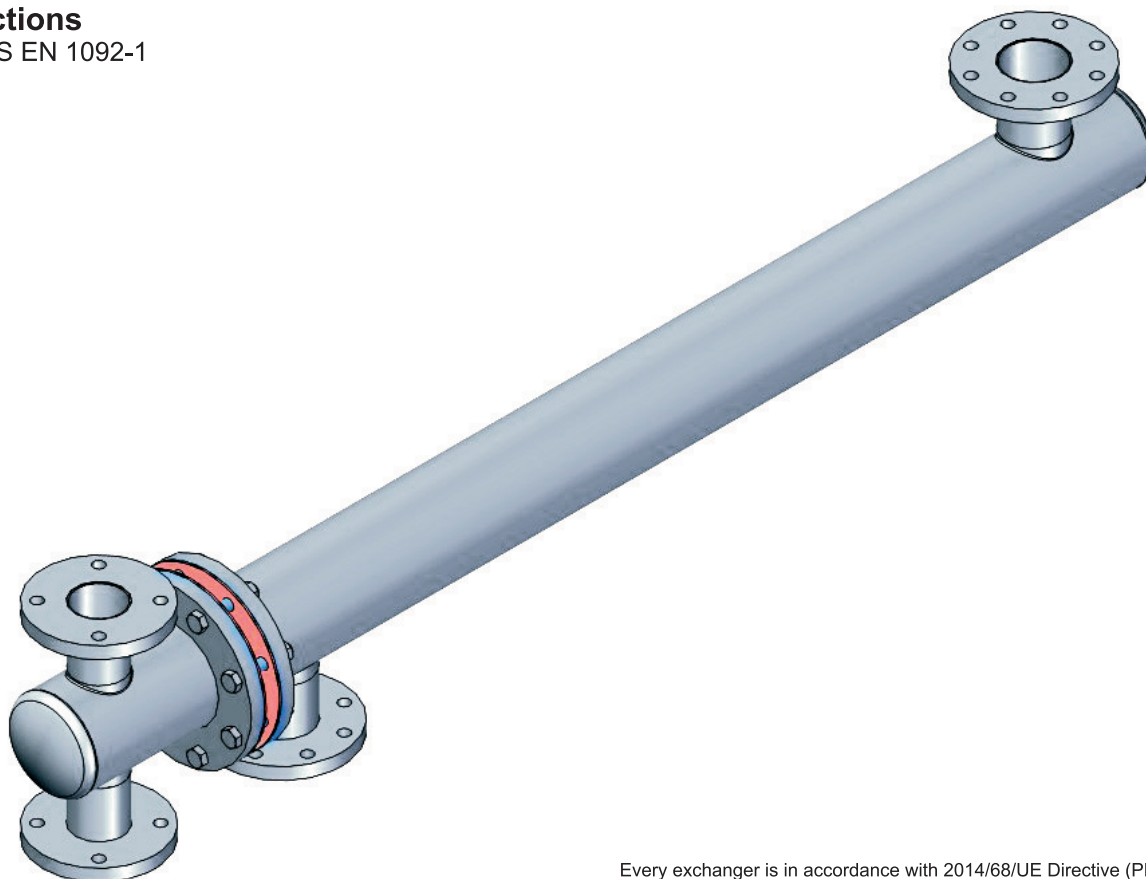
(Higher pressures are available depending on connections)

Standard temperature project

191 °C

Connections

FLANGES EN 1092-1



Every exchanger is in accordance with 2014/68/UE Directive (PED)

MODEL	SHELL VOLUME [litres]	TUBES VOLUME [litres]	VOLUME HEAD L [litres]	VOLUME HEAD S. [litres]	SHELL SECTION [mm ²]	TUBES SECTION [mm ²]	EXCHANGE AREA [m ²]	WEIGHT [kg]
MLU 139 14 18 L/S 1500	18.02	4.20	4.45	4.19	10894.61	2813.44	1.11	56
MLU 139 14 18 L/S 2000	26.12	5.61	4.45	4.19	10894.61	2813.44	1.48	60
MLU 139 14 18 L/S 2500	37.69	7.02	4.45	4.19	10894.61	2813.44	1.85	65
MLU 139 14 18 L/S 3000	44.91	8.43	4.45	4.19	10894.61	2813.44	2.23	70

L/S: L = liquid o S = steam

Category calculation for second group's fluids - Gas, melted gas and liquids with a steam tension at maximum temperature > 0.5 bar

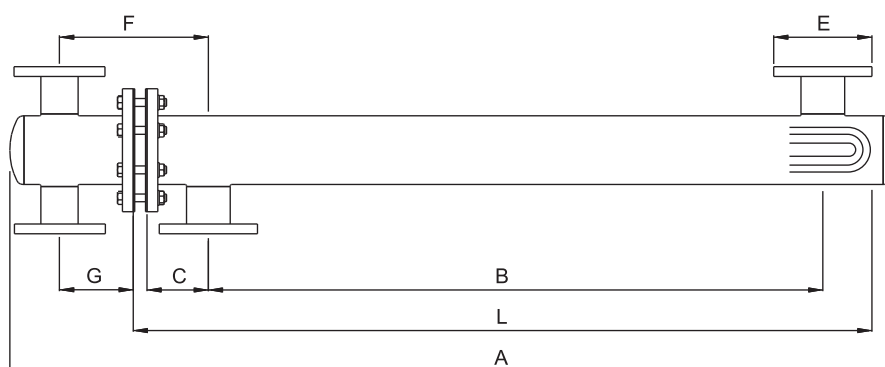
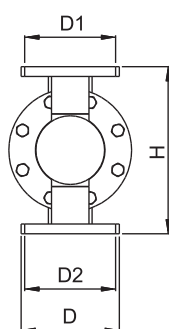
Article 4.3

1st Category

2nd Category

MODEL	VOLUME [litres]	PRESSURE [bar] *											
		1	2	3	4	5	6	7	8	9	10	11	12
MLU 139 14 18 L/S 1500	Shell / Tubes		2.7										12
MLU 139 14 18 L/S 2000	Shell / Tubes		1.9					7.6		9.0			
MLU 139 14 18 L/S 2500	Shell / Tubes	1.3				5.3		7.2					
MLU 139 14 18 L/S 3000	Shell / Tubes	1.1			4.4		6.0						

* for higher pressure contact MBS



MODEL	DIMENSIONS [mm]									
	A	B	C	D - D ₁ - D ₂		E	F	G	H	L
MLU 139 14 18 L/S 1500	1800	1250	125	L	D EN 1092-1 DN 65 PN.16	EN 1092-1 DN 80 PN.16	303	150	340	1550
MLU 139 14 18 L/S 2000	2300	1750		S	D ₁ EN 1092-1 DN 65 PN.16					2050
MLU 139 14 18 L/S 2500	2800	2250			D ₂ EN 1092-1 DN 32 PN.16					2550
MLU 139 14 18 L/S 3000	3300	2750								3050

L = extraction quote

Technical datas are not binding and may be modified by the manufacturer without advise

MODEL	SHELL VOLUME [litres]	TUBES VOLUME [litres]	VOLUME HEAD L [litres]	VOLUME HEAD S [litres]	SHELL SECTION [mm ²]	TUBES SECTION [mm ²]	EXCHANGE AREA [m ²]	WEIGHT [kg]
MLU 168 26 18 L/S 1500	34.54	7.67	7.37	6.93	14577.83	5224.96	2.04	68
MLU 168 26 18 L/S 2000	45.14	10.28	7.37	6.93	14577.83	5224.96	2.73	73
MLU 168 26 18 L/S 2500	55.73	12.89	7.37	6.93	14577.83	5224.96	3.42	78
MLU 168 26 18 L/S 3000	66.33	15.52	7.37	6.93	14577.83	5224.96	4.12	83

L/S: L = liquid o S = steam

Category calculation for second group's fluids - Gas, melted gas and liquids with a steam tension at maximum temperature > 0.5 bar

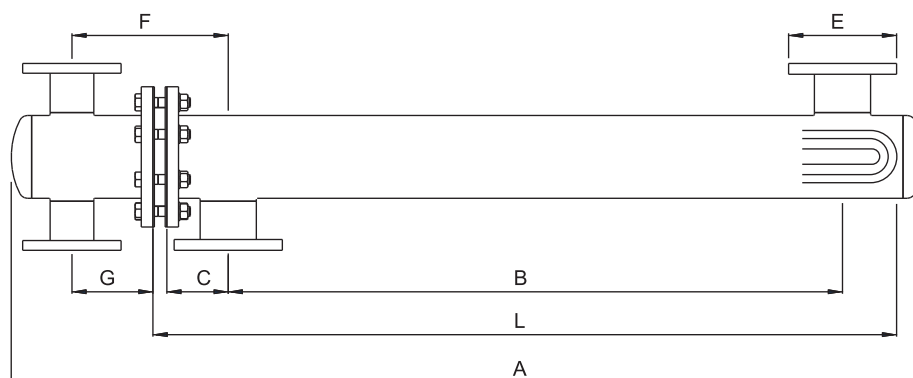
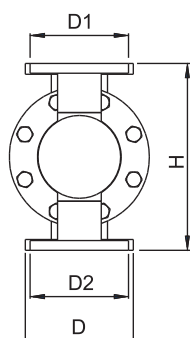
Article 4.3

1st Category

2nd Category

MODEL	VOLUME [litres]	PRESSIONE [bar] *											
		1	2	3	4	5	6	7	8	9	10	11	12
MLU 168 26 18 L/S 1500	Shell / Tubes	1.4				5.7	6.5						
MLU 168 26 18 L/S 2000	Shell / Tubes	1.1			4.3	4.8							
MLU 168 26 18 L/S 2500	Shell / Tubes			3.5	3.8								
MLU 168 26 18 L/S 3000	Shell / Tubes			3.0	3.2								

* for higher pressure contact MBS



MODEL	DIMENSIONS [mm]								
	A	B	C	D - D ₁ - D ₂		E	F	G	L
MLU 168 26 18 L/S 1500	1855	1250	125	L	D EN 1092-1 DN 80 PN.16	EN 1092-1 DN 100 PN.16	318	165	1550
MLU 168 26 18 L/S 2000	2355	1750		S	D ₁ EN 1092-1 DN 80 PN.16				2050
MLU 168 26 18 L/S 2500	2855	2250			D ₂ EN 1092-1 DN 32 PN.16				2550
MLU 168 26 18 L/S 3000	3355	2750							3050

L = extraction quote

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MODEL	SHELL VOLUME [litres]	TUBES VOLUME [litres]	VOLUME HEAD L [litres]	VOLUME HEAD S [litres]	SHELL SECTION [mm ²]	TUBES SECTION [mm ²]	EXCHANGE AREA [m ²]	WEIGHT [kg]
MLU 219 48 18 L/S 1500	58.19	13.89	12.17	11.87	24112.07	9646.08	3.75	85
MLU 219 48 18 L/S 2000	76.35	18.72	12.17	11.87	24112.07	9646.08	5.03	90
MLU 219 48 18 L/S 2500	94.51	23.54	12.17	11.87	24112.07	9646.08	6.31	95
MLU 219 48 18 L/S 3000	112.67	28.39	12.17	11.87	24112.07	9646.08	7.60	100

L/S: L = liquid o S = steam

Category calculation for second group's fluids - Gas, melted gas and liquids with a steam tension at maximum temperature > 0.5 bar

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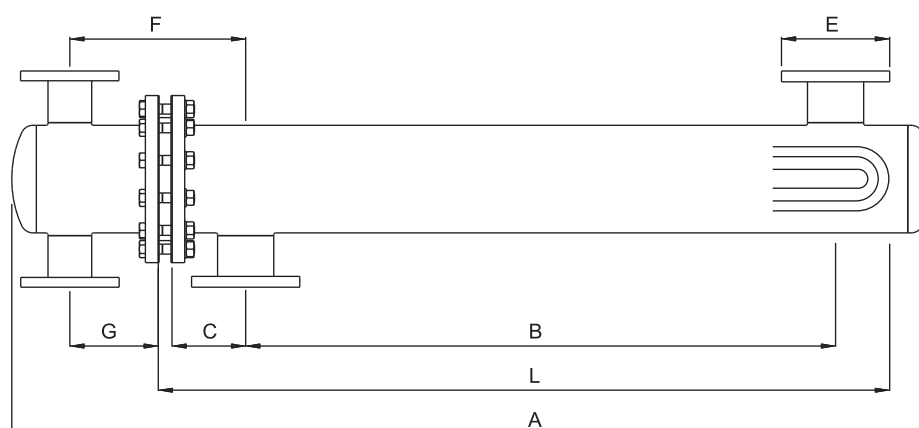
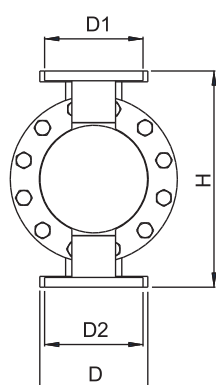
1st Category

2nd Category

3rd Category

MODEL	VOLUME [litres]	PRESSURE [bar] *											
		1	2	3	4	5	6	7	8	9	10	11	12
MLU 219 48 18 L/S 1500	Shell / Tubes			3.4	3.5								
MLU 219 48 18 L/S 2000	Shell / Tubes		2.6	2.6							10.6		
MLU 219 48 18 L/S 2500	Shell / Tubes		2.1	2.1					8.4		10.5		
MLU 219 48 18 L/S 3000	Shell / Tubes	1.7	1.7				6.9		8.8				

* for higher pressure contact MBS



MODEL	DIMENSIONS [mm]									
	A	B	C	D - D ₁ - D ₂		E	F	G	H	L
MLU 219 48 18 L/S 1500	1870	1200	150	L	D EN 1092-1 DN 80 PN.16	EN 1092-1 DN 100 PN.16	358	180	440	1550
MLU 219 48 18 L/S 2000	2370	1700		S	D ₁ EN 1092-1 DN 80 PN.16					2050
MLU 219 48 18 L/S 2500	2870	2200			D ₂ EN 1092-1 DN 40 PN.16					2550
MLU 219 48 18 L/S 3000	3370	2700								3050

L = extraction quote

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MODEL	SHELL VOLUME [litres]	TUBES VOLUME [litres]	VOLUME HEAD L [litres]	VOLUME HEAD S. [litres]	SHELL SECTION [mm ²]	TUBES SECTION [mm ²]	EXCHANGE AREA [m ²]	WEIGHT [kg]
MLU 273 76 18 L/S 1500	90.20	21.60	22.37	24.64	36632.02	15272.96	5.88	126
MLU 273 76 18 L/S 2000	118.18	29.24	22.37	24.64	36632.02	15272.96	7.91	136
MLU 273 76 18 L/S 2500	146.16	36.88	22.37	24.64	36632.02	15272.96	9.94	146
MLU 273 76 18 L/S 3000	174.14	44.55	22.37	24.64	36632.02	15272.96	11.98	156

L/S: L = liquid o S = steam

Category calculation for second group's fluids - Gas, melted gas and liquids with a steam tension at maximum temperature > 0.5 bar

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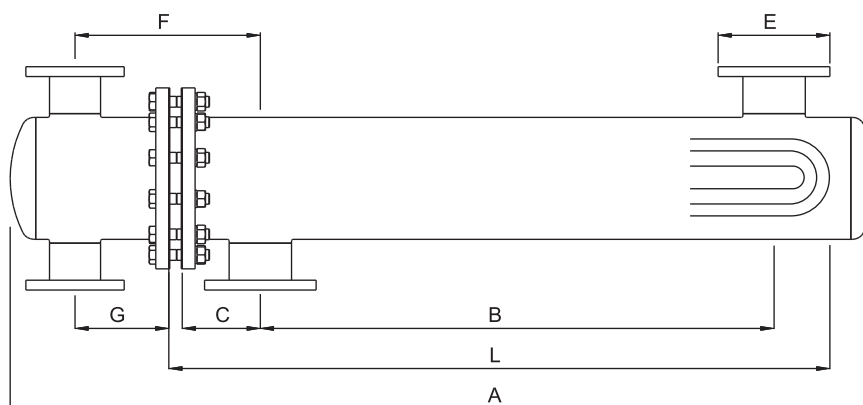
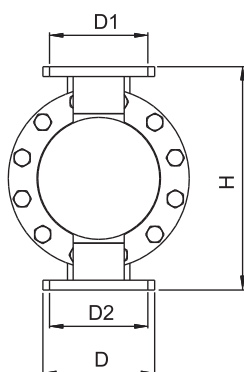
1st Category

2nd Category

3rd Category

MODEL	VOLUME [litres]	PRESSURE [bar] *											
		1	2	3	4	5	6	7	8	9	10	11	12
MLU 273 76 18 L/S 1500	Shell / Tubes		2.2	2.2						9.2		11	
MLU 273 76 18 L/S 2000	Shell / Tubes	1.6	1.6				6.8		8.4				
MLU 273 76 18 L/S 2500	Shell / Tubes	1.3	1.3			5.4	6.8						
MLU 273 76 18 L/S 3000	Shell / Tubes	1.1	1.1		4.4	5.7							

* for higher pressure contact MBS



MODEL	DIMENSIONS [mm]									
	A	B	C	D - D ₁ - D ₂		E	F	G	H	L
MLU 273 76 18 L/S 1500	1945	1150	175	L	D EN 1092-1 DN 100 PN.16	EN 1092-1 DN 125 PN.16	415	210	500	1550
MLU 273 76 18 L/S 2000	2445	1650		S	D ₁ EN 1092-1 DN 100 PN.16					2050
MLU 273 76 18 L/S 2500	2945	2150			D ₂ EN 1092-1 DN 40 PN.16					2550
MLU 273 76 18 L/S 3000	3445	2650								3050

L = extraction quote

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MODEL	SHELL VOLUME [litres]	TUBES VOLUME [litres]	VOLUME HEAD L [litres]	VOLUME HEAD S. [litres]	SHELL SECTION [mm ²]	TUBES SECTION [mm ²]	EXCHANGE AREA [m ²]	WEIGHT [kg]
MLU 323 114 18 L/S 1500	126.60	31.89	32.99	32.56	52432.50	20899.84	8.81	157
MLU 323 114 18 L/S 2000	166.04	43.35	32.99	32.56	52432.50	20899.84	11.85	167
MLU 323 114 18 L/S 2500	205.48	54.80	32.99	32.56	52432.50	20899.84	14.89	177
MLU 323 114 18 L/S 3000	244.92	66.31	32.99	32.56	52432.50	20899.84	17.95	187

L/S: L = liquid o S = steam

Category calculation for second group's fluids - Gas, melted gas and liquids with a steam tension at maximum temperature > 0.5 bar

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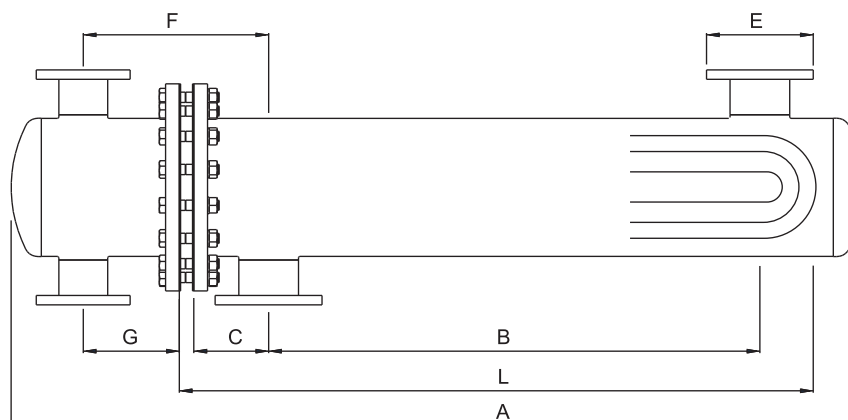
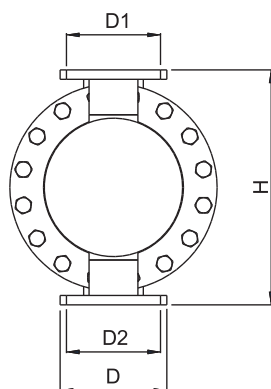
1st Category

2nd Category

3rd Category

MODEL	VOLUME [litres]	PRESSURE [bar] *											
		1	2	3	4	5	6	7	8	9	10	11	12
MLU 323 114 18 L/S 1500	Shell / Tubes	1.5	1.5				6.2	7.8					
MLU 323 114 18 L/S 2000	Shell / Tubes	1.2	1.1		4.6		6.0						
MLU 323 114 18 L/S 2500	Shell / Tubes			3.6	4.8								
MLU 323 114 18 L/S 3000	Shell / Tubes			3.0	4.0								

* for higher pressure contact MBS



MODEL	DIMENSIONS [mm]								
	A	B	C	D - D ₁ - D ₂		E	F	G	L
MLU 323 114 18 L/S 1500	1995	1150	175	L	D EN 1092-1 DN 100 PN.16	EN 1092-1 DN 125 PN.16	434	225	1550
MLU 323 114 18 L/S 2000	2495	1650		S	D ₁ EN 1092-1 DN 100 PN.16				2050
MLU 323 114 18 L/S 2500	2995	2150			D ₂ EN 1092-1 DN 50 PN.16				2550
MLU 323 114 18 L/S 3000	3495	2650							3050

L = extraction quote

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MODEL	SHELL VOLUME [litres]	TUBES VOLUME [litres]	VOLUME HEAD L [litres]	VOLUME HEAD S [litres]	SHELL SECTION [mm ²]	TUBES SECTION [mm ²]	EXCHANGE AREA [m ²]	WEIGHT [kg]
MLU 355 150 18 L/S 1500	155.28	41.20	44.64	44.10	57462.78	30144	11.44	205
MLU 355 150 18 L/S 2000	203.09	56.27	44.64	44.10	57462.78	30144	15.44	215
MLU 355 150 18 L/S 2500	250.90	71.35	44.64	44.10	57462.78	30144	19.44	225
MLU 355 150 18 L/S 3000	298.71	86.49	44.64	44.10	57462.78	30144	23.47	235

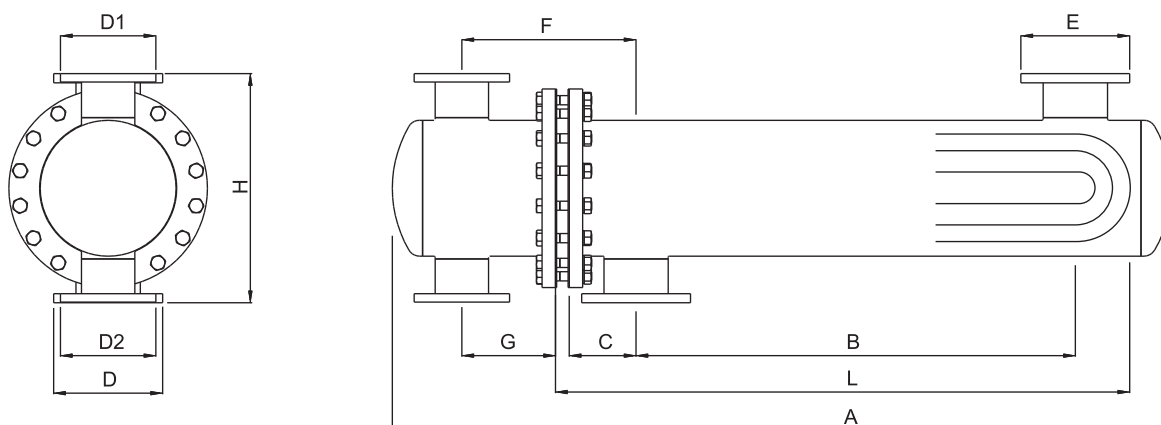
L/S: L = liquid o S = steam

Category calculation for second group's fluids - Gas, melted gas and liquids with a steam tension at maximum temperature > 0.5 bar

Article 4.3 1st Category 2nd Category 3rd Category 4nd Category

MODEL	VOLUME [litres]	PRESSURE [bar] *											
		1	2	3	4	5	6	7	8	9	10	11	12
MLU 355 150 18 L/S 1500	Shell / Tubes	1.2	1.2			4.8		6.4					
MLU 355 150 18 L/S 2000	Shell / Tubes			3.5	4.9								
MLU 355 150 18 L/S 2500	Shell / Tubes			2.8	3.9								12
MLU 355 150 18 L/S 3000	Shell / Tubes			2.3	3.2						10		11.5

* for higher pressure contact MBS



MODEL	DIMENSIONS [mm]									
	A	B	C	D - D ₁ - D ₂		E	F	G	H	L
MLU 355 150 18 L/S 1500	2040	1150	175	L	D EN 1092-1 DN 125 PN.16	EN 1092-1 DN 150 PN.16	456	245	600	1550
MLU 355 150 18 L/S 2000	2540	1650								2050
MLU 355 150 18 L/S 2500	3040	2150		S	D ₁ EN 1092-1 DN 125 PN.16					2550
MLU 355 150 18 L/S 3000	3540	2650			D ₂ EN 1092-1 DN 65 PN.16					3050

L = extraction quote

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MODEL	SHELL VOLUME [litres]	TUBES VOLUME [litres]	VOLUME HEAD L [litres]	VOLUME HEAD S. [litres]	SHELL SECTION [mm ²]	TUBES SECTION [mm ²]	EXCHANGE AREA [m ²]	WEIGHT [kg]
MLU 406 196 18 L/S 1500	206.65	52.90	61.17	59.89	74496.50	39388.16	14.80	265
MLU 406 196 18 L/S 2000	267.85	72.59	61.17	59.89	74496.50	39388.16	20.03	280
MLU 406 196 18 L/S 2500	329.75	92.29	61.17	59.89	74496.50	39388.16	25.26	295
MLU 406 196 18 L/S 3000	391.92	112.08	61.17	59.89	74496.50	39388.16	30.52	310

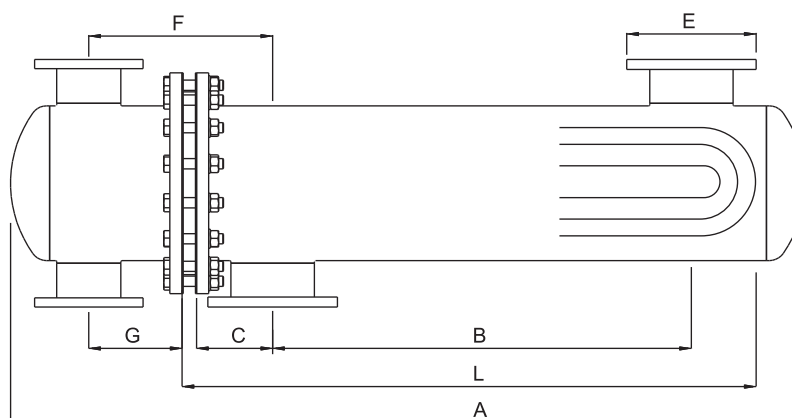
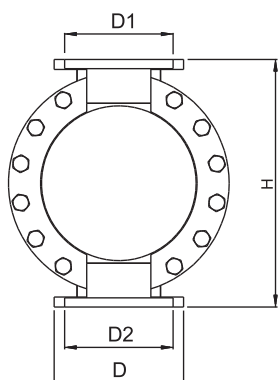
L/S: L = liquid o S = steam

Category calculation for second group's fluids - Gas, melted gas and liquids with a steam tension at maximum temperature > 0.5 bar

Article 4.3 1st Category 2nd Category 3rd Category 4nd Category

MODEL	VOLUME [litres]	PRESSURE [bar] *											
		1	2	3	4	5	6	7	8	9	10	11	12
MLU 406 196 18 L/S 1500	Shell / Tubes				3.7	4.8							
MLU 406 196 18 L/S 2000	Shell / Tubes		2.7	3.7								11.2	
MLU 406 196 18 L/S 2500	Shell / Tubes		2.1	3.0						9.0	10.8		
MLU 406 196 18 L/S 3000	Shell / Tubes	1.7	2.5					7.6		8.9			

* for higher pressure contact MBS



MODEL	DIMENSIONS [mm]									
	A	B	C	D - D ₁ - D ₂		E	F	G	H	L
MLU 406 196 18 L/S 1500	2090	1110	200	L	D EN 1092-1 DN 150 PN.16	EN 1092-1 DN 200 PN.16	483	245	650	1550
MLU 406 196 18 L/S 2000	2590	1600		S	D ₁ EN 1092-1 DN 150 PN.16					2050
MLU 406 196 18 L/S 2500	3090	2100			D ₂ EN 1092-1 DN 65 PN.16					2550
MLU 406 196 18 L/S 3000	3590	2600								3050

L = extraction quote

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U-tube heat exchanger industrial serie multiflo model

Element code

MLU Model

MLU	139	14	18	L	2000	F	F	A	A	A
								Material Head / Tubes / Shell A - EN 1.4301 - AISI 304 B - EN 1.4404 - AISI 316 L C - Carbon Steel		
								Element Connections Tubes / Shell F - FLANGIA EN 1092 - 1		
								Lenght [mm]		
								Version L/S: L = liquid / S = steam *		
								Tubes diameter [mm]		
								Inner tubes diameter [mm]		
								Shell diameter [mm]		
MLU - Versions demountable										

* the heat exchanger has got two versions:

L = type for liquids

S = type for steam